

Appendix B

Ground Transportation

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Traffic Impact Analysis

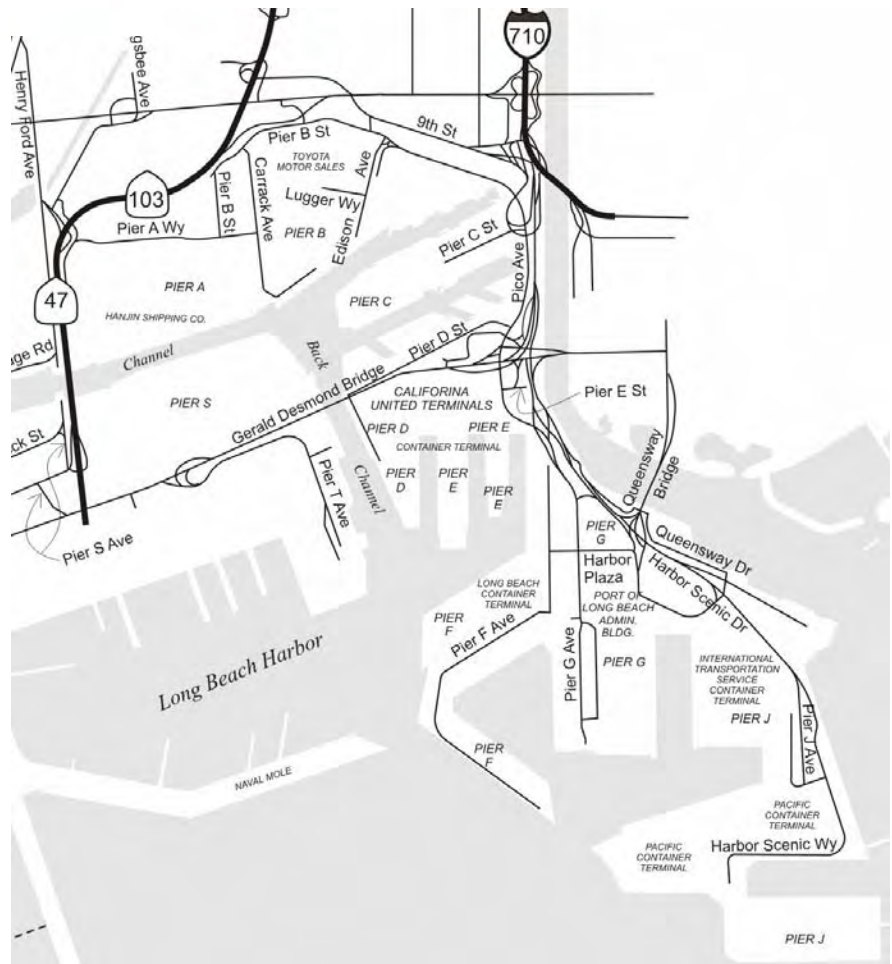
For

Port of Long Beach Middle Harbor Redevelopment Project

Conducted for



The Port of
LONG BEACH
Your Environmentally Friendly Port



By



Traffic Impact Analysis
For
Port of Long Beach
Middle Harbor Redevelopment Project

Conducted for



1700 Carnegie Avenue, Suite 100
Santa Ana, CA, 92705

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1.0 Executive Summary

This traffic study has been prepared to identify and evaluate the potential environmental impacts associated with implementation of the proposed Middle Harbor Redevelopment Project (hereinafter “Project” or “proposed Project”). The Project is part of a continued effort to optimize and expand Port facilities to accommodate increasing volumes of cargo efficiently. The Project would consolidate and expand the existing 294-acre Project site, consisting of the Pier E terminal (170 acres), the Pier F terminal (101 acres), 18 acres of underutilized land north of the Gerald Desmond Bridge and Ocean Boulevard, and the Berth E24 subsided oil area (five acres), into a single, modern, 345-acre container terminal. The Project would incorporate environmental practices and equipment pursuant to the Port’s Green

The Project would be constructed over a 10-year timeframe (2009 through 2019) with anticipated Project buildout occurring in 2019. The Project site would reach full operational capacity by 2025. The Project is also referred to in the EIS/EIR as the 345-Acre Alternative. The other alternatives analyzed in detail in this document are the 315-Acre Alternative, the Landside Improvements Alternative (also listed as NEPA Baseline), and the No Project Alternative.

This report describes the affected transportation resources and evaluates the potential impacts to those resources as a result of constructing and operating the Project or the proposed alternatives to the Project. This document will be used to inform agencies and the public of significant transportation effects associated with the Project and reasonable alternatives, and to propose mitigation measures that would avoid or reduce significant effects.

1.1 DESCRIPTION OF THE PROJECT AND ALTERNATIVES

Project Location

The Project is located in the Middle Harbor and Northeast Harbor Planning Districts within the highly industrialized inner Port complex (Figure 1-1). The Project comprises Middle Harbor, and is bordered by Pier D Street and Ocean Boulevard to the north, Pico Avenue/Harbor Scenic Drive to the east, Pier F Avenue to the south, and the Back Channel to the west. The Project would be built on land owned by the Port.

Project Alternatives

The alternatives evaluated in this study include:

- Alternative 1 – 345-Acre Alternative (the Project);
- Alternative 2 – 315-Acre Alternative;
- Alternative 3 – Landside Improvements Alternative; and
- Alternative 4 – No Project Alternative.

Alternative 1 – 345-Acre Alternative (the Project)

The Project would rehabilitate or replace deteriorated and obsolete terminal facilities; provide deeper water at berths and in basins and channels; create new land; modernize marine terminal facilities; and implement environmental controls, including the Port’s Green Port Policy, to accommodate a portion of the predicted future increases in containerized cargo volume and the modern, larger cargo vessels that are expected to transport these goods to and from the Port.

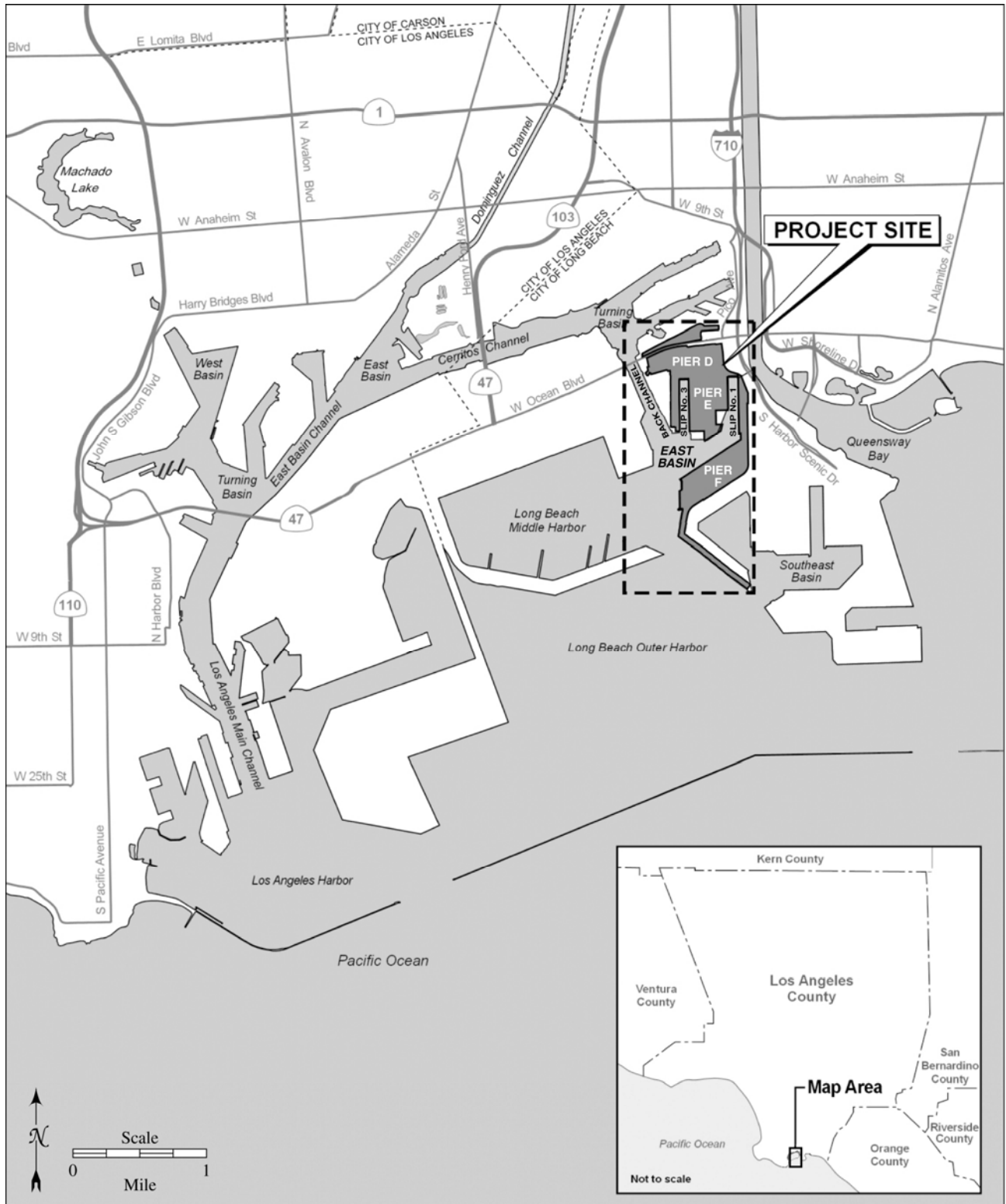


Figure 1.1: Project Site Location

Project construction would be scheduled for completion in 2019 (i.e., Project build-out year). However, the proposed Middle Harbor container terminal is forecasted to be fully optimized at maximum capacity by 2025.

When completed, the Project would consist of one consolidated container terminal (proposed Project) that would be designed to load and unload containerized cargo to and from marine vessels. When optimized at maximum throughput capacity (by year 2025), the consolidated container terminal would be designed to accommodate approximately 3,320,000 twenty-foot equivalent units (TEUs), representing standard-sized shipping containers, per year. The proposed expanded Pier F intermodal railyard would handle approximately 26.3 percent (873,160 TEUs per year) of the terminal's expected throughput.

Alternative 2 – 315-Acre Alternative

The 315-Acre Alternative would add 21 net acres of newly created land to the existing 294-acre Project site by filling Slip 1 between Piers E and F (Berths E12-E14 and F1-F4). This alternative would include terminal expansion on adjacent areas of existing and newly created land. Under the 315-Acre Alternative, a new wharf would be constructed to handle increased cargo throughput and accommodate deep-draft container ships, and to replace existing, insufficient wharves.

When completed, the 315-Acre Alternative would consist of one consolidated container terminal (proposed Project) that would be designed to load and offload containerized cargo from marine vessels. When optimized at maximum throughput capacity (anticipated by approximately 2025), the consolidated container terminal would be designed to accommodate approximately 2,870,000 TEUs per year. The proposed expanded Pier F intermodal railyard would handle approximately 30.4 percent (872,480 TEUs per year) of the terminal's expected throughput.

Alternative 3 – Landside Improvements Alternative

The Landside Improvements Alternative would add 18 net acres of land to the existing 294-acre Project site by redeveloping underutilized land north of the Gerald Desmond Bridge and Ocean Boulevard as a container yard area. The alternative would include construction of upland site improvements.

When completed, the Landside Improvements Alternative would consist of two consolidated container terminals (Piers E and F) that would be operated by one terminal operator. The terminals would be operated under a new lease between the terminal operator and the Port that would include environmental controls imposed pursuant to the Port's Green Port Policy. When optimized at maximum throughput capacity (anticipated by approximately 2025), the terminals would be designed to accommodate a combined total of about 2,910,000 TEUs per year. The Landside Improvements Alternative is equivalent to a No Federal Action Alternative because it only includes construction and operational activities that would not require issuance of federal permits. As no federal action or permit would be required, there would be no significance determination under NEPA for this alternative.

Alternative 4 – No Project Alternative

This alternative considers what would reasonably be expected to occur on the site if the Port did not implement, or federal action did not permit, the proposed Project. This alternative would not allow implementation of the proposed Project or other physical improvements at Middle Harbor. The No Project Alternative would maintain the current container terminal size at a maximum of 294 acres and in its current configuration. Forecasted increases in cargo would still occur as greater operational efficiencies are implemented.

Under this alternative no construction would occur. However, daily operational impacts associated with daily activities would occur under this alternative. The No Project Alternative would result in a maximum throughput of approximately 2,600,000 TEUs per year.

1.2 GROUND TRANSPORTATION IMPACTS

Throughout Project construction, there would be temporary adverse impacts on area roadways. There would not be any temporary delays due to lane closures; however, traffic generated by construction workers' vehicles would slightly increase the usage of surrounding roadways and intersections. The Port will implement standard traffic control measures to minimize short-term construction impacts, such as having work shifts start and end outside of peak traffic hours. Therefore, construction-related impacts on ground transportation would be less than significant under CEQA and NEPA.

During Project operations, the additional on-site employees would result in a negligible increase in work-related public transit trips. Additionally, there would be no ground transportation impacts associated with additional rail traffic generated due to recent regional improvements associated with the Alameda Corridor and the Alameda Corridor East projects. Project operations would result in significant impacts on various intersections; however, these impacts would be mitigated with the installation of traffic signals at these intersections. Additionally, Project operations would add 150 or more trips during either the a.m. or p.m. weekday peak hours at two CMP freeway monitoring locations. Therefore, impacts would be significant under CEQA and NEPA.

Existing levels of service at some of the intersections that would be affected by the Project would be degraded from acceptable operating (LOS D or better) conditions to unacceptable levels (LOS E or F) under the future No Project conditions, and would be further deteriorated under the proposed Project. Therefore, the proposed Project's contribution to the existing levels of service at the study intersections and highway segments would be significant.

Based on the analysis results, the Project will have significant impacts at the following four intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp
- Pico Avenue and Pier D Street

The impacts at all four locations will be mitigated to less than significant levels by the installation of traffic signals.

The Project is expected to have significant impacts on the following study highway segments using the future baseline comparison:

- I-405 south of I-710, northbound only
- I-710 between Willow Street and PCH, northbound only
- SR-91 east of I-710, both directions
- SR-91 west of I-710, westbound only

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, it should be noted that the POLB is currently participating in the following on-going regional transportation programs which are intended to address future regional traffic growth and resulting congestion on area freeways:

I-710 Corridor EIS/EIR 2008

The Port is presently working with Caltrans, Metro, SCAG, and Gateway Cities Council of Governments (COG) (of which the Port and City of Long Beach are member agencies) on the I-710 Corridor EIR/EIS and Caltrans Project Report. POLB has committed \$5 million to this \$34-million, 42-month study, which was commenced in early 2008. The POLB, City of Long Beach, and Gateway Cities COG are aggressively seeking federal, State, and Metro funds for the I-710 Corridor.

Advanced Transportation Management, Information and Security (ATMIS)

The POLB/POLA will also be implementing an Intelligent Transportation Systems project by 2009. This \$11-million program will provide real-time information to travelers in the port vicinity and on adjacent regional transportation facilities. The ATMIS System will monitor vehicle traffic conditions through the use of closed circuit television cameras and vehicle detection devices at the terminal gates. The ATMIS System will distribute the traffic information to truck drivers, motorists, other agencies, and intermodal industry information systems through the use of strategically placed changeable message signs, internet video, and appropriate data sharing means. The ATMIS System will be a major component in an overall intelligent transportation systems (ITS) program for the I-710 Corridor/Gerald Desmond Bridge Gateway Program. This planned project will help to mitigate the I-710 impacts of the Project.

SR-91 Corridor Study

The Gateway Cities COG has begun a SR-91 Corridor Study to explore options that will improve traffic conditions on this freeway. POLB continues to work in concert with the COG, Caltrans, and other agencies to find solutions to improving operating conditions on SR-91.

No additional feasible mitigation measures are available at this time.

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

2. Introduction

This traffic study has been prepared to identify and evaluate the potential environmental impacts associated with implementation of the proposed Middle Harbor Redevelopment Project (hereinafter “Project” or “proposed Project”). The Project is part of a continued effort to optimize and expand Port facilities to accommodate increasing volumes of cargo efficiently. The Project would consolidate and expand the existing 294-acre Project site, consisting of the Pier E terminal (170 acres), the Pier F terminal (101 acres), 18 acres of underutilized land north of the Gerald Desmond Bridge and Ocean Boulevard, and the Berth E24 subsided oil area (five acres), into a single, modern, 345-acre container terminal. The Project would incorporate environmental practices and equipment pursuant to the Port’s Green

The Project would be constructed over a 10-year timeframe (2009 through 2019) with anticipated Project buildout occurring in 2019. The Project site would reach full operational capacity by 2025; however, since full-capacity operation would continue from 2025 to 2030, 2030 is analyzed as the Project’s horizon year. The Project is also referred to in the EIS/EIR as the 345-Acre Alternative. The other alternatives analyzed in detail in this document are the 315-Acre Alternative, the Landside Improvements Alternative (also listed as NEPA Baseline), and the No Project Alternative.

This report describes the affected transportation resources and evaluates the potential impacts to those resources as a result of constructing and operating the Project or the proposed alternatives to the Project. This document will be used to inform agencies and the public of significant transportation effects associated with the Project and reasonable alternatives, and to propose mitigation measures that would avoid or reduce significant effects.

2.1 PROJECT SITE AND VICINITY

The Project site (Figure 1) is in the Middle Harbor and Northeast Harbor Planning Districts within the highly industrialized inner Port complex. The Project site is bordered by Pier D Street and Ocean Boulevard to the north, Pico Avenue/Harbor Scenic Drive to the east, Pier F Avenue to the south, and the Back Channel to the west. The site is entirely owned by the Port.

The Pier D and Pier E portions of the Project site are currently operated by California United Terminals (CUT) as a break-bulk and container cargo terminal with a combined area of approximately 170 acres and a total wharf length of 6,200 feet. Berths D28-31 and D34 occupy the southern portion of Pier D and support a general break-bulk facility, while Berths E24-E26 support container terminal operations on Pier E. Backlands are used for storage and handling of containerized cargo. The Pier F portion of the Project site is operated by Long Beach Container Terminal, Inc. (LBCT). The Pier F terminal has a total area of approximately 101 acres, a total wharf length of 2,490 feet (Berths F6 through F10), and an existing 10,000 track-feet intermodal rail facility.

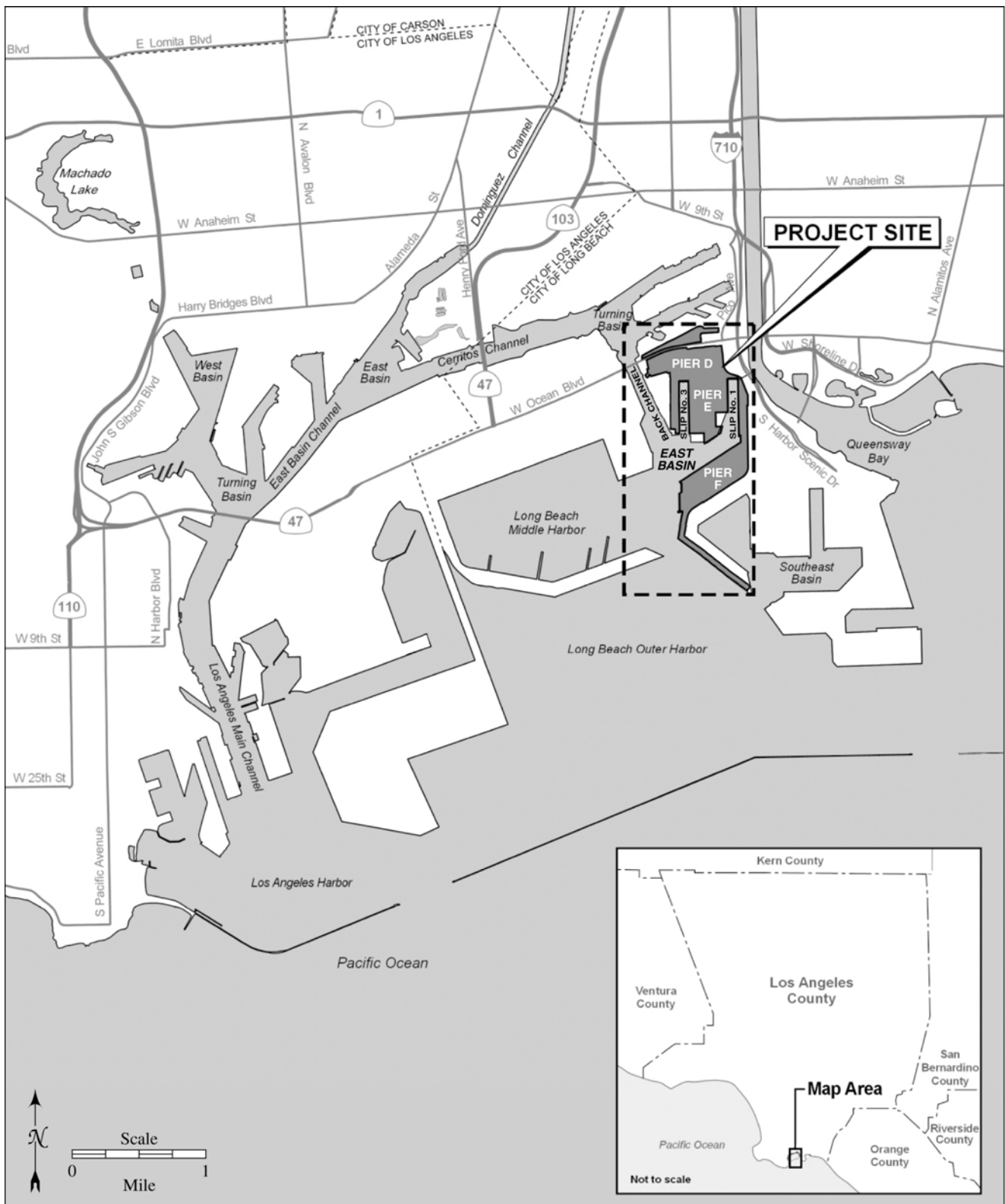


Figure 2-1: Project Site Location

The Project site vicinity includes additional containerized cargo and dry- and liquid-bulk terminals and various industrial/commercial uses. Two break-bulk facilities located at Berths D32-D33 and D46 are operated by Cemex USA and G-P Gypsum Corp, respectively, and are not within the Project area. Surrounding areas to the north on Pier D include the Catalyst Terminal (newsprint importer); G-P Gypsum Corp. (bulk gypsum); and L.G. Everist, Inc., a private-property concern that leases space to various businesses. Commercial and industrial uses to the east include Loren Scale Company, Memorial Maritime Clinic, Port Petroleum, Inc., and Quick Stop Commercial Oil and Lube Service. In addition, areas farther east on Pier H provide several commercial and recreational opportunities (hotels, restaurants, and public viewing areas).

Surrounding areas to the south on Pier F include break-bulk terminals operated by SSA Marine-Crescent and Cooper/T. Smith Stevedoring, a liquid-bulk terminal operated by Chemoil Marine Terminal, and the Koch Carbon dry-bulk terminal (petroleum coke and bulk organic compost). On Pier G a containerized cargo terminal is operated by International Transportation Service; and dry- and liquid-bulk goods terminals are operated by B.P. Wilmington Calciner (petroleum coke), Metropolitan Stevedore Company (petroleum coke, coal, and borax), and Oxbow Carbon & Mineral (petroleum coke). Container, neo-bulk, and liquid-bulk terminals to the west, on the other side of the Back Channel, include BP Pipelines North America Inc. (crude oil), Pacific Coast Recycling (scrap metal), Total Terminals International (containerized cargo), and Weyerhaeuser Co. (lumber).

2.2 ALTERNATIVES AND PROJECT DESCRIPTION

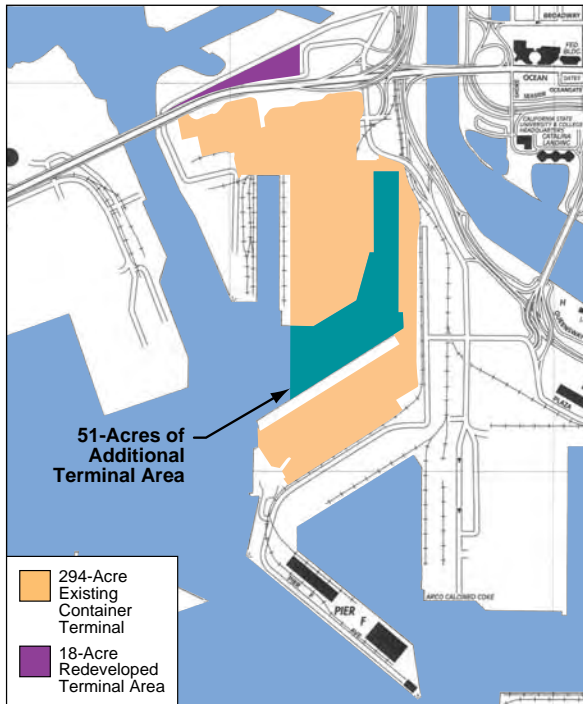
The alternatives discussed in this section include: Alternative 1 – 345-Acre Alternative (the Project); Alternative 2 – 315-Acre Alternative; Alternative 3 – Landside Improvements Alternative; and Alternative 4 – No Project Alternative, A summary of the operating characteristics of each alternative is provided in Table 2-1.

2.2.1 Alternative 1 – 345-Acre Alternative (the Project)

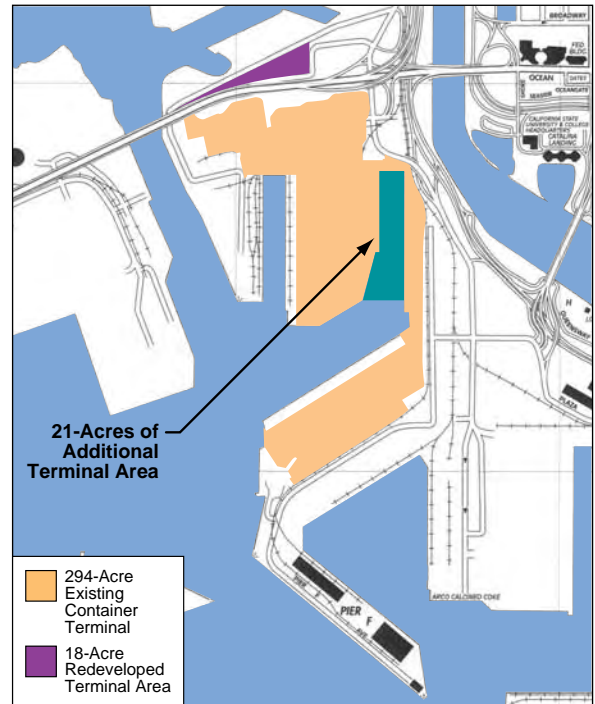
The Project would rehabilitate old terminal facilities; provide deeper water at berths; improve and expand rail infrastructure; create new land; modernize marine terminal facilities; and implement environmental controls, including the Port's Green Port Policy and CAAP. The Project would include construction of a 66kV substation (Pier E Substation) to provide power to support Middle Harbor container terminal operations, including supplying shore-to-ship power. The existing 294-acre Project site would be increased to 345 acres, by creating approximately 51 net acres of new land (Figure 2-2); the net acreage estimate takes into account the proposed fill areas, new wharf construction to create four deep water berths with -55 feet MLLW depths, and the demolition of existing wharves and land that would not be replaced).

Project construction would occur in two phases, the first phase in five stages and the second phase in four stages, and is scheduled to be completed in 2019 (i.e., Project build-out year); however, the proposed Middle Harbor marine terminal is forecasted to be fully optimized at maximum capacity by 2025.

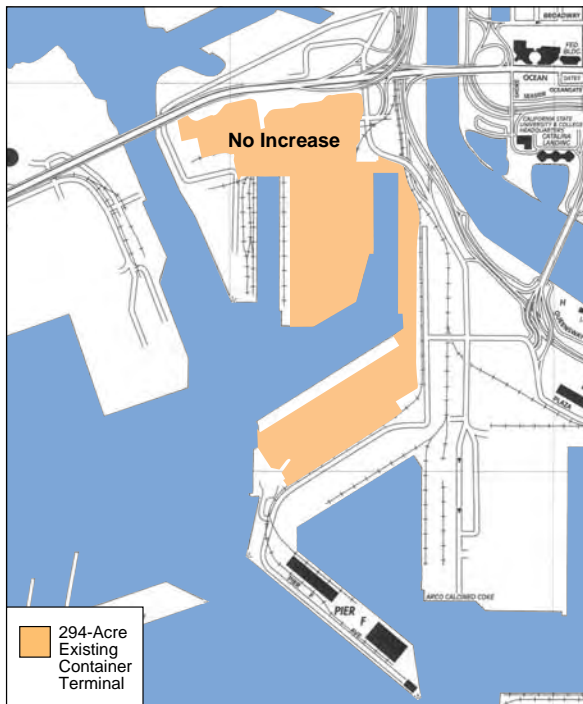
When completed, the Project would consist of one consolidated container terminal (proposed Project) that would load and unload containerized cargo to and from marine vessels. When optimized at maximum throughput capacity (by year 2025), the terminal would accommodate approximately 3,320,000 TEUs per year. The proposed expanded Pier F intermodal railyard would handle approximately 26.3 percent (873,160 TEUs per year) of the terminal's expected throughput.



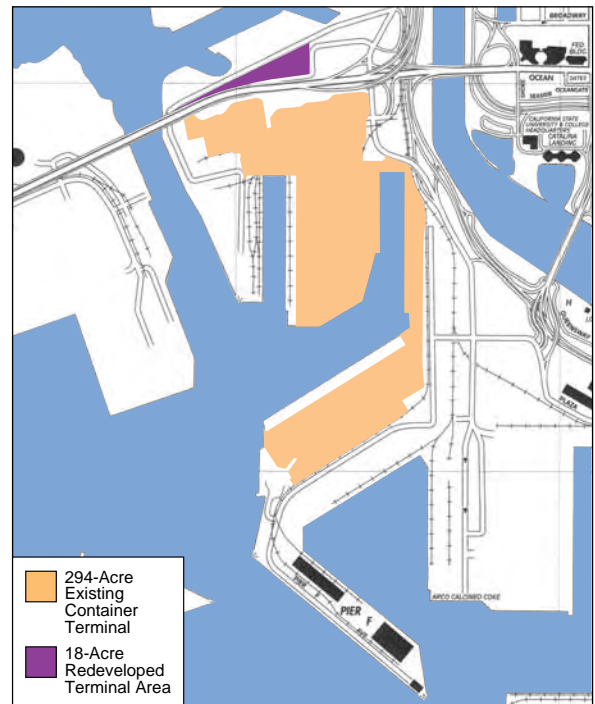
**Alternative 1:
345-Acre Alternative (The Project)**



**Alternative 2:
315-Acre Alternative**



**Alternative 3:
No Project Alternative**



**Alternative 4:
Landside Improvements Alternative**

Figure 2-2. Proposed Project and Alternatives Container Terminal Areas

Table 2-1: Project Alternatives Operations Summary

	Project Site Gross Acreage	Total Container Terminal Acreage ¹	TEUs ² per Acre	TOTAL TEUs	Annual Vessel Calls	Average Daily Truck Trips	Total Access Gates	Annual Trains ³	Total Container Berth Length (LF) ⁴	Joint Terminal Intermodal Yard Acreage	Employees
CEQA Baseline (2005)	294	244	5,180	1,264,021	185	6,528	2	138	4,480	0	625
NEPA Baseline											
Year 2010	294	244	6,497	1,611,260	208	6,796	2	122	4,480	25	847
Year 2015	294	267	8,043	2,165,212	260	7,170	2	1,092	4,480	25	1,931
Year 2020	294	267	9,355	2,518,396	312	8,014	2	1,412	4,480	25	2,246
Year 2030 ⁵	294	267	10,810	2,910,000	416	9,830	2	1,380	4,480	25	2,595
345-Acre Alternative											
Year 2010	308	244	6,776	1,666,946	208	7,032	2	126	4,590	0	876
Year 2015	328	250	8,847	2,211,751	260	6,119	2	1,648	2,900	47	1,972
Year 2020	345	322	8,836	2,845,333	312	7,911	2	2,098	4,250	47	2,537
Year 2030 ⁵	345	322	10,311	3,320,000	364	10,112	2	2,098	4,250	47	2,961
315-Acre Alternative											
Year 2010	308	244	6,480	1,594,083	208	6,724	2	120	4,590	0	838
Year 2015	320	275	7,946	2,185,185	260	5,996	2	1,653	2,900	47	1,949
Year 2020	315	292	8,514	2,486,157	260	6,276	2	2,114	4,250	47	2,217
Year 2030 ⁵	315	292	9,829	2,870,000	364	8,026	2	2,095	4,250	47	2,559
Landside Improvements Alternative											
Year 2010	294	244	6,497	1,611,260	208	6,796	2	122	4,480	25	847
Year 2015	294	267	8,043	2,165,212	260	7,170	2	1,092	4,480	25	1,931
Year 2020	294	267	9,355	2,518,396	312	8,014	2	1,412	4,480	25	2,246
Year 2030 ⁵	294	267	10,810	2,910,000	416	9,830	2	1,380	4,480	25	2,595
No Project Alternative											
Year 2010	294	244	5,710	1,524,550	208	6,381	2	144	4,480	0 ⁶	847
Year 2015	294	244	6,929	1,850,036	208	6,737	2	619	4,480	0 ⁶	1,931
Year 2020	294	244	8,460	2,258,739	260	8,113	2	801	4,480	0 ⁶	2,246
Year 2030 ⁵	294	244	9,738	2,600,000	312	9,594	2	786	4,480	0 ⁶	2,595

Notes:

1. The total container yard acreage is assumed to be slightly smaller than the Project site area due to other uses on the site (e.g., break-bulk cargo). The container yard is defined as the area dedicated to container activities, wharves, and spaces related to buildings and personal vehicles.
2. TEUs = Twenty-foot Equivalent Units. The TEU-per-acre estimates are based on the approximate size of the container yard projected for each year noted (2010, 2015, 2020, and 2030).
3. Estimate assumes 25 rail cars per train.
4. All Pier D berths and E-12-13 are break-bulk berths and are not included in container berth length. The total container berth lengths include both Pier E and Pier F berths.
5. Full-capacity level of operation would continue from 2025 to 2030.
6. Assumes the existing LBCT nine acre intermodal railyard would remain operational.

Source: Moffatt & Nichol 2006b.

Operations

Terminal Operations

At full operation (anticipated in approximately year 2025), the proposed container terminal would operate approximately 21 hours per day, 365 days per year, and would accommodate approximately 3,320,000 TEUs per year (Table 2-2). Proposed terminal operations would result in a 62 percent increase from the 2005 baseline average of 1,264,021 TEUs per year.

Truck Operations

Preliminary estimates indicate that the total number of truck trips to and from the Middle Harbor container terminal would increase from the 2005 baseline average of 6,528 trips per day to an average of approximately 10,112 trips per day in the year 2025 (i.e., a 36 percent increase) as a result of increased import and export of containerized cargo (Table 2-2). At maximum terminal capacity in 2025, approximately 76 percent of the containers (about 2,523,200 TEUs) would be moved to and from the terminal via truck. About 10 percent of those truck movements would transport containers to and from off-dock and near-dock railyards. The remaining truck-hauled containers would be transported to and from warehouses and distribution centers in the Los Angeles Basin, southern California, and nearby western states. Middle Harbor container terminal operations include use of an automated appointment system that would enable trucks to reschedule their trips to avoid peak hour traffic and congestion.

Rail Operations

When the Project terminal is fully optimized at maximum throughput capacity in 2025, the railyard would operate approximately 21 hours per day, 365 days per year, and handle approximately 873,160 TEUs per year, which would represent approximately 26.3 percent of the terminal's expected throughput. Preliminary estimates indicate that annual train trips would increase from the 2005 baseline average of 138 trips per day to an average of approximately 2,098 trips per day at maximum capacity in 2025. Rail operations assume three line haul locomotives per train for each inbound/outbound trip and that one switch locomotive would be in operation within the expanded Pier F intermodal railyard for each inbound/outbound trip. Intermodal export cargo would either arrive directly at the Pier F intermodal railyard or at another local railyard (e.g., the Intermodal Container Transfer Facility [ICTF], Hobart, City of Industry, East L.A., and Los Angeles Transportation Center [LATC]) and then be trucked to the terminal gate for receiving.

Table 2-2: 345-Acre Alternative (Project) Operations Summary									
Middle Harbor	CEQA Baseline (2005)	NEPA Baseline				345-Acre Alternative (Project)			
		<i>Year 2010</i>	<i>Year 2015</i>	<i>Year 2020</i>	<i>Year 2030⁴</i>	<i>Year 2010</i>	<i>Year 2015</i>	<i>Year 2020</i>	<i>Year 2030⁴</i>
Project Site Gross Acreage	294	294	294	294	294	308	328	345	345
Total Container Terminal Acreage ¹	244	244	267	267	267	244	250	322	322
TEUs ² per Acre	5,180	6,497	8,043	9,355	10,810	6,776	8,847	8,836	10,311
TOTAL TEUs	1,264,021	1,611,260	2,165,212	2,518,396	2,910,000	1,666,946	2,211,751	2,845,333	3,320,000
Annual Vessel Calls	185	208	260	312	416	208	260	312	364
Average Daily Truck Trips	6,528	6,796	7,170	8,014	9,830	7,032	6,119	7,911	10,112
Total Access Gates	2	2	2	2	2	2	2	2	2
Annual Trains ³	138	122	1,092	1,412	1,380	126	1,648	2,098	2,098
Operating Berths	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E26, D28, F6, F10	E24, E25, E26, D28,	E23, E24, E25, E26, D28	E23, E24, E25, E26, D28
Total Container Berth Length (LF) ⁵	4,480	4,480	4,480	4,480	4,480	4,590	2,900	4,250	4,250
Joint Terminal Intermodal Yard Acreage	0	25	25	25	25	0	47	47	47
Employees	625	847	1,931	2,246	2,595	876	1,972	2,537	2,961
Notes: <ol style="list-style-type: none"> 1. The total container yard acreage is assumed to be slightly smaller than the Project site area due to other uses on the site (e.g., break-bulk cargo). The container yard is defined as the area dedicated to container activities, wharves, and spaces related to buildings and personal vehicles. 2. TEUs = Twenty-foot Equivalent Units. The TEU-per-acre estimates are based on the approximate size of the container yard projected for each year noted (2010, 2015, and 2020). 3. Estimate assumes 25 rail cars per train. 4. Full-capacity level of operation would continue from 2025 to 2030. 5. All Pier D berths and E-12-13 are break-bulk berths and are not included in container berth length. The total container berth lengths include both Pier E and Pier F berths. <i>Source: Moffatt & Nichol 2006b.</i>									

2.2.2 Alternative 2 – 315-Acre Alternative

The 315-Acre Alternative would be designed to minimize significant, adverse impacts on air quality, biological resources, and noise. This alternative is the same as the proposed Project except that the 33-acre East Basin area would not be filled and the berth E23 wharf would not be constructed. Elimination of the East Basin fill and berth E23 wharf would result in decreased container movement efficiency compared to the Project. However, the 315-Acre Alternative would at least in part meet Project purpose and need/objectives of maximizing the use of existing waterways and available shorelines within the Port and would optimize cargo handling efficiency necessary to accommodate the projected growth in containerized cargo. Therefore, this alternative was carried forward for detailed analysis in the EIS/EIR.

The 315-Acre Alternative would add 21 net acres of newly created land to the existing 294-acre Project site by filling Slip 1 between Piers E and F (Berths E12-E14 and F1-F4) (Figure 1.6-9). This alternative would include dredge and fill operations to create new land and deeper berths, terminal expansion on adjacent existing land and newly created land, and new wharf construction. The alternative would include the rail improvements identified for the Project (i.e., expanded Pier F Intermodal Railyard, mainline track realignment at Ocean Boulevard/Harbor Scenic Drive, Pier F tail track, and Pier F storage yard and tracks.

When completed, the 315-Acre Alternative would consist of one consolidated container terminal that would load and unload containerized cargo to and from marine vessels. When optimized at maximum throughput capacity (anticipated in approximately year 2025), the consolidated terminal would handle approximately 2,870,000 TEUs per year (Table 2-3). The proposed expanded Pier F intermodal railyard would handle approximately 30.4 percent (872,480 TEUs per year) of the terminal's expected throughput. Dredging and excavation would be required to: deepen Slip 3 to a minimum of -55 feet MLLW; widen Slip 3 by 114 feet to accommodate two deep-water berths; fill the 25.6-acre Slip 1; and fill approximately four acres of the existing Tidelands subsided oil area located at Berth E24 with suitable materials dredged and excavated from Slip 3. The net result of these construction activities would be to create approximately 21 acres of new land which, when added to the existing 294-acre Project site, would total 315 acres.

Operations

Terminal Operations

Middle Harbor container terminal operations would include the same activities proposed for the Project. Under the 315-Acre Alternative, the Middle Harbor container terminal would operate approximately 21 hours per day, 365 days per year. The terminal could handle approximately 2,870,000 TEUs per year when operating at maximum throughput capacity in 2025 (Table 2-3). Proposed terminal operations would result in a 56 percent increase from the 2005 baseline average of 1,264,021 TEUs per year.

Truck Operations

Preliminary estimates indicate the total truck trips to and from the Middle Harbor container terminal would increase from the 2005 baseline average of 6,528 trips per day to an average of approximately 8,026 trips per day at maximum capacity in 2025 (i.e., a 19 percent increase) as a result of increased import and export of containerized cargo under proposed operations. When operating at maximum throughput capacity in 2025, approximately 72 percent of the containers (about 2,080,750 TEUs) would be moved to and from the terminal via truck. About six percent of the truck movements would represent the transport of offloaded and loaded containers via truck to and from off-dock and near-dock railyards. The remaining containers would be hauled via truck to and from warehouses, distribution centers, and container freight stations in the Los Angeles Basin, southern California, and nearby states. Middle Harbor container terminal operations include use of an automated appointment system that would enable trucks to reschedule their trips to avoid peak hour traffic and congestion.

Table 2-3: 315-Acre Alternative Operations Summary									
Middle Harbor	CEQA Baseline (2005)	NEPA Baseline				315-Acre Alternative			
		Year 2010	Year 2015	Year 2020	Year 2030 ⁴	Year 2010	Year 2015	Year 2020	Year 2030 ⁴
Project Site Gross Acreage	294	294	294	294	294	308	320	315	315
Total Container Terminal Acreage ¹	244	244	267	267	267	244	275	292	292
TEUs ² per Acre	5,180	6,497	8,043	9,355	10,810	6,480	7,946	8,514	9,829
TOTAL TEUs	1,264,021	1,611,260	2,165,212	2,518,396	2,910,000	1,594,083	2,185,185	2,486,157	2,870,000
Annual Vessel Calls	185	208	260	312	416	208	260	260	364
Average Daily Truck Trips	6,528	6,796	7,170	8,014	9,830	6,724	5,996	6,276	8,026
Total Access Gates	2	2	2	2	2	2	2	2	2
Annual Trains ³	138	122	1,092	1,412	1,380	120	1,653	2,114	2,095
Operating Berths	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E26, D28, F6, F10	E24, E25, E26, D28,	E23, E24, E25, E26, D28	E23, E24, E25, E26, D28, F6-F10
Total Container Berth Length (LF) ⁵	4,480	4,480	4,480	4,480	4,480	4,590	2,900	4,250	4,250
Joint Terminal Intermodal Yard Acreage	0	25	25	25	25	0	47	47	47
Employees	625	847	1,931	2,246	2,595	838	1,949	2,217	2,559
<p>Notes:</p> <ol style="list-style-type: none"> 1. The total container yard acreage is assumed to be slightly smaller than the Project site area due to other uses on the site (e.g., break-bulk cargo). The container yard is defined as the area dedicated to container activities, wharves, and spaces related to buildings and personal vehicles. 2. TEUs = Twenty-foot Equivalent Units. The TEU-per-acre estimates are based on the approximate size of the container yard projected for each year noted (2010, 2015, 2020, and 2030). 3. Estimate assumes 25 rail cars per train. 4. Full-capacity level of operation would continue from 2025 to 2030. 5. All Pier D berths and E-12-13 are break-bulk berths and are not included in container berth length. The total container berth lengths include both Pier E and Pier F berths. <p>Source: Moffatt & Nichol 2006b.</p>									

Rail Operations

The railyard would be planned for operation approximately 21 hours per day, 365 days per year. Preliminary estimates indicate that annual train trips would increase from the 2005 baseline average of 138 trips per day to an average of approximately 2,095 trips per day at the maximum capacity in 2025. When the Middle Harbor container terminal is fully optimized at maximum throughput capacity in 2025, preliminary estimates indicate the proposed intermodal railyard would transport approximately 872,480 TEUs, which would represent approximately 30.4 percent of the terminal's expected throughput. Middle Harbor rail operations would include the same assumptions proposed for the Project.

2.2.3 Alternative 3 – Landside Improvements Alternative

The Landside Improvements Alternative would redevelop existing underutilized land north of the Gerald Desmond Bridge and Ocean Boulevard within the Project site as container yard area (Figure 2-2). The alternative would include construction of the following upland site improvements: redevelopment and backland expansion on existing lands within the Project site (i.e., the Berth E23 oil area would be abandoned and redeveloped as container yard area); construction of a new 66 kV Pier E Substation; and construction of shore-to-ship infrastructure at Piers E and F to cold-iron vessels while at berth. This alternative would also include construction of a mainline track realignment at Ocean Boulevard/Harbor Scenic Drive and the Pier F storage yard and tracks. The alternative would expand the existing Pier F intermodal railyard to six tracks that would be part of a 25-acre railyard. Construction of the Landside Improvements Alternative would consist of five construction stages that would begin in 2009 and continue until 2018 (Table 2-4). When completed, the Landside Improvements Alternative would consist of two consolidated container terminals (Piers E and F) that would be operated by one terminal operator.

Under this alternative, there would be no in-water activities (e.g., dredging, filling Slip 1 and the East Basin, and/or new wharf construction as proposed for the Project), no wharf upgrades would occur, and channel and berth deepening would not occur. The Landside Improvements Alternative is equivalent to a No Federal Action Alternative because it only includes construction and operational activities that would not require issuance of federal permits. As no federal action or permit would be required, there would be no significance determination under NEPA for this alternative.

Table 2-4: Landside Improvements Alternative Operations Summary									
Middle Harbor	CEQA Baseline (2005)	NEPA Baseline				Landside Improvements Alternative			
		Year 2010	Year 2015	Year 2020	Year 2030 ^d	Year 2010	Year 2015	Year 2020	Year 2030 ^d
Project Site Gross Acreage	294	294	294	294	294	294	294	294	294
Total Container Terminal Acreage ¹	244	244	267	267	267	244	267	267	267
TEUs ² per Acre	5,180	6,497	8,043	9,355	10,810	6,497	8,043	9,355	10,810
TOTAL TEUs	1,264,021	1,611,260	2,165,212	2,518,396	2,910,000	1,611,260	2,165,212	2,518,396	2,910,000
Annual Vessel Calls	185	208	260	312	416	208	260	312	416
Average Daily Truck Trips	6,528	6,796	7,170	8,014	9,830	6,796	7,170	8,014	9,830
Total Access Gates	2	2	2	2	2	2	2	2	2
Annual Trains ³	138	122	1,092	1,412	1,380	122	1,092	1,412	1,380
Operating Berths	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10
Total Container Berth Length (LF) ⁵	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480
Joint Terminal Intermodal Yard Acreage	0	25	25	25	25	25	25	25	25
Employees	625	847	1,931	2,246	2,595	847	1,931	2,246	2,595
<p><i>Notes:</i></p> <ol style="list-style-type: none"> The total container yard acreage is assumed to be slightly smaller than the Project site area due to other uses on the site (e.g., break-bulk cargo). The container yard is defined as the area dedicated to container activities, wharves, and spaces related to buildings and personal vehicles. TEUs = Twenty-foot Equivalent Units. The TEU-per-acre estimates are based on the approximate size of the container yard projected for each year noted (2010, 2015, 2020, and 2030). Estimate assumes 25 rail cars per train. Full-capacity level of operation would continue from 2025 to 2030. All Pier D berths and E-12-13 are break-bulk berths and are not included in container berth length. The total container berth lengths include both Pier E and Pier F berths. <p><i>Source: Moffatt & Nichol 2006b.</i></p>									

2.2.4 Alternative 4 – No Project Alternative

This alternative considers what would reasonably be expected to occur on the site if no Port or federal action were to occur. The Port would take no further action to construct and develop additional backlands (other than the 294 acres that currently exist). The USACE would not issue permits for dredge and fill actions that would be needed for construction of wharves. This alternative would not allow implementation of the proposed Project or other physical improvements at Middle Harbor. The No Project Alternative would maintain the current container terminal size at a maximum of 294 acres and in its current configuration. Forecasted increases in cargo would still occur as greater operational efficiencies were implemented.

Under this alternative no construction and, consequently, no construction-related impacts would occur. However, operational impacts associated with the following activities would occur: cargo ships that currently berth and load/unload at the terminal would continue to do so; terminal equipment would continue to handle cargo containers; and trucks would continue to transport containers to outlying distribution facilities. No rail improvements, including the mainline track realignment at Ocean Boulevard/Harbor Scenic Drive, the Pier F storage yard and tracks, the expanded Pier F intermodal railyard, and the Pier F tail track would occur under this alternative, which would result in increased short-haul trips to near-dock and off-dock railyards. In addition, the Pier E Substation would not be constructed. However, in addition to environmental controls imposed by federal, state, and local regulatory agencies, the terminal would implement the POLB/POLA VSRP (CAAP measure OGV1) under this alternative.

The No Project Alternative would result in a maximum throughput of about 2,600,000 TEUs per year, which would be a 52 percent increase from the 2005 baseline average of approximately 1,264,021 TEUS per year (Table 2-5).

Table 2-5: No Project Alternative Operations Summary									
Middle Harbor	CEQA Baseline (2005)	NEPA Baseline				No Project Alternative			
		Year 2010	Year 2015	Year 2020	Year 2030 ⁽⁴⁾	Year 2010	Year 2015	Year 2020	Year 2030 ⁽⁴⁾
Project Site Gross Acreage	294	294	294	294	294	294	294	294	294
Total Container Terminal Acreage ⁽¹⁾	244	244	267	267	267	244	244	244	244
TEUs ⁽²⁾ per Acre	5,180	6,497	8,043	9,355	10,810	5,710	6,929	8,460	9,738
TOTAL TEUs	1,264,021	1,611,260	2,165,212	2,518,396	2,910,000	1,524,550	1,850,036	2,258,739	2,600,000
Annual Vessel Calls	185	208	260	312	416	208	208	260	312
Average Daily Truck Trips	6,528	6,796	7,170	8,014	9,830	6,381	6,737	8,113	9,594
Total Access Gates	2	2	2	2	2	2	2	2	2
Annual Trains ⁽³⁾	138	122	1,092	1,412	1,380	144	619	801	786
Operating Berths	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10	E24, E25, E26, D28-31, F6, F10
Total Container Berth Length (LF) ⁽⁵⁾	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480
Joint Terminal Intermodal Yard Acreage	0	0	25	25	25	0	0	0	0
Employees	625	847	1,931	2,246	2,595	847	1,931	2,246	2,595
<p><i>Notes:</i></p> <p>(1) The total container yard acreage is assumed to be slightly smaller than the Project site area due to other uses on the site (e.g., break-bulk cargo). The container yard is defined as the area dedicated to container activities, wharves, and spaces related to buildings and personal vehicles.</p> <p>(2) TEUs = Twenty-foot Equivalent Units. The TEU-per-acre estimates are based on the approximate size of the container yard projected for each year noted (2005, 2010, 2015, 2020, and 2030).</p> <p>(3) Estimate assumes 25 rail cars per train.</p> <p>(4) Full-capacity level of operation would continue from 2025 to 2030.</p> <p>(5) All Pier D berths and E-12-13 are break-bulk berths and are not included in container berth length. The total container berth lengths include both Pier E and Pier F berths.</p> <p>Source: Moffatt & Nichol 2006b.</p>									

3. Transportation Analysis

3.1 ENVIRONMENTAL SETTING

3.1.1 Area of Influence

The area of influence for ground transportation consists of the streets and intersections that could be affected by automobile, truck and rail traffic to gain access to and from the POLB Middle Harbor terminal project site. This area is generally bounded by Anaheim Street to the north, I-710 to the east, SR-47 and SR-103 to the west, and the waterfront to the south (Figure 3-1). The area of influence also includes freeway segments outside the study area along I-405, SR-91, and I-110 (Table 3-1). In the case of rail lines, the area of influence extends along the Alameda Corridor as far as the downtown Los Angeles rail yards.

3.1.2 Setting

Regional and Local Access

Regional access to the Middle Harbor is provided by a network of freeway and arterial facilities. The freeways include the Harbor Freeway (I-110), the Long Beach Freeway (I-710), and the Terminal Island Freeway (SR-47 and SR-103). The arterial street network includes Ocean Boulevard, Seaside Avenue, Alameda Street, Anaheim Street, and Pacific Coast Highway.

I-110 and I-710 are north-south highways that extend from the Port area to downtown Los Angeles. They each have six lanes in the vicinity of the harbor and widen to eight lanes to the north. SR-47 is a short state route that extends from Terminal Island across the Heim Bridge and terminates at Willow Street. It has six lanes on the southern segment and four lanes approaching Anaheim Street.

The key access streets serving the Project site are Harbor Scenic Drive, Ocean Boulevard, Pico Avenue, Pier D Street, Pier G Avenue, Pier F Avenue, Broadway, Pier E Street, and Harbor Plaza Drive.

Harbor Scenic Drive provides direct access to the Project area. It connects the Project site and the Pier G-H-J portion of the harbor to I-710. It has from one to three lanes in each direction, depending on location.

Ocean Boulevard is the primary east-west corridor to the north of the Project site and connects the study area to Terminal Island with three lanes in each direction.

Pico Avenue is a north-south corridor with two lanes in each direction and provides direct access to Broadway, Pier E Street, and Pier D Street.

Harbor Plaza runs east/west and connects Harbor Scenic Drive with Pico Avenue/Pier G Avenue. It has one to two lanes in each direction, depending on location.

On-street curbside parking is prohibited on all of the streets in the study area.

Existing Transit Services

Long Beach Transit (LBT) provides limited transit service to the Port area due to the non-typical nature of marine terminal work schedules. The only public transit service near the Project is LBT's Passport Route C, which primarily serves visitors to the area and connects downtown Long Beach to waterfront attractions, such as the Queen Mary. There are no other regular LBT routes serving the Harbor area, including the proposed Project site.

Figure 3-1: Study Area



Table 3-1: Study Intersections and Highway Links

Intersections
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (existing conditions) (c)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (future conditions) (c) (d)
3b. Pico Avenue and New Ocean Boulevard Westbound On-Ramp (future conditions) (c) (d)
4. Pico Avenue and Broadway (c)
5. Pico Avenue and Pier D Street (a)
6. Pico Avenue and Pier C Street (b)
7. Pico Avenue and Pier B Street and 9 th Street (b)
8. Anaheim Way and Pier B Street (a)
9. Farragut Avenue and Anaheim Street (b)
Highway/Freeway Links
1. I-405 Freeway north of I-710 Freeway
2. I-405 Freeway south of I-710 Freeway
3. I-710 Freeway between Willow Street and Pacific Coast Highway
4. I-110 Freeway north of C-Street
5. SR-47 Freeway at Heim Bridge
6. SR-91 Freeway east of I-710 Freeway
7. SR-91 Freeway west of I-710 Freeway
Notes: (a) All-way stop-controlled intersection (b) Signalized intersection (c) Stop controlled on minor street only (d) Intersection does not currently exist or will be significantly modified prior to project opening

Existing Rail Facilities

Port Vicinity Rail

Regional rail access to and from the study area is provided by two Class I rail carriers on four rail lines. A single-track line is owned and operated by Burlington Northern/Santa Fe Railroad (BNSF), two single-track lines are owned and operated by Union Pacific Railroad (UP), and one double-track line is owned and operated by the Alameda Corridor Transportation Authority. Figure 3-2 shows the existing rail facilities in the Port's vicinity.

Figure 3-2: Port Vicinity Rail Facilities



Pacific Harbor Lines (PHL) Railroad is a third-party rail operator serving both Ports. PHL provides support to UP and BNSF and is responsible for dispatching all train moves south of the West Thenard Control Point, which is located just north of Anaheim Street. PHL also provides services to individual terminal operators and performs maintenance on rail infrastructure owned by the both Ports.

The existing Pier F lead track is operated by PHL and supports railcar switching operations that connect to the Port's mainline tracks in the vicinity of the Pico Avenue overcrossing. The existing LBCT railyard on Pier F occupies 15.4 acres and is comprised of four tracks totaling approximately 10,000 feet and a side/passing track that is approximately 7,000 feet long.

Alameda Corridor

The Alameda Corridor is located in southern Los Angeles County, running 20 miles from the ports of Long Beach and Los Angeles to downtown Los Angeles, primarily along and adjacent to Alameda Street. This dedicated double-track, grade-separated, high-speed rail is owned and operated by the Alameda Corridor Transportation Authority and used by both BNSF and UP. Since its completion, the Alameda Corridor eliminated all of the regional at-grade rail/highway crossings between POLB, POLA, and the downtown rail yards. The Alameda Corridor has a daily capacity of 150 trains. Currently, the corridor carries between 50 and 65 trains per day.

Existing Traffic Conditions

A series of traffic counts were collected in 2005 (NOP year) at nine intersections and seven highway segments in the vicinity of the proposed Project site. Specifically, traffic counts were gathered during peak-periods of 6-9 a.m. and 2-6 p.m., on a typical weekday covering the three analysis peak hours: 8-9 a.m., 2-3 p.m., and 4-5 p.m. per the *Port of Long Beach Environmental Protocol* (Port Protocol, POLB 2006).

These study locations were selected because they are situated along key access routes to and from the Project site. In addition to traffic counts, travel lane configuration and type of traffic control at each of these study locations were verified and documented.

For planning purposes, the ability to handle traffic at an intersection or along a segment of roadway is generally estimated based on the volume of traffic versus the carrying capacity of the facility. The volume measure is a collection of either existing or forecasted traffic counts. The intersection and roadway capacity reflects the maximum amount of traffic that can be served, typically measured as the number of vehicles per hour per travel lane. The ratio between volume and roadway/intersection capacity yields a volume-to-capacity (V/C) ratio and that ratio has a corresponding Level of Service (LOS) descriptor.

For signalized intersections, LOS is determined by the V/C ratio. For non-signalized intersections, LOS is determined by estimated delay time per vehicle. For highway segments, LOS is determined by the Demand-to-Capacity ratio (D/C, generally referred to as V/C ratio in this document). LOS A reflects minimum delay at an intersection or free-flow condition on a highway segment. LOS F reflects long delay at an intersection or stop-and-go condition on a highway segment. In most urbanized regions, LOS D (V/C between 0.8 and 0.9; and D/C between 0.78 and 0.93) is considered acceptable.

Tables 3-2, 3-3, and 3-5.4 illustrate the level of service criteria for signalized intersections, non-signalized intersections, and highway segments, respectively. Table 3-5 shows the summary of existing levels of service at study intersections and highway segments. Capacity analysis worksheets are presented in the Appendix.

One of the nine study intersections i.e., Pico Avenue and Pier D Street, is currently operating at LOS E or F during one or more of the three analyzed peak hours.

Five of the seven freeway segments have at least one direction operating at LOS E or F during one or more of the three analyzed peak hours, including I-405 north and south of I-710, I-710 between Willow Street and PCH, and SR-91 near I-710.

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Table 3-2: Level Of Service Criteria For Signalized Intersections		
LOS	V/C Ratio	Description of Conditions
A	0 to 0.60	Little or no delay/congestion
B	>0.60 to 0.70	Slight congestion/delay
C	>0.70 to 0.80	Moderate delay/congestion
D	>0.80 to 0.90	Significant delay/congestion
E	>0.90 to 1.00	Extreme congestion/delay
F	1.00 +	Intersection failure/gridlock

Table 3-3: Level Of Service Criteria For Non-Signalized Intersections		
LOS	Average Delay (seconds/veh)	Description of Conditions
A	≤10"	Little or no delay
B	>10" and ≤15"	Slight delay
C	>15" and ≤25"	Moderate delay
D	>25" and ≤35"	Significant delay
E	>35" and ≤50"	Extreme congestion
F	>50"	Intersection gridlock

Source: Chapter 17, Highway Capacity Manual, Transportation Research Board, 2000

Table 3-4: Level Of Service Criteria For Highway Segment		
LOS	D/C Ratio	Description of Conditions
A	0.01-0.35	"Free-flow" condition
B	0.36-0.54	Slight congestion
C	0.55-0.77	Moderate congestion
D	0.78-0.93	Significant congestion
E	0.94-1.00	Extreme congestion
F	>1.00	Gridlock/Stop-and-Go Condition

Table 3-5: Existing Intersection / Highway Link Level Of Service Analysis

Intersection / Highway Links	2005 Existing Peak Hour Conditions					
	AM		MD		PM	
	LOS	V/C or Delay*	LOS	V/C or Delay*	LOS	V/C or Delay*
Intersection						
1. Pico Ave/Pier G Ave & Harbor Plaza (a)	B	14.0	C	21.7	B	14.6
2. Pico Ave & Pier E St/Ocean Blvd EB On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3
3. Pico Ave & Ocean Blvd WB On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5
4. Pico Ave & Broadway (c)	B	10.6	B	12.7	B	11.5
5. Pico Ave & Pier D Street (a)	A	9.8	E	47.3	F	106.8
6. Pico Ave & Pier C Street (b)	A	0.231	A	0.263	A	0.266
7. Pico Ave & Pier B Street & 9 th Street (b)	A	0.356	A	0.385	A	0.426
8. Anaheim Way & Pier B St (a)	A	8.1	A	8.8	A	9.1
9. Farragut Ave & Anaheim St (b) (d)	A	0.348	A	0.333	A	0.450
Highway/Freeway Segments						
1. NB I-405 Fwy n/o I-710 Fwy SB I-405 Fwy n/o I-710 Fwy	F	1.243	F	1.138	F	1.119
	E	0.943	F	1.062	F	1.221
2. NB I-405 Fwy s/o I-710 Fwy SB I-405 Fwy s/o I-710 Fwy	F	1.199	F	1.121	F	1.137
	D	0.929	F	1.024	F	1.173
3. NB I-710 Fwy between Willow St & PCH SB I-710 Fwy between Willow St & PCH	E	0.980	F	1.031	F	1.089
	F	1.080	F	1.072	F	1.091
4. NB I-110 Fwy n/o C-Street SB I-110 Fwy n/o C-Street	D	0.828	C	0.757	C	0.673
	C	0.587	C	0.667	D	0.788
5. NB SR-47 at Heim Bridge SB SR-47 at Heim Bridge	A	0.175	A	0.291	A	0.252
	A	0.233	A	0.241	A	0.150
6. EB SR-91 Fwy e/o I-710 Fwy WB SR-91 Fwy e/o I-710 Fwy	D	0.860	F	1.008	F	1.165
	F	1.202	F	1.084	F	1.056
7. EB SR-91 Fwy w/o I-710 Fwy WB SR-91 Fwy w/o I-710 Fwy	C	0.691	D	0.847	E	0.988
	E	0.972	D	0.852	D	0.814
<p>Notes:</p> <p>(a) All-way stop-controlled intersection (weighted average intersection delay in seconds)</p> <p>(b) Signalized intersection (V/C reported)</p> <p>(c) Stop controlled on minor street only (calculated average delay on minor approach in seconds)</p> <p>(d) Intersection does not currently exist or will be significantly modified prior to project opening</p> <p>w/o=West of; e/o=east of; n/o=north of; s/o=south of</p>						

3.1.3 Regulatory Setting

The traffic analysis was prepared in conformance with the Port Protocol, which complies with City of Long Beach procedures and Los Angeles County Metropolitan Transportation Authority Traffic Impact Analysis (CMPTIA) procedures.

3.2 IMPACTS AND MITIGATION MEASURES

3.2.1 Significance Criteria

Impacts to ground transportation would be significant if the Project would:

TRANS-1 Increase an intersection's V/C ratio in accordance with the following guidelines:

LOS without the project	LOS or Change in V/C with the project
City/Port of Long Beach Guidelines	
A, B, C, or D	To E or F
E, F	0.02 or greater
City of Los Angeles Dept. of Transportation Guidelines	
C	≥ 0.040
D	≥ 0.020
E or F	≥ 0.010

TRANS-2 Cause an increase of 0.02 or more in the demand-to-capacity (D/C) ratio with a resulting LOS E or F at a CMP monitoring station or on non-CMP segments analyzed in this traffic study.

TRANS-3 Increase the demand for transit services beyond the supply of services available to the Project site.

TRANS-4 Increase rail activity in a manner that causes delays at study area at-grade railroad crossings.

3.2.2 Methodology

The nine intersections and seven freeway locations chosen for analysis of existing conditions were also used to forecast Year 2010 conditions. For years 2015 through 2030, those nine intersections were analyzed as ten intersections by separating the Pico Avenue and Ocean Boulevard Westbound On/Off Ramps into two intersections (on-ramp and off-ramp). The same seven freeway locations were analyzed for all years.

Similar to the existing traffic condition analysis, the LOS values for signalized intersections were determined by using the intersection capacity utilization (ICU) methodology. Unsignalized (stop-sign controlled) intersections were analyzed using methodologies contained in the Highway Capacity Manual in which LOS is based on average vehicular delay. Freeway segments are analyzed in accordance with the County of Los Angeles Congestion Management Plan (CMP). The CMP uses demand-to-capacity (D/C) ratio to determine LOS.

According to the CMP, a traffic impact analysis is required at a CMP arterial monitoring intersection, including freeway on- or off-ramps, where the proposed project would add 50 or more trips during either

the AM. or P.M. weekday peak hour. Traffic impact analysis for freeway segments is also required at CMP freeway monitoring locations where the proposed project would add 150 or more trips during either the A.M. or P.M. weekday peak hours.

The closest CMP arterial monitoring station to the Project is Alameda Street / Pacific Coast Highway (PCH). Since the Project-related trips do not exceed the CMP minimum threshold at that location, no CMP analysis of the Alameda/PCH station for future conditions was required. Therefore, no existing conditions analysis was performed for this intersection either.

The closest freeway monitoring stations include I-710 at Willow Street and I-110 at C-Street. The Project would add less than 150 trips at these two freeway monitoring locations, therefore a CMP analysis for these two freeway locations was not required.

The need for additional transit services and the project-related increase in demand for such services was evaluated. The project-related rail activity on the local rail lines and the impacts on at-grade crossings also were qualitatively evaluated.

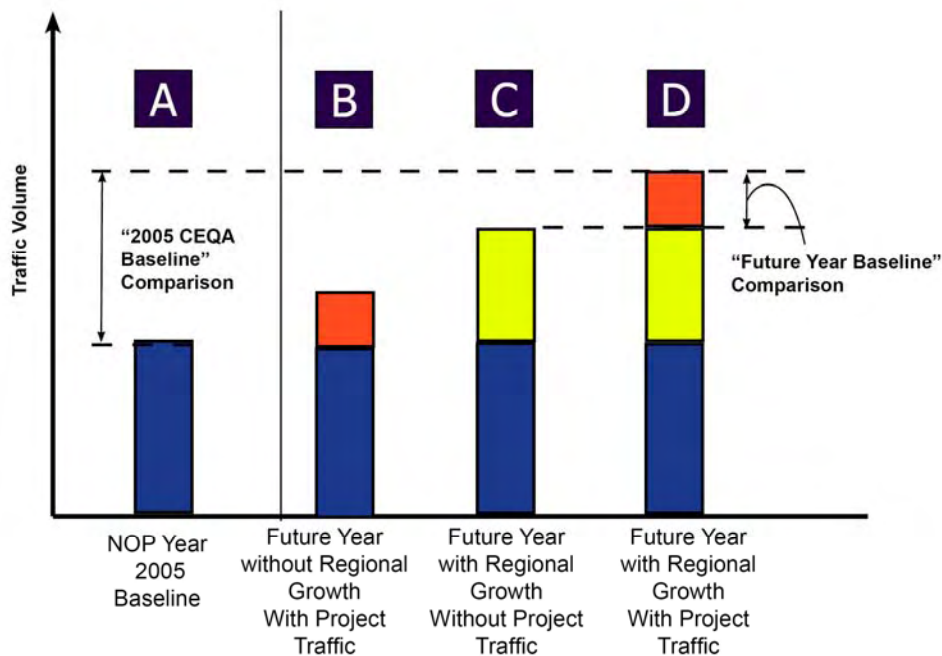
Analytical Framework

Comparison to Future Baseline

The first analysis was conducted to evaluate the effect of each alternative on traffic conditions in the context of future background traffic. These future-year traffic conditions, indicated by the column labeled “C” in Figure 3-3, includes the NOP Year 2005 traffic volumes plus other growth not related to the proposed Project, including traffic from approved and locally funded development projects, regional traffic growth, and traffic increases resulting from throughput growth at other terminals in both ports.

This analysis consists of comparing Column “D”, future conditions plus project-related traffic, to Column “C” in Figure 3-3. A separate analysis was conducted for each horizon year (2010, 2015, 2020, and 2030) and for each alternative. Impacts under this analysis were determined by using the significance criteria discussed above.

Figure 3-3 Analytical Framework for Comparison



Comparison to CEQA Baseline

The second analysis was conducted to evaluate the effect of each alternative on traffic conditions as they existed at the time of the NOP, i.e., the CEQA Baseline. These traffic conditions, indicated by the column labeled "A" in Figure 3-3, reflect the traffic conditions present in the NOP year of 2005, with no additional growth.

This analysis consists of comparing Column "D", future conditions plus project-related traffic, to Column "A", year 2005 conditions. A separate analysis was conducted for each horizon year (2010, 2015, 2020, and 2030) and for each alternative. Impacts under this analysis were determined by using the significance criteria discussed above.

Comparison to NEPA Baseline

The third analysis was conducted to evaluate the effect of each alternative on traffic conditions in the context of the NEPA Baseline. The NEPA Baseline differs from the CEQA Baseline because it is not fixed in time but rather reflects what would happen in the absence of federal permits.

For this analysis, each alternative, except the Landside Improvements Alternative, was compared to the NEPA Baseline. Because the NEPA Baseline corresponds to the Landside Improvements Alternative, no comparison was necessary. This analysis consists of comparing future conditions plus project-related traffic to the NEPA Baseline for each corresponding year. A separate analysis was conducted for each horizon year (2010, 2015, 2020, and 2030) and for each alternative. Impacts under this analysis were determined by using the significance criteria discussed above.

Modeling and Model Inputs

This analysis uses the Port Travel Demand Model which was originally developed for the *Ports of Long Beach and Los Angeles Transportation Study* (July 2001). The Port model is based on the Southern California Association of Governments (SCAG) Regional Travel Demand Forecasting Model.

The SCAG model was adjusted to incorporate proposed/planned developments in the vicinity of the project that were not defined in the original SCAG model forecasts. A list of the additional non-Port projects is provided in the Appendix. The use of the SCAG model to account for regional and sub-regional traffic growth beyond the general proximity of the project site is an accepted practice by agencies/jurisdictions. The SCAG model is used for the region's federally required RTP, as well as the SIP and SCAB AQMP.

Vehicular Trip Generation

The proposed Project site is currently a fully functional terminal, which serves as a destination and origin of vehicular trips. The terminal will remain in operation during the construction period of the proposed Project. New vehicular trips will be generated by activities in the terminal during and after each phase of the proposed Project. Since the construction is anticipated to occur over twelve years, the Project vicinity will experience both construction-related automobile and truck trips, and new automobile and truck trips generated due to incremental completion of the proposed Project.

Construction-related traffic was estimated based on similar terminal construction projects in the POLB. The estimates for this Project include both worker and truck traffic and are based upon (1) the estimated size of the workforce, the number of work shifts, and the shift hours; and (2) the estimated number of construction-related truck trips to and from the Project site.

The workforce estimates assume, consistent with standard construction industry practice, that workers will arrive on-site before the A.M. peak-hour traffic and leave the jobsite before 4 p.m., the start of the P.M. peak-hour traffic. To yield the most conservative estimate, it is assumed that each worker will arrive separately without any ride-sharing or use of public transit.

The Project will require only limited construction-related daily truck deliveries. Since earthwork and dredging will be done primarily within the Project site, the Project is not expected to require recurrent heavy trucks hauling material to and from the site.

In order to more accurately estimate the performance of a roadway carrying a mixed traffic stream of automobiles and trucks, adjustments were applied to trucks to account for their sizes, accelerations, and braking capabilities. For purposes of this traffic analysis, each truck trip generated by the Project is converted to passenger-car equivalents (PCE) by applying a factor of 2.0, per the Port Protocol.

The daily truck trips associated with equipment are estimated to equal approximately ten percent (10%) of the daily trips by construction workers. Additionally, construction-related truck trips expected during peak analysis hours were assumed to be ten percent (10%) of the total daily truck trips, based on Chapter 22 of the Highway Capacity Manual.

Future-year terminal traffic was estimated by using the QuickTrip model. QuickTrip is a spreadsheet truck trip generation model that was developed for use in the *Ports of Long Beach and Los Angeles Transportation Study* (July 2001). QuickTrip estimates terminal truck flows by hour of the day based on Twenty-foot Equivalent Units (TEUs) throughput and using assumed terminal operating parameters. For each of the analysis years, the terminal's operating parameters, which influence the amount of truck traffic generated by the terminal, were varied as follows:

- increased activity;
- expanded terminal operating hours (more second shift and hoot [night-time] shift activity);
- increased on-dock rail use; and
- increased dual transactions within the terminal

This approach is based on the expectation that with the increase in forecasted cargo volume (throughput), the terminals would be forced to change their operations. Some of these changes have already started to occur. For example, terminals have increased hoot shift activity and gate activity during non-peak hours in reaction to the Pier-Pass program. It should be noted that increased throughput does not directly translate into increased truck trips proportionately due to the different terminal operating parameters.

Tables 3-6 and 3-7 summarize the work shift hours and mode splits assumed for all of the analysis scenarios respectively. All employee trip rates for the various alternatives are based upon the *Ports of Long Beach and Los Angeles Transportation Study* (July 2001) trip generation methodology which estimates employment trips based on TEU throughput. The TEU throughput estimates for this analysis are set forth in Table 2-1.

Vehicular Trip Distribution

Port traffic was estimated and assigned to the roadway system using trip generation methodologies contained in the *Ports of Long Beach and Los Angeles Transportation Study* (July 2001). The truck trip distribution patterns were developed based upon origin-destination surveys conducted by the POLB/POLA in December 2004. Employee trip distribution patterns were developed based on longshoremen zip code data.

Rail Trip Generation

The proposed Project is expected to utilize the rail system to move a portion of the anticipated increase in container throughput. A rail yard capacity analysis was conducted for the terminal to ensure that the railyard facilities could accommodate the projected on-dock container volumes. The number of rail trips generated by the proposed Project and alternatives for the analysis years was calculated using the methodologies contained in the San Pedro Bay Ports Rail Study Update (December 2006) and are presented in Table 3-8. To provide a worst case truck estimate over the regional roadway network, a constrained rail network was assumed, i.e., no future off-port improvements to the rail infrastructure are included in the analysis.

Table 3-6: Work Shifts			
Year	Percentage of Throughput in Each Shift		
	Day	Second	Night
2010	70%	30%	0%
2015	65%	30%	5%
2020	60%	20%	20%
2030	60%	20%	20%

Table 3-7: Mode Splits¹ Under Alternatives And Analysis Years								
Year	Percentage of Total Throughput							
	No Project		345-Acre		315-Acre		Landside Improvements/ NEPA Baseline	
	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck
2010	10.1%	89.9%	10.0%	90.0%	10.0%	90.0%	10.0%	90.0%
2015	10.1%	89.9%	31.0%	69.0%	31.4%	68.6%	21.9%	78.1%
2020	10.1%	89.9%	30.7%	69.3%	35.0%	65.0%	24.1%	75.9%
2030	10.1%	89.9%	26.3%	73.7%	30.4%	69.6%	20.8%	79.2%

¹ In order to present a worst case analysis for truck trips no future off-site rail improvements were assumed to be in place, i.e., a constrained rail network was assumed.

Table 3-8: Number Of Daily Train¹ Trips Generated			
	345-Acre	315-Acre	Landside Improvements/ NEPA Baseline
2010	2	2	2
2015	4	4	3
2020	5	5	4
2030	5	5	4

¹ A train consists of 25 cars

3.2.3 Alternative 1 – 345-Acre Alternative (the Project)

Construction Impacts

The 345-Acre Alternative would generate more construction-related traffic than any of the other alternatives due to the scope of the proposed Project. Therefore, the analysis of construction-related traffic impact for each alternative uses the vehicular traffic estimates developed for the 345-Acre Alternative in order to generate the most conservative estimate of traffic impacts due to construction at the site.

Estimated Vehicular Trips during Construction

The Project would be constructed in two phases with a total of nine stages over a span of nearly twelve years. Although construction activities would vary over this time period, they likely will peak during Phase 1 Stages 1-4 in the first six years.

Using the methodology described in Section 3.2.2, potential construction traffic impacts were analyzed based on a construction workforce of 182 workers. A workforce of this size could result in up to 436 daily PCE trips (364 PCE auto trips plus 72 PCE truck trips converted from 36 truck trips). The workers could generate a maximum of 182 inbound trips during early mornings and a maximum of 182 outbound trips in mid-afternoons, assuming none of these trips would be shifted to public transit.

In order to estimate the potential impact of construction-related traffic during Phase 1, the maximum daily construction-related PCE are compared against the year 2005 (CEQA Baseline) trips to derive the maximum share of construction trips on study locations. Based on the 436 construction PCE's and a 2005 trip estimate of 10,994 PCE's, the estimated maximum percentage contribution of construction traffic to the background traffic volume would result in an increase of approximately 3.8 percent PCE's.

Impact TRANS-1: Construction would result in short-term, temporary increases in auto and truck traffic at the study intersections.

Future Baseline Impact Determination

This analysis assumes that all study intersections would experience a 3.8 percent increase in traffic volumes from construction activities. Therefore, the most conservative approach was to increase the volume to capacity ratio of each study intersection by 3.8 percent over the operational traffic for each analysis peak hour and horizon year up to 2020 when the construction would be complete.

As shown in Tables 3.9-1 to 3.9-3, construction is expected to have significant impacts on the following study intersections:

- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps ((2020)
- Pico Avenue and Pier D Street (2010)

Mitigation Measures

The following measures are recommended to mitigate traffic impacts due to construction-related traffic:

MM TRANS-1: Prior to beginning construction, the construction contractor shall prepare a detailed traffic management plan, which in addition to work shift start/end times, shall include the following: detour plans, coordination with emergency services, coordination with adjacent property owners and tenants, advanced notice of temporary parking loss, identification of temporary parking replacement or alternative adjacent parking within a reasonable walking distance, use of designated haul routes, use of truck staging areas, observance of hours of operations restrictions and appropriate signing for construction activities. The traffic management plan shall be submitted to Port of Long Beach for approval before beginning construction.

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MM TRANS-2: Consistent with City of Long Beach Department of Public Works practice, the construction-related traffic to/from the Project site will be restricted during morning and afternoon peak commute hours. Furthermore, no closure of major road corridors will be permitted as a result of construction activities.

MM TRANS-3: Install a signal at the intersection of Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps.

MM TRANS-4: Install a signal at the intersection of Pico Avenue and Pier D Street

With the application of **MM TRANS-1 through MM TRANS-4**, the intersection impacts would be reduced to less than significant. The mitigated levels of service are presented in Table 3-12.

Because **MM TRANS-3 and MM TRANS-4** are local measures, construction work related to these improvements can be completed primarily during the off-peak hours. Hence, there will not be any secondary impacts associated with the construction of these mitigation measures.

Significance of Impacts after Mitigation

Impacts would be mitigated to a level less than significant.

CEQA Baseline Impact Determination

The impact analysis under CEQA Baseline conditions uses the same methodology as the Future Baseline analysis.

As shown in Tables 3.10-1 to 3.10-3, construction is expected to have significant impacts on the following study intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza (2010)
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps (2020)
- Pico Avenue and Pier D Street (2020)

Mitigation Measures

In addition to proposed construction mitigation measures **MM TRANS-1 through MM TRANS-4** identified under the Future Baseline analysis, the CEQA Baseline comparison would require the following additional mitigation measure:

MM TRANS-5: Install a signal at the intersection of Pico Avenue/Pier G Avenue and Harbor Plaza.

With the application of **MM TRANS-1 through MM TRANS-5**, the intersection impacts would be reduced to less than significant. The mitigated levels of service are presented in Table 3-12.

Because **MM TRANS-3 and MM TRANS-5** are local measures, construction work related to these improvements can be completed primarily during the off-peak hours. Hence, there will not be any secondary impacts associated with the construction of these mitigation measures.

Significance of Impacts after Mitigation

Impacts would be mitigated to a level less than significant.

NEPA Baseline Impact Determination

The impact analysis under NEPA Baseline conditions uses the same methodology as the Future Baseline analysis.

As shown in Tables 3.11-1 to 3.11-3, construction is expected to have significant impacts on the following study intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza (2010)
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps (2020)
- Pico Avenue and Pier D Street (2020)

Mitigation Measures

The proposed CEQA Baseline construction mitigation measures **MM TRANS-1 through MM TRANS-5** would apply to the NEPA Baseline as well.

With the application of **MM TRANS-1 through MM TRANS-5**, the intersection impacts would be reduced to less than significant. The mitigated levels of service are presented in Table 3-12.

Significance of Impacts after Mitigation

Impacts would be mitigated to a level less than significant.

Impact TRANS-2: Additional traffic generated by construction activities will have short-term significant impacts on highway locations in the study area.

Future Baseline Impact Determination

The proposed Project's construction traffic would have short-term significant impacts on study highway segments up to the horizon year 2020. To be conservative, the same highway segments identified under the operational analysis are assumed to be impacted by the increase in construction-related traffic. Therefore, as shown in Table 3-19, the proposed Project is expected to have significant impacts on the following study highway segments:

- I-405 south of I-710, northbound only
- I-710 between Willow Street and PCH, northbound only
- SR-91 east of I-710, both directions

Tables 3-20.1 through 3-20.3 summarize the operating conditions at each study highway segment in Years 2010, 2015, and 2020 compared to the Future Baseline.

Mitigation Measures

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

Table 3-9.1: 345-Acre Alternative - Construction-Related Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2010 Future Year Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	D	32.8	F	84.6	E	36.9	C	22.2	F	68.6	D	31.1	-10.6	-16.0	-5.8	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	10.3	B	12.3	B	12.3	B	10.9	B	12.1	B	12.6	0.6	-0.2	0.3	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.4	A	8.3	B	11.8	B	10.4	B	13.8	B	12.8	1.0	5.5	1.0	No
4. Pico Avenue and Broadway (c)	B	10.2	B	10.5	A	9.3	B	11.3	B	11.8	B	10.1	1.1	1.3	0.8	No
5. Pico Avenue and Pier D Street (a)	C	23.4	B	14.3	B	12.0	D	29.7	E	42.8	C	21.5	6.3	28.5	9.5	Yes (MD)
6. Pico Avenue and Pier C Street (b)	A	0.333	A	0.280	A	0.241	A	0.385	A	0.340	A	0.295	0.052	0.060	0.054	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.536	A	0.476	A	0.509	A	0.583	A	0.565	A	0.580	0.047	0.089	0.071	No
8. Anaheim Way and Pier B Street (a)	A	7.2	A	7.6	A	7.9	A	7.5	A	7.9	A	8.0	0.3	0.3	0.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.296	A	0.262	A	0.391	A	0.313	A	0.267	A	0.407	0.017	0.005	0.016	No

Notes:

(a) all-way stop-controlled intersection; (weighted average delay in seconds for entire intersection reported)

(b) signalized intersection (V/C ratio is reported)

(c) stop controlled on minor street only (worst minor street approach delay in seconds is reported)

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-9.2: 345-Acre Alternative - Construction-Related Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2015 Future Year Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	E	38.5	F	95.1	E	39.2	C	21.7	F	75.4	C	23.1	-16.8	-19.7	-16.1	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	11.6	C	15.8	C	17.2	B	13.1	B	15.5	C	19.9	1.5	-0.3	2.7	No
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	A	10.0	C	16.2	B	10.2	B	13.1	C	18.3	C	19.4	3.1	2.1	9.2	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	8.4	A	9.1	A	9.3	A	9.2	A	9.9	B	10.3	0.8	0.8	1.0	No
4. Pico Avenue and Broadway (c)	B	10.1	B	11.5	B	10.2	B	11.4	B	12.6	B	10.7	1.3	1.1	0.5	No
5. Pico Avenue and Pier D Street (a)	D	25.6	C	15.9	B	13.1	D	26.2	C	24.2	C	17.7	0.6	8.3	4.6	No
6. Pico Avenue and Pier C Street (b)	A	0.350	A	0.314	A	0.288	A	0.405	A	0.352	A	0.335	0.055	0.038	0.047	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.565	A	0.581	A	0.543	B	0.616	B	0.630	B	0.607	0.051	0.049	0.064	No
8. Anaheim Way and Pier B Street (a)	A	7.9	A	8.1	A	8.4	A	8.3	A	8.4	A	9.0	0.4	0.3	0.6	No
9. Farragut Avenue and Anaheim Street (b)	A	0.356	A	0.349	A	0.476	A	0.376	A	0.359	A	0.492	0.020	0.010	0.016	No

Notes:

(a) all-way stop-controlled intersection; (weighted average delay in seconds for entire intersection reported)

(b) signalized intersection (V/C ratio is reported)

(c) stop controlled on minor street only (worst minor street approach delay in seconds is reported)

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-9.3: 345-Acre Alternative - Construction-Related Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2020 Future Year Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	63.4	F	108.5	F	54.8	F	58.8	F	104.4	E	38.9	-4.6	-4.1	-15.9	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	14.8	C	19.2	D	28.1	C	17.3	C	19.9	E	41.4	2.5	0.7	13.3	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	11.0	C	18.3	C	20.1	C	17.1	C	22.4	D	30.7	6.1	4.1	10.6	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	8.8	A	9.6	A	9.7	A	9.8	B	10.7	B	11.5	1.0	1.1	1.8	No
4. Pico Avenue and Broadway (c)	B	10.9	B	12.4	B	10.6	B	12.5	B	14.2	B	11.4	1.6	1.8	0.8	No
5. Pico Avenue and Pier D Street (a)	D	29.4	C	16.9	C	15.0	E	43.1	D	34.7	C	24.9	13.7	17.8	9.9	Yes (AM)
6. Pico Avenue and Pier C Street (b)	A	0.388	A	0.352	A	0.345	A	0.439	A	0.402	A	0.404	0.051	0.050	0.059	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.626	A	0.549	A	0.572	B	0.650	A	0.592	B	0.649	0.024	0.043	0.077	No
8. Anaheim Way and Pier B Street (a)	B	10.6	A	9.9	B	10.8	B	11.6	B	11.0	B	12.9	1.0	1.1	2.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.436	A	0.441	B	0.607	A	0.487	A	0.508	B	0.679	0.051	0.067	0.072	No

Notes:

(a) all-way stop-controlled intersection; (weighted average delay in seconds for entire intersection reported)

(b) signalized intersection (V/C ratio is reported)

(c) stop controlled on minor street only (worst minor street approach delay in seconds is reported)

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-10.1: 345-Acre Alternative - Construction-Related Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2005 CEQA Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	C	22.2	F	68.6	D	31.1	8.2	46.9	16.5	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	10.9	B	12.1	B	12.6	1.0	0.3	1.3	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5	B	10.4	B	13.8	B	12.8	0.8	3.9	3.3	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	11.3	B	11.8	A	10.1	0.7	-0.9	-1.4	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	29.7	E	42.8	C	21.5	19.9	-4.5	-85.3	No
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.385	A	0.340	A	0.295	0.154	0.077	0.029	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	A	0.583	A	0.565	A	0.580	0.227	0.180	0.154	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	A	7.5	A	7.9	A	8.0	-0.6	-0.9	-1.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.313	A	0.267	A	0.407	-0.035	-0.066	-0.043	No

Notes:

(a) all-way stop-controlled intersection; (weighted average delay in seconds for entire intersection reported)

(b) signalized intersection (V/C ratio is reported)

(c) stop controlled on minor street only (worst minor street approach delay in seconds is reported)

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-10.2: 345-Acre Alternative - Construction-Related Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2005 CEQA Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	C	21.7	F	75.4	C	23.1	7.7	53.7	8.5	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	13.1	B	15.5	C	19.9	3.2	3.7	8.6	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5	-	-	-	-	-	-	-	-	-	-
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	B	13.1	C	18.3	C	19.4	N/A	N/A	N/A	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	A	9.2	A	9.9	A	10.3	N/A	N/A	N/A	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	11.4	B	12.6	B	10.7	0.8	-0.1	-0.8	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	26.2	C	24.2	C	17.7	16.4	-23.1	-89.1	No
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.405	A	0.352	A	0.335	0.174	0.089	0.069	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	A	0.616	B	0.630	A	0.607	0.260	0.245	0.181	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	A	8.3	A	8.4	A	9.0	0.2	-0.4	-0.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.376	A	0.359	A	0.492	0.028	0.026	0.042	No

Notes:

(a) all-way stop-controlled intersection; (weighted average delay in seconds for entire intersection reported)

(b) signalized intersection (V/C ratio is reported)

(c) stop controlled on minor street only (worst minor street approach delay in seconds is reported)

(d) intersection configuration different in 2005 so no direct comparison is available AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-10.3: 345-Acre Alternative - Construction-Related Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2005 CEQA Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	F	56.6	F	100.6	E	37.5	42.6	78.9	22.9	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	C	16.7	C	19.2	E	39.9	6.8	7.4	28.6	Yes (PM)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5										
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	C	16.5	C	21.6	D	29.6	(d)	(d)	(d)	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	A	9.4	B	10.3	B	11.1	(d)	(d)	(d)	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	12.0	B	13.7	B	11.0	1.4	1	-0.5	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	E	41.5	D	33.4	C	24.0	31.7	-13.9	-82.8	Yes (AM)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.423	A	0.387	A	0.389	0.192	0.124	0.123	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.626	A	0.570	B	0.625	0.27	0.19	0.199	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	B	11.2	B	10.6	B	12.4	3.1	1.8	3.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.469	A	0.489	B	0.654	0.121	0.156	0.204	No

Notes:

(a) all-way stop-controlled intersection; (weighted average delay in seconds for entire intersection reported)

(b) signalized intersection (V/C ratio is reported)

(c) stop controlled on minor street only (worst minor street approach delay in seconds is reported)

(d) intersection configuration different in 2005 so no direct comparison is available AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-11.1: 345-Acre Alternative - Construction-Related Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2010 NEPA Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	C	21	F	63.5	D	28.2	C	21.4	F	66.1	D	30	0.4	2.6	1.8	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	10.6	B	11.7	B	12.1	B	10.5	B	11.7	B	12.1	-0.1	0	0	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.9	B	13.1	B	12.3	B	10	B	13.3	B	12.3	0.1	0.2	0	No
4. Pico Avenue and Broadway (c)	B	10.8	B	11.2	A	9.7	B	10.9	B	11.4	A	9.7	0.1	0.2	0	No
5. Pico Avenue and Pier D Street (a)	D	25.5	E	38.8	C	20.7	D	28.6	E	41.2	C	20.7	3.1	2.4	0	Yes (MD)
6. Pico Avenue and Pier C Street (b)	A	0.37	A	0.325	A	0.283	A	0.371	A	0.328	A	0.284	0.001	0.003	0.001	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.556	A	0.544	A	0.558	A	0.562	A	0.544	A	0.559	0.006	0	0.001	No
8. Anaheim Way and Pier B Street (a)	A	7.2	A	7.6	A	7.8	A	7.2	A	7.6	A	7.7	0	0	-0.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.358	A	0.333	A	0.443	A	0.368	A	0.329	A	0.449	0.010	-0.004	0.006	No

Notes:

(a) all-way stop-controlled intersection; (weighted average delay in seconds for entire intersection reported)

(b) signalized intersection (V/C ratio is reported)

(c) stop controlled on minor street only (worst minor street approach delay in seconds is reported)

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-11.2: 345-Acre Alternative - Construction-Related Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2015 NEPA Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	C	22.8	F	69.5	D	26.6	C	20.9	F	72.6	C	22.3	-1.9	3.1	-4.3	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	12.5	C	15.1	C	19	B	12.6	B	14.9	C	19.2	0.1	-0.2	0.2	No
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	12.9	C	18.2	C	19.1	B	12.6	C	17.6	C	18.7	-0.3	-0.6	-0.4	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9	A	9.8	B	10.1	A	8.9	A	9.5	A	9.9	-0.1	-0.3	-0.2	No
4. Pico Avenue and Broadway (c)	B	11.1	B	12.5	B	10.4	B	11	B	12.1	B	10.3	-0.1	-0.4	-0.1	No
5. Pico Avenue and Pier D Street (a)	D	27.6	D	30.3	C	19.1	D	25.2	C	23.3	C	17.1	-2.4	-7	-2	No
6. Pico Avenue and Pier C Street (b)	A	0.398	A	0.346	A	0.329	A	0.39	A	0.339	A	0.323	-	-	-	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.594	B	0.626	A	0.6	A	0.593	B	0.607	A	0.585	-	-	-	No
8. Anaheim Way and Pier B Street (a)	A	8	A	8.2	A	8.4	A	8	A	8.1	A	8.7	0	-0.1	0.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.425	A	0.405	A	0.518	A	0.426	A	0.408	A	0.532	0.001	0.003	0.014	No

Notes:

(a) all-way stop-controlled intersection; (weighted average delay in seconds for entire intersection reported)

(b) signalized intersection (V/C ratio is reported)

(c) stop controlled on minor street only (worst minor street approach delay in seconds is reported)

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-11.3: 345-Acre Alternative - Construction-Related Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2020 NEPA Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	59.4	F	102.2	E	36.3	F	56.6	F	100.6	E	37.5	-2.8	-1.6	1.2	Yes (PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	14.6	C	19.4	E	35.8	C	16.7	C	19.2	E	39.9	2.1	-0.2	4.1	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	C	19.1	C	21.5	D	27.2	C	16.5	C	21.6	D	29.6	-2.6	0.1	2.4	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9.9	B	10.3	B	11.1	A	9.4	B	10.3	B	11.1	-0.5	0	0	No
4. Pico Avenue and Broadway (c)	B	12.5	B	13.8	B	10.7	B	12	B	13.7	B	11	-0.5	-0.1	0.3	No
5. Pico Avenue and Pier D Street (a)	E	43.9	D	34.1	C	24.3	E	41.5	D	33.4	C	24	-2.4	-0.7	-0.3	No
6. Pico Avenue and Pier C Street (b)	A	0.431	A	0.384	A	0.371	A	0.423	A	0.387	A	0.389	-0.008	0.003	0.018	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.651	B	0.631	B	0.632	B	0.626	A	0.57	B	0.625	0.025	0.061	0.007	No
8. Anaheim Way and Pier B Street (a)	B	12.7	B	11.4	B	12.7	B	11.2	B	10.6	B	12.4	-1.5	-0.8	-0.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.508	A	0.506	B	0.609	A	0.469	A	0.489	B	0.654	-0.039	-0.017	0.045	No

Notes:

(a) all-way stop-controlled intersection; (weighted average delay in seconds for entire intersection reported)

(b) signalized intersection (V/C ratio is reported)

(c) stop controlled on minor street only (worst minor street approach delay in seconds is reported)

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-12: 345-Acre Alternative - Construction-Related Mitigated Intersection Level Of Service Analysis						
Year	8-9 a.m.		2-3 p.m.		4-5 p.m.	
	LOS	V/C Delay	LOS	V/C Delay	LOS	V/C Delay
Pico Ave / Pier G Ave and Harbor Plaza						
2010	A	0.569	B	0.721	A	0.588
2015	A	0.556	C	0.764	A	0.620
2020	B	0.722	D	0.838	B	0.710
Pico Ave / Pier E St and Ocean Blvd EB On/Off-Ramps						
2010	A	0.366	A	0.435	A	0.494
2015	A	0.458	A	0.529	B	0.689
2020	A	0.535	B	0.601	D	0.841
Pico Ave / Pier D St						
2010	B	0.686	B	0.665	B	0.606
2015	B	0.649	A	0.588	A	0.556
2020	C	0.700	B	0.619	B	0.603

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, it should be noted that the POLB is currently participating in the following on-going regional transportation programs which are intended to address future regional traffic growth and resulting congestion on area freeways:

I-710 Corridor EIS/EIR 2008

The Port is presently working with Caltrans, Metro, SCAG, and Gateway Cities Council of Governments (COG) (of which the Port and City of Long Beach are member agencies) on the I-710 Corridor EIR/EIS and Caltrans Project Report. POLB has committed \$5 million to this \$34-million, 42-month study, which was commenced in early 2008. This project entails analyzing potential impacts and advancing preliminary engineering of the Locally Preferred Strategy (LPS) adopted by the communities and participating agencies in 2004/2005. The LPS consists of dedicated truck lanes commencing at Ocean Boulevard, additional mixed flows on I-710 between Ocean Boulevard and Washington Street, and numerous freeway to freeway and arterial street interchange improvements. The POLB, City of Long Beach, and Gateway Cities COG are aggressively seeking federal, State, and Metro funds for the I-710 Corridor.

Advanced Transportation Management, Information and Security (ATMIS)

The POLB/POLA will also be implementing an Intelligent Transportation Systems project by 2009. This \$11-million program will provide real-time information to travelers in the port vicinity and on adjacent regional transportation facilities. The ATMIS System will monitor vehicle traffic conditions through the use of closed circuit television cameras and vehicle detection devices at the terminal gates. The ATMIS System will distribute the traffic information to truck drivers, motorists, other agencies, and intermodal industry information systems through the use of strategically placed changeable message signs, internet video, and appropriate data sharing means. While the ATMIS system will assist in addressing recurring daily congestion, its major benefit will be providing information to inform drivers, including trucks exiting the Port gates, of non-recurring incidents and congestion and to allow them to choose, if possible, alternative routes to avoid congested areas.

The ATMIS System will be a major component in an overall intelligent transportation systems (ITS) program for the I-710 Corridor/Gerald Desmond Bridge Gateway Program. This planned project will help to mitigate the I-710 impacts of the Project.

SR-91 Corridor Study

The Gateway Cities COG has begun a SR-91 Corridor Study to explore options that will improve traffic conditions on this freeway. POLB continues to work in concert with the COG, Caltrans, and other agencies to find solutions to improving operating conditions on SR-91.

No additional feasible mitigation measures are available at this time.

Significance of Impacts after Mitigation

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

CEQA Baseline Impact Determination

The proposed Project's construction traffic would have short-term significant impacts on study highway segments up to the horizon year 2020. To be conservative, the same highway segments identified under the operational analysis are assumed to be impacted by the increase in construction-related traffic. Therefore, as shown in Table 3-19, the proposed Project is expected to have significant impacts on the all but the following three study highway segments:

- I-405 Freeway n/o I-710 Freeway, both Directions (starting 2010)
- I-405 Freeway s/o I-710 Freeway, both directions (starting 2010)
- I-710 Freeway between Willow Street and Pacific Coast Highway, both directions (starting 2010)
- SR-91 Freeway e/o I-710 Freeway, both directions (starting 2010)
- SR-91 Freeway w/o I-710 Freeway, both directions (starting 2015)

Mitigation Measures

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, it should be noted that the POLB is currently participating in the on-going regional transportation programs, as described above, which are intended to address future regional traffic growth and resulting congestion on area freeways.

No additional feasible mitigation measures are available at this time.

Significance of Impacts after Mitigation

It can be assumed that until Caltrans implements improvements on the I-710, I-405, and SR-91, highway segments, the Project will have significant impacts at these locations. Therefore, there will be significant and unavoidable highway impacts associated with the Project.

NEPA Baseline Impact Determination

To be conservative in the assessment of construction impacts, the same highway segments identified under the operational analysis are assumed to be impacted by the increase in construction-related traffic. Tables 3-22.1 through 3-22.3 summarize the operating conditions at each study highway segment in Years 2010, 2015, and 2020 compared to the NEPA Baseline.

As shown in Table 3-19 the proposed Project is expected to have significant impact on the following study highway segment by using the NEPA Baseline comparison:

- I-405 south of I-710, northbound only

Mitigation Measures

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. The POLB fair share calculations are set forth in Table 3-23. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, it should be noted that the POLB is currently participating in the on-going regional transportation programs, as described above, which are intended to address future regional traffic growth and resulting congestion on area freeways.

No additional feasible mitigation measures are available at this time.

Significance of Impacts after Mitigation

Until Caltrans implements the I-710 and SR-91 improvements, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

Impact TRANS-3: Construction would not increase the demand for transit services.

Future Baseline Impact Determination

The construction-related activities are not expected to affect public transit because the only public transit in the vicinity of the Project site is a tourist-oriented line that runs from downtown Long Beach to the Queen Mary. Due to the lack of available public transit options, this analysis has assumed the use of public transit by construction workers to be negligible. Therefore, the proposed Project is not expected to cause any increase in demand for transit services.

Mitigation Measures

Because the impact on transit services would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on transit services would be less than significant.

CEQA Baseline Impact Determination

The construction-related activities are not expected to affect public transit because the only public transit in the vicinity of the Project site is a tourist-oriented line that runs from downtown Long Beach to the Queen Mary. Due to the lack of available public transit options, this analysis has assumed the use of public transit by construction workers to be negligible. Therefore, the proposed Project is not expected to cause any increase in demand for transit services.

Mitigation Measures

Because the impact on transit services would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on transit services would be less than significant.

NEPA Baseline Impact Determination

The construction-related activities are not expected to affect public transit because the only public transit in the vicinity of the Project site is a tourist-oriented line that runs from downtown Long Beach to the Queen Mary. Due to the lack of available public transit options, this analysis has assumed the use of public transit by construction workers to be negligible. Therefore, the proposed Project is not expected to cause any increase in demand for transit services.

Mitigation Measures

Because the impact on transit services would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on transit services would be less than significant.

Impact TRANS-4: Construction would not result in any increases in rail activity.

Future Baseline Impact Determination

The construction-related activities are not expected to use the rail services. There are currently two grade crossings in the port vicinity. Because the contractor will propose construction truck routes to avoid the grade crossings in order to minimize delays, the additional traffic associated with construction will be negligible at the grade crossings. Therefore, the proposed Project is not expected to have a significant effect on rail services nor on vehicular delays at the two grade crossings.

Mitigation Measures

Because the impacts on the rail services and grade crossings would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on rail activity and at-grade railroad crossings would be less than significant.

CEQA Baseline Impact Determination

The construction-related activities are not expected to use the rail services. There are currently two grade crossings in the port vicinity. Because the contractor will propose construction truck routes to avoid the grade crossings in order to minimize delays, the additional traffic associated with construction will be negligible at the grade crossings. Therefore, the proposed Project is not expected to have a significant effect on rail services nor on vehicular delays at the two grade crossings.

Mitigation Measures

Because the impacts on the rail services and grade crossings would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on rail activity and at-grade railroad crossings would be less than significant.

NEPA Baseline Impact Determination

The construction-related activities are not expected to use the rail services. There are currently two grade crossings in the port vicinity. Because the contractor will propose construction truck routes to avoid the grade crossings in order to minimize delays, the additional traffic associated with construction will be negligible at the grade crossings. Therefore, the proposed Project is not expected to have a significant effect on rail services nor on vehicular delays at the two grade crossings.

Mitigation Measures

Because the impacts on the rail services and grade crossings would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on rail activity and at-grade railroad crossings would be less than significant.

Operational Impacts

Traffic levels related to the 345-Acre Alternative were developed using the "QuickTrip" truck generation model in order to determine potential impacts of the proposed Project at study locations. The trip generation estimates were developed based on the assumed operating parameters, previously presented in Section 3.2.2. The net increase in truck trip generation takes into account the increased percent of cargo moved via the expanded on-dock rail facilities. A rail yard capacity analysis, per the methodologies contained in the San Pedro Bay Rail Study Update (December, 2006), was conducted for the expanded terminal to ensure that the proposed new rail yard could accommodate the projected on-dock container volumes.

The proposed Project trip generation estimates are summarized in Table 3-13. It is important to note that for future years, peak hour trips do not increase proportionately with TEU growth. This is because in future years, on-dock rail usage will increase and work shift splits will change as described above.

Impact TRANS-1: Additional traffic generated by the Project would have significant impacts at the study area intersections.

As described in section 3.2.2, Project impacts associated with the Future Baseline were determined by comparing the future without- and with-Project traffic conditions. The Project impacts associated with the CEQA Baseline were determined by comparing the future with-Project traffic conditions to the CEQA Baseline. The impacts associated with the NEPA Baseline were determined by comparing the future with-project traffic conditions to the NEPA Baseline.

Table 3-14 summarizes the intersection and time periods by analysis year where the project is expected to have significant impacts under the Future Year, CEQA, and NEPA Baselines.

Future Baseline Impact Determination

A detailed analysis using the Future Baseline was performed to assess the Project's impact on study intersections. Tables 3-15.1 through 3-15.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the Future Baseline.

As indicated in Table 3-14 the Project will have significant impacts at the following four study area intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp

- Pico Avenue and Pier D Street

Mitigation Measures

In addition to **MM TRANS-3 through MM TRANS-5**, the following intersection traffic control measure would mitigate project-related impacts:

MM TRANS-6: Install a signal at the intersection of Pico Avenue and Ocean Blvd WB Off-Ramp.

Table 3-18 summarizes the intersection operating conditions with mitigation. Because **MM TRANS-3 through MM TRANS-6** are local measures, construction work related to these improvements can be completed primarily during the off-peak hours. Hence, there will not be any secondary impacts associated with the construction of these mitigation measures.

Significance of Impacts after Mitigation

Impacts will be less than significant with the implementation of the recommended mitigation measures.

CEQA Baseline Impact Determination

Tables 3-16.1 through 3-16.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the CEQA Baseline.

As indicated in Table 3-14, the proposed Project would have significant impacts at the following four study area intersections.

-
- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp
- Pico Avenue and Pier D Street

Mitigation Measures

By implementing **MM TRANS-3 through MM TRANS-6**, project-related impacts under the CEQA Baseline analysis will be less than significant.

Table 3-18 summarizes the intersection operating conditions with mitigation.

Significance of Impacts after Mitigation

Impacts will be less than significant with the implementation of the recommended mitigation measures.

Table 3-13: 345-Acre Proposed Project Trip Generation

Vehicle Type	8-9 a.m.			2-3 p.m.			4-5 p.m.			Daily
	In	Out	Total	In	Out	Total	In	Out	Total	
Year 2005 CEQA Baseline										
Pier D/E Container Terminal – Trucks	100	88	188	98	96	194	39	57	96	2,527
Pier D/E Container Terminal – Auto	44	30	74	16	28	44	27	80	107	536
Pier D/E Container Terminal Total	144	118	262	114	124	238	66	137	203	3,063
Pier D/E Container Terminal Total P.C.E.	200	165	365	177	187	364	110	124	234	4,471
Pier F Container Terminal – Trucks	122	131	253	151	187	338	96	129	225	4,002
Pier F Container Terminal – Auto	59	39	98	22	37	59	36	106	142	711
Pier F Container Terminal Total	181	170	351	173	224	397	132	235	367	4,713
Pier F Container Terminal Total P.C.E.	236	250	486	252	349	601	211	266	477	6,523
Total PCE Vehicles	436	415	851	429	536	965	321	390	711	10,994
Year 2010										
Pier D/E Container Terminal – Trucks	168	92	260	195	207	402	106	143	249	4,271
Pier D/E Container Terminal – Auto	72	72	144	27	46	73	67	131	198	876
Pier D/E Container Terminal Total	240	164	404	222	253	475	173	274	447	5,147
Pier D/E Container Terminal Total P.C.E.	353	201	554	353	338	691	243	333	576	8,053
Pier F Container Terminal – Trucks	108	61	169	126	133	258	68	92	160	2,760
Pier F Container Terminal – Auto	50	50	100	19	32	51	47	91	138	610
Pier F Container Terminal Total	158	111	269	145	165	309	115	183	298	3,370
Pier F Container Terminal Total P.C.E.	231	136	367	229	219	448	161	221	381	5,249
Total PCE Vehicles	584	337	921	582	557	1,139	404	554	957	13,302
Year 2015										
Pier D/E/F Container Terminal – Trucks	223	144	367	258	277	535	140	196	336	6,119
Pier D/E/F Container Terminal – Auto	163	163	326	60	103	163	151	294	445	1,972
Pier D/E/F Container Terminal Total	386	307	693	318	380	698	291	490	781	8,091
Total PCE Vehicles	534	366	900	491	493	984	384	570	954	12,256
Year 2020										
Pier D/E/F Container Terminal – Trucks	266	233	499	308	328	636	167	235	402	7,912
Pier D/E/F Container Terminal – Auto	210	210	420	78	132	210	194	378	572	2,537
Pier D/E/F Container Terminal Total	476	443	919	386	460	846	361	613	974	10,449
Total PCE Vehicles	653	538	1,192	592	593	1,185	473	709	1,182	15,834
Year 2030										
Pier D/E/F Container Terminal – Trucks	340	299	639	394	403	797	214	346	560	10,112
Pier D/E/F Container Terminal – Auto	245	245	490	91	154	245	227	441	668	2,961
Pier D/E/F Container Terminal Total	585	544	1,129	485	557	1,042	441	787	1,228	13,073
Total PCE Vehicles	812	667	1,479	749	721	1,470	584	929	1,513	19,956

Note: Truck trips have been converted to Passenger Car Equivalent (P.C.E.) using a factor of 1.1 for bobtails, 2.0 for chassis, and containers.

Table 3-14: 345-ACRE ALTERNATIVE - INTERSECTION SIGNIFICANT IMPACTS

Intersections		2010	2015	2020	2030
1. Pico Avenue/Pier G Avenue and Harbor Plaza	Future Baseline				✓(M)
	CEQA Baseline	✓(M)	✓(M)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	✓(M)	✓(M)	✓(P)	✓(A,M,P)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps	Future Baseline			✓(P)	✓(M,P)
	CEQA Baseline			✓(P)	✓(M,P)
	NEPA Baseline			✓(P)	✓(P)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp	Future Baseline				✓(P)
	CEQA Baseline				✓(P)
	NEPA Baseline				✓(P)
6. Pico Avenue and Pier D Street	Future Baseline	✓(M)		✓(A)	✓(A,M,P)
	CEQA Baseline			✓(A)	✓(A,M,)
	NEPA Baseline	✓(M)			✓(A,M,P)
<i>A = AM Peak Hour</i> <i>M = Midday Peak Hour</i> <i>P = PM Peak Hour</i>					

Table 3-15.1: 345-Acre Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2010 Future Year Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	D	32.8	F	84.6	E	36.9	C	21.4	F	66.1	D	30.0	-11.4	-18.5	-6.9	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	10.3	B	12.3	B	12.3	B	10.5	B	11.7	B	12.1	0.2	-0.6	-0.2	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.4	A	8.3	B	11.8	B	10.0	B	13.3	B	12.3	0.6	5.0	0.5	No
4. Pico Avenue and Broadway (c)	B	10.2	B	10.5	A	9.3	B	10.9	B	11.4	A	9.7	0.7	0.9	0.4	No
5. Pico Avenue and Pier D Street (a)	C	23.4	B	14.3	B	12.0	D	28.6	E	41.2	C	20.7	5.2	26.9	8.7	Yes (MD)
6. Pico Avenue and Pier C Street (b)	A	0.333	A	0.280	A	0.241	A	0.371	A	0.328	A	0.284	0.038	0.048	0.043	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.536	A	0.476	A	0.509	A	0.562	A	0.544	A	0.559	0.026	0.068	0.050	No
8. Anaheim Way and Pier B Street (a)	A	7.2	A	7.6	A	7.9	A	7.2	A	7.6	A	7.7	0.0	0.0	-0.2	No
9. Farragut Avenue and Anaheim Street (b)	A	0.296	A	0.262	A	0.391	A	0.302	A	0.257	A	0.392	0.006	-0.005	0.001	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-15.2: 345-Acre Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2015 Future Year Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	E	38.5	F	95.1	E	39.2	C	20.9	F	72.6	C	22.3	-17.6	-22.5	-16.9	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	11.6	C	15.8	C	17.2	B	12.6	B	14.9	C	19.2	1.0	-0.9	2.0	No
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	A	10.0	C	16.2	B	10.2	B	12.6	C	17.6	C	18.7	2.6	1.4	8.5	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	8.4	A	9.1	A	9.3	A	8.9	A	9.5	A	9.9	0.5	0.4	0.6	No
4. Pico Avenue and Broadway (c)	B	10.1	B	11.5	B	10.2	B	11.0	B	12.1	B	10.3	0.9	0.6	0.1	No
5. Pico Avenue and Pier D Street (a)	D	25.6	C	15.9	B	13.1	D	25.2	C	23.3	C	17.1	-0.4	7.4	4.0	No
6. Pico Avenue and Pier C Street (b)	A	0.350	A	0.314	A	0.288	A	0.390	A	0.339	A	0.323	0.040	0.025	0.035	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.565	A	0.581	A	0.543	A	0.593	B	0.607	A	0.585	0.028	0.026	0.042	No
8. Anaheim Way and Pier B Street (a)	A	7.9	A	8.1	A	8.4	A	8.0	A	8.1	A	8.7	0.1	0.0	0.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.356	A	0.349	A	0.476	A	0.362	A	0.346	A	0.474	0.006	-0.003	-0.002	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m

Table 3-15.3: 345-Acre Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2020 Future Year Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	63.4	F	108.5	F	54.8	F	56.6	F	100.6	E	37.5	-6.8	-7.9	-17.3	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	14.8	C	19.2	D	28.1	C	16.7	C	19.2	E	39.9	1.9	0.0	11.8	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	11.0	C	18.3	C	20.1	C	16.5	C	21.6	D	29.6	5.5	3.3	9.5	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	8.8	A	9.6	A	9.7	A	9.4	B	10.3	B	11.1	0.6	0.7	1.4	No
4. Pico Avenue and Broadway (c)	B	10.9	B	12.4	B	10.6	B	12.0	B	13.7	B	11.0	1.1	1.3	0.4	No
5. Pico Avenue and Pier D Street (a)	D	29.4	C	16.9	C	15.0	E	41.5	D	33.4	C	24.0	12.1	16.5	9.0	Yes (AM)
6. Pico Avenue and Pier C Street (b)	A	0.388	A	0.352	A	0.345	A	0.423	A	0.387	A	0.389	0.035	0.035	0.044	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.626	A	0.549	A	0.572	B	0.626	A	0.570	B	0.625	0.000	0.021	0.053	No
8. Anaheim Way and Pier B Street (a)	B	10.6	A	9.9	B	10.8	B	11.2	B	10.6	B	12.4	0.6	0.7	1.6	No
9. Farragut Avenue and Anaheim Street (b)	A	0.436	A	0.441	B	0.607	A	0.469	A	0.489	B	0.654	0.033	0.048	0.047	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-15.4: 345-Acre Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2030 Future Year Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	90.8	F	141.3	F	68.7	F	89.8	F	157.2	F	64.2	-1.0	15.9	-4.5	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	C	17.7	D	31.9	E	42.7	C	21.3	E	35.6	F	57.8	3.6	3.7	15.1	Yes (MD, PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	11.5	B	12.0	C	23.6	C	22.9	D	26.3	E	41.8	11.4	14.3	18.2	Yes (PM)
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9.3	B	10.3	B	11.3	B	10.5	B	11.4	B	13.7	1.2	1.1	2.4	No
4. Pico Avenue and Broadway (c)	B	11.7	B	14.2	B	11.2	B	13.6	C	15.7	B	11.5	1.9	1.5	0.3	No
5. Pico Avenue and Pier D Street (a)	D	32.2	C	19.4	C	17.0	F	58.6	F	50.4	E	39.8	26.4	31.0	22.8	Yes (AM,MD,PM)
6. Pico Avenue and Pier C Street (b)	A	0.415	A	0.395	A	0.369	A	0.464	A	0.420	A	0.422	0.049	0.025	0.053	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.670	B	0.632	B	0.602	B	0.700	B	0.686	B	0.644	0.030	0.054	0.042	No
8. Anaheim Way and Pier B Street (a)	B	14.8	B	14.4	C	16.6	C	15.8	B	13.9	C	17.4	1.0	-0.5	0.8	No
9. Farragut Avenue and Anaheim Street (b)	A	0.509	A	0.500	B	0.672	A	0.532	A	0.553	B	0.688	0.023	0.053	0.016	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

NEPA Baseline Impact Determination

Tables 3-17.1 through 3-17.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the NEPA Baseline.

As indicated in Table 3-14 the Project will have significant impacts at the following four study area intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp
- Pico Avenue and Pier D Street

Mitigation Measures

By implementing **MM TRANS-3 through MM TRANS-6**, project-related impacts under the NEPA Baseline analysis will be less than significant.

Table 3-18 summarizes the intersection operating conditions with mitigation.

Significance of Impacts after Mitigation

Impacts will be less than significant with the implementation of recommended mitigation measures.

Impact TRANS-2: Additional traffic generated by the project will have significant impacts on highway locations in the study area.

For all analysis years, the proposed Project's impacts on highway locations are determined based upon comparing the LOS for the project alternative to that of the Future, CEQA and NEPA Baselines.

Table 3-19 summarizes the highway segments and time periods by analysis year where the project is expected to have significant impacts under the Future Year and NEPA Baselines.

Future Baseline Impact Determination

Tables 3-20.1 through 3-20.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030 compared to the Future Baseline analysis.

As shown in Table 3-19 the Project is expected to have significant impacts on the following study highway segments using the future baseline comparison:

- I-405 south of I-710, northbound only
- I-710 between Willow Street and PCH, northbound only
- SR-91 east of I-710, both directions
- SR-91 west of I-710, westbound only

Table 3-16.1: 345-Acre Alternative - Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2005 CEQA Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	C	21.4	F	66.1	D	30.0	7.4	44.4	15.4	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	10.5	B	11.7	B	12.1	0.6	-0.1	0.8	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5	B	10.0	B	13.3	B	12.3	0.4	3.4	2.8	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	10.9	B	11.4	A	9.7	0.3	-1.3	-1.8	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	28.6	E	41.2	C	20.7	18.8	-6.1	-86.1	No
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.371	A	0.328	A	0.284	0.14	0.065	0.018	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	A	0.562	A	0.544	A	0.559	0.206	0.159	0.133	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	A	7.2	A	7.6	A	7.7	-0.9	-1.2	-1.4	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.302	A	0.257	A	0.392	-0.046	-0.076	-0.058	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-16.2: 345-Acre Alternative - Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2005 CEQA Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	C	20.9	F	72.6	C	22.3	6.9	50.9	7.7	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	12.6	B	14.9	C	19.2	2.7	3.1	7.9	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5										
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	B	12.6	C	17.6	C	18.7	(d)	(d)	(d)	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	A	8.9	A	9.5	A	9.9	(d)	(d)	(d)	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	11.0	B	12.1	B	10.3	0.4	-0.6	-1.2	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	25.2	C	23.3	C	17.1	15.4	-24	-89.7	No
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.390	A	0.339	A	0.323	0.159	0.076	0.057	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	A	0.593	B	0.607	A	0.585	0.237	0.22	0.159	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	A	8.0	A	8.1	A	8.7	-0.1	-0.7	-0.4	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.362	A	0.346	A	0.474	0.014	0.013	0.024	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

(d) intersection configuration different in 2005 so no direct comparison is available

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-16.3: 345-Acre Alternative - Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2005 CEQA Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	F	56.6	F	100.6	E	37.5	42.6	78.9	22.9	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	C	16.7	C	19.2	E	39.9	6.8	7.4	28.6	Yes (PM)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5										
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	C	16.5	C	21.6	D	29.6	(d)	(d)	(d)	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	A	9.4	B	10.3	B	11.1	(d)	(d)	(d)	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	12.0	B	13.7	B	11.0	1.4	1	-0.5	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	E	41.5	D	33.4	C	24.0	31.7	-13.9	-82.8	Yes (AM)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.423	A	0.387	A	0.389	0.192	0.124	0.123	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.626	A	0.570	B	0.625	0.27	0.19	0.199	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	B	11.2	B	10.6	B	12.4	3.1	1.8	3.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.469	A	0.489	B	0.654	0.121	0.156	0.204	No

Notes:
 (a) all-way stop-controlled intersection; weighted average delay for entire intersection reported
 (b) signalized intersection
 (c) stop controlled on minor street only
 (d) intersection configuration different in 2005 so no direct comparison is available
 AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-16.4: 345-Acre Alternative - Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2005 CEQA Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	F	89.8	F	157.2	F	64.2	75.8	135.5	49.6	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	C	21.3	E	35.6	F	57.8	11.4	23.8	46.5	Yes (MD, PM)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5										
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	C	22.9	D	26.3	E	41.8	(d)	(d)	(d)	Yes (PM)
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	B	10.5	B	11.4	B	13.7	(d)	(d)	(d)	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	13.6	C	15.7	B	11.5	3	3	0	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	F	58.6	F	50.4	E	39.8	48.8	3.1	-67.0	Yes (AM,MD)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.464	A	0.420	A	0.422	0.233	0.157	0.156	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.700	B	0.686	B	0.644	0.344	0.30	0.218	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	C	15.8	B	13.9	C	17.4	7.7	5.1	8.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.532	A	0.553	B	0.688	0.184	0.22	0.238	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

(d) intersection configuration different in 2005 so no direct comparison is available

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-17.1: 345-Acre Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2010 NEPA Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	C	21	F	63.5	D	28.2	C	21.4	F	66.1	D	30	0.4	2.6	1.8	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	10.6	B	11.7	B	12.1	B	10.5	B	11.7	B	12.1	-0.1	0	0	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.9	B	13.1	B	12.3	B	10	B	13.3	B	12.3	0.1	0.2	0	No
4. Pico Avenue and Broadway (c)	B	10.8	B	11.2	A	9.7	B	10.9	B	11.4	A	9.7	0.1	0.2	0	No
5. Pico Avenue and Pier D Street (a)	D	25.5	E	38.8	C	20.7	D	28.6	E	41.2	C	20.7	3.1	2.4	0	Yes (MD)
6. Pico Avenue and Pier C Street (b)	A	0.37	A	0.325	A	0.283	A	0.371	A	0.328	A	0.284	0.001	0.003	0.001	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.556	A	0.544	A	0.558	A	0.562	A	0.544	A	0.559	0.006	0	0.001	No
8. Anaheim Way and Pier B Street (a)	A	7.2	A	7.6	A	7.8	A	7.2	A	7.6	A	7.7	0	0	-0.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.358	A	0.333	A	0.443	A	0.368	A	0.329	A	0.449	0.010	-0.004	0.006	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-17.2: 345-Acre Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2015 NEPA Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	C	22.8	F	69.5	D	26.6	C	20.9	F	72.6	C	22.3	-1.9	3.1	-4.3	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	12.5	C	15.1	C	19	B	12.6	B	14.9	C	19.2	0.1	-0.2	0.2	No
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	12.9	C	18.2	C	19.1	B	12.6	C	17.6	C	18.7	-0.3	-0.6	-0.4	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9	A	9.8	B	10.1	A	8.9	A	9.5	A	9.9	-0.1	-0.3	-0.2	No
4. Pico Avenue and Broadway (c)	B	11.1	B	12.5	B	10.4	B	11	B	12.1	B	10.3	-0.1	-0.4	-0.1	No
5. Pico Avenue and Pier D Street (a)	D	27.6	D	30.3	C	19.1	D	25.2	C	23.3	C	17.1	-2.4	-7	-2	No
6. Pico Avenue and Pier C Street (b)	A	0.398	A	0.346	A	0.329	A	0.39	A	0.339	A	0.323	-0.008	-0.007	-0.006	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.594	B	0.626	A	0.6	A	0.593	B	0.607	A	0.585	-0.001	-0.019	-0.015	No
8. Anaheim Way and Pier B Street (a)	A	8	A	8.2	A	8.4	A	8	A	8.1	A	8.7	0	-0.1	0.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.425	A	0.405	A	0.518	A	0.426	A	0.408	A	0.532	0.001	0.003	0.014	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-17.3: 345-Acre Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2020 NEPA Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	59.4	F	102.2	E	36.3	F	56.6	F	100.6	E	37.5	-2.8	-1.6	1.2	Yes (PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	14.6	C	19.4	E	35.8	C	16.7	C	19.2	E	39.9	2.1	-0.2	4.1	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	C	19.1	C	21.5	D	27.2	C	16.5	C	21.6	D	29.6	-2.6	0.1	2.4	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9.9	B	10.3	B	11.1	A	9.4	B	10.3	B	11.1	-0.5	0	0	No
4. Pico Avenue and Broadway (c)	B	12.5	B	13.8	B	10.7	B	12	B	13.7	B	11	-0.5	-0.1	0.3	No
5. Pico Avenue and Pier D Street (a)	E	43.9	D	34.1	C	24.3	E	41.5	D	33.4	C	24	-2.4	-0.7	-0.3	No
6. Pico Avenue and Pier C Street (b)	A	0.431	A	0.384	A	0.371	A	0.423	A	0.387	A	0.389	-0.008	0.003	0.018	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.651	B	0.631	B	0.632	B	0.626	A	0.57	B	0.625	0.025	0.061	0.007	No
8. Anaheim Way and Pier B Street (a)	B	12.7	B	11.4	B	12.7	B	11.2	B	10.6	B	12.4	-1.5	-0.8	-0.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.508	A	0.506	B	0.609	A	0.469	A	0.489	B	0.654	-0.039	-0.017	0.045	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-17.4: 345-Acre Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2030 NEPA Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	84.5	F	151.4	F	53.9	F	89.8	F	157.2	F	64.2	5.3	5.8	10.3	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	C	20.1	E	35.9	F	50.9	C	21.3	E	35.6	F	57.8	1.2	-0.3	6.9	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	C	19.8	D	25.5	E	35.2	C	22.9	D	26.3	E	41.8	3.1	0.8	6.6	Yes (PM)
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	B	10.4	B	11.2	B	12.9	B	10.5	B	11.4	B	13.7	0.1	0.2	0.8	No
4. Pico Avenue and Broadway (c)	B	13.4	C	15.2	B	11.1	B	13.6	C	15.7	B	11.5	0.2	0.5	0.4	No
5. Pico Avenue and Pier D Street (a)	F	57.8	E	48.7	D	31.9	F	58.6	F	50.4	E	39.8	0.8	1.7	7.9	Yes AM,MD,PM)
6. Pico Avenue and Pier C Street (b)	A	0.463	A	0.417	A	0.399	A	0.464	A	0.42	A	0.422	0.001	0.003	0.023	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.694	C	0.71	B	0.639	B	0.7	B	0.686	B	0.644	0.006	-	0.005	No
8. Anaheim Way and Pier B Street (a)	C	15.4	C	15.4	C	16.5	C	15.8	B	13.9	C	17.4	0.4	-1.5	0.9	No
9. Farragut Avenue and Anaheim Street (b)	A	0.529	A	0.522	B	0.657	A	0.532	A	0.553	B	0.688	0.003	0.031	0.031	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-18: 345-Acre Alternative - Mitigated Intersection Level Of Service Analysis						
Year	8-9 a.m.		2-3 p.m.		4-5 p.m.	
	LOS	V/C Delay	LOS	V/C Delay	LOS	V/C Delay
Pico Ave / Pier G Ave and Harbor Plaza						
2010	A	0.548	B	0.695	A	0.566
2015	A	0.536	C	0.736	A	0.597
2020	B	0.696	D	0.807	B	0.684
2030	C	0.766	D	0.891	C	0.760
Pico Ave / Pier E St and Ocean Blvd EB On/Off-Ramps						
2010	A	0.353	A	0.419	A	0.476
2015	A	0.441	A	0.510	B	0.664
2020	A	0.515	A	0.579	D	0.810
2030	A	0.566	B	0.666	D	0.869
Pico Ave / Ocean Blvd WB Off-Ramp						
2010	A	0.301	A	0.274	A	0.251
2015	A	0.284	A	0.286	A	0.327
2020	A	0.333	A	0.325	A	0.403
2030	A	0.398	A	0.372	A	0.439
Pico Ave / Pier D St						
2010	B	0.661	B	0.641	A	0.584
2015	B	0.625	A	0.566	A	0.536
2020	B	0.674	A	0.596	A	0.581
2030	C	0.748	B	0.667	B	0.661

Mitigation Measures

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, it should be noted that the POLB is currently participating in the following on-going regional transportation programs which are intended to address future regional traffic growth and resulting congestion on area freeways:

I-710 Corridor EIS/EIR 2008

The Port is presently working with Caltrans, Metro, SCAG, and Gateway Cities Council of Governments (COG) (of which the Port and City of Long Beach are member agencies) on the I-710 Corridor EIR/EIS and Caltrans Project Report. POLB has committed \$5 million to this \$34-million, 42-month study, which was commenced in early 2008. This project entails analyzing potential impacts and advancing preliminary engineering of the Locally Preferred Strategy (LPS) adopted by the communities and participating agencies in 2004/2005. The LPS consists of dedicated truck lanes commencing at Ocean Boulevard, additional mixed flows on I-710 between Ocean Boulevard and Washington Street, and numerous freeway to freeway and arterial street interchange improvements. The POLB, City of Long Beach, and Gateway Cities COG are aggressively seeking federal, State, and Metro funds for the I-710 Corridor.

Advanced Transportation Management, Information and Security (ATMIS)

The POLB/POLA will also be implementing an Intelligent Transportation Systems project by 2009. This \$11-million program will provide real-time information to travelers in the port vicinity and on adjacent regional transportation facilities. The ATMIS System will monitor vehicle traffic conditions through the use of closed circuit television cameras and vehicle detection devices at the terminal gates. The ATMIS System will distribute the traffic information to truck drivers, motorists, other agencies, and intermodal industry information systems through the use of strategically placed changeable message signs, internet video, and appropriate data sharing means. While the ATMIS system will assist in addressing recurring daily congestion, its major benefit will be providing information to inform drivers, including trucks exiting the Port gates, of non-recurring incidents and congestion and to allow them to choose, if possible, alternative routes to avoid congested areas.

The ATMIS System will be a major component in an overall intelligent transportation systems (ITS) program for the I-710 Corridor/Gerald Desmond Bridge Gateway Program. This planned project will help to mitigate the I-710 impacts of the Project.

SR-91 Corridor Study

The Gateway Cities COG has begun a SR-91 Corridor Study to explore options that will improve traffic conditions on this freeway. POLB continues to work in concert with the COG, Caltrans, and other agencies to find solutions to improving operating conditions on SR-91.

No additional feasible mitigation measures are available at this time.

Significance of Impacts after Mitigation

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

Table 3-19: 345-Acre Alternative - Highway Link Significant Impacts

Highway Segments	Baseline	2010	2015	2020	2030
1. NB I-405 Freeway n/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	✓(M)	✓(A,M,P)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	-	-	-	-
SB I-405 Freeway n/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	✓(A,M,P)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	-	-	-	-
2. NB I-405 Freeway s/o I-710 Freeway	Future Baseline	✓(A)	-	-	-
	CEQA Baseline	✓(A)	✓(A,M,P)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	-	-	✓(A)	-
SB I-405 Freeway s/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	✓(M)	✓(A,M,P)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	-	-	-	-
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	Future Baseline	-	-	✓(M)	✓(P)
	CEQA Baseline	✓(A,M,P)	✓(A,M,P)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	-	-	-	-
SB I-710 Freeway between Willow Street and Pacific Coast Highway	Future Baseline	-	-	-	-
	CEQA Baseline	✓(A,M,P)	✓(A,M,P)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	-	-	-	-
4. NB I-110 Freeway n/o C-Street	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	✓(A)
	NEPA Baseline	-	-	-	-
6. EB SR-91 Freeway e/o I-710 Freeway	Future Baseline	-	✓(P)	-	-
	CEQA Baseline	✓(M)	✓(M,P)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	-	-	-	-
WB SR-91 Freeway e/o I-710 Freeway	Future Baseline	-	✓(M,P)	✓(M,P)	✓(M,P)
	CEQA Baseline	✓(A,P)	✓(A,M,P)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	-	-	-	✓(P)
7. EB SR-91 Freeway w/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	✓(P)	✓(M,P)	✓(M,P)
	NEPA Baseline	-	-	-	-
WB SR-91 Freeway w/o I-710 Freeway	Future Baseline	-	-	-	✓(M)
	CEQA Baseline	-	✓(A)	✓(A,M)	✓(A,M,P)
	NEPA Baseline	-	-	-	-

A = AM Peak Hour
M = Midday Peak Hour
P = PM Peak Hour

Table 3-20.1: 345-Acre Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2010)

Highway Segments	Year 2010 Future Year Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.259	F	1.160	F	1.130	F	1.262	F	1.159	F	1.132	0.003	-0.001	0.002	No
SB I-405 Freeway n/o I-710 Freeway	E	0.953	F	1.082	F	1.220	E	0.954	F	1.081	F	1.224	0.001	-0.001	0.004	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.159	F	1.131	F	1.133	F	1.232	F	1.135	F	1.142	0.073	0.004	0.009	Yes (AM)
SB I-405 Freeway s/o I-710 Freeway	D	0.938	F	1.038	F	1.168	E	0.943	F	1.048	F	1.178	0.005	0.010	0.010	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.006	F	1.053	F	1.115	F	1.006	F	1.060	F	1.117	0.000	0.007	0.002	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.095	F	1.093	F	1.112	F	1.104	F	1.098	F	1.115	0.009	0.005	0.003	No
4. NB I-110 Freeway n/o C-Street	D	0.839	C	0.753	C	0.681	D	0.840	C	0.754	C	0.683	0.001	0.001	0.002	No
SB I-110 Freeway n/o C-Street	C	0.597	C	0.658	D	0.795	C	0.595	C	0.662	D	0.793	-0.002	0.004	-0.002	No
5. NB SR-47 Freeway at Heim Bridge	A	0.172	A	0.275	A	0.251	A	0.171	A	0.278	A	0.251	-0.001	0.003	0.000	No
SB SR-47 Freeway at Heim Bridge	A	0.225	A	0.232	A	0.148	A	0.224	A	0.229	A	0.145	-0.001	-0.003	-0.003	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.870	F	1.046	F	1.124	D	0.867	F	1.048	F	1.098	-0.003	0.002	-0.026	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.227	F	1.040	F	1.088	F	1.232	F	1.039	F	1.092	0.005	-0.001	0.004	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.694	D	0.861	E	0.962	C	0.693	D	0.860	E	0.950	-0.001	-0.001	-0.012	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.969	D	0.829	D	0.815	E	0.974	D	0.836	D	0.813	0.005	0.007	-0.002	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-20.2: 345-Acre Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2015)

Highway Segments	Year 2015 Future Year Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.324	F	1.214	F	1.202	F	1.327	F	1.211	F	1.196	0.003	-0.003	-0.006	No
SB I-405 Freeway n/o I-710 Freeway	F	1.006	F	1.129	F	1.315	F	1.005	F	1.121	F	1.307	-0.001	-0.008	-0.008	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.278	F	1.195	F	1.221	F	1.278	F	1.188	F	1.217	0.000	-0.007	-0.004	No
SB I-405 Freeway s/o I-710 Freeway	E	0.992	F	1.092	F	1.248	E	0.994	F	1.088	F	1.252	0.002	-0.004	0.004	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.052	F	1.100	F	1.158	F	1.051	F	1.107	F	1.167	-0.001	0.007	0.009	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.160	F	1.145	F	1.163	F	1.157	F	1.152	F	1.170	-0.003	0.007	0.007	No
4. NB I-110 Freeway n/o C-Street	D	0.889	D	0.808	C	0.726	D	0.892	D	0.807	C	0.731	0.003	-0.001	0.005	No
SB I-110 Freeway n/o C-Street	C	0.628	C	0.714	D	0.837	C	0.631	C	0.714	D	0.839	0.003	0.000	0.002	No
5. NB SR-47 Freeway at Heim Bridge	A	0.192	A	0.317	A	0.290	A	0.190	A	0.313	A	0.297	-0.002	-0.004	0.007	No
SB SR-47 Freeway at Heim Bridge	A	0.258	A	0.253	A	0.160	A	0.257	A	0.255	A	0.159	-0.001	0.002	-0.001	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.918	F	1.073	F	1.211	D	0.919	F	1.066	F	1.236	0.001	-0.007	0.025	Yes (PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.257	F	1.146	F	1.125	F	1.266	F	1.174	F	1.150	0.009	0.028	0.025	Yes (MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.738	D	0.907	F	1.038	C	0.738	D	0.899	F	1.053	0.000	-0.008	0.015	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.029	D	0.897	D	0.862	F	1.032	D	0.893	D	0.874	0.003	-0.004	0.012	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-20.3: 345-Acre Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2020)

Highway Segments	Year 2020 Future Year Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.387	F	1.313	F	1.259	F	1.386	F	1.309	F	1.262	-0.001	-0.004	0.003	No
SB I-405 Freeway n/o I-710 Freeway	F	1.059	F	1.203	F	1.369	F	1.055	F	1.217	F	1.364	-0.004	0.014	-0.005	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.312	F	1.232	F	1.281	F	1.320	F	1.209	F	1.279	0.008	-0.023	-0.002	No
SB I-405 Freeway s/o I-710 Freeway	F	1.038	F	1.161	F	1.315	F	1.044	F	1.160	F	1.306	0.006	-0.001	-0.009	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.059	F	1.141	F	1.203	F	1.063	F	1.186	F	1.206	0.004	0.045	0.003	Yes (MD)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.196	F	1.200	F	1.215	F	1.201	F	1.215	F	1.224	0.005	0.015	0.009	No
4. NB I-110 Freeway n/o C-Street	D	0.882	D	0.857	C	0.755	D	0.891	D	0.856	C	0.759	0.009	-0.001	0.004	No
SB I-110 Freeway n/o C-Street	C	0.634	C	0.746	D	0.886	C	0.633	C	0.741	D	0.886	-0.001	-0.005	0.000	No
5. NB SR-47 Freeway at Heim Bridge	A	0.002	A	0.326	A	0.271	A	-0.004	A	0.336	A	0.280	-0.006	0.010	0.009	No
SB SR-47 Freeway at Heim Bridge	A	0.280	A	0.257	A	0.171	A	0.270	A	0.267	A	0.169	-0.010	0.010	-0.002	No
6. EB SR-91 Freeway e/o I-710 Freeway	E	0.941	F	1.154	F	1.342	E	0.958	F	1.084	F	1.320	0.017	-0.070	-0.022	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.322	F	1.294	F	1.180	F	1.326	F	1.328	F	1.202	0.004	0.034	0.022	Yes (MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.779	E	0.986	F	1.124	D	0.781	E	0.956	F	1.128	0.002	-0.030	0.004	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.100	F	1.035	D	0.916	F	1.097	E	0.995	D	0.914	-0.003	-0.040	-0.002	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-20.4: 345-Acre Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2030)

Highway Segments	Year 2030 Future Year Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.453	F	1.353	F	1.291	F	1.456	F	1.337	F	1.304	0.003	-0.016	0.013	No
SB I-405 Freeway n/o I-710 Freeway	F	1.093	F	1.243	F	1.425	F	1.096	F	1.239	F	1.422	0.003	-0.004	-0.003	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.411	F	1.323	F	1.315	F	1.399	F	1.293	F	1.323	-0.012	-0.030	0.008	No
SB I-405 Freeway s/o I-710 Freeway	F	1.088	F	1.202	F	1.364	F	1.089	F	1.198	F	1.359	0.001	-0.004	-0.005	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.152	F	1.204	F	1.274	F	1.167	F	1.193	F	1.295	0.015	-0.011	0.021	Yes (PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.259	F	1.260	F	1.270	F	1.272	F	1.259	F	1.279	0.013	-0.001	0.009	No
4. NB I-110 Freeway n/o C-Street	E	0.967	D	0.891	D	0.784	E	0.969	D	0.897	D	0.796	0.002	0.006	0.012	No
SB I-110 Freeway n/o C-Street	C	0.686	D	0.790	D	0.918	C	0.691	D	0.792	D	0.924	0.005	0.002	0.006	No
5. NB SR-47 Freeway at Heim Bridge	A	0.212	A	0.333	A	0.307	A	0.221	A	0.344	A	0.301	0.009	0.011	-0.006	No
SB SR-47 Freeway at Heim Bridge	A	0.258	A	0.275	A	0.171	A	0.269	A	0.281	A	0.172	0.011	0.006	0.001	No
6. EB SR-91 Freeway e/o I-710 Freeway	F	1.004	F	1.179	F	1.361	E	1.000	F	1.179	F	1.346	-0.004	0.000	-0.015	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.383	F	1.295	F	1.222	F	1.383	F	1.338	F	1.269	0.000	0.043	0.047	Yes (MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	D	0.811	E	0.981	F	1.151	D	0.810	E	0.993	F	1.146	-0.001	0.012	-0.005	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.120	E	0.989	E	0.949	F	1.118	F	1.035	E	0.948	-0.002	0.046	-0.001	Yes (MD)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

CEQA Baseline Impact Determination

Tables 3-21.1 through 3-21.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030, compared to the CEQA Baseline. The same significance criteria used in the Future Baseline comparison was applied to the CEQA Baseline comparison.

As shown in Table 3-19, the proposed Project is expected to have significant impacts on the following study highway segments using the CEQA Baseline comparison:

- I-405 Freeway n/o I-710 Freeway, both Directions (starting 2010, max fair share of 1% in 2020)
- I-405 Freeway s/o I-710 Freeway, both directions (starting 2010, max fair of 5% in 2010)
- I-710 Freeway between Willow Street and Pacific Coast Highway, both directions (starting 2010, max fair share of 4% in 2020)
- I-110 Freeway n/o C-Street, northbound (2030, max fair share of 1.5% in 2030)
- SR-91 Freeway e/o I-710 Freeway, both directions (starting 2010, max fair share of 4% in 2030)
- SR-91 Freeway w/o I-710 Freeway, both directions (starting 2015, max fair share of 3.5% in 2030)

The Project shows an impact on more highway segments in this scenario because the 2005 traffic levels are compared to future traffic levels that include not only Project traffic but also all forecasted future traffic on these highway segments resulting from regional growth and other area projects and activities unrelated to this Project. Although total highway traffic will increase substantially in the future, this Project contributes only a small portion of the anticipated future traffic. Table 3-23 indicates the Project's share of the future traffic on the impacted study highway segments. The Project's maximum share of the future traffic on each individual link, ranges from approximately 1% to 5%.

Mitigation Measures

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, it should be noted that the POLB is currently participating in the on-going regional transportation programs, as described in the Future Baseline section, which are intended to address future regional traffic growth and resulting congestion on area freeways.

No additional feasible mitigation measures are available at this time.

Significance of Impacts after Mitigation

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

NEPA Baseline Impact Determination

Tables 3-22.1 through 3-22.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030, compared to the NEPA Baseline.

As shown in Table 3-19, the proposed Project is expected to have significant impact on the following study highway segments using the NEPA Baseline comparison:

- I-405 south of I-710, northbound only
- SR-91 east of I-710, westbound only

Mitigation measures

As discussed in the Future Baseline section, the POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. The POLB fair share calculations are set forth in Table 3-23. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, POLB is currently participating in the on-going regional transportation programs discussed in the Future Baseline, which will contribute toward mitigating any potential impacts of the Project.

No additional feasible mitigation measures are available at this time.

Significance of Impacts after Mitigation

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

Impact TRANS-3: Project operations would not increase the demand for transit services.

Future Baseline Impact Determination

Although the proposed Project would result in additional on-site employees, these additional employees are not expected to affect public transit because the only public transit in the vicinity of the Project site is a tourist-oriented line that runs from downtown Long Beach to the Queen Mary. Due to the lack of available public transit options, this analysis has assumed the use of public transit by workers to be negligible. Therefore, the proposed Project is not expected to cause any increase in demand for transit services.

Mitigation Measures

Because the impact on transit services would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on transit services would be less than significant.

Table 3-21.1: 345-Acre Alternative - CEQA Baseline Highway Link Level-Of-Service Analysis (Year 2010)

Highway Segments	CEQA Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.262	F	1.159	F	1.132	0.019	0.021	0.013	Yes(MD)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	E	0.954	F	1.081	F	1.224	0.011	0.019	0.003	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.232	F	1.135	F	1.142	0.033	0.014	0.005	Yes(AM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	E	0.943	F	1.048	F	1.178	0.014	0.024	0.005	Yes(MD)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.006	F	1.06	F	1.117	0.026	0.029	0.028	Yes(AM,MD, PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.104	F	1.098	F	1.115	0.024	0.026	0.024	Yes(AM,MD, PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.84	C	0.754	C	0.683	0.012	-0.003	0.01	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.595	C	0.662	D	0.793	0.008	-0.005	0.005	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.171	A	0.278	A	0.251	-0.004	-0.013	-0.001	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.224	A	0.229	A	0.145	-0.009	-0.012	-0.005	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	D	0.867	F	1.048	F	1.098	0.007	0.04	-0.067	Yes(MD)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.232	F	1.039	F	1.092	0.03	-0.045	0.036	Yes(AM,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.693	D	0.86	E	0.95	0.002	0.013	-0.038	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	E	0.974	D	0.836	D	0.813	0.002	-0.016	-0.001	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-21.2: 345-Acre Alternative - CEQA Baseline Highway Link Level-Of-Service Analysis (Year 2015)

Highway Segments	CEQA Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.327	F	1.211	F	1.196	0.084	0.073	0.077	Yes(AM,MD,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	F	1.005	F	1.121	F	1.307	0.062	0.059	0.086	Yes(AM,MD,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.278	F	1.188	F	1.217	0.079	0.067	0.08	Yes(AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	E	0.994	F	1.088	F	1.252	0.065	0.064	0.079	Yes(AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.051	F	1.107	F	1.167	0.071	0.076	0.078	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.157	F	1.152	F	1.17	0.077	0.08	0.079	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.892	D	0.807	C	0.731	0.064	0.05	0.058	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.631	C	0.714	D	0.839	0.044	0.047	0.051	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.19	A	0.313	A	0.297	0.015	0.022	0.045	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.257	A	0.255	A	0.159	0.024	0.014	0.009	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	D	0.919	F	1.066	F	1.236	0.059	0.058	0.071	Yes(MD,PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.266	F	1.174	F	1.15	0.064	0.09	0.094	Yes(AM,MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.738	D	0.899	F	1.053	0.047	0.052	0.065	Yes(PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	F	1.032	D	0.893	D	0.874	0.06	0.041	0.06	Yes(AM)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-21.3: 345-Acre Alternative - CEQA Baseline Highway Link Level-Of-Service Analysis (Year 2020)

Highway Segments	CEQA Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.386	F	1.309	F	1.262	0.143	0.171	0.143	Yes(AM,MD,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	F	1.055	F	1.217	F	1.364	0.112	0.155	0.143	Yes(AM,MD,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.32	F	1.209	F	1.279	0.121	0.088	0.142	Yes(AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	F	1.044	F	1.16	F	1.306	0.115	0.136	0.133	Yes(AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.063	F	1.186	F	1.206	0.083	0.155	0.117	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.201	F	1.215	F	1.224	0.121	0.143	0.133	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.891	D	0.856	C	0.759	0.063	0.099	0.086	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.633	C	0.741	D	0.886	0.046	0.074	0.098	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.004	A	0.336	A	0.28	-0.179	0.045	0.028	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.27	A	0.267	A	0.169	0.037	0.026	0.019	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	E	0.958	F	1.084	F	1.32	0.098	0.076	0.155	Yes(AM,MD,PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.326	F	1.328	F	1.202	0.124	0.244	0.146	Yes(AM,MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	D	0.781	E	0.956	F	1.128	0.09	0.109	0.14	Yes(MD,PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	F	1.097	E	0.995	D	0.914	0.125	0.143	0.1	Yes(AM,MD)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-21.4: 345-Acre Alternative - CEQA Baseline Highway Link Level-Of-Service Analysis (Year 2030)

Highway Segments	CEQA Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.456	F	1.337	F	1.304	0.213	0.199	0.185	Yes(AM,MD,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	F	1.096	F	1.239	F	1.422	0.153	0.177	0.201	Yes(AM,MD,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.399	F	1.293	F	1.323	0.2	0.172	0.186	Yes(AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	F	1.089	F	1.198	F	1.359	0.16	0.174	0.186	Yes(AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.167	F	1.193	F	1.295	0.187	0.162	0.206	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.272	F	1.259	F	1.279	0.192	0.187	0.188	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	E	0.969	D	0.897	D	0.796	0.141	0.14	0.123	Yes(AM)
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.691	D	0.792	D	0.924	0.104	0.125	0.136	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.221	A	0.344	A	0.301	0.046	0.053	0.049	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.269	A	0.281	A	0.172	0.036	0.04	0.022	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	E	1	F	1.179	F	1.346	0.14	0.171	0.181	Yes(AM,MD,PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.383	F	1.338	F	1.269	0.181	0.254	0.213	Yes(AM,MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	D	0.81	E	0.993	F	1.146	0.119	0.146	0.158	Yes(MD,PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	F	1.118	F	1.035	E	0.948	0.146	0.183	0.134	Yes(AM,MD,PM)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.
 Model: Harbor Redevelopment Project

Table 3-22.1: 345-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2010)

Highway Segments	Year 2010 NEPA Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.261	F	1.155	F	1.132	F	1.262	F	1.159	F	1.132	0.001	0.004	0.000	No
SB I-405 Freeway n/o I-710 Freeway	E	0.956	F	1.082	F	1.223	E	0.954	F	1.081	F	1.224	-0.002	-0.001	0.001	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.232	F	1.134	F	1.141	F	1.232	F	1.135	F	1.142	0.000	0.001	0.001	No
SB I-405 Freeway s/o I-710 Freeway	E	0.942	F	1.046	F	1.177	E	0.943	F	1.048	F	1.178	0.001	0.002	0.001	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.004	F	1.062	F	1.123	F	1.006	F	1.060	F	1.117	0.002	-0.002	-0.006	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.110	F	1.099	F	1.116	F	1.104	F	1.098	F	1.115	-0.006	-0.001	-0.001	No
4. NB I-110 Freeway n/o C-Street	D	0.839	C	0.754	C	0.682	D	0.840	C	0.754	C	0.683	0.001	0.000	0.001	No
SB I-110 Freeway n/o C-Street	C	0.598	C	0.657	D	0.792	C	0.595	C	0.662	D	0.793	-0.003	0.005	0.001	No
5. NB SR-47 Freeway at Heim Bridge	A	0.171	A	0.276	A	0.251	A	0.171	A	0.278	A	0.251	0.000	0.002	0.000	No
SB SR-47 Freeway at Heim Bridge	A	0.225	A	0.229	A	0.148	A	0.224	A	0.229	A	0.145	-0.001	0.000	-0.003	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.870	F	1.045	F	1.096	D	0.867	F	1.048	F	1.098	-0.003	0.003	0.002	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.249	F	1.039	F	1.080	F	1.232	F	1.039	F	1.092	-0.017	0.000	0.012	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.694	D	0.861	E	0.948	C	0.693	D	0.860	E	0.950	-0.001	-0.001	0.002	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.983	D	0.838	D	0.814	E	0.974	D	0.836	D	0.813	-0.009	-0.002	-0.001	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-22.2: 345-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2015)

Highway Segments	Year 2015 NEPA Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.328	F	1.214	F	1.202	F	1.327	F	1.211	F	1.196	-0.001	-0.003	-0.006	No
SB I-405 Freeway n/o I-710 Freeway	F	1.006	F	1.130	F	1.310	F	1.005	F	1.121	F	1.307	-0.001	-0.009	-0.003	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.277	F	1.190	F	1.211	F	1.278	F	1.188	F	1.217	0.001	-0.002	0.006	No
SB I-405 Freeway s/o I-710 Freeway	E	0.993	F	1.096	F	1.254	E	0.994	F	1.088	F	1.252	0.001	-0.008	-0.002	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.052	F	1.112	F	1.164	F	1.051	F	1.107	F	1.167	-0.001	-0.005	0.003	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.160	F	1.154	F	1.171	F	1.157	F	1.152	F	1.170	-0.003	-0.002	-0.001	No
4. NB I-110 Freeway n/o C-Street	D	0.887	D	0.808	C	0.729	D	0.892	D	0.807	C	0.731	0.005	-0.001	0.002	No
SB I-110 Freeway n/o C-Street	C	0.631	C	0.714	D	0.839	C	0.631	C	0.714	D	0.839	0.000	0.000	0.000	No
5. NB SR-47 Freeway at Heim Bridge	A	0.193	A	0.323	A	0.285	A	0.190	A	0.313	A	0.297	-0.003	-0.010	0.012	No
SB SR-47 Freeway at Heim Bridge	A	0.259	A	0.260	A	0.163	A	0.257	A	0.255	A	0.159	-0.002	-0.005	-0.004	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.919	F	1.073	F	1.255	D	0.919	F	1.066	F	1.236	0.000	-0.007	-0.019	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.257	F	1.163	F	1.135	F	1.266	F	1.174	F	1.150	0.009	0.011	0.015	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.741	D	0.907	F	1.060	C	0.738	D	0.899	F	1.053	-0.003	-0.008	-0.007	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.029	D	0.915	D	0.870	F	1.032	D	0.893	D	0.874	0.003	-0.022	0.004	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-22.3: 345-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2020)

Highway Segments	Year 2020 NEPA Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.386	F	1.310	F	1.259	F	1.386	F	1.309	F	1.262	0.000	-0.001	0.003	No
SB I-405 Freeway n/o I-710 Freeway	F	1.055	F	1.217	F	1.365	F	1.055	F	1.217	F	1.364	0.000	0.000	-0.001	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.271	F	1.226	F	1.277	F	1.320	F	1.209	F	1.279	0.049	-0.017	0.002	Yes (AM)
SB I-405 Freeway s/o I-710 Freeway	F	1.039	F	1.167	F	1.309	F	1.044	F	1.160	F	1.306	0.005	-0.007	-0.003	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.064	F	1.185	F	1.201	F	1.063	F	1.186	F	1.206	-0.001	0.001	0.005	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.212	F	1.220	F	1.221	F	1.201	F	1.215	F	1.224	-0.011	-0.005	0.003	No
4. NB I-110 Freeway n/o C-Street	D	0.889	D	0.859	C	0.752	D	0.891	D	0.856	C	0.759	0.002	-0.003	0.007	No
SB I-110 Freeway n/o C-Street	C	0.634	C	0.757	D	0.883	C	0.633	C	0.741	D	0.886	-0.001	-0.016	0.003	No
5. NB SR-47 Freeway at Heim Bridge	A	0.004	A	0.341	A	0.276	A	0.004	A	0.336	A	0.280	-0.008	-0.005	0.004	No
SB SR-47 Freeway at Heim Bridge	A	0.278	A	0.269	A	0.175	A	0.270	A	0.267	A	0.169	-0.008	-0.002	-0.006	No
6. EB SR-91 Freeway e/o I-710 Freeway	E	0.944	F	1.088	F	1.321	E	0.958	F	1.084	F	1.320	0.014	-0.004	-0.001	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.357	F	1.325	F	1.195	F	1.326	F	1.328	F	1.202	-0.031	0.003	0.007	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.777	E	0.955	F	1.132	D	0.781	E	0.956	F	1.128	0.004	0.001	-0.004	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.104	E	0.985	D	0.912	F	1.097	E	0.995	D	0.914	-0.007	0.010	0.002	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-22.4: 345-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2030)

Highway Segments	Year 2030 NEPA Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.452	F	1.329	F	1.303	F	1.456	F	1.337	F	1.304	0.004	0.008	0.001	No
SB I-405 Freeway n/o I-710 Freeway	F	1.095	F	1.242	F	1.431	F	1.096	F	1.239	F	1.422	0.001	-0.003	-0.009	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.393	F	1.277	F	1.329	F	1.399	F	1.293	F	1.323	0.006	0.016	-0.006	No
SB I-405 Freeway s/o I-710 Freeway	F	1.091	F	1.199	F	1.372	F	1.089	F	1.198	F	1.359	-0.002	-0.001	-0.013	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.164	F	1.202	F	1.283	F	1.167	F	1.193	F	1.295	0.003	-0.009	0.012	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.270	F	1.267	F	1.284	F	1.272	F	1.259	F	1.279	0.002	-0.008	-0.005	No
4. NB I-110 Freeway n/o C-Street	E	0.968	D	0.901	D	0.790	E	0.969	D	0.897	D	0.796	0.001	-0.004	0.006	No
SB I-110 Freeway n/o C-Street	C	0.689	D	0.793	D	0.927	C	0.691	D	0.792	D	0.924	0.002	-0.001	-0.003	No
5. NB SR-47 Freeway at Heim Bridge	A	0.218	A	0.347	A	0.302	A	0.221	A	0.344	A	0.301	0.003	-0.003	-0.001	No
SB SR-47 Freeway at Heim Bridge	A	0.271	A	0.280	A	0.172	A	0.269	A	0.281	A	0.172	-0.002	0.001	0.000	No
6. EB SR-91 Freeway e/o I-710 Freeway	F	1.004	F	1.181	F	1.345	E	1.000	F	1.179	F	1.346	-0.004	-0.002	0.001	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.365	F	1.363	F	1.237	F	1.383	F	1.338	F	1.269	0.018	-0.025	0.032	Yes (PM)
7. EB SR-91 Freeway w/o I-710 Freeway	D	0.808	E	0.989	F	1.151	D	0.810	E	0.993	F	1.146	0.002	0.004	-0.005	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.117	F	1.052	E	0.947	F	1.118	F	1.035	E	0.948	0.001	-0.017	0.001	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-23: Percentage of Project-Traffic to Highway (345-Acre Alternative)

Study Highway Segment	Traffic Volume in 2005 (Base)	2010			2015			2020			2030		
		Future without Proj.	Future with Proj.	Project Share	Future without Proj.	Future with Proj.	Project Share	Future without Proj.	Future with Proj.	Project Share	Future without Proj.	Future with Proj.	Project Share
AM PEAK													
1. NB I-405 Fwy. n/o I-710 Fwy.	15,657	16,184	16,220	0.22%	16,689	16,716	0.16%	17,444	17,438	-0.03%	18,304	18,334	0.16%
SB I-405 Fwy. n/o I-710 Fwy.	11,875	12,214	12,220	0.05%	12,671	12,661	-0.08%	13,296	13,254	-0.32%	13,785	13,821	0.26%
2. NB I-405 Fwy. s/o I-710 Fwy.	15,099	14,869	15,636	4.91%	16,106	16,101	-0.03%	16,544	16,623	0.48%	17,745	17,618	-0.72%
SB I-405 Fwy. s/o I-710 Fwy.	11,708	12,023	12,075	0.43%	12,498	12,515	0.14%	13,049	13,107	0.44%	13,706	13,715	0.07%
3. NB I-710 Fwy. b/w Willow St. and PCH	6,171	6,391	6,394	0.05%	6,628	6,622	-0.09%	6,666	6,693	0.40%	7,256	7,348	1.25%
SB I-710 Fwy. b/w Willow St. and PCH	6,804	6,963	7,017	0.77%	7,307	7,285	-0.30%	7,530	7,562	0.42%	7,936	8,017	1.01%
4. NB I-110 Fwy. n/o C-Street	6,953	7,139	7,151	0.17%	7,469	7,495	0.35%	7,408	7,488	1.07%	8,120	8,135	0.18%
SB I-110 Fwy. n/o C-Street	4,930	5,080	5,067	-0.26%	5,270	5,297	0.51%	5,329	5,320	-0.17%	5,765	5,806	0.71%
6. EB SR-91 Fwy. e/o I-710 Fwy.	10,831	11,191	11,158	-0.30%	11,568	11,577	0.08%	11,853	12,065	1.76%	12,649	12,598	-0.40%
WB SR-91 Fwy. e/o I-710 Fwy.	15,143	15,589	15,651	0.40%	15,831	15,950	0.75%	16,654	16,709	0.33%	17,429	17,431	0.01%
7. EB SR-91 Fwy. w/o I-710 Fwy.	10,163	10,491	10,481	-0.10%	10,857	10,859	0.02%	11,386	11,410	0.21%	11,918	11,908	-0.08%
WB SR-91 Fwy. w/o I-710 Fwy.	14,283	14,704	14,752	0.33%	15,164	15,194	0.20%	16,043	16,010	-0.21%	16,533	16,516	-0.10%
MIDDAY													
1. NB I-405 Fwy. n/o I-710 Fwy.	14,334	14,780	14,769	-0.07%	15,292	15,263	-0.19%	16,416	16,369	-0.29%	16,994	16,830	-0.97%
SB I-405 Fwy. n/o I-710 Fwy.	13,379	13,833	13,827	-0.04%	14,234	14,149	-0.60%	15,095	15,238	0.94%	15,654	15,610	-0.28%
2. NB I-405 Fwy. s/o I-710 Fwy.	14,116	14,576	14,614	0.26%	15,054	14,977	-0.51%	15,519	15,273	-1.61%	16,636	16,319	-1.94%
SB I-405 Fwy. s/o I-710 Fwy.	12,904	13,348	13,455	0.80%	13,771	13,731	-0.29%	14,569	14,561	-0.05%	15,138	15,099	-0.26%
3. NB I-710 Fwy. b/w Willow St. and PCH	6,493	6,708	6,753	0.67%	6,931	6,973	0.60%	7,185	7,471	3.83%	7,586	7,515	-0.94%
SB I-710 Fwy. b/w Willow St. and PCH	6,753	6,924	6,957	0.47%	7,211	7,255	0.61%	7,563	7,659	1.25%	7,937	7,932	-0.06%
4. NB I-110 Fwy. n/o C-Street	6,361	6,480	6,489	0.14%	6,790	6,778	-0.18%	7,203	7,199	-0.06%	7,487	7,542	0.73%
SB I-110 Fwy. n/o C-Street	5,599	5,730	5,761	0.54%	5,993	5,989	-0.07%	6,261	6,216	-0.72%	6,628	6,645	0.26%
6. EB SR-91 Fwy. e/o I-710 Fwy.	12,693	13,222	13,242	0.15%	13,505	13,422	-0.62%	14,538	13,655	-6.47%	14,842	14,844	0.01%
WB SR-91 Fwy. e/o I-710 Fwy.	13,662	13,922	13,906	-0.12%	14,443	14,795	2.38%	16,305	16,727	2.52%	16,318	16,862	3.23%
7. EB SR-91 Fwy. w/o I-710 Fwy.	12,452	13,016	13,002	-0.11%	13,322	13,241	-0.61%	14,273	13,953	-2.29%	14,456	14,582	0.86%
WB SR-91 Fwy. w/o I-710 Fwy.	12,516	12,883	12,960	0.59%	13,235	13,189	-0.35%	14,800	14,381	-2.91%	14,558	15,045	3.24%
PM PEAK													
1. NB I-405 Fwy. n/o I-710 Fwy.	14,098	14,600	14,626	0.18%	15,125	15,066	-0.39%	15,804	15,836	0.20%	16,293	16,431	0.84%
SB I-405 Fwy. n/o I-710 Fwy.	15,387	15,824	15,862	0.24%	16,549	16,467	-0.50%	17,206	17,154	-0.30%	17,954	17,925	-0.16%
2. NB I-405 Fwy. s/o I-710 Fwy.	14,324	14,816	14,911	0.64%	15,366	15,326	-0.26%	16,086	16,062	-0.15%	16,596	16,679	0.50%
SB I-405 Fwy. s/o I-710 Fwy.	14,780	15,170	15,276	0.69%	15,731	15,776	0.29%	16,522	16,428	-0.57%	17,210	17,159	-0.30%
3. NB I-710 Fwy. b/w Willow St. and PCH	6,859	7,070	7,081	0.16%	7,293	7,350	0.78%	7,578	7,600	0.29%	8,028	8,159	1.61%
SB I-710 Fwy. b/w Willow St. and PCH	6,873	7,037	7,054	0.24%	7,328	7,371	0.58%	7,652	7,709	0.74%	7,998	8,056	0.72%
4. NB I-110 Fwy. n/o C-Street	5,655	5,826	5,839	0.22%	6,094	6,132	0.62%	6,347	6,382	0.55%	6,587	6,686	1.48%
SB I-110 Fwy. n/o C-Street	6,618	6,902	6,883	-0.28%	7,034	7,051	0.24%	7,442	7,443	0.01%	7,703	7,757	0.70%
6. EB SR-91 Fwy. e/o I-710 Fwy.	14,676	15,205	14,874	-2.23%	15,248	15,559	2.00%	16,903	16,631	-1.64%	17,143	16,958	-1.09%
WB SR-91 Fwy. e/o I-710 Fwy.	13,309	13,767	13,815	0.35%	14,173	14,490	2.19%	14,871	15,142	1.79%	15,400	15,997	3.73%
7. EB SR-91 Fwy. w/o I-710 Fwy.	14,521	15,118	14,994	-0.83%	15,334	15,492	1.02%	16,371	16,413	0.26%	16,933	16,879	-0.32%
WB SR-91 Fwy. w/o I-710 Fwy.	11,958	12,441	12,425	-0.13%	12,697	12,819	0.95%	13,382	13,359	-0.17%	13,952	13,945	-0.05%

CEQA Baseline Impact Determination

Although the proposed Project would result in additional on-site employees, these additional employees are not expected to affect public transit because the only public transit in the vicinity of the Project site is a tourist-oriented line that runs from downtown Long Beach to the Queen Mary. Due to the lack of available public transit options, this analysis has assumed the use of public transit by workers to be negligible. Therefore, the proposed Project is not expected to cause any increase in demand for transit services.

Mitigation Measures

Because the impact on transit services would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on transit services would be less than significant.

NEPA Baseline Impact Determination

Although the proposed Project would result in additional on-site employees, they are not expected to affect public transit because the only public transit in the vicinity of the Project site is a tourist-oriented line that runs from downtown Long Beach to the Queen Mary. Due to the lack of available public transit options, this analysis has assumed the use of public transit by workers to be negligible. Therefore, the proposed Project is not expected to cause any increase in demand for transit services.

Mitigation Measures

Because the impact on transit services would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on transit services would be less than significant.

Impact TRANS-4: Project operations would not result in any increases in rail activity.

Future Baseline Impact Determination

As presented earlier in Table 3-8, the Project operations are expected to generate a maximum of 5 daily trains. The on-dock rail yard is designed to handle the additional trains without causing disruptions to the adjacent rail operations.

Rail activity causes delay at railroad crossings where trains pass and cause auto and truck traffic to stop. The amount of delay is related to the length of the train, the speed of the train and the amount of auto and truck traffic that is blocked. The proposed Project will cause an increase in the number of trains and the amount of auto and truck traffic. The increase in auto and truck traffic has effects only at the railroad crossings that are at-grade. The impacts associated with the increase in Project-related rail activity on the rail system and at the local grade crossings are discussed in the following sections.

Port Vicinity

Rail-related impacts due to the proposed Project are limited to the at-grade crossings that are located south of the downtown rail yards, and focus on the at-grade crossings in and near the Port between the proposed Project rail yard and the beginning of the Alameda Corridor. There are two local grade crossings which might be affected, namely, Pier B Street/9th Street and Edison Avenue.

The grade crossing at Edison Avenue will be eliminated as part of the Edison Avenue Closure project (2010). City council agenda by end of May, Harbor Development Permit has already been issued and the closure is expected by late summer 2008. Currently, at the Pier B Street/9th Street at-grade crossing, because drivers can experience long delays during the peak hours, most drivers already take different routes to avoid delays at this grade crossing. Moreover, as part of the Pier B Rail Yard expansion project this crossing will be eliminated (2015). Since both the crossings are being eliminated in the future and because alternative routes that avoid the crossings are available, the proposed Project would have less than significant impacts at either grade crossing.

Alameda Corridor

The proposed Project would have less than significant impact on regional rail corridors north of the proposed Project site. The completion of the Alameda Corridor has eliminated all of the regional at-grade rail/highway crossings between the Port and the downtown Los Angeles rail yards; therefore, there would be no change in vehicular delay at any of those crossings due to Project-related rail activity. Alameda Corridor has a daily capacity of 150 trains. Currently, the demand on the corridor is very low, about 50-65 trains per day. The Project-related increase in the number of trains could be easily accommodated by Alameda Corridor without causing any significant impact.

Therefore, the proposed Project is not expected to have a significant effect on rail services or vehicular delays at the two grade crossings.

Mitigation Measures

Because the impacts on rail services and grade crossings would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on rail activity and at-grade railroad crossings would be less than significant.

CEQA Baseline Impact Determination

As set forth in the Future Baseline section, the Project-related increase in number of trains can be easily accommodated by Alameda Corridor without causing any significant impact. Also, the proposed Project is not expected to have a negative impact on vehicular delays at the two grade crossings under the CEQA Baseline.

Therefore, the proposed Project is not expected to have a significant effect on rail services or vehicular delays at the two grade crossings.

Mitigation Measures

Because the impacts on rail services and grade crossings would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on rail activity and at-grade railroad crossings would be less than significant.

NEPA Baseline Impact Determination

As set forth in the Future Baseline section, the Project-related increase in number of trains can be easily accommodated by Alameda Corridor without causing any significant impact. Also, the proposed Project is not expected to have a negative impact on vehicular delays at the two grade crossings under the NEPA Baseline.

Middle Harbor Redevelopment Project

Therefore, the proposed Project is not expected to have a significant effect on rail services or vehicular delays at the two grade crossings.

Mitigation Measures

Because the impacts on rail services and grade crossings would be less than significant, no mitigation is required.

Significance of Impacts after Mitigation

Impacts on rail activity and at-grade railroad crossings would be less than significant.

3.2.4 Alternative 2 – 315-Acre Alternative

Construction Impacts

Future Baseline Impact Determination

As mentioned in Section 3.2.3, the analysis of construction-related traffic impacts for each alternative uses the vehicular traffic estimates developed for the 345-Acre Alternative. Because the 345-Acre Alternative would generate more construction-related traffic than the 315-Acre Alternative, this approach generates a conservative estimate of traffic impacts due to construction at the site for this alternative.

Under this approach, construction-related **Impacts TRANS-1 through TRANS-4**, for the future baseline comparison, is the same for the 315-Acre Alternative as they were for the 345-Acre Alternative. Consequently, the required mitigation measures and the significance of impacts after the mitigation are the same for the 315-Acre Alternative and the 345-Acre Alternative.

CEQA Baseline Impact Determination

The impact analysis under the CEQA Baseline uses the same assumption and data as the 345-Acre CEQA Baseline comparison. Therefore, construction-related **Impacts TRANS-1 through TRANS-4**, for the CEQA baseline comparison, is the same for the 315-Acre Alternative as they were for the 345-Acre Alternative. Consequently, the required mitigation measures and the significance of impacts after the mitigation are the same for the 315-Acre Alternative and the 345-Acre Alternative.

NEPA Baseline Impact Determination

The impact analysis under NEPA Baseline uses the same assumption and data as the 345-Acre NEPA Baseline comparison. Therefore, construction-related **Impacts TRANS-1 through TRANS-4**, for the NEPA baseline comparison, is the same for the 315-Acre Alternative as they were for the 345-Acre Alternative. Consequently, the required mitigation measures and the significance of impacts after the mitigation are the same for the 315-Acre Alternative and the 345-Acre Alternative.

Operational Impacts

The trip generation estimates were developed based on the operating parameters, previously presented in Section 3.2.2.

The proposed Project trip generation estimates are summarized in Table 3-24. It is important to note that for future years, peak hour trips do not increase proportionately with TEU growth. This is because in future years, on-dock rail usage will increase and work shift splits will change as described above.

Impact TRANS-1: Additional traffic generated by the Project would have significant impacts at the study area intersections.

As described in Section 3.2.2, Project impacts associated with the Future Baseline were determined by comparing the future without- and future with-Project traffic conditions. The Project impacts associated with the CEQA Baseline were determined by comparing the future with-Project traffic conditions to the CEQA Baseline. The impacts associated with the NEPA Baseline were determined by comparing the future with-project traffic conditions to the NEPA Baseline

Table 3-25 summarizes the intersection and time periods by analysis year where the project is expected to have significant impacts under the Future Year, CEQA, and NEPA Baselines.

Future Baseline Impact Determination

Tables 3-26.1 through 3-26.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the Future Baseline.

As indicated in Table 3-25 the Project will have significant impacts at the following four study area intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp
- Pico Avenue and Pier D Street

Mitigation Measures

Mitigation Measures **MM TRANS-3 through MM TRANS-6** at the impacted intersections would mitigate project-related impacts. Table 3-29 summarizes the intersection operating conditions with mitigation.

Significance of Impacts after Mitigation

Impacts will be less than significant with the implementation of the recommended mitigation measures.

CEQA Baseline Impact Determination

Tables 3-27.1 through 3-27.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the CEQA Baseline.

As indicated in Table 3-25, the proposed Project would have significant impacts at the following four study area intersections.

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp
- Pico Avenue and Pier D Street

Mitigation Measures

By implementing **MM Trans-3 through MM TRANS-6** project-related impacts under the CEQA Baseline analysis will be less than significant.

Table 3-29 summarizes the intersection operating conditions with mitigation.

Significance of Impacts after Mitigation

Impacts will be less than significant with the implementation of the recommended mitigation measures.

Table 3-24: 315-Acre Proposed Project Trip Generation

Vehicle Type	8-9 a.m.			2-3 p.m.			4-5 p.m.			Daily
	In	Out	Total	In	Out	Total	In	Out	Total	
Year 2005 CEQA Baseline										
Pier D/E Container Terminal – Trucks	100	88	188	98	96	194	39	57	96	2,527
Pier D/E Container Terminal – Auto	44	30	74	16	28	44	27	80	107	536
Pier D/E Container Terminal Total	144	118	262	114	124	238	66	137	203	3,063
Pier D/E Container Terminal Total P.C.E.	200	165	365	177	187	364	110	124	234	4,471
Pier F Container Terminal – Trucks	122	131	253	151	187	338	96	129	225	4,002
Pier F Container Terminal – Auto	59	39	98	22	37	59	36	106	142	711
Pier F Container Terminal Total	181	170	351	173	224	397	132	235	367	4,713
Pier F Container Terminal Total P.C.E.	236	250	486	252	349	601	211	266	477	6,523
Total PCE Vehicles	436	415	851	429	536	965	321	390	711	10,994
Year 2010										
Pier D/E Container Terminal – Trucks	161	81	242	186	199	385	101	140	241	4,084
Pier D/E Container Terminal – Auto	69	69	138	26	44	70	64	125	189	838
Pier D/E Container Terminal Total	230	150	380	212	243	455	165	265	430	4,922
Pier D/E Container Terminal Total P.C.E.	338	184	522	337	325	662	233	323	556	7,702
Pier F Container Terminal – Trucks	104	61	165	120	126	246	65	87	152	2,640
Pier F Container Terminal – Auto	48	48	96	18	30	48	45	87	132	584
Pier F Container Terminal Total	152	109	261	138	156	294	110	174	284	3,224
Pier F Container Terminal Total P.C.E.	221	134	355	219	207	426	154	209	363	5,020
Total PCE Vehicles	584	337	921	582	557	1,139	404	554	957	13,302
Year 2015										
Pier D/E/F Container Terminal – Trucks	218	144	362	253	272	525	137	191	328	5,996
Pier D/E/F Container Terminal – Auto	161	161	322	60	101	161	149	290	439	1,949
Pier D/E/F Container Terminal Total	379	305	684	313	373	686	286	481	767	7,945
Total PCE Vehicles	525	364	889	482	483	965	378	559	937	12,026
Year 2020										
Pier D/E/F Container Terminal – Trucks	211	176	387	244	252	496	132	210	342	6,276
Pier D/E/F Container Terminal – Auto	183	183	366	68	115	183	170	330	500	2,217
Pier D/E/F Container Terminal Total	394	359	753	312	367	679	302	540	842	8,493
Total PCE Vehicles	534	430	964	475	469	944	391	625	1,016	12,765
Year 2030										
Pier D/E/F Container Terminal – Trucks	270	240	510	313	328	641	169	248	417	8,026
Pier D/E/F Container Terminal – Auto	212	212	424	78	133	211	196	381	577	2,559
Pier D/E/F Container Terminal Total	482	452	934	391	461	852	365	629	994	10,585
Total PCE Vehicles	622	550	1,212	599	594	1,193	479	729	1208	16,047

Note: Truck trips have been converted to Passenger Car Equivalent (P.C.E.) using a factor of 1.1 for bobtails, 2.0 for chassis, and containers.

Table 3-25: 315-Acre Alternative - Intersection Significant Impacts

Intersections		2010	2015	2020	2030
1. Pico Avenue/Pier G Avenue and Harbor Plaza	Future Baseline				✓(M)
	CEQA Baseline	✓(M)	✓(M)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline		✓(M)	✓(P)	
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps	Future Baseline			✓(P)	✓(M,P)
	CEQA Baseline			✓(P)	✓(M,P)
	NEPA Baseline			✓(P)	✓(P)
3. Pico Avenue and Ocean Boulevard Westbound Off-Ramp	Future Baseline				✓(P)
	CEQA Baseline				✓(P)
	NEPA Baseline				
6. Pico Avenue and Pier D Street	Future Baseline	✓(M)			✓(A,M)
	CEQA Baseline	✓(M)			✓(A,M,P)
	NEPA Baseline				
<i>A = AM Peak Hour</i> <i>M = Midday Peak Hour</i> <i>P = PM Peak Hour</i>					

Table 3-26.1: 315-Acre Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2010 Future Year Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	D	32.8	F	84.6	E	36.9	C	20.7	F	61.9	D	28.1	-12.1	-22.7	-8.8	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	10.3	B	12.3	B	12.3	B	10.6	B	11.7	B	12.1	0.3	-0.6	-0.2	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.4	A	8.3	B	11.8	A	10.0	B	13.1	B	12.5	0.6	4.8	0.7	No
4. Pico Avenue and Broadway (c)	B	10.2	B	10.5	A	9.3	B	10.7	B	11.2	A	9.7	0.5	0.7	0.4	No
5. Pico Avenue and Pier D Street (a)	C	23.4	B	14.3	B	12.0	D	25.5	E	38.5	C	20.6	2.1	24.2	8.6	Yes (MD)
6. Pico Avenue and Pier C Street (b)	A	0.333	A	0.280	A	0.241	A	0.372	A	0.326	A	0.286	0.039	0.046	0.045	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.536	A	0.476	A	0.509	A	0.557	A	0.543	A	0.555	0.021	0.067	0.046	No
8. Anaheim Way and Pier B Street (a)	A	7.2	A	7.6	A	7.9	A	7.2	A	7.6	A	7.8	0.0	0.0	-0.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.296	A	0.262	A	0.391	A	0.299	A	0.261	A	0.381	0.003	-.001	-.010	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-26.2: 315-Acre Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2015 Future Year Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	E	38.5	F	95.1	E	39.2	C	20.7	F	72.1	C	22.1	-17.8	-23.0	-17.1	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	11.6	C	15.8	C	17.2	B	12.6	C	15.2	C	19.0	1.0	-0.6	18	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	10.0	C	16.2	B	10.2	B	12.5	C	17.7	C	18.9	2.5	1.5	8.7	No
4. Pico Avenue and Broadway (c)	A	8.4	A	9.1	A	9.3	A	8.9	A	9.6	A	10.0	0.5	0.5	0.7	No
5. Pico Avenue and Pier D Street (a)	B	10.1	B	11.5	B	10.2	B	10.9	B	12.2	B	10.4	0.8	0.7	0.2	No
6. Pico Avenue and Pier C Street (b)	D	25.6	C	15.9	B	13.1	D	25.4	C	23.3	C	17.0	-0.2	7.4	3.9	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.350	A	0.314	A	0.288	A	0.388	A	0.338	A	0.323	0.038	0.024	0.035	No
8. Anaheim Way and Pier B Street (a)	A	0.565	A	0.581	A	0.543	A	0.592	B	0.618	A	0.599	0.027	0.037	0.056	No
9. Farragut Avenue and Anaheim Street (b)	A	7.9	A	8.1	A	8.4	A	8.0	A	8.1	A	8.4	0.1	0.0	0.0	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-26.3: 315-Acre Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2020 Future Year Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	63.4	F	108.5	F	54.8	E	48.8	F	87.0	E	37.4	-14.6	-21.5	-17.4	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	14.8	C	19.2	D	28.1	C	16.1	C	19.3	E	37.0	1.3	0.1	8.9	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	11.0	C	18.3	C	20.1	C	15.3	C	20.4	D	27.1	4.3	2.1	7.0	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	8.8	A	9.6	A	9.7	A	9.2	A	10.0	B	10.7	0.4	0.4	1.0	No
4. Pico Avenue and Broadway (c)	B	10.9	B	12.4	B	10.6	B	11.6	B	13.4	B	10.8	0.7	1.0	0.2	No
5. Pico Avenue and Pier D Street (a)	D	29.4	C	16.9	C	15.0	D	32.1	C	23.6	C	21.5	2.7	6.7	6.5	No
6. Pico Avenue and Pier C Street (b)	A	0.388	A	0.352	A	0.345	A	0.413	A	0.371	A	0.376	0.025	0.019	0.031	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.626	A	0.549	A	0.572	B	0.640	A	0.591	B	0.625	0.014	0.042	0.053	No
8. Anaheim Way and Pier B Street (a)	B	10.6	A	9.9	B	10.8	B	11.0	B	11.2	B	11.9	0.4	1.3	1.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.436	A	0.441	B	0.607	A	0.460	A	0.495	B	0.603	0.024	0.054	-0.004	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-26.4: 315-Acre Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2030 Future Year Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	90.8	F	141.3	F	68.7	F	83.7	F	151.5	F	53.2	-7.1	10.2	-15.5	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	C	17.7	D	31.9	E	42.7	C	20.4	E	36.1	F	52.0	2.7	4.2	9.3	Yes (MD, PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	11.5	B	12.0	C	23.6	C	19.6	D	25.4	E	35.1	8.1	13.4	11.5	Yes (PM)
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9.3	B	10.3	B	11.3	B	10.1	B	11.2	B	13.0	0.8	0.9	1.7	No
4. Pico Avenue and Broadway (c)	B	11.7	B	14.2	B	11.2	B	12.8	C	15.2	B	11.2	1.1	1.0	0.0	No
5. Pico Avenue and Pier D Street (a)	D	32.2	C	19.4	C	17.0	E	44.0	E	48.5	D	26.9	11.8	29.1	9.9	Yes (AM, MD)
6. Pico Avenue and Pier C Street (b)	A	0.415	A	0.395	A	0.369	A	0.446	A	0.418	A	0.390	0.031	0.023	0.021	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.670	B	0.632	B	0.602	B	0.693	B	0.691	B	0.639	0.023	0.059	0.037	No
8. Anaheim Way and Pier B Street (a)	B	14.8	B	14.4	C	16.6	C	16.1	B	14.5	C	16.9	1.3	0.1	0.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.509	A	0.500	B	0.672	A	0.525	A	0.497	B	0.671	0.016	0.025	-0.001	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

NEPA Baseline Impact Determination

Tables 3-28.1 through 3-28.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the NEPA Baseline.

As indicated in Table 3-25 the Project will have significant impacts at the following two study area intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps

Mitigation Measures

By implementing **MM Trans-3 through MM TRANS-6** project-related impacts under the NEPA Baseline analysis will be less than significant.

Table 3-29 summarizes the intersection operating conditions with mitigation.

Significance of Impacts after Mitigation

Impacts will be less than significant with the implementation of recommended mitigation measures.

Impact TRANS-2: Additional traffic generated by the project will have significant impacts on highway locations in the study area.

For all analysis years, the impacts on highway locations for the 315-Acre Alternative were determined based upon comparing the LOS for the alternative to that of the Future, CEQA and NEPA Baselines.

Table 3-30 summarizes the highway segments and time periods by analysis year where the project is expected to have significant impacts under the Future Year, CEQA, and NEPA Baselines.

Future Baseline Impact Determination

Tables 3-31.1 through 3-31.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030 compared to the Future Baseline conditions.

As shown in Table 3-30 the Project is expected to have significant impacts on the following study highway segments using the Future Baseline comparison:

- I-405 south of I-710, northbound only
- I-710 between Willow Street and PCH, northbound only
- SR-91 east of I-710, both directions
- SR-91 west of I-710, both directions

Table 3-27.1: 315-Acre Alternative - Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2005 CEQA Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	C	20.7	F	61.9	D	28.1	6.7	40.2	13.5	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	10.6	B	11.7	B	12.1	0.7	-0.1	0.8	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5	A	10	B	13.1	B	12.5	0.4	3.2	3	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	10.7	B	11.2	A	9.7	0.1	-1.5	-1.8	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	25.5	E	38.5	C	20.6	15.7	-8.8	-86.2	No
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.372	A	0.326	A	0.286	0.141	0.063	0.02	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	A	0.557	A	0.543	A	0.555	0.201	0.158	0.129	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	A	7.2	A	7.6	A	7.8	-0.9	-1.2	-1.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.299	A	0.261	A	0.381	-0.049	-0.072	-0.069	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-27.2: 315-Acre Alternative - Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2005 CEQA Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	C	20.7	F	72.1	C	22.1	6.7	50.4	7.5	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	12.6	C	15.2	C	19	2.7	3.4	7.7	No
3. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	A	9.6	A	9.9	A	9.5										No
3A. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)							B	12.5	C	17.7	C	18.9	(d)	(d)	(d)	
3B. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	A	8.9	A	9.6	A	10	(d)	(d)	(d)	No
5. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	10.9	B	12.2	B	10.4	0.3	-0.5	-1.1	No
6. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	25.4	C	23.3	C	17	15.6	-24	-89.8	No
7. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.388	A	0.338	A	0.323	0.157	0.075	0.057	No
8. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	A	0.592	B	0.618	A	0.599	0.236	0.23	0.173	No
9. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	A	8	A	8.1	A	8.4	-0.1	-0.7	-0.7	No
10. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.358	A	0.349	A	0.474	0.01	0.016	0.024	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

(d) intersection configuration different in 2005 so no direct comparison is available

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-27.3: 315-Acre Alternative - Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2005 CEQA Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	E	48.8	F	87	E	37.4	34.8	65.3	22.8	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	C	16.1	C	19.3	E	37	6.2	7.5	25.7	Yes (PM)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5										
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	C	15.3	C	20.4	D	27.1	(d)	(d)	(d)	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	A	9.2	A	10	B	10.7	(d)	(d)	(d)	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	11.6	B	13.4	B	10.8	1	0.7	-0.7	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	32.1	C	23.6	C	21.5	22.3	-23.7	-85.3	No
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.413	A	0.371	A	0.376	0.182	0.108	0.11	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.64	A	0.591	B	0.625	0.284	0.21	0.199	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	B	11	B	11.2	B	11.9	2.9	2.4	2.8	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.46	A	0.495	B	0.603	0.112	0.162	0.153	No

Notes:
 (a) all-way stop-controlled intersection; weighted average delay for entire intersection reported
 (b) signalized intersection
 (c) stop controlled on minor street only
 (d) intersection configuration different in 2005 so no direct comparison is available
 AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-27.4: 315-Acre Alternative - Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2005 CEQA Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	F	83.7	F	151.5	F	53.2	69.7	129.8	38.6	Yes (AM,MD,MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	C	20.4	E	36.1	F	52	10.5	24.3	40.7	Yes (MD, PM)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5										
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	C	19.6	D	25.4	E	35.1	(d)	(d)	(d)	Yes (PM)
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	B	10.1	B	11.2	B	13	(d)	(d)	(d)	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	12.8	C	15.2	B	11.2	2.2	2.5	-0.3	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	E	44	E	48.5	D	26.9	34.2	1.2	-79.9	Yes (AM,MD)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.446	A	0.418	A	0.39	0.215	0.155	0.124	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.693	B	0.691	B	0.639	0.337	0.31	0.213	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	C	16.1	B	14.5	C	16.9	8	5.7	7.8	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.525	A	0.497	B	0.671	0.177	0.164	0.221	No

Notes:
 (a) all-way stop-controlled intersection; weighted average delay for entire intersection reported
 (b) signalized intersection
 (c) stop controlled on minor street only
 (d) intersection configuration different in 2005 so no direct comparison is available
 AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-28.1: 315-Acre Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2010 NEPA Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	C	21	F	63.5	D	28.2	C	20.7	F	61.9	D	28.1	-0.3	-1.6	-0.1	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	10.6	B	11.7	B	12.1	B	10.6	B	11.7	B	12.1	0	0	0	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.9	B	13.1	B	12.3	A	10	B	13.1	B	12.5	0.1	0	0.2	No
4. Pico Avenue and Broadway (c)	B	10.8	B	11.2	A	9.7	B	10.7	B	11.2	A	9.7	-0.1	0	0	No
5. Pico Avenue and Pier D Street (a)	D	25.5	E	38.8	C	20.7	D	25.5	E	38.5	C	20.6	0	-0.3	-0.1	No
6. Pico Avenue and Pier C Street (b)	A	0.37	A	0.325	A	0.283	A	0.372	A	0.326	A	0.286	0.002	0.001	0.003	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.556	A	0.544	A	0.558	A	0.557	A	0.543	A	0.555	0.001	-0.001	-0.003	No
8. Anaheim Way and Pier B Street (a)	A	7.2	A	7.6	A	7.8	A	7.2	A	7.6	A	7.8	0	0	0	No
9. Farragut Avenue and Anaheim Street (b)	A	0.358	A	0.333	A	0.443	A	0.299	A	0.261	A	0.381	0.007	0.000	-0.004	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-28.2: 315-Acre Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2015 NEPA Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	C	22.8	F	69.5	D	26.6	C	20.7	F	72.1	C	22.1	-2.1	2.6	-4.5	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	12.5	C	15.1	C	19	B	12.6	C	15.2	C	19	0.1	0.1	0	No
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	12.9	C	18.2	C	19.1	B	12.5	C	17.7	C	18.9	-0.4	-0.5	-0.2	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9	A	9.8	B	10.1	A	8.9	A	9.6	A	10	-0.1	-0.2	-0.1	No
4. Pico Avenue and Broadway (c)	B	11.1	B	12.5	B	10.4	B	10.9	B	12.2	B	10.4	-0.2	-0.3	0	No
5. Pico Avenue and Pier D Street (a)	D	27.6	D	30.3	C	19.1	D	25.4	C	23.3	C	17	-2.2	-7	-2.1	No
6. Pico Avenue and Pier C Street (b)	A	0.398	A	0.346	A	0.329	A	0.388	A	0.338	A	0.323	-0.01	-0.008	-0.006	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.594	B	0.626	A	0.6	A	0.592	B	0.618	A	0.599	-0.002	-0.008	-0.001	No
8. Anaheim Way and Pier B Street (a)	A	8	A	8.2	A	8.4	A	8	A	8.1	A	8.4	0	-0.1	0	No
9. Farragut Avenue and Anaheim Street (b)	A	0.425	A	0.405	A	0.518	A	0.358	A	0.349	A	0.474	-0.004	0.007	0.005	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-28.3: 315-Acre Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2020 NEPA Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	59.4	F	102.2	E	36.3	E	48.8	F	87	E	37.4	-10.6	-15.2	1.1	Yes (PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	14.6	C	19.4	E	35.8	C	16.1	C	19.3	E	37	1.5	-0.1	1.2	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	C	19.1	C	21.5	D	27.2	C	15.3	C	20.4	D	27.1	-3.8	-1.1	-0.1	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9.9	B	10.3	B	11.1	A	9.2	A	10	B	10.7	-0.7	-0.3	-0.4	No
4. Pico Avenue and Broadway (c)	B	12.5	B	13.8	B	10.7	B	11.6	B	13.4	B	10.8	-0.9	-0.4	0.1	No
5. Pico Avenue and Pier D Street (a)	E	43.9	D	34.1	C	24.3	D	32.1	C	23.6	C	21.5	-11.8	-10.5	-2.8	No
6. Pico Avenue and Pier C Street (b)	A	0.431	A	0.384	A	0.371	A	0.413	A	0.371	A	0.376	-0.018	-0.013	0.005	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.651	B	0.631	B	0.632	B	0.64	A	0.591	B	0.625	-0.011	-0.04	-0.007	No
8. Anaheim Way and Pier B Street (a)	B	12.7	B	11.4	B	12.7	B	11	B	11.2	B	11.9	-1.7	-0.2	-0.8	No
9. Farragut Avenue and Anaheim Street (b)	A	0.508	A	0.506	B	0.609	A	0.460	A	0.495	B	0.603	-0.048	-0.011	-0.006	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-28.4: 315-Acre Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2030 NEPA Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	84.5	F	151.4	F	53.9	F	83.7	F	151.5	F	53.2	-0.8	0.1	-0.7	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	C	20.1	E	35.9	F	50.9	C	20.4	E	36.1	F	52	0.3	0.2	1.1	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	C	19.8	D	25.5	E	35.2	C	19.6	D	25.4	E	35.1	-0.2	-0.1	-0.1	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	B	10.4	B	11.2	B	12.9	B	10.1	B	11.2	B	13	-0.3	0	0.1	No
4. Pico Avenue and Broadway (c)	B	13.4	C	15.2	B	11.1	B	12.8	C	15.2	B	11.2	-0.6	0	0.1	No
5. Pico Avenue and Pier D Street (a)	F	57.8	E	48.7	D	31.9	E	44	E	48.5	D	26.9	-13.8	-0.2	-5	No
6. Pico Avenue and Pier C Street (b)	A	0.463	A	0.417	A	0.399	A	0.446	A	0.418	A	0.39	-0.017	0.001	-0.009	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.694	C	0.71	B	0.639	B	0.693	B	0.691	B	0.639	-0.001	-0.019	0	No
8. Anaheim Way and Pier B Street (a)	C	15.4	C	15.4	C	16.5	C	16.1	B	14.5	C	16.9	0.7	-0.9	0.4	No
9. Farragut Avenue and Anaheim Street (b)	A	0.529	A	0.522	B	0.657	A	0.525	A	0.497	B	0.671	-0.004	-0.025	0.014	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-29: 315-Acre Alternative - Mitigated Intersection Level Of Service Analysis						
Year	8-9 a.m.		2-3 p.m.		4-5 p.m.	
	LOS	V/C Delay	LOS	V/C Delay	LOS	V/C Delay
Pico Ave / Pier G Ave and Harbor Plaza						
2010	A	0.543	B	0.690	A	0.560
2015	A	0.530	C	0.737	A	0.599
2020	B	0.686	C	0.774	B	0.690
2030	C	0.760	D	0.885	C	0.734
Pico Ave / Pier E St and Ocean Blvd EB On/Off-Ramps						
2010	A	0.357	A	0.417	A	0.473
2015	A	0.440	A	0.511	B	0.662
2020	A	0.506	A	0.572	D	0.791
2030	A	0.557	B	0.664	D	0.864
Pico Ave / Ocean Blvd WB Off-Ramp						
2010	A	0.297	A	0.267	A	0.252
2015	A	0.284	A	0.291	A	0.329
2020	A	0.322	A	0.317	A	0.391
2030	A	0.362	A	0.361	A	0.417
Pico Ave / Pier D St						
2010	B	0.651	B	0.636	A	0.584
2015	B	0.627	A	0.564	A	0.534
2020	B	0.653	A	0.559	A	0.564
2030	C	0.691	B	0.644	B	0.615

Table 3-30: 315-Acre Alternative - Highway Link Significant Impacts

Highway Segments	Baseline	2010	2015	2020	2030
1. NB I-405 Freeway n/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	-	-	-	-
SB I-405 Freeway n/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	-	-	-	-
2. NB I-405 Freeway s/o I-710 Freeway	Future Baseline	(A)	-	-	-
	CEQA Baseline	(A)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	-	-	(A)	-
SB I-405 Freeway s/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	-	-	-	-
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	Future Baseline	-	-	(M)	-
	CEQA Baseline	(A,M,P)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	-	-	-	-
SB I-710 Freeway between Willow Street and Pacific Coast Highway	Future Baseline	-	-	-	-
	CEQA Baseline	(A,M,P)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	-	-	-	-
4. NB I-110 Freeway n/o C-Street	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	(A)
	NEPA Baseline	-	-	-	-
6. EB SR-91 Freeway e/o I-710 Freeway	Future Baseline	-	(P)	-	-
	CEQA Baseline	(M)	(M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	-	-	-	-
WB SR-91 Freeway e/o I-710 Freeway	Future Baseline	-	(M)	-	(M)
	CEQA Baseline	(A,P)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	-	-	-	(A)
7. EB SR-91 Freeway w/o I-710 Freeway	Future Baseline	-	(P)	-	-
	CEQA Baseline	-	(P)	(M,P)	(M,P)
	NEPA Baseline	-	-	-	-
WB SR-91 Freeway w/o I-710 Freeway	Future Baseline	-	-	-	(M)
	CEQA Baseline	-	(M)	(A,M)	(A,M,P)
	NEPA Baseline	-	-	-	-

A = AM Peak Hour
M = Midday Peak Hour
P = PM Peak Hour

Mitigation Measures

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed for to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, the POLB is currently participating in the on-going regional transportation programs as described under the 345-Acre Alternative.

CEQA Baseline Impact Determination

Tables 3-32.1 through 3-32.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030, compared to the CEQA Baseline.

As shown in Table 3-30, the proposed Project is expected to have significant impact on the following study highway segments using the CEQA Baseline comparison:

:

- I-405 Freeway north of I-710 Freeway, both directions (starting 2015, max 1% in 2030)
- I-405 Freeway south of I-710 Freeway, both directions (starting 2010, max 5% in 2010)
- I-710 Freeway between Willow Street and Pacific Coast Highway, both directions (starting 2010, max 3.5% in 2020)
- I-110 Freeway north of C-Street, northbound only (starting 2030, max 1.5% in 2020)
- SR-91 Freeway east of I-710 Freeway, both directions (starting 2010, max 6% in 2030)
- SR-91 Freeway west of I-710 Freeway, both directions (starting 2015, max 2% in 2015)

Table 3-34 indicates the Project's share of the future traffic on the impacted study highway segments. The Project's maximum share of the future traffic on each individual link, ranges from approximately 1% to 6%. Although total highway traffic will increase substantially in the future, this Project contributes only a small portion to the anticipated future traffic.

Table 3-31.1: 315-Acre Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2010)

Highway Segments	Year 2010 Future Year Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.259	F	1.160	F	1.130	F	1.256	F	1.156	F	1.133	-0.003	-0.004	0.003	No
SB I-405 Freeway n/o I-710 Freeway	E	0.953	F	1.082	F	1.220	E	0.957	F	1.081	F	1.223	0.004	-0.001	0.003	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.159	F	1.131	F	1.133	F	1.232	F	1.134	F	1.137	0.073	0.003	0.004	Yes (AM)
SB I-405 Freeway s/o I-710 Freeway	D	0.938	F	1.038	F	1.168	E	0.944	F	1.044	F	1.176	0.006	0.006	0.008	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.006	F	1.053	F	1.115	F	1.005	F	1.063	F	1.121	-0.001	0.010	0.006	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.095	F	1.093	F	1.112	F	1.106	F	1.097	F	1.117	0.011	0.004	0.005	No
4. NB I-110 Freeway n/o C-Street	D	0.839	C	0.753	C	0.681	D	0.840	C	0.755	C	0.682	0.001	0.002	0.001	No
SB I-110 Freeway n/o C-Street	C	0.597	C	0.658	D	0.795	C	0.595	C	0.664	D	0.791	-0.002	0.006	-0.004	No
5. NB SR-47 Freeway at Heim Bridge	A	0.172	A	0.275	A	0.251	A	0.172	A	0.276	A	0.250	0.000	0.001	-0.001	No
SB SR-47 Freeway at Heim Bridge	A	0.225	A	0.232	A	0.148	A	0.227	A	0.230	A	0.147	0.002	-0.002	-0.001	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.870	F	1.046	F	1.124	D	0.873	F	1.047	F	1.096	0.003	0.001	-0.028	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.227	F	1.040	F	1.088	F	1.236	F	1.038	F	1.093	0.009	-0.002	0.005	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.694	D	0.861	E	0.962	C	0.693	D	0.860	E	0.947	-0.001	-0.001	-0.015	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.969	D	0.829	D	0.815	E	0.979	D	0.837	D	0.812	0.010	0.008	-0.003	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-31.2: 315-Acre Alternative- Future Year Baseline Highway Link Level Of Service Analysis (Year 2015)

Highway Segments	Year 2015 Future Year Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.324	F	1.214	F	1.202	F	1.331	F	1.211	F	1.197	0.007	-0.003	-0.005	No
SB I-405 Freeway n/o I-710 Freeway	F	1.006	F	1.129	F	1.315	F	1.006	F	1.119	F	1.305	0.000	-0.010	-0.010	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.278	F	1.195	F	1.221	F	1.277	F	1.183	F	1.219	-0.001	-0.012	-0.002	No
SB I-405 Freeway s/o I-710 Freeway	E	0.992	F	1.092	F	1.248	E	0.991	F	1.089	F	1.249	-0.001	-0.003	0.001	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.052	F	1.100	F	1.158	F	1.052	F	1.110	F	1.161	0.000	0.010	0.003	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.160	F	1.145	F	1.163	F	1.165	F	1.153	F	1.170	0.005	0.008	0.007	No
4. NB I-110 Freeway n/o C-Street	D	0.889	D	0.808	C	0.726	D	0.887	D	0.808	C	0.729	-0.002	0.000	0.003	No
SB I-110 Freeway n/o C-Street	C	0.628	C	0.714	D	0.837	C	0.631	C	0.714	D	0.843	0.003	0.000	0.006	No
5. NB SR-47 Freeway at Heim Bridge	A	0.192	A	0.317	A	0.290	A	0.193	A	0.315	A	0.283	0.001	-0.002	-0.007	No
SB SR-47 Freeway at Heim Bridge	A	0.258	A	0.253	A	0.160	A	0.258	A	0.258	A	0.163	0.000	0.005	0.003	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.918	F	1.073	F	1.211	D	0.919	F	1.069	F	1.257	0.001	-0.004	0.046	Yes (PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.257	F	1.146	F	1.125	F	1.260	F	1.172	F	1.135	0.003	0.026	0.010	Yes (MD)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.738	D	0.907	F	1.038	C	0.740	D	0.905	F	1.061	0.002	-0.002	0.023	Yes (PM)
WB SR-91 Freeway w/o I-710 Freeway	F	1.029	D	0.897	D	0.862	F	1.033	D	0.893	D	0.868	0.004	-0.004	0.006	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-31.3: 315-Acre Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2020)

Highway Segments	Year 2020 Future Year Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.387	F	1.313	F	1.259	F	1.389	F	1.313	F	1.264	0.002	0.000	0.005	No
SB I-405 Freeway n/o I-710 Freeway	F	1.059	F	1.203	F	1.369	F	1.056	F	1.214	F	1.369	-0.003	0.011	0.000	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.312	F	1.232	F	1.281	F	1.315	F	1.227	F	1.280	0.003	-0.005	-0.001	No
SB I-405 Freeway s/o I-710 Freeway	F	1.038	F	1.161	F	1.315	F	1.041	F	1.168	F	1.324	0.003	0.007	0.009	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.059	F	1.141	F	1.203	F	1.061	F	1.179	F	1.206	0.002	0.038	0.003	Yes (MD)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.196	F	1.200	F	1.215	F	1.202	F	1.218	F	1.218	0.006	0.018	0.003	No
4. NB I-110 Freeway n/o C-Street	D	0.882	D	0.857	C	0.755	D	0.894	D	0.860	C	0.753	0.012	0.003	-0.002	No
SB I-110 Freeway n/o C-Street	C	0.634	C	0.746	D	0.886	C	0.638	C	0.757	D	0.881	0.004	0.011	-0.005	No
5. NB SR-47 Freeway at Heim Bridge	A	0.002	A	0.326	A	0.271	A	0.007	A	0.336	A	0.277	0.005	0.010	0.006	No
SB SR-47 Freeway at Heim Bridge	A	0.280	A	0.257	A	0.171	A	0.276	A	0.269	A	0.175	-0.004	0.012	0.004	No
6. EB SR-91 Freeway e/o I-710 Freeway	E	0.941	F	1.154	F	1.342	E	0.947	F	1.077	F	1.318	0.006	-0.077	-0.024	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.322	F	1.294	F	1.180	F	1.320	F	1.306	F	1.196	-0.002	0.012	0.016	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.779	E	0.986	F	1.124	C	0.780	E	0.952	F	1.127	0.001	-0.034	0.003	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.100	F	1.035	D	0.916	F	1.098	E	0.988	D	0.913	-0.002	-0.047	-0.003	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-31.4: 315-Acre Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2030)

Highway Segments	Year 2030 Future Year Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.453	F	1.353	F	1.291	F	1.454	F	1.328	F	1.305	0.001	-0.025	0.014	No
SB I-405 Freeway n/o I-710 Freeway	F	1.093	F	1.243	F	1.425	F	1.093	F	1.244	F	1.432	0.000	0.001	0.007	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.411	F	1.323	F	1.315	F	1.407	F	1.288	F	1.329	-0.004	-0.035	0.014	No
SB I-405 Freeway s/o I-710 Freeway	F	1.088	F	1.202	F	1.364	F	1.087	F	1.199	F	1.369	-0.001	-0.003	0.005	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.152	F	1.204	F	1.274	F	1.156	F	1.207	F	1.280	0.004	0.003	0.006	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.259	F	1.260	F	1.270	F	1.266	F	1.267	F	1.274	0.007	0.007	0.004	No
4. NB I-110 Freeway n/o C-Street	E	0.967	D	0.891	D	0.784	E	0.968	D	0.902	D	0.787	0.001	0.011	0.003	No
SB I-110 Freeway n/o C-Street	C	0.686	D	0.790	D	0.918	C	0.688	D	0.791	D	0.926	0.002	0.001	0.008	No
5. NB SR-47 Freeway at Heim Bridge	A	0.212	A	0.333	A	0.307	A	0.212	A	0.328	A	0.318	0.000	-0.005	0.011	No
SB SR-47 Freeway at Heim Bridge	A	0.258	A	0.275	A	0.171	A	0.268	A	0.282	A	0.170	0.010	0.007	-0.001	No
6. EB SR-91 Freeway e/o I-710 Freeway	F	1.004	F	1.179	F	1.361	F	1.004	F	1.187	F	1.346	0.000	0.008	-0.015	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.383	F	1.295	F	1.222	F	1.398	F	1.371	F	1.235	0.015	0.076	0.013	Yes (MD)
7. EB SR-91 Freeway w/o I-710 Freeway	D	0.811	E	0.981	F	1.151	D	0.813	E	0.989	F	1.148	0.002	0.008	-0.003	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.120	E	0.989	E	0.949	F	1.122	F	1.059	E	0.947	0.002	0.070	-0.002	Yes (MD)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Mitigation Measures

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a Fair Share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed for to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

However, POLB is currently participating in the on-going regional transportation programs discussed in the Future Baseline, which will contribute toward mitigating any potential impacts of the Project.

No additional feasible mitigation measures are available at this time.

Significance of Impacts after Mitigation

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

NEPA Baseline Impact Determination

Tables 3-33.1 through 3-33.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030, compared to the NEPA Baseline.

As shown in Table 3-30, the proposed Project is expected to have significant impact on the following study highway segments using the NEPA Baseline comparison:

- I-405 south of I-710, northbound only
- SR-91 east of I-710, westbound only

Mitigation measures

As discussed in the Future Baseline section, the POLB does not own, control, or maintain any of the impacted highway segments because these segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. The POLB fair share calculations are set forth in Table 3-23. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, POLB is currently participating in the on-going regional transportation programs discussed in the Future Baseline, which will contribute toward mitigating any potential impacts of the Project.

No additional feasible mitigation measures are available at this time.

Significance of Impacts after Mitigation

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

Impact TRANS-3: Project operations would not increase the demand for transit services.

Impact TRANS-4: Project operations would not result in any increases in rail activity.

Future Baseline Impact Determination

Project impacts on transit services and rail operations are expected to be similar in nature but slightly less than the 345-acre alternative. Therefore, operations-related **Impacts TRANS-3 and TRANS-4** are the same for this alternative, as for the 345-Acre Alternative.. As with the 345-Acre Alternative, implementation of this alternative would result in less than significant impacts under the Future Baseline comparison.

CEQA Baseline Impact Determination

Project impacts on transit services and rail operations are expected to be similar in nature but slightly less than the 345-acre alternative. Therefore, operations-related **Impacts TRANS-3 and TRANS-4** are the same for this alternative, as for the 345-Acre Alternative.. As with the 345-Acre Alternative, implementation of this alternative would result in less than significant impacts under the CEQA Baseline comparison.

NEPA Baseline Impact Determination

Project impacts on transit services and rail operations are expected to be similar in nature but slightly less than the 345-acre alternative. Therefore, operations-related **Impacts TRANS-3 and TRANS-4** are the same for this alternative, as for the 345-Acre Alternative.. As with the 345-Acre Alternative, implementation of this alternative would result in less than significant impacts under the NEPA Baseline comparison.

Table 3-32.1: 315-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2010)

Highway Segments	CEQA Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.256	F	1.156	F	1.133	0.013	0.018	0.014	No
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	E	0.957	F	1.081	F	1.223	0.014	0.019	0.002	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.232	F	1.134	F	1.137	0.033	0.013	0	Yes(AM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	E	0.944	F	1.044	F	1.176	0.015	0.02	0.003	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.005	F	1.063	F	1.121	0.025	0.032	0.032	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.106	F	1.097	F	1.117	0.026	0.025	0.026	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.84	C	0.755	C	0.682	0.012	-0.002	0.009	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.595	C	0.664	D	0.791	0.008	-0.003	0.003	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.172	A	0.276	A	0.25	-0.003	-0.015	-0.002	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.227	A	0.23	A	0.147	-0.006	-0.011	-0.003	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	D	0.873	F	1.047	F	1.096	0.013	0.039	-0.069	Yes(MD)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.236	F	1.038	F	1.093	0.034	-0.046	0.037	Yes(AM,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.693	D	0.86	E	0.947	0.002	0.013	-0.041	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	E	0.979	D	0.837	D	0.812	0.007	-0.015	-0.002	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-32.2: 315-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2015)

Highway Segments	CEQA Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.331	F	1.211	F	1.197	0.088	0.073	0.078	Yes(AM,MD,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	F	1.006	F	1.119	F	1.305	0.063	0.057	0.084	Yes(AM,MD,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.277	F	1.183	F	1.219	0.078	0.062	0.082	Yes(AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	E	0.991	F	1.089	F	1.249	0.062	0.065	0.076	Yes(AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.052	F	1.11	F	1.161	0.072	0.079	0.072	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.165	F	1.153	F	1.17	0.085	0.081	0.079	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.887	D	0.808	C	0.729	0.059	0.051	0.056	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.631	C	0.714	D	0.843	0.044	0.047	0.055	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.193	A	0.315	A	0.283	0.018	0.024	0.031	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.258	A	0.258	A	0.163	0.025	0.017	0.013	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	D	0.919	F	1.069	F	1.257	0.059	0.061	0.092	Yes(MD,PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.26	F	1.172	F	1.135	0.058	0.088	0.079	Yes(AM,MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.74	D	0.905	F	1.061	0.049	0.058	0.073	Yes(PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	F	1.033	D	0.893	D	0.868	0.061	0.041	0.054	Yes(aM)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-32.3: 315-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2020)

Highway Segments	CEQA Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.389	F	1.313	F	1.264	0.146	0.175	0.145	Yes(AM,MD,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	F	1.056	F	1.214	F	1.369	0.113	0.152	0.148	Yes(AM,MD,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.315	F	1.227	F	1.28	0.116	0.106	0.143	Yes(AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	F	1.041	F	1.168	F	1.324	0.112	0.144	0.151	Yes(AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.061	F	1.179	F	1.206	0.081	0.148	0.117	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.202	F	1.218	F	1.218	0.122	0.146	0.127	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.894	D	0.86	C	0.753	0.066	0.103	0.08	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.638	C	0.757	D	0.881	0.051	0.09	0.093	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.007	A	0.336	A	0.277	-0.168	0.045	0.025	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.276	A	0.269	A	0.175	0.043	0.028	0.025	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	E	0.947	F	1.077	F	1.318	0.087	0.069	0.153	Yes(AM,MD,PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.32	F	1.306	F	1.196	0.118	0.222	0.14	Yes(AM,MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.78	E	0.952	F	1.127	0.089	0.105	0.139	Yes(MD,PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	F	1.098	E	0.988	D	0.913	0.126	0.136	0.099	Yes(AM,MD)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-32.4: 315-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2030)

Highway Segments	CEQA Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.454	F	1.328	F	1.305	0.211	0.19	0.186	Yes(AM,MD,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	F	1.093	F	1.244	F	1.432	0.15	0.182	0.211	Yes(AM,MD,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.407	F	1.288	F	1.329	0.208	0.167	0.192	Yes(AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	F	1.087	F	1.199	F	1.369	0.158	0.175	0.196	Yes(AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.156	F	1.207	F	1.28	0.176	0.176	0.191	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.266	F	1.267	F	1.274	0.186	0.195	0.183	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	E	0.968	D	0.902	D	0.787	0.14	0.145	0.114	Yes(AM)
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.688	D	0.791	D	0.926	0.101	0.124	0.138	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.212	A	0.328	A	0.318	0.037	0.037	0.066	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.268	A	0.282	A	0.17	0.035	0.041	0.02	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	F	1.004	F	1.187	F	1.346	0.144	0.179	0.181	Yes(AM,MD,PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.398	F	1.371	F	1.235	0.196	0.287	0.179	Yes(AM,MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	D	0.813	E	0.989	F	1.148	0.122	0.142	0.16	Yes(MD,PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	F	1.122	F	1.059	E	0.947	0.15	0.207	0.133	Yes(AM,MD,PM)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-33.1: 315-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2010)

Highway Segments	Year 2010 NEPA Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.261	F	1.155	F	1.132	F	1.256	F	1.156	F	1.133	-0.005	0.001	0.001	No
SB I-405 Freeway n/o I-710 Freeway	E	0.956	F	1.082	F	1.223	E	0.957	F	1.081	F	1.223	0.001	-0.001	0.000	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.232	F	1.134	F	1.141	F	1.232	F	1.134	F	1.137	0.000	0.000	-0.004	No
SB I-405 Freeway s/o I-710 Freeway	E	0.942	F	1.046	F	1.177	E	0.944	F	1.044	F	1.176	0.002	-0.002	-0.001	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.004	F	1.062	F	1.123	F	1.005	F	1.063	F	1.121	0.001	0.001	-0.002	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.110	F	1.099	F	1.116	F	1.106	F	1.097	F	1.117	-0.004	-0.002	0.001	No
4. NB I-110 Freeway n/o C-Street	D	0.839	C	0.754	C	0.682	D	0.840	C	0.755	C	0.682	0.001	0.001	0.000	No
SB I-110 Freeway n/o C-Street	C	0.598	C	0.657	D	0.792	C	0.595	C	0.664	D	0.791	-0.003	0.007	-0.001	No
5. NB SR-47 Freeway at Heim Bridge	A	0.171	A	0.276	A	0.251	A	0.172	A	0.276	A	0.250	0.001	0.000	-0.001	No
SB SR-47 Freeway at Heim Bridge	A	0.225	A	0.229	A	0.148	A	0.227	A	0.230	A	0.147	0.002	0.001	-0.001	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.870	F	1.045	F	1.096	D	0.873	F	1.047	F	1.096	0.003	0.002	0.000	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.249	F	1.039	F	1.080	F	1.236	F	1.038	F	1.093	-0.013	-0.001	0.013	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.694	D	0.861	E	0.948	C	0.693	D	0.860	E	0.947	-0.001	-0.001	-0.001	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.983	D	0.838	D	0.814	E	0.979	D	0.837	D	0.812	-0.004	-0.001	-0.002	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-33.2: 315-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2015)

Highway Segments	Year 2015 NEPA Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.328	F	1.214	F	1.202	F	1.331	F	1.211	F	1.197	0.003	-0.003	-0.005	No
SB I-405 Freeway n/o I-710 Freeway	F	1.006	F	1.130	F	1.310	F	1.006	F	1.119	F	1.305	0.000	-0.011	-0.005	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.277	F	1.190	F	1.211	F	1.277	F	1.183	F	1.219	0.000	-0.007	0.008	No
SB I-405 Freeway s/o I-710 Freeway	E	0.993	F	1.096	F	1.254	E	0.991	F	1.089	F	1.249	-0.002	-0.007	-0.005	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.052	F	1.112	F	1.164	F	1.052	F	1.110	F	1.161	0.000	-0.002	-0.003	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.160	F	1.154	F	1.171	F	1.165	F	1.153	F	1.170	0.005	-0.001	-0.001	No
4. NB I-110 Freeway n/o C-Street	D	0.887	D	0.808	C	0.729	D	0.887	D	0.808	C	0.729	0.000	0.000	0.000	No
SB I-110 Freeway n/o C-Street	C	0.631	C	0.714	D	0.839	C	0.631	C	0.714	D	0.843	0.000	0.000	0.004	No
5. NB SR-47 Freeway at Heim Bridge	A	0.193	A	0.323	A	0.285	A	0.193	A	0.315	A	0.283	0.000	-0.008	-0.002	No
SB SR-47 Freeway at Heim Bridge	A	0.259	A	0.260	A	0.163	A	0.258	A	0.258	A	0.163	-0.001	-0.002	0.000	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.919	F	1.073	F	1.255	D	0.919	F	1.069	F	1.257	0.000	-0.004	0.002	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.257	F	1.163	F	1.135	F	1.260	F	1.172	F	1.135	0.003	0.009	0.000	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.741	D	0.907	F	1.060	C	0.740	D	0.905	F	1.061	-0.001	-0.002	0.001	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.029	D	0.915	D	0.870	F	1.033	D	0.893	D	0.868	0.004	-0.022	-0.002	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-33.3: 345-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2020)

Highway Segments	Year 2020 NEPA Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.386	F	1.310	F	1.259	F	1.389	F	1.313	F	1.264	0.003	0.003	0.005	No
SB I-405 Freeway n/o I-710 Freeway	F	1.055	F	1.217	F	1.365	F	1.056	F	1.214	F	1.369	0.001	-0.003	0.004	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.271	F	1.226	F	1.277	F	1.315	F	1.227	F	1.280	0.044	0.001	0.003	Yes (AM)
SB I-405 Freeway s/o I-710 Freeway	F	1.039	F	1.167	F	1.309	F	1.041	F	1.168	F	1.324	0.002	0.001	0.015	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.064	F	1.185	F	1.201	F	1.061	F	1.179	F	1.206	-0.003	-0.006	0.005	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.212	F	1.220	F	1.221	F	1.202	F	1.218	F	1.218	-0.010	-0.002	-0.003	No
4. NB I-110 Freeway n/o C-Street	D	0.889	D	0.859	C	0.752	D	0.894	D	0.860	C	0.753	0.005	0.001	0.001	No
SB I-110 Freeway n/o C-Street	C	0.634	C	0.757	D	0.883	C	0.638	C	0.757	D	0.881	0.004	0.000	-0.002	No
5. NB SR-47 Freeway at Heim Bridge	A	0.004	A	0.341	A	0.276	A	0.007	A	0.336	A	0.277	0.003	-0.005	0.001	No
SB SR-47 Freeway at Heim Bridge	A	0.278	A	0.269	A	0.175	A	0.276	A	0.269	A	0.175	-0.002	0.000	0.000	No
6. EB SR-91 Freeway e/o I-710 Freeway	E	0.944	F	1.088	F	1.321	E	0.947	F	1.077	F	1.318	0.003	-0.011	-0.003	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.357	F	1.325	F	1.195	F	1.320	F	1.306	F	1.196	-0.037	-0.019	0.001	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.777	E	0.955	F	1.132	C	0.780	E	0.952	F	1.127	0.003	-0.003	-0.005	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.104	E	0.985	D	0.912	F	1.098	E	0.988	D	0.913	-0.006	0.003	0.001	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-33.4: 345-Acre Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2030)

Highway Segments	Year 2030 NEPA Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.452	F	1.329	F	1.303	F	1.454	F	1.328	F	1.305	0.002	-0.001	0.002	No
SB I-405 Freeway n/o I-710 Freeway	F	1.095	F	1.242	F	1.431	F	1.093	F	1.244	F	1.432	-0.002	0.002	0.001	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.393	F	1.277	F	1.329	F	1.407	F	1.288	F	1.329	0.014	0.011	0.000	No
SB I-405 Freeway s/o I-710 Freeway	F	1.091	F	1.199	F	1.372	F	1.087	F	1.199	F	1.369	-0.004	0.000	-0.003	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.164	F	1.202	F	1.283	F	1.156	F	1.207	F	1.280	-0.008	0.005	-0.003	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.270	F	1.267	F	1.284	F	1.266	F	1.267	F	1.274	-0.004	0.000	-0.010	No
4. NB I-110 Freeway n/o C-Street	E	0.968	D	0.901	D	0.790	E	0.968	D	0.902	D	0.787	0.000	0.001	-0.003	No
SB I-110 Freeway n/o C-Street	C	0.689	D	0.793	D	0.927	C	0.688	D	0.791	D	0.926	-0.001	-0.002	-0.001	No
5. NB SR-47 Freeway at Heim Bridge	A	0.218	A	0.347	A	0.302	A	0.212	A	0.328	A	0.318	-0.006	-0.019	0.016	No
SB SR-47 Freeway at Heim Bridge	A	0.271	A	0.280	A	0.172	A	0.268	A	0.282	A	0.170	-0.003	0.002	-0.002	No
6. EB SR-91 Freeway e/o I-710 Freeway	F	1.004	F	1.181	F	1.345	F	1.004	F	1.187	F	1.346	0.000	0.006	0.001	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.365	F	1.363	F	1.237	F	1.398	F	1.371	F	1.235	0.033	0.008	-0.002	Yes (AM)
7. EB SR-91 Freeway w/o I-710 Freeway	D	0.808	E	0.989	F	1.151	D	0.813	E	0.989	F	1.148	0.005	0.000	-0.003	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.117	F	1.052	E	0.947	F	1.122	F	1.059	E	0.947	0.005	0.007	0.000	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-34: Percentage of Project-Traffic to Highway (315-Acre Alternative)

Study Highway Segment	Traffic Volume in 2005 (Base)	2010			2015			2020			2030		
		Future without Proj.	Future with Proj.	Project Share	Future without Proj.	Future with Proj.	Project Share	Future without Proj.	Future with Proj.	Project Share	Future without Proj.	Future with Proj.	Project Share
AM PEAK													
1. NB I-405 Fwy. n/o I-710 Fwy.	15,657	16,184	16,157	-0.17%	16,689	16,764	0.45%	17,444	17,469	0.14%	18,304	18,315	0.06%
SB I-405 Fwy. n/o I-710 Fwy.	11,875	12,214	12,251	0.30%	12,671	12,675	0.03%	13,296	13,261	-0.26%	13,785	13,785	0.00%
2. NB I-405 Fwy. s/o I-710 Fwy.	15,099	14,869	15,632	4.88%	16,106	16,099	-0.04%	16,544	16,577	0.20%	17,745	17,698	-0.27%
SB I-405 Fwy. s/o I-710 Fwy.	11,708	12,023	12,083	0.50%	12,498	12,489	-0.07%	13,049	13,075	0.20%	13,706	13,692	-0.10%
3. NB I-710 Fwy. b/w Willow St. and PCH	6,171	6,391	6,383	-0.13%	6,628	6,626	-0.03%	6,666	6,677	0.16%	7,256	7,281	0.34%
SB I-710 Fwy. b/w Willow St. and PCH	6,804	6,963	7,033	1.00%	7,307	7,338	0.42%	7,530	7,566	0.48%	7,936	7,983	0.59%
4. NB I-110 Fwy. n/o C-Street	6,953	7,139	7,151	0.17%	7,469	7,452	-0.23%	7,408	7,509	1.35%	8,120	8,126	0.07%
SB I-110 Fwy. n/o C-Street	4,930	5,080	5,067	-0.26%	5,270	5,294	0.45%	5,329	5,359	0.56%	5,765	5,780	0.26%
6. EB SR-91 Fwy. e/o I-710 Fwy.	10,831	11,191	11,228	0.33%	11,568	11,585	0.15%	11,853	11,932	0.66%	12,649	12,650	0.01%
WB SR-91 Fwy. e/o I-710 Fwy.	15,143	15,589	15,701	0.71%	15,831	15,872	0.26%	16,654	16,630	-0.14%	17,429	17,621	1.09%
7. EB SR-91 Fwy. w/o I-710 Fwy.	10,163	10,491	10,485	-0.06%	10,857	10,873	0.15%	11,386	11,399	0.11%	11,918	11,934	0.13%
WB SR-91 Fwy. w/o I-710 Fwy.	14,283	14,704	14,814	0.74%	15,164	15,210	0.30%	16,043	16,020	-0.14%	16,533	16,558	0.15%
MIDDAY-PEAK													
1. NB I-405 Fwy. n/o I-710 Fwy.	14,334	14,780	14,735	-0.31%	15,292	15,258	-0.22%	16,416	16,411	-0.03%	16,994	16,728	-1.59%
SB I-405 Fwy. n/o I-710 Fwy.	13,379	13,833	13,821	-0.09%	14,234	14,131	-0.73%	15,095	15,214	0.78%	15,654	15,666	0.08%
2. NB I-405 Fwy. s/o I-710 Fwy.	14,116	14,576	14,604	0.19%	15,054	14,931	-0.82%	15,519	15,468	-0.33%	16,636	16,270	-2.25%
SB I-405 Fwy. s/o I-710 Fwy.	12,904	13,348	13,409	0.45%	13,771	13,740	-0.23%	14,569	14,638	0.47%	15,138	15,107	-0.21%
3. NB I-710 Fwy. b/w Willow St. and PCH	6,493	6,708	6,770	0.92%	6,931	6,991	0.86%	7,185	7,426	3.25%	7,586	7,604	0.24%
SB I-710 Fwy. b/w Willow St. and PCH	6,753	6,924	6,950	0.37%	7,211	7,263	0.72%	7,563	7,675	1.46%	7,937	7,980	0.54%
4. NB I-110 Fwy. n/o C-Street	6,361	6,480	6,494	0.22%	6,790	6,787	-0.04%	7,203	7,229	0.36%	7,487	7,582	1.25%
SB I-110 Fwy. n/o C-Street	5,599	5,730	5,779	0.85%	5,993	5,991	-0.03%	6,261	6,351	1.42%	6,628	6,639	0.17%
6. EB SR-91 Fwy. e/o I-710 Fwy.	12,693	13,222	13,231	0.07%	13,505	13,457	-0.36%	14,538	13,572	-7.12%	14,842	14,941	0.66%
WB SR-91 Fwy. e/o I-710 Fwy.	13,662	13,922	13,901	-0.15%	14,443	14,775	2.25%	16,305	16,459	0.94%	16,318	17,276	5.55%
7. EB SR-91 Fwy. w/o I-710 Fwy.	12,452	13,016	13,008	-0.06%	13,322	13,299	-0.17%	14,273	13,912	-2.59%	14,456	14,541	0.58%
WB SR-91 Fwy. w/o I-710 Fwy.	12,516	12,883	12,967	0.65%	13,235	13,190	-0.34%	14,800	14,311	-3.42%	14,558	15,295	4.82%
PM PEAK													
1. NB I-405 Fwy. n/o I-710 Fwy.	14,098	14,600	14,627	0.18%	15,125	15,073	-0.34%	15,804	15,855	0.32%	16,293	16,443	0.91%
SB I-405 Fwy. n/o I-710 Fwy.	15,387	15,824	15,860	0.23%	16,549	16,445	-0.63%	17,206	17,203	-0.02%	17,954	18,023	0.38%
2. NB I-405 Fwy. s/o I-710 Fwy.	14,324	14,816	14,862	0.31%	15,366	15,349	-0.11%	16,086	16,079	-0.04%	16,596	16,743	0.88%
SB I-405 Fwy. s/o I-710 Fwy.	14,780	15,170	15,252	0.54%	15,731	15,744	0.08%	16,522	16,618	0.58%	17,210	17,264	0.31%
3. NB I-710 Fwy. b/w Willow St. and PCH	6,859	7,070	7,107	0.52%	7,293	7,314	0.29%	7,578	7,598	0.26%	8,028	8,066	0.47%
SB I-710 Fwy. b/w Willow St. and PCH	6,873	7,037	7,067	0.42%	7,328	7,371	0.58%	7,652	7,669	0.22%	7,998	8,021	0.29%
4. NB I-110 Fwy. n/o C-Street	5,655	5,826	5,837	0.19%	6,094	6,122	0.46%	6,347	6,329	-0.28%	6,587	6,616	0.44%
SB I-110 Fwy. n/o C-Street	6,618	6,902	6,865	-0.54%	7,034	7,087	0.75%	7,442	7,397	-0.61%	7,703	7,767	0.82%
6. EB SR-91 Fwy. e/o I-710 Fwy.	14,676	15,205	14,850	-2.39%	15,248	15,828	3.66%	16,903	16,599	-1.83%	17,143	16,953	-1.12%
WB SR-91 Fwy. e/o I-710 Fwy.	13,309	13,767	13,827	0.43%	14,173	14,294	0.85%	14,871	15,070	1.32%	15,400	15,569	1.09%
7. EB SR-91 Fwy. w/o I-710 Fwy.	14,521	15,118	14,964	-1.03%	15,334	15,573	1.53%	16,371	16,404	0.20%	16,933	16,903	-0.18%
WB SR-91 Fwy. w/o I-710 Fwy.	11,958	12,441	12,411	-0.24%	12,697	12,758	0.48%	13,382	13,351	-0.23%	13,952	13,932	-0.14%

3.2.5 Alternative 3 – Landside Improvements Alternative

Construction Impacts

Future Baseline Impact Determination

As mentioned in Section 3.2.3, the analysis of construction-related traffic impacts for each alternative uses the vehicular traffic estimates developed for the 345-Acre Alternative. Because the 345-Acre Alternative would generate more construction-related traffic than the Landside Improvements Alternative, this approach generates a conservative estimate of traffic impacts due to construction at the site for this alternative.

Under this approach, construction-related **Impacts TRANS-1 through TRANS-4**, for the future baseline comparison, is the same for the Landside Improvements Alternative as they were for the 345-Acre Alternative. Consequently, the required mitigation measures and the significance of impacts after the mitigation are the same for the Landside Improvements Alternative and the 345-Acre Alternative.

CEQA Baseline Impact Determination

The impact analysis under the CEQA Baseline uses the same assumption and data as the 345-Acre CEQA Baseline comparison. Therefore, construction-related **Impacts TRANS-1 through TRANS-4**, for the CEQA baseline comparison, is the same for the Landside Improvements Alternative as they were for the 345-Acre Alternative. Consequently, the required mitigation measures and the significance of impacts after the mitigation are the same for the Landside Improvements Alternative and the 345-Acre Alternative.

NEPA Baseline Impact Determination

Landside Improvements Alternative is equivalent to the NEPA Baseline because it includes construction activities that would not require issuance of federal permits. Therefore, no impacts associated with ground transportation would occur under NEPA.

Operational Impacts

The trip generation estimates were developed based on the assumed operating parameters, previously presented in Section 3.2.2.

The proposed Project trip generation estimates are summarized in Table 3-35. It is important to note that for future years, peak hour trips do not increase proportionately with TEU growth. This is because in future years, on-dock rail usage will increase and work shift splits will change as described above.

Impact TRANS-1: Additional traffic generated by the Project will have significant impacts at the study area intersections.

Table 3-36 summarizes the intersection and time periods by analysis year where the project is expected to have significant impacts under the Future Year, and CEQA Baselines.

Future Baseline Impact Determination

Tables 3-37.1 through 3-37.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the Future Baseline.

As indicated in Table 3-35 the Project will have significant impacts at the following four study area intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp
- Pico Avenue and Pier D Street

Mitigation Measures

Mitigation Measures **MM TRANS-3 through MM TRANS-6** at the impacted intersections would mitigate project-related impacts. Table 3-39 summarizes the intersection operating conditions with mitigation.

Significance of Impacts after Mitigation

Impacts will be less than significant with the implementation of the recommended mitigation measures.

Table 3-35: Landside Improvements Alternative Trip Generation

Vehicle Type	8-9 a.m.			2-3 p.m.			4-5 p.m.			Daily
	In	Out	Total	In	Out	Total	In	Out	Total	
Year 2005 CEQA Baseline										
Pier D/E Container Terminal – Trucks	100	88	188	98	96	194	39	57	96	2,527
Pier D/E Container Terminal – Auto	44	30	74	16	28	44	27	80	107	536
Pier D/E Container Terminal Total	144	118	262	114	124	238	66	137	203	3,063
Pier D/E Container Terminal Total P.C.E.	200	165	365	177	187	364	110	124	234	4,471
Pier F Container Terminal – Trucks	122	131	253	151	187	338	96	129	225	4,002
Pier F Container Terminal – Auto	59	39	98	22	37	59	36	106	142	711
Pier F Container Terminal Total	181	170	351	173	224	397	132	235	367	4,713
Pier F Container Terminal Total P.C.E.	236	250	486	252	349	601	211	266	477	6,523
Total PCE Vehicles	436	415	851	429	536	965	321	390	711	10,994
Year 2010 Landside Improvements Alternative /NEPA Baseline										
Pier D/E Container Terminal – Trucks	162	81	243	188	201	389	102	142	244	4,128
Pier D/E Container Terminal – Auto	70	70	140	26	44	70	65	126	191	847
Pier D/E Container Terminal Total	232	151	383	214	245	459	167	268	435	4,975
Pier D/E Container Terminal Total P.C.E.	341	185	526	341	328	669	236	326	562	7,785
Pier F Container Terminal – Trucks	105	61	166	122	127	249	66	88	154	2,668
Pier F Container Terminal – Auto	49	49	98	18	31	49	45	88	133	590
Pier F Container Terminal Total	154	110	264	140	158	298	111	176	287	3,258
Pier F Container Terminal Total P.C.E.	224	135	359	221	211	432	155	212	367	5,074
Total PCE Vehicles	565	320	885	562	539	1,101	391	538	929	12,859
Year 2015 Landside Improvements Alternative /NEPA Baseline										
Pier D/E/F Container Terminal – Trucks	261	165	426	303	325	628	164	229	393	7,171
Pier D/E/F Container Terminal – Auto	160	160	320	59	100	159	148	288	436	1,931
Pier D/E/F Container Terminal Total	421	325	746	362	425	787	312	517	829	9,102
Total PCE Vehicles	596	393	999	565	557	1,122	422	610	1,032	13,982
Year 2020 Landside Improvements Alternative /NEPA Baseline										
Pier D/E/F Container Terminal – Trucks	270	239	509	312	327	639	169	245	414	8,014
Pier D/E/F Container Terminal – Auto	186	186	372	69	117	186	172	335	507	2,246
Pier D/E/F Container Terminal Total	456	425	881	381	444	825	341	580	921	10,260
Total PCE Vehicles	636	523	1,159	591	578	1,169	455	680	1,135	15,715
Year 2030 Landside Improvements Alternative /NEPA Baseline										
Pier D/E/F Container Terminal – Trucks	331	299	630	383	403	786	208	295	503	9,830
Pier D/E/F Container Terminal – Auto	214	214	428	79	135	214	199	387	586	2,595
Pier D/E/F Container Terminal Total	545	513	1,058	462	538	1,000	407	682	1,089	12,425
Total PCE Vehicles	766	636	1,402	719	702	1,421	546	803	1,349	19,115

Note: Truck trips have been converted to Passenger Car Equivalent (P.C.E.) using a factor of 1.1 for bobtails, 2.0 for chassis, and containers.

Table 3-36: Landside Improvements Alternative - Intersection Significant Impacts

Intersections		2010	2015	2020	2030
1. Pico Avenue/Pier G Avenue and Harbor Plaza	Future Baseline				✓(M)
	CEQA Baseline	✓(M)	✓(M)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline ⁽¹⁾	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps	Future Baseline			✓(P)	✓(M,P)
	CEQA Baseline			✓(P)	✓(M,P)
	NEPA Baseline ⁽¹⁾	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
3. Pico Avenue and Ocean Boulevard Westbound Off-Ramp	Future Baseline				✓(P)
	CEQA Baseline				✓(P)
	NEPA Baseline ⁽¹⁾	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
6. Pico Avenue and Pier D Street	Future Baseline	✓(M)		✓(A)	✓(A,M)
	CEQA Baseline			✓(A)	✓(A,M,P)
	NEPA Baseline ⁽¹⁾	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>

A = AM Peak Hour
M = Midday Peak Hour
P = PM Peak Hour

⁽¹⁾: Not Applicable, As no federal action or permit would be required under the Landside Improvements Alternative, there would be no significance determination under NEPA for this alternative.

Table 3-37.1: Landside Improvements Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2010 Future Year Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	D	32.8	F	84.6	E	36.9	C	21.0	F	63.5	D	28.2	-11.8	-21.1	-8.7	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	10.3	B	12.3	B	12.3	B	10.6	B	11.7	B	12.1	0.3	-0.6	-0.2	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.4	A	8.3	B	11.8	A	9.9	B	13.1	B	12.3	0.5	4.8	0.5	No
4. Pico Avenue and Broadway (c)	B	10.2	B	10.5	A	9.3	B	10.8	B	11.2	A	9.7	0.6	0.7	0.4	No
5. Pico Avenue and Pier D Street (a)	C	23.4	B	14.3	B	12.0	D	25.5	E	38.8	C	20.7	2.1	24.5	8.7	Yes (MD)
6. Pico Avenue and Pier C Street (b)	A	0.333	A	0.280	A	0.241	A	0.370	A	0.325	A	0.283	0.037	0.045	0.042	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.536	A	0.476	A	0.509	A	0.556	A	0.544	A	0.558	0.020	0.068	0.049	No
8. Anaheim Way and Pier B Street (a)	A	7.2	A	7.6	A	7.9	A	7.2	A	7.6	A	7.8	0.0	0.0	-0.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.296	A	0.262	A	0.391	A	0.292	A	0.261	A	0.385	-0.004	-0.001	-0.006	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-37.2: Landside Improvements Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2015 Future Year Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	E	38.5	F	95.1	E	39.2	C	22.8	F	69.5	D	26.6	-15.7	-25.6	-12.6	No
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	11.6	C	15.8	C	17.2	B	12.5	C	15.1	C	19.0	0.9	-0.7	1.8	No
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	A	10.0	C	16.2	B	10.2	B	12.9	C	18.2	C	19.1	2.9	2.0	8.9	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	8.4	A	9.1	A	9.3	A	9.0	A	9.8	B	10.1	0.6	0.7	0.8	No
4. Pico Avenue and Broadway (c)	B	10.1	B	11.5	B	10.2	B	11.1	B	12.5	B	10.4	1.0	1.0	0.2	No
5. Pico Avenue and Pier D Street (a)	D	25.6	C	15.9	B	13.1	D	27.6	D	30.3	C	19.1	2.0	14.4	6.0	No
6. Pico Avenue and Pier C Street (b)	A	0.350	A	0.314	A	0.288	A	0.398	A	0.346	A	0.329	0.048	0.032	0.041	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.565	A	0.581	A	0.543	A	0.594	B	0.626	A	0.600	0.029	0.045	0.057	No
8. Anaheim Way and Pier B Street (a)	A	7.9	A	8.1	A	8.4	A	8.0	A	8.2	A	8.4	0.1	0.1	0.0	No
9. Farragut Avenue and Anaheim Street (b)	A	0.356	A	0.349	A	0.476	A	0.362	A	0.342	A	0.469	0.006	-0.007	-0.007	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-37.3: Landside Improvements Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2020 Future Year Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	F	59.4	F	102.2	E	36.3	45.4	80.5	21.7	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	14.6	C	19.4	E	35.8	4.7	7.6	24.5	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	11	C	18.3	C	20.1	C	19.1	C	21.5	D	27.2	8.1	3.2	7.1	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	8.8	A	9.6	A	9.7	A	9.9	B	10.3	B	11.1	1.1	0.7	1.4	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	12.5	B	13.8	B	10.7	1.9	1.1	-0.8	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	E	43.9	D	34.1	C	24.3	34.1	-13.2	-82.5	Yes (AM)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.431	A	0.384	A	0.371	0.2	0.121	0.105	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.651	B	0.631	B	0.632	0.295	0.25	0.206	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	B	12.7	B	11.4	B	12.7	4.6	2.6	3.6	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.508	A	0.506	B	0.609	0.16	0.173	0.159	No

Notes:
 (a) all-way stop-controlled intersection; weighted average delay for entire intersection reported
 (b) signalized intersection
 (c) stop controlled on minor street only
 AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-37.4: Landside Improvements Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2030 Future Year Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	90.8	F	141.3	F	68.7	F	84.5	F	151.4	F	53.9	-6.3	10.1	-14.8	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	C	17.7	D	31.9	E	42.7	C	20.1	E	35.9	F	50.9	2.4	4.0	8.2	Yes (MD, PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	11.5	B	12.0	C	23.6	C	19.8	D	25.5	E	35.2	8.3	13.5	11.6	Yes (PM)
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9.3	B	10.3	B	11.3	B	10.4	B	11.2	B	12.9	1.1	0.9	1.6	No
4. Pico Avenue and Broadway (c)	B	11.7	B	14.2	B	11.2	B	13.4	C	15.2	B	11.1	1.7	1.0	-0.1	No
5. Pico Avenue and Pier D Street (a)	D	32.2	C	19.4	C	17.0	F	57.8	E	48.7	D	31.9	25.6	29.3	14.9	Yes (AM, MD)
6. Pico Avenue and Pier C Street (b)	A	0.415	A	0.395	A	0.369	A	0.463	A	0.417	A	0.399	0.048	0.022	0.030	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.670	B	0.632	B	0.602	B	0.694	C	0.710	B	0.639	0.024	0.078	0.037	No
8. Anaheim Way and Pier B Street (a)	B	14.8	B	14.4	C	16.6	C	15.4	C	15.4	C	16.5	0.6	1.0	-0.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.509	A	0.500	B	0.672	A	0.529	A	0.522	B	0.657	0.020	0.022	-0.015	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

CEQA Baseline Impact Determination

Tables 3-38.1 through 3-38.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the CEQA Baseline.

As indicated in Table 3-36, the proposed Project would have significant impacts at the following four study area intersections.

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp
- Pico Avenue and Pier D Street

Mitigation Measures

By implementing **MM Trans-3** through **MM TRANS-6**, project-related impacts under the CEQA Baseline analysis will be less than significant.

Table 3-39 summarizes the intersection operating conditions with mitigation.

Significance of Impacts after Mitigation

Impacts will be less than significant with the implementation of the recommended mitigation measures.

NEPA Baseline Impact Determination

The Landside Improvements Alternative and the NEPA Baseline are identical. Therefore, the NEPA impact associated with operation of the Alternative would be zero and less than significant.

Mitigation Measures

Since impacts would be less than significant under NEPA, no mitigation measures are necessary.

Significance of Impacts after Mitigation

Impacts would be less than significant.

Table 3-38.1: Landside Improvements Alternative - Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2005 CEQA Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	C	21	F	63.5	D	28.2	7	41.8	13.6	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	10.6	B	11.7	B	12.1	0.7	-0.1	0.8	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5	A	9.9	B	13.1	B	12.3	0.3	3.2	2.8	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	10.8	B	11.2	A	9.7	0.2	-1.5	-1.8	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	25.5	E	38.8	C	20.7	15.7	-8.5	-86.1	No
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.37	A	0.325	A	0.283	0.139	0.062	0.017	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	A	0.556	A	0.544	A	0.558	0.2	0.159	0.132	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	A	7.2	A	7.6	A	7.8	-0.9	-1.2	-1.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.292	A	0.261	A	0.385	-	-	-	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-38.2: Landside Improvements Alternative - Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2005 CEQA Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	C	21	F	63.5	D	28.2	7	41.8	13.6	Yes (MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	10.6	B	11.7	B	12.1	0.7	-0.1	0.8	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5										
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	A	9.9	B	13.1	B	12.3	0.3	3.2	2.8	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	B	10.8	B	11.2	A	9.7	0.2	-1.5	-1.8	No
4. Pico Avenue and Broadway (c)	A	9.8	E	47.3	F	106.8	D	25.5	E	38.8	C	20.7	15.7	-8.5	-86.1	No
5. Pico Avenue and Pier D Street (a)	A	0.231	A	0.263	A	0.266	A	0.37	A	0.325	A	0.283	0.139	0.062	0.017	No
6. Pico Avenue and Pier C Street (b)	A	0.356	A	0.385	A	0.426	A	0.556	A	0.544	A	0.558	0.2	0.159	0.132	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	8.1	A	8.8	A	9.1	A	7.2	A	7.6	A	7.8	-0.9	-1.2	-1.3	No
8. Anaheim Way and Pier B Street (a)	A	0.348	A	0.333	A	0.45	A	0.292	A	0.261	A	0.385	-0.056	-0.072	-0.065	No
9. Farragut Avenue and Anaheim Street (b)	B	14.0	C	21.7	B	14.6	C	21	F	63.5	D	28.2	7	41.8	13.6	Yes (MD)

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

(d) intersection configuration different in 2005 so no direct comparison is available

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-38.3: Landside Improvements Alternative - Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2005 CEQA Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	F	59.4	F	102.2	E	36.3	45.4	80.5	21.7	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	14.6	C	19.4	E	35.8	4.7	7.6	24.5	Yes (PM)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5										
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	C	19.1	C	21.5	D	27.2	(d)	(d)	(d)	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	A	9.9	B	10.3	B	11.1	(d)	(d)	(d)	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	12.5	B	13.8	B	10.7	1.9	1.1	-0.8	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	E	43.9	D	34.1	C	24.3	34.1	-13.2	-82.5	Yes (AM)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.431	A	0.384	A	0.371	0.2	0.121	0.105	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.651	B	0.631	B	0.632	0.295	0.25	0.206	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	B	12.7	B	11.4	B	12.7	4.6	2.6	3.6	No
10. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.508	A	0.506	B	0.609	0.16	0.173	0.159	No

Notes:
 (a) all-way stop-controlled intersection; weighted average delay for entire intersection reported
 (b) signalized intersection
 (c) stop controlled on minor street only
 (d) intersection configuration different in 2005 so no direct comparison is available
 AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-38.4: Landside Improvements Alternative - Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2005 CEQA Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	F	84.5	F	151.4	F	53.9	70.5	129.7	39.3	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	C	20.1	E	35.9	F	50.9	10.2	24.1	39.6	Yes (MD, PM)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5										
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c) (d)	-	-	-	-	-	-	C	19.8	D	25.5	E	35.2	(d)	(d)	(d)	Yes (PM)
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c) (d)	-	-	-	-	-	-	B	10.4	B	11.2	B	12.9	(d)	(d)	(d)	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	13.4	C	15.2	B	11.1	2.8	2.5	-0.4	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	F	57.8	E	48.7	D	31.9	48	1.4	-74.9	Yes (AM,MD)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.463	A	0.417	A	0.399	0.232	0.154	0.133	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.694	C	0.71	B	0.639	0.338	0.33	0.213	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	C	15.4	C	15.4	C	16.5	7.3	6.6	7.4	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.529	A	0.522	B	0.657	0.181	0.189	0.207	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

(d) intersection configuration different in 2005 so no direct comparison is available

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-39: Landside Improvements Alternative - Mitigated Intersection Level Of Service Analysis

Year	8-9 a.m.		2-3 p.m.		4-5 p.m.	
	LOS	V/C Delay	LOS	V/C Delay	LOS	V/C Delay
Pico Ave / Pier G Ave and Harbor Plaza						
2010	A	0.547	B	0.692	A	0.560
2015	A	0.541	C	0.729	B	0.614
2020	C	0.723	D	0.812	B	0.687
2030	C	0.750	D	0.885	C	0.730
Pico Ave / Pier E St and Ocean Blvd EB On/Off-Ramps						
2010	A	0.358	A	0.417	A	0.473
2015	A	0.437	A	0.512	B	0.663
2020	A	0.456	A	0.576	C	0.792
2030	A	0.556	B	0.665	D	0.852
Pico Ave / Ocean Blvd WB Off-Ramp						
2010	A	0.298	A	0.268	A	0.252
2015	A	0.292	A	0.302	A	0.328
2020	A	0.368	A	0.331	A	0.384
2030	A	0.384	A	0.363	A	0.416
Pico Ave / Pier D St						
2010	B	0.649	B	0.637	A	0.585
2015	B	0.634	A	0.589	A	0.551
2020	B	0.691	A	0.591	A	0.592
2030	C	0.740	B	0.650	B	0.636

Impact TRANS-2: Additional traffic generated by the project will have significant impacts on highway locations in the study area.

For all analysis years, the impacts on highway locations for the Landside Improvements Alternative were determined based upon comparing the LOS for the alternative to that of the Future and CEQA Baselines.

Table 3-40 summarizes the highway segments and time periods by analysis year where the project is expected to have significant impacts under the Future Year and CEQA Baselines.

Future Baseline Impact Determination

Tables 3-41.1 through 3-41.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030 compared to the Future Baseline conditions.

As shown in Table 3-40 the Project is expected to have significant impacts on the following study highway segments using the Future Baseline comparison:

- I-405 south of I-710, northbound only
- I-710 between Willow Street and PCH, northbound only
- SR-91 east of I-710, both directions
- SR-91 west of I-710, both directions

Mitigation Measures

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed for to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, the POLB is currently participating in the on-going regional transportation programs as described under the 345-Acre Alternative earlier.

Significance of Impacts after Mitigation

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

CEQA Baseline Impact Determination

Tables 3-42.1 through 3-42.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030, compared to the CEQA Baseline.

As shown in Table 3-40, the proposed Project is expected to have significant impact on the following study highway segments using the CEQA Baseline comparison:

:

- I-405 Freeway north of I-710 Freeway, both directions (starting 2015, max 1% in 2020)
- I-405 Freeway south of I-710 Freeway, both directions (starting 2010, max 5% in 2010)

Middle Harbor Redevelopment Project

- I-710 Freeway between Willow Street and Pacific Coast Highway, both directions (starting 2010, max 4% in 2020)
- I-110 Freeway north of C-Street, northbound only (starting 2030, max 1.5% in 2020)
- SR-91 Freeway east of I-710 Freeway, both directions (starting 2010, max 5% in 2030)
- SR-91 Freeway west of I-710 Freeway, both directions (starting 2015, max 4.5% in 2030)

Table 3-43 indicates the Project's share of the future traffic on the impacted study highway segments. The Project's maximum share of the future traffic on each individual link, ranges from approximately 1% to 5%. Although total highway traffic will increase substantially in the future, this Project contributes only a small portion to the anticipated future traffic.

Mitigation Measures

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

MM TRANS-7: If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed for to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, the POLB is currently participating in the on-going regional transportation programs as described under the 345-Acre Alternative earlier.

No additional feasible mitigation measures are available.

Significance of Impacts after Mitigation

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

NEPA Baseline Impact Determination

Operation of Landside Improvements Alternative and the NEPA Baseline are identical. Therefore, the NEPA impact associated with operation of the Alternative would be zero and less than significant.

Mitigation Measures

Since impacts would be less than significant under NEPA, no mitigation measures are necessary.

Significance of Impacts after Mitigation

Impacts would be less than significant.

Impact TRANS-3: Project operations would not increase the demand for transit services.

Impact TRANS-4: Project operations would not result in any increases in rail activity.

Future Baseline Impact Determination

Project impacts on transit services and rail operations are expected to be similar in nature but slightly less than the 345-acre alternative. Therefore, operations-related **Impacts TRANS-3 and TRANS-4** is the same for this alternative, as for the 345-Acre Alternative. As with the 345-Acre Alternative, implementation of this alternative would result in less than significant impacts under the Future Baseline comparison.

CEQA Baseline Impact Determination

Project impacts on transit services and rail operations are expected to be similar in nature but slightly less than the 345-acre alternative. Therefore, operations-related **Impacts TRANS-3 and TRANS-4** are the same for this alternative, as for the 345-Acre Alternative.. As with the 345-Acre Alternative, implementation of this alternative would result in less than significant impacts under the CEQA Baseline comparison.

NEPA Baseline Impact Determination

Operations of the Landside Improvements Alternative and the NEPA Baseline are identical. Therefore, the NEPA impact associated with operation of the alternative would be less than significant.

Table 3-40: Landside Improvements Alternative - Highway Link Significant Impacts					
Highway Segments	Baseline ⁽¹⁾	2010	2015	2020	2030
1. NB I-405 Freeway n/o I-710 Freeway	Future Baseline	(A,P)	-	-	-
	CEQA Baseline	-	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a
SB I-405 Freeway n/o I-710 Freeway	Future Baseline	(A,P)	-	-	-
	CEQA Baseline	-	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a
2. NB I-405 Freeway s/o I-710 Freeway	Future Baseline	(A,M,P)	-	-	-
	CEQA Baseline	(A)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a
SB I-405 Freeway s/o I-710 Freeway	Future Baseline	(A,M,P)	-	-	-
	CEQA Baseline	(M)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	Future Baseline	-	-	(M)	-
	CEQA Baseline	(A,M,P)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a
SB I-710 Freeway between Willow Street and Pacific Coast Highway	Future Baseline	(A)	-	(M)	-
	CEQA Baseline	(A,M,P)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a
4. NB I-110 Freeway n/o C-Street	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	(A)
	NEPA Baseline	n/a	n/a	n/a	n/a
6. EB SR-91 Freeway e/o I-710 Freeway	Future Baseline	-	(P)	-	-
	CEQA Baseline	(M)	(M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a
WB SR-91 Freeway e/o I-710 Freeway	Future Baseline	(M)	(A)	(A,M)	(M)
	CEQA Baseline	(A,P)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a
7. EB SR-91 Freeway w/o I-710 Freeway	Future Baseline	(P)	-	-	-
	CEQA Baseline	-	(P)	(M,P)	(M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a
WB SR-91 Freeway w/o I-710 Freeway	Future Baseline	(A)	-	-	(M)
	CEQA Baseline	-	(A)	(A,M)	(A,M,P)
	NEPA Baseline	n/a	n/a	n/a	n/a

A = AM Peak Hour
M = Midday Peak Hour
P = PM Peak Hour

Table 3-41.1: Landside Improvements Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2010)

Highway Segments	Year 2010 Future Year Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.259	F	1.160	F	1.130	F	1.285	F	1.177	F	1.157	0.026	0.016	0.027	Yes (AM,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.953	F	1.082	F	1.220	E	0.975	F	1.098	F	1.263	0.022	0.016	0.043	Yes (AM,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.159	F	1.131	F	1.133	F	1.240	F	1.159	F	1.176	0.081	0.028	0.042	Yes (AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.938	F	1.038	F	1.168	E	0.961	F	1.059	F	1.213	0.023	0.021	0.045	Yes (AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.006	F	1.053	F	1.115	F	1.013	F	1.066	F	1.126	0.008	0.013	0.011	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.095	F	1.093	F	1.112	F	1.117	F	1.108	F	1.128	0.022	0.015	0.016	Yes (AM)
4. NB I-110 Freeway n/o C-Street	D	0.839	C	0.753	C	0.681	D	0.856	D	0.783	C	0.696	0.018	0.030	0.015	No
SB I-110 Freeway n/o C-Street	C	0.597	C	0.658	D	0.795	C	0.607	C	0.690	D	0.815	0.010	0.031	0.020	No
5. NB SR-47 Freeway at Heim Bridge	A	0.172	A	0.275	A	0.251	A	0.181	A	0.301	A	0.261	0.009	0.026	0.010	No
SB SR-47 Freeway at Heim Bridge	A	0.225	A	0.232	A	0.148	A	0.241	A	0.249	A	0.155	0.016	0.017	0.007	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.870	F	1.046	F	1.124	D	0.889	F	1.042	F	1.205	0.019	-0.004	0.081	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.227	F	1.040	F	1.088	F	1.243	F	1.121	F	1.092	0.015	0.080	0.004	Yes (MD)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.694	D	0.861	E	0.962	C	0.714	D	0.876	F	1.022	0.020	0.014	0.059	Yes (PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.969	D	0.829	D	0.815	F	1.005	D	0.881	D	0.842	0.036	0.052	0.026	Yes (AM)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-41.2: Landside Improvements Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2015)

Highway Segments	Year 2015 Future Year Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.324	F	1.214	F	1.202	F	1.328	F	1.215	F	1.195	0.003	0.002	-0.007	No
SB I-405 Freeway n/o I-710 Freeway	F	1.006	F	1.129	F	1.315	F	1.007	F	1.134	F	1.304	0.001	0.006	-0.011	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.278	F	1.195	F	1.221	F	1.281	F	1.197	F	1.214	0.002	0.003	-0.007	No
SB I-405 Freeway s/o I-710 Freeway	E	0.992	F	1.092	F	1.248	E	0.992	F	1.094	F	1.253	0.001	0.001	0.005	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.052	F	1.100	F	1.158	F	1.047	F	1.101	F	1.163	-0.006	0.001	0.005	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.160	F	1.145	F	1.163	F	1.153	F	1.145	F	1.165	-0.006	0.000	0.002	No
4. NB I-110 Freeway n/o C-Street	D	0.889	D	0.808	C	0.726	D	0.884	D	0.808	C	0.719	-0.005	0.000	-0.007	No
SB I-110 Freeway n/o C-Street	C	0.628	C	0.714	D	0.837	C	0.627	C	0.712	D	0.842	-0.001	-0.001	0.004	No
5. NB SR-47 Freeway at Heim Bridge	A	0.192	A	0.317	A	0.290	A	0.187	A	0.311	A	0.269	-0.005	-0.006	-0.021	No
SB SR-47 Freeway at Heim Bridge	A	0.258	A	0.253	A	0.160	A	0.249	A	0.257	A	0.160	-0.009	0.004	0.000	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.918	F	1.073	F	1.211	D	0.918	F	1.077	F	1.244	0.000	0.004	0.033	Yes (PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.257	F	1.146	F	1.125	F	1.284	F	1.158	F	1.128	0.027	0.012	0.003	Yes (AM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.738	D	0.907	F	1.038	C	0.738	D	0.905	F	1.055	0.000	-0.002	0.017	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.029	D	0.897	D	0.862	F	1.038	D	0.910	D	0.869	0.009	0.013	0.007	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-41.3: Landside Improvements Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2020)

Highway Segments	Year 2020 Future Year Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.387	F	1.313	F	1.259	F	1.386	F	1.310	F	1.259	-0.001	-0.003	0.000	No
SB I-405 Freeway n/o I-710 Freeway	F	1.059	F	1.203	F	1.369	F	1.055	F	1.217	F	1.365	-0.004	0.014	-0.004	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.312	F	1.232	F	1.281	F	1.271	F	1.226	F	1.277	-0.041	-0.006	-0.004	No
SB I-405 Freeway s/o I-710 Freeway	F	1.038	F	1.161	F	1.315	F	1.039	F	1.167	F	1.309	0.001	0.006	-0.006	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.059	F	1.141	F	1.203	F	1.064	F	1.185	F	1.201	0.005	0.044	-0.002	Yes(MD)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.196	F	1.200	F	1.215	F	1.212	F	1.220	F	1.221	0.016	0.020	0.006	Yes(MD)
4. NB I-110 Freeway n/o C-Street	D	0.882	D	0.857	C	0.755	D	0.889	D	0.859	C	0.752	0.007	0.002	-0.003	No
SB I-110 Freeway n/o C-Street	C	0.634	C	0.746	D	0.886	C	0.634	C	0.757	D	0.883	0.000	0.011	-0.003	No
5. NB SR-47 Freeway at Heim Bridge	A	0.002	A	0.326	A	0.271	A	0.004	A	0.341	A	0.276	0.002	0.015	0.005	No
SB SR-47 Freeway at Heim Bridge	A	0.280	A	0.257	A	0.171	A	0.278	A	0.269	A	0.175	-0.002	0.012	0.004	No
6. EB SR-91 Freeway e/o I-710 Freeway	E	0.941	F	1.154	F	1.342	E	0.944	F	1.088	F	1.321	0.003	-0.066	-0.021	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.322	F	1.294	F	1.180	F	1.357	F	1.325	F	1.195	0.035	0.031	0.015	Yes (AM,MD)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.779	E	0.986	F	1.124	C	0.777	E	0.955	F	1.132	-0.002	-0.031	0.008	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.100	F	1.035	D	0.916	F	1.104	E	0.985	D	0.912	0.004	-0.050	-0.004	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-41.4: Landside Improvements Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2030)

Highway Segments	Year 2030 Future Year Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.453	F	1.353	F	1.291	F	1.452	F	1.329	F	1.303	-0.001	-0.024	0.012	No
SB I-405 Freeway n/o I-710 Freeway	F	1.093	F	1.243	F	1.425	F	1.095	F	1.242	F	1.431	0.002	-0.001	0.006	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.411	F	1.323	F	1.315	F	1.393	F	1.277	F	1.329	-0.018	-0.046	0.014	No
SB I-405 Freeway s/o I-710 Freeway	F	1.088	F	1.202	F	1.364	F	1.091	F	1.199	F	1.372	0.003	-0.003	0.008	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.152	F	1.204	F	1.274	F	1.164	F	1.202	F	1.283	0.012	-0.002	0.009	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.259	F	1.260	F	1.270	F	1.270	F	1.267	F	1.284	0.011	0.007	0.014	No
4. NB I-110 Freeway n/o C-Street	E	0.967	D	0.891	D	0.784	E	0.968	D	0.901	D	0.790	0.001	0.010	0.006	No
SB I-110 Freeway n/o C-Street	C	0.686	D	0.790	D	0.918	C	0.689	D	0.793	D	0.927	0.003	0.003	0.009	No
5. NB SR-47 Freeway at Heim Bridge	A	0.212	A	0.333	A	0.307	A	0.218	A	0.347	A	0.302	0.006	0.014	-0.005	No
SB SR-47 Freeway at Heim Bridge	A	0.258	A	0.275	A	0.171	A	0.271	A	0.280	A	0.172	0.013	0.005	0.001	No
6. EB SR-91 Freeway e/o I-710 Freeway	F	1.004	F	1.179	F	1.361	F	1.004	F	1.181	F	1.345	0.000	0.002	-0.016	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.383	F	1.295	F	1.222	F	1.365	F	1.363	F	1.237	-0.018	0.068	0.015	Yes (MD)
7. EB SR-91 Freeway w/o I-710 Freeway	D	0.811	E	0.981	F	1.151	D	0.808	E	0.989	F	1.151	-0.003	0.008	0.000	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.120	E	0.989	E	0.949	F	1.117	F	1.052	E	0.947	-0.003	0.063	-0.002	Yes (MD)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-42.1: Landside Improvements Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2010)

Highway Segments	CEQA Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.261	F	1.155	F	1.132	0.018	0.017	0.013	No
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	E	0.956	F	1.082	F	1.223	0.013	0.02	0.002	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.232	F	1.134	F	1.141	0.033	0.013	0.004	Yes(AM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	E	0.942	F	1.046	F	1.177	0.013	0.022	0.004	Yes(MD)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.004	F	1.062	F	1.123	0.024	0.031	0.034	Yes(AM,MD, PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.11	F	1.099	F	1.116	0.03	0.027	0.025	Yes(AM,MD, PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.839	C	0.754	C	0.682	0.011	-0.003	0.009	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.598	C	0.657	D	0.792	0.011	-0.01	0.004	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.171	A	0.276	A	0.251	-0.004	-0.015	-0.001	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.225	A	0.229	A	0.148	-0.008	-0.012	-0.002	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	D	0.87	F	1.045	F	1.096	0.01	0.037	-0.069	Yes(MD)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.249	F	1.039	F	1.08	0.047	-0.045	0.024	Yes(AM,PM))
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.694	D	0.861	E	0.948	0.003	0.014	-0.04	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	E	0.983	D	0.838	D	0.814	0.011	-0.014	0	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-42.2: Landside Improvements Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2015)

Highway Segments	CEQA Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.328	F	1.214	F	1.202	0.085	0.076	0.083	Yes(AM,MD,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	F	1.006	F	1.13	F	1.31	0.063	0.068	0.089	Yes(AM,MD,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.277	F	1.19	F	1.211	0.078	0.069	0.074	Yes(AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	E	0.993	F	1.096	F	1.254	0.064	0.072	0.081	Yes(AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.052	F	1.112	F	1.164	0.072	0.081	0.075	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.16	F	1.154	F	1.171	0.08	0.082	0.08	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.887	D	0.808	C	0.729	0.059	0.051	0.056	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.631	C	0.714	D	0.839	0.044	0.047	0.051	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.193	A	0.323	A	0.285	0.018	0.032	0.033	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.259	A	0.26	A	0.163	0.026	0.019	0.013	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	D	0.919	F	1.073	F	1.255	0.059	0.065	0.09	Yes(MD,PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.257	F	1.163	F	1.135	0.055	0.079	0.079	Yes(AM,MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.741	D	0.907	F	1.06	0.05	0.06	0.072	Yes(PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	F	1.029	D	0.915	D	0.87	0.057	0.063	0.056	Yes(AM)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-42.3: Landside Improvements Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2020)

Highway Segments	CEQA Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.386	F	1.31	F	1.259	0.143	0.172	0.14	Yes(AM,MD,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	F	1.055	F	1.217	F	1.365	0.112	0.155	0.144	Yes(AM,MD,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.271	F	1.226	F	1.277	0.072	0.105	0.14	Yes(AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	F	1.039	F	1.167	F	1.309	0.11	0.143	0.136	Yes(AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.064	F	1.185	F	1.201	0.084	0.154	0.112	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.212	F	1.22	F	1.221	0.132	0.148	0.13	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.889	D	0.859	C	0.752	0.061	0.102	0.079	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.634	C	0.757	D	0.883	0.047	0.09	0.095	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.004	A	0.341	A	0.276	-0.171	0.05	0.024	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.278	A	0.269	A	0.175	0.045	0.028	0.025	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	E	0.944	F	1.088	F	1.321	0.084	0.08	0.156	Yes(AM,MD,PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.357	F	1.325	F	1.195	0.155	0.241	0.139	Yes(AM,MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.777	E	0.955	F	1.132	0.086	0.108	0.144	Yes(MD,PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	F	1.104	E	0.985	D	0.912	0.132	0.133	0.098	Yes(AM,MD)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-42.4: Landside Improvements Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2030)

Highway Segments	CEQA Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	F	1.452	F	1.329	F	1.303	0.209	0.191	0.184	Yes(AM,MD,PM)
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	F	1.095	F	1.242	F	1.431	0.152	0.18	0.21	Yes(AM,MD,PM)
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	F	1.393	F	1.277	F	1.329	0.194	0.156	0.192	Yes(AM,MD,PM)
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	F	1.091	F	1.199	F	1.372	0.162	0.175	0.199	Yes(AM,MD,PM)
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.164	F	1.202	F	1.283	0.184	0.171	0.194	Yes(AM,MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.27	F	1.267	F	1.284	0.19	0.195	0.193	Yes(AM,MD,PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	E	0.968	D	0.901	D	0.79	0.14	0.144	0.117	Yes(AM)
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.689	D	0.793	D	0.927	0.102	0.126	0.139	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.218	A	0.347	A	0.302	0.043	0.056	0.05	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.271	A	0.28	A	0.172	0.038	0.039	0.022	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	F	1.004	F	1.181	F	1.345	0.144	0.173	0.18	Yes(AM,MD,PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	F	1.365	F	1.363	F	1.237	0.163	0.279	0.181	Yes(AM,MD,PM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	D	0.808	E	0.989	F	1.151	0.117	0.142	0.163	Yes(MD,PM)
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	F	1.117	F	1.052	E	0.947	0.145	0.2	0.133	Yes(AM,MD,PM)

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-43: Percentage of Project-Traffic to Highway (Landside Improvements Alternative)

Study Highway Segment	Traffic Volume in 2005 (Base)	2010			2015			2020			2030		
		Future without Proj.	Future with Proj.	Project Share	Future without Proj.	Future with Proj.	Project Share	Future without Proj.	Future with Proj.	Project Share	Future without Proj.	Future with Proj.	Project Share
AM PEAK													
1. NB I-405 Fwy. n/o I-710 Fwy.	15,657	16,184	16,205	0.13%	16,689	16,731	0.25%	17,444	17,437	-0.04%	18,304	18,290	-0.08%
SB I-405 Fwy. n/o I-710 Fwy.	11,875	12,214	12,245	0.25%	12,671	12,673	0.02%	13,296	13,252	-0.33%	13,785	13,803	0.13%
2. NB I-405 Fwy. s/o I-710 Fwy.	15,099	14,869	15,632	4.88%	16,106	16,099	-0.04%	16,544	16,117	-2.65%	17,745	17,552	-1.10%
SB I-405 Fwy. s/o I-710 Fwy.	11,708	12,023	12,061	0.32%	12,498	12,513	0.12%	13,049	13,064	0.11%	13,706	13,732	0.19%
3. NB I-710 Fwy. b/w Willow St. and PCH	6,171	6,391	6,376	-0.24%	6,628	6,629	0.02%	6,666	6,695	0.43%	7,256	7,331	1.02%
SB I-710 Fwy. b/w Willow St. and PCH	6,804	6,963	7,056	1.32%	7,307	7,305	-0.03%	7,530	7,633	1.35%	7,936	8,006	0.87%
4. NB I-110 Fwy. n/o C-Street	6,953	7,139	7,138	-0.01%	7,469	7,456	-0.17%	7,408	7,466	0.78%	8,120	8,128	0.10%
SB I-110 Fwy. n/o C-Street	4,930	5,080	5,085	0.10%	5,270	5,292	0.42%	5,329	5,330	0.02%	5,765	5,788	0.40%
6. EB SR-91 Fwy. e/o I-710 Fwy.	10,831	11,191	11,195	0.04%	11,568	11,587	0.16%	11,853	11,895	0.35%	12,649	12,655	0.05%
WB SR-91 Fwy. e/o I-710 Fwy.	15,143	15,589	15,870	1.77%	15,831	15,837	0.04%	16,654	17,095	2.58%	17,429	17,198	-1.34%
7. EB SR-91 Fwy. w/o I-710 Fwy.	10,163	10,491	10,486	-0.05%	10,857	10,884	0.25%	11,386	11,370	-0.14%	11,918	11,892	-0.22%
WB SR-91 Fwy. w/o I-710 Fwy.	14,283	14,704	14,853	1.00%	15,164	15,162	-0.01%	16,043	16,083	0.25%	16,533	16,505	-0.17%
MIDDAY													
1. NB I-405 Fwy. n/o I-710 Fwy.	14,334	14,780	14,730	-0.34%	15,292	15,293	0.01%	16,416	16,385	-0.19%	16,994	16,740	-1.52%
SB I-405 Fwy. n/o I-710 Fwy.	13,379	13,833	13,832	-0.01%	14,234	14,248	0.10%	15,095	15,247	1.00%	15,654	15,648	-0.04%
2. NB I-405 Fwy. s/o I-710 Fwy.	14,116	14,576	14,607	0.21%	15,054	15,001	-0.35%	15,519	15,455	-0.41%	16,636	16,150	-3.01%
SB I-405 Fwy. s/o I-710 Fwy.	12,904	13,348	13,434	0.64%	13,771	13,813	0.30%	14,569	14,632	0.43%	15,138	15,104	-0.23%
3. NB I-710 Fwy. b/w Willow St. and PCH	6,493	6,708	6,763	0.81%	6,931	7,005	1.06%	7,185	7,462	3.71%	7,586	7,575	-0.15%
SB I-710 Fwy. b/w Willow St. and PCH	6,753	6,924	6,964	0.57%	7,211	7,267	0.77%	7,563	7,687	1.61%	7,937	7,984	0.59%
4. NB I-110 Fwy. n/o C-Street	6,361	6,480	6,492	0.18%	6,790	6,792	0.03%	7,203	7,221	0.25%	7,487	7,569	1.08%
SB I-110 Fwy. n/o C-Street	5,599	5,730	5,725	-0.09%	5,993	5,996	0.05%	6,261	6,350	1.40%	6,628	6,657	0.44%
6. EB SR-91 Fwy. e/o I-710 Fwy.	12,693	13,222	13,205	-0.13%	13,505	13,503	-0.01%	14,538	13,702	-6.10%	14,842	14,869	0.18%
WB SR-91 Fwy. e/o I-710 Fwy.	13,662	13,922	13,911	-0.08%	14,443	14,661	1.49%	16,305	16,698	2.35%	16,318	17,177	5.00%
7. EB SR-91 Fwy. w/o I-710 Fwy.	12,452	13,016	13,012	-0.03%	13,322	13,317	-0.04%	14,273	13,947	-2.34%	14,456	14,541	0.58%
WB SR-91 Fwy. w/o I-710 Fwy.	12,516	12,883	12,976	0.72%	13,235	13,428	1.44%	14,800	14,280	-3.64%	14,558	15,221	4.36%
PM PEAK													
1. NB I-405 Fwy. n/o I-710 Fwy.	14,098	14,600	14,624	0.16%	15,125	15,127	0.01%	15,804	15,803	-0.01%	16,293	16,423	0.79%
SB I-405 Fwy. n/o I-710 Fwy.	15,387	15,824	15,855	0.20%	16,549	16,500	-0.30%	17,206	17,169	-0.22%	17,954	18,017	0.35%
2. NB I-405 Fwy. s/o I-710 Fwy.	14,324	14,816	14,901	0.57%	15,366	15,258	-0.71%	16,086	16,047	-0.24%	16,596	16,743	0.88%
SB I-405 Fwy. s/o I-710 Fwy.	14,780	15,170	15,263	0.61%	15,731	15,794	0.40%	16,522	16,461	-0.37%	17,210	17,292	0.47%
3. NB I-710 Fwy. b/w Willow St. and PCH	6,859	7,070	7,119	0.69%	7,293	7,334	0.56%	7,578	7,567	-0.15%	8,028	8,087	0.73%
SB I-710 Fwy. b/w Willow St. and PCH	6,873	7,037	7,063	0.37%	7,328	7,380	0.70%	7,652	7,690	0.49%	7,998	8,084	1.06%
4. NB I-110 Fwy. n/o C-Street	5,655	5,826	5,832	0.10%	6,094	6,119	0.41%	6,347	6,318	-0.46%	6,587	6,637	0.75%
SB I-110 Fwy. n/o C-Street	6,618	6,902	6,874	-0.41%	7,034	7,055	0.30%	7,442	7,413	-0.39%	7,703	7,779	0.98%
6. EB SR-91 Fwy. e/o I-710 Fwy.	14,676	15,205	14,846	-2.42%	15,248	15,804	3.52%	16,903	16,639	-1.59%	17,143	16,939	-1.20%
WB SR-91 Fwy. e/o I-710 Fwy.	13,309	13,767	13,662	-0.77%	14,173	14,301	0.90%	14,871	15,065	1.29%	15,400	15,589	1.21%
7. EB SR-91 Fwy. w/o I-710 Fwy.	14,521	15,118	14,970	-0.99%	15,334	15,568	1.50%	16,371	16,451	0.49%	16,933	16,936	0.02%
WB SR-91 Fwy. w/o I-710 Fwy.	11,958	12,441	12,433	-0.06%	12,697	12,779	0.64%	13,382	13,336	-0.34%	13,952	13,929	-0.17%

3.2.4 Alternative 4 – No Project Alternative

Construction Impacts

The No Project Alternative would not include any construction of upland site improvements or any in-water activities (i.e., dredging, filling of Slip 1 and the East Basin, and/or new wharf construction). However, forecasted increases in cargo would still occur under this alternative. Operational impacts associated with trucks transporting containers would continue to occur.

Because the No Project Alternative will not involve any construction activity, there would be no construction impacts for the No Project alternative in all horizon years.

Operational Impacts

The trip generation estimates were developed based on the assumed operating parameters, previously presented in Section 3.2.2.

The proposed Project trip generation estimates are summarized in Table 3-44. It is important to note that for future years, peak hour trips do not increase proportionately with TEU growth. This is because in future years work shift splits will change as described previously.

Impact TRANS-1: Additional traffic generated by the Project would have significant impacts at the study area intersections.

Table 3-45 summarizes the intersection and time periods by analysis year where the project is expected to have significant impacts under the Future Year, and CEQA, and NEPA Baselines.

Future Baseline Impact Determination

Tables 3-46.1 through 3-46.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the Future Baseline.

As indicated in Table 3-45 the Project will have significant impacts at the following three study area intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue and Pier D Street

Mitigation Measures

Mitigation measures were not identified for the No Project Alternative because this alternative would not require approvals for new uses.

Significance of Impacts after Mitigation

Impacts would be significant.

Table 3-44: No Project Alternative Trip Generation

Vehicle Type	8-9 a.m.			2-3 p.m.			4-5 p.m.			Daily
	In	Out	Total	In	Out	Total	In	Out	Total	
Year 2005 CEQA Baseline										
Pier D/E Container Terminal – Trucks	100	88	188	98	96	194	39	57	96	2,527
Pier D/E Container Terminal – Auto	44	30	74	16	28	44	27	80	107	536
Pier D/E Container Terminal Total	144	118	262	114	124	238	66	137	203	3,063
Pier D/E Container Terminal Total P.C.E.	200	165	365	177	187	364	110	124	234	4,471
Pier F Container Terminal – Trucks	122	131	253	151	187	338	96	129	225	4,002
Pier F Container Terminal – Auto	59	39	98	22	37	59	36	106	142	711
Pier F Container Terminal Total	181	170	351	173	224	397	132	235	367	4,713
Pier F Container Terminal Total P.C.E.	236	250	486	252	349	601	211	266	477	6,523
Total PCE Vehicles	436	415	851	429	536	965	321	390	711	10,994
Year 2010 No Project Alternative										
Pier D/E Container Terminal – Trucks	127	71	198	147	155	301	80	107	187	3,220
Pier D/E Container Terminal – Auto	55	55	109	20	34	55	51	98	149	661
Pier D/E Container Terminal Total	182	126	307	167	189	356	131	205	336	3,881
Pier D/E Container Terminal Total P.C.E.	267	175	441	265	295	560	184	279	463	6,102
Pier F Container Terminal – Trucks	124	71	196	144	151	295	78	105	183	3,161
Pier F Container Terminal – Auto	58	58	116	21	36	58	53	104	158	699
Pier F Container Terminal Total	182	129	312	165	187	353	131	209	341	3,860
Pier F Container Terminal Total P.C.E.	266	178	444	262	292	554	184	281	465	6,012
Total PCE Vehicles	533	353	886	527	587	1,141	368	560	928	12,114
Year 2015 No Project Alternative										
Pier D/E Container Terminal – Trucks	166	81	247	192	201	393	104	149	253	4,221
Pier D/E Container Terminal – Auto	72	72	143	27	45	72	66	129	195	866
Pier D/E Container Terminal Total	238	153	390	219	246	465	170	278	448	5,087
Pier D/E Container Terminal Total P.C.E.	350	210	560	349	384	733	240	381	621	7,960
Pier F Container Terminal – Trucks	92	64	156	106	113	219	58	78	136	2,516
Pier F Container Terminal – Auto	65	65	130	24	41	65	60	117	177	784
Pier F Container Terminal Total	157	129	286	130	154	284	118	195	313	3,300
Pier F Container Terminal Total P.C.E.	218	173	391	201	232	433	156	250	406	5,012
Total PCE Vehicles	568	383	951	550	616	1,166	396	631	1,027	12,972
Year 2020 No Project Alternative										
Pier D/E Container Terminal – Trucks	218	112	330	252	269	522	137	189	326	5,535
Pier D/E Container Terminal – Auto	94	94	188	35	59	94	87	169	256	1,135
Pier D/E Container Terminal Total	312	206	518	287	328	616	224	358	582	6,670
Pier D/E Container Terminal Total P.C.E.	458	283	741	457	514	971	316	488	804	10,437
Pier F Container Terminal – Trucks	87	72	159	100	106	206	54	73	127	2,578
Pier F Container Terminal – Auto	73	73	145	27	46	73	67	131	198	879
Pier F Container Terminal Total	160	145	304	127	152	279	121	204	325	3,457
Pier F Container Terminal Total P.C.E.	217	195	412	194	225	419	157	254	411	5,212
Total PCE Vehicles	675	478	1,153	651	739	1,390	473	742	1,215	15,649

Table 3-44: No Project Alternative Trip Generation

Vehicle Type	8-9 a.m.			2-3 p.m.			4-5 p.m.			Daily
	In	Out	Total	In	Out	Total	In	Out	Total	
Year 2030 No Project Alternative										
Pier D/E Container Terminal – Trucks	250	122	372	289	301	591	157	227	384	6,346
Pier D/E Container Terminal – Auto	108	108	215	40	68	108	100	194	294	1,302
Pier D/E Container Terminal Total	358	230	587	329	369	699	257	421	678	7,648
Pier D/E Container Terminal Total P.C.E.	525	314	839	524	577	1101	362	577	939	11,968
Pier F Container Terminal – Trucks	109	93	202	127	134	261	69	93	162	3,248
Pier F Container Terminal – Auto	83	83	167	31	52	83	77	150	227	1,008
Pier F Container Terminal Total	192	176	369	158	186	344	146	243	389	4,256
Pier F Container Terminal Total P.C.E.	265	240	505	242	280	522	191	308	499	6,467
Total PCE Vehicles	790	554	1,344	766	857	1,623	553	885	1,338	18,435

Note: Truck trips have been converted to Passenger Car Equivalent (P.C.E.) using a factor of 1.1 for bobtails, 2.0 for chassis, and containers.

Table 3-45: No Project Alternative - Intersection Significant Impacts

Intersections		2010	2015	2020	2030
1. Pico Avenue/Pier G Avenue and Harbor Plaza	Future Baseline	✓(M,P)	✓(P)	✓(A,M)	✓(A,M,P)
	CEQA Baseline	✓(M,P)	✓(M,P)	✓(A,M,P)	✓(A,M,P)
	NEPA Baseline	✓(M)	✓(M)		✓(A,M,P)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps	Future Baseline			✓(P)	✓(M,P)
	CEQA Baseline			✓(P)	✓(M,P)
	NEPA Baseline			✓(P)	✓(A,M,P)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp	Future Baseline				
	CEQA Baseline				✓(P)
	NEPA Baseline				
5. Pico Avenue and Pier D Street	Future Baseline			✓(M,P)	✓(A,M,P)
	CEQA Baseline		✓(M)	✓(A,M)	✓(A,M)
	NEPA Baseline			✓(M,P)	✓(A,M,P)
<i>A = AM Peak Hour</i> <i>M = Midday Peak Hour</i> <i>P = PM Peak Hour</i>					

Table 3-46.1: No Project Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2010 Future Year Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	D	32.8	F	84.6	E	36.9	D	29.4	F	98.0	F	52.3	-3.4	13.4	15.4	Yes (MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	10.3	B	12.3	B	12.3	B	11.8	C	17.0	C	17.0	1.5	4.7	4.7	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.4	A	8.3	B	11.8	A	9.8	C	15.1	C	15.1	0.4	6.8	3.3	No
4. Pico Avenue and Broadway (c)	B	10.2	B	10.5	A	9.3	B	10.8	B	11.5	A	9.8	0.6	1	0.5	No
5. Pico Avenue and Pier D Street (a)	C	23.4	B	14.3	B	12	D	25.3	D	33.3	C	18.9	1.5	5.9	5.1	No
6. Pico Avenue and Pier C Street (b)	A	0.333	A	0.28	A	0.241	A	0.368	A	0.315	A	0.281	0.035	0.035	0.04	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.536	A	0.476	A	0.509	A	0.555	A	0.539	A	0.547	0.019	0.063	0.038	No
8. Anaheim Way and Pier B Street (a)	A	7.2	A	7.6	A	7.9	A	7.1	A	7.7	A	7.8	-0.1	0.1	-0.1	No
9. Farragut Avenue and Anaheim Street (b)	A	0.296	A	0.262	A	0.391	A	0.313	A	0.275	A	0.434	0.017	0.013	0.043	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-46.2: No Project Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2015 Future Year Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	E	38.5	F	95.1	E	39.2	D	34.4	F	91.3	E	41.2	-4.1	-3.8	2	Yes (PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	11.6	C	15.8	C	17.2	B	13.9	C	23.4	C	23.9	2.3	7.6	6.7	No
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	A	10	C	16.2	B	10.2	B	11.7	C	19.5	C	19.1	1.7	3.3	8.9	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	8.4	A	9.1	A	9.3	A	9.4	B	10.8	B	10.5	1	1.7	1.2	No
4. Pico Avenue and Broadway (c)	B	10.1	B	11.5	B	10.2	B	11.2	B	12.7	B	10.3	1.1	1.2	0.1	No
5. Pico Avenue and Pier D Street (a)	D	25.6	C	15.9	B	13.1	D	33.3	F	66.9	D	32.8	7.7	51	19.7	Yes (MD)
6. Pico Avenue and Pier C Street (b)	A	0.35	A	0.314	A	0.288	A	0.406	A	0.365	A	0.334	0.056	0.051	0.046	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.565	A	0.581	A	0.543	A	0.582	B	0.665	B	0.605	0.017	0.084	0.062	No
8. Anaheim Way and Pier B Street (a)	A	7.9	A	8.1	A	8.4	A	7.6	A	7.8	A	8.2	-0.3	-0.3	-0.2	No
9. Farragut Avenue and Anaheim Street (b)	A	0.356	A	0.349	A	0.476	A	0.36	A	0.34	A	0.498	0.004	-0.009	0.022	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m

Table 3-46.3: No Project Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2020 Future Year Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	63.4	F	108.5	F	54.8	F	79.2	F	136.8	F	53.2	15.8	28.3	-1.6	Yes (AM,MD)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	14.8	C	19.2	D	28.1	C	16.5	D	29.3	E	37.8	1.7	10.1	9.7	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	11	C	18.3	C	20.1	B	14.4	C	23.9	C	24.5	3.4	5.6	4.4	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	8.8	A	9.6	A	9.7	B	10.5	B	12.7	B	11.5	1.7	3.1	1.8	No
4. Pico Avenue and Broadway (c)	B	10.9	B	12.4	B	10.6	B	12.9	C	15.1	B	10.5	2	2.7	-0.1	No
5. Pico Avenue and Pier D Street (a)	D	29.4	C	16.9	C	15	F	54.9	F	127.2	F	58.3	25.5	110.3	43.3	Yes (AM,MD,PM)
6. Pico Avenue and Pier C Street (b)	A	0.388	A	0.352	A	0.345	A	0.451	A	0.43	A	0.387	0.063	0.078	0.042	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.626	A	0.549	A	0.572	B	0.648	B	0.698	B	0.634	0.022	0.149	0.062	No
8. Anaheim Way and Pier B Street (a)	B	10.6	A	9.9	B	10.8	C	15.2	A	8.9	B	10.5	4.6	-1	-0.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.436	A	0.441	B	0.607	A	0.531	A	0.442	B	0.613	0.095	0.001	0.006	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-46.4: No Project Alternative - Future Year Baseline Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2030 Future Year Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	90.8	F	141.3	F	68.7	F	133.5	F	191.2	F	97.7	42.7	49.9	29	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	C	17.7	D	31.9	E	42.7	D	26.3	F	64	F	71.6	8.6	32.1	28.9	Yes (MD, PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	11.5	B	12	C	23.6	C	16.5	D	28.1	D	32.7	5	16.1	9.1	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9.3	B	10.3	B	11.3	B	11.9	C	15.3	C	17.1	2.6	5	5.8	No
4. Pico Avenue and Broadway (c)	B	11.7	B	14.2	B	11.2	B	14.2	C	16.9	B	11.4	2.5	2.7	0.2	No
5. Pico Avenue and Pier D Street (a)	D	32.2	C	19.4	C	17	F	67.1	F	133.8	F	88.8	34.9	114.4	71.8	Yes (AM,MD,PM)
6. Pico Avenue and Pier C Street (b)	A	0.415	A	0.395	A	0.369	A	0.491	A	0.451	A	0.425	0.076	0.056	0.056	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.67	B	0.632	B	0.602	B	0.671	C	0.719	B	0.662	0.001	0.087	0.06	No
8. Anaheim Way and Pier B Street (a)	B	14.8	B	14.4	C	16.6	B	13.9	B	13.8	C	15.1	-0.9	-0.6	-1.5	No
9. Farragut Avenue and Anaheim Street (b)	A	0.509	A	0.5	B	0.672	A	0.535	A	0.573	B	0.669	0.026	0.073	-0.003	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

CEQA Baseline Impact Determination

Tables 3-47.1 through 3-47.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the CEQA Baseline.

As indicated in Table 3-45, the proposed Project would have significant impacts at the following four study area intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp
- Pico Avenue and Pier D Street

Mitigation Measures

Mitigation measures were not identified for the No Project Alternative because this alternative would not require approvals for new uses.

Significance of Impacts after Mitigation

Impacts would be significant.

NEPA Baseline Impact Determination

Tables 3-48.1 through 3-48.4 summarize the intersection operating conditions at each study intersection in Years 2010, 2015, 2020, and 2030, compared to the NEPA Baseline.

As indicated in Table 3-45 the Project will have significant impacts at the following three study area intersections:

- -Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue and Pier D Street

Mitigation Measures

Mitigation measures were not identified for the No Project Alternative because this alternative would not require approvals for new uses.

Significance of Impacts after Mitigation

Impacts would be significant.

Table 3-47.1: No Project Alternative - Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2005 CEQA Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	D	29.4	F	98	F	52.3	15.4	76.3	37.7	Yes (MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	11.8	C	17	C	17	1.9	5.2	5.7	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5	A	9.8	C	15.1	C	15.1	0.2	5.2	5.6	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	10.8	B	11.5	A	9.8	0.2	-1.2	-1.7	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	25.3	D	33.3	C	18.9	15.5	-14	-87.9	No
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.368	A	0.315	A	0.281	0.137	0.052	0.015	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	A	0.555	A	0.539	A	0.547	0.199	0.154	0.121	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	A	7.1	A	7.7	A	7.8	-1	-1.1	-1.3	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.313	A	0.275	A	0.434	-	-	-	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-47.2: No Project Alternative - Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2005 CEQA Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	D	34.4	F	91.3	E	41.2	20.4	69.6	26.6	Yes (MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	B	13.9	C	23.4	C	23.9	4.0	11.6	12.6	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5	-	-	-	-	-	-				
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	-	-	-	-	-	-	B	11.7	C	19.5	C	19.1	11.7	19.5	19.1	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	-	-	-	-	-	-	A	9.4	B	10.8	B	10.5	9.4	10.8	10.5	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	11.2	B	12.7	B	10.3	0.6	0.0	-1.2	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	D	33.3	F	66.9	D	32.8	23.5	19.6	-74.0	Yes (MD)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.406	A	0.365	A	0.334	0.175	0.102	0.068	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	A	0.582	B	0.665	B	0.605	0.226	0.28	0.179	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	A	7.6	A	7.8	A	8.2	-0.5	-1.0	-0.9	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.36	A	0.34	A	0.498	0.012	0.007	0.048	No

Notes:
 (a) all-way stop-controlled intersection; weighted average delay for entire intersection reported
 (b) signalized intersection
 (c) stop controlled on minor street only
 (d) intersection configuration different in 2005 so no direct comparison is available
 AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-47.3: No Project Alternative - Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2005 CEQA Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	F	79.2	F	136.8	F	53.2	65.2	115.1	38.6	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	C	16.5	D	29.3	E	37.8	6.6	17.5	26.5	Yes (PM)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5	-	-	-	-	-	-				
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	-	-	-	-	-	-	B	14.4	C	23.9	C	24.5	14.4	23.9	24.5	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	-	-	-	-	-	-	B	10.5	B	12.7	B	11.5	10.5	12.7	11.5	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	12.9	C	15.1	B	10.5	2.3	2.4	-1.0	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	F	54.9	F	127.2	F	58.3	45.1	79.9	-48.5	Yes (AM,MD)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.451	A	0.43	A	0.387	0.22	0.167	0.121	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.648	B	0.698	B	0.634	0.292	0.31	0.208	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	C	15.2	A	8.9	B	10.5	7.1	0.1	1.4	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.531	A	0.442	B	0.613	0.183	0.109	0.163	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

(d) intersection configuration different in 2005 so no direct comparison is available

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-47.4: No Project Alternative - Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2005 CEQA Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	B	14.0	C	21.7	B	14.6	F	133.5	F	191.2	F	97.7	119.5	169.5	83.1	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	A	9.9	B	11.8	B	11.3	D	26.3	F	64	F	71.6	16.4	52.2	60.3	Yes (MD, PM)
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.6	A	9.9	A	9.5	-	-	-	-	-	-				
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	-	-	-	-	-	-	C	16.5	D	28.1	D	32.7	16.5	28.1	32.7	Yes (PM)
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	-	-	-	-	-	-	B	11.9	C	15.3	C	17.1	11.9	15.3	17.1	No
4. Pico Avenue and Broadway (c)	B	10.6	B	12.7	B	11.5	B	14.2	C	16.9	B	11.4	3.6	4.2	-0.1	No
5. Pico Avenue and Pier D Street (a)	A	9.8	E	47.3	F	106.8	F	67.1	F	133.8	F	88.8	57.3	86.5	-18.0	Yes (AM,MD)
6. Pico Avenue and Pier C Street (b)	A	0.231	A	0.263	A	0.266	A	0.491	A	0.451	A	0.425	0.26	0.188	0.159	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.356	A	0.385	A	0.426	B	0.671	C	0.719	B	0.662	0.315	0.33	0.236	No
8. Anaheim Way and Pier B Street (a)	A	8.1	A	8.8	A	9.1	B	13.9	B	13.8	C	15.1	5.8	5.0	6.0	No
9. Farragut Avenue and Anaheim Street (b)	A	0.348	A	0.333	A	0.45	A	0.535	A	0.573	B	0.669	0.187	0.24	0.219	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

(d) intersection configuration different in 2005 so no direct comparison is available

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-48.1: No Project Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2010)

Intersections	Year 2010 NEPA Baseline						Year 2010						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	C	21.0	F	63.5	D	28.2	D	29.4	F	98	F	52.3	8.4	34.5	24.1	Yes (MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	10.6	B	11.7	B	12.1	B	12.1	C	17.6	C	17.2	1.5	5.9	5.1	No
3. Pico Avenue and Ocean Boulevard Westbound On/Off-Ramps (c)	A	9.9	B	13.1	B	12.3	A	9.8	C	15.1	C	15.1	-0.1	2	2.8	No
4. Pico Avenue and Broadway (c)	B	10.8	B	11.2	A	9.7	B	10.8	B	11.5	A	9.8	0	0.3	0.1	No
5. Pico Avenue and Pier D Street (a)	D	25.5	E	38.8	C	20.7	D	25.3	D	33.3	C	18.9	1.5	5.9	5.1	No
6. Pico Avenue and Pier C Street (b)	A	0.37	A	0.325	A	0.283	A	0.368	A	0.315	A	0.281	-0.002	-0.01	-0.002	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.556	A	0.544	A	0.558	A	0.555	A	0.539	A	0.547	-0.001	-0.005	-0.011	No
8. Anaheim Way and Pier B Street (a)	A	7.2	A	7.6	A	7.8	A	7.1	A	7.7	A	7.8	-0.1	0.1	0	No
9. Farragut Avenue and Anaheim Street (b)	A	0.358	A	0.333	A	0.443	A	0.313	A	0.275	A	0.434	-0.045	-0.058	-0.009	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-48.2: No Project Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2015)

Intersections	Year 2015 NEPA Baseline						Year 2015						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	C	22.8	F	69.5	D	26.6	D	34.4	F	91.3	E	41.2	11.6	21.8	14.6	Yes (MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	12.5	C	15.1	C	19	B	13.9	C	23.4	C	23.9	1.4	8.3	4.9	No
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	B	12.9	C	18.2	C	19.1	B	11.7	C	19.5	C	19.1	-1.2	1.3	0.0	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9.0	A	9.8	B	10.1	A	9.4	B	10.8	B	10.5	0.4	1.0	0.4	No
4. Pico Avenue and Broadway (c)	B	11.1	B	12.5	B	10.4	B	11.2	B	12.7	B	10.3	0.1	0.2	-0.1	No
5. Pico Avenue and Pier D Street (a)	D	27.6	D	30.3	C	19.1	D	33.3	F	66.9	D	32.8	5.7	36.6	13.7	Yes (MD)
6. Pico Avenue and Pier C Street (b)	A	0.398	A	0.346	A	0.329	A	0.406	A	0.365	A	0.334	0.008	0.019	0.005	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	A	0.594	B	0.626	A	0.6	A	0.582	B	0.665	B	0.605	-0.012	0.039	0.005	No
8. Anaheim Way and Pier B Street (a)	A	8.0	A	8.2	A	8.4	A	7.6	A	7.8	A	8.2	-0.4	-0.4	-0.2	No
9. Farragut Avenue and Anaheim Street (b)	A	0.425	A	0.405	A	0.518	A	0.36	A	0.34	A	0.498	-0.065	-0.065	-0.02	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-48.3: No Project Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2020)

Intersections	Year 2020 NEPA Baseline						Year 2020						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	59.4	F	102.2	E	36.3	F	79.2	F	136.8	F	53.2	19.8	34.6	16.9	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	B	14.6	C	19.4	E	35.8	C	16.5	D	29.3	E	37.8	1.9	9.9	2	Yes (PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	C	19.1	C	21.5	D	27.2	B	14.4	C	23.9	C	24.5	-4.7	2.4	-2.7	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	A	9.9	B	10.3	B	11.1	B	10.5	B	12.7	B	11.5	0.6	2.4	0.4	No
4. Pico Avenue and Broadway (c)	B	12.5	B	13.8	B	10.7	B	12.9	C	15.1	B	10.85	0.4	1.3	0.15	No
5. Pico Avenue and Pier D Street (a)	E	43.9	D	34.1	C	24.3	F	54.9	F	127.2	F	58.3	11	93.1	34	Yes (AM,MD,PM)
6. Pico Avenue and Pier C Street (b)	A	0.431	A	0.384	A	0.371	A	0.451	A	0.43	A	0.387	0.02	0.046	0.016	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.651	B	0.631	B	0.632	B	0.648	B	0.698	B	0.634	-0.003	0.067	0.002	No
8. Anaheim Way and Pier B Street (a)	B	12.7	B	11.4	B	12.7	C	15.2	A	8.9	B	10.5	2.5	-2.5	-2.2	No
9. Farragut Avenue and Anaheim Street (b)	A	0.508	A	0.506	B	0.609	A	0.531	A	0.442	B	0.613	0.023	-0.064	0.004	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Table 3-48.4: No Project Alternative - NEPA Baseline Intersection Level Of Service Analysis (Year 2030)

Intersections	Year 2030 NEPA Baseline						Year 2030						Change in V/C or Delay			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay				
1. Pico Avenue/Pier G Avenue and Harbor Plaza (a)	F	84.5	F	151.4	F	53.9	F	133.5	F	191.2	F	97.7	49	39.8	43.8	Yes (AM,MD,PM)
2. Pico Avenue and Pier E Street/Ocean Boulevard Eastbound On/Off-Ramps (a)	C	20.1	E	35.9	F	50.9	D	26.3	F	64	F	71.6	6.2	28.1	20.7	Yes (MD,PM)
3a. Pico Avenue and Ocean Boulevard Westbound Off-Ramp (c)	C	19.8	D	25.5	E	35.2	C	16.5	D	28.1	D	32.7	-3.3	2.6	-2.5	No
3b. Pico Avenue and Ocean Boulevard Westbound On-Ramp (c)	B	10.4	B	11.2	B	12.9	B	11.9	C	15.3	C	17.1	1.5	4.1	4.2	No
4. Pico Avenue and Broadway (c)	B	13.4	C	15.2	B	11.1	B	14.2	C	16.9	B	11.4	0.8	1.7	0.3	No
5. Pico Avenue and Pier D Street (a)	F	57.8	E	48.7	D	31.9	F	167.1	F	133.8	F	88.8	109.3	85.1	56.9	Yes (AM,MD,PM)
6. Pico Avenue and Pier C Street (b)	A	0.463	A	0.417	A	0.399	A	0.491	A	0.451	A	0.425	0.028	0.034	0.026	No
7. Pico Avenue/Pier B Street and 9 th Street (b)	B	0.694	C	0.71	B	0.639	B	0.671	C	0.719	B	0.662	-0.023	0.009	0.023	No
8. Anaheim Way and Pier B Street (a)	C	15.4	C	15.4	C	16.5	B	13.9	B	13.8	C	15.1	-1.5	-1.6	-1.4	No
9. Farragut Avenue and Anaheim Street (b)	A	0.529	A	0.522	B	0.657	A	0.535	A	0.573	B	0.669	0.006	0.051	0.012	No

Notes:

(a) all-way stop-controlled intersection; weighted average delay for entire intersection reported

(b) signalized intersection

(c) stop controlled on minor street only

AM – 8-9 a.m.; MD – 2-3 p.m.; PM – 4-5 p.m.

Impact TRANS-2: Additional traffic generated by the project will have significant impacts on highway locations in the study area.

For all analysis years, the impacts on highway locations for the No Project Alternative are determined based upon comparing the LOS for the alternative to that of the Future, CEQA, and NEPA Baselines.

Table 3-49 summarizes the highway segments and time periods by analysis year where the project is expected to have significant impacts under the Future Year, CEQA, and NEPA Baselines.

Future Baseline Impact Determination

Tables 3-50.1 through 3-50.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030 compared to the Future Baseline comparison.

As shown in Table 3-49 the Project is expected to have significant impacts on the following study highway segments using the Future Baseline comparison:

- I-405 south of I-710, northbound only
 - o I-710 between Willow Street and PCH, northbound only
- SR-91 east of I-710, both directions

Mitigation Measures

Mitigation measures were not identified for the No Project Alternative because this alternative would not require approvals for new uses.

Significance of Impacts after Mitigation

Impacts would be significant.

Table 3-49: No Project - Highway Link Significant Impacts

Highway Segments	Baseline ⁽¹⁾	2010	2015	2020	2030
1. NB I-405 Freeway n/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	-
	NEPA Baseline	-	-	-	-
SB I-405 Freeway n/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	-
	NEPA Baseline	-	-	-	-
2. NB I-405 Freeway s/o I-710 Freeway	Future Baseline	(A)	-	-	-
	CEQA Baseline	-	-	-	-
	NEPA Baseline	-	-	(A)	(M)
SB I-405 Freeway s/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	-
	NEPA Baseline	-	-	-	-
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	Future Baseline	-	-	(A)	-
	CEQA Baseline	(M,P)	(A,M,P)	(A,M,P)	(A,M,P)
	NEPA Baseline	-	-	-	-
SB I-710 Freeway between Willow Street and Pacific Coast Highway	Future Baseline	-	-	-	-
	CEQA Baseline	-	(A,M)	(A,M)	(A,M,P)
	NEPA Baseline	-	-	-	-
4. NB I-110 Freeway n/o C-Street	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	-
	NEPA Baseline	-	-	-	-
SB I-110 Freeway n/o C-Street	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	-
	NEPA Baseline	-	-	-	-
6. EB SR-91 Freeway e/o I-710 Freeway	Future Baseline	-	(P)	-	-
	CEQA Baseline	-	-	-	-
	NEPA Baseline	(P)	-	(M)	-
WB SR-91 Freeway e/o I-710 Freeway	Future Baseline	-	(A)	-	(A)
	CEQA Baseline	-	-	-	-
	NEPA Baseline	-	(A)	-	(A)
7. EB SR-91 Freeway w/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	-
	NEPA Baseline	-	-	-	-
WB SR-91 Freeway w/o I-710 Freeway	Future Baseline	-	-	-	-
	CEQA Baseline	-	-	-	-
	NEPA Baseline	-	-	-	-

A = AM Peak Hour
M = Midday Peak Hour
P = PM Peak Hour

Table 3-50.1: No Project Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2010)

Highway Segments	Year 2010 Future Year Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.259	F	1.160	F	1.130	F	1.259	F	1.164	F	1.127	0.000	0.004	-0.002	No
SB I-405 Freeway n/o I-710 Freeway	E	0.953	F	1.082	F	1.220	E	0.959	F	1.082	F	1.228	0.006	0.000	0.008	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.159	F	1.131	F	1.133	F	1.229	F	1.133	F	1.133	0.071	0.002	0.000	Yes(AM)
SB I-405 Freeway s/o I-710 Freeway	D	0.938	F	1.038	F	1.168	E	0.946	F	1.037	F	1.179	0.008	-0.001	0.011	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.006	F	1.053	F	1.115	F	1.004	F	1.055	F	1.119	-0.002	0.001	0.003	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.095	F	1.093	F	1.112	F	1.107	F	1.102	F	1.123	0.012	0.009	0.011	No
4. NB I-110 Freeway n/o C-Street	D	0.839	C	0.753	C	0.681	D	0.844	C	0.765	C	0.684	0.006	0.012	0.002	No
SB I-110 Freeway n/o C-Street	C	0.597	C	0.658	D	0.795	C	0.600	C	0.665	D	0.788	0.002	0.007	-0.008	No
5. NB SR-47 Freeway at Heim Bridge	A	0.172	A	0.275	A	0.251	A	0.176	A	0.291	A	0.261	0.004	0.017	0.010	No
SB SR-47 Freeway at Heim Bridge	A	0.225	A	0.232	A	0.148	A	0.233	A	0.241	A	0.154	0.009	0.009	0.006	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.870	F	1.046	F	1.124	D	0.871	F	1.038	F	1.121	0.001	-0.008	-0.003	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.227	F	1.040	F	1.088	F	1.233	F	1.056	F	1.087	0.005	0.016	0.000	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.694	D	0.861	E	0.962	C	0.696	D	0.849	E	0.953	0.002	-0.013	-0.010	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.969	D	0.829	D	0.815	E	0.975	D	0.835	D	0.809	0.006	0.005	-0.007	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-50.2: No Project Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2015)

Highway Segments	Year 2015 Future Year Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.324	F	1.214	F	1.202	F	1.328	F	1.215	F	1.195	0.003	0.002	-0.007	No
SB I-405 Freeway n/o I-710 Freeway	F	1.006	F	1.129	F	1.315	F	1.007	F	1.134	F	1.304	0.001	0.006	-0.011	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.278	F	1.195	F	1.221	F	1.281	F	1.197	F	1.214	0.002	0.003	-0.007	No
SB I-405 Freeway s/o I-710 Freeway	E	0.992	F	1.092	F	1.248	E	0.992	F	1.094	F	1.253	0.001	0.001	0.005	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.052	F	1.100	F	1.158	F	1.047	F	1.101	F	1.163	-0.006	0.001	0.005	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.160	F	1.145	F	1.163	F	1.153	F	1.145	F	1.165	-0.006	0.000	0.002	No
4. NB I-110 Freeway n/o C-Street	D	0.889	D	0.808	C	0.726	D	0.884	D	0.808	C	0.719	-0.005	0.000	-0.007	No
SB I-110 Freeway n/o C-Street	C	0.628	C	0.714	D	0.837	C	0.627	C	0.712	D	0.842	-0.001	-0.001	0.004	No
5. NB SR-47 Freeway at Heim Bridge	A	0.192	A	0.317	A	0.290	A	0.187	A	0.311	A	0.269	-0.005	-0.006	-0.021	No
SB SR-47 Freeway at Heim Bridge	A	0.258	A	0.253	A	0.160	A	0.249	A	0.257	A	0.160	-0.009	0.004	0.000	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.918	F	1.073	F	1.211	D	0.918	F	1.077	F	1.244	0.000	0.004	0.033	Yes (PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.257	F	1.146	F	1.125	F	1.284	F	1.158	F	1.128	0.027	0.012	0.003	Yes (AM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.738	D	0.907	F	1.038	C	0.738	D	0.905	F	1.055	0.000	-0.002	0.017	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.029	D	0.897	D	0.862	F	1.038	D	0.910	D	0.869	0.009	0.013	0.007	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-50.3: No Project Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2020)

Highway Segments	Year 2020 Future Year Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.387	F	1.313	F	1.259	F	1.370	F	1.254	F	1.233	-0.018	-0.059	-0.026	No
SB I-405 Freeway n/o I-710 Freeway	F	1.059	F	1.203	F	1.369	F	1.039	F	1.170	F	1.346	-0.020	-0.033	-0.024	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.312	F	1.232	F	1.281	F	1.321	F	1.235	F	1.253	0.009	0.003	-0.028	No
SB I-405 Freeway s/o I-710 Freeway	F	1.038	F	1.161	F	1.315	F	1.024	F	1.128	F	1.293	-0.014	-0.033	-0.022	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.059	F	1.141	F	1.203	F	1.080	F	1.136	F	1.200	0.021	-0.005	-0.003	Yes (AM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.196	F	1.200	F	1.215	F	1.190	F	1.181	F	1.202	-0.006	-0.019	-0.012	No
4. NB I-110 Freeway n/o C-Street	D	0.882	D	0.857	C	0.755	D	0.912	D	0.834	C	0.742	0.031	-0.023	-0.013	No
SB I-110 Freeway n/o C-Street	C	0.634	C	0.746	D	0.886	C	0.647	C	0.735	D	0.868	0.013	-0.011	-0.018	No
5. NB SR-47 Freeway at Heim Bridge	A	0.002	A	0.326	A	0.271	A	0.193	A	0.321	A	0.278	0.191	-0.005	0.006	No
SB SR-47 Freeway at Heim Bridge	A	0.280	A	0.257	A	0.171	A	0.257	A	0.266	A	0.165	-0.023	0.008	-0.006	No
6. EB SR-91 Freeway e/o I-710 Freeway	E	0.941	F	1.154	F	1.342	E	0.948	F	1.111	F	1.284	0.007	-0.043	-0.058	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.322	F	1.294	F	1.180	F	1.325	F	1.195	F	1.164	0.003	-0.099	-0.016	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.779	E	0.986	F	1.124	C	0.761	D	0.933	F	1.089	-0.018	-0.052	-0.035	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.100	F	1.035	D	0.916	F	1.071	D	0.939	D	0.897	-0.029	-0.096	-0.019	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-50.4: No Project Alternative - Future Year Baseline Highway Link Level Of Service Analysis (Year 2030)

Highway Segments	Year 2030 Future Year Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.453	F	1.353	F	1.291	F	1.453	F	1.330	F	1.308	0.000	-0.023	0.017	No
SB I-405 Freeway n/o I-710 Freeway	F	1.093	F	1.243	F	1.425	F	1.102	F	1.241	F	1.427	0.010	-0.001	0.003	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.411	F	1.323	F	1.315	F	1.402	F	1.310	F	1.329	-0.009	-0.013	0.015	No
SB I-405 Freeway s/o I-710 Freeway	F	1.088	F	1.202	F	1.364	F	1.086	F	1.197	F	1.371	-0.002	-0.005	0.007	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.152	F	1.204	F	1.274	F	1.146	F	1.205	F	1.273	-0.007	0.001	-0.001	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.259	F	1.260	F	1.270	F	1.263	F	1.253	F	1.275	0.003	-0.007	0.005	No
4. NB I-110 Freeway n/o C-Street	E	0.967	D	0.891	D	0.784	E	0.968	D	0.885	D	0.787	0.001	-0.007	0.003	No
SB I-110 Freeway n/o C-Street	C	0.686	D	0.790	D	0.918	C	0.686	C	0.780	D	0.921	0.000	-0.010	0.004	No
5. NB SR-47 Freeway at Heim Bridge	A	0.212	A	0.333	A	0.307	A	0.205	A	0.340	A	0.295	-0.007	0.007	-0.013	No
SB SR-47 Freeway at Heim Bridge	A	0.258	A	0.275	A	0.171	A	0.272	A	0.282	A	0.175	0.014	0.006	0.005	No
6. EB SR-91 Freeway e/o I-710 Freeway	F	1.004	F	1.179	F	1.361	F	1.005	F	1.178	F	1.362	0.001	-0.001	0.001	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.383	F	1.295	F	1.222	F	1.405	F	1.267	F	1.234	0.022	-0.028	0.013	Yes (AM)
7. EB SR-91 Freeway w/o I-710 Freeway	D	0.811	E	0.981	F	1.151	D	0.808	E	0.990	F	1.155	-0.004	0.009	0.004	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.120	E	0.989	E	0.949	F	1.136	E	0.996	E	0.952	0.016	0.007	0.002	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

CEQA Baseline Impact Determination

Tables 3-51.1 through 3-51.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030, compared to the CEQA Baseline.

As shown in Table 3-49, the proposed Project is expected to have significant impact on the following study highway segment using the CEQA Baseline comparison:

- I-710 between Willow Street and PCH, northbound only

Mitigation Measures

Mitigation measures were not identified for the No Project Alternative because this alternative would not require approvals for new uses.

Significance of Impacts after Mitigation

Impacts would be significant..

NEPA Baseline Impact Determination

Tables 3-52.1 through 3-52.4 summarize the operating conditions at each study highway segment in Years 2010, 2015, 2020, and 2030, compared to the NEPA Baseline.

As shown in Table 3-49, the proposed Project is expected to have significant impact on the following study highway segments using the NEPA Baseline comparison:

- I-405 south of I-710, northbound only
- SR-91 east of I-710, both directions

Mitigation Measures

Mitigation measures were not identified for the No Project Alternative because this alternative would not require approvals for new uses.

Significance of Impacts after Mitigation

Impacts would be significant.

Table 3-51.1: No Project Alternative - CEQA Baseline Highway Link Level Of Service Analysis (Year 2010)

Highway Segments	CEQA Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	C	0.598	C	0.654	C	0.691	-0.645	-0.484	-0.428	No
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	C	0.63	C	0.629	C	0.62	-0.313	-0.433	-0.601	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	C	0.694	C	0.753	C	0.729	-0.505	-0.368	-0.408	No
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	C	0.706	C	0.721	C	0.678	-0.223	-0.303	-0.495	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	E	0.994	F	1.078	F	1.147	0.014	0.047	0.058	Yes(MD,PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.089	F	1.065	F	1.065	0.009	-0.007	-0.026	No
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	C	0.757	C	0.725	C	0.669	-0.071	-0.032	-0.004	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.589	C	0.674	D	0.808	0.002	0.007	0.02	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.152	A	0.304	A	0.309	-0.023	0.013	0.057	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.265	A	0.213	A	0.14	0.032	-0.028	-0.01	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	C	0.749	D	0.822	D	0.807	-0.111	-0.186	-0.358	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	C	0.713	C	0.756	C	0.738	-0.489	-0.328	-0.318	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.638	C	0.67	C	0.702	-0.053	-0.177	-0.286	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	C	0.662	C	0.659	C	0.675	-0.31	-0.193	-0.139	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-51.2: No Project Alternative - CEQA Highway Link Level-Of-Service Analysis (Year 2015)

Highway Segments	CEQA Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	C	0.608	C	0.654	C	0.694	-0.635	-0.484	-0.425	No
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	C	0.636	C	0.644	C	0.622	-0.307	-0.418	-0.599	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	C	0.708	C	0.769	C	0.738	-0.491	-0.352	-0.399	No
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	C	0.722	C	0.722	C	0.691	-0.207	-0.302	-0.482	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.044	F	1.109	F	1.189	0.064	0.078	0.1	Yes(AM,MD, PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.113	F	1.097	F	1.081	0.033	0.025	-0.01	Yes(AM,MD)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.782	C	0.754	C	0.693	-0.046	-0.003	0.02	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.62	C	0.698	D	0.823	0.033	0.031	0.035	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	A	0.191	A	0.331	A	0.345	0.016	0.04	0.093	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	A	0.285	A	0.244	A	0.156	0.052	0.003	0.006	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	C	0.765	D	0.836	C	0.765	-0.095	-0.172	-0.4	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	C	0.737	C	0.74	C	0.754	-0.465	-0.344	-0.302	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.642	C	0.665	C	0.679	-0.049	-0.182	-0.309	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	C	0.67	C	0.658	C	0.683	-0.302	-0.194	-0.131	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-51.3: No Project Alternative - CEQA Highway Link Level-Of-Service Analysis (Year 2020)

Highway Segments	CEQA Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	C	0.637	C	0.663	C	0.713	-0.606	-0.475	-0.406	No
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	C	0.654	C	0.643	C	0.63	-0.289	-0.419	-0.591	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	C	0.747	D	0.784	C	0.769	-0.452	-0.337	-0.368	No
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	C	0.751	C	0.74	C	0.702	-0.178	-0.284	-0.471	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.163	F	1.144	F	1.237	0.183	0.113	0.148	Yes(AM,MD, PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.168	F	1.141	F	1.108	0.088	0.069	0.017	Yes(AM,MD)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.898	D	0.793	C	0.744	0.07	0.036	0.071	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.699	C	0.727	D	0.855	0.112	0.06	0.067	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	C	0.568	B	0.449	B	0.525	0.393	0.158	0.273	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	B	0.394	B	0.361	A	0.214	0.161	0.12	0.064	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	D	0.809	D	0.829	C	0.773	-0.051	-0.179	-0.392	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	C	0.748	C	0.75	C	0.768	-0.454	-0.334	-0.288	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.658	C	0.667	C	0.676	-0.033	-0.18	-0.312	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	C	0.671	C	0.651	C	0.698	-0.301	-0.201	-0.116	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-51.4: No Project Alternative -CEQA Highway Link Level-Of-Service Analysis (Year 2030)

Highway Segments	CEQA Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.243	F	1.138	F	1.119	C	0.719	D	0.789	D	0.807	-0.524	-0.349	-0.312	No
SB I-405 Freeway n/o I-710 Freeway	E	0.943	F	1.062	F	1.221	C	0.728	C	0.775	C	0.726	-0.215	-0.287	-0.495	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.199	F	1.121	F	1.137	D	0.791	D	0.879	D	0.867	-0.408	-0.242	-0.27	No
SB I-405 Freeway s/o I-710 Freeway	D	0.929	F	1.024	F	1.173	D	0.818	D	0.868	D	0.79	-0.111	-0.156	-0.383	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	E	0.98	F	1.031	F	1.089	F	1.172	F	1.235	F	1.278	0.192	0.204	0.189	Yes(AM,MD, PM)
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.08	F	1.072	F	1.091	F	1.225	F	1.216	F	1.16	0.145	0.144	0.069	Yes(AM,MD, PM)
4. NB I-110 Freeway n/o C-Street	D	0.828	C	0.757	C	0.673	D	0.926	D	0.87	D	0.814	0.098	0.113	0.141	No
SB I-110 Freeway n/o C-Street	C	0.587	C	0.667	D	0.788	C	0.717	D	0.801	D	0.92	0.13	0.134	0.132	No
5. NB SR-47 Freeway at Heim Bridge	A	0.175	A	0.291	A	0.252	B	0.437	B	0.527	C	0.604	0.262	0.236	0.352	No
SB SR-47 Freeway at Heim Bridge	A	0.233	A	0.241	A	0.15	B	0.492	B	0.434	A	0.258	0.259	0.193	0.108	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.86	F	1.008	F	1.165	D	0.85	D	0.934	D	0.85	-0.01	-0.074	-0.315	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.202	F	1.084	F	1.056	D	0.851	D	0.87	D	0.838	-0.351	-0.214	-0.218	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.691	D	0.847	E	0.988	C	0.72	D	0.814	D	0.784	0.029	-0.033	-0.204	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.972	D	0.852	D	0.814	D	0.783	D	0.802	D	0.78	-0.189	-0.05	-0.034	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-52.1: No Project Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2010)

Highway Segments	Year 2010 NEPA Baseline						Year 2010						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.261	F	1.155	F	1.132	F	1.259	F	1.164	F	1.127	-0.002	0.009	-0.004	No
SB I-405 Freeway n/o I-710 Freeway	E	0.956	F	1.082	F	1.223	E	0.959	F	1.082	F	1.228	0.003	0.000	0.005	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.232	F	1.134	F	1.141	F	1.229	F	1.133	F	1.133	-0.002	-0.001	-0.008	No
SB I-405 Freeway s/o I-710 Freeway	E	0.942	F	1.046	F	1.177	E	0.946	F	1.037	F	1.179	0.004	-0.009	0.002	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.004	F	1.062	F	1.123	F	1.004	F	1.055	F	1.120	0.000	-0.008	-0.004	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.110	F	1.099	F	1.116	F	1.107	F	1.102	F	1.123	-0.003	0.003	0.007	No
4. NB I-110 Freeway n/o C-Street	D	0.839	C	0.754	C	0.682	D	0.844	D	0.764	C	0.684	0.006	0.010	0.001	No
SB I-110 Freeway n/o C-Street	C	0.598	C	0.657	D	0.792	C	0.600	C	0.665	D	0.789	0.001	0.008	-0.004	No
5. NB SR-47 Freeway at Heim Bridge	A	0.171	A	0.276	A	0.251	A	0.176	A	0.291	A	0.261	0.005	0.016	0.010	No
SB SR-47 Freeway at Heim Bridge	A	0.225	A	0.229	A	0.148	A	0.233	A	0.241	A	0.155	0.009	0.012	0.007	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.870	F	1.045	F	1.096	D	0.870	F	1.038	F	1.122	0.000	-0.007	0.026	Yes(PM)
WB SR-91 Freeway e/o I-710 Freeway	F	1.249	F	1.039	F	1.080	F	1.233	F	1.056	F	1.087	-0.017	0.017	0.008	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.694	D	0.861	E	0.948	C	0.697	D	0.849	F	0.953	0.003	-0.013	0.004	No
WB SR-91 Freeway w/o I-710 Freeway	E	0.983	D	0.838	D	0.814	F	0.975	D	0.835	D	0.808	-0.008	-0.004	-0.007	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-52.2: No Project Alternative – NEPA Highway Link Level-Of-Service Analysis (Year 2015)

Highway Segments	Year 2015 NEPA Baseline						Year 2015						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.328	F	1.214	F	1.202	F	1.328	F	1.215	F	1.195	-0.001	0.002	-0.007	No
SB I-405 Freeway n/o I-710 Freeway	F	1.006	F	1.130	F	1.310	F	1.007	F	1.134	F	1.304	0.001	0.005	-0.006	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.277	F	1.190	F	1.211	F	1.281	F	1.197	F	1.214	0.003	0.008	0.003	No
SB I-405 Freeway s/o I-710 Freeway	E	0.993	F	1.096	F	1.254	E	0.992	F	1.094	F	1.253	0.000	-0.003	-0.001	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.052	F	1.112	F	1.164	F	1.047	F	1.101	F	1.163	-0.006	-0.011	-0.001	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.160	F	1.154	F	1.171	F	1.153	F	1.145	F	1.165	-0.006	-0.009	-0.006	No
4. NB I-110 Freeway n/o C-Street	D	0.887	D	0.808	C	0.729	D	0.884	D	0.808	C	0.719	-0.003	0.000	-0.010	No
SB I-110 Freeway n/o C-Street	C	0.631	C	0.714	D	0.839	C	0.627	C	0.712	D	0.842	-0.004	-0.001	0.002	No
5. NB SR-47 Freeway at Heim Bridge	A	0.193	A	0.323	A	0.285	A	0.187	A	0.311	A	0.269	-0.006	-0.012	-0.016	No
SB SR-47 Freeway at Heim Bridge	A	0.259	A	0.260	A	0.163	A	0.249	A	0.257	A	0.160	-0.010	-0.003	-0.003	No
6. EB SR-91 Freeway e/o I-710 Freeway	D	0.919	F	1.073	F	1.255	D	0.918	F	1.077	F	1.244	-0.001	0.004	-0.011	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.257	F	1.163	F	1.135	F	1.284	F	1.158	F	1.128	0.027	-0.005	-0.007	Yes (AM)
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.741	D	0.907	F	1.060	C	0.738	D	0.905	F	1.055	-0.003	-0.002	-0.005	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.029	D	0.915	D	0.870	F	1.038	D	0.910	D	0.869	0.009	-0.005	-0.001	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-52.3: No Project Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2020)

Highway Segments	Year 2020 NEPA Baseline						Year 2020						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.386	F	1.310	F	1.259	F	1.370	F	1.254	F	1.233	-0.017	-0.056	-0.026	No
SB I-405 Freeway n/o I-710 Freeway	F	1.055	F	1.217	F	1.365	F	1.039	F	1.170	F	1.346	-0.016	-0.047	-0.020	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.271	F	1.226	F	1.277	F	1.321	F	1.235	F	1.253	0.050	0.009	-0.024	Yes (AM)
SB I-405 Freeway s/o I-710 Freeway	F	1.039	F	1.167	F	1.309	F	1.024	F	1.128	F	1.293	-0.015	-0.039	-0.016	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.064	F	1.185	F	1.201	F	1.080	F	1.136	F	1.200	0.016	-0.049	-0.001	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.212	F	1.220	F	1.221	F	1.190	F	1.181	F	1.202	-0.022	-0.039	-0.018	No
4. NB I-110 Freeway n/o C-Street	D	0.889	D	0.859	C	0.752	D	0.912	D	0.834	C	0.742	0.024	-0.025	-0.010	No
SB I-110 Freeway n/o C-Street	C	0.634	C	0.757	D	0.883	C	0.647	C	0.735	D	0.868	0.013	-0.022	-0.015	No
5. NB SR-47 Freeway at Heim Bridge	A	0.004	A	0.341	A	0.276	A	0.193	A	0.321	A	0.278	0.189	-0.020	0.001	No
SB SR-47 Freeway at Heim Bridge	A	0.278	A	0.269	A	0.175	A	0.257	A	0.266	A	0.165	-0.021	-0.004	-0.010	No
6. EB SR-91 Freeway e/o I-710 Freeway	E	0.944	F	1.088	F	1.321	E	0.948	F	1.111	F	1.284	0.004	0.023	-0.037	Yes (MD)
WB SR-91 Freeway e/o I-710 Freeway	F	1.357	F	1.325	F	1.195	F	1.325	F	1.195	F	1.164	-0.032	-0.130	-0.031	No
7. EB SR-91 Freeway w/o I-710 Freeway	C	0.777	E	0.955	F	1.132	C	0.761	D	0.933	F	1.089	-0.016	-0.021	-0.043	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.104	E	0.985	D	0.912	F	1.071	D	0.939	D	0.897	-0.033	-0.046	-0.015	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Table 3-52.4: No Project Alternative - NEPA Highway Link Level-Of-Service Analysis (Year 2030)

Highway Segments	Year 2030 NEPA Baseline						Year 2030						Change in V/C			Significant Impact (Yes / No)
	8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.		2-3 p.m.		4-5 p.m.		8-9 a.m.	2-3 p.m.	4-5 p.m.	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C				
1. NB I-405 Freeway n/o I-710 Freeway	F	1.452	F	1.329	F	1.303	F	1.453	F	1.330	F	1.308	0.001	0.001	0.005	No
SB I-405 Freeway n/o I-710 Freeway	F	1.095	F	1.242	F	1.431	F	1.102	F	1.241	F	1.427	0.008	0.000	-0.003	No
2. NB I-405 Freeway s/o I-710 Freeway	F	1.393	F	1.277	F	1.329	F	1.402	F	1.310	F	1.329	0.009	0.033	0.001	Yes (MD)
SB I-405 Freeway s/o I-710 Freeway	F	1.091	F	1.199	F	1.372	F	1.086	F	1.197	F	1.371	-0.005	-0.002	-0.001	No
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.164	F	1.202	F	1.283	F	1.146	F	1.205	F	1.273	-0.019	0.003	-0.010	No
SB I-710 Freeway between Willow Street and Pacific Coast Highway	F	1.270	F	1.267	F	1.284	F	1.263	F	1.253	F	1.275	-0.008	-0.014	-0.009	No
4. NB I-110 Freeway n/o C-Street	E	0.968	D	0.901	D	0.790	E	0.968	D	0.885	D	0.787	0.000	-0.017	-0.003	No
SB I-110 Freeway n/o C-Street	C	0.689	D	0.793	D	0.927	C	0.686	C	0.780	D	0.921	-0.003	-0.013	-0.005	No
5. NB SR-47 Freeway at Heim Bridge	A	0.218	A	0.347	A	0.302	A	0.205	A	0.340	A	0.295	-0.013	-0.007	-0.008	No
SB SR-47 Freeway at Heim Bridge	A	0.271	A	0.280	A	0.172	A	0.272	A	0.282	A	0.175	0.001	0.001	0.004	No
6. EB SR-91 Freeway e/o I-710 Freeway	F	1.004	F	1.181	F	1.345	F	1.005	F	1.178	F	1.362	0.001	-0.003	0.017	No
WB SR-91 Freeway e/o I-710 Freeway	F	1.365	F	1.363	F	1.237	F	1.405	F	1.267	F	1.234	0.040	-0.096	-0.002	Yes (AM)
7. EB SR-91 Freeway w/o I-710 Freeway	D	0.808	E	0.989	F	1.151	D	0.808	E	0.990	F	1.155	-0.001	0.001	0.004	No
WB SR-91 Freeway w/o I-710 Freeway	F	1.117	F	1.052	E	0.947	F	1.136	E	0.996	E	0.952	0.019	-0.056	0.004	No

Notes: Mainline link analysis is based on lane capacity of 2,100 vehicles per hour.

Impact TRANS-3: Project operations would not increase the demand for transit services.

Impact TRANS-4: Project operations would not result in any increases in rail activity.

Future Baseline Impact Determination

Transit services and rail operations are expected to remain the same as current conditions. Therefore, this alternative is not expected to create any additional impacts under the Future Baseline.

CEQA Baseline Impact Determination

Transit services and rail operations are expected to remain the same as current conditions. Therefore, this alternative is not expected to create any additional impacts under the CEQA Baseline.

NEPA Baseline Impact Determination

Transit services and rail operations are expected to remain the same as current conditions. Therefore, this alternative is not expected to create any additional impacts under the NEPA Baseline.

3.3 Cumulative Impact Analysis

This section examines the potential effects of the project in association with cumulative development. CEQA requires that EIRs discuss cumulative impacts, in addition to project-specific impacts. Section 15355 of the *CEQA Guidelines*, as amended, provides the following definition of cumulative impacts: "Cumulative impacts refer to two or more individual effects which, when considered together, are considerable, or which compound or increase other environmental impacts."

Related Projects

The fact that a cumulative impact is significant on the whole does not necessarily mean that the project-related contribution to that impact analysis is significant as well. Instead, under CEQA, a project related contribution to a significant cumulative impact is only significant if the contribution is cumulatively considerable.

A list of related development projects in the Project vicinity is provided in Appendix P. The Future Year Baseline model used in this analysis includes project traffic from the related projects identified in Appendix P and other regional projects in the SCAG's base model. The Port trip tables are not an integral part of the SCAG model, but are overlaid on top of the SCAG regional base model, which assumes all the Regional Transportation Plan projects to be in place. Trip generation refinements to provide more accurate assignment of special generator trips such as those in downtown Long Beach, San Pedro and other Project in the Port vicinity were also included in the model. These are identified in Appendix P and were incorporated in the model to assess the cumulative background traffic growth in the study area.

Analysis

To support each significance conclusion, this EIS/EIR provides a cumulative impact analysis and where project-specific impacts have been identified that, together with the effects of other related projects, could result in cumulatively significant impacts. The comparison of Project alternative to the future baseline conditions primarily constitutes the cumulative impact analysis and is presented in Sections 3.2.3 through 3.2.6 for 345-Acre Alternative, 315-Acre Alternative, Landside Improvements Alternative and No Project Alternative, respectively.

Both construction and operation of the Project would contribute to the cumulative significant traffic impacts at study locations.

IMPACT TRANS-1

The project when considered cumulatively would have significant impacts at study intersections. The deteriorations in the levels of service and associated impacts with the addition of Project traffic to the cumulative background (Future Baseline) traffic conditions are presented in Table 3-15.1 through Table 3-15.4 for 345- Acre Alternative, Table 3-26.1 through Table 3-26.4 for 315-Acre Alternative, Table 3-37.1 through Table 3-37.4 for the Landside Improvements Alternative, and Table 3-45.1 through Table 3-45.4 for the No-Project Alternative. Therefore, it can be concluded that the project would cumulatively contribute towards the intersection impacts provided in the above tables.

Mitigations

Since the project specific mitigation measures recommended under each alternative would alleviate the intersection impacts to a level of insignificance, no further mitigation measures are deemed necessary. As can be seen from the Tables 3-14, 3-29, and 3-39 the intersections are projected to operate at acceptable levels of service with project recommended mitigation measures. By implementing the MM Trans 3 through MM Trans 6, the Project is taking on the responsibility of mitigating the cumulative impacts.

Significance of Impacts after Mitigation

Impacts would be less than significant.

IMPACT TRANS-2

The project when considered cumulatively would have significant impacts at study highway segments. The deteriorations in the levels of service and associated impacts with the addition of Project traffic to the cumulative background (Future Baseline) traffic conditions are presented in Table 3-20.1 through Table 3-20.4 for 345-Acre Alternative, Table 3-31.1 through Table 3-31.4 for 315-Acre Alternative, Table 3-40.1 through Table 3-40.4 for the Landside Improvements Alternative, and Table 3-49.1 through Table 3-49.4 for the No-Project Alternative. Therefore, it can be concluded that the project would cumulatively contribute towards the highway segment impacts provided in the above tables.

Mitigations

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

If Caltrans either a) adopts a Fair Share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed for to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

It should be noted that the POLB is currently participating in the on-going regional transportation programs as described under the 345-Acre Alternative earlier.

Significance of Impacts after Mitigation

Impacts would be unavoidable and remain unmitigated.

IMPACT TRANS-3 & TRANS-4

As discussed in previous sections, the Project will not contribute towards the cumulative impacts on transit or rail services nor will contribute cumulatively in creating additional vehicular delays at the at-grade rail crossings.

Mitigations

Since there are no cumulative impacts, no mitigations are necessary.

Significance of Impacts after Mitigation

Impacts would be less than significant.

4. Mitigation Monitoring Program

To address the significant project impacts, a mitigation monitoring program is proposed for each Project alternative by analysis year. The program is listed in Table 4-1.

Table 4-1. Mitigation Monitoring Program (CEQA Only)			
Mitigation Measure	Responsible Party	Timing/Frequency	
345-Acre Alternative			
<u>Transp-1</u>	POLB	2010	
<u>Pico Avenue/Pier G Avenue and Harbor Plaza</u> Install a signal at this intersection			
<u>Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps</u> Install a signal at this intersection			2010 ⁽¹⁾
<u>Pico Avenue/Ocean Blvd WB Off-Ramp</u> Install a signal at this intersection			2010 ⁽¹⁾
<u>Pico Avenue/Pier D Street</u> Install a signal at this intersection		2010 ⁽¹⁾	
<u>Transp-2</u>	Caltrans	Undetermined at this time. The Project's fair share towards the mitigations is provided in Table 3-19.1	
<u>Northbound & Southbound I-405 south of I-710</u>			
<u>Northbound & Southbound I-405 north of I-710</u>			
<u>Northbound & Southbound I-710 between PCH and Willow Street</u>			
<u>Northbound I-110 Freeway n/o C-Street</u>			
<u>Eastbound & Westbound SR-91 East of I-710</u>			
<u>Eastbound & Westbound SR-91 West of I-710</u>			

Table 4-1. Mitigation Monitoring Program (CEQA Only) - continued

Mitigation Measure	Responsible Party	Timing/Frequency
315-Acre Alternative		
<p><u>Transp-1</u> <u>Pico Avenue/Pier G Avenue and Harbor Plaza</u> Install a signal at this intersection <u>Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps</u> Install a signal at this intersection <u>Pico Avenue/Ocean Blvd WB Off-Ramp</u> Install a signal at this intersection <u>Pico Avenue/Pier D Street</u> Install a signal at this intersection</p>	POLB	2010 2010 ⁽¹⁾ 2010 ⁽¹⁾ 2020 ⁽¹⁾
<p><u>Transp-2</u> <u>Northbound & Southbound I-405 south of I-710</u> <u>Northbound & Southbound I-405 north of I-710</u> <u>Northbound & Southbound I-710 between PCH and Willow Street</u> <u>Northbound I-110 Freeway n/o C-Street</u> <u>Eastbound & Westbound SR-91 East of I-710</u> <u>Eastbound & Westbound SR-91 West of I-710</u></p>	Caltrans	Undetermined at this time. The Project's fair share towards the mitigations is provided in Table 3-30.1

Table 4- . Mitigation Monitoring Program (CEQA Only) - continued

Mitigation Measure	Responsible Party	Timing/Frequency
Landside Improvements Alternative		
<u>Transp-1</u> <u>Pico Avenue/Pier G Avenue and Harbor Plaza</u> Install a signal at this intersection <u>Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps</u> Install a signal at this intersection <u>Pico Avenue/Ocean Blvd WB Off-Ramp</u> Install a signal at this intersection <u>Pico Avenue/Pier D Street</u> Install a signal at this intersection	POLB	2010 2010 ⁽¹⁾ 2010 2010 ⁽¹⁾
<u>Transp-2</u> <u>Northbound & Southbound I-405 south of I-710</u> <u>Northbound & Southbound I-405 north of I-710</u> <u>Northbound & Southbound I-710 between PCH and Willow Street</u> <u>Northbound I-110 Freeway n/o C-Street</u> <u>Eastbound & Westbound SR-91 East of I-710</u> <u>Eastbound & Westbound SR-91 West of I-710</u>	Caltrans,	Undetermined at this time. The Project's fair share towards the mitigations is provided in Table 3-40.1
No Project Alternative		
<u>Transp-1</u> <u>Pico Avenue/Pier G Avenue and Harbor Plaza</u> <u>Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps</u> <u>Pico Avenue/Pier D Street</u> <u>Pico Avenue and Ocean Boulevard Westbound Off-Ramp</u>	None	None
<u>Transp-2</u> <u>Northbound I-405 Freeway South of I-710 Freeway</u> <u>Westbound SR-91 Freeway East of I-710 Freeway</u>	None	None
(1) – Improvements also noted as part of other on-going project mitigation recommendations.		

5. Summary

Throughout Project construction, there would be temporary adverse impacts on area roadways. There would not be any temporary delays due to lane closures; however, traffic generated by construction workers' vehicles would slightly increase the usage of surrounding roadways and intersections. The Port will implement standard traffic control measures to minimize short-term construction impacts, such as having work shifts start and end outside of peak traffic hours. Therefore, construction-related impacts on ground transportation would be less than significant under CEQA and NEPA.

During Project operations, the additional on-site employees would result in a negligible increase in work-related public transit trips. Additionally, there would be no ground transportation impacts associated with additional rail traffic generated due to recent regional improvements associated with the Alameda Corridor and the Alameda Corridor East projects. Project operations would result in significant impacts on various intersections; however, these impacts would be mitigated with the installation of traffic signals at these intersections. Additionally, Project operations would add 150 or more trips during either the a.m. or p.m. weekday peak hours at two CMP freeway monitoring locations. Therefore, impacts would be significant under CEQA and NEPA.

Existing levels of service at some of the intersections that would be affected by the Project would be degraded from acceptable operating (LOS D or better) conditions to unacceptable levels (LOS E or F) under the future No Project conditions, and would be further deteriorated under the proposed Project. Therefore, the proposed Project's contribution to the existing levels of service at the study intersections and highway segments would be significant.

Based on the analysis results, the Project will have significant impacts at the following four intersections:

- Pico Avenue/Pier G Avenue and Harbor Plaza
- Pico Avenue and Pier E Street/Ocean Blvd EB On and Off-Ramps
- Pico Avenue/Ocean Blvd WB Off-Ramp
- Pico Avenue and Pier D Street

The impacts at all four locations will be mitigated to less than significant levels by the installation of traffic signals. The signals will need to be in place and operational by Year 2010.

The Project is expected to have significant impacts on the following study highway segments using the future baseline comparison:

- I-405 south of I-710, northbound only
- I-710 between Willow Street and PCH, northbound only
- SR-91 east of I-710, both directions
- SR-91 west of I-710, westbound only

The POLB does not own, control, or maintain any of the impacted highway segments. These segments fall under the jurisdiction of Caltrans. Therefore, the POLB does not have authority to unilaterally implement any mitigation measures on the highway segments.

If Caltrans either a) adopts a fair share based program to collect funds for actual mitigation that Caltrans commits itself to implement, or b) otherwise obtains the balance of funding needed to improve the impacted study highway segments in a manner that will improve the segments level of operation, POLB shall be required to pay its fair share into that program. If Caltrans does not implement either of these steps, the regional cumulative impact on these freeway segments would remain significant and unavoidable.

In addition, it should be noted that the POLB is currently participating in the following on-going regional transportation programs which are intended to address future regional traffic growth and resulting congestion on area freeways:

I-710 Corridor EIS/EIR 2008

The Port is presently working with Caltrans, Metro, SCAG, and Gateway Cities Council of Governments (COG) (of which the Port and City of Long Beach are member agencies) on the I-710 Corridor EIR/EIS and Caltrans Project Report. POLB has committed \$5 million to this \$34-million, 42-month study, which was commenced in early 2008. The POLB, City of Long Beach, and Gateway Cities COG are aggressively seeking federal, State, and Metro funds for the I-710 Corridor.

Advanced Transportation Management, Information and Security (ATMIS)

The POLB/POLA will also be implementing an Intelligent Transportation Systems project by 2009. This \$11-million program will provide real-time information to travelers in the port vicinity and on adjacent regional transportation facilities. The ATMIS System will monitor vehicle traffic conditions through the use of closed circuit television cameras and vehicle detection devices at the terminal gates. The ATMIS System will distribute the traffic information to truck drivers, motorists, other agencies, and intermodal industry information systems through the use of strategically placed changeable message signs, internet video, and appropriate data sharing means. The ATMIS System will be a major component in an overall intelligent transportation systems (ITS) program for the I-710 Corridor/Gerald Desmond Bridge Gateway Program. This planned project will help to mitigate the I-710 impacts of the Project.

SR-91 Corridor Study

The Gateway Cities COG has begun a SR-91 Corridor Study to explore options that will improve traffic conditions on this freeway. POLB continues to work in concert with the COG, Caltrans, and other agencies to find solutions to improving operating conditions on SR-91.

No additional feasible mitigation measures are available at this time.

Until Caltrans implements improvements to the I-710, I-405, and SR-91, the proposed Project's impacts on the above-mentioned highway segments will remain significant. Therefore, there will be significant and unavoidable highway traffic impacts associated with the Project.

Appendix

Appendix A: Figures

Appendix B: Existing Year 2005 Traffic Counts

Appendix C: Existing Year 2005 Peak-Hour Intersection Capacity Analysis Worksheets

Appendix D: Year 2010 Peak-Hour Intersection Capacity Analysis Worksheets

Appendix E: Year 2015 Peak-Hour Intersection Capacity Analysis Worksheets

Appendix F: Year 2020 Peak-Hour Intersection Capacity Analysis Worksheets

Appendix G: Year 2030 Peak-Hour Intersection Capacity Analysis Worksheets

Appendix H: Mitigated Intersection Peak-Hour Capacity Analysis Worksheets

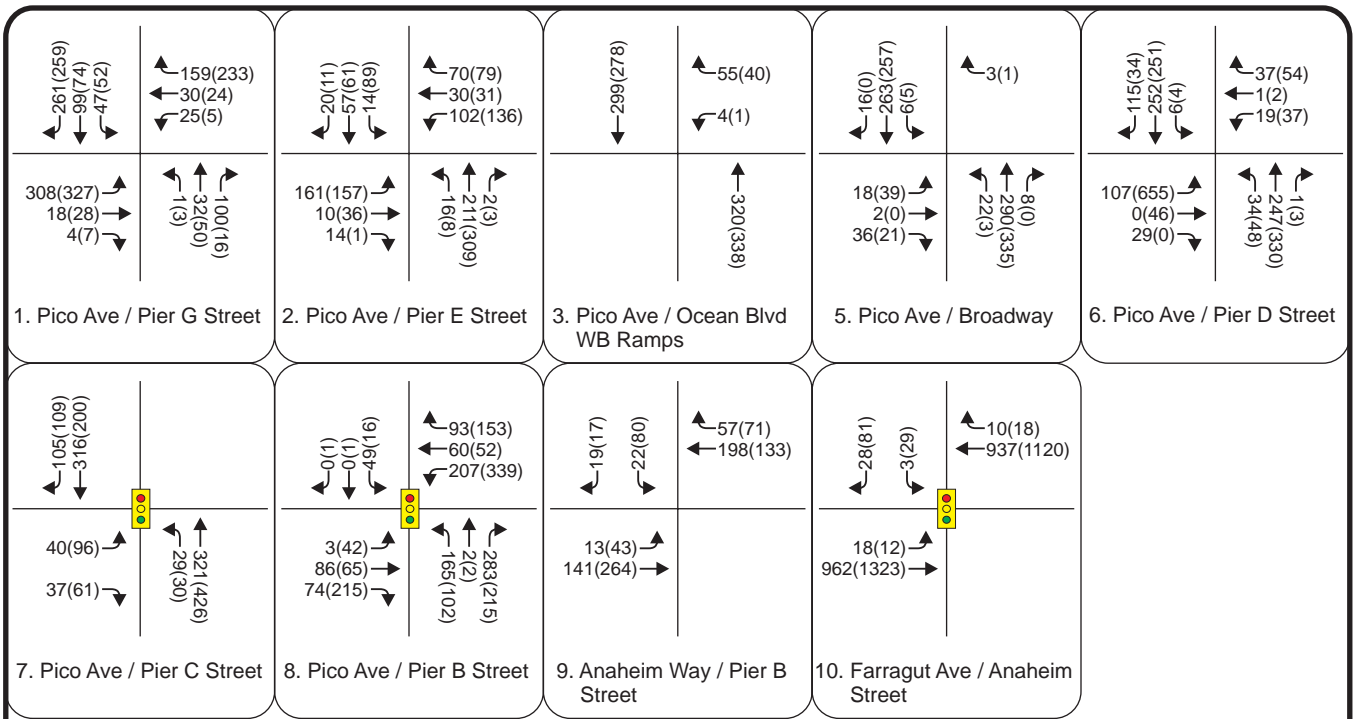
Appendix I: Highway Segment Analysis Worksheet

Appendix J: Rail Analysis

Appendix K: Traffic Signal Warrant Analysis

Appendix L: Related and Cumulative Projects List

Appendix A: Figures



Legend

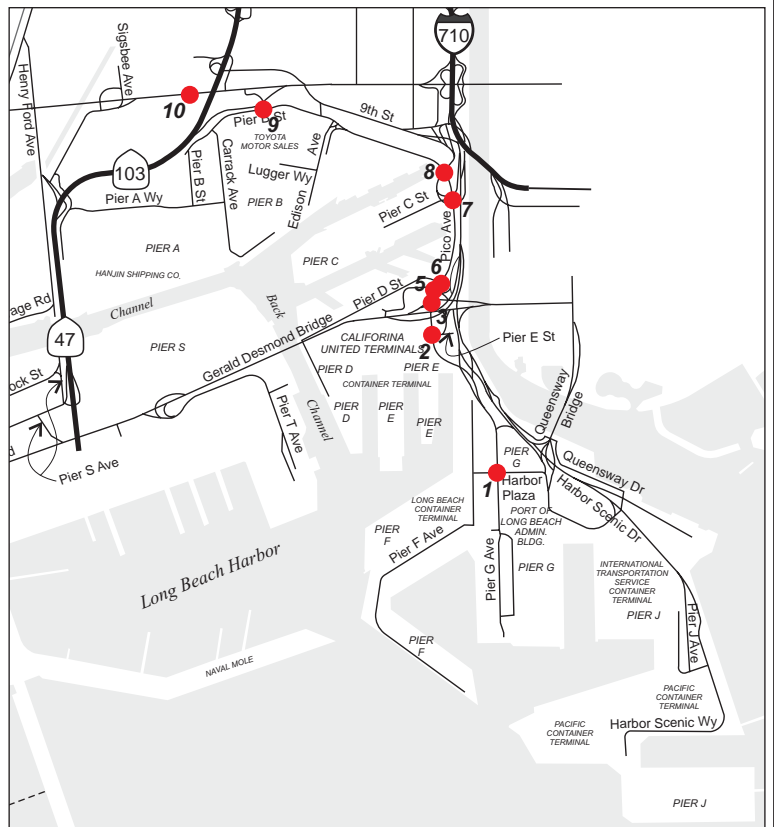
● Study Intersection

🚦 Signalized Intersection

XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

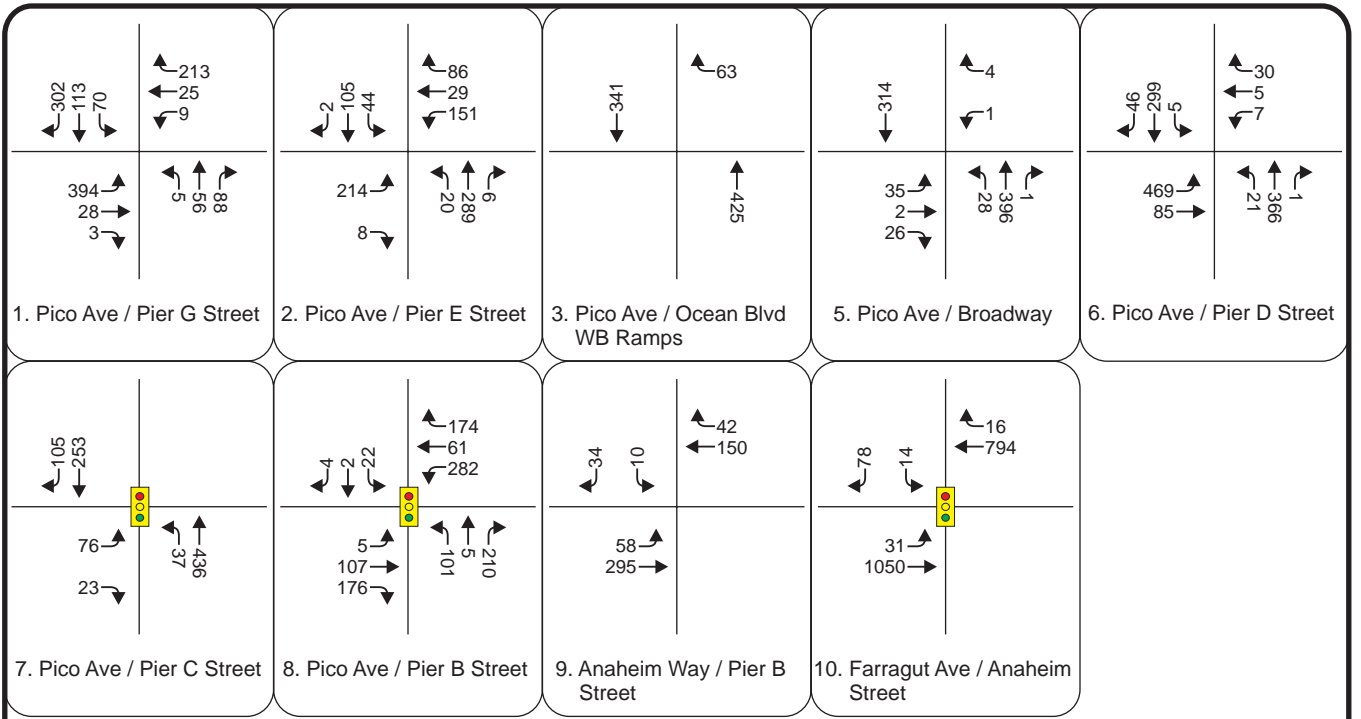


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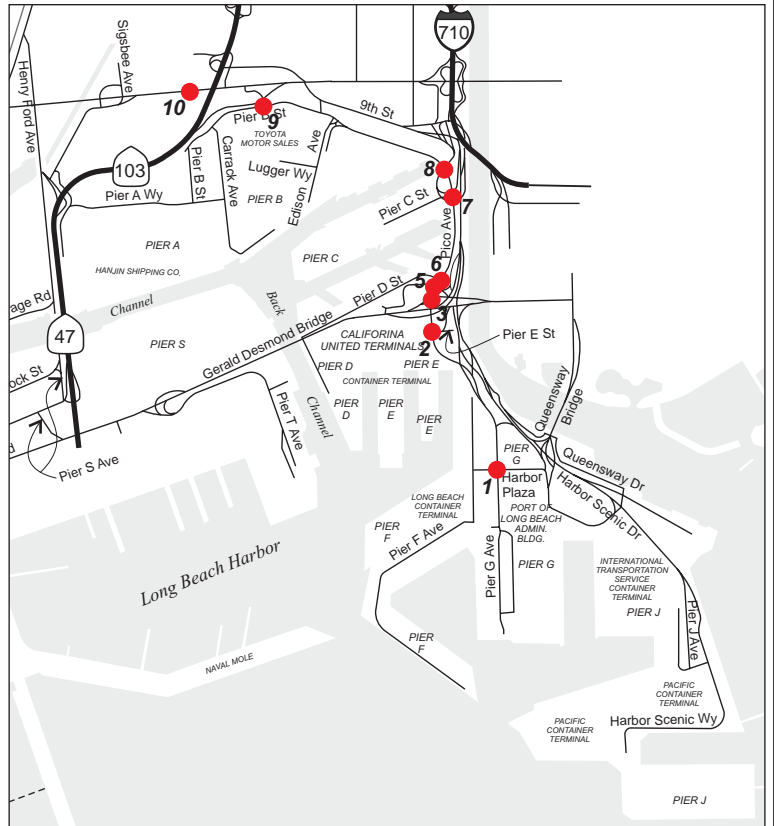
**FIGURE 3.5-7
Existing AM & PM
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume



NOT TO SCALE

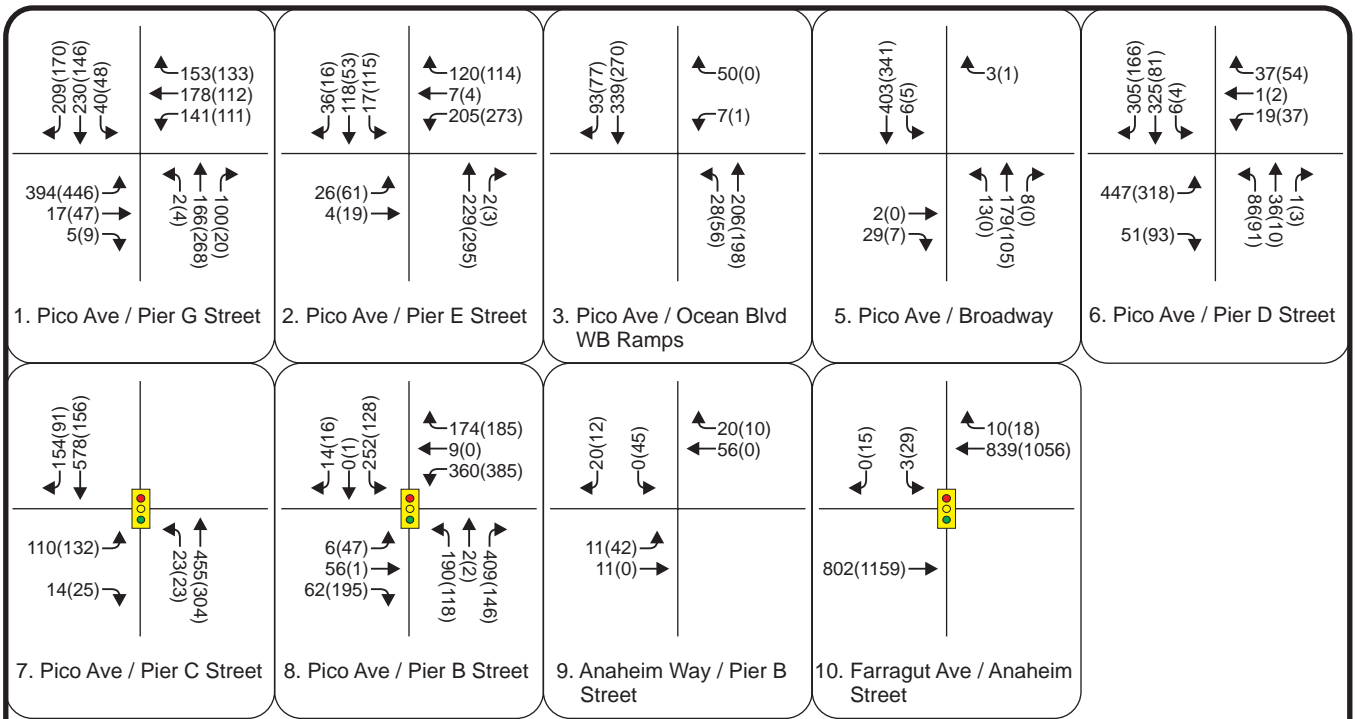


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**FIGURE 3.5-8
Existing MD
MD Peak Hour Traffic Volumes (PCE)**

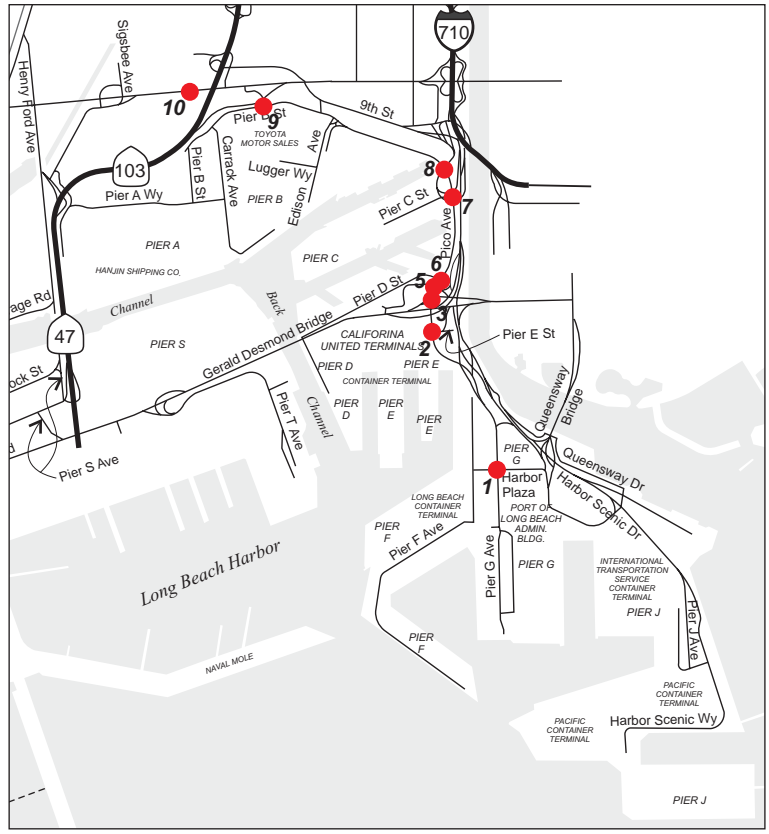


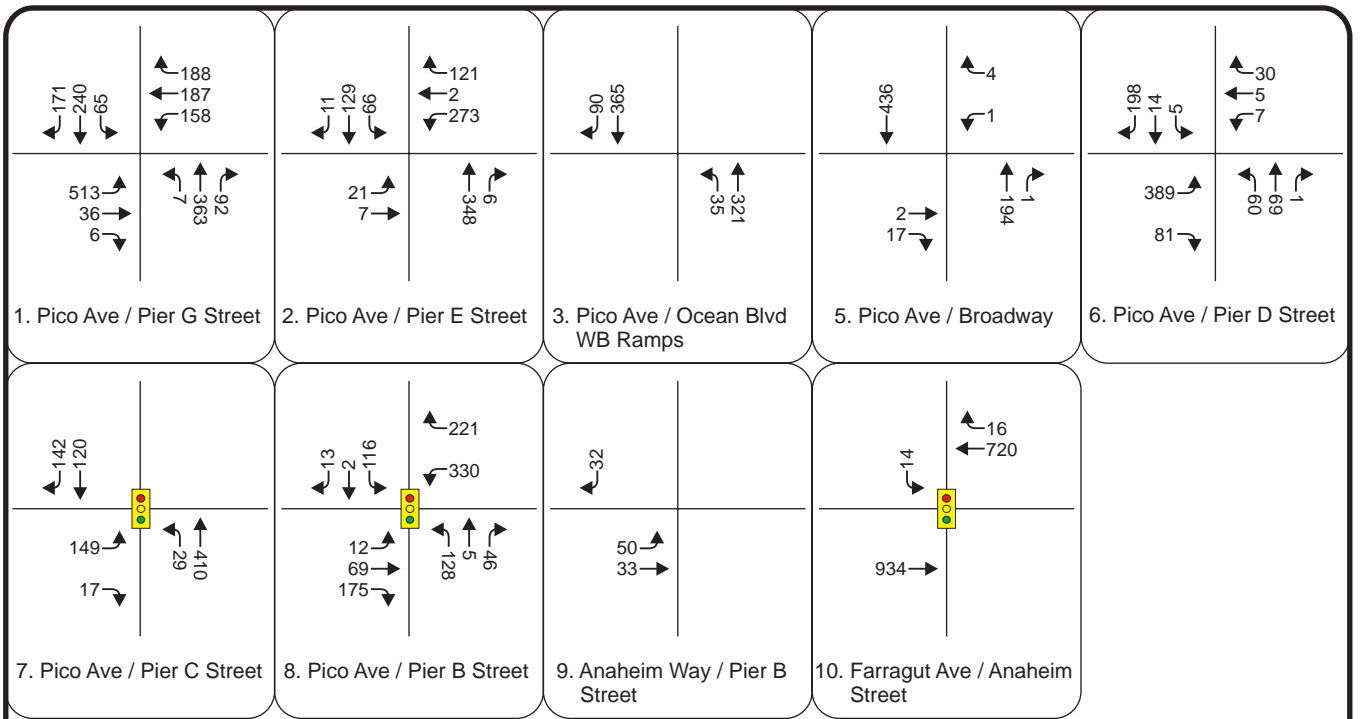
Legend

● Study Intersection

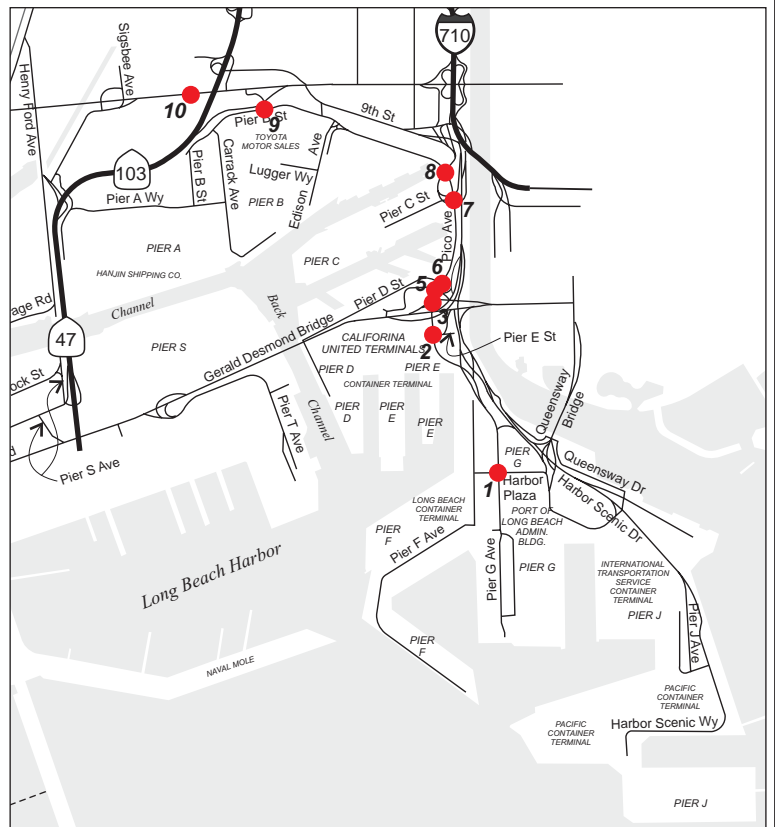
🚦 Signalized Intersection

XXX(XXX) AM(PM) Peak Hour Volume





- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

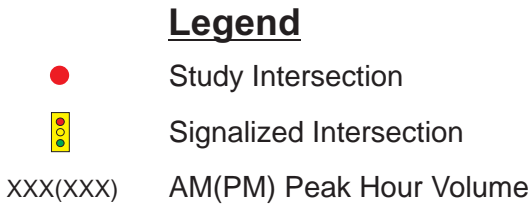
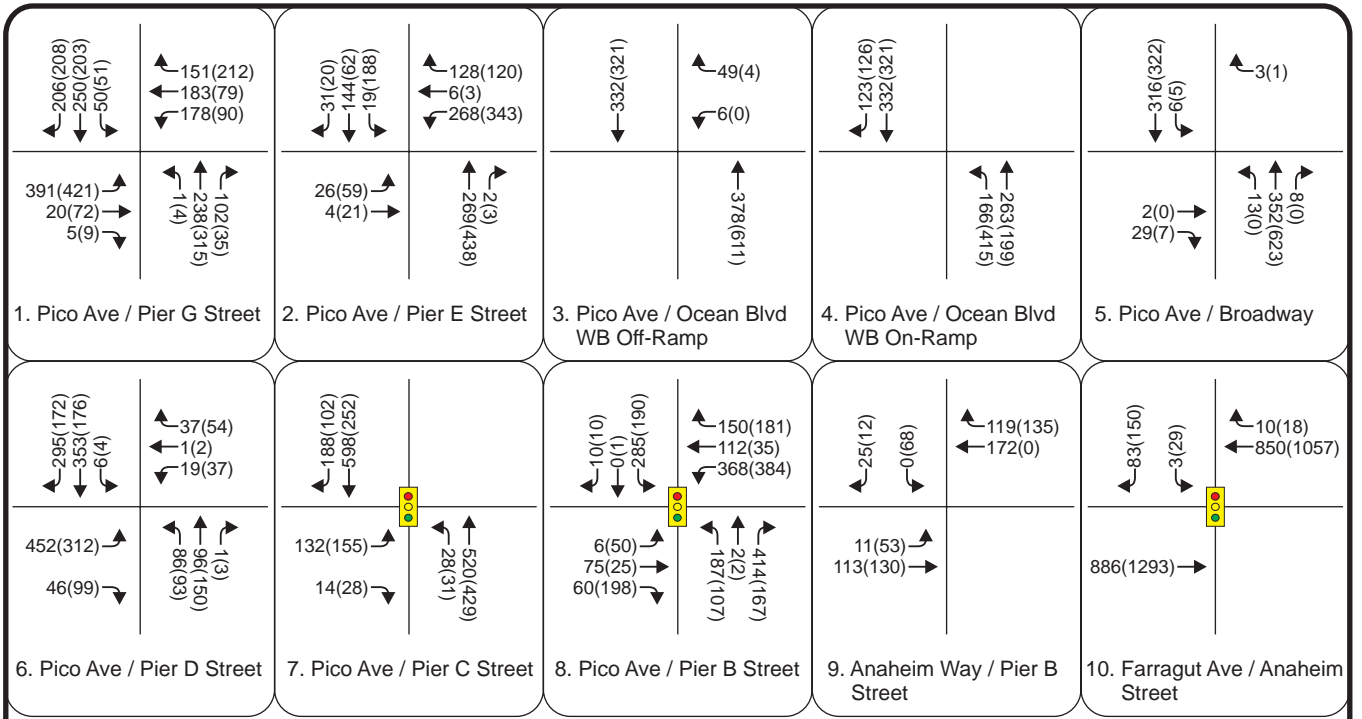


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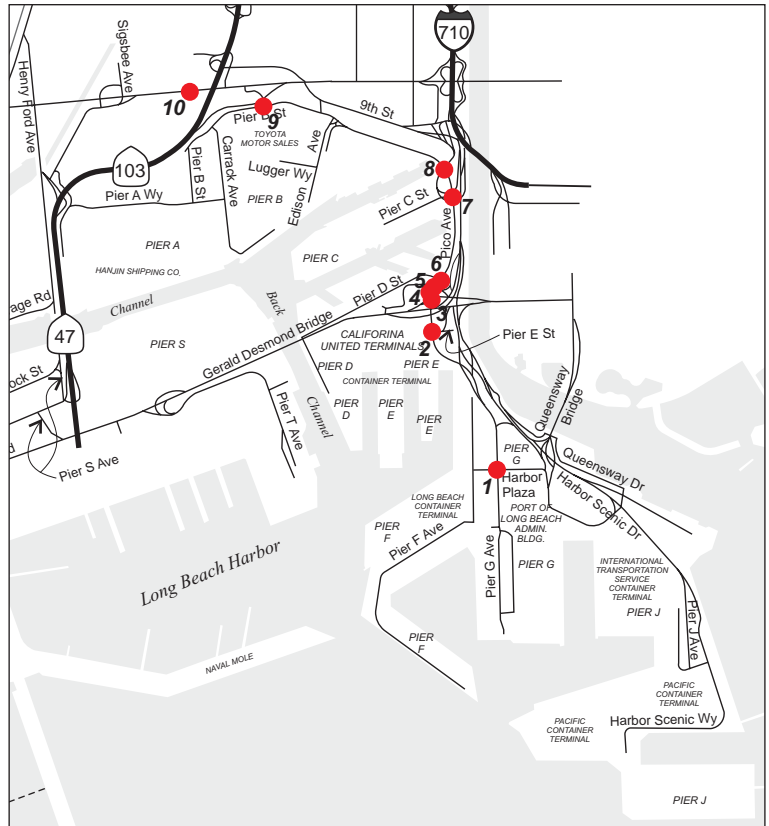
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**FIGURE 3.5-10
Year 2010 CEQA Baseline
MD Peak Hour Traffic Volumes (PCE)**



NOT TO SCALE

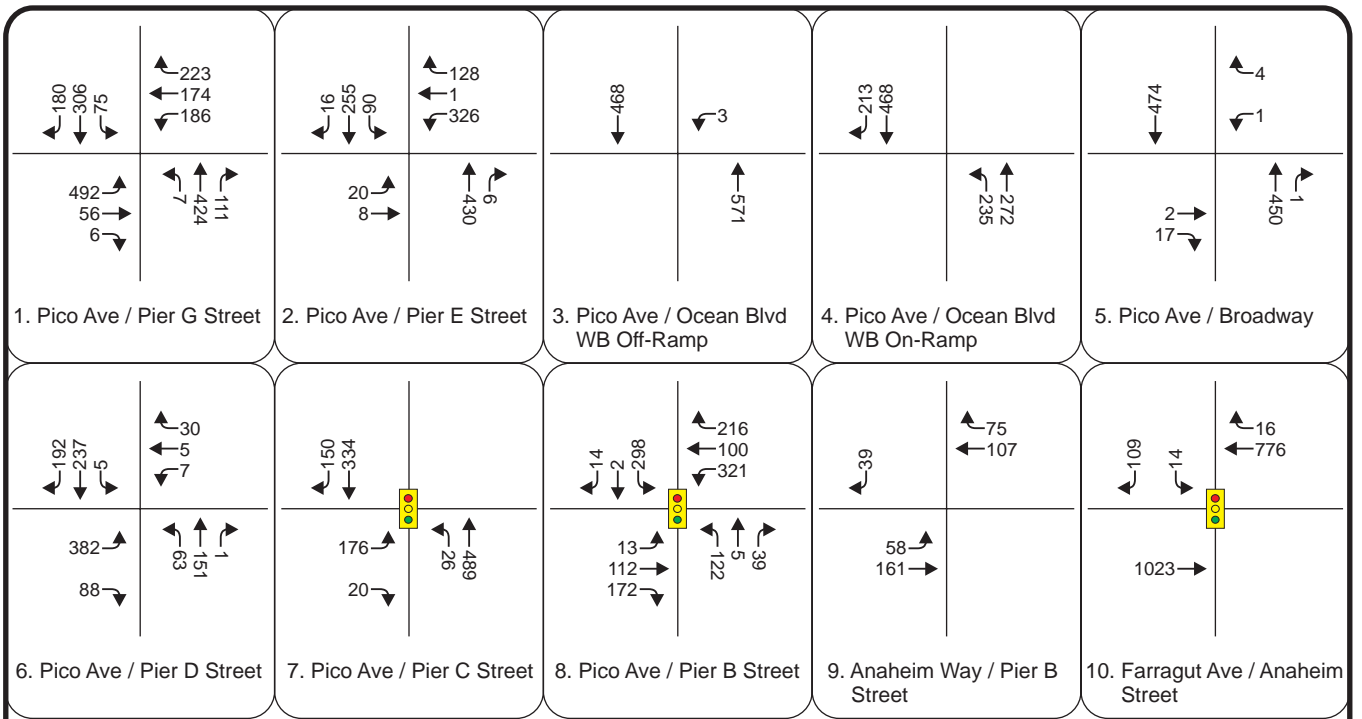


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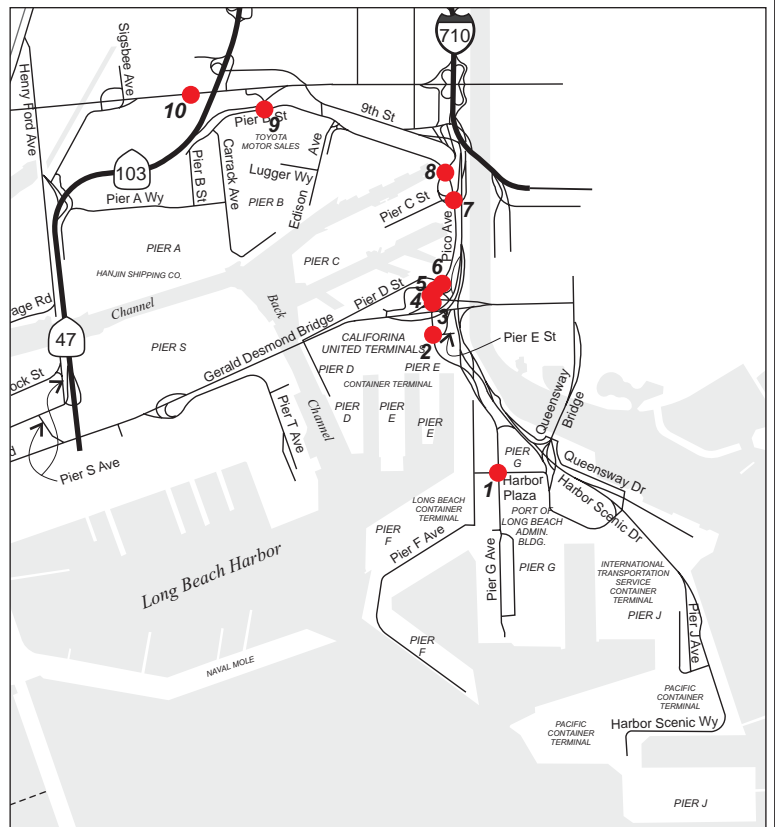
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**FIGURE 3.5-11
Year 2015 CEQA Baseline
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

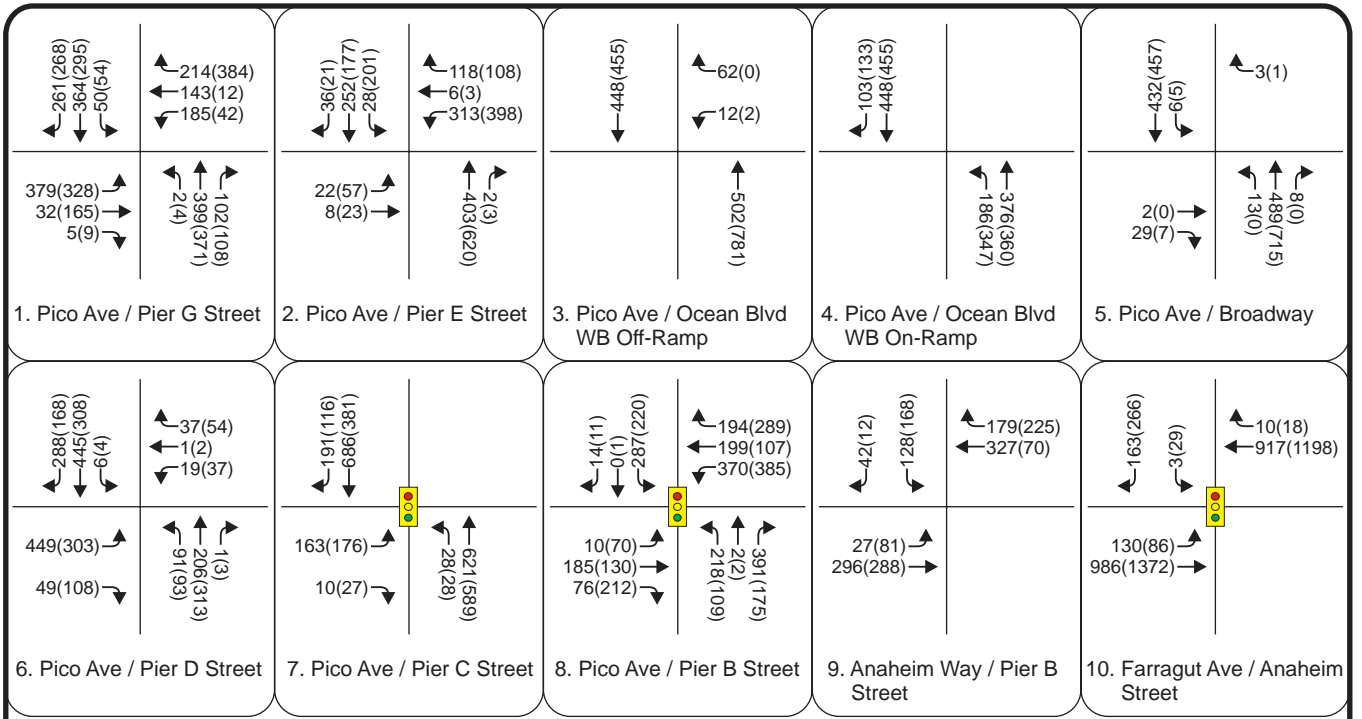


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**FIGURE 3.5-12
Year 2015 CEQA Baseline
MD Peak Hour Traffic Volumes (PCE)**



Legend

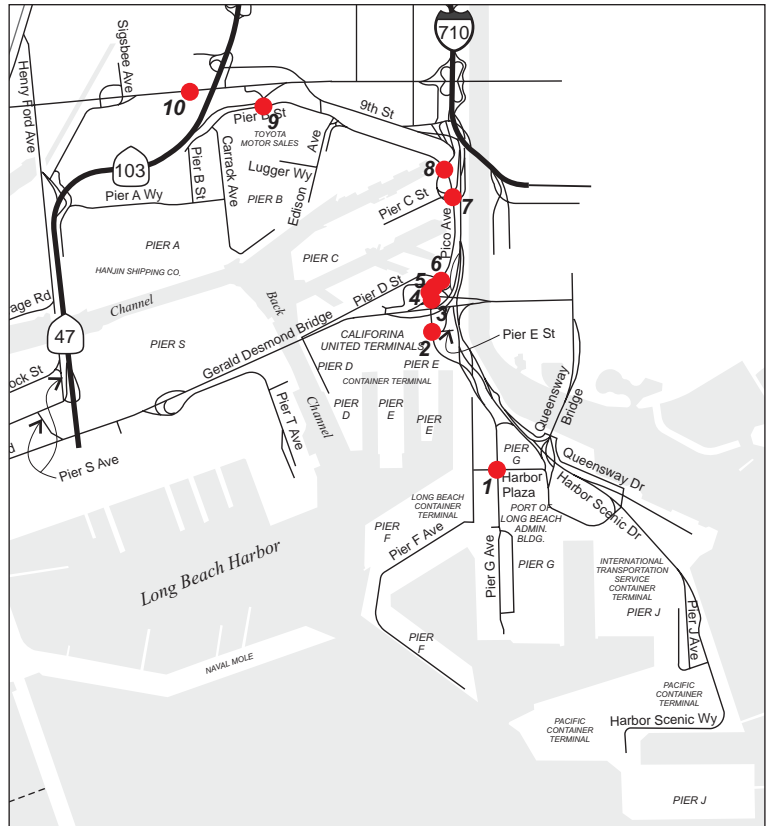
● Study Intersection

🚦 Signalized Intersection

XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

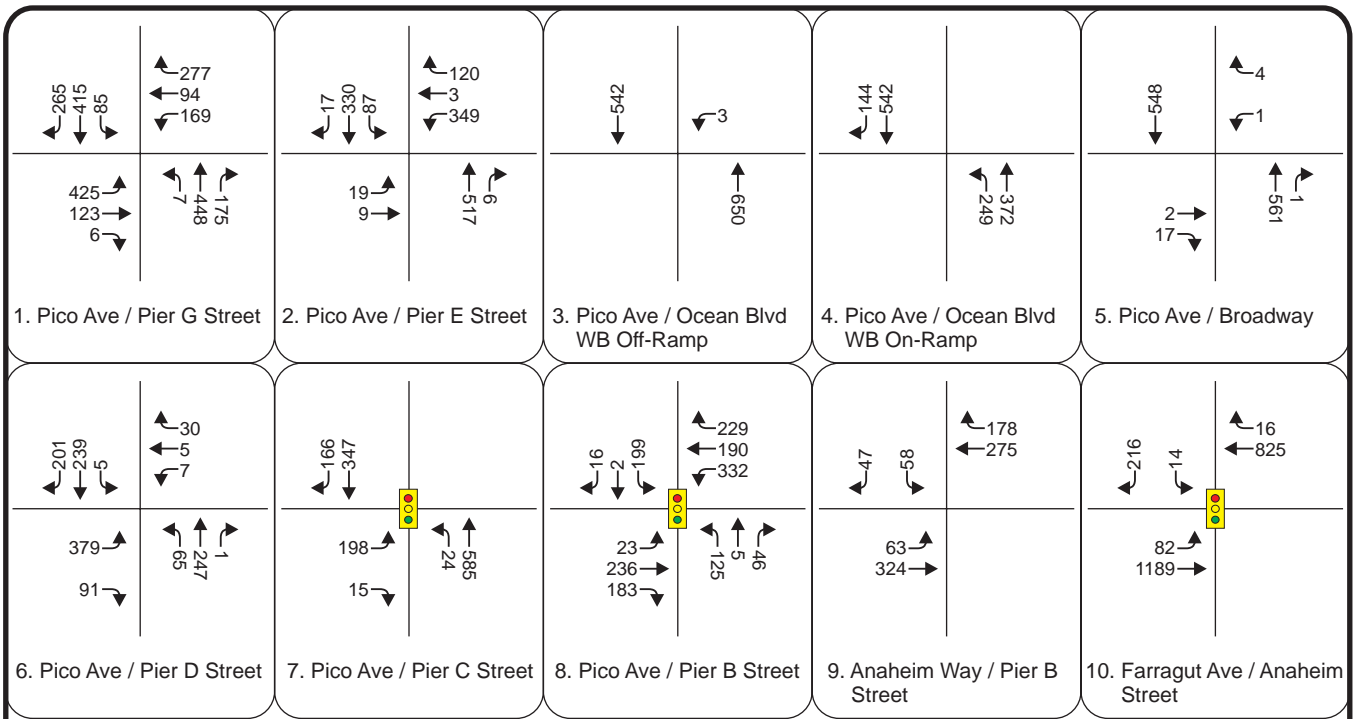


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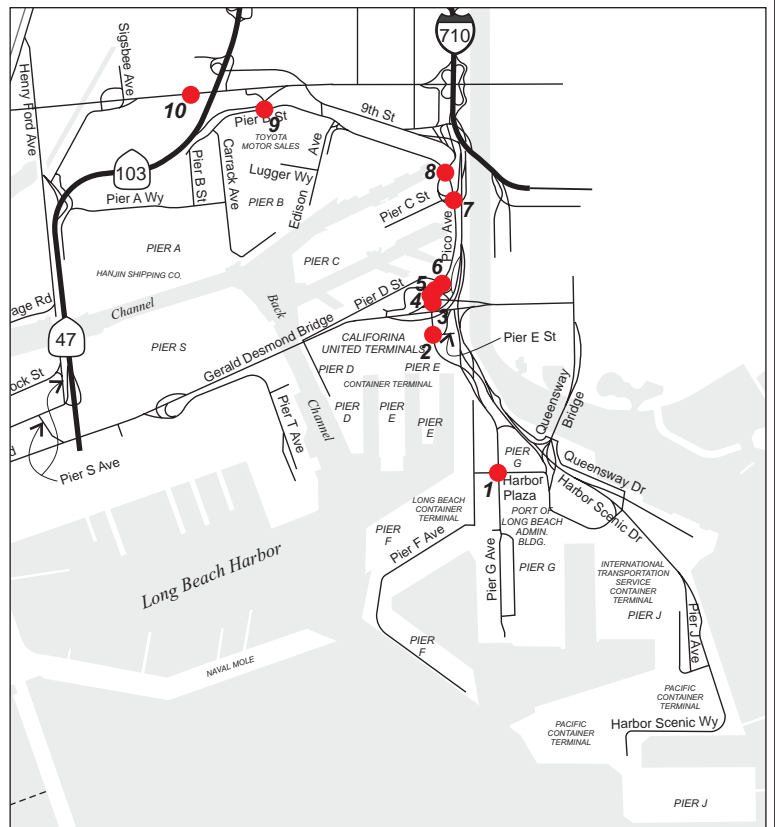
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**FIGURE 3.5-13
Year 2020 CEQA Baseline
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

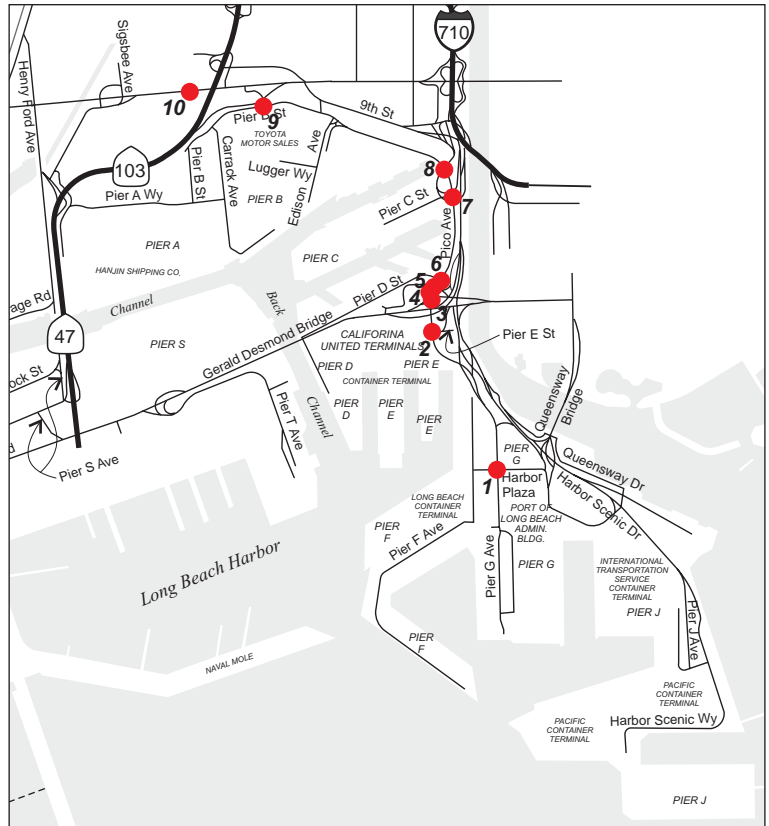
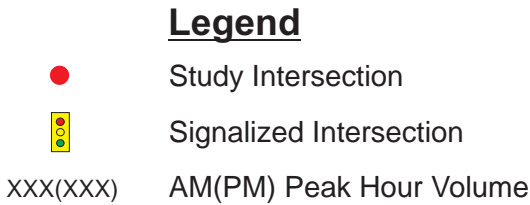
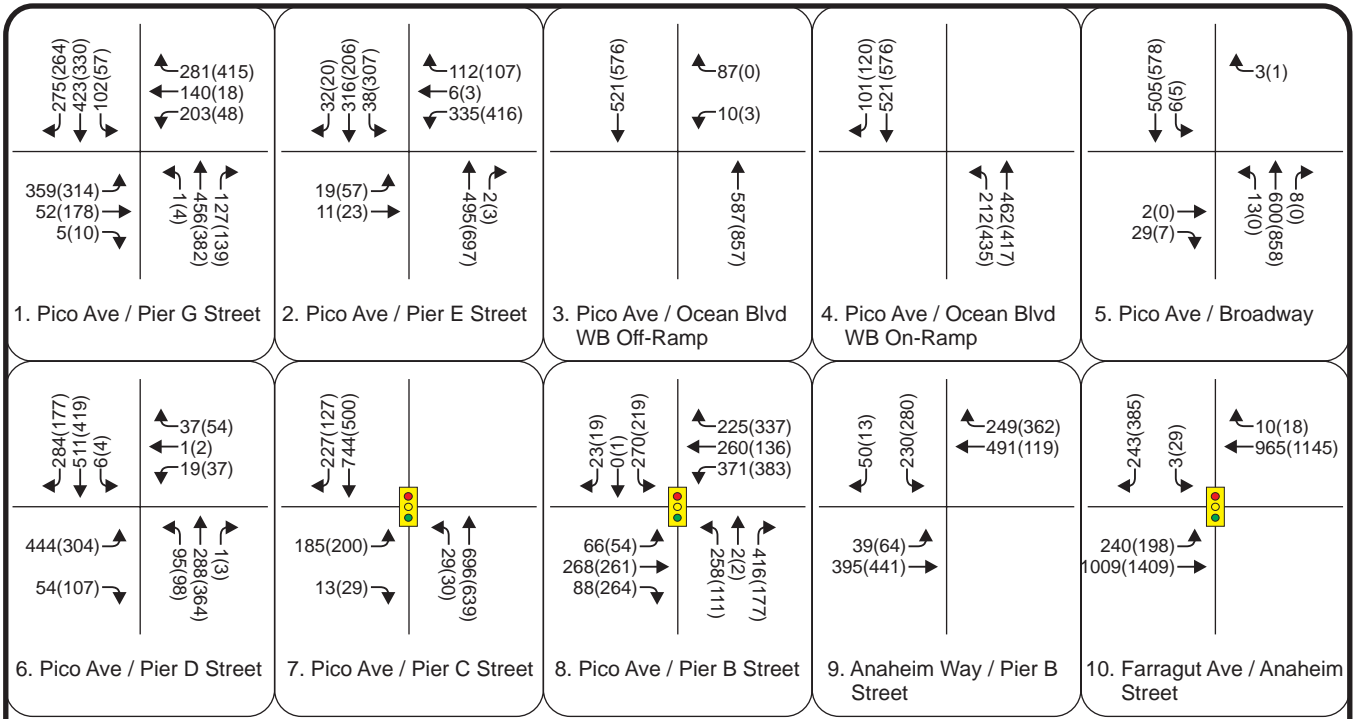


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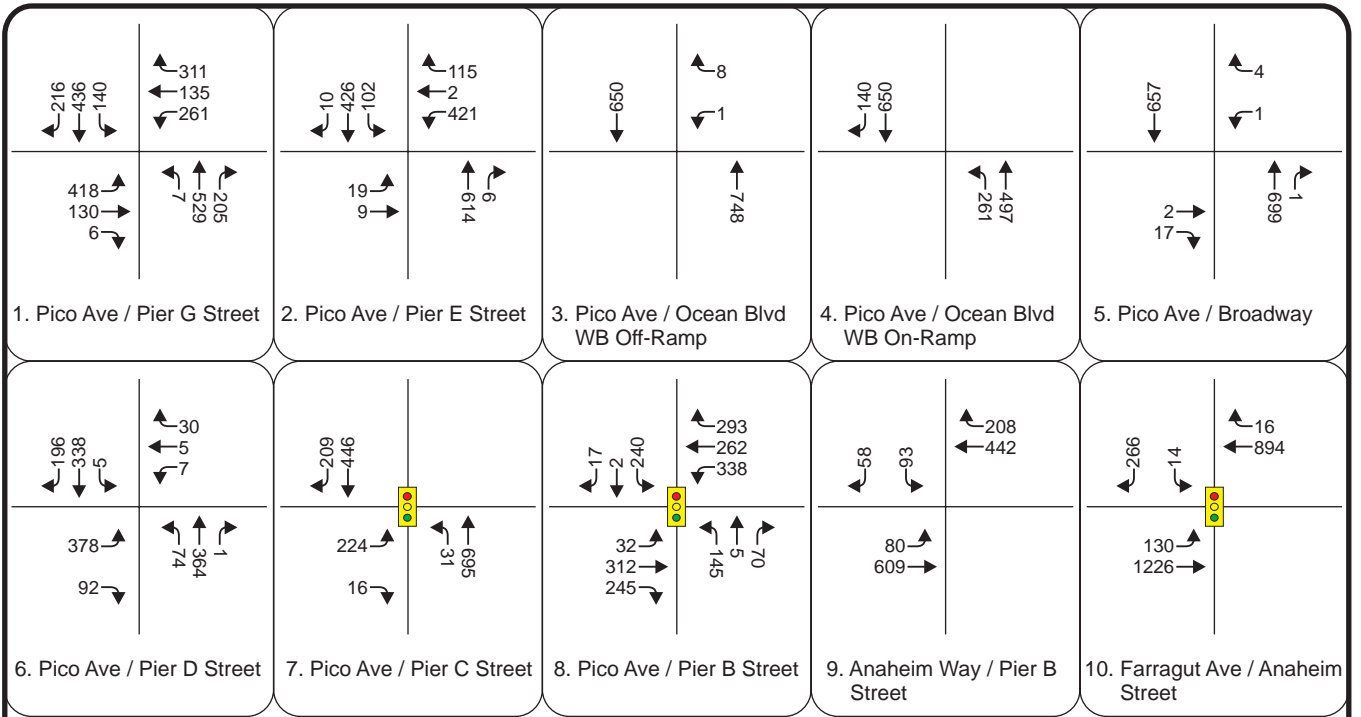
**FIGURE 3.5-14
Year 2020 CEQA Baseline
MD Peak Hour Traffic Volumes (PCE)**



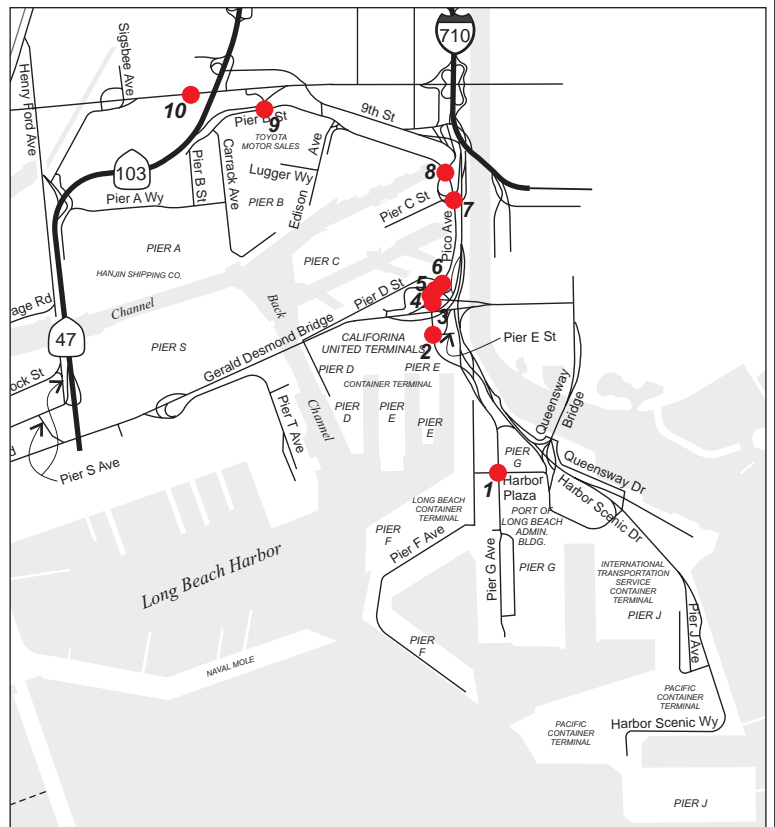
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**FIGURE 3.5-15
Year 2030 CEQA Baseline
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

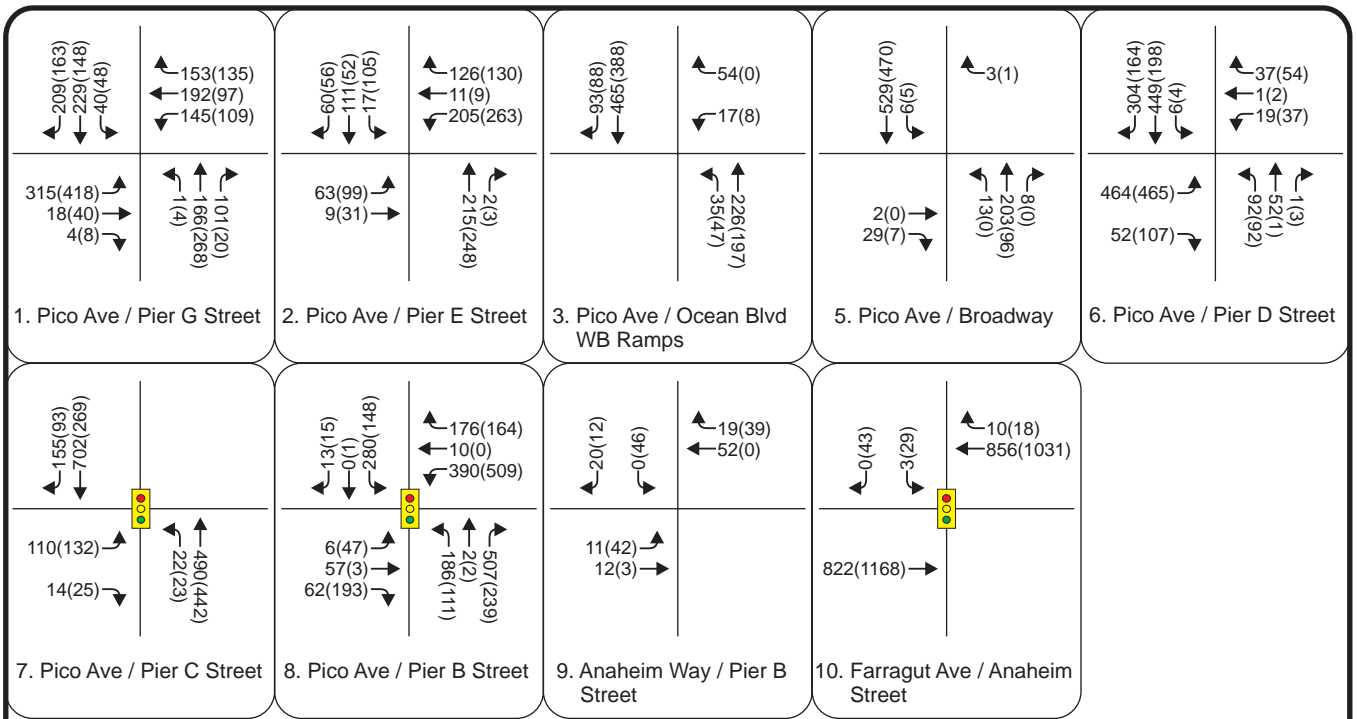


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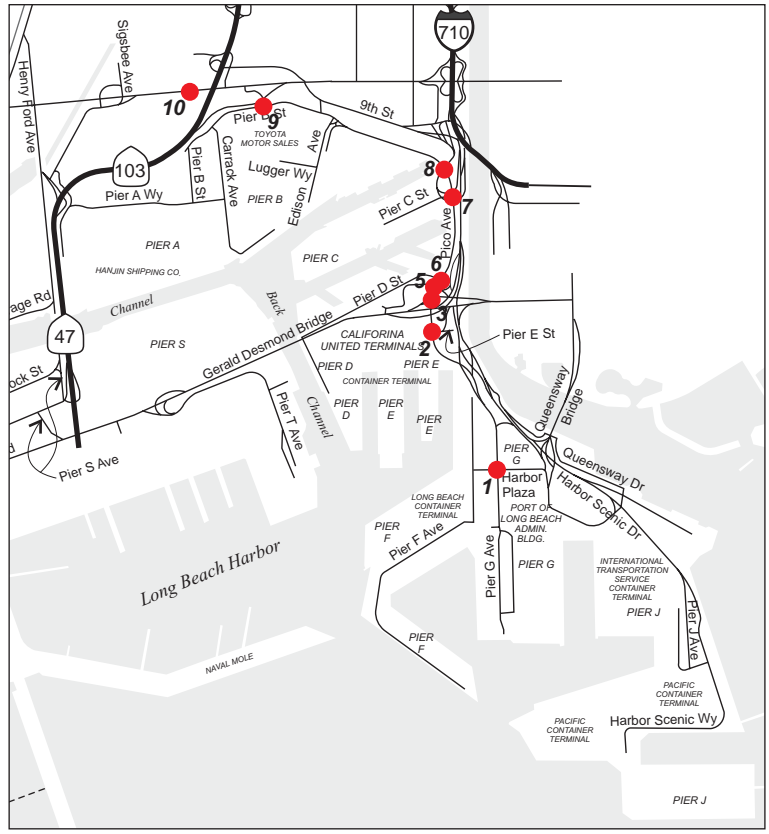
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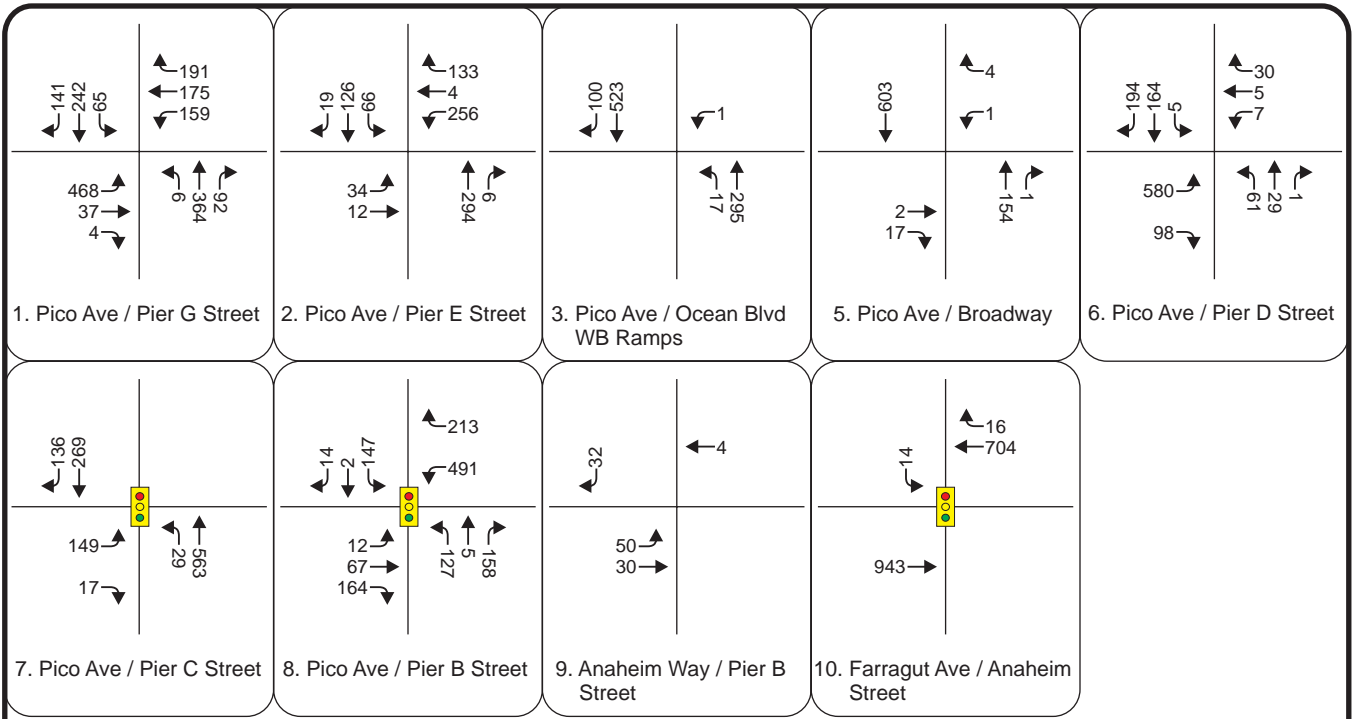
**FIGURE 3.5-16
Year 2030 CEQA Baseline
MD Peak Hour Traffic Volumes (PCE)**



Legend

- Study Intersection
- Signalized Intersection
- XXX(XXX) AM(PM) Peak Hour Volume

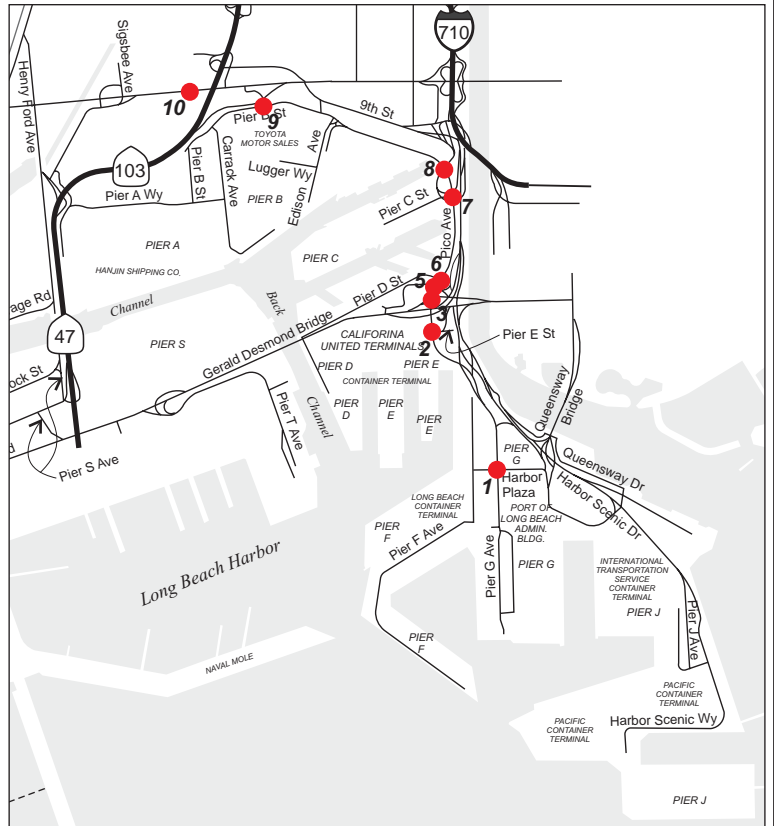




- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume



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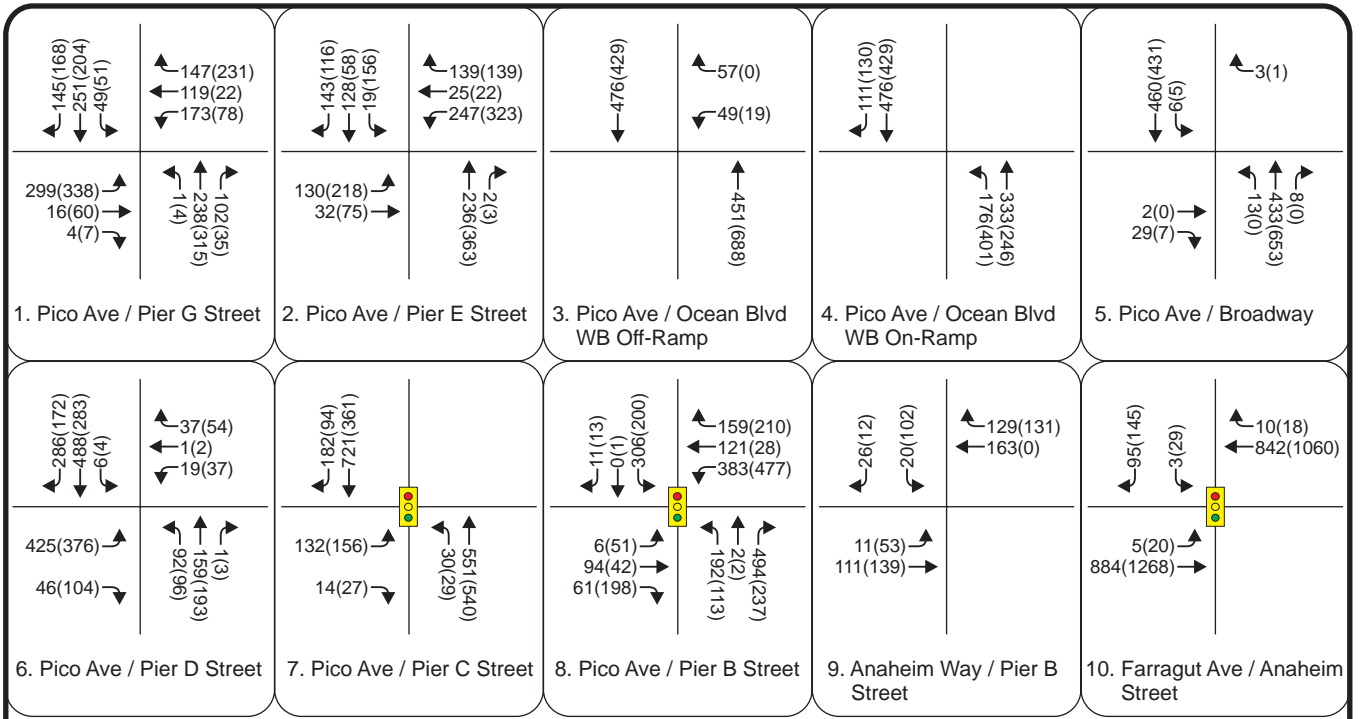


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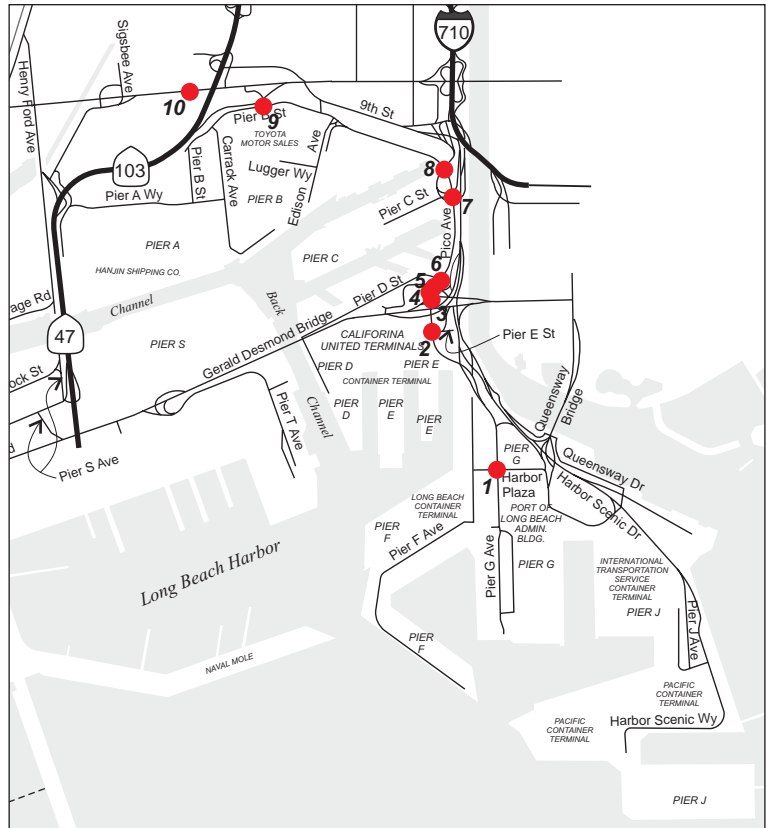
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**FIGURE 3.5-18
Year 2010 345-Acre Alternative
MD Peak Hour Traffic Volumes (PCE)**

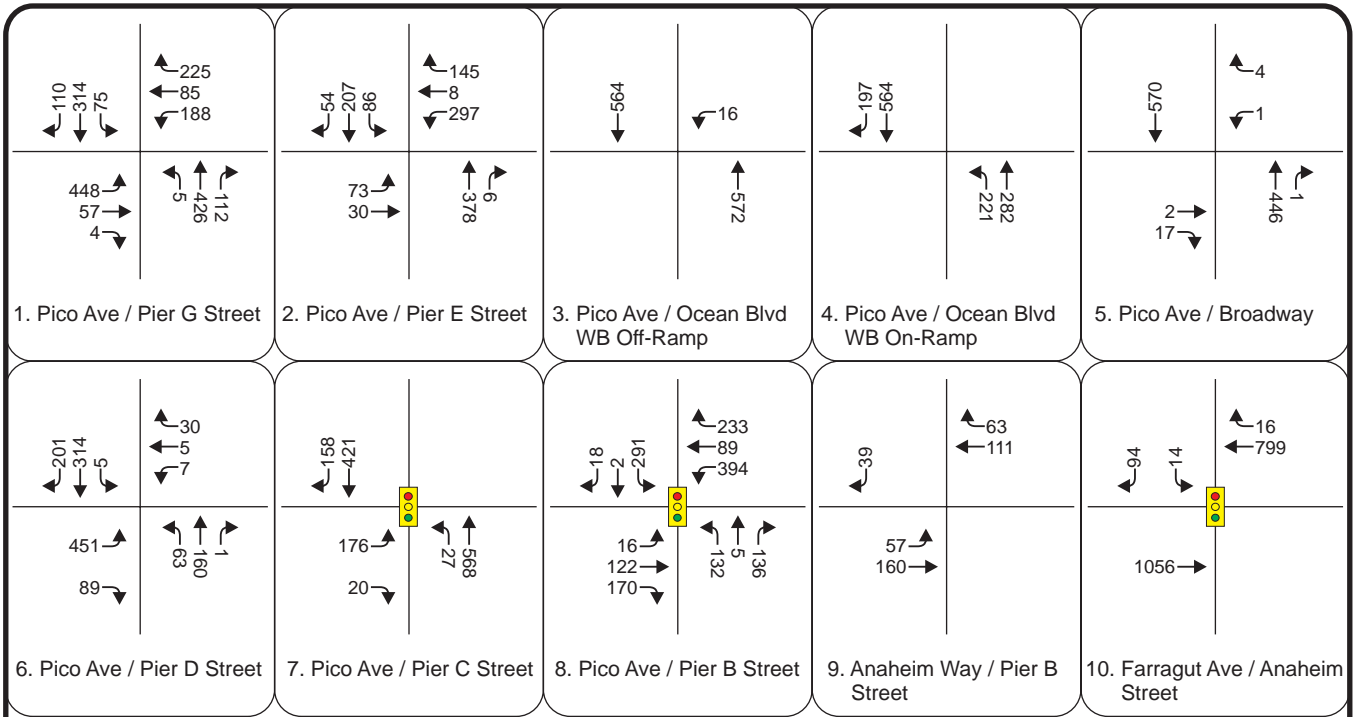


- Legend**
- Study Intersection
 - 🚦 Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume

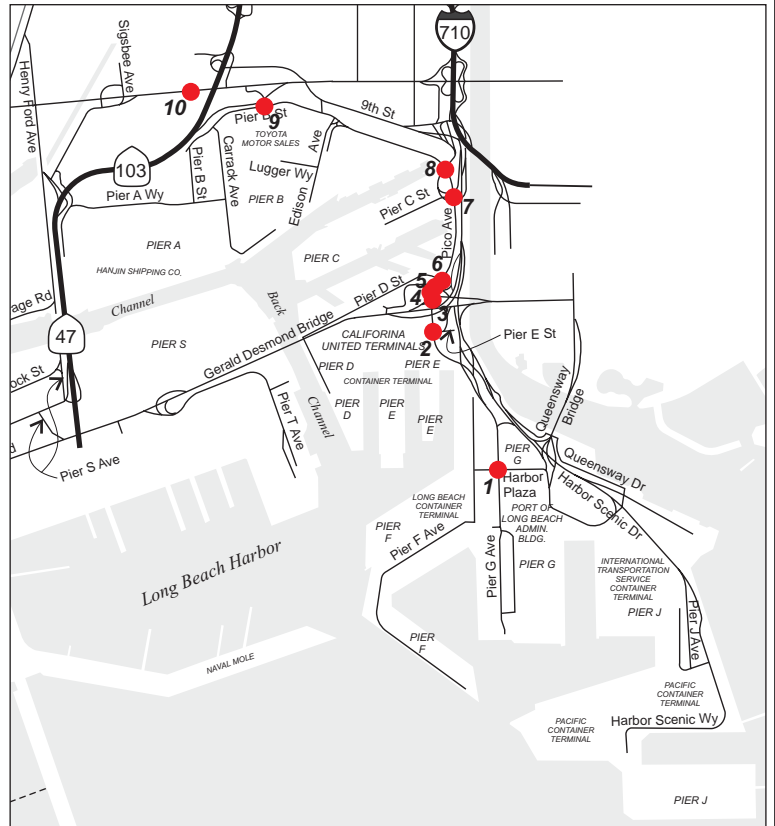


**Port of Long Beach
Middle Harbor Project**

**FIGURE 3.5-19
Year 2015 345-Acre Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

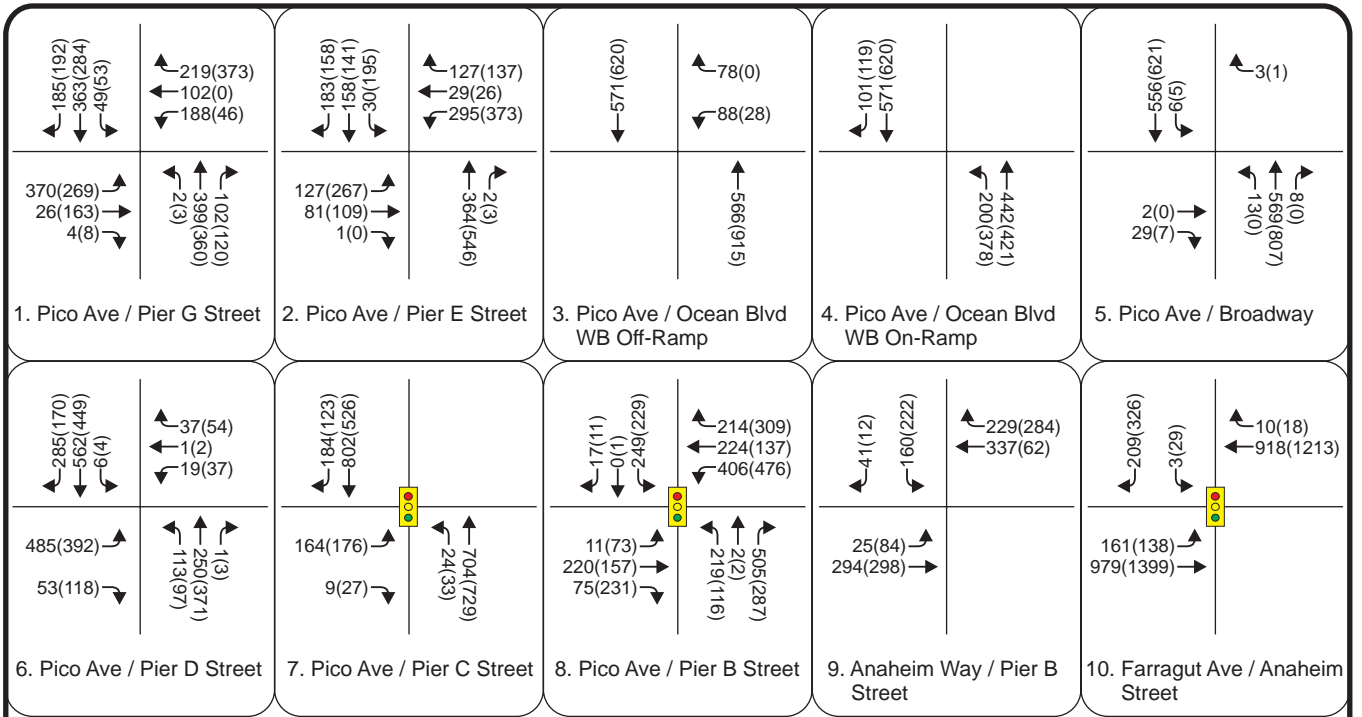


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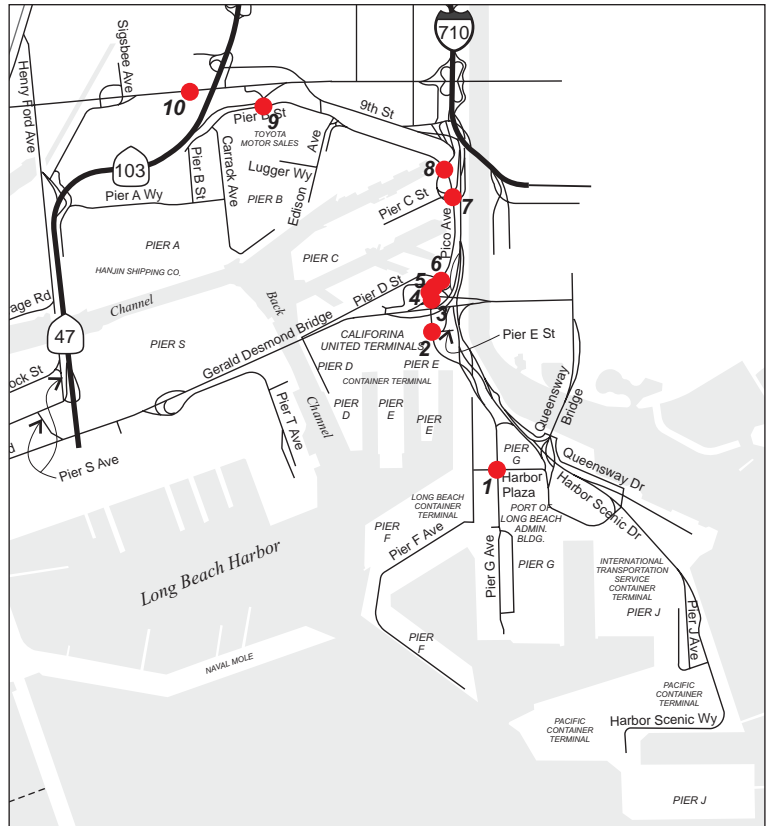
**FIGURE 3.5-20
Year 2015 345-Acre Alternative
MD Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

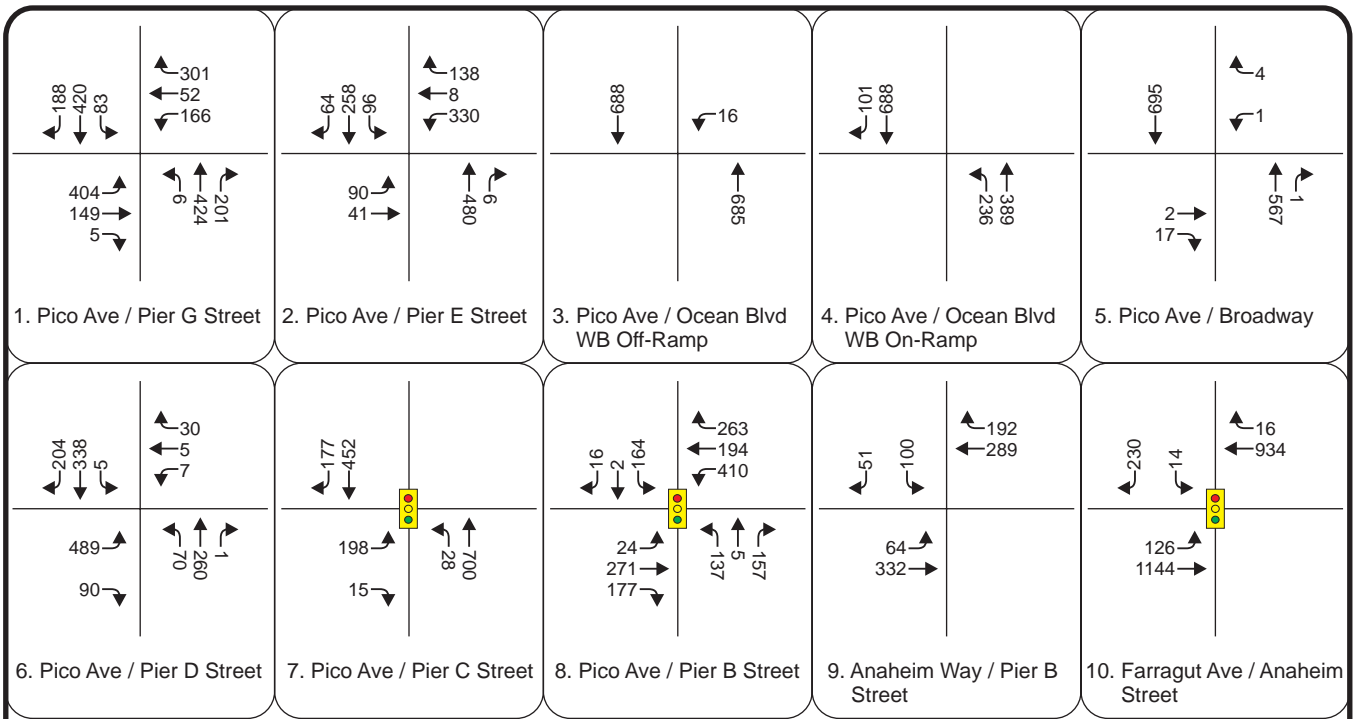


Meyer, Mohaddes Associates

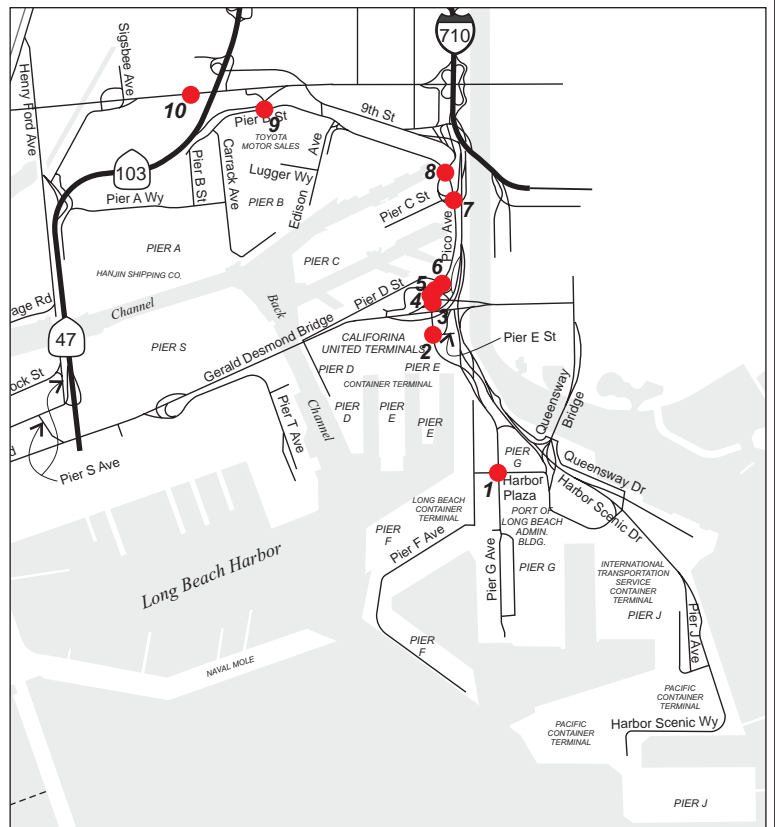
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**FIGURE 3.5-21
Year 2020 345-Acre Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

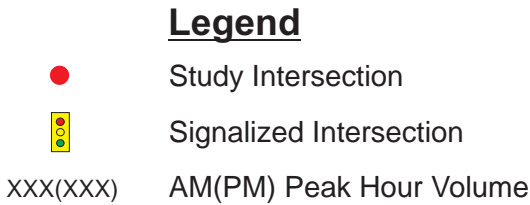
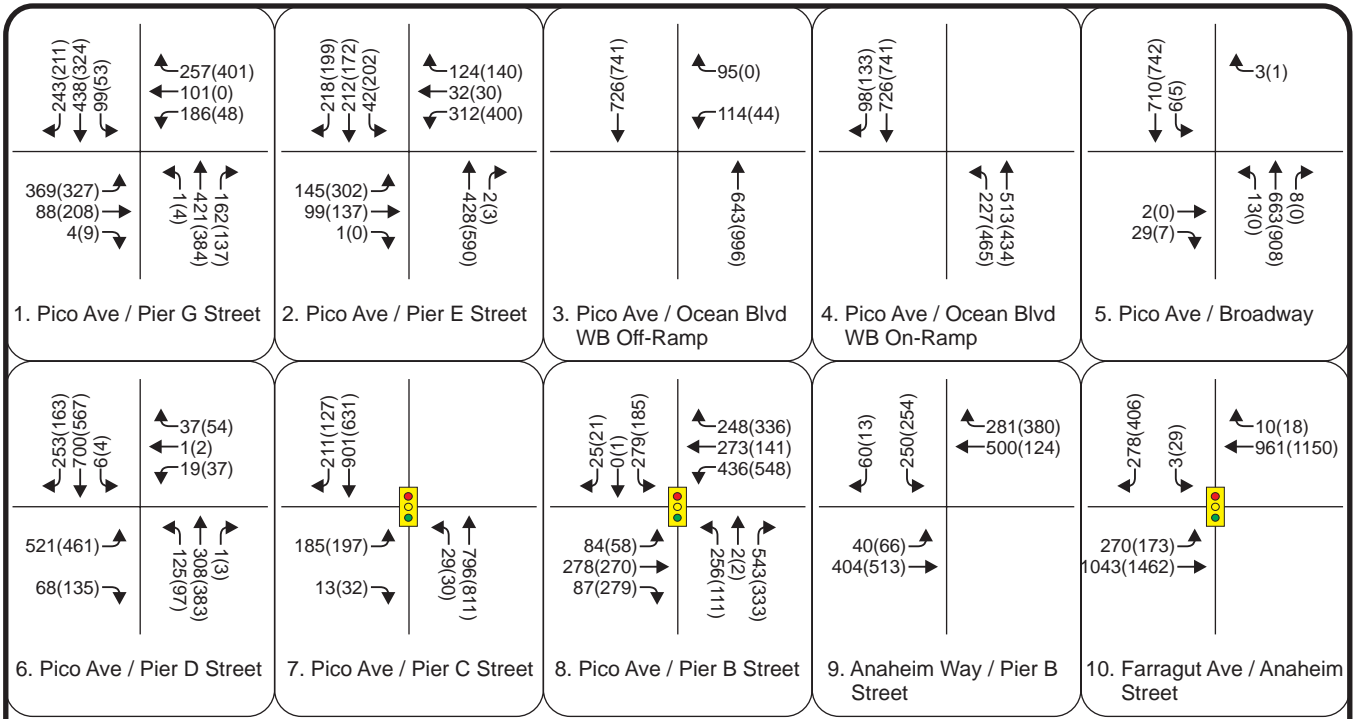


Meyer, Mohaddes Associates

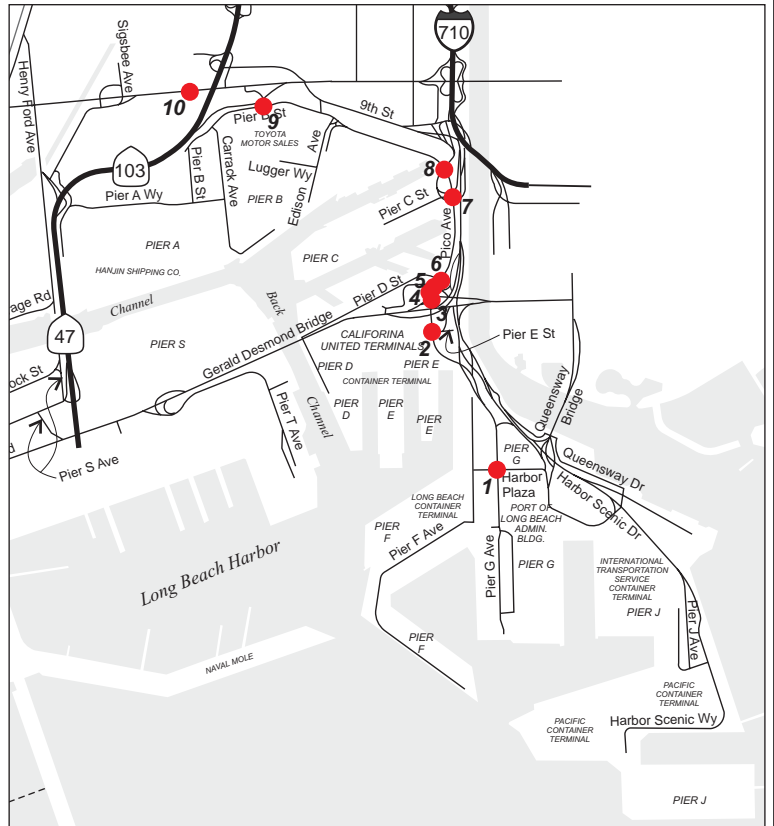
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**FIGURE 3.5-22
Year 2020 345-Acre Alternative
MD Peak Hour Traffic Volumes (PCE)**



NOT TO SCALE

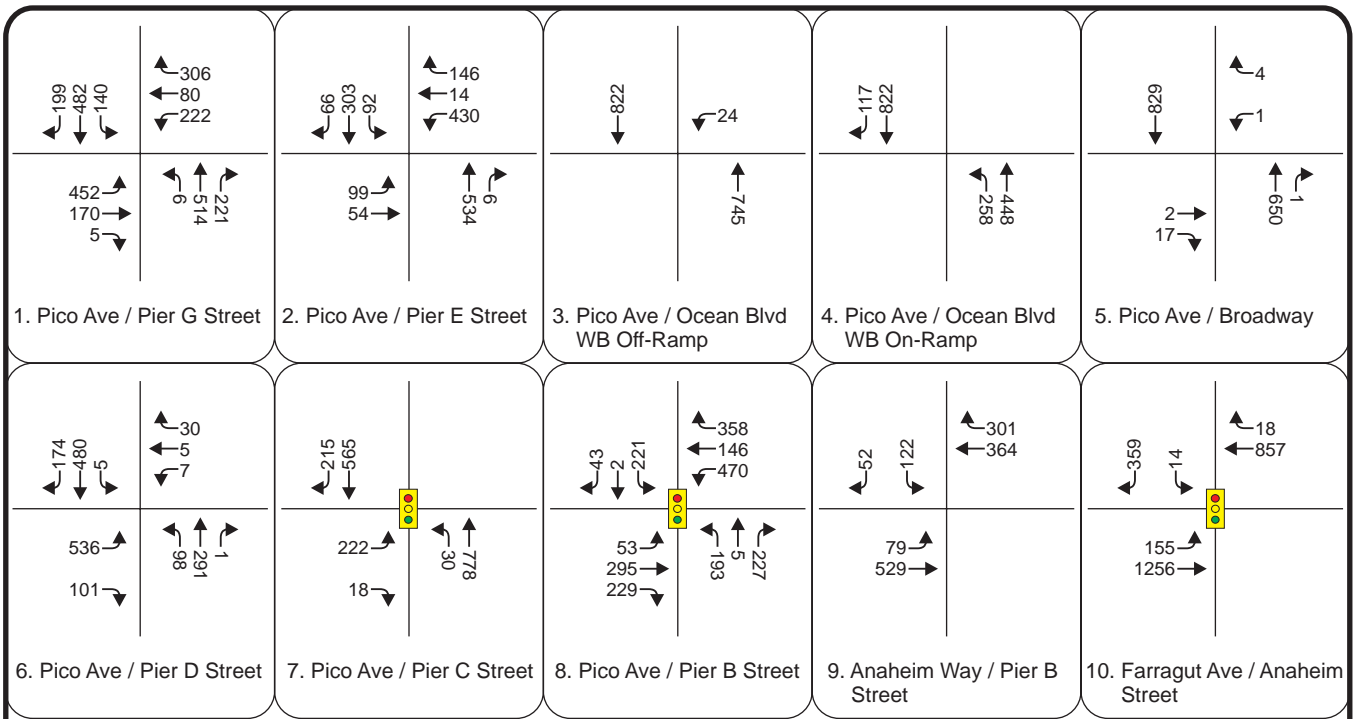


Meyer, Mohaddes Associates

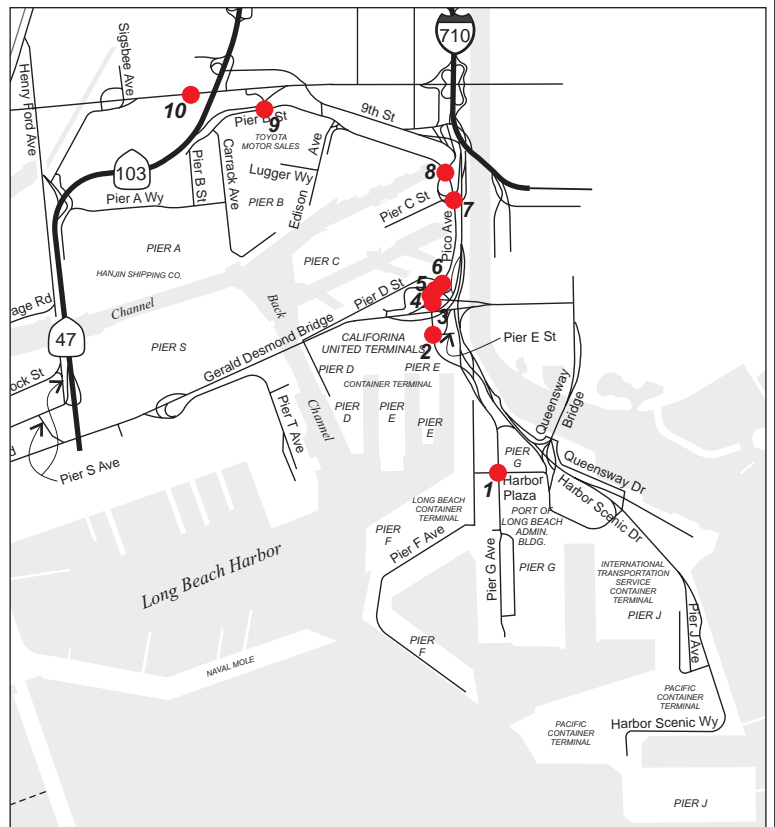
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**FIGURE 3.5-23
Year 2030 345-Acre Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

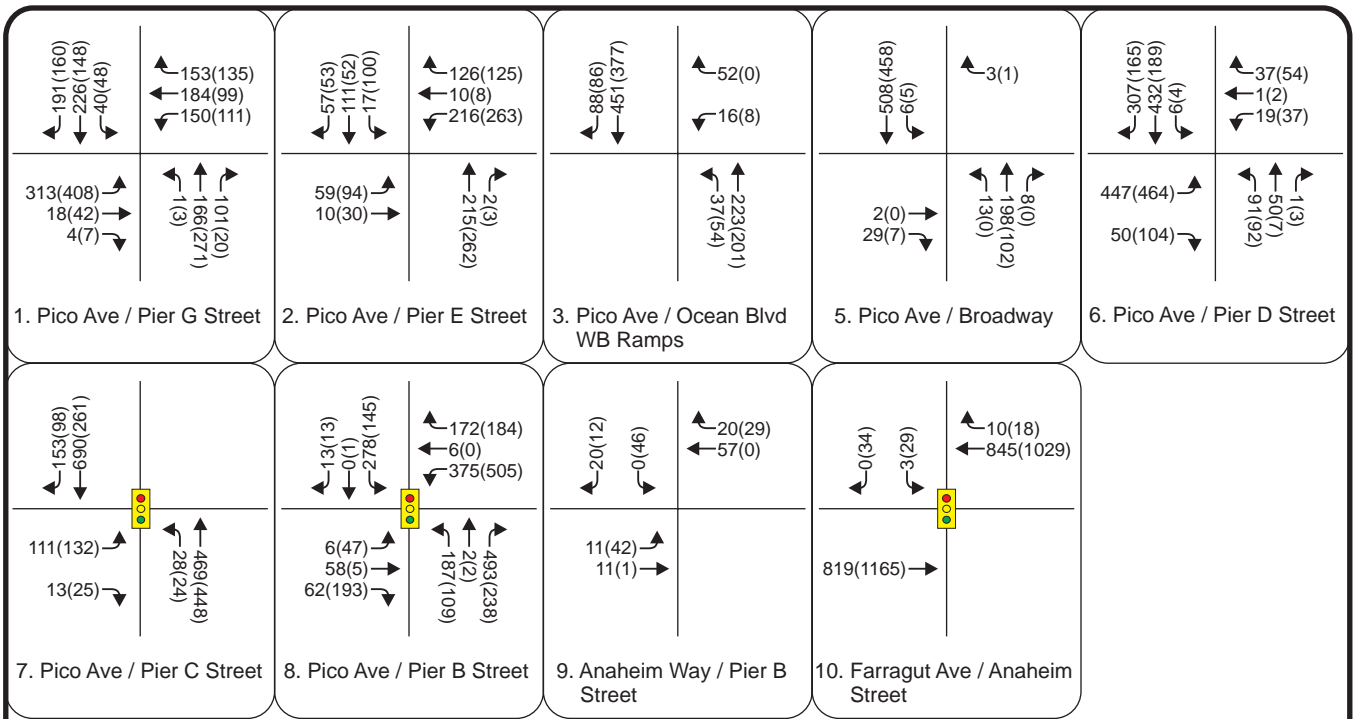


Meyer, Mohaddes Associates

a business unit of Iteer, Inc.

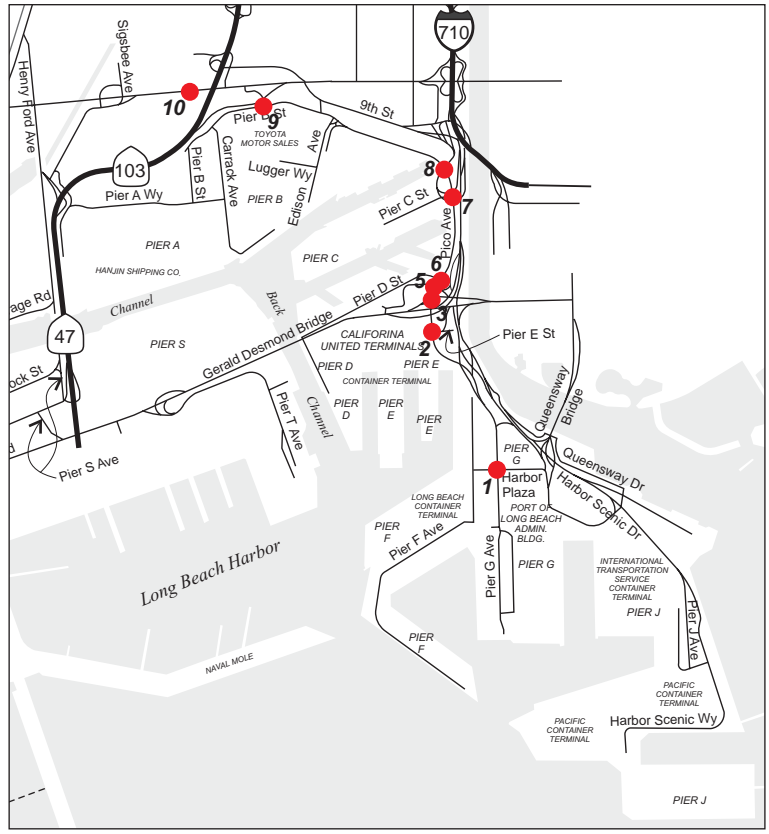
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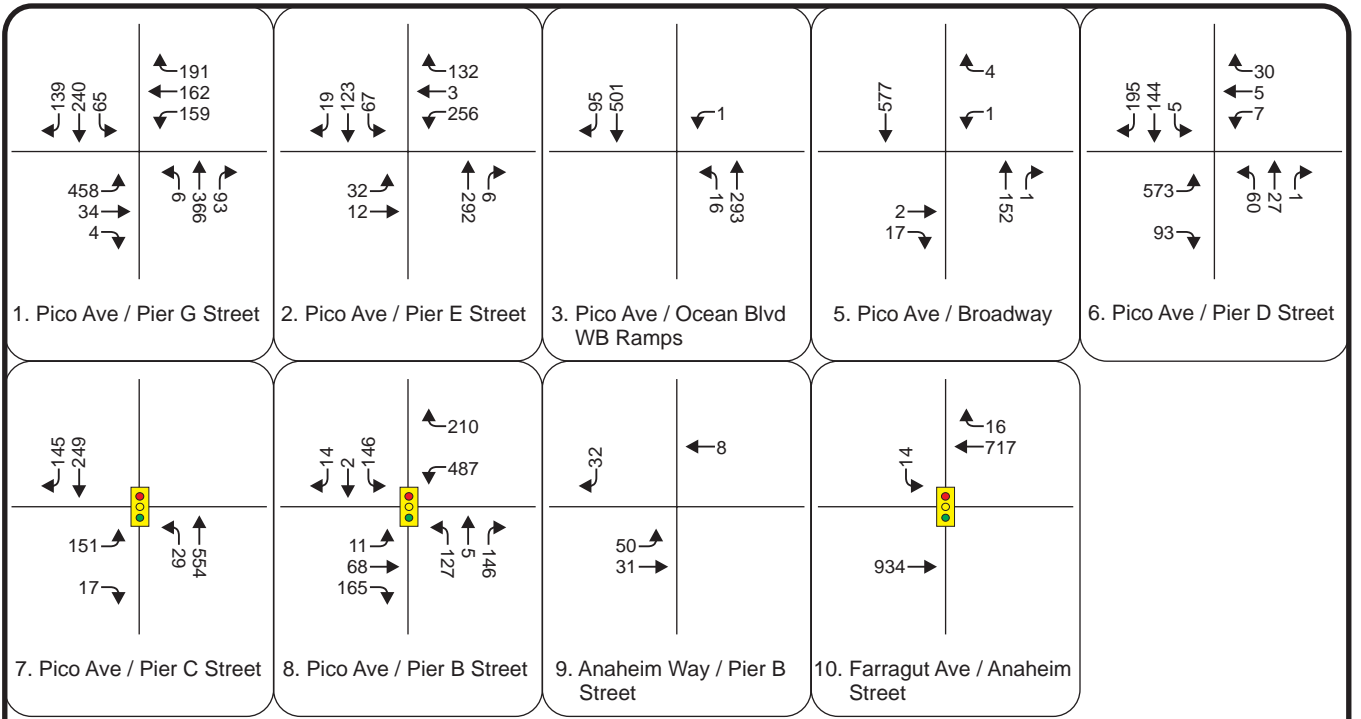
**FIGURE 3.5-24
Year 2030 345-Acre Alternative
MD Peak Hour Traffic Volumes (PCE)**



Legend

- Study Intersection
- Signalized Intersection
- XXX(XXX) AM(PM) Peak Hour Volume

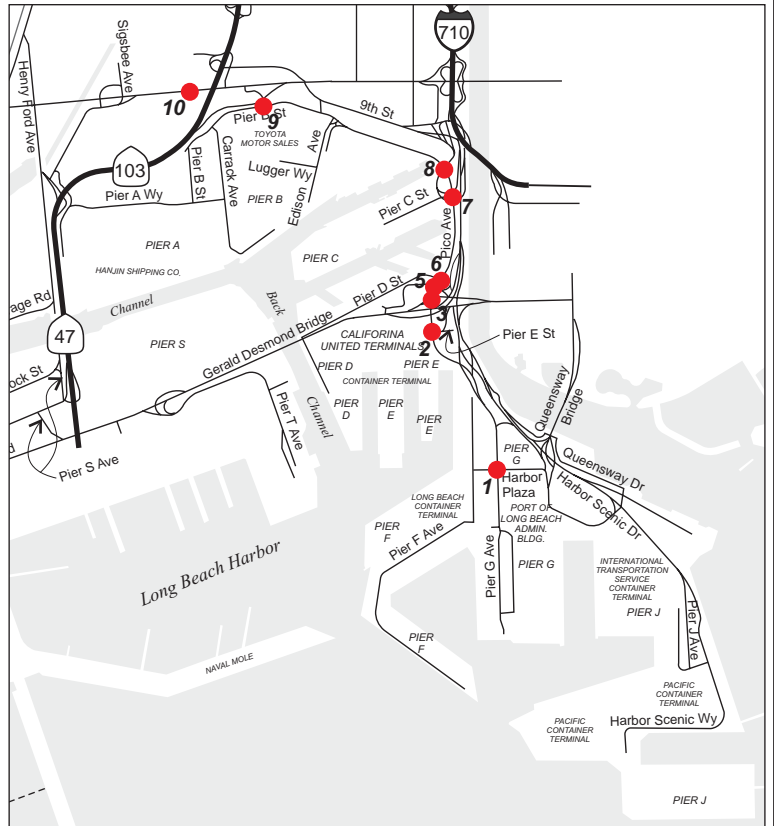




- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume



NOT TO SCALE

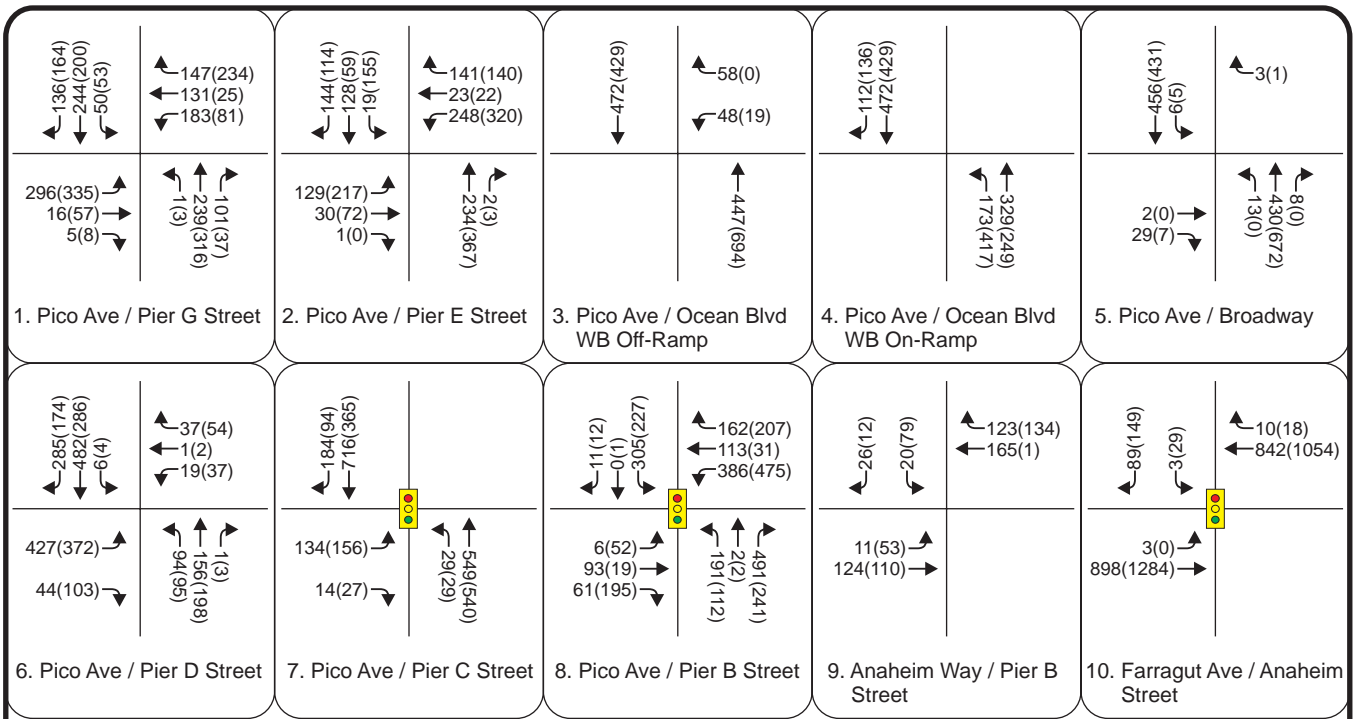


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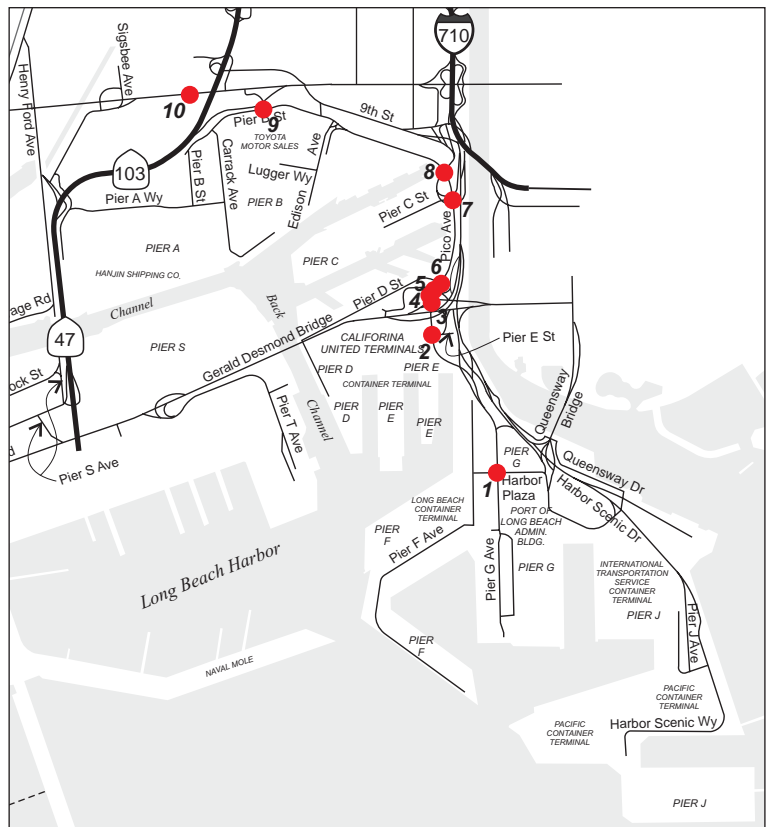
**FIGURE 3.5-26
Year 2010 315-Acre Alternative
MD Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

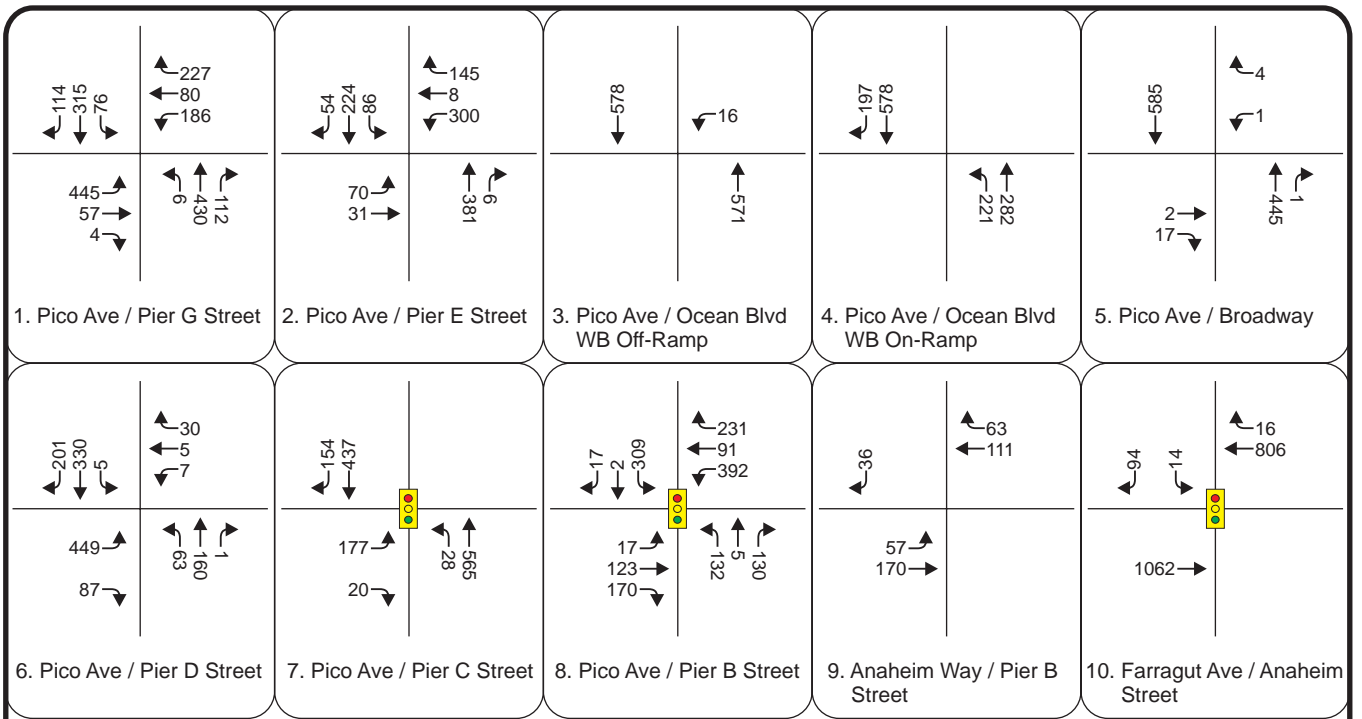


Meyer, Mohaddes Associates

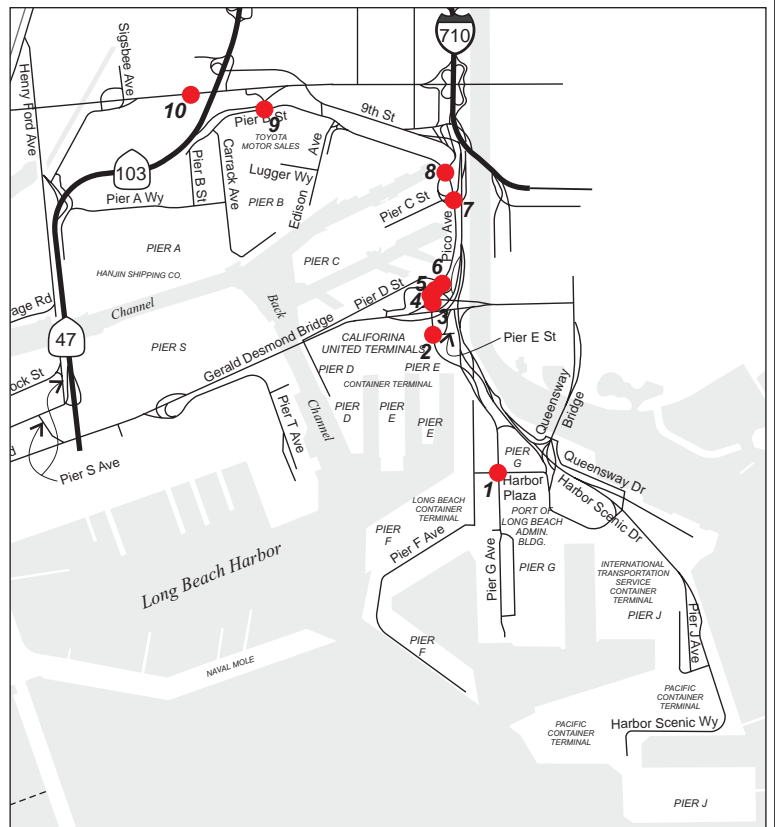
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**FIGURE 3.5-27
Year 2015 315-Acre Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

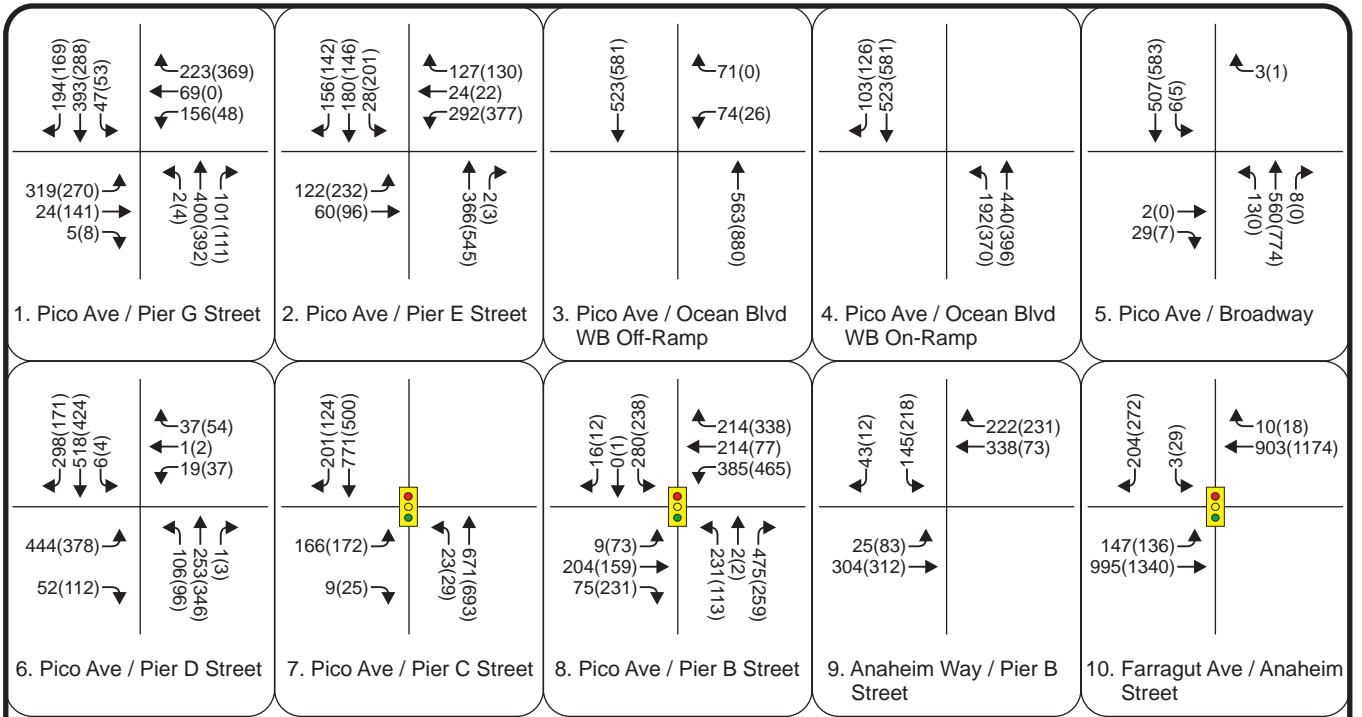


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**FIGURE 3.5-28
Year 2015 315-Acre Alternative
MD Peak Hour Traffic Volumes (PCE)**

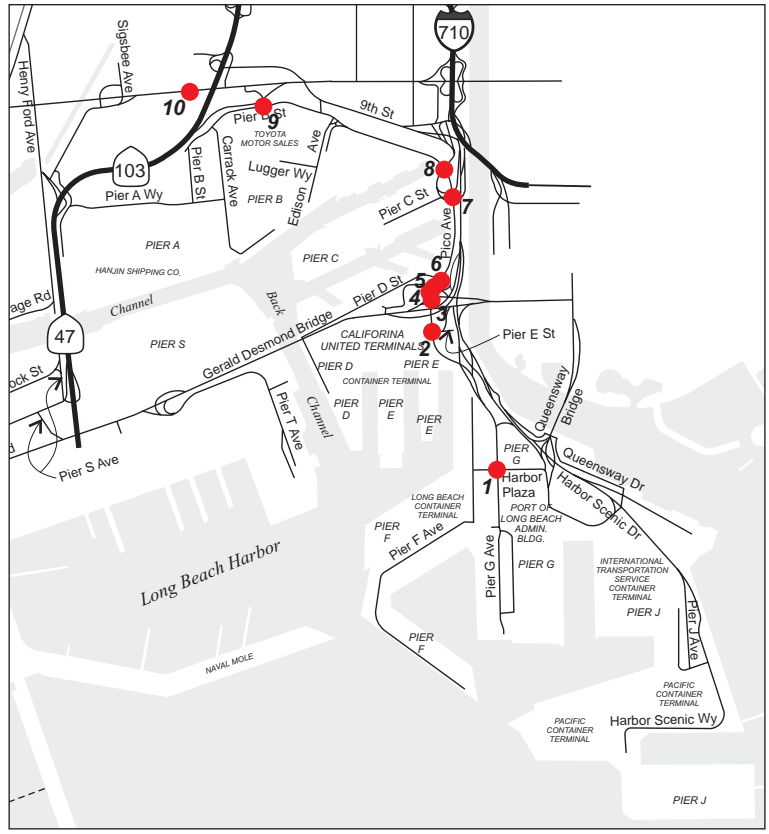


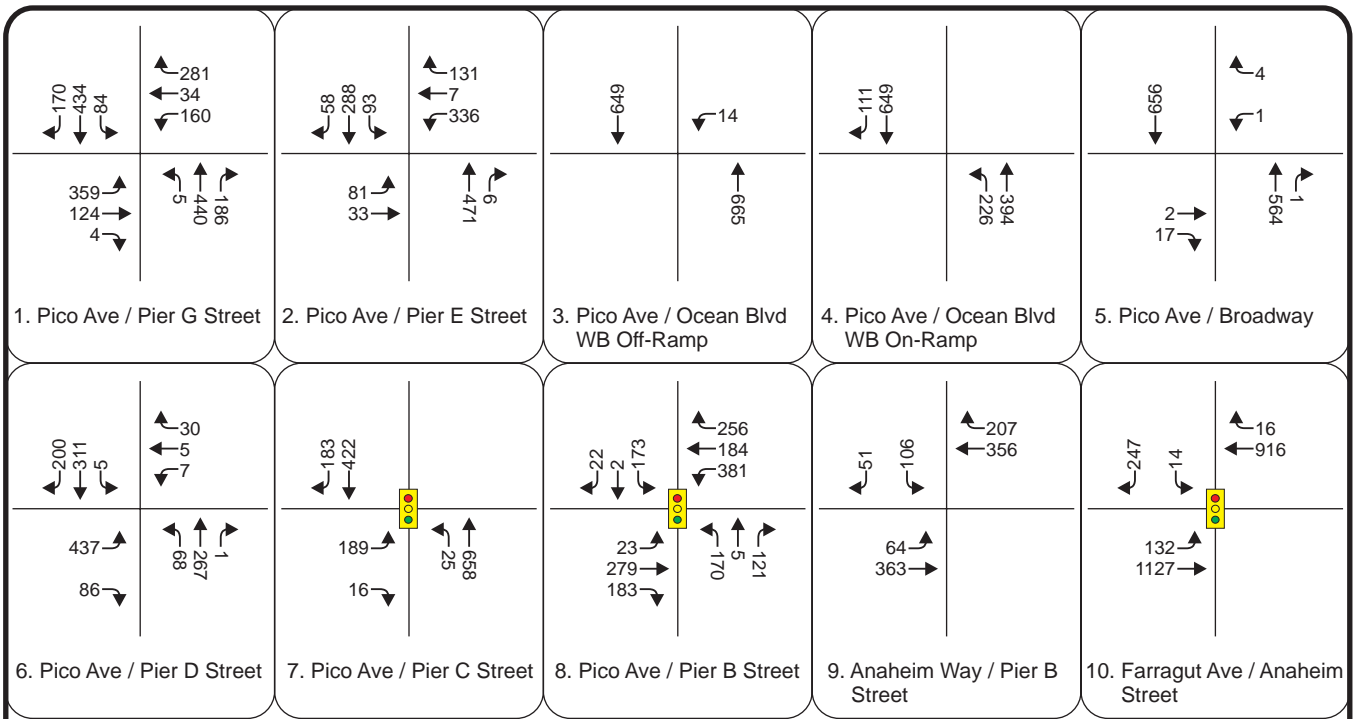
Legend

● Study Intersection

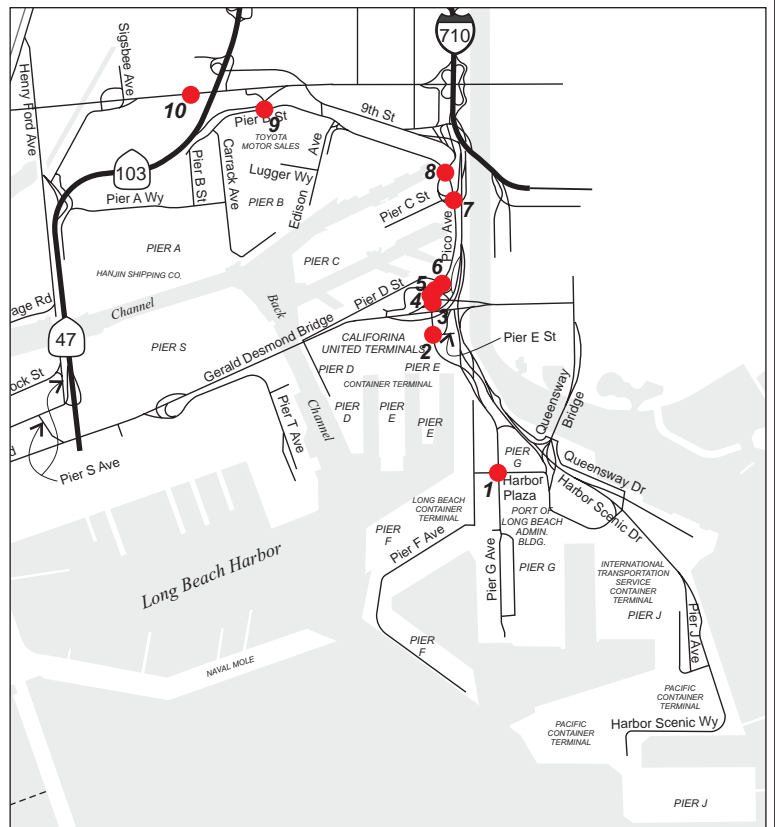
🚦 Signalized Intersection

XXX(XXX) AM(PM) Peak Hour Volume





- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

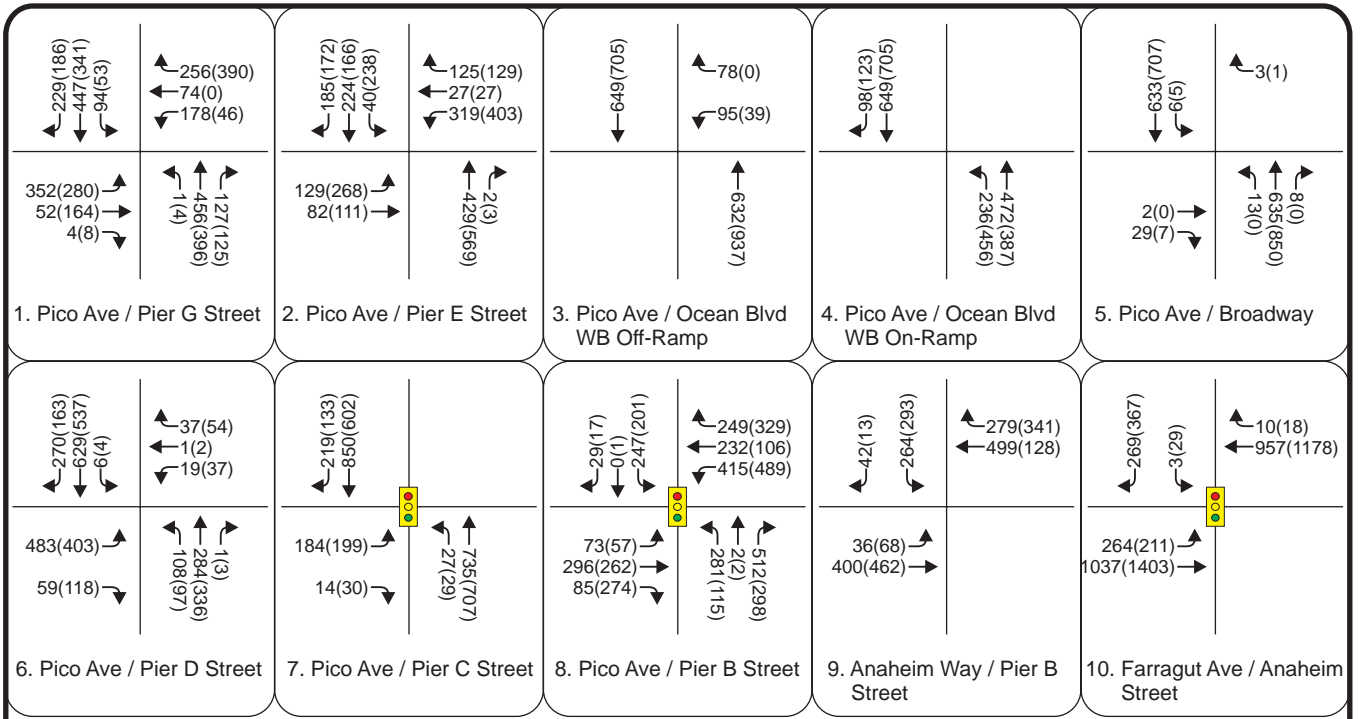


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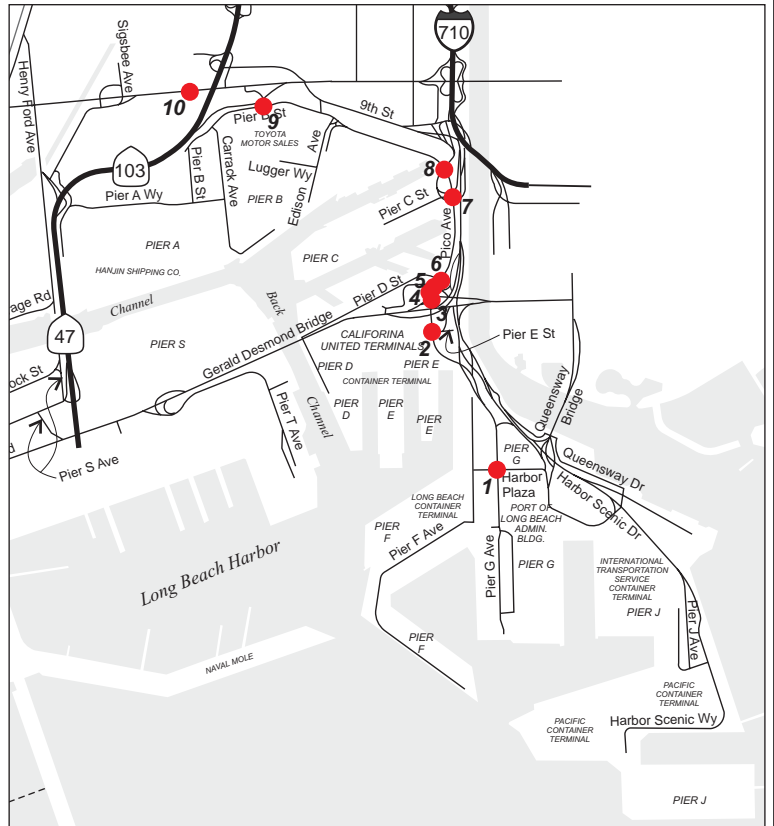
**FIGURE 3.5-30
Year 2020 315-Acre Alternative
MD Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - 🚦 Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

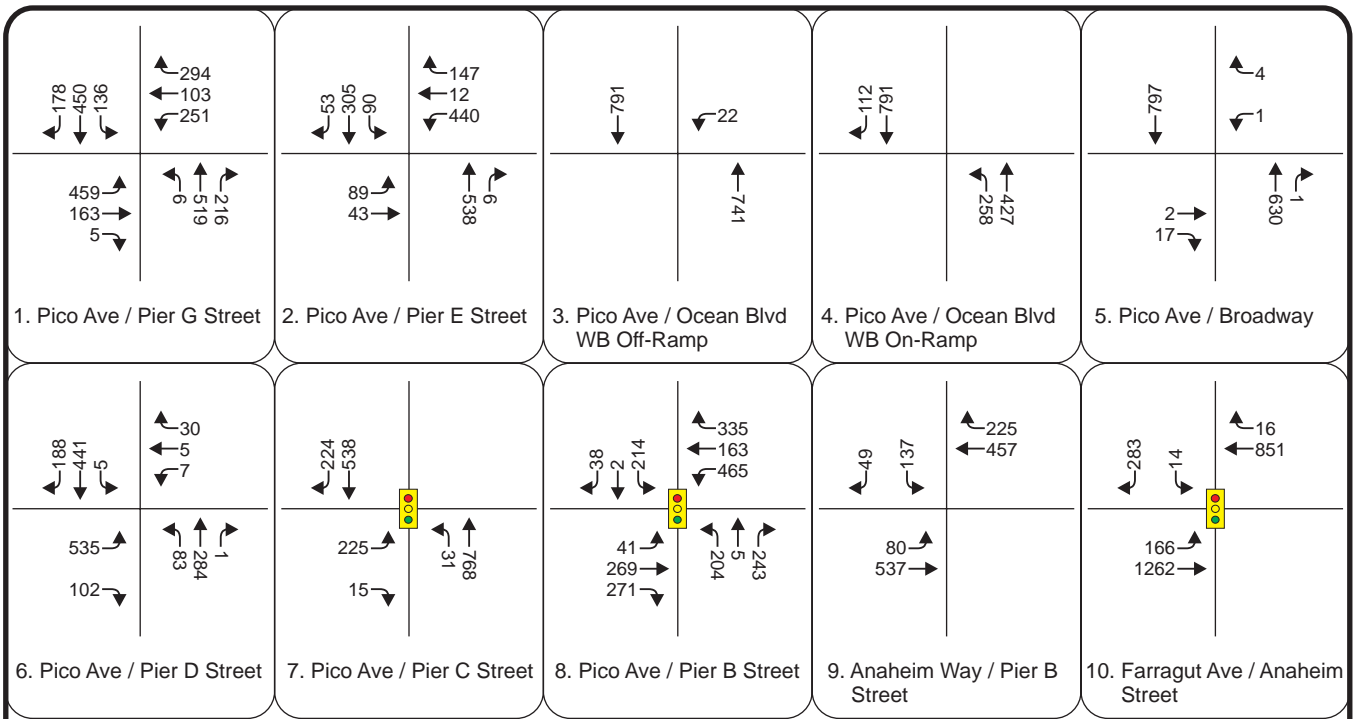


Meyer, Mohaddes Associates

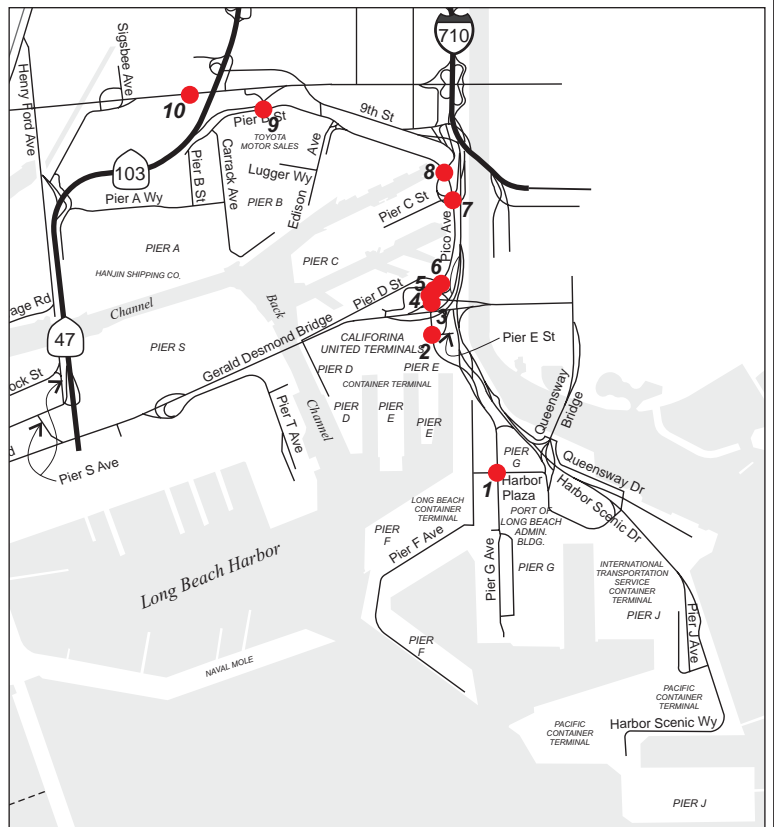
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**FIGURE 3.5-31
Year 2030 315-Acre Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

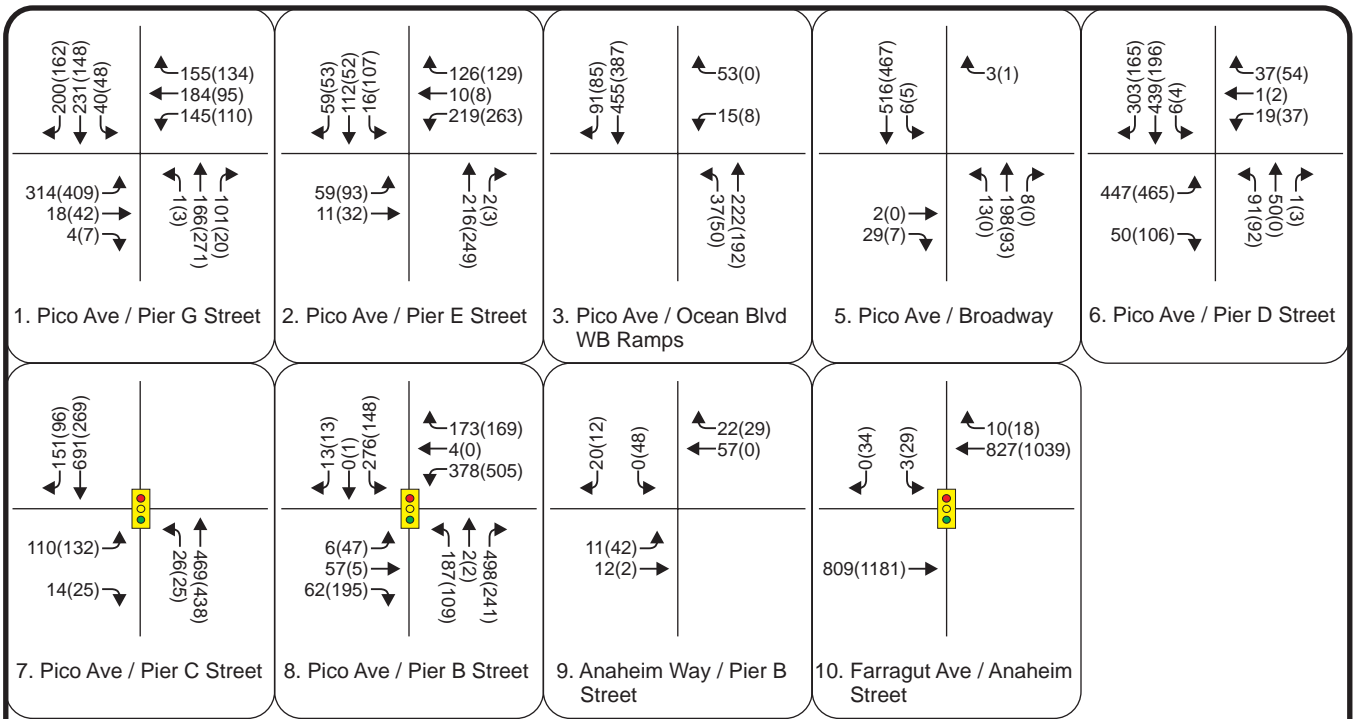


Meyer, Mohaddes Associates

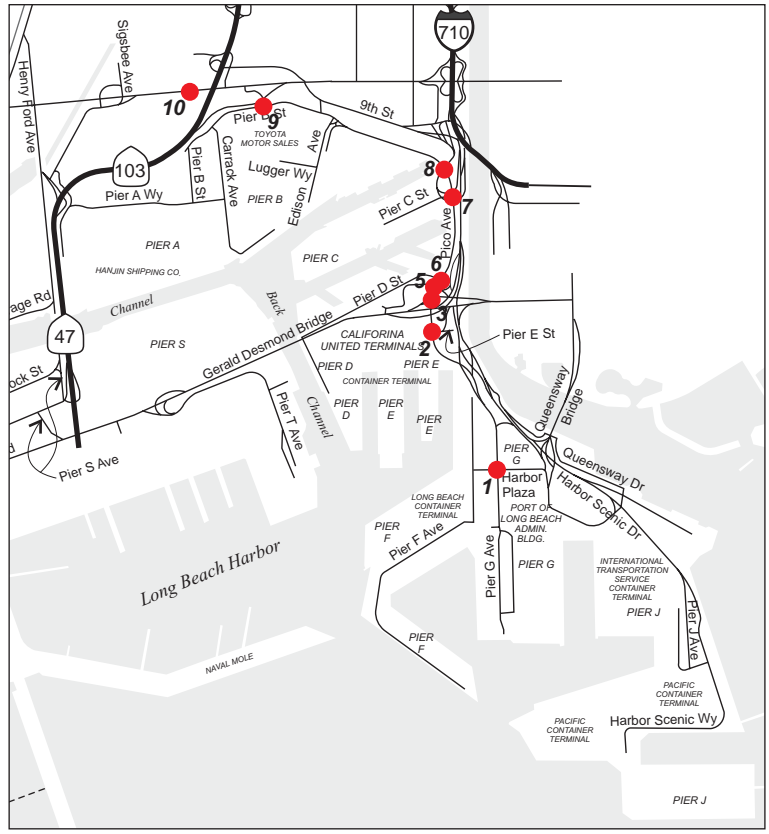
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**FIGURE 3.5-32
Year 2030 315-Acre Alternative
MD Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume

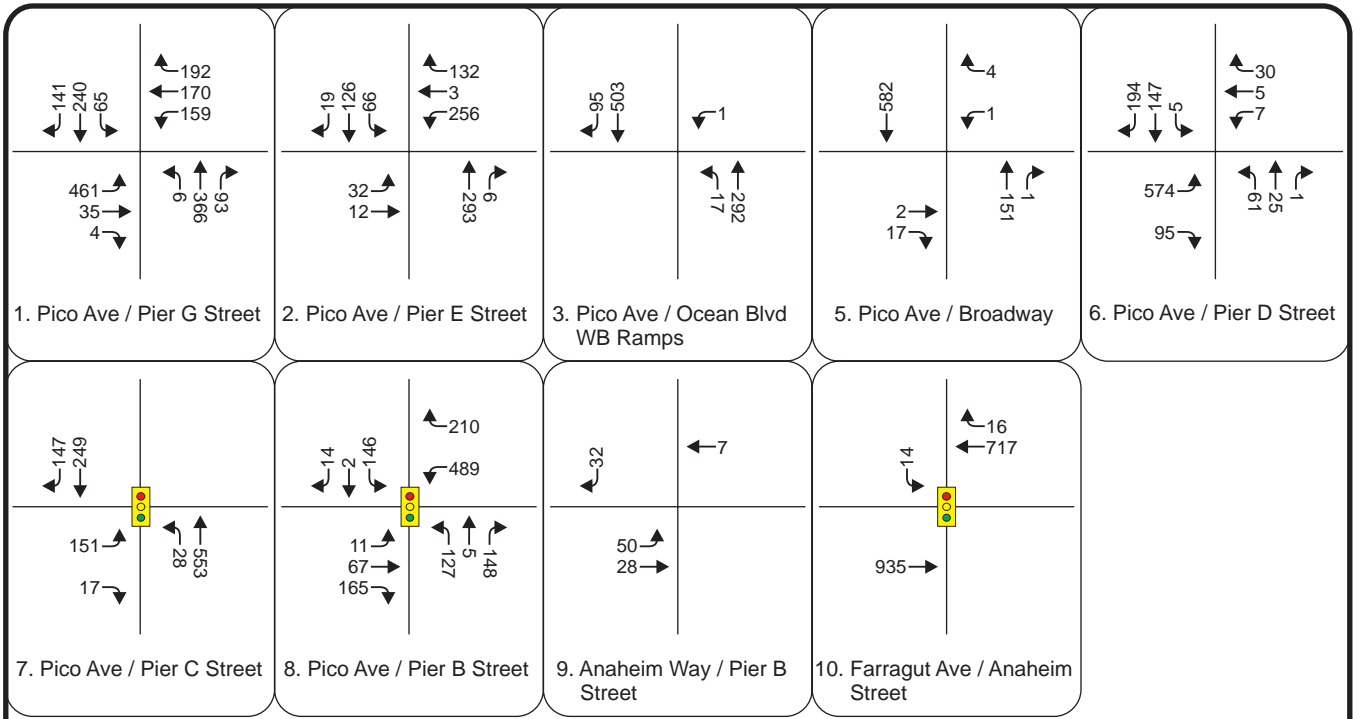


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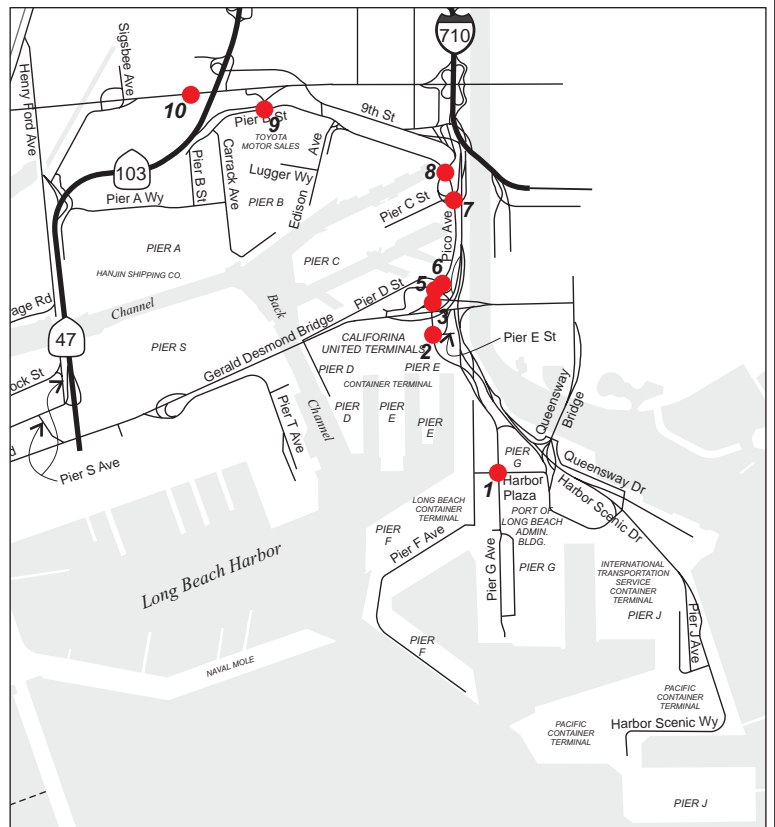
FIGURE 3.5-33
Year 2010 Landside Improvements/NEPA Baseline Alternative
AM and PM Peak Hour Traffic Volumes (PCE)



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume



NOT TO SCALE

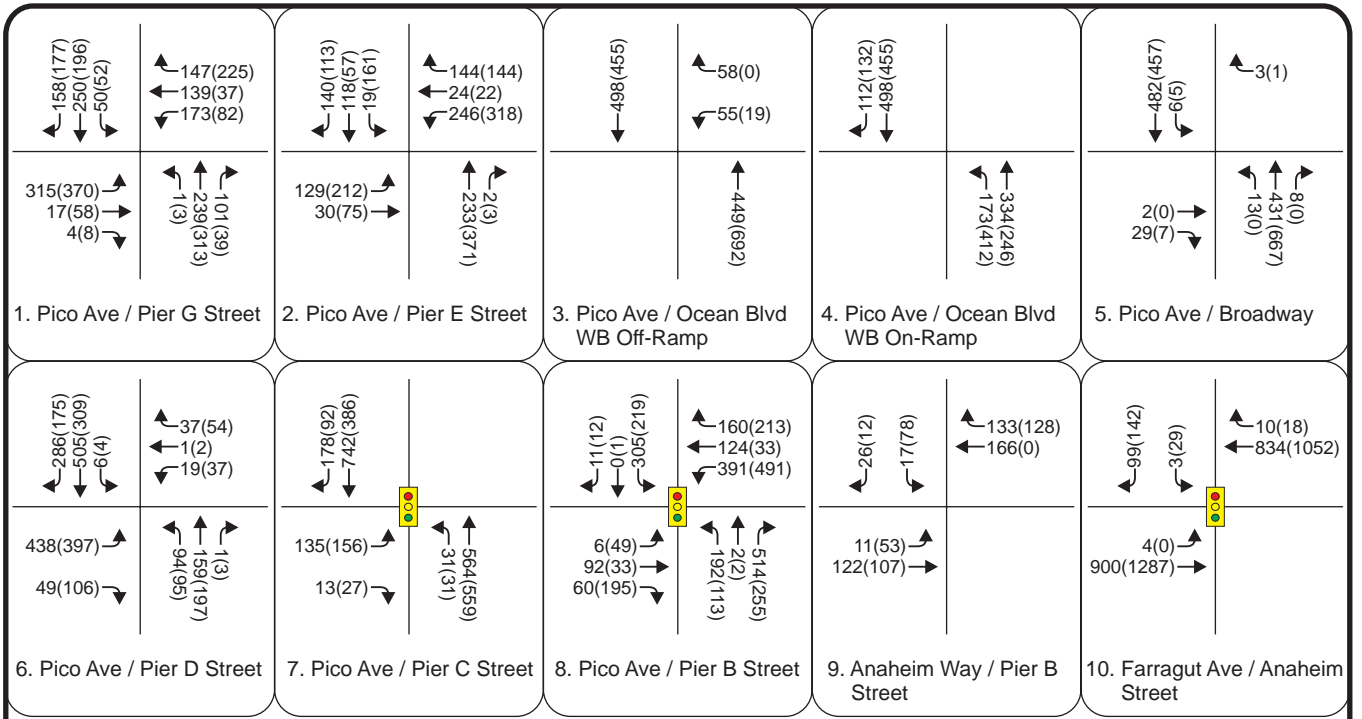


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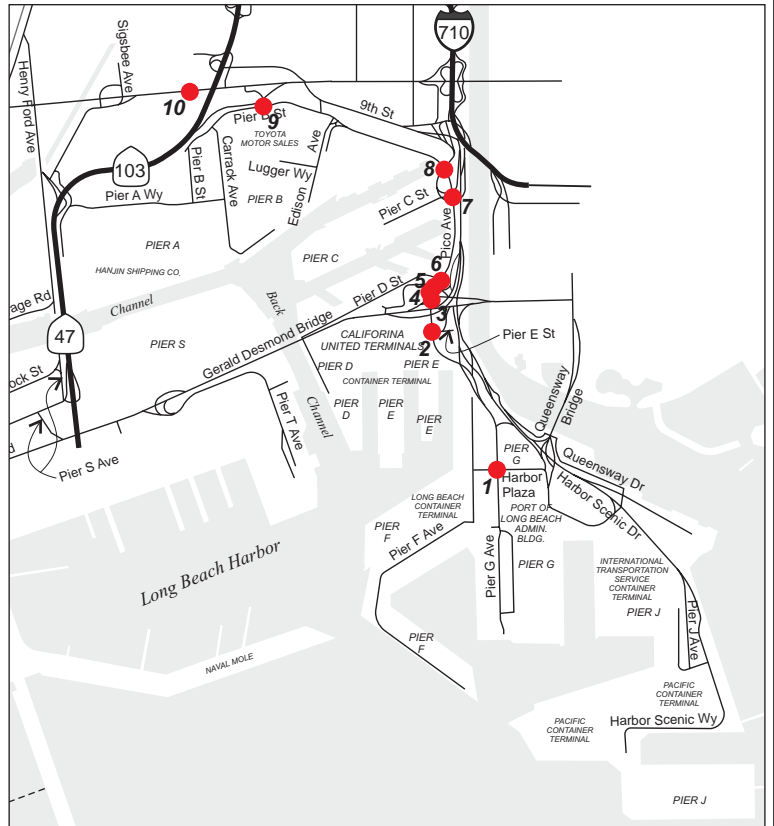
**FIGURE 3.5-34
Year 2010 Landside Improvements/NEPA Baseline Alternative
MD Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

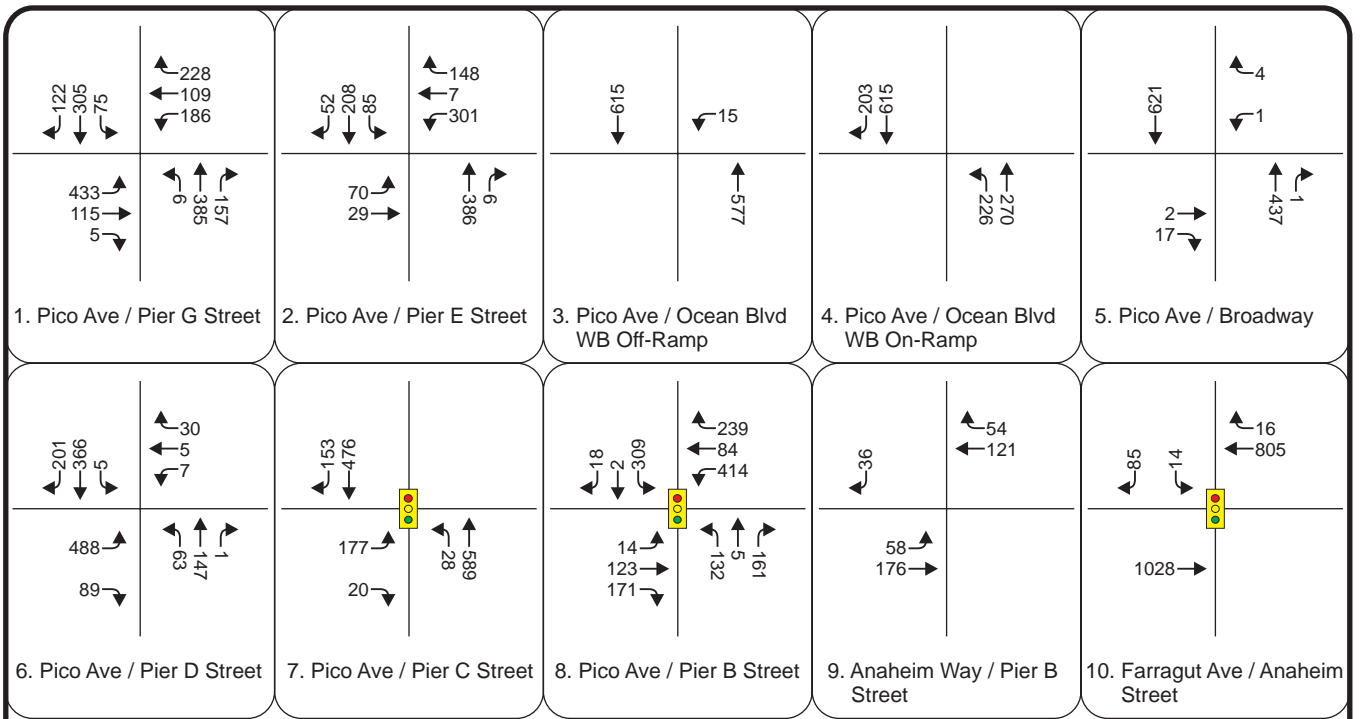


Meyer, Mohaddes Associates

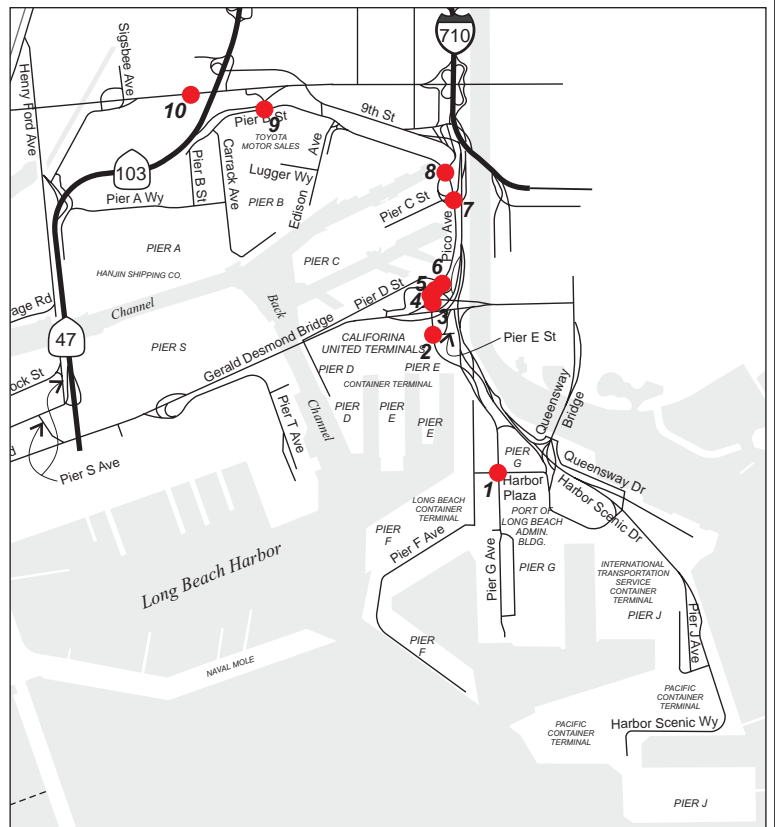
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**FIGURE 3.5-35
Year 2015 Landside Improvements/NEPA Baseline Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

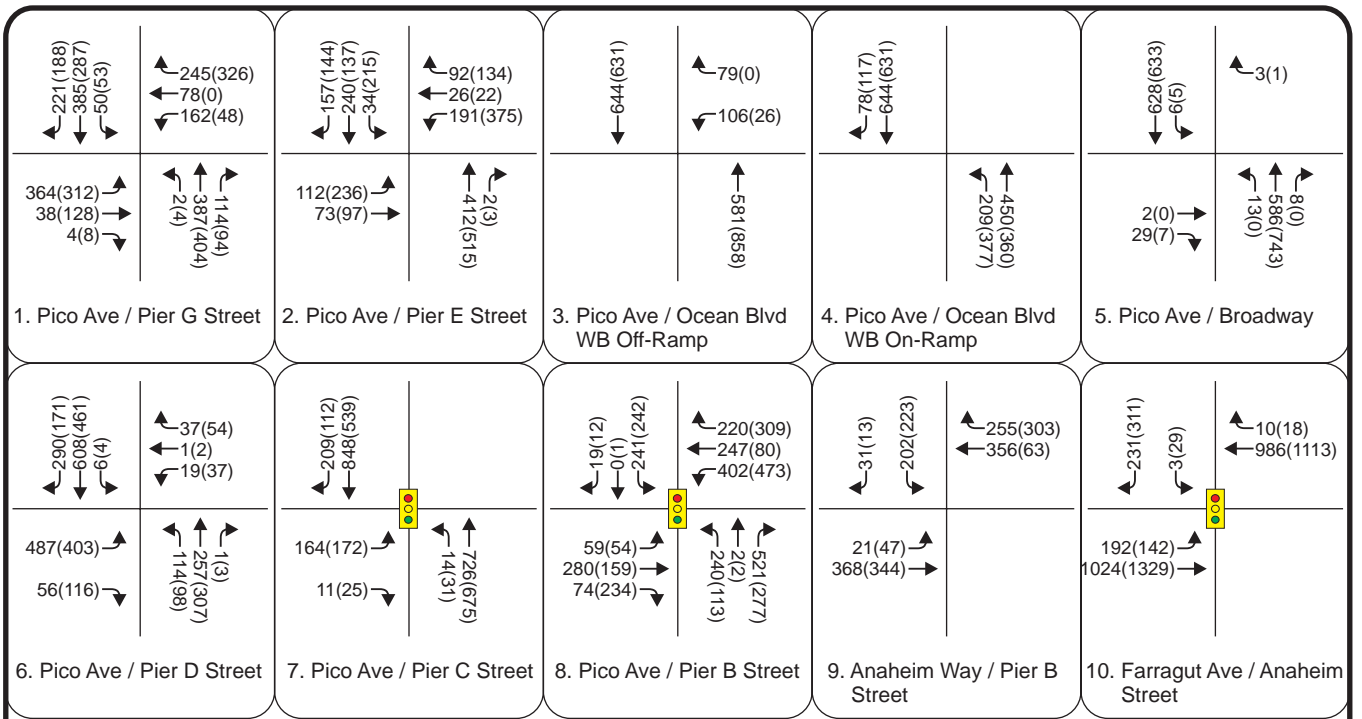


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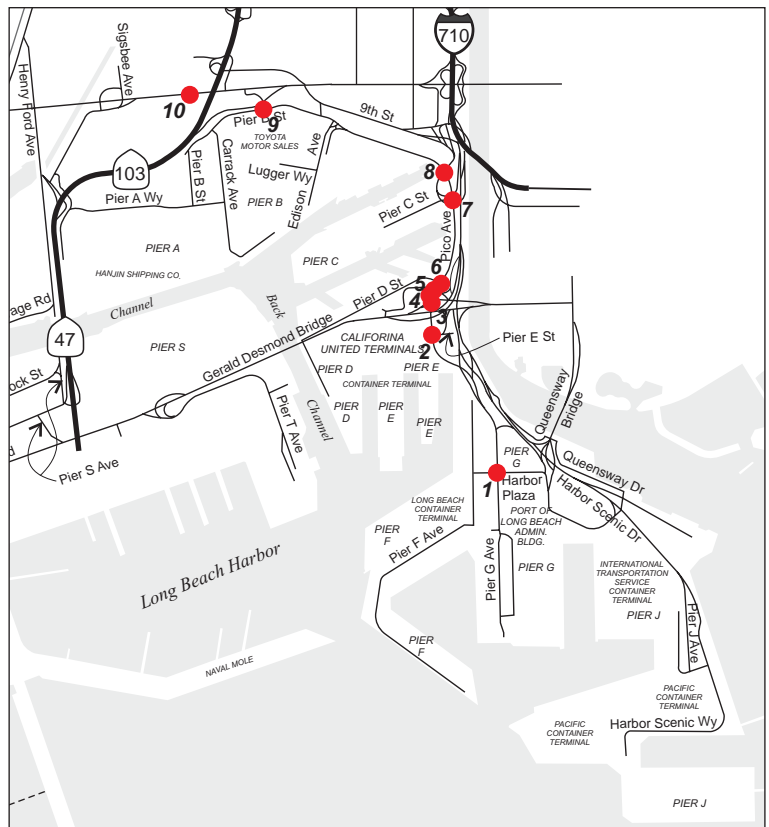
**FIGURE 3.5-36
Year 2015 Landside Improvements/NEPA Baseline Alternative
MD Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

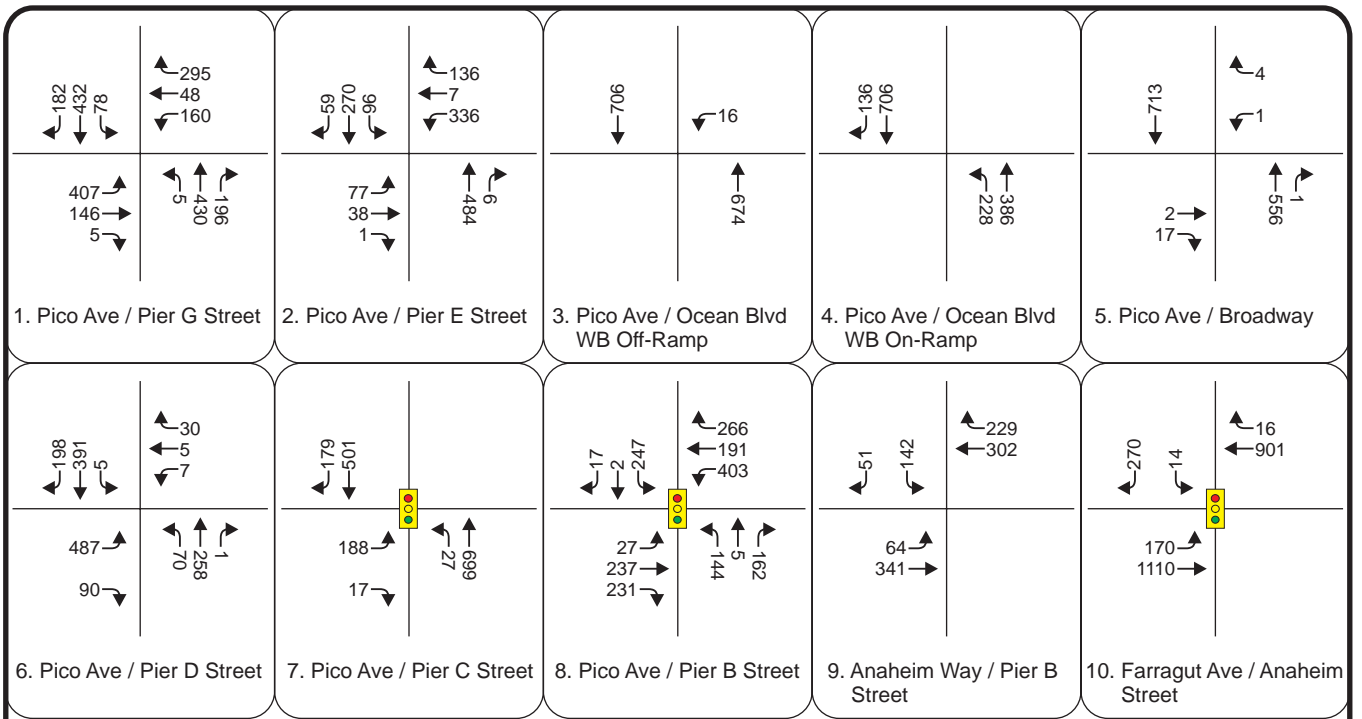


Meyer, Mohaddes Associates

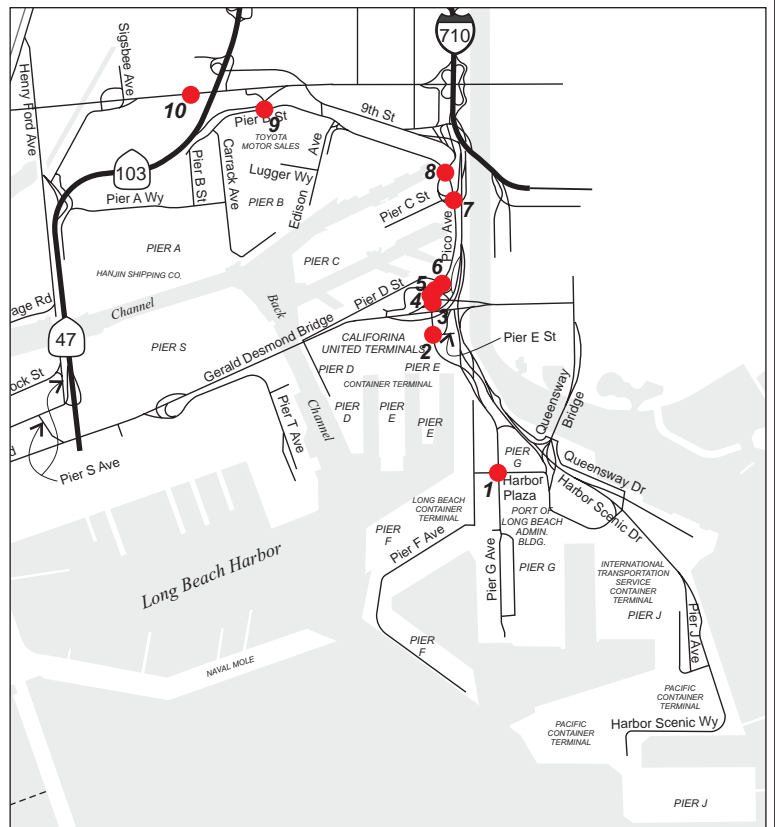
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**FIGURE 3.5-37
Year 2020 Landside Improvements/NEPA Baseline Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume

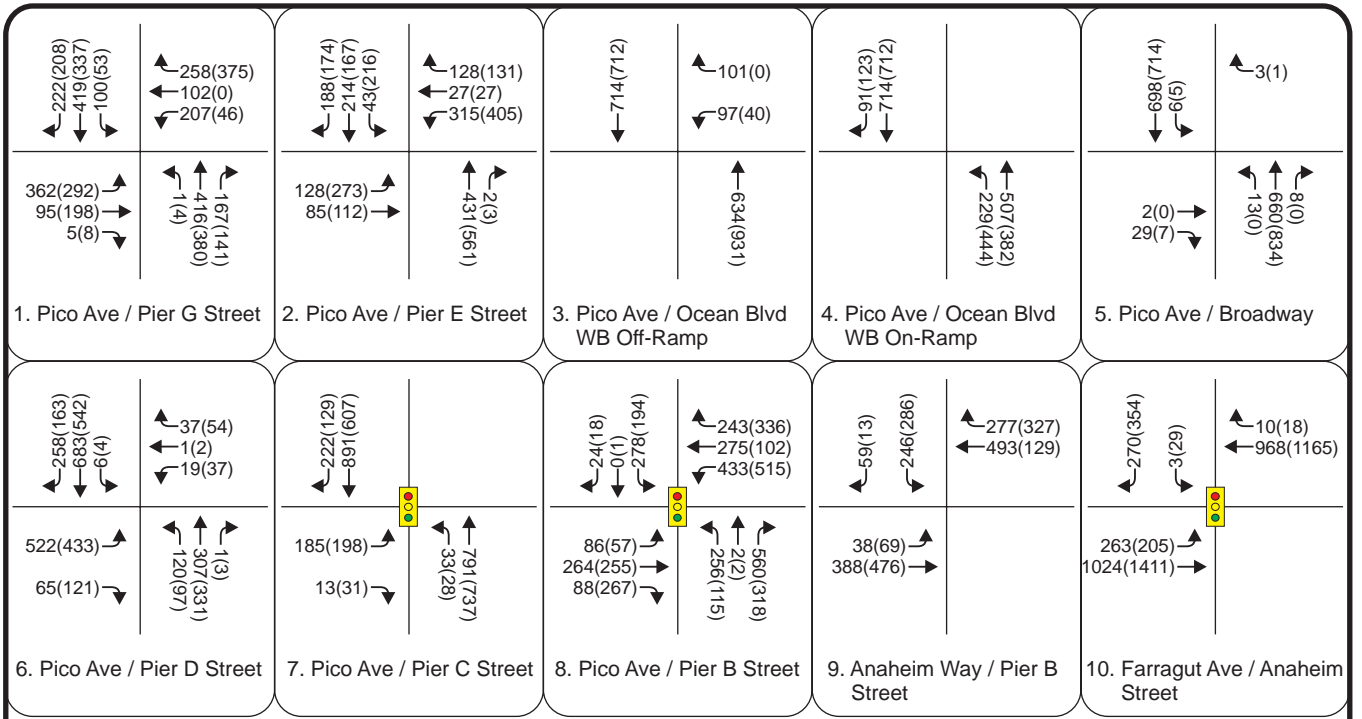


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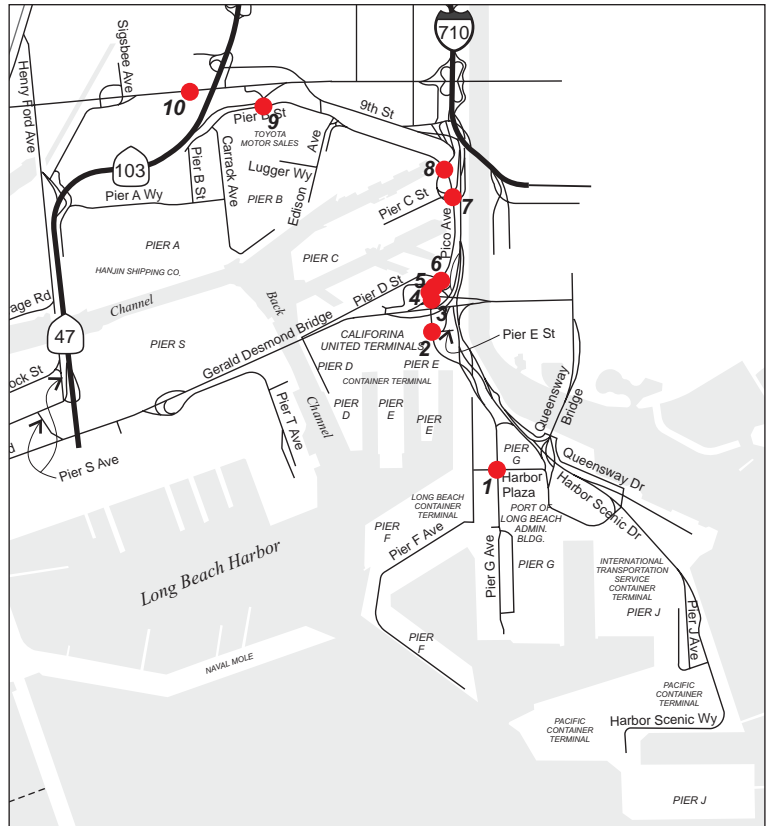
FIGURE 3.5-38
Year 2020 Landside Improvements/NEPA Baseline Alternative
MD Peak Hour Traffic Volumes (PCE)



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

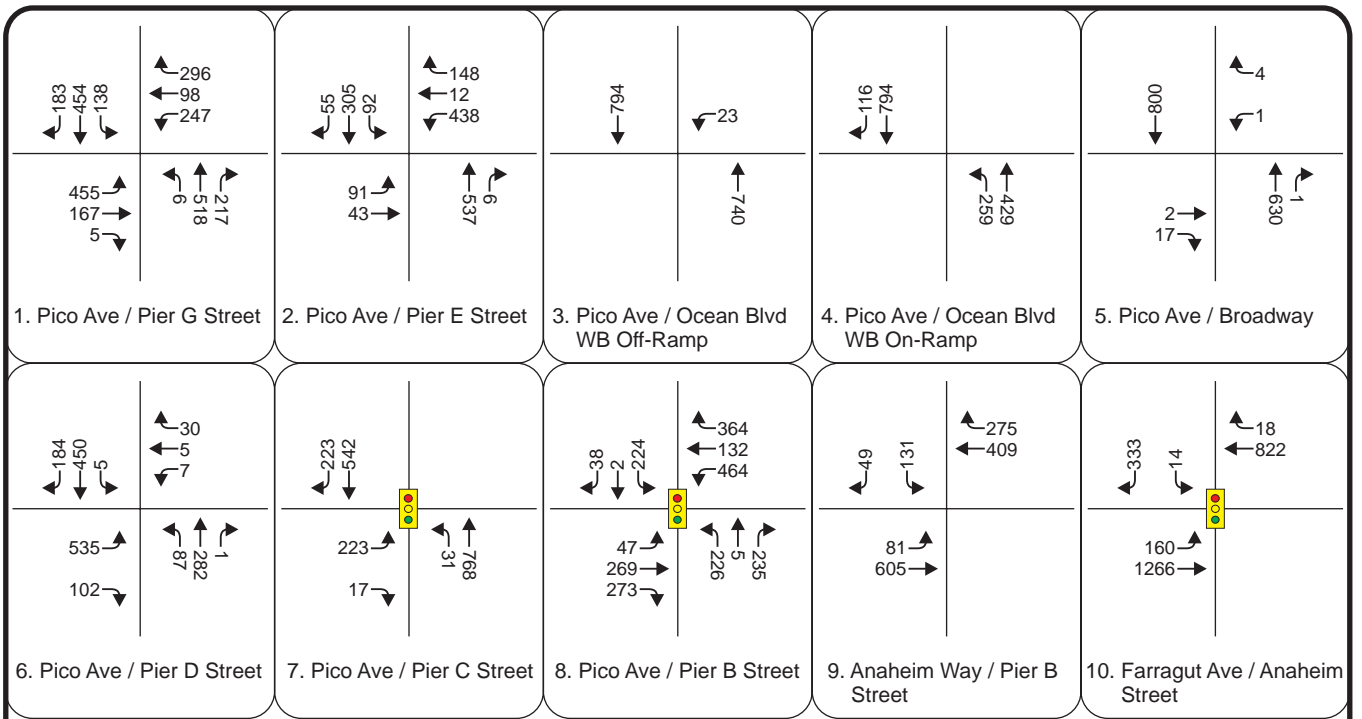


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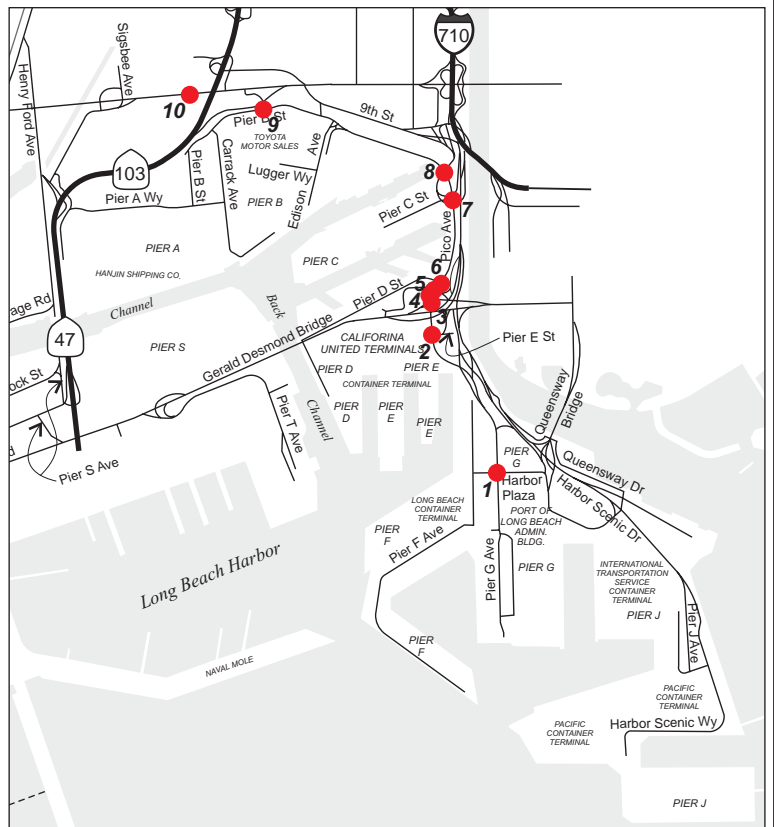
FIGURE 3.5-39
Year 2030 Landside Improvements/NEPA Baseline Alternative
AM and PM Peak Hour Traffic Volumes (PCE)



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume



NOT TO SCALE

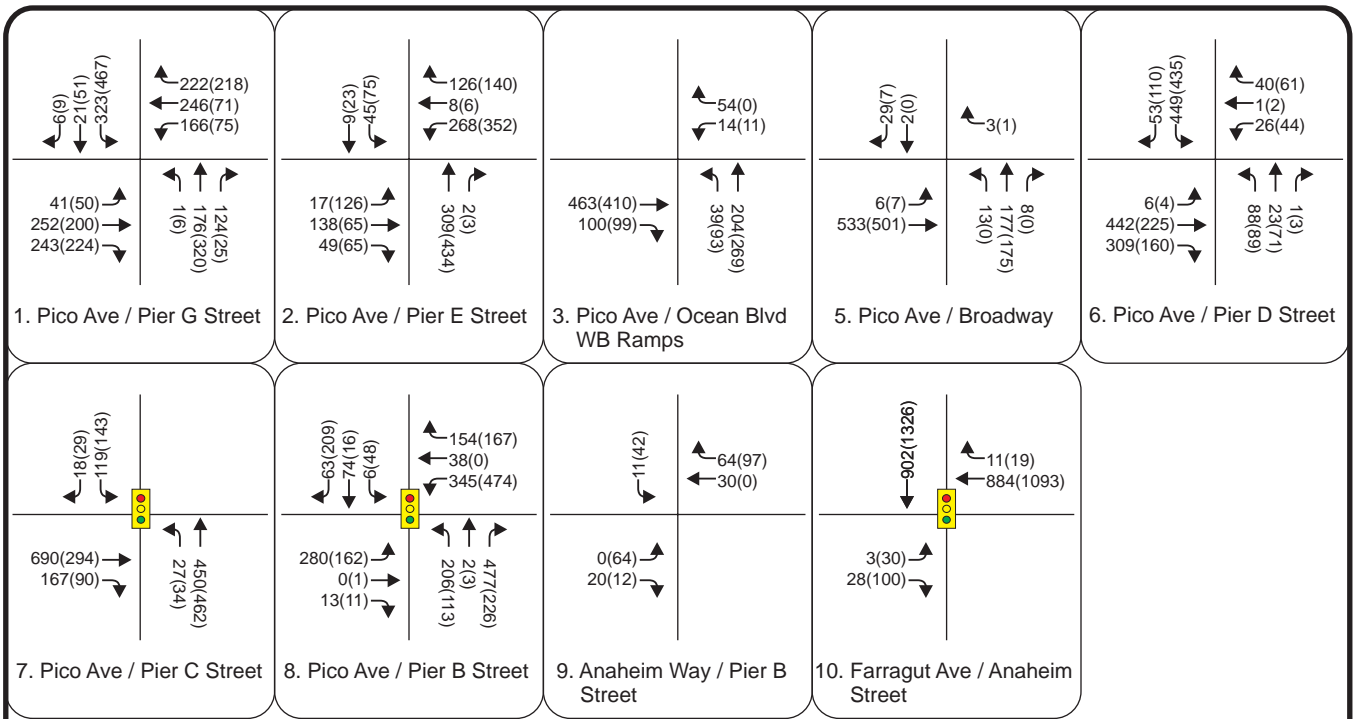


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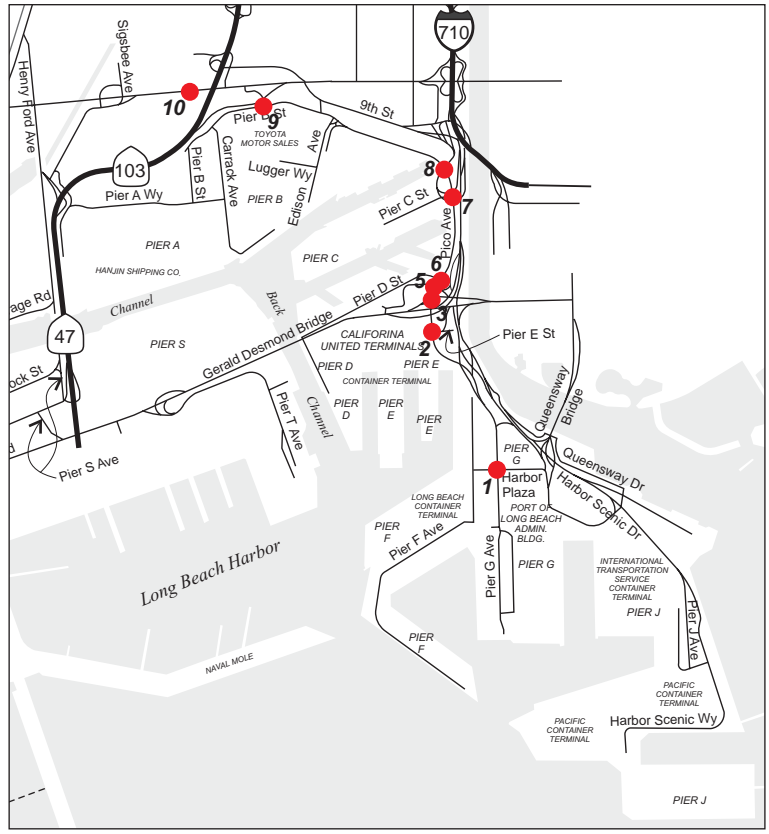
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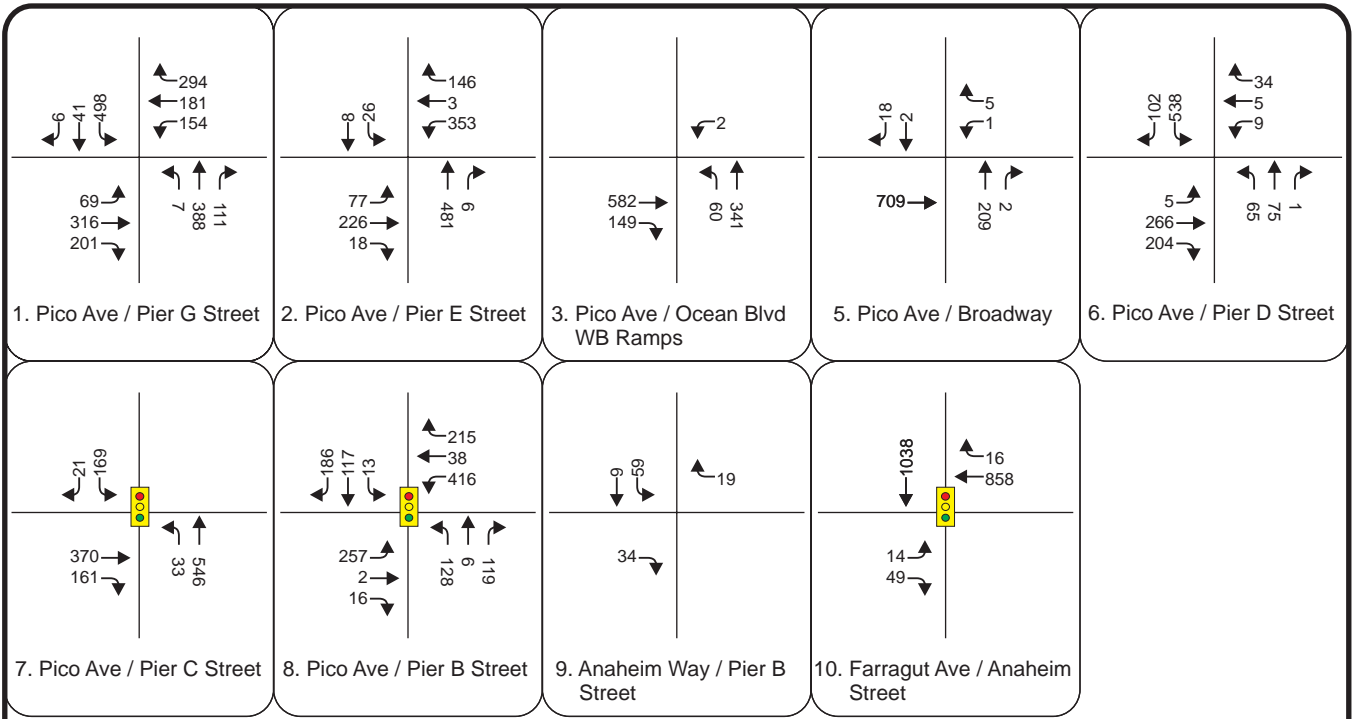
FIGURE 3.5-40
Year 2030 Landside Improvements/NEPA Baseline Alternative
MD Peak Hour Traffic Volumes (PCE)



Legend

- Study Intersection
- Signalized Intersection
- XXX(XXX) AM(PM) Peak Hour Volume

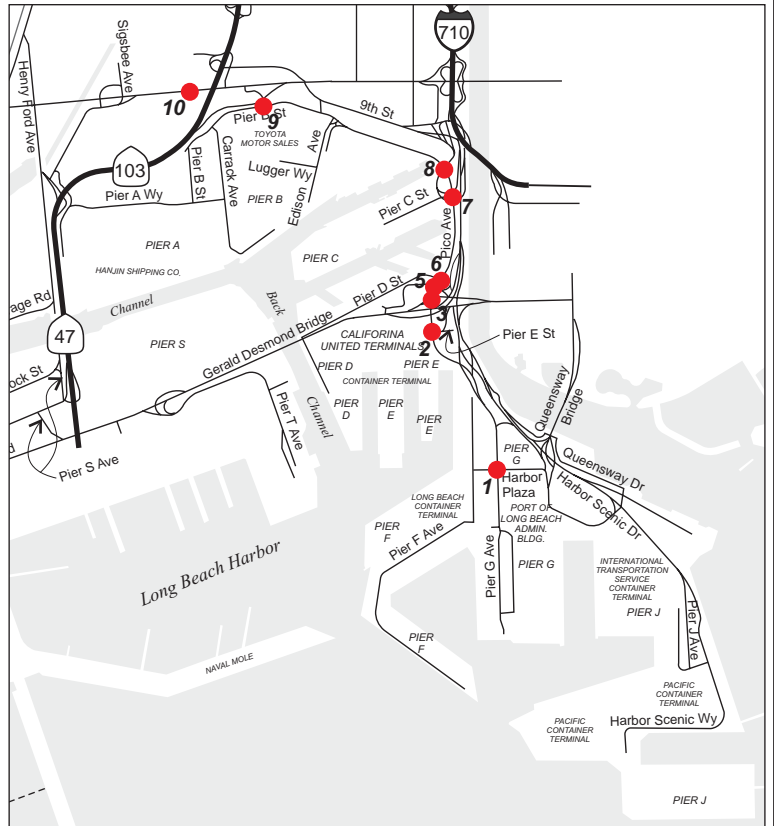




- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume



NOT TO SCALE

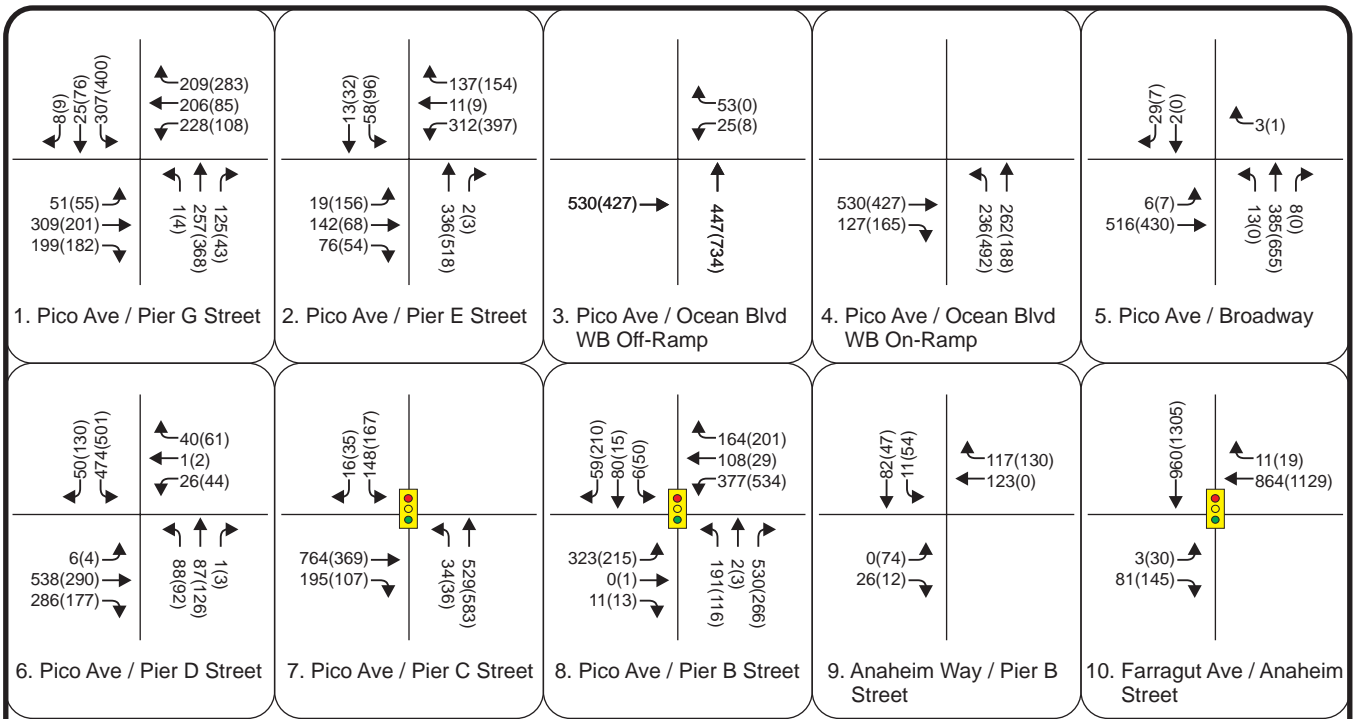


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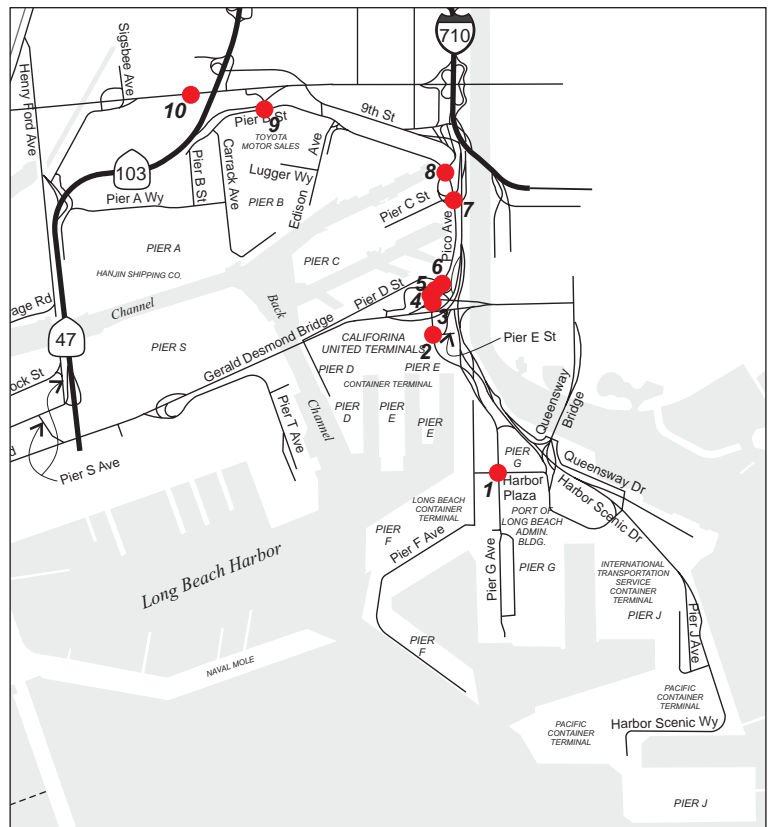
**FIGURE 3.5-42
Year 2010 No Project Alternative
MD Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

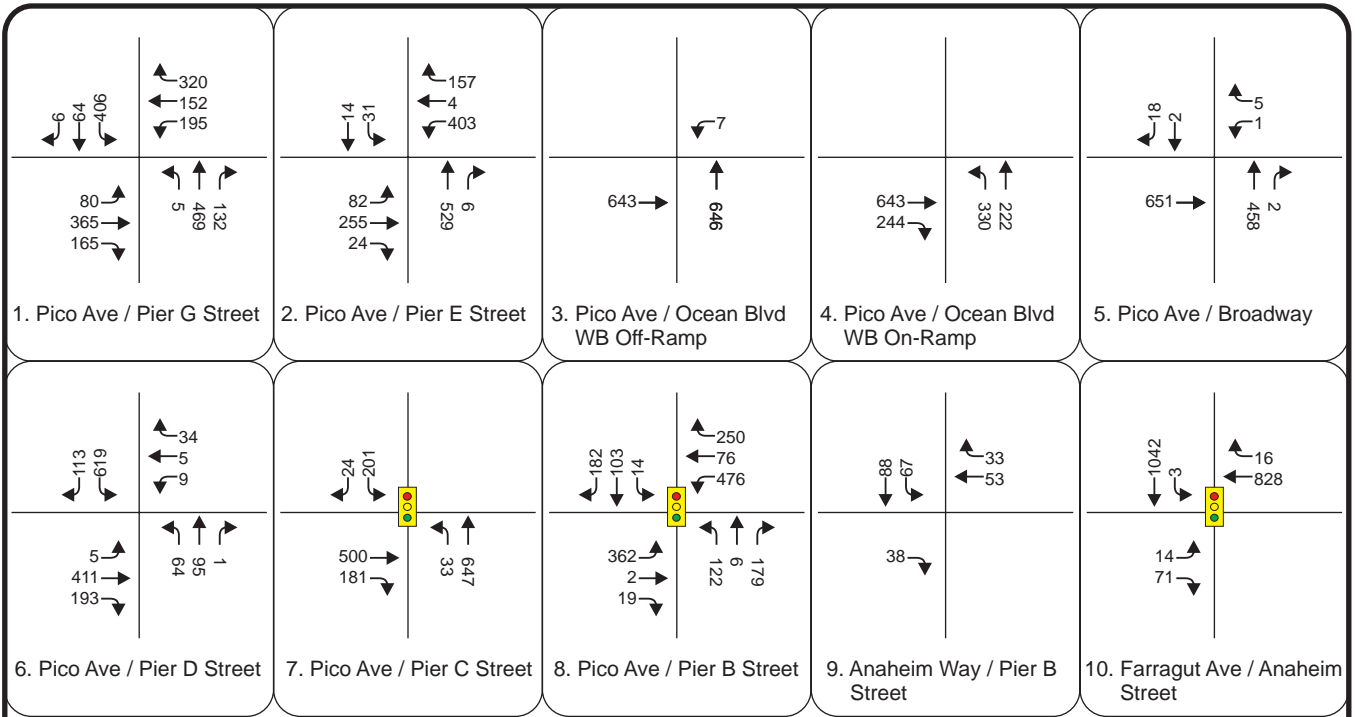


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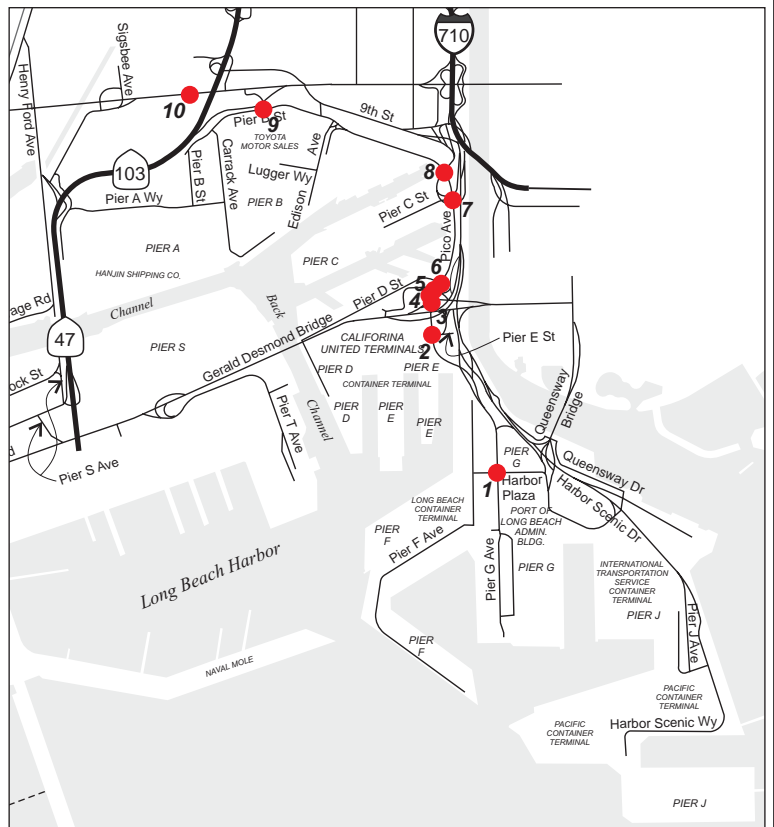
**FIGURE 3.5-43
Year 2015 No Project Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume



NOT TO SCALE

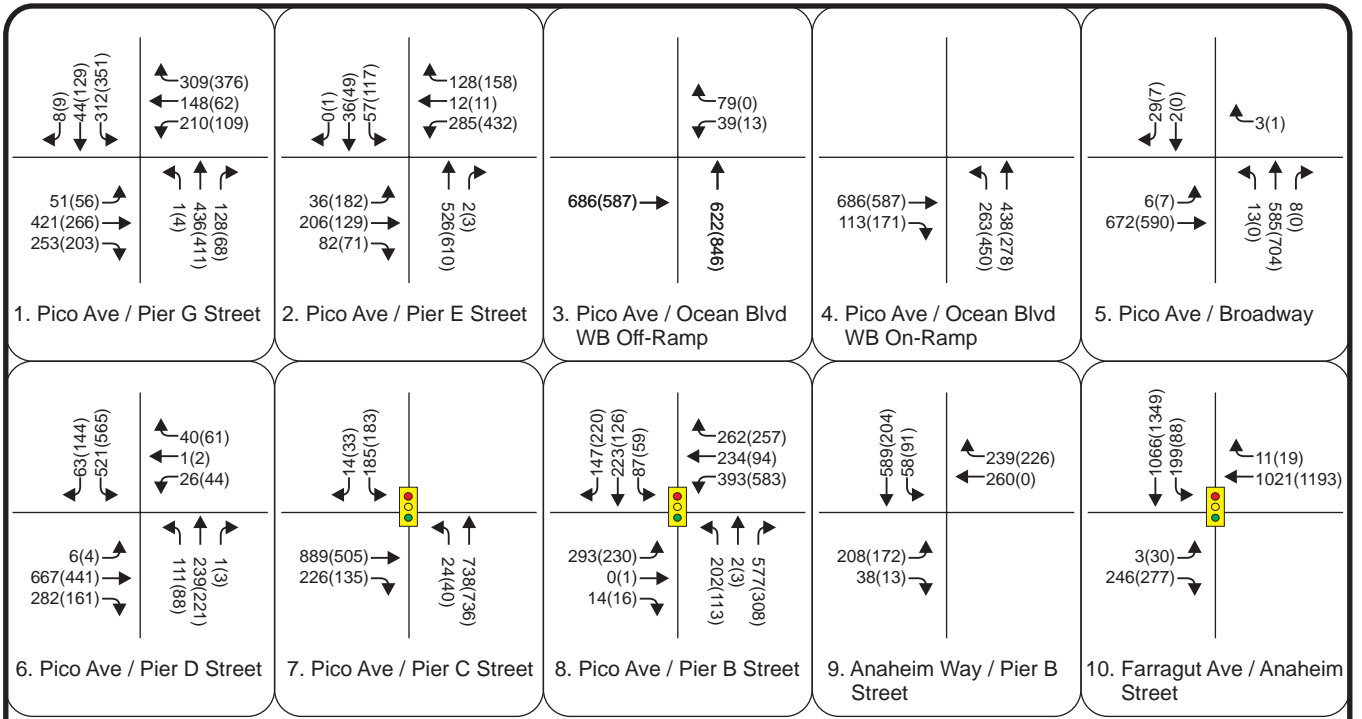


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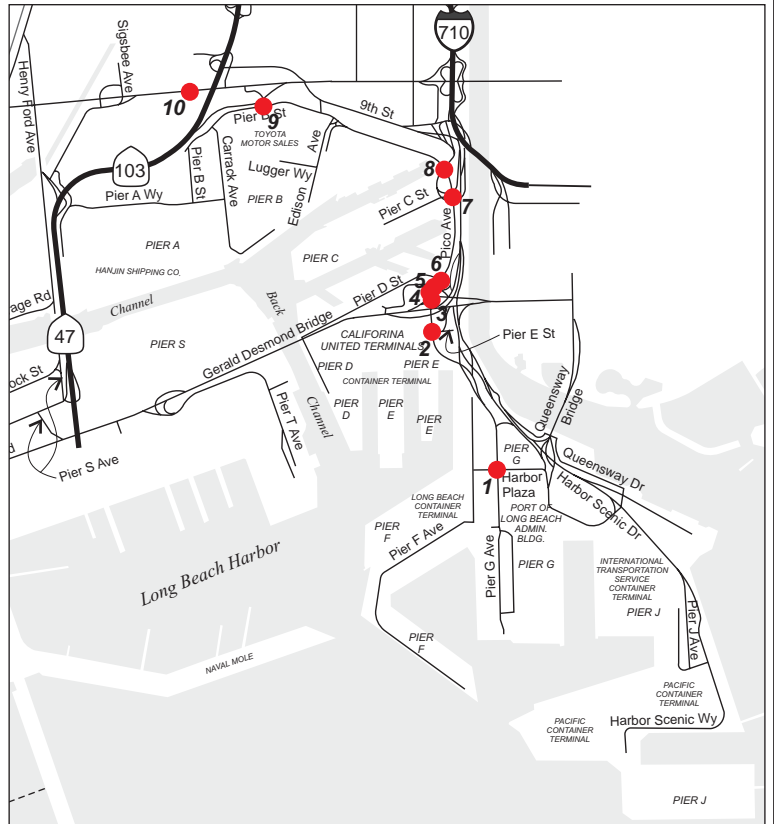
**FIGURE 3.5-44
Year 2015 No Project Alternative
MD Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

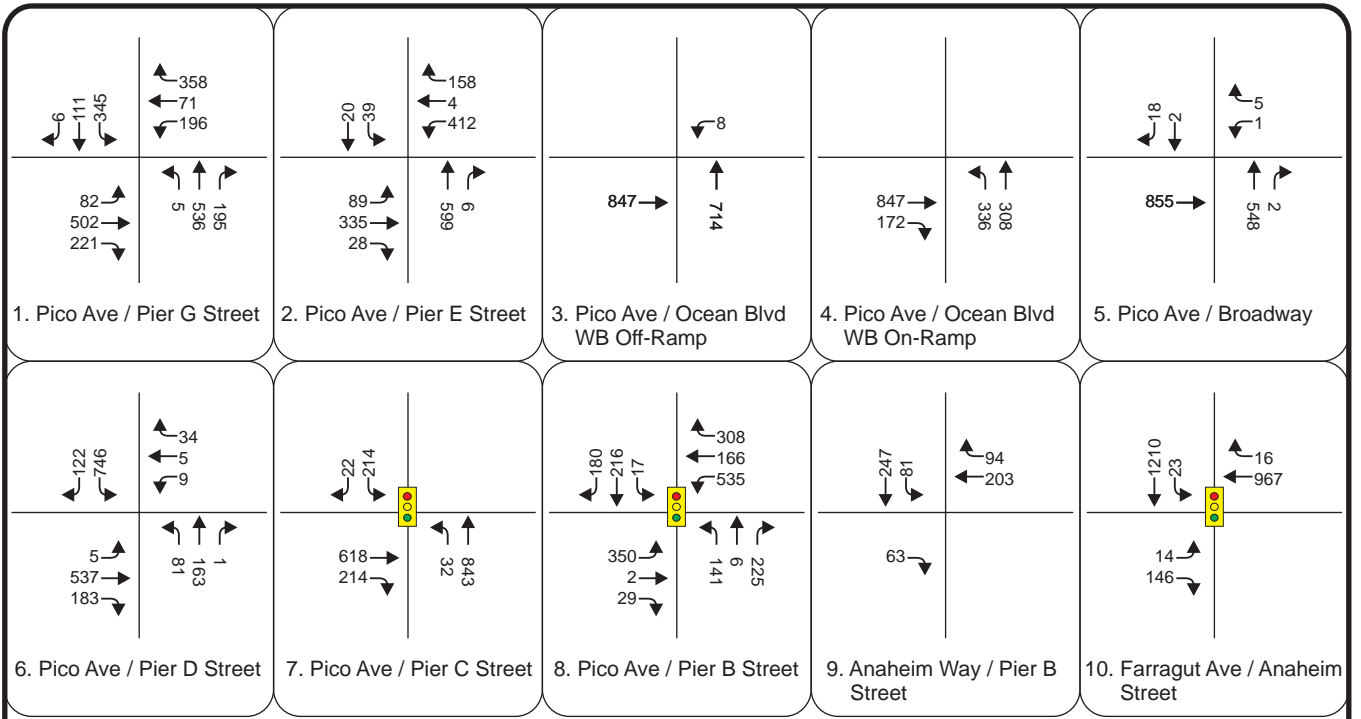


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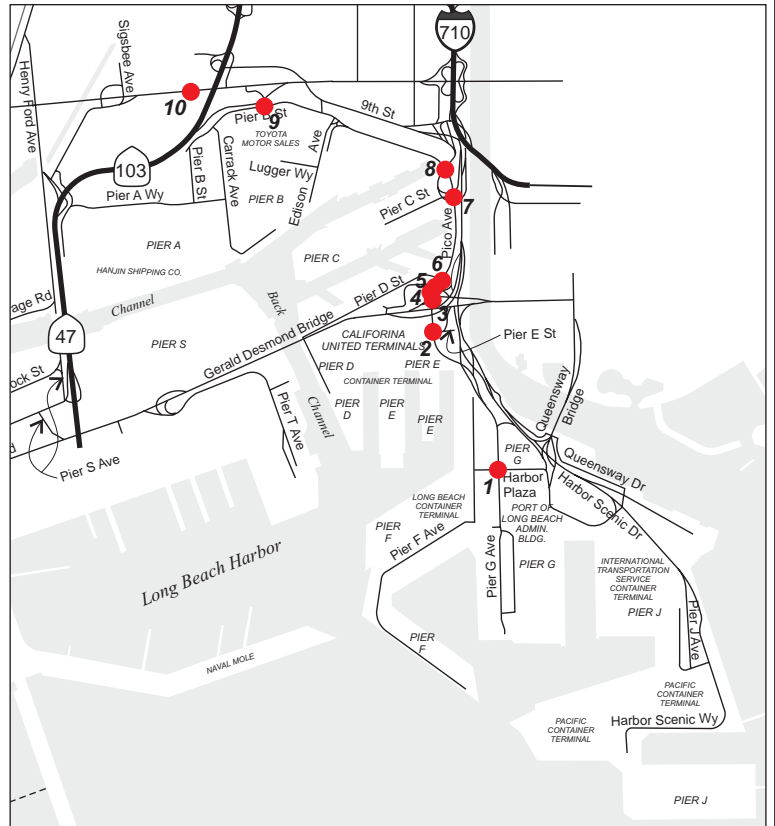
**FIGURE 3.5-45
Year 2020 No Project Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume



NOT TO SCALE

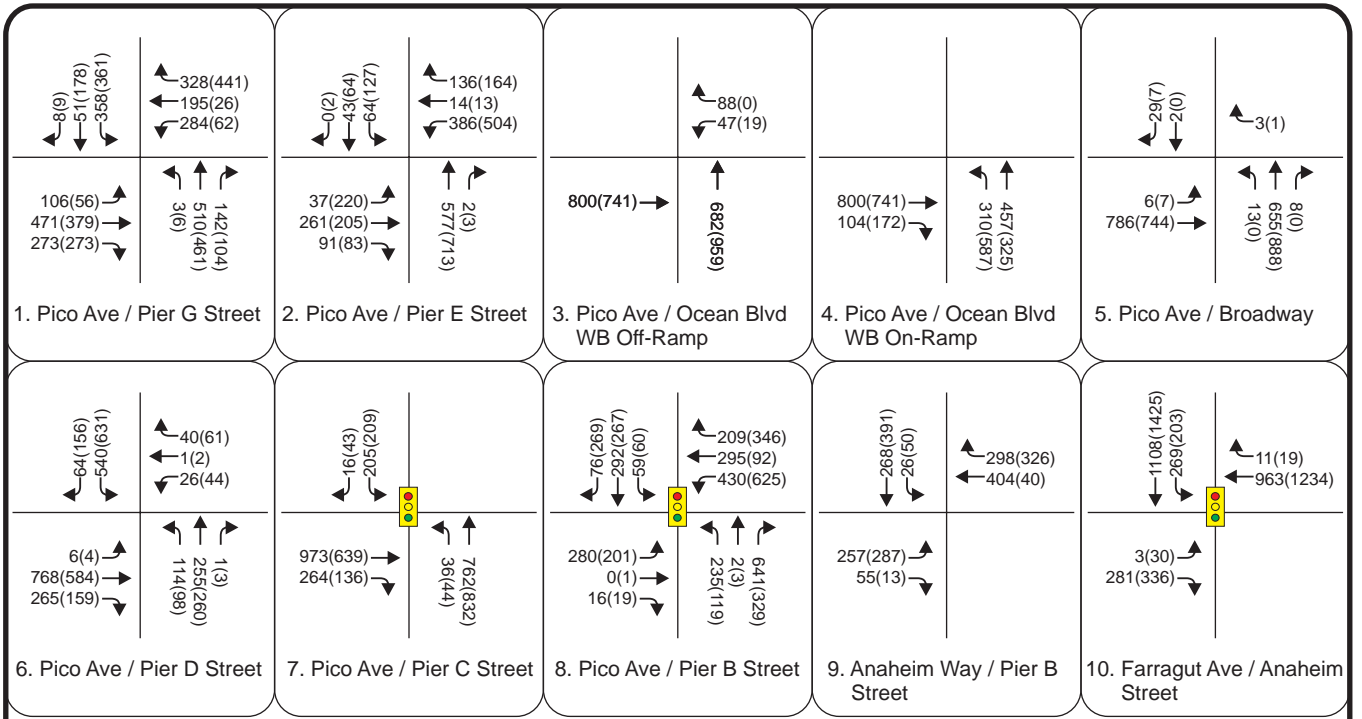


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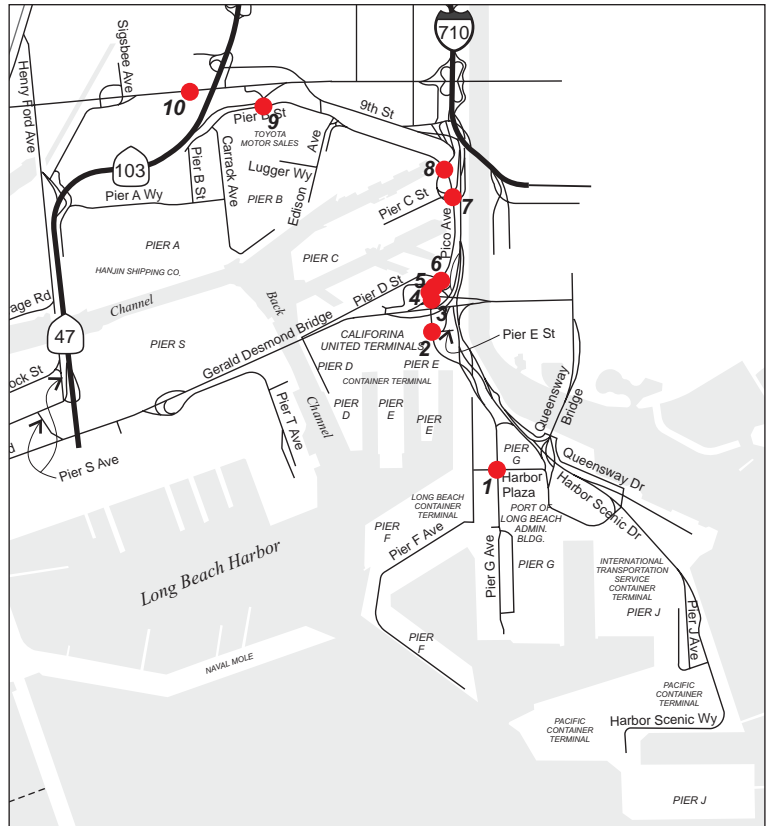
**FIGURE 3.5-46
Year 2020 No Project Alternative
MD Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX(XXX) AM(PM) Peak Hour Volume



NOT TO SCALE

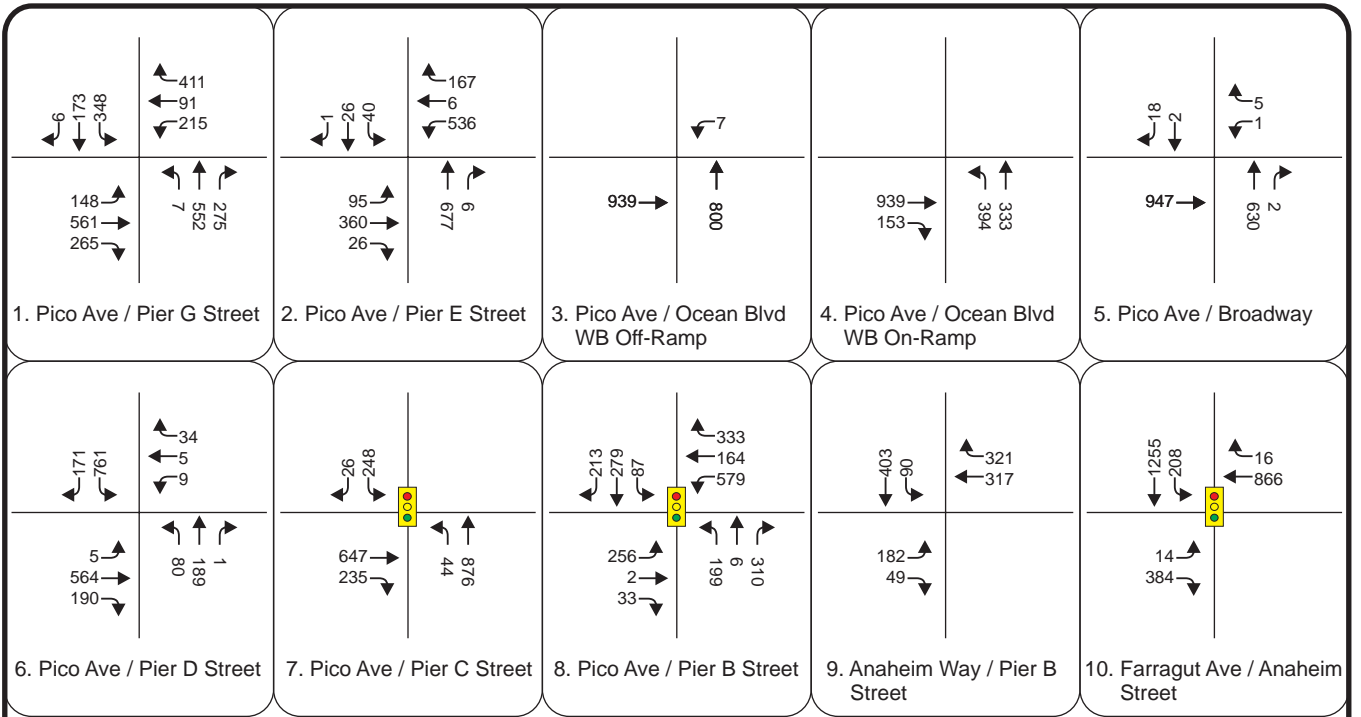


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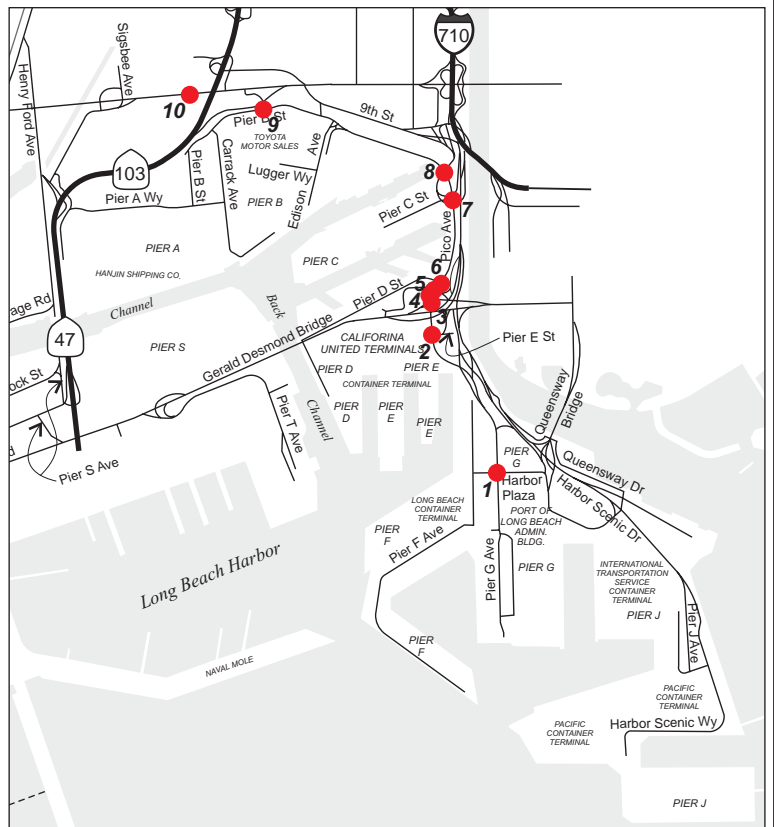
**FIGURE 3.5-47
Year 2030 No Project Alternative
AM and PM Peak Hour Traffic Volumes (PCE)**



- Legend**
- Study Intersection
 - Signalized Intersection
 - XXX MD Peak Hour Volume



NOT TO SCALE



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**Port of Long Beach
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**FIGURE 3.5-48
Year 2030 No Project Alternative
MD Peak Hour Traffic Volumes (PCE)**

Appendix B: Existing Year 2005 Traffic Counts

NORTH / SOUTH STREET: Pico Avenue
EAST / WEST STREET: Broadway
COMPANY SITE CODE #: Witec
DATE: Thursday, August 25, 2005

	INDIVIDUAL PEAK HOUR DATA (BY TYPE)		NB			SB			EB			WB			TOTAL	ST PK HR
			L	T	R	L	T	R	L	T	R	L	T	R		
			AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM		
1	PASSENGER VEHICLES	AM	27	174	2	0	122	29	7	0	13	0	2	0	376	6:45 AM
		MID	19	93	0	0	2	114	7	0	19	0	0	3	257	2:45 PM
		PM	3	113	0	3	0	158	23	0	21	0	0	1	322	4:00 PM
2	BOBTAILS	AM	0	30	0	0	53	0	0	0	0	0	0	0	83	8:00 AM
		MID	0	68	1	0	0	42	0	0	1	0	0	1	113	2:15 PM
		PM	0	78	0	2	0	19	0	0	0	0	0	0	99	4:00 PM
3	CHASSIS	AM	0	4	1	0	4	0	2	1	0	0	0	0	12	8:00 AM
		MID	1	26	0	0	0	9	0	0	0	0	0	1	37	2:00 PM
		PM	0	5	0	0	0	10	0	0	0	0	0	0	15	4:00 PM
4	CONTAINERS	AM	0	69	0	0	57	0	3	0	0	0	0	0	129	8:00 AM
		MID	0	67	0	0	0	70	9	1	3	0	0	0	150	2:00 PM
		PM	0	57	0	0	0	28	8	0	0	0	0	0	93	4:00 PM
5	OTHER TRUCKS	AM	5	32	0	0	9	1	3	0	4	0	0	0	54	6:45 AM
		MID	4	14	0	0	0	6	5	0	0	0	0	0	29	2:00 PM
		PM	0	2	0	0	0	6	1	0	0	0	0	0	9	5:00 PM
2 - 5	TRUCK SUBTOTAL	AM	3	115	3	0	121	2	5	1	9	0	0	0	259	8:00 AM
		MID	5	180	1	0	0	121	14	1	4	0	0	2	328	2:00 PM
		PM	0	146	0	2	0	58	8	0	0	0	0	0	214	4:00 PM
1 - 5	ALL VEHICLES	AM	32	241	2	0	209	30	11	1	17	0	2	0	545	6:45 AM
		MID	23	282	1	0	3	222	21	1	23	1	0	3	580	2:00 PM
		PM	3	259	0	5	0	216	31	0	21	0	0	1	536	4:00 PM

	COMMON PEAK HOUR DATA (BY TYPE)		NB			SB			EB			WB			TOTAL	
			L	T	R	L	T	R	L	T	R	L	T	R		
			AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM		
1	Passenger Vehicle	AM	16	87	2	6	69	12	8	0	18	0	0	3	221	
		MID	18	102	0	0	3	101	7	0	19	1	0	1	252	
		PM	3	113	0	3	0	158	23	0	21	0	0	1	322	
2	Bobtails	AM	0	30	0	0	53	0	0	0	0	0	0	0	83	
		MID	0	73	1	0	0	36	0	0	1	0	0	1	112	
		PM	0	78	0	2	0	19	0	0	0	0	0	0	99	
3	Chassis	AM	0	4	1	0	4	0	2	1	0	0	0	0	12	
		MID	1	26	0	0	0	9	0	0	0	0	0	1	37	
		PM	0	5	0	0	0	10	0	0	0	0	0	0	15	
4 - 5	Container + Other Trucks	AM	3	81	2	0	64	2	3	0	9	0	0	0	164	
		MID	4	81	0	0	0	76	14	1	3	0	0	0	179	
		PM	0	63	0	0	0	29	8	0	0	0	0	0	100	
2 - 5	Non-PCE (ALL TRUCKS)	AM	3	115	3	0	121	2	5	1	9	0	0	0	259	
		MID	5	180	1	0	0	121	14	1	4	0	0	2	328	
		PM	0	146	0	2	0	58	8	0	0	0	0	0	214	
1 - 5	Non-PCE (ALL VEHICLES)	AM	19	202	5	6	190	14	13	1	27	0	0	3	480	
		MID	23	282	1	0	3	222	21	1	23	1	0	3	580	
		PM	3	259	0	5	0	216	31	0	21	0	0	1	536	
Adjusted	PCE Volume (ALL VEHICLES)	AM	22	317	8	6	311	16	18	2	36	0	0	3	739	8:00 A.M.
		MID	28	462	2	0	3	343	35	2	27	1	0	5	908	2:00 P.M.
		PM	3	405	0	7	0	274	39	0	21	0	0	1	750	4:00 P.M.

NORTH / SOUTH STREET: Pico Avenue
EAST / WEST STREET: Pier D Street
COMPANY SITE CODE #: Wiltec
DATE: Thursday, August 25, 2005

	INDIVIDUAL PEAK HOUR DATA (BY TYPE)												TOTAL	ST PK HR	
	NB			SB			EB			WB					
	L	T	R	L	T	R	L	T	R	L	T	R			
1	AM	59	112	1	6	117	89	12	2	9	8	2	4	421	6:45 AM
	MID	32	95	1	2	90	16	122	57	3	2	1	2	423	3:00 PM
	PM	46	126	3	4	119	20	199	42	0	6	2	3	570	4:00 PM
2	AM	0	19	0	0	46	0	0	0	0	7	0	3	75	7:45 AM
	MID	0	65	0	0	42	2	51	0	0	2	0	3	165	2:15 PM
	PM	0	64	0	0	18	2	82	0	0	8	0	8	182	4:00 PM
3	AM	1	5	0	0	2	0	0	0	1	0	0	0	9	8:00 AM
	MID	0	21	0	0	14	0	8	1	0	0	0	0	44	3:00 PM
	PM	0	7	0	0	12	0	13	0	0	2	0	0	34	4:00 PM
4	AM	2	63	0	0	54	0	0	0	0	1	0	8	128	8:00 AM
	MID	0	47	0	0	84	2	124	3	0	2	0	17	279	2:45 PM
	PM	0	56	0	0	37	3	149	1	0	9	0	15	270	4:00 PM
5	AM	6	6	0	0	14	52	39	0	6	3	0	10	136	7:30 AM
	MID	2	10	0	0	10	15	24	22	0	1	1	0	85	2:00 PM
	PM	2	6	0	0	31	16	38	5	0	2	4	10	114	MULT PKS
2 - 5	AM	15	180	0	0	232	93	89	0	17	22	1	37	686	MULT PKS
	MID	2	164	0	0	128	17	199	24	0	4	1	17	556	2:00 PM
	PM	1	131	0	0	74	8	265	2	0	19	0	29	529	4:00 PM
1 - 5	AM	63	164	1	6	204	122	53	2	20	13	2	13	663	6:45 AM
	MID	23	237	2	3	221	39	326	59	2	9	5	13	939	2:30 PM
	PM	47	257	3	4	193	28	464	44	0	25	2	32	1099	4:00 PM

	COMMON PEAK HOUR DATA (BY TYPE)												TOTAL		
	NB			SB			EB			WB					
	L	T	R	L	T	R	L	T	R	L	T	R			
1	AM	20	71	1	6	66	29	13	0	11	4	1	4	226	
	MID	17	100	1	5	74	14	116	37	0	1	3	0	368	
	PM	46	126	3	4	119	20	199	42	0	6	2	3	570	
2	AM	0	20	0	0	40	0	0	0	0	8	0	3	71	
	MID	0	69	0	0	35	2	50	0	0	2	0	4	162	
	PM	0	64	0	0	18	2	82	0	0	8	0	8	182	
3	AM	1	5	0	0	2	0	0	0	1	0	0	0	9	
	MID	0	26	0	0	8	0	1	0	0	0	0	0	35	
	PM	0	7	0	0	12	0	13	0	0	2	0	0	34	
4 - 5	AM	6	72	0	0	69	43	47	0	8	3	0	15	263	
	MID	2	69	0	0	85	15	148	24	0	2	1	13	359	
	PM	1	60	0	0	44	6	170	2	0	9	0	21	313	
2 - 5	AM	7	97	0	0	111	43	47	0	9	11	0	18	343	
	MID	2	164	0	0	128	17	199	24	0	4	1	17	556	
	PM	1	131	0	0	74	8	265	2	0	19	0	29	529	
1 - 5	AM	27	168	1	6	177	72	60	0	20	15	1	22	569	
	MID	19	264	1	5	202	31	315	61	0	5	4	17	924	
	PM	47	257	3	4	193	28	464	44	0	25	2	32	1099	
Adjusted	AM	34	265	1	6	288	115	107	0	29	26	1	40	912	8:00 A.M.
	MID	21	428	1	5	330	48	514	85	0	9	5	34	1480	2:00 P.M.
	PM	48	388	3	4	267	36	729	46	0	44	2	61	1628	4:00 P.M.

NORTH / SOUTH STREET: Pico Avenue
EAST / WEST STREET: Pier C Street
COMPANY SITE CODE #: Witec
DATE: Thursday, August 25, 2005

	INDIVIDUAL PEAK HOUR DATA (BY TYPE)												TOTAL	ST PK HR	
	NB			SB			EB			WB					
	L	T	R	L	T	R	L	T	R	L	T	R			
1	AM	38	72	0	0	192	80	14	0	10	0	0	0	406	6:45 AM
	MID	15	158	0	0	86	32	23	0	20	0	0	0	334	3:00 PM
	PM	17	161	0	0	86	40	56	0	58	0	0	0	418	4:15 PM
2	AM	0	22	0	0	27	10	2	0	5	0	0	0	66	7:45 AM
	MID	6	44	0	0	23	18	3	0	3	0	0	0	97	2:00 PM
	PM	3	48	0	0	23	13	4	0	0	0	0	0	91	4:00 PM
3	AM	0	0	0	0	2	3	0	0	1	0	0	0	6	6:45 AM
	MID	3	15	0	0	5	1	0	0	2	0	0	0	26	2:30 PM
	PM	2	19	0	0	2	1	0	0	2	0	0	0	26	4:00 PM
4	AM	0	30	0	0	33	11	7	0	2	0	0	0	83	8:00 AM
	MID	1	62	0	0	56	30	35	0	1	0	0	0	185	3:00 PM
	PM	2	72	0	0	36	24	19	0	0	0	0	0	153	4:00 PM
5	AM	0	72	0	0	64	7	3	0	4	0	0	0	150	8:00 AM
	MID	2	36	0	0	31	5	5	0	1	0	0	0	80	2:00 PM
	PM	1	13	0	0	11	4	5	0	4	0	0	0	38	4:00 PM
2 - 5	AM	1	125	0	0	123	27	11	0	8	0	0	0	295	8:00 AM
	MID	13	143	0	0	113	61	32	0	7	0	0	0	369	2:15 PM
	PM	8	152	0	0	72	42	28	0	6	0	0	0	308	4:00 PM
1 - 5	AM	45	209	0	0	240	103	36	0	26	0	0	0	659	7:30 AM
	MID	25	308	0	0	199	95	50	0	24	0	0	0	701	2:15 PM
	PM	25	317	0	0	149	79	72	0	55	0	0	0	697	4:00 PM

	COMMON PEAK HOUR DATA (BY TYPE)												TOTAL		
	NB			SB			EB			WB					
	L	T	R	L	T	R	L	T	R	L	T	R			
1	AM	28	92	0	0	92	59	19	0	23	0	0	0	313	
	MID	14	160	0	0	76	27	23	0	12	0	0	0	312	
	PM	17	165	0	0	77	37	44	0	49	0	0	0	389	
2	AM	1	23	0	0	25	9	1	0	2	0	0	0	61	
	MID	6	44	0	0	23	18	3	0	3	0	0	0	97	
	PM	3	48	0	0	23	13	4	0	0	0	0	0	91	
3	AM	0	0	0	0	1	0	0	0	0	0	0	0	1	
	MID	3	11	0	0	6	1	2	0	0	0	0	0	23	
	PM	2	19	0	0	2	1	0	0	2	0	0	0	26	
4 - 5	AM	0	102	0	0	97	18	10	0	6	0	0	0	233	
	MID	5	103	0	0	70	28	23	0	4	0	0	0	233	
	PM	3	85	0	0	47	28	24	0	4	0	0	0	191	
2 - 5	AM	1	125	0	0	123	27	11	0	8	0	0	0	295	
	MID	14	158	0	0	99	47	28	0	7	0	0	0	353	
	PM	8	152	0	0	72	42	28	0	6	0	0	0	308	
1 - 5	AM	29	217	0	0	215	86	30	0	31	0	0	0	608	
	MID	28	318	0	0	175	74	51	0	19	0	0	0	665	
	PM	25	317	0	0	149	79	72	0	55	0	0	0	697	
Adjusted	AM	30	342	0	0	338	113	41	0	39	0	0	0	903	8:00 A.M.
	MID	42	476	0	0	274	121	79	0	26	0	0	0	1018	2:00 P.M.
	PM	33	469	0	0	221	121	100	0	61	0	0	0	1005	4:00 P.M.

NORTH / SOUTH STREET:	9th Street
EAST / WEST STREET:	Pico Avenue/Pier B Street
COMPANY SITE CODE #:	Witec
DATE:	Thursday, August 25, 2005

	INDIVIDUAL PEAK HOUR DATA (BY TYPE)	NB						SB						EB						WB						TOTAL	ST PK HR
		L		T		R		L		T		R		L		T		R		L		T		R			
		L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T		
1	PASSENGER VEHICLES	AM	63	2	176	43	2	20	1	47	14	17	47	16	448	6:30 AM											
		MID	10	1	67	4	0	7	40	101	80	21	77	408	3:00 PM												
		PM	26	1	69	7	1	0	36	41	128	116	30	70	525	4:15 PM											
2	BOBTAILS	AM	5	0	24	5	0	0	13	0	9	2	9	67	7:30 AM												
		MID	4	0	20	7	0	0	17	13	18	11	17	107	2:15 PM												
		PM	3	1	26	1	0	1	6	16	19	5	36	115	4:00 PM												
3	CHASSIS	AM	16	0	4	0	0	0	6	0	0	0	0	26	MULT PKS												
		MID	0	0	3	0	0	0	2	0	0	4	5	20	2:30 PM												
		PM	2	0	1	2	0	1	2	2	13	2	1	26	4:00 PM												
4	CONTAINERS	AM	42	0	38	0	0	0	3	17	24	2	10	136	8:00 AM												
		MID	50	0	63	1	0	0	15	39	63	8	28	267	3:00 PM												
		PM	31	0	49	1	0	0	7	38	72	6	17	223	4:00 PM												
5	OTHER TRUCKS	AM	23	0	60	4	0	0	11	17	57	8	10	191	8:00 AM												
		MID	12	0	22	2	0	0	5	11	33	1	14	100	2:00 PM												
		PM	4	0	9	1	0	0	3	10	17	1	5	51	4:00 PM												
2 - 5	TRUCK SUBTOTAL	AM	74	0	117	6	0	0	30	35	93	15	27	398	8:00 AM												
		MID	47	0	97	12	2	0	54	65	97	24	54	453	2:15 PM												
		PM	40	1	85	5	0	1	18	66	121	14	59	415	4:00 PM												
1 - 5	ALL VEHICLES	AM	109	1	207	76	0	5	2	60	31	122	44	82	739	7:30 AM											
		MID	70	2	165	6	1	0	8	67	162	182	55	133	851	3:00 PM											
		PM	63	2	148	12	1	0	45	56	196	211	50	112	896	4:15 PM											

	COMMON PEAK HOUR DATA (BY TYPE)	NB						SB						EB						WB						TOTAL
		L		T		R		L		T		R		L		T		R		L		T		R		
		L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	
1	Passenger Vehicle	AM	22	2	66	39	0	0	1	39	5	32	34	45	285											
		MID	19	4	64	6	0	0	3	34	31	82	37	61	341											
		PM	25	1	68	7	1	0	33	34	97	114	28	67	475											
2	Bobtails	AM	6	0	19	2	0	0	0	14	1	12	5	7	66											
		MID	5	1	20	9	0	4	0	14	12	16	7	17	105											
		PM	3	1	26	1	0	1	1	6	16	19	5	36	115											
3	Chassis	AM	3	0	0	0	0	0	2	0	0	0	0	5	19											
		MID	0	0	2	0	0	0	0	5	0	7	0	5	19											
		PM	2	0	1	2	0	0	1	2	2	13	2	1	26											
4 - 5	Container + Other Trucks	AM	65	0	98	4	0	0	14	34	81	10	20	327												
		MID	38	0	60	3	1	0	24	66	84	8	42	327												
		PM	35	0	58	2	0	0	3	10	48	89	7	22	274											
2 - 5	Non-PCE (ALL TRUCKS)	AM	74	0	117	6	0	0	30	35	93	15	27	398												
		MID	43	1	82	12	1	4	1	43	78	107	15	64	451											
		PM	40	1	85	5	0	1	5	18	66	121	14	59	415											
1 - 5	Non-PCE (ALL VEHICLES)	AM	96	2	183	45	0	0	2	69	40	125	49	72	683											
		MID	62	5	146	18	1	4	4	77	109	189	52	125	792											
		PM	65	2	153	12	1	1	38	52	163	235	42	126	890											
Adjusted	PCE Volume (ALL VEHICLES)	AM	170	2	300	51	0	0	3	99	75	218	64	99	1081											
		MID	105	6	228	30	2	8	5	120	187	296	67	189	1243											
		PM	105	3	238	17	1	2	43	70	229	356	56	185	1305											

NORTH / SOUTH STREET: Anaheim Way
EAST / WEST STREET: Pier B Street
COMPANY SITE CODE #: Wiltec
DATE: Wednesday, August 17, 2005

INDIVIDUAL PEAK HOUR DATA (BY TYPE)		NB			SB			EB			WB			TOTAL	ST PK HR
		L	T	R	L	T	R	L	T	R	L	T	R		
1	AM	0	0	0	15	0	10	5	12	0	0	71	52	165	6:00 AM
	MID	0	0	0	12	0	5	7	62	0	0	13	37	136	3:00 PM
	PM	0	0	0	62	0	8	41	138	0	0	19	71	339	4:30 PM
2	AM	0	0	0	0	0	1	0	15	0	0	16	1	33	8:00 AM
	MID	0	0	0	0	0	2	10	35	0	0	15	3	65	2:00 PM
	PM	0	0	0	1	0	0	1	30	0	0	8	3	43	4:00 PM
3	AM	0	0	0	0	0	0	0	4	0	0	10	0	14	8:00 AM
	MID	0	0	0	0	0	1	1	1	0	0	9	0	12	3:00 PM
	PM	0	0	0	0	0	2	0	4	0	0	3	1	10	4:15 PM
4	AM	0	0	0	0	0	1	0	31	0	0	54	2	88	8:00 AM
	MID	0	0	0	0	0	5	7	81	0	0	48	2	143	2:00 PM
	PM	0	0	0	1	0	1	2	44	0	0	39	4	91	4:00 PM
5	AM	0	0	0	9	0	11	12	29	0	0	15	16	92	MULT PKS
	MID	0	0	0	3	0	8	8	15	0	0	6	7	47	2:00 PM
	PM	0	0	0	6	0	3	2	5	0	0	7	4	27	4:00 PM
2 - 5	AM	0	0	0	7	0	7	6	64	0	0	86	11	181	8:00 AM
	MID	0	0	0	3	0	15	25	133	0	0	72	12	260	2:00 PM
	PM	0	0	0	8	0	5	5	82	0	0	58	12	170	4:00 PM
1 - 5	AM	0	0	0	15	0	13	7	90	0	0	126	47	298	8:00 AM
	MID	0	0	0	7	0	21	42	193	0	0	91	33	387	2:00 PM
	PM	0	0	0	65	0	10	43	212	0	0	75	85	490	4:15 PM

COMMON PEAK HOUR DATA (BY TYPE)		NB			SB			EB			WB			TOTAL	
		L	T	R	L	T	R	L	T	R	L	T	R		
1	AM	0	0	0	8	0	6	1	26	0	0	40	36	117	
	MID	0	0	0	4	0	6	17	60	0	0	19	21	127	
	PM	0	0	0	65	0	7	34	127	0	0	24	50	307	
2	AM	0	0	0	0	0	1	0	15	0	0	16	1	33	
	MID	0	0	0	0	0	2	10	35	0	0	15	3	65	
	PM	0	0	0	1	0	0	1	30	0	0	8	3	43	
3	AM	0	0	0	0	0	0	0	4	0	0	10	0	14	
	MID	0	0	0	0	0	0	0	2	0	0	3	0	5	
	PM	0	0	0	0	0	1	0	3	0	0	4	1	9	
4 - 5	AM	0	0	0	7	0	6	6	45	0	0	60	10	134	
	MID	0	0	0	3	0	13	15	96	0	0	54	9	190	
	PM	0	0	0	7	0	4	4	49	0	0	46	8	118	
2 - 5	AM	0	0	0	7	0	7	6	64	0	0	86	11	181	
	MID	0	0	0	3	0	15	25	133	0	0	72	12	260	
	PM	0	0	0	8	0	5	5	82	0	0	58	12	170	
1 - 5	AM	0	0	0	15	0	13	7	90	0	0	126	47	298	
	MID	0	0	0	7	0	21	42	193	0	0	91	33	387	
	PM	0	0	0	65	0	10	43	212	0	0	75	85	490	
Adjusted	AM	0	0	0	15	0	13	7	90	0	0	126	47	298	8:00 A.M.
	MID	0	0	0	7	0	21	42	193	0	0	91	33	387	2:00 P.M.
	PM	0	0	0	73	0	12	39	209	0	0	82	62	477	4:00 P.M.

NORTH / SOUTH STREET: Farragut Avenue
EAST / WEST STREET: Anaheim Street
COMPANY SITE CODE #: Witec
DATE: Wednesday, August 17, 2005

	INDIVIDUAL PEAK HOUR DATA (BY TYPE)												TOTAL	ST PK HR			
	AM			MID			PM			TOTAL							
	L	T	R	L	T	R	L	T	R	L	T	R					
1	PASSENGER VEHICLES												1436	7:00 AM			
	0	0	0	13	539	0	0	0	0	0	850	16	0	0	0	16	3:00 PM
	0	0	0	7	819	0	0	0	0	0	752	8	0	0	0	8	4:30 PM
2	BOBTAILS												2142	8:00 AM			
	0	0	0	30	1229	0	0	0	0	0	781	18	0	0	0	18	2:15 PM
	0	0	0	1	58	0	0	0	0	0	42	1	0	0	0	1	4:00 PM
3	CHASSIS												15	8:00 AM			
	0	0	0	1	65	0	0	0	0	0	54	0	0	0	0	0	3:00 PM
	0	0	0	1	63	0	0	0	0	0	72	1	0	0	0	1	4:00 PM
4	CONTAINERS												192	MULT PKS			
	0	0	0	0	13	0	0	0	0	0	2	0	0	0	0	0	3:00 PM
	0	0	0	0	4	0	0	0	0	0	5	1	0	0	0	1	4:30 PM
5	OTHER TRUCKS												88	4:00 PM			
	0	0	0	1	149	0	0	0	0	0	35	0	0	0	0	0	7:15 AM
	0	0	0	2	111	0	0	0	0	0	27	2	0	0	0	2	2:00 PM
2 - 5	TRUCK SUBTOTAL												392	2:00 PM			
	0	0	0	2	52	0	0	0	0	0	49	0	0	0	0	0	4:00 PM
	0	0	0	1	164	0	0	0	0	0	96	0	0	0	0	0	7:00 AM
1 - 5	ALL VEHICLES												2430	4:30 PM			
	0	0	0	1	60	0	0	0	0	0	58	1	0	0	0	1	2:45 PM
	0	0	0	1	39	0	0	0	0	0	41	1	0	0	0	1	4:00 PM

	COMMON PEAK HOUR DATA (BY TYPE)												TOTAL			
	AM			MID			PM			TOTAL						
	L	T	R	L	T	R	L	T	R	L	T	R				
1	Passenger Vehicle												1147			
	0	0	0	13	430	0	0	0	0	0	677	7	0	0	0	7
	0	0	0	15	657	0	0	0	0	0	592	8	0	0	0	8
2	Bobtails												2011			
	0	0	0	4	1062	0	0	0	0	0	855	13	0	0	0	13
	0	0	0	22	4	0	0	0	0	0	0	0	0	0	0	0
3	Chassis												103			
	0	0	0	1	58	0	0	0	0	0	42	1	0	0	0	1
	0	0	0	1	61	0	0	0	0	0	49	0	0	0	0	0
4 - 5	Container + Other Trucks												142			
	0	0	0	0	63	0	0	0	0	0	72	1	0	0	0	1
	0	0	0	0	13	0	0	0	0	0	2	0	0	0	0	0
2 - 5	Non-PCE (ALL TRUCKS)												350			
	0	0	0	0	221	0	0	0	0	0	105	1	0	0	0	1
	0	0	0	2	152	0	0	0	0	0	70	4	0	0	0	4
1 - 5	Non-PCE (ALL VEHICLES)												1599			
	0	0	0	7	881	0	0	0	0	0	715	12	0	0	0	12
	0	0	0	4	1221	0	0	0	0	0	1020	16	0	0	0	16
Adjusted	PCE Volume (ALL VEHICLES)												2051			
	0	0	0	8	1014	0	0	0	0	0	975	11	0	0	0	11
	0	0	0	19	1105	0	0	0	0	0	838	16	0	0	0	16
													2711			
													8:00 A.M.			
													2:00 P.M.			
													4:00 P.M.			

NORTH / SOUTH STREET:	Connolly Pacific
EAST / WEST STREET:	Pier D Street
COMPANY SITE CODE #:	Southland
DATE:	Tuesday, September 19, 2006

INDIVIDUAL PEAK HOUR DATA (BY TYPE)	NB						SB						EB						WB						TOTAL	ST PK HR
	L		T		R		L		T		R		L		T		R		L		T		R			
1 PASSENGER VEHICLES	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	MULT PKS	
	PM	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	4:00 PM		
2 BOBTAILS	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
3 CHASSIS	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
4 CONTAINERS	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
5 OTHER TRUCKS	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
2 - 5 TRUCK SUBTOTAL	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
1 - 5 ALL VEHICLES	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	MULT PKS	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	MULT PKS	
	PM	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	4:00 PM		

COMMON PEAK HOUR DATA (BY TYPE)	NB						SB						EB						WB						TOTAL	ST PK HR
	L		T		R		L		T		R		L		T		R		L		T		R			
1 Passenger Vehicle	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	NO PK	
	PM	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	4:00 PM		
2 Bobtails	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
3 Chassis	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
4 - 5 Container + Other Trucks	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
2 - 5 Non-PCE (ALL TRUCKS)	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
1 - 5 Non-PCE (ALL VEHICLES)	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	NO PK	
	PM	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	4:00 PM		
Adjusted PCE Volume (ALL VEHICLES)	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8:00 A.M.	
	MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2:00 P.M.	
	PM	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	5	4:00 P.M.	

NORTH / SOUTH STREET: L.G. Everist Driveway A
 EAST / WEST STREET: Pier D Street
 COMPANY SITE CODE #: Southland
 DATE: Tuesday, September 19, 2006

INDIVIDUAL PEAK HOUR DATA (BY TYPE)	NB						SB						EB						WB						TOTAL	ST PK HR
	L		T		R		L		T		R		L		T		R		L		T		R			
	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM		
1 PASSENGER VEHICLES	AM	0	0	0	0	0	2	0	0	0	0	0	105	0	0	0	56	4	167	8:00 AM						
	MID	0	0	0	0	0	4	0	3	1	164	0	0	164	0	0	51	8	231	2:00 PM						
	PM	0	0	0	0	0	7	0	1	1	122	0	0	122	0	0	22	2	155	4:00 PM						
2 BOBTAILS	AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	8:00 AM							
	MID	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	4	MULT PKS							
	PM	0	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	MULT PKS							
3 CHASSIS	AM	0	0	0	0	0	0	0	0	0	11	0	0	11	0	0	16	0	27	8:00 AM						
	MID	0	0	0	0	0	0	0	0	0	8	0	0	8	0	0	4	0	12	MULT PKS						
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	MULT PKS							
4 CONTAINERS	AM	0	0	0	0	0	0	0	0	0	8	0	0	8	0	0	4	0	12	MULT PKS						
	MID	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	3	2:00 PM						
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK						
5 OTHER TRUCKS	AM	0	0	0	0	0	0	0	0	0	7	0	0	7	0	0	14	0	21	8:00 AM						
	MID	0	0	0	0	0	0	0	0	0	34	0	0	34	0	0	16	0	50	2:00 PM						
	PM	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	4	0	10	4:00 PM						
2 - 5 TRUCK SUBTOTAL	AM	0	0	0	0	0	0	0	0	0	27	0	0	27	0	0	32	0	59	8:00 AM						
	MID	0	0	0	0	0	0	0	0	0	42	0	0	42	0	0	18	0	60	2:00 PM						
	PM	0	0	0	0	0	0	0	0	0	10	0	0	10	0	0	5	0	15	4:00 PM						
1 - 5 ALL VEHICLES	AM	0	0	0	0	0	2	0	0	0	132	0	0	132	0	0	88	4	226	8:00 AM						
	MID	0	0	0	0	0	4	0	3	1	206	0	0	206	0	0	69	8	291	2:00 PM						
	PM	0	0	0	0	0	7	0	1	1	132	0	0	132	0	0	27	2	170	4:00 PM						

COMMON PEAK HOUR DATA (BY TYPE)	NB						SB						EB						WB						TOTAL
	L		T		R		L		T		R		L		T		R		L		T		R		
	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	
1 Passenger Vehicle	AM	0	0	0	0	0	2	0	0	0	0	0	105	0	0	0	56	4	167						
	MID	0	0	0	0	0	4	0	3	1	164	0	0	164	0	0	51	8	231						
	PM	0	0	0	0	0	7	0	1	1	122	0	0	122	0	0	22	2	155						
2 Bobtails	AM	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	5						
	MID	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1						
	PM	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	4						
3 Chassis	AM	0	0	0	0	0	0	0	0	0	11	0	0	11	0	0	16	0	27						
	MID	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	2	0	6						
	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1							
4 - 5 Container + Other Trucks	AM	0	0	0	0	0	0	0	0	0	11	0	0	11	0	0	16	0	27						
	MID	0	0	0	0	0	0	0	0	0	37	0	0	37	0	0	16	0	53						
	PM	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	4	0	10						
2 - 5 Non-PCE (ALL TRUCKS)	AM	0	0	0	0	0	0	0	0	0	27	0	0	27	0	0	32	0	59						
	MID	0	0	0	0	0	0	0	0	0	42	0	0	42	0	0	18	0	60						
	PM	0	0	0	0	0	0	0	0	0	10	0	0	10	0	0	5	0	15						
1 - 5 Non-PCE (ALL VEHICLES)	AM	0	0	0	0	0	2	0	0	0	132	0	0	132	0	0	88	4	226						
	MID	0	0	0	0	0	4	0	3	1	206	0	0	206	0	0	69	8	291						
	PM	0	0	0	0	0	7	0	1	1	132	0	0	132	0	0	27	2	170						
Adjusted PCE Volume (ALL VEHICLES)	AM	0	0	0	0	0	2	0	0	0	159	0	0	159	0	0	120	4	285	8:00 A.M.					
	MID	0	0	0	0	0	4	0	3	1	248	0	0	248	0	0	87	8	351	2:00 P.M.					
	PM	0	0	0	0	0	7	0	1	1	142	0	0	142	0	0	32	2	185	4:00 P.M.					

NORTH / SOUTH STREET:	L.G. Everist Driveway B
EAST / WEST STREET:	Pier D Street
COMPANY SITE CODE #:	Southland
DATE:	Tuesday, September 19, 2006

	INDIVIDUAL PEAK HOUR DATA (BY TYPE)	NB						SB						EB						WB						TOTAL	ST PK HR	
		L		T		R		L		T		R		L		T		R		L		T		R				
1	PASSENGER VEHICLES	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144	4:00 PM
2	BOBTAILS	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	MULT PKGS
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	MULT PKGS
3	CHASSIS	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	MULT PKGS
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	MULT PKGS
4	CONTAINERS	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	MULT PKGS
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OTHER TRUCKS	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	4:00 PM
2 - 5	TRUCK SUBTOTAL	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	4:00 PM
1 - 5	ALL VEHICLES	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	220	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	275	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157	4:00 PM

	COMMON PEAK HOUR DATA (BY TYPE)	NB						SB						EB						WB						TOTAL	ST PK HR	
		L		T		R		L		T		R		L		T		R		L		T		R				
1	Passenger Vehicle	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144	4:00 PM
2	Bobtails	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4:00 PM
3	Chassis	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4:00 PM
4 - 5	Container + Other Trucks	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	4:00 PM
2 - 5	Non-PCE (ALL TRUCKS)	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	4:00 PM
1 - 5	Non-PCE (ALL VEHICLES)	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	220	8:00 AM
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	275	2:00 PM
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157	4:00 PM
Adjusted	PCE Volume (ALL VEHICLES)	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	279	8:00 A.M.
		MID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	335	2:00 P.M.
		PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	170	4:00 P.M.

NORTH / SOUTH STREET: GP Gypsum Driveway A
 EAST / WEST STREET: Pier D Street
 COMPANY SITE CODE #: Southland
 DATE: Tuesday, September 19, 2006

	INDIVIDUAL PEAK HOUR DATA (BY TYPE)	NB			SB			EB			WB			TOTAL	ST PK HR
		L	T	R	L	T	R	L	T	R	L	T	R		
		AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM		
1	PASSENGER VEHICLES	AM	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		MID	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		PM	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
2	BOBTAILS	AM	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		MID	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		PM	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
3	CHASSIS	AM	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		MID	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		PM	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
4	CONTAINERS	AM	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		MID	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		PM	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
5	OTHER TRUCKS	AM	0	0	0	1	0	0	0	0	0	0	0	0	8:00 AM
		MID	0	0	0	2	0	4	0	0	0	0	0	0	MULT PKS
		PM	0	0	0	1	0	0	0	0	0	0	0	0	4:00 PM
2 - 5	TRUCK SUBTOTAL	AM	0	0	0	1	0	0	0	0	0	0	0	0	8:00 AM
		MID	0	0	0	2	0	4	0	0	0	0	0	0	MULT PKS
		PM	0	0	0	1	0	0	0	0	0	0	0	0	4:00 PM
1 - 5	ALL VEHICLES	AM	0	0	0	1	0	0	0	0	0	0	0	0	8:00 AM
		MID	0	0	0	2	0	4	0	0	0	0	0	0	MULT PKS
		PM	0	0	0	1	0	0	0	0	0	0	0	0	4:00 PM

	COMMON PEAK HOUR DATA (BY TYPE)	NB			SB			EB			WB			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
		AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	
1	Passenger Vehicle	AM	0	0	0	0	0	0	0	0	0	0	0	0
		MID	0	0	0	0	0	0	0	0	0	0	0	0
		PM	0	0	0	0	0	0	0	0	0	0	0	0
2	Bobtails	AM	0	0	0	0	0	0	0	0	0	0	0	0
		MID	0	0	0	0	0	0	0	0	0	0	0	0
		PM	0	0	0	0	0	0	0	0	0	0	0	0
3	Chassis	AM	0	0	0	0	0	0	0	0	0	0	0	0
		MID	0	0	0	0	0	0	0	0	0	0	0	0
		PM	0	0	0	0	0	0	0	0	0	0	0	0
4 - 5	Container + Other Trucks	AM	0	0	0	1	0	0	0	0	0	0	0	1
		MID	0	0	0	1	0	2	0	0	0	0	0	3
		PM	0	0	0	1	0	0	0	0	0	0	0	1
2 - 5	Non-PCE (ALL TRUCKS)	AM	0	0	0	1	0	0	0	0	0	0	0	1
		MID	0	0	0	1	0	2	0	0	0	0	0	3
		PM	0	0	0	1	0	0	0	0	0	0	0	1
1 - 5	Non-PCE (ALL VEHICLES)	AM	0	0	0	1	0	0	0	0	0	0	0	1
		MID	0	0	0	1	0	2	0	0	0	0	0	3
		PM	0	0	0	1	0	0	0	0	0	0	0	1
Adjusted	PCE Volume (ALL VEHICLES)	AM	0	0	0	2	0	0	0	0	0	0	0	2
		MID	0	0	0	2	0	4	0	0	0	0	0	6
		PM	0	0	0	2	0	0	0	0	0	0	0	2

8:00 A.M.
 2:00 P.M.
 4:00 P.M.

NORTH / SOUTH STREET:	GP Gypsum Driveway B
EAST / WEST STREET:	Pier D Street
COMPANY SITE CODE #:	Southland
DATE:	Tuesday, September 19, 2006

	INDIVIDUAL PEAK HOUR DATA (BY TYPE)		NB			SB			EB			WB			TOTAL	ST PK HR	
			L	T	R	L	T	R	L	T	R	L	T	R			
1	AM		0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	PASSENGER VEHICLES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
	PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
2	AM		0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	BOBTAILS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
	PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
3	AM		0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	CHASSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
	PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
4	AM		0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK	
	MID	CONTAINERS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
	PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
5	AM		0	0	0	0	0	2	0	0	0	0	0	0	0	2	8:00 AM
	MID	OTHER TRUCKS	0	0	0	2	0	6	0	0	0	0	0	0	0	8	MULT PKS
	PM		0	0	0	0	0	2	0	0	0	0	0	0	2	2	4:00 PM
2 - 5	AM		0	0	0	0	0	2	0	0	0	0	0	0	0	2	8:00 AM
	MID	TRUCK SUBTOTAL	0	0	0	2	0	6	0	0	0	0	0	0	0	8	MULT PKS
	PM		0	0	0	0	0	2	0	0	0	0	0	0	2	2	4:00 PM
1 - 5	AM		0	0	0	0	0	2	0	0	0	0	0	0	0	2	8:00 AM
	MID	ALL VEHICLES	0	0	0	2	0	6	0	0	0	0	0	0	0	8	MULT PKS
	PM		0	0	0	0	0	2	0	0	0	0	0	0	2	2	4:00 PM

	COMMON PEAK HOUR DATA (BY TYPE)		NB			SB			EB			WB			TOTAL	ST PK HR	
			L	T	R	L	T	R	L	T	R	L	T	R			
1	AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MID	Passenger Vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MID	Bobtails	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MID	Chassis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4 - 5	AM		0	0	0	0	0	2	0	0	0	0	0	0	0	2	
	MID	Container + Other Trucks	0	0	0	1	0	3	0	0	0	0	0	0	0	4	
	PM		0	0	0	0	0	2	0	0	0	0	0	0	0	2	
2 - 5	AM		0	0	0	0	0	2	0	0	0	0	0	0	0	2	
	MID	Non-PCE (ALL TRUCKS)	0	0	0	1	0	3	0	0	0	0	0	0	0	4	
	PM		0	0	0	0	0	2	0	0	0	0	0	0	0	2	
1 - 5	AM		0	0	0	0	0	2	0	0	0	0	0	0	0	2	
	MID	Non-PCE (ALL VEHICLES)	0	0	0	1	0	3	0	0	0	0	0	0	0	4	
	PM		0	0	0	0	0	2	0	0	0	0	0	0	0	2	
Adjusted	AM		0	0	0	0	0	4	0	0	0	0	0	0	0	4	8:00 A.M.
	MID	PCE Volume (ALL VEHICLES)	0	0	0	2	0	6	0	0	0	0	0	0	0	8	2:00 P.M.
	PM		0	0	0	0	0	4	0	0	0	0	0	0	0	4	4:00 P.M.

NORTH / SOUTH STREET:	GP Gypsum Driveway C
EAST / WEST STREET:	Pier D Street
COMPANY SITE CODE #:	Southland
DATE:	Tuesday, September 19, 2006

	INDIVIDUAL PEAK HOUR DATA (BY TYPE)		NB			SB			EB			WB			TOTAL	ST PK HR	
			L	T	R	L	T	R	L	T	R	L	T	R			
			AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM			
1	PASSENGER VEHICLES	0	0	0	1	0	0	0	0	0	0	0	0	0	2	3	8:00 AM
		0	0	0	4	0	0	0	0	0	0	0	0	0	4	8	MULT PKS
		0	0	0	6	0	0	0	0	0	0	0	0	0	0	6	MULT PKS
2	BOBTAILS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
3	CHASSIS	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	8:00 AM
		0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	2:00 PM
		0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	4:00 PM
4	CONTAINERS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
5	OTHER TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	MULT PKS
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
2 - 5	TRUCK SUBTOTAL	0	0	0	0	0	0	0	1	0	0	0	0	0	2	2	8:00 AM
		0	0	0	0	0	0	0	0	0	0	0	0	5	6	6	2:00 PM
		0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	4:00 PM
1 - 5	ALL VEHICLES	0	0	0	1	0	0	0	0	0	0	0	0	4	5	5	8:00 AM
		0	0	0	1	0	0	0	1	0	0	0	0	6	8	8	2:00 PM
		0	0	0	2	0	0	0	0	0	0	0	0	5	7	7	4:00 PM

	COMMON PEAK HOUR DATA (BY TYPE)		NB			SB			EB			WB			TOTAL	ST PK HR	
			L	T	R	L	T	R	L	T	R	L	T	R			
			AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM			
1	Passenger Vehicle	0	0	0	1	0	0	0	0	0	0	0	0	0	2	3	8:00 AM
		0	0	0	1	0	0	0	0	0	0	0	0	0	1	2	2:00 PM
		0	0	0	2	0	0	0	0	0	0	0	0	0	2	2	4:00 PM
2	Bobtails	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
3	Chassis	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	8:00 AM
		0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	2:00 PM
		0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	4:00 PM
4 - 5	Container + Other Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO PK
		0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	8:00 AM
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2:00 PM
2 - 5	Non-PCE (ALL TRUCKS)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	8:00 AM
		0	0	0	0	0	0	0	1	0	0	0	0	0	5	6	2:00 PM
		0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	4:00 PM
1 - 5	Non-PCE (ALL VEHICLES)	0	0	0	1	0	0	0	0	0	0	0	0	4	5	5	8:00 AM
		0	0	0	1	0	0	0	1	0	0	0	0	6	8	8	2:00 PM
		0	0	0	2	0	0	0	0	0	0	0	0	5	7	7	4:00 PM
Adjusted	PCE Volume (ALL VEHICLES)	0	0	0	1	0	0	0	2	0	0	0	0	6	7	7	8:00 A.M.
		0	0	0	1	0	0	0	0	0	0	0	0	11	14	14	2:00 P.M.
		0	0	0	2	0	0	0	0	0	0	0	0	10	12	12	4:00 P.M.

NORTH / SOUTH STREET: Foss-Crowley Marine
 EAST / WEST STREET: Pier D Street
 COMPANY SITE CODE #: Southland
 DATE: Tuesday, September 19, 2006

INDIVIDUAL PEAK HOUR DATA (BY TYPE)	NB		SB		EB		WB		TOTAL	ST PK HR	
	L	T	L	T	L	T	L	T			
	R	R	R	R	R	R	R	R			
1 PASSENGER VEHICLES	AM	0	0	0	0	0	1	0	0	16	8:00 AM
	MID	0	0	4	0	2	0	0	0	4	MULT PKGS
	PM	0	0	18	0	0	0	0	2	20	4:00 PM
2 BOBTAILS	AM	0	0	0	0	0	0	0	0	0	NO PK
	MID	0	0	0	0	0	0	0	0	0	NO PK
	PM	0	0	0	0	0	0	0	0	0	NO PK
3 CHASSIS	AM	0	0	0	0	0	0	0	0	0	NO PK
	MID	0	0	0	0	0	0	0	0	0	NO PK
	PM	0	0	0	0	0	0	0	0	0	NO PK
4 CONTAINERS	AM	0	0	0	0	0	0	0	0	0	NO PK
	MID	0	0	0	0	0	0	0	0	0	NO PK
	PM	0	0	0	0	0	0	0	0	0	NO PK
5 OTHER TRUCKS	AM	0	0	0	0	0	0	0	0	0	NO PK
	MID	0	0	0	0	0	0	0	0	0	NO PK
	PM	0	0	0	0	0	0	0	0	0	NO PK
2 - 5 TRUCK SUBTOTAL	AM	0	0	0	0	0	0	0	0	0	NO PK
	MID	0	0	0	0	0	0	0	0	0	NO PK
	PM	0	0	0	0	0	0	0	0	0	NO PK
1 - 5 ALL VEHICLES	AM	0	0	0	0	1	0	0	0	16	8:00 AM
	MID	0	0	4	0	2	0	0	0	4	MULT PKGS
	PM	0	0	18	0	0	0	0	2	20	4:00 PM

COMMON PEAK HOUR DATA (BY TYPE)	NB		SB		EB		WB		TOTAL	ST PK HR	
	L	T	L	T	L	T	L	T			
	R	R	R	R	R	R	R	R			
1 Passenger Vehicle	AM	0	0	0	0	1	0	0	0	16	8:00 AM
	MID	0	0	2	0	1	0	0	0	2	2:00 P.M.
	PM	0	0	18	0	0	0	0	2	20	4:00 P.M.
2 Bobtails	AM	0	0	0	0	0	0	0	0	0	
	MID	0	0	0	0	0	0	0	0	0	
	PM	0	0	0	0	0	0	0	0	0	
3 Chassis	AM	0	0	0	0	0	0	0	0	0	
	MID	0	0	0	0	0	0	0	0	0	
	PM	0	0	0	0	0	0	0	0	0	
4 - 5 Container + Other Trucks	AM	0	0	0	0	0	0	0	0	0	
	MID	0	0	0	0	0	0	0	0	0	
	PM	0	0	0	0	0	0	0	0	0	
2 - 5 Non-PCE (ALL TRUCKS)	AM	0	0	0	0	0	0	0	0	0	
	MID	0	0	0	0	0	0	0	0	0	
	PM	0	0	0	0	0	0	0	0	0	
1 - 5 Non-PCE (ALL VEHICLES)	AM	0	0	0	0	1	0	0	0	16	8:00 A.M.
	MID	0	0	2	0	1	0	0	0	2	2:00 P.M.
	PM	0	0	18	0	0	0	0	2	20	4:00 P.M.
Adjusted PCE Volume (ALL VEHICLES)	AM	0	0	0	0	1	0	0	0	16	8:00 A.M.
	MID	0	0	2	0	1	0	0	0	2	2:00 P.M.
	PM	0	0	18	0	0	0	0	2	20	4:00 P.M.

Gerald Desmond Bridge Project
I-710 - Ocean Blvd Connector Ramp Calculation
Year 2005 Counts

Ocean EB to I-710 NB Connector Ramp	AM Peak Hour			MD Peak Hour			PM Peak Hour		
	Both Lanes	Right Lane	Left Lane	Both Lanes	Right Lane	Left Lane	Both Lanes	Right Lane	Left Lane
Autos	851	304	547	840	291	549	786	293	493
Bobtails	120	43	77	237	82	155	182	68	114
Containers	288	103	185	306	106	200	188	70	118
Total Trucks (Non-PCE)	408	146	262	542	188	354	370	138	232
Total Vehicles (Non-PCE)	1259	450	809	1382	479	903	1156	431	725
Total Vehicles (PCE)	1667	596	1071	1924	667	1257	1526	569	957

I-710 SB to Ocean WB Connector Ramp	Peak Hour		
	AM	MD	PM
Autos	321	254	484
Bobtails	106	46	50
Containers	285	167	159
Total Trucks (Non-PCE)	391	213	209
Total Vehicles (Non-PCE)	712	467	693
Total Vehicles (PCE)	1103	680	902

Red = Input from Counts

24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: PICO AVENUE WESTBOUND OFF-RAMP FROM OCEAN BOULEVARD
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		WB OFF				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	9	5	2	2	18	
1:00	3	3	2	0	8	
2:00	2	3	2	2	9	
3:00	0	1	1	2	4	
4:00	2	2	2	3	9	
5:00	2	11	10	15	38	
6:00	11	19	31	41	102	
7:00	31	24	28	29	112	
8:00	21	8	16	13	58	
9:00	14	11	3	14	42	
10:00	17	10	17	15	59	
11:00	10	17	21	21	69	
12:00	16	24	21	46	107	
13:00	35	19	20	17	91	
14:00	20	10	13	20	63	
15:00	20	12	13	15	60	
16:00	12	13	8	7	40	
17:00	13	15	16	7	51	
18:00	9	9	3	5	26	
19:00	7	4	10	9	30	
20:00	10	9	11	14	44	
21:00	6	10	15	8	39	
22:00	11	14	9	10	44	
23:00	6	6	5	1	18	
				TOTAL	1141	
AM PEAK HOUR		0630-0730				
VOLUME		127				
PM PEAK HOUR		1215-1315				
VOLUME		126				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	1141
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24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: PICO AVENUE WESTBOUND ON-RAMP
 TO OCEAN BOULEVARD
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		WB ON				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	18	14	20	22	74	
1:00	17	12	12	17	58	
2:00	16	22	41	52	131	
3:00	14	7	4	16	41	
4:00	2	8	3	6	19	
5:00	5	3	1	2	11	
6:00	6	12	13	12	43	
7:00	14	26	15	39	94	
8:00	33	34	48	34	149	
9:00	62	56	42	55	215	
10:00	57	52	58	52	219	
11:00	54	51	45	54	204	
12:00	46	43	26	52	167	
13:00	37	54	40	44	175	
14:00	61	39	44	55	199	
15:00	53	30	51	45	179	
16:00	52	40	66	100	258	
17:00	82	49	26	29	186	
18:00	34	28	37	22	121	
19:00	37	25	33	28	123	
20:00	21	17	15	37	90	
21:00	34	40	14	32	120	
22:00	24	11	12	10	57	
23:00	12	22	25	9	68	
				TOTAL	3001	
AM PEAK HOUR		0200-0300				
VOLUME		222				
PM PEAK HOUR		1630-1730				
VOLUME		297				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	3001
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24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: PICO AVENUE EASTBOUND OFF-RAMPS FROM OCEAN BOULEVARD
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		EB OFF				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	25	12	14	15	66	
1:00	20	15	6	8	49	
2:00	8	10	6	2	26	
3:00	2	0	4	1	7	
4:00	4	2	3	3	12	
5:00	2	8	7	12	29	
6:00	20	17	34	65	136	
7:00	34	44	49	57	184	
8:00	36	54	43	34	167	
9:00	38	40	38	33	149	
10:00	25	44	48	28	145	
11:00	50	46	44	57	197	
12:00	40	42	41	61	184	
13:00	37	48	71	63	219	
14:00	62	40	50	40	192	
15:00	53	42	47	36	178	
16:00	37	38	32	46	153	
17:00	33	37	56	30	156	
18:00	16	36	33	26	111	
19:00	24	29	19	10	82	
20:00	15	16	16	8	55	
21:00	10	14	20	20	64	
22:00	25	12	35	31	103	
23:00	15	9	14	21	59	
				TOTAL	2723	
AM PEAK HOUR		1100-1200				
VOLUME		197				
PM PEAK HOUR		1315-1415				
VOLUME		244				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	2723
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24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: PICO AVENUE EASTBOUND ON-RAMP TO OCEAN BOULEVARD
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		EB ON RAMP				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	3	2	1	1	7	
1:00	0	2	0	0	2	
2:00	1	0	7	4	12	
3:00	2	1	0	0	3	
4:00	2	0	1	0	3	
5:00	2	1	1	1	5	
6:00	1	2	2	2	7	
7:00	4	2	5	3	14	
8:00	5	4	5	3	17	
9:00	9	2	6	6	23	
10:00	14	10	11	12	47	
11:00	15	14	27	34	90	
12:00	28	16	10	12	66	
13:00	10	10	6	14	40	
14:00	15	11	22	22	70	
15:00	16	12	26	13	67	
16:00	37	19	31	41	128	
17:00	27	12	16	10	65	
18:00	4	11	5	4	24	
19:00	5	5	2	0	12	
20:00	3	4	10	3	20	
21:00	4	7	3	7	21	
22:00	5	1	2	2	10	
23:00	3	0	2	0	5	
				TOTAL	758	
AM PEAK HOUR		1100-1200				
VOLUME		90				
PM PEAK HOUR		1600-1700				
VOLUME		128				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	758
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24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: GATE 5 / PIER T
 WESTBOOUND OFF-RAMP
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		WB OFF				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	11	9	10	7	37	
1:00	10	14	11	11	46	
2:00	7	11	8	2	28	
3:00	3	3	2	0	8	
4:00	0	2	6	2	10	
5:00	7	7	10	24	48	
6:00	18	18	40	53	129	
7:00	51	42	63	50	206	
8:00	38	32	41	36	147	
9:00	33	42	58	50	183	
10:00	47	47	43	44	181	
11:00	47	42	47	41	177	
12:00	35	46	46	71	198	
13:00	45	49	38	30	162	
14:00	27	34	36	30	127	
15:00	33	33	24	17	107	
16:00	17	20	19	25	81	
17:00	19	27	25	22	93	
18:00	19	18	29	20	86	
19:00	21	24	27	25	97	
20:00	18	16	17	21	72	
21:00	18	15	8	23	64	
22:00	15	10	20	18	63	
23:00	13	12	9	5	39	
				TOTAL	2389	
AM PEAK HOUR		0645-0745				
VOLUME		209				
PM PEAK HOUR		1230-1330				
VOLUME		211				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	2389
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24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: SOUTHBOUND I-710 CONNECTOR RAMP TO
 WESTBOUND OCEAN BOULEVARD (BOTH LANES)
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		WB				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	56	53	43	50	202	
1:00	50	46	33	32	161	
2:00	23	28	17	10	78	
3:00	8	19	16	18	61	
4:00	23	23	44	43	133	
5:00	56	106	154	175	491	
6:00	139	189	203	233	764	
7:00	221	216	226	199	862	
8:00	192	157	197	166	712	
9:00	157	145	139	164	605	
10:00	168	180	158	170	676	
11:00	172	162	185	140	659	
12:00	157	161	188	175	681	
13:00	172	170	144	107	593	
14:00	98	114	108	147	467	
15:00	151	174	164	175	664	
16:00	158	168	201	166	693	
17:00	175	239	192	194	800	
18:00	161	172	161	189	683	
19:00	181	180	152	136	649	
20:00	123	121	116	132	492	
21:00	112	136	128	136	512	
22:00	102	102	112	111	427	
23:00	75	79	61	14	229	
				TOTAL	12294	
AM PEAK HOUR		0645-0745				
VOLUME		896				
PM PEAK HOUR		1700-1800				
VOLUME		800				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	12294
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WILTEC

Phone: (626) 564-1944

Fax: (626) 564-0969

24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: NB I -710 CONNECTOR RAMP FROM
 EASTBOUND OCEAN BOULEVARD (BOTH LANES)
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		TOTAL				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	170	164	186	160	680	
1:00	76	100	91	90	357	
2:00	122	76	62	102	362	
3:00	59	30	12	15	116	
4:00	14	18	30	36	98	
5:00	52	58	113	119	342	
6:00	140	147	162	180	629	
7:00	202	212	300	328	1042	
8:00	281	288	326	364	1259	
9:00	356	346	294	282	1278	
10:00	306	248	318	307	1179	
11:00	266	334	305	316	1221	
12:00	237	202	174	182	795	
13:00	200	216	336	404	1156	
14:00	348	348	364	322	1382	
15:00	287	233	267	312	1099	
16:00	281	304	277	294	1156	
17:00	212	180	178	188	758	
18:00	180	214	250	275	919	
19:00	253	279	280	244	1056	
20:00	276	276	210	183	945	
21:00	214	223	192	210	839	
22:00	213	150	108	111	582	
23:00	93	106	112	96	407	
				TOTAL	19657	
AM PEAK HOUR		0830-0930				
VOLUME		1392				
PM PEAK HOUR		1345-1445				
VOLUME		1464				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	19657
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WILTEC

Phone: (626) 564-1944

Fax: (626) 564-0969

24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: NB I -710 CONNECTOR RAMP FROM
 EASTBOUND OCEAN BOULEVARD (RIGHT LANE)
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		EB				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	45	40	55	30	170	
1:00	20	26	27	25	98	
2:00	35	19	21	43	118	
3:00	20	13	6	3	42	
4:00	4	7	12	12	35	
5:00	21	22	44	49	136	
6:00	63	68	84	73	288	
7:00	102	106	125	136	469	
8:00	112	106	121	111	450	
9:00	104	107	95	88	394	
10:00	98	87	92	84	361	
11:00	80	101	106	97	384	
12:00	81	78	62	61	282	
13:00	59	63	118	140	380	
14:00	107	106	133	133	479	
15:00	86	98	92	119	395	
16:00	106	96	100	129	431	
17:00	92	89	81	88	350	
18:00	79	109	88	98	374	
19:00	102	85	94	84	365	
20:00	100	76	69	68	313	
21:00	62	84	62	71	279	
22:00	70	59	44	46	219	
23:00	29	39	31	30	129	
				TOTAL	6941	
AM PEAK HOUR		0715-0815				
VOLUME		479				
PM PEAK HOUR		1345-1445				
VOLUME		486				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	6941
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WILTEC

Phone: (626) 564-1944

Fax: (626) 564-0969

24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: HARBOR SCENIC DRIVE ON-RAMP TO
 EASTBOUND OCEAN BOULEVARD
 DATE: WEDNESDAY SEPTEMBER 7TH, 2005

DIRECTION:		ON RAMP				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	2	3	1	0	6	
1:00	0	0	2	0	2	
2:00	0	1	1	2	4	
3:00	2	3	2	0	7	
4:00	0	0	0	0	0	
5:00	1	2	2	0	5	
6:00	2	0	1	0	3	
7:00	1	2	0	4	7	
8:00	3	3	1	6	13	
9:00	2	6	2	1	11	
10:00	1	2	1	3	7	
11:00	5	3	3	9	20	
12:00	5	8	3	4	20	
13:00	1	2	3	1	7	
14:00	3	7	3	3	16	
15:00	2	6	6	5	19	
16:00	4	2	4	9	19	
17:00	8	9	1	1	19	
18:00	4	3	1	4	12	
19:00	1	1	2	3	7	
20:00	2	3	2	3	10	
21:00	0	0	3	2	5	
22:00	0	1	2	0	3	
23:00	3	3	0	0	6	
				TOTAL	228	
AM PEAK HOUR		0245-0345				
VOLUME		20				
PM PEAK HOUR		1630-1730				
VOLUME		30				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	228
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WILTEC

Phone: (626) 564-1944

Fax: (626) 564-0969

24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: OCEAN BOULEVARD EAST OF
 HARBOR SCENIC DRIVE ON-RAMP
 DATE: WEDNESDAY SEPTEMBER 9TH, 2005

DIRECTION:		EB				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	22	24	28	16	90	
1:00	5	13	15	13	46	
2:00	20	16	22	42	100	
3:00	27	20	13	14	74	
4:00	9	11	16	14	50	
5:00	27	24	32	61	144	
6:00	60	87	94	120	361	
7:00	157	184	241	260	842	
8:00	254	249	233	184	920	
9:00	164	157	152	116	589	
10:00	144	142	120	117	523	
11:00	129	146	160	198	633	
12:00	204	158	122	154	638	
13:00	142	148	145	162	597	
14:00	139	186	178	193	696	
15:00	206	221	206	276	909	
16:00	296	324	283	382	1285	
17:00	403	364	358	326	1451	
18:00	264	248	206	188	906	
19:00	165	168	138	128	599	
20:00	124	104	104	91	423	
21:00	80	86	80	111	357	
22:00	78	86	52	62	278	
23:00	56	58	29	29	172	
				TOTAL	12683	
AM PEAK HOUR		0730-0830				
VOLUME		1004				
PM PEAK HOUR		1645-1745				
VOLUME		1507				

DIRECTION:		WB				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	26	22	18	20	86	
1:00	14	9	10	18	51	
2:00	14	11	19	27	71	
3:00	26	12	10	12	60	
4:00	10	8	14	21	53	
5:00	22	42	61	82	207	
6:00	96	145	218	262	721	
7:00	238	302	289	292	1121	
8:00	232	202	204	183	821	
9:00	146	158	136	132	572	
10:00	114	120	140	126	500	
11:00	84	110	133	156	483	
12:00	127	161	158	206	652	
13:00	160	166	148	128	602	
14:00	138	152	124	139	553	
15:00	156	164	188	169	677	
16:00	204	205	212	249	870	
17:00	308	245	214	186	953	
18:00	191	184	120	144	639	
19:00	114	119	101	105	439	
20:00	80	108	100	107	395	
21:00	92	104	97	118	411	
22:00	90	85	96	88	359	
23:00	39	36	42	28	145	
				TOTAL	11441	
AM PEAK HOUR		0700-0800				
VOLUME		1121				
PM PEAK HOUR		1645-1745				
VOLUME		1016				

TOTAL BI-DIRECTIONAL VOLUME	24124
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WILTEC

Phone: (626) 564-1944

Fax: (626) 564-0969

24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: OCEAN BOULEVARD EAST OF THE PICO AVENUE RAMPS
 WEST OF HARBOR SCENIC DRIVE ON-RAMP (RIGHT LANE)
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		WB RIGHT LANE				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	28	9	15	22	74	
1:00	9	12	19	9	49	
2:00	5	13	19	21	58	
3:00	15	11	11	17	54	
4:00	8	3	12	21	44	
5:00	21	26	39	47	133	
6:00	43	75	104	106	328	
7:00	92	106	116	110	424	
8:00	90	80	85	76	331	
9:00	58	60	67	65	250	
10:00	54	52	50	60	216	
11:00	57	69	58	78	262	
12:00	65	84	68	71	288	
13:00	69	77	78	66	290	
14:00	68	79	54	84	285	
15:00	76	76	83	85	320	
16:00	102	110	98	134	444	
17:00	146	147	124	107	524	
18:00	82	77	87	66	312	
19:00	69	82	57	74	282	
20:00	47	54	69	53	223	
21:00	62	78	61	56	257	
22:00	60	49	58	57	224	
23:00	27	30	23	18	98	
				TOTAL	5770	
AM PEAK HOUR		0700-0800				
VOLUME		424				
PM PEAK HOUR		1645-1745				
VOLUME		551				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	5770
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24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER MOHADDES ASSOCIATES INC.
 PROJECT: LONG BEACH
 LOCATION: OCEAN BOULEVARD EAST OF THE PICO AVENUE RAMPS
 WEST OF HARBOR SCENIC DRIVE (RIGHT LANE)
 DATE: THURSDAY AUGUST 25TH, 2005

DIRECTION:		EB				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	1	1	0	0	2	
1:00	2	1	0	1	4	
2:00	1	1	2	1	5	
3:00	1	1	0	1	3	
4:00	2	3	4	2	11	
5:00	1	3	5	7	16	
6:00	7	10	8	17	42	
7:00	18	24	33	44	119	
8:00	45	39	46	34	164	
9:00	28	9	22	7	66	
10:00	13	10	12	8	43	
11:00	16	17	17	26	76	
12:00	27	22	12	13	74	
13:00	14	15	11	15	55	
14:00	10	11	15	14	50	
15:00	18	21	20	24	83	
16:00	39	28	50	44	161	
17:00	50	47	42	44	183	
18:00	24	19	12	15	70	
19:00	11	8	6	5	30	
20:00	8	4	7	5	24	
21:00	3	9	3	4	19	
22:00	6	3	5	5	19	
23:00	1	1	4	2	8	
				TOTAL	1327	
AM PEAK HOUR		0745-0845				
VOLUME		174				
PM PEAK HOUR		1630-1730				
VOLUME		191				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	1327
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24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: PICO AVENUE ON RAMP TO
 HARBOR SCENIC WAY (NORTHBOUND)
 DATE: WEDNESDAY OCTOBER 12TH, 2005

DIRECTION:		ON RAMP				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	25	32	27	23	107	
1:00	23	16	7	24	70	
2:00	15	20	31	34	100	
3:00	15	5	4	9	33	
4:00	9	5	5	7	26	
5:00	4	4	5	9	22	
6:00	4	9	14	24	51	
7:00	17	19	18	16	70	
8:00	21	25	37	33	116	
9:00	26	45	36	43	150	
10:00	41	39	40	58	178	
11:00	46	45	49	51	191	
12:00	38	26	21	33	118	
13:00	45	46	40	38	169	
14:00	28	48	59	45	180	
15:00	37	42	43	50	172	
16:00	48	37	41	42	168	
17:00	39	15	10	13	77	
18:00	20	20	31	29	100	
19:00	37	26	26	29	118	
20:00	25	16	20	31	92	
21:00	28	35	28	25	116	
22:00	19	16	16	13	64	
23:00	13	27	27	22	89	
				TOTAL	2577	
AM PEAK HOUR		0000-0100				
VOLUME		198				
PM PEAK HOUR		1415-1515				
VOLUME		189				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	2577
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24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: HARBOR SCENIC WAY ON RAMP TO PICO AVENUE (SOUTHBOUND)
 DATE: WEDNESDAY OCTOBER 12TH, 2005

DIRECTION:		ON RAMP				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	22	24	24	15	85	
1:00	21	14	9	16	60	
2:00	18	13	6	8	45	
3:00	7	4	6	11	28	
4:00	11	4	6	14	35	
5:00	9	14	35	31	89	
6:00	31	50	35	52	168	
7:00	32	56	49	48	185	
8:00	46	34	44	46	170	
9:00	41	42	42	45	170	
10:00	40	45	47	38	170	
11:00	44	52	33	26	155	
12:00	27	34	66	68	195	
13:00	37	47	46	36	166	
14:00	49	50	34	32	165	
15:00	40	27	26	22	115	
16:00	21	29	26	21	97	
17:00	28	26	24	22	100	
18:00	33	29	40	26	128	
19:00	25	28	24	25	102	
20:00	26	19	24	23	92	
21:00	20	24	20	15	79	
22:00	16	25	21	27	89	
23:00	17	19	15	18	69	
				TOTAL	2757	
AM PEAK HOUR		0715-0815				
VOLUME		199				
PM PEAK HOUR		1230-1330				
VOLUME		218				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	2757
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24-HOUR ADT COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES INC.
 PROJECT: GERALD DESMOND BRIDGE PROJECT
 LOCATION: PICO AVENUE ON RAMP TO
 HARBOR SCENIC WAY (SOUTHBOUND)
 DATE: WEDNESDAY OCTOBER 12TH, 2005

DIRECTION:		ON RAMP				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	6	8	6	8	28	
1:00	2	4	2	3	11	
2:00	10	8	0	3	21	
3:00	1	0	0	1	2	
4:00	0	0	0	0	0	
5:00	1	0	2	8	11	
6:00	4	11	9	20	44	
7:00	13	17	26	27	83	
8:00	18	13	20	17	68	
9:00	24	23	15	18	80	
10:00	14	19	15	22	70	
11:00	10	13	21	21	65	
12:00	15	12	28	23	78	
13:00	18	20	19	33	90	
14:00	28	24	18	16	86	
15:00	18	18	19	17	72	
16:00	24	27	17	15	83	
17:00	15	18	20	25	78	
18:00	16	12	12	13	53	
19:00	8	16	9	19	52	
20:00	17	9	4	9	39	
21:00	5	10	12	5	32	
22:00	13	9	6	14	42	
23:00	12	11	12	14	49	
				TOTAL	1237	
AM PEAK HOUR		0715-0815				
VOLUME		88				
PM PEAK HOUR		1330-1430				
VOLUME		104				

DIRECTION:		O				HOUR TOTALS
TIME	00-15	15-30	30-45	45-60		
0:00	0	0	0	0	0	
1:00	0	0	0	0	0	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	0	0	0	0	0	
5:00	0	0	0	0	0	
6:00	0	0	0	0	0	
7:00	0	0	0	0	0	
8:00	0	0	0	0	0	
9:00	0	0	0	0	0	
10:00	0	0	0	0	0	
11:00	0	0	0	0	0	
12:00	0	0	0	0	0	
13:00	0	0	0	0	0	
14:00	0	0	0	0	0	
15:00	0	0	0	0	0	
16:00	0	0	0	0	0	
17:00	0	0	0	0	0	
18:00	0	0	0	0	0	
19:00	0	0	0	0	0	
20:00	0	0	0	0	0	
21:00	0	0	0	0	0	
22:00	0	0	0	0	0	
23:00	0	0	0	0	0	
				TOTAL	0	
AM PEAK HOUR		0000-0100				
VOLUME		0				
PM PEAK HOUR		1200-1300				
VOLUME		0				

TOTAL BI-DIRECTIONAL VOLUME	1237
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INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 17TH, 2005
 PERIOD: 6:00 AM TO 9:00 AM
 INTERSECTION: N/S TERMINAL ISLAND FREEWAY
 E/W OCEAN BOULEVARD

15-MIN COUNTS	1 SBRT						2 SBTH						3 SBLT						4 WBRT						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	22	3	0	1	2	28	0	1	0	0	0	1	4	0	0	0	0	1	5	5	0	0	2	0	7
615-630	59	7	0	5	3	74	0	0	0	0	0	0	8	0	0	0	0	8	4	0	1	0	1	6	
630-645	57	12	2	7	2	80	0	1	0	0	0	1	9	0	0	4	0	13	8	0	0	0	0	8	
645-700	71	14	0	6	4	95	0	3	0	0	0	3	12	2	0	1	0	15	9	0	0	0	0	9	
700-715	77	15	2	13	2	109	0	0	0	0	0	0	20	0	0	7	0	27	7	0	0	0	2	9	
715-730	58	23	0	8	3	92	0	5	0	0	0	5	10	0	0	4	1	15	8	0	0	0	1	9	
730-745	45	21	2	16	5	89	2	6	0	0	0	8	16	1	0	7	1	25	6	1	0	1	0	8	
745-800	28	26	3	17	6	80	0	8	0	0	0	8	12	2	1	3	2	20	11	0	0	3	0	14	
800-815	36	24	2	35	6	103	0	5	0	0	0	5	9	1	0	4	0	14	4	1	0	0	0	5	
815-830	27	18	1	15	3	64	0	3	0	0	0	3	7	2	1	17	3	30	4	2	0	1	1	8	
830-845	18	16	2	15	4	55	0	7	0	0	0	7	3	1	0	2	1	7	9	3	0	1	0	13	
845-900	14	20	1	37	11	83	0	2	0	0	0	2	4	2	1	4	1	12	2	4	0	3	0	9	
HOURL TOTALS																									
600-700	209	36	2	19	11	277	0	5	0	0	0	5	33	2	0	5	1	41	26	0	1	2	1	30	
615-715	264	48	4	31	11	358	0	4	0	0	0	4	49	2	0	12	0	63	28	0	1	0	3	32	
630-730	263	64	4	34	11	376	0	9	0	0	0	9	51	2	0	16	1	70	32	0	0	0	3	35	
645-745	251	73	4	43	14	385	2	14	0	0	0	16	58	3	0	19	2	82	30	1	0	1	3	35	
700-800	208	85	7	54	16	370	2	19	0	0	0	21	58	3	1	21	4	87	32	1	0	4	3	40	
715-815	167	94	7	76	20	364	2	24	0	0	0	26	47	4	1	18	4	74	29	2	0	4	1	36	
730-830	136	89	8	83	20	336	2	22	0	0	0	24	44	6	2	31	6	89	25	4	0	5	1	35	
745-845	109	84	8	82	19	302	0	23	0	0	0	23	31	6	2	26	6	71	28	6	0	5	1	40	
800-900	95	78	5	102	24	305	0	17	0	0	0	17	23	6	2	27	5	63	19	10	0	5	1	35	
5 WBTH																									
6 WBTL																									
7 NBRT																									
8 NBTH																									
15-MIN COUNTS	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	244	7	0	20	8	279	2	2	0	0	0	4	0	1	0	0	0	1	0	0	0	0	0	0	
615-630	254	8	0	16	7	285	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
630-645	284	9	0	18	14	325	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	
645-700	325	13	1	19	13	371	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	
700-715	357	14	1	22	13	407	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
715-730	361	16	1	28	5	411	1	5	0	0	0	6	0	0	0	0	1	1	0	0	0	0	0	0	
730-745	324	37	1	29	13	404	2	5	0	0	0	7	3	0	0	0	0	3	0	0	0	0	0	0	
745-800	337	32	2	42	15	428	1	5	0	0	0	6	0	2	0	0	0	2	0	0	0	0	0	0	
800-815	304	23	2	37	23	389	0	3	0	0	0	3	1	3	0	7	0	11	0	2	0	0	1	3	
815-830	277	36	3	51	21	388	2	8	0	0	0	10	2	1	0	6	0	9	0	1	0	1	0	2	
830-845	230	43	5	52	19	349	1	2	0	0	0	3	1	2	0	17	0	20	0	0	0	4	0	4	
845-900	186	43	3	46	13	291	5	4	0	0	0	9	1	6	0	14	0	21	0	1	0	2	0	3	
HOURL TOTALS																									
600-700	1107	37	1	73	42	1260	7	3	0	0	0	10	1	1	0	0	0	2	0	0	0	0	0	0	
615-715	1220	44	2	75	47	1388	6	1	0	0	0	7	1	0	0	0	0	1	0	0	0	0	0	0	
630-730	1327	52	3	87	45	1514	7	5	0	0	0	12	1	0	0	0	1	2	0	0	0	0	0	0	
645-745	1367	80	4	98	44	1593	8	10	0	0	0	18	3	0	0	0	1	4	0	0	0	0	0	0	
700-800	1379	99	5	121	46	1650	5	15	0	0	0	20	3	2	0	0	1	6	0	0	0	0	0	0	
715-815	1326	108	6	136	56	1632	4	18	0	0	0	22	4	5	0	7	1	17	0	2	0	0	1	3	
730-830	1242	128	8	159	72	1609	5	21	0	0	0	26	6	6	0	13	0	25	0	3	0	1	1	5	
745-845	1148	134	12	182	78	1554	4	18	0	0	0	22	4	8	0	30	0	42	0	3	0	5	1	9	
800-900	997	145	13	186	76	1417	8	17	0	0	0	25	5	12	0	44	0	61	0	4	0	7	1	12	
9 NBLT																									
10 EBRT																									
11 EBTH																									
12 EBLT																									
15-MIN COUNTS	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	1	0	0	0	0	1	1	0	0	0	0	1	259	1	0	3	10	273	10	0	0	0	2	12	
615-630	0	0	0	0	0	0	0	0	0	0	0	0	219	0	0	0	3	222	13	0	0	0	1	14	
630-645	2	0	0	0	0	2	1	1	0	0	0	2	295	2	0	1	9	307	20	0	0	1	2	23	
645-700	0	0	0	0	0	0	2	0	0	0	0	2	324	1	0	1	7	333	28	0	2	0	4	34	
700-715	0	0	0	0	0	0	0	1	0	0	0	1	356	2	0	2	11	371	32	1	0	0	1	34	
715-730	0	0	0	0	0	0	0	4	0	0	0	4	339	4	0	21	16	380	39	1	1	3	2	46	
730-745	0	0	0	0	0	0	0	2	0	0	0	2	390	6	0	40	14	450	36	4	0	7	0	47	
745-800	0	2	0	0	0	2	1	6	0	0	0	7	463	11	2	62	9	547	22	6	1	9	6	44	
800-815	0	6	0	0	0	6	1	3	0	0	1	5	420	6	3	71	13	513	21	8	0	9	1	39	
815-830	0	2	0	1	0	3	0	8	0	0	0	8	340	6	5	45	12	408	24	7	0	12	5	48	
830-845	1	5	0	1	0	7	1	6	0	0	0	7	311	21	0	74	17	423	21	7	2	7	4	41	
845-900	0	4	0	0	0	4	0	10	0	0	0	10	263	19	7	82	17	388	15	7	0	32	2	56	
HOURL TOTALS																									
600-700	3	0	0	0	0	3	4	1	0	0	0	5	1097	4	0	5	29	1135	71	0	2	1	9	83	
615-715	2	0	0	0	0	2	3	2	0	0	0	5	1194	5	0	4	30	1233	93	1	2	1	8	105	
630-730	2	0	0	0	0	2	3	6	0	0	0	9	1314	9	0	25	43	1391	119	2	3	4	9	137	
645-745	0	0	0	0	0	0	2	7	0	0	0	9	1409	13	0	64	48	1534	135	6	3	10	7	161	
700-800	0	2	0	0	0	2	1	13	0	0	0	14	1548	23	2	125	50	1748	129	12	2	19	9	171	
715-815	0	8	0	0	0	8	2	15	0	0	1	18	1612	27	5	194	52	1890	118	19	2	28	9	176	
730-830	0	10	0	1	0	11	2	19	0	0	1	22	1613	29	10	218	48	1918	103	25	1	37	12	178	
745-845	1	15	0	2	0	18	3	23	0	0	1	27	1534	44	10	252	51	1891	88	28	3	37	16	172	
800-900	1	17	0	2	0	20	2	27	0	0	1	30	1334	52	15	272	59	1732	81	29	2	60	12	184	

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: WEDNESDAY, AUGUST 17TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S PIER S AVENUE
E/W OCEAN BOULEVARD

Table with 24 columns (15-MIN COUNTS, AUTOS, BOB-T, CHASS, CONT, OTHR, TOTAL) and 24 rows. It is organized into 8 main sections (1-8) representing different intersection directions. Each section contains 15-min counts and hour totals for various time intervals from 6:00-7:00 AM to 8:00-9:00 AM.

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCAITES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: WEDNESDAY, AUGUST 17TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S TERMINAL ISLAND FREEWAY (SB OFF-RAMP)
E/W NEW DOCK STREET

15-MIN COUNTS	1						2						3						4					
	SBRT						SBTH						SBLT						WBRT					
AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	
615-630	12	0	0	1	13	3	0	0	0	1	4	1	0	0	0	0	1	0	0	0	0	0	0	
630-645	27	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
645-700	33	2	3	7	45	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	
700-715	46	7	1	5	59	2	0	0	0	0	2	3	0	0	0	1	4	0	0	0	0	0	0	
715-730	20	4	1	2	27	1	0	0	0	0	1	3	0	0	0	0	3	0	0	0	0	0	0	
730-745	30	7	0	3	40	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	
745-800	11	15	2	13	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
800-815	3	8	8	9	28	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	
815-830	10	7	6	8	31	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	
830-845	9	6	5	6	26	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	
845-900	4	8	8	5	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HOUR TOTALS																								
600-700	73	2	3	8	86	3	0	0	0	1	4	6	0	0	0	0	6	0	0	0	0	0	0	
615-715	118	9	4	13	144	5	0	0	0	1	6	8	0	0	0	1	9	0	0	0	0	0	0	
630-730	126	13	5	14	158	3	0	0	0	0	3	10	0	0	0	1	11	0	0	0	0	0	0	
645-745	129	20	5	17	171	3	0	0	0	0	3	13	0	0	0	1	14	0	0	0	0	0	0	
700-800	107	33	4	23	147	3	0	0	0	0	3	9	0	0	0	1	10	0	0	0	0	0	0	
715-815	64	34	11	27	116	1	0	0	0	0	1	7	0	0	0	0	7	0	0	0	0	0	0	
730-830	54	37	16	33	120	0	0	0	0	0	0	6	0	0	0	0	6	0	0	0	0	0	0	
745-845	33	36	21	36	90	0	0	0	0	0	0	5	0	0	0	0	5	0	0	0	0	0	0	
800-900	26	29	27	28	110	0	0	0	0	0	0	5	0	0	0	0	5	0	0	0	0	0	0	
5																								
WBTH						WBTL						NBRT						NBTH						
AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
615-630	3	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	
630-645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
645-700	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	
700-715	3	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	
715-730	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
730-745	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
745-800	4	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
800-815	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
815-830	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
830-845	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
845-900	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HOUR TOTALS																								
600-700	4	0	0	0	4	0	0	0	0	0	0	1	0	0	0	0	3	4	0	0	0	0	0	
615-715	7	0	0	0	7	0	0	0	0	0	0	2	0	0	0	0	3	5	0	0	0	0	0	
630-730	5	0	0	0	5	0	0	0	0	0	0	1	0	0	0	0	2	3	0	0	0	0	0	
645-745	9	0	0	0	9	0	0	0	0	0	0	1	0	0	0	0	2	3	0	0	0	0	0	
700-800	12	0	0	0	12	0	0	0	0	0	0	1	1	0	0	0	2	2	0	0	0	0	0	
715-815	12	0	0	0	12	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
730-830	12	0	0	0	12	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
745-845	10	0	0	0	10	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
800-900	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9																								
NBLT						EBRT						EBTH						EBLT						
AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	6	13	0	0	0	0	0	
615-630	0	0	0	0	0	0	0	0	0	1	1	8	0	0	0	0	2	10	0	0	0	0	0	
630-645	1	0	0	0	1	0	0	0	0	0	0	19	0	1	0	0	7	27	0	0	0	0	0	
645-700	1	4	0	0	5	0	2	0	0	1	3	11	0	0	0	0	7	18	0	0	0	0	0	
700-715	1	0	0	0	1	0	3	0	0	0	3	6	1	0	0	0	9	16	0	0	0	0	0	
715-730	0	0	0	0	0	1	0	0	0	0	1	4	1	0	0	0	10	15	0	0	0	0	0	
730-745	0	0	0	0	0	0	0	0	0	0	0	12	2	1	3	9	27	0	0	0	0	0	0	
745-800	0	0	0	0	0	0	1	0	0	0	1	8	2	1	2	3	16	0	0	0	0	0	0	
800-815	1	0	0	0	1	1	0	0	0	0	1	5	4	0	2	8	19	0	0	0	0	0	0	
815-830	0	1	0	0	1	2	0	1	0	0	1	2	5	1	0	5	3	14	0	0	0	0	0	
830-845	0	1	0	0	1	0	0	0	0	0	0	8	2	1	5	9	25	0	0	0	0	0	0	
845-900	1	1	0	1	3	0	1	0	2	0	3	7	6	2	11	13	39	0	0	0	0	0	0	
HOUR TOTALS																								
600-700	2	4	0	0	6	0	2	0	0	2	4	45	0	1	0	22	68	0	0	0	0	0	0	
615-715	3	4	0	0	7	0	5	0	0	2	7	44	1	1	0	25	71	0	0	0	0	0	0	
630-730	3	4	0	0	7	1	5	0	0	1	7	40	2	1	0	33	76	0	0	0	0	0	0	
645-745	2	4	0	0	6	1	5	0	0	1	7	33	4	1	3	35	76	0	0	0	0	0	0	
700-800	1	0	0	0	1	1	4	0	0	0	5	30	6	2	5	31	74	0	0	0	0	0	0	
715-815	1	0	0	0	1	2	1	0	0	0	3	29	9	2	7	30	77	0	0	0	0	0	0	
730-830	1	1	0	0	2	1	2	0	0	1	4	30	9	2	12	23	76	0	0	0	0	0	0	
745-845	1	2	0	0	3	1	2	0	0	1	4	26	9	2	14	23	74	0	0	0	0	0	0	
800-900	2	3	0	1	6	1	2	0	2	1	6	25	13	3	23	33	97	0	0	0	0	0	0	

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCAITES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 17TH, 2005
 PERIOD: 6:00 AM TO 9:00 AM
 INTERSECTION: N/S TERMINAL ISLAND FREEWAY (NB ON-RAMP)
 E/W NEW DOCK STREET

	1						2						3						4						
	SBRT						SBTH						SBLT						WBRT						
15-MIN COUNTS	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
615-630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
630-645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
645-700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
700-715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
715-730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	3	
730-745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
745-800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	
800-815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
815-830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
830-845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
845-900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
HOURL TOTALS																									
600-700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	
615-715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	
630-730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	10	
645-745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	4	10	
700-800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	4	12	
715-815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	4	13	
730-830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	6	
745-845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	6	
800-900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	
5																									
WBTH						WBTL						NBRT						NBTH							
15-MIN COUNTS	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
615-630	2	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
630-645	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
645-700	2	0	0	0	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
700-715	3	0	0	0	9	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
715-730	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
730-745	4	0	0	0	8	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
745-800	3	0	0	0	6	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
800-815	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
815-830	2	0	0	0	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
830-845	1	0	0	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
845-900	2	0	0	0	9	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HOURL TOTALS																									
600-700	4	0	0	0	8	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
615-715	7	0	0	0	17	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
630-730	5	0	0	0	25	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
645-745	9	0	0	0	31	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
700-800	10	0	0	0	32	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
715-815	11	0	0	0	23	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
730-830	13	0	0	0	18	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
745-845	10	0	0	0	15	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
800-900	9	0	0	0	18	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9																									
NBLT						EBRT						EBTH						EBLT							
15-MIN COUNTS	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	6	14	3	0	0	0	2	5
615-630	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	1	7	3	0	0	0	3	6
630-645	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	4	12	9	0	0	0	1	10
645-700	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	7	17	5	0	1	0	2	8
700-715	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	8	17	3	0	0	0	2	5
715-730	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	12	16	3	0	0	0	1	4
730-745	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	5	8	9	4	0	3	2	18
745-800	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	2	8	2	3	1	2	0	8
800-815	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	6	11	4	2	0	2	2	10
815-830	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	5	7	4	1	0	5	1	11
830-845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	7	3	1	5	2	18
845-900	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	8	10	5	4	1	12	4	26
HOURL TOTALS																									
600-700	0	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	18	50	20	0	1	0	8	29
615-715	0	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	20	53	20	0	1	0	8	29
630-730	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	31	62	20	0	1	0	6	27
645-745	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	32	58	20	4	1	3	7	35
700-800	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	27	49	17	7	1	5	5	35
715-815	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	25	43	18	9	1	7	5	40
730-830	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	18	34	19	10	1	12	5	47
745-845	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	18	31	17	9	2	14	5	47
800-900	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	24	33	20	10	2	24	9	65

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 18TH, 2005
 PERIOD: 6:00 AM TO 9:00 AM
 INTERSECTION: N/S PIER S AVENUE
 E/W NEW DOCK STREET

15-MIN COUNTS	1						2						3						4						
	SBRT			SBTH			SBLT			WBRT															
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	
615-630	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1
630-645	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	0	1	0	0	0	1
645-700	1	0	0	0	0	1	2	0	0	0	0	2	2	0	0	0	0	0	2	2	1	1	2	0	6
700-715	0	1	0	1	0	2	2	0	0	1	0	3	0	0	0	0	0	0	3	0	0	0	0	0	3
715-730	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	1	1
730-745	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	1	0	0	0	0	1
745-800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
800-815	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
815-830	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	3
830-845	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	2
845-900	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1
HOURLY TOTALS																									
600-700	2	0	0	0	0	2	2	0	0	2	0	4	4	0	0	0	0	0	4	3	2	1	2	0	8
615-715	1	1	0	1	0	3	4	0	0	3	0	7	3	0	0	0	0	0	3	6	2	1	2	0	11
630-730	1	1	0	1	0	3	4	0	0	3	1	8	3	0	0	0	0	1	4	5	2	1	2	1	11
645-745	1	1	0	1	0	3	4	0	0	2	1	7	3	0	0	0	0	2	5	6	1	1	2	1	11
700-800	0	1	0	1	0	2	2	0	0	2	1	5	1	0	0	0	0	2	3	5	0	0	0	1	6
715-815	0	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	2	4	2	0	0	0	1	3
730-830	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	1	3	5	0	0	0	0	5
745-845	0	0	0	0	0	0	4	0	0	0	0	4	1	0	0	0	0	1	6	0	0	0	0	0	6
800-900	0	0	0	0	0	0	4	0	0	0	0	4	2	0	0	0	0	0	2	6	0	0	0	0	6
HOURLY TOTALS																									
600-700	68	4	2	6	3	83	10	1	0	0	14	25	22	1	0	0	0	17	40	5	7	0	3	0	15
615-715	107	8	3	9	4	131	14	0	0	1	25	40	26	4	0	0	0	24	54	5	6	0	5	0	16
630-730	117	17	4	9	4	151	15	0	0	2	34	51	24	4	0	0	0	27	55	4	5	0	5	0	14
645-745	119	23	4	13	4	163	16	0	0	2	38	56	23	3	0	1	32	59	3	3	3	2	5	0	11
700-800	101	33	4	20	4	162	19	1	0	3	35	58	21	3	0	1	26	51	0	2	0	3	0	5	
715-815	63	34	10	24	4	135	16	1	0	2	27	46	17	0	0	1	24	42	0	1	0	1	0	2	
730-830	51	35	16	30	6	138	14	3	0	2	24	43	15	0	0	2	20	37	1	0	0	1	0	2	
745-845	23	34	20	28	6	111	15	5	1	2	18	41	14	1	0	1	21	37	1	0	0	2	0	3	
800-900	20	29	29	26	6	110	11	4	1	1	23	40	12	1	0	2	32	47	2	0	0	2	0	4	
HOURLY TOTALS																									
600-700	128	3	2	4	21	158	10	0	1	3	16	30	11	2	1	0	7	21	1	1	0	3	0	5	
615-715	138	8	2	7	20	175	12	0	2	3	15	32	14	2	1	0	4	21	1	2	0	4	0	7	
630-730	138	10	1	13	16	178	12	0	4	3	17	36	14	2	1	0	5	22	1	2	0	4	0	7	
645-745	111	16	1	19	14	161	13	1	4	6	12	36	10	6	1	3	2	22	1	1	0	2	0	4	
700-800	104	22	1	23	22	172	12	4	3	21	16	56	7	7	1	4	2	21	0	1	0	1	0	2	
715-815	85	26	1	24	21	157	13	8	2	31	16	70	9	8	2	6	2	27	0	0	0	0	0	0	
730-830	69	31	0	26	30	156	13	15	0	42	14	84	12	11	2	11	1	37	0	0	0	0	0	0	
745-845	53	40	1	35	38	167	22	24	1	41	25	113	11	9	2	13	3	38	0	0	0	0	0	0	
800-900	26	47	2	45	38	158	22	30	1	56	26	135	12	13	3	20	4	52	0	0	0	0	0	0	

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: WEDNESDAY, AUGUST 17TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S NAVY WAY
E/W SEASIDE AVENUE

Table with 26 columns (15-MIN COUNTS, 1-4, 5-8, 9-12) and 48 rows (600-615, 615-630, 630-645, 645-700, 700-715, 715-730, 730-745, 745-800, 800-815, 815-830, 830-845, 845-900, HOUR TOTALS, 600-700, 615-715, 630-730, 645-745, 700-800, 715-815, 730-830, 745-845, 800-900, HOUR TOTALS, 600-615, 615-630, 630-645, 645-700, 700-715, 715-730, 730-745, 745-800, 800-815, 815-830, 830-845, 845-900, HOUR TOTALS, 600-700, 615-715, 630-730, 645-745, 700-800, 715-815, 730-830, 745-845, 800-900, HOUR TOTALS, 600-615, 615-630, 630-645, 645-700, 700-715, 715-730, 730-745, 745-800, 800-815, 815-830, 830-845, 845-900, HOUR TOTALS, 600-700, 615-715, 630-730, 645-745, 700-800, 715-815, 730-830, 745-845, 800-900, HOUR TOTALS). Columns represent different traffic directions and vehicle types (AUTOS, BOB-T, CHASS, CONT, OTHR, TOTAL).

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 17TH, 2005
 PERIOD: 6:00 AM TO 9:00 AM
 INTERSECTION: N/S GATE 5
 E/W PIER T AVENUE

15-MIN COUNTS	1						2						3						4						
	SBRT						SBTH						SBLT						WBRT						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
615-630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
630-645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	5
645-700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
700-715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
715-730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	0	0	2	10
730-745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	0	0	0	14
745-800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	1	1	6
800-815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	4	0	0	2	14
815-830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2	0	6
830-845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	0	0	2	12
845-900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	4	0	11
HOURL TOTALS																									
600-700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	10
615-715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	1	12
630-730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	5	0	0	3	19
645-745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	16	0	0	2	28
700-800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	19	0	1	3	33
715-815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	23	0	1	5	44
730-830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	20	0	3	3	40
745-845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	15	0	3	5	38
800-900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	15	0	6	4	43
15-MIN COUNTS	5						6						7						8						
	WBTH						WBLT						NBRT						NBTH						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
615-630	5	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
630-645	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
645-700	4	0	0	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
700-715	3	0	0	0	10	13	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
715-730	1	0	0	6	5	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
730-745	5	5	0	4	4	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
745-800	3	8	0	12	6	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
800-815	3	6	0	7	8	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
815-830	6	2	0	3	6	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
830-845	10	3	0	8	5	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
845-900	6	3	0	10	4	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURL TOTALS																									
600-700	10	0	0	0	3	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
615-715	13	0	0	0	13	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
630-730	9	0	0	6	17	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
645-745	13	5	0	10	21	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
700-800	12	13	0	22	25	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
715-815	12	19	0	29	23	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
730-830	17	21	0	26	24	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
745-845	22	19	0	30	25	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
800-900	25	14	0	28	23	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-MIN COUNTS	9						10						11						12						
	NBLT						EBRT						EBTH						EBLT						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
615-630	0	0	0	0	0	0	0	0	0	0	0	0	31	1	0	4	4	40	3	0	0	0	0	0	3
630-645	0	0	0	0	0	0	0	0	0	0	0	0	47	1	0	14	5	67	1	0	0	0	0	1	2
645-700	0	0	0	0	0	0	0	0	0	0	0	0	39	4	0	6	4	53	2	0	0	0	0	0	2
700-715	0	0	0	0	0	0	0	0	0	0	0	0	56	8	0	22	7	93	1	0	0	0	0	1	1
715-730	0	0	0	0	0	0	0	0	0	0	0	0	49	4	1	17	5	76	0	0	0	0	0	0	0
730-745	0	0	0	0	0	0	0	0	0	0	0	0	58	9	1	33	9	110	1	0	0	0	0	1	1
745-800	0	0	0	0	0	0	0	0	0	0	0	0	39	14	3	11	4	71	2	0	0	0	0	2	2
800-815	0	0	0	0	0	0	0	0	0	0	0	0	29	2	1	29	4	65	1	0	0	0	0	1	1
815-830	0	0	0	0	0	0	0	0	0	0	0	0	20	12	1	35	5	73	0	0	0	0	1	1	1
830-845	0	0	0	0	0	0	0	0	0	0	0	0	15	12	3	36	4	70	1	0	0	0	0	1	1
845-900	0	0	0	0	0	0	0	0	0	0	0	0	17	13	3	30	14	77	1	0	0	0	0	1	1
HOURL TOTALS																									
600-700	0	0	0	0	0	0	0	0	0	0	0	0	117	6	0	24	13	160	6	0	0	0	1	7	7
615-715	0	0	0	0	0	0	0	0	0	0	0	0	173	14	0	46	20	253	7	0	0	0	1	8	8
630-730	0	0	0	0	0	0	0	0	0	0	0	0	191	17	1	59	21	289	4	0	0	0	1	5	5
645-745	0	0	0	0	0	0	0	0	0	0	0	0	202	25	2	78	25	332	4	0	0	0	0	4	4
700-800	0	0	0	0	0	0	0	0	0	0	0	0	202	35	5	83	25	350	4	0	0	0	0	4	4
715-815	0	0	0	0	0	0	0	0	0	0	0	0	175	29	6	90	22	322	4	0	0	0	0	4	4
730-830	0	0	0	0	0	0	0	0	0	0	0	0	146	37	6	108	22	319	4	0	0	0	1	5	5
745-845	0	0	0	0	0	0	0	0	0	0	0	0	103	40	8	111	17	279	4	0	0	0	1	5	5
800-900	0	0	0	0	0	0	0	0	0	0	0	0	81	39	8	130	27	285	3	0	0	0	1	4	4

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: THURSDAY, AUGUST 25TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S 9TH STREET
E/W PIER B / PICO AVENUE

Table with 26 columns (15-MIN COUNTS, AUTOS, BOB-T, CHASS, CONT, OTHR, TOTAL) and 12 rows of hourly data (600-700 to 800-900). Includes sub-sections for SBRT, SBTH, SBLT, WBRT, WBTH, WBLT, NBRT, NBTH, NBLT, EBRT, EBTH, and EBLT.

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: THURSDAY, AUGUST 25TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S PICO AVENUE
E/W PIER C STREET

Table with columns for 15-MIN COUNTS, HOUR TOTALS, and various intersection directions (SBRT, SBTH, SBLT, WBRT, WBTH, NBRT, NBTH, NBLT, EBRT, EBTH, EBLT) with sub-columns for AUTOS, BOB-T, CHASS, CONT, OTHR, and TOTAL.

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: THURSDAY, AUGUST 25TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S PICO AVENUE
E/W PIER D

		1					2					3					4								
		SBRT					SBTH					SBLT					WBRT								
15-MIN COUNTS	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	10	0	0	0	8	18	9	0	0	0	1	10	1	0	0	0	0	1	0	0	0	0	0	0	
615-630	11	0	0	0	5	16	16	0	0	2	1	19	1	0	0	0	0	1	1	0	0	0	0	1	
630-645	13	0	0	0	6	19	26	5	0	6	2	39	1	0	0	0	0	1	0	0	0	0	0	0	
645-700	34	0	0	0	9	43	35	5	0	10	2	52	3	0	0	0	0	3	0	0	0	0	4	4	
700-715	23	0	0	0	8	31	25	10	1	9	4	49	0	0	0	0	0	0	3	1	0	0	1	5	
715-730	15	0	0	0	9	24	24	11	1	12	3	51	1	0	0	0	0	1	0	0	0	0	0	0	
730-745	17	0	0	0	7	24	33	6	0	8	5	52	2	0	0	0	0	2	1	0	0	0	3	4	
745-800	10	0	0	0	16	26	25	12	0	17	2	56	0	0	0	0	0	0	1	0	0	0	2	3	
800-815	9	0	0	0	17	26	21	13	1	12	5	52	1	0	0	0	0	1	0	2	0	2	1	5	
815-830	10	0	0	0	12	22	22	12	1	13	2	50	2	0	0	0	0	2	0	0	0	2	4	6	
830-845	4	0	0	0	5	9	11	9	0	17	5	42	1	0	0	0	0	1	3	1	0	3	2	9	
845-900	6	0	0	0	9	15	12	6	0	12	3	33	2	0	0	0	0	2	1	0	0	1	0	2	
HOUR TOTALS																									
600-700	68	0	0	0	28	96	86	10	0	18	6	120	6	0	0	0	0	6	1	0	0	0	4	5	
615-715	81	0	0	0	28	109	102	20	1	27	9	159	5	0	0	0	0	5	4	1	0	0	5	10	
630-730	85	0	0	0	32	117	110	31	2	37	11	191	5	0	0	0	0	5	3	1	0	0	5	9	
645-745	89	0	0	0	33	122	117	32	2	39	14	204	6	0	0	0	0	6	4	1	0	0	8	13	
700-800	65	0	0	0	40	105	107	39	2	46	14	208	3	0	0	0	0	3	5	1	0	0	6	12	
715-815	51	0	0	0	49	100	103	42	2	49	15	211	4	0	0	0	0	4	2	2	0	2	6	12	
730-830	46	0	0	0	52	98	101	43	2	50	14	210	5	0	0	0	0	5	2	2	0	4	10	18	
745-845	33	0	0	0	50	83	79	46	2	59	14	200	4	0	0	0	0	4	4	3	0	7	9	23	
800-900	29	0	0	0	43	72	66	40	2	54	15	177	6	0	0	0	0	6	4	3	0	8	7	22	
HOUR TOTALS																									
5																									
WBTH						WBTL						NBRT						NBTH							
15-MIN COUNTS	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	12	0	0	0	0	12	
615-630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	
630-645	0	0	0	0	0	0	1	1	0	0	1	3	0	0	0	0	0	0	24	0	0	0	0	3	27
645-700	1	0	0	0	0	1	1	0	0	1	0	2	0	0	0	0	0	0	29	1	0	0	0	7	37
700-715	1	0	0	0	0	1	1	0	0	0	2	3	0	0	0	0	0	0	25	0	0	0	2	11	38
715-730	0	0	0	0	0	0	3	1	0	0	0	4	1	0	0	0	0	1	29	1	0	12	2	44	
730-745	0	0	0	0	0	0	3	0	0	0	1	4	0	0	0	0	0	0	29	5	0	10	1	45	
745-800	4	0	0	1	0	5	1	0	0	1	0	2	0	0	0	0	0	0	28	4	0	14	1	47	
800-815	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	17	3	0	11	1	32	
815-830	0	0	0	0	0	0	1	2	0	0	2	5	1	0	0	0	0	1	14	5	2	10	3	34	
830-845	0	0	0	0	0	0	3	5	0	0	0	8	0	0	0	0	0	0	23	7	2	19	1	52	
845-900	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	17	5	1	23	4	50	
HOUR TOTALS																									
600-700	1	0	0	0	0	1	2	2	0	1	2	7	0	0	0	0	0	0	87	1	0	0	10	98	
615-715	2	0	0	0	0	2	3	1	0	1	3	8	0	0	0	0	0	0	100	1	0	2	21	124	
630-730	2	0	0	0	0	2	6	2	0	1	3	12	1	0	0	0	0	1	107	2	0	14	23	146	
645-745	2	0	0	0	0	2	8	1	0	1	3	13	1	0	0	0	0	1	112	7	0	24	21	164	
700-800	5	0	0	1	0	6	8	1	0	1	3	13	1	0	0	0	0	1	111	10	0	38	15	174	
715-815	4	0	0	1	0	5	7	1	0	2	1	11	1	0	0	0	0	1	103	13	0	47	5	168	
730-830	4	0	0	1	0	5	5	2	0	2	3	12	1	0	0	0	0	1	88	17	2	45	6	158	
745-845	4	0	0	1	0	5	5	7	0	2	2	16	1	0	0	0	0	1	82	19	4	54	6	165	
800-900	1	0	0	0	0	1	4	8	0	1	2	15	1	0	0	0	0	1	71	20	5	63	9	168	
HOUR TOTALS																									
9																									
NBLT						EBRT						EBTH						EBLT							
15-MIN COUNTS	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	5	0	0	0	0	5	3	0	0	0	0	2	5	0	0	0	0	0	5	0	0	0	12	17	
615-630	5	0	0	0	0	5	1	0	0	0	0	1	0	0	0	0	0	0	9	0	0	0	11	20	
630-645	6	0	0	0	2	8	0	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0	6	8	
645-700	19	0	0	0	1	20	3	0	0	0	5	8	1	0	0	0	0	1	0	0	0	11	11		
700-715	17	0	0	0	1	18	3	0	0	0	3	6	0	0	0	0	0	0	4	0	0	0	8	12	
715-730	12	0	0	0	0	12	0	1	0	0	1	2	1	0	0	0	0	1	6	0	0	0	10	16	
730-745	11	0	0	0	2	13	3	0	0	0	1	4	0	0	0	0	0	0	2	1	0	0	11	14	
745-800	9	0	0	0	1	10	5	0	0	0	1	6	0	0	0	0	0	0	8	0	0	0	7	15	
800-815	4	0	0	0	2	6	1	0	0	0	3	4	0	0	0	0	0	0	1	0	0	0	10	11	
815-830	6	0	0	2	1	9	5	0	0	0	1	6	0	0	0	0	0	0	3	0	0	0	11	14	
830-845	5	0	1	0	1	7	2	0	1	0	2	5	0	0	0	0	0	0	4	0	0	0	14	18	
845-900	5	0	0	0	0	5	3	0	0	0	2	5	0	0	0	0	0	0	5	0	0	0	12	17	
HOUR TOTALS																									
600-700	35	0	0	0	3	38	7	0	0	0	8	15	1	0	0	0	0	1	16	0	0	0	40	56	
615-715	47	0	0	0	4	51	7	0	0	0	9	16	1	0	0	0	0	1	15	0	0	0	36	51	
630-730	54	0	0	0	4	58	6	1	0	0	10	17	2	0	0	0	0	2	12	0	0	0	35	47	
645-745	59	0	0	0	4	63	9	1	0	0	10	20	2	0	0	0	0	2	12	1	0	0	40	53	
700-800	49	0	0	0	4	53	11	1	0	0	6	18	1	0	0	0	0	1	20	1	0	0	36	57	
715-815	36	0	0	0	5	41	9	1	0	0	6	16	1	0	0	0	0	1	17	1	0	0	38	56	
730-830	30	0	0	2	6	38	14	0	0	0	6	20	0	0	0	0	0	0	14	1	0	0	39	54	
745-845	24	0	1	2	5	32	13	0	1	0	7	21	0	0	0	0	0	0	16	0	0	0	42	58	
800-900	20	0	1	2	4	27	11	0	1	0	8	20	0	0	0	0	0	0	13	0	0	0	47	60	

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: THURSDAY, AUGUST 25TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S PICO AVENUE
E/W BROADWAY

Table with 16 columns (15-MIN COUNTS, AUTOS, BOB-T, CHASS, CONT, OTHR, TOTAL) and 16 rows per section (600-615, 615-630, 630-645, 645-700, 700-715, 715-730, 730-745, 745-800, 800-815, 815-830, 830-845, 845-900). Sections 1-4 cover SBRT, SBTH, SBLT, and WBRT. Sections 5-8 cover WBTH, WBLT, NBRT, and NBTH. Sections 9-12 cover NBLT, EBRT, EBTH, and EBLT. Includes HOUR TOTALS for each section.

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: THURSDAY, AUGUST 25TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S PICO AVENUE
 E/W PIER E

15-MIN COUNTS	1 SBRT						2 SBTH						3 SBLT						4 WBRT						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	4	0	0	0	0	4	4	0	0	0	0	4	0	0	0	0	0	0	0	11	0	0	0	0	11
615-630	2	0	0	0	0	2	4	0	0	0	1	5	3	0	0	0	0	0	3	14	0	0	0	0	14
630-645	10	0	0	0	1	11	12	0	0	0	0	12	0	0	0	0	0	0	0	10	0	0	0	1	11
645-700	27	0	0	0	0	27	9	0	0	0	1	10	2	0	0	0	0	2	24	0	0	0	0	24	
700-715	10	0	0	0	1	11	10	2	0	2	1	15	3	0	0	0	0	3	18	0	0	0	0	21	
715-730	8	0	0	0	0	8	10	0	0	1	1	12	5	0	0	0	0	5	12	0	0	2	2	15	
730-745	7	0	0	0	0	7	11	2	0	2	0	15	4	0	0	0	2	6	12	0	0	0	1	13	
745-800	12	0	0	0	0	12	15	2	0	0	0	17	4	0	0	0	0	4	16	2	0	2	2	22	
800-815	5	0	0	1	0	6	6	2	0	0	0	8	2	0	0	0	0	2	4	3	0	2	3	12	
815-830	3	0	0	0	1	4	11	4	0	1	1	17	6	0	0	0	0	6	9	2	2	2	1	16	
830-845	3	0	0	0	1	4	9	0	0	0	2	11	3	0	0	0	0	3	8	1	0	3	0	12	
845-900	1	0	0	1	0	2	8	2	0	2	1	13	3	0	0	0	0	3	10	0	1	2	0	13	
HOURLY TOTALS																									
600-700	43	0	0	0	1	44	29	0	0	0	2	31	5	0	0	0	0	5	59	0	0	0	1	60	
615-715	49	0	0	0	2	51	35	2	0	2	3	42	8	0	0	0	0	8	66	0	0	0	4	70	
630-730	55	0	0	0	2	57	41	2	0	3	3	49	10	0	0	0	0	10	64	0	0	2	5	71	
645-745	52	0	0	0	1	53	40	4	0	5	3	52	14	0	0	0	2	16	66	0	0	2	5	73	
700-800	37	0	0	0	1	38	46	6	0	5	2	59	16	0	0	0	2	18	58	2	0	4	7	71	
715-815	32	0	0	1	0	33	42	6	0	3	1	52	15	0	0	0	2	17	44	5	0	6	7	62	
730-830	27	0	0	1	1	29	43	10	0	3	1	57	16	0	0	0	2	18	41	7	2	6	7	63	
745-845	23	0	0	1	2	26	41	8	0	1	3	53	15	0	0	0	0	15	37	8	2	9	6	62	
800-900	12	0	0	2	2	16	34	8	0	3	4	49	14	0	0	0	0	14	31	6	3	9	4	53	
15-MIN COUNTS	5 WBTH						6 WBTL						7 NBRT						8 NBTH						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	11	0	0	0	0	11	1	0	0	0	0	1	14	0	0	0	0	5	19
615-630	4	0	0	0	0	4	9	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0
630-645	4	0	0	0	0	4	28	0	0	0	0	28	0	0	0	0	0	0	10	0	0	0	2	12	
645-700	18	0	0	0	0	18	29	0	0	1	1	31	2	0	0	0	0	2	14	0	0	1	4	19	
700-715	4	1	0	0	0	5	27	0	0	0	1	28	4	0	0	0	1	5	17	1	0	3	6	27	
715-730	6	2	0	0	0	8	30	4	0	0	0	34	1	0	0	0	0	1	19	4	0	6	5	34	
730-745	6	3	0	1	0	10	42	9	0	0	0	51	1	0	0	0	0	1	14	13	1	2	2	32	
745-800	8	5	0	0	0	13	25	9	1	2	6	43	1	0	0	0	0	1	16	6	1	1	4	28	
800-815	1	7	0	0	0	8	13	7	0	5	1	26	0	0	0	0	0	0	14	8	1	5	2	30	
815-830	3	4	0	1	1	9	5	10	2	2	0	19	0	0	0	0	0	0	14	23	2	1	2	42	
830-845	2	5	0	0	0	7	3	7	1	2	0	13	1	0	0	0	0	1	20	27	4	4	1	56	
845-900	0	2	0	0	0	2	1	7	0	8	2	18	1	0	0	0	0	1	16	25	2	4	0	47	
HOURLY TOTALS																									
600-700	26	0	0	0	0	26	77	0	0	1	1	79	3	0	0	0	0	3	38	0	0	1	11	50	
615-715	30	1	0	0	0	31	93	0	0	1	2	96	6	0	0	0	1	7	41	1	0	4	12	58	
630-730	32	3	0	0	0	35	114	4	0	1	2	121	7	0	0	0	1	8	60	5	0	10	17	92	
645-745	34	6	0	1	0	41	128	13	0	1	2	144	8	0	0	0	1	9	64	18	1	12	17	112	
700-800	24	11	0	1	0	36	124	22	1	2	7	156	7	0	0	0	1	8	66	24	2	12	17	121	
715-815	21	17	0	1	0	39	110	29	1	7	7	154	3	0	0	0	0	3	63	31	3	14	13	124	
730-830	18	19	0	2	1	40	85	35	3	9	7	139	2	0	0	0	0	2	58	50	5	9	10	132	
745-845	14	21	0	1	1	37	46	33	4	11	7	101	2	0	0	0	0	2	64	64	8	11	9	156	
800-900	6	18	0	1	1	26	22	31	3	17	3	76	2	0	0	0	0	2	64	83	9	14	5	175	
15-MIN COUNTS	9 NBLT						10 EBRT						11 EBTH						12 EBLT						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
600-615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
615-630	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1
630-645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
645-700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	
700-715	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	
715-730	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	
730-745	2	1	0	0	0	3	2	1	0	0	0	3	1	0	0	0	0	1	7	4	0	13	0	24	
745-800	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	11	10	0	20	0	41	
800-815	2	1	0	0	0	3	1	1	0	0	0	2	2	1	0	0	0	3	4	5	0	10	0	19	
815-830	2	1	0	0	0	3	0	1	0	0	1	2	3	0	0	0	1	4	1	12	1	9	0	23	
830-845	2	1	0	0	0	3	2	1	0	0	1	4	2	0	0	0	0	2	2	9	0	21	0	32	
845-900	2	4	0	0	0	6	0	3	0	0	0	3	0	0	0	0	0	0	3	4	0	18	0	25	
HOURLY TOTALS																									
600-700	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	7	0	0	0	0	7	
615-715	1	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	9	0	0	0	0	9	
630-730	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	5	17	
645-745	5	1	0	0	0	6	2	1	0	0	0	3	1	0	0	0	0	1	17	4	0	18	0	39	
700-800	7	2	0	0	0	9	2	1	0	0	0	3	1	0	0	0	0	1	25	14	0	38	0	77	
715-815	8	3	0	0	0	11	3	2	0	0	0	5	3	1	0	0	0	4	26	19	0	48	0	93	
730-830	8	4	0	0	0	12	3	3	0	0	1	7	6	1	0	0	1	8	23	31	1	52	0	107	
745-845	8	4	0	0	0	12	3	3	0	0	2	8	7	1	0	0	1	9	18	36	1	60	0	115	
800-900	8	7	0	0	0	15	3	6	0	0	2	11	7	1	0	0	1	9	10	30	1	58	0	99	

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: WEDNESDAY, AUGUST 17TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S PICO AVENUE
E/W SOUTHBOUND ON-RAMP TO SCENIC HIGHWAY

Table with 26 columns and multiple rows. Columns are grouped into 12 sections (1-12) representing different intersection approaches. Each section includes '15-MIN COUNTS' and 'HOUR TOTALS' for categories: AUTOS, BOB-T, CHASS, CONT, OTHR, and TOTAL. Rows list time intervals from 6:00-6:15 to 8:00-9:00.

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCAITES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: WEDNESDAY, AUGUST 17TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S ANAHEIM WAY
E/W PIER B STREET

Table with 26 columns and 100 rows. Columns are grouped into 8 sections (1-8) representing different intersection directions. Each section has a sub-header for vehicle type (AUTOS, BOB-T, CHASS, CONT, OTHR, TOTAL) and a main header for the 15-MIN COUNTS. Rows include time intervals (e.g., 600-615) and hourly totals.

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: WEDNESDAY, AUGUST 17TH, 2005
PERIOD: 6:00 AM TO 9:00 AM
INTERSECTION: N/S 9TH STREET
E/W ANAHEIM STREET

Table with 26 columns (15-MIN COUNTS, AUTOS, BOB-T, CHASS, CONT, OTHR, TOTAL) and 100 rows (15-min counts, hour totals, and 100-hour totals) for intersection classification counts.

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 17, 2005
 PERIOD: 2:00 PM TO 6:00 PM
 INTERSECTION: N/S TERMINAL ISLAND FREEWAY
 E/W OCEAN BOULEVARD

15-MIN COUNTS	1 SBRT					2 SBTH					3 SBLT					4 WBRBT									
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	DELIVER	2 AXLE	3 AXLE	4+ AXLE	TOTAL	
	200-215	12	13	1	16	2	44	0	0	0	1	0	1	9	2	3	3	1	18	9	5	0	8	2	24
HOURL TOTALS																									

15-MIN COUNTS	5 WBTH					6 WBLT					7 NBRBT					8 NBHT								
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL
	200-215	196	29	17	87	13	342	4	2	0	0	0	6	2	5	1	12	0	20	1	5	0	5	0
HOURL TOTALS																								

15-MIN COUNTS	9 NBLT					10 EBRT					11 EBHT					12 EBLT								
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL
	200-215	0	0	0	2	0	2	0	2	0	0	0	2	184	43	6	78	9	320	26	11	0	30	4
HOURL TOTALS																								

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	1	2	9	0	12	26	184	0	4	196	9
215-230	0	0	2	9	1	14	24	234	0	1	183	10
230-245	1	0	0	5	0	24	35	241	1	1	197	7
245-300	1	1	1	6	0	17	31	310	3	2	183	8
300-315	0	0	0	7	0	16	34	283	0	1	234	17
315-330	0	0	0	10	0	33	29	305	1	0	268	9
330-345	0	0	0	6	0	31	22	332	1	2	218	7
345-400	0	0	1	5	0	12	37	394	1	4	276	9
400-415	0	0	0	2	0	15	41	419	0	1	298	8
415-430	1	1	1	9	0	42	43	351	3	2	344	14
430-445	0	0	3	8	0	60	36	402	0	4	328	15
445-500	0	0	3	23	0	54	79	499	0	4	399	74
500-515	1	0	1	60	1	54	46	497	1	3	362	65
515-530	0	0	0	73	0	67	41	467	0	1	416	16
530-545	0	0	1	92	0	38	42	547	0	1	351	11
545-600	0	0	0	28	0	47	27	431	0	1	318	12

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	5	5	2	0	13	11	43	2	2	29	5
215-230	4	1	5	4	5	11	13	48	8	5	28	10
230-245	3	6	1	1	3	12	12	29	3	3	27	5
245-300	2	2	2	4	4	12	14	23	4	4	22	2
300-315	3	3	2	3	6	13	12	22	4	2	20	5
315-330	4	7	8	2	4	14	10	29	1	3	21	7
330-345	3	7	4	0	5	15	19	36	4	1	16	4
345-400	4	8	4	0	3	9	6	19	4	0	12	8
400-415	0	2	2	2	0	8	19	39	3	0	16	6
415-430	0	0	1	2	0	14	20	24	1	0	24	20
430-445	0	1	0	4	0	8	19	41	2	0	15	14
445-500	0	1	0	4	0	12	24	25	0	0	20	17
500-515	0	0	0	6	0	12	9	9	0	0	15	3
515-530	0	0	0	6	0	14	3	5	0	0	11	4
530-545	0	0	1	4	1	12	10	18	0	0	18	0
545-600	0	0	0	8	0	20	11	17	0	0	19	1

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	1	3	0	1	0	6	0	0	17	0
215-230	2	0	1	2	0	0	0	8	0	0	10	1
230-245	0	0	1	2	0	0	0	7	0	0	20	1
245-300	0	0	0	6	0	2	1	4	0	1	16	4
300-315	2	0	0	2	0	0	2	2	0	0	14	0
315-330	0	0	0	1	0	3	1	6	0	0	17	0
330-345	2	1	0	4	0	1	3	4	0	0	12	0
345-400	1	0	2	2	0	1	2	8	0	0	13	0
400-415	0	0	0	0	0	0	1	13	0	0	16	1
415-430	0	0	0	4	0	3	5	2	0	0	15	3
430-445	0	0	0	5	0	3	6	7	0	0	3	0
445-500	0	0	0	2	0	0	1	3	0	0	3	2
500-515	0	0	0	1	0	0	2	9	0	0	3	0
515-530	0	0	0	2	0	0	1	2	0	0	9	0
530-545	0	0	0	1	0	1	2	5	0	0	6	0
545-600	0	0	0	1	0	0	1	3	0	0	4	1

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	2	5	12	3	1	16	30	78	0	0	87	8
215-230	3	8	12	4	0	13	38	90	0	0	77	7
230-245	2	5	11	6	0	21	28	81	0	0	84	4
245-300	4	4	15	7	0	11	28	76	1	0	58	4
300-315	3	7	11	5	0	19	32	62	0	0	65	3
315-330	2	5	11	7	0	20	33	65	0	0	67	4
330-345	6	9	8	3	0	27	31	78	0	0	56	4
345-400	1	8	11	8	0	22	34	42	0	0	60	4
400-415	1	0	3	1	0	17	51	71	0	0	56	5
415-430	0	0	0	2	0	26	43	59	0	0	47	15
430-445	0	0	0	3	0	10	43	55	0	0	38	7
445-500	0	0	0	1	0	16	12	45	0	0	36	7
500-515	0	0	0	2	0	16	8	22	0	0	33	2
515-530	0	0	0	7	0	11	7	19	0	0	45	2
530-545	0	0	0	6	0	15	13	11	0	0	55	0
545-600	0	0	0	10	0	35	12	14	0	1	52	2

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	1	0	2	4	9	0	0	13	2
215-230	0	0	0	0	0	5	5	16	0	0	13	0
230-245	0	0	1	0	0	2	10	15	0	0	17	1
245-300	0	0	0	1	0	6	5	13	0	0	8	1
300-315	0	0	2	1	1	8	3	12	0	0	8	0
315-330	0	0	0	4	0	6	6	11	0	0	12	0
330-345	0	0	0	0	0	3	7	6	0	1	9	0
345-400	0	0	0	0	0	4	3	5	1	0	9	4
400-415	0	0	0	0	0	2	4	6	0	0	10	0
415-430	0	0	0	0	0	6	6	12	0	0	9	1
430-445	0	0	0	5	0	3	3	8	0	0	6	1
445-500	0	0	0	1	0	1	8	16	0	0	4	1
500-515	0	0	0	0	0	8	1	7	0	0	2	2
515-530	0	0	0	0	0	2	8	6	0	0	5	0
530-545	0	0	0	0	0	7	4	5	0	0	4	1
545-600	0	0	0	1	0	7	4	5	0	0	4	0

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: WEDNESDAY, AUGUST 17, 2005
PERIOD: 2:00 PM TO 6:00 PM
INTERSECTION: N/S PIER S AVENUE
E/W OCEAN BOULEVARD

Table with 4 main columns (1, 2, 3, 4) representing different intersection directions. Each column contains sub-columns for vehicle types (AUTOS, BOB-T, CHASS, CONT, OTHR) and a TOTAL column. Rows include 15-MIN COUNTS and HOUR TOTALS for various time intervals.

Table with 4 main columns (5, 6, 7, 8) representing different intersection directions. Each column contains sub-columns for vehicle types (AUTOS, BOB-T, CHASS, CONT, OTHR) and a TOTAL column. Rows include 15-MIN COUNTS and HOUR TOTALS for various time intervals.

Table with 4 main columns (9, 10, 11, 12) representing different intersection directions. Each column contains sub-columns for vehicle types (AUTOS, BOB-T, CHASS, CONT, OTHR) and a TOTAL column. Rows include 15-MIN COUNTS and HOUR TOTALS for various time intervals.

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	4	0	8	3	239	0	0	197	6
215-230	0	0	0	9	0	15	6	251	0	0	240	4
230-245	0	0	0	13	0	10	4	271	0	0	221	3
245-300	0	0	0	14	0	21	9	304	0	0	195	3
300-315	0	0	0	12	0	6	5	323	0	0	227	3
315-330	0	0	0	8	0	11	7	322	0	0	304	1
330-345	0	0	0	9	0	12	4	353	0	0	250	7
345-400	0	0	0	6	0	9	5	378	0	0	300	5
400-415	0	0	0	8	0	2	13	474	0	0	338	1
415-430	0	0	0	7	0	13	17	385	0	0	321	7
430-445	0	0	0	17	0	30	15	453	0	0	381	11
445-500	0	0	0	13	0	43	27	520	0	0	464	5
500-515	0	0	0	11	0	29	18	553	0	0	453	8
515-530	0	0	0	12	0	38	21	495	0	0	417	4
530-545	0	0	0	11	0	24	23	578	0	0	393	10
545-600	0	0	0	6	0	6	15	436	0	0	379	9

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	5	0	3	5	59	0	0	32	7
215-230	0	0	0	11	0	3	4	74	0	0	35	6
230-245	0	0	0	6	0	1	7	32	0	0	42	5
245-300	0	0	0	5	0	3	3	37	0	0	43	4
300-315	0	0	0	7	0	1	5	33	0	0	33	3
315-330	0	0	0	5	0	4	0	40	0	0	30	3
330-345	0	0	0	6	0	0	2	39	0	0	36	6
345-400	0	0	0	9	0	2	2	40	0	0	25	3
400-415	0	0	0	14	0	6	4	39	0	0	23	2
415-430	0	0	0	9	0	3	2	46	0	0	36	2
430-445	0	0	0	12	0	2	4	71	0	0	20	2
445-500	0	0	0	2	0	0	1	41	0	0	29	0
500-515	0	0	0	1	0	1	5	19	0	0	34	1
515-530	0	0	0	0	0	0	1	11	0	0	27	2
530-545	0	0	0	0	0	1	1	28	0	0	24	0
545-600	0	0	0	0	0	0	6	26	0	0	49	3

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	1	0	0	3	7	0	0	8	12
215-230	0	0	0	0	0	1	2	11	0	0	8	3
230-245	0	0	0	0	0	1	0	7	0	0	14	5
245-300	0	0	0	0	0	1	0	3	0	0	8	12
300-315	0	0	0	0	0	0	1	6	0	0	9	9
315-330	0	0	0	1	0	0	0	3	0	0	17	5
330-345	0	0	0	0	0	0	1	4	0	0	11	7
345-400	0	0	0	3	0	0	2	12	0	0	11	4
400-415	0	0	0	1	0	2	0	10	0	0	9	7
415-430	0	0	0	0	0	0	0	7	0	0	5	8
430-445	0	0	0	0	0	1	0	13	0	0	6	1
445-500	0	0	0	0	0	0	1	5	0	0	2	2
500-515	0	0	0	0	0	0	0	12	0	0	3	1
515-530	0	0	0	0	0	0	0	4	0	0	7	2
530-545	0	0	0	0	0	0	1	7	0	0	5	3
545-600	0	0	0	0	0	0	0	4	0	0	6	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	17	0	2	1	122	0	0	91	10
215-230	0	0	0	18	0	5	4	76	0	0	89	4
230-245	0	0	0	22	0	5	2	90	0	0	100	11
245-300	0	0	0	22	0	3	1	71	0	0	86	8
300-315	0	0	0	17	0	6	1	83	0	0	64	12
315-330	0	0	0	14	0	4	4	79	0	0	73	8
330-345	0	0	0	20	0	3	4	71	0	0	86	17
345-400	0	0	0	13	0	5	6	84	0	0	72	10
400-415	0	0	0	16	0	5	3	88	0	0	74	6
415-430	0	0	0	15	0	2	0	80	0	0	59	7
430-445	0	0	0	21	0	5	1	75	0	0	52	2
445-500	0	0	0	11	0	1	0	44	0	0	52	1
500-515	0	0	0	5	0	0	0	35	0	0	47	7
515-530	0	0	0	3	0	0	0	17	0	0	45	4
530-545	0	0	0	1	0	0	1	14	0	0	60	3
545-600	0	0	0	0	0	2	1	28	0	0	91	3

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	9	0	5	0	5	0	0	4	12
215-230	0	0	0	6	0	7	1	12	0	0	12	6
230-245	0	0	0	6	0	4	2	13	0	0	7	12
245-300	0	0	0	5	0	4	1	15	0	0	10	6
300-315	0	0	0	11	0	4	0	14	0	0	15	4
315-330	0	0	0	5	0	6	0	10	0	0	5	8
330-345	0	0	0	2	0	2	1	5	0	0	9	7
345-400	0	0	0	3	0	8	1	4	0	0	7	3
400-415	0	0	0	6	0	5	1	6	0	0	6	6
415-430	0	0	0	6	0	4	0	12	0	0	5	7
430-445	0	0	0	2	0	4	0	6	0	0	3	6
445-500	0	0	0	3	0	1	2	13	0	0	3	4
500-515	0	0	0	2	0	5	0	8	0	0	8	1
515-530	0	0	0	1	0	3	0	10	0	0	4	2
530-545	0	0	0	1	0	1	0	4	0	0	8	1
545-600	0	0	0	3	0	5	0	9	0	0	9	3

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	2	1	2	0	3	0	0	1	0
215-230	0	0	0	1	0	8	0	6	0	0	2	0
230-245	1	0	0	1	0	3	0	5	1	0	0	0
245-300	0	0	0	0	0	7	0	11	0	0	2	0
300-315	0	0	0	0	0	0	0	13	2	0	1	0
315-330	0	0	0	0	0	1	0	9	0	0	2	0
330-345	0	0	1	0	0	8	0	15	0	0	4	0
345-400	0	0	0	0	0	8	0	8	1	0	2	0
400-415	0	0	0	2	0	2	0	9	1	0	3	0
415-430	0	0	2	1	1	16	0	20	0	0	3	0
430-445	0	0	1	0	0	18	0	37	0	0	2	0
445-500	0	0	1	1	0	29	0	35	0	0	1	0
500-515	0	0	0	1	0	33	0	27	0	0	0	0
515-530	0	0	1	1	0	40	0	29	0	0	0	0
530-545	0	0	0	0	0	30	0	6	0	0	0	0
545-600	0	0	1	0	0	15	0	6	1	0	0	0

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	2	0	0	3	0	12	0	0	0	0
215-230	0	0	1	0	0	4	0	7	0	0	0	0
230-245	0	0	0	0	0	1	0	6	1	0	0	0
245-300	0	0	1	0	0	5	0	8	1	0	0	0
300-315	0	0	1	0	0	4	0	4	0	0	0	0
315-330	0	0	2	0	0	6	0	8	0	0	0	0
330-345	0	0	0	0	0	4	0	5	0	0	0	0
345-400	0	0	0	1	0	3	0	12	0	0	0	0
400-415	0	0	0	0	0	2	0	17	1	0	0	0
415-430	0	0	0	0	0	1	0	15	1	0	0	0
430-445	0	0	0	0	0	0	0	11	0	0	0	0
445-500	0	0	0	0	0	4	0	4	0	0	0	0
500-515	0	0	0	0	0	3	0	1	0	0	0	0
515-530	0	0	0	0	0	6	0	0	0	0	0	0
530-545	0	0	0	0	0	5	0	0	0	0	0	0
545-600	0	0	0	0	0	4	0	3	0	0	0	0

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	0	0	1	0	0	0	0
215-230	0	0	0	0	0	5	0	0	0	0	0	0
230-245	0	0	0	0	0	7	0	0	0	0	0	0
245-300	0	0	0	0	0	5	0	1	0	0	0	0
300-315	0	0	0	0	0	2	0	0	0	0	0	0
315-330	0	0	0	1	0	3	0	2	0	0	0	0
330-345	0	0	0	0	0	3	0	2	0	0	0	0
345-400	0	0	0	0	0	0	0	1	0	0	0	0
400-415	0	0	0	0	0	3	0	2	0	0	0	0
415-430	0	0	0	0	0	1	0	1	0	0	0	0
430-445	0	0	0	0	0	0	0	1	0	0	0	0
445-500	0	0	1	0	0	0	0	0	0	0	0	0
500-515	0	0	0	0	0	0	0	1	0	0	0	0
515-530	0	0	0	0	0	0	0	0	0	0	0	0
530-545	0	0	0	0	0	1	0	0	0	0	0	0
545-600	0	0	0	0	0	0	0	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	1	0	5	0	0	0	0
215-230	0	0	0	0	0	3	0	8	0	0	0	0
230-245	0	0	0	0	0	9	0	21	0	0	0	0
245-300	0	0	0	0	0	11	0	20	1	0	0	0
300-315	0	0	1	0	0	7	0	12	0	0	0	0
315-330	0	0	0	1	0	10	0	11	0	0	0	0
330-345	0	0	0	0	0	7	0	21	0	0	0	0
345-400	0	0	1	0	0	6	0	20	1	0	0	0
400-415	0	0	1	0	0	0	0	20	1	0	0	0
415-430	0	0	0	0	0	0	0	21	0	0	0	0
430-445	0	0	0	0	0	0	0	25	0	0	0	0
445-500	0	0	0	0	1	5	0	7	0	0	0	0
500-515	0	0	0	0	0	1	0	0	0	0	0	0
515-530	0	0	0	0	0	1	0	0	0	0	0	0
530-545	0	0	0	0	0	1	0	0	0	0	0	0
545-600	0	0	0	0	0	4	0	0	0	0	0	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	1	0	0	5	0	7	0	0	0	0
215-230	0	0	0	0	0	5	0	3	0	0	0	0
230-245	0	0	1	0	0	2	0	3	0	1	0	0
245-300	0	0	0	0	0	6	0	3	1	0	1	0
300-315	0	0	2	0	0	5	0	3	0	0	0	0
315-330	0	0	0	0	0	5	0	3	2	0	0	0
330-345	0	0	1	2	0	2	0	8	0	0	1	0
345-400	0	0	0	0	0	6	0	3	0	0	0	0
400-415	0	0	0	0	0	5	0	6	0	0	0	0
415-430	0	0	0	0	0	3	0	6	0	0	0	0
430-445	0	0	0	0	1	5	0	6	0	0	0	0
445-500	0	0	1	0	0	4	0	7	0	0	0	0
500-515	0	0	0	0	0	2	0	4	0	0	0	0
515-530	0	0	6	0	0	2	0	1	1	0	0	0
530-545	0	0	0	0	0	3	0	1	0	0	0	0
545-600	0	0	0	0	0	3	0	0	1	0	0	0

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	0	4	1	0	0	1	4
215-230	0	0	0	0	0	0	6	3	0	0	0	1
230-245	0	0	0	0	0	0	4	1	0	0	1	1
245-300	0	0	0	0	0	0	10	0	0	0	2	2
300-315	0	0	0	0	0	0	11	2	0	0	1	0
315-330	0	0	0	0	0	0	11	0	0	0	2	1
330-345	0	0	0	0	0	0	12	0	0	0	3	1
345-400	0	0	0	0	0	0	9	0	0	0	3	1
400-415	0	0	0	0	0	0	13	0	0	0	1	2
415-430	0	0	0	0	0	0	19	1	0	0	4	3
430-445	0	0	0	0	0	0	41	0	0	0	3	2
445-500	0	0	0	0	0	0	34	0	0	0	1	1
500-515	0	0	0	0	0	0	29	0	0	0	0	0
515-530	0	0	0	0	0	0	30	1	0	0	0	1
530-545	0	0	0	0	0	0	9	0	0	0	0	0
545-600	0	0	0	0	0	0	8	1	0	0	0	0

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	0	11	0	0	0	0	0
215-230	0	0	0	0	0	0	7	0	0	0	0	0
230-245	0	0	0	0	0	0	6	0	0	0	0	0
245-300	0	0	0	0	0	0	9	0	0	0	0	0
300-315	0	0	0	0	0	0	4	0	0	0	0	0
315-330	0	0	0	0	0	0	10	0	0	0	0	0
330-345	0	0	0	0	0	0	3	0	0	0	0	0
345-400	0	0	0	0	0	0	14	0	0	0	0	0
400-415	0	0	0	0	0	0	18	0	0	0	0	0
415-430	0	0	0	0	0	0	15	0	0	0	0	0
430-445	0	0	0	0	0	0	10	0	0	0	0	0
445-500	0	0	0	0	0	0	3	0	0	0	0	0
500-515	0	0	0	0	0	0	1	0	0	0	0	0
515-530	0	0	0	0	0	0	0	0	0	0	0	0
530-545	0	0	0	0	0	0	0	0	0	0	0	0
545-600	0	0	0	0	0	0	0	0	0	0	0	0

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	0	0	0	0	0	0	0
215-230	0	0	0	0	0	0	0	0	0	0	0	0
230-245	0	0	0	0	0	0	0	0	0	0	0	0
245-300	0	0	0	0	0	0	1	0	0	0	0	0
300-315	0	0	0	0	0	0	0	0	0	0	0	0
315-330	0	0	0	0	0	0	3	0	0	0	0	0
330-345	0	0	0	0	0	0	4	0	0	0	0	0
345-400	0	0	0	0	0	0	1	0	0	0	0	0
400-415	0	0	0	0	0	0	0	0	0	0	0	0
415-430	0	0	0	0	0	0	1	0	0	0	0	0
430-445	0	0	0	0	0	0	3	0	0	0	0	0
445-500	0	0	0	0	0	0	1	0	0	0	0	0
500-515	0	0	0	0	0	0	0	0	0	0	0	0
515-530	0	0	0	0	0	0	0	0	0	0	0	0
530-545	0	0	0	0	0	0	0	0	0	0	0	0
545-600	0	0	0	0	0	0	1	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	0	7	0	0	0	0	0
215-230	0	0	0	0	0	0	9	0	0	0	0	0
230-245	0	0	0	0	0	0	20	0	0	0	0	0
245-300	0	0	0	0	0	0	17	0	0	0	0	0
300-315	0	0	0	0	0	0	17	0	0	0	0	0
315-330	0	0	0	0	0	0	10	0	0	0	0	0
330-345	0	0	0	0	0	0	18	0	0	0	0	0
345-400	0	0	0	0	0	0	24	0	0	0	0	0
400-415	0	0	0	0	0	0	20	0	0	0	0	0
415-430	0	0	0	0	0	0	19	0	0	0	0	0
430-445	0	0	0	0	0	0	25	0	0	0	0	0
445-500	0	0	0	0	0	0	5	0	0	0	0	0
500-515	0	0	0	0	0	0	1	0	0	0	0	0
515-530	0	0	0	0	0	0	1	0	0	0	0	0
530-545	0	0	0	0	0	0	1	0	0	0	0	0
545-600	0	0	0	0	0	0	0	0	0	0	0	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	0	10	0	0	0	0	0
215-230	0	0	0	0	0	0	2	0	0	0	0	0
230-245	0	0	0	0	0	0	2	1	0	0	1	1
245-300	0	0	0	0	0	0	4	0	0	0	1	0
300-315	0	0	0	0	0	0	5	0	0	0	0	0
315-330	0	0	0	0	0	0	5	0	0	0	0	0
330-345	0	0	0	0	0	0	8	3	0	0	1	0
345-400	0	0	0	0	0	0	2	0	0	0	0	0
400-415	0	0	0	0	0	0	5	0	0	0	0	0
415-430	0	0	0	0	0	0	6	0	0	0	0	1
430-445	0	0	0	0	0	0	7	0	0	0	0	0
445-500	0	0	0	0	0	0	8	0	0	0	0	0
500-515	0	0	0	0	0	0	3	0	0	0	0	0
515-530	0	0	0	0	0	0	4	0	0	0	0	0
530-545	0	0	0	0	0	0	1	0	0	0	0	0
545-600	0	0	0	0	0	0	1	0	0	0	0	0

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
PROJECT: GERALD DESMOND BRIDGE
DATE: WEDNESDAY, AUGUST 17, 2005
PERIOD: 2:00 PM TO 6:00 PM
INTERSECTION: N/S PIER S AVENUE
E/W NEW DOCK STREET

Table with 15 columns for 15-min counts and 4 main categories (SBRT, SBTH, SBLT, WBRRT). Rows include time intervals from 200-215 to 545-600 and an HOUR TOTALS row.

Table with 15 columns for 15-min counts and 4 main categories (SBRT, SBTH, SBLT, WBRRT). Rows include time intervals from 200-300 to 500-600 and an HOUR TOTALS row.

Table with 15 columns for 15-min counts and 4 main categories (WBTH, WBLT, NBRRT, NBRT). Rows include time intervals from 200-215 to 545-600 and an HOUR TOTALS row.

Table with 15 columns for 15-min counts and 4 main categories (WBTH, WBLT, NBRRT, NBRT). Rows include time intervals from 200-300 to 500-600 and an HOUR TOTALS row.

Table with 15 columns for 15-min counts and 4 main categories (NBLT, EBRRT, EBLT, EBLT). Rows include time intervals from 200-215 to 545-600 and an HOUR TOTALS row.

Table with 15 columns for 15-min counts and 4 main categories (NBLT, EBRRT, EBLT, EBLT). Rows include time intervals from 200-300 to 500-600 and an HOUR TOTALS row.

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	4	1	1	1	1	0	0	3	7	3	3	0
215-230	6	0	0	1	1	0	0	7	9	4	5	0
230-245	3	2	0	0	2	0	0	3	8	5	0	0
245-300	8	1	2	0	0	0	0	8	25	4	2	0
300-315	3	1	4	0	1	0	0	12	12	3	0	0
315-330	2	0	0	1	0	0	0	11	13	3	2	0
330-345	6	0	0	3	0	0	0	7	9	7	4	0
345-400	10	0	3	0	1	0	0	6	4	5	1	0
400-415	11	0	5	0	1	0	0	5	7	4	2	0
415-430	14	0	5	0	0	0	0	13	11	8	10	0
430-445	15	0	8	0	1	0	0	27	23	4	18	0
445-500	26	0	1	1	0	0	1	31	14	5	20	0
500-515	28	1	1	1	0	0	0	26	82	9	20	1
515-530	23	2	3	0	0	0	0	23	28	8	33	1
530-545	15	2	0	0	0	0	0	12	21	12	15	0
545-600	3	1	0	1	0	0	1	5	2	8	9	0

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	15	0	0	0	0	0	0	2	7	0	2	1
215-230	7	0	1	0	0	1	0	8	16	0	1	1
230-245	11	0	1	0	0	0	0	4	5	1	1	0
245-300	7	0	3	0	0	0	0	5	7	0	4	0
300-315	9	0	0	0	0	0	0	4	8	0	6	0
315-330	4	0	0	0	0	0	0	8	10	0	4	0
330-345	7	0	0	0	0	0	0	4	7	0	4	0
345-400	5	0	0	0	0	0	0	12	9	0	3	0
400-415	5	1	1	0	0	0	0	20	16	1	2	0
415-430	3	1	0	0	0	0	0	12	13	0	0	0
430-445	3	1	1	0	0	0	0	9	16	0	1	0
445-500	1	0	0	0	0	0	0	5	1	0	3	0
500-515	4	1	0	0	0	0	0	3	1	1	2	0
515-530	5	0	0	0	0	0	0	0	0	0	4	0
530-545	1	0	0	0	0	0	0	0	0	1	6	0
545-600	9	0	0	0	1	0	0	0	0	0	3	3

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	17	0	0	0	0	0	0	1	0	1	2	0
215-230	7	0	0	0	0	0	0	2	0	2	4	0
230-245	8	0	0	0	0	0	0	0	0	0	4	0
245-300	15	0	0	0	0	0	0	1	0	1	6	0
300-315	9	0	0	0	0	0	0	0	0	1	2	0
315-330	4	0	0	0	0	0	0	2	0	1	2	0
330-345	8	0	0	0	0	0	0	2	0	0	0	0
345-400	5	0	0	0	0	0	0	4	1	0	2	0
400-415	6	0	0	0	0	0	0	1	3	0	2	0
415-430	8	0	0	0	0	0	0	0	0	0	2	0
430-445	3	0	0	0	0	0	0	1	0	0	0	0
445-500	2	0	0	0	0	0	0	0	0	0	0	0
500-515	1	0	0	0	0	0	0	0	0	0	0	0
515-530	3	0	0	0	0	0	0	0	0	0	0	0
530-545	4	0	0	0	0	0	0	0	0	0	2	0
545-600	0	0	0	0	0	0	0	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	9	0	0	0	0	0	0	1	14	0	2	0
215-230	10	0	1	0	0	0	0	10	19	1	3	0
230-245	15	0	0	0	0	0	0	18	25	0	9	0
245-300	8	0	1	0	0	0	0	18	28	0	9	0
300-315	13	0	0	0	0	0	0	13	17	0	9	0
315-330	11	0	0	0	0	0	0	9	22	1	9	0
330-345	21	0	2	0	0	0	0	18	22	0	6	0
345-400	10	0	5	0	0	0	0	17	15	0	7	0
400-415	6	0	2	0	0	0	0	18	19	0	1	0
415-430	6	0	0	0	0	0	0	18	21	0	0	0
430-445	3	0	1	0	0	0	0	23	19	0	0	0
445-500	1	0	0	0	0	0	0	6	11	1	4	0
500-515	5	0	0	0	0	0	0	1	3	1	1	0
515-530	3	0	0	0	0	0	0	0	1	0	2	0
530-545	6	0	0	0	0	0	0	0	0	0	2	0
545-600	3	1	0	0	0	0	1	0	0	1	1	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	4	0	5	0	2	0	0	1	6	0	1	2
215-230	3	0	0	0	1	0	0	1	7	4	2	0
230-245	5	1	1	0	1	0	0	1	15	1	2	0
245-300	2	0	2	0	0	0	0	2	6	3	3	0
300-315	5	0	1	0	1	0	0	3	12	1	2	0
315-330	8	0	0	0	2	0	0	4	4	4	2	0
330-345	4	0	2	0	0	0	0	7	5	1	2	1
345-400	5	0	1	0	3	0	0	1	7	4	3	0
400-415	4	0	3	0	1	0	0	3	8	0	3	0
415-430	5	0	0	0	0	0	0	3	9	0	3	0
430-445	6	0	0	4	2	0	0	6	6	0	7	0
445-500	5	0	4	0	0	0	0	2	1	4	1	0
500-515	3	0	3	0	0	0	0	2	4	1	2	1
515-530	4	0	0	0	0	0	0	0	5	0	1	0
530-545	7	0	0	2	0	0	0	1	1	1	1	0
545-600	4	0	0	0	0	0	0	0	7	2	0	1

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 17, 2005
 PERIOD: 2:00 PM TO 6:00 PM
 INTERSECTION: N/S NAVY WAY
 E/W SEASIDE AVENUE

15-MIN COUNTS	1 SBRT						2 SBTH						3 SBLT						4 WBRT					
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	DELIVER	2 AXLE	3 AXLE	4+ AXLE	TOTAL
	200-215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

15-MIN COUNTS	5 WBTH						6 WBLT						7 NBR T						8 NBTH					
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL
	200-215	156	22	4	45	10	237	7	0	0	0	0	7	38	35	7	82	5	167	0	0	0	0	0

15-MIN COUNTS	9 NBLT						10 EBRT						11 EBHT						12 EBLT					
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL
	200-215	18	14	1	5	1	39	14	4	1	8	2	29	220	31	3	39	12	305	0	0	0	0	0

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	18	0	38	0	0	0	0	220	14	7	156	0
215-230	8	0	18	0	0	0	0	208	5	9	192	0
230-245	10	0	47	0	0	0	0	223	8	12	193	0
245-300	15	0	47	0	0	0	0	269	2	11	217	0
300-315	16	0	47	0	0	0	0	300	7	5	235	0
315-330	13	0	34	0	0	0	0	286	2	7	240	0
330-345	13	0	36	0	0	0	0	279	9	2	238	0
345-400	4	0	64	0	0	0	0	386	16	8	269	0
400-415	61	0	52	0	0	0	0	378	15	5	326	0
415-430	19	0	58	0	0	0	0	363	36	13	315	0
430-445	43	0	91	0	0	0	0	372	64	14	359	0
445-500	70	0	113	0	0	0	0	466	37	15	441	0
500-515	35	0	79	0	0	0	0	437	26	4	460	0
515-530	12	0	54	0	0	0	0	474	21	6	450	0
530-545	5	0	56	0	0	0	0	523	22	8	391	0
545-600	7	0	53	0	0	0	0	439	13	3	352	0

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	14	0	35	0	0	0	0	31	4	0	22	0
215-230	2	0	39	0	0	0	0	26	4	0	31	0
230-245	7	0	24	0	0	0	0	21	3	2	25	0
245-300	4	0	26	0	0	0	0	15	2	1	22	0
300-315	3	0	14	0	0	0	0	30	4	0	23	0
315-330	3	0	15	0	0	0	0	17	5	1	24	0
330-345	3	0	20	0	0	0	0	21	1	0	17	0
345-400	5	0	23	0	0	0	0	18	1	0	14	0
400-415	11	0	30	0	0	0	0	17	2	1	15	0
415-430	7	0	22	0	0	0	0	25	2	0	17	0
430-445	5	0	39	0	0	0	0	20	2	0	15	0
445-500	5	0	25	0	0	0	0	15	0	0	12	0
500-515	2	0	8	0	0	0	0	20	0	2	13	0
515-530	4	0	8	0	0	0	0	5	0	0	15	0
530-545	1	0	22	0	0	0	0	5	3	0	7	0
545-600	1	0	22	0	0	0	0	10	1	1	10	0

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	1	0	7	0	0	0	0	3	1	0	4	0
215-230	0	0	10	0	0	0	0	3	1	0	4	0
230-245	2	0	4	0	0	0	0	3	1	1	7	0
245-300	1	0	4	0	0	0	0	1	0	0	4	0
300-315	1	0	5	0	0	0	0	1	1	0	5	0
315-330	1	0	3	0	0	0	0	1	0	0	5	0
330-345	2	0	7	0	0	0	0	2	2	0	8	0
345-400	1	0	8	0	0	0	0	4	0	0	7	0
400-415	1	0	7	0	0	0	0	3	0	0	8	0
415-430	0	0	6	0	0	0	0	2	0	0	2	0
430-445	0	0	9	0	0	0	0	2	0	0	3	0
445-500	0	0	4	0	0	0	0	0	0	0	1	0
500-515	0	0	12	0	0	0	0	1	1	0	2	0
515-530	0	0	0	0	0	0	0	0	2	0	5	0
530-545	1	0	7	0	0	0	0	1	1	0	4	0
545-600	0	0	5	0	0	0	0	1	1	0	2	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	5	0	82	0	0	0	0	39	8	0	45	0
215-230	6	0	49	0	0	0	0	32	6	0	39	0
230-245	6	0	43	0	0	0	0	57	6	0	51	0
245-300	4	0	47	0	0	0	0	27	10	1	31	0
300-315	1	0	37	0	0	0	0	38	10	1	28	0
315-330	2	0	39	0	0	0	0	42	7	0	33	0
330-345	6	0	53	0	0	0	0	30	8	0	42	0
345-400	7	0	51	0	0	0	0	37	4	0	33	0
400-415	5	0	54	0	0	0	0	27	7	1	23	0
415-430	9	0	55	0	0	0	0	37	4	1	18	0
430-445	6	0	34	0	0	0	0	37	3	0	21	0
445-500	2	0	26	0	0	0	0	19	4	0	20	0
500-515	2	0	19	0	0	0	0	8	6	0	14	0
515-530	0	0	14	0	0	0	0	4	3	1	12	0
530-545	1	0	17	0	0	0	0	4	2	1	20	0
545-600	3	0	13	0	0	0	0	16	10	1	20	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	1	0	5	0	0	0	0	12	2	0	10	0
215-230	0	0	0	0	0	0	0	12	1	1	14	0
230-245	1	0	3	0	0	0	0	20	0	2	16	0
245-300	0	0	2	0	0	0	0	10	0	1	14	0
300-315	1	0	3	0	0	0	0	11	0	0	13	0
315-330	3	0	3	0	0	0	0	10	0	1	9	0
330-345	0	0	4	0	0	0	0	6	0	1	8	0
345-400	1	0	1	0	0	0	0	5	1	0	11	0
400-415	1	0	2	0	0	0	0	6	0	1	10	0
415-430	1	0	2	0	0	0	0	9	1	0	8	0
430-445	0	0	1	0	0	0	0	5	0	1	8	0
445-500	0	0	2	0	0	0	0	16	0	0	8	0
500-515	1	0	1	0	0	0	0	5	0	0	10	0
515-530	0	0	1	0	0	0	0	8	0	1	6	0
530-545	0	0	1	0	0	0	0	5	0	0	6	0
545-600	0	0	1	0	0	0	0	8	0	0	13	0

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	7	2	13	2	0	0	0	6	6	14	7	17
215-230	5	1	15	4	0	0	2	18	5	22	5	18
230-245	2	0	21	0	0	0	0	3	9	25	13	16
245-300	5	1	15	0	0	0	1	7	11	21	12	10
300-315	4	0	15	2	0	0	1	13	11	16	5	19
315-330	1	0	18	0	0	0	1	6	10	19	2	13
330-345	3	0	14	2	0	0	3	16	72	18	6	26
345-400	2	1	20	0	0	0	2	5	8	27	8	19
400-415	7	0	14	0	0	0	2	5	7	29	4	13
415-430	8	0	19	0	0	0	2	6	10	33	5	15
430-445	5	0	17	5	0	0	19	15	59	30	6	19
445-500	5	1	18	2	1	0	10	8	21	22	13	20
500-515	8	0	15	0	0	0	5	12	38	31	6	16
515-530	5	0	19	0	0	0	0	14	31	17	2	2
530-545	1	1	18	12	1	1	0	14	12	24	3	9
545-600	3	2	12	5	0	0	0	6	3	19	5	3

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	1	1	3	2	0	4	0	1	1	2	0	2
215-230	0	0	4	4	0	0	0	4	6	3	3	5
230-245	1	0	7	1	0	0	0	3	4	4	2	5
245-300	3	0	6	2	0	0	0	6	1	7	2	5
300-315	0	0	3	0	0	0	0	4	2	4	4	2
315-330	0	0	7	0	0	0	0	1	1	2	3	5
330-345	0	0	6	0	0	0	1	3	3	5	6	2
345-400	0	0	4	0	0	0	0	0	4	3	5	13
400-415	1	0	7	0	0	1	0	0	3	8	0	14
415-430	0	0	15	0	0	0	0	2	1	4	2	7
430-445	2	0	3	0	0	0	1	4	6	4	2	11
445-500	0	1	1	1	0	0	0	0	6	3	1	4
500-515	0	0	5	0	0	0	2	1	4	1	4	1
515-530	1	0	2	1	0	0	0	1	3	1	2	0
530-545	3	0	3	3	0	0	0	1	0	2	2	0
545-600	1	0	3	0	0	0	0	1	0	1	2	0

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	0	0	2	0	4	0	1
215-230	0	0	0	0	0	0	0	2	0	1	0	0
230-245	0	0	1	0	0	0	0	0	0	1	0	4
245-300	0	0	1	0	0	0	0	1	0	1	0	0
300-315	0	0	1	0	0	0	0	1	0	1	2	1
315-330	0	0	0	0	0	0	0	0	0	3	2	0
330-345	1	0	0	0	0	0	0	1	0	0	0	2
345-400	0	0	0	0	0	0	0	1	0	1	2	0
400-415	1	0	1	0	0	0	0	1	0	2	1	0
415-430	0	0	0	0	0	0	0	1	1	3	0	1
430-445	0	0	0	0	0	0	1	0	1	7	1	0
445-500	1	0	0	2	0	0	0	0	0	1	0	0
500-515	1	0	0	0	0	0	1	0	0	0	0	0
515-530	0	0	0	0	0	0	0	0	0	3	0	0
530-545	0	0	0	0	0	0	0	0	0	0	0	0
545-600	0	0	0	1	0	0	0	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	8	0	11	0	0	0	0	0	17	14	0	11
215-230	5	0	5	0	0	0	0	10	8	14	2	8
230-245	6	0	7	1	1	0	1	5	13	9	2	3
245-300	7	0	15	0	0	0	0	4	17	14	3	6
300-315	14	0	21	1	0	0	0	9	5	14	2	7
315-330	16	0	14	0	0	0	0	3	7	13	3	3
330-345	12	0	13	0	0	0	0	0	12	22	0	6
345-400	8	0	15	0	0	0	0	3	15	14	3	12
400-415	8	0	12	0	0	0	0	3	8	18	3	3
415-430	11	0	11	0	0	0	0	4	10	15	1	8
430-445	5	0	12	1	0	0	2	0	11	30	1	5
445-500	7	0	14	0	0	0	0	0	9	9	1	1
500-515	3	0	6	0	0	0	1	1	8	6	6	1
515-530	2	0	4	0	0	0	0	2	12	3	0	0
530-545	6	0	13	2	0	0	0	2	2	9	0	1
545-600	8	0	12	1	0	0	0	0	0	8	0	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	3	0	3	0	0	0	0	0	5	15	0	7
215-230	1	0	6	0	0	0	0	2	2	10	0	5
230-245	3	0	8	2	0	0	0	2	1	4	0	0
245-300	5	0	5	0	0	0	0	1	3	4	1	2
300-315	2	0	7	1	1	0	0	0	3	6	1	1
315-330	3	0	6	0	0	0	0	1	2	5	0	1
330-345	1	0	0	0	0	0	0	0	4	5	0	1
345-400	3	1	1	0	0	0	0	0	3	4	1	0
400-415	0	0	0	0	0	0	0	1	1	7	0	2
415-430	1	0	4	0	0	0	0	1	3	1	0	0
430-445	0	0	2	0	0	0	1	1	4	5	1	3
445-500	3	0	3	1	0	0	0	0	2	4	0	0
500-515	3	0	3	0	0	0	0	0	2	2	0	0
515-530	0	0	0	0	0	0	0	0	4	4	0	0
530-545	0	0	2	0	0	0	0	1	5	6	0	0
545-600	2	0	1	0	0	0	0	1	2	1	1	0

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: THURSDAY, AUGUST 25, 2005
 PERIOD: 2:00 PM TO 6:00 PM
 INTERSECTION: N/S PICO AVENUE
 E/W PIER C STREET

15-MIN COUNTS	1 SBRT						2 SBHT						3 SBLT						4 WBRBT							
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	DELIVER	2 AXLE	3 AXLE	4+ AXLE	TOTAL		
200-215	6	3	0	4	0	13	18	3	1	11	7	40	0	0	0	0	0	0	0	0	0	0	0	0	0	
215-230	8	1	0	4	2	15	28	11	2	11	7	59	0	0	0	0	0	0	0	0	0	0	0	0	0	
230-245	6	13	0	7	2	28	19	3	3	9	9	43	0	0	0	0	0	0	0	0	0	0	0	0	0	
245-300	7	1	1	8	1	18	11	6	0	8	8	33	0	0	0	0	0	0	0	0	0	0	0	0	0	
300-315	13	4	0	15	2	34	28	7	1	20	8	64	0	0	0	0	0	0	0	0	0	0	0	0	0	
315-330	10	5	0	6	2	23	17	2	1	8	5	33	0	0	0	0	0	0	0	0	0	0	0	0	0	
330-345	0	4	0	5	0	9	24	5	1	10	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	
345-400	9	1	1	4	1	16	17	4	1	18	3	43	0	0	0	0	0	0	0	0	0	0	0	0	0	
400-415	4	0	0	6	1	11	17	8	2	16	3	46	0	0	0	0	0	0	0	0	0	0	0	0	0	
415-430	10	9	1	7	1	28	18	6	0	4	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
430-445	8	2	0	6	0	16	28	5	0	6	1	40	0	0	0	0	0	0	0	0	0	0	0	0	0	
445-500	15	2	0	5	2	24	14	4	0	14	3	35	0	0	0	0	0	0	0	0	0	0	0	0	0	
500-515	7	3	0	5	0	15	26	4	0	4	1	35	0	0	0	0	0	0	0	0	0	0	0	0	0	
515-530	9	1	0	3	0	13	32	0	0	5	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	
530-545	12	0	0	7	0	19	23	8	0	10	3	44	0	0	0	0	0	0	0	0	0	0	0	0	0	
545-600	4	0	0	6	0	10	6	4	0	5	3	18	0	0	0	0	0	0	0	0	0	0	0	0	0	
HOURLY TOTALS																										
200-300	27	18	1	23	5	74	76	23	6	39	31	175	0	0	0	0	0	0	0	0	0	0	0	0	0	
215-315	34	19	1	34	7	95	86	27	6	48	32	199	0	0	0	0	0	0	0	0	0	0	0	0	0	
230-330	36	23	1	36	7	103	75	18	5	45	30	173	0	0	0	0	0	0	0	0	0	0	0	0	0	
245-345	30	14	1	34	5	84	80	20	3	46	21	170	0	0	0	0	0	0	0	0	0	0	0	0	0	
300-400	32	14	1	30	5	82	86	18	4	56	16	180	0	0	0	0	0	0	0	0	0	0	0	0	0	
315-415	23	10	1	21	4	59	75	19	5	52	11	162	0	0	0	0	0	0	0	0	0	0	0	0	0	
330-430	23	14	2	22	3	64	76	23	4	44	10	157	0	0	0	0	0	0	0	0	0	0	0	0	0	
345-445	31	12	2	23	3	71	80	23	3	40	11	157	0	0	0	0	0	0	0	0	0	0	0	0	0	
400-500	37	13	1	24	4	79	77	23	2	36	11	149	0	0	0	0	0	0	0	0	0	0	0	0	0	
415-515	40	16	1	23	3	83	86	19	0	24	9	138	0	0	0	0	0	0	0	0	0	0	0	0	0	
430-530	39	8	0	19	2	68	100	13	0	29	5	147	0	0	0	0	0	0	0	0	0	0	0	0	0	
445-545	43	6	0	20	2	71	95	16	0	33	7	151	0	0	0	0	0	0	0	0	0	0	0	0	0	
500-600	32	4	0	21	0	57	87	16	0	24	7	134	0	0	0	0	0	0	0	0	0	0	0	0	0	

15-MIN COUNTS	5 WBHT						6 WBLT						7 NBRBT						8 NBHT							
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL		
200-215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	10	5	21	13	86	
215-230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	9	0	15	10	76	
230-245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	11	4	14	6	79	
245-300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	14	2	17	7	77	
300-315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	4	5	20	5	76	
315-330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	8	4	12	3	58	
330-345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	5	0	13	5	65	
345-400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	20	4	17	5	89	
400-415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	15	5	18	3	78	
415-430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	14	7	18	1	85	
430-445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	10	6	25	2	78	
445-500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	9	1	11	7	76	
500-515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	2	0	4	2	41	
515-530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	3	6	3	1	43	
530-545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	5	0	5	2	39	
545-600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	2	0	2	1	20	
HOURLY TOTALS																										
200-300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160	44	11	67	36	318	
215-315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165	38	11	66	28	308	
230-330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	37	15	63	21	290	
245-345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	152	31	11	62	20	276	
300-400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	158	37	13	62	18	288	
315-415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153	48	13	60	16	290	
330-430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167	54	16	66	14	317	
345-445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160	59	22	78	11	330	
400-500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165	48	19	72	13	317	
415-515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161	35	14	58	12	280	
430-530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146	24	13	43	12	238	
445-545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138	19	7	23	12	199	
500-600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105	12	6	14	6	143	

15-MIN COUNTS	9 NBLT						10 EBRT						11 EBHT						12 EBLT						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
200-215	3	2	1	0	0	6	2	2	0	1	0	5	0	0	0	0	0	0	0	6	0	1	2	2	11
215-230	2	2	1	0	0	5	4	0	0	1	0	5	0	0	0	0	0	0	0	4	1	1	10	1	17
230-245	8	0	0	2	2	12	5	1	0	1	0	7	0	0	0	0	0	0	0	10	2	0	4	2	18
245-300	1	2	1	1	0	5	1	0	0	0	1	2	0	0	0	0	0	0	0	3	0	0	2	0	5
300-315	1	1	1	0	0	3	7	2	0	1	0	10	0	0	0	0	0	0	0	1	1	0	6	2	10
315-330	6	1																							

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	3	37	0	0	18	6	6	0	2	0	0	0
215-230	2	42	0	0	28	8	4	0	4	0	0	0
230-245	8	44	0	0	19	6	10	0	5	0	0	0
245-300	1	37	0	0	11	7	3	0	1	0	0	0
300-315	1	42	0	0	28	13	1	0	7	0	0	0
315-330	6	31	0	0	17	10	3	0	3	0	0	0
330-345	3	42	0	0	24	0	8	0	8	0	0	0
345-400	5	43	0	0	17	9	11	0	2	0	0	0
400-415	4	37	0	0	17	4	8	0	7	0	0	0
415-430	3	45	0	0	18	10	13	0	7	0	0	0
430-445	8	35	0	0	28	8	18	0	14	0	0	0
445-500	2	48	0	0	14	15	5	0	21	0	0	0
500-515	4	33	0	0	26	7	20	0	16	0	0	0
515-530	8	30	0	0	32	9	5	0	8	0	0	0
530-545	3	27	0	0	23	12	3	0	5	0	0	0
545-600	6	15	0	0	6	4	10	0	9	0	0	0

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	2	10	0	0	3	3	0	0	2	0	0	0
215-230	2	9	0	0	11	1	1	0	0	0	0	0
230-245	0	11	0	0	3	13	2	0	1	0	0	0
245-300	2	14	0	0	6	1	0	0	0	0	0	0
300-315	1	4	0	0	7	4	1	0	2	0	0	0
315-330	1	8	0	0	2	5	5	0	2	0	0	0
330-345	0	5	0	0	5	4	3	0	0	0	0	0
345-400	1	20	0	0	4	1	1	0	0	0	0	0
400-415	0	15	0	0	8	0	0	0	0	0	0	0
415-430	3	14	0	0	6	9	2	0	0	0	0	0
430-445	0	10	0	0	5	2	2	0	0	0	0	0
445-500	0	9	0	0	4	2	0	0	0	0	0	0
500-515	0	2	0	0	4	3	1	0	2	0	0	0
515-530	0	3	0	0	0	1	2	0	2	0	0	0
530-545	0	5	0	0	8	0	2	0	0	0	0	0
545-600	0	2	0	0	4	0	0	0	2	0	0	0

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	1	5	0	0	1	0	1	0	0	0	0	0
215-230	1	0	0	0	2	0	1	0	0	0	0	0
230-245	0	4	0	0	3	0	0	0	0	0	0	0
245-300	1	2	0	0	0	1	0	0	0	0	0	0
300-315	1	5	0	0	1	0	0	0	0	0	0	0
315-330	1	4	0	0	1	0	0	0	2	0	0	0
330-345	1	0	0	0	1	0	0	0	1	0	0	0
345-400	1	4	0	0	1	1	0	0	0	0	0	0
400-415	0	5	0	0	2	0	0	0	0	0	0	0
415-430	1	7	0	0	0	1	0	0	1	0	0	0
430-445	0	6	0	0	0	0	0	0	1	0	0	0
445-500	1	1	0	0	0	0	0	0	0	0	0	0
500-515	0	0	0	0	0	0	0	0	0	0	0	0
515-530	0	6	0	0	0	0	0	0	0	0	0	0
530-545	0	0	0	0	0	0	0	0	0	0	0	0
545-600	0	0	0	0	0	0	0	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	21	0	0	11	4	2	0	1	0	0	0
215-230	0	15	0	0	11	4	10	0	1	0	0	0
230-245	2	14	0	0	9	7	4	0	1	0	0	0
245-300	1	17	0	0	8	8	2	0	0	0	0	0
300-315	0	20	0	0	20	15	6	0	1	0	0	0
315-330	0	12	0	0	8	6	7	0	0	0	0	0
330-345	0	13	0	0	10	5	12	0	0	0	0	0
345-400	1	17	0	0	18	4	10	0	0	0	0	0
400-415	0	18	0	0	16	6	5	0	0	0	0	0
415-430	1	18	0	0	0	7	14	0	0	0	0	0
430-445	1	25	0	0	6	6	0	0	0	0	0	0
445-500	0	11	0	0	14	5	0	0	0	0	0	0
500-515	0	4	0	0	4	5	4	0	0	0	0	0
515-530	0	3	0	0	5	3	4	0	0	0	0	0
530-545	0	5	0	0	10	7	4	0	1	0	0	0
545-600	0	2	0	0	5	6	2	0	0	0	0	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	13	0	0	7	0	2	0	0	0	0	0
215-230	0	10	0	0	7	2	1	0	0	0	0	0
230-245	2	6	0	0	9	2	2	0	0	0	0	0
245-300	0	7	0	0	8	1	0	0	1	0	0	0
300-315	0	5	0	0	8	2	2	0	0	0	0	0
315-330	2	3	0	0	5	2	0	0	0	0	0	0
330-345	2	5	0	0	0	0	1	0	0	0	0	0
345-400	0	5	0	0	3	1	2	0	0	0	0	0
400-415	0	3	0	0	3	1	1	0	0	0	0	0
415-430	0	1	0	0	4	1	1	0	0	0	0	0
430-445	1	2	0	0	1	0	1	0	0	0	0	0
445-500	0	7	0	0	3	2	2	0	4	0	0	0
500-515	0	2	0	0	1	0	0	0	0	0	0	0
515-530	0	1	0	0	0	0	1	0	0	0	0	0
530-545	1	2	0	0	3	0	4	0	1	0	0	0
545-600	0	1	0	0	3	0	2	0	0	0	0	0

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 31, 2005
 PERIOD: 2:00 PM TO 6:00 PM
 INTERSECTION: N/S PICO AVENUE
 E/W PIER D

15-MIN COUNTS	1 SBRT					2 SBTH					3 SBLT					4 WBRBT						
	AUTOS	BOB-T	CHASS	CONT	OTHR	AUTOS	BOB-T	CHASS	CONT	OTHR	AUTOS	BOB-T	CHASS	CONT	OTHR	AUTOS	DELIVER	2 AXLE	3 AXLE	4+ AXLE	TOTAL	
	200-215	3	0	0	0	2	14	6	0	17	3	40	0	0	0	0	0	0	1	0	2	0
215-230	2	0	0	0	2	16	6	6	16	3	47	3	0	0	0	0	3	0	2	0	4	6
230-245	4	1	0	0	8	16	11	1	17	1	46	0	0	0	0	0	0	0	0	0	0	0
245-300	5	1	0	0	5	28	12	1	25	3	69	2	0	0	0	2	0	1	0	7	0	8
300-315	3	0	0	1	4	13	13	2	16	1	45	0	0	0	0	0	0	0	0	0	1	0
315-330	9	0	0	1	11	26	10	5	17	3	61	1	0	0	0	0	1	1	1	0	2	0
330-345	1	0	0	0	1	22	6	2	26	1	57	0	0	0	0	0	0	1	0	0	7	0
345-400	3	0	0	0	3	29	3	5	11	3	51	1	0	0	0	0	1	0	0	0	3	1
400-415	3	0	0	0	3	23	3	3	11	2	42	2	0	0	0	0	2	1	1	0	3	2
415-430	5	1	0	1	8	22	2	1	5	2	32	1	0	0	0	0	1	0	0	0	1	0
430-445	9	0	0	1	11	36	9	6	11	2	64	1	0	0	0	0	1	1	1	0	4	2
445-500	3	1	0	1	6	38	4	2	10	1	55	0	0	0	0	0	1	6	0	7	2	
500-515	1	1	0	1	2	29	3	1	7	2	42	1	0	0	0	0	1	1	1	0	2	0
515-530	5	1	0	1	2	22	8	1	11	5	47	1	0	0	0	0	1	2	2	0	1	3
530-545	5	0	0	0	3	28	11	1	15	6	61	0	0	0	0	0	4	4	0	3	0	11
545-600	3	0	0	1	1	16	5	2	10	4	37	0	0	0	0	0	3	2	0	1	2	8
HOURL TOTALS																						
200-300	14	2	0	0	15	74	35	8	75	10	202	5	0	0	0	5	0	4	0	13	0	17
215-315	14	2	0	1	13	73	42	10	74	8	207	5	0	0	0	5	0	3	0	12	0	15
230-330	21	2	0	2	14	83	46	9	75	8	221	3	0	0	0	3	1	2	0	10	0	13
245-345	18	1	0	2	6	89	41	10	84	8	232	3	0	0	0	3	2	2	0	17	0	21
300-400	16	0	0	2	1	90	32	14	70	8	214	2	0	0	0	2	2	1	0	13	1	17
315-415	16	0	0	1	1	100	22	15	65	9	211	4	0	0	0	4	3	2	0	15	3	23
330-430	12	1	0	1	1	96	14	11	53	8	182	4	0	0	0	4	2	1	0	14	3	20
345-445	20	1	0	2	2	110	17	15	38	9	189	5	0	0	0	5	2	2	0	11	5	20
400-500	20	2	0	3	3	119	18	12	37	7	193	4	0	0	0	4	3	8	0	15	6	32
415-515	18	3	0	4	5	125	18	10	33	7	193	3	0	0	0	3	3	8	0	14	4	29
430-530	18	3	0	4	6	125	24	10	39	10	208	3	0	0	0	3	5	10	0	14	7	36
445-545	14	3	0	3	8	117	26	5	43	14	205	2	0	0	0	2	8	13	0	13	5	39
500-600	14	2	0	3	8	95	27	5	43	17	187	2	0	0	0	2	10	9	0	7	5	31

15-MIN COUNTS	5 WBTH					6 WBLT					7 NBRBT					8 NBRBT							
	AUTOS	BOB-T	CHASS	CONT	OTHR	AUTOS	BOB-T	CHASS	CONT	OTHR	AUTOS	BOB-T	CHASS	CONT	OTHR	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL		
	200-215	1	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	25	14	8	14	4	65
215-230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	21	3	11	2	61	
230-245	2	0	0	0	1	3	1	1	0	0	3	1	0	0	0	0	27	17	7	14	3	68	
245-300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	17	8	20	1	70	
300-315	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	0	23	10	6	11	2	52	
315-330	1	0	0	0	1	2	2	1	0	1	4	0	0	0	0	0	23	6	4	11	3	47	
330-345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	10	6	5	0	41	
345-400	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	29	15	5	26	0	75	
400-415	2	0	0	0	0	2	1	1	0	2	0	4	1	0	0	0	1	38	15	2	21	1	77
415-430	0	0	0	0	0	3	3	0	5	0	11	2	0	0	0	0	2	24	20	0	16	1	61
430-445	0	0	0	0	0	2	2	0	2	0	6	0	0	0	0	0	0	21	12	5	13	2	53
445-500	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	43	17	0	6	0	66
500-515	1	0	0	0	1	2	2	2	1	2	0	7	0	0	0	0	0	29	4	0	4	1	38
515-530	1	0	0	0	1	3	0	0	0	0	3	2	0	0	0	0	2	15	4	1	0	0	20
530-545	0	0	0	0	0	2	1	0	2	1	6	1	0	0	0	0	1	25	2	5	3	2	37
545-600	0	0	0	0	0	3	3	0	3	0	9	0	0	0	0	0	15	8	2	6	0	31	
HOURL TOTALS																							
200-300	3	0	0	0	1	4	1	2	0	1	5	1	0	0	0	0	1	100	69	26	59	10	264
215-315	2	0	0	0	1	3	1	2	0	1	5	2	0	0	0	0	2	98	65	24	56	8	251
230-330	3	0	0	0	2	5	3	3	0	2	1	9	2	0	0	0	2	97	50	25	56	9	237
245-345	1	0	0	0	1	2	2	2	0	2	0	6	1	0	0	0	1	90	43	24	47	6	210
300-400	1	0	0	0	1	2	2	2	0	4	0	8	1	0	0	0	1	95	41	21	53	5	215
315-415	3	0	0	0	1	4	3	2	0	5	0	10	1	0	0	0	1	110	46	17	63	4	240
330-430	2	0	0	0	0	2	4	4	0	9	0	17	3	0	0	0	3	111	60	13	68	2	254
345-445	2	0	0	0	0	2	6	6	0	11	0	23	3	0	0	0	3	112	62	12	76	4	266
400-500	2	0	0	0	0	2	6	8	2	9	0	25	3	0	0	0	3	126	64	7	56	4	257
415-515	1	0	0	0	1	2	7	9	3	9	0	28	2	0	0	0	2	117	53	5	39	4	218
430-530	2	0	0	0	2	4	7	6	3	4	0	20	2	0	0	0	2	108	37	6	23	3	177
445-545	2	0	0	0	2	4	7	5	3	4	1	20	3	0	0	0	3	112	27	6	13	3	161
500-600	2	0	0	0	2	4	10	6	1	7	1	25	3	0	0	0	3	84	18	8	13	3	126

15-MIN COUNTS	9 NBLT					10 EBRBT					11 EBRBT					12 EBLT							
	AUTOS	BOB-T	CHASS	CONT	OTHR	AUTOS	BOB-T	CHASS	CONT	OTHR	AUTOS	BOB-T	CHASS	CONT	OTHR	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL		
	200-215	0	0	0	0	0	0	0	0	0	0	0	9	0	0	1	2	12	26	11	0	30	4
215-230	5	0	0	0	1	6	0	0	0	0	0	8	0	0	0	11	19	24	13	0	38	5	80
230-245	7	0	0	0	0	7	0	0	0	0	0	11	0	0	0	4	15	35	12	0	28	10	85
245-300	5	0	0	0	1	6	0	0	0	0	0	9	0	0	1	5	15	31	14	1	28	5	79
300-315	4	0	0	0	0	4	2	0	0	0	2	10	0	0	0	3	13	34	12	2	32	3	83
315-330	6	0	0	0	0	6	0	0	0	0	0	8	0	1	1	6	16	29	10	1	33	6	79
330-345	18	0	0	0	1	19	0	0	0	0	0	27	0	0	1	2	30	22	19	3	31	7	82
345-400	4	0	0	0	1	5	1	0	0	0	1	12	0	0	0	1	13	37	6	2	34	3	82
400-415	13	0	0	0	0	13	0	0	0	0	0	16	0	0	1	0	17	41	19	1	51	4	116
415-430	5	0	0	0	1	6	0	0	0	0	0	10	0	0	0	0	10	43	20	5	43	6	117
430-445	10	0	0	0	0	10	0	0	0	0	0	11	0	0	0	0	11	36	19	6	43	3	107
445-500	18	0	0	0	0	18	0	0	0	0	0	5	0	0	0	1	6	79	24				

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	25	0	0	14	3	26	9	0	0	1	0
215-230	5	24	0	3	16	2	24	8	0	0	0	0
230-245	7	27	1	0	16	4	35	11	0	1	2	0
245-300	5	24	0	2	28	5	31	9	0	0	0	0
300-315	4	23	1	0	13	3	34	10	2	0	0	0
315-330	6	23	0	1	26	9	29	8	0	2	1	1
330-345	18	20	0	0	22	1	22	27	0	0	0	1
345-400	4	29	0	1	29	3	37	12	1	0	0	0
400-415	13	38	1	2	23	3	41	16	0	1	2	1
415-430	5	24	2	1	22	5	43	10	0	3	0	0
430-445	10	21	0	1	36	9	36	11	0	2	0	1
445-500	18	43	0	0	38	3	79	5	0	0	0	1
500-515	9	29	0	1	29	1	46	19	0	2	1	1
515-530	6	15	2	1	22	5	41	3	0	3	1	2
530-545	4	25	1	0	28	5	42	8	1	2	0	4
545-600	3	15	0	0	16	3	27	6	0	3	0	3

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	14	0	0	6	0	11	0	0	1	0	1
215-230	0	21	0	0	6	0	13	0	0	0	0	2
230-245	0	17	0	0	11	1	12	0	0	1	0	0
245-300	0	17	0	0	12	1	14	0	0	0	0	1
300-315	0	10	0	0	13	0	12	0	0	1	0	0
315-330	0	6	0	0	10	0	10	0	0	1	0	1
330-345	0	10	0	0	6	0	19	0	0	0	0	0
345-400	0	15	0	0	3	0	6	0	0	0	0	0
400-415	0	15	0	0	3	0	19	0	0	1	0	1
415-430	0	20	0	0	2	1	20	0	0	3	0	0
430-445	0	12	0	0	9	0	19	0	0	2	0	1
445-500	0	17	0	0	4	1	24	0	0	2	0	6
500-515	0	4	0	0	3	1	9	0	0	2	0	1
515-530	0	4	0	0	8	1	3	0	0	0	0	2
530-545	0	2	0	0	11	0	10	0	0	1	0	4
545-600	0	8	0	0	5	0	11	0	0	3	0	2

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	8	0	0	0	0	0	0	0	0	0	0
215-230	0	3	0	0	6	0	0	0	0	0	0	0
230-245	0	7	0	0	1	0	0	0	0	0	0	0
245-300	0	8	0	0	1	0	1	0	0	0	0	0
300-315	0	6	0	0	2	0	2	0	0	0	0	0
315-330	0	4	0	0	5	0	1	1	0	0	0	0
330-345	0	6	0	0	2	0	3	0	0	0	0	0
345-400	0	5	0	0	5	0	2	0	0	0	0	0
400-415	0	2	0	0	3	0	1	0	0	0	0	0
415-430	0	0	0	0	1	0	5	0	0	0	0	0
430-445	0	5	0	0	6	0	6	0	0	0	0	0
445-500	0	0	0	0	2	0	1	0	0	2	0	0
500-515	0	0	0	0	1	0	2	0	0	1	0	0
515-530	0	1	0	0	1	0	1	0	0	0	0	0
530-545	0	5	0	0	1	0	2	0	0	0	0	0
545-600	0	2	0	0	2	0	1	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	14	0	0	17	0	30	1	0	1	0	2
215-230	0	11	0	0	16	0	38	0	0	0	0	4
230-245	0	14	0	0	17	0	28	0	0	0	0	0
245-300	0	20	0	0	25	0	28	1	0	0	0	7
300-315	0	11	0	0	16	1	32	0	0	1	0	1
315-330	0	11	0	0	17	1	33	1	0	1	0	2
330-345	0	5	0	0	26	0	31	1	0	0	0	7
345-400	0	26	0	0	11	0	34	0	0	2	0	3
400-415	0	21	0	0	11	0	51	1	0	2	0	3
415-430	0	16	0	0	5	1	43	0	0	5	0	1
430-445	0	13	0	0	11	1	43	0	0	2	0	4
445-500	0	6	0	0	10	1	12	0	0	0	0	7
500-515	0	4	0	0	7	1	8	0	0	2	0	2
515-530	0	0	0	0	11	1	7	0	0	0	0	1
530-545	0	3	0	0	15	0	13	0	0	2	0	3
545-600	0	6	0	0	10	1	12	0	0	3	0	1

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	4	0	0	3	2	4	2	0	0	0	0
215-230	1	2	0	0	3	0	5	11	0	0	0	0
230-245	0	3	0	0	1	8	10	4	0	1	1	0
245-300	1	1	0	0	3	5	5	5	0	0	0	0
300-315	0	2	0	0	1	0	3	3	0	0	0	0
315-330	0	3	0	0	3	1	6	6	0	0	1	0
330-345	1	0	0	0	1	0	7	2	0	0	0	0
345-400	1	0	0	0	3	0	3	1	0	0	0	1
400-415	0	1	0	0	2	0	4	0	0	0	0	2
415-430	1	1	0	0	2	1	6	0	0	0	0	0
430-445	0	2	0	0	2	1	3	0	0	0	0	2
445-500	0	0	0	0	1	1	8	1	0	0	0	2
500-515	1	1	0	0	2	2	1	1	0	0	1	0
515-530	0	0	0	0	5	2	8	0	0	0	1	3
530-545	0	2	0	0	6	3	4	0	0	1	0	0
545-600	0	0	0	0	4	1	4	2	0	0	0	2

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 31, 2005
 PERIOD: 2:00 PM TO 6:00 PM
 INTERSECTION: N/S PICO AVENUE
 E/W BROADWAY

15-MIN COUNTS	1 SBRT						2 SBTH						3 SBLT						4 WBR						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	DELIVER	2 AXLE	3 AXLE	4+ AXLE	TOTAL	
	200-215	25	7	2	17	3	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215-230	22	5	4	11	0	42	1	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	2	
230-245	26	10	1	17	1	55	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
245-300	28	14	2	25	2	71	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
300-315	14	13	2	15	1	45	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
315-330	26	7	4	17	2	56	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	2	
330-345	46	4	3	25	1	79	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	
345-400	26	3	4	12	3	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
400-415	43	4	3	9	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
415-430	23	4	3	6	0	36	0	0	0	0	0	0	3	2	0	0	0	0	5	0	0	0	0	0	
430-445	42	9	3	8	1	63	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
445-500	50	2	1	5	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500-515	41	5	0	6	1	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
515-530	29	4	0	10	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
530-545	26	11	3	11	3	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
545-600	14	8	2	13	2	39	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
HOURLY TOTALS																									
200-300	101	36	9	70	6	222	3	0	0	0	0	3	0	0	0	0	0	0	1	1	1	0	0	3	
215-315	90	42	9	68	4	213	5	0	0	0	0	5	0	0	0	0	0	0	1	1	1	0	0	3	
230-330	94	44	9	74	6	227	4	0	0	0	1	5	0	0	0	0	0	0	2	1	0	0	0	3	
245-345	114	38	11	82	6	251	2	0	0	0	1	3	0	0	0	0	0	0	3	1	1	0	0	5	
300-400	112	27	13	69	7	228	2	0	0	0	1	3	0	0	0	0	0	0	2	1	1	0	0	4	
315-415	141	18	14	63	6	242	0	0	0	0	1	3	0	0	0	0	0	0	2	1	1	0	0	4	
330-430	138	15	13	52	4	222	0	0	0	0	0	3	2	0	0	0	0	5	1	0	1	0	0	2	
345-445	134	20	13	35	4	206	0	0	0	0	0	3	2	0	0	0	0	5	1	0	0	0	0	1	
400-500	158	19	10	28	1	216	0	0	0	0	0	3	2	0	0	0	0	5	1	0	0	0	0	1	
415-515	156	20	7	25	2	210	0	0	0	0	0	3	2	0	0	0	0	5	1	0	0	0	0	1	
430-530	162	20	4	29	2	217	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
445-545	146	22	4	32	4	208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500-600	110	28	5	40	6	189	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	

15-MIN COUNTS	5 WBTH						6 WBLT						7 NBR						8 NBRT						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
	200-215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215-230	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	24	20	3	13	68	
230-245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	18	6	16	76	
245-300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	19	8	20	73	
300-315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	11	4	12	53		
315-330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	5	5	12	4	51	
330-345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	11	4	12	1	51	
345-400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	15	5	23	2	78	
400-415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	16	1	20	2	58	
415-430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	25	0	15	2	66	
430-445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	18	4	15	2	62	
445-500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	19	0	7	0	73	
500-515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	5	0	4	1	40	
515-530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	6	1	1	1	28	
530-545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	5	5	5	0	49	
545-600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	9	1	7	0	33	
HOURLY TOTALS																									
200-300	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	1	102	73	26	67	14	282
215-315	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	1	101	68	21	61	16	267
230-330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	53	23	60	15	253
245-345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93	46	21	56	12	228
300-400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	42	18	59	12	233
315-415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	47	15	67	9	238
330-430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99	67	10	70	7	253
345-445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99	74	10	73	8	264
400-500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	78	5	57	6	259
415-515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124	67	4	41	5	241
430-530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119	48	5	27	4	203
445-545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	35	6	17	2	190
500-600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99	25	7	17	2	150

15-MIN COUNTS	9 NBLT						10 EBRT						11 EBTH						12 EBLT						
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
	200-215	8	0	0	0	3	11	3	0	0	0	0	3	0	0	0	0	0	0	0	3	0	0	1	3
215-230	2	0	1	0	0	3	7	0	0	1	0	8	0	0	0	0	0	0	0	1	0	0	1	0	2
230-245	3	0	0	0	0	3	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5	1	6
245-300	5	0	0	0	1	6	5	1	0	2	0	8	0	0	0	1	6	0	1	3	0	0	2	1	6
300-315	2	0	0	0	0	2	8	0	0	1	0	9	0	0	0	0	0	0	0	3	0	0	1	0	4
315-330	7	0	0	0	0	7	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
330-345	5	0	0	0	3	8	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	1
345-400	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0									

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	8	22	0	0	0	25	3	0	3	0	0	0
215-230	2	24	0	0	1	22	1	0	7	1	0	0
230-245	3	32	0	0	2	26	0	0	4	0	0	0
245-300	5	24	0	0	0	28	3	0	5	0	0	1
300-315	2	21	0	0	2	14	3	0	8	0	0	0
315-330	7	25	0	0	0	26	1	0	1	0	0	1
330-345	5	23	0	0	0	46	0	0	5	0	0	1
345-400	0	33	0	0	0	26	1	0	2	0	0	0
400-415	2	19	0	0	0	43	19	0	19	0	0	0
415-430	0	24	0	3	0	23	2	0	1	0	0	0
430-445	1	23	0	0	0	42	1	0	0	0	0	1
445-500	0	47	0	0	0	50	1	0	1	0	0	0
500-515	0	30	0	0	0	41	0	0	1	0	0	0
515-530	0	19	0	0	0	29	0	0	1	0	0	0
530-545	2	34	0	0	0	26	2	0	1	0	0	0
545-600	0	16	0	0	0	14	0	0	0	0	0	0

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	16	0	0	0	7	0	0	0	0	0	0
215-230	0	20	1	0	0	5	0	0	0	0	0	1
230-245	0	18	0	0	0	10	0	0	0	0	0	0
245-300	0	19	0	0	0	14	0	0	1	0	0	0
300-315	0	11	0	0	0	13	0	0	0	0	0	0
315-330	0	5	0	0	0	7	0	0	0	0	0	1
330-345	0	11	0	0	0	4	0	0	0	0	0	0
345-400	0	15	0	0	0	3	0	0	0	0	0	0
400-415	0	16	0	0	0	4	0	0	0	0	0	0
415-430	0	25	0	2	0	4	0	0	0	0	0	0
430-445	0	18	0	0	0	9	0	0	0	0	0	0
445-500	0	19	0	0	0	2	0	0	0	0	0	0
500-515	0	5	0	0	0	5	0	0	0	0	0	0
515-530	0	6	0	0	0	4	0	0	0	0	0	0
530-545	0	5	0	0	0	11	0	0	0	0	0	0
545-600	0	9	0	0	0	8	0	0	0	0	0	1

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	9	0	0	0	2	0	0	0	0	0	0
215-230	1	3	0	0	0	4	0	0	0	0	0	1
230-245	0	6	0	0	0	1	0	0	0	0	0	0
245-300	0	8	0	0	0	2	0	0	0	0	0	0
300-315	0	4	0	0	0	2	0	0	0	0	0	0
315-330	0	5	0	0	0	4	0	0	0	0	0	0
330-345	0	4	0	0	0	3	0	0	0	0	0	1
345-400	0	5	0	0	0	4	0	0	0	0	0	0
400-415	0	1	0	0	0	3	0	0	0	0	0	0
415-430	0	0	0	0	0	3	0	0	0	0	0	0
430-445	0	4	0	0	0	3	0	0	0	0	0	0
445-500	0	0	0	0	0	1	0	0	0	0	0	0
500-515	0	0	0	0	0	0	0	0	0	0	0	0
515-530	0	1	0	0	0	0	0	0	0	0	0	0
530-545	0	5	0	0	0	3	0	0	0	0	0	0
545-600	0	1	0	0	0	2	0	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	18	0	0	0	17	1	0	0	0	0	0
215-230	0	13	0	0	0	11	1	0	1	0	0	0
230-245	0	16	0	0	0	17	5	0	0	0	0	0
245-300	0	20	0	0	0	25	2	1	2	0	0	0
300-315	0	12	0	0	0	15	1	0	1	0	0	0
315-330	0	12	0	0	0	17	0	0	0	0	0	0
330-345	0	12	0	0	0	25	1	0	0	0	0	0
345-400	0	23	0	0	0	12	2	0	0	0	0	0
400-415	0	20	0	0	0	9	1	0	0	0	0	0
415-430	0	15	0	0	0	6	3	0	0	0	0	0
430-445	0	15	0	0	0	8	2	0	0	0	0	0
445-500	0	7	0	0	0	5	2	0	0	0	0	0
500-515	0	4	0	0	0	6	1	0	0	0	0	0
515-530	0	1	0	0	0	10	1	0	0	0	0	0
530-545	0	5	0	0	0	11	0	0	0	0	0	0
545-600	0	7	0	0	0	13	1	0	0	0	0	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	3	3	0	0	0	3	3	0	0	0	0	0
215-230	0	5	0	0	0	0	0	0	0	0	0	0
230-245	0	4	0	0	0	1	1	0	0	0	0	0
245-300	1	2	0	0	0	2	1	0	0	0	0	0
300-315	0	5	0	0	0	1	0	0	0	0	0	0
315-330	0	4	0	0	1	2	1	0	0	0	0	0
330-345	3	1	0	0	0	1	0	0	0	0	0	0
345-400	0	2	0	0	0	3	0	0	0	0	0	0
400-415	0	2	0	0	0	0	0	0	0	0	0	0
415-430	0	2	0	0	0	0	0	0	0	0	0	0
430-445	0	2	0	0	0	1	0	0	0	0	0	0
445-500	0	0	0	0	0	0	0	0	0	0	0	0
500-515	0	1	0	0	0	1	0	0	0	0	0	0
515-530	0	1	0	0	0	0	0	0	0	0	0	0
530-545	0	0	0	0	0	3	1	0	0	0	0	0
545-600	0	0	0	0	0	2	0	0	0	0	0	0

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 31, 2005
 PERIOD: 2:00 PM TO 6:00 PM
 INTERSECTION: N/S PICO AVENUE
 E/W PIER E

15-MIN COUNTS	1 SBRT					2 SBHT					3 SBLT					4 WBRHT									
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	DELIVER	2 AXLE	3 AXLE	4+ AXLE	TOTAL	
	200-215	0	0	0	0	0	0	11	3	1	2	3	20	3	0	0	0	0	0	3	9	1	0	3	1
215-230	2	0	0	0	0	2	14	1	3	2	2	22	11	0	0	0	0	0	11	10	3	1	3	0	17
230-245	0	0	0	0	0	0	16	3	1	2	1	23	14	0	0	0	0	0	14	5	1	0	4	2	12
245-300	0	0	0	0	0	0	11	5	1	2	0	19	16	0	0	0	0	0	16	7	3	1	7	1	19
300-315	0	0	0	0	0	0	11	3	1	4	1	20	12	0	0	0	0	0	12	4	1	0	4	1	10
315-330	1	0	0	0	0	1	8	1	4	0	2	15	10	0	0	0	0	0	10	6	0	0	6	3	15
330-345	1	0	0	0	0	1	11	0	1	1	0	13	13	0	0	0	0	0	13	7	0	1	1	0	9
345-400	1	0	0	0	0	1	7	0	1	1	1	10	10	0	0	0	0	0	10	7	3	0	8	1	19
400-415	2	0	0	0	0	2	7	3	2	0	0	12	30	0	0	0	0	0	30	7	0	0	2	0	9
415-430	0	0	0	0	0	0	6	1	1	2	1	11	15	0	0	0	0	0	15	5	5	0	6	1	17
430-445	4	0	0	0	0	4	8	1	4	1	0	14	26	0	0	0	0	0	26	7	5	0	5	1	18
445-500	5	0	0	0	0	5	7	1	0	2	0	10	18	0	0	0	0	0	18	11	5	0	1	0	17
500-515	5	0	0	0	0	5	9	2	0	0	1	12	18	0	0	0	0	0	18	9	1	0	1	1	12
515-530	2	0	0	0	0	2	16	0	0	1	0	17	10	0	0	0	0	0	10	6	2	0	2	0	10
530-545	5	0	0	0	0	5	5	3	2	2	1	13	15	0	0	0	0	0	16	18	2	1	1	0	22
545-600	6	0	0	0	0	6	5	3	0	3	2	13	13	0	0	0	0	0	13	3	3	0	2	0	8
HOURLY TOTALS																									
200-300	2	0	0	0	0	2	52	12	6	8	6	84	44	0	0	0	0	0	44	31	8	2	17	4	62
215-315	2	0	0	0	0	2	52	12	6	10	4	84	53	0	0	0	0	0	53	26	8	2	18	4	58
230-330	1	0	0	0	0	1	46	12	7	8	4	77	52	0	0	0	0	0	52	22	5	1	21	7	56
245-345	2	0	0	0	0	2	41	9	7	7	3	67	51	0	0	0	0	0	51	24	4	2	18	5	53
300-400	3	0	0	0	0	3	37	4	7	6	4	58	45	0	0	0	0	0	45	24	4	1	19	5	53
315-415	5	0	0	0	0	5	33	4	8	2	3	50	63	0	0	0	0	0	63	27	3	1	17	4	52
330-430	4	0	0	0	0	4	31	4	5	4	2	46	68	0	0	0	0	0	68	26	8	1	17	2	54
345-445	7	0	0	0	0	7	28	5	8	4	2	47	81	0	0	0	0	0	81	26	13	0	21	3	63
400-500	11	0	0	0	0	11	28	6	7	5	1	47	89	0	0	0	0	0	89	30	15	0	14	2	61
415-515	14	0	0	0	0	14	30	5	5	5	2	47	77	0	0	0	0	0	77	32	16	0	13	3	64
430-530	16	0	0	0	0	16	40	4	4	4	1	53	72	0	0	0	0	0	72	33	13	0	9	2	57
445-545	17	0	0	0	0	17	37	6	2	5	2	52	61	0	0	0	0	0	62	44	10	1	5	1	61
500-600	18	0	0	0	0	18	35	8	2	6	4	55	56	0	0	0	0	0	57	36	8	1	6	1	52

15-MIN COUNTS	5 WBHT					6 WBLT					7 NBRHT					8 NBWHT									
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
	200-215	0	1	0	1	0	2	5	15	1	6	0	27	1	0	0	0	0	0	1	17	37	4	5	2
215-230	1	5	0	1	0	7	5	13	2	6	2	28	0	0	0	0	0	0	1	16	19	3	4	2	44
230-245	0	0	2	1	0	3	9	14	2	5	0	30	1	0	0	0	0	0	1	2	33	37	3	4	78
245-300	2	1	2	2	0	7	9	12	1	4	3	29	0	0	0	0	0	0	0	17	25	2	6	2	52
300-315	1	1	0	2	0	4	6	13	2	3	0	24	1	0	0	0	0	0	1	9	28	1	7	2	47
315-330	0	5	1	2	0	8	7	15	3	8	0	33	0	0	0	0	0	0	0	19	24	0	3	3	49
330-345	3	2	3	1	0	9	5	6	1	0	3	15	0	0	0	0	0	0	0	22	21	1	8	2	54
345-400	1	1	1	6	0	9	5	5	2	3	1	16	0	0	0	0	0	0	0	18	20	3	13	2	56
400-415	0	4	0	2	0	6	3	8	5	9	0	25	0	0	0	0	0	0	0	16	35	1	10	0	62
415-430	2	4	0	0	0	6	10	9	0	6	0	25	0	0	0	0	0	0	0	22	17	1	7	0	47
430-445	8	1	0	0	1	10	17	8	0	2	0	27	3	0	0	0	0	0	3	32	15	1	5	1	54
445-500	5	0	0	0	0	5	19	7	0	3	1	30	0	0	0	0	0	0	0	85	18	2	2	0	107
500-515	2	0	0	0	0	2	17	0	0	3	0	20	3	0	0	0	0	0	3	56	8	2	2	0	68
515-530	4	0	0	0	0	4	13	0	1	3	0	17	0	0	0	0	0	0	0	20	6	2	0	1	29
530-545	1	3	0	0	0	4	29	2	0	1	0	32	2	0	0	0	0	0	2	32	3	2	0	0	37
545-600	1	1	0	0	0	2	17	6	0	4	1	28	1	0	0	0	0	0	1	11	8	2	0	0	21
HOURLY TOTALS																									
200-300	3	7	4	5	0	19	28	54	6	21	5	114	2	0	0	0	0	2	4	83	118	12	19	7	239
215-315	4	7	4	6	0	21	29	52	7	18	5	111	2	0	0	0	0	2	4	75	109	9	21	7	221
230-330	3	7	5	7	0	22	31	54	8	20	3	116	2	0	0	0	0	1	3	78	114	6	20	8	226
245-345	6	9	6	7	0	28	27	46	7	15	6	101	1	0	0	0	0	0	1	67	98	4	24	9	202
300-400	5	9	5	11	0	30	23	39	8	14	4	88	1	0	0	0	0	0	1	68	93	5	31	9	206
315-415	4	12	5	11	0	32	20	34	11	20	4	89	0	0	0	0	0	0	0	75	100	5	34	7	221
330-430	6	11	4	9	0	30	23	28	8	18	4	81	0	0	0	0	0	0	0	78	93	6	38	4	219
345-445	11	10	1	8	1	31	35	30	7	20	1	93	3	0	0	0	0	0	3	88	87	6	35	3	219
400-500	15	9	0	2	1	27	49	32	5	20	1	107	3	0	0	0	0	0	3	155	85	5	24	1	270
415-515	17	5	0	0	1	23	63	24	0	14	1	102	6	0	0	0	0	0	6	195	58	6	16	1	276
430-530	19	1	0	0	1	21	66	15	1	11	1	94	6	0	0	0	0	0	6	193	47	7	9	2	258
445-545	12	3	0	0	0	15	78	9	1	10	1	99	5	0	0	0	0	0	5	193	35	8	4	1	241
500-600	8	4	0	0	0	12	76	8	1	11	1	97	6	0	0	0	0	0	6	119	25	8	2	1	155

15-MIN COUNTS	9 NBLT					10 EBRHT					11 EBLT					12 EBRHT									
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
	200-215	0	1	0	1	0	2	0	2	0	0	0	2	0	0	0	0	0	0	0	0	17	10	12	0
215-230	0	2	0	1	0	3	2	1	0	0	0	3	0	0	0	0	0	0	0	3	20	3	8	0	34
230-245	0	4	0	1	0	5	0	1	0	0	0	1	0	0	0	0	0	0	0	3	20	4	8	0	35
245-300	0	4	0	1	0	5	0																		

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	17	1	3	11	0	0	0	0	5	0	9
215-230	0	16	0	11	14	2	3	0	2	5	1	10
230-245	0	33	1	14	16	0	3	0	0	9	0	5
245-300	0	17	0	16	11	0	2	0	0	9	2	7
300-315	0	9	1	12	11	0	1	3	0	6	1	4
315-330	0	19	0	10	8	1	1	0	0	7	0	6
330-345	1	22	0	13	11	1	1	0	0	5	3	7
345-400	1	18	0	10	7	1	5	3	0	5	1	7
400-415	1	16	0	30	7	2	5	6	0	3	0	7
415-430	1	22	0	15	6	0	1	0	1	10	2	5
430-445	1	32	3	26	8	4	9	5	0	17	8	7
445-500	1	85	0	18	7	5	20	25	0	19	5	11
500-515	3	56	3	18	9	5	8	3	0	17	2	9
515-530	4	20	0	10	16	2	2	2	0	13	4	6
530-545	4	32	2	15	5	5	2	0	0	29	1	18
545-600	5	11	1	13	5	6	2	0	0	17	1	3

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	1	37	0	0	3	0	17	0	2	15	1	1
215-230	2	19	0	0	1	0	20	0	1	13	5	3
230-245	4	37	0	0	3	0	20	0	1	14	0	1
245-300	4	25	0	0	5	0	14	0	1	12	1	3
300-315	3	28	0	0	3	0	5	0	1	13	1	1
315-330	4	24	0	0	1	0	0	0	0	15	5	0
330-345	4	21	0	0	0	0	6	0	0	6	2	0
345-400	1	20	0	0	0	0	11	0	1	5	1	3
400-415	1	35	0	0	3	0	9	0	0	8	4	0
415-430	1	17	0	0	1	0	10	0	0	9	4	5
430-445	1	15	0	0	1	0	13	0	0	8	1	5
445-500	1	18	0	0	1	0	6	0	0	7	0	5
500-515	1	8	0	0	2	0	1	0	0	0	0	1
515-530	2	6	0	0	0	0	1	0	2	0	0	2
530-545	2	3	0	0	3	0	5	0	0	2	3	2
545-600	1	8	0	0	3	0	11	0	0	6	1	3

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	4	0	0	1	0	10	0	0	1	0	0
215-230	0	3	0	0	3	0	3	0	0	2	0	1
230-245	0	3	0	0	1	0	4	0	0	2	2	0
245-300	0	2	0	0	1	0	6	0	0	1	2	1
300-315	0	1	0	0	1	0	5	0	0	2	0	0
315-330	0	0	0	0	4	0	3	0	0	3	1	0
330-345	0	1	0	0	1	0	4	0	0	1	3	1
345-400	0	3	0	0	1	0	3	0	0	2	1	0
400-415	0	1	0	0	2	0	2	0	0	5	0	0
415-430	0	1	0	0	1	0	0	0	0	0	0	0
430-445	0	1	0	0	4	0	5	0	0	0	0	0
445-500	0	2	0	0	0	0	0	0	0	0	0	0
500-515	0	2	0	0	0	0	0	0	0	0	0	0
515-530	0	2	0	0	0	0	0	0	0	1	0	0
530-545	0	2	0	0	2	0	5	0	0	0	0	1
545-600	0	2	0	0	0	0	3	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	1	5	0	0	2	0	12	0	0	6	1	3
215-230	1	4	0	0	2	0	8	0	0	6	1	3
230-245	1	4	0	0	2	0	8	0	0	5	1	4
245-300	1	6	0	0	2	0	13	0	0	4	2	7
300-315	1	7	0	0	4	0	11	0	0	3	2	4
315-330	1	3	0	0	0	0	5	0	0	8	2	6
330-345	0	8	0	0	1	0	6	0	1	0	1	1
345-400	0	13	0	0	1	0	14	0	0	3	6	8
400-415	0	10	0	0	0	0	14	0	0	9	2	2
415-430	0	7	0	0	2	0	7	0	0	6	0	6
430-445	0	5	0	0	1	0	8	0	0	2	0	5
445-500	0	2	0	0	2	0	0	0	0	3	0	1
500-515	0	2	0	0	0	0	5	0	0	3	0	1
515-530	0	0	0	0	1	0	2	0	0	3	0	2
530-545	0	0	0	0	2	0	2	0	0	1	0	1
545-600	0	0	0	0	3	0	3	0	0	4	0	2

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	2	0	0	3	0	0	0	0	0	0	1
215-230	0	2	1	0	2	0	0	0	0	2	0	0
230-245	0	1	1	0	1	0	0	0	0	0	0	2
245-300	0	2	0	0	0	0	0	0	0	3	0	1
300-315	0	2	0	0	1	0	0	0	0	0	0	1
315-330	0	3	0	0	2	0	0	0	0	0	0	3
330-345	0	2	0	0	0	0	0	0	1	3	0	0
345-400	0	2	0	0	1	0	0	0	0	1	0	1
400-415	0	0	0	0	0	0	1	0	0	0	0	0
415-430	0	0	0	0	1	0	1	0	0	0	0	1
430-445	0	1	0	0	0	0	1	0	0	0	1	1
445-500	0	0	0	0	0	0	1	0	0	1	0	0
500-515	0	0	0	0	1	0	1	0	1	0	0	1
515-530	0	1	0	0	0	0	1	0	0	0	0	0
530-545	0	0	0	1	1	0	3	0	0	0	0	0
545-600	0	0	0	0	2	0	4	0	0	1	0	0

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	26	1	3	26	0	0	0	0	0	0	0
215-230	0	33	0	5	21	0	0	0	0	0	0	0
230-245	0	34	0	3	32	0	0	0	0	0	0	0
245-300	0	30	0	4	23	0	0	0	0	0	0	0
300-315	0	32	0	3	17	0	0	0	0	0	0	0
315-330	0	27	0	3	12	0	0	0	0	0	0	0
330-345	0	31	0	3	17	0	0	0	0	0	0	0
345-400	0	36	1	4	12	0	0	0	0	0	0	0
400-415	0	33	0	2	14	0	0	0	0	0	0	0
415-430	0	41	0	7	21	0	0	0	0	0	0	0
430-445	0	74	0	6	25	0	0	0	0	0	0	0
445-500	0	127	0	9	42	0	0	0	0	0	0	0
500-515	0	56	0	5	36	0	0	0	0	0	0	0
515-530	0	41	0	6	43	0	0	0	0	0	0	0
530-545	0	37	0	16	43	0	0	0	0	0	0	0
545-600	0	15	1	4	27	0	0	0	0	0	0	0

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	42	0	8	20	0	0	0	0	0	0	0
215-230	0	34	0	8	23	0	0	0	0	0	0	0
230-245	0	46	0	5	22	0	0	0	0	0	0	0
245-300	0	41	0	8	17	0	0	0	0	0	0	0
300-315	0	54	0	7	19	0	0	0	0	0	0	0
315-330	0	23	0	6	15	0	0	0	0	0	0	0
330-345	0	35	0	2	8	0	0	0	0	0	0	0
345-400	0	36	0	3	12	0	0	0	0	0	0	0
400-415	0	33	0	1	14	0	0	0	0	0	0	0
415-430	0	32	0	10	11	0	0	0	0	0	0	0
430-445	0	28	0	3	6	0	0	0	0	0	0	0
445-500	0	36	0	4	7	0	0	0	0	0	0	0
500-515	0	15	0	2	6	0	0	0	0	0	0	0
515-530	0	12	0	2	6	0	0	0	0	0	0	0
530-545	0	8	0	1	6	0	0	0	0	0	0	0
545-600	0	10	0	1	14	0	0	0	0	0	0	0

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	5	0	0	2	0	0	0	0	0	0	0
215-230	0	6	0	3	2	0	0	0	0	0	0	0
230-245	0	4	1	2	2	0	0	0	0	0	0	0
245-300	0	6	0	2	2	0	0	0	0	0	0	0
300-315	0	2	0	2	3	0	0	0	0	0	0	0
315-330	0	0	0	5	2	0	0	0	0	0	0	0
330-345	0	5	0	2	1	0	0	0	0	0	0	0
345-400	0	5	0	3	0	0	0	0	0	0	0	0
400-415	0	2	0	3	4	0	0	0	0	0	0	0
415-430	0	3	0	0	1	0	0	0	0	0	0	0
430-445	0	1	0	0	4	0	0	0	0	0	0	0
445-500	0	2	0	0	0	0	0	0	0	0	0	0
500-515	0	4	0	0	0	0	0	0	0	0	0	0
515-530	0	0	0	1	0	0	0	0	0	0	0	0
530-545	0	4	0	2	0	0	0	0	0	0	0	0
545-600	0	1	0	0	0	0	0	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	31	0	6	26	0	0	0	0	0	0	0
215-230	0	35	0	4	34	0	0	0	0	0	0	0
230-245	0	26	1	7	13	0	0	0	0	0	0	0
245-300	0	22	0	3	28	0	0	0	0	0	0	0
300-315	0	27	0	3	32	0	0	0	0	0	0	0
315-330	0	10	0	4	23	0	0	0	0	0	0	0
330-345	0	19	0	0	20	0	0	0	0	0	0	0
345-400	0	27	0	2	22	0	0	0	0	0	0	0
400-415	0	20	0	2	34	0	0	0	0	0	0	0
415-430	0	19	0	5	24	0	0	0	0	0	0	0
430-445	0	15	0	1	17	0	0	0	0	0	0	0
445-500	0	12	0	5	5	0	0	0	0	0	0	0
500-515	0	5	0	1	9	0	0	0	0	0	0	0
515-530	0	2	0	3	14	0	0	0	0	0	0	0
530-545	0	3	0	0	12	0	0	0	0	0	0	0
545-600	0	0	0	0	22	0	0	0	0	0	0	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	9	0	0	12	0	0	0	0	0	0	0
215-230	0	14	0	1	14	0	0	0	0	0	0	0
230-245	0	9	0	1	4	0	0	0	0	0	0	0
245-300	0	12	0	1	4	0	0	0	0	0	0	0
300-315	0	21	2	0	9	0	0	0	0	0	0	0
315-330	0	9	0	0	9	0	0	0	0	0	0	0
330-345	0	8	0	0	7	0	0	0	0	0	0	0
345-400	0	13	0	1	10	0	0	0	0	0	0	0
400-415	0	6	0	0	7	0	0	0	0	0	0	0
415-430	0	11	0	0	13	0	0	0	0	0	0	0
430-445	0	7	0	0	7	0	0	0	0	0	0	0
445-500	0	7	0	0	8	0	0	0	0	0	0	0
500-515	0	6	0	1	10	0	0	0	0	0	0	0
515-530	0	5	0	0	10	0	0	0	0	0	0	0
530-545	0	5	0	0	6	0	0	0	0	0	0	0
545-600	0	6	0	1	11	0	0	0	0	0	0	0

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: WEDNESDAY, AUGUST 31, 2005
 PERIOD: 2:00 PM TO 6:00 PM
 INTERSECTION: N/S PICO AVENUE/PIER G
 E/W HARBOR BOULEVARD

15-MIN COUNTS	1					2					3					4									
	SBRT					SBHT					SBLT					WBRT									
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	DELIVER	2 AXLE	3 AXLE	4+ AXLE	TOTAL	
200-215	8	12	1	15	8	44	4	6	1	8	4	23	15	1	1	0	0	17	10	23	4	6	0	43	
215-230	6	17	0	26	8	57	3	5	1	8	7	24	10	2	1	1	0	14	17	18	2	7	0	44	
230-245	16	16	0	10	2	44	4	5	2	2	1	14	16	0	0	0	1	17	15	27	2	4	0	48	
245-300	10	8	0	26	6	50	0	9	0	3	0	12	11	2	1	1	0	15	16	20	0	4	0	40	
300-315	7	9	0	22	6	44	2	7	0	2	1	12	10	3	0	2	0	15	15	23	0	3	1	42	
315-330	3	8	2	20	5	38	1	6	2	5	7	21	5	1	2	3	0	11	14	25	0	5	1	45	
330-345	6	4	0	18	2	30	0	1	1	2	5	9	10	1	0	0	0	11	9	18	2	6	3	38	
345-400	4	9	0	19	1	33	2	3	0	3	6	14	2	0	0	0	0	2	18	22	1	8	0	49	
400-415	5	10	0	25	1	41	1	2	2	3	6	14	5	2	2	3	0	12	17	15	0	9	0	41	
415-430	13	9	0	23	4	49	2	1	0	2	8	13	4	0	1	2	0	7	15	16	0	3	1	35	
430-445	14	7	0	17	1	39	1	0	0	0	5	6	10	0	4	0	0	14	32	12	1	3	2	50	
445-500	35	7	0	5	2	49	1	0	0	0	7	8	7	0	0	0	0	7	6	2	1	0	0	80	
500-515	21	4	1	11	1	38	3	0	0	0	9	12	12	0	0	0	0	12	31	3	0	2	1	37	
515-530	27	6	0	12	3	48	3	0	0	1	6	10	11	0	0	1	0	12	19	4	0	0	0	23	
530-545	28	3	0	11	2	44	3	1	0	0	4	8	8	1	0	2	0	11	11	2	2	0	0	15	
545-600	16	10	0	18	2	46	5	1	0	0	12	18	8	2	0	4	0	14	6	6	0	0	0	12	
HOURL TOTALS																									
200-300	40	53	1	77	24	195	11	25	4	21	12	73	52	5	3	2	1	63	58	88	8	21	0	175	
215-315	39	50	0	84	22	195	9	26	3	15	9	62	47	7	2	4	1	61	63	88	4	18	1	174	
230-330	36	41	2	78	19	176	7	27	4	12	9	59	42	6	3	6	1	58	60	95	2	16	2	175	
245-345	26	29	2	86	19	162	3	23	3	12	13	54	36	7	3	6	0	52	54	86	2	18	5	165	
300-400	20	30	2	79	14	145	5	17	3	12	19	56	27	5	2	5	0	39	56	88	3	22	5	174	
315-415	18	31	2	82	19	142	4	12	5	13	24	58	22	4	4	6	0	36	58	80	3	26	4	173	
330-430	28	32	0	85	8	153	5	7	3	10	25	50	21	3	3	5	0	32	59	71	3	26	4	163	
345-445	36	35	0	84	7	162	6	6	2	8	25	47	21	2	7	5	0	35	82	65	2	23	3	175	
400-500	67	33	0	70	8	178	5	3	2	5	26	41	26	2	7	5	0	40	135	49	3	16	3	206	
415-515	83	27	1	56	8	175	7	1	0	2	29	39	33	0	5	2	0	40	149	37	3	9	4	202	
430-530	97	24	1	45	7	174	8	0	0	1	27	36	40	0	4	1	0	45	153	25	3	6	3	190	
445-545	111	20	1	39	8	179	10	1	0	1	26	38	38	1	0	3	0	42	132	15	4	3	1	155	
500-600	92	23	1	52	8	176	14	2	0	1	31	48	39	3	0	7	0	49	67	15	2	2	1	87	

15-MIN COUNTS	5					6					7					8									
	WBTH					WBLT					NBRT					NBTH									
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	
200-215	4	2	1	1	0	8	1	0	0	0	0	1	2	5	1	8	1	17	4	0	0	1	6	11	
215-230	1	4	0	1	0	6	2	0	0	0	0	2	5	6	0	9	0	20	3	0	0	0	2	5	
230-245	0	3	1	0	0	4	4	0	0	0	0	4	6	4	3	2	0	15	10	1	1	1	3	16	
245-300	2	0	0	0	0	2	2	0	0	0	0	2	2	4	1	0	1	8	1	1	0	1	3	6	
300-315	1	2	0	0	0	3	5	0	0	0	0	5	4	8	0	4	0	16	4	0	0	0	10	14	
315-330	4	1	0	0	0	5	2	0	0	0	0	2	5	2	1	2	1	11	3	1	0	0	3	7	
330-345	0	0	0	0	0	0	2	0	0	0	1	3	2	2	0	2	0	6	2	0	0	0	4	6	
345-400	3	7	0	1	0	11	7	0	0	0	1	8	2	3	0	2	0	7	1	0	0	0	3	4	
400-415	0	5	0	0	0	5	2	1	0	0	0	3	0	1	0	2	0	3	2	1	0	1	6	10	
415-430	4	2	0	0	0	6	0	0	0	0	0	0	1	0	0	1	0	2	4	1	0	1	4	10	
430-445	1	1	1	1	0	4	0	0	0	0	0	0	3	0	0	0	1	4	5	2	0	0	2	9	
445-500	4	2	0	0	0	6	2	0	0	0	0	2	3	0	0	0	0	3	5	0	0	0	1	6	
500-515	6	0	0	0	0	6	1	1	0	0	1	3	4	2	0	0	0	6	2	0	0	0	4	6	
515-530	1	0	0	0	0	1	1	0	0	0	0	1	2	0	0	1	2	5	4	0	0	0	3	7	
530-545	5	0	0	0	0	5	2	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	2	3	
545-600	0	0	0	0	0	0	2	0	0	0	0	2	0	1	0	0	0	1	2	0	0	0	2	4	
HOURL TOTALS																									
200-300	7	9	2	2	0	20	9	0	0	0	0	9	15	19	5	19	2	60	18	2	1	3	14	38	
215-315	4	9	1	1	0	15	13	0	0	0	0	13	17	22	4	15	1	59	18	2	1	2	18	41	
230-330	7	6	1	0	0	14	13	0	0	0	0	13	17	18	5	8	2	50	18	3	1	2	19	43	
245-345	7	3	0	0	0	10	11	0	0	0	1	12	13	16	2	8	2	41	10	2	0	1	20	33	
300-400	8	10	0	1	0	19	16	0	0	0	2	18	13	15	1	10	1	40	10	1	0	0	20	31	
315-415	7	13	0	1	0	21	13	1	0	0	2	16	9	8	1	8	1	27	8	2	0	1	16	27	
330-430	7	14	0	1	0	22	11	1	0	0	2	14	5	6	0	7	0	18	9	2	0	2	17	30	
345-445	8	15	1	2	0	26	9	1	0	0	1	11	6	4	0	5	1	16	12	4	0	2	15	33	
400-500	9	10	1	1	0	21	4	1	0	0	0	5	7	1	0	3	1	12	16	4	0	2	13	35	
415-515	15	5	1	1	0	22	3	1	0	0	1	5	11	2	0	1	1	15	16	3	0	1	11	31	
430-530	12	3	1	1	0	17	4	1	0	0	1	6	12	2	0	1	3	18	16	2	0	0	10	28	
445-545	16	2	0	0	0	18	6	1	0	0	1	8	9	2	0	1	2	14	12	0	0	0	10	22	
500-600	12	0	0	0	0	12	6	1	0	0	1	8	6	3	0	1	2	12	9	0	0	0	11	20	

15-MIN COUNTS	9					10					11					12								
	NBLT					EBRT					EBHT					EBLT								
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL
200-215	1	0	0	0	0	1	1	1	0	0	0	2	2	0	1	1	1	5	3	16	2	19	10	50
215-230	0	0	0	1	0	1	1	0	0	0	0	1	3	1	0	1	0	5	8	19	4	37	12	80
230-245	1	0	0	0	0	1	0	0	0	0	0	0	4	1	0	0	0	5	7	23	3	23	9	65
245-300	1	0	0	0	0	1	0	0	0	0	0	0	3	2	0	1	1	7	10	11	5	17	4	47
300-315	0	0	0	0	0	0	0	1	0	0	0	1	7	1	0	1	1	10	9	38	2	23	11	83
315-330	0	0	0	0	0	0	1	1	0	0	0	2	4	1	0	0	0	5	11	9	1	8	10	39
330-345</																								

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	1	4	2	15	4	8	3	2	1	1	4	10
215-230	0	3	5	10	3	6	8	3	1	2	1	17
230-245	1	10	6	16	4	16	7	4	0	4	0	15
245-300	1	1	2	11	0	10	10	3	0	2	2	16
300-315	0	4	4	10	2	7	9	7	0	5	1	15
315-330	0	3	5	5	1	3	11	4	1	2	4	14
330-345	1	2	2	10	0	6	12	1	1	2	0	9
345-400	0	1	2	2	2	4	14	2	1	7	3	18
400-415	0	2	0	5	1	5	11	3	0	2	0	17
415-430	0	4	1	4	2	13	19	4	3	0	4	15
430-445	0	5	3	10	1	14	29	7	0	0	1	32
445-500	0	5	3	7	1	35	48	7	2	2	4	71
500-515	0	2	4	12	3	21	19	13	4	1	6	31
515-530	0	4	2	11	3	27	11	1	3	1	1	19
530-545	0	1	0	8	3	28	15	6	0	2	5	11
545-600	0	2	0	8	5	16	3	3	2	2	0	6

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	5	1	6	12	16	0	1	0	2	23
215-230	0	0	6	2	5	17	19	1	0	0	4	18
230-245	0	1	4	0	5	16	23	1	0	0	3	27
245-300	0	1	4	2	9	8	11	2	0	0	0	20
300-315	0	0	8	3	7	9	38	1	1	0	2	23
315-330	0	1	2	1	6	8	9	1	1	0	1	25
330-345	0	0	2	1	1	4	15	1	1	0	0	18
345-400	0	0	3	0	3	9	12	2	0	0	7	22
400-415	0	1	1	2	2	10	18	1	0	1	5	15
415-430	0	1	0	0	1	9	19	0	0	0	2	16
430-445	0	2	0	0	0	7	24	2	0	0	1	12
445-500	1	0	0	0	0	7	23	0	0	0	2	6
500-515	0	0	2	0	0	4	8	1	0	1	0	3
515-530	0	0	0	0	0	6	11	0	0	0	0	4
530-545	0	0	0	1	1	3	4	1	0	0	0	2
545-600	0	0	1	2	1	10	3	1	0	0	0	6

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	1	1	1	1	2	1	0	0	1	4
215-230	0	0	0	1	1	0	4	0	0	0	0	2
230-245	0	1	3	0	2	0	3	0	0	0	1	2
245-300	0	0	1	1	0	0	5	0	0	0	0	0
300-315	0	0	0	0	0	0	2	0	0	0	0	0
315-330	0	0	1	2	2	2	1	0	0	0	0	0
330-345	0	0	0	0	1	0	5	0	0	0	0	2
345-400	0	0	0	0	0	0	2	0	0	0	0	1
400-415	0	0	0	2	2	0	2	0	0	0	0	0
415-430	0	0	0	1	0	0	3	0	0	0	0	0
430-445	0	0	0	4	0	0	2	0	0	0	1	1
445-500	0	0	0	0	0	0	0	0	0	0	0	2
500-515	0	0	0	0	0	1	5	1	0	0	0	0
515-530	0	0	0	0	0	0	0	0	0	0	0	0
530-545	0	0	0	0	0	0	3	0	0	0	0	2
545-600	0	0	0	0	0	0	7	0	0	0	0	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	1	8	0	8	15	19	1	0	0	1	6
215-230	1	0	9	1	8	26	37	1	0	0	1	7
230-245	0	1	2	0	2	10	23	0	0	0	0	4
245-300	0	1	0	1	3	26	17	1	0	0	0	4
300-315	0	0	4	2	2	22	23	1	0	0	0	3
315-330	0	0	2	3	5	20	8	0	0	0	0	5
330-345	0	0	2	0	2	18	11	0	0	0	0	6
345-400	0	0	2	0	3	19	20	0	0	0	1	8
400-415	1	1	2	3	3	25	12	0	0	0	0	9
415-430	0	1	1	2	2	23	15	0	0	0	0	3
430-445	0	0	0	0	0	17	9	1	0	0	1	3
445-500	0	0	0	0	0	5	12	0	0	0	0	1
500-515	0	0	0	0	0	11	4	1	0	0	0	2
515-530	0	0	1	1	1	12	2	0	0	0	0	0
530-545	0	0	0	2	0	11	3	0	0	0	0	0
545-600	0	0	0	4	0	18	0	0	0	0	0	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	6	1	0	4	8	10	1	0	0	0	0
215-230	0	2	0	0	7	8	12	0	0	0	0	0
230-245	0	3	0	1	1	2	9	0	0	0	0	0
245-300	0	3	1	0	0	6	4	1	0	0	0	0
300-315	0	10	0	0	1	6	11	1	0	0	0	1
315-330	0	3	1	0	7	5	10	0	0	0	0	1
330-345	0	4	0	0	5	2	5	0	0	1	0	3
345-400	1	3	0	0	6	1	2	1	0	1	0	0
400-415	0	6	0	0	6	1	0	1	0	0	0	0
415-430	0	4	0	0	8	4	1	0	0	0	0	1
430-445	0	2	1	0	5	1	5	0	0	0	0	2
445-500	0	1	0	0	7	2	3	0	1	0	0	0
500-515	0	4	0	0	9	1	1	0	0	1	0	1
515-530	0	3	2	0	6	3	2	1	0	0	0	0
530-545	0	2	0	0	4	2	2	0	0	0	0	0
545-600	0	2	0	0	12	2	3	0	0	0	0	0

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	2	0	2	9	22	0	0	7	2
215-230	0	0	0	0	0	3	2	17	0	0	4	6
230-245	0	0	0	1	0	0	4	12	0	0	4	7
245-300	0	0	0	1	0	1	2	9	0	0	4	6
300-315	0	0	0	1	0	3	0	19	0	0	3	7
315-330	0	0	0	1	0	1	2	12	0	0	3	3
330-345	0	0	0	4	0	1	4	23	0	0	4	21
345-400	0	0	0	6	0	0	1	8	0	0	3	6
400-415	0	0	0	16	0	2	2	11	0	0	4	7
415-430	0	0	0	13	0	3	8	22	0	0	11	7
430-445	0	0	0	24	0	1	16	74	0	0	6	17
445-500	0	0	0	12	0	1	8	20	0	0	3	19
500-515	0	0	0	10	0	1	9	24	0	0	2	26
515-530	0	0	0	16	0	5	8	20	0	0	8	9
530-545	0	0	0	12	0	4	5	13	0	0	-6	2
545-600	0	0	0	5	0	0	2	6	0	0	4	4

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	1	9	18	0	0	5	1
215-230	0	0	0	0	0	1	0	6	0	0	2	0
230-245	0	0	0	0	0	0	1	7	0	0	2	2
245-300	0	0	0	0	0	0	0	4	0	0	6	0
300-315	0	0	0	0	0	0	0	4	0	0	1	1
315-330	0	0	0	0	0	0	1	1	0	0	2	1
330-345	0	0	0	0	0	0	0	11	0	0	9	0
345-400	0	0	0	0	0	0	0	4	0	0	3	1
400-415	0	0	0	0	0	0	1	4	0	0	2	0
415-430	0	0	0	0	0	0	0	8	0	0	1	3
430-445	0	0	0	1	0	0	0	11	0	0	3	0
445-500	0	0	0	0	0	0	0	7	0	0	2	0
500-515	0	0	0	0	0	0	0	1	0	0	3	1
515-530	0	0	0	0	0	0	0	1	0	0	3	1
530-545	0	0	0	0	0	1	0	4	0	0	3	0
545-600	0	0	0	0	0	0	0	0	0	0	2	0

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	0	0	0	0	0	1	0
215-230	0	0	0	0	0	0	0	2	0	0	1	0
230-245	0	0	0	0	0	0	0	0	0	0	1	0
245-300	0	0	0	0	0	0	0	0	0	0	0	0
300-315	0	0	0	0	0	0	0	1	0	0	2	0
315-330	0	0	0	0	0	0	0	0	0	0	1	0
330-345	0	0	0	0	0	0	0	0	0	0	1	0
345-400	0	0	0	0	0	1	1	0	0	0	5	0
400-415	0	0	0	0	0	0	0	0	0	0	1	0
415-430	0	0	0	0	0	0	0	1	0	0	1	0
430-445	0	0	0	0	0	0	0	2	0	0	1	1
445-500	0	0	0	0	0	1	0	0	0	0	1	0
500-515	0	0	0	0	0	1	0	1	0	0	0	0
515-530	0	0	0	0	0	0	0	0	0	0	0	0
530-545	0	0	0	0	0	0	0	0	0	0	0	0
545-600	0	0	0	0	0	0	0	0	0	0	1	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	2	5	30	0	0	17	0
215-230	0	0	0	0	0	1	0	16	0	0	10	0
230-245	0	0	0	0	0	1	1	17	0	0	9	1
245-300	0	0	0	0	0	1	1	18	0	0	12	1
300-315	0	0	0	0	0	0	0	11	0	0	15	1
315-330	0	0	0	0	0	0	0	5	0	0	14	0
330-345	0	0	0	1	0	0	0	16	0	0	20	0
345-400	0	0	0	0	0	1	1	20	0	0	10	0
400-415	0	0	0	1	0	1	2	16	0	0	6	0
415-430	0	0	0	0	0	0	0	8	0	0	12	1
430-445	0	0	0	0	0	0	0	13	0	0	11	3
445-500	0	0	0	0	0	0	0	7	0	0	10	0
500-515	0	0	0	0	0	0	0	9	0	0	3	3
515-530	0	0	0	0	0	3	2	10	0	0	5	0
530-545	0	0	0	0	0	1	0	7	0	0	15	0
545-600	0	0	0	0	0	1	0	0	0	0	11	1

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	1	0	2	2	4	0	0	2	1
215-230	0	0	0	1	0	3	2	6	0	0	2	2
230-245	0	0	0	1	0	0	1	1	0	0	2	0
245-300	0	0	0	0	0	3	3	4	0	0	0	4
300-315	0	0	0	0	0	2	2	4	0	0	1	1
315-330	0	0	0	0	0	1	0	0	0	0	0	0
330-345	0	0	0	0	0	1	1	1	0	0	2	1
345-400	0	0	0	0	0	2	1	1	0	0	2	2
400-415	0	0	0	2	0	1	0	1	0	0	3	1
415-430	0	0	0	2	0	1	0	1	0	0	1	2
430-445	0	0	0	1	0	1	1	2	0	0	2	1
445-500	0	0	0	1	0	0	1	1	0	0	1	0
500-515	0	0	0	1	0	0	0	0	0	0	1	1
515-530	0	0	0	0	0	1	0	2	0	0	0	1
530-545	0	0	0	0	0	0	1	4	0	0	2	1
545-600	0	0	0	0	0	4	0	0	0	0	2	0

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: THURSDAY, AUGUST 25, 2005
 PERIOD: 2:00 PM TO 6:00 PM
 INTERSECTION: N/S 9TH STREET
 E/W ANAHEIM STREET

15-MIN COUNTS	1 SBRT						2 SBTH						3 SBLT						4 WBRBT					
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	DELIVER	2 AXLE	3 AXLE	4+ AXLE	TOTAL
	200-215	4	0	0	3	1	8	6	2	2	2	2	14	8	6	0	1	3	18	8	5	0	16	3
215-230	7	0	0	0	1	8	11	3	1	3	0	18	3	6	1	6	6	22	17	4	2	15	2	40
230-245	5	2	0	0	0	7	3	1	2	5	0	11	7	8	4	7	1	27	7	8	3	13	1	32
245-300	8	3	0	1	2	14	5	1	0	1	2	9	10	4	6	14	3	37	15	3	3	11	4	36
300-315	2	2	1	0	0	5	7	1	1	3	0	12	4	5	9	3	2	23	11	8	6	10	3	38
315-330	6	1	0	1	1	9	3	1	1	1	0	6	3	1	9	8	1	22	12	7	8	15	3	45
330-345	6	3	0	0	3	12	6	2	0	1	0	9	6	2	11	9	1	29	12	4	8	13	4	41
345-400	9	0	0	0	0	9	7	4	2	0	1	14	3	2	15	7	0	27	16	6	8	7	2	39
400-415	6	2	0	0	2	10	5	1	1	2	0	9	1	1	15	3	0	20	13	9	9	13	1	45
415-430	0	1	0	0	2	3	9	1	0	0	0	10	6	1	16	3	1	27	4	2	10	8	3	27
430-445	6	2	0	0	1	9	11	1	0	2	0	14	7	0	16	1	0	24	16	7	10	8	4	45
445-500	8	1	0	1	0	10	10	3	0	1	0	14	5	3	16	4	1	29	18	6	11	4	3	42
500-515	3	2	1	0	0	6	13	1	0	0	0	14	8	1	16	3	0	28	14	2	11	4	1	32
515-530	5	1	0	0	1	7	8	0	0	2	0	10	8	1	17	2	0	28	15	4	11	0	2	32
530-545	1	0	0	0	0	1	8	1	0	2	1	12	4	2	17	8	0	31	12	5	11	3	4	35
545-600	1	2	0	0	1	4	11	0	1	1	0	13	5	2	17	3	0	27	8	1	11	3	3	26
HOURLY TOTALS																								
200-300	24	5	0	4	4	37	25	7	5	11	4	52	28	24	11	28	13	104	47	20	8	55	10	140
215-315	22	7	1	1	3	34	26	6	4	12	2	50	24	23	20	30	12	109	50	23	14	49	10	146
230-330	21	8	1	2	3	35	18	4	4	10	2	38	24	18	28	32	7	109	45	26	20	49	11	151
245-345	22	9	1	2	6	40	21	5	2	6	2	36	23	12	35	34	7	111	50	22	25	49	14	160
300-400	23	6	1	1	4	35	23	8	4	5	1	41	16	10	44	27	4	101	51	25	30	45	12	163
315-415	27	6	0	1	6	40	21	8	4	4	1	38	13	6	50	27	2	98	53	26	33	48	10	170
330-430	21	6	0	0	7	34	27	8	3	3	1	42	16	6	57	22	2	103	45	21	35	41	10	152
345-445	21	5	0	0	5	31	32	7	3	4	1	47	17	4	62	14	1	98	49	24	37	36	10	156
400-500	20	6	0	1	5	32	35	6	1	5	0	47	19	5	63	11	2	100	51	24	40	33	11	159
415-515	17	6	1	1	3	28	43	6	0	3	0	52	26	5	64	11	2	108	52	17	42	24	11	146
430-530	22	6	1	1	2	32	42	5	0	5	0	52	28	5	65	10	1	109	63	19	43	16	10	151
445-545	17	4	1	1	1	24	39	5	0	5	1	50	25	7	66	17	1	116	59	17	44	11	10	141
500-600	10	5	1	0	2	18	40	2	1	5	1	49	25	6	67	16	0	114	49	12	44	10	10	125

15-MIN COUNTS	5 WBTH						6 WBLT						7 NBRBT						8 NBTH					
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL
	200-215	111	6	0	5	4	126	1	0	0	0	0	1	1	2	0	1	0	4	2	4	0	9	3
215-230	110	10	1	4	6	131	3	0	0	0	0	3	0	1	0	2	0	3	4	8	1	6	2	21
230-245	124	7	0	4	4	139	1	0	0	0	0	1	2	0	0	0	2	4	4	3	1	3	1	12
245-300	142	11	0	7	10	170	2	1	0	2	0	5	0	1	0	0	0	1	4	5	1	3	0	13
300-315	125	11	1	14	10	161	2	0	0	1	0	3	4	2	0	0	0	6	3	1	0	4	1	9
315-330	180	6	1	5	8	200	0	0	0	1	0	1	0	0	0	0	0	4	2	0	3	2	11	
330-345	149	15	3	8	7	182	3	1	0	1	0	5	4	1	0	1	0	6	19	1	1	4	1	26
345-400	163	8	0	14	11	196	0	2	0	1	0	3	0	1	0	1	0	2	5	5	0	2	1	13
400-415	179	14	1	8	16	208	0	0	1	0	1	2	2	1	0	1	0	4	4	7	0	3	0	14
415-430	166	12	0	11	5	194	4	0	0	0	0	4	3	0	1	1	0	5	5	3	1	3	0	12
430-445	209	13	1	12	8	243	0	2	1	3	0	6	0	0	0	0	0	9	2	0	3	0	0	14
445-500	166	10	2	9	4	191	1	0	1	0	1	3	1	0	1	0	0	2	13	0	0	2	1	16
500-515	155	4	0	9	4	172	1	1	0	1	0	3	1	1	0	2	0	4	9	0	0	1	1	11
515-530	123	8	1	4	3	138	0	1	0	0	0	1	0	0	0	0	0	7	0	0	0	1	0	8
530-545	144	1	0	8	7	160	3	0	0	3	0	6	4	1	0	2	0	7	6	1	0	3	1	11
545-600	113	5	1	4	2	125	1	1	0	0	0	2	0	0	0	0	1	1	2	2	0	3	0	7
HOURLY TOTALS																								
200-300	487	34	1	20	24	566	7	1	0	2	0	10	3	4	0	3	2	12	14	20	3	21	6	64
215-315	501	39	2	29	30	601	8	1	0	3	0	12	6	4	0	2	2	14	15	17	3	16	4	55
230-330	571	35	2	30	32	670	5	1	0	4	0	10	6	3	0	0	2	11	15	11	2	13	4	45
245-345	596	43	5	34	35	713	7	2	0	5	0	14	8	4	0	1	0	13	30	9	2	14	4	59
300-400	617	40	5	41	36	739	5	3	0	4	0	12	8	4	0	2	0	14	31	9	1	13	5	59
315-415	671	43	5	35	32	786	3	3	1	3	1	11	6	3	0	3	0	12	32	15	1	12	4	64
330-430	657	49	4	41	29	780	7	3	1	2	1	14	9	3	1	4	0	17	33	16	2	12	2	65
345-445	717	47	2	45	30	841	4	4	2	4	1	15	5	2	1	3	0	11	23	17	1	11	1	53
400-500	720	49	4	40	23	836	5	2	3	3	2	15	6	1	2	2	0	11	31	12	1	11	1	56
415-515	696	39	3	41	21	800	6	3	2	4	1	16	5	1	2	3	0	11	36	5	1	9	2	53
430-530	653	35	4	34	19	745	2	4	2	4	1	13	2	1	1	2	0	6	38	2	0	7	2	49
445-545	588	23	3	30	18	662	5	2	1	4	1	13	6	2	1	4	0	13	35	1	0	7	3	46
500-600	535	18	2	25	16	596	5	3	0	4	0	12	5	2	0	4	1	12	24	3	0	8	2	37

15-MIN COUNTS	9 NBLT						10 EBRT						11 EBHT						12 EBLT					
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL
	200-215	17	3	2	2	2	26	29	2	3	11	1	46	112	8	2	17	5	144	5	3	1	7	0
215-230	22	3	0	3	1	29	38	4	1	7	2	52	126	12	1	16	7	162	6	3	0	3	1	13
230-245	31	2	1	0	3	37	24	2	0	5	1	32	133	13	1	18	6	171	5	0	0	0	0	5
245-300	21	2	0	1	4	28	34	3	0	6	3	46	152	12	2	22	17	205	8	2	0	0	2	12
300-315	30	0	0	1	4	35	33	2	0	4	2	41	165	12	3	15	12	207	5	1	0	0	2	8
315-330	30	3	0	0	4	37	31	2	0	0	3	36	150	10	2	11	10	183	7	2	1			

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	17	2	1	8	6	4	5	112	29	1	111	8
215-230	22	4	0	3	11	7	6	126	38	3	110	17
230-245	31	4	2	7	3	5	5	133	24	1	124	7
245-300	21	4	0	10	5	8	8	152	34	2	142	15
300-315	30	3	4	4	7	2	5	165	33	2	125	11
315-330	30	4	0	3	3	6	7	150	31	0	180	12
330-345	26	19	4	6	6	6	7	175	42	3	149	12
345-400	32	5	0	3	7	9	5	163	32	0	163	16
400-415	26	4	2	1	5	6	5	197	40	0	179	13
415-430	21	5	3	6	9	0	11	203	49	4	166	4
430-445	31	9	0	7	11	6	6	214	35	0	209	16
445-500	31	13	1	5	10	8	8	272	38	1	166	18
500-515	29	9	1	8	13	3	9	234	64	1	155	14
515-530	28	7	0	8	8	5	14	289	39	0	123	15
530-545	21	6	4	4	8	1	14	212	33	3	144	12
545-600	26	2	0	5	11	1	5	201	46	1	113	8

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	3	4	2	6	2	0	3	8	2	0	6	5
215-230	3	8	1	6	3	0	3	12	4	0	10	4
230-245	2	3	0	8	1	2	0	13	2	0	7	8
245-300	2	5	1	4	1	3	2	12	3	1	11	3
300-315	0	1	2	5	1	2	1	12	2	0	11	8
315-330	3	2	0	1	1	1	2	10	2	0	6	7
330-345	1	1	1	2	2	3	1	15	0	1	15	4
345-400	2	5	1	2	4	0	1	12	2	2	8	6
400-415	5	7	1	1	1	2	1	13	1	0	14	9
415-430	4	3	0	1	1	1	1	14	2	0	12	2
430-445	0	2	0	0	1	2	1	13	0	2	13	7
445-500	9	0	0	3	3	1	1	14	1	0	10	6
500-515	1	0	1	1	1	2	2	14	0	1	4	2
515-530	1	0	0	1	0	1	0	12	1	1	8	4
530-545	1	1	1	2	1	0	3	13	1	0	1	5
545-600	0	2	0	2	0	2	1	11	0	1	5	1

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	2	0	0	0	2	0	1	2	3	0	0	0
215-230	0	1	0	1	1	0	0	1	1	0	1	2
230-245	1	1	0	4	2	0	0	1	0	0	0	3
245-300	0	1	0	6	0	0	0	2	0	0	0	3
300-315	0	0	0	9	1	1	0	3	0	0	1	6
315-330	0	0	0	9	1	0	1	2	0	0	1	8
330-345	0	1	0	11	0	0	0	2	0	0	3	8
345-400	0	0	0	15	2	0	0	2	2	0	0	8
400-415	0	0	0	15	1	0	1	0	0	1	1	9
415-430	1	1	1	16	0	0	0	1	0	0	0	10
430-445	0	0	0	16	0	0	0	4	0	1	1	10
445-500	0	0	1	16	0	0	0	0	0	1	2	11
500-515	1	0	0	16	0	1	0	0	0	0	0	11
515-530	0	0	0	17	0	0	0	0	0	0	1	11
530-545	0	0	0	17	0	0	0	1	0	0	0	11
545-600	0	0	0	17	1	0	0	0	0	0	1	11

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	2	9	1	1	2	3	7	17	11	0	5	16
215-230	3	6	2	6	3	0	3	16	7	0	4	15
230-245	0	3	0	7	5	0	0	18	5	0	4	13
245-300	1	3	0	14	1	1	0	22	6	2	7	11
300-315	1	4	0	3	3	0	0	15	4	1	14	10
315-330	0	3	0	8	1	1	0	11	0	1	5	15
330-345	2	4	1	9	1	0	0	10	0	1	8	13
345-400	1	2	1	7	0	0	0	8	1	1	14	7
400-415	4	3	1	3	2	0	2	8	0	0	8	13
415-430	3	3	1	3	0	0	1	15	1	0	11	8
430-445	2	3	0	1	2	0	2	17	3	3	12	8
445-500	2	2	0	4	1	1	1	6	0	0	9	4
500-515	1	1	2	3	0	0	1	6	0	1	9	4
515-530	2	1	0	2	2	0	0	5	2	0	4	0
530-545	0	3	2	8	2	0	1	8	2	3	8	3
545-600	0	3	0	3	1	0	0	7	0	0	4	3

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	2	3	0	3	2	1	0	5	1	0	4	3
215-230	1	2	0	6	0	1	1	7	2	0	6	2
230-245	3	1	2	1	0	0	0	6	1	0	4	1
245-300	4	0	0	3	2	2	2	17	3	0	10	4
300-315	4	1	0	2	0	0	2	12	2	0	10	3
315-330	4	2	0	1	0	1	2	10	3	0	8	3
330-345	5	1	0	1	0	3	1	10	2	0	7	4
345-400	5	1	0	0	1	0	1	14	0	0	11	2
400-415	2	0	0	0	0	2	0	7	6	1	6	1
415-430	6	0	0	1	0	2	2	2	6	0	5	3
430-445	4	0	0	0	0	1	1	5	1	0	8	4
445-500	2	1	0	1	0	0	1	8	1	1	4	3
500-515	4	1	0	0	0	0	0	7	1	0	4	1
515-530	1	0	0	0	0	1	2	9	2	0	3	2
530-545	3	1	0	0	1	0	3	7	3	0	7	4
545-600	1	0	1	0	0	1	1	2	1	0	2	3

INTERSECTION CLASSIFICATION COUNT SUMMARY

CLIENT: MEYER, MOHADDES ASSOCIATES, INC.
 PROJECT: GERALD DESMOND BRIDGE
 DATE: THURSDAY, AUGUST 25, 2005
 PERIOD: 2:00 PM TO 6:00 PM
 INTERSECTION: N/S FARRAGUI AVENUE
 E/W ANAHEIM STREET

15-MIN COUNTS	1 SBRT						2 SBTH						3 SBLT						4 WBR					
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	DELIVER	2 AXLE	3 AXLE	4+ AXLE	TOTAL
	200-215	9	7	1	5	1	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
200-300	33	10	1	9	7	60	0	0	0	0	0	0	4	0	0	0	5	9	8	0	2	2	12	

15-MIN COUNTS	5 WBTH						6 WBLT						7 NBR						8 NBTH					
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL
	200-215	133	8	1	5	12	159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200-300	592	49	4	27	43	715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

15-MIN COUNTS	9 NBLT						10 EBRT						11 EBLT						12 EBLT					
	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL	AUTOS	BOB-T	CHASS	CONT	OTHR	TOTAL
	200-215	0	0	0	0	0	0	0	0	0	0	0	0	142	12	6	32	6	198	5	1	0	1	1
200-300	0	0	0	0	0	0	0	0	0	0	0	657	61	11	111	41	881	15	2	0	4	3	24	

Time	Autos											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	9	5	142	0	0	133	0
215-230	0	0	0	0	0	7	4	158	0	0	142	1
230-245	0	0	0	1	0	6	1	165	0	0	160	3
245-300	0	0	0	3	0	11	5	192	0	0	157	4
300-315	0	0	0	1	0	5	3	205	0	0	156	3
315-330	0	0	0	2	0	4	3	178	0	0	218	1
330-345	0	0	0	3	0	25	5	242	0	0	189	1
345-400	0	0	0	1	0	6	0	194	0	0	189	3
400-415	0	0	0	4	0	9	1	245	0	0	214	3
415-430	0	0	0	3	0	7	1	246	0	0	194	4
430-445	0	0	0	8	0	18	1	272	0	0	238	3
445-500	0	0	0	7	0	21	1	299	0	0	209	3
500-515	0	0	0	1	0	23	1	319	0	0	170	5
515-530	0	0	0	14	0	16	3	339	0	0	164	7
530-545	0	0	0	0	0	6	7	242	0	0	157	3
545-600	0	0	0	7	0	4	0	233	0	0	145	0

Time	Bobtails											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	7	1	12	0	0	8	0
215-230	0	0	0	0	0	1	1	20	0	0	12	0
230-245	0	0	0	0	0	1	0	14	0	0	13	0
245-300	0	0	0	0	0	1	0	15	0	0	16	0
300-315	0	0	0	0	0	1	0	16	0	0	13	0
315-330	0	0	0	0	0	1	0	17	0	0	9	0
330-345	0	0	0	1	0	0	0	12	0	0	17	0
345-400	0	0	0	0	0	1	0	14	0	0	11	0
400-415	0	0	0	1	0	0	0	16	0	0	21	0
415-430	0	0	0	0	0	3	0	19	0	0	16	0
430-445	0	0	0	0	0	1	0	10	0	0	15	0
445-500	0	0	0	0	0	1	0	18	0	0	20	1
500-515	0	0	0	0	0	1	0	18	0	0	6	1
515-530	0	0	0	0	0	1	0	10	0	0	9	0
530-545	0	0	0	0	0	0	1	15	0	0	2	0
545-600	0	0	0	0	0	0	0	15	0	0	7	0

Time	Chassis											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	1	0	6	0	0	1	0
215-230	0	0	0	0	0	0	0	3	0	0	1	0
230-245	0	0	0	0	0	0	0	1	0	0	2	0
245-300	0	0	0	0	0	0	0	1	0	0	0	0
300-315	0	0	0	0	0	0	0	3	0	0	2	0
315-330	0	0	0	0	0	0	0	3	0	0	0	0
330-345	0	0	0	0	0	0	0	1	0	0	4	0
345-400	0	0	0	1	0	0	0	3	0	0	0	0
400-415	0	0	0	0	0	0	0	1	0	0	1	0
415-430	0	0	0	0	0	0	0	1	0	0	0	0
430-445	0	0	0	0	0	0	0	2	0	0	1	0
445-500	0	0	0	0	0	1	0	1	0	0	1	1
500-515	0	0	0	0	0	0	0	0	0	0	2	0
515-530	0	0	0	0	0	0	0	1	0	0	1	0
530-545	0	0	0	0	0	0	0	0	0	0	0	0
545-600	0	0	0	0	0	0	0	0	0	0	1	0

Time	Containers											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	5	1	32	0	0	5	1
215-230	0	0	0	0	0	1	2	24	0	0	8	0
230-245	0	0	0	0	0	1	1	27	0	0	6	0
245-300	0	0	0	0	0	2	0	28	0	0	8	1
300-315	0	0	0	0	0	0	0	13	0	0	11	0
315-330	0	0	0	0	0	1	0	14	0	0	8	0
330-345	0	0	0	0	0	0	0	9	0	0	9	1
345-400	0	0	0	0	0	2	0	9	0	0	15	0
400-415	0	0	0	1	0	2	1	10	0	0	11	0
415-430	0	0	0	0	0	1	0	16	0	0	14	0
430-445	0	0	0	1	0	3	0	20	0	0	11	0
445-500	0	0	0	0	0	0	0	6	0	0	13	0
500-515	0	0	0	0	0	3	0	9	0	0	10	0
515-530	0	0	0	0	0	3	1	9	0	0	5	2
530-545	0	0	0	0	0	0	1	14	0	0	7	0
545-600	0	0	0	0	0	1	1	8	0	0	1	0

Time	Other Trucks											
	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
200-215	0	0	0	0	0	1	1	6	0	0	12	1
215-230	0	0	0	2	0	0	2	11	0	0	9	0
230-245	0	0	0	1	0	1	0	10	0	0	10	0
245-300	0	0	0	2	0	5	0	14	0	0	12	1
300-315	0	0	0	0	0	1	0	15	0	0	19	0
315-330	0	0	0	0	0	1	0	17	0	0	14	0
330-345	0	0	0	0	0	0	3	14	0	0	13	0
345-400	0	0	0	0	0	1	2	10	0	0	14	0
400-415	0	0	0	0	0	0	1	11	0	0	17	0
415-430	0	0	0	0	0	0	0	10	0	0	7	1
430-445	0	0	0	1	0	1	2	9	0	0	12	0
445-500	0	0	0	0	0	2	0	9	0	0	5	0
500-515	0	0	0	0	0	2	0	9	0	0	9	0
515-530	0	0	0	0	0	0	0	6	0	0	1	1
530-545	0	0	0	0	0	2	1	6	0	0	10	0
545-600	0	0	0	0	0	2	4	6	0	0	4	0

POLB Middle Harbor Project Harbor Scenic Way Calculation

	2005 Model Volume		
	AM	MD	PM
NB Harbor Scenic Way n/o Ocean Blvd s/o EB-NB Connector Ramp			
Autos	343	288	729
Bobtails	124	231	160
Containers	278	402	441
Total Trucks (Non-PCE)	402	633	601
Total Vehicles (Non-PCE)	745	921	1330
Total Vehicles (PCE)	1147	1554	1931

	2005 Model Volume		
	AM	MD	PM
SB Harbor Scenic Way n/o Ocean Blvd s/o SB-WB Connector Ramp			
Autos	831	459	971
Bobtails	201	224	119
Containers	313	433	272
Total Trucks (Non-PCE)	514	657	391
Total Vehicles (Non-PCE)	1345	1116	1362
Total Vehicles (PCE)	1859	1773	1753

	2005 Counts		
	AM	MD	PM
NB Harbor Scenic Way On-Ramp to EB Ocean Blvd			
Autos	13	16	19
Bobtails	0	0	0
Containers	0	0	0
Total Trucks (Non-PCE)	0	0	0
Total Vehicles (Non-PCE)	13	16	19
Total Vehicles (PCE)	13	16	19

	2005 Counts		
	AM	MD	PM
Pico Avenue On-Ramp to NB Harbor Scenic Way			
Autos	16	69	81
Bobtails	7	31	38
Containers	93	80	49
Total Trucks (Non-PCE)	100	111	87
Total Vehicles (Non-PCE)	116	180	168
Total Vehicles (PCE)	216	291	255

	2005 Calculated		
	AM	MD	PM
NB Harbor Scenic Way s/o Ocean Blvd s/o Pico Ave On-Ramp			
Autos	340	235	667
Bobtails	117	200	122
Containers	185	322	392
Total Trucks (Non-PCE)	302	522	514
Total Vehicles (Non-PCE)	642	757	1181
Total Vehicles (PCE)	944	1279	1695

Appendix C: Existing Year 2005 Peak-Hour Intersection Capacity Analysis Worksheets

Middle Harbor EIR
Existing 2005 CEQA Baseline
AM Peak Hour

Scenario Report

2005 AM

Command: 2005 AM
Volume: 2005 AM Peak
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Existing

Middle Harbor EIR
Existing 2005 CEQA Baseline
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base Del/V/LOS Veh C	Future Del/V/LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	B 14.0 0.635	B 14.0 0.635	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	A 9.9 0.284	A 9.9 0.284	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	A 9.6 0.000	A 9.6 0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.6 0.000	B 10.6 0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	A 9.8 0.215	A 9.8 0.215	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx 0.231	A xxxxx 0.231	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx 0.356	A xxxxx 0.356	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.1 0.137	A 8.1 0.137	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx 0.348	A xxxxx 0.348	+ 0.000 D/V

Middle Harbor EIR
Existing 2005 CEQA Baseline
AM Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.635
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 14.0
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 1 32 100 47 99 261 308 18 4 25 30 159
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.00 0.07 0.20 0.10 0.34 0.32 0.63 0.02 0.02 0.06 0.06 0.30
Crit Moves: ****

Delay/Veh: 10.5 10.5 10.8 10.7 12.2 11.6 20.8 9.4 9.3 10.7 10.2 11.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApproachDel: 10.7 11.6 20.0
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 10.7 11.6 20.0

LOS by Appr: B B B C
AllWayAvgQ: 0.0 0.1 0.2 0.1 0.4 0.4 1.5 0.0 0.0 0.1 0.1 0.4

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
AM Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.284
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.9
Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 16 211 2 14 57 20 161 10 14 102 30 70
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.48 0.52 1.00 0.42 0.58 0.77 0.23 1.00

Capacity Analysis Module:
Vol/Sat: 0.03 0.18 0.18 0.03 0.07 0.07 0.28 0.04 0.04 0.23 0.23 0.10
Crit Moves: ****

Delay/Veh: 9.3 9.8 9.8 9.6 9.2 8.9 11.1 8.1 8.1 10.4 10.4 8.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApproachDel: 9.8 9.2 10.7
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 9.8 9.2 10.7

LOS by Appr: A A A A B A A B A B A
AllWayAvgQ: 0.0 0.2 0.2 0.0 0.1 0.1 0.4 0.0 0.0 0.3 0.3 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
AM Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 0.215
Level of Service: A

Cycle (sec): 100
Loss Time (sec): 0 (Y+R=4.0 sec)
Average Delay (sec/veh): 9.8
Optimal Cycle: 0
Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Ignore Include Include Include Include

Min. Green: 1 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 0 1

Volume Module:
Base Vol: 34 247 1 6 252 115 107 0 29 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 34 247 1 6 252 115 107 0 29 19 1 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 34 247 1 6 252 0 107 0 29 19 1 37
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 34 247 1 6 252 0 107 0 29 19 1 37
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 34 247 1 6 252 0 107 0 29 19 1 37

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.05 1.95 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat.: 559 1210 5 28 1174 678 531 0 643 490 26 621

Capacity Analysis Module:
Vol/Sat: 0.06 0.20 0.20 0.22 0.21 0.00 0.20 xxxxx 0.05 0.04 0.04 0.06
Crit Moves: ***

Delay/Veh: 9.3 9.8 9.8 10.0 10.0 0.0 10.6 0.0 8.2 9.5 9.5 8.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 9.3 9.8 9.8 10.0 10.0 0.0 10.6 0.0 8.2 9.5 9.5 8.4
LOS by Move: A A A A * B B * A A A A A A
ApproachDel: 9.7 10.0 10.1
Delay Adj: 1.00 1.00
ApprAdjDel: 9.7 10.0 10.1

LOS by Appr: A
AllwayAvgQ: 0.1 0.2 0.2 0.2 0.2 0.0 0.2 0.2 0.0 0.0 0.0 0.1
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
AM Peak Hour

Level of Service Computation Report
ICU I(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.231
Level of Service: A

Cycle (sec): 100
Loss Time (sec): 10 (Y+R=4.0 sec)
Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23
Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ignore Include Include Include Include

Min. Green: 1 0 2 0 0 0 0 2 0 2 0 0 0 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 29 321 0 0 316 105 40 0 37 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 29 321 0 0 316 105 40 0 37 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 29 321 0 0 316 0 40 0 37 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 29 321 0 0 316 0 40 0 37 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 29 321 0 0 316 0 40 0 37 0 0 0
OvlAdjVol: 8

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.10 0.00 0.00 0.10 0.00 0.01 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: ****

LOS by Appr: A
AllwayAvgQ: 0.1 0.2 0.2 0.2 0.2 0.0 0.2 0.2 0.0 0.0 0.0 0.1
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
AM Peak Hour

Level of Service Computation Report
ICU l(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.356
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level of Service: A

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include

Min. Green: 0 1 0 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0 0 0
Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Volume Module:
Base Vol: 165 2 283 49 0 0 3 86 74 207 60 93
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 165 2 283 49 0 0 3 86 74 207 60 93
User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 165 2 0 49 0 0 3 86 74 207 60 93
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 165 2 0 49 0 0 3 86 74 207 60 93

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.10 0.00 0.00 0.03 0.00 0.00 0.00 0.05 0.05 0.05 0.07 0.04 0.06
Crit Moves: ****

Middle Harbor EIR
Existing 2005 CEQA Baseline
AM Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.137
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0

Volume Module:
Base Vol: 0 0 0 22 0 19 13 141
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 22 0 19 13 141
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 22 0 19 13 141
Reduced Vol: 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 22 0 19 13 141

Saturation Flow Module:
Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.07 0.93 0.17 1.83 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 582 52 661 122 1334 0 0 1442 838

Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx 0.04 0.00 0.03 0.11 0.11 xxxxx xxxxx 0.14 0.07
Crit Moves: ****

Level of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.348

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 31 Level of Service: A

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected Protected

Rights: Include Include Include Include Include Include

Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0

Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:

Base Vol: 0 0 0 0 3 0 28 18 962 0 0 937 10

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 0 3 0 28 18 962 0 0 937 10

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 0 3 0 28 18 962 0 0 937 10

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 0 3 0 28 18 962 0 0 937 10

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Vol.: 0 0 0 0 3 0 28 18 962 0 0 937 10

Saturation Flow Module:

Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 0.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00

Final Sat.: 0 0 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.02 0.01 0.23 0.00 0.00 0.33 0.01

Crit Vol: 0 28 0 0 0 0 0 0 0 0 0 0

Crit Moves: 0 0 0 0 0 0 0 0 0 0 0 0

Middle Habor EIR
Existing 2005 CEQA Baseline
MD Peak Hour

Scenario Report

2005 MD
Command: 2005 MD
Volume: 2005 MD Peak
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Existing

Middle Habor EIR
Existing 2005 CEQA Baseline
MD Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	C 21.7	0.859	C 21.7	0.859 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 11.8	0.418	B 11.8	0.418 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	A 9.9	0.000	A 9.9	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 12.7	0.000	B 12.7	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 47.3	1.087	E 47.3	1.087 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.263	A xxxxx	0.263 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.385	A xxxxx	0.385 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.8	0.247	A 8.8	0.247 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.333	A xxxxx	0.333 + 0.000 D/V

Middle Harbor EIR
Existing 2005 CEQA Baseline
MD Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.859
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 21.7
Optimal Cycle: 0 Level of Service: C

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 5 56 88 70 113 302 394 28 3 9 25 213
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 5 56 88 70 113 302 394 28 3 9 25 213
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 5 56 88 70 113 302 394 28 3 9 25 213
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 5 56 88 70 113 302 394 28 3 9 25 213

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 382 405 441 432 264 732 459 861 93 404 428 476

Capacity Analysis Module:
Vol/Sat: 0.01 0.14 0.20 0.16 0.43 0.41 0.86 0.03 0.03 0.02 0.06 0.45
Crit Moves: ****

Delay/Veh: 11.5 12.1 11.8 12.1 14.6 13.9 40.6 10.1 10.0 11.2 11.0 14.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.5 12.1 11.8 12.1 14.6 13.9 40.6 10.1 10.0 11.2 11.0 14.9

LOS by Move: B B B B B E B B B B B B
ApproachDel: 11.9 13.8 38.4
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 11.9 13.8 38.4

LOS by Appr: B
AllwayAvgQ: 0.0 0.1 0.2 0.2 0.7 0.7 3.8 0.0 0.0 0.0 0.1 0.7
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
MD Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.418
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.8
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 20 289 6 44 105 2 214 0 8 151 29 86
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 20 289 6 44 105 2 214 0 8 151 29 86
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 20 289 6 44 105 2 214 0 8 151 29 86
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 20 289 6 44 105 2 214 0 8 151 29 86

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.96 0.04 1.00 1.96 0.04 1.00 0.00 1.00 0.84 0.16 1.00
Final Sat.: 487 1032 21 456 958 18 512 0 609 436 84 617

Capacity Analysis Module:
Vol/Sat: 0.04 0.28 0.28 0.10 0.11 0.11 0.42 xxxx 0.01 0.35 0.35 0.14
Crit Moves: ****

Delay/Veh: 10.0 11.5 11.5 10.8 10.3 10.3 13.9 0.0 8.3 12.6 12.6 9.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 10.0 11.5 11.5 10.8 10.3 10.3 13.9 0.0 8.3 12.6 12.6 9.1

LOS by Move: B B B B B B * A B B A
ApproachDel: 11.4 10.5 13.7
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 11.4 10.5 13.7

LOS by Appr: B
AllwayAvgQ: 0.0 0.3 0.3 0.1 0.1 0.1 0.6 0.0 0.0 0.5 0.5 0.1
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
MD Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps
Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A [9.9]

Table with columns: Approach, Movement, Control, Rights, Lanes, Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume. Includes data for North Bound, South Bound, East Bound, West Bound.

Critical Gap Module:
Critical Gp: 4.1
FollowUpTim: 2.2

Capacity Module:
Conflict Vol: 314
Potential Cap: 1258
Move Cap: 1258
Volume/Cap: 0.02

Level Of Service Module:
2Way95thQ: 0.1
Control Del: 7.9
LOS By Move: A
Movement: LT - LTR - RT
Shared Cap: xxxxx
SharedQueue: xxxxx
Shrd ConDel: xxxxx
Shared LOS: *
ApproachDel: xxxxxx
ApproachLOS: *

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
MD Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 1.3 Worst Case Level Of Service: B [12.7]

Table with columns: Approach, Movement, Control, Rights, Lanes, Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume. Includes data for North Bound, South Bound, East Bound, West Bound.

Critical Gap Module:
Critical Gp: 4.1
FollowUpTim: 2.2

Capacity Module:
Conflict Vol: 314
Potential Cap: 1258
Move Cap: 1258
Volume/Cap: 0.02

Level Of Service Module:
2Way95thQ: 0.1
Control Del: 7.9
LOS By Move: A
Movement: LT - LTR - RT
Shared Cap: xxxxx
SharedQueue: xxxxx
Shrd ConDel: xxxxx
Shared LOS: *
ApproachDel: xxxxxx
ApproachLOS: *

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 1.087
Level of Service: E
Cycle (sec): 100 (Y+R=4.0 sec) Average Delay (sec/veh): 47.3
Loss Time (sec): 0 Optimal Cycle: 0

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Ignore Include Include Include Include
Lanes: 1 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 21 366 1 5 299 46 469 85 0 7 5 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 21 366 1 5 299 46 469 85 0 7 5 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 21 366 1 5 299 46 469 85 0 7 5 30
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 21 366 1 5 299 46 469 85 0 7 5 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 21 366 1 5 299 46 469 85 0 7 5 30

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.03 1.97 1.00 0.85 0.15 1.00 0.58 0.42 1.00
Final Sat: 446 950 3 15 913 508 431 78 589 251 179 489

Capacity Analysis Module:
Vol/Sat: 0.05 0.39 0.38 0.33 0.33 0.00 1.09 1.09 0.00 0.03 0.03 0.06
Crit Moves: ****
Delay/Veh: 11.1 14.7 14.7 14.0 14.0 0.0 91.3 91.3 0.0 10.9 10.9 10.1
Delay/Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.1 14.7 14.7 14.0 14.0 0.0 91.3 91.3 0.0 10.9 10.9 10.1

LOS by Move: B B B * F F *
ApproachDel: 14.5 14.0 14.0 91.3
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 14.5 14.0 14.0 91.3
LOS by Appr: B
AllwayAvgQ: 0.0 0.6 0.6 0.5 0.5 0.0 11.5 11.5 0.0 0.0 0.0 0.1

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.263
Level of Service: A
Cycle (sec): 100 (Y+R=4.0 sec) Average Delay (sec/veh): 24
Loss Time (sec): 10 Optimal Cycle: 24

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ignore Include Include Include Include
Lanes: 1 0 2 0 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0 0

Volume Module:
Base Vol: 37 436 0 0 253 105 76 0 23 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 37 436 0 0 253 105 76 0 23 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 37 436 0 0 253 105 76 0 23 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 37 436 0 0 253 105 76 0 23 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 37 436 0 0 253 105 76 0 23 0 0 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.14 0.00 0.00 0.08 0.00 0.03 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: ****

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
MD Peak Hour

Level of Service Computation Report
ICU l(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.385
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level of Service: A

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include

Min. Green: 0 1 0 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0 0 0
Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Volume Module:
Base Vol: 101 5 210 22 2 4 5 107 176 282 61 174
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 101 5 210 22 2 4 5 107 176 282 61 174
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 101 5 0 22 2 4 5 107 176 282 61 174
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 101 5 0 22 2 4 5 107 176 282 61 174

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.06 0.00 0.00 0.01 0.00 0.01 0.00 0.07 0.11 0.10 0.04 0.11
Crit Moves: ****

Middle Harbor EIR
Existing 2005 CEQA Baseline
MD Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.247
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 10 0 34 58 295 0 0 150 42
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 10 0 34 58 295 0 0 150 42
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 10 0 34 58 295 0 0 150 42
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 10 0 34 58 295 0 0 150 42

Saturation Flow Module:
Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.45 0.55 1.00 0.33 1.67 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 261 313 672 235 1217 0 0 1322 757

Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx xxxxx 0.04 0.00 0.05 0.25 0.24 xxxxx xxxxx 0.11 0.06
Crit Moves: ****

Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.333
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 30 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0 0 0 0

Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1

Volume Module:

Base Vol:	0	0	14	0	78	31	1050	0	0	794	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	14	0	78	31	1050	0	0	794	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	14	0	78	31	1050	0	0	794	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	14	0	78	31	1050	0	0	794	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	14	0	78	31	1050	0	0	794	16

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	0.00	0.00	2.00	1.00	1.00	1.00
Final Sat.:	0	0	1425	0	1425	4275	0	2850	1425	1425	1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.05 0.02 0.25 0.00 0.00 0.00 0.28 0.01
 Crit Vol: 0 78 0 0 397
 Crit Moves: ****

Middle Harbor EIR
Existing 2005 CEQA Baseline
PM Peak Hour

Scenario Report

2005 PM
Command: 2005 PM
Volume: 2005 PM Peak
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Existing

Middle Harbor EIR
Existing 2005 CEQA Baseline
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base Del/V/LOS Veh	Future Del/V/LOS Veh	Change in
# 1 Pico Ave / Pier G St & Harbor	B 14.6 0.658	B 14.6 0.658	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 11.3 0.320	B 11.3 0.320	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	A 9.5 0.000	A 9.5 0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.5 0.000	B 11.5 0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 106.8 1.381	F 106.8 1.381	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx 0.266	A xxxxx 0.266	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx 0.426	A xxxxx 0.426	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	A 9.1 0.227	A 9.1 0.227	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx 0.450	A xxxxx 0.450	+ 0.000 D/V

Middle Harbor EIR
Existing 2005 CEQA Baseline
PM Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.658
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 0 Level of Service: B

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 3 50 16 52 74 259 327 28 7 5 24 233
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 3 50 16 52 74 259 327 28 7 5 24 233
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 3 50 16 52 74 259 327 28 7 5 24 233
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 3 50 16 52 74 259 327 28 7 5 24 233

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.52 0.48 1.00 0.44 1.56 1.00 1.60 0.40 1.00 1.00 1.00

Final Sat.: 410 671 221 469 237 856 497 848 218 459 491 551
Capacity Analysis Module:
Vol/Sat: 0.01 0.07 0.07 0.11 0.31 0.30 0.66 0.03 0.03 0.01 0.05 0.42

Crit Moves: ****
Delay/Veh: 10.7 10.6 10.3 10.8 11.7 11.3 21.5 9.4 9.2 10.2 9.9 13.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdJDel/Veh: 10.7 10.6 10.3 10.8 11.7 11.3 21.5 9.4 9.2 10.2 9.9 13.0
LOS by Move: B B B B B B C A A A B A B
ApproachDel: 10.5 11.4 20.3 12.6
Delay Adj: 1.00 1.00 1.00 1.00

ApprAdJDel: 10.5 11.4 20.3 12.6
LOS by Appr: B B C
AllWayAvgQ: 0.0 0.1 0.1 0.1 0.4 0.4 1.6 0.0 0.0 0.0 0.0 0.6

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
PM Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.320
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.3
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 8 309 3 89 61 11 157 36 1 136 31 79
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 8 309 3 89 61 11 157 36 1 136 31 79
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 8 309 3 89 61 11 157 36 1 136 31 79
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 8 309 3 89 61 11 157 36 1 136 31 79

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.69 0.31 1.00 0.97 0.03 0.81 0.19 1.00

Final Sat.: 499 1070 10 471 862 158 509 531 15 426 97 618
Capacity Analysis Module:
Vol/Sat: 0.02 0.29 0.29 0.19 0.07 0.07 0.31 0.07 0.07 0.32 0.32 0.13

Crit Moves: ****
Delay/Veh: 9.7 11.5 11.4 11.4 9.8 9.6 12.2 9.4 9.4 12.2 12.2 8.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdJDel/Veh: 9.7 11.5 11.4 11.4 9.8 9.6 12.2 9.4 9.4 12.2 12.2 8.9
LOS by Move: A B B A A A B A A A B B A
ApproachDel: 11.4 10.7 11.7 11.1
Delay Adj: 1.00 1.00 1.00 1.00

ApprAdJDel: 11.4 10.7 11.7 11.1
LOS by Appr: B B B
AllWayAvgQ: 0.0 0.4 0.4 0.2 0.1 0.1 0.4 0.1 0.1 0.4 0.4 0.1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)

 Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B [11.5]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	1 0 1 1 0	1 0 1 1 0	0 1 0 0 1	0 1 0 0 1

Volume Module:				
Base Vol:	3 335	0 5 257	0 39	0 21
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Initial Bse:	3 335	0 5 257	0 39	0 21
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Volume:	3 335	0 5 257	0 39	0 21
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
FinalVolume:	3 335	0 5 257	0 39	0 21

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxxx 4.1 xxxxx xxxxxx 7.5 6.5 6.9 7.5 6.5 6.9
 FollowUpTim: 2.2 xxxxx xxxxxx 2.2 xxxxx xxxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Capacity Module:
 Cnflct Vol: 257 xxxxx xxxxxx 335 xxxxx xxxxxx 441 608 129 480 608 168
 Potent Cap.: 1320 xxxxx xxxxxx 1236 xxxxx xxxxxx 505 413 904 474 413 854
 Move Cap.: 1320 xxxxx xxxxxx 1236 xxxxx xxxxxx 502 410 904 461 410 854
 Volume/Cap: 0.00 xxxxx xxxxx 0.00 xxxxx xxxxx 0.08 0.00 0.02 0.00 0.00 0.00

Level Of Service Module:
 2Way95thQ: 0.0 xxxxx xxxxxx 0.0 xxxxx xxxxxx xxxxx xxxxx 0.1 xxxxx xxxxx 0.0
 Control Del: 7.7 xxxxx xxxxxx 7.9 xxxxx xxxxxx xxxxx xxxxx 9.1 xxxxx xxxxx 9.2
 LOS by Move: A * * * * * A * * * * * A * * * * * A * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 502 xxxxx xxxxxx 0 xxxxx xxxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.3 xxxxx xxxxxx xxxxxx xxxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 12.8 xxxxx xxxxxx xxxxxx xxxxxx
 Shared LOS: * * * * * * * * * * * B * * * * * * * * * * *
 ApproachDel: xxxxxx xxxxxx 11.5
 ApproachLOS: * * * * * * * * * * * B * * * * * A

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)

 Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A [9.5]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Ignore	Ignore	Include	Include
Lanes:	1 0 2 0 0	0 0 2 0 1	0 0 0 0 0	1 0 0 0 1

Volume Module:				
Base Vol:	0 338	0 0 278	0 0 0	0 1 0 40
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Initial Bse:	0 338	0 0 278	0 0 0	0 1 0 40
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Volume:	0 338	0 0 278	0 0 0	0 1 0 40
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0 40
FinalVolume:	0 338	0 0 278	0 0 0	0 1 0 40

Critical Gap Module:
 Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
 FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
 Cnflct Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 477 xxxxx 169
 Potent Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 522 xxxxx 852
 Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 522 xxxxx 852
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 xxxxx 0.05

Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx 0.1
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 11.9 xxxxx 9.4
 LOS by Move: * * * * * * * * * * * B * * * * * A * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxxx
 Shared LOS: *
 ApproachDel: xxxxxx xxxxxx 9.5
 ApproachLOS: * * * * * * * * * * * * * * * * * A

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
PM Peak Hour

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 1.381
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 106.8
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 1 0 0 1 1 0 1 0 0 1 0 1 0 0 1

Volume Module:
Base Vol: 48 330 3 4 251 34 655 46 0 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 48 330 3 4 251 34 655 46 0 37 2 54
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 48 330 3 4 251 0 655 46 0 37 2 54
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 48 330 3 4 251 0 655 46 0 37 2 54
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 48 330 3 4 251 0 655 46 0 37 2 54

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 0.03 1.97 1.00 0.93 0.07 1.00 0.95 0.05 1.00
Final Sat: 443 938 9 14 891 495 474 33 590 410 22 504

Capacity Analysis Module:
Vol/Sat: 0.11 0.35 0.35 0.28 0.28 0.00 1.38 1.38 0.00 0.09 0.09 0.11
Crit Moves: ****

Delay/Veh: 11.7 14.2 14.1 13.5 13.4 0.0 204.1 204 0.0 11.4 11.4 10.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.7 14.2 14.1 13.5 13.4 0.0 204.1 204 0.0 11.4 11.4 10.3
LOS by Move: B B B B * F F * B B B B
ApproachDel: 13.8 13.4 204.1 10.8
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 13.8 13.4 204.1 10.8
LOS by Appr: B B F B
AllwayVgQ: 0.1 0.5 0.5 0.4 0.4 0.0 27.4 27.4 0.0 0.1 0.1 0.1
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Existing 2005 CEQA Baseline
PM Peak Hour

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.266
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Protected Protected Protected Protected
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 30 426 0 0 200 109 96 0 61 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 30 426 0 0 200 109 96 0 61 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 30 426 0 0 200 0 96 0 61 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 30 426 0 0 200 0 96 0 61 0 0 0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 30 426 0 0 200 0 96 0 61 0 0 0
OvlAdjVol: 31

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.13 0.00 0.00 0.06 0.00 0.03 0.00 0.04 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: ****

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
ICU l(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.426
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level of Service: A

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include

Min. Green: 0 1 0 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 102 2 215 16 1 42 65 215 339 52 153
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.06 0.00 0.00 0.01 0.00 0.01 0.03 0.04 0.13 0.12 0.03 0.10
Crit Moves: ****

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.227
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.1
Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0
Volume Module:
Base Vol: 0 0 0 0 80 0 17 43 264 0 0 133 71
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: xxxxxx
Crit Moves: ****

Level of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.450
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 36 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0 0

Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:

Base Vol:	0	0	29	0	81	12	1323	0	0	1120	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	29	0	81	12	1323	0	0	1120	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	29	0	81	12	1323	0	0	1120	18
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	29	0	81	12	1323	0	0	1120	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	29	0	81	12	1323	0	0	1120	18

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	0.00	0.00	2.00	1.00	1.00	1.00
Final Sat.:	0	0	1425	0	1425	4275	0	2850	1425	1425	1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.06 0.01 0.31 0.00 0.00 0.00 0.39 0.01
 Crit Vol: 0 81 0 0 560
 Crit Moves: ****

Appendix D: Year 2010 Peak-Hour Intersection Capacity Analysis Worksheets

Middle Harbor EIR
Future Year 2010
345-Acre

Scenario Report

2010 345-Acre AM

Command: 2010 345-Acre AM
Volume: 2010 345-Acre AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

Middle Harbor EIR
Future Year 2010
345-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	C 21.4	0.815	C 21.4	0.815 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 10.5	0.384	B 10.5	0.384 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	B 10.0	0.000	B 10.0	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.9	0.000	B 10.9	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 28.6	0.961	D 28.6	0.961 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.371	A xxxxx	0.371 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.562	A xxxxx	0.562 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.2	0.033	A 7.2	0.033 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.302	A xxxxx	0.302 + 0.000 D/V

Middle Harbor EIR
Future Year 2010
345-Acre

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.815
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 21.4
Optimal Cycle: 0 Level Of Service: C

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign
Rights: Include Include Include

Min. Green: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 1 166 101 40 229 209 315 18 4 145 192 153
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 1 166 101 40 229 209 315 18 4 145 192 153
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 166 101 40 229 209 315 18 4 145 192 153
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 1 166 101 40 229 209 315 18 4 145 192 153

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.24 0.76 1.00 1.00 1.00 1.64 0.36 1.00 1.11 0.89
Final Sat.: 348 469 298 378 409 442 386 646 146 386 458 389

Capacity Analysis Module:
Vol/Sat: 0.00 0.35 0.34 0.11 0.56 0.47 0.82 0.03 0.03 0.38 0.42 0.39
Crit Moves: ****

Delay/Veh: 12.3 16.0 15.1 12.7 20.7 16.8 39.7 11.5 11.3 16.6 16.6 15.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.3 16.0 15.1 12.7 20.7 16.8 39.7 11.5 11.3 16.6 16.6 15.1

LOS by Move: B C C B C C E B B C C C
ApproachDel: 15.6 18.3 18.3 37.9
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 15.6 18.3 18.3 37.9

LOS by Appr: C
AllWayAvgQ: 0.0 0.5 0.4 0.1 1.1 1.1 3.0 0.0 0.0 0.5 0.6 0.6
Note: Queue reported is the number of cars per lane.

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Middle Harbor EIR
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.384
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign
Rights: Include Include Include

Min. Green: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 215 2 17 111 60 63 9 0 205 11 126
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 215 2 17 111 60 63 9 0 205 11 126
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 215 2 17 111 60 63 9 0 205 11 126
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 215 2 17 111 60 63 9 0 205 11 126

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.30 0.70 1.00 1.00 0.00 1.00 0.05 1.00
Final Sat.: 511 1096 10 504 718 411 517 554 0 533 29 685

Capacity Analysis Module:
Vol/Sat: 0.00 0.20 0.20 0.03 0.15 0.15 0.12 0.02 xxxxx 0.38 0.38 0.18
Crit Moves: ****

Delay/Veh: 0.0 10.3 10.3 9.7 9.9 9.4 10.1 8.9 0.0 12.5 12.5 8.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 10.3 10.3 9.7 9.9 9.4 10.1 8.9 0.0 12.5 12.5 8.8

LOS by Move: * B B A A A A B A * B B A
ApproachDel: 10.3 9.7 10.0
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 10.3 9.7 10.0

LOS by Appr: B
AllWayAvgQ: 0.0 0.2 0.2 0.0 0.2 0.1 0.1 0.0 0.0 0.6 0.6 0.2
Note: Queue reported is the number of cars per lane.

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Middle Harbor EIR
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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 0.961
Level of Service: D

Approach: North Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Volume Module:
Base Vol: 92 52 1 6 449 304 464 0 52 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.96 0.04 0.03 1.97 1.00 1.00 0.00 1.00 0.95 0.05 1.00

Capacity Analysis Module:
Vol/Sat: 0.23 0.06 0.06 0.46 0.46 0.55 0.96 xxxxx 0.09 0.05 0.05 0.08
Crit Moves: *** **

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Middle Harbor EIR
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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.371
Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include

Volume Module:
Base Vol: 22 490 0 0 702 155 110 0 14 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.01 0.15 0.00 0.00 0.22 0.00 0.04 0.00 0.01 0.00 0.00 0.00
OvlAdjVol: *****

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.562
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level of Service: A

Street Name: 9th Street Pico Ave
Approach: North Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R
Control: Split Phase Protected Protected Protected
Rights: Ignore Include Include Include

Volume Module:
Base Vol: 186 2 507 280 0 13 6 57 62 390 10 176
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 186 2 507 280 0 13 6 57 62 390 10 176

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.91 0.09 1.00 1.00 2.00 1.00 1.00

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Middle Harbor EIR
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345-Acre

Level of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.033
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.2
Optimal Cycle: 0 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Volume Module:
Base Vol: 0 0 0 0 20 11 12 0 0 52 19
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 20 11 12 0 0 52 19

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 0.96 1.04 0.00 0.00 2.00 1.00 1.00
Lanes: 0 0 0 0 750 880 676 810 0 1559 920

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Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St
 Critical Vol./Cap.(X): 0.302
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
 Lanes: -----|-----|-----|-----|-----|-----|

Volume Module:
 Base Vol: 0 0 0 3 0 0 0 822 0 0 856 10
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 0 0 822 0 0 856 10
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 0 0 822 0 0 856 10
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 0 0 822 0 0 856 10
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 3 0 0 0 822 0 0 856 10

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.19 0.00 0.00 0.30 0.01
 Crit Vol: 0 3 0 0 0 0 0 428
 Crit Moves: ****

Middle Harbor EIR
Future Year 2010
345-Acre

Scenario Report

2010 345-Acre MD
Command: 2010 345-Acre MD
Volume: 2010 345-Acre MD Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

Middle Harbor EIR
Future Year 2010
345-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 66.1	1.345	F 66.1	1.345 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 11.7	0.484	B 11.7	0.484 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	B 13.3	0.000	B 13.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.4	0.000	B 11.4	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 41.2	1.034	E 41.2	1.034 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.328	A xxxxx	0.328 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.544	A xxxxx	0.544 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.6	0.071	A 7.6	0.071 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.257	A xxxxx	0.257 + 0.000 D/V

Middle Harbor EIR
Future Year 2010
345-Acre

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.345
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 66.1
Optimal Cycle: 0 Level Of Service: F

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 6 364 92 65 242 141 468 37 4 159 175 191
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 6 364 92 65 242 141 468 37 4 159 175 191
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 6 364 92 65 242 141 468 37 4 159 175 191
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 6 364 92 65 242 141 468 37 4 159 175 191
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 6 364 92 65 242 141 468 37 4 159 175 191

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.60 0.40 1.00 1.00 1.00 1.00 1.80 0.20 1.00 1.00 1.00
Final Sat.: 336 580 149 336 358 381 348 629 68 346 363 391

Capacity Analysis Module:
Vol/Sat: 0.02 0.63 0.62 0.19 0.68 0.37 1.34 0.06 0.06 0.46 0.48 0.49
Crit Moves: ****
Delay/Veh: 13.2 26.9 25.9 15.5 30.1 17.0 201.5 13.1 13.0 21.0 20.7 19.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.2 26.9 25.9 15.5 30.1 17.0 201.5 13.1 13.0 21.0 20.7 19.6
LOS by Move: B D C D C F B B C C C
A345-AceroachDel: 26.5 23.9 186.3 20.4
Delay Adj: 1.00 1.00 1.00 1.00
A345-AceroachDel: 26.5 23.9 186.3 20.4
LOS by A345-Aceroach: D C F
AllWayAvgQ: 0.0 1.5 1.4 0.2 1.7 1.7 18.2 0.1 0.1 0.8 0.8 0.9

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.484
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.7
Optimal Cycle: 0 Level Of Service: B

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 0 294 6 66 126 19 34 12 0 256 4 133
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 294 6 66 126 19 34 12 0 256 4 133
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 294 6 66 126 19 34 12 0 256 4 133
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 294 6 66 126 19 34 12 0 256 4 133
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 294 6 66 126 19 34 12 0 256 4 133

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.96 0.04 1.00 1.74 0.26 1.00 1.00 0.00 0.98 0.02 1.00
Final Sat.: 498 1057 22 483 910 139 479 512 0 529 8 650

Capacity Analysis Module:
Vol/Sat: 0.00 0.28 0.28 0.14 0.14 0.14 0.07 0.02 xxxxx 0.48 0.48 0.20
Crit Moves: ****
Delay/Veh: 0.0 11.4 11.4 10.8 10.2 10.0 10.2 9.4 0.0 14.8 14.8 9.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 11.4 11.4 10.8 10.2 10.0 10.2 9.4 0.0 14.8 14.8 9.3
LOS by Move: * B B B B A * B A * B A
A345-AceroachDel: 11.4 10.4 10.4 10.0 10.0 13.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 13.0
A345-AceroachDel: 11.4 10.4 10.4 10.0 10.0 13.0
LOS by A345-Aceroach: B B B A
AllWayAvgQ: 0.0 0.3 0.3 0.1 0.1 0.1 0.1 0.0 0.0 0.8 0.8 0.2

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Average Delay (sec/veh): 0.2 Worst Case Level of Service: B [13.3]
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 2 0 0 0 0 2 0 1 0 0 0 0 1 0 0 0 1

Volume Module:
Base Vol: 17 295 0 0 523 100 0 0 0 0 1 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 17 295 0 0 523 100 0 0 0 0 1 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 17 295 0 0 523 100 0 0 0 0 1 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 17 295 0 0 523 100 0 0 0 0 1 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: 623 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 591 xxxxx 148
Potential Cap.: 968 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 443 xxxxx 879
Move Cap.: 968 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 437 xxxxx 879
Volume/Cap: 0.02 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 xxxxx 0.00

Level of Service Module:
2Way95thQ: 0.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx
Control Del: 8.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 13.3 xxxxx xxxxx
LOS by Move: A * * * * * B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: *
A345-AceroachDel: xxxxxx xxxxxx * * * * * 13.3
A345-AceroachLOS: * * * * * B * * * * *

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.3 Worst Case Level of Service: B [11.4]
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 0 154 1 0 603 0 0 2 17 1 0 0 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 154 1 0 603 0 0 2 17 1 0 0 4
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 154 1 0 603 0 0 2 17 1 0 0 4
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 154 1 0 603 0 0 2 17 1 0 0 4

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 680 758 302 457 758 78
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 341 339 701 492 339 974
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 340 339 701 478 339 974
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 0.01 0.02 0.00 0.00 0.00

Level of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: *
A345-AceroachDel: xxxxxx xxxxxx * * * * * 11.4
A345-AceroachLOS: * * * * * B * * * * *

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 1.034
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 41.2
Optimal Cycle: 0 Level of Service: E

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 61 29 1 5 164 194 580 0 98 7 5 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 61 29 1 5 164 194 580 0 98 7 5 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 61 29 1 5 164 194 580 0 98 7 5 30
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 61 29 1 5 164 194 580 0 98 7 5 30

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.93 0.07 0.06 1.94 1.00 1.00 0.00 1.00 0.58 0.42 1.00
Final Sat.: 435 897 31 30 984 564 561 0 676 283 202 561

Capacity Analysis Module:
Vol/Sat: 0.14 0.03 0.03 0.17 0.17 0.34 1.03 xxxxx 0.15 0.02 0.02 0.05
Crit Moves: *** **

Delay/Veh: 12.1 10.5 10.5 11.1 11.1 12.2 72.1 0.0 8.8 10.0 10.0 9.2
Delay/Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.1 10.5 10.5 11.1 11.1 12.2 72.1 0.0 8.8 10.0 10.0 9.2
LOS by Move: B B B B F * A A A A
A345-AceroachDel: 11.5 11.7 11.7 62.9 1.00 9.4
A345-AceroachDel: 11.5 11.7 62.9 1.00 9.4
LOS by A345-Aceroach: B B F A
AllWayAvgQ: 0.2 0.0 0.0 0.2 0.2 0.5 9.8 9.8 0.2 0.0 0.0 0.1

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.328
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level of Service: A

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Lanes: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0

Volume Module:
Base Vol: 29 563 0 0 269 136 149 0 17 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 29 563 0 0 269 136 149 0 17 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 29 563 0 0 269 0 149 0 17 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 29 563 0 0 269 0 149 0 17 0 0 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.18 0.00 0.00 0.08 0.00 0.05 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: ****

Crit Moves: ****

Level of Service Computation Report
 ICU l(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.544
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 36 Level of Service: A
 Street Name: 9th Street Pico Ave
 A345-Aceroach: North Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected
 Rights: Ignore Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
 Volume Module:
 Base Vol: 127 5 158 147 2 14 12 67 164 491 0 213
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 127 5 158 147 2 14 12 67 164 491 0 213
 User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 127 5 0 147 2 14 12 67 164 491 0 213
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 127 5 0 147 2 14 12 67 164 491 0 213
 PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 127 5 0 147 2 14 12 67 164 491 0 213
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 1.00 1.00 1.00 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1325 275 1600 1600 1600 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.08 0.00 0.00 0.09 0.00 0.05 0.01 0.04 0.10 0.17 0.00 0.13
 Crit Moves: ****
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.071
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.6
 Optimal Cycle: 0 Level of Service: A
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0
 Volume Module:
 Base Vol: 0 0 0 0 0 0 32 50 30 0 0 4
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 0 0 32 50 30 0 0 4
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 0 0 32 50 30 0 0 4
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 0 0 32 50 30 0 0 4
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 0 0 0 32 50 30 0 0 4
 Saturation Flow Module:
 Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Adjustment: 0.00 0.00 0.00 0.00 0.00 0.00 1.00 1.00 1.00 0.00 0.00 2.00
 Lanes: 0 0 0 0 0 0 754 885 706 784 0 1507
 Final Sat.: 0 0 0 0 0 0 0.42 0.42 0.42 0.00 0.00 0.00
 Capacity Analysis Module:
 Vol/Sat: xxxxx xxxxx xxxxx 0.04 0.07 0.04 xxxxx xxxxx 0.00 0.00
 Crit Moves: ****
 Delay/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 6.8 8.2 7.4 0.0 0.0 7.4
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 6.8 8.2 7.4 0.0 0.0 7.4
 LOS by Move: * * * * * A A * A *
 A345-AceroachDel: xxxxxx 6.8 1.00 7.9 1.00 7.4
 Delay Adj: xxxxxx 6.8 1.00 7.9 1.00 7.4
 A345-AceroachAdjDel: xxxxxx 6.8 1.00 7.9 1.00 7.4
 LOS by A345-Aceroach: * * * * * A A * A *
 AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.0 0.0 0.0
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St
 Critical Vol./Cap.(X): 0.257
 Average Delay (sec/veh): xxxxxx
 Level Of Service: A

Cycle (sec): 100
 Loss Time (sec): 10 (Y+R=4.0 sec)
 Optimal Cycle: 27

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0 0 0 0

Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1
 Volume Module:

Base Vol: 0 0 0 0 14 0 0 0 943 0 0 704 16
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 14 0 0 0 943 0 0 704 16
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 14 0 0 0 943 0 0 704 16
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 14 0 0 0 943 0 0 704 16
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 0 14 0 0 0 943 0 0 704 16

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00 1.00 1.00 1.00
 Final Sat.: 0 0 0 0 1425 1425 4275 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.00 0.00 0.22 0.00 0.00 0.25 0.01
 Crit Vol: 0 14 0 0 0 0 0 0 0 0 0 0 0 352
 Crit Moves: 0 0 0 0 0 0 0 0 0 0 0 0 0 0

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Scenario: 2010 345-Acre PM
 Command: 2010 345-Acre PM
 Volume: 2010 345-Acre PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 345-Acre

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Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	D 30.0	0.984	D 30.0	0.984 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 12.1	0.511	B 12.1	0.511 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	B 12.3	0.000	B 12.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	A 9.7	0.000	A 9.7	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 20.7	0.848	C 20.7	0.848 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.284	A xxxxx	0.284 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.559	A xxxxx	0.559 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.7	0.067	A 7.7	0.067 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.392	A xxxxx	0.392 + 0.000 D/V

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Cycle (sec): 100 Critical Vol./Cap.(X): 0.984
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 30.0
Optimal Cycle: 0 Level Of Service: D
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 4 268 20 48 148 163 418 40 8 109 97 135
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 4 268 20 48 148 163 418 40 8 109 97 135
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 4 268 20 48 148 163 418 40 8 109 97 135
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 4 268 20 48 148 163 418 40 8 109 97 135
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 4 268 20 48 148 163 418 40 8 109 97 135
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.86 0.14 1.00 0.95 1.05 1.00 1.67 0.33 1.00 1.00 1.00
Final Sat.: 378 755 57 387 393 467 425 731 149 389 411 448
Capacity Analysis Module:
Vol/Sat: 0.01 0.35 0.35 0.12 0.38 0.35 0.98 0.05 0.05 0.28 0.24 0.30
Crit Moves: ***
Delay/Veh: 11.9 15.7 15.6 12.9 15.9 14.5 68.2 11.0 10.8 14.9 13.6 13.6
Delay/Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.9 15.7 15.6 12.9 15.9 14.5 68.2 11.0 10.8 14.9 13.6 13.6
LOS by Move: B C B C B C F B B B B B
A345-AceroachDel: 15.6 14.9 62.3 1.00 14.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 15.6 14.9 62.3 1.00 14.0
LOS by A345-Aceroach: C B F B
AllWayAvgQ: 0.0 0.5 0.5 0.1 0.5 0.5 6.7 0.1 0.1 0.4 0.3 0.4
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Cycle (sec): 100 Critical Vol./Cap.(X): 0.511
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.1
Optimal Cycle: 0 Level Of Service: B
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 0 0 1 0 0 1
Volume Module:
Base Vol: 0 248 3 105 52 56 99 31 0 263 9 130
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 248 3 105 52 56 99 31 0 263 9 130
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 248 3 105 52 56 99 31 0 263 9 130
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 248 3 105 52 56 99 31 0 263 9 130
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.00 1.00 1.00 1.00 0.00 0.97 0.03 1.00
Final Sat.: 471 1004 12 466 497 550 488 521 0 515 18 639
Capacity Analysis Module:
Vol/Sat: 0.00 0.25 0.25 0.23 0.10 0.10 0.20 0.06 xxxxx 0.51 0.51 0.20
Crit Moves: ***
Delay/Veh: 0.0 11.5 11.4 12.0 10.3 9.4 11.3 9.6 0.0 15.6 15.6 9.4
Delay/Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 11.5 11.4 12.0 10.3 9.4 11.3 9.6 0.0 15.6 15.6 9.4
LOS by Move: * B B B A B A * C C A
A345-AceroachDel: 11.5 10.9 10.9 1.00 10.9 13.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 11.5 10.9 10.9 1.00 10.9 13.6
LOS by A345-Aceroach: B B B
AllWayAvgQ: 0.0 0.3 0.3 0.3 0.1 0.1 0.2 0.1 0.1 0.9 0.9 0.2
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Ramps
Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B(12.3)
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 2 0 0 0 0 2 0 1 0 0 0 0 1 0 0 0 1
Volume Module:
Base Vol: 47 197 0 0 388 88 0 0 0 8 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 47 197 0 0 388 88 0 0 8 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 47 197 0 0 388 88 0 0 8 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 47 197 0 0 388 88 0 0 8 0 0
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: 476 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 485 xxxxx 99
Potential Cap.: 1097 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 516 xxxxx 945
Move Cap.: 1097 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 499 xxxxx 945
Volume/Cap: 0.04 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.02 xxxxx 0.00
Level Of Service Module:
2Way95thQ: 0.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx
Control Del: 8.4 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 12.3 xxxxx xxxxx
LOS by Move: A * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: *
A345-AceroachDel: xxxxxx xxxxxx
A345-AceroachLOS: * B
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 0.2 Worst Case Level Of Service: A(9.7)
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 0 0 1 0 1 0 0 1
Volume Module:
Base Vol: 0 96 0 5 470 0 0 0 0 7 0 0 0 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 96 0 5 470 0 0 0 7 0 0 0 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 96 0 5 470 0 0 0 7 0 0 0 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 96 0 5 470 0 0 0 7 0 0 0 1
Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 235 341 576 48
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 773 594 431 1017
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 773 587 429 1017
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.01 0.00 0.00 0.00
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 9.7 xxxxx xxxxx 8.5
LOS by Move: A * A
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: *
A345-AceroachDel: xxxxxx xxxxxx 9.7 8.5
A345-AceroachLOS: * A
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 0.848
Level of Service: C
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 20.7
Optimal Cycle: 0

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 0 1

Volume Module:
Base Vol: 92 1 3 4 198 164 465 0 107 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 92 1 3 4 198 164 465 0 107 37 2 54
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 92 1 3 4 198 164 465 0 107 37 2 54
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 92 1 3 4 198 164 465 0 107 37 2 54

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat: 424 449 492 20 970 550 548 0 658 445 24 555

Capacity Analysis Module:
Vol/Sat: 0.22 0.00 0.01 0.20 0.20 0.30 0.85 xxxxx 0.16 0.08 0.08 0.10
Crit Moves: *** **

Delay/Veh: 12.7 10.2 9.5 11.3 11.3 11.3 34.7 0.0 9.0 10.5 10.5 9.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.7 10.2 9.5 11.3 11.3 11.3 34.7 0.0 9.0 10.5 10.5 9.3
LOS by Move: B A B B B D * A B B A
A345-AceroachDel: 12.5 11.3 29.9
Delay Adj: 1.00 1.00 1.00
A345-AceroachDel: 12.5 11.3 29.9
LOS by A345-Aceroach: B B D
AllwayAvgQ: 0.2 0.0 0.0 0.2 0.2 0.4 3.9 3.9 0.2 0.1 0.1 0.1

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.284
Level of Service: A
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Lanes: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 23 442 0 0 269 93 132 0 25 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 23 442 0 0 269 93 132 0 25 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 23 442 0 0 269 93 132 0 25 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 23 442 0 0 269 93 132 0 25 0 0 0
OvlAdjVol: 2

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.01 0.14 0.00 0.00 0.08 0.00 0.05 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: *****

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.559
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 37 Level of Service: A
 Street Name: 9th Street Pico Ave
 A345-Aceroach: North Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected
 Rights: Ignore Include Include Include
 Min. Green: 0
 Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
 Volume Module:
 Base Vol: 111 2 239 148 1 15 47 3 193 509 0 164
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 111 2 239 148 1 15 47 3 193 509 0 164
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 111 2 0 148 1 15 47 3 193 509 0 164
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 111 2 0 148 1 15 47 3 193 509 0 164
 PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 111 2 0 148 1 15 47 3 193 509 0 164
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.82 0.18 1.00 1.00 1.00 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1307 293 1600 1600 1600 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.07 0.00 0.00 0.09 0.00 0.05 0.03 0.00 0.12 0.18 0.00 0.10
 Crit Moves: ****
 Delay/Veh: 0.00 0.00 0.00 0.09 0.00 0.05 0.03 0.00 0.12 0.18 0.00 0.10
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 LOS by Move: * * * * *
 A345-AceroachDel: xxxxxx
 Delay Adj: xxxxxx
 A345-AceroachAdjDel: xxxxxx
 LOS by A345-Aceroach: *
 AllWayAVGQ: 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.1 0.0 0.0 0.0
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.067
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.7
 Optimal Cycle: 0 Level of Service: A
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0
 Lanes: 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
 Volume Module:
 Base Vol: 0 0 0 46 0 12 42 3 0 0 0 0 39
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 46 0 12 42 3 0 0 0 0 39
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 46 0 12 42 3 0 0 0 0 39
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 46 0 12 42 3 0 0 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 46 0 12 42 3 0 0 0 0 39
 Saturation Flow Module:
 Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Adjustment: 0.00 0.00 0.00 1.00 0.59 0.41 1.00 1.00 0.00 0.00 2.00 1.00
 Lanes: 0 0 0 683 471 333 682 752 0 0 1474 862
 Final Sat.: 0 0 0 683 471 333 682 752 0 0 1474 862
 Capacity Analysis Module:
 Vol/Sat: xxxxxx xxxxx 0.07 0.00 0.04 0.06 0.00 xxxxx xxxxx 0.00 0.05
 Crit Moves: ****
 Delay/Veh: 0.0 0.0 0.0 8.3 7.3 7.3 8.2 7.4 0.0 0.0 0.0 7.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 8.3 7.3 7.3 8.2 7.4 0.0 0.0 0.0 7.0
 LOS by Move: * * * * *
 A345-AceroachDel: xxxxxx
 Delay Adj: 7.9
 A345-AceroachAdjDel: xxxxxx
 LOS by A345-Aceroach: A
 AllWayAVGQ: 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 0.0 0.0 0.0
 Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St
Critical Vol./Cap.(X): 0.392
Average Delay (sec/veh): xxxxxx

Cycle (sec): 100
Loss Time (sec): 10 (Y+R=4.0 sec)
Optimal Cycle: 33
Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0 0 0 0

Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 29 0 43 0 1168 0 0 1031 18

Growth Adj: 1.00
Initial Bse: 0 0 0 29 0 43 0 1168 0 0 1031 18
User Adj: 1.00

PHF Adj: 1.00
PHF Volume: 0 0 0 29 0 43 0 1168 0 0 1031 18
Reduced Vol: 0

PCE Adj: 1.00
MLF Adj: 1.00
Final Vol.: 0 0 0 29 0 43 0 1168 0 0 1031 18

Saturation Flow Module:
Sat/Lane: 1425
Adjustment: 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 3.00 0.00 0.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.03 0.00 0.27 0.00 0.00 0.36 0.01
Crit Vol: 0 43 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Crit Moves: **** **

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Scenario Report

2010 315-Acre AM
Command: 2010 315-Acre AM
Volume: 2010 315-Acre AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 315-Acre

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Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	C 20.7	0.802	C 20.7	0.802 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 10.6	0.401	B 10.6	0.401 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	A 10.0	0.000	A 10.0	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.7	0.000	B 10.7	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 25.5	0.922	D 25.5	0.922 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.372	A xxxxx	0.372 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.557	A xxxxx	0.557 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.2	0.037	A 7.2	0.037 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.299	A xxxxx	0.299 + 0.000 D/V

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.802
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 20.7
Optimal Cycle: 0 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 1 166 101 40 226 191 313 18 4 150 184 153
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 1 166 101 40 226 191 313 18 4 150 184 153
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 166 101 40 226 191 313 18 4 150 184 153
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 166 101 40 226 191 313 18 4 150 184 153
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 1 166 101 40 226 191 313 18 4 150 184 153

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.24 0.76 1.00 1.00 1.00 1.64 0.36 1.00 1.09 0.91
Final Sat.: 352 475 302 379 411 443 390 653 148 390 454 404

Capacity Analysis Module:
Vol/Sat: 0.00 0.35 0.33 0.11 0.55 0.43 0.80 0.03 0.03 0.38 0.41 0.38
Crit Moves: ****

Delay/Veh: 12.1 15.7 14.8 12.6 20.3 15.7 37.9 11.4 11.2 16.6 16.1 14.7
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.1 15.7 14.8 12.6 20.3 15.7 37.9 11.4 11.2 16.6 16.1 14.7
LOS by Move: B C B C C E B B C C B
ApproachDel: 15.4 17.7 36.2 15.8
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 15.4 17.7 36.2 15.8
LOS by Appr: C E C
AllWayAvgQ: 0.0 0.5 0.4 0.1 1.0 1.0 2.8 0.0 0.0 0.5 0.6 0.5

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.401
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.6
Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 215 2 17 111 57 59 10 0 216 10 126
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 215 2 17 111 57 59 10 0 216 10 126
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 215 2 17 111 57 59 10 0 216 10 126
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 215 2 17 111 57 59 10 0 216 10 126
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 215 2 17 111 57 59 10 0 216 10 126

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.32 0.68 1.00 1.00 0.00 0.96 0.04 1.00
Final Sat.: 510 1093 10 502 729 395 516 554 0 538 25 686

Capacity Analysis Module:
Vol/Sat: 0.00 0.20 0.20 0.03 0.15 0.14 0.11 0.02 xxxxx 0.40 0.40 0.18
Crit Moves: ****

Delay/Veh: 0.0 10.3 10.3 9.7 9.9 9.4 10.1 8.9 0.0 12.8 12.8 8.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 10.3 10.3 9.7 9.9 9.4 10.1 8.9 0.0 12.8 12.8 8.8
LOS by Move: * B B A A A A B A * B B A
ApproachDel: 10.3 9.7 9.9 11.4
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 10.3 9.7 9.9 11.4
LOS by Appr: B A A
AllWayAvgQ: 0.0 0.2 0.2 0.0 0.2 0.1 0.1 0.1 0.0 0.0 0.6 0.6 0.2

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 0.922
Level of Service: D
Level of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 91 50 1 6 432 307 447 0 50 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 91 50 1 6 432 307 447 0 50 19 1 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 91 50 1 6 432 307 447 0 50 19 1 37
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 91 50 1 6 432 307 447 0 50 19 1 37
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 91 50 1 6 432 307 447 0 50 19 1 37

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.96 0.04 0.03 1.97 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat: 395 817 16 14 981 553 485 0 564 391 21 477
Capacity Analysis Module:
Vol/Sat: 0.23 0.06 0.06 0.44 0.44 0.56 0.92 xxxxx 0.09 0.05 0.05 0.08
Crit Moves: *** **

Delay/Veh: 13.8 11.4 11.4 15.0 15.0 16.3 49.7 0.0 9.5 11.3 11.3 10.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.8 11.4 11.4 15.0 15.0 16.3 49.7 0.0 9.5 11.3 11.3 10.3
LOS by Move: B B C B C E * A B B B
ApproachDel: 12.9 15.5 45.6 10.7
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 12.9 15.5 45.6 10.7
LOS by Appr: B C E B
AllwayAvgQ: 0.3 0.1 0.1 0.7 0.7 1.1 5.3 5.3 0.1 0.0 0.0 0.1

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.372
Level of Service: A
Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Min. Green: 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0

Volume Module:
Base Vol: 28 469 0 0 690 153 111 0 13 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 28 469 0 0 690 153 111 0 13 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 28 469 0 0 690 0 111 0 13 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 28 469 0 0 690 0 111 0 13 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 28 469 0 0 690 0 111 0 13 0 0 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.15 0.00 0.00 0.22 0.00 0.04 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: ****

Crit Moves: ****

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.557
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 37 Level of Service: A

Street Name: 9th Street Pico Ave
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Split Phase Split Phase Protected Protected
 Rights: Ignore Include Include
 Min. Green: 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Volume Module:
 Base Vol: 187 2 493 278 0 13 6 58 62 375 6 172
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 187 2 493 278 0 13 6 58 62 375 6 172
 User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 187 2 0 278 0 13 6 58 62 375 6 172
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 187 2 0 278 0 13 6 58 62 375 6 172
 PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 187 2 0 278 0 13 6 58 62 375 6 172

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.037
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.2
 Optimal Cycle: 0 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)

 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.299
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0 0

Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1
 Volume Module:

Base Vol: 0 0 0 3 0 0 0 0 819 0 0 845 10
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 0 0 819 0 0 845 10
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 0 0 819 0 0 845 10
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 0 0 819 0 0 845 10
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 3 0 0 0 819 0 0 845 10

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.19 0.00 0.00 0.30 0.01
 Crit Vol: 0 3 0 0 0 0 422
 Crit Moves: 0 3 0 0 0 0 422

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Scenario Report

2010 315-Acre MD
Command: 2010 315-Acre MD
Volume: 2010 315-Acre MD Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 315-Acre

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Impact Analysis Report
Level Of Service

Intersection	Base Del/V/LOS Veh C	Future Del/V/LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 61.9 1.308	F 61.9 1.308	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 11.7 0.480	B 11.7 0.480	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	B 13.1 0.000	B 13.1 0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.2 0.000	B 11.2 0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 38.5 1.013	E 38.5 1.013	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx 0.326	A xxxxx 0.326	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx 0.543	A xxxxx 0.543	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.6 0.071	A 7.6 0.071	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx 0.261	A xxxxx 0.261	+ 0.000 D/V

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.308
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 61.9
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 6 366 93 65 240 139 458 34 4 159 162 191
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 6 366 93 65 240 139 458 34 4 159 162 191
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 6 366 93 65 240 139 458 34 4 159 162 191
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 6 366 93 65 240 139 458 34 4 159 162 191
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 6 366 93 65 240 139 458 34 4 159 162 191

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.59 0.41 1.00 1.00 1.00 1.79 0.21 1.00 1.00 1.00 1.00
Final Sat.: 338 584 151 338 360 383 350 627 74 347 364 392

Capacity Analysis Module:
Vol/Sat: 0.02 0.63 0.62 0.19 0.67 0.36 1.31 0.05 0.05 0.46 0.45 0.49
Crit Moves: **** ** **
Delay/Veh: 13.1 26.7 25.7 15.4 29.4 16.7 186.4 12.9 12.8 20.9 19.6 19.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.1 26.7 25.7 15.4 29.4 16.7 186.4 12.9 12.8 20.9 19.6 19.5
LOS by Move: B D C D C F B B C C C
ApproachDel: 26.3 23.4 173.1 20.0
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 26.3 23.4 173.1 20.0
LOS by Appr: D C F
AllwayAvgQ: 0.0 1.5 1.4 0.2 1.7 1.7 16.9 0.1 0.1 0.8 0.7 0.9

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.480
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.7
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 292 6 67 123 19 32 12 0 256 3 132
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 292 6 67 123 19 32 12 0 256 3 132
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 292 6 67 123 19 32 12 0 256 3 132
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 292 6 67 123 19 32 12 0 256 3 132
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 292 6 67 123 19 32 12 0 256 3 132

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.96 0.04 1.00 1.73 0.27 1.00 1.00 0.00 0.99 0.01 1.00
Final Sat.: 499 1060 22 485 911 143 480 513 0 533 6 652

Capacity Analysis Module:
Vol/Sat: 0.00 0.28 0.27 0.14 0.14 0.13 0.07 0.02 xxxxx 0.48 0.48 0.20
Crit Moves: **** ** **
Delay/Veh: 0.0 11.3 11.3 10.8 10.1 10.0 10.2 9.3 0.0 14.7 14.7 9.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 11.3 11.3 10.8 10.1 10.0 10.2 9.3 0.0 14.7 14.7 9.3
LOS by Move: * B B B A B A *
ApproachDel: 11.3 10.3 9.9
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 11.3 10.3 9.9
LOS by Appr: B B
AllwayAvgQ: 0.0 0.3 0.3 0.1 0.1 0.1 0.1 0.1 0.0 0.0 0.8 0.8 0.2

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 1.013
Level of Service: E
Cycle (sec): 100 (Y+R=4.0 sec) Average Delay (sec/veh): 38.5
Loss Time (sec): 0
Optimal Cycle: 0
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 0 1
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 0 1
Volume Module:
Base Vol: 60 27 1 5 144 195 573 0 93 7 5 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 60 27 1 5 144 195 573 0 93 7 5 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 60 27 1 5 144 195 573 0 93 7 5 30
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 60 27 1 5 144 195 573 0 93 7 5 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 60 27 1 5 144 195 573 0 93 7 5 30

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.93 0.07 0.07 1.93 1.00 1.00 0.00 1.00 0.58 0.42 1.00
Final Sat: 439 903 34 34 982 566 566 0 683 286 204 567
Capacity Analysis Module:
Vol/Sat: 0.14 0.03 0.03 0.15 0.15 0.34 1.01 xxxxx 0.14 0.02 0.02 0.05
Crit Moves: *** ** ** ** **
Delay/Veh: 12.0 10.4 10.4 10.9 10.9 12.2 65.8 0.0 8.7 9.9 9.9 9.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.0 10.4 10.4 10.9 10.9 12.2 65.8 0.0 8.7 9.9 9.9 9.1
LOS by Move: B B B B B F * A A A A
ApproachDel: 11.5 11.7 57.8
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 11.5 11.7 57.8
LOS by Appr: B
AllwayAvgQ: 0.2 0.0 0.0 0.2 0.2 0.5 8.9 8.9 0.2 0.0 0.0 0.1
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.326
Level of Service: A
Cycle (sec): 100 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Loss Time (sec): 10
Optimal Cycle: 26
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0
Volume Module:
Base Vol: 29 554 0 0 249 145 151 0 17 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 29 554 0 0 249 145 151 0 17 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 29 554 0 0 249 145 151 0 17 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 29 554 0 0 249 145 151 0 17 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 29 554 0 0 249 145 151 0 17 0 0 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.17 0.00 0.00 0.08 0.00 0.05 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: *****
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.543
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 36 Level of Service: A

Street Name: 9th Street Pico Ave
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: Ignore Include Include Include
 Min. Green: 0
 Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
 Base Vol: 127 5 146 146 2 14 11 68 165 487 0 210
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 127 5 146 146 2 14 11 68 165 487 0 210
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 127 5 0 146 2 14 11 68 165 487 0 210
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 127 5 0 146 2 14 11 68 165 487 0 210
 PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 127 5 0 146 2 14 11 68 165 487 0 210

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 1.00 1.00 1.00 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1323 277 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
 Vol/Sat: 0.08 0.00 0.00 0.09 0.00 0.05 0.01 0.04 0.10 0.17 0.00 0.13
 Crit Moves: ****
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.071
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.6
 Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0
 Lanes: 0 0 0 0 0 0 1 0 1 0 1 0 1 0 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 0 0 0 32 50 31 0 0 8 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 0 0 32 50 31 0 0 8 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 0 0 32 50 31 0 0 8 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 0 0 32 50 31 0 0 8 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 0 0 0 32 50 31 0 0 8 0

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 0 752 880 706 783 0 0 1506 882

Capacity Analysis Module:
 Vol/Sat: xxxxx xxxxx xxxxx 0.04 0.07 0.04 xxxxx xxxxx 0.01 0.00
 Crit Moves: ****
 Delay/Veh: 0.0 0.0 0.0 0.0 0.0 6.9 8.2 7.5 0.0 0.0 7.5 0.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 6.9 8.2 7.5 0.0 0.0 7.5 0.0
 LOS by Move: * * * * * A A * * * * *
 ApproachDel: xxxxxx 6.9 7.9
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 6.9 7.9
 LOS by Appr: * A A A A A
 AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.1 0.0 0.0 0.0 0.0
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)

 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.261
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
 Lanes: -----|-----|-----|-----|-----|-----|

Volume Module:
 Base Vol: 0 0 0 14 0 0 0 934 0 0 717 16
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 14 0 0 0 934 0 0 717 16
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 14 0 0 0 934 0 0 717 16
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 14 0 0 0 934 0 0 717 16
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 14 0 0 0 934 0 0 717 16

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.00 0.00 0.22 0.00 0.00 0.25 0.01
 Crit Vol: 0 14 0 0 0 0 0 359 0 0 0 0
 Crit Moves: ****

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Scenario: 2010 315-Acre PM
 Command: 2010 315-Acre PM
 Volume: 2010 315-Acre PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 315-Acre

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Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh	V/ C	Future Del/ LOS Veh	V/ C	Change in
# 1 Pico Ave / Pier G St & Harbor	D 28.1	0.960	D 28.1	0.960	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 12.1	0.509	B 12.1	0.509	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	B 12.5	0.000	B 12.5	0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	A 9.7	0.000	A 9.7	0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 20.6	0.847	C 20.6	0.847	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.286	A xxxxx	0.286	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.555	A xxxxx	0.555	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.8	0.067	A 7.8	0.067	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.381	A xxxxx	0.381	+ 0.000 D/V

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.960
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 28.1
 Optimal Cycle: 0 Level Of Service: D
 Approach: North Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 3 271 20 48 148 160 408 42 7 111 99 135
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 3 271 20 48 148 160 408 42 7 111 99 135
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PFF Volume: 3 271 20 48 148 160 408 42 7 111 99 135
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 3 271 20 48 148 160 408 42 7 111 99 135
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 3 271 20 48 148 160 408 42 7 111 99 135
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.86 0.14 1.00 0.96 1.04 1.00 1.71 0.29 1.00 1.00 1.00
 Final Sat.: 379 755 56 386 396 462 425 749 127 389 411 448
 Capacity Analysis Module:
 Vol/Sat: 0.01 0.36 0.36 0.12 0.37 0.35 0.96 0.06 0.06 0.29 0.24 0.30
 Crit Moves: ****
 Delay/Veh: 11.9 15.7 15.6 12.9 15.8 14.3 62.7 11.0 10.9 14.9 13.6 13.5
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 11.9 15.7 15.6 12.9 15.8 14.3 62.7 11.0 10.9 14.9 13.6 13.5
 LOS by Move: B C B C B C B F B B B B B
 ApproachDel: 15.6 14.7 57.1 14.0
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 15.6 14.7 57.1 14.0
 LOS by Appr: C B F B
 AllwayAvgQ: 0.0 0.5 0.5 0.1 0.5 0.5 6.1 0.1 0.1 0.4 0.3 0.4
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.509
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.1
 Optimal Cycle: 0 Level Of Service: B
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 0 262 3 100 52 53 94 30 0 263 8 125
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 262 3 100 52 53 94 30 0 263 8 125
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PFF Volume: 0 262 3 100 52 53 94 30 0 263 8 125
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 262 3 100 52 53 94 30 0 263 8 125
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 262 3 100 52 53 94 30 0 263 8 125
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.98 0.02 1.00 1.00 1.00 1.00 1.00 0.00 0.97 0.03 1.00
 Final Sat.: 475 1014 12 466 497 550 487 521 0 517 16 639
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.26 0.26 0.21 0.10 0.10 0.19 0.06 xxxx 0.51 0.51 0.20
 Crit Moves: ****
 Delay/Veh: 0.0 11.5 11.5 11.9 10.2 9.4 11.2 9.5 0.0 15.6 15.6 9.3
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 11.5 11.5 11.9 10.2 9.4 11.2 9.5 0.0 15.6 15.6 9.3
 LOS by Move: * B B B A B A * C C A
 ApproachDel: 11.5 10.8 10.8 10.8
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 11.5 10.8 10.8 10.8
 LOS by Appr: B B B B
 AllwayAvgQ: 0.0 0.3 0.3 0.2 0.1 0.1 0.2 0.1 0.1 0.9 0.9 0.2
 Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 0.847
Level of Service: C

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 92 7 3 4 189 165 464 0 104 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 92 7 3 4 189 165 464 0 104 37 2 54
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 92 7 3 4 189 165 464 0 104 37 2 54

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 92 7 3 4 189 165 464 0 104 37 2 54

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.40 0.60 0.04 1.96 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat: 425 640 285 20 968 549 548 0 657 446 24 556

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.286
Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include

Min. Green: 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 24 448 0 0 261 98 132 0 25 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 24 448 0 0 261 98 132 0 25 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 24 448 0 0 261 98 132 0 25 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 24 448 0 0 261 98 132 0 25 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.555
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level of Service: A
Street Name: 9th Street Pico Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include
Min. Green: 0
Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
Volume Module:
Base Vol: 109 2 238 145 1 13 47 5 193 505 0 184
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 109 2 238 145 1 13 47 5 193 505 0 184
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 109 2 0 145 1 13 47 5 193 505 0 184
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 109 2 0 145 1 13 47 5 193 505 0 184
PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 109 2 0 145 1 13 47 5 193 505 0 184
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.84 0.16 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1338 262 1600 1600 1600 2880 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.09 0.00 0.05 0.03 0.00 0.12 0.18 0.00 0.12
Crit Moves: ****
Delay/Veh: 0.00 0.00 0.00 0.09 0.00 0.05 0.03 0.00 0.12 0.18 0.00 0.12
Delay Adj: 0.00 0.00 0.00 0.09 0.00 0.05 0.03 0.00 0.12 0.18 0.00 0.12
AdjDel/Veh: 0.00 0.00 0.00 0.09 0.00 0.05 0.03 0.00 0.12 0.18 0.00 0.12
LOS by Move: * * * * *
ApproachDel: xxxxxx
Delay Adj: xxxxxx
ApprAdjDel: xxxxxx
LOS by Appr: *
AllWayAvgQ: 0.0 0.0 0.0 0.1 0.0 0.0 0.0 0.0 0.1 0.1 0.0 0.0
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.067
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.8
Optimal Cycle: 0 Level of Service: A
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1
Volume Module:
Base Vol: 0 0 0 46 0 12 42 1 0 0 0 0 29
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 46 0 12 42 1 0 0 0 0 29
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 46 0 12 42 1 0 0 0 0 29
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 46 0 12 42 1 0 0 0 0 29
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 46 0 12 42 1 0 0 0 0 29
Saturation Flow Module:
Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adjustment: 0.00 0.00 0.00 1.00 0.59 0.41 1.00 1.00 0.00 0.00 2.00 1.00
Lanes: 0 0 0 689 475 335 683 754 0 0 1475 862
Final Sat.: 0 0 0 689 475 335 683 754 0 0 1475 862
Capacity Analysis Module:
Vol/Sat: xxxxxx xxxxx 0.07 0.00 0.04 0.06 0.00 xxxxx xxxxx 0.00 0.03
Crit Moves: ****
Delay/Veh: 0.0 0.0 0.0 8.2 7.2 7.2 8.2 7.4 0.0 0.0 0.0 6.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 8.2 7.2 7.2 8.2 7.4 0.0 0.0 0.0 6.9
LOS by Move: * * * * *
ApproachDel: xxxxxx
Delay Adj: 7.8
ApprAdjDel: xxxxxx
LOS by Appr: *
AllWayAvgQ: 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.1 0.0 0.0 0.0
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St
 Critical Vol./Cap.(X): 0.381
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 32 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
 Lanes: -----|-----|-----|-----|-----|-----|

Volume Module:
 Base Vol: 0 0 0 29 0 34 0 1165 0 0 1029 18
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 29 0 34 0 1165 0 0 1029 18
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 29 0 34 0 1165 0 0 1029 18
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 29 0 34 0 1165 0 0 1029 18
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 29 0 34 0 1165 0 0 1029 18

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.02 0.00 0.27 0.00 0.00 0.36 0.01
 Crit Vol: 0 29 0 0 0 0 0 514
 Crit Moves: ****

Middle Harbor EIR
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Scenario: 2010 NEPA AM Scenario Report

Command: 2010 NEPA AM
Volume: 2010 NEPA AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NEPA

Middle Harbor EIR
Future Year 2010
NEPA

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	21.0 0.808	21.0 0.808	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	10.6 0.407	10.6 0.407	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	9.9 0.000	9.9 0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	10.8 0.000	10.8 0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	25.5 0.922	25.5 0.922	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	xxxxx 0.370	xxxxx 0.370	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	xxxxx 0.556	xxxxx 0.556	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	7.2 0.037	7.2 0.037	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	xxxxx 0.292	xxxxx 0.292	+ 0.000 D/V

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Cycle (sec): 100 Critical Vol./Cap.(X): 0.407
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.6
Optimal Cycle: 0 Level Of Service: B

Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Cycle (sec): 100 Critical Vol./Cap.(X): 0.808
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 21.0
Optimal Cycle: 0 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 0 1 0 0 1 0

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 0

Volume Module:
Base Vol: 0 216 2 16 112 59 11 0 219 10 126
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Volume Module:
Base Vol: 1 166 101 40 231 200 314 18 4 145 184 155
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.31 0.69 1.00 1.00 0.00 0.96 0.04 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.24 0.76 1.00 1.00 1.64 0.36 1.00 1.09 0.91 0.91

Capacity Analysis Module:
Vol/Sat: 0.00 0.20 0.20 0.03 0.16 0.15 0.11 0.02 xxxxx 0.41 0.41 0.18
Crit Moves: ****

Capacity Analysis Module:
Vol/Sat: 0.00 0.35 0.34 0.11 0.56 0.45 0.81 0.03 0.03 0.37 0.41 0.38
Crit Moves: ****

Delay/Veh: 0.0 10.3 10.3 9.7 9.9 9.4 10.1 8.9 0.0 12.9 12.9 8.8
AdJDel/Veh: 0.0 10.3 10.3 9.7 9.9 9.4 10.1 8.9 0.0 12.9 12.9 8.8
LOS by Move: * B B A A A A * B B A

Delay/Veh: 12.2 15.9 14.9 12.6 20.7 16.2 38.8 11.4 11.3 16.5 16.3 14.8
AdJDel/Veh: 12.2 15.9 14.9 12.6 20.7 16.2 38.8 11.4 11.3 16.5 16.3 14.8
LOS by Move: B C B C E B B C C B

ApproachDel: 10.3 9.8 9.9 1.00 1.00 11.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
ApprAdJDel: 10.3 9.8 9.9 1.00 1.00 11.4

ApproachDel: 15.5 18.1 18.1 1.00 1.00 15.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
ApprAdJDel: 15.5 18.1 18.1 1.00 1.00 15.9

AllWayAvgQ: 0.0 0.2 0.2 0.0 0.2 0.2 0.1 0.0 0.0 0.6 0.6 0.2
Note: Queue reported is the number of cars per lane.

AllWayAvgQ: 0.0 0.5 0.4 0.1 1.1 1.1 2.9 0.0 0.0 0.5 0.6 0.5
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
ICU I(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.370
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), and Control (Protected, Ignored, Protected, Protected, Protected). Rows include Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PPF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Table with columns for Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module, Vol/Sat, OvlAdjV/S, and Crit Moves. Rows include Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module, Vol/Sat, OvlAdjV/S, and Crit Moves.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.922
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 25.5
Optimal Cycle: 0 Level Of Service: D

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), and Control (Stop Sign, Stop Sign, Stop Sign, Stop Sign). Rows include Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PPF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Table with columns for Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module, Vol/Sat, OvlAdjV/S, and Crit Moves. Rows include Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module, Vol/Sat, OvlAdjV/S, and Crit Moves.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St
 Critical Vol./Cap.(X): 0.292
 Average Delay (sec/veh): xxxxxx
 Level of Service: A

Cycle (sec): 100
 Loss Time (sec): 10 (Y+R=4.0 sec)
 Optimal Cycle: 28
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 3 0 0 0 809 0 0 827 10
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 0 0 809 0 0 827 10
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 0 0 809 0 0 827 10
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 0 0 809 0 0 827 10
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 3 0 0 0 809 0 0 827 10

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.19 0.00 0.00 0.29 0.01
 Crit Vol: 0 3 0 0 0 0 0 414
 Crit Moves: 0 3 0 0 0 0 0 0 0 0 0 0

Middle Harbor EIR
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 Scenario Report
 2010 NEPA MD

Command: 2010 NEPA MD
 Volume: 2010 NEPA MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: NEPA

Middle Harbor EIR
 Future Year 2010
 NEPA

 Scenario Report
 2010 NEPA MD

Command: 2010 NEPA MD
 Volume: 2010 NEPA MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: NEPA

Middle Harbor EIR
 Future Year 2010
 NEPA

 Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 63.5	1.323	F 63.5 1.323	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 11.7	0.481	B 11.7 0.481	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	B 13.1	0.000	B 13.1 0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.2	0.000	B 11.2 0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 38.8	1.015	E 38.8 1.015	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.325	A xxxxx 0.325	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.544	A xxxxx 0.544	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.6	0.071	A 7.6 0.071	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.261	A xxxxx 0.261	+ 0.000 D/V

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.323
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 63.5
Optimal Cycle: 0 Level of Service: F

Cycle (sec): 100 Critical Vol./Cap.(X): 1.323
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 63.5
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound

Approach: North Bound South Bound East Bound West Bound

Movement: L T R L T R L T R L T R L T R

Movement: L T R L T R L T R L T R L T R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Min. Green: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:

Volume Module:

Base Vol: 6 366 93 65 240 141 461 35 4 159 170 192

Base Vol: 6 366 93 65 240 141 461 35 4 159 170 192

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 6 366 93 65 240 141 461 35 4 159 170 192

Initial Bse: 6 366 93 65 240 141 461 35 4 159 170 192

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 6 366 93 65 240 141 461 35 4 159 170 192

PHF Volume: 6 366 93 65 240 141 461 35 4 159 170 192

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 6 366 93 65 240 141 461 35 4 159 170 192

Reduced Vol: 6 366 93 65 240 141 461 35 4 159 170 192

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 6 366 93 65 240 141 461 35 4 159 170 192

FinalVolume: 6 366 93 65 240 141 461 35 4 159 170 192

Saturation Flow Module:

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.59 0.41 1.00 1.00 1.00 1.00 1.79 0.21 1.00 1.00 1.00

Lanes: 1.00 1.59 0.41 1.00 1.00 1.00 1.00 1.79 0.21 1.00 1.00 1.00

Final Sat.: 336 581 150 336 359 382 349 626 72 346 363 392

Final Sat.: 336 581 150 336 359 382 349 626 72 346 363 392

Capacity Analysis Module:

Capacity Analysis Module:

Vol/Sat: 0.02 0.63 0.62 0.19 0.67 0.37 1.32 0.06 0.06 0.46 0.47 0.49

Vol/Sat: 0.02 0.63 0.62 0.19 0.67 0.37 1.32 0.06 0.06 0.46 0.47 0.49

Crit Moves: ****

Crit Moves: ****

Delay/Veh: 13.2 26.9 25.9 15.4 29.7 16.9 192.5 13.0 12.9 21.0 20.3 19.7

Delay/Veh: 13.2 26.9 25.9 15.4 29.7 16.9 192.5 13.0 12.9 21.0 20.3 19.7

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 13.2 26.9 25.9 15.4 29.7 16.9 192.5 13.0 12.9 21.0 20.3 19.7

AdjDel/Veh: 13.2 26.9 25.9 15.4 29.7 16.9 192.5 13.0 12.9 21.0 20.3 19.7

LOS by Move: B D C D C F B B C C C C

LOS by Move: B D C D C F B B C C C C

ApproachDel: 26.6 23.6 23.6 178.5

ApproachDel: 26.6 23.6 23.6 178.5

Delay Adj: 1.00 1.00 1.00 1.00

Delay Adj: 1.00 1.00 1.00 1.00

ApprAdjDel: 26.6 23.6 23.6 178.5

ApprAdjDel: 26.6 23.6 23.6 178.5

LOS by Appr: D C C F

LOS by Appr: D C C F

AllwayAvgQ: 0.0 1.5 1.4 0.2 1.7 1.7 17.4 0.1 0.1 0.8 0.8 0.9

AllwayAvgQ: 0.0 1.5 1.4 0.2 1.7 1.7 17.4 0.1 0.1 0.8 0.8 0.9

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 1.015
Level of Service: E

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 61 25 1 5 147 194 574 0 95 7 5 30

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 61 25 1 5 147 194 574 0 95 7 5 30

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 61 25 1 5 147 194 574 0 95 7 5 30
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 61 25 1 5 147 194 574 0 95 7 5 30
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat: 438 899 36 33 983 566 566 0 683 286 204 568

Capacity Analysis Module:
Vol/Sat: 0.14 0.03 0.03 0.15 0.15 0.34 1.01 xxxxx 0.14 0.02 0.02 0.05
Crit Moves: *** **

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.325
Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Protected Protected Protected Protected
Rights: Include Ignore Protected Protected

Min. Green: 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 28 553 0 0 249 147 151 0 17 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 28 553 0 0 249 147 151 0 17 0 0 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 28 553 0 0 249 0 151 0 17 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 28 553 0 0 249 0 151 0 17 0 0 0
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.02 0.17 0.00 0.00 0.08 0.00 0.05 0.00 0.01 0.00 0.00 0.00
Crit Moves: ****

Middle Harbor EIR
Future Year 2010
NEPA

Scenario: 2010 NEPA PM

Command: 2010 NEPA PM
Volume: 2010 NEPA PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NEPA

Middle Harbor EIR
Future Year 2010
NEPA

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	D 28.2	0.961	D 28.2	0.961 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 12.1	0.508	B 12.1	0.508 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	B 12.3	0.000	B 12.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	A 9.7	0.000	A 9.7	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 20.7	0.847	C 20.7	0.847 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.283	A xxxxx	0.283 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.558	A xxxxx	0.558 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.8	0.070	A 7.8	0.070 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.385	A xxxxx	0.385 + 0.000 D/V

Middle Harbor EIR Future Year 2010 NEPA

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.847
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 20.7
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 0 0 1 1 0 1 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 92 0 3 4 196 165 465 0 106 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 92 0 3 4 196 165 465 0 106 37 2 54
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 92 0 3 4 196 165 465 0 106 37 2 54
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 92 0 3 4 196 165 465 0 106 37 2 54
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 92 0 3 4 196 165 465 0 106 37 2 54

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat: 424 449 492 20 971 550 549 0 659 446 24 556

Capacity Analysis Module:
Vol/Sat: 0.22 0.00 0.01 0.20 0.20 0.30 0.85 xxxxx 0.16 0.08 0.08 0.10
Crit Moves: ***
Delay/Veh: 12.7 0.0 9.5 11.2 11.2 11.3 34.6 0.0 9.0 10.5 10.5 9.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.7 0.0 9.5 11.2 11.2 11.3 34.6 0.0 9.0 10.5 10.5 9.3
LOS by Move: B * A B B B D * A B B A
ApproachDel: 12.6 11.3 29.9
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 12.6 11.3 29.9
LOS by Appr: B D A
AllwayAvgQ: 0.2 0.0 0.0 0.2 0.2 0.4 3.9 3.9 0.2 0.1 0.1 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR Future Year 2010 NEPA

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.283
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Lanes: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0

Volume Module:
Base Vol: 25 438 0 0 269 96 132 0 25 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 25 438 0 0 269 96 132 0 25 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 25 438 0 0 269 96 132 0 25 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 25 438 0 0 269 96 132 0 25 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 25 438 0 0 269 96 132 0 25 0 0 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.14 0.00 0.00 0.08 0.00 0.05 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: *****

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St
 Critical Vol./Cap.(X): 0.385
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 33 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0 0
 Lanes: -----|-----|-----|-----|-----|-----|

Volume Module:
 Base Vol: 0 0 0 29 0 34 0 1181 0 0 1039 18
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 29 0 34 0 1181 0 0 1039 18
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 29 0 34 0 1181 0 0 1039 18
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 29 0 34 0 1181 0 0 1039 18
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 29 0 34 0 1181 0 0 1039 18

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.02 0.00 0.28 0.00 0.00 0.36 0.01
 Crit Vol: 0 29 0 0 0 0 0 0 0 0 520
 Crit Moves: ****

Middle Harbor EIR
Future Year 2010
No Project

Scenario Report

2010 NP AM

Command: 2010 NP AM
Volume: 2010 NP AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Paths
Routes: Default Routes
Configuration: NP

Middle Harbor EIR
Future Year 2010
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	D 29.4	0.921	D 29.4	0.921 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 11.8	0.490	B 11.8	0.490 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	A 9.8	0.000	A 9.8	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.8	0.000	B 10.8	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 25.3	0.919	D 25.3	0.919 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.368	A xxxxx	0.368 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.555	A xxxxx	0.555 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.1	0.031	A 7.1	0.031 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.313	A xxxxx	0.313 + 0.000 V/C

Middle Harbor EIR
Future Year 2010
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Cycle (sec): 100 Critical Vol./Cap.(X): 0.921
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 29.4
Optimal Cycle: 0 Level of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 1 176 124 41 263 260 323 21 6 155 229 222
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 1 176 124 41 263 260 323 21 6 155 229 222
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 176 124 41 263 260 323 21 6 155 229 222
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 176 124 41 263 260 323 21 6 155 229 222
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 1 176 124 41 263 260 323 21 6 155 229 222

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.17 0.83 1.00 1.00 1.00 1.56 0.44 1.00 1.02 0.98
Final Sat.: 320 402 297 350 377 406 351 546 159 356 386 402
Capacity Analysis Module:
Vol/Sat: 0.00 0.44 0.42 0.12 0.70 0.64 0.92 0.04 0.04 0.43 0.59 0.55
Crit Moves: ****
Delay/Veh: 13.3 19.5 18.2 13.7 29.7 24.5 61.1 12.6 12.4 19.2 23.7 20.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.3 19.5 18.2 13.7 29.7 24.5 61.1 12.6 12.4 19.2 23.7 20.6
LOS by Move: B C C B D C F B B C C C
ApproachDel: 18.9 26.1 26.1 57.3
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 18.9 26.1 26.1 57.3
LOS by Appr: C D F
AllwayAvgQ: 0.0 0.7 0.6 0.1 1.8 1.8 4.7 0.0 0.0 0.7 1.2 1.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Cycle (sec): 100 Critical Vol./Cap.(X): 0.490
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.8
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 306 2 17 133 49 45 9 0 256 8 125
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 306 2 17 133 49 45 9 0 256 8 125
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 306 2 17 133 49 45 9 0 256 8 125
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 306 2 17 133 49 45 9 0 256 8 125
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 306 2 17 133 49 45 9 0 256 8 125

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.46 0.54 1.00 1.00 0.00 0.97 0.03 1.00
Final Sat.: 498 1073 7 478 765 293 481 514 0 522 16 649
Capacity Analysis Module:
Vol/Sat: 0.00 0.29 0.28 0.04 0.17 0.17 0.09 0.02 xxxx 0.49 0.49 0.19
Crit Moves: ****
Delay/Veh: 0.0 11.5 11.5 10.1 10.5 10.1 10.4 9.3 0.0 14.9 14.9 9.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 11.5 11.5 10.1 10.5 10.1 10.4 9.3 0.0 14.9 14.9 9.2
LOS by Move: * B B B B B A *
ApproachDel: 11.5 10.4 10.2 13.1
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 11.5 10.4 10.2 13.1
LOS by Appr: B B
AllwayAvgQ: 0.0 0.4 0.4 0.0 0.2 0.2 0.1 0.0 0.0 0.9 0.9 0.2

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.919
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 25.3
Optimal Cycle: 0 Level of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 87 20 1 6 439 310 449 0 53 26 1 40
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 87 20 1 6 439 310 449 0 53 26 1 40
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 87 20 1 6 439 310 449 0 53 26 1 40

Reduced Vol: 0 0 0 0
Reduced Vol: 87 20 1 6 439 310 449 0 53 26 1 40

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Vol.: 87 20 1 6 439 310 449 0 53 26 1 40
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.90 0.10 0.03 1.97 1.00 1.00 0.00 1.00 0.96 0.04 1.00
Final Sat.: 391 789 40 14 992 559 488 0 569 402 15 484

Capacity Analysis Module:
Vol/Sat: 0.22 0.03 0.03 0.44 0.44 0.55 0.92 xxxxx 0.09 0.06 0.06 0.08

Crit Moves: *** ** ** ** **
Delay/Veh: 13.7 11.1 11.1 14.9 14.9 16.2 49.0 0.0 9.4 11.4 11.4 10.3

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.7 11.1 11.1 14.9 14.9 16.2 49.0 0.0 9.4 11.4 11.4 10.3

LOS by Move: B B B C E * A B B B
ApproachDel: 13.2 15.4 44.8 10.7
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 13.2 15.4 44.8 10.7
LOS by Appr: B C E B
AllwayAvgQ: 0.3 0.0 0.0 0.7 0.7 1.1 5.3 5.3 0.1 0.1 0.1 0.1

Middle Harbor EIR
Future Year 2010
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.368
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include

Min. Green: 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0

Volume Module:
Base Vol: 27 448 0 0 686 167 119 0 18 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 27 448 0 0 686 167 119 0 18 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 27 448 0 0 686 0 119 0 18 0 0 0

Reduced Vol: 0 0 0 0
Reduced Vol: 27 448 0 0 686 0 119 0 18 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Vol.: 27 448 0 0 686 0 119 0 18 0 0 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 2.00 0.00 0.00 0.00

Final Sat.: 1600 3200 0 0 3200 3200 3200 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.14 0.00 0.00 0.21 0.00 0.04 0.00 0.01 0.00 0.00 0.00

OvlAdjV/S: ****
Crit Moves: ****

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.313

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 29 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound

Movement: L T R L T R L T R L T R L T R

Control: Protected Protected Protected Protected Protected Protected

Rights: Include Include Include Include Include Include

Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0 0

Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1

Volume Module:

Base Vol: 0 0 0 0 3 0 0 0 0 900 0 0 900 0 0 886 11

Growth Adj: 1.00

Initial Bse: 0 0 0 0 3 0 0 0 0 900 0 0 900 0 0 886 11

User Adj: 1.00

PHF Adj: 1.00

PHF Volume: 0 0 0 0 3 0 0 0 0 900 0 0 900 0 0 886 11

Reduced Vol: 0

Reduct Vol: 0 0 0 0 3 0 0 0 0 900 0 0 900 0 0 886 11

PCE Adj: 1.00

MLF Adj: 1.00

Final Vol.: 0 0 0 0 3 0 0 0 0 900 0 0 900 0 0 886 11

Saturation Flow Module:

Sat/Lane: 1425

Adjustment: 1.00

Lanes: 0.00

Final Sat.: 0 0 0 0 1425 0 1425 0 1425 4275 0 1425 4275 0 2850 1425

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.21 0.00 0.00 0.00 0.00 0.31 0.01

Crit Vol: 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Crit Moves: 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Middle Harbor EIR
Future Year 2010
No Project

Scenario Report

2010 NP MD

Command: 2010 NP MD
Volume: 2010 NP MD Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Paths
Routes: Default Routes
Configuration: NP

Middle Harbor EIR
Future Year 2010
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 98.0	1.612	F 98.0	1.612 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 17.0	0.728	C 17.0	0.728 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	C 15.1	0.000	C 15.1	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.5	0.000	B 11.5	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 33.3	0.985	D 33.3	0.985 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.315	A xxxxx	0.315 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.539	A xxxxx	0.539 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.7	0.084	A 7.7	0.084 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.275	A xxxxx	0.275 + 0.000 V/C

Middle Harbor EIR Future Year 2010 No Project

Level of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Average Delay (sec/veh): 0.5 Worst Case Level of Service: C [15.1]

Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-R L-T-R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Include Lanes: 1 0 2 0 0 0 2 0 1 0 0 0 0 1 0 0 0 1

Volume Module: Base Vol: 56 317 0 0 545 101 0 0 0 2 0 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module: Critical Gap: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx xxxxx FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx xxxxx

Capacity Module: Conflict Vol: 646 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 702 xxxxx xxxxx Potential Cap: 949 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 377 xxxxx xxxxx

Level of Service Module: 2Way95thQ: 0.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx Control Del: 9.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 15.1 xxxxx xxxxx

LOS By Move: A * * * * * Movement: LT-LTR-RT LT-LTR-RT LT-LTR-RT LT-LTR-RT Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR Future Year 2010 No Project

Level of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.3 Worst Case Level of Service: B [11.5]

Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-R L-T-R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Include Lanes: 1 0 1 1 0 1 0 1 0 0 1 0 0 1 0 0 1

Volume Module: Base Vol: 0 177 2 0 627 0 0 2 18 0 1 0 5 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module: Critical Gap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.5 6.9 7.5 xxxxx FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 4.0 3.3 3.5 xxxxx

Capacity Module: Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 806 314 493 xxxxx Potential Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 318 688 464 xxxxx

Level of Service Module: 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

LOS By Move: * * * * * Movement: LT-LTR-RT LT-LTR-RT LT-LTR-RT LT-LTR-RT Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 0.985
Level of Service: D
Level of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 0 1

Volume Module:
Base Vol: 61 47 1 5 183 208 540 0 100 1.00 9 5 34
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 61 47 1 5 183 208 540 0 100 1.00 9 5 34
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 61 47 1 5 183 208 540 0 100 1.00 9 5 34
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 61 47 1 5 183 208 540 0 100 1.00 9 5 34
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 61 47 1 5 183 208 540 0 100 1.00 9 5 34

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.96 0.04 0.05 1.95 1.00 1.00 0.00 1.00 0.64 0.36 1.00
Final Sat.: 430 895 19 27 977 558 548 0 655 303 168 544

Capacity Analysis Module:
Vol/Sat: 0.14 0.05 0.05 0.19 0.19 0.37 0.98 xxxxx 0.15 0.03 0.03 0.06
Crit Moves: *** **

Delay/Veh: 12.1 10.7 10.7 11.4 11.4 12.7 59.9 0.0 9.0 10.2 10.2 9.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.1 10.7 10.7 11.4 11.4 12.7 59.9 0.0 9.0 10.2 10.2 9.4
LOS by Move: B B B B B F * A B B A

ApproachDel: 11.5 12.1 52.0 9.6
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 11.5 12.1 52.0 9.6
LOS by Appr: B B F A
AllwayAvgQ: 0.2 0.1 0.1 0.2 0.2 0.6 7.7 0.2 0.0 0.0 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.315
Level of Service: A
Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include

Min. Green: 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 34 518 0 0 291 160 170 0 20 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 34 518 0 0 291 160 170 0 20 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 34 518 0 0 291 160 170 0 20 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 34 518 0 0 291 160 170 0 20 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 34 518 0 0 291 160 170 0 20 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 2.00 0.00 2.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 3200 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.16 0.00 0.00 0.09 0.00 0.05 0.00 0.01 0.00 0.00 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: ****

ApproachDel: 11.5 12.1 52.0 9.6
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 11.5 12.1 52.0 9.6
LOS by Appr: B B F A
AllwayAvgQ: 0.2 0.1 0.1 0.2 0.2 0.6 7.7 0.2 0.0 0.0 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
No Project

Scenario Report

Command: 2010 NP PM
Volume: 2010 NP PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Paths
Routes: Default Routes
Configuration: NP

Middle Harbor EIR
Future Year 2010
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/V/LOS Veh	Future Del/V/LOS Veh	Change in
# 1 Pico Ave / Pier G St & Harbor	F 52.3 1.208	F 52.3 1.208	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 17.0 0.725	C 17.0 0.725	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	C 15.1 0.000	C 15.1 0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	A 9.8 0.000	A 9.8 0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 18.9 0.818	C 18.9 0.818	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx 0.281	A xxxxx 0.281	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx 0.547	A xxxxx 0.547	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.8 0.077	A 7.8 0.077	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx 0.434	A xxxxx 0.434	+ 0.000 V/C

Middle Harbor EIR
Future Year 2010
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.208
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 52.3
Optimal Cycle: 0 Level of Service: F

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0

Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 6 320 25 50 192 212 468 50 9 83 83 225

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 6 320 25 50 192 212 468 50 9 83 83 225

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 6 320 25 50 192 212 468 50 9 83 83 225
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 6 320 25 50 192 212 468 50 9 83 83 225

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.86 0.14 1.00 0.95 1.05 1.00 1.69 0.31 1.00 1.00 1.00

Final Sat.: 355 707 56 367 373 442 388 668 122 362 380 415
Capacity Analysis Module:
Vol/Sat: 0.02 0.45 0.45 0.14 0.52 0.48 1.21 0.07 0.07 0.23 0.22 0.54

Crit Moves: ****
Delay/Veh: 12.6 19.0 18.8 13.7 20.5 18.2 143.7 12.1 11.9 15.1 14.3 20.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdJDel/Veh: 12.6 19.0 18.8 13.7 20.5 18.2 143.7 12.1 11.9 15.1 14.3 20.2
LOS by Move: B C C B C C F B B C B C
ApproachDel: 18.8 18.7 129.0 17.9
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdJDel: 18.8 18.7 129.0 17.9

LOS by Appr: C
AllWayAvgQ: 0.0 0.8 0.7 0.1 1.0 1.0 14.2 0.1 0.1 0.3 0.3 1.0
Note: Queue reported is the number of cars per lane.

Traffix 7.8-0715 (c) 2006 Dowling Assoc. Licensed to ITERIS, ANAHEIM, CA

Middle Harbor EIR
Future Year 2010
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.725
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 17.0
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0

Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 0 433 3 128 62 65 74 24 0 349 6 139

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 433 3 128 62 65 74 24 0 349 6 139

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 433 3 128 62 65 74 24 0 349 6 139
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 433 3 128 62 65 74 24 0 349 6 139

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Sat.: 445 956 7 422 446 488 423 448 0 481 8 575
Capacity Analysis Module:
Vol/Sat: 0.00 0.45 0.45 0.30 0.14 0.13 0.17 0.05 xxxx 0.72 0.72 0.24

Crit Moves: ****
Delay/Veh: 0.0 15.5 15.4 14.1 11.5 10.6 12.2 10.5 0.0 26.0 26.0 10.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdJDel/Veh: 0.0 15.5 15.4 14.1 11.5 10.6 12.2 10.5 0.0 26.0 26.0 10.6
LOS by Move: * C C B B B B B * D D B
ApproachDel: 15.5 12.6 11.8 11.8
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdJDel: 15.5 12.6 11.8 11.8

LOS by Appr: C
AllWayAvgQ: 0.0 0.7 0.7 0.4 0.1 0.1 0.2 0.0 0.0 2.2 2.2 0.3
Note: Queue reported is the number of cars per lane.

Traffix 7.8-0715 (c) 2006 Dowling Assoc. Licensed to ITERIS, ANAHEIM, CA

Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.434

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 35 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound

Movement: L T R L T R L T R L T R

Control: Protected Protected Protected Protected Protected Protected

Rights: Include Include Include Include Include Include

Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0 0

Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1

Volume Module:

Base Vol: 0 0 0 30 0 38 0 1224 0 1224 0 0 1162 19

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 30 0 38 0 1224 0 1224 0 0 1162 19

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 30 0 38 0 1224 0 1224 0 0 1162 19

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 30 0 38 0 1224 0 1224 0 0 1162 19

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Vol.: 0 0 0 30 0 38 0 1224 0 1224 0 0 1162 19

Saturation Flow Module:

Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 3.00 0.00 0.00 2.00 1.00 1.00

Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.03 0.00 0.29 0.00 0.00 0.41 0.01

Crit Vol: 0 38 0 0 0 0 0 0 0 0 0 0 0

Crit Moves: **** *

Middle Harbor EIR
 Future Year 2010
 Future Year Baseline

Scenario Report

2010 Future Year Baseline AM
 Command: 2010 Future Year Baseline AM
 Volume: 2010 Future Year Baseline AM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

Middle Harbor EIR
 Future Year 2010
 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	D 32.8	1.013	D 32.8	1.013 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 10.3	0.372	B 10.3	0.372 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	A 9.4	0.000	A 9.4	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.2	0.000	B 10.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 23.4	0.890	C 23.4	0.890 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.333	A xxxxx	0.333 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.536	A xxxxx	0.536 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.2	0.036	A 7.2	0.036 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.296	A xxxxx	0.296 + 0.000 V/C

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.333
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ignore Protected Include
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0
Lanes: 1 0 2 0 0 0 0 2 0 2 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 23 455 0 0 578 154 110 0 14 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 23 455 0 0 578 154 110 0 14 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 23 455 0 0 578 0 110 0 14 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 23 455 0 0 578 0 110 0 14 0 0 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00
Final Sat: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0 0 0 0 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.01 0.14 0.00 0.00 0.18 0.00 0.04 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: ****

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.890
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 23.4
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 1 0 1 1 0 0 1 0 1 0 1 0 0 1 0 0 1 0 0 1
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 86 36 1 6 325 305 447 0 51 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 86 36 1 6 325 305 447 0 51 19 1 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 86 36 1 6 325 305 447 0 51 19 1 37
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 86 36 1 6 325 305 447 0 51 19 1 37

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.95 0.05 0.04 1.96 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat: 405 835 23 18 990 563 502 0 589 406 21 496
Capacity Analysis Module:
Vol/Sat: 0.21 0.04 0.04 0.33 0.33 0.54 0.89 xxxxx 0.09 0.05 0.05 0.07
Crit Moves: ***
Delay/Veh: 13.2 10.9 10.9 12.8 12.8 15.6 42.8 0.0 9.2 11.0 11.0 9.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.2 10.9 10.9 12.8 12.8 15.6 42.8 0.0 9.2 11.0 11.0 9.9
LOS by Move: B B B C E * A B B A
ApproachDel: 12.5 14.2 39.4
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 12.5 14.2 39.4
LOS by Appr: B B E
AllwayAvgQ: 0.2 0.0 0.0 0.4 0.4 1.0 4.6 4.6 0.1 0.0 0.0 0.1
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2010
 Future Year Baseline

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Critical Vol./Cap.(X): 0.536
 Level of Service: A

Cycle (sec): 100
 Loss Time (sec): 10 (Y+R=4.0 sec)
 Optimal Cycle: 35
 Street Name: 9th Street
 Approach: North Bound
 Movement: L T R L T R L T R L T R
 Control: Split Phase
 Rights: Ignore
 Min. Green: 0
 Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
 Base Vol: 190 2 409 252 0 14 6 56 62 360 9 174
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 190 2 409 252 0 14 6 56 62 360 9 174
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 190 2 0 252 0 14 6 56 62 360 9 174
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 190 2 0 252 0 14 6 56 62 360 9 174
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 190 2 0 252 0 14 6 56 62 360 9 174

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Sat: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Capacity Analysis Module:
 Vol/Sat: 0.12 0.00 0.00 0.16 0.00 0.08 0.00 0.04 0.04 0.13 0.01 0.11
 Crit Moves: ****
 Delay/Veh: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 Delay/Adj: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 AdjDel/Veh: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 LOS by Move: * * * * *
 ApproachDel: xxxxxx
 Delay Adj: xxxxxx
 ApprAdjDel: xxxxxx
 LOS by Appr: *
 AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2010
 Future Year Baseline

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Critical Vol./Cap.(X): 0.036
 Level of Service: A

Cycle (sec): 100
 Loss Time (sec): 0 (Y+R=4.0 sec)
 Optimal Cycle: 0
 Street Name: North Bound
 Approach: North Bound
 Movement: L T R L T R L T R L T R
 Control: Stop Sign
 Rights: Include
 Min. Green: 0
 Lanes: 0

Volume Module:
 Base Vol: 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0

Saturation Flow Module:
 Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Adjustment: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 Lanes: 0 0 0 0 0 0 0 0 0 0 0 0
 Final Sat: 0 0 0 0 0 0 0 0 0 0 0 0

Capacity Analysis Module:
 Vol/Sat: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Crit Moves: ****
 Delay/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Delay/Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 LOS by Move: * * * * *
 ApproachDel: xxxxxx
 Delay Adj: xxxxxx
 ApprAdjDel: xxxxxx
 LOS by Appr: *
 AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2010
 Future Year Baseline

Scenario Report

2010 Future Year Baseline MD
 Command: 2010 Future Year Baseline MD
 Volume: 2010 Future Year Baseline MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

Middle Harbor EIR
 Future Year 2010
 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 84.6	1.496	F 84.6	1.496 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 12.3	0.518	B 12.3	0.518 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	A 8.3	0.000	A 8.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.5	0.000	B 10.5	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	B 14.3	0.665	B 14.3	0.665 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.280	A xxxxx	0.280 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.476	A xxxxx	0.476 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.6	0.071	A 7.6	0.071 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.262	A xxxxx	0.262 + 0.000 V/C

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.496
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 84.6
Optimal Cycle: 0 Level Of Service: F

Approach: North Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 7 363 92 65 240 171 513 36 6 158 187 188
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 7 363 92 65 240 171 513 36 6 158 187 188
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 7 363 92 65 240 171 513 36 6 158 187 188
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 7 363 92 65 240 171 513 36 6 158 187 188

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.60 0.40 1.00 1.00 1.00 1.00 1.71 0.29 1.00 1.00 1.00
Final Sat.: 331 572 148 334 356 380 343 589 99 342 360 387

Capacity Analysis Module:
Vol/Sat: 0.02 0.63 0.62 0.19 0.67 0.45 1.50 0.06 0.06 0.46 0.52 0.49
Crit Moves: ****
Delay/Veh: 13.4 27.6 26.5 15.6 30.2 19.0 264.4 13.2 13.1 21.2 22.2 19.8
AdjDel/Veh: 13.4 27.6 26.5 15.6 30.2 19.0 264.4 13.2 13.1 21.2 22.2 19.8
LOS by Move: B D C D C F B B C C C
ApproachDel: 27.1 1.00 24.2 245.4
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 27.1 24.2 245.4
LOS by Appr: D C F
AllWayAvgQ: 0.0 1.5 1.4 0.2 1.7 1.7 23.9 0.1 0.1 0.8 1.0 0.9

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.518
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.3
Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 348 6 66 129 11 21 7 0 273 2 121
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 348 6 66 129 11 21 7 0 273 2 121
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 348 6 66 129 11 21 7 0 273 2 121
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 348 6 66 129 11 21 7 0 273 2 121

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.97 0.03 1.00 1.84 0.16 1.00 1.00 0.00 0.99 0.01 1.00
Final Sat.: 501 1069 18 477 948 82 466 498 0 527 4 639

Capacity Analysis Module:
Vol/Sat: 0.00 0.33 0.32 0.14 0.14 0.13 0.05 0.01 xxxxx 0.52 0.52 0.19
Crit Moves: ****
Delay/Veh: 0.0 12.0 11.9 11.0 10.3 10.2 10.2 9.5 0.0 15.8 15.8 9.3
AdjDel/Veh: 0.0 12.0 11.9 11.0 10.3 10.2 10.2 9.5 0.0 15.8 15.8 9.3
LOS by Move: * B B B B B A * C C A
ApproachDel: 12.0 10.5 10.0
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 12.0 10.5 10.0
LOS by Appr: B B
AllWayAvgQ: 0.0 0.4 0.4 0.1 0.1 0.1 0.0 0.0 0.0 1.0 1.0 0.2

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A [8.3]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 2 0 0 0 0 2 1 0 0 0 0 0 1 0 0 0 1

Volume Module:
Base Vol: 35 321 0 0 365 90 0 0 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 35 321 0 0 365 90 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 35 321 0 0 365 90 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 35 321 0 0 365 90 0 0 0 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gap: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: 455 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 574 xxxxx 161
Potential Cap: 1116 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 454 xxxxx 862
Move Cap: 1116 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 443 xxxxx 862
Volume/Cap: 0.03 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 xxxxx 0.00

Level Of Service Module:
2Way95thQ: 0.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 8.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS By Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B [10.5]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 0 194 1 0 436 0 0 2 17 1 0 0 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 194 1 0 436 0 0 2 17 1 0 0 4
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 194 1 0 436 0 0 2 17 1 0 0 4
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 194 1 0 436 0 0 2 17 1 0 0 4

Critical Gap Module:
Critical Gap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 533 631 218 414 631 98
Potential Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 434 401 792 528 401 946
Move Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 432 401 792 515 401 946
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 0.00 0.02 0.00 0.00 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS By Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 401 xxxxx 719 515 xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx 0.1 0.0 xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 14.0 xxxxx 10.1 12.0 xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 0.665
Level of Service: B

Cycle (sec): 100 (Y+R=4.0 sec) Average Delay (sec/veh): 14.3
Loss Time (sec): 0 Level of Service: B
Optimal Cycle: 24

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 60 69 1 5 14 198 389 0 81 7 5 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 60 69 1 5 14 198 389 0 81 7 5 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 60 69 1 5 14 198 389 0 81 7 5 30
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 60 69 1 5 14 198 389 0 81 7 5 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 60 69 1 5 14 198 389 0 81 7 5 30

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.97 0.03 0.53 1.47 1.00 1.00 0.00 1.00 0.58 0.42 1.00
Final Sat.: 479 1012 15 268 771 595 585 0 717 307 219 614

Capacity Analysis Module:
Vol/Sat: 0.13 0.07 0.07 0.02 0.02 0.33 0.67 xxxxx 0.11 0.02 0.02 0.05
Crit Moves: *** **

Delay/Veh: 10.7 9.7 9.7 9.5 9.3 11.0 19.4 0.0 8.1 9.2 9.2 8.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 10.7 9.7 9.7 9.5 9.3 11.0 19.4 0.0 8.1 9.2 9.2 8.4
LOS by Move: B A A A B C * A A A A
ApproachDel: 10.1 10.8 17.5 17.5
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 10.1 10.8 17.5 17.5
LOS by Appr: B C
AllwayAvgQ: 0.1 0.1 0.1 0.0 0.0 0.4 1.7 1.7 0.1 0.0 0.0 0.0

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.280
Level of Service: A

Cycle (sec): 100 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Loss Time (sec): 10 Level of Service: A
Optimal Cycle: 24

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ignore Protected Protected

Min. Green: 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0

Volume Module:
Base Vol: 29 410 0 0 120 142 149 0 17 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 29 410 0 0 120 142 149 0 17 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 29 410 0 0 120 0 149 0 17 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 29 410 0 0 120 0 149 0 17 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 29 410 0 0 120 0 149 0 17 0 0 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.13 0.00 0.00 0.04 0.00 0.05 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: ****

Middle Harbor EIR
 Future Year 2010
 Future Year Baseline

Scenario Report

2010 Future Year Baseline PM
 Command: 2010 Future Year Baseline PM
 Volume: 2010 Future Year Baseline PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

Middle Harbor EIR
 Future Year 2010
 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	E 36.9	1.059	E 36.9	1.059 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 12.3	0.517	B 12.3	0.517 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Ramps	B 11.8	0.000	B 11.8	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	A 9.3	0.000	A 9.3	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	B 12.0	0.554	B 12.0	0.554 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.241	A xxxxx	0.241 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.509	A xxxxx	0.509 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.9	0.065	A 7.9	0.065 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.391	A xxxxx	0.391 + 0.000 V/C

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: A [9.3]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 0 0 1

Volume Module:
Base Vol: 0 105 0 5 341 0 0 0 0 7 0 0 0 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 105 0 5 341 0 0 0 0 7 0 0 0 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 105 0 5 341 0 0 0 0 7 0 0 0 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 105 0 5 341 0 0 0 0 7 0 0 0 1

Critical Gap Module:
Critical Gp:xxxxxx xxxxx xxxxx 4.1 xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9
FollowUpTim:xxxxxx xxxxx xxxxx 2.2 xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx 105 xxxxx xxxxx 404 xxxxx 171 286 456 53
Potential Cap.: xxxxx xxxxx xxxxx 1499 xxxxx xxxxx 536 xxxxx 850 650 504 1010
Move Cap.: xxxxx xxxxx xxxxx 1499 xxxxx xxxxx 535 xxxxx 850 643 502 1010
Volume/Cap: xxxxx xxxxx xxxxx 0.00 xxxxx xxxxx 0.00 xxxxx 0.01 0.00 0.00 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0
Control Del:xxxxx xxxxx xxxxx 7.4 xxxxx xxxxx xxxxx xxxxx 9.3 xxxxx xxxxx 8.6

LOS By Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx 9.3
ApproachLOS: A A A

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B [11.8]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 2 0 0 0 0 2 0 1 0 0 0 0 1

Volume Module:
Base Vol: 56 198 0 0 270 77 0 0 0 0 1 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 56 198 0 0 270 77 0 0 0 0 1 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 56 198 0 0 270 77 0 0 0 0 1 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 56 198 0 0 270 77 0 0 0 0 1 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: 347 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 445 xxxxx 99
Potential Cap.: 1223 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 547 xxxxx 944
Move Cap.: 1223 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 528 xxxxx 944
Volume/Cap: 0.05 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 xxxxx 0.00

Level Of Service Module:
2Way95thQ: 0.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx
Control Del: 8.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 11.8 xxxxx xxxxx

LOS By Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx 11.8
ApproachLOS: B B B

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street
Critical Vol./Cap.(X): 0.554
Level Of Service: B
Average Delay (sec/veh): 12.0
Optimal Cycle: 0

Cycle (sec): 100
Loss Time (sec): 0 (Y+R=4.0 sec)
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 0 1 1 0 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 91 10 3 4 81 166 318 0 93 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 91 10 3 4 81 166 318 0 93 37 2 54
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 91 10 3 4 81 166 318 0 93 37 2 54
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 91 10 3 4 81 166 318 0 93 37 2 54

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.54 0.46 0.09 1.91 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat.: 478 796 246 50 1024 606 574 0 702 494 27 629
Capacity Analysis Module:
Vol/Sat: 0.19 0.01 0.01 0.08 0.08 0.27 0.55 xxxxx 0.13 0.07 0.07 0.09
Crit Moves: *** **

Delay/Veh: 11.3 9.2 9.0 9.6 9.5 10.2 15.8 0.0 8.3 9.7 9.7 8.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.3 9.2 9.0 9.6 9.5 10.2 15.8 0.0 8.3 9.7 9.7 8.5
LOS by Move: B A A B C * A A A A
ApproachDel: 11.0 10.0 14.1 14.1
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 11.0 10.0 14.1 14.1
LOS by Appr: B
AllwayAvgQ: 0.2 0.0 0.0 0.1 0.1 0.3 1.1 1.1 0.1 0.1 0.1 0.1
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.241
Level Of Service: A
Average Delay (sec/veh): 10 (Y+R=4.0 sec)
Optimal Cycle: 23

Cycle (sec): 100
Loss Time (sec): 10 (Y+R=4.0 sec)
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 23 304 0 0 156 91 132 0 25 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 23 304 0 0 156 91 132 0 25 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 23 304 0 0 156 91 132 0 25 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 23 304 0 0 156 91 132 0 25 0 0 0

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.01 0.10 0.00 0.00 0.05 0.00 0.05 0.00 0.02 0.00 0.00 0.00
OviAdjV/S: ****
Crit Moves: ****

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.509
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Street Name: 9th Street Pico Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Split Phase Split Phase Protected Protected
Rights: Ignore Include Include Include
Min. Green: 0

Lanes: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 118 2 146 128 1 16 47 1 195 385 0 185

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 118 2 146 128 1 16 47 1 195 385 0 185
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 118 2 0 128 1 16 47 1 195 385 0 185
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 118 2 0 128 1 16 47 1 195 385 0 185
PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 118 2 0 128 1 16 47 1 195 385 0 185
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.78 0.22 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat: 1600 1600 1600 1600 1247 353 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.08 0.00 0.05 0.03 0.00 0.12 0.13 0.00 0.12
Crit Moves: ****

Middle Harbor EIR
Future Year 2010
Future Year Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.065
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 0 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0

Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0
Volume Module:
Base Vol: 0 0 0 45 0 12 42 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 45 0 12 42 0 0 0 0 0 0 0 0 0 0 0 0 0 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 45 0 12 42 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0
Reduced Vol: 0 0 0 45 0 12 42 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 0 0 45 0 12 42 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 0.00 0.00 1.00 0.58 0.42 1.00 1.00 0.00 0.00 2.00 1.00
Final Sat: 0 0 0 696 476 347 685 758 0 0 1480 864
Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx 0.06 0.00 0.03 0.06 0.00 xxxxx xxxxx 0.00 0.01

Crit Moves: ****
Delay/Veh: 0.0 0.0 0.0 8.2 7.2 7.2 8.2 8.2 0.0 0.0 0.0 0.0 6.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 0.0 0.0 0.0 8.2 7.2 7.2 8.2 8.2 0.0 0.0 0.0 0.0 6.8
LOS by Move: * * * * * A A A * * * * *
ApproachDel: xxxxxx 7.8 8.2 6.8
Delay Adj: xxxxxx 1.00 1.00 1.00

ApproachDel: xxxxxx 7.8 8.2 6.8
AllWayAvgQ: 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 0.0 0.0
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2010
 Future Year Baseline

Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.391
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 33 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0 0
 Lanes: -----|-----|-----|-----|-----|-----|

Volume Module:
 Base Vol: 0 0 0 29 0 15 0 1159 0 0 1056 18
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 29 0 15 0 1159 0 0 1056 18
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 29 0 15 0 1159 0 0 1056 18
 Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 29 0 15 0 1159 0 0 1056 18
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 29 0 15 0 1159 0 0 1056 18

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.01 0.00 0.27 0.00 0.00 0.37 0.01
 Crit Volume: 0 29 0 0 0 0 0 0 0 0 0 0
 Crit Moves: ****

Appendix E: Year 2015 Peak-Hour Intersection Capacity Analysis Worksheets

Middle Harbor EIR
Future Year 2015
345-Acre

Scenario Report

2015 345-Acre AM
Command: 2015 345-Acre AM
Volume: 2015 345-Acre AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

Middle Harbor EIR
Future Year 2015
345-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	C 20.9	0.781	C 20.9	0.781 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 12.6	0.528	B 12.6	0.528 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	B 12.6	0.000	B 12.6	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 8.9	0.000	A 8.9	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.0	0.000	B 11.0	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 25.2	0.919	D 25.2	0.919 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.390	A xxxxx	0.390 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.593	A xxxxx	0.593 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.0	0.152	A 8.0	0.152 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.362	A xxxxx	0.362 + 0.000 D/V

Middle Harbor EIR
Future Year 2015
345-Acre

Level Of Service Computation Report

***** 2000 HCM 4-Way Stop Method (Base Volume Alternative) *****
***** 2000 HCM 4-Way Stop Method (Base Volume Alternative) *****

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.781

Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 20.9

Optimal Cycle: 0 Level Of Service: C

***** A345-Aceroach: North Bound South Bound East Bound West Bound *****

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: Include Include Include Include

Min. Green: 0 0 0 0

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 1 238 102 49 251 145 299 16 4 173 119 147
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 1 238 102 49 251 145 299 16 4 173 119 147
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 238 102 49 251 145 299 16 4 173 119 147
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 238 102 49 251 145 299 16 4 173 119 147
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 1 238 102 49 251 145 299 16 4 173 119 147

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.40 0.60 1.00 1.00 1.00 1.00 1.60 0.40 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 360 552 244 377 408 436 383 628 160 382 400 435

Capacity Analysis Module:

Vol/Sat: 0.00 0.43 0.42 0.13 0.62 0.33 0.78 0.03 0.03 0.45 0.30 0.34
Crit Moves: ****

Delay/Veh: 12.0 17.2 16.4 13.0 22.9 14.1 35.9 11.5 11.3 18.5 14.5 14.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.0 17.2 16.4 13.0 22.9 14.1 35.9 11.5 11.3 18.5 14.5 14.2
LOS by Move: B C C B E B B C B C B
A345-AceroachDel: 17.0 19.0 19.0 34.4 1.00 16.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 17.0 19.0 19.0 34.4 1.00 16.0
LOS by A345-Aceroach: C D C
AllWayVgq: 0.0 0.7 0.6 0.1 1.3 1.3 2.6 0.0 0.0 0.7 0.4 0.4

***** Note: Queue reported is the number of cars per lane. *****

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Middle Harbor EIR
Future Year 2015
345-Acre

Level Of Service Computation Report

***** 2000 HCM 4-Way Stop Method (Base Volume Alternative) *****
***** 2000 HCM 4-Way Stop Method (Base Volume Alternative) *****

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.528

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.6

Optimal Cycle: 0 Level Of Service: B

***** A345-Aceroach: North Bound South Bound East Bound West Bound *****

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: Include Include Include Include

Min. Green: 0 0 0 0

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 0 236 2 19 128 143 130 32 0 247 25 139
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 236 2 19 128 143 130 32 0 247 25 139
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 236 2 19 128 143 130 32 0 247 25 139
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 236 2 19 128 143 130 32 0 247 25 139
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 236 2 19 128 143 130 32 0 247 25 139

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 448 954 8 455 489 540 473 503 0 468 47 610

Capacity Analysis Module:

Vol/Sat: 0.00 0.25 0.25 0.04 0.26 0.26 0.27 0.06 xxxxx 0.53 0.53 0.23
Crit Moves: ****

Delay/Veh: 0.0 11.9 11.9 10.5 12.0 11.1 12.4 9.8 0.0 16.4 16.4 9.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 11.9 11.9 10.5 12.0 11.1 12.4 9.8 0.0 16.4 16.4 9.9
LOS by Move: * B B B B A * C C A
A345-AceroachDel: 11.9 11.9 11.4 11.4 1.00 11.9 14.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 11.9 11.9 11.4 11.4 1.00 11.9 14.2
LOS by A345-Aceroach: B B B
AllWayVgq: 0.0 0.3 0.3 0.0 0.3 0.3 0.3 0.1 0.1 1.0 1.0 0.3

***** Note: Queue reported is the number of cars per lane. *****

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: B [12.6]
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 451 0 0 476 0 0 0 0 49 0 0 57
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 451 0 0 476 0 0 0 0 49 0 0 57
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 451 0 0 476 0 0 0 0 49 0 0 57
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 451 0 0 476 0 0 0 0 49 0 0 57

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 689 xxxxx 226
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 384 xxxxx 784
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 384 xxxxx 784
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.13 xxxxx 0.07

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.4 xxxxx 0.2
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 15.7 xxxxx 10.0
LOS by Move: A B C
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
A345-AceroachDel: xxxxxx
A345-AceroachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A [8.9]
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 176 333 0 0 476 111 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 176 333 0 0 476 111 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 176 333 0 0 476 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 176 333 0 0 476 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 476 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1097 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 1097 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.16 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 0.6 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 8.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
A345-AceroachDel: xxxxxx
A345-AceroachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.5 Worst Case Level of Service: B(11.0)
Loss Time (sec): 0 (Y+R=4.0 sec) Critical Vol./Cap.(X): 0.919
Optimal Cycle: 0 Level of Service: D
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include

Table with columns for Volume Module, Base Vol., Growth Adj., Initial Bse, User Adj., PHF Volume, PHF Vol, and Final Volume. Values range from 460 to 460.

Critical Gap Module:
Critical Gap: 4.1 xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Capacity Module:
Conflict Vol: 460 xxxxx xxxxx 715 939 230 706 935 221
Potential Cap.: 1112 xxxxx xxxxx 322 266 779 327 267 790

Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del.: 8.3 xxxxx xxxxx 8.2 xxxxx xxxxx xxxxx xxxxx xxxxx 9.6

LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: * * * * *
A345-AceroachDel: xxxxxx
A345-AceroachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Average Delay (sec/veh): 100 Critical Vol./Cap.(X): 0.919
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 25.2
Optimal Cycle: 0 Level of Service: D
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Table with columns for Volume Module, Base Vol., Growth Adj., Initial Bse, User Adj., PHF Volume, PHF Vol, and Final Volume. Values range from 159 to 159.

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat.: 389 819 5 12 945 528 462 0 530 371 20 447

Capacity Analysis Module:
Vol/Sat: 0.24 0.19 0.19 0.52 0.52 0.54 0.92 xxxxx 0.09 0.05 0.05 0.08
Crit Moves: *** **

Delay/Veh: 14.1 12.9 12.9 17.4 17.4 16.6 50.8 0.0 9.8 11.8 11.8 10.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.1 12.9 12.9 17.4 17.4 16.6 50.8 0.0 9.8 11.8 11.8 10.8
LOS by Move: B B C C C F * A B B B

A345-AceroachDel: 13.3 17.1 17.1 46.8 11.2
A345-AceroachLOS: 13.3 17.1 17.1 46.8 11.2
LOS by A345-Acrot: B B C E
AllWayAvgQ: 0.3 0.2 0.2 1.0 1.0 1.1 5.2 5.2 0.1 0.0 0.0 0.1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.390
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
A345-Aceroach: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Include Include Include
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0 0
Volume Module:
Base Vol: 30 551 0 0 721 182 132 0 14 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 30 551 0 0 721 182 132 0 14 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 30 551 0 0 721 0 132 0 14 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 30 551 0 0 721 0 132 0 14 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.17 0.00 0.00 0.23 0.00 0.05 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.593
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
A345-Aceroach: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0

Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 192 2 494 306 0 11 6 94 61 383 121 159
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 192 2 494 306 0 11 6 94 61 383 121 159
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 192 2 0 306 0 11 6 94 61 383 121 159
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 192 2 0 306 0 11 6 94 61 383 121 159
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.93 0.07 1.00 1.21 0.79 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1489 111 1600 1941 1259 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.12 0.00 0.00 0.19 0.00 0.10 0.00 0.05 0.05 0.13 0.08 0.10
OvlAdjV/S: ****
Crit Moves: *****

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Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.152
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.0
 Optimal Cycle: 0 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 20 0 26 11 111 0 0 163 129
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 20 0 26 11 111 0 0 163 129
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 20 0 26 11 111 0 0 163 129
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 20 0 26 11 111 0 0 163 129
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 20 0 26 11 111 0 0 163 129

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.87 0.13 1.00 0.18 1.82 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 513 77 722 129 1311 0 0 1454 848
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.04 0.00 0.04 0.09 0.08 xxxx xxxx 0.11 0.15
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 0.0 8.7 8.7 7.5 8.1 8.0 0.0 0.0 8.2 7.6
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 8.7 8.7 7.5 8.1 8.0 0.0 0.0 8.2 7.6
 LOS by Move: * * * A A A * * A A
 A345-AceroachDel: xxxxxx 8.1 1.00 8.0
 Delay Adj: xxxxxx 1.00 1.00 1.00
 A345-AceroachDel: xxxxxx 8.1 8.0
 LOS by A345-Aceroach: * A A A
 AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.1 0.1 0.1 0.0 0.0 0.1 0.2
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.362
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 31 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 3 0 95 5 884 0 0 842 10
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 95 5 884 0 0 842 10
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 95 5 884 0 0 842 10
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 95 5 884 0 0 842 10
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 3 0 95 5 884 0 0 842 10

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.07 0.00 0.21 0.00 0.00 0.30 0.01
 Crit Vol: 0 95 0
 Crit Moves: **** **
 Note: Queue reported is the number of cars per lane.

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Scenario Report

2015 345-Acre MD
Command: 2015 345-Acre MD
Volume: 2015 345-Acre MD Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

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Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS, Veh F	V/ C	Future Del/ LOS, Veh F	V/ C	Change in
# 1 Pico Ave / Pier G St & Harbor	72.6	1.361	72.6	1.361	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	14.9	0.633	14.9	0.633	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	17.6	0.000	17.6	0.000	+ 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	9.5	0.000	9.5	0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	12.1	0.000	12.1	0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	23.3	0.899	23.3	0.899	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	xxxxx	0.339	xxxxx	0.339	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	xxxxx	0.607	xxxxx	0.607	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	8.1	0.152	8.1	0.152	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	xxxxx	0.346	xxxxx	0.346	+ 0.000 D/V

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.361
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 72.6
Optimal Cycle: 0 Level Of Service: F

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 5 426 112 75 314 110 448 57 4 188 85 225
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 5 426 112 75 314 110 448 57 4 188 85 225
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 5 426 112 75 314 110 448 57 4 188 85 225
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 5 426 112 75 314 110 448 57 4 188 85 225

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.58 0.42 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 325 560 150 325 349 366 329 613 43 326 337 367

Capacity Analysis Module:
Vol/Sat: 0.02 0.76 0.75 0.23 0.90 0.30 1.36 0.09 0.09 0.58 0.25 0.61
Crit Moves: ****

Delay/Veh: 13.5 37.9 36.0 16.5 57.9 16.2 210.4 14.1 14.0 26.7 16.3 25.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.5 37.9 36.0 16.5 57.9 16.2 210.4 14.1 14.0 26.7 16.3 25.9
LOS by Move: B E C F C F B B D C D
A345-AceroachDel: 37.3 42.5 186.8 1.00 24.6
Delay Adj: 1.00 1.00 186.8 1.00 24.6
A345-AceroachDel: 37.3 42.5 186.8 1.00 24.6
LOS by A345-Aceroach: E B F C
AllWayAvgQ: 0.0 2.5 2.3 0.3 4.4 4.4 18.0 0.1 0.1 1.2 0.3 1.4

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.633
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 14.9
Optimal Cycle: 0 Level Of Service: B

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 378 6 86 207 54 73 30 0 297 8 145
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 378 6 86 207 54 73 30 0 297 8 145
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 378 6 86 207 54 73 30 0 297 8 145
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 378 6 86 207 54 73 30 0 297 8 145

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.97 0.03 1.00 1.59 0.41 1.00 1.00 0.00 0.97 0.03 1.00
Final Sat.: 439 934 15 435 748 200 423 448 0 469 13 566

Capacity Analysis Module:
Vol/Sat: 0.00 0.40 0.40 0.20 0.28 0.27 0.17 0.07 xxxxx 0.63 0.63 0.26
Crit Moves: ****

Delay/Veh: 0.0 14.6 14.6 12.4 12.6 12.3 12.2 10.6 0.0 21.2 21.2 10.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 14.6 14.6 12.4 12.6 12.3 12.2 10.6 0.0 21.2 21.2 10.8
LOS by Move: * B B B B B B * C C B
A345-AceroachDel: 14.6 1.00 12.5 11.7 17.8
Delay Adj: 1.00 1.00 12.5 11.7 17.8
A345-AceroachDel: 14.6 1.00 12.5 11.7 17.8
LOS by A345-Aceroach: B B B C
AllWayAvgQ: 0.0 0.6 0.6 0.2 0.3 0.3 0.2 0.1 0.1 1.5 1.5 0.3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
 Average Delay (sec/veh): 0.2 Worst Case Level Of Service: [I 17.6]
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Rights: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Include Include Include Include
 Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1

Volume Module:
 Base Vol: 0 572 0 0 564 0 0 0 0 16 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 572 0 0 564 0 0 0 0 16 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 572 0 0 564 0 0 0 0 16 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 572 0 0 564 0 0 0 0 16 0 0
 Critical Gap Module:
 Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
 FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 854 xxxxx 286
 Potent Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 302 xxxxx 717
 Move Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.05 xxxxx 0.00
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.2 xxxxx xxxxx
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 17.6 xxxxx xxxxx
 LOS by Move: A * * * * * C
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 A345-AceroachDel: xxxxxx
 A345-AceroachLOS: *
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
 Average Delay (sec/veh): 2.0 Worst Case Level Of Service: [I 9.5]
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Rights: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Include Include Include Include
 Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 221 282 0 0 564 197 0 0 0 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 221 282 0 0 564 197 0 0 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 221 282 0 0 564 0 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 221 282 0 0 564 0 0 0 0 0 0 0 0 0 0 0
 Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
 Conflict Vol: 564 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potent Cap: 1018 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap: 1018 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: 0.22 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Level Of Service Module:
 2Way95thQ: 0.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: 9.5 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS by Move: A * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 A345-AceroachDel: xxxxxx
 A345-AceroachLOS: *
 Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B(12.1)
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 0 446 1 0 570 0 0 2 17 1 0 0 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 446 1 0 570 0 0 2 17 1 0 0 4
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 446 1 0 570 0 0 2 17 1 0 0 4
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 446 1 0 570 0 0 2 17 1 0 0 4

Critical Gap Module:
Critical Gp:xxxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim:xxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 224
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 786
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 786
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.01

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 9.6
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
A345-AceroachDel: xxxxxx 12.1
A345-AceroachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.899
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 23.3
Optimal Cycle: 0 Level Of Service: C

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 63 160 1 5 314 201 451 0 89 7 5 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 63 160 1 5 314 201 451 0 89 7 5 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 63 160 1 5 314 201 451 0 89 7 5 30
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 63 160 1 5 314 201 451 0 89 7 5 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 63 160 1 5 314 201 451 0 89 7 5 30

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.03 1.97 1.00 1.00 0.00 1.00 0.58 0.42 1.00
Final Sat.: 415 877 5 15 950 534 502 0 589 249 178 484

Capacity Analysis Module:
Vol/Sat: 0.15 0.18 0.18 0.33 0.33 0.38 0.90 xxxxx 0.15 0.03 0.03 0.06
Crit Moves: ***
Delay/Veh: 12.3 12.1 12.1 13.3 13.2 12.8 44.5 0.0 9.6 10.8 10.8 10.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.3 12.1 12.1 13.3 13.2 12.8 44.5 0.0 9.6 10.8 10.8 10.0
LOS by Move: B B B B B E * A B B A
A345-AceroachDel: 12.1 13.1 38.7 10.2
A345-AceroachAdjDel: 12.1 13.1 38.7 10.2
LOS by A345-Acres: B B B E
AllWayAvgQ: 0.2 0.2 0.4 0.4 0.5 4.8 4.8 0.2 0.0 0.0 0.1

Note: Queue reported is the number of cars per lane.
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Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #7 Pico Avenue, Pier C Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.339
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 26 Level Of Service: A

 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected
 Rights: 0
 Min. Green: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0 0 0 0 0
 Lanes: -----
 Volume Module:
 Base Vol: 27 568 0 0 421 158 176 0 20 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 27 568 0 0 421 158 176 0 20 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 27 568 0 0 421 0 176 0 20 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 27 568 0 0 421 0 176 0 20 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 27 568 0 0 421 0 176 0 20 0 0 0
 OvlAdjVol: -----
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.18 0.00 0.00 0.13 0.00 0.06 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: *****

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #8 Pico Avenue, Pier B Street & 9th Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.607
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: B

 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: 0
 Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Lanes: -----
 Volume Module:
 Base Vol: 132 5 136 291 2 18 16 122 170 394 89 233
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 132 5 136 291 2 18 16 122 170 394 89 233
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 132 5 0 291 2 18 16 122 170 394 89 233
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 132 5 0 291 2 18 16 122 170 394 89 233
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 132 5 0 291 2 18 16 122 170 394 89 233
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.88 0.12 1.00 1.00 1.00 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1415 185 1600 1600 1600 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.08 0.00 0.00 0.18 0.00 0.10 0.01 0.08 0.11 0.14 0.06 0.15
 Crit Moves: *****

```

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
*****
Intersection #9 Anaheim Way & Pier B St
*****
Cycle (sec): 100 Critical Vol./Cap.(X): 0.152
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 0 Level Of Service: A
*****
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 0 1 0 0 1 0 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 0 39 57 160 0 0 111 63
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 39 57 160 0 0 111 63
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 39 57 160 0 0 111 63
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 39 57 160 0 0 111 63
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 0 39 57 160 0 0 111 63
Saturation Flow Module:
Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adj Sat: 0.00 0.00 0.00 0.00 0.53 1.47 0.00 0.00 2.00 1.00
Lanes: 0 0 0 0 636 727 374 1090 0 0 1411 818
Final Sat.: 0 0 0 0 0.636 0.727 0.374 0.1090 0 0 1.411 0.818
Capacity Analysis Module:
Vol/Sat: xxxx xxxx xxxx 0.05 0.15 0.15 xxxx xxxx 0.08 0.08
Crit Moves: *** **
Delay/Veh: 0.0 0.0 0.0 0.0 7.6 8.6 8.3 0.0 0.0 8.1 7.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adj Del/Veh: 0.0 0.0 0.0 0.0 7.6 8.6 8.3 0.0 0.0 8.1 7.4
LOS by Move: * * * A A A *
A345-AceroachDel: xxxxxx 7.6 8.4 8.4 1.00 7.9
Delay Adj: xxxxxx
A345-AceroachDel: xxxxxx
LOS by A345-Aceroach: A
AllWayAvgQ: 0.0 0.0 0.0 0.0 0.2 0.2 0.0 0.0 0.1 0.1
*****
Note: Queue reported is the number of cars per lane.
*****

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #10 Farragut Ave & Anaheim St
*****
Cycle (sec): 100 Critical Vol./Cap.(X): 0.346
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A
*****
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Ovl Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0
Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 0 14 0 94 0 1056 0 799 16
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 14 0 94 0 1056 0 799 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 14 0 94 0 1056 0 799 16
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 14 0 94 0 1056 0 799 16
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 0 14 0 94 0 1056 0 799 16
Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adj Sat: 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0 0 0 0 0 0 1425 0 1425 1425 4275 0
Final Sat.: 0 0 0 0 0 0 0.1425 0 0.1425 0.1425 0.2850 0.1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.07 0.00 0.25 0.00 0.00 0.28 0.01
Crit Moves: 94 0
*****

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Middle Harbor EIR
 Future Year 2015
 345-Acre

Scenario: 2015 345-Acre PM
 Command: 2015 345-Acre PM
 Volume: 2015 345-Acre PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 345-Acre

Middle Harbor EIR
 Future Year 2015
 345-Acre

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	C 22.3	0.842	C 22.3	0.842 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 19.2	0.766	C 19.2	0.766 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 18.7	0.000	C 18.7	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.9	0.000	A 9.9	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.3	0.000	B 10.3	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 17.1	0.773	C 17.1	0.773 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.323	A xxxxx	0.323 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.585	A xxxxx	0.585 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.7	0.176	A 8.7	0.176 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.474	A xxxxx	0.474 + 0.000 D/V

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.842
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 22.3
 Optimal Cycle: 0 Level Of Service: C
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 4 315 35 51 204 168 338 60 7 78 22 231
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 4 315 35 51 204 168 338 60 7 78 22 231
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 4 315 35 51 204 168 338 60 7 78 22 231
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 4 315 35 51 204 168 338 60 7 78 22 231
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 4 315 35 51 204 168 338 60 7 78 22 231
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.80 0.20 1.00 1.00 1.00 1.79 0.21 1.00 1.00 1.00 1.00
 Final Sat.: 368 720 81 378 407 439 401 737 87 369 385 429
 Capacity Analysis Module:
 Vol/Sat: 0.01 0.44 0.43 0.14 0.50 0.38 0.84 0.08 0.08 0.21 0.06 0.54
 Crit Moves: ****
 Delay/Veh: 11.9 17.2 17.0 13.0 18.7 14.8 42.1 11.7 11.6 14.1 11.9 18.7
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 11.9 17.2 17.0 13.0 18.7 14.8 42.1 11.7 11.6 14.1 11.9 18.7
 LOS by Move: B C B C B E B B B B C
 A345-AceroachDel: 17.1 16.5 16.5 1.00 37.1 1.00 17.2
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 A345-AceroachDel: 17.1 16.5 16.5 1.00 37.1 1.00 17.2
 LOS by A345-Aceroach: C E
 AllwayVgq: 0.0 0.7 0.6 0.1 0.9 0.9 3.4 0.1 0.1 0.2 0.1 1.0
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.766
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 19.2
 Optimal Cycle: 0 Level Of Service: C
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
 Volume Module:
 Base Vol: 0 363 3 156 58 116 218 75 0 323 22 139
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 363 3 156 58 116 218 75 0 323 22 139
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 363 3 156 58 116 218 75 0 323 22 139
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 363 3 156 58 116 218 75 0 323 22 139
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 363 3 156 58 116 218 75 0 323 22 139
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.98 0.02 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Sat.: 388 830 7 388 406 443 421 442 0 422 29 517
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.44 0.44 0.40 0.14 0.26 0.52 0.17 xxxxx 0.77 0.77 0.27
 Crit Moves: ****
 Delay/Veh: 0.0 16.8 16.8 17.0 12.4 12.9 18.8 11.9 0.0 30.9 30.9 11.7
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 16.8 16.8 17.0 12.4 12.9 18.8 11.9 0.0 30.9 30.9 11.7
 LOS by Move: * C C B B C B * D D B
 A345-AceroachDel: 16.8 14.7 14.7 1.00 17.1 1.00 25.4
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 A345-AceroachDel: 16.8 14.7 14.7 1.00 17.1 1.00 25.4
 LOS by A345-Aceroach: C B B C
 AllwayVgq: 0.0 0.7 0.7 0.6 0.1 0.3 0.9 0.2 0.2 2.5 2.5 0.3
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C (18.7)
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 688 0 0 429 0 0 0 0 19 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 688 0 429 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 688 0 429 0 0 0 0 19 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 688 0 429 0 0 0 0 19 0 0

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 903 xxxxx 344
Potential Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 281 xxxxx 658
Move Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 281 xxxxx 658
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.07 xxxxx 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.2 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 18.7 xxxxx xxxxx
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
A345-AceroachDel: xxxxxx xxxxxx 18.7
A345-AceroachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 3.7 Worst Case Level Of Service: A (9.9)
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 401 246 0 0 429 130 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 401 246 0 0 429 130 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 401 246 0 0 429 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 401 246 0 0 429 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 429 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap: 1141 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap: 1141 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.35 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 1.6 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 9.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
A345-AceroachDel: xxxxxx xxxxxx
A345-AceroachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
345-Acre

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.323
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
A345-Aceroach: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Ignore
Min. Green: 1 0 2 0 0 0 2 0 0 1 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 0 1 0 0 0 0 0 0

Volume Module:
Base Vol: 29 540 0 0 361 94 156 0 27 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 29 540 0 0 361 94 156 0 27 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 29 540 0 0 361 94 156 0 27 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 29 540 0 0 361 94 156 0 27 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.17 0.00 0.00 0.11 0.00 0.05 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

Middle Harbor EIR
Future Year 2015
345-Acre

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Critical Vol./Cap.(X): 0.585
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
A345-Aceroach: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Ignore
Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 113 2 237 200 1 13 51 42 198 477 28 210
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 113 2 237 200 1 13 51 42 198 477 28 210
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 113 2 237 200 1 13 51 42 198 477 28 210
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 113 2 237 200 1 13 51 42 198 477 28 210
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 0.88 0.12 1.00 1.00 1.00 2.00 1.00
Final Sat.: 1600 1600 1600 1600 1600 1406 194 1600 1600 1600 2880 1600
Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.13 0.00 0.07 0.03 0.03 0.12 0.17 0.02 0.13
OvlAdjV/S: ****
Crit Moves: ****

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.176
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.7
Optimal Cycle: 0 Level of Service: A
A345-Acre Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 102 0 12 53 139 0 0 0 131
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 102 0 12 53 139 0 0 0 131
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 102 0 12 53 139 0 0 0 131
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 102 0 12 53 139 0 0 0 131
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 102 0 12 53 139 0 0 0 131
Saturation Flow Module:
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.79 0.21 0.55 1.45 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 604 534 142 364 991 0 0 1299 746
Capacity Analysis Module:
Vol/Sat: xxxx xxxx 0.17 0.00 0.08 0.15 0.14 xxxx xxxx 0.00 0.18
Crit Moves: *** **
Delay/Veh: 0.0 0.0 0.0 9.6 8.2 8.2 8.9 8.6 0.0 0.0 0.0 8.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 9.6 8.2 8.2 8.9 8.6 0.0 0.0 0.0 8.3
LOS by Move: * * * * * A A A * * *
A345-Acre ApproachDel: xxxxxx 9.1 1.00 8.7 1.00 8.3
Delay Adj: xxxxxx
A345-Acre AdjDel: xxxxxx 9.1 1.00 8.7 1.00 8.3
LOS by A345-Acre: * * * * * A A A * * *
AllWayAvgQ: 0.0 0.0 0.0 0.2 0.1 0.1 0.2 0.2 0.0 0.0 0.0 0.2
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.474
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level of Service: A
A345-Acre Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 29 0 145 20 1268 0 0 1060 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 29 0 145 20 1268 0 0 1060 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 29 0 145 20 1268 0 0 1060 18
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 29 0 145 20 1268 0 0 1060 18
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 29 0 145 20 1268 0 0 1060 18
Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.10 0.01 0.30 0.00 0.00 0.37 0.01
Crit Moves: 145 0

Middle Harbor EIR
Future Year 2015
315-Acre

Scenario: 2015 315-Acre AM
Command: 2015 315-Acre AM
Volume: 2015 315-Acre AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 315-Acre

Middle Harbor EIR
Future Year 2015
315-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	C 20.7	0.776	C 20.7	0.776 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 12.6	0.526	B 12.6	0.526 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	B 12.5	0.000	B 12.5	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 8.9	0.000	A 8.9	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.9	0.000	B 10.9	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 25.4	0.922	D 25.4	0.922 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.388	A xxxxx	0.388 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.592	A xxxxx	0.592 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.0	0.146	A 8.0	0.146 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.358	A xxxxx	0.358 + 0.000 D/V

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.776
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 20.7
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 1 239 101 50 244 136 296 16 5 183 131 147
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 1 239 101 50 244 136 296 16 5 183 131 147
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PWF Volume: 1 239 101 50 244 136 296 16 5 183 131 147
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 1 239 101 50 244 136 296 16 5 183 131 147
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 1 239 101 50 244 136 296 16 5 183 131 147
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.41 0.59 1.00 1.00 1.00 1.52 0.48 1.00 1.00 1.00
 Final Sat.: 359 553 241 374 405 432 382 597 191 384 403 438
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.43 0.42 0.13 0.60 0.31 0.78 0.03 0.03 0.48 0.33 0.34
 Crit Moves: ****
 Delay/Veh: 12.0 17.3 16.5 13.1 22.5 13.9 35.5 11.5 11.3 19.0 14.9 14.1
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 12.0 17.3 16.5 13.1 22.5 13.9 35.5 11.5 11.3 19.0 14.9 14.1
 LOS by Move: B C C B E B B C B C B
 ApproachDel: 17.0 18.7 33.9 16.3
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 17.0 18.7 33.9 16.3
 LOS by Appr: C C D C
 AllwayAvgQ: 0.0 0.7 0.6 0.1 1.3 1.3 2.5 0.0 0.0 0.8 0.4 0.4
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.526
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.6
 Optimal Cycle: 0 Level of Service: B
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 0 1 0 0 1
 Volume Module:
 Base Vol: 0 234 2 19 128 144 129 30 1 248 23 141
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 234 2 19 128 144 129 30 1 248 23 141
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PWF Volume: 0 234 2 19 128 144 129 30 1 248 23 141
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 234 2 19 128 144 129 30 1 248 23 141
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 234 2 19 128 144 129 30 1 248 23 141
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.98 0.02 1.00 1.00 1.00 1.00 0.97 0.03 0.92 0.08 1.00
 Final Sat.: 448 955 8 456 489 541 474 489 16 472 44 611
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.25 0.24 0.04 0.26 0.27 0.27 0.06 0.06 0.53 0.53 0.23
 Crit Moves: ****
 Delay/Veh: 0.0 11.9 11.8 10.5 11.9 11.0 12.4 9.8 9.8 16.4 16.4 9.9
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 11.9 11.8 10.5 11.9 11.0 12.4 9.8 9.8 16.4 16.4 9.9
 LOS by Move: * B B B B B A A A C C A
 ApproachDel: 11.9 11.4 11.9 11.9
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 11.9 11.4 11.9 11.9
 LOS by Appr: B B B B
 AllwayAvgQ: 0.0 0.3 0.3 0.0 0.3 0.3 0.3 0.1 0.1 1.0 1.0 0.3
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
 Average Delay (sec/veh): 1.3 Worst Case Level Of Service: B [12.5]

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
 Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A [8.9]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Right:	Include	Ignore	Include	Include
Lanes:	0 0 2 0 0	0 0 2 0 0	0 0 0 0 0	0 0 0 0 0

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Right:	Include	Ignore	Include	Include
Lanes:	0 0 2 0 0	0 0 2 0 0	0 0 0 0 0	1 0 0 0 1

Volume Module:
 Base Vol: 173 329 0 0 472 112 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 173 329 0 0 472 112 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 173 329 0 0 472 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 173 329 0 0 472 0 0 0 0 0

Volume Module:
 Base Vol: 0 447 0 0 472 0 0 0 0 48 0 58
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 447 0 0 472 0 0 0 0 48 0 58
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 447 0 0 472 0 0 0 0 48 0 58
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 447 0 0 472 0 0 0 0 48 0 58

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Capacity Module:
 Conflict Vol: 472 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potential Cap.: 1100 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap.: 1100 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: 0.16 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Level Of Service Module:
 2Way95thQ: 0.6 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: 8.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS By Move: A * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx xxxxxx
 ApproachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

Critical Gap Module:
 Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
 FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
 Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 683 xxxxx 224
 Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 387 xxxxx 786
 Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 387 xxxxx 786
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.12 xxxxx 0.07
 Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.4 xxxxx 0.2
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 15.6 xxxxx 9.9
 LOS By Move: * * * * * C * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx xxxxxx
 ApproachLOS: * * * * * B
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 0.5 Worst Case Level of Service: Bf 10.9]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 1
Volume Module:
Base Vol: 13 430 8 6 456 0 0 2 29 0 0 0 0 0 3
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 13 430 8 6 456 0 2 29 0 0 3
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 13 430 8 6 456 0 2 29 0 0 3
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 13 430 8 6 456 0 2 29 0 0 3
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: 456 xxxxx xxxxxx 438 xxxxx xxxxxx 709 932 228 701 928 219
Potential Cap: 1115 xxxxx xxxxxx 1133 xxxxx xxxxxx 325 269 781 329 270 791
Move Cap: 1115 xxxxx xxxxxx 1133 xxxxx xxxxxx 320 264 781 311 265 791
Volume/Cap: 0.01 xxxxx xxxxx 0.00 0.01 0.04 0.00 0.00 0.00
Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxxx 0.0 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del: 8.3 xxxxx xxxxx 8.2 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx 9.6
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 264 xxxxx 693 0 xxxxx xxxxxx
SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 0.0 xxxxx 0.1 xxxxx xxxxx xxxxxx
Shrd ConDel: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 18.7 xxxxx 10.4 xxxxx xxxxx xxxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.922
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 25.4
Optimal Cycle: 0 Level of Service: D
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 0 1
Volume Module:
Base Vol: 94 156 1 6 482 285 427 0 44 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 94 156 1 6 482 285 427 0 44 19 1 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 94 156 1 6 482 285 427 0 44 19 1 37
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 94 156 1 6 482 285 427 0 44 19 1 37
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 94 156 1 6 482 285 427 0 44 19 1 37
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat: 391 820 5 12 944 528 463 0 532 371 20 448
Capacity Analysis Module:
Vol/Sat: 0.24 0.19 0.19 0.51 0.51 0.54 0.92 xxxxx 0.08 0.05 0.05 0.08
Crit Moves: *** ** * * * * *
Delay/Veh: 14.1 12.8 12.8 17.2 17.2 16.6 51.3 0.0 9.8 11.8 11.8 10.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.1 12.8 12.8 17.2 17.2 16.6 51.3 0.0 9.8 11.8 11.8 10.8
LOS by Move: B B B C C C F * A B B B
ApproachDel: 13.3 17.0 17.0 47.4
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 13.3 17.0 47.4
LOS by Appr: B C E
AllWayAvgQ: 0.3 0.2 0.2 0.9 0.9 1.1 5.3 5.3 0.1 0.0 0.0 0.1
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #7 Pico Avenue, Pier C Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.388
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level of Service: A

 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: 0
 Min. Green: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0 0 0
 Lanes: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0 0 0
 Volume Module:
 Base Vol: 29 549 0 0 716 184 134 0 14 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 29 549 0 0 716 184 134 0 14 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 29 549 0 0 716 184 134 0 14 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 29 549 0 0 716 184 134 0 14 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 29 549 0 0 716 184 134 0 14 0 0 0
 OvlAdjVol: 29 549 0 0 716 184 134 0 14 0 0 0
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.17 0.00 0.00 0.22 0.00 0.05 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: ****

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #8 Pico Avenue, Pier B Street & 9th Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.592
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 39 Level of Service: A

 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: 0
 Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
 Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 191 2 491 305 0 11 6 93 61 386 113 162
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 191 2 491 305 0 11 6 93 61 386 113 162
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 191 2 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 191 2 0 0 0 0 0 0 0 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 191 2 0 0 305 0 11 6 93 61 386 113 162
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.93 0.07 1.00 1.21 0.79 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1489 111 1600 1932 1268 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.12 0.00 0.00 0.19 0.00 0.10 0.00 0.05 0.05 0.13 0.07 0.10
 Crit Moves: ****

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.146
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.0
 Optimal Cycle: 0 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 20 0 26 11 124 0 0 165 123
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 20 0 26 11 124 0 0 165 123
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 20 0 26 11 124 0 0 165 123
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 20 0 26 11 124 0 0 165 123
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 20 0 26 11 124 0 0 165 123
 Saturation Flow Module:
 Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.87 0.13 1.00 0.16 1.84 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 510 76 719 116 1325 0 0 1447 843
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.04 0.00 0.04 0.09 0.09 xxxx xxxx 0.11 0.15
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 8.7 8.7 7.6 8.1 8.1 0.0 0.0 8.2 7.6
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 8.7 8.7 7.6 8.1 8.1 0.0 0.0 8.2 7.6
 LOS by Move: * * * * *
 ApproachDel: xxxxxx 8.1 A A * *
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 8.1 8.0
 LOS by Appr: * A A A A A
 AllwayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.1 0.1 0.0 0.0 0.1 0.2
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.358
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 31 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R L T R
 Control: Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 3 0 89 3 898 0 0 842 10
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 89 3 898 0 0 842 10
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 89 3 898 0 0 842 10
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 89 3 898 0 0 842 10
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 3 0 89 3 898 0 0 842 10
 Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.06 0.00 0.21 0.00 0.00 0.30 0.01
 Crit Vol: 0 89 0
 Crit Moves: **** *

Scenario: 2015 315-Acre MD Scenario Report
 Command: 2015 315-Acre MD
 Volume: 2015 315-Acre MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 315-Acre

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS, Veh C	V/ C	Future Del/ LOS, Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 72.1	1.355	F 72.1	1.355 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 15.2	0.643	C 15.2	0.643 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 17.7	0.000	C 17.7	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.6	0.000	A 9.6	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 12.2	0.000	B 12.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 23.3	0.900	C 23.3	0.900 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.338	A xxxxx	0.338 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.618	B xxxxx	0.618 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.1	0.158	A 8.1	0.158 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.349	A xxxxx	0.349 + 0.000 D/V

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.355
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 72.1
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0

Volume Module:
Base Vol: 6 430 112 76 315 114 445 57 4 186 80 227
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 6 430 112 76 315 114 445 57 4 186 80 227
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 6 430 112 76 315 114 445 57 4 186 80 227
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 6 430 112 76 315 114 445 57 4 186 80 227
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 6 430 112 76 315 114 445 57 4 186 80 227

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.59 0.41 1.00 1.00 1.00 1.00 1.87 0.13 1.00 1.00 1.00
Final Sat.: 325 561 149 325 349 366 328 612 43 325 336 366

Capacity Analysis Module:
Vol/Sat: 0.02 0.77 0.75 0.23 0.90 0.31 1.36 0.09 0.09 0.57 0.24 0.62
Crit Moves: **** **

Delay/Veh: 13.6 38.6 36.6 16.6 58.5 16.4 207.9 14.1 14.1 26.6 16.1 26.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.6 38.6 36.6 16.6 58.5 16.4 207.9 14.1 14.1 26.6 16.1 26.3
LOS by Move: B E C F C F B B D C D
ApproachDel: 37.9 42.7 184.6
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 37.9 42.7 184.6
LOS by Appr: E E F
AllwayAvgQ: 0.0 2.6 2.4 0.3 4.4 4.4 17.7 0.1 0.1 1.2 0.3 1.4
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.643
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.2
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 0 1 0 0 1 0 1

Volume Module:
Base Vol: 0 381 6 86 224 54 70 31 0 300 8 145
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 381 6 86 224 54 70 31 0 300 8 145
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 381 6 86 224 54 70 31 0 300 8 145
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 381 6 86 224 54 70 31 0 300 8 145
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 381 6 86 224 54 70 31 0 300 8 145

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.97 0.03 1.00 1.61 0.39 1.00 1.00 0.00 0.97 0.03 1.00
Final Sat.: 436 929 15 434 758 187 419 443 0 466 12 561

Capacity Analysis Module:
Vol/Sat: 0.00 0.41 0.41 0.20 0.30 0.29 0.17 0.07 xxxxx 0.64 0.64 0.26
Crit Moves: **** **

Delay/Veh: 0.0 14.8 14.8 12.5 12.9 12.6 12.2 10.7 0.0 21.7 21.7 10.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 14.8 14.8 12.5 12.9 12.6 12.2 10.7 0.0 21.7 21.7 10.9
LOS by Move: * B B B B B B * C C B
ApproachDel: 14.8 12.8 11.8 11.8
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 14.8 12.8 11.8
LOS by Appr: B B C
AllwayAvgQ: 0.0 0.6 0.6 0.2 0.4 0.4 0.2 0.1 0.1 1.6 1.6 0.3
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #5 Pico Avenue, Broadway
 Average Delay (sec/veh): 0.3 Worst Case Level of Service: B(12.2)
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 1 0 0 1
 Volume Module:
 Base Vol: 0 445 1 0 585 0 0 2 17 1 0 0 4
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 445 1 0 585 0 0 2 17 1 0 0 4
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 445 1 0 585 0 0 2 17 1 0 0 4
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 445 1 0 585 0 0 2 17 1 0 0 4
 Critical Gap Module:
 Critical Gap:xxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
 FollowUpTim:xxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
 Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx 807 1031 293 739 1031 223
 Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx 276 235 710 309 235 787
 Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx 275 235 710 300 235 787
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 0.01 0.02 0.00 0.00 0.01
 Level of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
 Control Del:xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 9.6
 LOS by Move: * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx 235 xxxxx 585 300 xxxxx xxxxx
 SharedQueue:xxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx 0.1 0.0 xxxxx xxxxx
 Shrd ConDel:xxxx xxxxx xxxxx xxxxx xxxxx 20.5 xxxxx 11.4 17.0 xxxxx xxxxx
 Shared LOS: * * * * * C * * * * * B C * * *
 ApproachDel: xxxxx
 ApproachLOS: * * * * * B
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #6 Pico Avenue, Pier D Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.900
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 23.3
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 1 0 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 63 160 1 5 330 201 449 0 87 7 5 30
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 63 160 1 5 330 201 449 0 87 7 5 30
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 63 160 1 5 330 201 449 0 87 7 5 30
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 63 160 1 5 330 201 449 0 87 7 5 30
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 63 160 1 5 330 201 449 0 87 7 5 30
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 0.03 1.97 1.00 1.00 0.00 1.00 0.58 0.42 1.00
 Final Sat.: 413 873 5 14 951 534 499 0 585 248 177 482
 Capacity Analysis Module:
 Vol/Sat: 0.15 0.18 0.18 0.35 0.35 0.38 0.90 xxxxx 0.15 0.03 0.03 0.06
 Crit Moves: ***
 Delay/Veh: 12.4 12.1 12.1 13.5 13.5 12.8 44.7 0.0 9.7 10.8 10.8 10.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 12.4 12.1 12.1 13.5 13.5 12.8 44.7 0.0 9.7 10.8 10.8 10.0
 LOS by Move: B B B B B E * A B B B B
 ApproachDel: 12-2 13-2 39.0 10.3
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 12.2 13.2 39.0 10.3
 LOS by Appr: B B E B
 AllwayAvgQ: 0.2 0.2 0.2 0.5 0.5 0.5 4.8 4.8 0.2 0.0 0.0 0.1
 Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.338
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx A
Optimal Cycle: 26 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Ignore Protected Include
Min. Green: 1 0 2 0 0 0 2 0 0 1 0 0 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 0 1 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 28 565 0 0 437 154 177 0 20 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 28 565 0 0 437 154 177 0 20 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 28 565 0 0 437 0 177 0 20 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 28 565 0 0 437 0 177 0 20 0 0 0
OvlAdjVol: 28 565 0 0 437 0 177 0 20 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.18 0.00 0.00 0.14 0.00 0.06 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: *****

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.618
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx B
Optimal Cycle: 41 Level of Service: B

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Ignore Protected Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0
Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Volume Module:
Base Vol: 132 5 130 309 2 17 17 123 170 392 91 231
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 132 5 130 309 2 17 17 123 170 392 91 231
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 132 5 0 309 2 17 17 123 170 392 91 231
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 132 5 0 309 2 17 17 123 170 392 91 231
OvlAdjVol: 132 5 0 309 2 17 17 123 170 392 91 231

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.90 0.10 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1434 166 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.08 0.00 0.00 0.19 0.00 0.10 0.01 0.08 0.11 0.14 0.06 0.14
OvlAdjV/S: *****
Crit Moves: *****

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.158
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 0 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 1 0 0 0 0 2 0 1
Lanes: 0 0 0 0 0 1 0 0 1 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 0 36 57 170 0 0 111 63
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 36 57 170 0 0 111 63
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 36 57 170 0 0 111 63
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 36 57 170 0 0 111 63
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 0 36 57 170 0 0 111 63

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.50 1.50 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 0 634 723 360 1110 0 0 1411 816
Capacity Analysis Module:
Vol/Sat: xxxx xxxx
Crit Moves: 0.0 0.0 0.0 0.0 7.6 8.6 8.4 0.0 0.0 8.2 7.4
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 0.0 7.6 8.6 8.4 0.0 0.0 8.2 7.4
LOS by Move: * * * * A A * *
ApproachDel: xxxxxx 7.6 8.4 7.9
Delay Adj: xxxxxx 1.00 1.00
ApprAdjDel: xxxxxx 7.6 8.4 7.9
LOS by Appr: * A A A
AllwayAvgQ: 0.0 0.0 0.0 0.0 0.2 0.2 0.0 0.0 0.1 0.1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.349
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0
Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 1

Volume Module:
Base Vol: 0 0 0 0 14 0 94 0 1062 0 0 806 16
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 14 0 94 0 1062 0 0 806 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 14 0 94 0 1062 0 0 806 16
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 14 0 94 0 1062 0 0 806 16
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 14 0 94 0 1062 0 0 806 16

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.07 0.00 0.25 0.00 0.00 0.28 0.01
Crit Moves: 0 0 0 0 94 0

Note: Queue reported is the number of cars per lane.

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Scenario Report
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Command: 315-Acre PM
 Volume: 315-Acre PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 315-Acre

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Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	C 22.1	0.837	C 22.1	0.837 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 19.0	0.759	C 19.0	0.759 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 18.9	0.000	C 18.9	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 10.0	0.000	A 10.0	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.4	0.000	B 10.4	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 17.0	0.767	C 17.0	0.767 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.323	A xxxxx	0.323 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.599	A xxxxx	0.599 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.4	0.172	A 8.4	0.172 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.474	A xxxxx	0.474 + 0.000 D/V

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Critical Vol./Cap.(X): 0.837
Level of Service: C

Cycle (sec): 100
Loss Time (sec): 9 (Y+R=4.0 sec)
Average Delay (sec/veh): 22.1

Optimal Cycle: 0
Approach: North Bound
Movement: L T R L T R L T R L T R

Control: Stop Sign
Rights: 0
Lanes: 1 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 3 316 37 53 200 164 335 57 8 81 25 234
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Reduced Vol: 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.79 0.21 1.00 1.00 1.00 1.00 1.75 0.25 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.01 0.44 0.44 0.37 0.84 0.08 0.08 0.22 0.06 0.54
Crit Moves: ****

Delay/Veh: 11.9 17.2 17.0 13.0 18.5 14.7 41.4 11.6 11.5 14.2 11.9 18.8
AdJDel/Veh: 11.9 17.2 17.0 13.0 18.5 14.7 41.4 11.6 11.5 14.2 11.9 18.8

ApproachDel: 17.2
Delay Adj: 1.00
ApprAdJDel: 17.2

LOS by Appr: C
AllWayAvgQ: 0.0 0.7 0.7 0.1 0.8 0.8 3.3 0.1 0.1 0.2 0.1 1.0

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
315-Acre

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Critical Vol./Cap.(X): 0.759
Level of Service: C

Cycle (sec): 100
Loss Time (sec): 0 (Y+R=4.0 sec)
Average Delay (sec/veh): 19.0

Optimal Cycle: 0
Approach: North Bound
Movement: L T R L T R L T R L T R

Control: Stop Sign
Rights: 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 0 367 3 155 59 114 217 72 0 320 22 140
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Reduced Vol: 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.00 0.44 0.44 0.40 0.15 0.26 0.52 0.16 xxxx
Crit Moves: ****

Delay/Veh: 0.0 16.8 16.8 16.9 12.4 12.8 18.7 11.8 0.0 30.3 30.3 11.7
AdJDel/Veh: 0.0 16.8 16.8 16.9 12.4 12.8 18.7 11.8 0.0 30.3 30.3 11.7

ApproachDel: 16.8
Delay Adj: 1.00
ApprAdJDel: 16.8

LOS by Appr: C
AllWayAvgQ: 0.0 0.7 0.7 0.6 0.1 0.3 0.9 0.2 0.2 2.5 2.5 0.3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 3.8 Worst Case Level Of Service: A [10.0]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 417 249 0 0 429 136 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 429 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1141 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 1.7 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 10.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C [18.9]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 1 1

Volume Module:
Base Vol: 0 694 0 0 429 0 0 0 0 0 19 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #6 Pico Avenue, Pier D Street
 Average Delay (sec/veh): 100 Worst Case Level of Service: B
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.767
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 17.0
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1
 Volume Module:
 Base Vol: 95 198 3 4 286 174 372 0 103 37 2 54
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 95 198 3 4 286 174 372 0 103 37 2 54
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 95 198 3 4 286 174 372 0 103 37 2 54
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Critical Gap: 95 198 3 4 286 174 372 0 103 37 2 54
 FollowUpTim: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Capacity Module:
 Conflict Vol: 95 198 3 4 286 174 372 0 103 37 2 54
 Potential Cap: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Move Cap: 1.00 1.97 0.03 0.03 1.97 1.00 1.00 0.00 1.00 0.95 0.05 1.00
 Volume/Cap: 422 885 13 13 932 522 485 0 568 396 21 483
 Level of Service Module:
 2Way95thQ: 0.32 0.22 0.22 0.31 0.31 0.33 0.77 xxxxx 0.18 0.09 0.09 0.11
 Control Del: 12.6 12.6 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8
 LOS by Move: B B B B B B B B B B B B
 Shared Cap: 13.0 12.3 12.3 13.1 13.1 12.4 29.2 0.0 10.1 11.5 11.5 10.3
 SharedQueue: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Shrd ConDel: 13.0 12.3 12.3 13.1 13.1 12.4 29.2 0.0 10.1 11.5 11.5 10.3
 Shared LOS: B B B B B B B B B B B B
 ApproachDel: 12.6 12.6 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8
 ApproachLOS: B B B B B B B B B B B B
 Note: Queue reported is the number of cars per lane.
 AllWayAvgQ: 0.3 0.3 0.3 0.4 0.4 0.4 2.6 2.6 0.2 0.1 0.1 0.1

Level of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #5 Pico Avenue, Broadway
 Average Delay (sec/veh): 0.1 Worst Case Level of Service: B
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.767
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 17.0
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 0 1 0 1 0 0 1
 Volume Module:
 Base Vol: 0 672 0 5 431 0 0 0 7 0 0 0 1
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 672 0 5 431 0 0 0 7 0 0 0 1
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 672 0 5 431 0 0 0 7 0 0 0 1
 PHF Adj: 0 672 0 5 431 0 0 0 7 0 0 0 1
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 672 0 5 431 0 0 0 7 0 0 0 1
 Critical Gap Module:
 Critical Gap: 4.1 xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9
 FollowUpTim: 2.2 xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3
 Capacity Module:
 Conflict Vol: 672 xxxxx xxxxx 777 xxxxx 215 898 1113 336
 Potential Cap: 928 xxxxx xxxxx 290 xxxxx 795 238 210 666
 Move Cap: 928 xxxxx xxxxx 289 xxxxx 795 235 209 666
 Volume/Cap: 0.01 xxxxx xxxxx 0.00 xxxxx 0.01 0.00 0.00 0.00
 Level of Service Module:
 2Way95thQ: 0.0 xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0
 Control Del: 8.9 xxxxx xxxxx xxxxx xxxxx 9.6 xxxxx xxxxx 10.4
 LOS by Move: A A A A A A A A A A A A
 Shared Cap: 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6
 SharedQueue: 0.00 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6
 Shared LOS: A A A A A A A A A A A A
 ApproachDel: 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6
 ApproachLOS: A A A A A A A A A A A A
 Note: Queue reported is the number of cars per lane.
 AllWayAvgQ: 0.3 0.3 0.3 0.4 0.4 0.4 2.6 2.6 0.2 0.1 0.1 0.1

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.599
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level of Service: A
Street Name: 9th Street Pico Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Volume Module:
Base Vol: 112 2 241 12 52 19 195 475 31 207
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 112 2 241 12 52 19 195 475 31 207
User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 112 2 227 1 12 52 19 195 475 31 207
Reduced Vol: 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 112 2 0 227 1 12 52 19 195 475 31 207

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.90 0.10 1.00 1.00 2.00 1.00
Final Sat.: 1600 1600 1600 1600 1440 160 1600 1600 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.14 0.00 0.08 0.03 0.01 0.12 0.16 0.02 0.13
Crit Moves: *****

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.323
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level of Service: A
Street Name: Pier C Street
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected Protected
Rights: Ignore Include Include
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0

Volume Module:
Base Vol: 29 540 0 0 365 94 156 0 27 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 29 540 0 0 365 94 156 0 27 0 0 0
User Adj: 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 29 540 0 0 365 0 156 0 27 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 29 540 0 0 365 0 156 0 27 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.17 0.00 0.00 0.11 0.00 0.05 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: *****

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.172
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.4
 Optimal Cycle: 0 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 79 0 12 53 110 0 0 1 134
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 79 0 12 53 110 0 0 1 134
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 79 0 12 53 110 0 0 1 134
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 79 0 12 53 110 0 0 1 134
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 79 0 12 53 110 0 0 1 134
 Saturation Flow Module:
 Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Adjustment: 0.00 0.00 0.00 1.00 0.74 0.26 0.65 1.35 0.00 0.00 2.00 1.00
 Lanes: 0 0 0 611 508 182 435 945 0 0 1346 778
 Final Sat: 0 0 0 0.13 0.00 0.07 0.12 0.12 0.00 0.00 0.17
 Capacity Analysis Module:
 Vol/Sat: xxxxx xxxxx
 Crit Moves: ***
 Delay/Veh: 0.0 0.0 0.0 9.2 8.0 8.0 8.7 8.4 0.0 0.0 7.9 8.1
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 9.2 8.0 8.0 8.7 8.4 0.0 0.0 7.9 8.1
 LOS by Move: * * * * * A A A * * * * *
 ApproachDel: xxxxxx 8.8 A A 8.5 8.1
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 8.8 8.5
 LOS by Appr: * A A A A A
 AllwayAvgQ: 0.0 0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.2
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.474
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 29 0 149 0 1284 0 0 1054 18
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 29 0 149 0 1284 0 0 1054 18
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 29 0 149 0 1284 0 0 1054 18
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 29 0 149 0 1284 0 0 1054 18
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol: 0 0 0 29 0 149 0 1284 0 0 1054 18
 Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.10 0.00 0.30 0.00 0.00 0.37 0.01
 Crit Vol: 0 149 0 527
 Crit Moves: *****

Middle Harbor EIR
Future Year 2015
NEPA

Scenario: 2015 NEPA AM

Command: 2015 NEPA AM
Volume: 2015 NEPA AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NEPA

Middle Harbor EIR
Future Year 2015
NEPA

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	C 22.8	0.834	C 22.8	0.834 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 12.5	0.520	B 12.5	0.520 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	B 12.9	0.000	B 12.9	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.0	0.000	A 9.0	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.1	0.000	B 11.1	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 27.6	0.952	D 27.6	0.952 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.398	A xxxxx	0.398 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.594	A xxxxx	0.594 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.0	0.157	A 8.0	0.157 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.362	A xxxxx	0.362 + 0.000 D/V

Middle Harbor EIR
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NEPA

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.834
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 22.8
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0

Lanes: 1 0 1 1 0 0 1 1 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 1 239 101 50 250 158 315 17 4 173 139 147

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 1 239 101 50 250 158 315 17 4 173 139 147
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 239 101 50 250 158 315 17 4 173 139 147
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 1 239 101 50 250 158 315 17 4 173 139 147
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 1 239 101 50 250 158 315 17 4 173 139 147

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.41 0.59 1.00 1.00 1.00 1.62 0.38 1.00 1.00 1.00
Final Sat.: 351 539 235 369 399 426 378 624 149 375 393 426

Capacity Analysis Module:
Vol/Sat: 0.00 0.44 0.43 0.14 0.63 0.37 0.83 0.03 0.03 0.46 0.35 0.35
Crit Moves: ****

Delay/Veh: 12.2 17.9 17.1 13.3 23.9 15.0 42.7 11.7 11.5 19.0 15.7 14.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.2 17.9 17.1 13.3 23.9 15.0 42.7 11.7 11.5 19.0 15.7 14.5

LOS by Move: B C C B C E B B C C B
ApproachDel: 17.6 19.7 40.7 40.7
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 17.6 19.7 40.7 40.7

LOS by Appr: C E C
AllwayAvgQ: 0.0 0.7 0.6 0.1 1.4 1.4 3.2 0.0 0.0 0.7 0.5 0.5
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
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NEPA

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.520
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.5
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0

Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 0 1 0 0 1
Volume Module:
Base Vol: 0 233 2 19 118 140 129 30 0 246 24 144

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 233 2 19 118 140 129 30 0 246 24 144
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 233 2 19 118 140 129 30 0 246 24 144
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 233 2 19 118 140 129 30 0 246 24 144
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 233 2 19 118 140 129 30 0 246 24 144

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.00 1.00 1.00 1.00 1.00 0.00 0.91 0.09 1.00
Final Sat.: 451 961 8 456 490 542 477 507 0 473 46 617

Capacity Analysis Module:
Vol/Sat: 0.00 0.24 0.24 0.04 0.24 0.26 0.27 0.06 xxxxx 0.52 0.52 0.23
Crit Moves: ****

Delay/Veh: 0.0 11.8 11.8 10.5 11.7 10.9 12.3 9.7 0.0 16.1 16.1 9.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 11.8 11.8 10.5 11.7 10.9 12.3 9.7 0.0 16.1 16.1 9.9

LOS by Move: * B B B B B A * C C A
ApproachDel: 11.8 11.2 11.8 11.8 13.9
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 11.8 11.2 11.8 11.8

LOS by Appr: B B B
AllwayAvgQ: 0.0 0.3 0.3 0.0 0.3 0.3 0.3 0.1 0.1 1.0 1.0 0.3
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
 Average Delay (sec/veh): 1.5 Worst Case Level Of Service: [9.0]

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Ignore Include Include
 Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 173 334 0 0 498 112 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 173 334 0 0 498 112 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 173 334 0 0 498 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0
 FinalVolume: 173 334 0 0 498 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
 Conflict Vol: 498 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potential Cap.: 1076 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap.: 1076 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: 0.16 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
 2Way95thQ: 0.6 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: 9.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS by Move: A * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx xxxxxx
 ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
 Average Delay (sec/veh): 1.4 Worst Case Level Of Service: [12.9]

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
 Base Vol: 0 449 0 0 498 0 0 0 0 55 0 58
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 449 0 0 498 0 0 0 0 55 0 58
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 449 0 0 498 0 0 0 0 55 0 58
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 449 0 0 498 0 0 0 0 55 0 58

Critical Gap Module:
 Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
 FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 698 xxxxx 225
 Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 379 xxxxx 785
 Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 379 xxxxx 785
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.15 xxxxx 0.07

Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.5 xxxxx 0.2
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 16.1 xxxxx 10.0
 LOS by Move: * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx xxxxxx
 ApproachLOS: * * * * *
 B

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street
Average Delay (sec/veh): 100 Critical Vol./Cap.(X): 0.952
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 27.6
Optimal Cycle: 0 Level of Service: D
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 0 0
Volume Module:
Base Vol: 94 159 1 6 505 286 438 0 49 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 94 159 1 6 505 286 438 0 49 19 1 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 94 159 1 6 505 286 438 0 49 19 1 37
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 94 159 1 6 505 286 438 0 49 19 1 37
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 94 159 1 6 505 286 438 0 49 19 1 37
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat: 387 814 5 11 935 522 460 0 527 368 19 444
Capacity Analysis Module:
Vol/Sat: 0.24 0.20 0.20 0.54 0.54 0.55 0.95 xxxxx 0.09 0.05 0.05 0.08
Crit Moves: *** ** * ** * ** *
Delay/Veh: 14.3 13.1 13.1 18.2 18.2 17.0 57.9 0.0 10.0 11.9 11.9 10.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.3 13.1 13.1 18.2 18.2 17.0 57.9 0.0 10.0 11.9 11.9 10.9
LOS by Move: B B B C C C F * A B B B
ApproachDel: 13.5 17.8 17.8 53.0
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 13.5 17.8 17.8 53.0
LOS by Appr: B C F
AllwayAvgQ: 0.3 0.2 0.2 1.1 1.1 1.1 6.1 6.1 0.1 0.0 0.0 0.1
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 0.5 Worst Case Level of Service: B[11.1]
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 27.6
Optimal Cycle: 0 Level of Service: D
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 1
Volume Module:
Base Vol: 13 431 8 6 482 0 0 2 29 0 0 0 3
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 13 431 8 6 482 0 0 2 29 0 0 0 3
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 13 431 8 6 482 0 0 2 29 0 0 0 3
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 13 431 8 6 482 0 0 2 29 0 0 0 3
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: 482 xxxxx xxxxx 736 959 241 715 955 220
Potential Cap: 1091 xxxxx xxxxx 1132 xxxxx xxxxx 311 259 766 322 260 791
Move Cap: 1091 xxxxx xxxxx 1132 xxxxx xxxxx 306 255 766 304 256 791
Volume/Cap: 0.01 xxxxx xxxxx 0.00 0.01 0.04 0.00 0.00 0.00
Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del: 8.3 xxxxx xxxxx 8.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 9.6
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * C * B * * *
ApproachDel: xxxxx 11.1
ApprAdjDel: * * * * * B A
LOS by Appr: * * * * * B A
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.398
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 31 564 0 0 742 178 135 0 13 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 31 564 0 0 742 178 135 0 13 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 31 564 0 0 742 0 135 0 13 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 31 564 0 0 742 0 135 0 13 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00

Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.18 0.00 0.00 0.23 0.00 0.05 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.594
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level of Service: A

Street Name: 9th Street Pico Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0

Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 192 2 514 305 0 11 6 92 60 391 124 160

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 192 2 514 305 0 11 6 92 60 391 124 160
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 192 2 0 305 0 11 6 92 60 391 124 160
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 192 2 0 305 0 11 6 92 60 391 124 160
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.93 0.07 1.00 1.21 0.79 2.00 1.00 1.00

Final Sat.: 1600 1600 1600 1600 1489 111 1600 1937 1263 2880 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.12 0.00 0.00 0.19 0.00 0.10 0.00 0.05 0.05 0.14 0.08 0.10
Crit Moves: ****

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.362
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level of Service: A

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), and various traffic metrics like Control, Rights, Lanes, and Volume Module.

Table with columns for Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat, and Capacity Analysis Module.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Anaheim Way & Pier B St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.157
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.0
Optimal Cycle: 0 Level of Service: A

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), and various traffic metrics like Control, Rights, Lanes, and Volume Module.

Table with columns for Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat, and Capacity Analysis Module.

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 Scenario Report
 2015 NEPA MD

Command: 2015 NEPA MD
 Volume: 2015 NEPA MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: NEPA

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 Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 69.5	1.344	F 69.5	1.344 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 15.1	0.640	C 15.1	0.640 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 18.2	0.000	C 18.2	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.8	0.000	A 9.8	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 12.5	0.000	B 12.5	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 30.3	0.983	D 30.3	0.983 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.346	A xxxxx	0.346 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.626	B xxxxx	0.626 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.2	0.163	A 8.2	0.163 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.342	A xxxxx	0.342 + 0.000 D/V

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Cycle (sec): 100 Critical Vol./Cap.(X): 0.640
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.1
Optimal Cycle: 0 Level of Service: C

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Cycle (sec): 100 Critical Vol./Cap.(X): 1.344
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 69.5
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
Rights: 0 Include 0 Include 0 Include 0 Include 0 Include 0 Include
Min. Green: 1 0 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
Volume Module:
Base Vol: 0 386 6 85 208 52 70 29 0 301 7 148
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 386 6 85 208 52 70 29 0 301 7 148
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 386 6 85 208 52 70 29 0 301 7 148
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 386 6 85 208 52 70 29 0 301 7 148

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
Rights: 0 Include 0 Include 0 Include 0 Include 0 Include 0 Include
Min. Green: 1 0 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
Volume Module:
Base Vol: 6 385 157 75 305 122 433 115 5 186 109 228
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 6 385 157 75 305 122 433 115 5 186 109 228
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 6 385 157 75 305 122 433 115 5 186 109 228
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 6 385 157 75 305 122 433 115 5 186 109 228

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.97 0.03 1.00 1.60 0.40 1.00 1.00 0.00 0.98 0.02 1.00
Final Sat: 439 936 15 434 751 192 421 446 0 470 11 565
Capacity Analysis Module:
Vol/Sat: 0.00 0.41 0.41 0.20 0.28 0.27 0.17 0.07 xxxxx 0.64 0.64 0.26
Crit Moves: ****
Delay/Veh: 0.0 14.8 14.7 12.4 12.6 12.3 12.1 10.7 0.0 21.5 21.5 10.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 14.8 14.7 12.4 12.6 12.3 12.1 10.7 0.0 21.5 21.5 10.9
LOS by Move: * B B B B B B B B * C C C B
ApproachDel: 14.8 12.5 11.7 11.7
Delay Adj: 1.00 1.00
ApprAdjDel: 14.8 12.5 11.7 11.7
LOS by Appr: B B
AllwayAvgQ: 0.0 0.6 0.6 0.2 0.3 0.3 0.2 0.1 0.1 1.5 1.5 0.3
Note: Queue reported is the number of cars per lane.

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.42 0.58 1.00 1.00 1.92 0.08 1.00 1.00 1.00 1.00
Final Sat: 315 487 204 314 337 353 322 617 27 318 330 357
Capacity Analysis Module:
Vol/Sat: 0.02 0.79 0.77 0.24 0.90 0.35 1.34 0.19 0.19 0.58 0.33 0.64
Crit Moves: ****
Delay/Veh: 13.9 42.0 38.7 17.1 59.8 17.5 204.1 15.6 15.6 27.7 18.2 27.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.9 42.0 38.7 17.1 59.8 17.5 204.1 15.6 15.6 27.7 18.2 27.8
LOS by Move: B E E C F C F C D C D C D
ApproachDel: 40.8 43.1 163.2 163.2
Delay Adj: 1.00 1.00
ApprAdjDel: 40.8 43.1 163.2 163.2
LOS by Appr: E E F D
AllwayAvgQ: 0.0 2.8 2.5 0.3 4.4 4.4 17.0 0.2 0.2 1.2 0.5 1.5
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 2.0 Worst Case Level Of Service: [9.8]

Table with columns: Approach, Movement, Control, Rights, Lanes, Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume.

Critical Gap Module:
Critical Gap: 4.1
FollowUpTim: 2.2

Capacity Module:
Conflict Vol: 615
Potential Cap: 974
Move Cap: 974
Volume/Cap: 0.23

Level Of Service Module:
2Way95thQ: 0.9
Control Del: 9.8
LOS By Move: A
Movement: LT - LTR - RT
Shared Cap: xxxxxx
SharedQueue: xxxxxx
Shrd ConDel: xxxxxx
Shared LOS: *
ApproachDel: xxxxxx
ApproachLOS: *

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.2 Worst Case Level Of Service: [18.2]

Table with columns: Approach, Movement, Control, Rights, Lanes, Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume.

Critical Gap Module:
Critical Gap: 6.9
FollowUpTim: 3.5

Capacity Module:
Conflict Vol: xxxxxx
Potential Cap: xxxxxx
Move Cap: xxxxxx
Volume/Cap: 0.05

Level Of Service Module:
2Way95thQ: xxxxxx
Control Del: xxxxxx
LOS By Move: C
Movement: LT - LTR - RT
Shared Cap: xxxxxx
SharedQueue: xxxxxx
Shrd ConDel: xxxxxx
Shared LOS: *
ApproachDel: xxxxxx
ApproachLOS: C

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Cycle (sec): 100
Loss Time (sec): 0
Optimal Cycle: 0
Approach: North Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Average Delay (sec/veh): 0.3
Worst Case Level of Service: B(12.5)
Approach: North Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Volume Module:
Base Vol: 63 147 1 5 366 201 488 0 89 7 5 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 63 147 1 5 366 201 488 0 89 7 5 30

Volume Module:
Base Vol: 0 437 1 0 621 0 0 2 17 1 0 0 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.15 0.17 0.17 0.38 0.38 0.98 xxxxx 0.15 0.03 0.03 0.06
Crit Moves: ***
Delay/Veh: 12.7 12.3 12.3 14.5 14.5 13.2 62.6 0.0 9.8 11.0 11.0 10.2

Capacity Analysis Module:
Vol/Sat: 0.15 0.17 0.17 0.38 0.38 0.98 xxxxx 0.15 0.03 0.03 0.06
Crit Moves: ***
Delay/Veh: 12.7 12.3 12.3 14.5 14.5 13.2 62.6 0.0 9.8 11.0 11.0 10.2

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.346
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Ignore Protected Protected
 Min. Green: 1 0 2 0 0 0 2 0 0 2 0 0 1 0 0 0 0 0
 Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0

Volume Module:
 Base Vol: 28 589 0 0 476 153 177 0 20 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 28 589 0 0 476 153 177 0 20 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 28 589 0 0 476 0 177 0 20 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 28 589 0 0 476 0 177 0 20 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 28 589 0 0 476 0 177 0 20 0 0
 OvAdjVol: 28 589 0 0 476 0 177 0 20 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0

Capacity Analysis Module:
 Vol/Sat: 0.02 0.18 0.00 0.00 0.15 0.00 0.06 0.00 0.01 0.00 0.00
 OviAdjV/S: 0.00 0.00
 Crit Moves: ****

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.626
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level of Service: B

Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected
 Rights: Ignore Include Include
 Min. Green: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0
 Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
 Base Vol: 132 5 161 309 2 18 14 123 171 414 84 239
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 132 5 161 309 2 18 14 123 171 414 84 239
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 132 5 0 309 2 18 14 123 171 414 84 239
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 132 5 0 309 2 18 14 123 171 414 84 239
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 132 5 0 309 2 18 14 123 171 414 84 239
 OvAdjVol: 132 5 0 309 2 18 14 123 171 414 84 239

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.89 0.11 1.00 1.00 1.00 2.00 1.00
 Final Sat.: 1600 1600 1600 1600 1425 175 1600 1600 1600 2880 1600

Capacity Analysis Module:
 Vol/Sat: 0.08 0.00 0.00 0.19 0.00 0.10 0.01 0.08 0.11 0.14 0.05
 Crit Moves: ****

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.342
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 30 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R L-T-R
 Control: Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 0 14 0 85 0 1028 0 805 16
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 14 0 85 0 1028 0 805 16
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 14 0 85 0 1028 0 805 16
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 14 0 85 0 1028 0 805 16
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 0 14 0 85 0 1028 0 805 16

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 Final Sat.: 0 0 0 0 1425 0 1425 1425 4275 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.06 0.00 0.00 0.24 0.00 0.00 0.28 0.01
 Crit Vol: 85 0
 Crit Moves: ****

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.163
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.2
 Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 0 1 0 0 1 1 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 0 36 58 176 0 0 121 54
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 36 58 176 0 0 121 54
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 36 58 176 0 0 121 54
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 36 58 176 0 0 121 54
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 0 36 58 176 0 0 121 54

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.50 1.50 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 0 632 719 355 1114 0 0 1405 814

Capacity Analysis Module:
 Vol/Sat: xxx xxx xxx 0.05 0.16 0.16 xxx xxx 0.09 0.07
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 0.0 0.0 7.6 8.6 8.4 0.0 0.0 8.2 7.3
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 7.6 8.6 8.4 0.0 0.0 8.2 7.3
 LOS by Move: * * * * A A * *
 ApproachDel: xxxxxx 7.6 8.4 7.9
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 7.6 8.4 7.9
 LOS by Appr: * A A A A
 AllwayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.2 0.2 0.0 0.0 0.1 0.1

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Note: Queue reported is the number of cars per lane.

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Scenario: 2015 NEPA PM Scenario Report

Command: 2015 NEPA PM
Volume: 2015 NEPA PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NEPA

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Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	D 26.6	0.927	D 26.6	0.927 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 19.0	0.756	C 19.0	0.756 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 19.1	0.000	C 19.1	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.1	0.000	B 10.1	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.4	0.000	B 10.4	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 19.1	0.824	C 19.1	0.824 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.329	A xxxxx	0.329 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.600	A xxxxx	0.600 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.4	0.164	A 8.4	0.164 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.469	A xxxxx	0.469 + 0.000 D/V

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.927
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 26.6
Optimal Cycle: 0 Level of Service: D

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 3 313 39 52 196 177 370 58 8 82 37 225
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 3 313 39 52 196 177 370 58 8 82 37 225
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 3 313 39 52 196 177 370 58 8 82 37 225
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 3 313 39 52 196 177 370 58 8 82 37 225

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.78 0.22 1.00 1.00 1.00 1.00 1.76 0.24 1.00 1.00 1.00
Final Sat.: 364 697 88 373 397 429 399 716 100 365 384 421

Capacity Analysis Module:
Vol/Sat: 0.01 0.45 0.44 0.14 0.49 0.41 0.93 0.08 0.08 0.22 0.10 0.53
Crit Moves: ****
Delay/Veh: 12.1 17.9 17.7 13.3 19.0 15.8 57.2 11.8 11.7 14.6 12.5 19.1
AdjDel/Veh: 12.1 17.9 17.7 13.3 19.0 15.8 57.2 11.8 11.7 14.6 12.5 19.1
LOS by Move: B C C B C C F B B B B C
ApproachDel: 17.8 17.0 50.3 17.3
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 17.8 17.0 50.3 17.3
LOS by Appr: C
AllWayAvgQ: 0.0 0.7 0.7 0.1 0.8 0.8 5.0 0.1 0.1 0.3 0.1 1.0

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.756
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 19.0
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 371 3 161 57 113 212 75 0 318 22 144
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 371 3 161 57 113 212 75 0 318 22 144
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 371 3 161 57 113 212 75 0 318 22 144
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 371 3 161 57 113 212 75 0 318 22 144

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 390 832 7 388 407 444 420 440 0 420 29 516

Capacity Analysis Module:
Vol/Sat: 0.00 0.45 0.45 0.41 0.14 0.25 0.51 0.17 xxxxx 0.76 0.76 0.28
Crit Moves: ****
Delay/Veh: 0.0 16.9 16.9 17.2 12.3 12.8 18.5 11.9 0.0 30.2 30.2 11.9
AdjDel/Veh: 0.0 16.9 16.9 17.2 12.3 12.8 18.5 11.9 0.0 30.2 30.2 11.9
LOS by Move: * C C C B B C B * D D B
ApproachDel: 16.9 14.9 16.8 16.8
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 16.9 14.9 16.8 16.8
LOS by Appr: C
AllWayAvgQ: 0.0 0.7 0.7 0.6 0.1 0.3 0.9 0.2 0.2 2.4 2.4 0.4

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 3.7 Worst Case Level Of Service: [B, 10.1]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: [C, 19.1]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 412 246 0 0 455 132 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 412 246 0 0 455 132 0 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 412 246 0 0 455 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0
FinalVolume: 412 246 0 0 455 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 0 692 0 0 455 0 0 0 0 0 19 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 692 0 0 455 0 0 0 0 0 19 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 692 0 0 455 0 0 0 0 0 19 0 0 0 0 0 0 0 0 0
Reduct Vol: 0
FinalVolume: 0 692 0 0 455 0 0 0 0 0 19 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 455 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap: 1116 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap: 1116 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.37 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 1.7 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 10.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2015
 NEPA

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.329
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 26 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
 Rights: Include Ignore Protected Protected
 Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0
 Volume Module:
 Base Vol: 31 559 0 0 386 92 156 0 27 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 31 559 0 0 386 92 156 0 27 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 31 559 0 0 386 92 156 0 27 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 31 559 0 0 386 92 156 0 27 0 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MFL Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 31 559 0 0 386 92 156 0 27 0 0 0 0
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.02 0.17 0.00 0.00 0.12 0.00 0.05 0.00 0.02 0.00 0.00 0.00
 OvlAdjV/S: 0.00

Crit Moves: ****

Middle Harbor EIR
 Future Year 2015
 NEPA

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.600
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 40 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected
 Rights: Ignore Include Include
 Min. Green: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
 Volume Module:
 Base Vol: 113 2 255 219 1 12 49 33 195 491 33 213

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 113 2 255 219 1 12 49 33 195 491 33 213
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 113 2 255 219 1 12 49 33 195 491 33 213
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 113 2 255 219 1 12 49 33 195 491 33 213
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MFL Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 113 2 255 219 1 12 49 33 195 491 33 213
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1434 166 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
 Vol/Sat: 0.07 0.00 0.00 0.14 0.00 0.07 0.03 0.02 0.12 0.17 0.02 0.13
 Crit Moves: ****

Middle Harbor EIR
Future Year 2015
NEPA

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.164
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 0 1

Volume Module:
Base Vol: 0 0 0 0 78 0 12 53 107 0 0 0 128
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 0 78 0 12 53 107 0 0 0 128
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 0 78 0 12 53 107 0 0 0 128
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 0 78 0 12 53 107 0 0 0 128

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.73 0.27 0.66 1.34 0.00 0.00 2.00 1.00 1.00
Final Sat.: 0 0 0 0 614 509 185 443 940 0 0 1350 780

Capacity Analysis Module:
Vol/Sat: xxxx xxxx xxxx 0.13 0.00 0.06 0.12 0.11 xxxx xxxx 0.00 0.16
Crit Moves: *** **

Delay/Veh: 0.0 0.0 0.0 9.1 8.0 8.0 8.7 8.3 0.0 0.0 0.0 8.0
AdjDel/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
LOS by Move: * * * A A A A * * * * *
ApproachDel: xxxxxx 8.7 8.4 8.0
Delay Adj: xxxxxx 1.00 1.00
ApprAdjDel: xxxxxx 8.7 8.4 8.0

LOS by Appr: * A A A 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.2
AllwayAvgQ: 0.0 0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.0 0.0

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
NEPA

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.469
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 0 29 0 142 0 1287 0 0 1052 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 0 29 0 142 0 1287 0 0 1052 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 0 29 0 142 0 1287 0 0 1052 18
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 29 0 142 0 1287 0 0 1052 18

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.00 0.00 0.00 2.00 1.00 1.00
Final Sat.: 0 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.10 0.00 0.30 0.00 0.00 0.00 0.37 0.01
Crit Vol: 0 142 0 526
Crit Moves: ****

Middle Harbor EIR
Future Year 2015
No Project

Scenario Report

2015 NP AM

Command: 2015 NP AM
Volume: 2015 NP AM Peak

Geometry: Future

Impact Fee: Default Impact Fee

Trip Generation: Default Trip Generation

Trip Distribution: Default Trip Distribution

Paths: Default Path

Routes: Default Route

Configuration: NP

Middle Harbor EIR
Future Year 2015
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	D 34.4	0.933	D 34.4	0.933 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 13.9	0.621	B 13.9	0.621 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	B 11.7	0.000	B 11.7	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.4	0.000	A 9.4	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.2	0.000	B 11.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 33.3	1.014	D 33.3	1.014 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.406	A xxxxx	0.406 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.582	A xxxxx	0.582 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.6	0.133	A 7.6	0.133 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.360	A xxxxx	0.360 + 0.000 V/C

Middle Harbor EIR
Future Year 2015
No Project

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.933

Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 34.4

Optimal Cycle: 0 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound

Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 0 1 1 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 1 257 125 51 309 199 307 25 8 228 206 209

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 1 257 125 51 309 199 307 25 8 228 206 209

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 1 257 125 51 309 199 307 25 8 228 206 209

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 1 257 125 51 309 199 307 25 8 228 206 209

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 1 257 125 51 309 199 307 25 8 228 206 209

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.35 0.65 1.00 1.00 1.00 1.00 1.52 0.48 1.00 1.00 1.00

Final Sat: 311 453 227 331 359 378 329 497 162 344 359 385

Capacity Analysis Module:

Vol/Sat: 0.00 0.57 0.55 0.15 0.86 0.53 0.93 0.05 0.05 0.66 0.57 0.54

Crit Moves: *** **

Delay/Veh: 13.6 24.7 23.2 14.9 49.0 21.0 66.4 13.5 13.2 29.8 23.9 21.2

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 13.6 24.7 23.2 14.9 49.0 21.0 66.4 13.5 13.2 29.8 23.9 21.2

LOS by Move: C C C B E C F B B D C C

ApproachDel: 24.2 1.00 35.9 61.2 61.2 25.1

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApprAdjDel: 24.2 1.00 35.9 61.2 61.2 25.1

LOS by Appr: C E F D

AllwayAvgQ: 0.0 1.1 1.0 0.2 3.6 4.8 0.0 0.0 1.6 1.1 1.0

Note: Queue reported is the number of cars per lane.

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Middle Harbor EIR
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No Project

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.621

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 13.9

Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound

Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 0 336 2 19 142 76 58 13 0 312 11 137

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 336 2 19 142 76 58 13 0 312 11 137

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 336 2 19 142 76 58 13 0 312 11 137

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 336 2 19 142 76 58 13 0 312 11 137

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 0 336 2 19 142 76 58 13 0 312 11 137

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.99 0.01 1.00 1.30 0.70 1.00 1.00 0.00 0.97 0.03 1.00

Final Sat: 468 1005 6 450 640 361 453 481 0 503 18 620

Capacity Analysis Module:

Vol/Sat: 0.00 0.33 0.33 0.04 0.22 0.21 0.13 0.03 xxxxx 0.62 0.62 0.22

Crit Moves: *** **

Delay/Veh: 0.0 12.7 12.7 10.6 11.5 10.9 11.1 9.8 0.0 19.4 19.4 9.8

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 0.0 12.7 12.7 10.6 11.5 10.9 11.1 9.8 0.0 19.4 19.4 9.8

LOS by Move: * B B B B B A * C C A

ApproachDel: 12.7 11.2 11.2 10.9 10.9 16.5

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApprAdjDel: 12.7 11.2 11.2 10.9 10.9 16.5

LOS by Appr: B B C

AllwayAvgQ: 0.0 0.4 0.4 0.0 0.3 0.2 0.1 0.0 0.0 1.4 1.4 0.3

Note: Queue reported is the number of cars per lane.

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Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 0.5 Worst Case Level of Service: B(11.2)
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 0 1 0 0 1
Volume Module:
Base Vol: 13 385 8 6 516 0 0 2 29 0 0 0 0 0 0 3
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 13 385 8 6 516 0 0 2 29 0 0 0 0 0 0 3
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 13 385 8 6 516 0 0 2 29 0 0 0 0 0 0 3
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 13 385 8 6 516 0 0 2 29 0 0 0 0 0 0 3

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: 516 xxxxx xxxxx 393 xxxxx xxxxx 747 947 258 686 943 197
Potential Cap: 1060 xxxxx xxxxx 1177 xxxxx xxxxx 305 263 747 338 265 818
Move Cap: 1060 xxxxx xxxxx 1177 xxxxx xxxxx 300 259 747 318 260 818
Volume/Cap: 0.01 xxxxx xxxxx 0.00 0.01 0.04 0.00 0.00 0.00 0.00

Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del: 8.4 xxxxx xxxxx 8.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 9.4
LOS by Move: A * * * * *
Movement: LT-LTR-RT LT-LTR-RT LT-LTR-RT LT-LTR-RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx 259 xxxxx 666 0 xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx 0.1 xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx 19.0 xxxxx 10.7 xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Cycle (sec): 100 Critical Vol./Cap.(X): 1.014
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 33.3
Optimal Cycle: 0 Level of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 1 0 1 0 1 0 0 1 0 0 1
Volume Module:
Base Vol: 88 87 1 6 538 286 474 0 50 26 1 40
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 88 87 1 6 538 286 474 0 50 26 1 40
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 88 87 1 6 538 286 474 0 50 26 1 40
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 88 87 1 6 538 286 474 0 50 26 1 40
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 88 87 1 6 538 286 474 0 50 26 1 40

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 0.02 1.98 1.00 1.00 0.00 1.00 0.96 0.04 1.00
Final Sat: 384 801 9 11 960 537 468 0 538 383 15 457
Capacity Analysis Module:
Vol/Sat: 0.23 0.11 0.11 0.56 0.56 0.53 1.01 xxxxx 0.09 0.07 0.07 0.09
Crit Moves: *** **

Delay/Veh: 14.4 12.3 12.3 19.0 19.0 16.6 72.9 0.0 9.8 12.0 12.0 10.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.4 12.3 12.3 19.0 19.0 16.6 72.9 0.0 9.8 12.0 12.0 10.9
LOS by Move: B B B C C C F * A B B B
ApproachDel: 13.4 18.2 18.2 66.8 11.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 13.4 18.2 18.2 66.8 11.3
LOS by Appr: B C
AllWayAvgQ: 0.3 0.1 0.1 1.2 1.2 1.1 8.1 8.1 0.1 0.1 0.1 0.1
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.406
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Ignore Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 34 529 0 0 764 195 148 0 16 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 34 529 0 0 764 195 148 0 16 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 34 529 0 0 764 195 148 0 16 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 34 529 0 0 764 195 148 0 16 0 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00
Final Sat.: 1600 3200 0 0 3200 3200 3200 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.17 0.00 0.00 0.00 0.00 0.05 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.582
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0

Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 191 2 530 323 0 11 6 80 59 377 108 164
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 191 2 530 323 0 11 6 80 59 377 108 164
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 191 2 530 323 0 11 6 80 59 377 108 164
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 191 2 530 323 0 11 6 80 59 377 108 164
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.93 0.07 1.00 1.15 0.85 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1495 105 1600 1842 1358 3200 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.12 0.00 0.00 0.20 0.00 0.10 0.00 0.04 0.04 0.12 0.07 0.10
OvlAdjV/S: ****
Crit Moves: ****

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.133
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.6
 Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 0 1 0 0 1 0 0 1 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 0 26 11 82 0 0 123 117
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 26 11 82 0 0 123 117
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 26 11 82 0 0 123 117
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 26 11 82 0 0 123 117
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 0 26 11 82 0 0 123 117

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 0.24 1.76 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 0 659 755 173 1307 0 0 1503 881

Capacity Analysis Module:
 Vol/Sat: xxxxxx xxxxxx 0.03 0.06 0.06 xxxxxx xxxxxx 0.08 0.13
 Crit Moves: *** **

Delay/Veh: 0.0 0.0 0.0 0.0 7.3 7.9 7.8 0.0 0.0 7.9 7.4
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 7.3 7.9 7.8 0.0 0.0 7.9 7.4
 LOS by Move: * * * * A * * * A * * A * A * A *
 ApproachDel: xxxxxx 7.3 A 7.8 7.6
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 7.3 7.8 7.6
 LOS by Appr: * A A A A A A A A A A A A
 AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.1 0.1 0.0 0.0 0.1 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.360
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 31 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 3 0 81 0 960 0 864 11
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 81 0 960 0 864 11
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 81 0 960 0 864 11
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 81 0 960 0 864 11
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 3 0 81 0 960 0 864 11

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 3.00 0.00 0.00 2.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.06 0.00 0.22 0.00 0.00 0.30 0.01
 Crit Moves: 0 81 0 ****

Middle Harbor EIR
Future Year 2015
No Project

Scenario Report

2015 NP MD

Command: 2015 NP MD
Volume: 2015 NP MD Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NP

Middle Harbor EIR
Future Year 2015
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 91.3	1.385	F 91.3	1.385 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 23.4	0.869	C 23.4	0.869 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 19.5	0.000	C 19.5	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.8	0.000	B 10.8	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 12.7	0.000	B 12.7	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 66.9	1.241	F 66.9	1.241 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.365	A xxxxx	0.365 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.665	B xxxxx	0.665 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.8	0.110	A 7.8	0.110 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.340	A xxxxx	0.340 + 0.000 V/C

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.385
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 91.3
Optimal Cycle: 0 Level of Service: F

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: 0
Min. Green: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 5 469 132 80 365 165 406 64 6 195 152 320
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 5 469 132 80 365 165 406 64 6 195 152 320
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 5 469 132 80 365 165 406 64 6 195 152 320
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 5 469 132 80 365 165 406 64 6 195 152 320
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 5 469 132 80 365 165 406 64 6 195 152 320

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.56 0.44 1.00 1.00 1.00 1.00 1.83 0.17 1.00 1.00 1.00
Final Sat.: 301 505 145 296 318 332 293 544 51 309 321 347

Capacity Analysis Module:
Vol/Sat: 0.02 0.93 0.91 0.27 1.15 0.50 1.39 0.12 0.12 0.63 0.47 0.92
Crit Moves: ****
Delay/Veh: 14.6 67.4 63.2 18.7 131 23.0 224.9 15.9 15.9 31.8 23.1 63.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.6 67.4 63.2 18.7 131 23.0 224.9 15.9 15.9 31.8 23.1 63.2
LOS by Move: B F C F C F C F C D C F
ApproachDel: 66.1 86.8 194.2 44.9
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 66.1 86.8 194.2 44.9
LOS by Appr: F F F E
AllwayAvgQ: 0.0 5.0 4.5 0.3 10.3 10.3 17.1 0.1 0.1 1.5 0.8 4.8
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.869
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 23.4
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: 0
Min. Green: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 529 6 82 255 24 31 14 0 403 4 157
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 529 6 82 255 24 31 14 0 403 4 157
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 529 6 82 255 24 31 14 0 403 4 157
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 529 6 82 255 24 31 14 0 403 4 157
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 529 6 82 255 24 31 14 0 403 4 157

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.83 0.17 1.00 1.00 0.00 0.99 0.01 1.00
Final Sat.: 423 911 10 406 796 75 384 405 0 464 5 544

Capacity Analysis Module:
Vol/Sat: 0.00 0.58 0.58 0.20 0.32 0.32 0.08 0.03 xxxxx 0.87 0.87 0.29
Crit Moves: ****
Delay/Veh: 0.0 20.0 19.9 13.2 14.2 14.0 12.1 11.2 0.0 42.0 42.0 11.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 20.0 19.9 13.2 14.2 14.0 12.1 11.2 0.0 42.0 42.0 11.6
LOS by Move: * C C B B B B E B * E E B
ApproachDel: 20.0 14.0 11.8 11.8 33.6
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 20.0 14.0 11.8 11.8 33.6
LOS by Appr: C B B D
AllwayAvgQ: 0.0 1.2 1.2 0.2 0.4 0.4 0.1 0.0 0.0 4.1 4.1 0.4
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: [I 19.5]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 646 0 0 643 0 0 0 0 0 7 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 646 0 0 643 0 0 0 0 7 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 646 0 0 643 0 0 0 0 7 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 646 0 0 643 0 0 0 0 7 0 0

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 968 xxxxx 323
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 255 xxxxx 679
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 255 xxxxx 679
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.03 xxxxx 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.1 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 19.5 xxxxx xxxxx
LOS by Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: C

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: [I 10.8]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 330 222 0 0 643 244 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 330 222 0 0 643 244 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 330 222 0 0 643 244 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 330 222 0 0 643 244 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 643 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 951 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 951 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.35 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 1.6 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 10.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: *

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.3 Worst Case Level of Service: B(12.7)

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 0 1 0 0 1

Volume Module:
Base Vol: 0 458 2 0 651 0 0 2 18 1 0 0 5
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gap: xxxxx xxxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 1.241

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 66.9
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 1 0 1 0 1 0 0 1 0 1 0 1

Volume Module:
Base Vol: 64 95 1 5 411 193 619 0 113 9 5 34
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 0.02 1.98 1.00 1.00 0.00 1.00 0.64 0.36 1.00

Capacity Analysis Module:
Vol/Sat: 0.16 0.11 0.11 0.43 0.43 0.36 1.24 xxxxx 0.19 0.03 0.03 0.07
Crit Moves: ****

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.365
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Ignore Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 33 647 0 0 500 181 201 0 24 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 33 647 0 0 500 181 201 0 24 0 0 0 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 33 647 0 0 500 0 201 0 24 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 33 647 0 0 500 0 201 0 24 0 0 0 0
OvAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 0 1600 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.20 0.00 0.00 0.16 0.00 0.06 0.00 0.02 0.00 0.00 0.00
OvAdjV/S: 0.00

Crit Moves: ****

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.665
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected
Rights: Ignore Include Include Include
Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 122 6 179 362 2 19 14 103 182 476 76 250

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 122 6 179 362 2 19 14 103 182 476 76 250

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 122 6 0 362 2 19 14 103 182 476 76 250
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 122 6 0 362 2 19 14 103 182 476 76 250
OvAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.00 1.00 1.00 0.90 0.10 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1441 159 1600 1600 1600 3200 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.08 0.00 0.00 0.23 0.00 0.12 0.01 0.06 0.11 0.15 0.05 0.16
OvAdjV/S: ****

Crit Moves: *****

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.340
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 30 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R L T R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0 0 0
 Lanes: 0

Volume Module:
 Base Vol: 0 0 0 0 14 0 71 3 1042 0 0 828 16
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 14 0 71 3 1042 0 0 828 16
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 14 0 71 3 1042 0 0 828 16
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 14 0 71 3 1042 0 0 828 16
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 0 14 0 71 3 1042 0 0 828 16

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 Final Sat: 0 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.05 0.00 0.24 0.00 0.00 0.00 0.29 0.01
 Crit Moves: 0 0 71 0 414

Volume Module:
 Base Vol: 0 0 0 0 38 67 88 0 0 53 33
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 38 67 88 0 0 53 33
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 38 67 88 0 0 53 33
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 38 67 88 0 0 53 33
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 0 38 67 88 0 0 53 33

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 0.00 0.00 0.00 0.00 0.686 792 608 862 0 0 1452 845
 Lanes: 0 0 0 0 0 686 792 608 862 0 0 1452 845
 Final Sat: 0 0 0 0 0 0 0 0 0 0 0 0 0

Capacity Analysis Module:
 Vol/Sat: xxxxx xxxxx xxxxx 0.05 0.11 0.10 xxxxx xxxxx 0.04 0.04
 Crit Moves: 0.0 0.0 0.0 0.0 7.2 8.4 7.9 0.0 0.0 7.8 7.1
 Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 LOS by Move: * * * A * * *
 ApproachDel: xxxxxx 7.2 8.1 7.5
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 7.2 8.1 7.5
 LOS by Appr: * A A A
 AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.1 0.1 0.0 0.0 0.0 0.0 0.0
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.110
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 7.8
 Optimal Cycle: 7.8 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 1 1 0 0 1 0 0 0 2 0 1
 Lanes: 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 0 0 0 0 38 67 88 0 0 53 33
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 38 67 88 0 0 53 33
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 38 67 88 0 0 53 33
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 38 67 88 0 0 53 33
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 0 38 67 88 0 0 53 33

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 0.86 1.14 0.00 0.00 2.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 0.686 792 608 862 0 0 1452 845
 Final Sat: 0 0 0 0 0 0 0 0 0 0 0 0 0

Capacity Analysis Module:
 Vol/Sat: xxxxx xxxxx xxxxx 0.11 0.10 xxxxx xxxxx 0.04 0.04
 Crit Moves: 0.0 0.0 0.0 0.0 7.2 8.4 7.9 0.0 0.0 7.8 7.1
 Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 LOS by Move: * * * A * * *
 ApproachDel: xxxxxx 7.2 8.1 7.5
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 7.2 8.1 7.5
 LOS by Appr: * A A A
 AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.1 0.1 0.0 0.0 0.0 0.0 0.0
 Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Scenario Report

Command: 2015 NP PM
Volume: 2015 NP PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NP

Middle Harbor EIR
Future Year 2015
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	E 41.2	1.102	E 41.2	1.102 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 23.9	0.876	C 23.9	0.876 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 19.1	0.000	C 19.1	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.5	0.000	B 10.5	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.3	0.000	B 10.3	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 32.8	1.012	D 32.8	1.012 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.334	A xxxxx	0.334 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.605	B xxxxx	0.605 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.2	0.161	A 8.2	0.161 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.498	A xxxxx	0.498 + 0.000 V/C

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.102
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 41.2
Optimal Cycle: 0 Level of Service: E

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 4 368 43 55 201 182 400 76 9 108 85 283
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 4 368 43 55 201 182 400 76 9 108 85 283
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 4 368 43 55 201 182 400 76 9 108 85 283
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 4 368 43 55 201 182 400 76 9 108 85 283
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 4 368 43 55 201 182 400 76 9 108 85 283

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.79 0.21 1.00 1.00 1.00 1.00 1.79 0.21 1.00 1.00 1.00
Final Sat.: 340 656 77 342 365 391 363 654 78 349 366 401

Capacity Analysis Module:
Vol/Sat: 0.01 0.56 0.56 0.16 0.55 0.47 1.10 0.12 0.12 0.31 0.23 0.71
Crit Moves: ****
Delay/Veh: 13.0 23.4 23.1 14.7 23.1 18.9 109.4 13.2 13.1 17.0 15.0 29.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.0 23.4 23.1 14.7 23.1 18.9 109.4 13.2 13.1 17.0 15.0 29.3
LOS by Move: B C C B C C F B B C B D
ApproachDel: 23.3 20.3 92.5
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 23.3 20.3 92.5
LOS by Appr: C
AllwayAvgQ: 0.0 1.1 1.1 0.2 1.1 1.1 9.8 0.1 0.1 0.4 0.3 2.0

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.876
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 23.9
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 518 3 156 68 54 96 32 0 397 9 154
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 518 3 156 68 54 96 32 0 397 9 154
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 518 3 156 68 54 96 32 0 397 9 154
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 518 3 156 68 54 96 32 0 397 9 154
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 518 3 156 68 54 96 32 0 397 9 154

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.11 0.89 1.00 1.00 0.00 0.98 0.02 1.00
Final Sat.: 416 897 5 391 460 390 396 418 0 453 10 538

Capacity Analysis Module:
Vol/Sat: 0.00 0.58 0.58 0.40 0.15 0.14 0.24 0.08 xxxxx 0.88 0.88 0.29
Crit Moves: ****
Delay/Veh: 0.0 20.1 20.1 16.9 12.3 11.6 13.8 11.4 0.0 43.1 43.1 11.7
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 20.1 20.1 16.9 12.3 11.6 13.8 11.4 0.0 43.1 43.1 11.7
LOS by Move: * C C C B B B B * E E B
ApproachDel: 20.1 14.7 13.2
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 20.1 14.7 13.2
LOS by Appr: C
AllwayAvgQ: 0.0 1.2 1.2 0.6 0.2 0.1 0.3 0.1 0.1 4.2 4.2 0.4

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: [I 19.1]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 734 0 0 427 0 0 0 0 0 0 0 0 8 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 734 0 0 427 0 0 0 0 0 0 0 0 8 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 734 0 0 427 0 0 0 0 0 0 0 0 8 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 734 0 0 427 0 0 0 0 0 0 0 0 8 0 0

Critical Gap Module:
Critical Gp: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 6.8 xxxxx 6.9
FollowUpTm: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 948 xxxxx 367
Potential Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 263 xxxxx 636
Move Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 263 xxxxx 636
Volume/Cap: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 0.03 xxxxx 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 0.1 xxxxx xxxxxx
Control Del: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 19.1 xxxxx xxxxxx

LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
Shrd ConDel: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * * 19.1 C

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 4.7 Worst Case Level Of Service: [I 10.5]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 492 188 0 0 427 165 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 492 188 0 0 427 165 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 492 188 0 0 427 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 492 188 0 0 427 0 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
FollowUpTm: 2.2 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx

Capacity Module:
Conflict Vol: 427 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
Potential Cap.: 1143 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
Move Cap.: 1143 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
Volume/Cap: 0.43 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx

Level Of Service Module:
2Way95thQ: 2.2 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
Control Del: 10.5 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx

LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
Shrd ConDel: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * * xxxxxx

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.334
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ignore Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0

Volume Module:
Base Vol: 36 583 0 0 369 107 167 0 35 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 36 583 0 0 369 107 167 0 35 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 36 583 0 0 369 0 167 0 35 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 36 583 0 0 369 0 167 0 35 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 0 1600 0 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.18 0.00 0.00 0.12 0.00 0.05 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

Middle Harbor EIR
Future Year 2015
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Critical Vol./Cap.(X): 0.605
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Split Phase Split Phase Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 116 3 266 215 1 13 50 15 210 534 29 201
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 116 3 266 215 1 13 50 15 210 534 29 201
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 116 3 0 215 1 13 50 15 210 534 29 201
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 116 3 0 215 1 13 50 15 210 534 29 201
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.89 0.11 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1418 182 1600 1600 1600 3200 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.13 0.00 0.07 0.03 0.01 0.13 0.17 0.02 0.13
OvlAdjV/S: ****
Crit Moves: ****

Middle Harbor EIR
 Future Year 2015
 No Project

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.161
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.2
 Optimal Cycle: 0 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 74 0 12 54 47 0 0 0 130
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 74 0 12 54 47 0 0 0 130
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 74 0 12 54 47 0 0 0 130
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 74 0 12 54 47 0 0 0 130
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 74 0 12 54 47 0 0 0 130

Saturation Flow Module:
 Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Adjustment: 0.00 0.00 0.00 1.00 0.72 0.28 1.00 1.00 0.00 0.00 2.00 1.00
 Lanes: 0 0 0 632 518 201 652 717 0 0 1392 807
 Final Sat: 0 0 0 0.12 0.06 0.08 0.07 xxxx xxxxx 0.00 0.16
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxxx
 Crit Moves: 0.0 0.0 0.0 8.9 7.8 7.8 8.6 7.9 0.0 0.0 0.0 7.9
 Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 8.9 7.8 7.8 8.6 7.9 0.0 0.0 0.0 7.9
 LOS by Move: * * * * A A A *
 ApproachDel: xxxxxx 8.5 A A 8.3 7.9
 Delay Adj: xxxxxx 1.00 1.00
 AppradjDel: xxxxxx 8.5 8.3
 LOS by Appr: * A A A A A
 AllwayAvgQ: 0.0 0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.2

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2015
 No Project

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.498
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 40 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 30 0 145 0 1305 0 0 1129 19
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 30 0 145 0 1305 0 0 1129 19
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 30 0 145 0 1305 0 0 1129 19
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 30 0 145 0 1305 0 0 1129 19
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 30 0 145 0 1305 0 0 1129 19

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00 1.00
 Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.10 0.00 0.31 0.00 0.00 0.40 0.01
 Crit Volume: 145 0
 Crit Moves: *****

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2015
 Future Year Baseline

Scenario Report
 2015 Future Year Baseline AM
 Command: 2015 Future Year Baseline AM
 Volume: 2015 Future Year Baseline AM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

Middle Harbor EIR
 Future Year 2015
 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	E 38.5	1.077	E 38.5	1.077 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 11.6	0.495	B 11.6	0.495 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	A 10.0	0.000	A 10.0	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 8.4	0.000	A 8.4	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.1	0.000	B 10.1	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 25.6	0.925	D 25.6	0.925 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.350	A xxxxx	0.350 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.565	A xxxxx	0.565 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 7.9	0.137	A 7.9	0.137 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.356	A xxxxx	0.356 + 0.000 V/C

Middle Harbor EIR
Future Year 2015
Future Year Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.077
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 38.5
Optimal Cycle: 0 Level Of Service: E

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0

Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 1 238 102 50 250 206 391 20 5 178 183 151
Growth Adj: 1.00
Initial Bse: 1 238 102 50 250 206 391 20 5 178 183 151
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 1 238 102 50 250 206 391 20 5 178 183 151
Reduced Vol: 0
PCE Adj: 1 238 102 50 250 206 391 20 5 178 183 151
MLF Adj: 1.00
FinalVolume: 1 238 102 50 250 206 391 20 5 178 183 151

Saturation Flow Module:
Adjustment: 1.00
Lanes: 1.00 1.40 0.60 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 336 507 224 355 379 408 363 585 149 360 417 365

Capacity Analysis Module:
Vol/Sat: 0.00 0.47 0.46 0.14 0.66 0.51 1.08 0.03 0.03 0.50 0.44 0.41
Crit Moves: ****

Delay/Veh: 13.0 20.2 19.3 14.1 27.8 19.5 101.5 12.3 12.1 21.4 18.7 17.1
Delay Adj: 1.00
AdjDel/Veh: 13.0 20.2 19.3 14.1 27.8 19.5 101.5 12.3 12.1 21.4 18.7 17.1
LOS by Move: B C C B D C F B B C C C
ApproachDel: 19.9 23.1 96.1 19.2
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 19.9 23.1 96.1 19.2
LOS by Appr: C C F C
AllWayAvgQ: 0.0 0.8 0.7 0.2 1.7 9.0 0.0 0.0 0.0 0.9 0.7 0.6

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
Future Year Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.495
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.6
Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
Volume Module:
Base Vol: 0 269 2 19 144 31 26 4 0 268 6 128
Growth Adj: 1.00
Initial Bse: 0 269 2 19 144 31 26 4 0 268 6 128
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 0 269 2 19 144 31 26 4 0 268 6 128
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
FinalVolume: 0 269 2 19 144 31 26 4 0 268 6 128

Saturation Flow Module:
Adjustment: 1.00
Lanes: 1.00 1.99 0.01 1.00 1.65 0.35 1.00 1.00 0.00 0.98 0.02 1.00
Final Sat.: 504 1085 8 490 881 194 489 524 0 541 12 672

Capacity Analysis Module:
Vol/Sat: 0.00 0.25 0.25 0.04 0.16 0.16 0.05 0.01 xxxxx 0.50 0.50 0.19
Crit Moves: ****

Delay/Veh: 0.0 10.9 10.9 9.9 10.2 10.0 9.9 9.1 0.0 14.8 14.8 9.0
Delay Adj: 1.00
AdjDel/Veh: 0.0 10.9 10.9 9.9 10.2 10.0 9.9 9.1 0.0 14.8 14.8 9.0
LOS by Move: * B B A B B A A A * B B A
ApproachDel: 10.9 10.2 9.8 9.8
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 10.9 10.2 9.8 9.8
LOS by Appr: B B B A
AllWayAvgQ: 0.0 0.3 0.3 0.0 0.2 0.2 0.0 0.0 0.0 0.0 0.9 0.9 0.2

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: A [8.4]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Right:	Include	Ignore	Include	Include
Lanes:	1 0 2 0 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0

Volume Module:			
Base Vol:	166 263	0 0 332	123 0 0 0 0 0 0
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:	166 263	0 0 332	123 0 0 0 0 0 0
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:	166 263	0 0 332	0 0 0 0 0 0 0 0
Reduct Vol:	0 0 0 0	0 0 0 0	0 0 0 0 0 0 0 0
FinalVolume:	166 263	0 0 332	0 0 0 0 0 0 0 0

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
 Cnflct Vol: 332 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potent Cap: 1239 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap: 1239 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: 0.13 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
 2Way95thQ: 0.5 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: 8.4 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS By Move: A * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx xxxxxxx xxxxxxx
 ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A [10.0]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Right:	Include	Include	Include	Include
Lanes:	0 0 2 0 0	0 0 2 0 0	0 0 0 0 0	1 0 0 0 1

Volume Module:			
Base Vol:	0 378	0 0 332	0 0 0 6 0 49
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:	0 378	0 0 332	0 0 0 6 0 49
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:	0 378	0 0 332	0 0 0 6 0 49
Reduct Vol:	0 0 0 0	0 0 0 0	0 0 0 0 0 0
FinalVolume:	0 378	0 0 332	0 0 0 6 0 49

Critical Gap Module:
 Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
 Cnflct Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potent Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS By Move: A * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx xxxxxxx
 ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
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Future Year Baseline

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.7 Worst Case Level of Service: B(10.1)
Loss Time (sec): 0 (Y+R=4.0 sec) Critical Vol./Cap.(X): 0.925
Optimal Cycle: 0 Level of Service: D
Approach: North Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R
Control: Uncontrolled Stop Sign
Rights: Include Include Include
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 0 0 1
Volume Module:
Base Vol: 13 352 8 6 316 0 0 2 29 0 0 0 0 3
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 13 352 8 6 316 0 0 2 29 0 0 0 0 3
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 13 352 8 6 316 0 0 2 29 0 0 0 0 3
Reduced Vol: 0 0 0 0 0 0 0 2 29 0 0 0 0 3
FinalVolume: 13 352 8 6 316 0 0 2 29 0 0 0 0 3
Critical Gap Module:
Critical Gap: 4.1 xxxxx xxxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: 316 xxxxx xxxxxx 360 xxxxx xxxxxx 530 714 158 553 710 180
Potential Cap.: 1256 xxxxx xxxxxx 1210 xxxxx xxxxxx 436 359 866 420 361 838
Move Cap.: 1256 xxxxx xxxxxx 1210 xxxxx xxxxxx 430 354 866 400 356 838
Volume/Cap: 0.01 xxxxx xxxxx 0.00 xxxxx xxxxx 0.00 0.01 0.03 0.00 0.00 0.00

Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxxx 0.0 xxxxx xxxxxx xxxxxx xxxxxx xxxxx 0.0
Control Del: 7.9 xxxxx xxxxx 8.0 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx 9.3
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 354 xxxxx 792 0 xxxxx xxxxxx
SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 0.0 xxxxx xxxxx xxxxxx
Shrd ConDel: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 15.2 xxxxx 9.7 xxxxxx xxxxx xxxxxx
Shared LOS: * * * * * C * * A * * * *
ApproachDel: xxxxxx * * * * * 10.1 * * * * * 9.3
ApproachLOS: * * * * * B A
Note: Queue reported is the number of cars per lane.

Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
Future Year Baseline

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.925
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 25.6
Optimal Cycle: 0 Level of Service: D
Approach: North Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign
Rights: Include Include Include
Lanes: 1 0 1 1 0 0 1 0 1 0 0 0 0 1 0 0 1 0
Volume Module:
Base Vol: 86 96 1 6 353 295 452 0 46 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 86 96 1 6 353 295 452 0 46 19 1 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 86 96 1 6 353 295 452 0 46 19 1 37
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 86 96 1 6 353 295 452 0 46 19 1 37
Critical Gap Module:
Critical Gap: 4.1 xxxxx xxxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: 316 xxxxx xxxxxx 360 xxxxx xxxxxx 530 714 158 553 710 180
Potential Cap.: 1256 xxxxx xxxxxx 1210 xxxxx xxxxxx 436 359 866 420 361 838
Move Cap.: 1256 xxxxx xxxxxx 1210 xxxxx xxxxxx 430 354 866 400 356 838
Volume/Cap: 0.01 xxxxx xxxxx 0.00 xxxxx xxxxx 0.00 0.01 0.03 0.00 0.00 0.00

Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxxx 0.0 xxxxx xxxxxx xxxxxx xxxxxx xxxxx 0.0
Control Del: 7.9 xxxxx xxxxx 8.0 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx 9.3
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 354 xxxxx 792 0 xxxxx xxxxxx
SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 0.0 xxxxx xxxxx xxxxxx
Shrd ConDel: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 15.2 xxxxx 9.7 xxxxxx xxxxx xxxxxx
Shared LOS: * * * * * C * * A * * * *
ApproachDel: xxxxxx * * * * * 10.1 * * * * * 9.3
ApproachLOS: * * * * * B A
Note: Queue reported is the number of cars per lane.

Queue reported is the number of cars per lane.

Middle Harbor EIR
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Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.350
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Ignore Protected Protected Protected Protected
 Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0
 Volume Module:
 Base Vol: 28 520 0 0 598 188 132 0 14 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 28 520 0 0 598 188 132 0 14 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 28 520 0 0 598 188 132 0 14 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 28 520 0 0 598 188 132 0 14 0 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 28 520 0 0 598 188 132 0 14 0 0 0 0
 OvlAdjVol: 28 520 0 0 598 188 132 0 14 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.02 0.16 0.00 0.00 0.19 0.00 0.05 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Crit Moves: ****

Middle Harbor EIR
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Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.565
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 37 Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected Protected
 Rights: Ignore Include Include Include Include Include
 Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1
 Volume Module:
 Base Vol: 187 2 414 285 0 10 6 75 60 368 112 150

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 187 2 414 285 0 10 6 75 60 368 112 150
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 187 2 0 285 0 10 6 75 60 368 112 150
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 187 2 0 285 0 10 6 75 60 368 112 150
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 187 2 0 285 0 10 6 75 60 368 112 150
 OvlAdjVol: 187 2 0 285 0 10 6 75 60 368 112 150

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.00 1.00 1.00 0.93 0.07 1.00 1.11 0.89 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1492 108 1600 1778 1422 2880 1600 1600

Capacity Analysis Module:
 Vol/Sat: 0.12 0.00 0.00 0.18 0.00 0.09 0.00 0.04 0.04 0.13 0.07 0.09
 OvlAdjV/S: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Crit Moves: ****

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.137
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.9
 Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 0 25 11 113 0 0 172 119
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 25 11 113 0 0 172 119
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 25 11 113 0 0 172 119
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 25 11 113 0 0 172 119
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 0 25 11 113 0 0 172 119

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 0.18 1.82 0.00 0.00 2.00 1.00 1.00
 Final Sat.: 0 0 0 0 634 722 129 1339 0 0 1482 868

Capacity Analysis Module:
 Vol/Sat: xxxx xxxx xxxx 0.03 0.09 0.08 xxxx xxxx 0.12 0.14
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 0.0 0.0 7.5 8.0 7.9 0.0 0.0 8.1 7.5
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 7.5 8.0 7.9 0.0 0.0 8.1 7.5
 LOS by Move: * * * * A A * * * *
 ApproachDel: xxxxxx 7.5 A 8.0 7.9
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 7.5 8.0 7.9
 LOS by Appr: * A A A A A
 AllwayAvgQ: 0.0 0.0 0.0 0.0 0.1 0.1 0.1 0.0 0.0 0.1 0.2

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.356
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 31 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 3 0 83 0 886 0 850 10
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 83 0 886 0 850 10
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 83 0 886 0 850 10
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 83 0 886 0 850 10
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 3 0 83 0 886 0 850 10

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.06 0.00 0.21 0.00 0.00 0.30 0.01
 Crit Vol: 0 83 0
 Crit Moves: **** **
 Delay/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 LOS by Move: * * * * A A * * * *
 ApproachDel: xxxxxx 7.5 A 8.0 7.9
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 7.5 8.0 7.9
 LOS by Appr: * A A A A A
 AllwayAvgQ: 0.0 0.0 0.0 0.0 0.1 0.1 0.1 0.0 0.0 0.1 0.2

Note: Queue reported is the number of cars per lane.

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Scenario Report

2015 Future Year Baseline MD
 Command: 2015 Future Year Baseline MD
 Volume: 2015 Future Year Baseline MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

Middle Harbor EIR
 Future Year 2015
 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 95.1	1.580	F 95.1 1.580	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 15.8	0.672	C 15.8 0.672	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 16.2	0.000	C 16.2 0.000	+ 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.1	0.000	A 9.1 0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.5	0.000	B 11.5 0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 15.9	0.738	C 15.9 0.738	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.314	A xxxxx 0.314	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.581	A xxxxx 0.581	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.1	0.154	A 8.1 0.154	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.349	A xxxxx 0.349	+ 0.000 V/C

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.580
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 95.1
Optimal Cycle: 0 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 7 424 111 75 306 180 492 56 6 186 174 223
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 7 424 111 75 306 180 492 56 6 186 174 223
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 7 424 111 75 306 180 492 56 6 186 174 223
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 7 424 111 75 306 180 492 56 6 186 174 223

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.59 0.41 1.00 1.00 1.00 1.00 1.81 0.19 1.00 1.00 1.00
Final Sat.: 309 533 142 313 336 354 311 562 61 318 332 356

Capacity Analysis Module:
Vol/Sat: 0.02 0.80 0.78 0.24 0.91 0.51 1.58 0.10 0.10 0.58 0.52 0.63
Crit Moves: **** **

Delay/Veh: 14.2 43.4 41.2 17.2 61.6 22.2 303.6 14.8 14.8 27.9 24.0 27.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.2 43.4 41.2 17.2 61.6 22.2 303.6 14.8 14.8 27.9 24.0 27.3
LOS by Move: B E C F C F B B D C D
ApproachDel: 42.6 43.0 271.2 26.5
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 42.6 43.0 271.2 26.5
LOS by Appr: E E F D
AllwayAvgQ: 0.0 2.9 2.7 0.3 4.5 4.5 25.0 0.1 0.1 1.2 1.0 1.4
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.672
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.8
Optimal Cycle: 0 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 430 6 90 255 16 20 8 0 326 1 128
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 430 6 90 255 16 20 8 0 326 1 128
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 430 6 90 255 16 20 8 0 326 1 128
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 430 6 90 255 16 20 8 0 326 1 128

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.97 0.03 1.00 1.88 0.12 1.00 1.00 0.00 0.99 0.01 1.00
Final Sat.: 454 971 14 446 901 57 410 434 0 485 1 573

Capacity Analysis Module:
Vol/Sat: 0.00 0.44 0.44 0.20 0.28 0.28 0.05 0.02 xxxx 0.67 0.67 0.22
Crit Moves: **** **

Delay/Veh: 0.0 15.0 15.0 12.3 12.6 12.5 11.2 10.4 0.0 22.8 22.8 10.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 15.0 15.0 12.3 12.6 12.5 11.2 10.4 0.0 22.8 22.8 10.4
LOS by Move: * C C B B B B B * C C B
ApproachDel: 15.0 12.5 11.0 11.0 19.3
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 15.0 12.5 11.0 11.0
LOS by Appr: C B B
AllwayAvgQ: 0.0 0.7 0.7 0.2 0.4 0.4 0.0 0.0 0.0 1.7 1.7 0.3
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C [16.2]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 571 0 0 468 0 0 0 0 0 3 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 571 0 0 468 0 0 0 0 0 3 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 571 0 0 468 0 0 0 0 3 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 571 0 0 468 0 0 0 0 3 0 0

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 805 xxxxx 286
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 324 xxxxx 717
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 324 xxxxx 717
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.01 xxxxx 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 16.2 xxxxx xxxxx
LOS By Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: A [9.1]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0

Volume Module:
Base Vol: 235 272 0 0 468 213 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 235 272 0 0 468 213 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 235 272 0 0 468 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 235 272 0 0 468 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Conflict Vol: 468 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1104 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 1104 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.21 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 0.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 9.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS By Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
*****
Intersection #5 Pico Avenue, Broadway
*****
Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B(11.5)
*****
Approach: North Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 0 1

Volume Module:
Base Vol: 0 450 1 0 474 0 0 2 17 1 0 0 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 450 1 0 474 0 0 2 17 1 0 0 4
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 450 1 0 474 0 0 2 17 1 0 0 4
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 450 1 0 474 0 0 2 17 1 0 0 4

Critical Gap Module:
Critical Gp:xxxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim:xxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: *
Note: Queue reported is the number of cars per lane.
*****

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
*****
Intersection #6 Pico Avenue, Pier D Street
*****
Cycle (sec): 100 Critical Vol./Cap.(X): 0.738
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.9
Optimal Cycle: 0 Level Of Service: C
*****
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 0 1

Volume Module:
Base Vol: 63 151 1 5 237 192 382 0 88 7 5 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 63 151 1 5 237 192 382 0 88 7 5 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 63 151 1 5 237 192 382 0 88 7 5 30
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 63 151 1 5 237 192 382 0 88 7 5 30
PLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 63 151 1 5 237 192 382 0 88 7 5 30

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.04 1.96 1.00 1.00 0.00 1.00 0.58 0.42 1.00
Final Sat.: 441 936 6 21 990 563 518 0 615 263 188 515

Capacity Analysis Module:
Vol/Sat: 0.14 0.16 0.16 0.24 0.24 0.34 0.74 xxxxx 0.14 0.03 0.03 0.06
Crit Moves: ***
Delay/Veh: 11.6 11.2 11.2 11.6 11.6 11.8 25.6 0.0 9.2 10.3 10.3 9.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.6 11.2 11.2 11.6 11.6 11.8 25.6 0.0 9.2 10.3 10.3 9.5
LOS by Move: B B B B B D * A B B A
ApproachDel: 11.3 11.6 22.5 22.5 9.7
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 11.3 11.6 22.5 22.5 9.7
LOS by Appr: B B C
AllWayAvgQ: 0.1 0.2 0.2 0.3 0.3 0.5 2.3 2.3 0.2 0.0 0.0 0.1
Note: Queue reported is the number of cars per lane.
*****

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Level Of Service Computation Report
ICU l(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100
Loss Time (sec): 10 (Y+R=4.0 sec)
Optimal Cycle: 25
Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Protected Protected Protected Protected Protected Protected
Rights: Include Ignore
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0 0 0
Volume Module:
Base Vol: 26 489 0 0 334 150 176 0 20 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 26 489 0 0 334 150 176 0 20 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 26 489 0 0 334 150 176 0 20 0 0 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 26 489 0 0 334 150 176 0 20 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 26 489 0 0 334 150 176 0 20 0 0 0
OvlAdjVol:
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.15 0.00 0.00 0.00 0.10 0.00 0.06 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S:
Crit Moves:

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Level Of Service Computation Report
ICU l(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100
Loss Time (sec): 10 (Y+R=4.0 sec)
Optimal Cycle: 39
Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include
Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 0 0 0 0 0 0 0
Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 122 5 39 298 2 14 13 112 172 321 100 216
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 122 5 39 298 2 14 13 112 172 321 100 216
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 122 5 39 298 2 14 13 112 172 321 100 216
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 122 5 39 298 2 14 13 112 172 321 100 216
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 122 5 39 298 2 14 13 112 172 321 100 216
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat: 1600 1600 1600 1600 1457 143 1600 1600 1600 2880 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.08 0.00 0.00 0.19 0.00 0.10 0.01 0.07 0.11 0.11 0.06 0.14
OvlAdjV/S:
Crit Moves:

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.154
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 0 39 58 161 0 0 107 75
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 39 58 161 0 0 107 75
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 39 58 161 0 0 107 75
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 0 39 58 161 0 0 107 75

Saturation Flow Module:
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.53 1.47 0.00 0.00 2.00 1.00
Final Sat: 0 0 0 0 634 723 377 1086 0 0 1410 818

Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx xxxxx 0.05 0.15 0.15 xxxxx xxxxx 0.08 0.09
Crit Moves: **** **

Delay/Veh: 0.0 0.0 0.0 0.0 7.6 8.6 8.3 0.0 0.0 8.1 7.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 0.0 7.6 8.6 8.3 0.0 0.0 8.1 7.5
LOS by Move: * * * * A A * * A A
ApproachDel: xxxxxx 7.6 8.4 7.9
Delay Adj: xxxxxx 1.00 1.00
ApprAdjDel: xxxxxx 7.6 8.4 7.9
LOS by Appr: * A A A A A A A A A A
AllwayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.2 0.2 0.0 0.0 0.1 0.1

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.349
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 0 14 0 109 0 1023 0 0 776 16
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 14 0 109 0 1023 0 0 776 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 14 0 109 0 1023 0 0 776 16
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 0 14 0 109 0 1023 0 0 776 16

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00 1.00
Final Sat: 0 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.08 0.00 0.24 0.00 0.00 0.27 0.01
Crit Vol: 0 109 0
Crit Moves: ****

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Scenario Report

2015 Future Year Baseline PM
 Command: 2015 Future Year Baseline PM
 Volume: 2015 Future Year Baseline PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

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 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	E 39.2	1.090	E 39.2	1.090 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 17.2	0.711	C 17.2	0.711 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	B 10.2	0.000	B 10.2	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.3	0.000	A 9.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.2	0.000	B 10.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	B 13.1	0.606	B 13.1	0.606 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.288	A xxxxx	0.288 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.543	A xxxxx	0.543 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.4	0.173	A 8.4	0.173 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.476	A xxxxx	0.476 + 0.000 V/C

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.711
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 17.2
Optimal Cycle: 0 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: 0
Min. Green: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 0 438 3 188 62 20 59 21 0 343 3 120
Growth Adj: 1.00

Initial Bse: 0 438 3 188 62 20 59 21 0 343 3 120
User Adj: 1.00
PHF Adj: 1.00

PHF Volume: 0 438 3 188 62 20 59 21 0 343 3 120
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
FinalVolume: 0 438 3 188 62 20 59 21 0 343 3 120

Saturation Flow Module:
Adjustment: 1.00
Lanes: 1.00 1.99 0.01 1.00 1.51 0.49 1.00 1.00 0.00 1.00 1.00 0.00 0.99 0.01 1.00
Final Sat.: 449 965 7 432 697 231 418 443 0 482 4 572

Capacity Analysis Module:
Vol/Sat: 0.00 0.45 0.45 0.44 0.09 0.09 0.14 0.05 xxxxx 0.71 0.71 0.21
Crit Moves: *** **

Delay/Veh: 0.0 15.4 15.4 16.4 10.8 10.5 11.9 10.5 0.0 25.1 25.1 10.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 15.4 15.4 16.4 10.8 10.5 11.9 10.5 0.0 25.1 25.1 10.3

LOS by Move: * C C C B B B B * D D B
ApproachDel: 15.4 14.7 14.7 11.6
Delay Adj: 1.00 1.00
ApprAdjDel: 15.4 14.7 14.7 11.6

LOS by Appr: C B C
AllWayAvgQ: 0.0 0.7 0.7 0.7 0.1 0.1 0.1 0.0 0.0 2.0 2.0 0.2
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.090
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 39.2
Optimal Cycle: 0 Level Of Service: E

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: 0
Min. Green: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 4 315 35 51 203 208 421 72 9 90 79 212
Growth Adj: 1.00

Initial Bse: 4 315 35 51 203 208 421 72 9 90 79 212
User Adj: 1.00
PHF Adj: 1.00

PHF Volume: 4 315 35 51 203 208 421 72 9 90 79 212
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
FinalVolume: 4 315 35 51 203 208 421 72 9 90 79 212

Saturation Flow Module:
Adjustment: 1.00
Lanes: 1.00 1.80 0.20 1.00 0.99 1.01 1.00 1.78 0.22 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 353 682 76 365 385 426 386 698 88 358 376 410

Capacity Analysis Module:
Vol/Sat: 0.01 0.46 0.46 0.14 0.53 0.49 1.09 0.10 0.10 0.25 0.21 0.52
Crit Moves: *** **

Delay/Veh: 12.6 19.3 19.0 13.8 21.0 18.5 102.8 12.4 12.3 15.5 14.3 19.6
Delay Adj: 1.00
AdjDel/Veh: 12.6 19.3 19.0 13.8 21.0 18.5 102.8 12.4 12.3 15.5 14.3 19.6

LOS by Move: B C C C F B B C B C
ApproachDel: 19.2 19.1 19.1 88.2
Delay Adj: 1.00 1.00
ApprAdjDel: 19.2 19.1 19.1 88.2

LOS by Appr: C C F
AllWayAvgQ: 0.0 0.8 0.8 0.2 1.0 1.0 9.7 0.1 0.1 0.3 0.2 0.9
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B(10.2)
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 611 0 0 321 0 0 0 0 0 0 0 0 0 0 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 611 0 0 321 0 0 0 0 0 0 0 0 0 0 4
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 611 0 0 321 0 0 0 0 0 0 0 0 0 0 4
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 611 0 0 321 0 0 0 0 0 0 0 0 0 0 4

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 772 xxxxx 306
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 340 xxxxx 696
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 340 xxxxx 696
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 xxxxx 0.01

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.2
LOS By Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * * 10.2
B

Note: Queue reported is the number of cars per lane.

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Future Year Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: A(9.3)
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0

Volume Module:
Base Vol: 415 199 0 0 321 126 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 415 199 0 0 321 126 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 415 199 0 0 321 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 415 199 0 0 321 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 321 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1250 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 1250 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.33 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 1.5 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 9.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS By Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * * xxxxxx
* * * * *
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
Future Year Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: Bf 10.2]

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Rights: Include Include Include Include

Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1 0 1 0 0 1

Volume Module:

Base Vol: 0 623 0 5 322 0 0 0 0 7 0 0 0 1

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 623 0 5 322 0 0 0 0 7 0 0 0 1

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 623 0 5 322 0 0 0 0 7 0 0 0 1

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

FinalVolume: 0 623 0 5 322 0 0 0 0 7 0 0 0 1

Critical Gap Module:

Critical Gp:xxxxx xxxxx 4.1 xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9

FollowUpTim:xxxxx xxxxx 2.2 xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3

Capacity Module:

Cnflct Vol: xxxxx xxxxx xxxxx 623 xxxxx xxxxx 644 xxxxx 161 794 955 312

Potent Cap.: xxxxx xxxxx xxxxx 968 xxxxx xxxxx 362 xxxxx 862 282 260 690

Move Cap.: xxxxx xxxxx xxxxx 968 xxxxx xxxxx 360 xxxxx 862 279 259 690

Volume/Cap: xxxxx xxxxx xxxxx 0.01 xxxxx xxxxx 0.00 xxxxx 0.01 0.00 0.00 0.00

Level Of Service Module:

2Way95thQ: xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0

Control Del:xxxxx xxx xxxxx 8.7 xxxxx xxxxx xxxxx xxxxx 9.2 xxxxx xxxxx 10.2

LOS by Move: * * * * * A * * * * * A * * * * * A * * * * * B

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0 xxxxx xxxxx

SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: *

ApproachDel: xxxxxx xxxxxx 9.2 10.2

ApproachLOS: * * * * * A * * * * * B

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
Future Year Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.606

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 13.1

Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 0 1

Volume Module:

Base Vol: 93 150 3 4 176 172 312 0 99 37 2 54

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 93 150 3 4 176 172 312 0 99 37 2 54

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 93 150 3 4 176 172 312 0 99 37 2 54

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 93 150 3 4 176 172 312 0 99 37 2 54

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 93 150 3 4 176 172 312 0 99 37 2 54

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.96 0.04 0.04 1.96 1.00 1.00 0.00 1.00 0.95 0.05 1.00

Final Sat.: 457 956 19 22 982 560 515 0 613 435 24 539

Capacity Analysis Module:

Vol/Sat: 0.20 0.16 0.16 0.18 0.18 0.31 0.61 xxxxx 0.16 0.09 0.09 0.10

Crit Moves: *** **

Delay/Veh: 12.0 10.9 10.9 10.9 10.9 11.3 18.9 0.0 9.3 10.7 10.7 9.5

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 12.0 10.9 10.9 10.9 10.9 11.3 18.9 0.0 9.3 10.7 10.7 9.5

LOS by Move: B B B B B B C * A B B A

ApproachDel: 11.3 11.1 16.6 16.6 10.0

Delay Adj: 1.00 1.00 1.00 1.00 1.00

ApprAdjDel: 11.3 11.1 16.6 16.6 10.0

LOS by Appr: B B C

AllWayAvgQ: 0.2 0.2 0.2 0.2 0.2 0.4 1.3 1.3 0.2 0.1 0.1 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2015
Future Year Baseline

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.288
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Protected Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0 0
Volume Module:
Base Vol: 31 429 0 0 252 102 155 0 28 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 31 429 0 0 252 102 155 0 28 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 31 429 0 0 252 102 155 0 28 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 31 429 0 0 252 102 155 0 28 0 0 0 0

OvAdjVol: 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.13 0.00 0.00 0.08 0.00 0.05 0.00 0.02 0.00 0.00 0.00
OvAdjV/S: 0.00

Crit Moves: ****

Middle Harbor EIR
Future Year 2015
Future Year Baseline

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.543
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0

Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 107 2 167 190 1 10 50 25 198 384 35 181

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 107 2 167 190 1 10 50 25 198 384 35 181
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 107 2 0 190 1 10 50 25 198 384 35 181
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 107 2 0 190 1 10 50 25 198 384 35 181

OvAdjVol: 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1441 159 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.12 0.00 0.06 0.03 0.02 0.12 0.13 0.02 0.11
OvAdjV/S: ****

Crit Moves: ****

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.173
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.4
 Optimal Cycle: 0 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 68 0 12 53 130 0 0 0 135
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 68 0 12 53 130 0 0 0 135
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 68 0 12 53 130 0 0 0 135
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 68 0 12 53 130 0 0 0 135
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 68 0 12 53 130 0 0 0 135
 Saturation Flow Module:
 Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.70 0.30 0.58 1.42 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 605 481 206 394 1007 0 0 1352 781
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.11 0.00 0.06 0.13 0.13 xxxx xxxx 0.00 0.17
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 9.1 8.0 8.0 8.7 8.4 0.0 0.0 0.0 8.1
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 9.1 8.0 8.0 8.7 8.4 0.0 0.0 8.1
 LOS by Move: * * A A A *
 ApproachDel: xxxxxx 8.7 A A 8.5 8.1
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 8.7 8.5 8.1
 LOS by Appr: * A A A
 AllwayAvgQ: 0.0 0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.2
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.476
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 29 0 150 0 1293 0 0 1057 18
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 29 0 150 0 1293 0 0 1057 18
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 29 0 150 0 1293 0 0 1057 18
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 29 0 150 0 1293 0 0 1057 18
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 29 0 150 0 1293 0 0 1057 18
 Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.11 0.00 0.30 0.00 0.00 0.37 0.01
 Crit Vol: 150 0
 Crit Moves: *****

Appendix F: Year 2020 Peak-Hour Intersection Capacity Analysis Worksheets

Middle Harbor EIR
Future Year 2020
345-Acre

Scenario Report

2020 345-Acre AM
Command: 2020 345-Acre AM
Volume: 2020 345-Acre AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

Middle Harbor EIR
Future Year 2020
345-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh	V/ C	Future Del/ LOS Veh	V/ C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 56.6	1.144	F 56.6	1.144	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 16.7	0.700	C 16.7	0.700	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 16.5	0.000	C 16.5	0.000	+ 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.4	0.000	A 9.4	0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 12.0	0.000	B 12.0	0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 41.5	1.107	E 41.5	1.107	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.423	A xxxxx	0.423	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.626	B xxxxx	0.626	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	B 11.2	0.355	B 11.2	0.355	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.469	A xxxxx	0.469	+ 0.000 D/V

Middle Harbor EIR
Future Year 2020
345-Acre

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.144
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 56.6
Optimal Cycle: 0 Level Of Service: F

A345-Aceroach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 2 399 102 49 363 185 370 26 4 188 102 219
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 2 399 102 49 363 185 370 26 4 188 102 219
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 2 399 102 49 363 185 370 26 4 188 102 219
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 2 399 102 49 363 185 370 26 4 188 102 219
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 2 399 102 49 363 185 370 26 4 188 102 219

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.59 0.41 1.00 1.00 1.00 1.00 1.73 0.27 1.00 1.00 1.00
Final Sat.: 324 554 144 329 355 375 323 568 88 327 341 368

Capacity Analysis Module:
Vol/Sat: 0.01 0.72 0.71 0.15 1.02 0.49 1.14 0.05 0.05 0.57 0.30 0.60
Crit Moves: ****
Delay/Veh: 13.6 35.0 33.5 15.1 86.3 20.7 128.7 13.7 13.6 27.0 17.4 25.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.6 35.0 33.5 15.1 86.3 20.7 128.7 13.7 13.6 27.0 17.4 25.4
LOS by Move: B E D C F B B D C D
A345-AceroachDel: 34.6 60.1 120.1 120.1 1.00 24.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 34.6 60.1 120.1 120.1 1.00 24.4
LOS by A345-Aceroach: D F
AllwayAvgQ: 0.0 2.2 2.0 0.2 7.2 7.2 10.3 0.0 0.0 1.2 0.4 1.3
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
345-Acre

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.700
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 16.7
Optimal Cycle: 0 Level Of Service: C

A345-Aceroach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 364 2 30 158 183 127 81 1 295 29 127
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 364 2 30 158 183 127 81 1 295 29 127
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 364 2 30 158 183 127 81 1 295 29 127
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 2 399 102 49 363 185 370 26 4 188 102 219
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 364 2 30 158 183 127 81 1 295 29 127

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.00 1.00 1.00 0.99 0.01 0.91 0.09 1.00
Final Sat.: 409 876 5 408 438 478 420 439 5 422 41 534

Capacity Analysis Module:
Vol/Sat: 0.00 0.42 0.42 0.07 0.36 0.38 0.30 0.18 0.18 0.70 0.70 0.24
Crit Moves: ****
Delay/Veh: 0.0 15.6 15.6 11.7 14.7 13.9 14.0 11.9 11.9 25.4 25.4 11.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 15.6 15.6 11.7 14.7 13.9 14.0 11.9 11.9 25.4 25.4 11.1
LOS by Move: * C C B B B B B D D B
A345-AceroachDel: 15.6 14.1 13.2 13.2 1.00 21.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 15.6 14.1 13.2 13.2 1.00 21.3
LOS by A345-Aceroach: C B
AllwayAvgQ: 0.0 0.6 0.6 0.1 0.5 0.5 0.4 0.2 0.2 1.9 1.9 0.3
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
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345-Acre

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 2.1 Worst Case Level Of Service: [C] 16.5]

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include

Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 0 566 0 0 571 0 0 0 0 0 0 0 88 0 78

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 566 0 0 571 0 0 0 0 0 0 0 88 0 78
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 566 0 0 571 0 0 0 0 0 0 0 88 0 78
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

FinalVolume: 0 566 0 0 571 0 0 0 0 0 0 0 88 0 78

Critical Gap Module:
Critical Gp: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 6.8 xxxxx 6.9

FollowUpTim: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 852 xxxxx 283

Potent Cap.: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 303 xxxxx 720

Move Cap.: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 303 xxxxx 720

Volume/Cap: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 0.29 xxxxx 0.11

Level Of Service Module:
2Way95thQ: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 1.2 xxxxx 0.4

Control Del: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 21.7 xxxxx 10.6

LOS by Move: A * * * * * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx

SharedQueue: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx

Shrd ConDel: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx

Shared LOS: * * * * *
A345-AceroachDel: xxxxxx
A345-AceroachLOS: * * * * * 16.5

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
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345-Acre

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 1.6 Worst Case Level Of Service: [A] 9.4]

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include

Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 200 442 0 0 571 101 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 200 442 0 0 571 101 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 200 442 0 0 571 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduct Vol: 0

FinalVolume: 200 442 0 0 571 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx

FollowUpTim: 2.2 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx

Capacity Module:
Conflict Vol: 571 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxxx

Potent Cap.: 1012 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxxx

Move Cap.: 1012 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxxx

Volume/Cap: 0.20 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxxx

Level Of Service Module:
2Way95thQ: 0.7 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxxx

Control Del: 9.4 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxxx

LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxxx

SharedQueue: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxxx

Shrd ConDel: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxxx xxxxxx

Shared LOS: * * * * *
A345-AceroachDel: xxxxxx
A345-AceroachLOS: * * * * * xxxxxx

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #5 Pico Avenue, Broadway
 Average Delay (sec/veh): 0.5 Worst Case Level of Service: Bf 12.0j
 A345-Acrossover: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include Include Include
 Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1
 Volume Module:
 Base Vol: 13 569 8 6 556 0 0 2 29 0 0 2 29 0 0 0 3
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 13 569 8 6 556 0 2 29 0 0 2 29 0 0 3
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 13 569 8 6 556 0 2 29 0 0 2 29 0 0 3
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 13 569 8 6 556 0 2 29 0 0 2 29 0 0 3

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #6 Pico Avenue, Pier D Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.107
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 41.5
 Optimal Cycle: 0 Level of Service: E
 A345-Acrossover: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include Include Include
 Lanes: 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
 Volume Module:
 Base Vol: 113 250 1 6 562 285 485 0 53 19 1 37
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 113 250 1 6 562 285 485 0 53 19 1 37
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 113 250 1 6 562 285 485 0 53 19 1 37
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 113 250 1 6 562 285 485 0 53 19 1 37
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 113 250 1 6 562 285 485 0 53 19 1 37

Capacity Analysis Module:
 Vol/Sat: 0.30 0.31 0.31 0.63 0.63 0.57 1.11 xxxxx 0.11 0.05 0.05 0.09
 Crit Moves: ***
 Delay/Veh: 15.7 15.3 15.3 22.8 22.7 18.9 103.3 0.0 10.5 12.5 12.5 11.6
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 15.7 15.3 15.3 22.8 22.7 18.9 103.3 0.0 10.5 12.5 12.5 11.6
 LOS by Move: C C C C C C C F * B B B B
 A345-AcrossoverDel: 15.4 21.5 94.2 1.00 1.00 1.00 11.9
 A345-AcrossoverAdjDel: 15.4 21.5 94.2 1.00 1.00 1.00 11.9
 LOS by A345-Acres: C C C C C C C F
 AllWayAvgQ: 0.4 0.4 1.5 1.5 1.2 11.2 11.2 0.1 0.1 0.1 0.1 0.1
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #5 Pico Avenue, Broadway
 Average Delay (sec/veh): 0.5 Worst Case Level of Service: Bf 12.0j
 A345-Acrossover: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include Include Include
 Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1
 Volume Module:
 Base Vol: 13 569 8 6 556 0 0 2 29 0 0 2 29 0 0 0 3
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 13 569 8 6 556 0 2 29 0 0 2 29 0 0 3
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 13 569 8 6 556 0 2 29 0 0 2 29 0 0 3
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 13 569 8 6 556 0 2 29 0 0 2 29 0 0 3

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #6 Pico Avenue, Pier D Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.107
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 41.5
 Optimal Cycle: 0 Level of Service: E
 A345-Acrossover: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include Include Include
 Lanes: 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
 Volume Module:
 Base Vol: 113 250 1 6 562 285 485 0 53 19 1 37
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 113 250 1 6 562 285 485 0 53 19 1 37
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 113 250 1 6 562 285 485 0 53 19 1 37
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 113 250 1 6 562 285 485 0 53 19 1 37
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 113 250 1 6 562 285 485 0 53 19 1 37

Capacity Analysis Module:
 Vol/Sat: 0.30 0.31 0.31 0.63 0.63 0.57 1.11 xxxxx 0.11 0.05 0.05 0.09
 Crit Moves: ***
 Delay/Veh: 15.7 15.3 15.3 22.8 22.7 18.9 103.3 0.0 10.5 12.5 12.5 11.6
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 15.7 15.3 15.3 22.8 22.7 18.9 103.3 0.0 10.5 12.5 12.5 11.6
 LOS by Move: C C C C C C C F * B B B B
 A345-AcrossoverDel: 15.4 21.5 94.2 1.00 1.00 1.00 11.9
 A345-AcrossoverAdjDel: 15.4 21.5 94.2 1.00 1.00 1.00 11.9
 LOS by A345-Acres: C C C C C C C F
 AllWayAvgQ: 0.4 0.4 1.5 1.5 1.2 11.2 11.2 0.1 0.1 0.1 0.1 0.1
 Note: Queue reported is the number of cars per lane.

Capacity Analysis Module:
 Vol/Sat: 0.30 0.31 0.31 0.63 0.63 0.57 1.11 xxxxx 0.11 0.05 0.05 0.09
 Crit Moves: ***
 Delay/Veh: 15.7 15.3 15.3 22.8 22.7 18.9 103.3 0.0 10.5 12.5 12.5 11.6
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 15.7 15.3 15.3 22.8 22.7 18.9 103.3 0.0 10.5 12.5 12.5 11.6
 LOS by Move: C C C C C C C F * B B B B
 A345-AcrossoverDel: 15.4 21.5 94.2 1.00 1.00 1.00 11.9
 A345-AcrossoverAdjDel: 15.4 21.5 94.2 1.00 1.00 1.00 11.9
 LOS by A345-Acres: C C C C C C C F
 AllWayAvgQ: 0.4 0.4 1.5 1.5 1.2 11.2 11.2 0.1 0.1 0.1 0.1 0.1
 Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #7 Pico Avenue, Pier C Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.423
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 30 Level of Service: A

 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected
 Rights: Include Ignore Ovl Include
 Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0
 Lanes: -----
 Volume Module:
 Base Vol: 24 704 0 0 802 184 164 0 9 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 24 704 0 0 802 184 164 0 9 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 24 704 0 0 802 164 0 9 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 24 704 0 0 802 164 0 9 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 24 704 0 0 802 164 0 9 0 0 0
 OvlAdjVol: -----
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.22 0.00 0.00 0.25 0.00 0.06 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: *****

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #8 Pico Avenue, Pier B Street & 9th Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.626
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level of Service: B

 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected
 Rights: Ignore Include Include
 Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0
 Lanes: -----
 Volume Module:
 Base Vol: 219 2 505 249 0 17 11 220 75 406 224 214
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 219 2 505 249 0 17 11 220 75 406 224 214
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 219 2 0 249 0 17 11 220 75 406 224 214
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 219 2 0 249 0 17 11 220 75 406 224 214
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 219 2 0 249 0 17 11 220 75 406 224 214
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.87 0.13 1.00 1.49 0.51 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1395 205 1600 2386 814 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.14 0.00 0.00 0.16 0.00 0.08 0.01 0.09 0.09 0.14 0.14 0.13
 Crit Moves: *****

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Scenario Report

2020 345-Acre MD
Command: 2020 345-Acre MD
Volume: 2020 345-Acre MD Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

Middle Harbor EIR
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345-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 100.6	1.350	F 100.6	1.350 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 19.2	0.754	C 19.2	0.754 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 21.6	0.000	C 21.6	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.3	0.000	B 10.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 13.7	0.000	B 13.7	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 33.4	1.021	D 33.4	1.021 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.387	A xxxxx	0.387 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.570	A xxxxx	0.570 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 10.6	0.325	B 10.6	0.325 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.489	A xxxxx	0.489 + 0.000 D/V

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Cycle (sec): 100 Critical Vol./Cap.(X): 1.350
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 100.6
Optimal Cycle: 0 Level Of Service: F
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 6 424 201 83 420 188 404 149 5 166 52 301
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 6 424 201 83 420 188 404 149 5 166 52 301
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 6 424 201 83 420 188 404 149 5 166 52 301
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 6 424 201 83 420 188 404 149 5 166 52 301
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 6 424 201 83 420 188 404 149 5 166 52 301
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.36 0.64 1.00 1.00 1.00 1.00 1.94 0.06 1.00 1.00 1.00
Final Sat.: 303 443 216 301 321 337 299 589 20 299 309 334
Capacity Analysis Module:
Vol/Sat: 0.02 0.96 0.93 0.28 1.31 0.56 1.35 0.25 0.25 0.56 0.17 0.90
Crit Moves: ****
Delay/Veh: 14.6 73.4 65.7 18.7 190 25.3 209.6 17.9 17.9 28.3 16.4 60.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.6 73.4 65.7 18.7 190 25.3 209.6 17.9 17.9 28.3 16.4 60.0
LOS by Move: B F C F C F C D C F
A345-AceroachDel: 70.4 124.4 156.7 1.00 45.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 70.4 124.4 156.7 1.00 45.5
LOS by A345-Aceroach: F F F
AllWayAvgQ: 0.0 5.6 4.9 0.4 15.7 16.2 0.3 0.3 1.1 0.2 4.3
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Cycle (sec): 100 Critical Vol./Cap.(X): 0.754
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 19.2
Optimal Cycle: 0 Level Of Service: C
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 0 480 6 96 258 64 90 41 0 330 8 138
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 480 6 96 258 64 90 41 0 330 8 138
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 480 6 96 258 64 90 41 0 330 8 138
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 480 6 96 258 64 90 41 0 330 8 138
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.60 0.40 1.00 1.00 0.00 0.98 0.02 1.00
Final Sat.: 409 878 11 403 698 177 391 411 0 438 11 517
Capacity Analysis Module:
Vol/Sat: 0.00 0.55 0.55 0.24 0.37 0.36 0.23 0.10 xxxx 0.75 0.75 0.27
Crit Moves: ****
Delay/Veh: 0.0 19.2 19.2 13.8 15.0 14.6 13.7 11.7 0.0 30.1 30.1 11.7
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 19.2 19.2 13.8 15.0 14.6 13.7 11.7 0.0 30.1 30.1 11.7
LOS by Move: * C C B B B B * D D B
A345-AceroachDel: 19.2 14.6 13.1 1.00 24.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 19.2 14.6 13.1 1.00 24.8
LOS by A345-Aceroach: C B B B B C
AllWayAvgQ: 0.0 1.1 1.1 0.3 0.5 0.5 0.3 0.1 0.1 2.4 2.4 0.3
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
 Average Delay (sec/veh): 0.2 Worst Case Level Of Service: [C 21.6]
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1

Volume Module:
 Base Vol: 0 685 0 0 688 0 0 0 0 16 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 685 0 0 688 0 0 0 0 16 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 685 0 0 688 0 0 0 0 16 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 685 0 0 688 0 0 0 0 16 0 0

Critical Gap Module:
 Critical Gp: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 6.8 xxxxx 6.9
 FollowUpTim: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 3.5 xxxxx 3.3

Capacity Module:
 Conflict Vol: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 1029 xxxxx 343
 Potential Cap.: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 233 xxxxx 659
 Move Cap.: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 233 xxxxx 659
 Volume/Cap: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 0.07 xxxxx 0.00

Level Of Service Module:
 2Way95thQ: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 0.2 xxxxx xxxxxx
 Control Del: xxxxx xxx xxxxxx xxxxxx xxxxxx xxxxxx 21.6 xxxxx xxxxxx
 LOS By Move: * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 SharedQueue: xxxxx xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 Shrd ConDel: xxxxx xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 Shared LOS: * * * * *
 A345-AceroachDel: xxxxxx * * * * *
 A345-AceroachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
 Average Delay (sec/veh): 1.8 Worst Case Level Of Service: [B 10.3]
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Ignore Include Include
 Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 236 389 0 0 688 101 0 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 236 389 0 0 688 101 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 236 389 0 0 688 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 236 389 0 0 688 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 FollowUpTim: 2.2 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx

Capacity Module:
 Conflict Vol: 688 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 Potential Cap.: 916 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 Move Cap.: 916 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 Volume/Cap: 0.26 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx

Level Of Service Module:
 2Way95thQ: 1.0 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 Control Del: 10.3 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 LOS By Move: B * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 SharedQueue: xxxxx xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 Shrd ConDel: xxxxx xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 Shared LOS: * * * * *
 A345-AceroachDel: xxxxxx * * * * *
 A345-AceroachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #5 Pico Avenue, Broadway
 Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B(13.7)
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 1 0 0 1
 Volume Module:
 Base Vol: 0 567 1 0 695 0 0 2 17 1 0 0 4
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 567 1 0 695 0 0 2 17 1 0 0 4
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 567 1 0 695 0 0 2 17 1 0 0 4
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 567 1 0 695 0 0 2 17 1 0 0 4
 Critical Gap Module:
 Critical Gp:xxxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
 FollowUpTim:xxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
 Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 284
 Potent Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 719
 Move Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 719
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.01
 Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
 Control Del:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.0
 LOS By Move: * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 505
 SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.1
 Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 26.3
 Shared LOS: * * * * *
 A345-AceroachDel: xxxxxx 13.7
 A345-AceroachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #6 Pico Avenue, Pier D Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.021
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 33.4
 Optimal Cycle: 0 Level Of Service: D
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 1 0 1 1 0 0 1 1 0 1 0 0 1 0 1 0 1
 Volume Module:
 Base Vol: 70 260 1 5 338 204 489 0 90 7 5 30
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 70 260 1 5 338 204 489 0 90 7 5 30
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 70 260 1 5 338 204 489 0 90 7 5 30
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 70 260 1 5 338 204 489 0 90 7 5 30
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 70 260 1 5 338 204 489 0 90 7 5 30
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 0.03 1.97 1.00 1.00 0.00 1.00 0.58 0.42 1.00
 Final Sat: 411 870 3 13 909 508 479 0 555 236 168 456
 Capacity Analysis Module:
 Vol/Sat: 0.17 0.30 0.30 0.37 0.37 0.40 1.02 xxxxx 0.16 0.03 0.03 0.07
 Crit Moves: ****
 Delay/Veh: 13.0 14.1 14.1 14.8 14.8 14.2 73.9 0.0 10.2 11.4 11.4 10.7
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 13.0 14.1 14.1 14.8 14.8 14.2 73.9 0.0 10.2 11.4 11.4 10.7
 LOS by Move: B B B B B F * B B B B
 A345-AceroachDel: 13.9 14.6 64.0 10.9
 A345-AceroachAdjDel: 13.9 14.6 64.0 10.9
 LOS by A345-Acrot: B B B F B
 AllWayAvgQ: 0.2 0.4 0.4 0.6 0.6 0.6 8.5 8.5 0.2 0.0 0.0 0.1
 Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.387
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
A345-Aceroach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0 0

Volume Module:
Base Vol: 28 700 0 0 452 177 198 0 15 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 28 700 0 0 452 177 198 0 15 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 28 700 0 0 452 0 198 0 15 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 28 700 0 0 452 0 198 0 15 0 0 0
OvlAdjVol: 28 700 0 0 452 0 198 0 15 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.22 0.00 0.00 0.00 0.14 0.00 0.07 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.570
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
A345-Aceroach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0 0
Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Volume Module:
Base Vol: 137 5 157 164 2 16 24 271 177 410 194 263
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 137 5 157 164 2 16 24 271 177 410 194 263
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 137 5 0 164 2 16 24 271 177 410 194 263
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 137 5 0 164 2 16 24 271 177 410 194 263
OvlAdjVol: 137 5 0 164 2 16 24 271 177 410 194 263

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.82 0.18 1.00 1.21 0.79 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1319 281 1600 1936 1264 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.09 0.00 0.00 0.10 0.00 0.06 0.02 0.14 0.14 0.14 0.12 0.16
OvlAdjV/S: ****
Crit Moves: ****

```
Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St
*****
Cycle (sec): 100 Critical Vol./Cap.(X): 0.325
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.6
Optimal Cycle: 0 Level of Service: B
*****
A345-Acre Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 100 0 51 64 332 0 0 289 192
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 100 0 51 64 332 0 0 289 192
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 100 0 51 64 332 0 0 289 192
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 100 0 51 64 332 0 0 289 192
Saturation Flow Module:
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.32 0.68 0.32 1.68 0.00 0.00 2.00 1.00
Final Sat: 0 0 0 495 185 384 197 1038 0 0 1180 667
Capacity Analysis Module:
Vol/Sat: xxxx xxxx 0.20 0.00 0.13 0.32 0.32 xxxx xxxx 0.24 0.29
Crit Moves: *** ** ** ** **
Delay/Veh: 0.0 0.0 0.0 11.2 9.5 9.5 11.1 10.9 0.0 0.0 10.5 10.0
Delay/Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 11.2 9.5 9.5 11.1 10.9 0.0 0.0 10.5 10.0
LOS by Move: * * * * *
A345-Acre Approach: xxxxxx
Delay Adj: xxxxxx
A345-Acre AdjDel: xxxxxx
LOS by A345-Acre: *
AllwayAVGQ: 0.0 0.0 0.0 0.2 0.1 0.1 0.4 0.4 0.0 0.0 0.3 0.4
*****
Note: Queue reported is the number of cars per lane.
*****
```

```
Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St
*****
Cycle (sec): 100 Critical Vol./Cap.(X): 0.489
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level of Service: A
*****
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Ovl Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 14 0 230 126 1144 0 0 934 16
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 14 0 230 126 1144 0 0 934 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 14 0 230 126 1144 0 0 934 16
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 0 0 0 14 0 230 126 1144 0 0 934 16
Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 0.00 3.00 0.00 0.00 2.00 1.00 1.00
Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.16 0.09 0.27 0.00 0.00 0.33 0.01
Crit Vol: 0 230 0
Crit Moves: ****
*****
```

Middle Harbor EIR
Future Year 2020
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Scenario Report

2020 345-Acre PM
Command: 2020 345-Acre PM
Volume: 2020 345-Acre PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

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345-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	E 37.5	0.972	E 37.5	0.972 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	E 39.9	1.036	E 39.9	1.036 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	D 29.6	0.000	D 29.6	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 11.1	0.000	B 11.1	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.0	0.000	B 11.0	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 24.0	0.897	C 24.0	0.897 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxxx	0.389	A xxxxxx	0.389 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxxx	0.625	B xxxxxx	0.625 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 12.4	0.471	B 12.4	0.471 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxxx	0.654	B xxxxxx	0.654 + 0.000 D/V

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Cycle (sec): 100 Critical Vol./Cap.(X): 0.972
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 37.5
Optimal Cycle: 0 Level Of Service: E
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 1 1 0 1 0 1 1 0
Volume Module:
Base Vol: 3 360 120 53 284 192 269 163 8 46 0 373
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 3 360 120 53 284 192 269 163 8 46 0 373
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 3 360 120 53 284 192 269 163 8 46 0 373
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 3 360 120 53 284 192 269 163 8 46 0 373
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.50 0.50 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 330 537 183 336 360 383 338 666 33 325 337 384
Capacity Analysis Module:
Vol/Sat: 0.01 0.67 0.65 0.16 0.79 0.50 0.80 0.24 0.24 0.14 0.00 0.97
Crit Moves: ****
Delay/Veh: 13.2 29.3 27.8 14.9 39.3 20.2 42.2 15.7 15.6 14.9 0.0 69.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.2 29.3 27.8 14.9 39.3 20.2 42.2 15.7 15.6 14.9 0.0 69.0
LOS by Move: B D B E C C E C B *
A345-AceroachDel: 28.9 29.9 31.9 1.00 63.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 28.9 29.9 31.9 1.00 63.0
LOS by A345-Aceroach: D D
AllWayAvgQ: 0.0 1.7 1.6 0.2 2.7 2.7 0.3 0.3 0.1 0.0 6.1
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Cycle (sec): 100 Critical Vol./Cap.(X): 1.036
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 39.9
Optimal Cycle: 0 Level Of Service: E
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1
Volume Module:
Base Vol: 0 546 3 195 141 158 267 109 0 373 26 137
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 546 3 195 141 158 267 109 0 373 26 137
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 546 3 195 141 158 267 109 0 373 26 137
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 546 3 195 141 158 267 109 0 373 26 137
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.00 1.00 1.00 1.00 0.00 0.93 0.07 1.00
Final Sat.: 338 724 4 338 352 379 366 381 0 360 25 428
Capacity Analysis Module:
Vol/Sat: 0.00 0.75 0.75 0.58 0.40 0.42 0.73 0.29 xxxxx 1.04 1.04 0.32
Crit Moves: ****
Delay/Veh: 0.0 36.6 36.6 26.1 19.0 18.2 33.8 15.4 0.0 86.7 86.7 14.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 36.6 36.6 26.1 19.0 18.2 33.8 15.4 0.0 86.7 86.7 14.5
LOS by Move: * E D C C D C *
A345-AceroachDel: 36.6 1.00 21.5 28.5 1.00 68.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
A345-AceroachDel: 36.6 1.00 21.5 28.5 1.00 68.2
LOS by A345-Aceroach: E D
AllWayAvgQ: 0.0 2.4 2.4 1.2 0.6 0.7 2.2 0.4 0.4 8.0 8.0 0.4
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.5 Worst Case Level Of Service: Df 29.6j
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1
Volume Module:
Base Vol: 0 915 0 0 620 0 0 0 0 28 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 915 0 0 620 0 0 0 28 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 915 0 0 620 0 0 0 28 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 915 0 0 620 0 0 0 28 0 0
Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1225 xxxxx 458
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 174 xxxxx 556
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 174 xxxxx 556
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.16 xxxxx 0.00
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.6 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 29.6 xxxxx xxxxx
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
A345-AceroachDel: xxxxxx
A345-AceroachLOS: *
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 2.9 Worst Case Level Of Service: Bf 11.1j
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0
Volume Module:
Base Vol: 378 421 0 0 620 119 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 378 421 0 0 620 119 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 378 421 0 0 620 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 378 421 0 0 620 0 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Conflict Vol: 620 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 970 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 970 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.39 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Level Of Service Module:
2Way95thQ: 1.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 11.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
A345-AceroachDel: xxxxxx
A345-AceroachLOS: *
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
345-Acre

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.389
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
A345-Aceroach: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Ignore
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 33 729 0 0 526 123 176 0 27 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 33 729 0 0 526 123 176 0 27 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 33 729 0 0 526 0 176 0 27 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 33 729 0 0 526 0 176 0 27 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.23 0.00 0.00 0.16 0.00 0.06 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

Middle Harbor EIR
Future Year 2020
345-Acre

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Critical Vol./Cap.(X): 0.625
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level of Service: B

Street Name: North Bound South Bound East Bound West Bound
A345-Aceroach: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Ignore
Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 116 2 287 229 1 11 73 157 231 476 137 309
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 116 2 287 229 1 11 73 157 231 476 137 309
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 116 2 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 116 2 0 0 0 0 0 0 0 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1454 146 1600 1600 1600 2880 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.14 0.00 0.08 0.05 0.10 0.14 0.17 0.09 0.19
OvlAdjV/S: ****
Crit Moves: ****

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.471
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.4
 Optimal Cycle: 0 Level of Service: B
 A345-Acre Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 222 0 12 84 298 0 0 62 284
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 222 0 12 84 298 0 0 62 284
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 222 0 12 84 298 0 0 62 284
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 222 0 12 84 298 0 0 62 284
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 222 0 12 84 298 0 0 62 284

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.90 0.10 0.44 1.56 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 514 499 57 247 898 0 0 1068 603
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.43 0.00 0.21 0.34 0.33 xxxx xxxx 0.06 0.47
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 0.0 14.2 10.4 10.4 11.9 11.6 0.0 0.0 9.6 13.3
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 14.2 10.4 10.4 11.9 11.6 0.0 0.0 9.6 13.3
 LOS by Move: * * * * * B B B * * A B
 A345-Acre Approach Del: xxxxxx 12.9 11.7 11.7 1.00 12.6
 Delay Adj: xxxxxx 1.00 12.9 11.7 1.00 12.6
 A345-Acre Adj Del: xxxxxx
 LOS by A345-Acre: * * * * * B B
 AllWayAvgQ: 0.0 0.0 0.0 0.7 0.2 0.2 0.5 0.4 0.0 0.0 0.1 0.8
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.654
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 58 Level of Service: B
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 29 0 326 138 1399 0 0 1213 18
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 29 0 326 138 1399 0 0 1213 18
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 29 0 326 138 1399 0 0 1213 18
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 29 0 326 138 1399 0 0 1213 18
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 29 0 326 138 1399 0 0 1213 18

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.23 0.10 0.33 0.00 0.00 0.43 0.01
 Crit Vol: 0 0 0 326 0
 Crit Moves: ****
 Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
315-Acre

Scenario Report

2020 315-Acre AM
Command: 2020 315-Acre AM
Volume: 2020 315-Acre AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 315-Acre

Middle Harbor EIR
Future Year 2020
315-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	E 48.8	1.072	E 48.8	1.072 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 16.1	0.675	C 16.1	0.675 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 15.3	0.000	C 15.3	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.2	0.000	A 9.2	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.6	0.000	B 11.6	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 32.1	1.005	D 32.1	1.005 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.413	A xxxxx	0.413 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.640	B xxxxx	0.640 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 11.0	0.340	B 11.0	0.340 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.460	A xxxxx	0.460 + 0.000 D/V

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.072
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 48.8
Optimal Cycle: 0 Level of Service: E

Approach: North Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 2 400 101 47 393 194 319 24 5 156 69 223
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 2 400 101 47 393 194 319 24 5 156 69 223
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 2 400 101 47 393 194 319 24 5 156 69 223
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 2 400 101 47 393 194 319 24 5 156 69 223
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 2 400 101 47 393 194 319 24 5 156 69 223
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.60 0.40 1.00 1.00 1.00 1.00 1.66 0.34 1.00 1.00 1.00
Final Sat.: 330 567 146 337 367 385 331 556 118 328 341 369
Capacity Analysis Module:
Vol/Sat: 0.01 0.71 0.69 0.14 1.07 0.50 0.96 0.04 0.04 0.48 0.20 0.60
Crit Moves: ****
Delay/Veh: 13.4 32.6 31.2 14.6 99.5 20.3 74.3 13.4 13.3 22.6 15.5 25.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.4 32.6 31.2 14.6 99.5 20.3 74.3 13.4 13.3 22.6 15.5 25.3
LOS by Move: B D D B F C F B B C C D
ApproachDel: 32.3 69.0 69.2 22.8
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 32.3 69.0 69.2 22.8
LOS by Appr: D F
AllwayAvgQ: 0.0 2.0 1.9 0.1 8.9 8.9 5.6 0.0 0.0 0.8 0.2 1.3

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.675
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 16.1
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1
Volume Module:
Base Vol: 0 366 2 28 180 156 122 60 0 292 24 127
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 366 2 28 180 156 122 60 0 292 24 127
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 366 2 28 180 156 122 60 0 292 24 127
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 366 2 28 180 156 122 60 0 292 24 127
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 366 2 28 180 156 122 60 0 292 24 127
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.07 0.93 1.00 1.00 0.00 0.92 0.08 1.00
Final Sat.: 417 895 5 415 481 450 423 446 0 433 36 542
Capacity Analysis Module:
Vol/Sat: 0.00 0.41 0.41 0.07 0.37 0.35 0.29 0.13 xxxx 0.68 0.68 0.23
Crit Moves: ****
Delay/Veh: 0.0 15.2 15.2 11.5 14.6 13.2 13.7 11.3 0.0 23.7 23.7 10.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 15.2 15.2 11.5 14.6 13.2 13.7 11.3 0.0 23.7 23.7 10.9
LOS by Move: * C C B B B B B * C C B
ApproachDel: 15.2 13.8 12.9
Delay Adj: 1.00 1.00
ApprAdjDel: 15.2 13.8 12.9
LOS by Appr: C B
AllwayAvgQ: 0.0 0.6 0.6 0.1 0.5 0.5 0.4 0.1 0.1 1.8 1.8 0.3

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
315-Acre

Middle Harbor EIR
Future Year 2020
315-Acre

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 1.8 Worst Case Level Of Service: [I 15.3]

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 1.5 Worst Case Level Of Service: [I 9.2]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 0 563 0 0 523 0 0 0 0 0 74 0 0 71
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Volume Module:
Base Vol: 192 440 0 0 523 103 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 824 xxxxx 282
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 315 xxxxx 722

Capacity Module:
Conflict Vol: 523 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1054 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.9 xxxxx 0.3
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 19.9 xxxxx 10.5

Level Of Service Module:
2Way95thQ: 0.7 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 9.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

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Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.413
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level of Service: A
 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected
 Rights: Include Ignore Ovl Include
 Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0
 Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 23 671 0 0 771 201 166 0 9 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 23 671 0 0 771 201 166 0 9 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 23 671 0 0 771 201 166 0 9 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 23 671 0 0 771 201 166 0 9 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 23 671 0 0 771 201 166 0 9 0 0 0
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.01 0.21 0.00 0.00 0.24 0.00 0.06 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: ****

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.640
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 44 Level of Service: B
 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: Ignore Include Include
 Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0
 Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Volume Module:
 Base Vol: 231 2 475 280 0 16 9 204 75 385 214 214
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 231 2 475 280 0 16 9 204 75 385 214 214
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 231 2 475 280 0 16 9 204 75 385 214 214
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 231 2 475 280 0 16 9 204 75 385 214 214
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 231 2 475 280 0 16 9 204 75 385 214 214
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.89 0.11 1.00 1.46 0.54 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1427 173 1600 2340 860 2880 1600 1600

Capacity Analysis Module:
 Vol/Sat: 0.14 0.00 0.00 0.17 0.00 0.09 0.01 0.09 0.09 0.13 0.13 0.13
 Crit Moves: ****

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.340
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.0
 Optimal Cycle: 0 Level Of Service: B
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 145 0 43 25 304 0 0 338 222
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 145 0 43 25 304 0 0 338 222
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 145 0 43 25 304 0 0 338 222
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 145 0 43 25 304 0 0 338 222
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 145 0 43 25 304 0 0 338 222
 Saturation Flow Module:
 Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Adj Sat: 0.00 0.00 0.00 1.00 0.54 0.46 0.15 1.85 0.00 0.00 2.00 1.00
 Final Sat: 0 0 0 495 301 254 88 1080 0 0 1157 653
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.29 0.00 0.17 0.28 0.28 xxxx xxxx 0.29 0.34
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 12.3 10.0 10.0 10.9 10.9 0.0 0.0 11.2 10.7
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 12.3 10.0 10.0 10.9 10.9 0.0 0.0 11.2 10.7
 LOS by Move: * * * * *
 LOS by Appr: * * * * *
 ApproachDel: 11.4 10.9 11.0
 Delay Adj: 1.00 1.00 1.00
 ApprAdjDel: 11.4 10.9 11.0
 LOS by Appr: * * * * *
 AllwayAvgQ: 0.0 0.0 0.4 0.2 0.2 0.4 0.4 0.0 0.0 0.4 0.5
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.460
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 37 Level Of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 3 0 204 147 995 0 0 903 10
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 204 147 995 0 0 903 10
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 204 147 995 0 0 903 10
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 204 147 995 0 0 903 10
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol: 0 0 0 3 0 204 147 995 0 0 903 10
 Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.14 0.10 0.23 0.00 0.00 0.32 0.01
 Crit Vol: 0 204 0
 Crit Moves: **** *

Scenario: 2020 315-Acre MD Scenario Report
 Command: 2020 315-Acre MD
 Volume: 2020 315-Acre MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 315-Acre

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh	V/ C	Future Del/ LOS Veh	V/ C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 87.0	1.311	F 87.0	1.311	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 19.3	0.762	C 19.3	0.762	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 20.4	0.000	C 20.4	0.000	+ 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 10.0	0.000	A 10.0	0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 13.4	0.000	B 13.4	0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 23.6	0.906	C 23.6	0.906	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.371	A xxxxx	0.371	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.591	A xxxxx	0.591	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	B 11.2	0.360	B 11.2	0.360	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.495	A xxxxx	0.495	+ 0.000 D/V

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.311
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 87.0
 Optimal Cycle: 0 Level of Service: F
 Approach: North Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 5 440 186 84 434 170 359 124 4 160 34 281
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 5 440 186 84 434 170 359 124 4 160 34 281
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 5 440 186 84 434 170 359 124 4 160 34 281
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 5 440 186 84 434 170 359 124 4 160 34 281
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 5 440 186 84 434 170 359 124 4 160 34 281
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.41 0.59 1.00 1.00 1.00 1.94 0.06 1.00 1.00 1.00
 Final Sat.: 311 473 205 308 331 347 307 603 19 303 314 340
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.93 0.91 0.27 1.31 0.49 1.17 0.21 0.21 0.53 0.11 0.83
 Crit Moves: ****
 Delay/Veh: 14.2 66.2 59.8 18.1 190 21.9 139.8 16.7 16.6 26.5 15.2 47.2
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 14.2 66.2 59.8 18.1 190 21.9 139.8 16.7 16.6 26.5 15.2 47.2
 LOS by Move: B F C F C F C F C D C E
 ApproachDel: 63.9 127.6 107.4 37.9
 Delay Adj: 1.00 1.00 1.00
 ApprAdjDel: 63.9 127.6 107.4
 LOS by Appr: F F F
 AllwayAvgQ: 0.0 5.1 4.5 0.3 16.2 16.2 10.7 0.2 0.2 1.0 0.1 3.2
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.762
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 19.3
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 0 0 1 0 1 0
 Volume Module:
 Base Vol: 0 471 6 93 288 58 81 33 0 336 7 131
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 471 6 93 288 58 81 33 0 336 7 131
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 471 6 93 288 58 81 33 0 336 7 131
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 471 6 93 288 58 81 33 0 336 7 131
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 471 6 93 288 58 81 33 0 336 7 131
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.97 0.03 1.00 1.66 0.34 1.00 1.00 0.00 0.98 0.02 1.00
 Final Sat.: 410 879 11 408 734 150 389 409 0 441 9 519
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.54 0.54 0.23 0.39 0.39 0.21 0.08 xxxxx 0.76 0.76 0.25
 Crit Moves: ****
 Delay/Veh: 0.0 18.8 18.8 13.5 15.3 14.9 13.4 11.5 0.0 30.7 30.7 11.5
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 18.8 18.8 13.5 15.3 14.9 13.4 11.5 0.0 30.7 30.7 11.5
 LOS by Move: * C C B C B B B * D D B
 ApproachDel: 18.8 14.9 12.9 25.4
 Delay Adj: 1.00 1.00 1.00
 ApprAdjDel: 18.8 14.9 12.9 25.4
 LOS by Appr: C B B D
 AllwayAvgQ: 0.0 1.0 1.0 0.3 0.6 0.6 0.2 0.1 0.1 2.5 2.5 0.3
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #5 Pico Avenue, Broadway
 Average Delay (sec/veh): 0.2 Worst Case Level of Service: B (13.4)
 Approach: North Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R
 Control: Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 0 0 1
 Volume Module:
 Base Vol: 0 564 1 0 656 0 0 2 17 1 0 0 4
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 564 0 0 656 0 0 2 17 1 0 0 4
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 564 1 0 656 0 0 2 17 1 0 0 4
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 564 1 0 656 0 0 2 17 1 0 0 4
 Critical Gap Module:
 Critical Gp: xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
 FollowUpTim: xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
 Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
 Potential Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.0
 Move Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 0.01 0.03 0.00 0.00 0.01
 Level of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS by Move: * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx 181 xxxxx 524 231 xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx 0.1 0.0 xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx 25.1 xxxxx 12.1 20.6 xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx
 ApproachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #6 Pico Avenue, Pier D Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.906
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 23.6
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 1 0 1 1 0 0 0 0 0 1 0 0 1 0 0 0 1
 Volume Module:
 Base Vol: 68 267 1 5 311 200 437 0 86 7 5 30
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 68 267 1 5 311 200 437 0 86 7 5 30
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 68 267 1 5 311 200 437 0 86 7 5 30
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 68 267 1 5 311 200 437 0 86 7 5 30
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 68 267 1 5 311 200 437 0 86 7 5 30
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 0.03 1.97 1.00 1.00 0.00 1.00 0.58 0.42 1.00
 Final Sat: 415 879 3 15 912 511 482 0 561 238 170 460
 Capacity Analysis Module:
 Vol/Sat: 0.16 0.30 0.30 0.34 0.34 0.39 0.91 xxxxx 0.15 0.03 0.03 0.07
 Crit Moves: * * * * *
 Delay/Veh: 12.6 13.7 13.7 13.9 13.8 13.6 46.9 0.0 10.0 11.2 11.2 10.4
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 12.6 13.7 13.7 13.9 13.8 13.6 46.9 0.0 10.0 11.2 11.2 10.4
 LOS by Move: B B B B E * A B B B
 ApproachDel: 13.4 13.7 40.9 10.6
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 13.4 13.7 40.9 10.6
 LOS by Appr: B B E
 AllWayAvgQ: 0.2 0.4 0.4 0.5 0.5 0.6 4.9 4.9 0.2 0.0 0.0 0.1
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #6 Pico Avenue, Pier D Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.906
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 23.6
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 1 0 1 1 0 0 0 0 0 1 0 0 1 0 0 0 1
 Volume Module:
 Base Vol: 68 267 1 5 311 200 437 0 86 7 5 30
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 68 267 1 5 311 200 437 0 86 7 5 30
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 68 267 1 5 311 200 437 0 86 7 5 30
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 68 267 1 5 311 200 437 0 86 7 5 30
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 68 267 1 5 311 200 437 0 86 7 5 30
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 0.03 1.97 1.00 1.00 0.00 1.00 0.58 0.42 1.00
 Final Sat: 415 879 3 15 912 511 482 0 561 238 170 460
 Capacity Analysis Module:
 Vol/Sat: 0.16 0.30 0.30 0.34 0.34 0.39 0.91 xxxxx 0.15 0.03 0.03 0.07
 Crit Moves: * * * * *
 Delay/Veh: 12.6 13.7 13.7 13.9 13.8 13.6 46.9 0.0 10.0 11.2 11.2 10.4
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 12.6 13.7 13.7 13.9 13.8 13.6 46.9 0.0 10.0 11.2 11.2 10.4
 LOS by Move: B B B B E * A B B B
 ApproachDel: 13.4 13.7 40.9 10.6
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 13.4 13.7 40.9 10.6
 LOS by Appr: B B E
 AllWayAvgQ: 0.2 0.4 0.4 0.5 0.5 0.6 4.9 4.9 0.2 0.0 0.0 0.1
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #5 Pico Avenue, Broadway
 Average Delay (sec/veh): 0.2 Worst Case Level of Service: B (13.4)
 Approach: North Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R
 Control: Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 1
 Volume Module:
 Base Vol: 0 564 1 0 656 0 0 2 17 1 0 0 4
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 564 0 0 656 0 0 2 17 1 0 0 4
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 564 1 0 656 0 0 2 17 1 0 0 4
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 564 1 0 656 0 0 2 17 1 0 0 4
 Critical Gap Module:
 Critical Gp: xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
 FollowUpTim: xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
 Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
 Potential Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.0
 Move Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 0.01 0.03 0.00 0.00 0.01
 Level of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS by Move: * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx 181 xxxxx 524 231 xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx 0.1 0.0 xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx 25.1 xxxxx 12.1 20.6 xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx
 ApproachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #7 Pico Avenue, Pier C Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.371
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level of Service: A
 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Ignore Ovl Include
 Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0
 Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0
 Volume Module:
 Base Vol: 25 658 0 0 422 183 189 0 16 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 25 658 0 0 422 183 189 0 16 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 25 658 0 0 422 0 189 0 16 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 25 658 0 0 422 0 189 0 16 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MFL Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 25 658 0 0 422 0 189 0 16 0 0 0
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.21 0.00 0.00 0.13 0.00 0.07 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: ****

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.591
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 39 Level of Service: A
 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: Ignore Include Include
 Min. Green: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0
 Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
 Volume Module:
 Base Vol: 170 5 121 173 2 22 23 279 183 381 184 256
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 170 5 121 173 2 22 23 279 183 381 184 256
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 170 5 0 173 2 22 23 279 183 381 184 256
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 170 5 0 173 2 22 23 279 183 381 184 256
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MFL Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 170 5 0 173 2 22 23 279 183 381 184 256
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.78 0.22 1.00 1.21 0.79 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1243 357 1600 1932 1268 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.11 0.00 0.00 0.11 0.00 0.06 0.01 0.14 0.14 0.13 0.12 0.16
 OvlAdjV/S: ****
 Crit Moves: *****

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.360
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.2
 Optimal Cycle: 0 Level of Service: B
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 106 0 51 64 363 0 0 356 207
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 106 0 51 64 363 0 0 356 207
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 106 0 51 64 363 0 0 356 207
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 106 0 51 64 363 0 0 356 207
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 106 0 51 64 363 0 0 356 207
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.35 0.65 0.30 1.70 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 480 192 356 178 1024 0 0 1157 651
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.22 0.00 0.14 0.36 0.35 xxxx xxxx 0.31 0.32
 Crit Moves: ***
 Delay/Veh: 0.0 0.0 11.7 9.8 9.8 11.7 11.5 0.0 0.0 11.4 10.5
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 11.7 9.8 9.8 11.7 11.5 0.0 0.0 11.4 10.5
 LOS by Move: * * * * * A A B * * * * *
 ApproachDel: xxxxxx 10.9 B B 11.6
 Delay Adj: xxxxxx 1.00 B 1.00
 ApprAdjDel: xxxxxx 10.9 B 11.6
 LOS by Appr: * * * * * B B 0.4
 AllwayAvgQ: 0.0 0.0 0.0 0.2 0.1 0.1 0.5 0.5 0.0 0.0 0.4 0.4
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.495
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 40 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 14 0 247 132 1127 0 0 916 16
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 14 0 247 132 1127 0 0 916 16
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 14 0 247 132 1127 0 0 916 16
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 14 0 247 132 1127 0 0 916 16
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 14 0 247 132 1127 0 0 916 16
 Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.17 0.09 0.26 0.00 0.00 0.32 0.01
 Crit Vol: 0 247 0
 Crit Moves: *****

 Scenario: 2020 315-Acre PM Scenario Report
 Command: 2020 315-Acre PM
 Volume: 2020 315-Acre PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 315-Acre

 Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	E 37.4	0.958	E 37.4	0.958 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	E 37.0	1.014	E 37.0	1.014 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	D 27.1	0.000	D 27.1	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.7	0.000	B 10.7	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.8	0.000	B 10.8	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 21.5	0.853	C 21.5	0.853 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.376	A xxxxx	0.376 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.625	B xxxxx	0.625 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 11.9	0.419	B 11.9	0.419 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxx	0.603	B xxxxx	0.603 + 0.000 D/V

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.958
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 37.4
 Optimal Cycle: 0 Level of Service: E
 Approach: North Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 4 392 111 53 288 169 270 141 8 48 0 369
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 4 392 111 53 288 169 270 141 8 48 0 369
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 4 392 111 53 288 169 270 141 8 48 0 369
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 4 392 111 53 288 169 270 141 8 48 0 369
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 4 392 111 53 288 169 270 141 8 48 0 369
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.56 0.44 1.00 1.00 1.00 1.00 1.89 0.11 1.00 1.00 1.00
 Final Sat.: 333 564 163 335 360 382 337 658 37 326 339 385
 Capacity Analysis Module:
 Vol/Sat: 0.01 0.69 0.68 0.16 0.80 0.44 0.80 0.21 0.21 0.15 0.00 0.96
 Crit Moves: ****
 Delay/Veh: 13.1 30.5 29.1 14.8 40.2 18.4 42.4 15.2 15.1 14.9 0.0 65.2
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 13.1 30.5 29.1 14.8 40.2 18.4 42.4 15.2 15.1 14.9 0.0 65.2
 LOS by Move: B D B E C E C C B * F
 ApproachDel: 30.1 30.4 32.7 32.7 59.4
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 30.1 30.4 32.7 32.7 59.4
 LOS by Appr: D
 AllwayAvgQ: 0.0 1.9 1.7 0.2 2.8 2.8 2.7 0.2 0.2 0.2 0.0 5.7
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.014
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 37.0
 Optimal Cycle: 0 Level of Service: E
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 0 1 0 1 0 0 0 1 0 0 1
 Volume Module:
 Base Vol: 0 545 3 201 146 142 232 96 0 377 22 130
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 545 3 201 146 142 232 96 0 377 22 130
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 545 3 201 146 142 232 96 0 377 22 130
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 545 3 201 146 142 232 96 0 377 22 130
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 545 3 201 146 142 232 96 0 377 22 130
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 1.00 1.01 0.99 1.00 1.00 0.00 0.94 0.06 1.00
 Final Sat.: 346 742 4 346 367 383 367 383 0 372 22 439
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.73 0.73 0.58 0.40 0.37 0.63 0.25 xxxxx 1.01 1.01 0.30
 Crit Moves: ****
 Delay/Veh: 0.0 34.0 34.0 25.7 18.5 16.8 26.8 14.7 0.0 79.7 79.7 13.9
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 34.0 34.0 25.7 18.5 16.8 26.8 14.7 0.0 79.7 79.7 13.9
 LOS by Move: * D D D C C C D B * F F B
 ApproachDel: 34.0 21.0 23.3 23.3 63.5
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 34.0 21.0 23.3 23.3 63.5
 LOS by Appr: D
 AllwayAvgQ: 0.0 2.3 2.3 1.2 0.6 0.5 1.5 0.3 0.3 7.4 7.4 0.4
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.5 Worst Case Level Of Service: D [27.1]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 0 1 0 0 0 0 1
Volume Module:
Base Vol: 0 880 0 0 581 0 0 0 0 0 0 26 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 880 0 0 581 0 0 26 0 0 26 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 880 0 0 581 0 0 26 0 0 26 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 880 0 0 581 0 0 26 0 0 26 0 0
Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1171 xxxxx 440
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 189 xxxxx 570
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 189 xxxxx 570
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.14 xxxxx 0.00
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.5 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 27.1 xxxxx xxxxx
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxx xxxxx 27.1
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 2.9 Worst Case Level Of Service: B [10.7]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0
Volume Module:
Base Vol: 370 396 0 0 581 126 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 370 396 0 0 581 126 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 370 396 0 0 581 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 370 396 0 0 581 0 0 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Conflict Vol: 581 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1003 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 1003 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.37 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Level Of Service Module:
2Way95thQ: 1.7 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 10.7 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxx xxxxx xxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #7 Pico Avenue, Pier C Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.376
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level of Service: A

 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Ignore Protected Protected Protected Protected
 Min. Green: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0 0
 Lanes: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0 0
 Volume Module:
 Base Vol: 29 693 0 0 500 124 172 0 25 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 29 693 0 0 500 124 172 0 25 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 29 693 0 0 500 0 172 0 25 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 29 693 0 0 500 0 172 0 25 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 29 693 0 0 500 0 172 0 25 0 0 0
 OvlAdjVol: 29 693 0 0 500 0 172 0 25 0 0 0
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.22 0.00 0.00 0.16 0.00 0.06 0.00 0.02 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: *****

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #8 Pico Avenue, Pier B Street & 9th Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.625
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level of Service: B

 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: Ignore Include Include Include Include Include
 Min. Green: 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
 Volume Module:
 Base Vol: 113 2 259 238 1 12 73 159 231 465 77 338
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 113 2 259 238 1 12 73 159 231 465 77 338
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 113 2 0 238 1 12 73 159 231 465 77 338
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 113 2 0 238 1 12 73 159 231 465 77 338
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 113 2 0 238 1 12 73 159 231 465 77 338
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.90 0.10 1.00 1.00 1.00 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1447 153 1600 1600 1600 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.07 0.00 0.00 0.15 0.00 0.08 0.05 0.10 0.14 0.16 0.05 0.21
 Crit Moves: *****

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.603
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Ovl Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 0 0 29 0 272 136 1340 0 0 1174 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 29 0 272 136 1340 0 0 1174 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 29 0 272 136 1340 0 0 1174 18
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 0 0 29 0 272 136 1340 0 0 1174 18

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat: 0 0 0 0 1425 1425 4275 0 0 2850 1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.19 0.10 0.31 0.00 0.00 0.41 0.01
Crit Vol: 0 272 0 587
Crit Moves: *****

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315-Acre

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Anaheim Way & Pier B St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.419
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 0 0 218 0 12 83 312 0 0 73 231
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 218 0 12 83 312 0 0 73 231
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 218 0 12 83 312 0 0 73 231
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 218 0 12 83 312 0 0 73 231

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.42 1.58 0.00 0.00 2.00 1.00
Final Sat: 0 0 0 520 504 59 241 923 0 0 1069 602
Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx xxxxx 0.42 0.00 0.20 0.35 0.34 xxxxx xxxxx 0.07 0.38
Crit Moves: *****
Delay/Veh: 0.0 0.0 13.8 10.3 10.3 11.9 11.6 0.0 0.0 9.6 11.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 13.8 10.3 10.3 11.9 11.6 0.0 0.0 9.6 11.8
LOS by Move: * * * * * B B B * * * * * A B
ApproachDel: 12.6 B B B 11.6 11.3
Delay Adj: xxxxxx 1.00 1.00
ApprAdjDel: xxxxxx 12.6 11.6
LOS by Appr: * * * * * B B
AllwayAvgQ: 0.0 0.0 0.0 0.6 0.2 0.2 0.5 0.5 0.0 0.0 0.1 0.6
Note: Queue reported is the number of cars per lane.

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Scenario: 2020 NEPA AM

Command: 2020 NEPA AM
Volume: 2020 NEPA AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NEPA

Middle Harbor EIR
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NEPA

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 59.4	1.129	F 59.4	1.129 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 14.6	0.482	B 14.6	0.482 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 19.1	0.000	C 19.1	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.9	0.000	A 9.9	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 12.5	0.000	B 12.5	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 43.9	1.126	E 43.9	1.126 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.431	A xxxxx	0.431 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.651	B xxxxx	0.651 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 12.7	0.424	B 12.7	0.424 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.508	A xxxxx	0.508 + 0.000 D/V

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Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.129

Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 59.4

Optimal Cycle: 0 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound

Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 0 1 0 1 1 0 1 0 1 0 1 0

Volume Module: Base Vol: 2 387 114 50 385 221 364 38 4 162 78 245

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 2 387 114 50 385 221 364 38 4 162 78 245

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 2 387 114 50 385 221 364 38 4 162 78 245

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 2 387 114 50 385 221 364 38 4 162 78 245

Saturation Flow Module: Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.54 0.46 1.00 1.00 1.00 1.00 1.81 0.19 1.00 1.00 1.00

Final Sat.: 322 535 161 330 356 377 322 590 62 323 336 364

Capacity Analysis Module: Vol/Sat: 0.01 0.72 0.71 0.15 1.08 0.59 1.13 0.06 0.06 0.50 0.23 0.67

Crit Moves: *** **

Delay/Veh: 13.7 35.4 33.6 15.1 104 24.2 123.5 14.0 13.9 24.0 16.3 30.0

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Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.482

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 14.6

Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound

Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1

Lanes: 1 0 1 1 0 0 1 0 1 1 0 1 0 1 0 1 0

Volume Module: Base Vol: 0 412 2 34 240 157 112 73 0 191 26 92

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 412 2 34 240 157 112 73 0 191 26 92

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 412 2 34 240 157 112 73 0 191 26 92

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 412 2 34 240 157 112 73 0 191 26 92

Saturation Flow Module: Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.99 0.01 1.00 1.21 0.79 1.00 1.00 0.00 0.88 0.12 1.00

Final Sat.: 433 932 5 435 573 398 425 450 0 396 54 520

Capacity Analysis Module: Vol/Sat: 0.00 0.44 0.44 0.08 0.42 0.39 0.26 0.16 xxxxx 0.48 0.48 0.18

Crit Moves: *** **

Delay/Veh: 0.0 15.5 15.5 11.3 14.9 13.7 13.3 11.5 0.0 16.9 16.9 10.6

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)

 Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

 Average Delay (sec/veh): 2.5 Worst Case Level Of Service: [C 19.1]

Approach:		North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign			
Rights:	Include			Include			Ignore			Include			
Lanes:	0	0	2	0	0	2	0	0	0	0	0	1	

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)

 Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

 Average Delay (sec/veh): 1.6 Worst Case Level Of Service: [A 9.9]

Approach:		North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign			
Rights:	Include			Ignore			Include			Include			
Lanes:	1	0	2	0	0	0	1	1	0	0	0	0	

Volume Module:
 Base Vol: 209 450 0 0 644 78 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 209 450 0 0 644 78 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 209 450 0 0 644 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 209 450 0 0 644 0 0 0 0 0 0 0 0

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Volume Module:
 Base Vol: 0 581 0 0 644 0 0 0 0 106 0 0 79
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 581 0 0 644 0 0 0 0 106 0 0 79
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 581 0 0 644 0 0 0 0 106 0 0 79
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 581 0 0 644 0 0 0 0 106 0 0 79

Critical Gap Module:
 Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
 Conflict Vol: 644 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potential Cap.: 951 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap.: 951 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: 0.22 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
 2Way95thQ: 0.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: 9.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS By Move: A * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx xxxxxx
 ApproachLOS: * * * * *

Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS By Move: * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx xxxxxx
 ApproachLOS: * * * * *
 C
 Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Average Delay (sec/veh): 0.4 Worst Case Level of Service: Bf 12.5]
Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Cycle (sec): 100 Critical Vol./Cap.(X): 1.126
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 43.9
Optimal Cycle: 0 Level of Service: E

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 114 257 1 6 608 290 487 0 56 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.95 0.05 1.00

Capacity Analysis Module:
Vol/Sat: 0.30 0.33 0.33 0.68 0.68 0.59 1.13 xxxxx 0.12 0.06 0.06 0.09
Crit Moves: ***

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.431
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 0 2 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 0 2 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 14 726 0 0 848 209 164 0 11 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 14 726 0 0 848 209 164 0 11 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 14 726 0 0 848 0 164 0 11 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 14 726 0 0 848 0 164 0 11 0 0 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.01 0.23 0.00 0.00 0.27 0.00 0.06 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.651
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 0 0 0 0 0

Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 240 2 521 241 0 19 59 280 74 402 247 220
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 240 2 521 241 0 19 59 280 74 402 247 220
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 240 2 0 241 0 19 59 280 74 402 247 220
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 240 2 0 241 0 19 59 280 74 402 247 220
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.85 0.15 1.00 1.58 0.42 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1366 234 1600 2531 669 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.15 0.00 0.00 0.15 0.00 0.08 0.04 0.11 0.11 0.14 0.15 0.14
Crit Moves: ****

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.424
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 202 0 31 21 368 0 0 356 255
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 202 0 31 21 368 0 0 356 255
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 202 0 31 21 368 0 0 356 255
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 202 0 31 21 368 0 0 356 255
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 202 0 31 21 368 0 0 356 255

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.73 0.27 0.11 1.89 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 479 385 140 59 1036 0 0 1075 602

Capacity Analysis Module:
Vol/Sat: xxxx xxxx 0.42 0.00 0.22 0.36 0.36 xxxx xxxx 0.33 0.42
Crit Moves: *** ** ** ** **
Delay/Veh: 0.0 0.0 0.0 14.8 11.0 11.0 12.4 12.4 0.0 0.0 12.3 12.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 14.8 11.0 11.0 12.4 12.4 0.0 0.0 12.3 12.6
LOS by Move: * * * B B B * *
ApproachDel: xxxxxx 13.4 12.4
Delay Adj: xxxxxx 1.00 1.00
ApprAdjDel: xxxxxx 13.4 12.4
LOS by Appr: * B B
AllwayVgQ: 0.0 0.0 0.0 0.6 0.3 0.3 0.5 0.5 0.0 0.0 0.5 0.7
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.508
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Protected Protected Protected Protected

Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 3 0 231 192 1024 0 0 986 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 3 0 231 192 1024 0 0 986 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 3 0 231 192 1024 0 0 986 10
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 3 0 231 192 1024 0 0 986 10
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 3 0 231 192 1024 0 0 986 10

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.16 0.13 0.24 0.00 0.00 0.35 0.01
Crit Vol: 0 231 0
Crit Moves: **** **
Note: Queue reported is the number of cars per lane.

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 Scenario Report
 2020 NEPA MD

Command: 2020 NEPA MD
 Volume: 2020 NEPA MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: NEPA

Middle Harbor EIR
 Future Year 2020
 NEPA

 Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 102.2	1.346	F 102.2	1.346 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 19.4	0.763	C 19.4	0.763 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 21.5	0.000	C 21.5	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.3	0.000	B 10.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 13.8	0.000	B 13.8	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 34.1	1.030	D 34.1	1.030 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.384	A xxxxx	0.384 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.631	B xxxxx	0.631 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 11.4	0.361	B 11.4	0.361 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.506	A xxxxx	0.506 + 0.000 D/V

Middle Harbor EIR
Future Year 2020
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Critical Vol./Cap.(X): 1.346
Average Delay (sec/veh): 102.2

Cycle (sec): 100
Loss Time (sec): 9 (Y+R=4.0 sec)
Optimal Cycle: 0

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign
Rights: Include Include Include
Min. Green: 0 0 0

Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 5 430 196 78 432 182 407 146 5 160 48 295

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 5 430 196 78 432 182 407 146 5 160 48 295

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 5 430 196 78 432 182 407 146 5 160 48 295
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 5 430 196 78 432 182 407 146 5 160 48 295

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.37 0.63 1.00 1.00 1.00 1.00 1.93 0.07 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Sat.: 306 453 213 303 324 340 302 594 20 300 311 336
Capacity Analysis Module:
Vol/Sat: 0.02 0.95 0.92 0.26 1.33 0.54 1.35 0.25 0.25 0.53 0.15 0.88

Crit Moves: ***
Delay/Veh: 14.4 71.1 63.8 18.2 199 24.1 207.6 17.6 17.6 27.0 16.1 55.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdJDel/Veh: 14.4 71.1 63.8 18.2 199 24.1 207.6 17.6 17.6 27.0 16.1 55.6
LOS by Move: B F C F C F C F C D C F
ApproachDel: 68.4 132.9 156.2 156.2 42.7
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApprAdJDel: 68.4 132.9 156.2 156.2 42.7
LOS by Appr: F F F
AllWayAvgQ: 0.0 5.4 4.8 0.3 16.7 16.7 16.2 0.3 0.3 1.0 0.2 3.9

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Critical Vol./Cap.(X): 0.763
Average Delay (sec/veh): 19.4

Cycle (sec): 100
Loss Time (sec): 0 (Y+R=4.0 sec)
Optimal Cycle: 0

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign
Rights: Include Include Include
Min. Green: 0 0 0

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 0 484 6 96 270 59 77 38 1 336 7 136

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 484 6 96 270 59 77 38 1 336 7 136

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 484 6 96 270 59 77 38 1 336 7 136
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 484 6 96 270 59 77 38 1 336 7 136

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.64 0.36 1.00 0.97 0.03 0.98 0.02 1.00 1.00 1.00 1.00 1.00 1.00

Final Sat.: 412 882 11 406 718 160 389 399 11 441 9 519
Capacity Analysis Module:
Vol/Sat: 0.00 0.55 0.55 0.24 0.38 0.37 0.20 0.10 0.10 0.20 0.10 0.10 0.20 0.10 0.10 0.20 0.10

Crit Moves: ***
Delay/Veh: 0.0 19.2 19.2 13.7 15.0 14.7 13.3 11.6 11.6 30.7 30.7 11.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdJDel/Veh: 0.0 19.2 19.2 13.7 15.0 14.7 13.3 11.6 11.6 30.7 30.7 11.6
LOS by Move: * C C B C B B B D D B
ApproachDel: 19.2 14.7 12.7 12.7 25.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApprAdJDel: 19.2 14.7 12.7 12.7 25.3
LOS by Appr: C B B
AllWayAvgQ: 0.0 1.1 1.1 0.3 0.5 0.5 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
 Average Delay (sec/veh): 1.8 Worst Case Level Of Service: [B, 10.3]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Ignore	Include	Include
Lanes:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0

Volume Module:
 Base Vol: 228 386 0 0 706 136 0 0 0 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 228 386 0 0 706 136 0 0 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 228 386 0 0 706 0 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 228 386 0 0 706 0 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
 Conflict Vol: 706 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potential Cap.: 902 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap.: 902 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: 0.25 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
 2Way95thQ: 1.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: 10.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS by Move: B * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx
 ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
 Average Delay (sec/veh): 0.2 Worst Case Level Of Service: [C, 21.5]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 2 0 0	0 0 2 0 0	0 0 0 0 0	1 0 0 0 1

Volume Module:
 Base Vol: 0 674 0 0 706 0 0 0 0 16 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 674 0 0 706 0 0 0 0 16 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 674 0 0 706 0 0 0 0 16 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 674 0 0 706 0 0 0 0 16 0 0

Critical Gap Module:
 Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
 FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1027 xxxxx 337
 Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 234 xxxxx 665
 Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 234 xxxxx 665
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.07 xxxxx 0.00

Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.2 xxxxx xxxxx
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 21.5 xxxxx xxxxx
 LOS by Move: * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx
 ApproachLOS: * * * * * 21.5
 C

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.2 Worst Case Level of Service: B [13.8]
Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Average Delay (sec/veh): 0.2 Worst Case Level of Service: B [13.8]
Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Volume Module:
Base Vol: 0 556 1 0 713 0 0 2 17 1 0 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Volume Module:
Base Vol: 0 556 1 0 713 0 0 2 17 1 0 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gap: xxxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: xxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Critical Gap Module:
Critical Gap: xxxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: xxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Capacity Analysis Module:
Vol/Sat: 0.17 0.30 0.30 0.43 0.43 0.39 1.03 xxxxx 0.16 0.03 0.03 0.07
Crit Moves: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Analysis Module:
Vol/Sat: 0.17 0.30 0.30 0.43 0.43 0.39 1.03 xxxxx 0.16 0.03 0.03 0.07
Crit Moves: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.03 1.97 1.00 1.00 0.00 1.00 0.58 0.42 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.03 1.97 1.00 1.00 0.00 1.00 0.58 0.42 1.00

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.384
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level of Service: A

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Ignore	Ovl	Include
Min. Green:	1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes:	1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:	Base Vol:	Growth Adj:	Initial Bse:	User Adj:	PHF Adj:	PHF Volume:	Reduced Vol:	Reduced Vol:	PCE Adj:	MLF Adj:	FinalVolume:	OvAdjVol:
	27 699	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	0 0 0 0	0 0 0 0	1.00 1.00	1.00 1.00	1.00 1.00	0 0
	27 699	0 0 501 179	188 0 17 0	188 0 17 0	188 0 17 0	188 0 17 0	188 0 17 0	188 0 17 0	1.00 1.00	1.00 1.00	1.00 1.00	0 0

Saturation Flow Module:	Sat/Lane:	Adjustment:	Lanes:	Final Sat:
	1600 1600	1.00 1.00	0 0 3200 3200	0 0 0 0
	1600 1600	1.00 1.00	0 0 3200 3200	0 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.02 0.22 0.00 0.00 0.16 0.00 0.07 0.00 0.01 0.00 0.00 0.00
 OvAdjV/S: 0.00
 Crit Moves: ****

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.631
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 43 Level of Service: B

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase	Split Phase	Protected	Protected
Rights:	Ignore	Include	Include	Include
Min. Green:	0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0	0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0	0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes:	0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0	0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0	0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:	Base Vol:	Growth Adj:	Initial Bse:	User Adj:	PHF Adj:	PHF Volume:	Reduced Vol:	Reduced Vol:	PCE Adj:	MLF Adj:	FinalVolume:	OvAdjVol:
	144 5 162 247	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	0 0 0 0	0 0 0 0	1.00 1.00	1.00 1.00	1.00 1.00	0 0
	144 5 162 247	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	0 0 0 0	0 0 0 0	1.00 1.00	1.00 1.00	1.00 1.00	0 0

Saturation Flow Module:	Sat/Lane:	Adjustment:	Lanes:	Final Sat:
	1600 1600	1.00 1.00	0 0 205 205	0 0 0 0
	1600 1600	1.00 1.00	0 0 205 205	0 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.09 0.00 0.00 0.15 0.00 0.08 0.02 0.15 0.15 0.14 0.12 0.17
 Crit Moves: ****

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.506
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level of Service: A
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected Protected Protected
Rights: Include Ovl Include Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 0 14 0 270 170 1110 0 0 901 16
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 14 0 270 170 1110 0 0 901 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 14 0 270 170 1110 0 0 901 16
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 14 0 270 170 1110 0 0 901 16

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 0 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.19 0.12 0.26 0.00 0.00 0.00 0.32 0.01
Crit Vol: 0 270 0
Crit Moves: ****

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.361
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.4
Optimal Cycle: 0 Level of Service: B
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 142 0 51 64 341 0 0 302 229
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 142 0 51 64 341 0 0 302 229
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 142 0 51 64 341 0 0 302 229
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 142 0 51 64 341 0 0 302 229

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.47 0.53 0.32 1.68 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 487 259 290 182 986 0 0 1126 634
Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx 0.29 0.00 0.18 0.35 0.35 xxxxx xxxxx 0.27 0.36
Crit Moves: ***
Delay/Veh: 0.0 0.0 12.4 10.1 10.1 11.9 11.7 0.0 0.0 11.1 11.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 12.4 10.1 10.1 11.9 11.7 0.0 0.0 11.1 11.2
LOS by Move: * * * * * B B B * * * * * B B
ApproachDel: xxxxxx 11.5 11.7 11.2
Delay Adj: xxxxxx 1.00 1.00 1.00
ApprAdjDel: xxxxxx 11.5 11.7 11.2
LOS by Appr: * * * * * B B B
AllWayAvgQ: 0.0 0.0 0.0 0.4 0.2 0.2 0.5 0.5 0.0 0.0 0.3 0.5
Note: Queue reported is the number of cars per lane.

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Scenario: 2020 NEPA PM

Command: 2020 NEPA PM
Volume: 2020 NEPA PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NEPA

Middle Harbor EIR
Future Year 2020
NEPA

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	E 36.3 0.905	E 36.3 0.905	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	E 35.8 1.005	E 35.8 1.005	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	D 27.2 0.000	D 27.2 0.000	+ 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 11.1 0.000	B 11.1 0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.7 0.000	B 10.7 0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 24.3 0.908	C 24.3 0.908	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxxx 0.371	A xxxxxx 0.371	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxxx 0.632	B xxxxxx 0.632	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	B 12.7 0.504	B 12.7 0.504	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxxx 0.609	B xxxxxx 0.609	+ 0.000 D/V

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.905

Cycle (sec): 100 Critical Vol./Cap.(X): 0.905

Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 36.3

Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 36.3

Optimal Cycle: 0 Level of Service: E

Optimal Cycle: 0 Level of Service: E

Approach: North Bound South Bound East Bound West Bound

Approach: North Bound South Bound East Bound West Bound

Movement: L T R L T R L T R L T R L T R

Movement: L T R L T R L T R L T R L T R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0

Min. Green: 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 0 1 0 1 1 0 0 1 0 1 0

Lanes: 1 0 1 1 0 0 1 0 1 1 0 0 1 0 1 0

Volume Module:

Volume Module:

Base Vol: 4 404 94 53 287 188 312 128 8 48 0 326

Base Vol: 4 404 94 53 287 188 312 128 8 48 0 326

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 4 404 94 53 287 188 312 128 8 48 0 326

Initial Bse: 4 404 94 53 287 188 312 128 8 48 0 326

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 4 404 94 53 287 188 312 128 8 48 0 326

PHF Volume: 4 404 94 53 287 188 312 128 8 48 0 326

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 4 404 94 53 287 188 312 128 8 48 0 326

Reduced Vol: 4 404 94 53 287 188 312 128 8 48 0 326

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 4 404 94 53 287 188 312 128 8 48 0 326

Final Volume: 4 404 94 53 287 188 312 128 8 48 0 326

Saturation Flow Module:

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.62 0.38 1.00 1.00 1.88 0.12 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.62 0.38 1.00 1.00 1.88 0.12 1.00 1.00 1.00 1.00 1.00

Final Sat: 328 586 138 332 362 382 345 655 41 321 334 376

Final Sat: 328 586 138 332 362 382 345 655 41 321 334 376

Capacity Analysis Module:

Capacity Analysis Module:

Vol/Sat: 0.01 0.69 0.68 0.16 0.79 0.49 0.90 0.20 0.19 0.15 0.00 0.87

Vol/Sat: 0.01 0.69 0.68 0.16 0.79 0.49 0.90 0.20 0.19 0.15 0.00 0.87

Crit Moves: ****

Crit Moves: ****

Delay/Veh: 13.1 30.1 29.0 14.8 39.4 19.6 58.3 14.7 14.6 15.1 0.0 47.8

Delay/Veh: 13.1 30.1 29.0 14.8 39.4 19.6 58.3 14.7 14.6 15.1 0.0 47.8

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 13.1 30.1 29.0 14.8 39.4 19.6 58.3 14.7 14.6 15.1 0.0 47.8

AdjDel/Veh: 13.1 30.1 29.0 14.8 39.4 19.6 58.3 14.7 14.6 15.1 0.0 47.8

LOS by Move: B D B E C F B B C * E

LOS by Move: B D B E C F B B C * E

ApproachDel: 29.8 29.9 45.1 43.6

ApproachDel: 29.8 29.9 45.1 43.6

Delay Adj: 1.00 1.00 1.00 1.00

Delay Adj: 1.00 1.00 1.00 1.00

ApprAdjDel: 29.8 29.9 45.1 43.6

ApprAdjDel: 29.8 29.9 45.1 43.6

LOS by Appr: D E

LOS by Appr: D E

AllWayAvgQ: 0.0 1.8 1.7 0.2 2.7 2.7 4.3 0.2 0.2 0.2 0.0 3.7

AllWayAvgQ: 0.0 1.8 1.7 0.2 2.7 2.7 4.3 0.2 0.2 0.2 0.0 3.7

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: B [11.1]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: D [27.2]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 377 360 0 0 631 117 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 377 360 0 0 631 117 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 377 360 0 0 631 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 377 360 0 0 631 0 0 0 0 0 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Volume Module:
Base Vol: 0 858 0 0 631 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 858 0 0 631 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 858 0 0 631 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 858 0 0 631 0 0 0 0 0 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 631 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 961 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 961 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.39 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Level Of Service Module:
2Way95thQ: 1.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 11.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Level of Service Computation Report
2000 HCM Signalized Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Average Delay (sec/veh): 0.1 Worst Case Level of Service: Bf 10.7]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Cycle (sec): 100 Critical Vol./Cap.(X): 0.908
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 24.3
Optimal Cycle: 0 Level of Service: C

Volume Module:
Base Vol: 98 307 3 4 461 171 403 0 116 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Volume Module:
Base Vol: 98 307 3 4 461 171 403 0 116 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.25 0.38 0.38 0.53 0.53 0.36 0.91 xxxxx 0.23 0.10 0.10 0.13
Crit Moves: ***

Capacity Analysis Module:
Vol/Sat: 0.25 0.38 0.38 0.53 0.53 0.36 0.91 xxxxx 0.23 0.10 0.10 0.13
Crit Moves: ***

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.371
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx A
Optimal Cycle: 27 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected Protected Protected
Rights: Include Ignore Protected Protected Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 0 2 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 31 675 0 0 539 112 172 0 25 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 31 675 0 0 539 112 172 0 25 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 31 675 0 0 539 0 172 0 25 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 31 675 0 0 539 0 172 0 25 0 0 0
OvAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.21 0.00 0.00 0.17 0.00 0.06 0.00 0.02 0.00 0.00 0.00
OvAdjV/S: 0.00
Crit Moves: ****

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Middle Harbor EIR
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NEPA

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.632
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx B
Optimal Cycle: 43 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 113 2 277 242 1 12 54 159 234 473 80 309
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 113 2 277 242 1 12 54 159 234 473 80 309
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 113 2 0 242 1 12 54 159 234 473 80 309
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 113 2 0 242 1 12 54 159 234 473 80 309
OvAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1449 151 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.15 0.00 0.08 0.03 0.10 0.15 0.16 0.05 0.19
Crit Moves: ****

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St
Level Of Service: B

Cycle (sec): 100 Critical Vol./Cap.(X): 0.504
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: 0 Level Of Service: B

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 0 0 0 0 2 0 1
Lanes: 0 0 0 0 0 1 0 1 0 1 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 223 0 13 47 344 0 0 63 303
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 223 0 13 47 344 0 0 63 303
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 223 0 13 47 344 0 0 63 303
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 223 0 13 47 344 0 0 63 303

Saturation Flow Module:
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.11 0.24 1.76 0.00 0.00 2.00 1.00
Final Sat: 0 0 509 491 61 136 1010 0 0 1063 601

Capacity Analysis Module:
Vol/Sat: xxxx xxxx 0.44 0.00 0.21 0.34 0.34 xxxx xxxx 0.06 0.50
Crit Moves: *** ** ** ** ** **

Delay/Veh: 0.0 0.0 14.4 10.5 10.5 11.9 11.7 0.0 0.0 9.6 14.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 14.4 10.5 10.5 11.9 11.7 0.0 0.0 9.6 14.0
LOS by Move: * B B B B *
ApproachDel: 13.1 11.8 13.2
Delay Adj: xxxxxx
ApprAdjDel: 13.1 11.8 13.2
LOS by Appr: * B B
AllwayAvgQ: 0.0 0.0 0.0 0.7 0.2 0.2 0.5 0.5 0.0 0.0 0.1 0.9

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St
Level Of Service: B

Cycle (sec): 100 Critical Vol./Cap.(X): 0.609
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ovl Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 29 0 311 142 1329 0 0 1113 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 29 0 311 142 1329 0 0 1113 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 29 0 311 142 1329 0 0 1113 18
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 29 0 311 142 1329 0 0 1113 18

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
Final Sat: 0 0 0 0 1425 0 1425 4275 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.22 0.10 0.31 0.00 0.00 0.39 0.01
Crit Vol: 0 311 0 557
Crit Moves: **** ** * *****

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Scenario Report

2020 NP AM
Command: 2020 NP AM
Volume: 2020 NP AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Paths
Routes: Default Routes
Configuration: NP

Middle Harbor EIR
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No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS, Veh C	V/ C	Future Del/ LOS, Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 79.5	1.320	F 79.5	1.320 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 17.3	0.711	C 17.3	0.711 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	B 14.0	0.000	B 14.0	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.4	0.000	B 10.4	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 12.5	0.000	B 12.5	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 52.5	1.195	F 52.5	1.195 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.442	A xxxxx	0.442 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.594	A xxxxx	0.594 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 10.1	0.287	B 10.1	0.287 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.430	A xxxxx	0.430 + 0.000 V/C

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Cycle (sec): 100 Critical Vol./Cap.(X): 1.320
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 79.5
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 1 437 127 49 435 265 316 40 8 196 136 286
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 1 437 127 49 435 265 316 40 8 196 136 286
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 437 127 49 435 265 316 40 8 196 136 286
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 437 127 49 435 265 316 40 8 196 136 286
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 1 437 127 49 435 265 316 40 8 196 136 286

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.55 0.45 1.00 1.00 1.00 1.00 1.67 0.33 1.00 1.00 1.00
Final Sat.: 301 505 149 304 329 349 296 497 101 312 324 349

Capacity Analysis Module:
Vol/Sat: 0.00 0.87 0.85 0.16 1.32 0.76 1.07 0.08 0.08 0.63 0.42 0.82
Crit Moves: ****

Delay/Veh: 14.4 55.1 51.8 16.2 194 38.3 107.4 15.2 15.0 31.4 21.2 45.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.4 55.1 51.8 16.2 194 38.3 107.4 15.2 15.0 31.4 21.2 45.3
LOS by Move: B F F C F E F C C D C E
ApproachDel: 54.3 127.2 95.3 35.6
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 54.3 127.2 95.3 35.6
LOS by Appr: F F F F F F F F F F F F
AllWayAvgQ: 0.0 3.9 3.5 0.2 16.5 16.5 7.6 0.1 0.1 1.5 0.7 3.1

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Cycle (sec): 100 Critical Vol./Cap.(X): 0.711
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 17.3
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 0 1 0 0 1 0

Volume Module:
Base Vol: 0 488 2 29 185 81 60 33 0 326 13 134
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 488 2 29 185 81 60 33 0 326 13 134
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 488 2 29 185 81 60 33 0 326 13 134
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 488 2 29 185 81 60 33 0 326 13 134
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 488 2 29 185 81 60 33 0 326 13 134

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.39 0.61 1.00 1.00 0.00 0.96 0.04 1.00
Final Sat.: 443 956 4 415 629 286 411 435 0 458 18 556

Capacity Analysis Module:
Vol/Sat: 0.00 0.51 0.51 0.07 0.29 0.28 0.15 0.08 xxxxx 0.71 0.71 0.24
Crit Moves: ****

Delay/Veh: 0.0 17.0 17.0 11.5 13.3 12.7 12.1 10.9 0.0 25.6 25.6 10.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 17.0 17.0 11.5 13.3 12.7 12.1 10.9 0.0 25.6 25.6 10.8
LOS by Move: * C C B B B B B * D D B
ApproachDel: 17.0 12.9 11.7 11.7
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 17.0 12.9 11.7 11.7
LOS by Appr: C B B B
AllWayAvgQ: 0.0 0.9 0.9 0.1 0.4 0.3 0.1 0.1 0.1 2.0 2.0 0.3

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B [14.0]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include

Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1
Volume Module:
Base Vol: 0 588 0 0 654 0 0 0 0 0 39 0 74
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 588 0 0 654 0 0 0 0 39 0 74
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 588 0 0 654 0 0 0 0 39 0 74
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 0 588 0 0 654 0 0 0 0 39 0 74

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 915 xxxxx 294
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 276 xxxxx 708
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 276 xxxxx 708
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.14 xxxxx 0.10

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.5 xxxxx 0.3
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 20.2 xxxxx 10.7

LOS By Move: * * * * * C * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 14.0
ApproachLOS: * * * * * B

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
No Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B [10.4]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include

Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0
Volume Module:
Base Vol: 276 385 0 0 654 111 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 276 385 0 0 654 111 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 276 385 0 0 654 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 276 385 0 0 654 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 654 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 943 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 943 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.29 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 1.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 10.4 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

LOS By Move: B * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * * * * * * * *

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #5 Pico Avenue, Broadway
 Average Delay (sec/veh): 0.5 Worst Case Level of Service: Bf 12.5]

Cycle (sec):	100	Critical Vol./Cap.(X):	1.195
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	52.5
Optimal Cycle:	0	Level of Service:	F

Approach: North Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R L-T-R
 Control: Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 0 0 1 0 0 1

Volume Module:
 Base Vol: 13 548 8 6 640 0 0 2 29 0 0 0 3
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 13 548 8 6 640 0 2 29 0 0 3
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 13 548 8 6 640 0 2 29 0 0 3
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Final Vol.: 13 548 8 6 640 0 2 29 0 0 3

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx 4.1 xxxxx xxxxx 6.5 6.9 xxxxx xxxxx 6.9
 FollowUpTim: 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx 4.0 3.3 xxxxx xxxxx 3.3

Capacity Module:
 Conflict Vol: 640 xxxxx xxxxx 556 xxxxx xxxxx xxxxx 1234 320 xxxxx xxxxx 278
 Potent Cap: 954 xxxxx xxxxx 1025 xxxxx xxxxx xxxxx 178 682 xxxxx xxxxx 725
 Move Cap: 954 xxxxx xxxxx 1025 xxxxx xxxxx xxxxx 175 682 xxxxx xxxxx 725
 Volume/Cap: 0.01 xxxxx xxxxx xxxxx 0.01 xxxxx xxxxx 0.01 0.04 xxxxx xxxxx 0.00

Level of Service Module:
 2Way95thQ: 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
 Control Del: 8.8 xxxxx xxxxx 8.5 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.0
 LOS By Move: A * A * A * A * A * A * A * A * A
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * * D * * * * * B * * * * *
 ApproachDel: xxxxxx xxxxxx 12.5 B
 ApproachLOS: * * * * * A
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #6 Pico Avenue, Pier D Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.195

Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	52.5
Optimal Cycle:	0	Level of Service:	F

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 1 0 1 1 0 0 0 1 0 1 0 0 0 0 0 1 0 0 1

Volume Module:
 Base Vol: 108 188 1 6 636 285 524 0 60 26 1 40
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 108 188 1 6 636 285 524 0 60 26 1 40
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 108 188 1 6 636 285 524 0 60 26 1 40
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 108 188 1 6 636 285 524 0 60 26 1 40
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 108 188 1 6 636 285 524 0 60 26 1 40

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.96 0.04 1.00
 Final Sat.: 372 779 4 9 913 506 439 0 496 356 14 421

Capacity Analysis Module:
 Vol/Sat: 0.29 0.24 0.24 0.70 0.70 0.56 1.19 xxxxx 0.12 0.07 0.07 0.10
 Crit Moves: *** **** * * * * *
 Delay/Veh: 15.8 14.4 14.3 26.3 26.2 18.4 134.4 0.0 10.6 12.7 12.7 11.6
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 15.8 14.4 14.3 26.3 26.2 18.4 134.4 0.0 10.6 12.7 12.7 11.6
 LOS by Move: C B B D C F * * * * * B B B B
 ApproachDel: 14.9 23.8 23.8 121.7 121.7 12.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00
 ApprAdjDel: 14.9 23.8 23.8 121.7 121.7
 LOS by Appr: B C C 2.0 2.0 1.2 15.0 15.0 0.1 0.1 0.1 0.1
 AllwayAvgQ: 0.4 0.3 0.3 2.0 2.0 1.2 15.0 15.0 0.1 0.1 0.1 0.1
 Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.442
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Protected Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 28 689 0 0 857 222 182 0 17 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 28 689 0 0 857 222 182 0 17 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 28 689 0 0 857 0 182 0 17 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 28 689 0 0 857 0 182 0 17 0 0 0 0

OvAdjVol: 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 0 1600 0 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.22 0.00 0.00 0.27 0.00 0.06 0.00 0.01 0.00 0.00 0.00

OvAdjV/S: 0.00
Crit Moves: ****

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.594
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 183 2 585 258 0 13 8 214 62 422 212 203

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 183 2 585 258 0 13 8 214 62 422 212 203
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 183 2 0 258 0 13 8 214 62 422 212 203
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 183 2 0 258 0 13 8 214 62 422 212 203

OvAdjVol: 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.00 1.00 1.00 0.90 0.10 1.00 1.55 0.45 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1446 154 1600 2481 719 3200 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.11 0.00 0.00 0.16 0.00 0.08 0.01 0.09 0.09 0.13 0.13 0.13

OvAdjV/S: 0.00
Crit Moves: ****

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.430
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Ovl Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0
Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 3 0 167 149 1037 0 0 891 11
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 3 0 167 149 1037 0 0 891 11
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 3 0 167 149 1037 0 0 891 11
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 3 0 167 149 1037 0 0 891 11

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.12 0.10 0.24 0.00 0.00 0.31 0.01
Crit Vol: 0 167 0
Crit Moves: ****

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Anaheim Way & Pier B St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.287
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 152 0 41 26 192 0 0 262 188
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 152 0 41 26 192 0 0 262 188
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 152 0 41 26 192 0 0 262 188
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 152 0 41 26 192 0 0 262 188

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.58 0.42 0.24 1.76 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 529 343 254 141 1051 0 0 1207 684

Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx 0.29 0.00 0.16 0.18 0.18 xxxxx 0.22 0.27
Crit Moves: ****
Delay/Veh: 0.0 0.0 11.7 9.5 9.5 9.8 9.7 0.0 0.0 10.0 9.6
AdjDel/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
LOS by Move: * * * * * A A A * * * * *
ApproachDel: xxxxxx 10.8 A 9.7
Delay Adj: xxxxxx 1.00
ApprAdjDel: xxxxxx 10.8 9.7
LOS by Appr: * B
AllwayAvgQ: 0.0 0.0 0.4 0.2 0.2 0.2 0.2 0.0 0.0 0.3 0.4

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
No Project

Scenario Report

2020 NP MD

Command:
2020 NP MD

Volume:
2020 NP MD Peak

Geometry:
Future

Impact Fee:
Default Impact Fee

Trip Generation:
Default Trip Generation

Trip Distribution:
Default Trip Distribution

Paths:
Default Path

Routes:
Default Route

Configuration:
NP

Middle Harbor EIR
Future Year 2020
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 136.8	1.603	F 136.8	1.603 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	D 29.3	0.938	D 29.3	0.938 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 23.9	0.000	C 23.9	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 12.7	0.000	B 12.7	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	C 15.1	0.000	C 15.1	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 127.2	1.594	F 127.2	1.594 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.430	A xxxxx	0.430 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.698	B xxxxx	0.698 + 0.000 V/C
# 9 Anaheim Way & Pier B St	A 8.9	0.240	A 8.9	0.240 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.442	A xxxxx	0.442 + 0.000 V/C

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.603
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 136.8
Optimal Cycle: 0 Level of Service: F

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0

Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 5 536 195 82 502 221 345 111 6 196 71 358

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 5 536 195 82 502 221 345 111 6 196 71 358
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 5 536 195 82 502 221 345 111 6 196 71 358
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 5 536 195 82 502 221 345 111 6 196 71 358
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.47 0.53 1.00 1.00 1.00 1.00 1.90 0.10 1.00 1.00 1.00
Final Sat.: 298 467 174 299 313 333 287 564 31 298 310 332

Capacity Analysis Module:
Vol/Sat: 0.02 1.15 1.12 0.27 1.60 0.66 1.20 0.20 0.20 0.66 0.23 1.08
Crit Moves: ****

Delay/Veh: 14.8 130 120.3 19.1 312 32.2 153.9 17.6 17.5 34.9 17.6 105.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.8 130 120.3 19.1 312 32.2 153.9 17.6 17.5 34.9 17.6 105.3

LOS by Move: B F C F D F C C D C F
ApproachDel: 126.7 205.3 119.4 73.3
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 126.7 205.3 119.4 73.3

LOS by Appr: F
AllwayAvgQ: 0.0 10.6 9.6 0.4 25.9 25.9 11.1 0.2 0.2 1.7 0.3 8.5
Note: Queue reported is the number of cars per lane.

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Middle Harbor EIR
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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.938
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 29.3
Optimal Cycle: 0 Level of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0

Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 0 599 335 28 39 20 0 412 4 158

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 599 335 28 39 20 0 412 4 158
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 599 335 28 39 20 0 412 4 158
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 0 599 335 28 39 20 0 412 4 158
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.98 0.02 1.00 1.85 0.15 1.00 1.00 0.00 0.99 0.01 1.00
Final Sat.: 402 864 9 390 769 65 366 385 0 439 4 510

Capacity Analysis Module:
Vol/Sat: 0.00 0.69 0.69 0.23 0.44 0.43 0.11 0.05 xxxxx 0.94 0.94 0.31
Crit Moves: ****

Delay/Veh: 0.0 26.6 26.5 14.1 17.1 16.9 13.0 11.9 0.0 56.1 56.1 12.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 26.6 26.5 14.1 17.1 16.9 13.0 11.9 0.0 56.1 56.1 12.5

LOS by Move: * D D B C C B B * F F B
ApproachDel: 26.6 16.5 12.6 12.6
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 26.6 16.5 12.6 12.6

LOS by Appr: D
AllwayAvgQ: 0.0 1.9 1.9 0.3 0.7 0.7 0.1 0.0 0.0 5.6 5.6 0.4
Note: Queue reported is the number of cars per lane.

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Middle Harbor EIR
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No Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C [23.9]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 714 0 0 847 0 0 0 0 0 8 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 714 0 0 847 0 0 0 0 0 8 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 714 0 0 847 0 0 0 0 0 8 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 714 0 0 847 0 0 0 0 0 8 0
Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1138 xxxxx 357
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 198 xxxxx 645
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 198 xxxxx 645
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.04 xxxxx 0.00
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.1 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 23.9 xxxxx xxxxx
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: C

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
No Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 2.9 Worst Case Level Of Service: B [12.7]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 336 308 0 0 847 172 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 336 308 0 0 847 172 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 336 308 0 0 847 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 336 308 0 0 847 0 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 847 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 799 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 799 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.42 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Level Of Service Module:
2Way95thQ: 2.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 12.7 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: *

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Critical Vol./Cap.(X): 0.430
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Protected Protected Protected Protected Protected Protected
Rights: 0
Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 32 843 0 0 618 214 214 0 22 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 32 843 0 0 618 214 214 0 22 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 32 843 0 0 618 0 214 0 22 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 32 843 0 0 618 0 214 0 22 0 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 3200 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.26 0.00 0.00 0.19 0.00 0.00 0.07 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Critical Vol./Cap.(X): 0.698
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Protected Protected Protected Protected Protected Protected
Rights: 0
Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 141 6 225 350 2 29 17 216 180 535 166 308
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 141 6 225 350 2 29 17 216 180 535 166 308
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 141 6 0 350 2 29 17 216 180 535 166 308
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 141 6 0 350 2 29 17 216 180 535 166 308
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.85 0.15 1.00 1.09 0.91 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1356 244 1600 1745 1455 3200 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.09 0.00 0.00 0.22 0.00 0.12 0.01 0.12 0.12 0.17 0.10 0.19
OvlAdjV/S: ****
Crit Moves: ****

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.240
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.9
Optimal Cycle: 0 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 0 1 0 0 1 0 0 1 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 0 63 81 247 0 0 203 94
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adj: 0.00 0.00 0.00 0.00 0.49 1.51 0.00 0.00 2.00 1.00

Capacity Analysis Module:
Vol/Sat: xxxx xxxx xxxx 0.10 0.24 0.23 xxxx xxxx 0.15 0.12
Crit Moves: *** **

Delay/Veh: 0.0 0.0 0.0 0.0 8.3 9.5 9.2 0.0 0.0 9.0 8.0
AdjDel/Veh: 0.0 0.0 0.0 0.0 8.3 9.5 9.2 0.0 0.0 9.0 8.0

ApproachDel: xxxxxx 8.3 A 9.2 8.6
Delay Adj: xxxxxx 1.00 1.00
ApprAdjDel: xxxxxx 8.3 9.2 8.6

LOS by Appr: * A 0.0 0.0 0.1 0.3 0.0 0.0 0.2 0.1
AllwayAvgQ: 0.0 0.0 0.0 0.0 0.1 0.3 0.0 0.0 0.2 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.442
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 1 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 0 14 0 146 23 1210 0 0 967 16
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adj: 0.00 0.00 0.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.10 0.02 0.28 0.00 0.00 0.34 0.01
Crit Moves: **** **

Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApproachDel: xxxxxx 9.2 8.6
Delay Adj: xxxxxx 1.00 1.00
ApprAdjDel: xxxxxx 8.3 9.2 8.6

LOS by Appr: * A 0.0 0.0 0.1 0.3 0.0 0.0 0.2 0.1
AllwayAvgQ: 0.0 0.0 0.0 0.0 0.1 0.3 0.0 0.0 0.2 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
No Project

Scenario Report

Command: 2020 NP PM
Volume: 2020 NP PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NP

Middle Harbor EIR
Future Year 2020
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 53.2	1.081	F 53.2	1.081 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	E 37.8	1.034	E 37.8	1.034 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 24.5	0.000	C 24.5	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 11.5	0.000	B 11.5	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.5	0.000	B 10.5	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 58.3	1.233	F 58.3	1.233 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.387	A xxxxx	0.387 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.634	B xxxxx	0.634 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 10.5	0.343	B 10.5	0.343 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxx	0.613	B xxxxx	0.613 + 0.000 V/C

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.081
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 53.2
Optimal Cycle: 0 Level of Service: F

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0

Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 4 411 68 56 266 203 351 129 9 109 62 376

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 4 411 68 56 266 203 351 129 9 109 62 376
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 4 411 68 56 266 203 351 129 9 109 62 376
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 4 411 68 56 266 203 351 129 9 109 62 376
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 4 411 68 56 266 203 351 129 9 109 62 376

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.72 0.28 1.00 1.00 1.00 1.00 1.87 0.13 1.00 1.00 1.00
Final Sat.: 315 579 97 319 338 361 325 619 43 320 333 368

Capacity Analysis Module:
Vol/Sat: 0.01 0.71 0.70 0.18 0.79 0.56 1.08 0.21 0.21 0.34 0.19 1.02
Crit Moves: ****

Delay/Veh: 14.0 34.8 33.9 16.0 42.3 24.2 107.7 15.9 15.8 19.1 15.5 84.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.0 34.8 33.9 16.0 42.3 24.2 107.7 15.9 15.8 19.1 15.5 84.8

LOS by Move: B D C E C F C C C C F
ApproachDel: 34.5 32.5 81.8 63.8
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 34.5 32.5 81.8 63.8

LOS by Appr: D F
AllWayAvgQ: 0.0 2.1 2.0 0.2 2.7 2.7 8.5 0.2 0.2 0.5 0.2 7.4
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.034
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 37.8
Optimal Cycle: 0 Level of Service: E

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 0 610 3 182 129 71 117 49 1 432 11 158

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 610 3 182 129 71 117 49 1 432 11 158
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 610 3 182 129 71 117 49 1 432 11 158
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 610 3 182 129 71 117 49 1 432 11 158
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 610 3 182 129 71 117 49 1 432 11 158

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.29 0.71 1.00 0.98 0.02 0.98 0.02 1.00
Final Sat.: 387 830 4 369 505 290 373 384 8 418 11 488

Capacity Analysis Module:
Vol/Sat: 0.00 0.73 0.73 0.49 0.26 0.25 0.31 0.13 0.13 1.03 1.03 0.32
Crit Moves: ****

Delay/Veh: 0.0 31.2 31.2 21.0 14.6 14.0 16.0 12.7 12.7 81.7 81.7 13.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 31.2 31.2 21.0 14.6 14.0 16.0 12.7 12.7 81.7 81.7 13.2

LOS by Move: * D D C B B C B B F F B
ApproachDel: 31.2 17.5 15.1 15.1
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 31.2 17.5 15.1 15.1

LOS by Appr: D C
AllWayAvgQ: 0.0 2.3 2.3 0.9 0.3 0.3 0.4 0.1 0.1 0.1 8.4 8.4 0.4
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR Future Year 2020 No Project

Level of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway Average Delay (sec/veh): 0.1 Worst Case Level of Service: Bf [10.5]

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Include

Lanes: 1 0 1 1 0 1 0 1 0 0 1 0 0 1 0 0 1 Volume Module: Base Vol: 0 704 0 7 590 0 0 0 0 7 0 0 0 1

Critical Gap Module: Critical Gap:xxxxx xxxxx 4.1 xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9 FollowUpTim:xxxxx xxxxx 2.2 xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3

Capacity Module: Conflict Vol: xxxxx xxxxx xxxxx 704 xxxxx xxxxx 956 xxxxx 295 1013 1308 352 Potential Cap.: xxxxx xxxxx xxxxx 903 xxxxx xxxxx 216 xxxxx 707 196 161 650

Middle Harbor EIR Future Year 2020 No Project

Level of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street Cycle (sec): 100 Critical Vol./Cap.(X): 1.233

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include

Lanes: 1 0 1 1 0 0 0 0 1 0 1 0 1 0 1 0 0 1 0 0 1 Volume Module: Base Vol: 88 221 3 4 441 161 565 0 144 44 2 61

Critical Gap Module: Critical Gap:xxxxx xxxxx 88 221 3 4 441 161 565 0 144 44 2 61 FollowUpTim:xxxxx xxxxx 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Module: Conflict Vol: xxxxx xxxxx xxxxx 88 221 3 4 441 161 565 0 144 44 2 61 Potential Cap.: xxxxx xxxxx xxxxx 88 221 3 4 441 161 565 0 144 44 2 61

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.387
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Protected Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 40 736 0 0 505 135 183 0 33 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 40 736 0 0 505 135 183 0 33 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 40 736 0 0 505 0 183 0 33 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 40 736 0 0 505 0 183 0 33 0 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 3200 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.03 0.23 0.00 0.00 0.00 0.16 0.00 0.06 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.634
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 113 3 308 230 1 16 59 126 220 583 94 257
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 113 3 308 230 1 16 59 126 220 583 94 257
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 113 3 0 230 1 16 59 126 220 583 94 257
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 113 3 0 230 1 16 59 126 220 583 94 257
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.87 0.13 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1393 207 1600 1600 1600 3200 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.14 0.00 0.08 0.04 0.08 0.14 0.18 0.06 0.16
OvlAdjV/S: ****
Crit Moves: ****

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.634
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 113 3 308 230 1 16 59 126 220 583 94 257
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 113 3 308 230 1 16 59 126 220 583 94 257
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 113 3 0 230 1 16 59 126 220 583 94 257
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 113 3 0 230 1 16 59 126 220 583 94 257
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.87 0.13 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1393 207 1600 1600 1600 3200 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.14 0.00 0.08 0.04 0.08 0.14 0.18 0.06 0.16
OvlAdjV/S: ****
Crit Moves: ****

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.634
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 113 3 308 230 1 16 59 126 220 583 94 257
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 113 3 308 230 1 16 59 126 220 583 94 257
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 113 3 0 230 1 16 59 126 220 583 94 257
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 113 3 0 230 1 16 59 126 220 583 94 257
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.87 0.13 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1393 207 1600 1600 1600 3200 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.14 0.00 0.08 0.04 0.08 0.14 0.18 0.06 0.16
OvlAdjV/S: ****
Crit Moves: ****

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.343
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0
Lanes: 0

Volume Module:
Base Vol: 0 0 172 0 13 91 204 0 0 0 226
Growth Adj: 1.00
Initial Bse: 0 0 172 0 13 91 204 0 0 0 226
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 0 0 172 0 13 91 204 0 0 0 226
Reduced Vol: 0
Reduced Vol: 0 0 172 0 13 91 204 0 0 0 226
PCE Adj: 1.00
MLF Adj: 1.00
Final Volume: 0 0 172 0 13 91 204 0 0 0 226

Saturation Flow Module:
Adjustment: 1.00
Lanes: 0.00 0.00 0.00 1.00 0.86 0.14 0.62 1.38 0.00 0.00 2.00 1.00 0.00 2.00 1.00 0.00 2.00 1.00 0.00 2.00
Final Sat: 0 0 0 552 521 85 370 862 0 0 1157 659
Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx xxxxx 0.31 0.00 0.15 0.25 0.24 xxxxx xxxxx 0.00 0.34
Crit Moves: ***

Delay/Veh: 0.0 0.0 11.6 9.3 9.3 10.3 9.9 0.0 0.0 0.0 10.6
Delay Adj: 1.00
AdjDel/Veh: 0.0 0.0 0.0 11.6 9.3 9.3 10.3 9.9 0.0 0.0 10.6
LOS by Move: * * * * * A A B A * * * * *
ApproachDel: xxxxxx 10.8 A 10.1 B 10.6
Delay Adj: xxxxxx 1.00 A 1.00 B 1.00
ApprAdjDel: xxxxxx 10.8 A 10.1 B 10.6
LOS by Appr: * * * * * B B B B B
AllWayAvgQ: 0.0 0.0 0.0 0.4 0.2 0.2 0.3 0.3 0.0 0.0 0.0 0.5

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2020
No Project

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.613
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0
Lanes: 0

Volume Module:
Base Vol: 0 0 30 0 277 88 1349 0 0 1193 19
Growth Adj: 1.00
Initial Bse: 0 0 30 0 277 88 1349 0 0 1193 19
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 0 0 30 0 277 88 1349 0 0 1193 19
Reduced Vol: 0
Reduced Vol: 0 0 30 0 277 88 1349 0 0 1193 19
PCE Adj: 1.00
MLF Adj: 1.00
Final Volume: 0 0 30 0 277 88 1349 0 0 1193 19

Saturation Flow Module:
Sat/Lane: 1425
Adjustment: 1.00
Lanes: 0.00
Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.19 0.06 0.32 0.00 0.00 0.00 0.42 0.01
Crit Moves: 277 0 *****

Middle Harbor EIR
 Future Year 2020
 Future Year Baseline

Scenario Report
 2020 Future Year Baseline AM

Command: 2020 Future Year Baseline AM
 Volume: 2020 Future Year Baseline AM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

Middle Harbor EIR
 Future Year 2020
 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 63.4	1.215	F 63.4	1.215 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	B 14.8	0.638	B 14.8	0.638 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	B 11.0	0.000	B 11.0	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 8.8	0.000	A 8.8	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.9	0.000	B 10.9	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 29.4	0.978	D 29.4	0.978 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.388	A xxxxx	0.388 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.626	B xxxxx	0.626 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 10.6	0.277	B 10.6	0.277 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.436	A xxxxx	0.436 + 0.000 V/C

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.215
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 63.4
 Optimal Cycle: 0 Level Of Service: F

Approach: North Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 0 1 0 1 1 1 0 1 0 1 1 0

Volume Module:
 Base Vol: 2 399 102 50 364 261 379 32 5 185 143 214
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 2 399 102 50 364 261 379 32 5 185 143 214
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 2 399 102 50 364 261 379 32 5 185 143 214
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 2 399 102 50 364 261 379 32 5 185 143 214
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 2 399 102 50 364 261 379 32 5 185 143 214

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.59 0.41 1.00 1.00 1.00 1.00 1.73 0.27 1.00 1.00 1.00
 Final Sat.: 312 535 139 322 348 369 312 544 86 320 334 358

Capacity Analysis Module:
 Vol/Sat: 0.01 0.75 0.73 0.16 1.05 0.71 1.21 0.06 0.06 0.58 0.43 0.60
 Crit Moves: ****
 Delay/Veh: 14.0 38.3 36.5 15.5 94.2 32.0 155.4 14.3 14.2 27.7 20.9 26.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 14.0 38.3 36.5 15.5 94.2 32.0 155.4 14.3 14.2 27.7 20.9 26.0
 LOS by Move: B E C F D B B D C D
 ApproachDel: 37.8 64.3 142.9
 Delay Adj: 1.00 1.00 1.00
 ApprAdjDel: 37.8 64.3 142.9
 LOS by Appr: E F F
 AllwayAvgQ: 0.0 2.4 2.2 0.2 7.8 7.8 12.2 0.1 0.1 1.2 0.7 1.3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.638
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 14.8
 Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 0 1 0 0 1

Volume Module:
 Base Vol: 0 403 2 28 252 36 22 8 0 313 6 118
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 403 2 28 252 36 22 8 0 313 6 118
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 403 2 28 252 36 22 8 0 313 6 118
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 403 2 28 252 36 22 8 0 313 6 118
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 403 2 28 252 36 22 8 0 313 6 118

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 1.00 1.75 0.25 1.00 1.00 0.00 0.98 0.02 1.00
 Final Sat.: 466 1004 5 453 861 125 425 451 0 490 9 592

Capacity Analysis Module:
 Vol/Sat: 0.00 0.40 0.40 0.06 0.29 0.29 0.05 0.02 xxxx 0.64 0.64 0.20
 Crit Moves: ****
 Delay/Veh: 0.0 13.9 13.9 10.8 12.4 12.2 10.9 10.1 0.0 20.7 20.7 9.9
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 13.9 13.9 10.8 12.4 12.2 10.9 10.1 0.0 20.7 20.7 9.9
 LOS by Move: * B B B B B B *
 ApproachDel: 13.9 12.2 10.7
 Delay Adj: 1.00 1.00 1.00
 ApprAdjDel: 13.9 12.2 10.7
 LOS by Appr: B B B
 AllwayAvgQ: 0.0 0.6 0.6 0.1 0.4 0.4 0.0 0.0 0.0 1.5 1.5 0.2

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B(11.0)
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 502 0 0 448 0 0 0 0 12 0 62
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 502 0 0 448 0 0 0 12 0 62
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 502 0 0 448 0 0 0 12 0 62
Reduct Vol: 0 0 0 0 0 0 0 0 12 0 0
FinalVolume: 0 502 0 0 448 0 0 0 12 0 62

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 726 xxxxx 251
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 364 xxxxx 755
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 364 xxxxx 755
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.03 xxxxx 0.08

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.1 xxxxx 0.3
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 15.2 xxxxx 10.2
LOS by Move: A * * * * * C * * * * * B *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 11.0
ApproachLOS: * * * * * B

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A(8.8)
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0

Volume Module:
Base Vol: 186 376 0 0 448 103 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 186 376 0 0 448 103 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 186 376 0 0 448 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 186 376 0 0 448 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 448 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1123 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 1123 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.17 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 0.6 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 8.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * * * * * * * *

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.5 Worst Case Level of Service: B(10.9)
Cycle Time (sec): 100
Loss Time (sec): 0
Optimal Cycle: 0
Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 1

Volume Module:
Base Vol: 13 489 8 6 432 0 0 2 29 0 0 0 0 3
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 13 489 8 6 432 0 0 2 29 0 0 3
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 13 489 8 6 432 0 0 2 29 0 0 0 3
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Final Volume: 13 489 8 6 432 0 0 2 29 0 0 0 3

Critical Gap Module:
Critical Gap: 4.1 xxxxx xxxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Capacity Module:
Conflict Vol: 432 xxxxx xxxxxx 497 xxxxx xxxxxx 715 967 216 748 963 249
Potential Cap: 1138 xxxxx xxxxxx 1077 xxxxx xxxxxx 322 256 795 305 258 758
Move Cap: 1138 xxxxx xxxxxx 1077 xxxxx xxxxxx 317 252 795 288 253 758
Volume/Cap: 0.01 xxxxx xxxxx 0.01 xxxxx xxxxx 0.00 0.01 0.04 0.00 0.00 0.00

Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxxx 0.0 xxxxx xxxxxx 0.0 xxxxx xxxxx xxxxx xxxxx
Control Del: 8.2 xxxxx xxxxx 8.4 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS By Move: A * * * * *
Movement: LT-LTR-RT LT-LTR-RT LT-LTR-RT LT-LTR-RT
Shared Cap: xxxxx xxxxx xxxxx 252 xxxxx 698 0 xxxxx xxxxxx
Shared Queue: xxxxx xxxxx xxxxx 0.0 xxxxx 0.1 xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx 19.4 xxxxx 10.4 xxxxx xxxxx xxxxx
Shared LOS: * * * * *
Approach Del: xxxxxx
Approach LOS: * * * * *
B 10.9
A 9.8

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.978
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 29.4
Optimal Cycle: 0 Level of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 0 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 91 206 1 6 445 288 449 0 49 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 91 206 1 6 445 288 449 0 49 19 1 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 91 206 1 6 445 288 449 0 49 19 1 37
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 91 206 1 6 445 288 449 0 49 19 1 37
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 91 206 1 6 445 288 449 0 49 19 1 37

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.03 1.97 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat: 392 827 4 12 919 514 459 0 525 367 19 442

Capacity Analysis Module:
Vol/Sat: 0.23 0.25 0.25 0.48 0.48 0.56 0.98 xxxxx 0.09 0.05 0.05 0.08
Crit Moves: *** **

Delay/Veh: 14.2 13.8 13.8 17.1 17.1 17.8 64.0 0.0 10.0 12.0 12.0 11.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.2 13.8 13.8 17.1 17.1 17.8 64.0 0.0 10.0 12.0 12.0 11.0
LOS by Move: B B B C C C F * A B B B
Approach Del: 13.9 17.4 17.4 58.7 11.4
AppradjDel: 13.9 17.4 17.4 58.7 11.4
LOS by Appr: B B C
AllwayAvgQ: 0.3 0.3 0.3 0.9 0.9 1.2 6.8 6.8 0.1 0.0 0.0 0.1

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.388
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Protected Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0 0 0
Volume Module:
Base Vol: 28 621 0 0 686 191 163 0 10 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 28 621 0 0 686 191 163 0 10 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 28 621 0 0 686 191 163 0 10 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 28 621 0 0 686 191 163 0 10 0 0 0 0

OvAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.19 0.00 0.00 0.21 0.00 0.06 0.00 0.01 0.00 0.00 0.00
OvAdjV/S: 0.00
Crit Moves: ****

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.626
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level of Service: B

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include
Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 218 2 391 287 0 14 10 185 76 370 199 194

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 218 2 391 287 0 14 10 185 76 370 199 194
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 218 2 0 287 0 14 10 185 76 370 199 194
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 218 2 0 287 0 14 10 185 76 370 199 194

OvAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.91 0.09 1.00 1.42 0.58 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1451 149 1600 2268 932 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.14 0.00 0.00 0.18 0.00 0.09 0.01 0.08 0.08 0.13 0.12 0.12
OvAdjV/S: ****
Crit Moves: ****

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.277
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.6
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 128 0 42 27 296 0 0 327 179
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 128 0 42 27 296 0 0 327 179
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 128 0 42 27 296 0 0 327 179
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 128 0 42 27 296 0 0 327 179
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 128 0 42 27 296 0 0 327 179

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.51 0.49 0.17 1.83 0.00 0.00 2.00 1.00
Final Sat.: 0 0 503 287 280 100 1103 0 0 1181 667

Capacity Analysis Module:
Vol/Sat: xxxx xxxx 0.25 0.00 0.15 0.27 0.27 xxxx xxxx 0.28 0.27
Crit Moves: *** ** ** ** **
Delay/Veh: 0.0 0.0 11.7 9.7 9.7 10.6 10.5 0.0 0.0 10.8 9.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 11.7 9.7 9.7 10.6 10.5 0.0 0.0 10.8 9.8
LOS by Move: * * * * *
ApproachDel: 10.9 A B * * *
Delay Adj: 1.00 B * * * *
ApprAdjDel: 10.9 B * * * *
LOS by Appr: * B * * * *
AllwayAvgQ: 0.0 0.0 0.3 0.2 0.2 0.3 0.3 0.0 0.0 0.4 0.3

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.436
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Protected Protected Protected Protected
Rights: Include Ovl Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 3 0 163 130 986 0 0 917 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 3 0 163 130 986 0 0 917 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 3 0 163 130 986 0 0 917 10
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 3 0 163 130 986 0 0 917 10
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 3 0 163 130 986 0 0 917 10

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.11 0.09 0.23 0.00 0.00 0.32 0.01
Crit Vol: 0 163 0
Crit Moves: **** **

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Scenario Report

2020 Future Year Baseline MD
 Command: 2020 Future Year Baseline MD
 Volume: 2020 Future Year Baseline MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

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 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh	V/ C	Future Del/ LOS Veh	V/ C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 108.5	1.460	F 108.5	1.460	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 19.2	0.758	C 19.2	0.758	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 18.3	0.000	C 18.3	0.000	+ 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.6	0.000	A 9.6	0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 12.4	0.000	B 12.4	0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 16.9	0.763	C 16.9	0.763	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.352	A xxxxx	0.352	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.549	A xxxxx	0.549	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	A 9.9	0.301	A 9.9	0.301	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.441	A xxxxx	0.441	+ 0.000 V/C

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.460
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 108.5
Optimal Cycle: 0 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0

Volume Module:
Base Vol: 7 448 175 85 415 265 425 123 6 169 94 277
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 7 448 175 85 415 265 425 123 6 169 94 277
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 7 448 175 85 415 265 425 123 6 169 94 277
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 7 448 175 85 415 265 425 123 6 169 94 277

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.44 0.56 1.00 1.00 1.00 1.00 1.91 0.09 1.00 1.00 1.00
Final Sat.: 297 460 184 300 319 338 291 566 28 294 306 328

Capacity Analysis Module:
Vol/Sat: 0.02 0.97 0.95 0.28 1.30 0.78 1.46 0.22 0.22 0.57 0.31 0.84
Crit Moves: ****
Delay/Veh: 14.8 78.3 71.6 18.9 187 42.0 255.9 17.7 17.6 29.7 19.3 51.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.8 78.3 71.6 18.9 187 42.0 255.9 17.7 17.6 29.7 19.3 51.3
LOS by Move: B F C F E F C C D C F
ApproachDel: 75.7 117.9 200.4
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 75.7 117.9 200.4
LOS by Appr: F F F
AllwayAvgQ: 0.0 5.9 5.3 0.4 15.3 15.3 19.5 0.3 0.3 1.2 0.4 3.4

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.758
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 19.2
Optimal Cycle: 0 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 0 517 6 87 330 17 19 9 0 349 3 120
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 517 6 87 330 17 19 9 0 349 3 120
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 517 6 87 330 17 19 9 0 349 3 120
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 517 6 87 330 17 19 9 0 349 3 120

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.90 0.10 1.00 1.00 0.00 0.99 0.01 1.00
Final Sat.: 434 933 11 426 870 45 384 405 0 461 4 540

Capacity Analysis Module:
Vol/Sat: 0.00 0.55 0.55 0.20 0.38 0.38 0.05 0.02 xxxx
Crit Moves: ****
Delay/Veh: 0.0 18.7 18.6 12.8 14.7 14.6 11.7 11.0 0.0 29.6 29.6 10.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 18.7 18.6 12.8 14.7 14.6 11.7 11.0 0.0 29.6 29.6 10.9
LOS by Move: * C C B B B B * D D B
ApproachDel: 18.7 14.3 11.5
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 18.7 14.3 11.5
LOS by Appr: C B B
AllwayAvgQ: 0.0 1.1 1.1 0.2 0.6 0.5 0.0 0.0 0.0 2.5 2.5 0.3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C [18.3]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 0 650 0 0 542 0 0 0 0 0 3 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 650 0 0 542 0 0 0 0 3 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 650 0 0 542 0 0 0 0 3 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 650 0 0 542 0 0 0 0 3 0 0

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 921 xxxxx 325
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 273 xxxxx 677
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 273 xxxxx 677
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.01 xxxxx 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 18.3 xxxxx xxxxx
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: C
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 2.0 Worst Case Level Of Service: A [9.6]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 249 372 0 0 542 144 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 249 372 0 0 542 144 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 249 372 0 0 542 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 249 372 0 0 542 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Conflict Vol: 542 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1037 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 1037 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.24 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 0.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 9.6 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: *
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100
Loss Time (sec): 0
Optimal Cycle: 0
Approach: North Bound
Movement: L - T - R
Control: Stop Sign
Rights: Include
Min. Green: 0
Lanes: 1 0 1 1 0 0

Volume Module:
Base Vol: 65 247
Initial Bse: 65 247
User Adj: 1.00 1.00
PHF Adj: 1.00 1.00
PHF Volume: 65 247
Reduced Vol: 0 0
PCE Adj: 1.00 1.00
MLF Adj: 1.00 1.00
Final Volume: 65 247

Saturation Flow Module:
Adjustment: 1.00 1.00
Lanes: 1.00 1.99
Final Sat: 437 931

Capacity Analysis Module:
Vol/Sat: 0.15 0.27
Crit Moves: ***
Delay/Veh: 11.8 12.5
AdjDel/Veh: 11.8 12.5
LOS by Move: B B B
ApproachDel: 12.4
Delays by Appr: B
AllWayAvgQ: 0.2 0.3

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.3
Approach: North Bound
Movement: L - T - R
Control: Uncontrolled
Rights: Include
Lanes: 1 0 1 1 0 1

Volume Module:
Base Vol: 0 561
Initial Bse: 0 548
User Adj: 1.00 1.00
PHF Adj: 1.00 1.00
PHF Volume: 0 548
Reduced Vol: 0 0
Final Volume: 0 548

Critical Gap Module:
Critical Gp: xxxxxx
FollowUpTim: xxxxxx
Capacity Module:
Conflict Vol: xxxxxx
Potential Cap: xxxxxx
Move Cap: xxxxxx
Volume/Cap: xxxxxx

Level of Service Module:
2Way95thQ: xxxxxx
Control Del: xxxxxx
LOS by Move: * * * * *
Shared Cap: xxxxxx
SharedQueue: xxxxxx
Shrd ConDel: xxxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.352
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Protected Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 24 585 0 0 347 166 198 0 15 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 24 585 0 0 347 166 198 0 15 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 24 585 0 0 347 166 198 0 15 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 24 585 0 0 347 166 198 0 15 0 0 0 0

OvAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.18 0.00 0.00 0.11 0.00 0.07 0.00 0.01 0.00 0.00 0.00
OvAdjV/S: 0.00
Crit Moves: ****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.549
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include
Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1 0

Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1 0
Volume Module:
Base Vol: 125 5 46 199 2 16 23 236 183 332 190 229

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 125 5 46 199 2 16 23 236 183 332 190 229
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 125 5 0 199 2 16 23 236 183 332 190 229
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 125 5 0 199 2 16 23 236 183 332 190 229

OvAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.85 0.15 1.00 1.13 0.87 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1364 236 1600 1802 1398 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.08 0.00 0.00 0.12 0.00 0.07 0.01 0.13 0.13 0.12 0.12 0.14
OvAdjV/S: ****
Crit Moves: ****

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Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.301
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.9
 Optimal Cycle: 0 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 58 0 47 63 324 0 0 275 178
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 58 0 47 63 324 0 0 275 178
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 58 0 47 63 324 0 0 275 178
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 58 0 47 63 324 0 0 275 178
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 58 0 47 63 324 0 0 275 178

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.10 0.90 0.33 1.67 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 500 62 529 209 1096 0 0 1242 707
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.12 0.00 0.09 0.30 0.30 0.30 xxxx xxxx 0.22 0.25
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 10.3 8.8 8.8 10.4 10.2 0.0 0.0 9.9 9.3
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 10.3 8.8 8.8 10.4 10.2 0.0 0.0 9.9 9.3
 LOS by Move: * * * * *
 ApproachDel: xxxxxx 9.6 10.3 9.7
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 9.6 10.3 9.7
 LOS by Appr: * * * * *
 AllwayAvgQ: 0.0 0.0 0.0 0.1 0.1 0.1 0.4 0.4 0.0 0.0 0.3 0.3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.441
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 36 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 14 0 216 82 1189 0 0 825 16
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 14 0 216 82 1189 0 0 825 16
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 14 0 216 82 1189 0 0 825 16
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 14 0 216 82 1189 0 0 825 16
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 14 0 216 82 1189 0 0 825 16

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.15 0.06 0.28 0.00 0.00 0.29 0.01
 Crit Moves: 216 0 413

Middle Harbor EIR
 Future Year 2020
 Future Year Baseline

Scenario Report

2020 Future Year Baseline PM
 Command: 2020 Future Year Baseline PM
 Volume: 2020 Future Year Baseline PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

Middle Harbor EIR
 Future Year 2020
 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 54.8	1.078	F 54.8	1.078 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	D 28.1	0.904	D 28.1	0.904 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 20.1	0.000	C 20.1	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.7	0.000	A 9.7	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 10.6	0.000	B 10.6	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 15.0	0.653	C 15.0	0.653 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.345	A xxxxx	0.345 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	A xxxxx	0.572	A xxxxx	0.572 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 10.8	0.352	B 10.8	0.352 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxx	0.607	B xxxxx	0.607 + 0.000 V/C

Middle Harbor EIR
Future Year 2020
Future Year Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.078
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 54.8
Optimal Cycle: 0 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 4 371 108 54 295 268 328 165 9 42 12 384
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 4 371 108 54 295 268 328 165 9 42 12 384
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 4 371 108 54 295 268 328 165 9 42 12 384
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 4 371 108 54 295 268 328 165 9 42 12 384

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.55 0.45 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 316 525 156 327 347 371 328 638 35 308 321 356

Capacity Analysis Module:
Vol/Sat: 0.01 0.71 0.69 0.17 0.85 0.72 1.00 0.26 0.26 0.14 0.04 1.08
Crit Moves: ****
Delay/Veh: 14.0 34.7 33.0 15.6 50.2 33.4 84.1 16.6 16.6 15.7 13.9 102.6
AdjDel/Veh: 14.0 34.7 33.0 15.6 50.2 33.4 84.1 16.6 16.6 15.7 13.9 102.6
LOS by Move: B D C F D C F C C C C F
ApproachDel: 34.2 1.00 1.00 60.7 91.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 34.2 1.00 1.00 60.7 91.8
LOS by Appr: D E F
AllwayAvgQ: 0.0 2.1 1.9 0.2 3.6 6.4 0.3 0.3 0.1 0.0 8.9

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.904
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 28.1
Optimal Cycle: 0 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 620 3 201 177 21 57 23 0 398 3 108
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 620 3 201 177 21 57 23 0 398 3 108
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 620 3 201 177 21 57 23 0 398 3 108
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 620 3 201 177 21 57 23 0 398 3 108

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.79 0.21 1.00 1.00 0.00 0.99 0.01 1.00
Final Sat.: 409 888 4 394 742 89 373 393 0 440 3 509

Capacity Analysis Module:
Vol/Sat: 0.00 0.70 0.70 0.51 0.24 0.24 0.15 0.06 xxxxx 0.90 0.90 0.21
Crit Moves: ****
Delay/Veh: 0.0 26.4 26.4 20.0 13.5 13.3 13.3 11.8 0.0 49.5 49.5 11.3
AdjDel/Veh: 0.0 26.4 26.4 20.0 13.5 13.3 13.3 11.8 0.0 49.5 49.5 11.3
LOS by Move: * D D C B B B B * E E B
ApproachDel: 26.4 16.8 12.9 12.9 41.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 26.4 16.8 12.9 12.9 41.4
LOS by Appr: D C B E
AllwayAvgQ: 0.0 2.0 2.0 0.9 0.3 0.3 0.2 0.1 0.1 4.8 4.8 0.3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C [20.1]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 0 781 0 0 455 0 0 0 0 0 2 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 781 0 0 455 0 0 0 0 0 2 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 781 0 0 455 0 0 0 0 0 2 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 781 0 0 455 0 0 0 0 0 2 0 0

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1009 xxxxx 391
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 240 xxxxx 614
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 240 xxxxx 614
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.01 xxxxx 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 20.1 xxxxx xxxxx
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 2.9 Worst Case Level Of Service: A [9.7]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 347 360 0 0 455 133 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 347 360 0 0 455 133 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 347 360 0 0 455 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 347 360 0 0 455 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 455 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1116 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 1116 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.31 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 1.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 9.7 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B(10.6)

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1 0 1 0 0 1

Volume Module:
Base Vol: 0 715 0 5 457 0 0 0 0 7 0 0 0 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 715 0 5 457 0 0 0 0 7 0 0 0 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 715 0 5 457 0 0 0 0 7 0 0 0 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 715 0 5 457 0 0 0 0 7 0 0 0 1

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9
FollowUpTim: xxxxx xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3

Capacity Module:
Conflic Vol: xxxxx xxxxx xxxxx 824 xxxxx 229 954 1182 358
Potent Cap: xxxxx xxxxx xxxxx 268 xxxxx 780 216 191 645
Move Cap: xxxxx xxxxx xxxxx 267 xxxxx 780 214 190 645
Volume/Cap: xxxxx xxxxx xxxxx 0.01 xxxxx xxxxx 0.00 xxxxx 0.00 0.00 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0
Control Del: xxxxx xxxxx xxxxx 9.0 xxxxx xxxxx xxxxx 9.7 xxxxx xxxxx 10.6
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxx 9.7
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.653

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: 0 Level Of Service: C
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 0 0 0 0 0 0 0 0 1 0 0 1

Volume Module:
Base Vol: 93 313 3 4 308 168 303 0 108 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 93 313 3 4 308 168 303 0 108 37 2 54
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 93 313 3 4 308 168 303 0 108 37 2 54
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 93 313 3 4 308 168 303 0 108 37 2 54
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 93 313 3 4 308 168 303 0 108 37 2 54

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 0.03 1.97 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat: 432 914 9 12 924 515 464 0 540 385 21 469

Capacity Analysis Module:
Vol/Sat: 0.22 0.34 0.34 0.33 0.33 0.33 0.65 xxxxx 0.20 0.10 0.10 0.12
Crit Moves: ***
Delay/Veh: 12.8 13.8 13.8 13.6 13.6 12.4 22.7 0.0 10.6 11.7 11.7 10.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.8 13.8 13.8 13.6 13.6 12.4 22.7 0.0 10.6 11.7 11.7 10.6
LOS by Move: B B B B B B C * B B B B B
ApproachDel: 13.6 13.2 19.5 11.1
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 13.6 13.2 19.5 11.1
LOS by Appr: B B C B
AllWayAvgQ: 0.2 0.5 0.5 0.4 0.4 1.6 1.6 0.2 0.1 0.1 0.1 0.1
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.345
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: Protected Protected Protected Protected

Control: Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0
Volume Module:
Base Vol: 28 589 0 0 381 116 176 0 27 0 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 28 589 0 0 381 116 176 0 27 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 28 589 0 0 381 0 176 0 27 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 28 589 0 0 381 0 176 0 27 0 0 0 0

OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.18 0.00 0.00 0.12 0.00 0.06 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

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Middle Harbor EIR
Future Year 2020
Future Year Baseline

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.572
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: Protected Protected Protected Protected

Control: Split Phase Split Phase Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1 0
Volume Module:
Base Vol: 109 2 175 220 1 11 70 130 212 385 107 289

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 109 2 175 220 1 11 70 130 212 385 107 289
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 109 2 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 109 2 0 220 1 11 70 130 212 385 107 289

OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1448 152 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.14 0.00 0.07 0.04 0.08 0.13 0.13 0.07 0.18
OvlAdjV/S: ****
Crit Moves: *****

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Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.352
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.8
 Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 168 0 12 81 288 0 0 70 225
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 168 0 12 81 288 0 0 70 225
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 168 0 12 81 288 0 0 70 225
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 168 0 12 81 288 0 0 70 225
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 168 0 12 81 288 0 0 70 225

Saturation Flow Module:
 Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Adjustment: 0.00 0.00 0.00 1.00 0.87 0.13 0.44 1.56 0.00 0.00 2.00 1.00
 Lanes: 0 0 0 526 497 77 263 957 0 0 1128 639
 Final Sat: 0 0 0 0.31 0.30 0.30 xxxxx 0.06 0.35
 Capacity Analysis Module:
 Vol/Sat: xxxxx xxxxx xxxxx 0.31 0.30 xxxxx xxxxx 0.06 0.35
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 12.1 9.7 9.7 11.0 10.7 0.0 0.0 9.2 10.9
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 12.1 9.7 9.7 11.0 10.7 0.0 0.0 9.2 10.9
 LOS by Move: * * * * * A B * * * * A B
 ApproachDel: xxxxxx 11.3 10.8
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 11.3 10.8
 LOS by Appr: * B B
 AllwayAvgQ: 0.0 0.0 0.4 0.2 0.2 0.4 0.4 0.0 0.0 0.1 0.5
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.607
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 51 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R L T R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 29 0 266 86 1372 0 0 1198 18
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 29 0 266 86 1372 0 0 1198 18
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 29 0 266 86 1372 0 0 1198 18
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 29 0 266 86 1372 0 0 1198 18
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 29 0 266 86 1372 0 0 1198 18

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.19 0.06 0.32 0.00 0.00 0.42 0.01
 Crit Volume: 0 266 0 599
 Crit Moves: ****

Appendix G: Year 2030 Peak-Hour Intersection Capacity Analysis Worksheets

Middle Harbor EIR
Future Year 2030
345-Acre

Scenario: 2030 345-Acre AM
Command: 2030 345-Acre AM
Volume: 2030 345-Acre AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

Middle Harbor EIR
Future Year 2030
345-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 89.8	1.331	F 89.8	1.331 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 21.3	0.800	C 21.3	0.800 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 22.9	0.000	C 22.9	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.5	0.000	B 10.5	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 13.6	0.000	B 13.6	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 58.6	1.245	F 58.6	1.245 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.464	A xxxxx	0.464 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.700	B xxxxx	0.700 + 0.000 V/C
# 9 Anaheim Way & Pier B St	C 15.8	0.551	C 15.8	0.551 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.532	A xxxxx	0.532 + 0.000 D/V

Middle Harbor EIR
Future Year 2030
345-Acre

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza
Critical Vol./Cap.(X): 1.331
Average Delay (sec/veh): 89.8
Level Of Service: F

Cycle (sec): 100
Loss Time (sec): 9 (Y+R=4.0 sec)
Optimal Cycle: 0
A345-Aceroach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 1 421 162 99 438 243 369 88 4 186 101 257
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 1 421 162 99 438 243 369 88 4 186 101 257
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 421 162 99 438 243 369 88 4 186 101 257
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 1 421 162 99 438 243 369 88 4 186 101 257

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.44 0.56 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 301 469 185 307 329 347 297 574 26 302 313 338

Capacity Analysis Module:
Vol/Sat: 0.00 0.90 0.88 0.32 1.33 0.70 1.24 0.15 0.15 0.62 0.32 0.76
Crit Moves: ****
Delay/Veh: 14.4 60.8 55.8 19.3 198 33.0 167.7 16.3 16.2 31.2 19.1 39.7
Delay/Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.4 60.8 55.8 19.3 198 33.0 167.7 16.3 16.2 31.2 19.1 39.7
LOS by Move: B F C F D F C D C E
A345-AceroachDel: 59.3 123.9 137.5 137.5 1.00 33.0
Delay Adj: 1.00 1.00 123.9 137.5 1.00 33.0
A345-AceroachDel: 1.00 123.9 137.5 1.00 33.0
LOS by A345-Aceroach: F F F
AllWayAvgQ: 0.0 4.4 3.9 0.4 16.9 16.9 12.6 0.2 0.2 1.4 0.4 2.5

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
345-Acre

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
Critical Vol./Cap.(X): 0.800
Average Delay (sec/veh): 21.3
Level Of Service: C

Cycle (sec): 100
Loss Time (sec): 0 (Y+R=4.0 sec)
Optimal Cycle: 0
A345-Aceroach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 0 428 2 42 212 218 145 99 1 312 32 124
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 428 2 42 212 218 145 99 1 312 32 124
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 428 2 42 212 218 145 99 1 312 32 124
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 428 2 42 212 218 145 99 1 312 32 124

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.00 1.00 1.00 1.00 0.99 0.01 0.91 0.09 1.00
Final Sat.: 378 814 4 382 411 446 390 406 4 390 40 488

Capacity Analysis Module:
Vol/Sat: 0.00 0.53 0.53 0.11 0.52 0.49 0.37 0.24 0.24 0.80 0.80 0.25
Crit Moves: ****
Delay/Veh: 0.0 19.8 19.8 12.7 19.4 17.2 16.2 13.4 13.4 35.6 35.6 12.1
Delay/Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 19.8 19.8 12.7 19.4 17.2 16.2 13.4 13.4 35.6 35.6 12.1
LOS by Move: * C B C C B B E B
A345-AceroachDel: 19.8 17.8 15.1 15.1 1.00 29.4
Delay Adj: 1.00 1.00 17.8 15.1 1.00 29.4
A345-AceroachDel: 19.8 17.8 15.1 1.00 29.4
LOS by A345-Aceroach: C C C
AllWayAvgQ: 0.0 1.0 1.0 0.1 0.9 0.8 0.5 0.3 0.3 2.9 2.9 0.3

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
345-Acre

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 3.0 Worst Case Level Of Service: [C] 22.9]
A345-Acre Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1
Volume Module:
Base Vol: 0 643 0 0 726 0 0 0 0 114 0 95
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 643 0 0 726 0 0 0 114 0 95
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 643 0 0 726 0 0 0 114 0 95
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 643 0 0 726 0 0 114 0 95
Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1006 xxxxx 322
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 241 xxxxx 680
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 241 xxxxx 680
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.47 xxxxx 0.14
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 2.3 xxxxx 0.5
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 32.6 xxxxx 11.2
LOS By Move: * * * * * D * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * * * * * * *
A345-Acre Approach Del: xxxxxx
A345-Acre Approach LOS: * * * * * C
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
345-Acre

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 1.6 Worst Case Level Of Service: [B] 10.5]
A345-Acre Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0
Volume Module:
Base Vol: 227 513 0 0 726 98 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 227 513 0 0 726 98 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 227 513 0 0 726 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 227 513 0 0 726 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Conflict Vol: 786 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 886 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 886 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.26 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Level Of Service Module:
2Way95thQ: 1.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 10.5 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS By Move: B * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * * * * * * *
A345-Acre Approach Del: xxxxxx
A345-Acre Approach LOS: * * * * *
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #5 Pico Avenue, Broadway
 Average Delay (sec/veh): 0.4 Worst Case Level Of Service: Bf [13.6]
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 0 1
 Volume Module:
 Base Vol: 13 663 8 6 710 0 0 2 29 0 0 0 0 0 3
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 13 663 8 6 710 0 0 2 29 0 0 0 0 0 3
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 13 663 8 6 710 0 0 2 29 0 0 0 0 0 3
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 13 663 8 6 710 0 0 2 29 0 0 0 0 0 3
 Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
 FollowUpTim: 2.2 xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
 Capacity Module:
 Conflict Vol: 710 xxxxx xxxxx 671 xxxxx xxxxx 1079 1419 355 1061 1415 336
 Potent Cap: 899 xxxxx xxxxx 929 xxxxx xxxxx 175 138 647 181 139 666
 Move Cap: 899 xxxxx xxxxx 929 xxxxx xxxxx 172 135 647 168 136 666
 Volume/Cap: 0.01 xxxxx xxxxx 0.00 0.01 0.04 0.00 0.00 0.00 0.00
 Level Of Service Module:
 2Way95thQ: 0.0 xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
 Control Del: 9.1 xxxxx xxxxx 8.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.4
 LOS by Move: A * A * A * A * A * A * A * A * B
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 520 0 xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx 0.2 xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx 32.0 xxxxx 12.4 xxxxx xxxxx
 Shared LOS: * * * * * D * * * * *
 A345-AceroachDel: xxxxxx
 A345-AceroachLOS: *
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #6 Pico Avenue, Pier D Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.245
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 58.6
 Optimal Cycle: 0 Level Of Service: F
 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 0 1
 Volume Module:
 Base Vol: 125 308 1 6 700 253 521 0 68 19 1 37
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 125 308 1 6 700 253 521 0 68 19 1 37
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 125 308 1 6 700 253 521 0 68 19 1 37
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 125 308 1 6 700 253 521 0 68 19 1 37
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 125 308 1 6 700 253 521 0 68 19 1 37
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.95 0.05 1.00
 Final Sat: 367 772 3 7 873 479 419 0 467 331 17 394
 Capacity Analysis Module:
 Vol/Sat: 0.34 0.40 0.80 0.80 0.53 1.24 xxxxx 0.15 0.06 0.06 0.09
 Crit Moves: *** **
 Delay/Veh: 17.0 17.5 17.5 36.2 36.1 18.0 154.5 0.0 11.3 13.0 13.0 12.1
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 17.0 17.5 17.5 36.2 36.1 18.0 154.5 0.0 11.3 13.0 13.0 12.1
 LOS by Move: C C C E E C F * B B B B
 A345-AceroachDel: 17.4
 Delay Adj: 1.00
 A345-AceroachLOS: 17.4
 LOS by A345-Acrot: C B D F
 AllWayAvgQ: 0.5 0.6 3.1 1.0 16.6 16.6 0.2 0.1 0.1 0.1
 Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100
Loss Time (sec): 10 (Y+R=4.0 sec)
Optimal Cycle: 31
Critical Vol./Cap.(X): 0.464
Average Delay (sec/veh): xxxxxx
Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
A345-Aceroach: L - T - R - L - T - R - L - T - R - L - T - R
Movement: L - T - R - L - T - R - L - T - R - L - T - R
Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 0 2 0 0 1 0 0 0 0 0 0
Lanes: -----

Volume Module:
Base Vol: 29 796 0 0 901 211 185 0 13 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 29 796 0 0 901 211 185 0 13 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 29 796 0 0 901 0 185 0 13 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 29 796 0 0 901 0 185 0 13 0 0 0
OvlAdjVol: -----

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 1.00 0.00 0.00
Final Sat: 1600 3200 0 0 3200 3200 2880 0 1600 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.25 0.00 0.00 0.28 0.00 0.06 0.00 0.01 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100
Loss Time (sec): 10 (Y+R=4.0 sec)
Optimal Cycle: 50
Critical Vol./Cap.(X): 0.700
Average Delay (sec/veh): xxxxxx
Level Of Service: B

Street Name: 9th Street Pico Ave
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R - L - T - R - L - T - R - L - T - R
Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0
Lanes: -----

Volume Module:
Base Vol: 256 2 543 279 0 25 84 278 87 436 273 248
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 256 2 543 279 0 25 84 278 87 436 273 248
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 256 2 0 279 0 25 84 278 87 436 273 248
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 256 2 0 279 0 25 84 278 87 436 273 248
OvlAdjVol: -----

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.84 0.16 1.00 1.52 0.48 2.00 1.00
Final Sat: 1600 1600 1600 1600 1337 263 1600 2437 763 2880 1600

Capacity Analysis Module:
Vol/Sat: 0.16 0.00 0.00 0.17 0.00 0.10 0.05 0.11 0.11 0.15 0.17
Crit Moves: ****

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.551
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.8
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R L T R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0

Lanes: 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 2 0 1

Volume Module:
Base Vol: 0 0 250 0 60 40 404 0 0 500 281
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 60 40 404 0 0 500 281
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 250 0 60 40 404 0 0 500 281
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 250 0 60 40 404 0 0 500 281

Saturation Flow Module:
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.61 0.39 0.18 1.82 0.00 0.00 2.00 1.00
Final Sat: 0 0 0 454 305 193 89 907 0 0 1000 554

Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx 0.55 0.00 0.31 0.45 0.45 xxxxx xxxxx 0.50 0.51
Crit Moves: *** **

Delay/Veh: 0.0 0.0 19.0 12.6 12.6 15.1 15.0 0.0 0.0 16.4 15.2
Delay/Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 19.0 12.6 12.6 15.1 15.0 0.0 0.0 16.4 15.2
LOS by Move: * * * C B B * C * C
A345-AceroachDel: xxxxxx 16.5 15.0 15.0 16.0
A345-AceroachDel: xxxxxx 16.5 15.0 15.0 16.0
AllwayVgQ: 0.0 0.0 0.0 1.1 0.4 0.4 0.7 0.7 0.0 0.0 0.9 0.9

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.532
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R L T R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0 0

Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 0 3 0 278 270 1043 0 0 961 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 3 0 278 270 1043 0 0 961 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 3 0 278 270 1043 0 0 961 10
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 0 3 0 278 270 1043 0 0 961 10

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat: 0 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.20 0.19 0.24 0.00 0.00 0.34 0.01
Crit Moves: **** **

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Middle Harbor EIR
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Scenario Report

2030 345-Acre MD
Command: 2030 345-Acre MD
Volume: 2030 345-Acre MD Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

Middle Harbor EIR
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Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 157.2	1.594	F 157.2	1.594 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	E 35.6	1.031	E 35.6	1.031 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	D 26.3	0.000	D 26.3	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 11.4	0.000	B 11.4	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	C 15.7	0.000	C 15.7	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 50.4	1.177	F 50.4	1.177 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.420	A xxxxx	0.420 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.686	B xxxxx	0.686 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 13.9	0.534	B 13.9	0.534 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.553	A xxxxx	0.553 + 0.000 D/V

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Level Of Service Computation Report

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100
Loss Time (sec): 0 (Y+R=4.0 sec)
Optimal Cycle: 0

Cycle (sec): 1594
Loss Time (sec): 157.2
Optimal Cycle: F

Average Delay (sec/veh): 35.6

Average Delay (sec/veh): 157.2

Level Of Service: E

Level Of Service: F

North Bound South Bound East Bound West Bound

North Bound South Bound East Bound West Bound

L - T - R L - T - R L - T - R L - T - R

L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Include Include Include Include

Include Include Include Include

Min. Green: 0 0 0 0

Min. Green: 0 0 0 0

Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:

Volume Module:

Base Vol: 0 534 6 92 303 66 99 54 0 430 14 146

Base Vol: 6 514 221 140 482 199 452 170 5 222 80 306

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 534 6 92 303 66 99 54 0 430 14 146

Initial Bse: 6 514 221 140 482 199 452 170 5 222 80 306

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 534 6 92 303 66 99 54 0 430 14 146

PHF Volume: 6 514 221 140 482 199 452 170 5 222 80 306

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 534 6 92 303 66 99 54 0 430 14 146

Reduced Vol: 6 514 221 140 482 199 452 170 5 222 80 306

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 0 534 6 92 303 66 99 54 0 430 14 146

Final Volume: 6 514 221 140 482 199 452 170 5 222 80 306

Saturation Flow Module:

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.98 0.02 1.00 1.64 0.36 1.00 1.00 0.00 0.97 0.03 1.00

Lanes: 1.00 1.40 0.60 1.00 1.00 1.94 0.06 1.00 1.00 1.00 1.00 1.00

Final Sat.: 382 813 9 376 664 147 371 390 0 417 14 489

Final Sat.: 289 431 190 291 305 323 284 568 17 290 301 322

Capacity Analysis Module:

Capacity Analysis Module:

Vol/Sat: 0.00 0.66 0.66 0.24 0.46 0.45 0.27 0.14 xxxxx 1.03 1.03 0.30

Vol/Sat: 0.02 1.19 1.16 0.48 1.58 0.62 1.59 0.30 0.30 0.76 0.27 0.95

Crit Moves: ****

Crit Moves: ****

Delay/Veh: 0.0 26.1 26.0 15.0 18.4 17.9 15.2 12.9 0.0 80.8 80.8 12.8

Delay/Veh: 15.2 147 135.1 25.7 302 29.7 313.1 19.9 19.9 46.0 18.8 72.6

AdjDel/Veh: 0.0 26.1 26.0 15.0 18.4 17.9 15.2 12.9 0.0 80.8 80.8 12.8

AdjDel/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

LOS by Move: * D B C C C B * F F B

LOS by Move: C F D F C E C F

A345-AceroachDel: 26.1 17.6 14.4 14.4 1.00 63.9

A345-AceroachDel: 142.6 189.0 231.3 231.3 1.00 55.8

A345-AceroachDel: 26.1 17.6 14.4 14.4 1.00 63.9

A345-AceroachDel: 142.6 189.0 231.3 231.3 1.00 55.8

LOS by A345-Acroc: D C B

LOS by A345-Acroc: F F F

AllWayAvgQ: 0.0 1.7 0.3 0.8 0.8 0.3 0.1 0.1 8.3 8.3 0.4

AllWayAvgQ: 0.0 11.7 10.6 0.9 24.4 24.4 23.5 0.4 0.4 2.5 0.4 5.3

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
*****
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
*****
Average Delay (sec/veh): 1.9 Worst Case Level Of Service: [B, 11.4]
*****
A345-Acreoach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Rights: Uncontrolled Uncontrolled Stop Sign Stop Sign
          Include      Ignore      Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0
Volume Module:
Base Vol: 258 448 0 0 822 117 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 258 448 0 0 822 117 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 258 448 0 0 822 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 258 448 0 0 822 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Conflict Vol: 822 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 816 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 816 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.32 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Level Of Service Module:
2Way95thQ: 1.4 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 11.4 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS By Move: B * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
A345-AcreoachDel: xxxxxx xxxxxx
A345-AcreoachLOS: * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
Note: Queue reported is the number of cars per lane.
*****

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
*****
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
*****
Average Delay (sec/veh): 0.4 Worst Case Level Of Service: [D, 26.3]
*****
A345-Acreoach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Rights: Uncontrolled Uncontrolled Stop Sign Stop Sign
          Include      Ignore      Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 0 1 0 0 0 0 1
Volume Module:
Base Vol: 0 745 0 0 822 0 0 0 0 0 0 0 24 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 745 0 0 822 0 0 0 0 0 0 0 24 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 745 0 0 822 0 0 0 0 0 0 0 24 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 745 0 0 822 0 0 0 0 0 0 0 24 0 0 0 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1156 xxxxx 373
Potential Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 193 xxxxx 631
Move Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 193 xxxxx 631
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.12 xxxxx 0.00
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.4 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 26.3 xxxxx xxxxx
LOS By Move: * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
A345-AcreoachDel: xxxxxx xxxxxx
A345-AcreoachLOS: * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
Note: Queue reported is the number of cars per lane.
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Middle Harbor EIR
Future Year 2030
345-Acre

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C(15.7)
A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 0 650 1 0 829 0 0 2 17 1 0 0 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gap: xxxxx xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: xxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx 1154 1480 414 1066 1480 326
Potential Cap.: xxxxx xxxxx xxxxx 155 127 592 179 127 676

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.4

LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx 127 xxxxx 427 172 xxxxx xxxxx

Shared Queue: xxxxx xxxxx xxxxx 0.0 xxxxx 0.1 0.0 xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx 33.9 xxxxx 26.0 xxxxx xxxxx

Shared LOS: * * * * *
A345-AceroachDel: xxxxxx 15.7
A345-AceroachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
345-Acre

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Cycle (sec): 100 Critical Vol./Cap.(X): 1.177
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 50.4
Optimal Cycle: 0 Level Of Service: F

A345-Aceroach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Volume Module:
Base Vol: 98 291 1 5 480 174 536 0 101 7 5 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.25 0.35 0.35 0.54 0.54 0.35 1.18 xxxxx 0.19 0.03 0.03 0.07
Crit Moves: *** **

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.58 0.42 1.00

Final Sat.: 396 837 3 9 892 493 455 0 521 223 160 428
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #7 Pico Avenue, Pier C Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.420
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected
 Rights: Include Ignore Ovl Include
 Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0
 Lanes: -----
 Volume Module:
 Base Vol: 30 778 0 0 565 215 222 0 18 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 30 778 0 0 565 215 222 0 18 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 30 778 0 0 565 0 222 0 18 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 30 778 0 0 565 0 222 0 18 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 30 778 0 0 565 0 222 0 18 0 0 0
 OvlAdjVol: -----
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.24 0.00 0.00 0.18 0.00 0.08 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: *****

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #8 Pico Avenue, Pier B Street & 9th Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.686
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 48 Level Of Service: B

 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: Ignore Include Include
 Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0
 Lanes: -----
 Volume Module:
 Base Vol: 193 5 227 221 2 43 53 295 229 470 146 358
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 193 5 227 221 2 43 53 295 229 470 146 358
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 193 5 0 221 2 43 53 295 229 470 146 358
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 193 5 0 221 2 43 53 295 229 470 146 358
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 193 5 0 221 2 43 53 295 229 470 146 358
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.68 0.32 1.00 1.13 0.87 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1083 517 1600 1802 1398 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.12 0.00 0.00 0.14 0.00 0.08 0.03 0.16 0.16 0.16 0.09 0.22
 Crit Moves: *****

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.534
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: 0 Level of Service: B
A345-Acre Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 122 0 52 79 529 0 0 364 301
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 122 0 52 79 529 0 0 364 301
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 122 0 52 79 529 0 0 364 301
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 122 0 52 79 529 0 0 364 301
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 122 0 52 79 529 0 0 364 301
Saturation Flow Module:
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.40 0.60 0.26 1.74 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 448 203 301 148 1002 0 0 1065 598
Capacity Analysis Module:
Vol/Sat: xxxx xxxx 0.27 0.00 0.17 0.53 0.53 xxxx xxxx 0.34 0.50
Crit Moves: *** **
Delay/Veh: 0.0 0.0 0.0 13.0 10.7 10.7 15.5 15.2 0.0 0.0 12.6 14.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 13.0 10.7 10.7 15.5 15.2 0.0 0.0 12.6 14.2
LOS by Move: * * * * *
A345-Acre Approach Del: xxxxxx
Delay Adj: 1.00 12.0 1.00 15.3 1.00 13.3
A345-Acre Adj Del: xxxxxx
LOS by A345-Acre: * * * * *
AllwayVgQ: 0.0 0.0 0.0 0.3 0.2 0.2 1.0 1.0 0.0 0.0 0.5 0.9
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.553
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level of Service: A
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 14 0 359 155 1256 0 0 857 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 14 0 359 155 1256 0 0 857 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 14 0 359 155 1256 0 0 857 18
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 14 0 359 155 1256 0 0 857 18
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 14 0 359 155 1256 0 0 857 18
Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.25 0.11 0.29 0.00 0.00 0.30 0.01
Crit Vol: 0 359 0
Crit Moves: **** *
Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
345-Acre

Scenario Report

2030 345-Acre PM
Command: 2030 345-Acre PM
Volume: 2030 345-Acre PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: 345-Acre

Middle Harbor EIR
Future Year 2030
345-Acre

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 64.2	1.155	F 64.2	1.155 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	F 57.8	1.189	F 57.8	1.189 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	E 41.8	0.000	E 41.8	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 13.7	0.000	B 13.7	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.5	0.000	B 11.5	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 39.8	1.091	E 39.8	1.091 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.422	A xxxxx	0.422 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.644	B xxxxx	0.644 + 0.000 V/C
# 9 Anaheim Way & Pier B St	C 17.4	0.697	C 17.4	0.697 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxx	0.688	B xxxxx	0.688 + 0.000 D/V

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.155
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 64.2
 Optimal Cycle: 0 Level Of Service: F
 Movement: L - T - R L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include Include
 Min. Green: 0
 Lanes: 1 0 1 1 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 4 384 137 53 324 211 327 208 9 48 0 401
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 4 384 137 53 324 211 327 208 9 48 0 401
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 4 384 137 53 324 211 327 208 9 48 0 401
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 4 384 137 53 324 211 327 208 9 48 0 401
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 4 384 137 53 324 211 327 208 9 48 0 401
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.47 0.53 1.00 1.00 1.00 1.00 1.92 0.08 1.00 1.00 1.00
 Final Sat.: 314 496 181 319 340 361 324 639 28 303 314 347
 Capacity Analysis Module:
 Vol/Sat: 0.01 0.77 0.76 0.17 0.95 0.58 1.01 0.33 0.32 0.16 0.00 1.15
 Crit Moves: ****
 Delay/Veh: 14.1 41.4 38.7 15.9 70.8 25.3 86.6 18.1 18.1 16.4 0.0 129.1
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 14.1 41.4 38.7 15.9 70.8 25.3 86.6 18.1 18.1 16.4 0.0 129.1
 LOS by Move: B E C F D F C C *
 A345-AceroachDel: 40.4 49.5 49.5 59.3 117.1
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 A345-AceroachDel: 40.4 49.5 49.5 59.3 117.1
 LOS by A345-Aceroach: E E F F
 AllWayAvgQ: 0.0 2.7 2.4 0.2 5.4 5.4 6.5 0.5 0.4 0.2 0.0 11.2
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.189
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 57.8
 Optimal Cycle: 0 Level Of Service: F
 Movement: L - T - R L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include Include
 Min. Green: 0
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 0 590 3 202 172 199 302 137 0 400 30 140
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 590 3 202 172 199 302 137 0 400 30 140
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 590 3 202 172 199 302 137 0 400 30 140
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 590 3 202 172 199 302 137 0 400 30 140
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 590 3 202 172 199 302 137 0 400 30 140
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Sat.: 318 683 3 322 336 360 353 365 0 336 25 396
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.86 0.86 0.63 0.51 0.55 0.86 0.37 xxxxx 1.19 1.19 0.35
 Crit Moves: ****
 Delay/Veh: 0.0 52.5 52.5 30.0 23.4 23.6 49.9 17.8 0.0 139.6 140 16.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 52.5 52.5 30.0 23.4 23.6 49.9 17.8 0.0 139.6 140 16.0
 LOS by Move: * F F D C C E C *
 A345-AceroachDel: 52.5 25.8 25.8 39.9 109.2
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 A345-AceroachDel: 52.5 25.8 25.8 39.9 109.2
 LOS by A345-Aceroach: F F D E
 AllWayAvgQ: 0.0 3.8 3.8 1.5 0.9 1.1 3.6 0.6 0.6 12.8 12.8 0.5
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
 Average Delay (sec/veh): 1.0 Worst Case Level Of Service: E[41.8]

A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Rights: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Include Include Include Include
 Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1

Volume Module:
 Base Vol: 0 996 0 0 741 0 0 0 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 996 0 0 741 0 0 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 996 0 0 741 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 996 0 0 741 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
 Critical Gp: 6.8 6.9
 FollowUpTim: 3.5 3.3

Capacity Module:
 Conflict Vol: 1367 498
 Potent Cap: 141 523
 Move Cap: 141 523
 Volume/Cap: 0.31 0.00

Level Of Service Module:
 2Way95thQ: 1.2 41.8
 Control Del: 41.8 41.8
 LOS By Move: E E
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: 141 523
 SharedQueue: 141 523
 Shrd ConDel: 0.31 0.00
 Shared LOS: * * * * *
 A345-AceroachDel: xxxxxx
 A345-AceroachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
 Average Delay (sec/veh): 3.9 Worst Case Level Of Service: B[13.7]

A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Rights: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Include Include Include Include
 Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0

Volume Module:
 Base Vol: 465 434 0 0 741 133 0 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 465 434 0 0 741 133 0 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 465 434 0 0 741 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 465 434 0 0 741 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
 Critical Gp: 4.1
 FollowUpTim: 2.2

Capacity Module:
 Conflict Vol: 741
 Potent Cap: 875
 Move Cap: 875
 Volume/Cap: 0.53

Level Of Service Module:
 2Way95thQ: 3.2
 Control Del: 13.7
 LOS By Move: B * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap: 875 875
 SharedQueue: 875 875
 Shrd ConDel: 0.53
 Shared LOS: * * * * *
 A345-AceroachDel: xxxxxx
 A345-AceroachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

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345-Acre

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway *****

Average Delay (sec/veh): 0.1 Worst Case Level of Service: B [11.5]

A345-Aceroach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include

Lanes: 1 0 1 1 0 1 0 1 0 0 1 0 1 0 0 1
Volume Module:
Base Vol: 0 908 0 5 742 0 0 0 7 0 0 0 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 908 0 5 742 0 0 0 7 0 0 0 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 908 0 5 742 0 0 0 7 0 0 0 1
PHF Vol: 0 0 0 0 0 0 0 0 7 0 0 0 0
FinalVolume: 0 908 0 5 742 0 0 0 7 0 0 0 1

Critical Gap Module:
Critical Gp:xxxxx xxxxx 4.1 xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9
FollowUpTim:xxxxx xxxxx 2.2 xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx 908 xxxxx xxxxx 1206 xxxxx 371 1289 1660 454
Potential Cap.: xxxxx xxxxx xxxxx 758 xxxxx xxxxx 142 xxxxx 632 123 98 559
Move Cap.: xxxxx xxxxx xxxxx 758 xxxxx xxxxx 141 xxxxx 632 121 98 559
Volume/Cap: xxxxx xxxxx xxxxx 0.01 xxxxx xxxxx 0.00 xxxxx 0.01 0.00 0.00 0.00

Level of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0 xxxxx xxxxx 0.0
Control Del:xxxxx xxx xxxxx 9.8 xxx xxxxx xxxxx xxxxx 10.8 xxxxx xxxxx 11.5
LOS by Move: * A * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
A345-AceroachDel: xxxxxx 10.8
A345-AceroachLOS: *

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
345-Acre

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street *****

Average Delay (sec/veh): 100 Critical Vol./Cap.(X): 1.091

A345-Aceroach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Lanes: 1 0 1 1 0 0 0 0 0 0 0 0 1 0 1 0 0 0
Volume Module:
Base Vol: 97 383 3 4 567 163 461 0 135 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 97 383 3 4 567 163 461 0 135 37 2 54
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 97 383 3 4 567 163 461 0 135 37 2 54
PHF Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 97 383 3 4 567 163 461 0 135 37 2 54
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 97 383 3 4 567 163 461 0 135 37 2 54

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 0.01 1.99 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat.: 370 780 6 6 834 453 422 0 476 336 18 401

Capacity Analysis Module:
Vol/Sat: 0.26 0.49 0.49 0.68 0.68 0.36 1.09 xxxxx 0.28 0.11 0.11 0.13
Crit Moves: ***
Delay/Veh: 15.4 19.8 19.8 27.2 27.2 14.7 99.7 0.0 12.8 13.5 13.5 12.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 15.4 19.8 19.8 27.2 27.2 14.7 99.7 0.0 12.8 13.5 13.5 12.4
LOS by Move: C C C D D B F * B B B
A345-AceroachDel: 18.9 24.4 80.0
Delay Adj: 1.00 1.00 1.00
A345-AceroachDel: 18.9 24.4 80.0
LOS by A345-Acrot: C C C
AllWayAvgQ: 0.3 0.9 0.9 1.9 1.9 0.5 10.4 10.4 0.4 0.1 0.1 0.1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #7 Pico Avenue, Pier C Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.422
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected
 Rights: 0
 Min. Green: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0 0 0 0 0
 Lanes: -----
 Volume Module:
 Base Vol: 30 811 0 0 631 127 197 0 32 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 30 811 0 0 631 127 197 0 32 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 30 811 0 0 631 0 197 0 32 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 30 811 0 0 631 0 197 0 32 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MFL Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 30 811 0 0 631 0 197 0 32 0 0 0
 OvlAdjVol: -----
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.25 0.00 0.00 0.00 0.20 0.00 0.07 0.00 0.02 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: *****

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #8 Pico Avenue, Pier B Street & 9th Street

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.644
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 44 Level Of Service: B

 A345-Aceroach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: 0 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Lanes: -----
 Volume Module:
 Base Vol: 111 2 333 185 1 21 58 270 279 548 141 336
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 111 2 333 185 1 21 58 270 279 548 141 336
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 111 2 0 185 1 21 58 270 279 548 141 336
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 111 2 0 185 1 21 58 270 279 548 141 336
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MFL Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 111 2 0 185 1 21 58 270 279 548 141 336
 OvlAdjVol: -----
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.80 0.20 1.00 1.00 1.00 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1275 325 1600 1600 1600 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.07 0.00 0.00 0.12 0.00 0.06 0.04 0.17 0.17 0.19 0.09 0.21
 Crit Moves: *****

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.697
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 17.4
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 254 0 13 66 513 0 0 124 380
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 254 0 13 66 513 0 0 124 380
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 254 0 13 66 513 0 0 124 380
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 254 0 13 66 513 0 0 124 380
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 254 0 13 66 513 0 0 124 380
 Saturation Flow Module:
 Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.90 0.10 0.23 1.77 0.00 0.00 2.00 1.00
 Final Sat: 0 0 0 467 451 49 121 950 0 0 966 545
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.54 0.00 0.27 0.55 0.54 xxxx xxxx 0.13 0.70
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 0.0 18.3 12.0 12.0 16.7 16.4 0.0 0.0 10.9 22.3
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 18.3 12.0 12.0 16.7 16.4 0.0 0.0 10.9 22.3
 LOS by Move: * * * C B B C * *
 A345-AceroachDel: xxxxxx 16.1 16.5 16.5 1.00 19.5
 Delay Adj: xxxxxx
 A345-AceroachDel: xxxxxx 16.1 16.5 16.5 1.00 19.5
 LOS by A345-Aceroach: * * * C
 AllWayVgQ: 0.0 0.0 0.0 1.1 0.3 0.3 1.1 1.0 0.0 0.0 0.1 2.0
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.688
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 64 Level of Service: B
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 29 0 406 173 1462 0 0 1150 18
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 29 0 406 173 1462 0 0 1150 18
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 29 0 406 173 1462 0 0 1150 18
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 29 0 406 173 1462 0 0 1150 18
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol: 0 0 0 29 0 406 173 1462 0 0 1150 18
 Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.28 0.12 0.34 0.00 0.00 0.40 0.01
 Crit Vol: 0 406 0 575
 Crit Moves: ****

Middle Harbor EIR
 Future Year 2030
 315-Acre

Scenario: 2030 315-Acre AM Scenario Report
 Command: 2030 315-Acre AM
 Volume: 2030 315-Acre AM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 315-Acre

Middle Harbor EIR
 Future Year 2030
 315-Acre

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh	V/ C	Future Del/ LOS Veh	Change in
# 1 Pico Ave / Pier G St & Harbor	F 83.7	1.318	F 83.7	1.318 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 20.4	0.790	C 20.4	0.790 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 19.6	0.000	C 19.6	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.1	0.000	B 10.1	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 12.8	0.000	B 12.8	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 44.0	1.125	E 44.0	1.125 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.446	A xxxxx	0.446 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.693	B xxxxx	0.693 + 0.000 V/C
# 9 Anaheim Way & Pier B St	C 16.1	0.580	C 16.1	0.580 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.525	A xxxxx	0.525 + 0.000 D/V

Middle Harbor EIR
Future Year 2030
315-Acre

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.318
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 83.7
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 1 456 127 94 447 229 352 52 4 178 74 256
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 1 456 127 94 447 229 352 52 4 178 74 256
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 456 127 94 447 229 352 52 4 178 74 256
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 456 127 94 447 229 352 52 4 178 74 256
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 1 456 127 94 447 229 352 52 4 178 74 256

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.56 0.44 1.00 1.00 1.00 1.00 1.86 0.14 1.00 1.00 1.00
Final Sat.: 310 524 148 316 339 358 304 568 44 308 319 345

Capacity Analysis Module:
Vol/Sat: 0.00 0.87 0.86 0.30 1.32 0.64 1.16 0.09 0.09 0.58 0.23 0.74
Crit Moves: ****
Delay/Veh: 14.1 54.8 51.5 18.3 192 28.1 136.1 15.1 15.0 28.5 16.9 36.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.1 54.8 51.5 18.3 192 28.1 136.1 15.1 15.0 28.5 16.9 36.9
LOS by Move: B F C F D F C C D C E
ApproachDel: 54.0 121.9 119.4 31.1
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 54.0 121.9 119.4 31.1
LOS by Appr: F F F F
AllwayAvgQ: 0.0 4.0 3.6 0.4 16.8 16.8 10.3 0.1 0.1 1.2 0.3 2.3

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
315-Acre

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.790
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 20.4
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 429 2 40 224 185 129 82 0 319 27 125
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 429 2 40 224 185 129 82 0 319 27 125
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 429 2 40 224 185 129 82 0 319 27 125
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 429 2 40 224 185 129 82 0 319 27 125
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 429 2 40 224 185 129 82 0 319 27 125

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.10 0.90 1.00 1.00 0.00 0.92 0.08 1.00
Final Sat.: 388 836 4 390 462 408 393 414 0 404 34 501

Capacity Analysis Module:
Vol/Sat: 0.00 0.51 0.51 0.10 0.48 0.45 0.33 0.20 xxxxx 0.79 0.79 0.25
Crit Moves: ****
Delay/Veh: 0.0 18.9 18.9 12.5 18.0 16.2 15.3 12.7 0.0 33.8 33.8 11.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 18.9 18.9 12.5 18.0 16.2 15.3 12.7 0.0 33.8 33.8 11.8
LOS by Move: * C C C C C C C * D D B
ApproachDel: 18.9 16.8 14.3 14.3 28.0
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 18.9 16.8 14.3 14.3
LOS by Appr: C C C C
AllwayAvgQ: 0.0 0.9 0.9 0.1 0.8 0.7 0.4 0.2 0.2 2.8 2.8 0.3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
 Average Delay (sec/veh): 2.3 Worst Case Level Of Service: [I 19.6]

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1

Volume Module:
 Base Vol: 0 632 0 0 649 0 0 0 0 95 0 78
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 632 0 0 649 0 0 0 0 95 0 78
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 632 0 0 649 0 0 0 0 95 0 78
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 632 0 0 649 0 0 0 0 95 0 78

Critical Gap Module:
 Critical Gp: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 6.8 xxxxx 6.9
 FollowUpTim: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 3.5 xxxxx 3.3

Capacity Module:
 Conflict Vol: xxxxx xxxx xxxxxx xxxx xxxx xxxxxx 957 xxxxx 316
 Potential Cap.: xxxxx xxxx xxxxxx xxxxx xxxx xxxxxx 259 xxxxx 686
 Move Cap.: xxxxx xxxx xxxxxx xxxxx xxxx xxxxxx 259 xxxxx 686
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx 0.37 xxxxx 0.11

Level Of Service Module:
 2Way95thQ: xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx 1.6 xxxxx 0.4
 Control Del: xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx 26.7 xxxxx 10.9

LOS by Move: * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 Shrd ConDel: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx
 ApproachLOS: C

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
 Average Delay (sec/veh): 1.7 Worst Case Level Of Service: [B 10.1]

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Ignore Include Include
 Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 236 472 0 0 649 98 0 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 236 472 0 0 649 98 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 236 472 0 0 649 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 236 472 0 0 649 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
 FollowUpTim: 2.2 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx

Capacity Module:
 Conflict Vol: 649 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 Potential Cap.: 947 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 Move Cap.: 947 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 Volume/Cap: 0.25 xxxxx xxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx

Level Of Service Module:
 2Way95thQ: 1.0 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 Control Del: 10.1 xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx

LOS by Move: B * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 Shrd ConDel: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx
 ApproachLOS: *

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 0.4 Worst Case Level of Service: Bf 12.8j
Critical Gap: 4.1 xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: 633 xxxxx xxxxx 989 1314 317 995 1310 322
Potential Cap.: 960 xxxxx xxxxx 204 160 685 202 160 680
Move Cap.: 960 xxxxx xxxxx 200 156 685 189 157 680
Volume/Cap.: 0.01 xxxxx xxxxx 0.00 0.01 0.04 0.00 0.00 0.00
Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del.: 8.8 xxxxx xxxxx 8.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.3
LOS by Move: A * A * A * A * A * A * A * A * A * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * D * * * * * B * * * * *
ApproachDel: xxxxxx 12.8 B 10.3
ApproachLOS: * * * * * B
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street
Cycle (sec): 100 Critical Vol./Cap.(X): 1.125
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 44.0
Optimal Cycle: 0 Level of Service: E
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1
Volume Module:
Base Vol.: 108 284 1 6 629 270 483 0 59 19 1 37
Growth Adj.: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 108 284 1 6 629 270 483 0 59 19 1 37
User Adj.: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj.: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 108 284 1 6 629 270 483 0 59 19 1 37
Reduced Vol.: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj.: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj.: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 108 284 1 6 629 270 483 0 59 19 1 37
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat.: 374 786 3 8 888 489 429 0 482 340 18 406
Capacity Analysis Module:
Vol/Sat: 0.29 0.36 0.36 0.71 0.71 0.55 1.13 xxxxx 0.12 0.06 0.06 0.09
Crit Moves: *** * * * * *
Delay/Veh: 15.8 16.4 16.4 27.7 27.7 18.4 110.2 0.0 10.8 12.8 12.8 11.8
Delay Adj.: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 15.8 16.4 16.4 27.7 27.7 18.4 110.2 0.0 10.8 12.8 12.8 11.8
LOS by Move: C C C D D C F * B B B B
ApproachDel: 16.2 24.9 24.9 99.4 12.2
Delay Adj.: 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 16.2 24.9 24.9 99.4 12.2
LOS by Appr: C
AllwayAvgQ: 0.4 0.5 0.5 2.1 2.1 1.1 11.8 11.8 0.1 0.1 0.1 0.1
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) *****
 Intersection #7 Pico Avenue, Pier C Street *****
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.446
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 31 Level Of Service: A
 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: 0
 Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 0 1 0 0 0 0 0 0
 Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 0 1 0 0 0 0 0 0
 Volume Module:
 Base Vol: 27 735 0 0 850 219 184 0 14 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 27 735 0 0 850 219 184 0 14 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 27 735 0 0 850 0 184 0 14 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 27 735 0 0 850 0 184 0 14 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 27 735 0 0 850 0 184 0 14 0 0 0
 OvAdjVol: 27 735 0 0 850 0 184 0 14 0 0 0
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.23 0.00 0.00 0.27 0.00 0.06 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: ****

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) *****
 Intersection #8 Pico Avenue, Pier B Street & 9th Street *****
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.693
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 49 Level Of Service: B
 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: 0
 Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 281 2 512 247 0 29 73 296 85 415 232 249
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 281 2 512 247 0 29 73 296 85 415 232 249
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 281 2 0 247 0 29 73 296 85 415 232 249
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 281 2 0 247 0 29 73 296 85 415 232 249
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 281 2 0 247 0 29 73 296 85 415 232 249
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.79 0.21 1.00 1.55 0.45 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1264 336 1600 2486 714 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.18 0.00 0.00 0.15 0.00 0.09 0.05 0.12 0.12 0.14 0.15 0.16
 Crit Moves: ****

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.580
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 16.1
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 264 0 42 36 400 0 0 499 279
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 264 0 42 36 400 0 0 499 279
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 264 0 42 36 400 0 0 499 279
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 264 0 42 36 400 0 0 499 279
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 264 0 42 36 400 0 0 499 279
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.73 0.27 0.17 1.83 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 455 358 136 81 909 0 0 996 551
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.58 0.00 0.31 0.44 0.44 xxxx xxxx 0.50 0.51
 Crit Moves: ***
 Delay/Veh: 0.0 0.0 20.0 12.7 12.7 15.1 14.9 0.0 0.0 16.5 15.2
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 20.0 12.7 12.7 15.1 14.9 0.0 0.0 16.5 15.2
 LOS by Move: * * * C B B * C B * C
 ApproachDel: xxxxxx 17.3 B 14.9 C
 Delay Adj: xxxxxx 1.00
 ApprAdjDel: xxxxxx 17.3 B 14.9 C
 LOS by Appr: * C 0.0 1.2 0.4 0.4 0.7 0.7 0.0 0.0 0.9 0.9
 AllwayAvgQ: 0.0 0.0 0.0 1.2 0.4 0.4 0.7 0.7 0.0 0.0 0.9 0.9
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.525
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level of Service: A
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 0 3 0 269 264 1037 0 0 957 10
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 269 264 1037 0 0 957 10
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 269 264 1037 0 0 957 10
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 269 264 1037 0 0 957 10
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 3 0 269 264 1037 0 0 957 10
 Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.19 0.19 0.24 0.00 0.00 0.34 0.01
 Crit Vol: 0 269 0
 Crit Moves: *****

Scenario: 2030 315-Acre MD Scenario Report
 Command: 2030 315-Acre MD
 Volume: 2030 315-Acre MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 315-Acre

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh	V/ C	Future Del/ LOS Veh	Change in
# 1 Pico Ave / Pier G St & Harbor	F 151.5	1.622	F 151.5	1.622 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	E 36.1	1.037	E 36.1	1.037 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	D 25.4	0.000	D 25.4	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 11.2	0.000	B 11.2	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	C 15.2	0.000	C 15.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 48.5	1.159	E 48.5	1.159 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.418	A xxxxx	0.418 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.691	B xxxxx	0.691 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 14.5	0.553	B 14.5	0.553 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.497	A xxxxx	0.497 + 0.000 D/V

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.622
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 151.5
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 6 519 216 136 450 178 459 163 5 251 103 294
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 6 519 216 136 450 178 459 163 5 251 103 294
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 6 519 216 136 450 178 459 163 5 251 103 294
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 6 519 216 136 450 178 459 163 5 251 103 294
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 6 519 216 136 450 178 459 163 5 251 103 294

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.41 0.59 1.00 1.00 1.00 1.00 1.94 0.06 1.00 1.00 1.00
Final Sat.: 288 434 185 289 303 320 283 566 17 292 304 324

Capacity Analysis Module:
Vol/Sat: 0.02 1.19 1.17 0.47 1.49 0.56 1.62 0.29 0.29 0.86 0.34 0.91
Crit Moves: ****

Delay/Veh: 15.3 148 136.3 25.4 263 26.8 325.3 19.7 19.6 58.8 20.4 63.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 15.3 148 136.3 25.4 263 26.8 325.3 19.7 19.6 58.8 20.4 63.1

LOS by Move: C F F D F C C F C F C F
ApproachDel: 143.7 165.9 243.4
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 143.7 165.9 243.4

LOS by Appr: F
AllwayAvgQ: 0.0 11.7 10.7 0.8 20.9 20.9 24.4 0.4 0.4 3.6 0.5 4.4

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.037
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 36.1
Optimal Cycle: 0 Level of Service: E

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 538 6 90 305 53 89 43 0 440 12 147
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 538 6 90 305 53 89 43 0 440 12 147
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 538 6 90 305 53 89 43 0 440 12 147
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 538 6 90 305 53 89 43 0 440 12 147
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 538 6 90 305 53 89 43 0 440 12 147

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 1.00 1.70 0.30 1.00 1.00 0.00 0.97 0.03 1.00
Final Sat.: 388 826 9 381 695 122 372 391 0 424 12 497

Capacity Analysis Module:
Vol/Sat: 0.00 0.65 0.65 0.24 0.44 0.43 0.24 0.11 xxxxx 1.04 1.04 0.30
Crit Moves: ****

Delay/Veh: 0.0 25.5 25.4 14.7 17.8 17.4 14.7 12.5 0.0 81.9 81.9 12.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 25.5 25.4 14.7 17.8 17.4 14.7 12.5 0.0 81.9 81.9 12.6

LOS by Move: * D D B C C B B *
ApproachDel: 25.5 17.1 17.1 14.0
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 25.5 17.1 17.1

LOS by Appr: D
AllwayAvgQ: 0.0 1.7 1.6 0.3 0.7 0.7 0.3 0.1 0.1 8.6 8.6 0.4

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.2 Worst Case Level of Service: C [15.2]
Critical Gap: 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTime: 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: xxxxxx xxxxxx 1112 1428 399 1030 1428 316
Potential Cap.: xxxxxx xxxxxx 166 136 607 190 136 686
Move Cap.: xxxxxx xxxxxx 165 136 607 183 136 686
Volume/Cap: xxxxxx xxxxxx 0.00 0.01 0.03 0.01 0.00 0.01

Level of Service Module:
2Way95thQ: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 0.0
Control Del: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 10.3
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 445
SharedQueue: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 0.0
Shrd ConDel: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 31.8
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 1.159
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 48.5
Optimal Cycle: 0 Level of Service: E
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 83 284 1 5 441 188 535 0 102 7 5 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 83 284 1 5 441 188 535 0 102 7 5 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 83 284 1 5 441 188 535 0 102 7 5 30
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Critical Gap: 83 284 1 5 441 188 535 0 102 7 5 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 83 284 1 5 441 188 535 0 102 7 5 30

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.58 0.42 1.00
Final Sat.: 398 844 3 10 898 498 462 0 531 227 162 435
Capacity Analysis Module:
Vol/Sat: 0.21 0.34 0.34 0.49 0.49 0.38 1.16 xxxxx 0.19 0.03 0.03 0.07
Crit Moves: ***
Delay/Veh: 13.8 15.1 15.1 17.8 17.8 14.0 119.4 0.0 10.8 11.8 11.8 11.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.8 15.1 15.1 17.8 17.8 14.0 119.4 0.0 10.8 11.8 11.8 11.0
LOS by Move: B C C C C B F * B B B B
ApproachDel: 14.8 16.7 102.0
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 14.8 16.7 102.0
LOS by Appr: B C F B
AllwayAvgQ: 0.2 0.5 0.5 0.9 0.9 0.6 14.0 14.0 0.2 0.0 0.0 0.1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #7 Pico Avenue, Pier C Street
*****
Cycle (sec): 100 Critical Vol./Cap.(X): 0.418
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A
*****
Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0
Lanes: -----
Volume Module:
Base Vol: 31 768 0 0 538 224 225 0 15 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 31 768 0 0 538 224 225 0 15 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 31 768 0 0 538 0 225 0 15 0 0 0 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 31 768 0 0 538 0 225 0 15 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 31 768 0 0 538 0 225 0 15 0 0 0 0
OvlAdjVol: -----
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.24 0.00 0.00 0.17 0.00 0.08 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: *****
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #8 Pico Avenue, Pier B Street & 9th Street
*****
Cycle (sec): 100 Critical Vol./Cap.(X): 0.691
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B
*****
Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0
Lanes: -----
Volume Module:
Base Vol: 204 5 243 214 2 38 41 269 271 465 163 335
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 204 5 243 214 2 38 41 269 271 465 163 335
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 204 5 0 214 2 38 41 269 271 465 163 335
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 204 5 0 214 2 38 41 269 271 465 163 335
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 204 5 0 214 2 38 41 269 271 465 163 335
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.30 1.00 0.30 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1121 479 1600 1600 1600 2880 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.13 0.00 0.00 0.13 0.00 0.08 0.03 0.17 0.17 0.16 0.10 0.21
Crit Moves: *****
*****

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.553
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 14.5 B
Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 137 0 49 80 537 0 0 457 225
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 137 0 49 80 537 0 0 457 225
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 137 0 49 80 537 0 0 457 225
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 137 0 49 80 537 0 0 457 225

Saturation Flow Module:
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adj Sat: 0.00 0.00 0.00 0.00 0.47 0.53 0.26 1.74 0.00 0.00 2.00 1.00
Final Sat: 0 0 0 0 445 234 261 145 981 0 0 1049 583
Capacity Analysis Module:
Vol/Sat: xxxx xxxx 0.31 0.00 0.19 0.55 0.55 xxxx xxxx 0.44 0.39
Crit Moves: *** **

Delay/Veh: 0.0 0.0 0.0 13.6 11.0 11.0 16.3 16.0 0.0 0.0 14.3 12.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 13.6 11.0 11.0 16.3 16.0 0.0 0.0 14.3 12.3
LOS by Move: * * * * * B * C * * * * * B * B
ApproachDel: xxxxxx 12.5 16.0 13.7
Delay Adj: xxxxxx 1.00 1.00
ApprAdjDel: xxxxxx 12.5 16.0 13.7
LOS by Appr: * * * * * B C
AllwayAvgQ: 0.0 0.0 0.0 0.4 0.2 0.2 1.1 1.1 0.0 0.0 0.7 0.6
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.497
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 2 0 1
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 1

Volume Module:
Base Vol: 0 0 0 14 0 283 166 1262 0 0 851 16
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 14 0 283 166 1262 0 0 851 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 14 0 283 166 1262 0 0 851 16
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 14 0 283 166 1262 0 0 851 16

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 3.00 0.00 0.00 2.00 1.00
Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.20 0.12 0.30 0.00 0.00 0.30 0.01
Crit Moves: 0 0 0 283 0

Scenario: 2030 315-Acre PM Scenario Report
 Command: 2030 315-Acre PM
 Volume: 2030 315-Acre PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: 315-Acre

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 53.2	1.073	F 53.2	1.073 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	F 52.0	1.156	F 52.0	1.156 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	E 35.1	0.000	E 35.1	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 13.0	0.000	B 13.0	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.2	0.000	B 11.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 26.9	0.932	D 26.9	0.932 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.390	A xxxxx	0.390 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.639	B xxxxx	0.639 + 0.000 V/C
# 9 Anaheim Way & Pier B St	C 16.9	0.637	C 16.9	0.637 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxx	0.671	B xxxxx	0.671 + 0.000 D/V

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.073
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 53.2
 Optimal Cycle: 0 Level of Service: F
 Approach: North Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 4 396 125 53 341 186 280 164 8 46 0 390
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 4 396 125 53 341 186 280 164 8 46 0 390
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 4 396 125 53 341 186 280 164 8 46 0 390
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 4 396 125 53 341 186 280 164 8 46 0 390
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 4 396 125 53 341 186 280 164 8 46 0 390
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.52 0.48 1.00 1.00 1.00 1.00 1.91 0.09 1.00 1.00 1.00
 Final Sat.: 323 529 170 327 352 372 326 644 31 312 324 364
 Capacity Analysis Module:
 Vol/Sat: 0.01 0.75 0.73 0.16 0.97 0.50 0.86 0.25 0.25 0.15 0.00 1.07
 Crit Moves: ****
 Delay/Veh: 13.7 37.2 35.1 15.4 72.2 21.0 53.4 16.6 16.5 15.6 0.0 100.1
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 13.7 37.2 35.1 15.4 72.2 21.0 53.4 16.6 16.5 15.6 0.0 100.1
 LOS by Move: B E C F C F C F C C C
 ApproachDel: 36.5 50.6 39.4 91.2
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 36.5 50.6 39.4 91.2
 LOS by Appr: E F E
 AllwayAvgQ: 0.0 2.4 2.2 0.2 5.8 5.8 3.6 0.3 0.3 0.2 0.0 8.8
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.156
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 52.0
 Optimal Cycle: 0 Level of Service: F
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 0 1 0 0 1
 Volume Module:
 Base Vol: 0 569 3 238 166 172 268 111 0 403 27 129
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 569 3 238 166 172 268 111 0 403 27 129
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 569 3 238 166 172 268 111 0 403 27 129
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 569 3 238 166 172 268 111 0 403 27 129
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 569 3 238 166 172 268 111 0 403 27 129
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 1.00 1.00 1.00 1.00 1.00 0.00 0.94 0.06 1.00
 Final Sat.: 327 702 4 334 348 373 355 369 0 349 23 410
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.81 0.81 0.71 0.48 0.46 0.75 0.30 xxxxx 1.16 1.16 0.31
 Crit Moves: ****
 Delay/Veh: 0.0 43.9 43.9 35.1 21.5 19.7 36.8 16.1 0.0 126.7 127 14.9
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 43.9 43.9 35.1 21.5 19.7 36.8 16.1 0.0 126.7 127 14.9
 LOS by Move: * E E C C E C *
 ApproachDel: 43.9 26.6 30.8 100.9
 Delay Adj: 1.00 1.00 1.00 1.00
 ApprAdjDel: 43.9 26.6 30.8 100.9
 LOS by Appr: E D D
 AllwayAvgQ: 0.0 3.0 3.0 2.0 0.8 0.8 2.4 0.4 0.4 11.8 11.8 0.4
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.8 Worst Case Level Of Service: E[35.1]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1
Volume Module:
Base Vol: 0 937 0 0 705 0 0 0 0 0 39 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 937 0 0 705 0 0 0 0 0 39 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 937 0 0 705 0 0 0 0 39 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 937 0 0 705 0 0 0 0 39 0
Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1290 xxxxx 468
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 158 xxxxx 547
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 158 xxxxx 547
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.25 xxxxx 0.00
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.9 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 35.1 xxxxx xxxxx
LOS By Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 3.8 Worst Case Level Of Service: B[13.0]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0
Volume Module:
Base Vol: 456 387 0 0 705 123 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 456 387 0 0 705 123 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 456 387 0 0 705 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 456 387 0 0 705 0 0 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Conflict Vol: 705 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 902 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 902 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.51 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Level Of Service Module:
2Way95thQ: 2.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 13.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS By Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.390
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Ignore
 Min. Green: 1 0 2 0 0 0 2 0 2 0 2 0 0 1 0 0 0 0 0 0
 Lanes: -----|-----|-----|-----|-----|

Volume Module:
 Base Vol: 29 707 0 0 602 133 199 0 30 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 29 707 0 0 602 133 199 0 30 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 29 707 0 0 602 133 199 0 30 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 29 707 0 0 602 133 199 0 30 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 29 707 0 0 602 133 199 0 30 0 0 0
 OviAdjVol: -----|-----|-----|-----|-----|

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 2.00 2.00 2.00 2.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.02 0.22 0.00 0.00 0.00 0.19 0.00 0.07 0.00 0.02 0.00 0.00 0.00
 OviAdjV/S: 0.00
 Crit Moves: *****

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.639
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 43 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: Include Ignore
 Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
 Lanes: -----|-----|-----|-----|

Volume Module:
 Base Vol: 115 2 298 201 1 17 57 262 274 489 106 329
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 115 2 298 201 1 17 57 262 274 489 106 329
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 115 2 298 201 1 17 57 262 274 489 106 329
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 115 2 298 201 1 17 57 262 274 489 106 329
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 115 2 298 201 1 17 57 262 274 489 106 329
 OviAdjVol: -----|-----|-----|-----|-----|

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.84 0.16 1.00 1.00 1.00 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1352 248 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
 Vol/Sat: 0.07 0.00 0.00 0.13 0.00 0.07 0.04 0.16 0.17 0.17 0.07 0.21
 Crit Moves: *****

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Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.637
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 16.9
 Optimal Cycle: 0 Level of Service: C
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
 Volume Module:
 Base Vol: 0 0 293 0 13 68 462 0 0 128 341
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 293 0 13 68 462 0 0 128 341
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 293 0 13 68 462 0 0 128 341
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 293 0 13 68 462 0 0 128 341
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 293 0 13 68 462 0 0 128 341
 Saturation Flow Module:
 Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Adj: 0.00 0.00 0.00 1.00 0.92 0.08 0.26 1.74 0.00 0.00 2.00 1.00
 Lanes: 0 0 0 476 467 43 133 915 0 0 955 536
 Final Sat: 0 0 0 0 0 0 0 0 0 0 0 0
 Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.62 0.00 0.30 0.51 0.50 xxxx xxxx 0.13 0.64
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 20.6 12.3 12.3 16.0 15.8 0.0 0.0 11.1 19.6
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 20.6 12.3 12.3 16.0 15.8 0.0 0.0 11.1 19.6
 LOS by Move: * * * C B B C * * *
 ApproachDel: xxxxxx 17.8 B 17.3
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 17.8 C 17.3
 LOS by Appr: * C C
 AllwayAvgQ: 0.0 0.0 0.0 1.4 0.4 0.4 0.9 0.9 0.0 0.0 0.1 1.5
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.671
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 61 Level of Service: B
 Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 2 0 1
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 1
 Volume Module:
 Base Vol: 0 0 29 0 367 211 1403 0 0 1178 18
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 29 0 367 211 1403 0 0 1178 18
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 29 0 367 211 1403 0 0 1178 18
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 29 0 367 211 1403 0 0 1178 18
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 29 0 367 211 1403 0 0 1178 18
 Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 3.00 0.00 0.00 2.00 1.00
 Final Sat: 0 0 0 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.26 0.15 0.33 0.00 0.00 0.41 0.01
 Crit Vol: 0 367 0 589
 Crit Moves: *****

Middle Harbor EIR
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Scenario: 2030 NEPA AM

Command: 2030 NEPA AM
Volume: 2030 NEPA AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NEPA

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Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 84.5	1.286	F 84.5	1.286 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 20.1	0.780	C 20.1	0.780 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 19.8	0.000	C 19.8	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.4	0.000	B 10.4	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 13.4	0.000	B 13.4	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 57.8	1.241	F 57.8	1.241 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.463	A xxxxx	0.463 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.694	B xxxxx	0.694 + 0.000 V/C
# 9 Anaheim Way & Pier B St	C 15.4	0.538	C 15.4	0.538 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.529	A xxxxx	0.529 + 0.000 D/V

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Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.286
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 84.5
Optimal Cycle: 0 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 1 416 167 100 419 222 362 95 5 207 102 258
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 1 416 167 100 419 222 362 95 5 207 102 258
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 416 167 100 419 222 362 95 5 207 102 258
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 416 167 100 419 222 362 95 5 207 102 258
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 1 416 167 100 419 222 362 95 5 207 102 258

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.43 0.57 1.00 1.00 1.00 1.00 1.90 0.10 1.00 1.00 1.00
Final Sat.: 300 462 190 304 326 343 296 569 30 303 313 338

Capacity Analysis Module:
Vol/Sat: 0.00 0.90 0.88 0.33 1.29 0.65 1.22 0.17 0.17 0.68 0.33 0.76
Crit Moves: ***
Delay/Veh: 14.5 61.9 56.6 19.6 181 29.6 160.5 16.5 16.5 36.0 19.2 39.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.5 61.9 56.6 19.6 181 29.6 160.5 16.5 16.5 36.0 19.2 39.9
LOS by Move: B F C F D F C C E E
ApproachDel: 60.3 113.7 129.4
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 60.3 113.7 129.4
LOS by Appr: F
AllwayAvgQ: 0.0 4.5 4.0 0.5 15.1 15.1 12.0 0.2 0.2 1.8 0.5 2.5
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.780
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 20.1
Optimal Cycle: 0 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 1 0 0 1

Volume Module:
Base Vol: 0 431 2 43 214 188 128 85 0 315 27 128
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 431 2 43 214 188 128 85 0 315 27 128
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 431 2 43 214 188 128 85 0 315 27 128
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 431 2 43 214 188 128 85 0 315 27 128
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 431 2 43 214 188 128 85 0 315 27 128

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.06 0.94 1.00 1.00 0.00 0.92 0.08 1.00
Final Sat.: 389 837 4 390 448 423 394 414 0 404 35 501

Capacity Analysis Module:
Vol/Sat: 0.00 0.51 0.51 0.11 0.48 0.44 0.33 0.21 xxxxx 0.78 0.78 0.26
Crit Moves: ***
Delay/Veh: 0.0 19.0 18.9 12.5 17.9 15.9 15.2 12.8 0.0 32.9 32.9 11.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 19.0 18.9 12.5 17.9 15.9 15.2 12.8 0.0 32.9 32.9 11.9
LOS by Move: * C C B C C B * D D B
ApproachDel: 19.0 16.5 14.2
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 19.0 16.5 14.2
LOS by Appr: C
AllwayAvgQ: 0.0 0.9 0.9 0.1 0.8 0.7 0.4 0.2 0.2 2.7 2.7 0.3
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
*****
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
*****
Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[ 19.8]
*****
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 0 1 0 0 0 0 1
-----
Volume Module:
Base Vol: 0 634 0 0 714 0 0 0 0 0 97 0 101
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 634 0 0 714 0 0 0 0 97 0 101
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 634 0 0 714 0 0 0 0 97 0 101
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 634 0 0 714 0 0 0 0 97 0 101
-----
Critical Gap Module:
Critical Gp:xxxxx xxxxxx xxxxxx xxxxxx xxxxxx 6.8 xxxxx 6.9
FollowUpTim:xxxxx xxxxxx xxxxxx xxxxxx xxxxxx 3.5 xxxxx 3.3
-----
Capacity Module:
Conflict Vol: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx 991 xxxxx 317
Potential Cap.: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx 247 xxxxxx 685
Move Cap.: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx 247 xxxxxx 685
Volume/Cap: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx 0.39 xxxxxx 0.15
-----
Level Of Service Module:
2Way95thQ: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx 1.8 xxxxx 0.5
Control Del:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx 28.8 xxxxx 11.2
LOS By Move: " " " " " " " " " " " " " " " " " " " " " " " " " " " " " "
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
Shared LOS: " " " " " " " " " " " " " " " " " " " " " " " " " " " " " "
ApproachDel: xxxxxx xxxxxxxx 19.8
ApproachLOS: " " " " " " " " " " " " " " " " " " " " " " " " " " " " " "
*****
Note: Queue reported is the number of cars per lane.
*****

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Middle Harbor EIR
 Future Year 2030
 NEPA

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
*****
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
*****
Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[ 10.4]
*****
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0
-----
Volume Module:
Base Vol: 229 507 0 0 714 91 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 229 507 0 0 714 91 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 229 507 0 0 714 91 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 229 507 0 0 714 91 0 0 0 0 0 0 0 0 0 0
-----
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
FollowUpTim: 2.2 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
-----
Capacity Module:
Conflict Vol: 714 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
Potential Cap.: 895 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
Move Cap.: 895 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
Volume/Cap: 0.26 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
-----
Level Of Service Module:
2Way95thQ: 1.0 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
Control Del: 10.4 xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
LOS By Move: B " " " " " " " " " " " " " " " " " " " " " " " " " " " " "
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx xxxxxx
Shared LOS: " " " " " " " " " " " " " " " " " " " " " " " " " " " " " "
ApproachDel: xxxxxx xxxxxxxx xxxxxxx
ApproachLOS: " " " " " " " " " " " " " " " " " " " " " " " " " " " " " "
*****
Note: Queue reported is the number of cars per lane.
*****

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 1.241
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 57.8
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 120 307 1 6 683 258 522 0 65 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 120 307 1 6 683 258 522 0 65 19 1 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 120 307 1 6 683 258 522 0 65 19 1 37
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 120 307 1 6 683 258 522 0 65 19 1 37
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 120 307 1 6 683 258 522 0 65 19 1 37

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.95 0.05 1.00
Final Sat: 369 775 3 8 876 481 420 0 470 333 18 396

Capacity Analysis Module:
Vol/Sat: 0.33 0.40 0.40 0.78 0.78 0.54 1.24 xxxxx 0.14 0.06 0.06 0.09
Crit Moves: ***
Delay/Veh: 16.7 17.4 17.4 33.9 33.8 18.2 153.0 0.0 11.2 13.0 13.0 12.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 16.7 17.4 17.4 33.9 33.8 18.2 153.0 0.0 11.2 13.0 13.0 12.1
LOS by Move: C C C D D C F * B B B B
ApproachDel: 17.2 29.6 29.6 137.3 12.4
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 17.2 29.6 137.3
LOS by Appr: C D D F
AllwayAvgQ: 0.5 0.6 0.6 2.8 2.8 1.1 16.6 16.6 0.1 0.1 0.1 0.1

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.4 Worst Case Level of Service: B(13.4)
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 1

Volume Module:
Base Vol: 13 660 8 6 698 0 0 2 29 0 0 0 3
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 13 660 8 6 698 0 0 2 29 0 0 0 3
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 13 660 8 6 698 0 0 2 29 0 0 0 3
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Volume: 13 660 8 6 698 0 0 2 29 0 0 0 3

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: 698 xxxxx xxxxx 1066 1404 349 1052 1400 334
Potential Cap: 908 xxxxx xxxxx 931 xxxxx xxxxx 179 141 653 184 142 668
Move Cap: 908 xxxxx xxxxx 931 xxxxx xxxxx 176 138 653 171 139 668
Volume/Cap: 0.01 xxxxx xxxxx 0.00 0.01 0.04 0.00 0.00 0.00

Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del: 9.0 xxxxx xxxxx 8.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.4
LOS by Move: A * A * A * A * A * A * A * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * D * B * * * * *
ApproachDel: xxxxx 13.4 10.4
ApprAdjDel: * * * * * B
LOS by Appr: * * * * * B

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.463
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A

Table with columns for Street Name (North Bound, South Bound, East Bound, West Bound), Approach, Movement, Control, Rights, Min. Green, Lanes, Volume Module, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, OvlAdjVol.

Table with columns for Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module, Vol/Sat, OvlAdjV/S, Crit Moves.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.694
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with columns for Street Name (North Bound, South Bound, East Bound, West Bound), Approach, Movement, Control, Rights, Min. Green, Lanes, Volume Module, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, OvlAdjVol.

Table with columns for Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module, Vol/Sat, OvlAdjV/S, Crit Moves.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.538
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.4
 Optimal Cycle: 0 Level of Service: C

Approach: North Bound East Bound West Bound
 Movement: L T R L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 246 0 59 38 388 0 0 493 277
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 246 0 59 38 388 0 0 493 277
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 246 0 59 38 388 0 0 493 277
 Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 246 0 59 38 388 0 0 493 277
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 246 0 59 38 388 0 0 493 277

Saturation Flow Module:
 Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Adjustment: 0.00 0.00 0.00 0.00 0.61 0.39 0.18 1.82 0.00 0.00 2.00 1.00
 Lanes: 0 0 0 0 0 0 18.4 12.4 12.4 14.6 14.4 0.0 0.0 16.0 14.8
 Final Sat.: 0 0 0 0 0 0 18.4 12.4 12.4 14.6 14.4 0.0 0.0 16.0 14.8

Capacity Analysis Module:
 Vol/Sat: xxxx xxxx 0.54 0.00 0.30 0.43 0.42 xxxx xxxx 0.49 0.49
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 18.4 12.4 12.4 14.6 14.4 0.0 0.0 16.0 14.8
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 18.4 12.4 12.4 14.6 14.4 0.0 0.0 16.0 14.8
 LOS by Move: * * * * * C B B B * * * * *
 ApproachDel: xxxxxx 16.1 B B 14.5 15.5
 Delay Adj: xxxxxx 1.00 1.00 1.00
 ApprAdjDel: xxxxxx 16.1 B 14.5 15.5
 LOS by Appr: * C B
 AllwayVgQ: 0.0 0.0 0.0 1.0 0.4 0.4 0.7 0.7 0.0 0.0 0.9 0.9

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.529
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R L T R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 3 0 270 263 1024 0 0 968 10
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 270 263 1024 0 0 968 10
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 270 263 1024 0 0 968 10
 Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 3 0 270 263 1024 0 0 968 10
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 0 0 3 0 270 263 1024 0 0 968 10

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.19 0.18 0.24 0.00 0.00 0.34 0.01
 Crit Vol: 0 270 0 484
 Crit Moves: ****

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Scenario: 2030 NEPA MD

Command: 2030 NEPA MD
Volume: 2030 NEPA MD Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NEPA

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Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 151.4	1.609	F 151.4	1.609 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	E 35.9	1.034	E 35.9	1.034 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	D 25.5	0.000	D 25.5	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 11.2	0.000	B 11.2	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	C 15.2	0.000	C 15.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	E 48.7	1.161	E 48.7	1.161 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.417	A xxxxx	0.417 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	C xxxxx	0.710	C xxxxx	0.710 + 0.000 V/C
# 9 Anaheim Way & Pier B St	C 15.4	0.611	C 15.4	0.611 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.522	A xxxxx	0.522 + 0.000 D/V

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Level of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.034

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 35.9

Optimal Cycle: 0 Level of Service: E

Approach: North Bound South Bound East Bound West Bound

Movement: L T R L T R L T R L T R L T R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module: Base Vol: 0 537 6 92 305 55 91 43 0 438 12 148

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 537 6 92 305 55 91 43 0 438 12 148

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 537 6 92 305 55 91 43 0 438 12 148

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 537 6 92 305 55 91 43 0 438 12 148

Saturation Flow Module: Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.98 0.02 1.00 1.69 0.31 1.00 1.00 0.00 0.97 0.03 1.00

Final Sat.: 387 824 9 380 690 126 372 390 0 423 12 496

Capacity Analysis Module: Vol/Sat: 0.00 0.65 0.65 0.24 0.44 0.44 0.24 0.11 xxxxx 1.03 1.03 0.30

Crit Moves: *** **

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Level of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.609

Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 151.4

Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound

Movement: L T R L T R L T R L T R L T R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module: Base Vol: 6 518 217 138 454 183 455 167 5 247 98 296

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 6 518 217 138 454 183 455 167 5 247 98 296

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 6 518 217 138 454 183 455 167 5 247 98 296

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 6 518 217 138 454 183 455 167 5 247 98 296

Saturation Flow Module: Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.41 0.59 1.00 1.00 1.00 1.00 1.94 0.06 1.00 1.00 1.00

Final Sat.: 288 433 186 289 303 320 283 566 17 291 303 324

Capacity Analysis Module: Vol/Sat: 0.02 1.20 1.17 0.48 1.50 0.57 1.61 0.29 0.29 0.85 0.32 0.91

Crit Moves: *** **

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B [11.2]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 259 429 0 0 794 116 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 259 429 0 0 794 116 0 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 259 429 0 0 794 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 794 0 0 0 0 0 0 0 0 0 0
FinalVolume: 259 429 0 0 794 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Conflict Vol: 794 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap: 836 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap: 836 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.31 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 1.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 11.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.4 Worst Case Level Of Service: D [25.5]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 0 740 0 0 794 0 0 0 0 23 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 740 0 0 794 0 0 0 0 23 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 740 0 0 794 0 0 0 0 23 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0
FinalVolume: 0 740 0 0 794 0 0 0 0 23 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.417
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level of Service: A
 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Ignore Ovl Include
 Min. Green: 1 0 2 0 0 0 2 0 2 0 0 0 2 0 0 1 0 0 0 0 0 0
 Lanes: 1 0 2 0 0 0 0 2 0 2 0 0 2 0 0 1 0 0 0 0 0 0

Volume Module:
 Base Vol: 31 768 0 0 542 223 223 0 17 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 31 768 0 0 542 223 223 0 17 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 31 768 0 0 542 223 223 0 17 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 31 768 0 0 542 223 223 0 17 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MFL Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 31 768 0 0 542 223 223 0 17 0 0 0
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.24 0.00 0.00 0.17 0.00 0.08 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: ****

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.710
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 51 Level of Service: C
 Street Name: North Bound South Bound East Bound West Bound
 Approach: L - T - R L - T - R L - T - R L - T - R
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: Ignore Include Include
 Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0 0 0
 Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1 0 1

Volume Module:
 Base Vol: 226 5 235 224 2 38 47 269 273 464 132 364
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 226 5 235 224 2 38 47 269 273 464 132 364
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 226 5 235 224 2 38 47 269 273 464 132 364
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 226 5 235 224 2 38 47 269 273 464 132 364
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MFL Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 226 5 235 224 2 38 47 269 273 464 132 364
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.71 0.29 1.00 1.00 1.00 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1139 461 1600 1600 1600 2880 1600 1600
 Capacity Analysis Module:
 Vol/Sat: 0.14 0.00 0.00 0.14 0.00 0.08 0.03 0.17 0.17 0.16 0.08 0.23
 OvlAdjV/S: ****
 Crit Moves: *****

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St
Critical Vol./Cap.(X): 0.611
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.4
Optimal Cycle: 0 Level Of Service: C
Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 1 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 131 0 49 81 605 0 0 409 275
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 131 0 49 81 605 0 0 409 275
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 131 0 49 81 605 0 0 409 275
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 131 0 49 81 605 0 0 409 275
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 131 0 49 81 605 0 0 409 275
Saturation Flow Module:
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adj: 0.00 0.00 0.00 1.00 0.46 0.54 0.24 1.76 0.00 0.00 2.00 1.00
Lanes: 0 0 0 0 438 223 266 133 1000 0 0 1032 575
Final Sat: 0 0 0 0 0 0 0 0 0 0 0 0 0
Capacity Analysis Module:
Vol/Sat: xxxx xxxx 0.30 0.00 0.18 0.61 0.60 xxxx xxxx 0.40 0.48
Crit Moves: *** ** *
Delay/Veh: 0.0 0.0 13.6 11.1 11.1 18.1 17.7 0.0 0.0 13.8 14.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 13.6 11.1 11.1 18.1 17.7 0.0 0.0 13.8 14.1
LOS by Move: * * B B B C C *
ApproachDel: 12.6 17.8
Delay Adj: 1.00 1.00
ApprAdjDel: 12.6 17.8
LOS by Appr: * B C
AllwayAvgQ: 0.0 0.0 0.4 0.2 0.2 1.4 1.4 0.0 0.0 0.6 0.8
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St
Critical Vol./Cap.(X): 0.522
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: A
Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Protected Protected Protected Protected
Rights: Include Ovl Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 0
Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 14 0 333 160 1266 0 0 822 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 14 0 333 160 1266 0 0 822 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 14 0 333 160 1266 0 0 822 18
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 14 0 333 160 1266 0 0 822 18
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 0 0 14 0 333 160 1266 0 0 822 18
Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.23 0.11 0.30 0.00 0.00 0.29 0.01
Crit Vol: 0 333 0 411
Crit Moves: **** *

Middle Harbor EIR
Future Year 2030
NEPA

Scenario: 2030 NEPA PM Scenario Report

Command: 2030 NEPA PM
Volume: 2030 NEPA PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NEPA

Middle Harbor EIR
Future Year 2030
NEPA

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 53.9	1.060	F 53.9	1.060 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	F 50.9	1.155	F 50.9	1.155 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	E 35.2	0.000	E 35.2	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 12.9	0.000	B 12.9	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.1	0.000	B 11.1	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 31.9	1.003	D 31.9	1.003 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.399	A xxxxx	0.399 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.639	B xxxxx	0.639 + 0.000 V/C
# 9 Anaheim Way & Pier B St	C 16.5	0.610	C 16.5	0.610 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxx	0.657	B xxxxx	0.657 + 0.000 D/V

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.155

Cycle (sec): 100 Critical Vol./Cap.(X): 1.060

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 50.9

Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 53.9

Optimal Cycle: 0 Level of Service: F

Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound

Approach: North Bound South Bound East Bound West Bound

Movement: L-T-R L-T-R L-T-R L-T-R

Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Min. Green: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 0 561 3 216 167 174 273 112 0 405 27 131

Volume Module:
Base Vol: 4 380 141 53 337 208 292 198 8 46 0 375

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 561 3 216 167 174 273 112 0 405 27 131

Initial Bse: 4 380 141 53 337 208 292 198 8 46 0 375

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 561 3 216 167 174 273 112 0 405 27 131

PHF Volume: 4 380 141 53 337 208 292 198 8 46 0 375

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 561 3 216 167 174 273 112 0 405 27 131

Reduced Vol: 4 380 141 53 337 208 292 198 8 46 0 375

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 0 561 3 216 167 174 273 112 0 405 27 131

Final Volume: 4 380 141 53 337 208 292 198 8 46 0 375

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.99 0.01 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.46 0.54 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Sat: 329 704 4 334 349 374 358 372 0 351 23 414

Final Sat: 316 497 189 321 346 366 324 644 26 304 316 354

Capacity Analysis Module:
Vol/Sat: 0.00 0.80 0.80 0.65 0.48 0.47 0.76 0.30 xxxxx 1.15 1.15 0.32

Capacity Analysis Module:
Vol/Sat: 0.01 0.76 0.75 0.17 0.97 0.57 0.90 0.31 0.31 0.15 0.00 1.06

Crit Moves: *** **

Crit Moves: *** **

Delay/Veh: 0.0 41.9 41.8 30.3 21.5 19.8 37.4 16.0 0.0 125.6 126 14.8

Delay/Veh: 13.9 39.5 36.9 15.7 74.6 24.0 61.5 17.7 17.7 16.0 0.0 97.4

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 0.0 41.9 41.8 30.3 21.5 19.8 37.4 16.0 0.0 125.6 126 14.8

AdjDel/Veh: 13.9 39.5 36.9 15.7 74.6 24.0 61.5 17.7 17.7 16.0 0.0 97.4

LOS by Move: * E D C C C E C * F F B

LOS by Move: B E E C F C C F C C * F

ApproachDel: 41.9 24.4 31.2 1.00 1.00 99.8

ApproachDel: 38.6 51.8 43.4 1.00 1.00 88.5

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApprAdjDel: 41.9 24.4 31.2 1.00 1.00 99.8

ApprAdjDel: 38.6 51.8 43.4 1.00 1.00 88.5

LOS by Appr: E C D 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

LOS by Appr: E F 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AllWayAvgQ: 0.0 2.9 2.9 1.6 0.8 0.8 2.5 0.4 0.4 11.8 11.8 0.4

AllWayAvgQ: 0.0 2.6 2.3 0.2 5.9 5.9 4.3 0.4 0.4 0.2 0.0 8.3

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 3.7 Worst Case Level Of Service: [12.9]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: [E 35.2]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 444 382 0 0 712 123 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 444 382 0 0 712 123 0 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 444 382 0 0 712 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0
FinalVolume: 444 382 0 0 712 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Volume Module:
Base Vol: 0 931 0 0 712 0 0 0 0 0 0 0 0 40 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 931 0 0 712 0 0 0 0 0 0 0 0 40 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 931 0 0 712 0 0 0 0 0 0 0 0 40 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 40 0 0 0 0 0 0
FinalVolume: 0 931 0 0 712 0 0 0 0 0 0 0 0 40 0 0 0 0 0 0
Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 712 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 897 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 897 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.49 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 2.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 12.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.399
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Lanes, Volume Module, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, OvlAdjVol. Rows include data for North Bound, South Bound, East Bound, and West Bound movements.

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00
Lanes: 1.00 2.00 2.00 2.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.23 0.00 0.00 0.19 0.00 0.07 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: *****

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.639
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Lanes, Volume Module, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, OvlAdjVol. Rows include data for North Bound, South Bound, East Bound, and West Bound movements.

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 0.83 0.17 1.00
Final Sat.: 1600 1600 1600 1330 270 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.12 0.00 0.07 0.04 0.16 0.17 0.18 0.06 0.21
Crit Moves: *****

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Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.610
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 16.5
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 0 0 0 0 286 0 13 69 476 0 0 129 327
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 286 0 13 69 476 0 0 129 327
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 286 0 13 69 476 0 0 129 327
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 286 0 13 69 476 0 0 129 327
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 0 286 0 13 69 476 0 0 129 327

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.91 0.09 0.25 1.75 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 476 466 44 133 925 0 0 955 536

Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx 0.60 0.00 0.29 0.52 0.51 xxxxx xxxxx 0.14 0.61
Crit Moves: *** **
Delay/Veh: 0.0 0.0 20.0 12.2 12.2 16.2 15.9 0.0 0.0 11.1 18.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 20.0 12.2 12.2 16.2 15.9 0.0 0.0 11.1 18.6
LOS by Move: * * * C B B C * * *
ApproachDel: xxxxxx 17.3 B 16.0
Delay Adj: xxxxxx 1.00
ApprAdjDel: xxxxxx 17.3 C 16.5
LOS by Appr: * C C C
AllwayVgQ: 0.0 0.0 0.0 1.3 0.4 0.4 1.0 1.0 0.0 0.0 0.1 1.4

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.657
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 58 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 0 0
Lanes: 0 0 0 0 1 0 0 0 1 1 0 3

Volume Module:
Base Vol: 0 0 0 0 29 0 354 205 1411 0 0 1165 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 29 0 354 205 1411 0 0 1165 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 29 0 354 205 1411 0 0 1165 18
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 29 0 354 205 1411 0 0 1165 18
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 0 0 29 0 354 205 1411 0 0 1165 18

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 0 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.25 0.14 0.33 0.00 0.00 0.41 0.01
Crit Vol: 0 354 0
Crit Moves: **** *

Middle Harbor EIR
Future Year 2030
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Scenario Report

Command: 2030 NP AM
Volume: 2030 NP AM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NP

Middle Harbor EIR
Future Year 2030
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 133.5	1.587	F 133.5	1.587 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	D 26.3	0.897	D 26.3	0.897 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 16.5	0.000	C 16.5	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 11.9	0.000	B 11.9	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 14.2	0.000	B 14.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 67.1	1.291	F 67.1	1.291 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.491	A xxxxx	0.491 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.671	B xxxxx	0.671 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 13.9	0.533	B 13.9	0.533 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.535	A xxxxx	0.535 + 0.000 V/C

Middle Harbor EIR Future Year 2030 No Project

Level of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.587

Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 133.5

Optimal Cycle: 0 Level of Service: F

Approach: North Bound East Bound West Bound

Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1

Lanes: 1 0 1 1 0 0 1 0 1 1 0 1 0 1 0 1 0 1

Volume Module: Base Vol: 3 510 142 106 471 273 358 51 8 284 195 328

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 3 510 142 106 471 273 358 51 8 284 195 328

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 3 510 142 106 471 273 358 51 8 284 195 328

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 3 510 142 106 471 273 358 51 8 284 195 328

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 3 510 142 106 471 273 358 51 8 284 195 328

Saturation Flow Module: Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.56 0.44 1.00 1.00 1.00 1.00 1.73 0.27 1.00 1.00 1.00

Final Sat.: 280 466 132 283 297 315 274 494 78 297 307 329

Capacity Analysis Module: Vol/Sat: 0.01 1.09 1.08 0.37 1.59 0.87 1.31 0.10 0.10 0.96 0.63 1.00

Crit Moves: *** **

Delay/Veh: 15.5 116 109.6 22.6 307 57.0 196.4 16.7 16.6 78.3 32.3 83.0

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 15.5 116 109.6 22.6 307 57.0 196.4 16.7 16.6 78.3 32.3 83.0

LOS by Move: C F F C F C F C F D F

ApproachDel: 114.1 191.3 171.0 171.0 69.1

Delay Adj: 1.00 1.00 1.00 1.00 1.00

ApprAdjDel: 114.1 191.3 171.0 171.0 69.1

LOS by Appr: F F F

AllwayAvgQ: 0.0 8.6 8.0 0.6 24.1 24.1 13.7 0.1 0.1 5.2 1.5 6.3

Note: Queue reported is the number of cars per lane.

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Middle Harbor EIR Future Year 2030 No Project

Level of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.897

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 26.3

Optimal Cycle: 0 Level of Service: D

Approach: North Bound South Bound East Bound West Bound

Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Min. Green: 1 0 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 0 1 0 1 1 0 1 0 1 0 1 0 1

Volume Module: Base Vol: 0 577 2 37 261 91 64 43 0 386 14 136

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 577 2 37 261 91 64 43 0 386 14 136

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 577 2 37 261 91 64 43 0 386 14 136

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 577 2 37 261 91 64 43 0 386 14 136

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 577 2 37 261 91 64 43 0 386 14 136

Saturation Flow Module: Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.99 0.01 1.00 1.48 0.52 1.00 1.00 0.00 0.96 0.04 1.00

Final Sat.: 404 879 3 384 619 222 377 398 0 431 16 512

Capacity Analysis Module: Vol/Sat: 0.00 0.66 0.66 0.10 0.42 0.41 0.17 0.11 xxxxx 0.90 0.90 0.27

Crit Moves: *** **

Delay/Veh: 0.0 24.2 24.2 12.5 16.6 16.0 13.4 12.1 0.0 47.9 47.9 11.9

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 0.0 24.2 24.2 12.5 16.6 16.0 13.4 12.1 0.0 47.9 47.9 11.9

LOS by Move: * C C C B C C B * E E B

ApproachDel: 24.2 16.1 16.1 12.9 12.9 38.7

Delay Adj: 1.00 1.00 1.00 1.00 1.00

ApprAdjDel: 24.2 16.1 16.1 12.9 12.9 38.7

LOS by Appr: C C C B E

AllwayAvgQ: 0.0 1.7 1.6 0.1 0.7 0.6 0.2 0.1 0.1 4.6 4.6 0.3

Note: Queue reported is the number of cars per lane.

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Middle Harbor EIR
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Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: [I 16.5]
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 1
 Volume Module:
 Base Vol: 0 682 0 0 800 0 0 0 0 47 0 88
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 682 0 0 800 0 0 0 47 0 88
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 682 0 0 800 0 0 0 47 0 88
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 682 0 0 800 0 0 0 47 0 88
 Critical Gap Module:
 Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
 FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx 1082 xxxxx 341
 Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx 215 xxxxx 661
 Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx 215 xxxxx 661
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx 0.22 xxxxx 0.13
 Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx 0.8 xxxxx 0.5
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx 26.3 xxxxx 11.3
 LOS by Move: * * * * * D * * * * * B
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * * * * * * * * * * * *
 ApproachDel: xxxxxx xxxxxx 16.5
 ApproachLOS: * * * * * C * * * * *

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2030
 No Project

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: [I 11.9]
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Ignore Include Include
 Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0
 Volume Module:
 Base Vol: 310 457 0 0 800 104 0 0 0 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 310 457 0 0 800 104 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 310 457 0 0 800 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 310 457 0 0 800 0 0 0 0 0 0 0 0
 Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
 Conflict Vol: 800 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potential Cap.: 832 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap.: 832 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: 0.37 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Level Of Service Module:
 2Way95thQ: 1.7 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: 11.9 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS by Move: B * * * * * * * * * * * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * * * * * * * * * * * *
 ApproachDel: xxxxxx xxxxxx xxxxxx
 ApproachLOS: * * * * * * * * * * * * * * *
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 0.4 Worst Case Level of Service: Bf [14.2]
Approach: North Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 0 0 1
Volume Module:
Base Vol: 13 655 8 6 786 0 0 2 29 0 0 0 3
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 13 655 8 6 786 0 0 2 29 0 0 0 3
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 13 655 8 6 786 0 0 2 29 0 0 0 3
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 13 655 8 6 786 0 0 2 29 0 0 0 3
Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.2 xxxxx xxxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: 786 xxxxx xxxxxx 1152 1487 393 1091 1483 332
Potential Cap: 842 xxxxx xxxxxx 155 126 612 172 126 670
Move Cap: 842 xxxxx xxxxxx 152 123 612 159 123 670
Volume/Cap: 0.02 xxxxx xxxxx 0.00 0.02 0.05 0.00 0.00 0.00
Level of Service Module:
2Way95thQ: 0.0 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del: 9.3 xxxxx xxxxx 8.9 xxxxx xxxxxx xxxxx xxxxx xxxxx xxxxx 10.4
LOS by Move: A * A * A * A * A * A * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap: xxxxx xxxxx xxxxxx 123 xxxxx 487 0 xxxxx xxxxxx
SharedQueue: xxxxx xxxxx xxxxxx 0.0 xxxxx 0.2 xxxxx xxxxx xxxxxx
Shrd ConDel: xxxxx xxxxx xxxxxx 34.8 xxxxx 12.9 xxxxx xxxxx xxxxxx
Shared LOS: * * * * * D * * * * *
ApproachDel: xxxxxx 14.2 B * *
ApproachLOS: * * * * * B
Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street
Cycle (sec): 100 Critical Vol./Cap.(X): 1.291
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 67.1
Optimal Cycle: 0 Level of Service: F
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1
Volume Module:
Base Vol: 114 255 1 6 768 265 540 0 64 26 1 40
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 114 255 1 6 768 265 540 0 64 26 1 40
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 114 255 1 6 768 265 540 0 64 26 1 40
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 114 255 1 6 768 265 540 0 64 26 1 40
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 114 255 1 6 768 265 540 0 64 26 1 40
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 0.02 1.98 1.00 1.00 0.00 1.00 0.96 0.04 1.00
Final Sat: 359 754 3 7 888 487 418 0 466 341 13 400
Capacity Analysis Module:
Vol/Sat: 0.32 0.34 0.34 0.87 0.86 0.54 1.29 xxxxx 0.14 0.08 0.08 0.10
Crit Moves: ***
Delay/Veh: 16.8 16.4 16.4 43.8 43.7 18.3 172.6 0.0 11.2 13.2 13.2 12.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 16.8 16.4 16.4 43.8 43.7 18.3 172.6 0.0 11.2 13.2 13.2 12.1
LOS by Move: C C C E E C F * * * * * B B B B
ApproachDel: 16.5 37.2 155.5
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 16.5 37.2 155.5
LOS by Appr: C E F
AllWayAvgQ: 0.4 0.5 0.5 4.1 4.1 1.1 18.7 18.7 0.1 0.1 0.1 0.1
Note: Queue reported is the number of cars per lane.

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No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.491
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Ovl Include
Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 36 762 0 0 973 264 205 0 16 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 36 762 0 0 973 264 205 0 16 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 36 762 0 0 973 0 205 0 16 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 36 762 0 0 973 0 205 0 16 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00 0.00

Final Sat.: 1600 3200 0 0 3200 3200 3200 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.02 0.24 0.00 0.00 0.30 0.00 0.06 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: ****
Crit Moves: ****

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.671
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0

Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 235 2 641 280 0 16 59 292 76 430 295 209

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 235 2 641 280 0 16 59 292 76 430 295 209
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 235 2 0 280 0 16 59 292 76 430 295 209
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 235 2 0 280 0 16 59 292 76 430 295 209
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.89 0.11 1.00 1.59 0.41 2.00 1.00 1.00

Final Sat.: 1600 1600 1600 1600 1427 173 1600 2539 661 3200 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.15 0.00 0.00 0.17 0.00 0.09 0.04 0.12 0.11 0.13 0.18 0.13
OvlAdjV/S: ****
Crit Moves: ****

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.533
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 13.9
 Optimal Cycle: 0 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R L T R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 1 0 0 1 1 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 1 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 257 0 55 26 268 0 0 404 298
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 257 0 55 26 268 0 0 404 298
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 257 0 55 26 268 0 0 404 298
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 257 0 55 26 268 0 0 404 298
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 257 0 55 26 268 0 0 404 298

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.65 0.35 0.18 1.82 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 482 344 187 89 927 0 0 1057 592
 Capacity Analysis Module:
 Vol/Sat: xxxxx xxxxx xxxxx 0.53 0.00 0.29 0.29 0.29 xxxxx xxxxx 0.38 0.50
 Crit Moves: *** **
 Delay/Veh: 0.0 0.0 0.0 17.5 11.8 11.8 12.2 12.1 0.0 0.0 13.3 14.3
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 17.5 11.8 11.8 12.2 12.1 0.0 0.0 13.3 14.3
 LOS by Move: * * * C B B B * * *
 ApproachDel: xxxxxx 15.4 12.1 13.7
 Delay Adj: xxxxxx 1.00 1.00
 ApprAdjDel: xxxxxx 15.4 12.1 13.7
 LOS by Appr: * C B B
 AllWayAvgQ: 0.0 0.0 0.0 1.0 0.4 0.4 0.4 0.4 0.0 0.0 0.6 0.9
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.535
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 43 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L T R L T R L T R L T R L T R
 Control: Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 3 0 281 269 1108 0 0 963 11
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 3 0 281 269 1108 0 0 963 11
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 3 0 281 269 1108 0 0 963 11
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 3 0 281 269 1108 0 0 963 11
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 0 0 3 0 281 269 1108 0 0 963 11

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.20 0.19 0.26 0.00 0.00 0.34 0.01
 Crit Volume: 281 0
 Crit Moves: ****
 Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
No Project

Scenario Report

2030 NP MD

Command:
2030 NP MD

Volume:
2030 NP MD Peak

Geometry:
Future

Impact Fee:
Default Impact Fee

Trip Generation:
Default Trip Generation

Trip Distribution:
Default Trip Distribution

Paths:
Default Path

Routes:
Default Route

Configuration:
NP

Middle Harbor EIR
Future Year 2030
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 191.2	1.854	F 191.2	1.854 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	F 64.0	1.261	F 64.0	1.261 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	D 28.1	0.000	D 28.1	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	C 15.3	0.000	C 15.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	C 16.9	0.000	C 16.9	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 133.8	1.657	F 133.8	1.657 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.451	A xxxxx	0.451 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	C xxxxx	0.719	C xxxxx	0.719 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 13.8	0.547	B 13.8	0.547 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.573	A xxxxx	0.573 + 0.000 V/C

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.854
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 191.2
Optimal Cycle: 0 Level of Service: F

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0

Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 7 552 275 148 561 265 348 173 6 215 91 411

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 7 552 275 148 561 265 348 173 6 215 91 411

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 7 552 275 148 561 265 348 173 6 215 91 411
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 7 552 275 148 561 265 348 173 6 215 91 411

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.33 0.67 1.00 1.00 1.00 1.00 1.93 0.07 1.00 1.00 1.00
Final Sat.: 284 401 206 290 303 322 278 558 19 285 295 315

Capacity Analysis Module:
Vol/Sat: 0.02 1.38 1.34 0.51 1.85 0.82 1.25 0.31 0.31 0.76 0.31 1.31

Crit Moves: ****
Delay/Veh: 15.6 219 201.4 27.2 422 49.6 174.1 20.6 20.5 45.6 20.1 189.1

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 15.6 219 201.4 27.2 422 49.6 174.1 20.6 20.5 45.6 20.1 189.1

LOS by Move: C F F D F E F C C E C F
ApproachDel: 211.4 260.5 122.0 124.7
Delay Adj: 1.00 1.00 1.00 1.00

ApprAdjDel: 211.4 260.5 122.0 124.7
LOS by Appr: F F F
AllwayAvgQ: 0.0 17.4 16.1 1.0 34.2 34.2 12.2 0.4 0.4 2.4 0.4 15.3

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.261
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 64.0
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 0 677 6 95 360 26 40 26 1 536 6 167

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 677 6 95 360 26 40 26 1 536 6 167

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 677 6 95 360 26 40 26 1 536 6 167
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 677 6 95 360 26 40 26 1 536 6 167

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.98 0.02 1.00 1.87 0.13 1.00 0.96 0.04 0.99 0.01 1.00
Final Sat.: 392 843 7 379 755 55 356 361 14 425 5 490

Capacity Analysis Module:
Vol/Sat: 0.00 0.80 0.80 0.25 0.48 0.47 0.11 0.07 0.07 1.26 1.26 0.34

Crit Moves: ****
Delay/Veh: 0.0 37.1 37.0 15.0 19.0 18.8 13.5 12.5 12.5 160.3 160 13.4

Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 37.1 37.0 15.0 19.0 18.8 13.5 12.5 12.5 160.3 160 13.4

LOS by Move: * E E C C C B B F F B
ApproachDel: 37.1 18.2 13.1 13.1
Delay Adj: 1.00 1.00 1.00 1.00

ApprAdjDel: 37.1 18.2 13.1 13.1
LOS by Appr: E C C
AllwayAvgQ: 0.0 3.1 3.1 0.3 0.9 0.8 0.1 0.1 0.1 17.8 17.8 0.5

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
No Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C(16.9)
Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Include Include
Rights: L 0 1 1 0 1 0 1 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 0 630 2 0 947 0 0 2 18 1 0 0 5
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gap: xxxxxx xxxxxx xxxxxx xxxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: xxxxxx xxxxxx xxxxxx xxxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Note: Queue reported is the number of cars per lane.
Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
No Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 1.657
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 133.8
Optimal Cycle: 0 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign Include Include

Volume Module:
Base Vol: 80 189 1 5 564 190 761 0 171 9 5 34
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gap: xxxxxx xxxxxx xxxxxx xxxxxx 5 564 190 761 0 171 9 5 34
FollowUpTim: xxxxxx xxxxxx xxxxxx xxxxxx 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Note: Queue reported is the number of cars per lane.
Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.451
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Protected Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 1 0 0 0 0 0 0
Volume Module:
Base Vol: 44 876 0 0 647 235 248 0 26 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 44 876 0 0 647 235 248 0 26 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 44 876 0 0 647 0 248 0 26 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 44 876 0 0 647 0 248 0 26 0 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 3200 0 1600 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.03 0.27 0.00 0.00 0.20 0.00 0.08 0.00 0.02 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: *****

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.719
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0

Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module:
Base Vol: 199 6 310 256 2 33 87 279 213 579 164 333
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 199 6 310 256 2 33 87 279 213 579 164 333
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 199 6 0 256 2 33 87 279 213 579 164 333
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 199 6 0 256 2 33 87 279 213 579 164 333
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.77 0.23 1.00 1.13 0.87 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1237 363 1600 1815 1385 3200 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.12 0.00 0.00 0.16 0.00 0.09 0.05 0.15 0.15 0.18 0.10 0.21
Crit Moves: *****

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.547
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 13.8
Optimal Cycle: 0 Level of Service: B

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 182 0 49 90 403 0 0 317 321
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 182 0 49 90 403 0 0 317 321
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 182 0 49 90 403 0 0 317 321
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 182 0 49 90 403 0 0 317 321

Saturation Flow Module:
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.58 0.42 0.37 1.63 0.00 0.00 2.00 1.00
Final Sat: 0 0 463 295 217 197 894 0 0 1046 587

Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx 0.39 0.00 0.23 0.46 0.45 xxxxx xxxxx 0.30 0.55
Crit Moves: ***

Delay/Veh: 0.0 0.0 0.0 14.6 11.2 11.2 14.4 14.0 0.0 0.0 12.2 15.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 14.6 11.2 11.2 14.4 14.0 0.0 0.0 12.2 15.5
LOS by Move: * * * * *
ApproachDel: xxxxxx 13.3 B 14.1 B 13.8 C
Delay Adj: xxxxxx 1.00 B 1.00 B 1.00
ApprAdjDel: xxxxxx 13.3 B 14.1 B 13.8 B
LOS by Appr: * * * * *
AllwayAvgQ: 0.0 0.0 0.0 0.6 0.3 0.3 0.8 0.7 0.0 0.0 0.4 1.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.573
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 14 0 384 208 1255 0 0 866 16
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 14 0 384 208 1255 0 0 866 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 14 0 384 208 1255 0 0 866 16
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 0 14 0 384 208 1255 0 0 866 16

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 0.00 3.00 0.00 0.00 2.00 1.00
Final Sat: 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.27 0.15 0.29 0.00 0.00 0.30 0.01
Crit Moves: 384 0 *****

Middle Harbor EIR
Future Year 2030
No Project

Scenario Report

Command: 2030 NP PM
Volume: 2030 NP PM Peak
Geometry: Future
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: NP

Middle Harbor EIR
Future Year 2030
No Project

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 97.7	1.317	F 97.7	1.317 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	F 71.6	1.302	F 71.6	1.302 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	D 32.7	0.000	D 32.7	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	C 17.1	0.000	C 17.1	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.4	0.000	B 11.4	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	F 88.8	1.456	F 88.8	1.456 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.425	A xxxxx	0.425 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.662	B xxxxx	0.662 + 0.000 V/C
# 9 Anaheim Way & Pier B St	C 15.1	0.583	C 15.1	0.583 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxx	0.669	B xxxxx	0.669 + 0.000 V/C

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.317
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 97.7
Optimal Cycle: 0 Level of Service: F

Approach: North Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include Include Include
Min. Green: 0
Lanes: 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 6 461 104 56 379 273 361 178 9 62 26 441
Growth Adj: 1.00
Initial Bse: 6 461 104 56 379 273 361 178 9 62 26 441
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 6 461 104 56 379 273 361 178 9 62 26 441
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
FinalVolume: 6 461 104 56 379 273 361 178 9 62 26 441

Saturation Flow Module:
Adjustment: 1.00
Lanes: 1.00 1.63 0.37 1.00 1.00 1.00 1.00 1.90 0.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 307 535 122 312 331 353 309 606 31 295 306 335

Capacity Analysis Module:
Vol/Sat: 0.02 0.86 0.85 0.18 1.14 0.77 1.17 0.29 0.29 0.21 0.08 1.32
Crit Moves: ****
Delay/Veh: 14.5 54.5 51.9 16.5 127 39.8 139.3 18.3 18.2 17.7 15.2 191.9
AdJdel/Veh: 14.5 54.5 51.9 16.5 127 39.8 139.3 18.3 18.2 17.7 15.2 191.9
LOS by Move: B F C F E F C C C C F
ApproachDel: 53.6 84.5 98.0 162.8
Delay Adj: 1.00 1.00
ApprAdjDel: 53.6 84.5 98.0 162.8
AllwayAvgQ: 0.0 3.8 3.6 0.2 10.4 10.4 10.7 0.4 0.4 0.3 0.1 16.6

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.302
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 71.6
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include Include Include
Min. Green: 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 713 3 220 205 83 127 64 2 504 13 164
Growth Adj: 1.00
Initial Bse: 0 713 3 220 205 83 127 64 2 504 13 164
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 0 713 3 220 205 83 127 64 2 504 13 164
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
FinalVolume: 0 713 3 220 205 83 127 64 2 504 13 164

Saturation Flow Module:
Adjustment: 1.00
Lanes: 1.00 1.99 0.01 1.00 1.42 0.58 1.00 0.97 0.03 0.97 0.03 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 359 778 3 352 529 221 351 358 11 387 10 446

Capacity Analysis Module:
Vol/Sat: 0.00 0.92 0.92 0.62 0.39 0.38 0.36 0.18 0.18 1.30 1.30 0.37
Crit Moves: ****
Delay/Veh: 0.0 56.9 56.8 27.8 17.9 17.2 18.0 14.1 14.1 179.2 179 14.9
AdJdel/Veh: 0.0 56.9 56.8 27.8 17.9 17.2 18.0 14.1 14.1 179.2 179 14.9
LOS by Move: * F F D C C C B B F F B
ApproachDel: 56.9 22.0 16.6 139.6
Delay Adj: 1.00 1.00
ApprAdjDel: 56.9 22.0 16.6 139.6
AllwayAvgQ: 0.0 4.9 4.9 1.5 0.6 0.6 0.5 0.2 0.2 18.5 18.5 0.5

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
 Average Delay (sec/veh): 0.4 Worst Case Level Of Service: Df 22.7]

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
 Base Vol: 0 959 0 0 741 0 0 0 0 0 0 0 0 19 0 0 0
 Growth Adj: 1.00
 Initial Bse: 0 959 0 0 741 0 0 0 0 0 0 0 0 19 0 0 0
 User Adj: 1.00
 PHF Adj: 1.00
 PHF Volume: 0 959 0 0 741 0 0 0 0 0 0 0 0 19 0 0 0
 Reduct Vol: 0
 FinalVolume: 0 959 0 0 741 0 0 0 0 0 0 0 0 19 0 0 0

Critical Gap Module:
 Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
 FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
 Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1329 xxxxx 480
 Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 149 xxxxx 538
 Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 149 xxxxx 538
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.13 xxxxx 0.00

Level Of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.4 xxxxx xxxxx
 Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 32.7 xxxxx xxxxx
 LOS by Move: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx 32.7
 ApproachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)
 Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
 Average Delay (sec/veh): 6.1 Worst Case Level Of Service: [17.1]

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
 Rights: Include Ignore Include Include
 Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 587 325 0 0 741 172 0 0 0 0 0 0 0 0 0 0 0
 Growth Adj: 1.00
 Initial Bse: 587 325 0 0 741 172 0 0 0 0 0 0 0 0 0 0 0
 User Adj: 1.00
 PHF Adj: 1.00
 PHF Volume: 587 325 0 0 741 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Reduct Vol: 0
 FinalVolume: 587 325 0 0 741 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
 Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
 Conflict Vol: 741 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Potential Cap.: 875 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Move Cap.: 875 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Volume/Cap: 0.67 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
 2Way95thQ: 5.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del: 17.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS by Move: C * * * * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * * * * *
 ApproachDel: xxxxxx
 ApproachLOS: * * * * *
 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Average Delay (sec/veh): 0.1 Worst Case Level of Service: B(11.4)
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Average Delay (sec/veh): 0.1 Worst Case Level of Service: B(11.4)
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 0 1 0 0 0 1

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 0 1 0 0 0 1

Volume Module:
Base Vol: 0 888 0 7 744 0 0 0 0 7 0 0 0 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Volume Module:
Base Vol: 0 888 0 7 744 0 0 0 0 7 0 0 0 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gap: 4.1 xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9
FollowUpTime: xxxxx xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3

Critical Gap Module:
Critical Gap: 4.1 xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9
FollowUpTime: xxxxx xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx 888 xxxxx xxxxx 1202 xxxxx 372 1274 1646 444
Potential Cap: xxxxx xxxxx xxxxx 771 xxxxx xxxxx 143 xxxxx 631 126 100 567

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx 888 xxxxx xxxxx 1202 xxxxx 372 1274 1646 444
Potential Cap: xxxxx xxxxx xxxxx 771 xxxxx xxxxx 143 xxxxx 631 126 100 567

Level of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0
Control Del: xxxxx xxxxx xxxxx 9.7 xxxxx xxxxx xxxxx xxxxx 10.8 xxxxx xxxxx 11.4

Level of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0
Control Del: xxxxx xxxxx xxxxx 9.7 xxxxx xxxxx xxxxx xxxxx 10.8 xxxxx xxxxx 11.4

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 1.456
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 88.8
Optimal Cycle: 0 Level of Service: F

Cycle (sec): 100 Critical Vol./Cap.(X): 1.456
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 88.8
Optimal Cycle: 0 Level of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 98 260 3 4 584 159 631 0 156 44 2 61
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Volume Module:
Base Vol: 98 260 3 4 584 159 631 0 156 44 2 61
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 0.01 1.99 1.00 1.00 0.00 1.00 0.96 0.04 1.00

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 0.01 1.99 1.00 1.00 0.00 1.00 0.96 0.04 1.00

Capacity Analysis Module:
Vol/Sat: 0.27 0.34 0.34 0.68 0.68 0.34 1.46 xxxxx 0.32 0.13 0.13 0.15
Crit Moves: ****

Capacity Analysis Module:
Vol/Sat: 0.27 0.34 0.34 0.68 0.68 0.34 1.46 xxxxx 0.32 0.13 0.13 0.15
Crit Moves: ****

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #7 Pico Avenue, Pier C Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.425
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level of Service: A

Street Name: North Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R
Control: Protected Protected Protected
Rights: Include Ignore Ovl Include
Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0
Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0

Volume Module:
Base Vol: 44 832 0 0 639 136 209 0 43 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 44 832 0 0 639 136 209 0 43 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 44 832 0 0 639 0 209 0 43 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MEF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 44 832 0 0 639 0 209 0 43 0 0 0
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00 2.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 3200 0 1600 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.03 0.26 0.00 0.00 0.20 0.00 0.07 0.00 0.03 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

Middle Harbor EIR
Future Year 2030
No Project

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
Intersection #8 Pico Avenue, Pier B Street & 9th Street
Cycle (sec): 100 Critical Vol./Cap.(X): 0.662
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level of Service: B

Street Name: North Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected
Rights: Ignore Include Include
Min. Green: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0 0
Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1

Volume Module:
Base Vol: 119 3 329 201 1 19 60 267 269 625 92 346
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 119 3 329 201 1 19 60 267 269 625 92 346
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 119 3 0 201 1 19 60 267 269 625 92 346
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MEF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 119 3 0 201 1 19 60 267 269 625 92 346
OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1325 275 1600 1600 1600 3200 1600 1600
Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.13 0.00 0.07 0.04 0.17 0.17 0.20 0.06 0.22
OvlAdjV/S: ****
Crit Moves: ****

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.669
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R
Control: Protected Protected Protected Protected Protected
Rights: 0
Min. Green: 0
Lanes: 0

Volume Module:
Base Vol: 0
Growth Adj: 1.00
Initial Bse: 0
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 0
Reduc Vol: 0
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
Final Volume: 0

Saturation Flow Module:
Sat/Lane: 1425
Adjustment: 1.00
Lanes: 0.00
Final Sat: 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.24 0.14 0.33 0.00 0.00 0.00 0.00 0.43 0.01
Crit Moves: 0 0 336 0

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St
Cycle (sec): 100 Critical Vol./Cap.(X): 0.583
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.1
Optimal Cycle: 0 Level of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: 0
Min. Green: 0
Lanes: 0

Volume Module:
Base Vol: 0
Growth Adj: 1.00
Initial Bse: 0
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 0
Reduc Vol: 0
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
Final Volume: 0

Saturation Flow Module:
Sat/Lane: 1.00
Adjustment: 0.00 0.00 0.00 1.00 0.91 0.09 0.23 1.77 0.00 0.00 2.00 1.00
Lanes: 0 0 0 501 492 47 122 964 0 0 993 560
Final Sat: 0

Capacity Analysis Module:
Vol/Sat: xxxx xxxx 0.57 0.00 0.28 0.41 0.41 xxxx xxxx 0.04 0.58
Crit Moves: *** **

Delay/Veh: 0.0 0.0 18.2 11.5 11.5 13.4 13.2 0.0 0.0 10.0 16.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 18.2 11.5 11.5 13.4 13.2 0.0 0.0 10.0 16.9
LOS by Move: * * C B B B * * A C
ApproachDel: xxxxxx 15.9 B B 13.3 13.3 16.2
Delay Adj: xxxxxx 1.00 1.00 16.2
ApproachDel: xxxxxx 15.9 B B 13.3 13.3 16.2
LOS by Appr: * C
AllWayAvgQ: 0.0 0.0 0.0 1.2 0.4 0.4 0.6 0.6 0.0 0.0 0.0 1.2

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2030
 Future Year Baseline

Scenario Report

2030 Future Year Baseline AM
 Command: 2030 Future Year Baseline AM
 Volume: 2030 Future Year Baseline AM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

Middle Harbor EIR
 Future Year 2030
 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/V/LOS Veh C	Future Del/V/LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 90.8 1.312	F 90.8 1.312	+ 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	C 17.7 0.719	C 17.7 0.719	+ 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	B 11.5 0.000	B 11.5 0.000	+ 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	A 9.3 0.000	A 9.3 0.000	+ 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.7 0.000	B 11.7 0.000	+ 0.000 D/V
# 6 Pico Avenue, Pier D Street	D 32.2 1.008	D 32.2 1.008	+ 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx 0.415	A xxxxx 0.415	+ 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx 0.670	B xxxxx 0.670	+ 0.000 V/C
# 9 Anaheim Way & Pier B St	B 14.8 0.501	B 14.8 0.501	+ 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx 0.509	A xxxxx 0.509	+ 0.000 V/C

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.719
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 17.7
 Optimal Cycle: 0 Level Of Service: C

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.312
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 90.8
 Optimal Cycle: 0 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: 0 Include Include Include Include
 Min. Green: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 0 495 2 38 316 32 19 11 0 335 6 112
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 495 2 38 316 32 19 11 0 335 6 112
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 495 2 38 316 32 19 11 0 335 6 112
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 495 2 38 316 32 19 11 0 335 6 112
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 0 495 2 38 316 32 19 11 0 335 6 112

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: 0 Include Include Include Include
 Min. Green: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 1 456 127 102 423 275 359 52 5 203 140 281
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 1 456 127 102 423 275 359 52 5 203 140 281
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 1 456 127 102 423 275 359 52 5 203 140 281
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 1 456 127 102 423 275 359 52 5 203 140 281
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Volume: 1 456 127 102 423 275 359 52 5 203 140 281

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.99 0.01 1.00 1.82 0.18 1.00 1.00 0.00 0.98 0.02 1.00
 Final Sat.: 446 964 4 433 850 87 396 418 0 466 8 555
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.51 0.51 0.09 0.37 0.37 0.05 0.03 xxxxx 0.72 0.72 0.20
 Crit Moves: ***
 Delay/Veh: 0.0 17.0 17.0 11.4 14.2 14.0 11.5 10.8 0.0 26.1 26.1 10.5
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 17.0 17.0 11.4 14.2 14.0 11.5 10.8 0.0 26.1 26.1 10.5
 LOS by Move: * C C B B B B B B * D D B
 ApproachDel: 17.0 13.9 13.9 11.2 11.2 22.3
 Delay Adj: 1.00 1.00 1.00
 ApprAdjDel: 17.0 13.9 13.9 11.2 11.2
 LOS by Appr: C B B
 AllWayAvgQ: 0.0 0.9 0.9 0.1 0.5 0.5 0.0 0.0 0.0 2.1 2.1 0.2
 Note: Queue reported is the number of cars per lane.

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.56 0.44 1.00 1.00 1.00 1.82 0.18 1.00 1.00 1.00 1.00
 Final Sat.: 293 496 140 300 322 341 288 532 51 301 312 337
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.92 0.90 0.34 1.31 0.81 1.25 0.10 0.10 0.67 0.45 0.84
 Crit Moves: ***
 Delay/Veh: 14.7 66.5 62.6 20.0 191 44.2 171.5 15.9 15.8 35.4 22.7 48.9
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 14.7 66.5 62.6 20.0 191 44.2 171.5 15.9 15.8 35.4 22.7 48.9
 LOS by Move: B F F C F F C E C E C E
 ApproachDel: 65.6 119.0 150.2 38.6
 Delay Adj: 1.00 1.00 1.00
 ApprAdjDel: 65.6 119.0 150.2
 LOS by Appr: F F F
 AllWayAvgQ: 0.0 4.8 4.4 0.5 15.9 15.9 12.5 0.1 0.1 1.7 0.7 3.3
 Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: [9.3]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 212 462 0 0 521 101 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 212 462 0 0 521 101 0 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 212 462 0 0 521 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0
FinalVolume: 212 462 0 0 521 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 521 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1056 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 1056 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.20 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 0.7 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 9.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: [11.5]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 0 587 0 0 521 0 0 0 0 10 0 0 87
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 587 0 0 521 0 0 0 0 10 0 0 87
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 587 0 0 521 0 0 0 0 10 0 0 87
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 587 0 0 521 0 0 0 0 10 0 0 87

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx xxxxxx
ApproachLOS: * * * * *

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #6 Pico Avenue, Pier D Street

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #5 Pico Avenue, Broadway

Cycle (sec): 100
Loss Time (sec): 0
Optimal Cycle: 0
Approach: North Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Average Delay (sec/veh): 0.5
Worst Case Level of Service: B (11.7)
Approach: North Bound
Movement: L-T-R L-T-R L-T-R L-T-R

Volume Module:
Base Vol: 95 288 1 6 511 284 444 0 54 19 1 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 95 288 1 6 511 284 444 0 54 19 1 37

Volume Module:
Base Vol: 13 600 8 6 505 0 0 2 29 0 0 0 3
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 13 600 8 6 505 0 0 2 29 0 0 3

Capacity Analysis Module:
Vol/Sat: 0.25 0.36 0.36 0.57 0.57 1.01 xxxxx 0.11 0.05 0.05 0.09
Crit Moves: ***
Delay/Veh: 14.8 15.9 15.9 20.6 20.6 19.1 73.7 0.0 10.5 12.5 12.5 11.6

Capacity Analysis Module:
Vol/Sat: 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Crit Moves: A
Delay/Veh: LT-LTR-RT LT-LTR-RT LT-LTR-RT LT-LTR-RT

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #7 Pico Avenue, Pier C Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.415
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: 0
 Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0
 Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 29 696 0 0 744 227 185 0 13 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 29 696 0 0 744 227 185 0 13 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 29 696 0 0 744 0 185 0 13 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 29 696 0 0 744 0 185 0 13 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 29 696 0 0 744 0 185 0 13 0 0 0
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.02 0.22 0.00 0.00 0.23 0.00 0.06 0.00 0.01 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: ****

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.670
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 47 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected
 Rights: 0 1 1 0 1 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0
 Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1
 Lanes: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
 Base Vol: 258 2 416 270 0 23 66 268 88 371 260 225
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 258 2 416 270 0 23 66 268 88 371 260 225
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 258 2 0 270 0 23 66 268 88 371 260 225
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 258 2 0 270 0 23 66 268 88 371 260 225
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 258 2 0 270 0 23 66 268 88 371 260 225
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.84 0.16 1.00 1.51 0.49 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1349 251 1600 2409 791 2880 1600 1600

Capacity Analysis Module:
 Vol/Sat: 0.16 0.00 0.00 0.17 0.00 0.09 0.04 0.11 0.11 0.13 0.16 0.14
 Crit Moves: ****

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.509
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: A
Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R L T R
Control: Protected Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 3 0 0 0 0 0 2 0 1
Lanes: -----
Volume Module:
Base Vol: 0 0 0 0 3 0 243 240 1009 0 0 965 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 3 0 243 240 1009 0 0 965 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 3 0 243 240 1009 0 0 965 10
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 0 3 0 243 240 1009 0 0 965 10

Cycle (sec): 100 Critical Vol./Cap.(X): 0.501
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 14.8
Optimal Cycle: 0 Level Of Service: B
Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 2 0 1
Lanes: -----
Volume Module:
Base Vol: 0 0 0 230 0 50 39 395 0 0 491 249
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 230 0 50 39 395 0 0 491 249
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 230 0 50 39 395 0 0 491 249
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 230 0 50 39 395 0 0 491 249

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 0.00 3.00 0.00 0.00 2.00 1.00 1.00
Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Saturation Flow Module:
Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adjustment: 0.00 0.00 0.00 1.00 0.64 0.36 0.18 1.82 0.00 0.00 2.00 1.00
Lanes: 0 0 0 459 324 180 91 933 0 0 1024 568
Final Sat: 0 0 0 14.3 12.0 12.0 14.3 14.2 0.0 0.0 15.6 13.5

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.17 0.17 0.24 0.00 0.00 0.34 0.01
Crit Moves: 243 0

Capacity Analysis Module:
Vol/Sat: xxxxxx xxxxxx 0.50 0.00 0.28 0.43 0.42 xxxxxx xxxxx 0.48 0.44
Crit Moves: ***
Delay/Veh: 0.0 0.0 0.0 17.3 12.0 12.0 14.3 14.2 0.0 0.0 15.6 13.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 17.3 12.0 12.0 14.3 14.2 0.0 0.0 15.6 13.5
LOS by Move: * * * C B B B * * * C * C B
ApproachDel: xxxxxx 15.3 B 14.2
Delay Adj: xxxxxx 1.00 1.00
ApprAdjDel: xxxxxx 15.3 B 14.2
LOS by Appr: * C B B
AllwayAvgQ: 0.0 0.0 0.0 0.9 0.3 0.3 0.7 0.7 0.0 0.0 0.9 0.7

Note: Queue reported is the number of cars per lane.

Note: Queue reported is the number of cars per lane.

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Scenario Report

2030 Future Year Baseline MD
 Command: 2030 Future Year Baseline MD
 Volume: 2030 Future Year Baseline MD Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

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 Future Year Baseline

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 141.3	1.503	F 141.3	1.503 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	D 31.9	0.962	D 31.9	0.962 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	B 12.0	0.000	B 12.0	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 10.3	0.000	B 10.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 14.2	0.000	B 14.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 19.4	0.815	C 19.4	0.815 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.395	A xxxxx	0.395 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.632	B xxxxx	0.632 + 0.000 V/C
# 9 Anaheim Way & Pier B St	B 14.4	0.587	B 14.4	0.587 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	A xxxxx	0.500	A xxxxx	0.500 + 0.000 V/C

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Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #1 Pico Ave / Pier G St & Harbor Plaza
 Cycle (sec): 100 Critical Vol./Cap.(X): 1.503
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 141.3
 Optimal Cycle: 0 Level Of Service: F
 Approach: North Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0
 Volume Module:
 Base Vol: 7 529 205 140 436 216 418 130 6 261 135 311
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 7 529 205 140 436 216 418 130 6 261 135 311
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 7 529 205 140 436 216 418 130 6 261 135 311
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 7 529 205 140 436 216 418 130 6 261 135 311
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 7 529 205 140 436 216 418 130 6 261 135 311
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.44 0.56 1.00 1.00 1.00 1.00 1.91 0.09 1.00 1.00 1.00
 Final Sat.: 284 436 173 286 301 317 278 549 25 291 302 323
 Capacity Analysis Module:
 Vol/Sat: 0.02 1.21 1.19 0.49 1.45 0.68 1.50 0.24 0.24 0.90 0.45 0.96
 Crit Moves: ****
 Delay/Veh: 15.5 156 145.3 26.4 251 34.6 275.8 18.9 18.8 65.8 23.7 75.5
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 15.5 156 145.3 26.4 251 34.6 275.8 18.9 18.8 65.8 23.7 75.5
 LOS by Move: C F F D F C F C F C F
 ApproachDel: 152.0 152.1 212.8 62.0
 Delay Adj: 1.00 1.00
 ApprAdjDel: 152.0 152.1 212.8 62.0
 LOS by Appr: F F F
 AllwayAvgQ: 0.0 12.2 11.3 0.9 19.7 19.7 20.1 0.3 0.3 4.1 0.8 5.5
 Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.962
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 31.9
 Optimal Cycle: 0 Level Of Service: D
 Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 1 0 0 1
 Volume Module:
 Base Vol: 0 614 6 102 426 10 19 9 0 421 2 115
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 614 6 102 426 10 19 9 0 421 2 115
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 614 6 102 426 10 19 9 0 421 2 115
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 614 6 102 426 10 19 9 0 421 2 115
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 614 6 102 426 10 19 9 0 421 2 115
 Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.98 0.02 1.00 1.95 0.05 1.00 1.00 0.00 0.99 0.01 1.00
 Final Sat.: 402 861 8 398 830 20 358 377 0 438 2 502
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.71 0.71 0.26 0.51 0.51 0.05 0.02 xxxx 0.96 0.96 0.23
 Crit Moves: ****
 Delay/Veh: 0.0 28.0 28.0 14.4 19.1 19.0 12.6 11.9 0.0 61.9 61.9 11.7
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 28.0 28.0 14.4 19.1 19.0 12.6 11.9 0.0 61.9 61.9 11.7
 LOS by Move: * D D B C C B B * F F B
 ApproachDel: 28.0 18.2 12.4
 Delay Adj: 1.00 1.00
 ApprAdjDel: 28.0 18.2 12.4
 LOS by Appr: D B
 AllwayAvgQ: 0.0 2.1 2.1 0.3 1.0 0.9 0.0 0.0 0.0 6.2 6.2 0.3
 Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: Bf 12.0j

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 0 748 0 0 650 0 0 0 0 0 1 0 0 8
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 748 0 0 650 0 0 0 0 0 1 0 0 8
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 748 0 0 650 0 0 0 0 0 1 0 0 8
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 748 0 0 650 0 0 0 0 0 1 0 0 8

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1073 xxxxx 374
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 218 xxxxx 629
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 218 xxxxx 629
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00 xxxxx 0.01

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx 0.0
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 21.6 xxxxx 10.8

LOS By Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * * 12.0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)
Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)
Average Delay (sec/veh): 1.9 Worst Case Level Of Service: Bf 10.3j

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
Base Vol: 261 497 0 0 650 140 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 261 497 0 0 650 140 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 261 497 0 0 650 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 261 497 0 0 650 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 650 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 946 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 946 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.28 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 1.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 10.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

LOS By Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * * xxxxxx

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Pico Avenue, Pier C Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.395
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Ignore Protected Protected Protected
Min. Green: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0 0

Lanes: 1 0 2 0 0 0 2 0 2 0 0 0 1 0 0 0 0 0 0 0
Volume Module: 31 695 0 0 446 209 224 0 16 0 0 0 0

Base Vol: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 31 695 0 0 446 209 224 0 16 0 0 0 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 31 695 0 0 446 209 224 0 16 0 0 0 0

Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 31 695 0 0 446 209 224 0 16 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 31 695 0 0 446 209 224 0 16 0 0 0 0
OvlAdjVol: 31 695 0 0 446 209 224 0 16 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.02 0.22 0.00 0.00 0.14 0.00 0.08 0.00 0.01 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: *****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pico Avenue, Pier B Street & 9th Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.632
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Street Name: North Bound South Bound East Bound West Bound
Approach: L - T - R L - T - R L - T - R L - T - R
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected Protected
Rights: Ignore Include Include Include Include
Min. Green: 0 1 1 0 1 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0

Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1 0 1
Volume Module: 145 5 70 240 2 17 32 312 245 338 262 293

Base Vol: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 145 5 70 240 2 17 32 312 245 338 262 293

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 145 5 0 240 2 17 32 312 245 338 262 293

Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 145 5 0 240 2 17 32 312 245 338 262 293
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 145 5 0 240 2 17 32 312 245 338 262 293
OvlAdjVol: 145 5 0 240 2 17 32 312 245 338 262 293

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.00 1.00 1.00 0.87 0.13 1.00 1.12 0.88 2.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1390 210 1600 1792 1408 2880 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.09 0.00 0.00 0.15 0.00 0.08 0.02 0.17 0.17 0.12 0.16 0.18
Crit Moves: *****

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)
 Intersection #9 Anaheim Way & Pier B St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.587
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 14.4
 Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 93 0 58 80 609 0 0 442 208
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 93 0 58 80 609 0 0 442 208
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 93 0 58 80 609 0 0 442 208
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 93 0 58 80 609 0 0 442 208
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 93 0 58 80 609 0 0 442 208

Saturation Flow Module:
 Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Delay/Veh: 12.3 10.5 10.5 16.6 16.3 0.0 0.0 13.7 11.6
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 12.3 10.5 10.5 16.6 16.3 0.0 0.0 13.7 11.6
 LOS by Move: * * * * *
 ApproachDel: 11.5 B B C *
 Delay Adj: 1.00 B C *
 AppradjDel: 11.5 B C *
 LOS by Appr: * B B C *
 AllwayVgQ: 0.0 0.0 0.0 0.2 0.2 0.2 1.3 1.2 0.0 0.0 0.7 0.5

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 Circular 212 Planning Method (Base Volume Alternative)
 Intersection #10 Farragut Ave & Anaheim St
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.500
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 40 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L-T-R L-T-R L-T-R L-T-R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 14 0 266 130 1226 0 0 894 16
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 14 0 266 130 1226 0 0 894 16
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 14 0 266 130 1226 0 0 894 16
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 14 0 266 130 1226 0 0 894 16
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 14 0 266 130 1226 0 0 894 16

Saturation Flow Module:
 Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 Final Sat: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.19 0.09 0.29 0.00 0.00 0.31 0.01
 Crit Volume: 0 266 0 447
 Crit Moves: *****

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Scenario Report

2030 Future Year Baseline PM
 Command: 2030 Future Year Baseline PM
 Volume: 2030 Future Year Baseline PM Peak
 Geometry: Future
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Future Year Baseline

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Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Pico Ave / Pier G St & Harbor	F 68.7	1.207	F 68.7	1.207 + 0.000 V/C
# 2 Pico Ave & Pier E St / Ocean B	E 42.7	1.002	E 42.7	1.002 + 0.000 V/C
# 3 Pico Ave & Ocean Blvd WB Off-R	C 23.6	0.000	C 23.6	0.000 + 0.000 D/V
# 4 Pico Ave & Ocean Blvd WB On-Ra	B 11.3	0.000	B 11.3	0.000 + 0.000 D/V
# 5 Pico Avenue, Broadway	B 11.2	0.000	B 11.2	0.000 + 0.000 D/V
# 6 Pico Avenue, Pier D Street	C 17.0	0.689	C 17.0	0.689 + 0.000 V/C
# 7 Pico Avenue, Pier C Street	A xxxxx	0.369	A xxxxx	0.369 + 0.000 V/C
# 8 Pico Avenue, Pier B Street & 9	B xxxxx	0.602	B xxxxx	0.602 + 0.000 V/C
# 9 Anaheim Way & Pier B St	C 16.6	0.662	C 16.6	0.662 + 0.000 V/C
# 10 Farragut Ave & Anaheim St	B xxxxx	0.672	B xxxxx	0.672 + 0.000 V/C

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 1.207
Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): 68.7
Optimal Cycle: 0 Level Of Service: F

Approach: North Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 4 382 139 57 330 264 314 178 10 48 18 415
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 4 382 139 57 330 264 314 178 10 48 18 415
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 4 382 139 57 330 264 314 178 10 48 18 415
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 4 382 139 57 330 264 314 178 10 48 18 415

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.47 0.53 1.00 1.00 1.00 1.00 1.89 0.11 1.00 1.00 1.00
Final Sat.: 311 487 181 319 340 361 318 619 35 300 312 344
Capacity Analysis Module:
Vol/Sat: 0.01 0.78 0.77 0.18 0.97 0.73 0.99 0.29 0.29 0.16 0.06 1.21
Crit Moves: ****
Delay/Veh: 14.2 42.8 40.0 16.1 74.7 34.6 82.3 17.7 17.6 16.5 14.5 148.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.2 42.8 40.0 16.1 74.7 34.6 82.3 17.7 17.6 16.5 14.5 148.2
LOS by Move: B E C F D F C C C B F
ApproachDel: 41.8
Delay Adj: 1.00
ApprAdjDel: 41.8
LOS by Appr: E
AllwayAvgQ: 0.0 2.8 2.5 0.2 5.8 6.0 0.4 0.4 0.2 0.1 12.9

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.002
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 42.7
Optimal Cycle: 0 Level Of Service: E

Approach: North Bound South Bound East Bound West Bound
Movement: L T R L T R L T R L T R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 697 206 20 57 23 0 416 3 107
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 697 206 20 57 23 0 416 3 107
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 697 206 20 57 23 0 416 3 107
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 697 206 20 57 23 0 416 3 107

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.82 0.18 1.00 1.00 0.00 0.99 0.01 1.00
Final Sat.: 386 831 4 383 734 72 352 369 0 415 3 472
Capacity Analysis Module:
Vol/Sat: 0.00 0.84 0.84 0.80 0.28 0.28 0.16 0.06 xxxx 1.00 1.00 0.23
Crit Moves: ****
Delay/Veh: 0.0 42.0 42.0 40.2 14.8 14.7 14.3 12.6 0.0 74.1 74.1 12.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 42.0 42.0 40.2 14.8 14.7 14.3 12.6 0.0 74.1 74.1 12.2
LOS by Move: * E E B B B B B * F F B
ApproachDel: 42.0 29.4 13.8
Delay Adj: 1.00
ApprAdjDel: 42.0 29.4 13.8
LOS by Appr: E
AllwayAvgQ: 0.0 3.6 3.6 3.0 0.4 0.4 0.2 0.1 0.1 7.3 7.3 0.3

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
Future Year Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: [C 23.6]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 857 0 0 576 0 0 0 0 0 3 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 857 0 0 576 0 0 0 0 3 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 857 0 0 576 0 0 0 0 3 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 857 0 0 576 0 0 0 0 3 0 0

Critical Gap Module:
Critical Gp: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 xxxxx 6.9
FollowUpTim: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxxx 3.3

Capacity Module:
Conflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1145 xxxxx 429
Potential Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 196 xxxxx 580
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 196 xxxxx 580
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.02 xxxxx 0.00

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 23.6 xxxxx xxxxx

LOS By Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *
C

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
Future Year Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pico Ave & Ocean Blvd WB On-Ramp (Future Condition)

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: [B 11.3]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Ignore Include Include
Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0

Volume Module:
Base Vol: 435 417 0 0 576 120 0 0 0 0 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 435 417 0 0 576 120 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 435 417 0 0 576 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 435 417 0 0 576 0 0 0 0 0 0 0 0 0

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: 576 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: 1007 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: 1007 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: 0.43 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: 11.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

LOS By Move: * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * *
ApproachDel: xxxxxx
ApproachLOS: * * * * *
x

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
Future Year Baseline

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street
Average Delay (sec/veh): 100 Worst Case Level of Service: B
Cycle (sec): 100 (Y+R=4.0 sec) Critical Vol./Cap.(X): 0.689
Loss Time (sec): 0 Level of Delay (sec/veh): 17.0

Optimal Cycle: 0 Level of Service: C
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 98 364 3 4 419 177 304 0 107 37 2 54
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 98 364 3 4 419 177 304 0 107 37 2 54
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 98 364 3 4 419 177 304 0 107 37 2 54
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 98 364 3 4 419 177 304 0 107 37 2 54

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.98 0.02 0.02 1.98 1.00 1.00 0.00 1.00 0.95 0.05 1.00

Final Sat: 412 873 7 9 902 498 441 0 506 363 20 438
Capacity Analysis Module:
Vol/Sat: 0.24 0.42 0.42 0.46 0.46 0.36 0.69 xxxxx 0.21 0.10 0.10 0.12

Crit Moves: ***
Delay/Veh: 13.6 15.8 15.8 16.6 16.6 13.3 25.8 0.0 11.2 12.3 12.3 11.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdJdel/Veh: 13.6 15.8 15.8 16.6 16.6 13.3 25.8 0.0 11.2 12.3 12.3 11.2
LOS by Move: B C C C B D * B B B B B
ApproachDel: 15.3 15.6 22.0 11.7
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApproachLOS: 15.3 15.6 22.0 11.7
LOS by Appr: C
AllWayAvgQ: 0.3 0.6 0.6 0.8 0.8 0.5 1.8 1.8 0.2 0.1 0.1 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
Future Year Baseline

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Pico Avenue, Broadway
Average Delay (sec/veh): 0.1 Worst Case Level of Service: B
Cycle (sec): 11.2

Optimal Cycle: 0 Level of Service: B
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R L-T-R L-T-R L-T-R L-T-R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0
Lanes: 1 0 1 1 0 1 0 0 1 0 1 0 0 1

Volume Module:
Base Vol: 0 858 0 5 578 0 0 0 0 7 0 0 0 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 858 0 5 578 0 0 0 0 7 0 0 0 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 858 0 5 578 0 0 0 0 7 0 0 0 1
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 858 0 5 578 0 0 0 0 7 0 0 0 1

Saturation Flow Module:
Adjustment: 4.1 xxxxx xxxxx 7.5 xxxxx 6.9 7.5 6.5 6.9
Lanes: 2.2 xxxxx xxxxx 3.5 xxxxx 3.3 3.5 4.0 3.3

Final Sat: 858 xxxxx xxxxx 1017 xxxxx 289 1157 1446 429
Capacity Analysis Module:
Vol/Sat: 0.0 xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0

Crit Moves: A * * * * * B
Delay/Veh: 9.6 xxxxx xxxxx xxxxx xxxxx 10.1 xxxxx xxxxx 11.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdJdel/Veh: 9.6 xxxxx xxxxx xxxxx xxxxx 10.1 xxxxx xxxxx 11.2
LOS by Move: * * * * * * * * * * *
ApproachDel: 10.1 11.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

ApproachLOS: * * * * * * * * * * *
LOS by Appr: * * * * * * * * * * *
AllWayAvgQ: 0.3 0.6 0.6 0.8 0.8 0.5 1.8 1.8 0.2 0.1 0.1 0.1

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
 Future Year 2030
 Future Year Baseline

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #7 Pico Avenue, Pier C Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.369
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected
 Rights: 0
 Min. Green: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 2 0 0 0 2 0 2 2 0 0 1 0 0 0 0 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 30 639 0 0 500 127 200 0 29 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 30 639 0 0 500 127 200 0 29 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 30 639 0 0 500 0 200 0 29 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 30 639 0 0 500 0 200 0 29 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 30 639 0 0 500 0 200 0 29 0 0 0
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 0.00 2.00 2.00 0.00 2.00 0.00 2.00 0.00 0.00
 Final Sat.: 1600 3200 0 0 3200 3200 2880 0 1600 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.02 0.20 0.00 0.00 0.16 0.00 0.07 0.00 0.02 0.00 0.00 0.00
 OvlAdjV/S: 0.00
 Crit Moves: ****

Middle Harbor EIR
 Future Year 2030
 Future Year Baseline

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
 Intersection #8 Pico Avenue, Pier B Street & 9th Street
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.602
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 40 Level of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: 0 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Min. Green: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
 Lanes: 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
 Base Vol: 111 2 177 219 1 19 54 261 264 383 136 337
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 111 2 177 219 1 19 54 261 264 383 136 337
 User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 111 2 0 219 1 19 54 261 264 383 136 337
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 111 2 0 219 1 19 54 261 264 383 136 337
 PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 111 2 0 219 1 19 54 261 264 383 136 337
 OvlAdjVol: 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 1.00 1.00 0.84 0.16 1.00 1.00 1.00 2.00 1.00 1.00
 Final Sat.: 1600 1600 1600 1600 1346 254 1600 1600 1600 2880 1600 1600

Capacity Analysis Module:
 Vol/Sat: 0.07 0.00 0.00 0.14 0.00 0.07 0.03 0.16 0.17 0.13 0.09 0.21
 OvlAdjV/S: ****
 Crit Moves: ****

Middle Harbor EIR
Future Year 2030
Future Year Baseline

Level of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)
Intersection #9 Anaheim Way & Pier B St
Critical Vol./Cap.(X): 0.662
Level of Service: C
Average Delay (sec/veh): 16.6

Cycle (sec): 100
Loss Time (sec): 0 (Y+R=4.0 sec)
Optimal Cycle: 0
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 280 0 13 64 441 0 0 119 362
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 280 0 13 64 441 0 0 119 362
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 280 0 13 64 441 0 0 119 362
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 280 0 13 64 441 0 0 119 362
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 280 0 13 64 441 0 0 119 362

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.91 0.09 0.25 1.75 0.00 0.00 2.00 1.00
Final Sat.: 0 0 477 466 45 133 924 0 0 971 547

Capacity Analysis Module:
Vol/Sat: xxxxx xxxxx 0.59 0.00 0.29 0.48 0.48 xxxxx xxxxx 0.12 0.66
Crit Moves: ***
Delay/Veh: 0.0 0.0 19.4 12.1 12.1 15.3 15.0 0.0 0.0 10.8 20.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 19.4 12.1 12.1 15.3 15.0 0.0 0.0 10.8 20.4
LOS by Move: * * * * * C B C * * * * *
ApproachDel: xxxxxx 16.9 B 15.0 C 18.0
Delay Adj: xxxxxx 1.00
AppradjDel: xxxxxx 16.9 C 15.0
LOS by Appr: * * * * * C C C
AllWayAvgQ: 0.0 0.0 0.0 1.2 0.4 0.4 0.8 0.8 0.0 0.0 0.1 1.7

Note: Queue reported is the number of cars per lane.

Middle Harbor EIR
Future Year 2030
Future Year Baseline

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
Intersection #10 Farragut Ave & Anaheim St
Critical Vol./Cap.(X): 0.672
Level of Service: B
Average Delay (sec/veh): xxxxxx

Cycle (sec): 100
Loss Time (sec): 10 (Y+R=4.0 sec)
Optimal Cycle: 61
Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 29 0 385 198 1409 0 0 1145 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 29 0 385 198 1409 0 0 1145 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 29 0 385 198 1409 0 0 1145 18
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 29 0 385 198 1409 0 0 1145 18
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 29 0 385 198 1409 0 0 1145 18

Saturation Flow Module:
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 3.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 1425 0 1425 1425 4275 0 0 2850 1425

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.27 0.14 0.33 0.00 0.00 0.40 0.01
Crit Volume: 385 0
Crit Moves: *****

Appendix H: Mitigated Intersection Peak-Hour Capacity Analysis Worksheets

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.548
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 36 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	1	166	101	40	229	209	315	18	4	145	192	153
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	166	101	40	229	209	315	18	4	145	192	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	166	101	40	229	209	315	18	4	145	192	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	166	101	40	229	209	315	18	4	145	192	153
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	166	101	40	229	209	315	18	4	145	192	153

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.24	0.76	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.11	0.89
Final Sat.:	1600	1990	1210	1600	1600	1600	1600	2618	582	1600	1781	1419

Capacity Analysis Module:

Vol/Sat:	0.00	0.08	0.08	0.03	0.14	0.13	0.20	0.01	0.01	0.09	0.11	0.11
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.695
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns representing different volume metrics and 12 rows of adjustment factors.

Saturation Flow Module table with 12 columns and 4 rows of saturation flow data.

Capacity Analysis Module table with 12 columns and 3 rows of capacity analysis data.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.566
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	4	268	20	48	148	163	418	40	8	109	97	135
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	268	20	48	148	163	418	40	8	109	97	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	268	20	48	148	163	418	40	8	109	97	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	268	20	48	148	163	418	40	8	109	97	135
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	4	268	20	48	148	163	418	40	8	109	97	135

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	0.95	1.05	1.00	1.67	0.33	1.00	1.00	1.00
Final Sat.:	1600	2978	222	1600	1523	1677	1600	2667	533	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.09	0.03	0.10	0.10	0.26	0.01	0.02	0.07	0.06	0.08
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.353
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	215	2	17	111	60	63	9	0	205	11	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	215	2	17	111	60	63	9	0	205	11	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	215	2	17	111	60	63	9	0	205	11	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	215	2	17	111	60	63	9	0	205	11	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	215	2	17	111	60	63	9	0	205	11	126

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.30	0.70	1.00	1.00	0.00	0.95	0.05	1.00
Final Sat.:	1600	3171	29	1600	2077	1123	1600	1600	0	1519	81	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.01	0.05	0.05	0.04	0.01	0.00	0.13	0.14	0.08
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.419
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	294	6	66	126	19	34	12	0	256	4	133
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	294	6	66	126	19	34	12	0	256	4	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	294	6	66	126	19	34	12	0	256	4	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	294	6	66	126	19	34	12	0	256	4	133
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	294	6	66	126	19	34	12	0	256	4	133

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.74	0.26	1.00	1.00	0.00	0.98	0.02	1.00
Final Sat.:	1600	3136	64	1600	2781	419	1600	1600	0	1575	25	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.09	0.04	0.05	0.05	0.02	0.01	0.00	0.16	0.16	0.08
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.476
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 32 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	248	3	105	52	56	99	31	0	263	9	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	248	3	105	52	56	99	31	0	263	9	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	248	3	105	52	56	99	31	0	263	9	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	248	3	105	52	56	99	31	0	263	9	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	248	3	105	52	56	99	31	0	263	9	130

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.00	1.00	1.00	1.00	0.00	0.97	0.03	1.00
Final Sat.:	1600	3162	38	1600	1600	1600	1600	1600	0	1547	53	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.08	0.08	0.07	0.03	0.04	0.06	0.02	0.00	0.16	0.17	0.08
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.301
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	35	226	0	0	465	93	0	0	0	17	0	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	226	0	0	465	93	0	0	0	17	0	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	226	0	0	465	93	0	0	0	17	0	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	226	0	0	465	93	0	0	0	17	0	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	35	226	0	0	465	93	0	0	0	17	0	54

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.02	0.07	0.00	0.00	0.15	0.06	0.00	0.00	0.00	0.01	0.00	0.03
Crit Moves:	****				****							****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.274
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 24 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	17	295	0	0	523	100	0	0	0	1	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	295	0	0	523	100	0	0	0	1	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	295	0	0	523	100	0	0	0	1	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	295	0	0	523	100	0	0	0	1	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	17	295	0	0	523	100	0	0	0	1	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.01	0.09	0.00	0.00	0.16	0.06	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****						****	

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.251
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 24 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	47	197	0	0	388	88	0	0	0	8	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	197	0	0	388	88	0	0	0	8	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	197	0	0	388	88	0	0	0	8	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	197	0	0	388	88	0	0	0	8	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	47	197	0	0	388	88	0	0	0	8	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.03	0.06	0.00	0.00	0.12	0.06	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****				****						****	

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.661
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 46 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	92	52	1	6	449	304	464	0	52	19	1	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	52	1	6	449	304	464	0	52	19	1	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	52	1	6	449	304	464	0	52	19	1	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	52	1	6	449	304	464	0	52	19	1	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	92	52	1	6	449	304	464	0	52	19	1	37

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	0.03	1.97	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3140	60	42	3158	1600	1600	0	1600	1520	80	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.02	0.02	0.00	0.14	0.19	0.29	0.00	0.03	0.01	0.01	0.02
Crit Moves:	****					****	****					****

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	61	29	1	5	164	194	580	0	98	7	5	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	29	1	5	164	194	580	0	98	7	5	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	61	29	1	5	164	194	580	0	98	7	5	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	29	1	5	164	194	580	0	98	7	5	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	61	29	1	5	164	194	580	0	98	7	5	30

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.93	0.07	0.06	1.94	1.00	1.00	0.00	1.00	0.58	0.42	1.00
Final Sat.:	1600	3093	107	95	3105	1600	1600	0	1600	933	667	1600

Capacity Analysis Module:

Vol/Sat:	0.04	0.01	0.01	0.00	0.05	0.12	0.36	0.00	0.06	0.00	0.01	0.02
Crit Moves:	****					****	****					****

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.584
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	92	1	3	4	198	164	465	0	107	37	2	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	1	3	4	198	164	465	0	107	37	2	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	1	3	4	198	164	465	0	107	37	2	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	1	3	4	198	164	465	0	107	37	2	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	92	1	3	4	198	164	465	0	107	37	2	54

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.04	1.96	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	1600	1600	63	3137	1600	1600	0	1600	1518	82	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.00	0.00	0.00	0.06	0.10	0.29	0.00	0.07	0.02	0.02	0.03
Crit Moves:	****					****	****					****

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.543
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 36 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	1	166	101	40	226	191	313	18	4	150	184	153
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	166	101	40	226	191	313	18	4	150	184	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	166	101	40	226	191	313	18	4	150	184	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	166	101	40	226	191	313	18	4	150	184	153
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	166	101	40	226	191	313	18	4	150	184	153

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.24	0.76	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.09	0.91
Final Sat.:	1600	1990	1210	1600	1600	1600	1600	2618	582	1600	1747	1453

Capacity Analysis Module:

Vol/Sat:	0.00	0.08	0.08	0.03	0.14	0.12	0.20	0.01	0.01	0.09	0.11	0.11
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.690

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 49 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	6	366	93	65	240	139	458	34	4	159	162	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	366	93	65	240	139	458	34	4	159	162	191
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	366	93	65	240	139	458	34	4	159	162	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	366	93	65	240	139	458	34	4	159	162	191
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	6	366	93	65	240	139	458	34	4	159	162	191

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	1.00	1.00	1.00	1.79	0.21	1.00	1.00	1.00
Final Sat.:	1600	2552	648	1600	1600	1600	1600	2863	337	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.14	0.14	0.04	0.15	0.09	0.29	0.01	0.01	0.10	0.10	0.12
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.560
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	3	271	20	48	148	160	408	42	7	111	99	135
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	271	20	48	148	160	408	42	7	111	99	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	271	20	48	148	160	408	42	7	111	99	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	271	20	48	148	160	408	42	7	111	99	135
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	271	20	48	148	160	408	42	7	111	99	135

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	0.96	1.04	1.00	1.71	0.29	1.00	1.00	1.00
Final Sat.:	1600	2980	220	1600	1538	1662	1600	2743	457	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.09	0.03	0.10	0.10	0.26	0.02	0.02	0.07	0.06	0.08
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.357
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	215	2	17	111	57	59	10	0	216	10	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	215	2	17	111	57	59	10	0	216	10	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	215	2	17	111	57	59	10	0	216	10	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	215	2	17	111	57	59	10	0	216	10	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	215	2	17	111	57	59	10	0	216	10	126

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.32	0.68	1.00	1.00	0.00	0.96	0.04	1.00
Final Sat.:	1600	3171	29	1600	2114	1086	1600	1600	0	1529	71	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.01	0.05	0.05	0.04	0.01	0.00	0.14	0.14	0.08
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.417
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	292	6	67	123	19	32	12	0	256	3	132
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	292	6	67	123	19	32	12	0	256	3	132
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	292	6	67	123	19	32	12	0	256	3	132
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	292	6	67	123	19	32	12	0	256	3	132
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	292	6	67	123	19	32	12	0	256	3	132

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.73	0.27	1.00	1.00	0.00	0.99	0.01	1.00
Final Sat.:	1600	3136	64	1600	2772	428	1600	1600	0	1581	19	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.09	0.04	0.04	0.04	0.02	0.01	0.00	0.16	0.16	0.08
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.473
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 32 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	262	3	100	52	53	94	30	0	263	8	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	262	3	100	52	53	94	30	0	263	8	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	262	3	100	52	53	94	30	0	263	8	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	262	3	100	52	53	94	30	0	263	8	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	262	3	100	52	53	94	30	0	263	8	125

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.00	1.00	1.00	1.00	0.00	0.97	0.03	1.00
Final Sat.:	1600	3164	36	1600	1600	1600	1600	1600	0	1553	47	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.08	0.08	0.06	0.03	0.03	0.06	0.02	0.00	0.16	0.17	0.08
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.297
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	37	223	0	0	451	88	0	0	0	16	0	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	223	0	0	451	88	0	0	0	16	0	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	223	0	0	451	88	0	0	0	16	0	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	223	0	0	451	88	0	0	0	16	0	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	37	223	0	0	451	88	0	0	0	16	0	52

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.02	0.07	0.00	0.00	0.14	0.06	0.00	0.00	0.00	0.01	0.00	0.03
Crit Moves:	****				****							****

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.267
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 24 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	16	293	0	0	501	95	0	0	0	1	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	293	0	0	501	95	0	0	0	1	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	293	0	0	501	95	0	0	0	1	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	293	0	0	501	95	0	0	0	1	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	16	293	0	0	501	95	0	0	0	1	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.01	0.09	0.00	0.00	0.16	0.06	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****						****	

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.252
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 24 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	54	201	0	0	377	86	0	0	0	8	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	201	0	0	377	86	0	0	0	8	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	201	0	0	377	86	0	0	0	8	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	201	0	0	377	86	0	0	0	8	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	54	201	0	0	377	86	0	0	0	8	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.03	0.06	0.00	0.00	0.12	0.05	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****				****						****	

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.651
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	91	50	1	6	432	307	447	0	50	19	1	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	50	1	6	432	307	447	0	50	19	1	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	50	1	6	432	307	447	0	50	19	1	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	50	1	6	432	307	447	0	50	19	1	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	91	50	1	6	432	307	447	0	50	19	1	37

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	0.03	1.97	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3137	63	44	3156	1600	1600	0	1600	1520	80	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.02	0.02	0.00	0.14	0.19	0.28	0.00	0.03	0.01	0.01	0.02
Crit Moves:	****					****	****					****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R				
Control:	Permitted			Permitted			Permitted			Permitted						
Rights:	Include			Include			Include			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0	1	0	0	1

Volume Module:

Base Vol:	60	27	1	5	144	195	573	0	93	7	5	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	27	1	5	144	195	573	0	93	7	5	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	27	1	5	144	195	573	0	93	7	5	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	27	1	5	144	195	573	0	93	7	5	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	60	27	1	5	144	195	573	0	93	7	5	30

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.93	0.07	0.07	1.93	1.00	1.00	0.00	1.00	0.58	0.42	1.00
Final Sat.:	1600	3086	114	107	3093	1600	1600	0	1600	933	667	1600

Capacity Analysis Module:

Vol/Sat:	0.04	0.01	0.01	0.00	0.05	0.12	0.36	0.00	0.06	0.00	0.01	0.02
Crit Moves:	****					****	****					****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.584
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	92	7	3	4	189	165	464	0	104	37	2	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	7	3	4	189	165	464	0	104	37	2	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	7	3	4	189	165	464	0	104	37	2	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	7	3	4	189	165	464	0	104	37	2	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	92	7	3	4	189	165	464	0	104	37	2	54

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	0.04	1.96	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	2240	960	66	3134	1600	1600	0	1600	1518	82	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.00	0.00	0.00	0.06	0.10	0.29	0.00	0.07	0.02	0.02	0.03
Crit Moves:	****					****	****					****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.547
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.692
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns representing different traffic volumes and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing volume/saturation and critical moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.560
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns representing different volume and adjustment factors.

Saturation Flow Module table with 13 columns representing saturation flow and adjustment factors.

Capacity Analysis Module table with 13 columns representing capacity analysis metrics.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.358
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns representing different volume components and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.417
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns representing different volume components and their values.

Saturation Flow Module table with 13 columns representing saturation flow values and adjustments.

Capacity Analysis Module table with 13 columns representing capacity analysis values.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.473
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.298
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.268
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.252
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation and flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity and critical move factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.649
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.637
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2010 With Mitigation
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.585
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for different volume categories and 12 rows for various adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 12 columns for saturation flow and 4 rows for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis and 3 rows for Vol/Sat, Crit Moves, and a summary row.

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.608

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	1	176	124	41	263	260	323	21	6	155	229	222
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	176	124	41	263	260	323	21	6	155	229	222
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	176	124	41	263	260	323	21	6	155	229	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	176	124	41	263	260	323	21	6	155	229	222
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	176	124	41	263	260	323	21	6	155	229	222

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.17	0.83	1.00	1.00	1.00	1.00	1.56	0.44	1.00	1.02	0.98
Final Sat.:	1600	1877	1323	1600	1600	1600	1600	2489	711	1600	1625	1575

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.09	0.03	0.16	0.16	0.20	0.01	0.01	0.10	0.14	0.14
Crit Moves:	****			****			****			****		

Middle Harbor EIR
Future Year 2010 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.792
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2010 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.672
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns for Vol/Sat and Crit Moves.

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.400
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	306	2	17	133	49	45	9	0	256	8	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	306	2	17	133	49	45	9	0	256	8	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	306	2	17	133	49	45	9	0	256	8	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	306	2	17	133	49	45	9	0	256	8	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	306	2	17	133	49	45	9	0	256	8	125

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.46	0.54	1.00	1.00	0.00	0.97	0.03	1.00
Final Sat.:	1600	3179	21	1600	2338	862	1600	1600	0	1552	48	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.10	0.10	0.01	0.06	0.06	0.03	0.01	0.00	0.16	0.16	0.08
Crit Moves:	****			****			****			****		

Middle Harbor EIR
Future Year 2010 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.525
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

 Middle Harbor EIR
 Future Year 2010 With Mitigation
 No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.584

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	433	3	128	62	65	74	24	0	349	6	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	433	3	128	62	65	74	24	0	349	6	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	433	3	128	62	65	74	24	0	349	6	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	433	3	128	62	65	74	24	0	349	6	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	433	3	128	62	65	74	24	0	349	6	139

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.00	1.00	1.00	1.00	0.00	0.98	0.02	1.00
Final Sat.:	1600	3178	22	1600	1600	1600	1600	1600	0	1573	27	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.14	0.14	0.08	0.04	0.04	0.05	0.02	0.00	0.22	0.22	0.09
Crit Moves:	****			****			****			****		

Middle Harbor EIR
Future Year 2010 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.300
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns for Vol/Sat and Crit Moves.

Middle Harbor EIR
Future Year 2010 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.305
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns for Vol/Sat and Crit Moves.

Middle Harbor EIR
Future Year 2010 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.299
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2010 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.646
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2010 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.627
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow related metrics like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis metrics like Vol/Sat, Crit Moves, etc.

Middle Harbor EIR
Future Year 2010 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.566
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.536
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 35 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	1	238	102	49	251	145	299	16	4	173	119	147
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	238	102	49	251	145	299	16	4	173	119	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	238	102	49	251	145	299	16	4	173	119	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	238	102	49	251	145	299	16	4	173	119	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	238	102	49	251	145	299	16	4	173	119	147

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	1.00	1.00	1.00	1.60	0.40	1.00	1.00	1.00
Final Sat.:	1600	2240	960	1600	1600	1600	1600	2560	640	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.11	0.03	0.16	0.09	0.19	0.01	0.01	0.11	0.07	0.09
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.736
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 55 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	5	426	112	75	314	110	448	57	4	188	85	225
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	426	112	75	314	110	448	57	4	188	85	225
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	426	112	75	314	110	448	57	4	188	85	225
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	426	112	75	314	110	448	57	4	188	85	225
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	426	112	75	314	110	448	57	4	188	85	225

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.58	0.42	1.00	1.00	1.00	1.00	1.87	0.13	1.00	1.00	1.00
Final Sat.:	1600	2534	666	1600	1600	1600	1600	2990	210	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.17	0.17	0.05	0.20	0.07	0.28	0.02	0.02	0.12	0.05	0.14
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec):	100	Critical Vol./Cap.(X):	0.597
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	0	1	0	1	1	0	0

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Volume Module:

Base Vol:	4	315	35	51	204	168	338	60	7	78	22	231
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	315	35	51	204	168	338	60	7	78	22	231
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	315	35	51	204	168	338	60	7	78	22	231
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	315	35	51	204	168	338	60	7	78	22	231
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	4	315	35	51	204	168	338	60	7	78	22	231

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Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.00	1.00	1.00	1.79	0.21	1.00	1.00	1.00
Final Sat.:	1600	2880	320	1600	1600	1600	1600	2866	334	1600	1600	1600

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Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.11	0.03	0.13	0.11	0.21	0.02	0.02	0.05	0.01	0.14
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.441
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 30 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	236	2	19	128	143	130	32	0	247	25	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	236	2	19	128	143	130	32	0	247	25	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	236	2	19	128	143	130	32	0	247	25	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	236	2	19	128	143	130	32	0	247	25	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	236	2	19	128	143	130	32	0	247	25	139

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.00	1.00	1.00	1.00	0.00	0.91	0.09	1.00
Final Sat.:	1600	3173	27	1600	1600	1600	1600	1600	0	1453	147	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.01	0.08	0.09	0.08	0.02	0.00	0.15	0.17	0.09
Crit Moves:	****					****	****				****	

Middle Harbor EIR
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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.510

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 34 Level Of Service: A

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, and Lanes. It details traffic signal settings for each movement.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol. for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each movement.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.664
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 46 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	363	3	156	58	116	218	75	0	323	22	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	363	3	156	58	116	218	75	0	323	22	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	363	3	156	58	116	218	75	0	323	22	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	363	3	156	58	116	218	75	0	323	22	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	363	3	156	58	116	218	75	0	323	22	139

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.00	1.00	1.00	1.00	0.00	0.94	0.06	1.00
Final Sat.:	1600	3174	26	1600	1600	1600	1600	1600	0	1498	102	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.11	0.10	0.04	0.07	0.14	0.05	0.00	0.20	0.22	0.09
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.284
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	451	0	0	476	0	0	0	0	49	0	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	451	0	0	476	0	0	0	0	49	0	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	451	0	0	476	0	0	0	0	49	0	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	451	0	0	476	0	0	0	0	49	0	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	451	0	0	476	0	0	0	0	49	0	57

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.14	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.03	0.00	0.04
Crit Moves:	****			****								****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.286
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	572	0	0	564	0	0	0	0	16	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	572	0	0	564	0	0	0	0	16	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	572	0	0	564	0	0	0	0	16	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	572	0	0	564	0	0	0	0	16	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	572	0	0	564	0	0	0	0	16	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****						****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.327
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	688	0	0	429	0	0	0	0	19	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	688	0	0	429	0	0	0	0	19	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	688	0	0	429	0	0	0	0	19	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	688	0	0	429	0	0	0	0	19	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	688	0	0	429	0	0	0	0	19	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****						****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.625
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 42 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	92	159	1	6	488	286	425	0	46	19	1	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	159	1	6	488	286	425	0	46	19	1	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	159	1	6	488	286	425	0	46	19	1	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	159	1	6	488	286	425	0	46	19	1	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	92	159	1	6	488	286	425	0	46	19	1	37

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.02	1.98	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3180	20	39	3161	1600	1600	0	1600	1520	80	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.05	0.05	0.00	0.15	0.18	0.27	0.00	0.03	0.01	0.01	0.02
Crit Moves:	****					****	****					****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.566
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	63	160	1	5	314	201	451	0	89	7	5	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	160	1	5	314	201	451	0	89	7	5	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	160	1	5	314	201	451	0	89	7	5	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	160	1	5	314	201	451	0	89	7	5	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	63	160	1	5	314	201	451	0	89	7	5	30

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.03	1.97	1.00	1.00	0.00	1.00	0.58	0.42	1.00
Final Sat.:	1600	3180	20	50	3150	1600	1600	0	1600	933	667	1600

Capacity Analysis Module:

Vol/Sat:	0.04	0.05	0.05	0.00	0.10	0.13	0.28	0.00	0.06	0.00	0.01	0.02
Crit Moves:	****					****	****					****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.536
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 35 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	96	193	3	4	283	172	376	0	104	37	2	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	96	193	3	4	283	172	376	0	104	37	2	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	193	3	4	283	172	376	0	104	37	2	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	193	3	4	283	172	376	0	104	37	2	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	96	193	3	4	283	172	376	0	104	37	2	54

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.97	0.03	0.03	1.97	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3151	49	45	3155	1600	1600	0	1600	1518	82	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.06	0.06	0.00	0.09	0.11	0.24	0.00	0.07	0.02	0.02	0.03
Crit Moves:	****					****	****					****

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 315 (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.530
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 35 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	1	239	101	50	244	136	296	16	5	183	131	147
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	239	101	50	244	136	296	16	5	183	131	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	239	101	50	244	136	296	16	5	183	131	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	239	101	50	244	136	296	16	5	183	131	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	239	101	50	244	136	296	16	5	183	131	147

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.41	0.59	1.00	1.00	1.00	1.00	1.52	0.48	1.00	1.00	1.00
Final Sat.:	1600	2249	951	1600	1600	1600	1600	2438	762	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.11	0.03	0.15	0.09	0.19	0.01	0.01	0.11	0.08	0.09
Crit Moves:	****			****			****			****		

Middle Harbor EIR
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315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.737
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module:

Table with 12 columns representing different volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module:

Table with 12 columns representing saturation flow factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with 12 columns representing capacity analysis factors. Rows include Vol/Sat and Crit Moves.

Middle Harbor EIR
Future Year 2015 With Mitigation
315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.599
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns and 12 rows including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module table with 12 columns and 4 rows including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns and 2 rows including Vol/Sat and Crit Moves.

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.440
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 30 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	234	2	19	128	144	129	30	1	248	23	141
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	234	2	19	128	144	129	30	1	248	23	141
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	234	2	19	128	144	129	30	1	248	23	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	234	2	19	128	144	129	30	1	248	23	141
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	234	2	19	128	144	129	30	1	248	23	141

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.00	1.00	1.00	0.97	0.03	0.92	0.08	1.00
Final Sat.:	1600	3173	27	1600	1600	1600	1600	1548	52	1464	136	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.01	0.08	0.09	0.08	0.02	0.02	0.16	0.17	0.09
Crit Moves:	****					****	****				****	

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.511
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	381	6	86	224	54	70	31	0	300	8	145
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	381	6	86	224	54	70	31	0	300	8	145
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	381	6	86	224	54	70	31	0	300	8	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	381	6	86	224	54	70	31	0	300	8	145
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	381	6	86	224	54	70	31	0	300	8	145

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.97	0.03	1.00	1.61	0.39	1.00	1.00	0.00	0.97	0.03	1.00
Final Sat.:	1600	3150	50	1600	2578	622	1600	1600	0	1558	42	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.12	0.12	0.05	0.09	0.09	0.04	0.02	0.00	0.19	0.19	0.09
Crit Moves:	****			****			****			****		

Middle Harbor EIR
 Future Year 2015 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.662
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 46 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	367	3	155	59	114	217	72	0	320	22	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	367	3	155	59	114	217	72	0	320	22	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	367	3	155	59	114	217	72	0	320	22	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	367	3	155	59	114	217	72	0	320	22	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	367	3	155	59	114	217	72	0	320	22	140

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.00	1.00	1.00	1.00	0.00	0.94	0.06	1.00
Final Sat.:	1600	3174	26	1600	1600	1600	1600	1600	0	1497	103	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.12	0.12	0.10	0.04	0.07	0.14	0.05	0.00	0.20	0.21	0.09
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.284
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	447	0	0	472	0	0	0	0	48	0	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	447	0	0	472	0	0	0	0	48	0	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	447	0	0	472	0	0	0	0	48	0	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	447	0	0	472	0	0	0	0	48	0	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	447	0	0	472	0	0	0	0	48	0	58

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.14	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.03	0.00	0.04
Crit Moves:	****			****								****

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.291
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	571	0	0	578	0	0	0	0	16	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	571	0	0	578	0	0	0	0	16	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	571	0	0	578	0	0	0	0	16	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	571	0	0	578	0	0	0	0	16	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	571	0	0	578	0	0	0	0	16	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.329
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	694	0	0	429	0	0	0	0	19	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	694	0	0	429	0	0	0	0	19	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	694	0	0	429	0	0	0	0	19	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	694	0	0	429	0	0	0	0	19	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	694	0	0	429	0	0	0	0	19	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****						****		

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	94	156	1	6	482	285	427	0	44	19	1	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	156	1	6	482	285	427	0	44	19	1	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	94	156	1	6	482	285	427	0	44	19	1	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	156	1	6	482	285	427	0	44	19	1	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	94	156	1	6	482	285	427	0	44	19	1	37

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.02	1.98	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3180	20	39	3161	1600	1600	0	1600	1520	80	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.05	0.05	0.00	0.15	0.18	0.27	0.00	0.03	0.01	0.01	0.02
Crit Moves:	****					****	****					****

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.564
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	63	160	1	5	330	201	449	0	87	7	5	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	160	1	5	330	201	449	0	87	7	5	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	160	1	5	330	201	449	0	87	7	5	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	160	1	5	330	201	449	0	87	7	5	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	63	160	1	5	330	201	449	0	87	7	5	30

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.03	1.97	1.00	1.00	0.00	1.00	0.58	0.42	1.00
Final Sat.:	1600	3180	20	48	3152	1600	1600	0	1600	933	667	1600

Capacity Analysis Module:

Vol/Sat:	0.04	0.05	0.05	0.00	0.10	0.13	0.28	0.00	0.05	0.00	0.01	0.02
Crit Moves:	****					****	****					****

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.534
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 35 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	95	198	3	4	286	174	372	0	103	37	2	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	198	3	4	286	174	372	0	103	37	2	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	198	3	4	286	174	372	0	103	37	2	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	198	3	4	286	174	372	0	103	37	2	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	95	198	3	4	286	174	372	0	103	37	2	54

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.97	0.03	0.03	1.97	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3152	48	44	3156	1600	1600	0	1600	1518	82	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.06	0.06	0.00	0.09	0.11	0.23	0.00	0.06	0.02	0.02	0.03
Crit Moves:	****					****	****					****

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.541
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.729
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: C

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L, T, R). Rows include Control, Rights, Min. Green, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol. for L, T, R movements.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat. for L, T, R movements.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves for L, T, R movements.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.614
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.437
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns and 13 rows including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module table with 13 columns and 4 rows including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 13 columns and 3 rows including Vol/Sat and Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.512
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.663
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow related metrics like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis metrics like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.292
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.302

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns for Vol/Sat and Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.328
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns for Vol/Sat and Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.634
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.589
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2015 With GDB Project
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.551
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves, etc.

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.614
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	1	257	125	51	309	199	307	25	8	228	206	209
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	257	125	51	309	199	307	25	8	228	206	209
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	257	125	51	309	199	307	25	8	228	206	209
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	257	125	51	309	199	307	25	8	228	206	209
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	257	125	51	309	199	307	25	8	228	206	209

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.35	0.65	1.00	1.00	1.00	1.00	1.52	0.48	1.00	1.00	1.00
Final Sat.:	1600	2153	1047	1600	1600	1600	1600	2424	776	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.12	0.12	0.03	0.19	0.12	0.19	0.01	0.01	0.14	0.13	0.13
Crit Moves:	****			****			****			****		

Middle Harbor EIR
Future Year 2015 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.792
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns representing different volume categories and their values.

Saturation Flow Module table with 12 columns representing saturation flow values.

Capacity Analysis Module table with 12 columns representing capacity analysis values.

Middle Harbor EIR
Future Year 2015 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.690
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for different volume metrics and 12 rows for various adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 12 columns for saturation flow metrics and 4 rows for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics and 2 rows for Vol/Sat and Crit Moves.

Middle Harbor EIR
Future Year 2015 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.456
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns representing different volume components and 13 rows of adjustment factors.

Saturation Flow Module table with 13 columns and 4 rows of saturation flow data.

Capacity Analysis Module table with 13 columns and 2 rows of capacity analysis data.

Middle Harbor EIR
Future Year 2015 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.592
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.674
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 47 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	518	3	156	68	54	96	32	0	397	9	154
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	518	3	156	68	54	96	32	0	397	9	154
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	518	3	156	68	54	96	32	0	397	9	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	518	3	156	68	54	96	32	0	397	9	154
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	518	3	156	68	54	96	32	0	397	9	154

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.11	0.89	1.00	1.00	0.00	0.98	0.02	1.00
Final Sat.:	1600	3182	18	1600	1784	1416	1600	1600	0	1565	35	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.16	0.10	0.04	0.04	0.06	0.02	0.00	0.25	0.25	0.10
Crit Moves:	****			****			****			****		

Middle Harbor EIR
Future Year 2015 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.299
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2015 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.301
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

 Middle Harbor EIR
 Future Year 2015 With Mitigation
 No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.329
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	734	0	0	427	0	0	0	0	8	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	734	0	0	427	0	0	0	0	8	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	734	0	0	427	0	0	0	0	8	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	734	0	0	427	0	0	0	0	8	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	734	0	0	427	0	0	0	0	8	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****						****		

Middle Harbor EIR
Future Year 2015 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.647
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2015 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.678
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow related metrics like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis metrics like Vol/Sat, Crit Moves, etc.

Middle Harbor EIR
Future Year 2015 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.619
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.696
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 50 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	2	399	102	49	363	185	370	26	4	188	102	219
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	399	102	49	363	185	370	26	4	188	102	219
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	399	102	49	363	185	370	26	4	188	102	219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	399	102	49	363	185	370	26	4	188	102	219
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	399	102	49	363	185	370	26	4	188	102	219

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	1.00	1.00	1.00	1.73	0.27	1.00	1.00	1.00
Final Sat.:	1600	2549	651	1600	1600	1600	1600	2773	427	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.16	0.03	0.23	0.12	0.23	0.01	0.01	0.12	0.06	0.14
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.807
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 68 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	6	424	201	83	420	188	404	149	5	166	52	301
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	424	201	83	420	188	404	149	5	166	52	301
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	424	201	83	420	188	404	149	5	166	52	301
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	424	201	83	420	188	404	149	5	166	52	301
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	6	424	201	83	420	188	404	149	5	166	52	301

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.36	0.64	1.00	1.00	1.00	1.00	1.94	0.06	1.00	1.00	1.00
Final Sat.:	1600	2171	1029	1600	1600	1600	1600	3096	104	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.20	0.05	0.26	0.12	0.25	0.05	0.05	0.10	0.03	0.19
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.684
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 48 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	3	360	120	53	284	192	269	163	8	46	0	373
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	360	120	53	284	192	269	163	8	46	0	373
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	360	120	53	284	192	269	163	8	46	0	373
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	360	120	53	284	192	269	163	8	46	0	373
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	360	120	53	284	192	269	163	8	46	0	373

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.00	1.00	1.00	1.91	0.09	1.00	1.00	1.00
Final Sat.:	1600	2400	800	1600	1600	1600	1600	3050	150	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.15	0.15	0.03	0.18	0.12	0.17	0.05	0.05	0.03	0.00	0.23
Crit Moves:	****			****			****			****		

Middle Harbor EIR
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Preferred Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.515
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns and 13 rows including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module table with 13 columns and 4 rows including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 13 columns and 2 rows including Vol/Sat and Crit Moves.

Middle Harbor EIR
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 Preferred Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.579
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	480	6	96	258	64	90	41	0	330	8	138
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	480	6	96	258	64	90	41	0	330	8	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	480	6	96	258	64	90	41	0	330	8	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	480	6	96	258	64	90	41	0	330	8	138
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	480	6	96	258	64	90	41	0	330	8	138

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.60	0.40	1.00	1.00	0.00	0.98	0.02	1.00
Final Sat.:	1600	3160	40	1600	2564	636	1600	1600	0	1562	38	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.15	0.15	0.06	0.10	0.10	0.06	0.03	0.00	0.21	0.21	0.09
Crit Moves:	****			****			****			****		

Middle Harbor EIR
Future Year 2020 With Mitigation
Preferred Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.810
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 69 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns and 13 rows including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module table with 13 columns and 4 rows including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 13 columns and 2 rows including Vol/Sat and Crit Moves.

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.333
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	566	0	0	571	0	0	0	0	88	0	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	566	0	0	571	0	0	0	0	88	0	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	566	0	0	571	0	0	0	0	88	0	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	566	0	0	571	0	0	0	0	88	0	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	566	0	0	571	0	0	0	0	88	0	78

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.06	0.00	0.05
Crit Moves:	****			****						****		

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.325
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	685	0	0	688	0	0	0	0	16	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	685	0	0	688	0	0	0	0	16	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	685	0	0	688	0	0	0	0	16	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	685	0	0	688	0	0	0	0	16	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	685	0	0	688	0	0	0	0	16	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****						****		

Middle Harbor EIR
Future Year 2020 With Mitigation
345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.403
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns for various adjustment factors like Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns for Vol/Sat and Crit Moves.

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 Preferred Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.674
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 47 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	113	250	1	6	562	285	485	0	53	19	1	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	250	1	6	562	285	485	0	53	19	1	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	113	250	1	6	562	285	485	0	53	19	1	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	250	1	6	562	285	485	0	53	19	1	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	113	250	1	6	562	285	485	0	53	19	1	37

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.02	1.98	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3187	13	34	3166	1600	1600	0	1600	1520	80	1600

Capacity Analysis Module:

Vol/Sat:	0.07	0.08	0.08	0.00	0.18	0.18	0.30	0.00	0.03	0.01	0.01	0.02
Crit Moves:	****			****			****			****		

Middle Harbor EIR
Future Year 2020 With Mitigation
Preferred Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.596
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
Preferred Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.581
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.686
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 48 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	2	400	101	47	393	194	319	24	5	156	69	223
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	400	101	47	393	194	319	24	5	156	69	223
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	400	101	47	393	194	319	24	5	156	69	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	400	101	47	393	194	319	24	5	156	69	223
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	400	101	47	393	194	319	24	5	156	69	223

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.00	1.00	1.00	1.66	0.34	1.00	1.00	1.00
Final Sat.:	1600	2555	645	1600	1600	1600	1600	2648	552	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.16	0.03	0.25	0.12	0.20	0.01	0.01	0.10	0.04	0.14
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.774
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 61 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	5	440	186	84	434	170	359	124	4	160	34	281
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	440	186	84	434	170	359	124	4	160	34	281
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	440	186	84	434	170	359	124	4	160	34	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	440	186	84	434	170	359	124	4	160	34	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	440	186	84	434	170	359	124	4	160	34	281

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.41	0.59	1.00	1.00	1.00	1.00	1.94	0.06	1.00	1.00	1.00
Final Sat.:	1600	2249	951	1600	1600	1600	1600	3100	100	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.20	0.05	0.27	0.11	0.22	0.04	0.04	0.10	0.02	0.18
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.690
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 49 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	4	392	111	53	288	169	270	141	8	48	0	369
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	392	111	53	288	169	270	141	8	48	0	369
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	392	111	53	288	169	270	141	8	48	0	369
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	392	111	53	288	169	270	141	8	48	0	369
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	4	392	111	53	288	169	270	141	8	48	0	369

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	1.00	1.00	1.00	1.00	1.89	0.11	1.00	1.00	1.00
Final Sat.:	1600	2494	706	1600	1600	1600	1600	3028	172	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.16	0.03	0.18	0.11	0.17	0.05	0.05	0.03	0.00	0.23
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.506
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	366	2	28	180	156	122	60	0	292	24	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	366	2	28	180	156	122	60	0	292	24	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	366	2	28	180	156	122	60	0	292	24	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	366	2	28	180	156	122	60	0	292	24	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	366	2	28	180	156	122	60	0	292	24	127

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.07	0.93	1.00	1.00	0.00	0.92	0.08	1.00
Final Sat.:	1600	3183	17	1600	1714	1486	1600	1600	0	1478	122	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.12	0.02	0.11	0.10	0.08	0.04	0.00	0.18	0.20	0.08
Crit Moves:			****	****			****			****		

Middle Harbor EIR
 Future Year 2020 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.572
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	471	6	93	288	58	81	33	0	336	7	131
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	471	6	93	288	58	81	33	0	336	7	131
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	471	6	93	288	58	81	33	0	336	7	131
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	471	6	93	288	58	81	33	0	336	7	131
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	471	6	93	288	58	81	33	0	336	7	131

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.97	0.03	1.00	1.66	0.34	1.00	1.00	0.00	0.98	0.02	1.00
Final Sat.:	1600	3160	40	1600	2664	536	1600	1600	0	1567	33	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.15	0.15	0.06	0.11	0.11	0.05	0.02	0.00	0.21	0.21	0.08
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.791
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	545	3	201	146	142	232	96	0	377	22	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	545	3	201	146	142	232	96	0	377	22	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	545	3	201	146	142	232	96	0	377	22	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	545	3	201	146	142	232	96	0	377	22	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	545	3	201	146	142	232	96	0	377	22	130

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.01	0.99	1.00	1.00	0.00	0.94	0.06	1.00
Final Sat.:	1600	3182	18	1600	1622	1578	1600	1600	0	1512	88	1600

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.17	0.17	0.13	0.09	0.09	0.15	0.06	0.00	0.24	0.25	0.08
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.322
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	563	0	0	523	0	0	0	0	74	0	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	563	0	0	523	0	0	0	0	74	0	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	563	0	0	523	0	0	0	0	74	0	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	563	0	0	523	0	0	0	0	74	0	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	563	0	0	523	0	0	0	0	74	0	71

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.05	0.00	0.04
Crit Moves:	****			****						****		

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.317
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R			
Control:	Permitted			Permitted			Permitted			Permitted					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	0	665	0	0	649	0	0	0	0	14	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	665	0	0	649	0	0	0	0	14	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	665	0	0	649	0	0	0	0	14	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	665	0	0	649	0	0	0	0	14	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	665	0	0	649	0	0	0	0	14	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.391
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	880	0	0	581	0	0	0	0	26	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	880	0	0	581	0	0	0	0	26	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	880	0	0	581	0	0	0	0	26	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	880	0	0	581	0	0	0	0	26	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	880	0	0	581	0	0	0	0	26	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.28	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Crit Moves:	****			****						****		

 Middle Harbor EIR
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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.653
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 45 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	106	253	1	6	518	298	444	0	52	19	1	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	253	1	6	518	298	444	0	52	19	1	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	253	1	6	518	298	444	0	52	19	1	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	253	1	6	518	298	444	0	52	19	1	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	106	253	1	6	518	298	444	0	52	19	1	37

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.02	1.98	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3187	13	37	3163	1600	1600	0	1600	1520	80	1600

Capacity Analysis Module:

Vol/Sat:	0.07	0.08	0.08	0.00	0.16	0.19	0.28	0.00	0.03	0.01	0.01	0.02
Crit Moves:	****					****	****					****

 Middle Harbor EIR
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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.559
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	68	267	1	5	311	200	437	0	86	7	5	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	267	1	5	311	200	437	0	86	7	5	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	267	1	5	311	200	437	0	86	7	5	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	267	1	5	311	200	437	0	86	7	5	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	68	267	1	5	311	200	437	0	86	7	5	30

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.03	1.97	1.00	1.00	0.00	1.00	0.58	0.42	1.00
Final Sat.:	1600	3188	12	51	3149	1600	1600	0	1600	933	667	1600

Capacity Analysis Module:

Vol/Sat:	0.04	0.08	0.08	0.00	0.10	0.13	0.27	0.00	0.05	0.00	0.01	0.02
Crit Moves:	****					****	****					****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.564
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	96	346	3	4	424	171	378	0	112	37	2	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	96	346	3	4	424	171	378	0	112	37	2	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	346	3	4	424	171	378	0	112	37	2	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	346	3	4	424	171	378	0	112	37	2	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	96	346	3	4	424	171	378	0	112	37	2	54

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	0.02	1.98	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3172	28	30	3170	1600	1600	0	1600	1518	82	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.11	0.11	0.00	0.13	0.11	0.24	0.00	0.07	0.02	0.02	0.03
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.723
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.812
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 69 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.687
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.456

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 31 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns and 13 rows including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module table with 13 columns and 4 rows including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 13 columns and 2 rows including Vol/Sat and Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.576
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow related metrics like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.792
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns representing different volume components and their values.

Saturation Flow Module table with 13 columns representing saturation flow values and adjustments.

Capacity Analysis Module table with 13 columns representing capacity analysis values.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.368
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.331
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.384
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.691
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.591
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.592
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.749
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.856
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 82 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.739
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns representing different traffic flow metrics and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.521
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: A

Table with columns: Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Lanes.

Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol.

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Vol/Sat, Crit Moves

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.629
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns representing different volume and adjustment factors.

Saturation Flow Module table with 13 columns representing saturation flow and adjustment factors.

Capacity Analysis Module table with 13 columns representing capacity and critical moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.755
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 58 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

 Middle Harbor EIR
 Future Year 2020 With Mitigation
 No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.351
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	588	0	0	654	0	0	0	0	39	0	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	588	0	0	654	0	0	0	0	39	0	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	588	0	0	654	0	0	0	0	39	0	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	588	0	0	654	0	0	0	0	39	0	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	588	0	0	654	0	0	0	0	39	0	74

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.02	0.00	0.05
Crit Moves:	****			****								****

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.365
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns for Vol/Sat and Crit Moves.

Middle Harbor EIR
 Future Year 2020 With Mitigation
 No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.373
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	846	0	0	587	0	0	0	0	13	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	846	0	0	587	0	0	0	0	13	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	846	0	0	587	0	0	0	0	13	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	846	0	0	587	0	0	0	0	13	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	846	0	0	587	0	0	0	0	13	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.26	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****			****			****		

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.712
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.808
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
Future Year 2020 With Mitigation
No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.685
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

 Middle Harbor EIR
 Future Year 2030 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.766
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 60 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	1	421	162	99	438	243	369	88	4	186	101	257
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	421	162	99	438	243	369	88	4	186	101	257
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	421	162	99	438	243	369	88	4	186	101	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	421	162	99	438	243	369	88	4	186	101	257
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	421	162	99	438	243	369	88	4	186	101	257

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.44	0.56	1.00	1.00	1.00	1.00	1.91	0.09	1.00	1.00	1.00
Final Sat.:	1600	2311	889	1600	1600	1600	1600	3061	139	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.18	0.06	0.27	0.15	0.23	0.03	0.03	0.12	0.06	0.16
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2030 With GDB Project
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.891
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 96 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	6	514	221	140	482	199	452	170	5	222	80	306
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	514	221	140	482	199	452	170	5	222	80	306
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	514	221	140	482	199	452	170	5	222	80	306
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	514	221	140	482	199	452	170	5	222	80	306
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	6	514	221	140	482	199	452	170	5	222	80	306

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	1.00	1.00	1.00	1.94	0.06	1.00	1.00	1.00
Final Sat.:	1600	2238	962	1600	1600	1600	1600	3109	91	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.23	0.09	0.30	0.12	0.28	0.05	0.05	0.14	0.05	0.19
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2030 With GDB Project
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.760

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 59 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	4	384	137	53	324	211	327	208	9	48	0	401
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	384	137	53	324	211	327	208	9	48	0	401
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	384	137	53	324	211	327	208	9	48	0	401
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	384	137	53	324	211	327	208	9	48	0	401
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	4	384	137	53	324	211	327	208	9	48	0	401

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.47	0.53	1.00	1.00	1.00	1.00	1.92	0.08	1.00	1.00	1.00
Final Sat.:	1600	2359	841	1600	1600	1600	1600	3067	133	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.16	0.03	0.20	0.13	0.20	0.07	0.07	0.03	0.00	0.25
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2030 With Mitigation
 345 Acre (Preferred Project)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.566

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	428	2	42	212	218	145	99	1	312	32	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	428	2	42	212	218	145	99	1	312	32	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	428	2	42	212	218	145	99	1	312	32	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	428	2	42	212	218	145	99	1	312	32	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	428	2	42	212	218	145	99	1	312	32	124

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.00	1.00	1.00	0.99	0.01	0.91	0.09	1.00
Final Sat.:	1600	3185	15	1600	1600	1600	1600	1584	16	1451	149	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.13	0.13	0.03	0.13	0.14	0.09	0.06	0.06	0.20	0.21	0.08
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.666
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 46 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	534	6	92	303	66	99	54	0	430	14	146
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	534	6	92	303	66	99	54	0	430	14	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	534	6	92	303	66	99	54	0	430	14	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	534	6	92	303	66	99	54	0	430	14	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	534	6	92	303	66	99	54	0	430	14	146

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.64	0.36	1.00	1.00	0.00	0.97	0.03	1.00
Final Sat.:	1600	3164	36	1600	2628	572	1600	1600	0	1550	50	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.17	0.17	0.06	0.12	0.12	0.06	0.03	0.00	0.27	0.28	0.09
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.869
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 87 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	590	3	202	172	199	302	137	0	400	30	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	590	3	202	172	199	302	137	0	400	30	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	590	3	202	172	199	302	137	0	400	30	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	590	3	202	172	199	302	137	0	400	30	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	590	3	202	172	199	302	137	0	400	30	140

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.00	1.00	1.00	1.00	0.00	0.93	0.07	1.00
Final Sat.:	1600	3184	16	1600	1600	1600	1600	1600	0	1488	112	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.19	0.19	0.13	0.11	0.12	0.19	0.09	0.00	0.25	0.27	0.09
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.398

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	643	0	0	726	0	0	0	0	114	0	95
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	643	0	0	726	0	0	0	0	114	0	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	643	0	0	726	0	0	0	0	114	0	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	643	0	0	726	0	0	0	0	114	0	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	643	0	0	726	0	0	0	0	114	0	95

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.07	0.00	0.06
Crit Moves:	****			****						****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.372
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Permitted			Permitted			Permitted					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	2	0	0	0	0	2	0	0	0	0	0	0	1

Volume Module:

Base Vol:	0	745	0	0	822	0	0	0	0	24	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	745	0	0	822	0	0	0	0	24	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	745	0	0	822	0	0	0	0	24	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	745	0	0	822	0	0	0	0	24	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	745	0	0	822	0	0	0	0	24	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Crit Moves:	****			****						****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.439
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 30 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	996	0	0	741	0	0	0	0	44	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	996	0	0	741	0	0	0	0	44	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	996	0	0	741	0	0	0	0	44	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	996	0	0	741	0	0	0	0	44	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	996	0	0	741	0	0	0	0	44	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.31	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.748
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	125	308	1	6	700	253	521	0	68	19	1	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	308	1	6	700	253	521	0	68	19	1	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	308	1	6	700	253	521	0	68	19	1	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	308	1	6	700	253	521	0	68	19	1	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	125	308	1	6	700	253	521	0	68	19	1	37

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.02	1.98	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3190	10	27	3173	1600	1600	0	1600	1520	80	1600

Capacity Analysis Module:

Vol/Sat:	0.08	0.10	0.10	0.00	0.22	0.16	0.33	0.00	0.04	0.01	0.01	0.02
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.667
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	98	291	1	5	480	174	536	0	101	7	5	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	291	1	5	480	174	536	0	101	7	5	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	98	291	1	5	480	174	536	0	101	7	5	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	291	1	5	480	174	536	0	101	7	5	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	98	291	1	5	480	174	536	0	101	7	5	30

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.02	1.98	1.00	1.00	0.00	1.00	0.58	0.42	1.00
Final Sat.:	1600	3189	11	33	3167	1600	1600	0	1600	933	667	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.09	0.09	0.00	0.15	0.11	0.34	0.00	0.06	0.00	0.01	0.02
Crit Moves:	****			****			****					****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	97	383	3	4	567	163	461	0	135	37	2	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	383	3	4	567	163	461	0	135	37	2	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	383	3	4	567	163	461	0	135	37	2	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	383	3	4	567	163	461	0	135	37	2	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	97	383	3	4	567	163	461	0	135	37	2	54

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	0.01	1.99	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3175	25	22	3178	1600	1600	0	1600	1518	82	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.12	0.12	0.00	0.18	0.10	0.29	0.00	0.08	0.02	0.02	0.03
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.760
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 59 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	1	456	127	94	447	229	352	52	4	178	74	256
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	456	127	94	447	229	352	52	4	178	74	256
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	456	127	94	447	229	352	52	4	178	74	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	456	127	94	447	229	352	52	4	178	74	256
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	456	127	94	447	229	352	52	4	178	74	256

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	1.00	1.00	1.00	1.00	1.86	0.14	1.00	1.00	1.00
Final Sat.:	1600	2503	697	1600	1600	1600	1600	2971	229	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.18	0.06	0.28	0.14	0.22	0.02	0.02	0.11	0.05	0.16
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	93	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	0	1	0	1	1	0	1

Volume Module:												
Base Vol:	6	519	216	136	450	178	459	163	5	251	103	294
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	519	216	136	450	178	459	163	5	251	103	294
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	519	216	136	450	178	459	163	5	251	103	294
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	519	216	136	450	178	459	163	5	251	103	294
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	6	519	216	136	450	178	459	163	5	251	103	294

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.41	0.59	1.00	1.00	1.00	1.00	1.94	0.06	1.00	1.00	1.00
Final Sat.:	1600	2260	940	1600	1600	1600	1600	3105	95	1600	1600	1600

Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.23	0.09	0.28	0.11	0.29	0.05	0.05	0.16	0.06	0.18
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.734
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 55 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	4	396	125	53	341	186	280	164	8	46	0	390
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	396	125	53	341	186	280	164	8	46	0	390
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	396	125	53	341	186	280	164	8	46	0	390
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	396	125	53	341	186	280	164	8	46	0	390
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	4	396	125	53	341	186	280	164	8	46	0	390

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.52	0.48	1.00	1.00	1.00	1.00	1.91	0.09	1.00	1.00	1.00
Final Sat.:	1600	2432	768	1600	1600	1600	1600	3051	149	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.16	0.03	0.21	0.12	0.17	0.05	0.05	0.03	0.00	0.24
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.557
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	0	429	2	40	224	185	129	82	0	319	27	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	429	2	40	224	185	129	82	0	319	27	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	429	2	40	224	185	129	82	0	319	27	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	429	2	40	224	185	129	82	0	319	27	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	429	2	40	224	185	129	82	0	319	27	125

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.10	0.90	1.00	1.00	0.00	0.92	0.08	1.00
Final Sat.:	1600	3185	15	1600	1753	1447	1600	1600	0	1475	125	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.13	0.13	0.03	0.13	0.13	0.08	0.05	0.00	0.20	0.22	0.08
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.664
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 46 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	538	6	90	305	53	89	43	0	440	12	147
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	538	6	90	305	53	89	43	0	440	12	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	538	6	90	305	53	89	43	0	440	12	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	538	6	90	305	53	89	43	0	440	12	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	538	6	90	305	53	89	43	0	440	12	147

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.70	0.30	1.00	1.00	0.00	0.97	0.03	1.00
Final Sat.:	1600	3165	35	1600	2726	474	1600	1600	0	1558	42	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.17	0.17	0.06	0.11	0.11	0.06	0.03	0.00	0.28	0.28	0.09
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.864
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 85 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	569	3	238	166	172	268	111	0	403	27	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	569	3	238	166	172	268	111	0	403	27	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	569	3	238	166	172	268	111	0	403	27	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	569	3	238	166	172	268	111	0	403	27	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	569	3	238	166	172	268	111	0	403	27	129

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.00	1.00	1.00	1.00	0.00	0.94	0.06	1.00
Final Sat.:	1600	3183	17	1600	1600	1600	1600	1600	0	1500	100	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.18	0.15	0.10	0.11	0.17	0.07	0.00	0.25	0.27	0.08
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.362
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	632	0	0	649	0	0	0	0	95	0	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	632	0	0	649	0	0	0	0	95	0	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	632	0	0	649	0	0	0	0	95	0	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	632	0	0	649	0	0	0	0	95	0	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	632	0	0	649	0	0	0	0	95	0	78

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.06	0.00	0.05
Crit Moves:	****			****						****		

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.361
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	741	0	0	791	0	0	0	0	22	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	741	0	0	791	0	0	0	0	22	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	741	0	0	791	0	0	0	0	22	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	741	0	0	791	0	0	0	0	22	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	741	0	0	791	0	0	0	0	22	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2030 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.417
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	937	0	0	705	0	0	0	0	39	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	937	0	0	705	0	0	0	0	39	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	937	0	0	705	0	0	0	0	39	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	937	0	0	705	0	0	0	0	39	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	937	0	0	705	0	0	0	0	39	0	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.29	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Crit Moves:	****			****						****		

 Middle Harbor EIR
 Future Year 2030 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.691
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 49 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	108	284	1	6	629	270	483	0	59	19	1	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	284	1	6	629	270	483	0	59	19	1	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	284	1	6	629	270	483	0	59	19	1	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	284	1	6	629	270	483	0	59	19	1	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	108	284	1	6	629	270	483	0	59	19	1	37

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.02	1.98	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3189	11	30	3170	1600	1600	0	1600	1520	80	1600

Capacity Analysis Module:

Vol/Sat:	0.07	0.09	0.09	0.00	0.20	0.17	0.30	0.00	0.04	0.01	0.01	0.02
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
 Future Year 2030 With Mitigation
 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.644
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 44 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	83	284	1	5	441	188	535	0	102	7	5	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	83	284	1	5	441	188	535	0	102	7	5	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	284	1	5	441	188	535	0	102	7	5	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	284	1	5	441	188	535	0	102	7	5	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	83	284	1	5	441	188	535	0	102	7	5	30

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	0.02	1.98	1.00	1.00	0.00	1.00	0.58	0.42	1.00
Final Sat.:	1600	3189	11	36	3164	1600	1600	0	1600	933	667	1600

Capacity Analysis Module:

Vol/Sat:	0.05	0.09	0.09	0.00	0.14	0.12	0.33	0.00	0.06	0.00	0.01	0.02
Crit Moves:	****			****			****			****		

 Middle Harbor EIR
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 315 Acre (Reduced Fill)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.615
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	97	336	3	4	537	163	403	0	118	37	2	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	336	3	4	537	163	403	0	118	37	2	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	336	3	4	537	163	403	0	118	37	2	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	336	3	4	537	163	403	0	118	37	2	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	97	336	3	4	537	163	403	0	118	37	2	54

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	0.01	1.99	1.00	1.00	0.00	1.00	0.95	0.05	1.00
Final Sat.:	1600	3172	28	24	3176	1600	1600	0	1600	1518	82	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.11	0.11	0.00	0.17	0.10	0.25	0.00	0.07	0.02	0.02	0.03
Crit Moves:	****			****			****			****		

Middle Harbor EIR
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NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.750
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module:

Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module:

Table with 12 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.885
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 93 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.730
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.556
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module: Table with 12 columns for saturation flow. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat and Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.665
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns representing different volume components and 13 rows of adjustment factors.

Saturation Flow Module table with 13 columns and 5 rows of saturation flow data.

Capacity Analysis Module table with 13 columns and 3 rows of capacity analysis data.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.852
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 81 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.384
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.363
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
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NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.416
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
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NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.740
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 56 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.650
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

Middle Harbor EIR
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NEPA

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.636
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

 Middle Harbor EIR
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 No Project

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.825
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx
 Optimal Cycle: 73 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	3	510	142	106	471	273	358	51	8	284	195	328
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	510	142	106	471	273	358	51	8	284	195	328
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	510	142	106	471	273	358	51	8	284	195	328
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	510	142	106	471	273	358	51	8	284	195	328
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	510	142	106	471	273	358	51	8	284	195	328

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	1.00	1.00	1.00	1.00	1.73	0.27	1.00	1.00	1.00
Final Sat.:	1600	2503	697	1600	1600	1600	1600	2766	434	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.20	0.07	0.29	0.17	0.22	0.02	0.02	0.18	0.12	0.21
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.925
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 114 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	7	552	275	148	561	265	348	173	6	215	91	411
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	552	275	148	561	265	348	173	6	215	91	411
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	552	275	148	561	265	348	173	6	215	91	411
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	552	275	148	561	265	348	173	6	215	91	411
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	552	275	148	561	265	348	173	6	215	91	411

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.33	0.67	1.00	1.00	1.00	1.00	1.93	0.07	1.00	1.00	1.00
Final Sat.:	1600	2136	1064	1600	1600	1600	1600	3093	107	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.26	0.26	0.09	0.35	0.17	0.22	0.06	0.06	0.13	0.06	0.26
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Pico Ave / Pier G St & Harbor Plaza

Cycle (sec): 100 Critical Vol./Cap.(X): 0.842

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 77 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	6	461	104	56	379	273	361	178	9	62	26	441
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	461	104	56	379	273	361	178	9	62	26	441
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	461	104	56	379	273	361	178	9	62	26	441
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	461	104	56	379	273	361	178	9	62	26	441
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	6	461	104	56	379	273	361	178	9	62	26	441

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.00	1.00	1.00	1.90	0.10	1.00	1.00	1.00
Final Sat.:	1600	2611	589	1600	1600	1600	1600	3046	154	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.18	0.04	0.24	0.17	0.23	0.06	0.06	0.04	0.02	0.28
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.594
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	0	0	1	0

Volume Module:

Base Vol:	0	577	2	37	261	91	64	43	0	386	14	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	577	2	37	261	91	64	43	0	386	14	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	577	2	37	261	91	64	43	0	386	14	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	577	2	37	261	91	64	43	0	386	14	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	577	2	37	261	91	64	43	0	386	14	136

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.48	0.52	1.00	1.00	0.00	0.96	0.04	1.00
Final Sat.:	1600	3189	11	1600	2373	827	1600	1600	0	1544	56	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.18	0.02	0.11	0.11	0.04	0.03	0.00	0.24	0.25	0.09
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.725
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Pico Ave & Pier E St / Ocean Blvd EB On-Off Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.864
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 85 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 12 columns for different volume categories and 12 rows for various adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 12 columns for saturation flow and 4 rows for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis and 2 rows for Vol/Sat and Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.405
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	682	0	0	800	0	0	0	0	47	0	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	682	0	0	800	0	0	0	0	47	0	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	682	0	0	800	0	0	0	0	47	0	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	682	0	0	800	0	0	0	0	47	0	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	682	0	0	800	0	0	0	0	47	0	88

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.03	0.00	0.06
Crit Moves:	****			****								

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.393
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	800	0	0	939	0	0	0	0	7	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	800	0	0	939	0	0	0	0	7	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	800	0	0	939	0	0	0	0	7	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	800	0	0	939	0	0	0	0	7	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	800	0	0	939	0	0	0	0	7	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.25	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****						****		

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Pico Ave & Ocean Blvd WB Off-Ramp (Future Condition)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.412
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	2	0	0	0	1	0	0

Volume Module:

Base Vol:	0	959	0	0	741	0	0	0	0	19	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	959	0	0	741	0	0	0	0	19	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	959	0	0	741	0	0	0	0	19	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	959	0	0	741	0	0	0	0	19	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	959	0	0	741	0	0	0	0	19	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	0	0	3200	0	0	0	0	1600	0	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.30	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Crit Moves:	****			****						****		

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.767
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.825
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves, etc.

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ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Pico Avenue, Pier D Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.778
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	98	260	3	4	584	159	631	0	156	44	2	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	260	3	4	584	159	631	0	156	44	2	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	98	260	3	4	584	159	631	0	156	44	2	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	260	3	4	584	159	631	0	156	44	2	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	98	260	3	4	584	159	631	0	156	44	2	61

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	0.01	1.99	1.00	1.00	0.00	1.00	0.96	0.04	1.00
Final Sat.:	1600	3163	37	22	3178	1600	1600	0	1600	1530	70	1600

Capacity Analysis Module:

Vol/Sat:	0.06	0.08	0.08	0.00	0.18	0.10	0.39	0.00	0.10	0.03	0.03	0.04
Crit Moves:	****			****			****			****		

Appendix I: Highway Segment Analysis Worksheets

345-ACRE ALTERNATIVE
HIGHWAY LINK VOLUMES
AM PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030		
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	345-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	345-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	345-Acre Alternative	
1. NB I-405 Freeway n/o I-710 Freeway	15,657	1.243	12,596	1.285	16,185	1.288	16,223	1.324	16,682	1.327	16,720	1.401	17,644	1.400	17,632	
SB I-405 Freeway n/o I-710 Freeway	11,875	0.943	12,593	0.989	12,206	0.970	12,219	1.006	12,673	1.005	12,660	1.053	13,260	1.049	13,210	
2. NB I-405 Freeway s/o I-710 Freeway	15,099	1.199	12,593	1.169	14,721	1.242	15,640	1.278	16,098	1.278	16,098	1.324	16,668	1.332	16,769	
SB I-405 Freeway s/o I-710 Freeway	11,708	0.929	12,603	0.952	12,002	0.957	12,065	0.992	12,486	0.994	12,521	1.043	13,147	1.049	13,223	
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,171	0.980	6,296	1.015	6,390	1.015	6,390	1.052	6,626	1.051	6,619	1.101	6,934	1.105	6,959	
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,804	1.080	6,300	1.105	6,960	1.114	7,017	1.160	7,306	1.157	7,287	1.189	7,493	1.194	7,525	
4. NB I-110 Freeway n/o C-Street	6,953	0.828	8,397	0.850	7,141	0.851	7,149	0.889	7,466	0.892	7,491	0.916	7,690	0.925	7,766	
SB I-110 Freeway n/o C-Street	4,930	0.587	8,399	0.605	5,078	0.603	5,061	0.628	5,272	0.631	5,297	0.658	5,527	0.657	5,519	
5. NB SR-47 Freeway at Heim Bridge	1,103	0.175	6,305	0.176	1,113	0.175	1,106	0.192	1,212	0.190	1,199	0.202	1,273	0.196	1,236	
SB SR-47 Freeway at Heim Bridge	1,466	0.233	6,292	0.232	1,461	0.231	1,455	0.258	1,623	0.257	1,617	0.255	1,605	0.245	1,542	
6. EB SR-91 Freeway e/o I-710 Freeway	10,831	0.860	12,594	0.888	11,187	0.885	11,149	0.918	11,564	0.919	11,577	0.959	12,078	0.976	12,292	
WB SR-91 Freeway e/o I-710 Freeway	15,143	1.202	12,598	1.237	15,590	1.242	15,653	1.257	15,830	1.266	15,943	1.305	16,445	1.309	16,496	
7. EB SR-91 Freeway w/o I-710 Freeway	10,163	0.691	14,708	0.713	10,487	0.712	10,472	0.738	10,859	0.738	10,859	0.786	11,563	0.788	11,592	
WB SR-91 Freeway w/o I-710 Freeway	14,283	0.972	14,894	0.989	14,678	1.004	14,751	1.029	15,126	1.032	15,170	1.091	16,036	1.088	15,992	

PCE = Passenger Car Equivalent

345-ACRE ALTERNATIVE
HIGHWAY LINK VOLUMES
AND PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030		
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	345-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	345-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	345-Acre Alternative	
1. NB I-405 Freeway n/o I-710 Freeway	14,334	1.138	12,596	1.173	14,770	1.172	14,758	1.214	15,286	1.211	15,248	1.313	16,536	1.309	16,485	
SB I-405 Freeway n/o I-710 Freeway	13,379	1.062	12,598	1.088	13,831	1.087	13,818	1.129	14,218	1.121	14,117	1.203	15,160	1.217	15,336	
2. NB I-405 Freeway s/o I-710 Freeway	14,116	1.121	12,593	1.157	14,575	1.161	14,625	1.195	15,045	1.188	14,956	1.232	15,513	1.209	15,224	
SB I-405 Freeway s/o I-710 Freeway	12,904	1.024	12,601	1.080	13,353	1.070	13,479	1.082	13,766	1.088	13,715	1.161	14,634	1.160	14,621	
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,493	1.031	6,298	1.065	6,705	1.072	6,749	1.100	6,930	1.107	6,975	1.141	7,186	1.186	7,470	
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,753	1.072	6,300	1.089	6,926	1.104	6,957	1.145	7,212	1.152	7,256	1.200	7,560	1.215	7,654	
4. NB I-110 Freeway n/o C-Street	6,361	0.757	8,403	0.771	6,478	0.772	6,486	0.808	6,793	0.807	6,785	0.857	7,203	0.856	7,194	
SB I-110 Freeway n/o C-Street	5,939	0.667	8,394	0.683	5,729	0.687	5,763	0.714	5,991	0.714	5,991	0.746	6,265	0.741	6,223	
5. NB SR-47 Freeway at Heim Bridge	1,930	0.291	6,289	0.284	1,787	0.287	1,806	0.317	1,992	0.313	1,967	0.326	2,047	0.336	2,110	
SB SR-47 Freeway at Heim Bridge	1,515	0.241	6,288	0.240	1,510	0.237	1,491	0.253	1,593	0.255	1,605	0.257	1,619	0.267	1,682	
6. EB SR-91 Freeway e/o I-710 Freeway	12,693	1.008	12,592	1.050	13,222	1.052	13,247	1.073	13,509	1.066	13,421	1.154	14,533	1.084	13,652	
WB SR-91 Freeway e/o I-710 Freeway	13,662	1.084	12,603	1.105	13,927	1.104	13,915	1.146	14,438	1.174	14,791	1.294	16,305	1.328	16,734	
7. EB SR-91 Freeway w/o I-710 Freeway	12,452	0.847	14,701	0.889	13,065	0.888	13,050	0.907	13,335	0.899	13,217	0.986	14,492	0.966	14,051	
WB SR-91 Freeway w/o I-710 Freeway	12,516	0.852	14,691	0.875	12,862	0.882	12,964	0.897	13,174	0.893	13,116	1.035	15,204	0.989	14,616	

PCE = Passenger Car Equivalent

345-ACRE ALTERNATIVE
HIGHWAY LINK VOLUMES
PM PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030		
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	345-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	345-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	345-Acre Alternative	
1. NB I-405 Freeway n/o I-710 Freeway	14,098	1.119	12,598	1.159	14,607	1.161	14,632	1.202	15,139	1.196	15,064	1.259	15,859	1.262	15,896	
SB I-405 Freeway n/o I-710 Freeway	15,387	1.221	12,602	1.254	15,807	1.258	15,858	1.315	16,575	1.307	16,474	1.369	17,254	1.364	17,191	
2. NB I-405 Freeway s/o I-710 Freeway	14,324	1.137	12,598	1.176	14,815	1.185	14,928	1.221	15,383	1.217	15,332	1.281	16,141	1.279	16,116	
SB I-405 Freeway s/o I-710 Freeway	14,780	1.173	12,600	1.202	15,145	1.212	15,271	1.248	15,721	1.252	15,771	1.315	16,565	1.306	16,451	
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,859	1.089	6,298	1.123	7,072	1.125	7,085	1.158	7,294	1.167	7,350	1.203	7,579	1.206	7,598	
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,873	1.091	6,299	1.117	7,037	1.120	7,065	1.163	7,326	1.170	7,371	1.215	7,651	1.224	7,707	
4. NB I-110 Freeway n/o C-Street	5,655	0.673	8,402	0.693	5,827	0.695	5,843	0.726	6,097	0.731	6,139	0.755	6,343	0.759	6,377	
SB I-110 Freeway n/o C-Street	6,618	0.788	8,398	0.822	6,906	0.820	6,889	0.837	7,033	0.839	7,050	0.886	7,441	0.886	7,441	
5. NB SR-47 Freeway at Heim Bridge	1,988	0.252	6,300	0.250	1,577	0.250	1,577	0.280	1,825	0.297	1,869	0.271	1,709	0.280	1,766	
SB SR-47 Freeway at Heim Bridge	942	0.150	6,283	0.149	937	0.146	919	0.160	1,004	0.159	998	0.171	1,073	0.169	1,061	
6. EB SR-91 Freeway e/o I-710 Freeway	14,676	1.165	12,597	1.207	15,209	1.181	14,882	1.211	15,253	1.236	15,567	1.342	16,903	1.320	16,625	
WB SR-91 Freeway e/o I-710 Freeway	13,309	1.056	12,603	1.082	13,766	1.096	13,816	1.125	14,176	1.150	14,491	1.180	14,871	1.202	15,148	
7. EB SR-91 Freeway w/o I-710 Freeway	14,521	0.988	14,698	1.031	15,155	1.019	14,979	1.038	15,261	1.053	15,481	1.124	16,515	1.128	16,574	
WB SR-91 Freeway w/o I-710 Freeway	11,958	0.814	14,690	0.848	12,464	0.846	12,435	0.862	12,669	0.874	12,845	0.916	13,459	0.914	13,429	

PCE = Passenger Car Equivalent

315-ACRE ALTERNATIVE
HIGHWAY LINK VOLUMES
AM PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030		
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	315-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	315-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	315-Acre Alternative	
1. NB I-405 Freeway n/o I-710 Freeway	15,657	1.243	12,596	1.285	16,185	1.282	16,147	1.324	16,682	1.331	16,770	1.401	17,644	1.403	17,669	
SB I-405 Freeway n/o I-710 Freeway	11,875	0.943	12,593	0.989	12,206	0.973	12,257	1.006	12,673	1.006	12,673	1.053	13,260	1.050	13,222	
2. NB I-405 Freeway s/o I-710 Freeway	15,099	1.199	12,593	1.169	14,721	1.242	15,640	1.278	16,098	1.277	16,085	1.324	16,668	1.327	16,706	
SB I-405 Freeway s/o I-710 Freeway	11,708	0.929	12,603	0.952	12,002	0.958	12,078	0.992	12,486	0.991	12,483	1.043	13,147	1.046	13,185	
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,171	0.980	6,296	1.015	6,390	1.014	6,384	1.052	6,626	1.052	6,626	1.101	6,934	1.103	6,947	
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,804	1.080	6,300	1.105	6,960	1.116	7,030	1.160	7,306	1.165	7,338	1.189	7,493	1.195	7,531	
4. NB I-110 Freeway n/o C-Street	6,953	0.828	8,397	0.850	7,141	0.851	7,149	0.889	7,466	0.887	7,449	0.916	7,690	0.928	7,791	
SB I-110 Freeway n/o C-Street	4,930	0.587	8,399	0.605	5,078	0.603	5,061	0.628	5,272	0.631	5,297	0.658	5,527	0.662	5,561	
5. NB SR-47 Freeway at Heim Bridge	1,103	0.175	6,305	0.176	1,113	0.176	1,113	0.192	1,212	0.193	1,218	0.202	1,273	0.207	1,305	
SB SR-47 Freeway at Heim Bridge	1,466	0.233	6,292	0.232	1,461	0.234	1,474	0.258	1,623	0.258	1,623	0.255	1,605	0.251	1,580	
6. EB SR-91 Freeway e/o I-710 Freeway	10,831	0.860	12,594	0.888	11,187	0.891	11,225	0.918	11,564	0.919	11,577	0.959	12,078	0.965	12,153	
WB SR-91 Freeway e/o I-710 Freeway	15,143	1.202	12,598	1.237	15,590	1.246	15,703	1.257	15,830	1.260	15,867	1.305	16,445	1.303	16,420	
7. EB SR-91 Freeway w/o I-710 Freeway	10,163	0.691	14,708	0.713	10,487	0.712	10,472	0.738	10,859	0.740	10,888	0.786	11,563	0.787	11,578	
WB SR-91 Freeway w/o I-710 Freeway	14,283	0.972	14,894	0.999	14,678	1.009	14,825	1.029	15,126	1.033	15,185	1.091	16,036	1.089	16,007	

PCE = Passenger Car Equivalent

315-ACRE ALTERNATIVE
HIGHWAY LINK VOLUMES
AND PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030			
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	315-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	315-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	315-Acre Alternative	Volume/ Capacity Ratio	
1. NB I-405 Freeway n/o I-710 Freeway	14,334	1.138	12,596	1.173	14,770	1.169	14,720	1.214	15,286	1.211	15,248	1.313	16,536	1.313	16,536	1.328	16,731
SB I-405 Freeway n/o I-710 Freeway	13,379	1.062	12,598	1.088	13,831	1.087	13,818	1.129	14,218	1.119	14,092	1.203	15,160	1.214	15,298	1.244	15,686
2. NB I-405 Freeway s/o I-710 Freeway	14,116	1.121	12,593	1.157	14,575	1.160	14,613	1.195	15,045	1.183	14,893	1.232	15,513	1.227	15,450	1.288	16,225
SB I-405 Freeway s/o I-710 Freeway	12,904	1.024	12,601	1.080	13,353	1.066	13,429	1.092	13,766	1.089	13,728	1.161	14,634	1.168	14,722	1.199	15,108
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,493	1.031	6,298	1.065	6,705	1.075	6,788	1.100	6,930	1.110	6,993	1.141	7,186	1.179	7,426	1.207	7,604
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,753	1.072	6,300	1.089	6,926	1.103	6,951	1.145	7,212	1.153	7,262	1.200	7,560	1.218	7,673	1.267	7,981
4. NB I-110 Freeway n/o C-Street	6,361	0.757	8,403	0.771	6,478	0.773	6,495	0.808	6,793	0.808	6,793	0.857	7,203	0.860	7,228	0.902	7,583
SB I-110 Freeway n/o C-Street	5,939	0.667	8,394	0.683	5,729	0.689	5,780	0.714	5,991	0.714	5,991	0.746	6,265	0.757	6,357	0.791	6,638
5. NB SR-47 Freeway at Heim Bridge	1,930	0.291	6,289	0.284	1,787	0.285	1,793	0.317	1,992	0.315	1,979	0.326	2,047	0.336	2,110	0.328	2,063
SB SR-47 Freeway at Heim Bridge	1,515	0.241	6,288	0.240	1,510	0.238	1,498	0.253	1,593	0.258	1,624	0.257	1,619	0.269	1,694	0.282	1,775
6. EB SR-91 Freeway e/o I-710 Freeway	12,693	1.008	12,592	1.050	13,222	1.051	13,234	1.073	13,509	1.069	13,459	1.154	14,533	1.077	13,564	1.187	14,947
WB SR-91 Freeway e/o I-710 Freeway	13,662	1.084	12,603	1.105	13,927	1.103	13,902	1.146	14,438	1.172	14,766	1.294	16,305	1.306	16,456	1.371	17,276
7. EB SR-91 Freeway w/o I-710 Freeway	12,452	0.847	14,701	0.889	13,065	0.888	13,050	0.907	13,335	0.905	13,306	0.986	14,492	0.952	13,992	0.989	14,540
WB SR-91 Freeway w/o I-710 Freeway	12,516	0.852	14,691	0.875	12,862	0.883	12,979	0.897	13,174	0.893	13,116	1.035	15,204	0.988	14,514	1.059	15,551

PCE = Passenger Car Equivalent

315-ACRE ALTERNATIVE
HIGHWAY LINK VOLUMES
PM PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030		
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	315-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	315-Acre Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	315-Acre Alternative	
1. NB I-405 Freeway n/o I-710 Freeway	14,098	1.119	12,598	1.159	14,607	1.162	14,645	1.202	15,139	1.197	15,076	1.259	15,859	1.264	15,922	
SB I-405 Freeway n/o I-710 Freeway	15,387	1.221	12,602	1.254	15,807	1.257	15,845	1.315	16,575	1.305	16,449	1.369	17,254	1.369	17,254	
2. NB I-405 Freeway s/o I-710 Freeway	14,324	1.137	12,598	1.176	14,815	1.180	14,865	1.221	15,383	1.219	15,358	1.281	16,141	1.280	16,128	
SB I-405 Freeway s/o I-710 Freeway	14,780	1.173	12,600	1.202	15,145	1.210	15,246	1.248	15,721	1.249	15,734	1.315	16,565	1.324	16,678	
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,859	1.089	6,298	1.123	7,072	1.129	7,110	1.158	7,294	1.161	7,312	1.203	7,579	1.206	7,598	
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,873	1.091	6,299	1.117	7,037	1.122	7,068	1.163	7,326	1.170	7,371	1.215	7,651	1.218	7,670	
4. NB I-110 Freeway n/o C-Street	5,655	0.673	8,402	0.693	5,827	0.694	5,835	0.726	6,097	0.729	6,122	0.755	6,343	0.753	6,327	
SB I-110 Freeway n/o C-Street	6,618	0.788	8,398	0.822	6,906	0.818	6,872	0.837	7,033	0.843	7,084	0.886	7,441	0.881	7,399	
5. NB SR-47 Freeway at Heim Bridge	1,988	0.252	6,300	0.250	1,577	0.249	1,571	0.280	1,825	0.283	1,781	0.271	1,709	0.277	1,747	
SB SR-47 Freeway at Heim Bridge	942	0.150	6,283	0.149	937	0.148	931	0.160	1,004	0.163	1,023	0.171	1,073	0.175	1,098	
6. EB SR-91 Freeway e/o I-710 Freeway	14,676	1.165	12,597	1.207	15,209	1.179	14,857	1.211	15,253	1.257	15,832	1.342	16,903	1.318	16,600	
WB SR-91 Freeway e/o I-710 Freeway	13,309	1.056	12,603	1.092	13,766	1.097	13,829	1.125	14,176	1.135	14,302	1.180	14,871	1.196	15,073	
7. EB SR-91 Freeway w/o I-710 Freeway	14,521	0.988	14,698	1.031	15,155	1.016	14,935	1.038	15,261	1.061	15,599	1.124	16,515	1.127	16,559	
WB SR-91 Freeway w/o I-710 Freeway	11,958	0.814	14,690	0.848	12,464	0.845	12,420	0.862	12,669	0.868	12,757	0.916	13,459	0.913	13,415	

PCE = Passenger Car Equivalent

LANDSIDE IMPROVEMENTS ALTERNATIVE (NEPA BASELINE)
 HIGHWAY LINK VOLUMES
 AM PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030					
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	NEPA Baseline Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	NEPA Baseline Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	NEPA Baseline Alternative				
1. NB I-405 Freeway n/o I-710 Freeway	15,657	1,243	12,566	1,285	16,185	1,287	16,210	1,324	16,682	1,328	16,732	1,401	17,644	1,401	17,642	1,453	18,302	1,452	18,289
SB I-405 Freeway n/o I-710 Freeway	11,875	0,943	12,593	0,989	12,206	0,972	12,244	1,006	12,673	1,006	12,673	1,053	13,260	1,049	13,212	1,093	13,761	1,095	13,786
2. NB I-405 Freeway s/o I-710 Freeway	15,099	1,199	12,593	1,169	14,721	1,242	15,640	1,278	16,098	1,277	16,085	1,324	16,668	1,283	16,156	1,411	17,764	1,393	17,537
SB I-405 Freeway s/o I-710 Freeway	11,708	0,929	12,603	0,952	12,002	0,956	12,053	0,992	12,486	0,993	12,508	1,043	13,147	1,045	13,167	1,088	13,708	1,091	13,746
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,171	0,980	6,296	1,015	6,390	1,013	6,378	1,052	6,626	1,052	6,626	1,101	6,934	1,106	6,964	1,152	7,255	1,164	7,330
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,804	1,080	6,300	1,105	6,960	1,120	7,055	1,160	7,306	1,160	7,306	1,189	7,493	1,205	7,594	1,259	7,934	1,270	8,003
4. NB I-110 Freeway n/o C-Street	6,953	0,828	8,397	0,850	7,141	0,850	7,141	0,889	7,466	0,887	7,449	0,916	7,690	0,923	7,751	0,967	8,118	0,968	8,127
SB I-110 Freeway n/o C-Street	4,930	0,587	8,399	0,605	5,078	0,606	5,086	0,628	5,272	0,631	5,297	0,658	5,527	0,659	5,531	0,686	5,762	0,689	5,787
5. NB SR-47 Freeway at Heim Bridge	1,103	0,175	6,305	0,176	1,113	0,175	1,106	0,192	1,212	0,193	1,218	0,202	1,273	0,203	1,282	0,212	1,334	0,218	1,371
SB SR-47 Freeway at Heim Bridge	1,466	0,233	6,292	0,232	1,461	0,232	1,461	0,258	1,623	0,259	1,629	0,255	1,605	0,252	1,588	0,258	1,626	0,271	1,708
6. EB SR-91 Freeway e/o I-710 Freeway	10,831	0,860	12,594	0,888	11,187	0,888	11,187	0,918	11,564	0,919	11,577	0,959	12,078	0,963	12,123	1,004	12,643	1,004	12,643
WB SR-91 Freeway e/o I-710 Freeway	15,143	1,202	12,598	1,237	15,590	1,259	15,867	1,257	15,830	1,257	15,830	1,305	16,445	1,341	16,891	1,383	17,423	1,385	17,197
7. EB SR-91 Freeway w/o I-710 Freeway	10,163	0,691	14,708	0,713	10,487	0,713	10,487	0,738	10,859	0,741	10,903	0,786	11,563	0,785	11,543	0,811	11,935	0,808	11,890
WB SR-91 Freeway w/o I-710 Freeway	14,283	0,972	14,894	0,999	14,678	1,013	14,883	1,029	15,126	1,029	15,126	1,091	16,036	1,095	16,093	1,120	16,462	1,117	16,418

PCE = Passenger Car Equivalent

LANDSIDE IMPROVEMENTS ALTERNATIVE (NEPA BASELINE)
 HIGHWAY LINK VOLUMES
 AND PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030		
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	NEPA Baseline Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	NEPA Baseline Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	NEPA Baseline Alternative	
1. NB I-405 Freeway n/o I-710 Freeway	14,334	1.138	12,596	1.173	14,770	1.168	14,707	1.214	15,286	1.214	15,286	1.313	16,536	1.310	16,503	
SB I-405 Freeway n/o I-710 Freeway	13,379	1.062	12,598	1.098	13,831	1.098	13,831	1.129	14,218	1.130	14,230	1.203	15,160	1.218	15,348	
2. NB I-405 Freeway s/o I-710 Freeway	14,116	1.121	12,593	1.157	14,575	1.160	14,613	1.195	15,045	1.190	14,982	1.232	15,513	1.226	15,436	
SB I-405 Freeway s/o I-710 Freeway	12,904	1.024	12,601	1.080	13,353	1.068	13,454	1.092	13,766	1.096	13,816	1.161	14,634	1.168	14,713	
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,493	1.031	6,298	1.065	6,705	1.074	6,762	1.100	6,930	1.112	7,006	1.141	7,186	1.185	7,462	
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,753	1.072	6,300	1.099	6,926	1.105	6,963	1.145	7,212	1.154	7,269	1.200	7,560	1.220	7,687	
4. NB I-110 Freeway n/o C-Street	6,361	0.757	8,403	0.771	6,478	0.772	6,486	0.808	6,793	0.808	6,793	0.857	7,203	0.859	7,221	
SB I-110 Freeway n/o C-Street	5,939	0.667	8,394	0.683	5,729	0.682	5,721	0.714	5,991	0.714	5,991	0.746	6,265	0.756	6,349	
5. NB SR-47 Freeway at Heim Bridge	1,930	0.291	6,289	0.284	1,787	0.285	1,793	0.317	1,992	0.323	2,029	0.326	2,047	0.340	2,140	
SB SR-47 Freeway at Heim Bridge	1,515	0.241	6,288	0.240	1,510	0.237	1,491	0.253	1,593	0.260	1,637	0.257	1,619	0.269	1,691	
6. EB SR-91 Freeway e/o I-710 Freeway	12,693	1.008	12,592	1.050	13,222	1.049	13,209	1.073	13,509	1.073	13,509	1.154	14,533	1.088	13,702	
WB SR-91 Freeway e/o I-710 Freeway	13,662	1.084	12,603	1.105	13,927	1.104	13,915	1.146	14,438	1.163	14,652	1.294	16,305	1.325	16,699	
7. EB SR-91 Freeway w/o I-710 Freeway	12,452	0.847	14,701	0.889	13,065	0.889	13,065	0.907	13,335	0.907	13,335	0.986	14,492	0.955	14,037	
WB SR-91 Freeway w/o I-710 Freeway	12,516	0.852	14,691	0.875	12,862	0.884	12,994	0.897	13,174	0.915	13,439	1.035	15,204	0.965	14,474	

PCE = Passenger Car Equivalent

LANDSIDE IMPROVEMENTS ALTERNATIVE (NEPA BASELINE)
 HIGHWAY LINK VOLUMES
 PM PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030		
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	NEPA Baseline Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	NEPA Baseline Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	NEPA Baseline Alternative	
1. NB I-405 Freeway n/o I-710 Freeway	14,098	1.119	12,598	1.159	14,607	1.161	14,632	1.202	15,139	1.202	15,139	1.259	15,859	1.259	15,857	
SB I-405 Freeway n/o I-710 Freeway	15,387	1.221	12,602	1.254	15,807	1.257	15,845	1.310	16,575	1.310	16,572	1.369	17,254	1.366	17,210	
2. NB I-405 Freeway s/o I-710 Freeway	14,324	1.137	12,598	1.176	14,815	1.184	14,916	1.221	15,383	1.211	15,257	1.281	16,141	1.278	16,100	
SB I-405 Freeway s/o I-710 Freeway	14,780	1.173	12,600	1.202	15,145	1.211	15,258	1.248	15,721	1.254	15,797	1.315	16,565	1.309	16,495	
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,859	1.089	6,298	1.123	7,072	1.131	7,123	1.158	7,294	1.164	7,331	1.203	7,579	1.201	7,567	
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,873	1.091	6,299	1.117	7,037	1.121	7,062	1.163	7,326	1.171	7,377	1.215	7,651	1.221	7,691	
4. NB I-110 Freeway n/o C-Street	5,655	0.673	8,402	0.693	5,827	0.694	5,835	0.726	6,097	0.729	6,122	0.755	6,343	0.752	6,318	
SB I-110 Freeway n/o C-Street	6,618	0.788	8,398	0.822	6,906	0.819	6,881	0.837	7,033	0.839	7,050	0.886	7,441	0.883	7,413	
5. NB SR-47 Freeway at Heim Bridge	1,988	0.252	6,300	0.250	1,577	0.250	1,577	0.280	1,825	0.285	1,793	0.271	1,709	0.277	1,744	
SB SR-47 Freeway at Heim Bridge	942	0.150	6,283	0.149	937	0.149	937	0.160	1,004	0.163	1,023	0.171	1,073	0.175	1,101	
6. EB SR-91 Freeway e/o I-710 Freeway	14,676	1.165	12,597	1.207	15,209	1.179	14,857	1.211	15,253	1.255	15,807	1.342	16,903	1.321	16,639	
WB SR-91 Freeway e/o I-710 Freeway	13,309	1.056	12,603	1.082	13,766	1.084	13,665	1.125	14,176	1.135	14,302	1.180	14,871	1.195	15,066	
7. EB SR-91 Freeway w/o I-710 Freeway	14,521	0.988	14,698	1.031	15,155	1.017	14,950	1.038	15,261	1.060	15,584	1.124	16,515	1.132	16,631	
WB SR-91 Freeway w/o I-710 Freeway	11,958	0.814	14,690	0.848	12,464	0.847	12,449	0.862	12,669	0.870	12,786	0.916	13,459	0.912	13,399	

PCE = Passenger Car Equivalent

NO PROJECT ALTERNATIVE
HIGHWAY LINK VOLUMES
AM PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030					
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	No Project Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	No Project Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	No Project Alternative				
1. NB I-405 Freeway n/o I-710 Freeway	15,657	1.243	12,566	1.285	16,185	1.285	16,189	1.324	16,682	1.328	16,721	1.401	17,644	1.370	17,254	1.453	18,302	1.453	18,303
SB I-405 Freeway n/o I-710 Freeway	11,875	0.943	12,593	0.989	12,206	0.975	12,279	1.006	12,673	1.007	12,683	1.053	13,260	1.039	13,086	1.093	13,761	1.102	13,882
2. NB I-405 Freeway s/o I-710 Freeway	15,099	1.199	12,593	1.169	14,721	1.240	15,613	1.278	16,098	1.281	16,126	1.324	16,668	1.321	16,640	1.411	17,764	1.402	17,651
SB I-405 Freeway s/o I-710 Freeway	11,708	0.929	12,603	0.952	12,002	0.961	12,106	0.992	12,486	0.992	12,504	1.043	13,147	1.024	12,902	1.088	13,708	1.086	13,687
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,171	0.980	6,296	1.015	6,390	1.013	6,380	1.052	6,626	1.047	6,590	1.101	6,934	1.080	6,800	1.152	7,255	1.146	7,213
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,804	1.080	6,300	1.105	6,960	1.117	7,036	1.160	7,306	1.153	7,267	1.189	7,493	1.190	7,498	1.259	7,934	1.263	7,954
4. NB I-110 Freeway n/o C-Street	6,953	0.828	8,397	0.850	7,141	0.886	7,190	0.889	7,466	0.884	7,426	0.916	7,690	0.912	7,662	0.967	8,118	0.968	8,128
SB I-110 Freeway n/o C-Street	4,930	0.587	8,399	0.605	5,078	0.607	5,088	0.628	5,272	0.627	5,265	0.658	5,527	0.647	5,433	0.686	5,762	0.686	5,763
5. NB SR-47 Freeway at Heim Bridge	1,103	0.175	6,305	0.176	1,113	0.181	1,141	0.192	1,212	0.187	1,178	0.202	1,273	0.193	1,216	0.212	1,334	0.205	1,290
SB SR-47 Freeway at Heim Bridge	1,466	0.233	6,292	0.232	1,461	0.241	1,516	0.258	1,623	0.249	1,566	0.255	1,605	0.257	1,616	0.258	1,626	0.272	1,714
6. EB SR-91 Freeway e/o I-710 Freeway	10,831	0.860	12,594	0.888	11,187	0.889	11,199	0.918	11,564	0.918	11,567	0.959	12,078	0.948	11,935	1.004	12,643	1.005	12,661
WB SR-91 Freeway e/o I-710 Freeway	15,143	1.202	12,598	1.237	15,590	1.243	15,657	1.257	15,830	1.284	16,172	1.305	16,445	1.325	16,687	1.383	17,423	1.405	17,702
7. EB SR-91 Freeway w/o I-710 Freeway	10,163	0.691	14,708	0.713	10,487	0.714	10,509	0.738	10,859	0.738	10,855	0.786	11,563	0.761	11,200	0.811	11,935	0.808	11,881
WB SR-91 Freeway w/o I-710 Freeway	14,283	0.972	14,894	0.989	14,678	1.005	14,769	1.029	15,126	1.038	15,254	1.091	16,036	1.071	15,740	1.120	16,462	1.136	16,697

PCE = Passenger Car Equivalent

NO PROJECT ALTERNATIVE
HIGHWAY LINK VOLUMES
AND PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020								
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	No Project Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	No Project Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	No Project Alternative				
1. NB I-405 Freeway n/o I-710 Freeway	14,334	1.138	12,596	1.173	14,770	1.177	14,822	1.214	15,286	1.215	15,309	1.313	16,536	1.254	15,796	1.353	17,046	1.330	16,757
SB I-405 Freeway n/o I-710 Freeway	13,379	1.062	12,598	1.088	13,831	1.098	13,834	1.129	14,218	1.134	14,289	1.203	15,160	1.170	14,743	1.243	15,654	1.241	15,640
2. NB I-405 Freeway s/o I-710 Freeway	14,116	1.121	12,593	1.157	14,575	1.159	14,586	1.195	15,045	1.197	15,076	1.232	15,513	1.235	15,556	1.323	16,066	1.310	16,502
SB I-405 Freeway s/o I-710 Freeway	12,904	1.024	12,601	1.080	13,353	1.059	13,342	1.092	13,766	1.094	13,781	1.161	14,634	1.128	14,220	1.202	15,146	1.197	15,084
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,493	1.031	6,298	1.065	6,705	1.066	6,714	1.100	6,930	1.101	6,935	1.141	7,186	1.136	7,165	1.204	7,585	1.205	7,591
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,753	1.072	6,300	1.089	6,926	1.108	6,983	1.145	7,212	1.145	7,213	1.200	7,560	1.181	7,442	1.260	7,937	1.253	7,895
4. NB I-110 Freeway n/o C-Street	6,361	0.757	8,403	0.771	6,478	0.783	6,577	0.808	6,793	0.808	6,793	0.857	7,203	0.834	7,010	0.891	7,491	0.885	7,496
SB I-110 Freeway n/o C-Street	5,939	0.667	8,394	0.683	5,729	0.690	5,789	0.714	5,991	0.712	5,980	0.746	6,265	0.735	6,170	0.790	6,630	0.780	6,545
5. NB SR-47 Freeway at Heim Bridge	1,930	0.291	6,289	0.284	1,787	0.301	1,892	0.317	1,992	0.311	1,955	0.326	2,047	0.321	2,017	0.333	2,094	0.340	2,139
SB SR-47 Freeway at Heim Bridge	1,515	0.241	6,288	0.240	1,510	0.249	1,567	0.253	1,593	0.257	1,618	0.257	1,619	0.266	1,670	0.275	1,731	0.282	1,771
6. EB SR-91 Freeway e/o I-710 Freeway	12,693	1.008	12,592	1.050	13,222	1.042	13,125	1.073	13,509	1.077	13,556	1.154	14,533	1.111	13,988	1.179	14,846	1.178	14,838
WB SR-91 Freeway e/o I-710 Freeway	13,662	1.084	12,603	1.105	13,927	1.121	14,126	1.146	14,438	1.158	14,591	1.294	16,305	1.195	15,055	1.295	16,318	1.287	15,971
7. EB SR-91 Freeway w/o I-710 Freeway	12,452	0.847	14,701	0.889	13,065	0.876	12,875	0.907	13,335	0.905	13,289	0.986	14,492	0.933	13,722	0.981	14,422	0.990	14,556
WB SR-91 Freeway w/o I-710 Freeway	12,516	0.852	14,691	0.875	12,862	0.881	12,942	0.897	13,174	0.910	13,368	1.035	15,204	0.939	13,793	0.989	14,523	0.996	14,632

PCE = Passenger Car Equivalent

NO PROJECT ALTERNATIVE
HIGHWAY LINK VOLUMES
PM PEAK HOUR (PCE VOLUMES)

LOCATIONS	Existing 2005	2005			2010			2015			2020			2030		
		Volume/ Capacity Ratio	Capacity	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	No Project Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	No Project Alternative	Volume/ Capacity Ratio	Future Year Baseline	Volume/ Capacity Ratio	No Project Alternative	
1. NB I-405 Freeway n/o I-710 Freeway	14,098	1.119	12,598	1.159	14,607	1.157	14,577	1.202	15,139	1.195	15,056	1.259	15,859	1.233	15,536	
SB I-405 Freeway n/o I-710 Freeway	15,387	1.221	12,602	1.254	15,807	1.263	15,910	1.315	16,575	1.304	16,434	1.369	17,254	1.346	16,957	
2. NB I-405 Freeway s/o I-710 Freeway	14,324	1.137	12,598	1.176	14,815	1.176	14,811	1.221	15,383	1.214	15,298	1.281	16,141	1.253	15,785	
SB I-405 Freeway s/o I-710 Freeway	14,780	1.173	12,600	1.202	15,145	1.213	15,282	1.248	15,721	1.253	15,785	1.315	16,565	1.293	16,287	
3. NB I-710 Freeway between Willow Street and Pacific Coast Highway	6,859	1.089	6,298	1.123	7,072	1.126	7,082	1.158	7,294	1.163	7,325	1.203	7,579	1.200	7,568	
SB I-710 Freeway between Willow Street and Pacific Coast Highway	6,873	1.091	6,299	1.117	7,037	1.128	7,106	1.163	7,326	1.165	7,340	1.215	7,651	1.202	7,573	
4. NB I-110 Freeway n/o C-Street	5,655	0.673	8,402	0.693	5,827	0.696	5,847	0.726	6,097	0.719	6,039	0.755	6,343	0.742	6,231	
SB I-110 Freeway n/o C-Street	6,618	0.788	8,398	0.822	6,906	0.815	6,843	0.837	7,033	0.842	7,068	0.886	7,441	0.868	7,293	
5. NB SR-47 Freeway at Heim Bridge	1,988	0.252	6,300	0.250	1,577	0.261	1,642	0.280	1,825	0.269	1,696	0.271	1,709	0.278	1,750	
SB SR-47 Freeway at Heim Bridge	942	0.150	6,283	0.149	937	0.155	974	0.160	1,004	0.160	1,006	0.171	1,073	0.165	1,039	
6. EB SR-91 Freeway e/o I-710 Freeway	14,676	1.165	12,597	1.207	15,209	1.205	15,175	1.211	15,253	1.244	15,674	1.342	16,903	1.284	16,173	
WB SR-91 Freeway e/o I-710 Freeway	13,309	1.056	12,603	1.092	13,766	1.092	13,761	1.125	14,176	1.128	14,214	1.180	14,871	1.164	14,666	
7. EB SR-91 Freeway w/o I-710 Freeway	14,521	0.988	14,698	1.031	15,155	1.022	15,015	1.038	15,261	1.055	15,509	1.124	16,515	1.089	16,002	
WB SR-91 Freeway w/o I-710 Freeway	11,958	0.814	14,690	0.848	12,464	0.842	12,365	0.862	12,669	0.869	12,771	0.916	13,459	0.897	13,178	

PCE = Passenger Car Equivalent

Appendix J: Rail Analysis

**Middle Harbor EIR
Year 2010 Rail Analysis (Pier F)**

Alternative	Monthly TEUs	Monthly Boxes	On-Dock Rail %				Daily Boxes (On-Dock Rail)		Daily Trains Weekday	
			Import (Eastbound)	Export (Westbound)	Empty (Westbound)	Total Westbound	Import	Export	Import	Export
NEPA Baseline	60,204	32,543	5.0%	2.0%	3.0%	5.0%	54	54	0.18	0.18
345-Acre Alternative	62,285	33,668	5.0%	2.0%	3.0%	5.0%	56	56	0.19	0.19
315-Acre Alternative	59,562	32,196	5.0%	2.0%	3.0%	5.0%	53	53	0.18	0.18

Assumptions
Month to Week = 4.33
Week to Day = 7
Cars per Train = 25
Boxes per Car = 10
Efficiency Ratio = 85%

**Middle Harbor EIR
Year 2015 Rail Analysis (Pier DEF)**

Alternative	Monthly TEUs	Monthly Boxes	On-Dock Rail %				Daily Boxes (On-Dock Rail)		Daily Trains Weekday	
			Import (Eastbound)	Export (Westbound)	Empty (Westbound)	Total Westbound	Import	Export	Import	Export
NEPA Baseline	197,034	106,505	13.4%	5.5%	3.0%	8.5%	471	299	1.64	1.04
345-Acre Alternative	201,269	108,794	19.8%	8.2%	3.0%	11.2%	711	402	2.47	1.40
315-Acre Alternative	198,852	107,488	20.1%	8.3%	3.0%	11.3%	713	401	2.48	1.39

Assumptions
Month to Week = 4.33
Week to Day = 7
Cars per Train = 25
Boxes per Car = 10
Efficiency Ratio = 87%

**Middle Harbor EIR
Year 2020 Rail Analysis (Pier DEF)**

Alternative	Monthly TEUs	Monthly Boxes	On-Dock Rail %				Daily Boxes (On-Dock Rail)		Daily Trains Weekday	
			Import (Eastbound)	Export (Westbound)	Empty (Westbound)	Total Westbound	Import	Export	Import	Export
NEPA Baseline	229,174	123,878	14.9%	6.2%	3.0%	9.2%	609	376	2.12	1.31
345-Acre Alternative	258,925	139,959	19.6%	8.1%	3.0%	11.1%	905	513	3.15	1.78
315-Acre Alternative	226,240	122,292	22.6%	9.4%	3.0%	12.4%	912	500	3.17	1.74

Assumptions
Month to Week = 4.33
Week to Day = 7
Cars per Train = 25
Boxes per Car = 10
Efficiency Ratio = 87%

**Middle Harbor EIR
Year 2030 Rail Analysis (Pier DEF)**

Alternative	Monthly TEUs	Monthly Boxes	On-Dock Rail %			Daily Boxes (On-Dock Rail)		Daily Trains Weekday		
			Import (Eastbound)	Export (Westbound)	Empty (Westbound)	Total Westbound	Import	Export	Import	Export
NEPA Baseline	264,810	143,141	12.6%	5.2%	3.0%	8.2%	595	387	2.07	1.35
345-Acre Alternative	302,120	163,308	16.5%	6.8%	3.0%	9.8%	889	528	3.09	1.84
315-Acre Alternative	261,170	141,173	19.4%	8.0%	3.0%	11.0%	904	512	3.14	1.78

Assumptions
Month to Week = 4.33
Week to Day = 7
Cars per Train = 25
Boxes per Car = 10
Efficiency Ratio = 87%

**Middle Harbor EIR
Year 2010 Rail Analysis (Pier F)**

Alternative	Annual TEUs	Annual Boxes	On-Dock Rail %				Annual Boxes (On-Dock Rail)		Annual Trains	
			Import (Eastbound)	Export (Westbound)	Empty (Westbound)	Total Westbound	Import	Export	Import	Export
NEPA Baseline	661,583	357,613	5.0%	2.0%	3.0%	5.0%	17,881	17,881	60.79	60.79
345-Acre Alternative	684,448	369,972	5.0%	2.0%	3.0%	5.0%	18,499	18,499	62.90	62.90
315-Acres Alternative	654,531	353,900	5.0%	2.0%	3.0%	5.0%	17,690	17,690	60.15	60.15

Assumptions
Cars per Train = 25
Boxes per Car = 10
Efficiency Ratio = 85%

**Middle Harbor EIR
Year 2015 Rail Analysis (Pier DEF)**

Alternative	Annual TEUs	Annual Boxes	On-Dock Rail %				Annual Boxes (On-Dock Rail)		Annual Trains	
			Import (Eastbound)	Export (Westbound)	Empty (Westbound)	Total Westbound	Import	Export	Import	Export
NEPA Baseline	2,165,212	1,170,385	13.4%	5.5%	3.0%	8.5%	156,832	99,483	545.77	346.20
345-Acre Alternative	2,211,751	1,195,541	19.8%	8.2%	3.0%	11.2%	236,717	133,901	823.78	465.97
315-Acres Alternative	2,185,185	1,181,181	20.1%	8.3%	3.0%	11.3%	237,417	133,473	826.21	464.49

Assumptions
Cars per Train = 25
Boxes per Car = 10
Efficiency Ratio = 87%

**Middle Harbor EIR
Year 2020 Rail Analysis (Pier DEF)**

Alternative	Annual TEUs	Annual Boxes	On-Dock Rail %				Annual Boxes (On-Dock Rail)		Annual Trains	
			Import (Eastbound)	Export (Westbound)	Empty (Westbound)	Total Westbound	Import	Export	Import	Export
NEPA Baseline	2,518,396	1,361,295	14.9%	6.2%	3.0%	9.2%	202,833	125,239	705.86	435.83
345-Acre Alternative	2,845,333	1,538,018	19.6%	8.1%	3.0%	11.1%	301,451	170,720	1,049.05	594.11
315-Acres Alternative	2,486,157	1,343,868	22.6%	9.4%	3.0%	12.4%	303,714	166,640	1,056.93	579.91

Assumptions
Cars per Train = 25
Boxes per Car = 10
Efficiency Ratio = 87%

**Middle Harbor EIR
Year 2030 Rail Analysis (Pier DEF)**

Alternative	Annual TEUs	Annual Boxes	On-Dock Rail %				Annual Boxes (On-Dock Rail)		Annual Trains	
			Import (Eastbound)	Export (Westbound)	Empty (Westbound)	Total Westbound	Import	Export	Import	Export
NEPA Baseline	2,910,000	1,572,973	12.6%	5.2%	3.0%	8.2%	198,195	128,984	689.72	448.86
345-Acre Alternative	3,320,000	1,794,595	16.5%	6.8%	3.0%	9.8%	296,108	175,870	1,030.46	612.03
315-Acres Alternative	2,870,000	1,551,351	19.4%	8.0%	3.0%	11.0%	300,962	170,649	1,047.35	593.86

Assumptions
Cars per Train = 25
Boxes per Car = 10
Efficiency Ratio = 87%

Appendix K: Traffic Signal Warrant Analysis

Signal Warrant
Year 2030 345-Acre Alternative - AM Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / Pier D Street	Time Period: AM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: Yes _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: Yes _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? Yes _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / Pier D Street	Time Period: AM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1393 _____</p> <p>2) Number of lanes on major approach: 2 _____</p> <p>3) Minor street (vph) on high volume approach: 589 _____</p> <p>4) Number of lanes on minor approach: 2 _____</p>		
WARRANT #11 SATISFIED ? Yes _____		

Signal Warrant
Year 2030 345-Acre Alternative - MD Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / Pier D Street	Time Period: MD Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: Yes _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: Yes _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? Yes _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / Pier D Street	Time Period: MD Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1049 _____</p> <p>2) Number of lanes on major approach: 2 _____</p> <p>3) Minor street (vph) on high volume approach: 637 _____</p> <p>4) Number of lanes on minor approach: 2 _____</p>		
WARRANT #11 SATISFIED ? Yes _____		

Signal Warrant

Year 2030 345-Acre Alternative - PM Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / Pier D Street	Time Period: PM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: Yes _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: Yes _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? Yes _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / Pier D Street	Time Period: PM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1217 _____</p> <p>2) Number of lanes on major approach: 2 _____</p> <p>3) Minor street (vph) on high volume approach: 596 _____</p> <p>4) Number of lanes on minor approach: 2 _____</p>		
WARRANT #11 SATISFIED ? Yes _____		

**Signal Warrant
Year 2030 345-Acre Alternative - AM Peak Hour**

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / Pier E Street	Time Period: AM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: <u> No </u></p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: <u> Yes </u></p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: <u> Yes </u></p>		
WARRANT #10 SATISFIED ?		
<u> No </u>		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / Pier E Street	Time Period: AM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: <u> 902 </u></p> <p>2) Number of lanes on major approach: <u> 2 </u></p> <p>3) Minor street (vph) on high volume approach: <u> 468 </u></p> <p>4) Number of lanes on minor approach: <u> 2 </u></p>		
WARRANT #11 SATISFIED ?		
<u> Yes </u>		

Signal Warrant

Year 2030 345-Acre Alternative - MD Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / Pier E Street	Time Period: MD Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: Yes _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: Yes _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? Yes _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / Pier E Street	Time Period: MD Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1001 _____</p> <p>2) Number of lanes on major approach: 2 _____</p> <p>3) Minor street (vph) on high volume approach: 590 _____</p> <p>4) Number of lanes on minor approach: 2 _____</p>		
WARRANT #11 SATISFIED ? Yes _____		

Signal Warrant

Year 2030 345-Acre Alternative - PM Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / Pier E Street	Time Period: PM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: Yes _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: Yes _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? Yes _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / Pier E Street	Time Period: PM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1166 _____</p> <p>2) Number of lanes on major approach: 2 _____</p> <p>3) Minor street (vph) on high volume approach: 570 _____</p> <p>4) Number of lanes on minor approach: 2 _____</p>		
WARRANT #11 SATISFIED ? Yes _____		

Signal Warrant

Year 2030 345-Acre Alternative - AM Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / Pier G Avenue	Time Period: AM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: Yes _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: Yes _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? Yes _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / Pier G Avenue	Time Period: AM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1364 _____</p> <p>2) Number of lanes on major approach: 3 _____</p> <p>3) Minor street (vph) on high volume approach: 544 _____</p> <p>4) Number of lanes on minor approach: 2 _____</p>		
WARRANT #11 SATISFIED ? Yes _____		

Signal Warrant

Year 2030 345-Acre Alternative - MD Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / Pier G Avenue	Time Period: MD Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: Yes _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: Yes _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? Yes _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / Pier G Avenue	Time Period: MD Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1562 _____</p> <p>2) Number of lanes on major approach: 3 _____</p> <p>3) Minor street (vph) on high volume approach: 627 _____</p> <p>4) Number of lanes on minor approach: 2 _____</p>		
WARRANT #11 SATISFIED ? Yes _____		

Signal Warrant

Year 2030 345-Acre Alternative - PM Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / Pier G Avenue	Time Period: PM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: Yes _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: Yes _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? Yes _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / Pier G Avenue	Time Period: PM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1113 _____</p> <p>2) Number of lanes on major approach: 3 _____</p> <p>3) Minor street (vph) on high volume approach: 544 _____</p> <p>4) Number of lanes on minor approach: 2 _____</p>		
WARRANT #11 SATISFIED ? Yes _____		

Signal Warrant

Year 2030 345-Acre Alternative - AM Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / WB Ocean Blvd Off-Ramp	Time Period: AM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: No _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: Yes _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? No _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / WB Ocean Blvd Off-Ramp	Time Period: AM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1369 _____</p> <p>2) Number of lanes on major approach: 2 _____</p> <p>3) Minor street (vph) on high volume approach: 209 _____</p> <p>4) Number of lanes on minor approach: 1 _____</p>		
WARRANT #11 SATISFIED ? Yes _____		

Signal Warrant

Year 2030 345-Acre Alternative - MD Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / WB Ocean Blvd Off-Ramp	Time Period: MD Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: No _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: No _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? No _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / WB Ocean Blvd Off-Ramp	Time Period: MD Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1567 _____</p> <p>2) Number of lanes on major approach: 2 _____</p> <p>3) Minor street (vph) on high volume approach: 24 _____</p> <p>4) Number of lanes on minor approach: 1 _____</p>		
WARRANT #11 SATISFIED ? No _____		

Signal Warrant

Year 2030 345-Acre Alternative - PM Peak Hour

Warrant # 10 - Peak Hour Delay

Intersection: Pico Avenue / WB Ocean Blvd Off-Ramp	Time Period: PM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Total delay on one minor street approach controlled by a stop sign equals or exceeds four vehicle-hours for a one lane approach and five vehicle-hours for a two-lane approach: No _____</p> <p>2) Volume on same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 for two moving lanes: No _____</p> <p>3) The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches: Yes _____</p>		
WARRANT #10 SATISFIED ? No _____		

Warrant # 11 - Peak Hour Volume

Intersection: Pico Avenue / WB Ocean Blvd Off-Ramp	Time Period: PM Peak	Scenario: 2030 345-Acre Alternative
<p>1) Major street (vph) total for both approaches: 1737 _____</p> <p>2) Number of lanes on major approach: 2 _____</p> <p>3) Minor street (vph) on high volume approach: 44 _____</p> <p>4) Number of lanes on minor approach: 1 _____</p>		
WARRANT #11 SATISFIED ? No _____		

Appendix L: Related and Cumulative Projects List

Table 2.1-1. Related and Cumulative Projects

No. in Figure 2.1-1	Project Title	Project Description	Project Status	Relevant Cumulative Environmental Factors
Port of Long Beach				
1	Middle Harbor Terminal Redevelopment, (Proposed Project)	Expansion of an existing marine container terminal in the Middle Harbor area. The Project would consolidate two existing container terminals into one 345-acre terminal. Construction would include creation of approximately 51 acres of land, dredging, wharf construction; construction of an intermodal railyard; and reconstruction of terminal buildings. The Initial Study prepared for this project identified potentially significant air, public health, transportation, biological, and water quality impacts.	EIS/EIR under preparation. NOI/NOP released in 2006. (2009-2030)	Analyzed in this document
2	Piers G & J Terminal Redevelopment Project	Redevelopment of two existing marine container terminals into one terminal in the Southeast Harbor Planning District area. The project will develop a marine terminal of up to 315 acres by consolidating portions of two existing terminals on Piers G and J and several surrounding parcels. Construction is now underway and will occur in four phases; it will include creation of approximately 53 acres of land, dredging, concrete wharves, rock dikes, and road and railway improvements. The EIR prepared for this project identified potentially significant impacts on air quality, geology, groundwater, and soils.	Approved project. Construction underway. (2005-2015)	Geology, Groundwater and Soils, Air Quality Biological Resources
3	Pier T, T.T.I. (formerly Hanjin) Terminal, Phase III	Expansion of a 300-acre marine container terminal, to 375 acres on Terminal Island.	Approved project. Under construction. (2000-2007)	Air Quality Transportation
4	Pier S Marine Terminal, Port of Long Beach	Development of a 150-acre container terminal and construction of navigational safety improvements to the Back Channel.	EIS/EIR to be prepared. (2007-2012)	Transportation Air Quality

Table 2.1-1. Related and Cumulative Projects (continued)

No. in Figure 2.1-1	Project Title	Project Description	Project Status	Relevant Cumulative Environmental Factors
Port of Long Beach (continued)				
5	Pier T, Long Beach LNG Import Terminal	Construction of a 25-acre liquefied natural gas (LNG) import terminal facility including pipeline and wharf construction on a portion of Pier T. *This project was not included in determining cumulative impacts because the project cannot proceed without BHC approval.	Project disapproved by BHC January 2007*	Transportation Air Quality Hazards
6	Pier A East	Redevelopment of 32 acres of existing auto storage area into container terminal backlands.	EIR to be prepared	Transportation Air Quality
7	Chemoil Marine Terminal, Tank Installation	Construction of two petroleum storage tanks and associated relocation of utilities and reconfiguration of adjoining marine terminal uses between Berths F210 and F211 on Pier F.	EIR to be prepared. 2008-2009	Transportation Air Quality Hazards
8	Gerald Desmond Bridge Replacement Project, POLB/Caltrans/FHWA	Replacement of the existing four-lane bridge with a new six-to eight-lane bridge.	EIR/EA being prepared. (2008-2012)	Transportation
9	Administration Building Replacement Project	Replacement of the existing Port Administration Building with a new facility on an adjacent site.	EIR being prepared. (2007-2010)	Transportation Air Quality
10	Pier A West Interim/Source Removal POLB, DTSC	Removal and offsite disposal of contaminated soil from 19 sumps including oil wells, filling, and paving.	Cleanup and Abatement Order (2008-2009).	Hazards Geology
11	Rail Enhancement Project	Multiple rail transportation projects in and around Harbor District.	EIR to be prepared.	Transportation
City of Long Beach				
12	Shoreline Gateway Project	Mixed-use development of a 22-story residential tower with retail, commercial, and office uses located north of Ocean Boulevard, between Atlantic Avenue and Alamos Avenue.	EIR certified in 2006.	Transportation Air Quality
Port of Los Angeles				
13	Berths 136-147 Marine Terminal, West Basin	Reconfiguration of wharves and backland, expansion and redevelopment of the TraPac Terminal.	EIS/EIR released July 2007. (2008-2015)	Transportation Air Quality
14	Evergreen Redevelopment/YTI Wharf Upgrade Terminal Island	Expansion of the Evergreen Marine Terminal. Lease boundary changes, gate improvements, wharf modifications, cranes, and new buildings.	EIR/EIS to be prepared. NOP/NOI anticipated Fall 2007.	Transportation

Table 2.1-1. Related and Cumulative Projects (continued)

No. in Figure 2.1-1	Project Title	Project Description	Project Status	Relevant Cumulative Environmental Factors
Port of Los Angeles (continued)				
15	Berths 97-109 Container Terminal Project, West Basin	Development and operation of a container terminal at Berths 97-109.	Draft EIS/EIR released August 2006. Phase I construction complete. Recirculated Draft EIR/EIS anticipated early 2008. Construction expected 2009-2015.	Transportation Air Quality
16	Channel Deepening Project/Additional Disposal Capacity	Dredging and soil disposal to deepen the Port of Los Angeles Main Channel to a maximum depth of -53 feet MLLW (lesser depths are considered as project alternatives) by removing between 3.9 million and 8.5 million cubic yards of soils. The soils would be disposed of at several sites. The SIES/EIR is being prepared to evaluate dredging an additional four million cy of material and creating 151 acres of new lands from the soils.	Approved project; construction underway. SEIR for additional disposal capacity being prepared. (2008-2009)	Biological Resources Hydrology and Water Quality Transportation Air Quality
17	Berths 171-181, Pasha Marine Terminal	Redevelopment of existing facilities at Berths 171-181 as an omni (multi-use) facility.	Draft EIR being prepared. (2006-2010)	Transportation Air Quality
18	Pacific Los Angeles Marine Terminal (formerly Pacific Energy), Pier 400	Proposal to construct a crude oil receiving facility on Pier 400 with tanks on Terminal Island and pipelines between berth, tanks, and refineries.	EIS/EIR being prepared. (2008-2011)	Transportation Air Quality Biological Resources
19	Berth 206-209 Interim Container Terminal Reuse Project	Interim reuse of former Matson Terminal.	Final EIR certified. Construction on hold.	Hydrology and Water Quality
20	Ultramar Lease Renewal Project	Lease renewal for liquid-bulk (petroleum) terminal.	Draft EIR being prepared. (2008-2010)	Air Quality Hazards
21	SSA Outer Harbor Fruit Facility Relocation	Relocate the existing fruit import facility at 22nd and Miner to Berth 153.	Project on hold. (2008-2010)	Transportation Air Quality
22	Port of Los Angeles Charter School and Port Police Headquarters, San Pedro	Develop a Port of Los Angeles Charter School and Port Police Headquarters.	EIR Certified August 2005. Construction anticipated 2007-2008.	Transportation Air Quality
23	San Pedro Waterfront Enhancement Project	Surface and landscaping upgrades to improve pedestrian and vehicular connections.	Mitigated Negative Declaration approved April 2006. Anticipated construction completion in 2009.	Transportation Air Quality

Table 2.1-1. Related and Cumulative Projects (continued)

No. in Figure 2.1-1	Project Title	Project Description	Project Status	Relevant Cumulative Environmental Factors
Port of Los Angeles (continued)				
24	Southern California International Gateway Project	Construction and operation of an intermodal container transfer facility and various associated components, including the relocation of an existing rail operation.	Supplemental NOP released October 2005.	Transportation Air Quality
25	Cabrillo Way Marina, Phase II	Redevelop the old marinas in the Watchorn Basin and develop the backland areas for a variety of commercial and recreational uses.	Construction underway. (2006-2008)	Transportation Air Quality
26	Artificial Reef, San Pedro Breakwater	Development of an artificial reef site south of the San Pedro Breakwater. Provides opportunity for suitable reuse of clean construction materials, and to create bottom topography to promote local sport fishing.	Negative Declaration issued and certified. Project proceeding. (2006-2010)	Biological Resources Hydrology and Water Quality
27	Waterfront Gateway,	This is part of the San Pedro Waterfront Enhancement Project (see Item No.22). Development initiated for waterfront promenade between Vincent Thomas Bridge and Fire Station 112.	Construction of Phase I underway. (2007-2012)	Transportation Air Quality
28	Pan-Pacific Cannery Complex Demolition Project	Demolition of two unused buildings and other small accessory structures at the former Pan-Pacific Cannery in the Fish Harbor area.	Draft EIR released 10/06.	Transportation Air Quality
29	Pier 300 APL Container Terminal Expansion Project	Construction and operation of a new, 40-acre container terminal expansion area on the east side of Pier 300. An additional 40 acres of fill will be evaluated in the Channel Deepening Supplemental EIS/EIR.	Project under development.	Transportation Air Quality Biological Resources
30	Fries Avenue Grade Separation	Construction of an elevated grade separation along a portion of Fries Avenue over the existing rail line tracks, to eliminate vehicular traffic delays that would otherwise be caused by trains using the existing rail line and the new ICTF railyard.	Conceptual Planning.	Transportation Air Quality
31	"C" Street/Figueroa Street Interchange	Reconfiguration of the "C" Street/ Figueroa Street interchange to include an elevated ramp from Harry Bridges Boulevard to the I-110 Freeway, over John S. Gibson Blvd., and an additional extension connecting Figueroa Street to the new elevated ramp, over Harry Bridges Blvd.	Conceptual Planning.	Transportation Air Quality
32	Port Transportation Master Plan	Construction and reconfiguration of roadways in and around POLA facilities. Some improvements under consideration include: I-110/SR-47/Harbor Blvd interchange improvements; south Wilmington grade separations; and additional traffic capacity analysis for the Vincent Thomas Bridge.	Conceptual planning stages.	Transportation Air Quality
33	Berths 212-224 YTI Wharf Upgrades	Modifications at the YTI Marine Terminal including wharf upgrades and backland reconfiguration.	NOP/NOI anticipated in 2008.	Transportation Air Quality
34	Berths 121-131 Yang Ming Container Terminal	Reconfiguration of wharves and backlands. Expansion and redevelopment of the APL Terminal.	NOP/NOI anticipated in 2008.	Transportation Air Quality

Table 2.1-1. Related and Cumulative Projects (continued)

No. in Figure 2.1-1	Project Title	Project Description	Project Status	Relevant Cumulative Environmental Factors
Community of San Pedro				
35	Pacific Corridors Redevelopment Project	Development of commercial/retail, manufacturing, and residential components.	Construction underway. Expected 2032 completion year according to Community Redevelopment Agency of Los Angeles.	Transportation Air Quality
California Department of Transportation				
36	Schuyler Heim Bridge Replacement and SR 47/ Expressway	Replace the Schuyler Heim Bridge with a fixed structure and improve the SR 47/Henry Ford Avenue/Alameda Street transportation corridor by constructing an elevated expressway from the Heim Bridge to SR 1 (Pacific Coast Highway).	Draft EIS/EIR released August 2007. Final EIS/EIR expected spring 2008.	Transportation Air Quality
37	I-710 (Long Beach Freeway) Major Corridor Study	Develop multi-modal, timely, cost-effective transportation solutions to traffic congestion and other mobility problems along approximately 18 miles of the I-710, between the San Pedro Bay ports and State Route 60.	Conceptual Planning and Analysis Stage.	Transportation Air Quality

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Appendix C

Noise

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Table C-1. POLB Middle Harbor Redevelopment Construction/Demolition Activities and Noise Data

Activity	Equipment	HP	No. of Pieces	Estimated Noise Level at 50-ft (dBA) ¹	Estimated Usage Factor ²	L _{eq} (h) at 50-ft (dBA)	L _{eq} (h) at 2,500-ft (dBA) ³
Wharf Demolition Landside (A)	Hydra-Crane – 20 Ton	130	1	82	0.30	77	43
	Excavator	428	1	85	0.30	80	46
	Flatbed Truck	230	1	80	0.30	75	41
	End Dump Truck	310	4	80	1.20	82	48
Activity (A) Totals						85	51
Wharf Demolition Marine (B)	Derrick Barge	800	1	88	0.30	83	49
	Flat Deck Barge	0	1	0	0.30	0	0
	Work Tug	900	1	82	0.30	77	43
	Hydra-Crane – 20 Ton	130	1	82	0.30	77	43
	Excavator	428	1	85	0.30	80	46
	Flatbed Truck	230	1	80	0.30	75	41
	End Dump Truck	310	3	80	0.90	80	46
Activity (B) Totals						87	53
Sheet Pile Bulkhead Demolition (C)	Crane-100 Ton	335	1	84	0.30	79	45
	Vibratory Hammer & Power Pack	350	1	92	0.30	88	54
	Excavator	428	1	85	0.30	80	46
	Flatbed Truck	230	1	80	0.30	75	41
	Welding Machine	26	1	70	0.30	65	31
	Generator – 7.5kW	13	1	73	0.30	68	34
Activity (C) Totals						89	55
Retaining Bulkhead Construction (D)	Crane-100 Ton	335	1	84	0.30	79	45
	Vibratory Hammer & Power Pack	350	1	92	0.30	88	54
	Flatbed Truck	230	1	80	0.30	75	41
	Welding Machine	26	1	70	0.30	65	31
	Generator – 7.5kW	13	1	73	0.30	68	34
Activity (D) Totals						89	55
Clamshell Dredging (E)	Clamshell Dredge	3,000	1	81	0.30	76	42
	Bottom Dump Scow	250	1	82	0.30	77	43
	Tug Boat	4,400	1	82	0.30	77	43
	Work Tug	900	1	82	0.30	77	43
	Crew/Survey Boat	480	1	82	0.30	77	43
Activity (E) Totals						84	50
Land Excavation (F)	Excavator	428	1	85	0.30	80	46
	Loader	170	1	79	0.30	74	40
	End Dump Truck	310	1	80	0.30	75	41
Activity (F) Totals						82	48
Rock Placement, Push-off and Tub (G)	Derrick Barge	800	1	88	0.30	83	49
	Front End Loader	400	1	84	0.30	79	45
	Flatdeck Barge	0	1	0	0.30	0	0
	Tug Boat	1,650	1	82	0.30	77	43
	Tug Boat	4,400	1	82	0.30	77	43
	Crew/Survey Boat	480	1	82	0.30	77	43
Activity (G) Totals						86	52

Table C-1. POLB Middle Harbor Redevelopment Construction/Demolition Activities and Noise Data (continued)

Activity	Equipment	HP	No. of Pieces	Estimated Noise Level at 50-ft (dBA) ¹	Estimated Usage Factor ²	L _{eq} (h) at 50-ft (dBA)	L _{eq} (h) at 2,500-ft (dBA) ³
New Warf Construction (H1)	Drive 24" Octagonal Piles – LAND:						
	Hydraulic Crane – 40 Ton	152	1	83	0.30	78	44
	Crane-200 Ton	335	1	86	0.30	81	47
	Drill	270	1	85	0.30	80	46
	Piledriving Hammer	0	1	97	0.30	92	58
	Loader-Wheel	300	1	84	0.30	79	45
	Jet Pump	33	1	82	0.30	77	43
	End Dump Truck	310	1	80	0.30	75	41
	Flatbed Truck	230	1	80	0.30	75	41
Lowboy Truck	350	1	81	0.30	76	42	
Sub-Totals						93	59
(H2)	Drive 24" Octagonal Piles – WATER:						
	Crane – 200 Ton	335	1	86	0.30	81	47
	Derrick Barge	575	1	88	0.30	83	49
	Flatbed Barge	0	2	0	0.60	0	0
	Piledriving Hammer	0	1	97	0.30	92	58
	End Dump Truck	310	1	80	0.30	75	41
	Tugboat	1,100	1	82	0.30	77	43
Flatbed Truck	230	1	80	0.30	75	41	
Sub-Totals						93	59
(H3)	Drive Piles – Miscellaneous Activities:						
	Excavator	428	1	85	0.30	80	46
	Loader-Wheel	180	1	79	0.30	74	40
	Hydraulic Crane	152	1	83	0.30	78	44
Crane –150 Ton	335	1	86	0.30	81	47	
Sub-Totals						85	51
(H4)	Reinforced Concrete Wharf:						
	Hydraulic Crane – 40 Ton	152	1	83	0.30	78	44
	Crane – 150 Ton	335	1	86	0.30	81	47
	Crane Barge – 150 Ton	442	1	86	0.30	81	47
	Flatdeck Barge	0	1	0	0.30	0	0
	Concrete Pump	210	1	82	0.30	77	43
	Concrete Trucks	285	4.5	81	1.35	82	48
	Sandblaster/compressor	50	1	81	0.30	76	42
	Flatbed Truck	230	1	80	0.30	75	41
	Tugboat	1,100	2	82	0.60	77	43
	Concrete Saw	35	1	85	0.30	80	46
	Truck Crane-65 Ton	365	1	86	0.30	81	47
	Boom Truck	350	1	82	0.30	77	43
Crane-100 Ton	335	1	86	0.30	81	47	
Sub-Totals						90	56
Activity (H) Totals						97	63
New Container Yard – Utilities (I)	Pipelayer	300	1	80	0.30	75	41
	Auger	125	1	85	0.30	80	46
	Crane – 20 Ton	130	1	80	0.30	75	41
	Grader	215	3	85	0.90	80	46
	End Dump Truck	310	1	80	0.30	75	41
	Flatbed Truck	230	2	80	0.60	75	41
	Concrete Truck	250	4	80	1.20	81	47
	Front End Loader	400	2	84	0.60	79	45
Trencher	200	1	83	0.30	78	44	
Activity (I) Totals						88	54
New Container Yard – Paving (J)	AC Paver	187	1	89	0.30	84	50
	Grader	215	1	85	0.30	80	46
	Roller	151	3	85	0.90	85	51
	Vibration Roller	154	3	85	0.90	85	51

Table C-1. POLB Middle Harbor Redevelopment Construction/Demolition Activities and Noise Data (continued)							
Activity	Equipment	HP	No. of Pieces	Estimated Noise Level at 50-ft (dBA)¹	Estimated Usage Factor²	L_{eq}(h) at 50-ft (dBA)	L_{eq}(h) at 2,500-ft (dBA)³
	Water Truck	210	1	80	0.30	75	41
	Road Sweeper	190	1	85	0.30	80	46
Activity (J) Totals						90	56
New Container Yard – Electrical (K)	Flat Bed Truck	230	1	80	0.30	75	41
	Truck Crane – 20 Ton	130	1	80	0.30	75	41
	Auger	125	1	85	0.30	80	46
Activity (K) Totals						82	48
Wick Drains (L)	Wick Drain Rig (Excavator Mounted)	428	1	85	0.30	80	46
Activity (L) Totals						80	46
Roll Surcharge (M)	Scrapers	475	9	88	2.70	92	58
	Dozers	285	2	80	0.60	78	44
	Loader	170	3	79	0.90	79	45
	End Dump Truck	310	6	80	1.80	83	49
	Water Truck	310	1	80	0.30	75	41
Activity (M) Totals						93	59
Building Construction (N)	Auger	125	1	85	0.30	80	46
	Crane – 20 Ton	130	3	80	0.90	80	46
	Grader	215	3	85	0.90	85	51
	End Dump Truck	310	4	80	1.20	81	47
	Flatbed Truck	230	2	80	0.60	78	44
	Concrete Truck	250	2	80	0.60	78	44
	Front End Loader	400	2	84	0.60	82	48
	Trencher	200	1	83	0.30	78	44
Activity (N) Totals						90	56
Intermodal Yard Construction (O)	Backhoe	102	1	90	0.30	85	51
	Excavator	428	1	85	0.30	80	46
	Ballast Spreader	100	1	85	0.30	80	46
	Ballast Tamper	100	1	85	0.30	80	46
	Generator – 10kW	23	2	76	0.60	74	40
	Roller	151	1	85	0.30	80	46
	Grader	215	1	85	0.30	80	46
	Truck Mounted Crane – 20 Ton	130	1	80	0.30	75	41
	Forklift	103	1	67	0.30	62	28
	Flatbed Truck	230	2	80	0.60	78	44
	End Dump Truck	310	2	80	0.60	78	44
	Water Truck	210	1	80	0.30	75	41
	Activity (O) Totals						90
Cutter Suction Dredging – Spill Barge (P)	Cutter Suction Dredging	13,200	1	89	0.30	84	50
	Work Tug	900	2	82	0.60	80	46
	Derrick Barge	800	1	88	0.30	83	50
	Spill Barge	350	1	82	0.30	77	43
	Crew/Survey Boat	480	1	82	0.30	77	43
Activity (P) Totals						88	54
Cutter Suction Dredging – Spill Barge (Q)	Cutter Suction Dredging	13,200	1	89	0.30	84	50
	Work Tug	900	2	82	0.60	80	46
	Derrick Barge	800	1	88	0.30	83	49
	Hydra-Crane	130	1	82	0.30	77	43
	Dozer	285	3	80	0.90	80	46
	Crew/Survey Boat	480	1	82	0.30	77	43
Activity (Q) Totals						89	55
Triple Track Installation Demolition (R)	Track Hoe with Breaker and Bucket	345	1	90	0.30	85	51
	Front End Loader	262	1	84	0.30	79	45
	Backhoe	78	1	90	0.30	85	51
	14H Blade Grader	220	1	85	0.30	80	46

Table C-1. POLB Middle Harbor Redevelopment Construction/Demolition Activities and Noise Data (continued)

Activity	Equipment	HP	No. of Pieces	Estimated Noise Level at 50-ft (dBA) ¹	Estimated Usage Factor ²	L _{eq} (h) at 50-ft (dBA)	L _{eq} (h) at 2,500-ft (dBA) ³
	Sheepsfoot Vibratory Roller	150	1	85	0.30	80	46
	Water Truck	210	1	80	0.30	75	41
	Dump Truck	310	1	80	0.30	75	41
Activity (R) Totals						90	56
Triple Track Utility Relocation (S)	Front End Loader	262	1	84	0.30	79	45
	Backhoe	78	1	90	0.30	85	51
	Trench Vibratory Roller	150	1	85	0.30	80	46
	Water Truck	210	1	80	0.30	75	41
	Dump Truck	310	2	80	0.60	78	44
	Concrete Truck	310	1	80	0.30	75	41
Activity (S) Totals						88	54
Triple Track Grading (T)	Dump Truck	310	1	80	0.30	75	41
	Front End Loader	262	1	84	0.30	79	45
	Backhoe	78	1	90	0.30	85	51
	14H Blade Grader	220	1	85	0.30	80	46
	Smooth Drum Vibratory Roller	150	1	85	0.30	80	46
	Water Truck	210	1	80	0.30	75	41
Activity (T) Totals						88	54
Triple Track Retaining Wall (U)	Backhoe	78	1	90	0.30	85	51
	Trench Vibratory Roller	150	1	85	0.30	80	46
	Water Truck	210	1	80	0.30	75	41
	Extendable Fork Lift	98	1	80	0.30	75	41
	Concrete Truck	310	2	80	0.60	78	44
	Form Truck	310	1	80	0.30	75	41
Activity (U) Totals						88	54
Triple Track Trackwork (V)	Dump Truck	310	1	80	0.30	75	41
	Smooth Drum Vibratory Roller	150	1	85	0.30	80	46
	Extendable Fork Lift	230	1	84	0.30	79	45
	Swingmaster Loader	TBD ⁴	1	85	0.30	80	46
	Ballast Car	TBD ⁴	1	85	0.30	80	46
	Vibratory Tamper	TBD ⁴	1	85	0.30	80	46
	Ballast Regulator	TBD ⁴	1	85	0.30	80	46
	Water Truck	210	1	80	0.30	75	41
Rail Vibrator	TBD ⁴	1	85	0.30	80	46	
Activity (V) Totals						89	55
Triple Track Miscellaneous (W)	Mechanic's Truck	TBD ⁴	1	80	0.30	75	41
	Tool Truck	TBD ⁴	1	80	0.30	75	41
	Welding Truck	TBD ⁴	1	80	0.30	75	41
	Fuel Truck	TBD ⁴	1	80	0.30	75	41
	Working Pickup Truck	TBD ⁴	2	80	0.60	78	44
	Generator	13	1	74	0.30	69	41
Activity (W) Totals						83	49

Notes:

1. Construction Equipment Noise Data Sources: U.S. EPA 1971; USACE and Port of Oakland 1998; Oregon Department of Transportation Research Group 1999; DA and USACE 2004; Parsons 2006; and Alameda Corridor Transportation Authority 1993.
2. Estimated usage factor assumes that each piece of equipment is operating at, or near, its maximum sound level for 30% of the time during operation.
Source: Parsons 2006.
3. Distance losses assume spherical radiation with no ground absorption.
4. HP ratings to be determined.

Table C-2. Port of Long Beach, Middle Harbor Redevelopment – Alternative 1 (345-Acre Alternative) Construction Activity Overlap and Hourly Noise Level Calculations

Task	Start	Finish	2009												
			January	February	March	April	May	June	July	August	September	October	November	December	
Demolish Existing Facilities	11/9/09	3/13/10												(A) ⁽¹⁾	
														(B)	
														(C)	
Prep for Toe Dike / Construction Dike	12/7/09	2/28/10													(G)
Estimated Total Noise Level (Hourly Leq) at 2,500'														58	59
Task	Start	Finish	2010												
			January	February	March	April	May	June	July	August	September	October	November	December	
Demolish Existing Facilities	11/9/09	3/13/10	(A)												
			(B)												
			(C)												
Construct New Bulkhead	1/18/10	2/21/10		(D)											
Excavation Fronting E24	2/22/10	5/29/10			(E)										
					(F)										
Construct New Armor Slope	3/14/10	5/22/10				(G)									
Wharf Construction	4/11/10	10/2/10					(H)								
							(D)								
Utility Construction	9/19/10	10/29/10										(I)			
Paving	10/30/10	11/26/10												(J)	
Lighting, Striping Crane Power	11/27/10	1/7/11													(K)
Prep for Toe Dike / Construction Dike	12/7/09	2/28/10	(G)												
Fill within Dike	2/29/10	5/22/10			(E)										
Remaining Dike Lifts	5/23/10	8/14/10						(G)							
Remaining Fill Lifts	7/4/10	9/25/10							(E)						
Wharf Construction	10/3/10	2/4/11											(H)		
													(D)		
Wick Drains	9/26/10	11/5/10										(L)			
Surcharge	11/6/10	12/31/10												(M)	
Construct Retaining Structure at Pier D	1/18/10	4/10/10	(D)												
Excavate & Truck Material in Cell Bulkhead	4/25/10	10/9/10					(F)								
Excavate Material Fronting Pier D	4/11/10	10/9/10					(F)								
							(E)								
Remove Cellular Sheetpile	6/20/10	12/17/10							(C)						
Rock Revetment	8/29/10	2/11/11									(G)				
Dredge to -55 feet	9/26/10	11/5/10										(E)			
Demo – E12-13 Wharf	3/14/10	9/11/10			(A)										
					(B)										
Slip 1, Lift #1	2/29/10	7/3/10			(G)										
Slip 1, Lift #2	7/4/10	10/23/10							(G)						
Slip 1, Lift #3	10/24/10	1/28/11											(G)		
Ocean Boulevard/Harbor Scenic Drive Train Track Realignment	2009	2010	(R)												
				(S)											
								(T)							
									(U)						
			(W)								(V)				
Estimated Total Noise Level (Hourly Leq) at 2,500'			61	63	62				66	65	66		67	66	

Table C-2. Port of Long Beach, Middle Harbor Redevelopment – Alternative 1 (345-Acre Alternative) Construction Activity Overlap and Hourly Noise Level Calculations (continued)

Task	Start	Finish	2011												
			January	February	March	April	May	June	July	August	September	October	November	December	
Ocean Boulevard/Harbor Scenic Drive Train Track Realignment	2009	2010	(V) (W)												
Lighting, Striping Crane Power	1/27/10	1/7/11	(K)												
Wharf Construction	10/3/10	2/4/11	(H) (D)												
Rock Revetment	8/29/10	2/11/11	(G)												
Slip 1, Lift #3	10/24/10	1/28/11	(G)												
Construct South Mooring Dolphin	1/22/11	3/13/11	(H2)												
Remove Surcharge to Slip 1 Fill Site	3/26/11	4/22/11	(M)												
Utility Construction	1/22/11	4/15/11	(I)												
Paving	4/2/11	6/24/11	(J)												
Lighting, Fence, Striping, Crane Power	6/4/11	8/26/11	(K)												
Demolish Existing Facilities	10/16/11	1/7/12	(C) (A) (B)												
Construct New Bulkhead	1/20/11	12/31/11	(D)												
Excavation Fronting E25 and Dispose Slip 1	10/30/11	1/21/12	(E)												
Lift #4	1/29/11	4/22/11	(G)												
Estimated Total Noise Level (Hourly Leq) at 2,500'			65	66	65	66	63	60	57	56	60	61	62		
Task	Start	Finish	2012												
			January	February	March	April	May	June	July	August	September	October	November	December	
Demolish Existing Facilities	10/16/11	1/7/12	(C) (A) (B)												
Excavation Fronting E25 and Dispose Slip 1	10/30/11	1/21/12	(E)												
Construct New Armor Slope	1/22/12	4/15/12	(G)												
Wharf Construction	4/16/12	10/7/12	(H)												
CY Development	10/8/12	3/31/13	(J)												
Dredge to -55 feet	1/22/12	2/18/12	(E)												
Initial Surcharge and Wick Drains	2/19/12	5/13/12	(L) (M)												
2 nd Surcharge and Wick Drains	5/14/12	8/5/12	(L) (M)												
3 rd Surcharge and Wick Drains	8/6/12	1/20/13	(L) (M)												
Remove Surcharge	6/3/12	11/17/12	(M)												
Container Yard Development	11/18/12	12/04/15	(I) (J) (K)												
Estimated Total Noise Level (Hourly Leq) at 2,500'			59	60	62	65	66	66	63						

Table C-2. Port of Long Beach, Middle Harbor Redevelopment – Alternative 1 (345-Acre Alternative) Construction Activity Overlap and Hourly Noise Level Calculations (continued)

Task	Start	Finish	2013											
			January	February	March	April	May	June	July	August	September	October	November	December
Container Yard Development	11/18/12	12/04/15	(I)											
			(J)											
			(K)											
Demolish Existing Facilities	4/1/13	9/15/13	(A)											
			(B)											
			(C)											
Construct New Bulkhead	9/16/13	12/8/13	(D)											
Excavation Fronting E26 and Dispose Slip 1	12/9/13	4/12/14	(E)											
Construct E27 Bulkhead	12/9/13	2/2/14	(D)											
Demolition	6/2/13	10/19/13	(A)											
Railyard	10/20/13	8/29/14	(O)											
Construct East Basin Retaining Dike	6/2/13	10/5/13	(G)											
Slip Basin Fill and Surcharge East	10/6/13	2/6/15	(P)											
			(Q)											
			(L)											
Estimated Total Noise Level (Hourly Leq) at 2,500'			59			61			62			61	63	
Task	Start	Finish	2014											
			January	February	March	April	May	June	July	August	September	October	November	December
Excavation Fronting E26 and Dispose Slip 1	12/9/13	4/12/14	(E)											
Construct E27 Bulkhead	12/9/13	2/2/14	(D)											
Railyard	10/20/13	8/29/14	(O)											
Slip Basin Fill and Surcharge East	10/6/13	2/6/15	(P)											
			(Q)											
			(L)											
4 th Surcharge and Wick Drains	10/12/14	2/14/15	(L)											
Construct New Armor Slope	4/27/14	8/30/14	(M)											
Wharf Construction	8/31/14	5/2/15	(G)											
Hydraulic Dredge to -55 feet	8/31/14	10/11/14	(H)											
Container Yard Development	8/30/14	1/16/15	(E)											
			(I)											
			(J)											
Estimated Total Noise Level (Hourly Leq) at 2,500'			61	60			61			65			66	

Table C-2. Port of Long Beach, Middle Harbor Redevelopment – Alternative 1 (345-Acre Alternative) Construction Activity Overlap and Hourly Noise Level Calculations (continued)

Task	Start	Finish	2015													
			January	February	March	April	May	June	July	August	September	October	November	December		
Slip Basin Fill and Surcharge East	10/6/13	2/6/15	(P)													
			(Q)													
			(L)													
4 th Surcharge and Wick Drains	10/12/14	2/14/15	(L)													
			(M)													
Wharf Construction	8/31/14	5/2/15	(H)													
			(I)													
Container Yard Development	8/30/14	1/16/15	(J)													
			(K)													
								(I)								
CY Development	5/3/15	11/28/15						(J)								
								(K)								
													(I)			
Terminal Construction	9/4/15	9/1/17											(J)			
													(K)			
Estimated Total Noise Level (Hourly Leq) at 2,500'			66	65		63				59				62		59
			2016													
Task	Start	Finish	January	February	March	April	May	June	July	August	September	October	November	December		
Terminal Construction	4/22/16	4/18/18				(N)										
			(I)													
Terminal Construction	9/4/15	9/1/17	(J)													
			(K)													
Dredge and Excavate at Quay Wall	9/18/16	2/4/17											(E)			
Seaside Railyard Area Redevelopment (not in schedule, added)	5/1/16	3/1/18						(I)								
								(J)								
								(K)								
Estimated Total Noise Level (Hourly Leq) at 2,500'				59			60				63					
			2017													
Task	Start	Finish	January	February	March	April	May	June	July	August	September	October	November	December		
Terminal Construction	4/22/16	4/18/18	(N)													
			(I)													
Terminal Construction	9/4/15	9/1/17	(J)													
			(K)													
Dredge and Excavate at Quay Wall	9/18/16	2/4/17	(E)													
Seaside Railyard Area Redevelopment (not in schedule, added)	5/1/16	3/1/18	(I)													
			(J)													
			(K)													
Roll Surcharge	9/17/17	3/2/18										(M)				
Demo Existing Wharf	2/5/17	8/5/17		(A)												
				(B)												
Construct Wharf Armor	8/6/17	9/26/17									(F)					
											(G)					
											(D)					
											(H)					
Basin Fill and Surcharge West	10/29/16	6/29/18												(P)		
														(Q)		
														(L)		
Estimated Total Noise Level (Hourly Leq) at 2,500'						63					66		63	64		

Table C-2. Port of Long Beach, Middle Harbor Redevelopment – Alternative 1 (345-Acre Alternative) Construction Activity Overlap and Hourly Noise Level Calculations (continued)

Task	Start	Finish	2018												
			January	February	March	April	May	June	July	August	September	October	November	December	
Terminal Construction	4/22/16	4/18/18	(N)												
Seaside Railyard Area Redevelopment (not in schedule, added)	5/1/16	3/1/18	(I)												
			(J)												
			(K)												
Roll Surcharge	9/17/17	3/2/18	(M)												
Basin Fill and Surcharge West	10/29/17	6/29/18	(P)												
			(Q)												
			(L)												
Demo Existing F1-4, F6 Wharf	5/16/18	11/11/18					(A)								
							(B)								
Remove Surcharge	12/29/18	6/28/19													(M)
Estimated Total Noise Level (Hourly Leq) at 2,500'			64		60		58	60		56					59
Task	Start	Finish	2019 ⁽²⁾												
			January	February	March	April	May	June	July	August	September	October	November	December	
Remove Surcharge	12/29/18	6/28/19	(M)												
CY Development	3/30/18	11/22/19				(I)									
						(J)									
						(K)									
Estimated Total Noise Level (Hourly Leq) at 2,500'			59			62			59						
<i>Note:</i>															
1. Letters in the table (e.g., "(A)") correspond to the construction activity listed in Table C-1.															
2. The end year (2019) in this table represents the final construction phase for this alternative.															

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Table C-3. Port of Long Beach, Middle Harbor Redevelopment – Alternative 2 (315-Acre Alternative) Construction Activity Overlap and Hourly Noise Level Calculations

Task	Start	Finish	2009												
			January	February	March	April	May	June	July	August	September	October	November	December	
Demolish Existing Facilities	11/9/09	3/13/10												(A) ⁽¹⁾	
														(B)	
														(C)	
Prep for Toe Dike / Construction Dike	12/7/09	2/28/10													(G)
Estimated Total Noise Level (Hourly Leq) at 2,500'														58	59
Task	Start	Finish	2010												
			January	February	March	April	May	June	July	August	September	October	November	December	
Demolish Existing Facilities	11/9/09	3/13/10	(A)												
			(B)												
			(C)												
Construct New Bulkhead	1/18/10	2/21/10		(D)											
Excavation Fronting E24	2/22/10	5/29/10			(E)										
					(F)										
Construct New Armor Slope	3/14/10	5/22/10				(G)									
Wharf Construction	4/11/10	10/2/10					(H)								
							(D)								
Utility Construction	9/19/10	10/29/10										(I)			
Paving	10/30/10	11/26/10												(J)	
Lighting, Striping Crane Power	11/27/10	1/7/11													(K)
Prep for Toe Dike / Construction Dike	12/7/09	2/28/10	(G)												
Fill within Dike	2/29/10	5/22/10			(E)										
Remaining Dike Lifts	5/23/10	8/14/10						(G)							
Remaining Fill Lifts	7/4/10	9/25/10							(E)						
Wharf Construction	10/3/10	2/4/11											(H)		
													(D)		
Wick Drains	9/26/10	11/5/10										(L)			
Surcharge	11/6/10	12/31/10												(M)	
Construct Retaining Structure at Pier D	1/18/10	4/10/10	(D)												
Excavate & Truck Material in Cell Bulkhead	4/25/10	10/9/10					(F)								
Excavate Material Fronting Pier D	4/11/10	10/9/10					(F)								
							(E)								
Remove Cellular Sheetpile	6/20/10	12/17/10							(C)						
Rock Revetment	8/29/10	2/11/11									(G)				
Dredge to -55 feet	9/26/10	11/5/10										(E)			
Demo – E12-13 Wharf	3/14/10	9/11/10			(A)										
					(B)										
Slip 1, Lift #1	2/29/10	7/3/10			(G)										
Slip 1, Lift #2	7/4/10	10/23/10							(G)						
Slip 1, Lift #3	10/24/10	1/28/11											(G)		
Ocean Boulevard/Harbor Scenic Drive Train Track Realignment	2009	2010	(R)												
				(S)											
								(T)							
									(U)						
			(V)								(V)				
Estimated Total Noise Level (Hourly Leq) at 2,500'			61	63	62			66		65		66		67	66

Table C-3. Port of Long Beach, Middle Harbor Redevelopment – Alternative 2 (315-Acre Alternative) Construction Activity Overlap and Hourly Noise Level Calculations (continued)

Task	Start	Finish	2011												
			January	February	March	April	May	June	July	August	September	October	November	December	
Ocean Boulevard/Harbor Scenic Drive Train Track Realignment	2009	2010	(V)												
Lighting, Striping Crane Power	1/27/10	1/7/011	(W)												
Wharf Construction	10/3/10	2/4/11	(H)												
Rock Revetment	8/29/10	2/11/011	(D)												
Slip 1, Lift #3	10/24/10	1/28/11	(G)												
Construct South Mooring Dolphin	1/22/11	3/13/11	(H2)												
Remove Surcharge to Slip 1 Fill Site	3/26/11	4/22/11	(M)												
Utility Construction	1/22/11	4/15/11	(I)												
Paving	4/2/11	6/24/11	(J)												
Lighting, Fence, Striping, Crane Power	6/4/11	8/26/11	(K)												
Demolish Existing Facilities	10/16/11	1/7/12	(C)												
			(A)												
			(B)												
Construct New Bulkhead	11/20/11	12/31/11	(D)												
Excavation Fronting E25 and Dispose Slip 1	10/30/11	1/21/12	(E)												
Lift #4	1/29/11	4/22/11	(G)												
Estimated Total Noise Level (Hourly Leq) at 2,500'			65	66	65	66	63	60	57	56	60	61	62		
Task	Start	Finish	2012												
			January	February	March	April	May	June	July	August	September	October	November	December	
Demolish Existing Facilities	10/16/11	1/7/12	(C)												
			(A)												
			(B)												
Excavation Fronting E25 and Dispose Slip 1	10/30/11	1/21/12	(E)												
Construct New Armor Slope	1/22/12	4/15/12	(G)												
Wharf Construction	4/16/12	10/7/12	(H)												
CY Development	10/8/12	3/31/13	(J)												
Dredge to -55 feet	1/22/12	2/18/12	(E)												
Initial Surcharge and Wick Drains	2/19/12	5/13/12	(L)												
			(M)												
2 nd Surcharge and Wick Drains	5/14/12	8/5/12	(L)												
			(M)												
3 rd Surcharge and Wick Drains	8/6/12	1/20/13	(L)												
			(M)												
Remove Surcharge	6/3/12	11/17/12	(M)												
Container Yard Development	11/18/12	12/04/15	(I)												
			(J)												
			(K)												
Estimated Total Noise Level (Hourly Leq) at 2,500'			59	60	62	65	66	63							

Table C-3. Port of Long Beach, Middle Harbor Redevelopment – Alternative 2 (315-Acre Alternative) Construction Activity Overlap and Hourly Noise Level Calculations (continued)

Task	Start	Finish	2013													
			January	February	March	April	May	June	July	August	September	October	November	December		
Container Yard Development	11/18/12	12/04/15	(I)													
			(J)													
			(K)													
Demolish Existing Facilities	4/1/13	9/15/13				(A)										
						(B)										
						(C)										
Construct New Bulkhead	9/16/13	12/8/13										(D)				
Excavation Fronting E26 and Dispose Slip 1	12/9/13	4/12/14														(E)
Construct E27 Bulkhead	12/9/13	2/2/14														(D)
Demolition	6/2/13	10/19/13							(A)							
Railyard	10/20/13	8/29/14													(O)	
Estimated Total Noise Level (Hourly Leq) at 2,500'				59			61				62			61		62
Task	Start	Finish	2014													
			January	February	March	April	May	June	July	August	September	October	November	December		
Excavation Fronting E26 and Dispose Slip 1	12/9/13	4/12/14	(E)													
Construct E27 Bulkhead	12/9/13	2/2/14	(D)													
Railyard	10/20/13	8/29/14	(O)													
4 th Surcharge and Wick Drains	10/12/14	2/14/15														(L)
																(M)
Construct New Armor Slope	4/27/14	8/30/14					(G)									
Wharf Construction	8/31/14	5/2/15											(H)			
Hydraulic Dredge to -55 feet	8/31/13	10/11/13											(E)			
Container Yard Development	8/30/14	1/16/15											(I)			
													(J)			
													(K)			
Estimated Total Noise Level (Hourly Leq) at 2,500'			59		57		56			57				64		65
Task	Start	Finish	2015													
			January	February	March	April	May	June	July	August	September	October	November	December		
4 th Surcharge and Wick Drains	10/12/14	2/14/15	(L)													
			(M)													
Wharf Construction	8/31/14	5/2/15	(H)													
Container Yard Development	8/30/14	1/16/15	(I)													
			(J)													
			(K)													
CY Development	5/3/15	11/28/15						(I)								
								(J)								
								(K)								
Terminal Construction	9/4/15	9/1/17											(I)			
													(J)			
													(K)			
Estimated Total Noise Level (Hourly Leq) at 2,500'			65			63				59				62		59

Table C-3. Port of Long Beach, Middle Harbor Redevelopment – Alternative 2 (315-Acre Alternative) Construction Activity Overlap and Hourly Noise Level Calculations (continued)

Task	Start	Finish	2016														
			January	February	March	April	May	June	July	August	September	October	November	December			
Terminal Construction	9/4/15	9/1/17	(I)														
			(J)														
			(K)														
Dredge and Excavate at Quay Wall	9/18/16	2/4/17											(E)				
Seaside Railyard Area Redevelopment (not in schedule, added)	5/1/16	3/1/18						(I)									
								(J)									
								(K)									
Estimated Total Noise Level (Hourly Leq) at 2,500'			59						62								
Task	Start	Finish	2017														
			January	February	March	April	May	June	July	August	September	October	November	December			
Terminal Construction	9/4/15	9/1/17	(I)														
			(J)														
			(K)														
Seaside Railyard Area Redevelopment (not in schedule, added)	5/1/16	3/1/18	(I)														
			(J)														
			(K)														
Estimated Total Noise Level (Hourly Leq) at 2,500'			62						59								
Task	Start	Finish	2018 ⁽²⁾														
			January	February	March	April	May	June	July	August	September	October	November	December			
Seaside Railyard Area Redevelopment (not in schedule, added)	5/1/16	3/1/18	(I)														
			(J)														
			(K)														
Estimated Total Noise Level (Hourly Leq) at 2,500'			59														

Notes:
 1. Letters in the table (e.g., "(A)") correspond to the construction activity listed in Table C-1.
 2. The end year (2018) in this table represents the final construction phase for this alternative.

Table C-4. Port of Long Beach, Middle Harbor Redevelopment – Alternative 3 (Landside Improvements Alternative) Construction Activity Overlap and Hourly Noise Level Calculations

Task	Start	Finish	2009												
			January	February	March	April	May	June	July	August	September	October	November	December	
Demolish Existing Facilities	11/9/09	3/13/10												(A) ⁽¹⁾	
Estimated Total Noise Level (Hourly Leq) at 2,500'														51	
Task	Start	Finish	2010												
			January	February	March	April	May	June	July	August	September	October	November	December	
Demolish Existing Facilities	11/9/09	3/13/10	(A)												
Excavation Fronting E24	2/22/10	5/29/10		(F)											
Utility Construction	9/19/10	10/29/10								(I)					
Paving	10/30/10	11/26/10											(J)		
Lighting, Striping Crane Power	11/27/10	1/7/11												(K)	
Wick Drains	9/26/10	11/5/10								(L)					
Surcharge	11/6/10	12/31/10											(M)		
Excavate & Truck Material in Cell Bulkhead	4/25/10	10/9/10				(F)									
Excavate Material Fronting Pier D	4/11/10	10/9/10				(F)									
Demo – E12-13 Wharf	3/14/10	9/11/10			(A)										
Ocean Boulevard/Harbor Scenic Drive Train Track Realignment	2009	20010	(R)												
				(S)											
								(T)							
									(U)						
			(W)									(V)			
Estimated Total Noise Level (Hourly Leq) at 2,500'			58		57		58			59		62		61	
Task	Start	Finish	2011												
			January	February	March	April	May	June	July	August	September	October	November	December	
Ocean Boulevard/Harbor Scenic Drive Train Track Realignment	2009	2010	(V)												
			(W)												
Lighting, Striping Crane Power	11/27/10	1/7/11	(K)												
Remove Surcharge to Slip 1 Fill Site	3/26/11	4/22/11			(M)										
Utility Construction	1/22/11	4/15/11		(I)											
Paving	4/2/11	6/24/11				(J)									
Lighting, Fence, Striping, Crane Power	6/4/11	8/26/11						(K)							
Demolish Existing Facilities	10/16/11	1/7/12										(A)			
Estimated Total Noise Level (Hourly Leq) at 2,500'			57	59		62	63	62	59	60	57	57	56	57	

Table C-4. Port of Long Beach, Middle Harbor Redevelopment – Alternative 3 (Landside Improvements Alternative) Construction Activity Overlap and Hourly Noise Level Calculations (continued)

Task	Start	Finish	2012															
			January	February	March	April	May	June	July	August	September	October	November	December				
Demolish Existing Facilities	10/16/11	1/7/12	(A)															
CY Development	10/8/12	3/31/13	(J)															
Initial Surcharge and Wick Drains	2/19/12	5/13/12	(L) (M)															
2 nd Surcharge and Wick Drains	5/14/12	8/5/12	(L) (M)															
3 rd Surcharge and Wick Drains	8/6/12	1/20/13	(L) (M)															
Remove Surcharge	6/3/12	11/17/12	(M)															
Container Yard Development	11/18/12	12/04/15	(I) (J) (K)															
Estimated Total Noise Level (Hourly Leq) at 2,500'				51			60			62			63					
Task	Start	Finish	2013															
			January	February	March	April	May	June	July	August	September	October	November	December				
Container Yard Development	11/18/12	12/04/15	(I) (J) (K)															
Demolish Existing Facilities	4/1/13	9/15/13	(A)															
Demolition	6/2/13	10/19/13	(A)															
Railyard	10/20/13	8/29/14	(O)															
Estimated Total Noise Level (Hourly Leq) at 2,500'				59			60			59			60					
Task	Start	Finish	2014															
			January	February	March	April	May	June	July	August	September	October	November	December				
Railyard	10/20/13	8/29/14	(O)															
4 th Surcharge and Wick Drains	10/12/14	2/14/15	(L) (M)															
Container Yard Development	8/30/14	1/16/15	(I) (J) (K)															
Estimated Total Noise Level (Hourly Leq) at 2,500'				56			59			59			62					
Task	Start	Finish	2015															
			January	February	March	April	May	June	July	August	September	October	November	December				
4 th Surcharge and Wick Drains	10/12/14	2/14/15	(L) (M)															
Container Yard Development	8/30/14	1/16/15	(I) (J) (K)															
CY Development	5/3/15	11/28/15	(I) (J) (K)															
Terminal Construction	9/4/15	9/1/17	(I) (J) (K)															
Estimated Total Noise Level (Hourly Leq) at 2,500'				62			59			59			62			59		

Table C-4. Port of Long Beach, Middle Harbor Redevelopment – Alternative 3 (Landside Improvements Alternative) Construction Activity Overlap and Hourly Noise Level Calculations (continued)

Task	Start	Finish	2016												
			January	February	March	April	May	June	July	August	September	October	November	December	
Terminal Construction	9/4/15	9/1/17	(I)												
			(J)												
			(K)												
Seaside Railyard Area Redevelopment (not in schedule, added)	5/1/16	3/1/18	(I)												
			(J)												
			(K)												
Estimated Total Noise Level (Hourly Leq) at 2,500'			59						62						
Task	Start	Finish	2017												
			January	February	March	April	May	June	July	August	September	October	November	December	
Terminal Construction	9/4/15	9/1/17	(I)												
			(J)												
			(K)												
Seaside Railyard Area Redevelopment (not in schedule, added)	5/1/16	3/1/18	(I)												
			(J)												
			(K)												
Estimated Total Noise Level (Hourly Leq) at 2,500'			62						59						
Task	Start	Finish	2018 ⁽²⁾												
			January	February	March	April	May	June	July	August	September	October	November	December	
Seaside Railyard Area Redevelopment (not in schedule, added)	5/1/16	3/1/18	(I)												
			(J)												
			(K)												
Estimated Total Noise Level (Hourly Leq) at 2,500'			59												

Note:

- Letters in the table (e.g., "(A)") correspond to the construction activity listed in Table C-1.
- The end year (2018) in this table represents the final construction phase for this alternative.

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Appendix D

Environmental Justice

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Table D-1. Minority and Low-Income Populations within One Mile of the Port Of Long Beach Planning Area and Selected Additional Areas (by Block Group)				
Census Tract	Census Block Group	Population	Percent Minority	Percent Low-Income
2941.2	1	637	99.2	9.3
	2	1204	99.0	16.7
	3	688	96.7	9.1
2947	1	12	58.3	0.0
	2	19	84.2	0.0
	3	95	52.6	12.8
	4	1894	92.0	40.8
	5	523	99.6	49.1
	6	727	97.5	39.9
2949	1	1316	92.8	12.8
	2	1946	97.6	60.2
	3	0	n/a	n/a
2961	1	184	20.7	31.0
	2	1241	75.4	0.0
	9	9	11.1	0.0
5433.05	1	2353	54.5	5.2
5439.04	1	1617	93.3	16.2
	2	2806	97.5	26.3
	3	0	n/a	n/a
	4	3	100.0	0.0
5440	1	691	85.5	8.8
	2	1105	87.4	15.1
	3	1575	87.6	31.1
	4	1314	87.1	10.2
	5	1369	86.3	9.6
	6	1011	75.6	9.7
	7	633	79.1	5.9
5702.02	1	861	87.5	15.2
	2	1391	85.4	13.5
	3	788	78.8	12.3
	4	981	82.5	9.2
	5	2191	88.2	22.1
5703.01	1	3890	85.8	33.2
	2	1424	84.6	20.6
	3	1476	80.1	13.8
5703.03	1	1580	86.0	24.4
	2	2287	84.0	23.4
5703.04	1	1721	88.8	22.8
	2	1931	85.1	32.9
	3	1172	86.0	26.6
5704.01	1	1465	95.0	27.6
	2	3312	96.1	31.9
	3	1918	96.2	37.4
	4	1540	94.2	24.4
5704.02	1	1317	91.4	3.4
	2	1157	89.4	31.6
	3	936	92.2	6.7
<i>Note:</i> n/a = Not applicable.				

Table D-1. Minority and Low-Income Populations within One Mile of the Port Of Long Beach Planning Area and Selected Additional Areas (by Block Group) (continued)				
Census Tract	Census Block Group	Population	Percent Minority	Percent Low-Income
5705.01	1	2194	80.9	24.4
	2	1412	77.1	10.4
	3	2195	79.9	13.3
	4	1481	80.9	9.3
5717.01	1	1700	89.0	26.6
	2	2063	87.4	19.9
	3	2351	83.7	27.9
5718	1	1305	26.4	0.8
	2	1058	30.2	5.6
	3	755	48.2	16.5
5720.02	1	1264	30.9	11.8
	2	2317	64.5	8.7
	3	938	47.5	3.8
5721	1	1083	75.3	5.5
5722.01	1	895	76.4	10.2
	2	1141	84.0	10.5
	3	1958	81.7	2.4
	4	2463	70.7	11.5
5722.02	1	753	85.5	12.1
	2	677	76.7	8.8
	3	831	74.4	4.1
	4	1452	80.0	8.7
5723.01	1	1921	93.5	19.6
	2	1732	92.9	20.6
5723.02	1	864	95.4	8.0
	2	791	94.3	16.1
	3	1847	92.1	25.1
5724	1	373	89.8	15.8
	2	700	95.0	6.3
5726	1	1382	94.1	15.0
	2	1644	95.6	6.3
	3	1423	93.8	18.7
	4	681	93.2	8.5
5727	1	1125	95.6	5.3
	2	1095	95.5	22.8
	3	1455	97.0	16.6
	4	1820	93.8	19.6
5728	1	262	87.8	70.2
	2	0	n/a	n/a
	3	1	100.0	0.0
5729	1	1803	96.9	32.4
	2	2106	98.1	42.4
	3	1204	95.9	13.7
5730.01	1	1770	93.0	40.7
	2	2142	91.2	37.1
	3	1846	85.5	26.5
	4	1350	82.1	32.1

Note:
n/a = Not applicable.

Table D-1. Minority and Low-Income Populations within One Mile of the Port Of Long Beach Planning Area and Selected Additional Areas (by Block Group) (continued)				
Census Tract	Census Block Group	Population	Percent Minority	Percent Low-Income
5730.02	1	1917	95.8	53.8
	2	2263	97.1	59.1
5731	1	1788	92.1	25.3
	2	3335	88.7	33.4
	3	1417	81.2	22.1
	4	751	83.6	18.3
5732.02	1	1568	98.0	32.0
	2	2059	96.0	30.8
	3	2070	97.1	38.1
5753	1	1140	99.3	38.9
	2	1752	94.8	42.3
	3	2089	94.9	27.9
5754.01	1	782	86.1	53.7
	2	616	99.2	33.6
	3	1362	93.9	50.9
	4	2716	98.0	53.3
5754.02	1	2957	98.1	49.9
	2	801	93.3	58.3
5755	1	49	98.0	62.5
	2	2	0.0	0.0
	3	16	81.3	0.0
	4	180	73.3	51.2
	5	5	80.0	0.0
5756	1	11	45.5	0.0
	2	2	50.0	0.0
	3	33	100.0	0.0
	9	0	n/a	n/a
5758.01	1	1704	92.4	38.7
	2	1017	95.5	52.3
5758.02	1	2807	95.0	45.7
	2	2626	87.6	55.2
5758.03	1	1868	82.0	51.4
	2	1100	74.5	31.6
5759.01	1	1235	82.3	50.4
	2	1196	85.8	42.7
	3	739	87.4	26.5
	4	655	87.2	21.6
5759.02	1	1757	59.0	32.4
	2	1444	65.7	30.6
	3	1907	82.3	36.6
5760	1	440	60.5	21.9
	2	2	0.0	0.0
	3	3	100.0	0.0
5761	1	826	48.5	34.8
	2	1096	26.7	6.5
	3	747	44.7	17.6

Note:
n/a = Not applicable.

Table D-1.				
Minority and Low-Income Populations within One Mile of the Port Of Long Beach Planning Area and Selected Additional Areas (by Block Group) (continued)				
Census Tract	Census Block Group	Population	Percent Minority	Percent Low-Income
5762	1	1553	86.7	36.1
	2	1290	73.8	31.1
	3	1283	68.3	28.3
	4	1502	79.0	28.5
	5	11	100.0	0.0
	6	13	100.0	0.0
5763	1	1955	96.5	48.4
	2	1471	93.0	46.2
	3	1148	86.8	47.0
	4	1140	85.3	29.3
	5	990	79.9	30.8
	6	1204	93.4	26.2
	7	1004	86.5	27.6
5766.01	1	2345	40.3	12.2
	2	938	52.9	13.6
	3	1112	56.7	23.8
5766.02	1	776	38.5	15.2
	2	1145	35.3	10.1
	3	932	43.0	16.9
	4	1021	48.6	14.2
5767	1	1355	30.8	8.0
	2	721	27.5	6.8
	3	1775	32.7	6.9
5771	5	1458	44.7	14.6
5772	1	1098	20.2	14.6
	2	1175	22.0	4.2
	3	1214	23.9	5.3
	4	1960	24.8	6.5
<p><i>Note:</i> n/a = Not applicable. Source: U.S. Census Bureau 2000 (Summary File 1 P4; Summary File 3 P87).</p>				

Appendix E

Section 404(b)(1) Alternatives Analysis

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Draft Section 404(b)(1) Alternatives Analysis

Port of Long Beach

Middle Harbor Redevelopment Project

I. INTRODUCTION

The following evaluation is provided in accordance with Section 404(b)(1) of the Clean Water Act and the Section 404(b)(1) Guidelines (40 CFR 230). The impact evaluation is summarized from the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Middle Harbor Redevelopment Project ("Project" or "proposed Project") and is not intended to be a stand-alone document. References to sections of the Final EIS/EIR where more information may be obtained are provided throughout this analysis.

II. PROJECT DESCRIPTION

The Port of Long Beach (POLB or Port) Middle Harbor Redevelopment Project involves widening Slip 3 and excavation at Berth F201, filling Slip1 and portions of East Basin, demolition and reconstruction of wharves, construction of a new Berth E23, development of new container terminal facilities on the new landfills, improvement of adjacent backlands, and modifications to transportation systems on land. The proposed federal action is for the U.S. Army Corps of Engineers (USACE) to issue a permit for work, including dredge and fill activities, and structures in waters of the United States (U.S.) for the Project. Alternatives to the 345-Acre Alternative (the Project; Alternative 1) include a 315-Acre Alternative (Alternative 2), Landside Improvements Alternative (Alternative 3), and No Project Alternative (Alternative 4). The Landside Improvements Alternative and No Project Alternative would have no in-water construction, and therefore, would require no National Environmental Policy Act (NEPA) impact analysis or federal permits from the USACE.

A. Location

The proposed Project is located in the Middle Harbor, Northeast Harbor, and Southeast Harbor Planning Districts of the POLB, Los Angeles County, California. The Project comprises Piers D, E, and F and is bordered by Pier D Street and Ocean Boulevard to the north, Pico Avenue to the south, and the Back Channel to the west. The federal portion of the Project includes Slip 1, Slip 3, the eastern portion of East Basin, and Berths D28-31, E23-27, E11-13, F1-4, and F6-10. Modifications to the backlands associated with the berths do not require any federal permits.

B. General Description

The Project includes the following components:

- Demolition of Berths D29-31, E12-13, E23-26, and F1-10;
- Excavation of approximately 710,000 cubic yards (cy) of material from Berths D29-31 and E24-26 to widen Slip 3 by about 117 feet, excavation of about 580,000 cy at Berth F201, and dredging approximately 680,000 cy to deepen portions of Slip 3 to -55 feet Mean Lower Low Water (MLLW). The excavation would create approximately 10.7 acres of marine habitat;

- Construction of rocky dikes along the excavated berths in Slip 3, at Berth F201, for extension of Berth E24, and to contain the stages of fill in Slip 1 and East Basin (1,404,000 tons of rock);
- Abandonment and relocation of the Tidelands oil well facilities and pipelines on the southwest portion of Pier E, and removal of the Baker Commodities, Inc. facilities on Pier D;
- Fill of approximately 25.6 acres in Slip 1, 5.4 acres at Berth E24, and 34.3 acres in East Basin using about 680,000 cy of material dredged from Slip 3, 1,290,000 cy of material excavated from Pier D and Berth F201, and an additional 6,730,000 cy of material imported from inside and outside the Harbor District;
- Extension of Berth E24 southward and construction of a new Berth E23 south of E24. This includes demolition of approximately 550 linear feet (LF) of wharf and bulkhead at E24, and construction of 2,450 LF of new wharf;
- Construction of a new 66 kilovolt (kV) substation on Pier E;
- Realignment of the mainline track at Ocean Boulevard/Harbor Scenic Drive by removing about 4,000 feet of track, realigning 4,000 feet of track, and constructing about 6,000 feet of new track. Approximately 1,700 feet of Harbor Scenic Drive would also be relocated;
- Construction of Pier F storage yard and tracks (approximately 8,000 feet of new track);
- Redevelopment of Berths E25-26 by demolishing and reconstructing about 1,800 lf of existing wharf, and wharf improvements at Berth E27;
- Construction of container terminal facilities on the fill in Slip 1 and East Basin;
- Demolition of Seaside Railyard on Pier E and redevelopment of that area and adjacent terminal area (32 acres total) as container storage yard/backland area;
- Redevelopment of 18 acres north of the Gerald Desmond Bridge and Ocean Boulevard;
- Expansion of the Pier F intermodal railyard; and
- Redevelopment of the existing Pier F, including grading, paving, fencing, and lighting, and constructing buildings and other infrastructure, utilities, tail track, and a loop road.

The federal action is issuance a permit by USACE authorizing work and structures in navigable waters of the U.S. and the discharge of fill in waters of the U.S. Components of the Project that would need USACE approval include wharf demolition and reconstruction at Berths E23-26, new wharf construction at Berth E23, dredging in Slip 3, placement of fill in Slip 1 and East Basin, and construction of rocky dikes for containment of fill and as part of wharf reconstruction. Any contaminated material used for fill would be placed in an engineered Confined Disposal Facility (CDF) within the proposed fill.

C. Authority and Purpose

Discharge of fill material into “waters of the U.S.” requires compliance with Section 404 of the Clean Water Act. A Section 404(b)(1) alternatives analysis is one of the provisions required to demonstrate compliance with the Clean Water Act.

Anticipating the importance of containerized shipping, the Ports of Long Beach and Los Angeles have conducted several studies to evaluate the capacity of the combined port complex in San Pedro Bay to accommodate cargo forecasts. Portions of the San Pedro Bay Ports Long-Term Cargo Forecast (Mercer 1998) were updated in 2001 for the Ports of Long Beach and Los Angeles Transportation Study (Meyer, Mohaddes Associates 2001). These studies indicate that if the ports had unlimited capacity to accommodate future cargo forecasts, overall container throughput for the San Pedro Bay ports could reach 36.2 million twenty-foot equivalent units (TEUs) by 2020 (more than double the 14.2 million TEUs throughput for the ports in 2005). In February 2005, the ports completed a “Forecast of Container Vessel Specifications and Port Calls Within San Pedro Bay” (Mercator 2005). This study forecasted the number and size of vessels expected to call at POLB and POLA if cargo growth proceeds as expected. Increasing cargo volumes combined with the continued introduction of larger vessels would result in a 74 percent increase in the number of ship calls at the

ports between 2004 and 2020. The forecast also projects an increase in larger vessels. Without expansion or significant improvements, the capacity of the existing POLB facilities is estimated to be approximately 12 million TEUs per year. Based on the Port's growth expectations, that level of throughput would be reached by 2015. The improved terminal efficiency and additional terminal acreage provided by the Port's terminal development program would increase overall capacity to 20.3 million TEUs per year and delay Port-wide capacity constraints to after 2020. Estimated future cargo volumes and terminal capacity (throughput) for the Port indicate that terminal capacity needs to be increased to meet the projected demand. The proposed Project would meet a public need for economic growth in trade and import/export of goods, as well as a need for efficiency in cargo handling at the Port.

The overall Project need is to increase container terminal efficiency to accommodate a portion of the predicted future containerized cargo throughput volume and the modern cargo vessels that transport those goods to and from the Port. These larger container vessels need slip widths, water depths, and berth lengths that are greater than previous generations of cargo vessels. The overall Project purpose is to increase and optimize the cargo handling efficiency and capacity of the Port, by constructing sufficient berthing and infrastructure capacity to accommodate a proportional share of foreseeable increases in containerized cargo. Additional Project purposes include improving marine terminal operational efficiency that would expand the use of existing waterways for international maritime commerce, and upgrading utility infrastructure to support the implementation of environmental controls necessary to reduce pollution and conserve energy.

D. Alternatives Considered

During the NEPA process, the following alternatives to the Project (345-Acre Alternative) were thoroughly reviewed: 315-Acre Alternative; Landside Improvements Alternative; and No Project Alternative (Figure 1).

Under the Project, the existing 294-acre Project site would be increased to 345-acres, which would require a net fill of 54.6 acres in waters of the U.S. The Project includes terminal consolidation, redevelopment, and expansion in areas of existing and newly created land; dredge and fill operations; wharf construction to create three deep water berths with -55 feet MLLW depths; rail infrastructure improvements (e.g., mainline track realignment at Ocean Boulevard/Harbor Scenic Drive, Pier F Avenue storage yard and tracks, Pier F tail track, and expanding the existing Pier F intermodal railyard); and construction of a 66kV substation that would support Middle Harbor container terminal operations, including supplying shore-to-ship power, and future power needs for other Port facilities. When optimized at maximum throughput capacity (by year 2025), the consolidated container terminal would be designed to accommodate approximately 3,320,000 TEUs per year.

The 315-Acre Alternative would add a net fill area of approximately 24.7 acres to the existing 294-acre Project site by filling Slip 1 between Piers E and F (Berths E12-E14 and F1-F4). This alternative would include terminal expansion on adjacent areas of existing and newly created land, dredge and fill operations, and new wharf construction. Under this alternative, a new wharf would be constructed to handle increased cargo throughput and accommodate deep-draft container ships, and to replace existing, insufficient wharves. The new 2,900-foot wharf would consist of two deep water berths with a -55 feet MLLW depth. Buildout under this alternative would include the rail improvements identified for the Project (e.g., mainline track realignment at Ocean Boulevard/Harbor Scenic Drive, Pier F Avenue storage yard and tracks, Pier F tail track, and expanding the existing Pier F intermodal railyard). However, due to land constraints, the area along the railyard would be limited in width under this alternative. The proposed 66kV Pier E Substation would be constructed as described for the Project. When optimized at maximum throughput capacity (anticipated by approximately 2025), the consolidated container terminal would be designed to accommodate approximately 2,870,000 TEUs per year.

The Landside Improvements Alternative would redevelop existing terminal areas on Piers E and F and convert underutilized land north of the Gerald Desmond Bridge and Ocean Boulevard within the Project site to a container yard. The alternative would include construction of the following upland site improvements: redevelopment and backland expansion on existing lands within the Project site (the Berth E23 oil area would be abandoned and redeveloped as container yard area); construction of a new 66 kV Pier E Substation; and construction of shore-to-ship infrastructure at Piers E and F to cold-iron vessels while at berth. This alternative would also include construction of a mainline track realignment at Ocean Boulevard/Harbor Scenic Drive and the Pier F storage yard and tracks. The alternative would expand the existing Pier F intermodal railyard to six

tracks. When optimized at maximum throughput capacity (anticipated by approximately 2025), the terminal would be designed to accommodate a combined total of about 2,910,000 TEUs per year. Under this alternative, there would be no in-water activities (e.g., dredging, filling Slip 1 and the East Basin, new wharf construction) as proposed for the Project, no wharf upgrades would occur (except the provisions for shore-to-ship power), and channel and berth deepening would not occur. The Laneside Improvements Alternative is equivalent to a No Federal Action Alternative because it only includes construction and operational activities that would not require issuance of federal permits.

The No Project Alternative considers what would reasonably be expected to occur on the site if the Port did not implement, or federal action did not permit, the proposed Project. The Port would take no further action to construct additional backlands or redevelop the 294 acres that currently exist. The USACE would not issue permits for dredge and fill or wharf construction activities. The No Project Alternative would maintain the current California United Terminals (CUT) and Long Beach Container Terminal, Inc. (LBCT) container terminals at a combined size of 294 acres and in their current configuration. Forecasted increases in cargo would still occur as greater operational efficiencies are implemented. Under this alternative no construction and, consequently, no construction-related impacts would occur. However, the two terminals would continue to generate operational impacts: cargo ships that currently berth and load/unload at the terminal would continue to do so; terminal equipment would continue to handle cargo containers; and trucks would continue to transport containers to outlying distribution facilities. The No Project Alternative would result in a maximum throughput of approximately 2,600,000 TEUs per year.

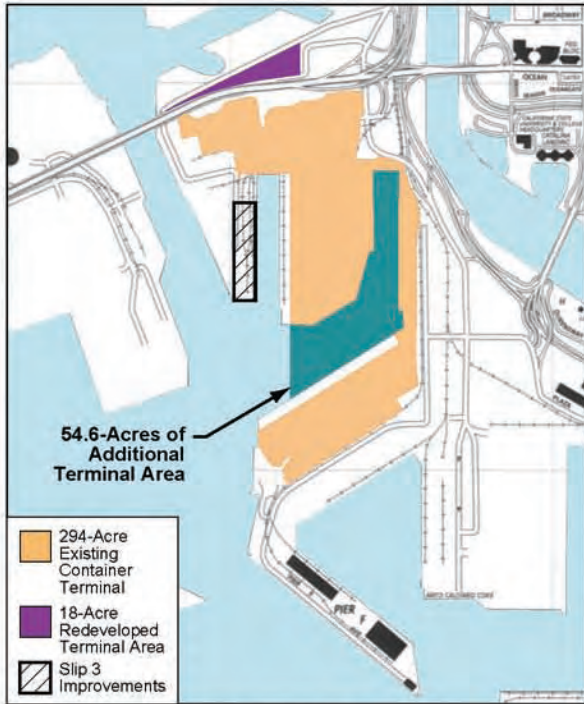
An additional alternative was identified by the U.S. Environmental Protection Agency (EPA) during the Draft EIS/EIR public review period. The proposed alternative would not include any fill activities, but would provide deeper water (-55 feet MLLW) at berths and in basins and channels to accommodate the current and expected future generations of cargo vessels. However, under this alternative the existing terminal areas would remain insufficient to support the activities and modern equipment necessary to efficiently and safely handle the anticipated containerized cargo volumes. Furthermore, Slips 1 and 3 would remain too narrow (395 feet and 364 feet, respectively) for the current larger vessels that require a width of approximately 480 feet to maneuver safely up to and away from the existing berths; and Pier E docks and adjacent backland areas would be separated from the intermodal rail facilities on Pier F, resulting in an existing Pier E terminal that would be inadequately connected to the essential infrastructure required to handle intermodal containerized cargo. Also, as dredged material would not be reused under this alternative, the Port would need to locate new disposal locations and conduct additional sediment characterization. Therefore, this alternative was eliminated from further consideration in the Final EIS/EIR.

A description of other alternatives considered but eliminated from consideration is included in Final EIS/EIR Section 1.6.2.

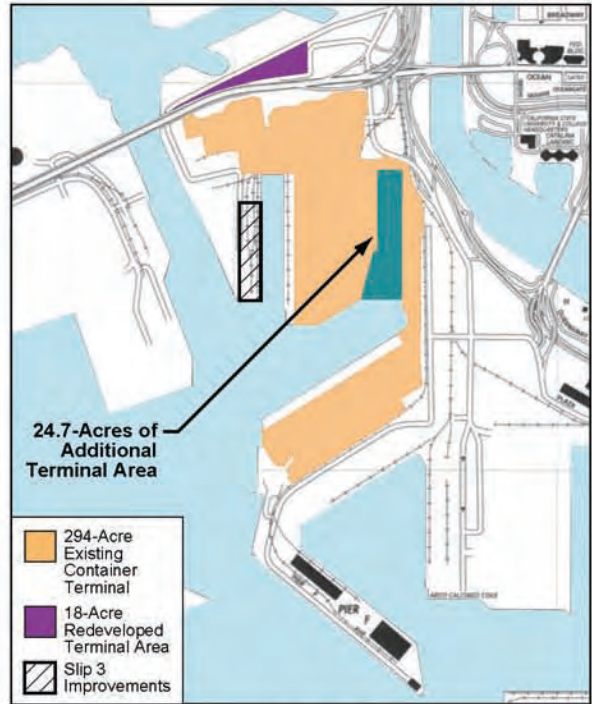
E. Description of Dredged/Fill Material

Sediments that would be dredged are described in Final EIS/EIR Section 3.3, Hydrology and Water Quality, and summarized below. Sediments within the Project area are primarily composed of nearshore marine or estuarine sediments that were either deposited in place along the margin of the early San Pedro embayment or subsequently dredged and placed at their current locations as fill material. Spills and runoff of petroleum products and hazardous substances due to long-term industrial land use have resulted in contamination of some sediments. Waters of the Long Beach/Los Angeles Outer Harbor and Long Beach/Los Angeles Inner Harbor are listed as impaired under 303(d) of the Clean Water Act. The Project is located primarily in the Inner Harbor, but much of East Basin is within the Outer Harbor.

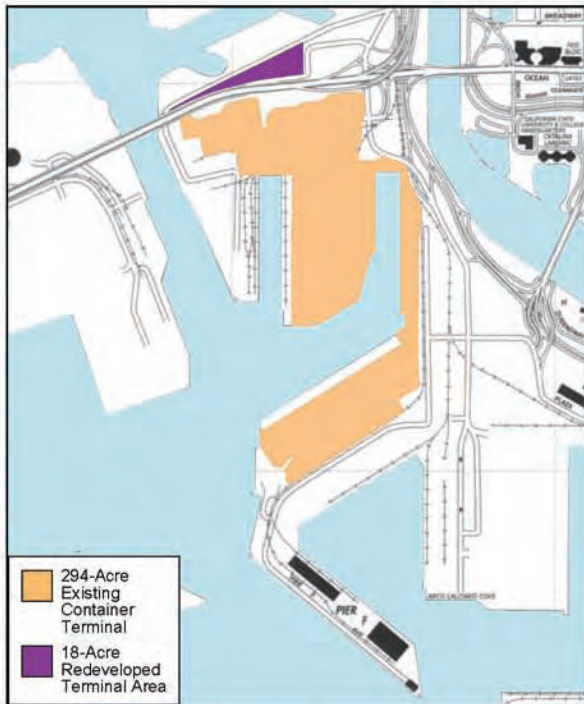
Sediments in the Project vicinity are predominantly fine grained (MEC Analytical Systems, Inc. 2002). In Slip 1, sediments were over 99 percent silt and clay, while the channel just south of East Basin was 89 percent silt and clay. East Basin was last dredged in 1997, with Slip 3 dredged in 1999, and Slip 1 dredged in 1971.



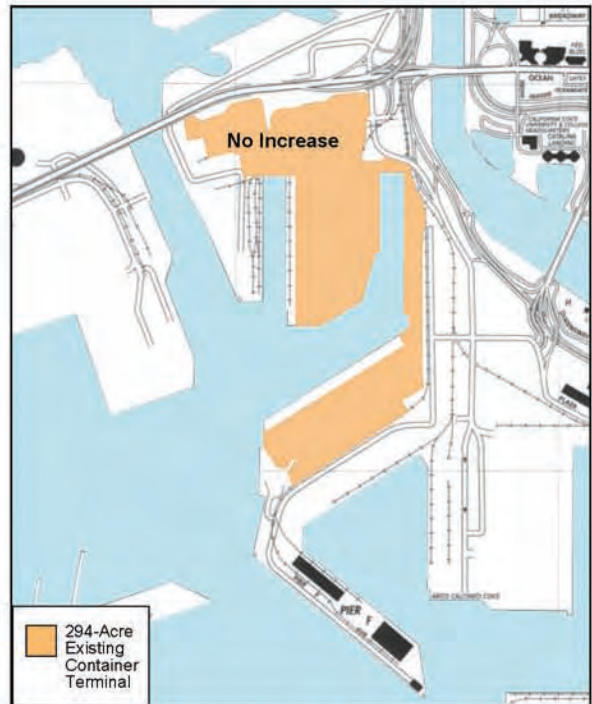
**Alternative 1:
345-Acre Alternative (The Project)**



**Alternative 2:
315-Acre Alternative**



**Alternative 3:
Landside Improvements Alternative**



**Alternative 4:
No Project Alternative**

Figure 1. Proposed Project and Alternatives Container Terminal Areas

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Soils in the areas to be excavated for widening Slip 3 were sampled as described in Final EIS/EIR Section 3.1, Geology, Groundwater, and Soils, and some areas of contamination were found for Total Extractable Hydrocarbons (TEHs), Organochlorine Pesticides (OCPs), and polynuclear aromatic hydrocarbons (PAHs) (Pacific Edge Engineering, Inc. 2006).

- TEH concentrations, as oil and diesel, were detected in 10 of 133 samples, at maximum concentrations of 180 parts per million (ppm) and 105 ppm, respectively.
- Of 93 samples analyzed, VOCs were not detected above practical quantitation limits (PQLs), or the lowest levels which can be routinely quantified and reported by a laboratory.
- Of 133 samples analyzed, OCPs dichloro-diphenyl-dichloroethylene (DDE) and dichloro-diphynyl-trichloroethane (DDT) were detected above PQLs in one boring, to a depth of 14 feet, and in three other borings, to a depth of three feet.
- Polychlorinated biphenyl (PCBs) were not detected in any of the 133 samples analyzed for these contaminants.
- Hazardous concentrations of metals were not detected in the 133 samples analyzed.
- Carcinogenic PAHs (based on EPA Region 9 Preliminary Remediation Goals) were detected in 31 of the 133 samples analyzed, at depths varying from five to 60 feet below ground surface.

The concentrations of all metals tested were below the California Total Threshold Limit Concentration (TTLC), but the copper concentration at one site exceeded the California Soluble Threshold Limit Concentration (STLC). Additional testing found the soluble concentration to be less than the STLC of five milligrams per liter (mg/L).

Although no numerical sediment quality objectives exist, sediment quality objectives are being developed by the State Water Resources Control Board (SWRCB). Therefore, sediment quality typically is characterized by comparing measured bulk sediment results to published sediment quality guidelines (Long et al. 1995) as follows:

- Effect Range Low (ER-L) = concentrations below which minimal toxic effects are expected; and
- Effect Range Medium (ER-M) = concentrations above which toxic effects are expected.

Sediment samples collected four times from August 1994 to January 1996 in Slip 1 and Slip 2 (which was subsequently filled) were analyzed for metals, chlorinated pesticides, PAHs, and total petroleum hydrocarbons (SAIC and MEC 1997). The results (Table E-1) indicate that copper, lead, mercury, nickel, zinc, and benzo(a)pyrene (PAH) concentrations were slightly elevated (above ER-L but below ER-M). Dichloro-diphenyl-dichloroethylene (DDE) concentrations were slightly above the ER-M. Elutriate tests in 2001 indicated that chromium concentrations were slightly higher than at a reference site (URS 2004). The sediments in Slip 1 would be covered by the proposed fill and would be no longer in contact with marine waters and organisms.

Pollutant	Concentration (ppm)	ER-L	ER-M
Cadmium	0.50	1.2	9.6
Chromium	55.0	81	370
Copper	96.8	34	270
Lead	63.5	47	218
Mercury	0.48	0.15	0.71
Nickel	37.0	20.9	51.6
Silver	0.45	1.0	3.7
Zinc	180	150	410
Benzo(a)pyrene (PAH)	0.54	0.43	1.60
DDE	0.031	0.002	0.027
TRPH	1008	--	--

Source: SAIC and MEC 1997; Kinnetic Laboratories and ToxScan 2002.

Sediments in Slip 3 were sampled in September 2006 (Weston Solutions 2006), with the chemical test results as summarized in Table E-2. The top layer consisted of 60.6 to 86.1 percent fine grained sediments while the bottom layer consisted of 33.3 to 52.6 percent fine grained material. For metals, arsenic, copper, mercury, and nickel were slightly elevated (above ER-L but below ER-M) in top sediments. Total PCBs, total detectable DDTs, six PAHs, and total low molecular weight (LMW) PAHs also were slightly elevated in top sediments. The concentration of contaminants in the upper layer of Slip 3 sediments to be dredged is generally much closer to the ER-L levels (i.e., concentrations below which minimal toxic effects are expected) than to the ER-M levels (i.e., concentrations above which toxic effects are expected), except for low molecular weight PAHs. Therefore, toxic effects would be low because the concentrations are close to the level where minimal effects are expected. None of the other contaminants tested in top sediments and no contaminants in the bottom sediments were elevated. Most PCBs, Arochlors, pesticides, and phenols were not detectable. Elutriate tests on the sediments found no contaminants to exceed water quality objectives for the protection of marine life (Weston Solutions 2006). This means that contaminants would not be released to the water at concentrations that could exceed water quality objectives during dredging or filling activities using these sediments.

Pollutant	Top Layer	Bottom Layer	ER-L	ER-M
Arsenic	10.6	6.07	8.2	70
Cadmium	0.77	0.37	1.2	9.6
Chromium	44.3	25.1	81	370
Copper	63.8	29.3	34	270
Lead	38.1	15.7	46.7	218
Mercury	0.30	0.14	0.15	0.71
Nickel	25.3	18.3	20.9	51.6
Silver	0.15	0.13	1.0	3.7
Zinc	118	69.6	150	410
Total PCBs	47.1	8.3	22.7	180
Total Detectable DDTs	22.9	0.0	1.6	46.1
Acenaphthene	32.2	1*	16	500
Anthracene	124	5.8	85	1100
Benz[a]anthracene	312	13.7	261	1600
Benzo[a]pyrene	485	18.9	430	1600
Chrysene	504	21.4	384	2800
Dibenz[a,h]anthracene	85.2	3.1*	63	260
Total LMW PAHs	2121.7	105.3	552	3160
<i>Notes:</i> Concentrations are the higher value for composites from samples in the north and south portion of Slip 3. * = estimated value. LMW = low molecular weight PAHs. <i>Source:</i> Weston Solutions 2006.				

Dredging projects in both the Inner and Outer Harbor areas have removed contaminated sediments, and the input of contaminants has decreased through discharge controls. In addition, some contaminated sediment areas have been covered by less contaminated sediments as part of recent landfill construction, thereby sealing them from interchange with the overlying water. Nevertheless, some localized areas of contaminated sediments still remain.

In addition to the sediments to be dredged from Slip 3 (680,000 cy) and the soils to be excavated from Pier D and Berth F201 (1,290,000 cy) to be reused as fill, approximately 6,730,000 cy of material would be imported to complete the proposed landfills (Project only). The imported material would come from sources inside and outside the Harbor District. Potential sources of fill material from inside the Harbor District include the Main Channel Project (approximately 800,000 cy), the Western Anchorage Sediment Storage Site (approximately 1,290,000 cy), and the Pier S/Back Channel Project (approximately 2,350,000 cy). Additional fill would come from currently undetermined dredge and borrow locations, likely in the Outer Harbor area. All imported fill material would be required to undergo appropriate testing and notification to the USACE prior to placement within the Project fill. If used, contaminated sediments would be capped and isolated by the placement of uncontaminated materials on top and at the sides in accordance with regulatory requirements and permits. Approximately 1,404,000 tons of rock would also be used to cover excavated and reconstructed slopes and for fill containment dikes. The 768 pilings removed during demolition of Berths E24-E26 would be replaced

when the berths are reconstructed, and new pilings would be installed for the Berth E24 wharf extension and the new Berth E23 wharf. A total of 2,707 new concrete pilings and eight steel pilings would be installed with just over half of the concrete piles in the water.

For Alternative 2 (315-Acre Alternative), 680,000 cy of material dredged from Slip 3 and 710,000 cy of soil excavated from Pier D would be reused as fill, and 1,840,000 cy of imported material would be required to complete the fill in Slip 1. The sources of this material would be the same as described for the Project and would require testing and notification of the USACE prior to placement within the fill. If used, contaminated sediments would be capped and isolated by the placement of uncontaminated materials on top and at the sides in accordance with regulatory requirements and permits. Approximately 445,000 tons of rock would also be used to cover excavated and reconstructed slopes and for fill containment dikes. The 768 pilings removed during demolition of Berths E24-E26 would be replaced when the berths were reconstructed, and new pilings would be installed for the Berth E24 wharf extension. A total of 1,804 new concrete pilings and eight steel pilings would be installed, with just over half of the concrete piles in the water.

F. Description of Proposed Discharge Sites

Under the Project, dredged, excavated, and imported material would be placed in Slip 1, at the south end of Berth E24, and in East Basin to create a net 54.6 acres of additional backlands in the Port. Approximately 1,404,000 tons of rock would be used to cover excavated and reconstructed slopes and for fill containment dikes. Approximately 173,000 cy of excess material from final surcharge of the new fill would be removed for use in other Harbor District projects. Under Alternative 2, dredged, excavated, and imported material would be placed in Slip 1 and at the south end of Berth E24 to create a net 24.7 acres of additional backlands in the Port. Approximately 445,000 tons of rock would be used to cover excavated and reconstructed slopes in Slip 3 and for fill containment dikes (Slip 1 and Berth E24). No material would be exported for use in other Harbor District projects.

G. Description of Disposal Methods

Fill placement would be by bottom-dump barge or discharge through a pipe from a suction dredge (Project and Alternative 2). Bottom-dump barges would be used until the water becomes too shallow for the barges to enter the fill areas. Then, fill would continue by use of a derrick barge or pump to offload the material from the barges into the fill site, or the material from dredging in Slip 3 could be pumped in via pipe. Once the fill is above the water level, fill material could also be brought in by truck. Rock riprap would be placed along the berths by derrick barge and a skip box. In some cases, large rocks could be placed individually. For the containment dikes, the rock could be pushed over the side of the transport barge or placed as described for the riprap.

III. FACTUAL DETERMINATIONS

A. Physical Substrate Determinations

The substrate to be dredged in Slip 3 and for keying in the containment dikes is predominantly silt and clay near the surface with more coarse grained (sand) material below. These sediments are at a depth of about -36 to -54 feet MLLW (Weston Solutions 2006). Excavation to widen Slip 3 in the Project and Alternative 2 and at Berth F201 for the Project would remove rock riprap and previous fill sediments. Approximately 212 pilings would be removed at Berths D29-D31. New rock riprap would be placed on the reconstructed slopes in the excavated areas. Contaminants in the sediments to be dredged and excavated were discussed previously in Section II.E. In Slip 1 (Project and Alternative 2), the fill would cover predominantly fine, soft sediments on the bottom at a depth of about -45 feet MLLW and vertical bulkheads along the sides and end of the slip. Approximately 1,746 pilings would be removed during wharf demolition in Slip 1 prior to fill placement. A rock riprap containment dike would be constructed to keep the fill in Slip 1 until the fill in East Basin covers that dike. A rock riprap containment dike would be constructed at the west side of the East Basin fill to keep the fill material in place. Approximately 1,050 pilings would be removed during wharf demolition at Berths F6-10 prior to fill placement in East Basin (Project only). Approximately 2,707 new concrete pilings would be installed for Berths E23-E26 in the Project while 1,804 pilings would be installed for Berths E24-E26 in Alternative 2. A little over half of these would be in the water. A total of 410 LF of vertical bulkhead (sheet pile) would be installed along Berth E27 to provide slope stability in the Project and Alternative 2.

Dredging in Slip 3 (Project and Alternative 2) would remove benthic invertebrates living in and on the soft sediments and on the riprap and bulkhead while landfill construction would bury soft bottom and hard substrate (rock dike and bulkhead) biota in 63.5 acres for the Project and in 31 acres for Alternative 2. Sediments suspended by dredging would settle on benthic organisms in a narrow area of soft bottom adjacent to the dredging along the south end of Slip 3 and along the containment dikes (Project and Alternative 2). Some of these organisms would be buried. These losses in terms of acres are described in Final EIS/EIR Section 3.4, Biota and Habitats, and are summarized in Table E-3. The fill and excavation in Phase 2 would not occur for Alternative 2, resulting in 31 acres of habitat loss and 6.3 acres of habitat created for a net habitat loss of 24.7 acres. After dredging, the remaining soft sediments would be up to 10 feet deeper and would be recolonized by the same types of invertebrate communities. The new rock riprap, vertical bulkhead, and pilings would also be recolonized by the same types of invertebrate communities. Community re-establishment would occur within a few years.

Construction Phase	Location	345-Acre Alternative			315-Acre Alternative		
		Marine Habitat Loss/Gain ¹	Inner Harbor	Outer Harbor	Marine Habitat Loss/Gain ¹	Inner Harbor	Outer Harbor
1	Slip 1 fill	-25.6	-25.6	--	-25.6	-25.6	--
2	East Basin fill	-34.3	-10.0	-24.3	--	--	--
1	Pier E Extension	-5.4	--	-5.4	-5.4	--	-5.4
Total Habitat Loss		-65.3	-35.6	-29.7	-31.0	-25.6	-5.4
1	Slip 3 widening	+6.3	+6.3	--	+6.3	+6.3	--
2	Berth F201 excavation	+4.4	--	+4.4	--	--	--
Total Habitat Created		+10.7	+6.3	+4.4	+6.3	+6.3	--
Net Habitat Loss		-54.6	-29.3	-25.3	-24.7	-19.3	-5.4

Notes:
1. Water column, soft bottom, and hard substrate.
Acreages are approximate. + = gain and - = loss.

Actions Taken to Minimize Impacts. Dredging and excavation would occur for the Project and Alternative 2. The amount of dredging required for Alternative 2 would be slightly (approximately one percent) less than for the Project, while the amount of excavation would be about 40 percent less than for the Project. Dredging and excavation, in the Project and Alternative 2, would be limited to areas needed to allow access by larger container vessels to the berths. Contaminated sediments for both alternatives would be placed in an approved CDF using dredging and filling. Fill placement in Slip 1 (Project and Alternative 2) and East Basin (Project) would be behind rock dikes that would limit movement of the sediments during and after placement. Alternative 3 (Landside Improvements Alternative) and the No Project Alternative would involve no in-water construction and, therefore, would not result in impacts or require mitigation measures for in-water activities.

B. Water Circulation, Fluctuation, and Salinity Determinations

Current Patterns and Circulation

Current Patterns and Flow. Circulation patterns in the Inner Harbor and Outer Harbor would change very little as a result of the proposed dredging, excavation, and filling activities. Slip 1 has no through flow (dead-end slip), and placement of fill in this slip for the proposed Project and Alternative 2 would not substantially affect current patterns and water flow in the adjacent East Basin. Widening and deepening Slip 3 (Project and Alternative 2) also would have minimal effects on current patterns and water flow. Placement of fill in East Basin (Project only) and excavation of Berth F201 would not substantially affect current patterns and water flow in the Outer Harbor or Back Channel.

Waves. Wave action in Middle Harbor would not change substantially as a result of the Project because waves entering East Basin are unlikely to be reflected or enhanced by Project structures (Project and Alternative 2).

Velocity. Tidal current velocities in Slip 3 would be slightly lower due to the increased water depth resulting from dredging in the Project and Alternative 2. Water velocity within Slip 1 (Project and Alternative 2) and East Basin (Project) would be reduced to zero as a result of the fill. Water velocities in the Back Channel and the remainder of Middle Harbor would not be altered by dredging in Slip 3 and placement of fill in Slip 1 and East Basin.

Stratification. The Project and Alternative 2 would not alter stratification in Harbor waters, nor would Alternatives 3 and 4 because they would not include any in-water activities.

Hydrologic Regime. No changes are anticipated for the Project or any of the alternatives.

Water Level Fluctuations

Tides would remain unchanged in the harbor as a result of the proposed dredging and excavation to widen Slip 3 and fill Slip 1 (Project and Alternative 2), and fill East Basin and excavation of Berth F201 (Project), because no restrictions to tidal flow would occur. The tidal prism would be slightly reduced by the Project fill, but increased by the dredging and excavation for a net decrease since the amount of fill would exceed the amount of dredging and excavation. For Alternative 2, the amount of fill would exceed the amount of dredging and excavation by considerably less than for the Project. Since Alternatives 3 and 4 would not involve fill, excavation, or dredging, no effects on the tidal prism would occur.

Salinity Gradients

The Project would result in minor, localized changes in salinity gradients in the harbor during rainfall events. The fill in Slip 1 and East Basin would convert approximately 65 acres of open water to an impervious surface, and direct precipitation on that fill would be channeled to the harbor through storm drains. Excavation would increase the water surface by nearly 11 acres, with a net change of about 55 acres. In Alternative 2, the net increase in land surface would be approximately 25 acres. In the absence of fill, rainfall would have fallen evenly on the water surface. Discharging the stormwater runoff from the fill surface at specific points would locally reduce salinity in the adjacent harbor water until mixing occurs. Runoff from the remainder of the Project backlands would continue as in the past. No changes in salinity gradients would occur under Alternatives 3 and 4 because neither includes any fill or excavation.

Actions Taken to Minimize Impacts. No actions are necessary to offset the less than significant impacts expected on water circulation, water level fluctuations, and salinity gradients.

C. Suspended Particulate/Turbidity Determinations

Turbidity

In-water construction activities that involve excavation of existing fill, removal of the existing wharves and riprap, pile driving, rock riprap placement, and dredging would cause short-term increases in suspended sediments and turbidity. Following completion or interruption of dredging, the time required for suspended materials to settle-out, combined with the current velocity, would determine the size and persistence of the turbidity plume. Settling rates are largely determined by the grain size of the suspended material but are also affected by the chemistry of the particles and the receiving water (USACE and LAHD 1992). Dredging would occur in Slip 3 (Project and Alternative 2) and for keying-in the fill containment dikes for each construction stage (approximately 0.3 acres more for the Project than Alternative 2), while excavation would occur in Slip 3 (Project and Alternative 2) and at Berth 201 (Project). Dredging would resuspend bottom sediments, predominately silt, clay, and organic material, while in-water excavation (i.e., removal of existing fill to create open water) would suspend sediments from the fill being excavated. Dredging and excavation would occur 12 times over a 10-year period, lasting from 16 to 84 days each time, for a total of 528 days and an average of 44 days per year for the Project. For Alternative 2, these activities would occur nine times over five years, lasting from 16 to 70 days each time, for a total of 336 days and an average of 37 days per year. The plume durations are expected to be generally short, with the concentration of suspended solids returning to background levels within one to 24 hours after dredging stops (Parish and Wiener 1987). Sampling based on water transmissivity at 82, 164, and 328 feet from a pilot dredging project (USACE et al. 2002, Moore and Edmunds 2002) found the turbidity plume for clean sediments did not extend over 328 feet in the down current direction. A typical mixing zone in a permit for dredging is 328 feet (USACE 2002). Based on this information, turbidity from Project (and Alternative 2) dredging would affect a small area of the East Basin near the dredging site but would not substantially affect water quality outside the mixing zone. Therefore, water quality objectives for turbidity/light transmittance would not be exceeded outside the mixing zone, and effects on marine organisms would be minor and less than significant. No dredging or excavation would occur for Alternatives 3 and 4.

Placement of fill material in Slip 1 and the East Basin using bottom-dump barges would increase suspended sediments in the vicinity of the filling activities and has the potential to release contaminants to the water as the sediment falls through the water column to the bottom. Turbidity would occur within Slip 1 and in the East Basin throughout the filling process, but would be of short duration once filling is complete (USACE and LAHD 1992). The turbidity plume would extend approximately 650 feet or less from the discharge location (USACE 2002). Slip 1 is about 2,000 feet long and the portion of East Basin to be filled (Project only) is about 1,500 feet long. Thus, only turbidity from fill placed near the southern end of Slip 1 would be expected to reach East Basin, and turbidity from fill placed in East Basin would likely extend outside the fill area only when work is in the western part of the fill area. Construction of the containment dikes on the south side of the Slip 1 fill (Project and Alternative 2) and on the west side of the East Basin fill (Project only) would also restrict circulation in the fill areas. Therefore, potential effects from these activities would be less than significant.

For the Project, pile removal during wharf demolition and pile driving operations associated with wharf construction (about 948 piles for Berths E24-E26 and 493 for Berth E23 driven in water), as well as driving sheet piles for upgrades at Berth E27, would cause localized and temporary turbidity. Wharf and bulkhead demolition would occur seven times in eight years for a total of 800 days with a range of 65 to 182 days and an average of 114 days per year. Pile and bulkhead installation would occur 11 times in nine years for a total of 503 days with a range of eight to 126 days and an average of 46 days per year. Placement of new riprap for reconstruction of Berths E24-E26 and for fill containment would also cause localized and temporary turbidity. Rock placement would occur nine times in nine years for a total of 695 days with a range of 48 to 168 days and an average of 77 days per year. Sediments would be suspended in the immediate vicinity of these activities, particularly during pile removal. As noted above, suspended sediments would settle rapidly (within hours), and turbidity levels would decrease once activities were completed. Therefore, effects on water quality and marine organisms would be minor and less than significant.

For Alternative 2, pile removal and driving would be the same as for the Project at Berths E24-E26 and Berth E27 (no piles would be driven at Berth E23). Wharf and bulkhead demolition would occur five times in four years for a total of 436 days with a range of 65 to 120 days and an average of 87 days per year. Pile and bulkhead installation would occur 10 times in six years for a total of 377 days with a range of 8 to 88 days and an average of 38 days per year. Rock placement would occur seven times in five years for a total of 437 days with a range of 48 to 90 days and an average of 62 days per year. Thus, suspension of sediments and turbidity would occur over a shorter time period than for the Project. Therefore, effects on water quality and marine organisms would be minor and less than significant.

Secondary effects of backland improvements construction also would be minor as described below in Section III.H.

Effects on Chemical and Physical Properties of the Water Column

Dredging, excavation, and filling within Middle Harbor would have minor and temporary effects on water quality in the immediate vicinity of those activities. Terminal operations would also have minor effects on the water column. These effects are described in Final EIS/EIR Section 3.4 and summarized below.

Salinity. No change in salinity would occur as a result of construction. As described previously in Section III.B, Salinity Gradients, salinity gradients could be altered during stormwater runoff from the net increase in land surface of about 55 acres in the Project or 25 acres for Alternative 2, but salinity gradients would not be substantially altered by runoff from the existing terminal surfaces. These effects would be of short duration, occur in a limited area, and have minor effects on the water column. Terminal operations under Alternative 3 would not affect salinity gradients because the amount of runoff would remain essentially the same as prior to backland improvements. Alternative 4 would not change the backlands or generate any new runoff from those areas.

Clarity/Light Penetration. Turbidity in the immediate vicinity of dredging, excavation, fill placement, and pile removal would reduce water clarity in a small area for the duration of the activity in the Project and Alternative 2. The effects of turbidity are discussed in more detail above. Construction activities would not alter other factors that affect water clarity, such as phytoplankton abundance. Light penetration in the dredged areas would not be reduced in the long term. For Slip 3 (Project and Alternative 2) and East Basin (Project) fill areas, no water would remain so water clarity would not be applicable. Terminal operations under the Project

or any of the alternatives would have minor effects, if any, on water clarity because runoff would be similar to that from the existing terminals.

Color. Color of harbor waters would be changed little if any due to Project or alternative construction activities, and operations would have no effects on color. Turbidity during placement of fill in the Slip 1 (Project and Alternative 2) and East Basin (Project only) could have minor, short-term effects on water color in those areas. Dredging, excavation, pile removal and installation, and rock placement for the Project and Alternative 2 would also produce turbidity that could have minor but less than significant effects on water color adjacent to the berths when the work is in progress.

Odor. Any odors resulting from construction activities would be expected to be localized, temporary, and less than significant.

Taste. Not applicable.

Dissolved Gases. Dissolved oxygen (DO) levels in aquatic habitats can be reduced by the introduction of high concentrations of suspended particulates. This is especially true if the particulates are from anaerobic sediments, which would place an oxygen demand on the surrounding waters. DO levels would be reduced in the immediate vicinity of dredging, excavation, pile removal and fill placement activities (Project and Alternative 2) by the introduction of high concentrations of suspended particulates and by the oxygen demand on surrounding waters from anaerobic sediments. Any reduction in DO levels, however, would be brief and of limited spatial extent. For example, a study in New York Harbor showed a small reduction in DO near the dredge but no reductions in DO levels 200 to 300 feet away from the dredging activities (Lawler, Matusky, and Skelly 1983). Further, a study of dredge material releases in San Francisco Bay showed only a three- to four-minute reduction in DO levels near the point of release (USACE and LAHD 1973). These results are consistent with the findings and conclusions from studies of the potential environmental impacts of open water disposal of dredged material conducted as part of the USACE Dredged Material Research Program (Lee et al. 1978; Jones and Lee 1978). Therefore, water quality objectives for DO would not be exceeded outside the mixing zone for either the Project or Alternative 2.

Nutrients and Eutrophication. Nutrients could be released into the water column during the dredging and excavation as well as filling operations (Project and Alternative 2), and could promote temporary growth of phytoplankton. Observations of previous dredge projects (including the Port of Los Angeles Deep Draft Navigation Improvement Project [USACE and LAHD 1992]) indicate that phytoplankton blooms have occurred during the spring while dredging was underway, although phytoplankton blooms are normal in the spring in the southern California Bight (Gruber and McWilliams 2005, Nezhlin and Li 2003). Dredging, excavation, and filling could release nutrients that may contribute to natural phytoplankton blooms, although there is no evidence that this has happened as a direct result of previous projects. The Basin Plan (RWQCB 1994b) limits on biostimulatory substances are defined as "...concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses." Given the limited spatial and temporal extent of Project activities with the potential for releasing nutrients from bottom sediments, significant adverse effects on phytoplankton populations and beneficial uses of the Middle Harbor area are unlikely to occur as a result of the Project or Alternative 2.

Toxic Metals and Organics. Testing of sediments to be dredged in Slip 3 (Project and Alternative 2) indicated slightly elevated concentrations, relative to ER-L and ER-M values, for several metals and organic compounds in top sediments but not in bottom sediments. Elutriate tests, however, found no contaminants that exceeded water quality objectives for the protection of marine life (Weston Solutions 2006). Testing of soils to be excavated for widening Slip 3 (Project and Alternative 2) indicated elevated concentrations of hydrocarbons and other organic compounds at several locations but concentrations of all metals were below threshold limits. Based on these results, dredging, excavation, and disposal of these sediments in the proposed landfills would not cause significant toxicity, contaminant bioaccumulation, or degraded water quality and adversely affect beneficial uses. Sections II.E and III.D provide a more detailed discussion.

Pathogens. No pathogens are expected to be released to harbor waters as a result of the Project or Alternative 2 dredging, excavation, and filling activities.

Temperature. Activities associated with the Project and alternatives would not affect water temperatures.

Other. The hydrocarbon ion concentration (pH) may decrease slightly in the immediate vicinity of dredging locations. This change would be caused by the reducing conditions found in the dredged sediments as the sediments are released into the water column. Seawater, however, is a buffer solution (Sverdrup et al. 1942) that acts to minimize changes in pH. Therefore, any measurable change in pH would be highly localized and short in duration with changes in ambient pH of less than 0.2 units. Thus, water quality objectives for pH would not be exceeded outside the mixing zone.

Actions Taken to Minimize Impacts. A Section 401 (of the Clean Water Act) Certification would be obtained from the Los Angeles Regional Water Quality Control Board (RWQCB) for construction dredging, excavation, and filling activities that contains standard Waste Discharge Requirements (WDRs) and would specify receiving water monitoring requirements. Monitoring requirements typically include measurements of water quality parameters such as DO, light transmittance (turbidity), pH, and suspended solids at varying distances from the dredging, excavation, and filling activities. Analyses of contaminant concentrations (metals, DDT, PCBs, and PAHs) in waters near the dredging, excavation, or filling activities may also be required if the contaminant levels in the dredged, excavated, or discharged sediments are known to be elevated and represent a potential risk to beneficial uses. Monitoring data would be used by the Port's dredger to demonstrate that water quality limits specified in the permit are not exceeded. The dredging, excavation, and filling permit could identify corrective actions, such as use of silt curtains that would be implemented if the monitoring data indicate that water quality conditions outside of the mixing zone exceed the permit-specified limits.

Material imported for use as fill would be tested using standard EPA/USACE protocols prior to discharge into harbor waters to determine the suitability of the material for unconfined, aquatic disposal. Material not suitable for unconfined aquatic disposal would either not be used or placed in a CDF within the landfill.

Monitoring would be conducted to ensure that return water flow from discharge of fill material (i.e., material dredged or excavated from the harbor, or imported to the site, and used to create new landfills) behind the fill dikes meets the RWQCB WDRs for settleable solids and toxic pollutants.

A Municipal Stormwater and Urban Runoff Discharge Plan would be prepared and implemented for the Project or alternatives.

D. Contaminant Determinations

Contaminants, including metals and organics, could be released into the water column during the dredging, excavation, and pile removal/driving activities in the Project and Alternative 2. However, like turbidity, any increase in contaminant levels in the water is expected to be localized within the mixing zone and of short duration. The magnitude of contaminant releases would be related to the bulk contaminant concentrations of the disturbed sediments, as well as the organic content and grain size which affect the binding capacity of sediments for contaminants. Because the sediment characteristics vary across the Project site, the magnitude of contaminant releases and water quality effects would also vary. Elutriate tests on the sediments to be dredged in Slip 3 found no contaminants that exceeded water quality objectives for the protection of marine life (Weston Solutions 2006). For soils that would be excavated on the west side of Slip 3, soluble copper concentrations were found to be less than the STLC of five mg/L. Elutriate tests of sediments in Slip 1, where wharf demolition would occur, only found chromium concentrations to be slightly higher than at a reference site (URS 2004).

Suspended sediments containing contaminants would rapidly (within hours) settle to the bottom in association with the turbidity plume caused by dredging, excavation, and pile removal. The amount of contaminants redistributed in this manner would be small and localized, primarily within Slip 3 adjacent to the work area but also in Slip 1 and East Basin where wharf demolition would occur. Permit-required monitoring associated with previous dredging projects in the harbor has shown that substantial resuspension of contaminated sediments does not occur. Consequently, concentrations of contaminants in the sediments of East Basin adjacent to the dredged area would not be substantially increased by dredging activities because resuspension (followed by settling) of sediments is expected to be low. Filling Slip 1 (Project and Alternative 2) and a portion of East Basin (Project only) would cover the sediments from wharf demolition and dredging/excavation that settled in the fill area. These examples and scenarios demonstrate that contaminant releases from sediments disturbed by dredging, excavation, and other demolition/construction activities would not substantially affect the concentrations or bioavailability of contaminants in Middle Harbor.

Placement of fill in Slip 1 (Project and Alternative 2) and East Basin (Project only) would cover the existing sediments and associated contaminants. The fill would act as an isolation cap for the contaminated sediments and would eliminate the potential for exchanges between existing bottom sediments and overlying harbor water. The containment dike for the East Basin fill (Project) and Slip 1 fill (Alternative 2) would also isolate the fill from waters of Middle Harbor.

Accidents resulting in spills of fuel, lubricants, or hydraulic fluid from equipment used during dredging, excavation, fill placement, and wharf demolition and construction could occur during the proposed Project and Alternative 2. Accidents or spills from in-water construction equipment could result in direct releases of petroleum materials or other contaminants to harbor waters. The magnitude of impacts to water quality would depend on the spill volume, characteristics of the spilled materials, and effectiveness of containment and cleanup measures. However, the probability of such accidents is very low based on observations from similar work in the past.

Operation of terminal facilities would not result in any direct waste discharges to the harbor, other than stormwater discharges. However, increased transportation activities (truck and rail) relative to the NEPA Baseline associated with the Project (truck and rail) and Alternative 2 (rail only) could increase the amount of particulate and chemical pollutants settling from the air and brought in by vehicles (e.g., tires, fuel and lubricant leaks, and brakes) and cargo on the larger paved area. The amount of cargo (TEUs) would increase for the Project, Alternative 2, and Alternative 3. A portion of the pollutants from these sources would enter East Basin, primarily through stormwater runoff. Stormwater discharge sampling in the POLB in 2005 (MBC 2005) showed that pollutants such as metals and semi-volatile organic compounds were present in rain runoff before it entered harbor waters. However, no exceedances of water quality standards or objectives in receiving waters (i.e., the harbor) were reported for this sampling program. Thus, Project (and alternative) activities are unlikely to result in runoff of metals at concentrations that would exceed water quality standards.

The number of vessel calls at East Basin berths would decrease for the Project, Alternative 2, and Alternative 4 relative to the NEPA Baseline, but the new Pier E berths (Project and Alternative 2) would accommodate larger vessels than the existing berths. The amount of pollutants in clean water discharges from those vessels would be low because the Port prohibits discharge of polluted water or refuse to the harbor, but would add incrementally to the pollutants being discharged into harbor waters. Accidental spills on land that enter storm drains and from vessels while in East Basin could occur. Impacts to water and sediment quality would depend on the characteristics of the material spilled, such as volatility, solubility in water, sedimentation rate, and the speed and effectiveness of the spill response and cleanup efforts. However, continued use of existing pollution controls and implementation of improved storm drain infrastructure on the new fill and where storm drains are replaced would reduce the potential for pollutants to enter the harbor.

Actions Taken to Minimize Impacts. Dredged, excavated, and imported contaminated sediments would be placed and confined in disposal sites within the fill that are engineered and constructed in such a manner that the contaminants cannot enter harbor waters after the fill is complete, or they would not be used as fill. For accidental spills during construction, spill prevention and cleanup procedures for the Project or alternatives would be addressed in a plan that would be prepared and implemented by the construction contractor. The plan would define actions to minimize the potential for spills and provide efficient responses to spill events to minimize the magnitude of the spill and extent of impacts. The Port will require all tenants to comply with pollution control measures in the City of Long Beach Municipal Stormwater Permit and in the Long Beach Stormwater Management Plan (LBSWMP) that are applicable for their facilities.

E. Aquatic Ecosystem and Organism Determinations

Placement of fill in Slip 1 (Project and Alternative 2) and East Basin (Project only) would result in a permanent loss of aquatic habitat, including water surface, water column, soft bottom, and artificial hard substrate (pilings and vertical bulkheads), while excavation to widen Slip 3 (Project and Alternative 2) and at Berth F201 (Project only) would increase the amount of aquatic habitat. The net loss would be 54.6 acres under the Project and 24.7 acres under Alternative 2 (Table E-3 provides details of losses and gains). The exact amount of habitat gain and loss would be calculated by the Port and the agencies who are signatories to the Inter-Agency Bolsa Chica MOA after completion of the Project, on the basis of the "as-built" surveys.

Dredging to deepen Slip 3 would temporarily impact 21.1 acres of soft bottom habitat. Excavation to widen Slip 3 would remove pier pilings, riprap, and vertical bulkheads. The exposed "shore" on both sides of Slip 3 would be covered with rock riprap to stabilize the slopes, and new pilings would be installed for the reconstructed wharves (Project and Alternative 2). Rock riprap would be removed during excavation of Berth F201 and then replaced on the new slope (Project). About 0.3 acre of soft sediment would be dredged to key-in the dike for the East Basin fill (Project only).

The marine habitat created by excavation would replace an equal amount of habitat lost by fill because it would be of the same type and in the same general area of the harbor, and it would provide the same functions as the habitat lost to fill placement within a short period of time. Excavation of Pier D to widen Slip 3 (Project and Alternative 2) would create 6.3 acres of water surface in Middle Harbor during construction Phase 1. In addition to the water surface and water column habitat created in Slip 3, approximately 2.9 acres of soft bottom and 3.6 acres of rock riprap habitat would be created, replacing approximately 1.2 acres of vertical sheet pile habitat. Excavation at Berth F201 (Project only) would create 4.4 acres of water surface during Phase 2. At Berth F201, approximately 4.4 acres of new soft bottom would be created. The existing riprap habitat would be replaced by the same amount of new riprap along the excavated portions of the existing landfill. The new water column at both locations would be used immediately by plankton, invertebrates, and fish because these organisms would move freely from the adjacent waters into the new habitat. Planktonic organisms, such as copepods and ichthyoplankton, would be entrained in the water that moves into the excavated area while mobile species such as fish (e.g., northern anchovy, white croaker, and queenfish) would move in to use the new space for foraging and resting. The water surface could be used immediately by birds, such as gulls and aerial fish foragers. The new soft bottom would be colonized by invertebrates at a rate similar to that for dredged areas in Slip 3 (as described below under Effects on Benthos), and the new riprap would be colonized by algae and invertebrates in the same manner as other new riprap for the fill containment dikes. Based on surveys in Slip 1 and the channel south of East Basin (MEC Analytical Systems, Inc. 2002) as described in Final EIS/EIR Section 3.4.1.2, approximately 12 to 36 species of infaunal invertebrates would colonize the new soft bottom and reach a biomass of about 15.5 to 39.5 grams/square meter (g/m^2). Fish would immediately use the spaces between the rocks for shelter.

Material from excavation to widen Slip 3 (Project and Alternative 2) would be used in construction of the 31-acre Phase 1 fill, while the material excavated from Berth F201 (Project only) would be used in constructing the 34.3-acre Phase 2 fill. Because excavation would occur immediately prior to placement of fill material, no temporal loss of water surface or water column habitat would occur for any of the excavated areas.

During operation of the terminal, stormwater runoff that could affect marine organisms would be similar to that from the existing terminals. The amount of impervious surface would be increased by about 54.6 acres under the Project and by about 25 acres for Alternative 2; however, as described in Final EIS/EIR Section 3.3, runoff from the fill surface would be conveyed to the harbor through storm drains. As noted above, vessel calls to the berths would decrease for all but Alternative 3, which would have the same number as the NEPA Baseline.

Effects on Threatened/Endangered Species

The only federally-listed species likely to be present in the Middle Harbor area is the California brown pelican. However, the state-listed peregrine falcon could also be present. The Middle Harbor area is not considered an important area for California least tern or California brown pelican foraging and does not provide other important habitat values for the California least tern and only limited perching/resting sites for the California brown pelican. Dredging/excavation/filling activities (Project and Alternative 2) and the resultant temporary turbidity would affect few if any individuals of these species, and other foraging areas are available nearby if construction disturbances cause them to temporarily avoid the work areas. Foraging in the Project area could also continue with no adverse effects to either species compared to baseline conditions because no prey would be lost and only a small amount of potential foraging area would be temporarily affected.

The peregrine falcon feeds on other birds and would not be affected by Project or alternative construction activities because no prey would be lost and only a small amount of potential foraging area would be temporarily affected. The peregrine falcon foraging area potentially extends for miles (Grinnell and Miller 1986) and, thus, covers much of the harbor as well as land areas to the west and north. This species has nested on Gerald Desmond Bridge in the past, but backland construction and operation near the bridge would not

adversely affect any peregrine falcons using this area. Proposed ground disturbances would not cause a loss of prey and noise would be similar to that from existing facilities in this industrial area.

Sea lions and possibly harbor seals (pinnipeds) could be present in low numbers in the Middle Harbor area (Final EIS/EIR Section 3.4.1.2), and sound pressure waves in the water caused by pile driving could affect their hearing. In water, sound transmission loss is between three and six dB per doubling of distance, with approximately 4.5 dB per doubling of distance in nearshore waters (Vagle 2003). However, at distances of less than about 330 feet (100 meters), the transmission loss (rate of attenuation) can be less (Caltrans 2007). For this project, marine mammals, such as pinnipeds, could experience sound levels approaching Level A harassment levels at around 330 feet (100 meters) from the pile driving. This estimate accounts for the size of the largest steel piles, the power of the hammer that would be required to drive them, the lower rate of attenuation close to the pile, and uncertainty in the sound propagation rate that depends on site-specific characteristics (Caltrans 2007). Consequently, a “soft start” environmental control would be included for Project pile driving procedures, meaning a gradual increase in the force and, consequently, the associated noise for these activities. In particular, for the soft start the pile driving hammer will be operated at less than full capacity (i.e., approximately 40–60 percent energy levels) with no less than a one-minute interval between each strike for a five-minute period. A soft start has been shown to gradually disperse any pinnipeds in the vicinity, thereby avoiding significant noise effects. Additionally, a qualified biological monitor would note (surface scan only) whether marine mammals are present within 330 feet (100 meters) of the pile driving and, if any are observed, temporarily halt pile driving until the observed mammals move beyond this distance.

With the exception of pile driving, underwater noise levels associated with construction activities such as dredging would be below the Level A harassment (potential to injure) level of 180 dB_{rms} (re one µPa) for marine mammals (Federal Register 2005). Observations during pile driving for the San Francisco-Oakland Bay Bridge East Span seismic safety project showed sea lions swam rapidly out of the area when the piles were being driven (Caltrans 2001). Thus, sea lions would be expected to avoid areas where sound pressure waves could affect them. Harbor seals are unlikely to be present, as few have been observed in the Middle Harbor area (MEC Analytical Systems, Inc. 2002). Any harbor seals or California sea lions present in the Middle Harbor area during construction (Project and Alternative 2) would likely avoid the disturbance areas and thus would not be injured. Construction activities would not interfere with marine mammal foraging because the disturbances would be in localized areas and large foraging areas would remain available to them.

Although vessel transport of construction materials to the Project site from outside the POLB would occur at intervals over approximately 10 years, the potential for a Project-related vessel collision with a blue whale or gray whale, or a sea turtle, in offshore waters would be unlikely considering the small number of vessels relative to existing vessel traffic in this area (Project and Alternative 2). In addition, few blue whales and gray whales have been known to be struck by existing traffic within this area (Section 3.4 of the Final EIS/EIR). Furthermore, much of the Project-related vessel traffic would include barges carrying materials, such as rock, that travel at less than 10 knots. California sea lions and harbor seals are unlikely to be struck in offshore waters or within the harbor by these vessels due to their sparse distribution in the open ocean (and in the harbor) as well as their agility and ability to avoid damage by vessels.

Operation of new and upgraded terminal facilities in Middle Harbor (Project and alternatives) would not adversely affect any of the federally- or state-listed bird species that could be present (California least tern, California brown pelican, peregrine falcon). Those species that currently use the area for foraging or resting could continue to do so because the Project would not appreciably change the industrial activities or cause a loss of habitat for those species. Operation of new and upgraded backland facilities in Middle Harbor (Project and Alternatives 2 and 3) would not measurably change the numbers or species of common birds in that area and, thus, would not affect peregrine falcon foraging. Perching locations for birds such as the California brown pelican would still be present. The number of vessel calls to the Middle Harbor container terminal would decrease (Project, Alternative 2, Alternative 4) or stay the same (Alternative 3) compared to the NEPA Baseline. Therefore, underwater sound in nearshore waters and in the harbor would not be increased by these vessels. The potential for whale or sea turtle strikes in offshore waters would not be increased because the number of vessel calls would not increase. No critical habitat for any federally-listed species is present in the harbor, so none would be affected by operation of the Project or alternatives.

Effects on Benthos

Benthic invertebrates living in and on the sediments to be dredged in Slip 3 (Project and Alternative 2) would be lost. At a biomass of 15.5 g/m^2 in soft bottom, approximately 1.3 metric tons of invertebrates living in the sediments would be temporarily lost. The habitat would be made permanently deeper by the dredging, but the sediments would be recolonized by the same types of invertebrates and communities, especially polychaetes, with the process starting shortly (hours to days) after the dredging stops in each location. A community similar to that currently present would be expected to develop within at least five years based on surveys in 1987 of areas dredged in 1982 (MEC 1988). This would represent a temporary loss in bottom community productivity and diversity and alteration of food available for fish and other marine organisms that feed on benthos in a small proportion of the Long Beach Harbor.

Excavation and wharf reconstruction (Project and Alternative 2) would result in a loss of approximately 186.7 metric tons of invertebrates on rocky dikes that would be replaced by colonization of the new dikes. The replacement of soft bottom with rocky dike would permanently remove 0.09 metric ton of invertebrates (Project only), but the rocky dike would be expected to be colonized by a diverse assemblage of marine organisms at a higher biomass (1,000 to over $13,000 \text{ g/m}^2$; MEC Analytical Systems, Inc. 2002) than that found in the soft-bottom sediments (15.5 g/m^2 ; MEC Analytical Systems, Inc. 2002) based on observed biomass of organisms in/on those habitats.

Benthic organisms in a narrow area of soft bottom adjacent to dredging areas and on the riprap, piles, and bulkheads along the berths would be subjected to temporary impacts from turbidity and sediment deposition generated by dredging. Lethal and sublethal effects that could occur include direct mortality, reduction in development and growth, reduced feeding, depressed filtration rates, and increased mucous secretion. Benthic organisms exposed to turbidity could also be buried by sediments. However, impacts of turbidity and sediment deposition would be temporary with relatively rapid recovery of the benthic communities (months to years).

Placement of fill in Slip 1 (Project and Alternative 2) and East Basin (Project) would result in a permanent loss of soft bottom and hard substrate habitat for benthic organisms. Approximately 3.3 metric tons of soft bottom invertebrates would be lost for the Project and 1.6 metric tons for Alternative 2. Invertebrates living on the pilings removed and bulkheads/riprap covered with fill would also be lost, with fewer lost for Alternative 2 than for the Project.

Effects on Water Column Species

Placement of fill in Slip 1 would permanently remove 25.6 acres of water column habitat for marine organisms, while fill for the Berth E24 extension would permanently remove 5.4 acres (Project and Alternative 2). Placement of fill in East Basin (Project only) would permanently remove an additional 34.3 acres of water column habitat. Dredging of Slip 3 (Project and Alternative 2) would increase the water column habitat in that area. Excavation to widen Slip 3 (Project and Alternative 2) would add approximately 6.3 acres of water column habitat while excavation of Berth F201 (Project only) would add about 4.4 acres. The net loss of water surface would be 54.6 acres.

Planktonic organisms would be temporarily affected by turbidity within the water column. Turbidity can impact plankton populations by lowering the light available for phytoplankton photosynthesis and by clogging the filter feeding mechanisms of zooplankton. However, impacts to plankton would be short term and limited to the immediate vicinity of the dredging activities. Planktonic organisms have a naturally-occurring high mortality rate and their reproductive rates are correspondingly high, thereby allowing for rapid recovery from localized impacts. Elutriate tests on sediments similar to those to be dredged indicate that significant biological impacts are not expected from resuspension of sediments containing contaminants or mobilization of the contaminants into the water column (Final EIS/EIR Section 3.3). In addition, dilution by tidal waters moving into and out of the harbor would rapidly reduce concentrations of contaminants to levels that would not adversely affect marine organisms.

Fish in the water column and in or near the bottom would be temporarily disturbed by the dredge and fill activities as a result of turbidity, noise, displacement, and vibration. Most fish would leave the immediate area of the dredging, although some may stay to feed on invertebrates released from the sediments. No mortality of

fish has been observed in the Outer Harbor as a result of dredging activities associated with the Deep Draft Navigation Improvements Project (Pier 400) (USACE and LAHD 1992). After dredging is complete, reduced numbers of invertebrates (until recolonization is complete) would reduce the food supply for some species of fish. However, those effects would be short term and localized.

The reduction in vessel calls to the berths (Project and Alternatives 2 and 4) would not adversely affect fish or plankton in the water column. The number of vessel calls would remain the same as the NEPA Baseline in Alternative 3.

Effects on Food Web

Dredging of Slip 3 would remove the top layer of sediments and the associated contaminants. This would decrease the potential for bioaccumulation of contaminants in aquatic organisms if the lower layers that are exposed by the dredging are not also contaminated. Placing any dredged sediments that are not suitable for unconfined aquatic disposal in a CDF could provide a benefit to water quality in the harbor by removing a pollutant source in an area for the Project and Alternative 2. Capping sediments in Slip 1 (Project and Alternative 2) and in East Basin (Project) would reduce the area where benthic invertebrates could come in contact with and potentially accumulate pollutants that could in turn be passed to other marine organisms, such as fish, through the food web (bioaccumulation). However, the placement of fill in those locations would result in a net loss of habitat for organisms within the food web (54.6 acres for the Project and 24.7 acres for Alternative 2).

Disturbance due to Project and Alternative 2 construction activities in the water would not significantly affect the food web in the harbor. After dredging is complete, reduced numbers of invertebrates (until recolonization is complete) would temporarily reduce the food supply for some species of fish. Impacts on fish populations in the harbor are expected to be short term and localized, because few individuals that feed on benthic invertebrates would be affected (low density in Slip 3), the area affected would be a small proportion of available foraging area in the Middle Harbor area, and other adequate foraging areas are present nearby. The loss of marine habitat resulting from fill of Slip 1 (Project and Alternative 2) and East Basin (Project) would not significantly affect the food web because no important foraging, breeding, or rearing areas, or marine species would be lost.

The potential for introduction of invasive exotic species due to vessel traffic would not increase due to the Project or alternatives because fewer (Project, Alternative 2, and Alternative 4) or the same (Alternative 3) number of vessel calls would be made at Middle Harbor berths. These vessels would come primarily from outside the Exclusive Economic Zone (EEZ) and would be subject to regulations to minimize the introduction of non-native species in ballast water. Thus, ballast water discharges during cargo transfers in the Port would be unlikely to result in the release of non-native species. The potential for introduction or spread of the invasive alga, *Caulerpa taxifolia*, as a result of Project operations is very low because the species is most likely introduced from disposal of aquarium plants and water, and is spread by fragmentation rather than from ship hulls or ballast water.

Effects on Special Aquatic Sites

No special aquatic sites (wetlands, mudflats, coral reefs, riffle and pool complexes, vegetated shallows, marine sanctuaries or refuges) are present in or near the Project site, including along the shipping channel from Queens Gate to Middle Harbor. Eelgrass beds, mudflats, and salt marsh wetlands are the only special aquatic sites within the harbor, and these are located far enough from the Project that no direct or indirect effects would result from Project activities (Section 3.4 of the Final EIS/EIR).

Effects on Essential Fish Habitat

The Essential Fish Habitat (EFH) analysis in the Final EIS/EIR indicates that the Project and Alternative 2 would have no significant effects on the Fisheries Management Plan (FMP) species that are rare or uncommon in the Middle Harbor area, such as California skate, big skate, California scorpionfish, and black rockfish because few if any individuals would be present in the disturbance area (MEC Analytical Systems, Inc. 2002). The net loss of marine habitat due to placement of fill and excavation (54.6 acres for the Project and 24.7 acres for Alternative 2), however, would result in a substantial loss of habitat for the FMP species that use

Middle Harbor, including water column and benthic habitats. Both habitats provide food sources for FMP species occurring in the Project region. Dredging, pile removal, and wharf construction/reconstruction at Berths E24-E27 (Project and Alternative 2) and Berth E23 (Project only) along with excavation at Berths D29-D31 (Project and Alternative 2) and F201 (Project only) also could affect FMP species through habitat disturbance, turbidity and resuspension of contaminants from sediments, and vibration from pile and sheetpile driving and stone column installation. These effects would be temporary and would occur at intervals throughout the construction period, with a return to baseline conditions following construction. Therefore, no permanent loss of habitat would occur from the wharf work, and few, if any, individual fish would be lost because most individuals would avoid the work area.

Construction activities on land would have no direct effects on EFH, which is located in the water. Runoff of sediments from construction, however, could enter harbor waters. As discussed in Final EIS/EIR Section 3.3, Hydrology and Water Quality, implementation of sediment control measures would avoid or minimize runoff so that no significant effects would occur.

Operation of Project facilities would have minimal effects on EFH or managed fish species. The number of vessel calls per year would remain the same (Alternative 3) or decrease (Project, Alternative 2, and Alternative 4) relative to the NEPA Baseline. Due to runoff control measures, runoff from the new terminal would be essentially the same as under baseline conditions for existing backlands, with a minor addition of pollutants from new fill surfaces. This runoff would not adversely affect EFH or FMP species.

Effects on Other Wildlife

Terrestrial wildlife in the Project area is limited to those species adapted to industrial areas, and no wildlife migration or movement corridors are present. Individuals of water-associated bird species that are resident or transient visitors to the harbor forage over or in the water, or may rest on the water surface. However, few individuals of these species would occur in the Project area, and those present during construction (Project and Alternative 2) could use other areas of the harbor for the duration of the disturbance. The water surface lost in Slip 1 (Project and Alternative 2) and in East Basin (Project) would be a small proportion of the habitat available for birds in the harbor and does not represent important habitat for nesting or foraging. No substantial impacts to those species would occur. No loss of surface water habitat would occur in Alternatives 3 and 4.

Actions Taken to Minimize Impacts. Unavoidable losses of marine habitat in the Long Beach/Los Angeles Harbor complex are mitigated by the use of habitat credits from mitigation banks created by the two ports. This policy was developed by the USACE, U.S. Fish and Wildlife Service (USFWS), NOAA Fisheries, and California Department of Fish and Game (CDFG) in consultation with the ports and has been applied to Port development projects for the past 20 years. The goal of the mitigation policy is "no net loss of in-kind habitat value," where in-kind refers to marine tidal water of value to fish and birds. Given the infeasibility of undertaking any substantial onsite mitigation and the public interest mandate of accommodating maritime cargo conferred upon the Port by the California Coastal Act, offsite mitigation is allowed between Pt. Conception and the Mexican border (area of ecological continuity). Implementation of mitigation measures shall occur prior to or concurrent with Project activities. The preferred mitigation is the restoration of coastal embayment habitat (i.e., tidal wetlands).

Accordingly, the two ports have undertaken several wetlands restoration projects (e.g., Anaheim Bay and Batiquitos Lagoon) that generated habitat mitigation credits. The most recent credits have been generated by funding a multi-agency project to restore tidal wetland habitats in the Bolsa Chica lowlands in Orange County. The credits were vested via the Inter-Agency Bola Chica Memorandum of Agreement (MOA) that was negotiated in 1996 and amended in 2003 to provide in-kind credits for Port fills. The parties to the MOA include National Marine Fisheries Service (NMFS), USFWS, CDFG, USACE, California Coastal Conservancy, Ports of Los Angeles and Long Beach, EPA, California Resources Agency, and California State Lands Commission (CSLC). Thus, the MOA incorporates all applicable federal and state agencies and their associated mitigation policies.

For the proposed Project, habitat credits from restoration of Bolsa Chica would be used to offset the 54.6-acre loss of marine habitat in accordance with the MOA. The entire Slip 1 fill (25.6 acres) and 10 acres of the East Basin 34.3-acre fill would constitute Inner Harbor habitat, while the remaining 24.3 acres of East Basin fill and

the 5.4-acre Pier E extension fill would constitute Outer Harbor habitat. Widening Slip 3 would result in the creation of 6.3 acres of Inner Harbor habitat leaving a net loss of 29.3 acres of Inner Harbor habitat. Excavation at Berth F201 would result in the creation of 4.4 acres of Outer Harbor habitat, leaving a net loss of 25.3 acres of Outer Harbor habitat.

To mitigate these losses, Bolsa Chica credits would need to be applied as follows: 14.7 credits to mitigate 29.3 acres of Inner Harbor fill at a ratio of 0.5 credit:one acre of fill; and 25.3 credits to mitigate the Outer Harbor fill at a ratio of 1:1, for a total of 40 credits. As noted above, the completed Project could result in the use of more or fewer credits, but the difference would only be four or five credits at most, meaning that actual mitigation credits needed would be between 35 and 45. Currently, the Port has approximately 270 Bolsa Chica credits remaining in its account. Therefore, sufficient credits remain in the Port's account to mitigate the marine habitat lost due to Project construction even if the as-built survey results show the need for as many as 45 credits.

For Alternative 2, habitat credits from the Bolsa Chica mitigation bank would be used to offset the 24.7-acre loss of marine habitat in accordance with the MOA. All of the loss would be Inner Harbor habitat requiring approximately 12.4 credits.

Other in-water work, such as dredging and wharf construction/reconstruction, would result in temporary impacts to marine organisms under the Project and Alternative 2. The amount and duration of construction disturbances would be less for Alternative 2 than for the Project. These impacts would be minimized by limiting the work area and duration of the work to the minimum necessary to complete the dredging and wharf construction activities.

F. Proposed Disposal Site Determinations

Mixing Zone Determinations

Mixing zones would need to be established through the RWQCB Section 401 Water Quality Certification for turbidity from the filling activities. A mixing zone for the Slip 1 and East Basin fills would be needed for the Project, and also would be needed for Slip 1 in Alternative 2. Effects of the proposed Project on water quality and biological resources outside the mixing zones would be less than significant because contaminated sediments would be handled and disposed in accordance with applicable regulations, and applicable Best Management Practices (BMPs) would be used to control turbidity.

Compliance with Applicable Water Quality Standards

The Project or alternatives would be implemented in accordance with all applicable federal and state water quality standards. Some of the measures to be implemented for in-harbor work to ensure compliance with these standards include:

- Soils to be used for fill will be tested for contaminants prior to placement in the proposed landfills to determine disposal method;
- Contaminated soils and dredge material will be placed in a CDF or not used in the fill; and
- Monitoring will be conducted to ensure compliance with permit conditions.

Potential Effect on Human Use Characteristics

Recreational and Commercial Fisheries. Not applicable. No recreational or commercial fisheries are present in the Project area.

Water-Related Recreation. Not applicable. No recreation sites are present in or adjacent to the Project area.

Municipal and Private Water Supply. Not applicable.

Aesthetics. Filling Slip 1 (Project and Alternative 2) and East Basin (Project) would not adversely affect aesthetics of the Middle Harbor area. The fill areas are located within an industrial area of the Port, and a loss

of 54.6 acres of surface water (Project) or 24.7 acres (Alternative 2) would not represent a substantial reduction in the amount of water visible to the public. Turbidity during placement of the fill would have temporary effects on aesthetics. No landfilling would occur under the other alternatives.

Flooding. Although portions of the Project site are located within the 100-year flood zone, Project or alternatives construction would not increase the potential for flooding onsite because drainage would be maintained in accordance with all applicable regulations. Site elevations would remain generally the same as a result of Project (or alternative) construction, and runoff would be directed to storm drains.

Project construction would increase the land surface area upon which precipitation would fall by a net increase of 54.6 acres. In Alternative 2, the increase would be 24.7 acres. Drainage slopes and storm drains would be installed during development of the fill surface to adequately handle storm runoff without flooding, even though development of terminal facilities on the fill would increase the impermeable surface present and, thus, the volume of surface runoff. Redevelopment of the existing backlands (Project, Alternative 2, and Alternative 3) would increase the amount of impermeable surfaces where unpaved areas are paved, but this would not increase the potential for flooding because existing storm drains would be sufficient to carry the runoff to the adjacent harbor waters.

Project or alternatives operations would not increase the potential for flooding onsite. Existing and new storm drains are designed to convey water from a 10-year storm. Runoff associated with a larger storm could exceed the capacity of the storm drain system, resulting in temporary and localized ponding. Site elevations, however, would remain generally the same as existing conditions, and the risk of flooding on existing backlands would not be increased above that under baseline conditions. For the new fill areas (Project and Alternative 2), the potential for flooding would be the same as on the existing backlands. Because the Project facilities would be part of a paved container terminal, any flooding that did occur would not result in a loss of life, substantial property damage, or harm to sensitive biological resources.

Actions Taken to Minimize Impacts. Implementation of BMPs and monitoring to ensure compliance with permit conditions would minimize impacts of turbidity on aesthetics.

G. Determination of Cumulative Effects on the Aquatic Ecosystem

A number of the cumulative projects listed in the Final EIS/EIR (Table 2.1-1) would directly affect marine biological resources through fill (approximately 277 acres of which about 105 acres are completed or under construction), dredging, wharf construction/reconstruction, installation of boat slips, artificial reef construction, and/or rocky dike construction. Wharf construction and reconstruction would also result in underwater sound pressure waves from pile driving that could affect marine mammals and fish. Increased vessel traffic associated with some of the cumulative projects would increase the potential for introduction of invasive species. Further, all of the cumulative projects would have the potential to indirectly affect marine biological resources through runoff of sediments and pollutants as a result of construction and operations activities on land.

Special Status Species. Three cumulative projects have the potential to adversely affect the California least tern, an endangered species, and those cumulative impacts would be significant but feasibly mitigated. Increased vessel traffic as a result of the cumulative projects would have less than significant cumulative impacts within the harbor because few marine mammals would be affected (small numbers are present in the harbor), individuals would avoid the vessels, and overall underwater noise levels would not be significantly increased. Further, the environmental controls described previously in Section III.E (soft start for pile driving and use of a biological observer for marine mammals) would also serve to avoid significant effects. The cumulative increase in vessel traffic, particularly large vessels travelling at greater than 10 knots, would increase the potential for vessel strikes of whales. Mortality of blue whales is a particular concern, and cumulative impacts would be significant and unavoidable for this species. The Project and alternatives would not contribute to cumulative effects on the least tern because this species would not be affected, and the Project (and alternatives) would not make a cumulatively considerable contribution to cumulative effects of vessel sound on marine mammals because the same or fewer vessel calls (relative to the NEPA Baseline) would occur. Project-related vessel strikes to blue whales would be unlikely to occur, and the decrease in vessel calls (Project, Alternative 2, and Alternative 4) would not contribute to significant and unavoidable cumulative impacts associated with vessel strikes to that species. For Alternative 3, the number of vessel calls would be the same as the NEPA Baseline and would not change the potential for blue whale strikes, resulting in no contribution to cumulative impacts.

Loss of Marine Habitat. Numerous landfill projects have been constructed in the harbor since the harbor was first developed, and these projects have resulted in a generally unquantified loss of marine habitat. The more recent losses have been mitigated by use of mitigation bank credits. Six of the cumulative projects would involve placement of fill, totaling a loss of approximately 277 acres of marine habitat. These losses would be mitigated through use of existing mitigation bank credits from offsite marine habitat restoration through agreements with regulatory agencies. Therefore, cumulative impacts would be less than significant. The Project would contribute 54.6 acres, or about 16 percent, of the approximately 332 acres of fill recently completed or proposed for the harbor (including the Project). Alternative 2 would contribute 24.7 acres, or about 7.7 percent, and Alternatives 3 and 4 would not result in any loss of marine habitat. The Project and Alternative 2 would make cumulative considerable contributions to habitat loss prior to mitigation, but impacts would be mitigated to less than significant levels through use of mitigation bank credits. Alternatives 3 and 4 would not contribute to cumulative impacts.

Essential Fish Habitat. EFH has been and will be lost due to past, present, and future landfill projects in the harbor. EFH protection requirements began in 1996, and thus, only apply to projects since that time. Since 1996, the loss of EFH has been significant but mitigated, as described above for the recent marine habitat losses. The permanent marine habitat loss from the Project and Alternative 2 includes EFH, and would contribute to cumulatively considerable effects on EFH prior to mitigation. However, cumulative impacts would be mitigated to less than significant.

Natural Habitat, Special Aquatic Sites, and Wetlands. Natural habitats, special aquatic sites, and wetlands currently have a limited distribution and abundance in the harbor. The 40-acre Pier 300 expansion project caused a loss of eelgrass beds that was mitigated. The Southwest Slip fill in West Basin completed as part of the Channel Deepening Project resulted in a small loss of saltmarsh that also was mitigated. Losses of eelgrass, mudflats, and saltmarsh from early landfill and harbor development projects are quantitatively unknown but likely were significant. Future projects could affect these habitats, such as the mudflat at Berth 78 that could be affected by the San Pedro Waterfront project. Thus, impacts to these habitats are considered cumulatively significant. The Project and alternatives, however, would not contribute cumulatively considerable effects on any of these habitats.

Wildlife Migration Corridors. The cumulative projects would have no cumulative impacts on migration or movement of fish and terrestrial wildlife because no known migration corridors would be affected. Blue and gray whale migration along the coast would not be adversely affected by increased vessel traffic. The Project or alternatives would not affect migration or movement of fish and wildlife and, therefore, would not contribute to cumulative effects.

Biological Communities. Construction activities in harbor waters associated with the cumulative projects, such as dredging, excavation, and wharf construction, would remove soft bottom habitat as well as temporarily remove artificial hard substrate habitat (e.g., piles and rocky dikes). In general, the rocky dikes would be replaced and new pilings would be installed. The effects of such activities are generally of short duration, affect small, localized areas, and do not occur simultaneously for all projects. Because recolonization of dredged areas and new in-water structures begins quickly (hours to days) and proceeds rapidly (months to years), these areas would generate typical productivity and food sources for other species such as fish within a relatively short time. Accordingly, multiple projects spread over time would not result in a substantial reduction in the forage base that could affect predatory species. Temporary in-water construction disturbances that can cause fish and marine mammals to avoid the work area would not substantially alter the distribution and abundance of these organisms due to the cumulative projects. Consequently, cumulative impacts of such disturbances on local biological communities would be less than significant because the effects would be dispersed in time and space. Project and Alternative 2 construction activities related to dredging, excavation, and wharf construction would have less than significant impacts on local biological communities, and these activities would not contribute substantially to cumulative impacts of other projects that could take place concurrently. Alternatives 3 and 4 would not affect marine biological communities.

Runoff from temporary disturbances on land during construction of cumulative project facilities would not occur simultaneously, but rather would be spread over time so that total runoff to harbor waters would be dispersed, both in frequency and location. Cumulative impacts would be less than significant due in part to this dispersal, in part because cumulative project levels of development in the harbor would affect minimal

amounts of land, and in part because runoff control measures such as Stormwater Pollution Prevention Plans (SWPPPs), would be implemented as required in project permits. The contribution to this runoff from the Project or alternatives would not be cumulatively considerable due to implementation of a SWPPP.

Cumulative projects would have temporary and less than significant impacts on terrestrial biota and habitats during construction that would result in less than significant cumulative impacts on local biological communities. This is because these projects would only affect small areas at a time and would have minimal effects on biological communities, many of which are comprised of landscape or disturbed area species, in industrial areas. The Project and alternatives would not result in any cumulatively considerable effects on terrestrial biological communities because they would have minimal effects on terrestrial habitats in an existing industrial area.

Several of the cumulative projects would add vessel traffic to the harbors above baseline levels, thus increasing the risk of invasive species introduction. Many non-native species have already been introduced into the harbor and this would continue with the potential to have significant cumulative impacts on local biological communities. However, current ballast water regulations would reduce the potential for introducing invasive species to the harbor. As vessel traffic would be reduced by the Project, Alternative 2, and Alternative 4 and remain the same for Alternative 3 compared to the NEPA Baseline, the Project and alternatives would not contribute to cumulative impacts.

Past landfills in the harbor have altered water circulation, but not to the extent that local biological communities are substantially affected. Present and future landfill projects would have minor effects on water circulation because fill areas generally occur in dead-end slips with no through passage of water. Thus, cumulative impacts on water circulation would be less than significant. The proposed Project would add a small amount of fill, and Alternative 2 would add an even smaller amount, neither of which would substantially alter water circulation and nor contribute to cumulatively considerable effects.

H. Determination of Indirect/Secondary Effects on the Aquatic Ecosystem

Project construction activities related to filling the subsided area at the southwest end of Pier E, railyard improvements, development of facilities on the new landfills, and redevelopment of approximately 294 acres of backlands could result in temporary impacts on marine water quality through surface water runoff containing asphalt leachate, concrete washwater, and other construction materials, particularly during the rainy season. It is assumed that any contaminated soils would be remediated prior to construction. For Alternative 2, the amount of new landfill developed would be less than for the Project. Under Alternative 3, no development of facilities would occur on new land because no landfills would be constructed, but all other backland work would occur as described for the Project. Under Alternative 4, no backlands improvements would be constructed.

Runoff of construction-related contaminants other than soils from onshore construction sites would enter harbor waters primarily through storm drains. Most runoff would occur during storm events, although some could occur during use of water as part of construction activities. Standard BMPs, such as sediment barriers, sedimentation basins, and site contouring, would be implemented during construction activities to minimize runoff of contaminants dissolved in water and adsorbed on soil particles, thus complying with the State General Permit for Stormwater Discharges Associated with Construction Activity (Water Quality Order 99-08-DWQ) and the Project SWPPP. Sediment control measures generally have an average efficiency of approximately 70 percent, although efficiencies can be higher, particularly for coarser materials such as sand (EPA 1993). Thus, a small amount of pollutants associated with soils could reach harbor waters via storm drains, but this runoff would be rapidly diluted by rainfall and mixing in the immediate vicinity of the drain discharge.

Effects of runoff on DO, pH, and nutrient levels would be minor and limited to the vicinity of drain discharge locations because control measures would prevent the runoff of materials that could cause water quality standards to be exceeded. The small amount of pollutants that could pass the control measures would not result in a major input. No substances that are identified in the 303(d) list for the Inner Harbor (e.g., DDT and PCBs) would be used during construction, but some could be present in soils that would be disturbed during construction activities (Final EIS/EIR Section 3.1). These substances generally have a very low solubility in

water and remain adsorbed on sediment particles. Control of soil runoff from contaminated areas would be in accordance with all applicable regulations and would prevent these substances from entering harbor waters.

If dewatering activities were required for the Project or Alternatives 2 and 3 construction, shallow groundwater collected from the dewatering activities may contain unacceptable levels of contaminants that would affect the ability for discharge into nearby drainages and harbor waters. Any Project-related dewatering activities would be required to either discharge into the sanitary sewer, under permit with the City of Long Beach Sanitation Bureau, or comply with the NPDES permit regulations and an associated SWPPP regarding discharge into storm drains and/or directly into harbor waters. Such permit requirements typically include onsite treatment to remove pollutants prior to discharge. Alternatively, the water could be temporarily stored onsite in holding tanks, pending offsite disposal at a facility approved by the RWQCB. Incorporation of NPDES-mandated SWPPP elements would ensure that potential pollutants encountered during excavation would be isolated and collected for transportation to a licensed facility or treatment prior to their discharge into the storm drain system.

Based on past history for this type of work in the harbor, accidents resulting in spills of fuel, lubricants, or hydraulic fluid from equipment used during dredging, excavation, filling, and wharf demolition and construction are unlikely to occur during the Project or Alternative 2. Consequently, there would be a low potential for adverse effects on water quality from these sources. Most spills of this nature would be small and cleaned up immediately. Accidental leaks and spills during onshore construction activities (Project, Alternative 2, and Alternative 3) would also have a very low probability of occurring and entering storm drains due to implementation of BMPs (e.g., containment measures, sediment barriers, and sedimentation basins) that would be stipulated in the Project SWPPP. Most spills on land are expected to be small and contained within the work area. Existing regulations, such as the General Construction Activity Stormwater Permit and LBSWMP that include requirements to avoid or minimize effects on water quality during construction activities would be implemented during the Project.

Operation of terminal facilities on the new landfills and existing backlands would add approximately 54.6 acres of new paved landfill (Project), or 24.7 acres of new paved landfill (Alternative 2), and small, newly paved areas on the existing backlands that would increase the amount of impervious surface. Paving of these surfaces would reduce the amount of soil that could run off to harbor waters as a result of wind or water erosion. Although some soil would be carried into the harbor via storm runoff from the small remaining unpaved areas (primarily landscaped areas), the Project would not result in substantial erosion and sediment deposition in harbor waters due to implementation of required sediment control measures, presence of vegetation to stabilize soils, and the small amount of unpaved area present.

Proposed terminal operations would not result in any direct waste discharges to the harbor, other than stormwater discharges. However, increased transportation activities (truck and rail) associated with the Project could increase the amount of particulate and chemical pollutants settling from the air and brought in by vehicles (e.g., tires, fuel and lubricant leaks, and brakes) and cargo on the larger paved area. A portion of the pollutants from these sources would enter East Basin, primarily through stormwater runoff. Stormwater discharge sampling in the POLB in 2005 (MBC 2005) showed that pollutants such as metals and semi-volatile organic compounds were present in rain runoff before it entered harbor waters. Only copper, lead, nickel, and zinc were found in concentrations that could have the potential to exceed the standards for marine waters at a few locations. No exceedances of water quality standards or objectives in receiving waters (i.e., the harbor) were reported for this sampling program. Project or alternative activities are unlikely to result in runoff of metals at concentrations that would exceed water quality standards.

Aerial deposition of pollutants from Project non-electric equipment, vehicle, and vessel operations would occur on land with a minor amount on the surface of harbor waters (Project and all alternatives). Pollutants deposited on land could be washed into harbor waters in storm runoff. This deposition would represent a small amount of pollutants that would periodically enter the harbor. Past monitoring indicates that these inputs would not cause concentrations in harbor waters to exceed any regulatory standards or objectives, and no DDT or PCBs would be in the Project or alternative aerial fallout because these chemicals would not be used during proposed operations.

Actions Taken to Minimize Impacts. Standard BMPs, such as sediment barriers, sedimentation basins, and site contouring, would be used during construction activities to minimize runoff of soil and contaminants

dissolved in water and adsorbed on soil particles in compliance with the State General Permit for Stormwater Discharges Associated with Construction Activity (Water Quality Order 99-08-DWQ) and the Project SWPPP. Examples of BMPs that would be included in the SWPPP include:

- Equipment shall be inspected regularly (daily) during construction, and any leaks found shall be repaired immediately;
- Refueling of vehicles and equipment shall be in a designated, contained area;
- Drip pans shall be used under stationary equipment (e.g., diesel fuel generators), during refueling, and when equipment is maintained;
- Drip pans that are in use shall be covered during rainfall to prevent washout of pollutants; and
- Monitoring to verify that the BMPs are implemented and kept in good working order.

Continued use of existing pollution controls and implementation of improved storm drain infrastructure on the new fill and existing backlands (Project and Alternative 2) would reduce the potential for pollutants to enter the harbor. As described in the City of Long Beach Municipal Stormwater Permit, the Port will require all tenants to comply with all applicable pollution control measures stipulated in the City of Long Beach Municipal Stormwater Permit and in the LBSWMP. Other sources of pollutants that could accumulate in sediments of the East Basin include accidental spills on land that enter storm drains and accidental spills from vessels while at berth. Impacts would depend on the material spilled, speed of cleanup, and sedimentation rate of the material.

IV. FINDINGS

Evaluation of Compliance with Section 404(b)(1) Guidelines (restrictions on discharge, 40 CFG 230.10).

No adaptations of the Section 404(b)(1) Guidelines were made relative to this evaluation.

A. Alternatives Test

<table border="0"> <tr> <td style="padding-right: 10px;">___</td> <td style="padding-right: 10px;">X</td> <td></td> </tr> <tr> <td>Yes</td> <td>No</td> <td></td> </tr> </table>	___	X		Yes	No		(1) Based on the discussion in Section II.D, are there available, practicable alternatives having less adverse impacts on the aquatic ecosystem and without other significant adverse environmental consequences that do not involve discharges into “waters of the United States” or at other locations within these waters.
___	X						
Yes	No						

Discussion: The Final EIS/EIR evaluated the proposed Project and three alternatives, including the 315-Acre Alternative, Landside Improvements Alternative, and the No Project Alternative, which would not involve a federal action (Section II.D). A number of other alternatives were considered but not carried forward for analysis for the reasons described in Section 1.6.2 of the Final EIS/EIR and previously in Section II.D for an alternative identified by the EPA during the Draft EIS/EIR public review period. The proposed Project (345-Acre Alternative) would create approximately 65 acres of new landfill in Slip 1 and the East Basin. The Project would rehabilitate or replace deteriorated and obsolete terminal facilities; provide deeper water (-55 feet MLLW) at berths and in basins and channels; create new land; modernize marine terminal facilities; and implement environmental controls to accommodate a portion of the predicted future increases in containerized cargo volume and the modern, larger cargo vessels that are expected to transport these goods to and from the Port. The existing 294-acre Project site would be increased to 345-acres, including 54.6 net acres of newly created land. The Project includes terminal consolidation, redevelopment, and expansion on areas of existing and newly created land, dredge and fill operations, wharf construction to create three deep water berths with -55 feet MLLW depths, and rail infrastructure improvements. When optimized at maximum throughput capacity (by year 2025), the consolidated container terminal would be designed to accommodate approximately 3,320,000 TEUs per year. This approach is consistent with the Coastal Zone Management Act and the California Coastal Act that encourage modernization of existing facilities within existing Port boundaries.

Alternative 2 (315-Acre Alternative) would add 24.7 net acres of newly created land to the existing 294-acre Project site by filling Slip 1 between Piers E and F (Berths E12-E14 and F1-F4). This

alternative would include terminal expansion on adjacent areas of existing and newly created land, dredge and fill operations, and new wharf construction. Under the 315-Acre Alternative, a new wharf would be constructed to handle increased cargo throughput and accommodate deep-draft container ships, and to replace existing, insufficient wharves. The new 2,900-foot wharf would consist of two deep water berths with -55 feet MLLW depth. When optimized at maximum throughput capacity (anticipated by approximately 2025), the consolidated container terminal would be designed to accommodate approximately 2,870,000 TEUs per year.

Alternative 3 (Landside Improvements Alternative) would redevelop existing terminal areas on Piers E and F and convert underutilized land north of the Gerald Desmond Bridge and Ocean Boulevard within the Project site to a container yard. Under this alternative, there would be no in-water activities (e.g., dredging, filling Slip 1 and the East Basin, new wharf construction) as proposed for the Project, no wharf upgrades would occur (except the provisions for shore-to-ship power), and channel and berth deepening would not occur. When optimized at maximum throughput capacity (anticipated by approximately 2025), the terminals would be designed to accommodate a combined total of about 2,910,000 TEUs per year.

Alternative 4 (No Project Alternative) would maintain the current CUT and LBCT container terminals at a combined size of 294 acres and in their current configuration. This alternative would not allow implementation of the proposed Project or other physical improvements at Middle Harbor. The No Project Alternative would result in a maximum throughput of approximately 2,600,000 TEUs per year, which is approximately 22 percent less throughput than the Project.

The same amount of dredged materials would be disposed in the harbor under the Project and Alternative 2. The amount of excavated material to be disposed within the harbor would be slightly less for Alternative 2 than for the Project. The amount of imported fill, however, would be considerably less for Alternative 2. Although the quantities to be disposed and the area filled would differ, the types of impacts would be similar.

Water Quality. Modifications to backlands and transportation systems within the Project area are not water-dependent activities, although their use is related to operation of the marine terminal berths. Runoff from construction activities at these locations, however, could similarly affect water quality in the harbor with the exception of the No Project Alternative where no backland construction would occur. Compliance with existing regulations and Project permits would minimize impacts on water quality.

Construction activities in harbor waters (Project and Alternative 2) would have short-term effects on water quality but would remain in compliance with federal and state water quality standards. The Project would have more in-water activity, due to the fill in East Basin, than Alternative 2. However, no contaminants would be discharged in concentrations that could be toxic to aquatic biota for the Project or Alternative 2. Alternatives 3 and 4 would not involve in-water activities.

Aquatic Biota. The Project would permanently remove 63.5 acres of marine habitat as a result of the Slip 1 and East Basin fills while creating 10.7 acres of marine habitat through excavation at Pier D and Pier F for a net loss of 54.6 acres. This would affect aquatic biota and EFH. Alternative 2 would permanently remove 31 acres of marine habitat while creating 6.3 acres of marine habitat through excavation at Pier D for a net loss of 24.7 acres. These impacts would be mitigated by use of existing Port mitigation credits. In-water construction activities would temporarily affect aquatic biota for the Project and Alternative 2 through turbidity, underwater noise, and habitat alteration. Impacts would be less than significant because the effects would occur in a small area, have a relatively short duration, would not permanently disrupt communities, and mobile species would temporarily avoid the work areas. The Landside Improvements Alternative and No Project Alternative would have no in-water construction or discharges and, therefore, not require federal action. No threatened or endangered species or special aquatic sites would be adversely affected by the Project or alternatives.

The potential for introduction of invasive species via ballast water and vessel hulls would not be increased by the Project or alternatives. The number of vessel calls for the Project, Alternative 2,

and Alternative 4 would be less than the NEPA Baseline, while the number of vessel calls under Alternative 3 would be the same as the NEPA Baseline. Vessel hulls are generally coated with antifouling paints and cleaned at intervals to reduce the frictional drag from growths of organisms on the hull (Global Security 2007), thereby reducing the potential for transport of exotic species. Due to these standard procedures and current ballast water regulations, the potential to introduce additional exotic species via ballast water would not be increased by the Project or alternatives.

Human Health and Welfare. The Project and alternatives would have no significant impacts on human health and welfare, including recreational and commercial fishing, municipal and private water supplies, water-related recreation, flooding, and aesthetics.

Waters of the U.S. The Project and Alternative 2 would result in a permanent loss of 54.7 acres and 24.7 acres of waters of the U.S., respectively, that would be mitigated through use of Port credits. The Project and Alternative 2 also would have temporary impacts within waters of the U.S. The extent and duration of these temporary impacts would be less for Alternative 2 than for the Project.

Terminal Function. As described in Section II.C, without expansion or significant improvements, the capacity of existing Port facilities is estimated to be approximately 12 million TEUs per year and that level of throughput will be reached by 2015, based on predicted future containerized cargo throughput volume. In addition to the total TEUs, the number of vessel calls required to transport this throughput have also been projected. The results of these forecasts are shown in Table E-4.

Conclusions. Based on the Final EIS/EIR analyses, Alternative 3 (Landside Improvements Alternative) and Alternative 4 (No Project Alternative) would be the least environmentally damaging alternatives; however, neither of these alternatives would meet the overall Project purpose of increasing container terminal efficiency to accommodate a portion of the predicted future containerized cargo throughput volume and the modern cargo vessels that transport those goods to and from the Port. Compared to the NEPA Baseline (Table E-4), the terminal area would remain the same for Alternative 3 (Landside Improvements Alternative) and Alternative 4 (No Project Alternative); throughput would be the same as the NEPA Baseline for Alternative 3 and 11 percent less for Alternative 4; and vessel calls would be the same as the NEPA Baseline for Alternative 3 and 25 percent less for Alternative 4. Under Alternatives 3 and 4, none of the existing berths would be upgraded or expanded. Consequently, the terminals would be insufficient for the activities and modern equipment necessary to efficiently and safely handle the anticipated containerized cargo volumes.

Compared to the NEPA Baseline, Alternative 2 (315-Acre Alternative) would be seven percent larger, throughput would be one percent less, and vessel calls would be 12.5 percent less. Slip 3 would be widened, Berths E24-E26 would be upgraded and expanded, and Berths F6-F10 would be upgraded, resulting in temporary disturbances to marine habitat. The increase in terminal area would result from landfill construction that would have a significant but mitigated net loss of 24.7 acres of marine habitat. Alternative 2 would be similar to the proposed Project except that the 34.3-acre East Basin area would not be filled and the Berth E23 wharf would not be constructed. The elimination of the East Basin fill and Berth E23 wharf would decrease container movement efficiency compared to the Project. Alternative 2 would consolidate common operations and wharves of the existing two terminals on Piers E and F into one terminal, as would occur under the proposed Project. However, under this design the available area along the railyard would be substantially limited in width and would not support efficient access by trucks transporting containerized cargo. Therefore, under Alternative 2 the proposed terminal areas would not support the activities and modern equipment necessary to efficiently and safely handle the anticipated containerized cargo volumes necessary to fulfill the Project purpose. Overall, Alternative 2 would be less environmentally damaging than the Project; however, it would not meet the overall Project purpose of increasing container terminal efficiency to accommodate a portion of the predicted future containerized cargo throughput volumes. Therefore, Alternative 2 is not considered the least environmentally damaging practicable alternative.

The Project would rehabilitate or replace deteriorated and obsolete terminal facilities; provide deeper water (-55 feet MLLW) at berths and in basins and channels; create new land; modernize marine terminal facilities; provide rail infrastructure improvements (e.g., Mainline Track Realignment at Ocean Boulevard/Harbor Scenic Drive, Pier F Avenue storage yard and tracks, Pier F tail track, and expansion of the existing Pier F intermodal railyard); construct a 66kV substation to support Middle Harbor container terminal operations, including shore-to-ship power; and implement environmental controls, including the Port’s Green Port Policy and CAAP, to accommodate a portion of the predicted future increases in containerized cargo volume and the modern, larger cargo vessels that are expected to transport these goods to and from the Port. Project throughput volumes (3,320,000 TEUs) would adequately accommodate forecasted container throughput growth at the Port. Therefore, based on preliminary analysis, the Project is the least environmentally damaging practicable alternative that meets the overall Project purpose.

- NA ___ (2) Based on Section II.C, if the project is in a special aquatic site and is not water-dependent, Yes No has the applicant clearly demonstrated that there are no practicable alternative sites available?

Table E-4. Comparison of Alternatives					
	NEPA Baseline	345-Acre Alternative (Project)	315-Acre Alternative	Landside Improvements Alternative	No Project Alternative
Total terminal area (acres)	294	345	315	294	294
Vessel calls	416	364	364	416	312
Annual throughput (TEU)	2,910,000	3,320,000	2,870,000	2,910,000	2,600,000
Dredging (cy)	0	680,000	680,000	0	0
Excavation (cy)	0	1,290,000	710,000	0	0
New wharf (feet)	0	1,900	550	0	0
<i>Note: Numbers represent total in 2025.</i>					

B. Special Restrictions

Will the discharge:

- ___ X (1) Violate state water quality standards?
Yes No
- ___ X (2) Violate toxic effluent standards (under Section 307 of the Act)?
Yes No
- ___ X (3) Jeopardize endangered or threatened species or their critical habitat?
Yes No
- ___ X (4) Violate standards set by the Department of Commerce to protect marine sanctuaries?
Yes No
- X ___ (5) Evaluation of the information in Sections II.D and II.E above indicates that the discharge material meets testing exclusions criteria for the following reason(s):
Yes No
- () Based on the above information, the material is not a carrier of contaminants.
 - () The levels of contamination are substantially similar at the extraction and disposal sites and the discharge is not likely to result in degradation of the disposal site and pollutants will not be transported to less contaminated areas.
 - (X) Acceptable constraints are available and will be implemented to reduce contamination to acceptable levels within the disposal site and prevent contaminants from being

transported beyond the boundaries of the disposal site.

C. Other Restrictions

Will the discharge contribute to significant "waters of the U.S." through adverse impacts to:

- Yes No (1) Human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife and special aquatic sites?
- Yes No (2) Life states of aquatic life and other wildlife?
- Yes No (3) Diversity, productivity and stability of the aquatic ecosystem, such as the loss of fish or wildlife habitat, or loss of the capacity of wetland to assimilate nutrients, purify water or reduce wave energy?
- Yes No (4) Recreational, aesthetic and economic values?

D. Actions to Minimize Potential Adverse Impacts (Mitigation)

- Yes No Will all appropriate and practicable steps (40 CFR 23.70-77) be taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem?

Discussion: Actions taken to minimize potential impacts are described in Section III. The permanent loss of aquatic habitat (54.6 acres) due to fill placement for the Project would be mitigated to less than significant through use of existing mitigation credits in the Bolsa Chica Bank. Alternative 2 (315-Acre Alternative) would reduce the amount of fill to 24.7 acres and the number of credits needed for mitigation. The temporary impacts of dredging, excavation, and berth construction/reconstruction would be minimized by limiting the area of disturbance to that needed for these activities. If the Project were approved, fill placement in Slip 1 and East Basin would be confined with a rock dike to limit sediment movement. Any contaminated sediments dredged or imported for fill would be placed in an approved CDF. Temporary construction impacts on water quality and aquatic biota would be minimized by compliance with conditions of the Project 401 Water Quality Certification and Section 404 permit. Plans and specifications for fill placement in Slip 1 and East Basin would include measures to prevent turbidity from leaving the site and monitoring to verify the Project complies with water quality standards. Runoff of pollutants during backland construction activities would be minimized through use of construction and industrial SWPPPs and standard Port BMPs listed in Final EIS/EIR Section 3.3.2.3 (e.g., use of drip pans, refueling in contained areas, regular equipment inspection with immediate repair of leaks, and covering drip pans during rainfall to prevent washout).

Based on the above information, the USACE has made a preliminary determination that the Project would avoid and minimize impacts to waters of the U.S. to the maximum extent practicable while meeting the overall Project purpose of increasing container terminal efficiency to accommodate a portion of the predicted future containerized cargo throughput volume and the modern cargo vessels that transport those goods to and from the Port. Therefore, the Project represents the least environmentally damaging practicable alternative.

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