

**LONG BEACH AIRPORT TERMINAL AREA
IMPROVEMENT PROJECT
ENVIRONMENTAL IMPACT REPORT NO. 37-03**

SCH NO. 200309112

Supplemental Responses to Comments

Lead Agency:



City of Long Beach
Planning and Building Department
333 West Ocean Boulevard
Long Beach, California 90802

Contact: Angela Reynolds
(562) 570-6354

May 10, 2006

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A	Supplementary Visual Analysis Exhibits
	• 1999 Aerial Photo of Terminal Area • Conceptual Design Overlay • 1991 Aerial Photo of Terminal Area • Sight Line Exhibit • Exhibit Depicting Aircraft Parking Spaces
B	Cumulative Projects List
C	Air Quality Analysis Worksheets
D	Sensitive Receptors (Schools and Hospital) Locations

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SECTION 1 INTRODUCTION

As part of the preparation of Final EIR No. 37-03 (State Clearinghouse No. 200309112), *Long Beach Airport Terminal Area Improvements*, the City of Long Beach prepared and circulated responses to comments received during the public review period. The Responses to Comments documents were presented in two volumes. The first volume included written comments received (letters, e-mails, and comment cards), as well as transcripts of the public meetings (November 29, December 3, and December 5, 2005) and transcript of a joint Planning Commission and Cultural Heritage Commission study session. The second volume included responses to each of the written and oral comments made during the 84-day public review period.

Through an inadvertent oversight there were nine emails that were received on January 30, 2005, within the 84-day public review period, that were not included in the responses to comments document. These comments and the written responses to those comments are presented in this supplemental document. It should be noted that none of the issues raised in these comments raise new issues that have not been previously addressed either in the Draft EIR or in Responses to Comments Volumes I and II that were provided on April 24, 2006.

The following is a listing of the commenters addressed in this supplemental volume.

- Sarah Robbins
- Steven Wraight, AIA
- Sondra N. Lavoie
- Bob Williford
- Helen Manning-Brown
- Joseph Valles
- Douglas P. Haubert
- Laura Sellmer
- Lorraine Fitton

Section 2 provides a copy of the bracketed comments, and Section 3 provides the written responses.

SECTION 2
SUPPLEMENTAL E-MAIL COMMENT RECEIVED

The comments provided in each of the following e-mails have been bracketed and numbered to correspond to the responses provided in Section 3.



"Robbins, Sarah"
<SRobbins@capnet.ucla.edu>

01/30/2006 09:08 AM

To: <AirportEIR@longbeach.gov>, <district1@longbeach.gov>, <district2@longbeach.gov>, <district3@longbeach.gov>, <district4@longbeach.gov>, <district5@longbeach.gov>, <district6@longbeach.gov>, <district7@longbeach.gov>, <district8@longbeach.gov>, <district9@longbeach.gov>, <mayor@longbeach.gov>

cc:

Subject: Airport Draft EIR

<?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" />

Dear Ms. Reynolds

Thank you for the opportunity to provide a response to the Draft EIR.

Below are my comments to the Draft Environmental Impact Report for the Long Beach Airport Area Terminal Improvement Project.

I am particularly alarmed by the Draft EIR's conclusion that the proposed project of a 103,000 square foot Terminal Building "is the environmentally superior alternative." According to USGBC LEED criteria which is supposed to be a guiding principal for this project, the larger a building is, the more it materials it requires to build, the more energy it requires to light, the more energy it requires to air condition, the more energy it requires to heat, more chemicals it requires to maintain, and it creates more heat source in an urban landscape. Furthermore the larger alternative relies on the development presently undeveloped of Parcel "O" which is now open space and permeable land. According to LEED principals, the larger building would be the **environmentally inferior alternative**.

1

Most people would agree that building a parking structure to accommodate passengers driving single accompany vehicles to and from the airport is also an **environmentally inferior alternative**.

2

HNTB's 2004 study recommending an even larger terminal building shows bias. City Council approved a smaller size option because HNTB conclusions ignored the voices of hundreds of hours of testimony of residents who oppose airport expansion. For purposes of this study, the City Council voted to study a stated project - nothing more. If the EIR discusses HNTB's recommendations at all, it must also cite all the public testimony that HNTB ignored because airport management was paying for the study.

3

Noise evaluations in this Draft report are very problematic. The public has just recently learned that the noise calculation disregard the high level of noise when a jet is taking off and landing, when wheels are on the ground. Full public disclosure requires that ALL the airport noise, noise that the surrounding community is exposed to, must be disclosed. This includes ALL the noise from life-flight, military and any other aviation noise that may be disregarded in the budgets for the Noise Ordinance. Policy makers and the public must have a comprehensive data of all the noise exposure. The noise contours must show all the present and expected noise impacts.

4

It is unacceptable that the Draft EIR failed to include air quality data of actual air sampling taken at, near and around the airport property. In public scoping meetings, there was an overwhelming public demand for actual air sampling. The only existing air collection point is many blocks

5

upwind of the airport. When a jet runs up its engines at take off, jet exhaust levels are very high and are blown into residential neighborhoods. A single collection point upwind of the runway is unacceptable to evaluate this pollution. Residents demand to know the cumulative negative impact associated with the ports pollution and the 710 corridor for the movement of goods, must be considered so the public knows the health risk.

The evaluation of emissions from aircraft still using lead-based additives in aviation fuel, must be conducted. Lead exposure is very hazardous to humans.

5 cont.

Sarah Robbins

2169 Stanbridge Ave.
Long Beach, CA 90815



"Steve Wraight"
<swraight@related.co
m>

01/30/2006 09:30 AM
 Please respond to
 swraight

To: <kell@longbeach.gov>, <district9@longbeach.gov>,
 <district8@longbeach.gov>, <district7@longbeach.gov>,
 <district6@longbeach.gov>, <district5@longbeach.gov>,
 <district4@longbeach.gov>, <district3@longbeach.gov>,
 <district2@longbeach.gov>, <district1@longbeach.gov>,
 <dan_baker@longbeach.gov>, <airport@longbeach.gov>
 cc: "Mike & Kathy Kowal" <mike4kath@aol.com>, <contact@bhush2.org>
 Subject: Airport EIR

Questions regarding the Airport EIR

1) PROJECT OBJECTIVE, Item 1.5

Why is the objective of this EIR to provide airport facilities which accommodate the "minimum" permitted number of flights and not the maximum (41 commercial & 25 commuter)? EIR's are used to evaluate the environmental implications of a maximized, proposed development...it seems the objective for this EIR is fallacious.

2) ENVIRONMENTALLY SUPERIOR ALTERNATIVE, Item 1.13

How can a +- 102,850 square foot (excluding parking structures and other facilities) terminal expansion of an airport, which is surrounded by residential neighborhoods, which were in existence prior to the commercialization of the airport, be an "environmentally superior" solution to: a) maintaining the existing facility with no new environmental impacts? or, b) providing a minimal increase in facilities to accommodate new TSA/security requirements?

3) ALTERNATIVE , Item 2.5.4

If Alternate C is unacceptable because of the loss of terminal parking spaces and need to address TSA requirements, then why was this alternate continued throughout the EIR and not replaced with a viable alternate? The viable alternate would simply address: TSA office space (1400 SF), non secure restrooms (850 SF), new Passenger Security Screening (2000 SF) and Baggage Screening (2000 SF) for a total of 8.850 SF of new addition? Replacement parking could be achieved with a City constructed Parking Structure, at much less expense to the citizens of Long Beach.

4) How will the existing airport, much less the proposed expansion, affect the 1400 new homes proposed north of the airport?

5) The Zoning Ordinance requires buildings to be sited to provide views, avoid a wall of buildings and encourage views to the Terminal Building. Parking structures should be articulated to avoid long uninterrupted horizontal and/or vertical lines, located to not disrupt any lines of sight to the Terminal Building and not exceed 43 feet high. The proposed parking structure along Donald Douglas Drive is the antithesis of these requirements. The structures improper siting, bulk and design is illustrated on Exhibits 2-4 and 3.1-3. It's patently obvious that it disrupts the views to the Terminal and is indeed a long, unarticulated wall, which exceeds the prescribed height (see last paragraph on page 3.1-8). How can this parking structure be an acceptable response to these important City requirements?

6) The first paragraph on page 3.1-4 states "the baggage claim area may be relocated and enlarged to accommodate an increase in space requirements related to an approved INCREASE in flights". Why is an increase in the baggage being proposed by this EIR if this EIR's objective is to accommodate the "minimum" number of flights?

7) IMPACT ANALYSIS 3.1.2

The project does substantially degrade the existing visual character of the site. See item 5 above. How can this EIR state otherwise?

The project does adversely impact views of the Terminal from the Street.

See item 5 above. How can this EIR state otherwise?

The project does adversely impact views of the Terminal from the airfield.

See the elevation study/view (eye level elevation) from the airfield which clearly demonstrates how the base of this building will be obscured by the proposed addition. How can this EIR state otherwise?

7

8) It's repeated, throughout the EIR, "The improvements to the Airport Terminal Area and Parcel O would be the same and would not be affected by an increase in flights". If this is so, then why is the development proposing more than a minimal expansion? It appears the proposal wants to over-build, anticipating an increase in flights. How can this EIR be supportive of this over-building which simply increases the environmental impacts and degradation to the surrounding community?

8

9) Why not demolish the existing parking structure, which is aesthetically detrimental to the existing airport character?

9

10) The "viewsheds" mentioned in the EIR, specifically with respect to the proposed parking structure, are erroneous and misleading. Why not provide more accurate representations on how this egregious structure will obscure the views to the Terminal?

10

11) On page 3.3-2 there are eleven criteria listed as City evaluators for a historical resource, although items H and I are repetitive. Therefore, which criteria is missing?

11

12) Per page 3.3-5, McDonnell Douglas Aircraft Co. was begun in 1940. Commercial flights began later, after most of the residential neighborhoods north and south of the airport were built-out, therefore, why should expansion of this airport be allowed to disrupt these predecessor neighborhoods?

12

13) Why doesn't the EIR discuss the implications of potential structural and aesthetic damage to the Terminal Building during construction i.e., installation of attached and adjacent foundations, heavy equipment operations, etc.?

13

14) Why on page 3.3-9 does the EIR state that the two story old air traffic control tower is "not considered a character-defining feature" ?

14

15) Why doesn't Table 3.5-1 list the schools, both north and south of the airport as sensitive receptors? Two of these schools, Longfellow Elementary and Hughes Middle School, suffer much more from noise and pollutants than the schools which are listed, within four kilometers, to the SIDES of the runways. Why doesn't the EIR take into consideration areas (take-offs and landings) that are more impacted by the airport, than simply drawing a radius around the airport? Why doesn't the sensitive receptor areas extend for 3-4 miles north and south of the airport?

15

16) If "Growth of the airport will be limited in order to protect surrounding residential neighborhoods....", then why is this EIR supportive of expansion beyond the minimal needs to satisfy TSA requirements?

16

17) Where is goal two for the City of Long Beach Strategic Plan 1020, listed on page 3.5-10?

} 17

18) The EIR doesn't address SCAG's requirement: "Operations at Long Beach Airport shall be constrained to existing physical or legal capacity" why not?

} 18

19) Item K on page 3.5-15 states " No portion of any site within the LB Airport Terminal Area shall be used in such a manner as to create a nuisance to an adjacent site, such as....sound,....air or water pollution, dust and emission or odorous toxic or noxious matter". If the Terminal Area supports the flying of airplanes, which create all of these nuisances for adjacent sites (neighborhoods), how can this EIR be approved?

} 19

Steven W. Wraight AIA
(949) 660-7272
swraight@related.com



"Lavoie, Sondra N."
<SNLavoie@isecinc.com>

01/30/2006 10:50 AM

To: <AirportEIR@longbeach.gov>, <district1@longbeach.gov>, <district2@longbeach.gov>, <district3@longbeach.gov>, <district4@longbeach.gov>, <district5@longbeach.gov>, <district6@longbeach.gov>, <district7@longbeach.gov>, <district8@longbeach.gov>, <district9@longbeach.gov>, <mayor@longbeach.gov>

cc:

Subject: QUESTIONS AND COMMENTS TO AIRPORT DRAFT EIR

Dear Ms. Reynolds

Thank you for the opportunity to provide a response to the Airport Terminal Draft EIR. I am expecting that my comments will be read and addressed. When I and by what method, can expect to hear specific responses to my comments below? If the City is not responding to public comments, why is that?

1

The Draft EIR's conclusion that, all things being equal, the Proposed Project, a 103,000 square foot terminal building "is the environmentally superior alternative" is not consistent with LEED guidelines. According to USGBC LEED criteria, the larger a building is, the more materials it requires to build, the more energy it requires to light, the more energy it requires to air condition, the more energy it requires to heat, more chemicals it requires to maintain, and it creates more heat source in an urban landscape. Furthermore the alternative relying on the development presently undeveloped of Parcel "O" which is now open space is not environmentally superior. The DEIR cannot and does not adequately support the statement that the largest alternative is environmentally superior. According to LEED principals, the larger building would be the environmentally inferior alternative.

2

Noise evaluations in this Draft report are very problematic and disturbing confusing to the public. Residents have just recently learned that the noise calculations for the Noise Ordinance disregard the high level of noise when a jet is taking off and landing, when wheels are on the ground. Shouldn't full public disclosure require that ALL the airport noise impacting the surrounding community must be disclosed? Should the public disclosure include ALL the noise from life-flight, helicopter flight paths, military and any other aviation noise that may be disregarded in the budgets for the Noise Ordinance? Policy makers and the public must have a comprehensive data of all the noise exposure.

3

It is imperative that the noise contour diagrams show ALL the present and expected noise impacts from every source of aviation noise. This must be done in clear, accurate and thorough terms so the public can understand the noise exposure. If you have to temporarily set up noise monitors over helicopter paths and other locations, then you must do that in order to achieve the required full-public disclosure. Flights wake people up at all hours of the night and sleep disruption is a negative impact that exceeds mere "annoyance."

4

The proposed parking structure to accommodate passengers driving single accompany vehicles to and from the airport is also an environmentally inferior alternative. Why didn't the consultant consider alternatives like incentives for vanpools, car pools and high occupancy vehicles? Isn't an enlarged, overbuilt parking structure an invitation to bring in more flights to Long Beach Airport? Isn't an overbuilt airport with excess capacity an invitation to bring more flights into Long Beach.

5

HNTB's 2004 study recommending an even larger terminal building shows bias. Why did you not mention the hundreds of hours of public testimony that the residents do not want a larger airport terminal

at Long Beach. Why did you not state that Airport paid HNTB, and the residential concerns were ignored by that consultant because the Airport Management wants the biggest terminal? City Council approved the smaller size options for purposes of this study. If the EIR discusses HNTB's recommendations as relevant, then the consultant must include the residents comments, those who are already impacted and at risk of airport expansion?

5 cont.

It is unacceptable that the Draft EIR failed to include air quality data of actual air sampling taken at, near and around the airport property. In public scoping meetings, there was an overwhelming public demand for actual air sampling. The only existing air collection point is many blocks upwind of the airport. When a jet runs up it engines at take off, jet exhaust levels are extremely high and toxic to humans. These emissions are windblown directly into residential neighborhoods. Meanwhile the air collection station is upwind! A single collection point upwind of the runway is unacceptable to evaluate the emissions and health risk to thousands of Long Beach residents whose homes surround the airport. Residents are legally entitled to know the cumulative negative impact associated with the ports pollution and the 710 corridor for the movement of goods AND THE AIRPORT. If you plan to ignore this request, tell me why and what legal grounds you have to ignore this in an EIR? Aircraft still use lead-based additives in aviation fuel. Lead exposure is very hazardous to humans. Why is this not discussed and disclosed?

6

Economic growth as a criteria for Long Beach Airport Terminal Improvements is unacceptable. Why haven't you included the fact that there has never been an unbiased study of the airport which includes negative economic impact to Long Beach Neighborhoods? The Airport paid for an economic study last year, but they did not allow anyone from the public on the oversight committee to consider even a single negative economic impact? Jets flying over residential neighborhoods has significant negative economic impacts that must be disclosed to the public and policy makers. Also, why have you included economic growth for an entire airport property, when the project is only supposed to be about terminal improvements? The public has been told that improvements will not generate more flights or more passengers, so where is the logic that the project supports significant economic growth for Long Beach?

7

Sincerely,

Sondra Lavoie
6567 Walnut Ave.
Long Beach, CA 90805
solowwon@msn.com



Bob Williford
 <rwillifo@yahoo.com>
 01/30/2006 10:54 AM

To: AirportEIR@longbeach.gov
 CC:
 Subject: EIR Response

Dear Ms. Reynolds

Thank you for the opportunity to provide a response to the 1,500 page Draft EIR. Here it goes:

I am particularly shocked by the Draft EIR's conclusion that the proposed project of a 103,000 square foot Terminal Building "is the environmentally superior alternative." According to USGBC LEED criteria which is supposed to be a guiding principal for this project, the larger a building is, the more it materials it requires to build, the more energy it requirs to light, the more energy it requires to air condition, the more energy it requires to heat, more chemicals it requires to maintain, and it creates more heat source in an urban landscape. Furthermore the larger alternative relies on the development presently undeveloped of Parcel "O" which is now open space and permeable land. Accoroding to LEED principals, the larger building would be the environmentally inferior alterantive. That is elementary.

1

Most people would agree that building a parking structure to accommodate passengers driving single accompany vehicles to and from the airport is also an environmentally inferior alternative. I don't buy that people dropping off passengers is better than parking concerning the environmental impact.

2

HNTB's 2004 study recommending an even larger terminal building shows bias. City Council approved a smaller size option because HNTB conclusions ignored the voices of hundreds of hours of testimony of residents who oppose airport expansion. For purposes of this study, the City Council voted to study a stated project - nothingmore. If the EIR discusses HNTB's recommendations at all, it must also cite all the public testimoney that HNTB ignored because airport management was paying for the study.

3

Noise evaluations in this Draft report are very problematic. The public has just recently learned that the noise calculation disregard the nigh level of noise when a jet is taking off and landing, when wheels are on the ground. Full public disclosure requires that ALL the airport noise, noise that the surrounding community is exposed to, must be disclosed. This includes ALL the noise from

4

life-flight, military and any other aviation noise that may be disregarded in the budgets for the Noise Ordinance. Policy makers and the public must have a comprehensive data of all the noise exposure. The noise contours must show all the present and expected noise impacts.

} 4 cont.

It is unacceptable that the Draft EIR failed to include air quality data of actual air sampling taken at, near and around the airport property. In public scoping meetings, there was an overwhelming public demand for actual air sampling. The only existing air collection point is many blocks upwind of the airport.

When a jet runs up its engines at take off, jet exhaust levels are very high and are blown into residential neighborhoods. A single collection point upwind of the runway is unacceptable to evaluate this pollution. Residents demand to know the cumulative negative impact associated with the ports pollution and the 710 corridor for the movement of goods, must be considered so the public knows the health risk.

} 5

The evaluation of emissions from aircraft still using lead-based additives in aviation fuel must be conducted. Lead exposure is very hazardous to humans.

I can go on forever but you get my point.

Bob Williford
Los Altos Resident

Do You Yahoo!?

Tired of spam? Yahoo! Mail has the best spam protection around
<http://mail.yahoo.com>



"Helen
Manning-Brown"
<helenmb@verizon.net>
>

To: <AirportEIR@longbeach.gov>
cc:
Subject: eir comments

01/30/2006 02:12 PM
Please respond to
helenmb

HELEN MANNING-BROWN
3640 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90807
(562/424-3417)

January 30, 2006

Angela Reynolds
Environmental Officer
City of Long Beach Planning and Building Department
333 W. Ocean Boulevard
Long Beach, CA 90802.

RE: Long Beach AIRPORT TERMINAL Area Improvement Project
Draft Environmental Report No. 37-03
SCH no. 200309112

Dear Ms. Reynolds:

The attached document contains comments to the Draft Environmental Impact Report for the Long Beach Airport Area Terminal Improvement Project.

I am against the Draft EIR's conclusion that the proposed project of a 103,000 square foot Terminal Building "is the environmentally superior alternative.". The Draft EIR fails to discuss or evaluate any LEED components, which are supposed to be a guiding principal for this project. It is very unlikely that after applying the USGBC LEED criteria and principals for sustainable building, that the largest building size would be an environmentally superior alternative.

1

Noise evaluations must include ALL the airport noise, noise that the surrounding community is exposed to, must be disclosed. This includes all the noise from life-flight, military and any other aviation noise that may be disregarded in the budgets for the Noise Ordinance. Policy makers and the public must have a comprehensive data of all the noise exposure. The noise contours must show all the present and expected noise impacts.

2

The Draft EIR must include air quality data of actual air sampling taken at, near and around the airport property. We who live near the airport know that when a jet runs up it engines at take off, jet exhaust levels are very high and are blown into our neighborhoods. Because residential neighborhoods and schools surround Long Beach Airport, it is imperative that this EIR fully and accurately disclose the health impacts associated with aviation and ground support emission. Aviation fuel today, particularly used by general aviation aircraft, still contains lead-based additives. The public must have accurate data that deals with airport specific emission in the community. An air-sampling site upwind of the airport is inadequate. The cumulative negative impact associated with the ports pollution and the

3

710 corridor for the movement of goods, must be considered so the public knows the health risk.

} 3 cont.

Sincerely,

Helen Manning-Brown

Instead of just overbuilding a parking structure and blocking the view of the historic terminal, the EIR should evaluate alternatives to the project that could be significantly reduce the environmental impact, such as incentives for vanpool programs for the majority of passengers who happen to live in Orange County. Carpool and Vanpool programs are a known method of reducing emissions and numbers of trips. A massive parking structure to accommodate each and every passenger driving single occupancy vehicles is not the environmentally superior alternative.

} 4

VOLUME I, Page 2-5

Airport Advisory Committee

The second half of this paragraph should be titled Commuter Slots. It is misleading to have this information buried under a topic Airport Advisory Committee, because it presents key assumptions about the commuter slots, which are inseparable from the arguments for terminal sizing. There is a high probability that average reader, members of the public, would miss this information because of its misleading location under another topic.

The last sentence of paragraph titled 'Airport Advisory Commission' states, "All 25 commuter flights are expected to be in regular operation between December 2005 and Spring 2006" is now inaccurate information an must be updated. Furthermore, many members of the community are convinced that the named airline. "Smooth Flight Holdings" was created for the sole function of slot allocation so that Jetblue and Airport Management could a build a case for the largest terminal at Long Beach Airport. Smooth Flight holdings founder, Alec Wilcox a former employee of Jetblue at Long Beach Airport, created his Airline on paper in 30 days for the sole purpose of having LBG slots allocated. He never listed assets, never had a plane, never had an employee, his corporate address is a P.O. Box in Henderson, NV. Smooth Flight Holdings never had routes for commuter flights, not did it have the capital required to start an airline, buy or lease planes, market an airline, pay employees, purchase fuel and insure this kind of business. His suggestion that he was going to "raise the assets" was a highly improbably. Many in the community are convinced Airport Management made no effort whatsoever to qualify the airline as legitimate before it announced and assigned the slots and allowed Mr. Wilcox to make it seem like he was going to have twenty-one 90-passenger flights daily flying at full passenger loads. This propaganda, claiming that there is airline, when said airline is nothing more than a corporation on paper, is inconsistent with the EIR objectives of "full-disclosure document" to "inform agency decision makers and the general public." (page 1-1 General Introduction)

} 5

Mr. Wilcox, upon the assignment of slots by Airport Management, publicly stated that his planes were to bring in 90-passenger planes, which allowed Airport Management to inflate expected passenger loads of up to an additional 821,000 annual passengers. The arguments for the largest terminal possible and expansive parking structure are invalid and the community deserves transparency. Previous assumptions for commuter slots are entirely unfounded.

Furthermore, the City Council instructed Airport Management NOT to market the available commuter slots. But with the appearance of, Smooth Flight

Holdings original application, Airport Management immediately notified all the airlines, an in effect marketed all slot availability, before notifying Council that the application had been filed. The community believes this strategy was timed to coincide with the Airport Management wanting an argument to build the largest terminal possible.

4 cont.

VOLUME I, Page 2-11
Paragraph 2 (LEED)

The discussion of achieving LEED certification is inadequate and fails to capture or adequately coordinate the environmentally favorable strategies required by USGBC to achieve LEED status. For full public disclosure, this discussion should include more substantive information in order that both policy makers and the public can understand the benefits to the environment proposed by LEED.

Failing to incorporate LEED strategies at this stage, allows the authors of the DEIR to conclude that the largest building option is the "Environmentally Superior Alternative." To delay applying any LEED standards at this stage of the project evaluation is not an "objective" evaluation, but rather appears to have embraced the bias of Airport Management, the entity that is paying for the EIR. Airport Management is on the public record as wanting the largest terminal building possible.

With the City of Long Beach a member of the U. S. Green Building Council (USGBC) and publicly commitment to LEED building, it is impetrative that this project not be accused of "green washing" in the EIR's project evaluation stage, but rather the City must acknowledge the principals and standards that are consistent with USGBC's sustainable building practices. Doing so would reveal the flawed conclusion that the largest building is the "Environmental Superior Alternative"

6

For example, LEED principals are significantly more likely to point to a smaller building square footage that requires less energy to air condition, less energy to heat, less energy to light, less materials used to build, less fossil fuel to transport building materials, less chemicals used for years of routine maintenance, and no impact on previously undeveloped open space (Parcel O).

LEED strategies apply objective and proven methodologies, and will look beyond the DEIR simplistic conclusion that the largest terminal size is superior because a parking structure would result in fewer round trips and jets would not idle. LEED principals are designed to incorporate enducements for carpools, vanpools, shared rides, public transportation to significantly reduce the environmental impact of building users transportation to the building. Smaller buildings require fewer resources to build and fewer resources to maintain. The airlines can be legally induced to level schedules to reduce the likelihood of jet engine idling that occurs when too many flights are scheduled in narrow time slots. LEED strategies must be evaluated as they have proven to be the most economical and environmentally superior protocols than "bigger is better."

VOLUME I, Page 2-11
Paragraph 4

The written description, "The new construction would generally be set back from the existing Airport Terminal Building so as not to appear an "add on" to the exiting airport terminal structure" is inconsistent with the

7

illustrations provided which do create an appearance that the new construction has been added on to the existing terminal.

} 7 cont.

VOLUME I, Page 2-12
Concession Area

The concession area assumption "to serve the anticipated number of passengers" is an inadequate explanation. In August 2005, there was a questionable allocation of commuter slots to faux airline. The airline was promising an exaggerated 850,000 annual passengers per year. That airline had no assets and had only been in business for 30 days when it was assigned slots. That airline has the slot allocation rescinded and the "anticipated number of passengers" must be adjusted. Another factor requiring analysis is that commuter travelers on 30-minute flights are unlikely to utilize the concession services for meals. There is a high probability that commuter passengers have a lower demand for full meals.

} 8

This EIR needs to adequately identify and evaluate alternatives such as if scheduling modifications will level passenger occupancy in holdrooms, and alleviate peak demand at concession areas. Current flight scheduling appears to create a peak periods which distort the evaluation of space requirements for concession area and space will be underutilized for many hours of the day, and thus is overbuilt for the annual passengers loads..

VOLUME I, Page 2-12 through 2-13

Covered open areas in addition to the building area, covered by full roofing should be calculated into the square footage of the structure. These appear to be structural parts of the building, not open areas, provided for by the City for airlines and TSA. Providing the roof and foundation structure, while considered open-air construction is still part of the construction and building design. This design feature appears to be a loop-hole, because as part of the structural roof, it can be simply enclosed by walls in the future to add additional square footage to the terminal size.

} 9

VOLUME I, Page 2-12
Baggage Security Screening

The statement "TSA has indicated that the open-air situation is not sufficient because of the sensitivity of the equipment being used. The Proposed Project would provide a 7,000-square foot structure for security screening of baggage. The structure would house the explosive detection equipment and would include in-line baggage conveyors" This statement is highly misleading and fails to adequately explain that TSA is operating with adequate facilities within the current conditions. If current conditions are insufficient, how can TSA function and allow 3,000,00 passenger per years travel through Long Beach Airport without adequate screening?

} 10

There have been numerous requests by community leaders for TSA to supply actual documented requirements, which apply to all airports nationwide. To date no one has been able to provide the City with TSA mandated requirements. TSA is not requiring high speed, high capacity, in-line explosive detection equipment and that fact should be stated for the public record. If the no-build option is selected, TSA will continue to screen

baggage with the same degree of assurance for public safety.

} 10 cont.

VOLUME I, Page 3.3-5,
Historical Landmark Designation

Criterion B The statement "The airport has been a significant part of the City's economy since its founding in 1924, and an important factor in Long Beach's economic growth" needs to be modified to historical criteria only to conform to the subheading under which it is placed. Economic criteria are a separate and highly controversial topic and not part of the EIR review. In 2004, Dr. Magaddino was paid \$30,000 to prepare an airport economic impact report. This study was conducted with complete disregard for public input and at no time was the negative economic impact evaluated in comparison the neighborhoods that surround LBG. No member of the public were allowed to provide input on that research design, yet members of the aviation community, active advocates of airport growth, were selected by the Airport management to participate on the steering committee. The final report was highly questionable and eventually never made it past the Transportation and Infrastructure Committee. Additionally, when it was presented to the Economic Development Commissioner, the public was not allowed to speak - a Brown Act Violation.

Furthermore, the economic contribution from the manufacturing sector must be clearly distinguished from the Airport Terminal Improvement Project. It is the manufacturing jobs that are the higher paying jobs, and these manufacturing jobs will not be impacted by the terminal improvement project. No independently validated research has ever pointed to a fact that the terminal is an important factor in Long Beach's economic growth. No independently validated research has shown that travelers spend enough money or time in Long Beach to compensate for the negative impacts of having a commercial airlines flying directly over residential neighborhoods at all times of the day and night, often outside the hours allowable by the ordinance.

} 11

Economic Growth should NOT be criterion of the Airport Terminal Improvement Project. The project will not result in increased passenger loads or significant consumer spending at the terminal. Reduced spending at local food establishments near the terminal will largely offset any new tax revenue as a result of new concessions. If passengers are able to buy a sandwich at the terminal, they won't stop at a local establishment before arriving at the terminal. The public and residents surrounding the airport has been promised that terminal improvements will not generate more passengers, or more flights. Therefore, no increase in the amount of passengers will provide a new source for economic growth. Additionally, the airport properties have been identified as economic enterprise zones and are already enjoying tax advantages that serve to reduce realized revenue to the State and the City.

VOLUME I, Page 3.312
Paragraph 1

Per Secretary Standard #10 "...and new construction would be ..compatible in size, massing, scale and style" is Not in conformance. The original terminal structure of the Historic Long Beach Terminal is less than 30,000 square feet. The proposed new construction in excess of an additional 70,000 square feet plus unspecified covered areas with a full roof and lighting.

} 12

This brings the proposed new structure to an increase of about 200% for massing and scale. Furthermore, the proposed new parking structure adds adjacent structure massing that will all serve to significantly dwarf the original terminal which the community is striving to preserve in character and aesthetic appeal.

12 cont.

VOLUME I, Page 3.4-7
Regulated Materials, Aerially-Deposited Lead

The discussion on aerially deposited lead is inadequate. The paragraph fails to mention that lead continues to be an additive to in aviation fuel today and its presence in the near-surface soil may be more widespread than the case outlined by limiting the discussion to automobile fuels before 1990 and limiting the exhaust to adjacent roadways. Full public disclosure requires an evaluation of the hazards of aerially deposited lead that may still be going on today. The likelihood of significantly greater amounts of aerially deposited lead from aviation fuel deposited directly on airport property is high. Because of the lead based additives in aviation fuels into this decade, there needs to be core testing of the soil in advance of the project. Remediation costs could have an significant impact on the project costs and the City and the public need to know what to anticipate. Soil movement when grading for new construction and the high probability of lead within the windblown dust could have significant health impact to neighborhoods surrounding the airport.

13

VOLUME I, Page 3.6-1
Noise

The discussion, while complex, fails to address actual noise impacts in the environment. The community has only recently learned that noise calculations and analysis required by the noise ordinance, entirely disregard the high noise levels created when planes run up their engines at take off, and the noise levels created by reverse thrusters when a plane lands. While this newly uncovered practice of disregarding noise when a plane's wheels are on the ground, this noise is very real and the levels must be revealed to the community. Presenting data of all actual noise levels is the only way the community can adequately address the noise impacts. The noise contours must be reconfigured to publicly disclose actual noise form all planes, even the noise created at take-off and landing. It is also imperative that the noise, disregarded in the monthly noise calculation, such as military and life flights, be publicly disclosed. Accurate and comprehensive data of all actual noise levels is the only way the public can evaluate the full and complete extent the adverse impacts: loss of sleep, annoyance levels, disruption to concentration, disruption to work activities, disruption to classroom activities. The actual noise levels also have impacts the valuation of properties and the public should have an understating of how noise contributes to neighborhood blight.

14

VOLUME I, Page 3.7-5, Project Related Impacts

The statement " ..the circulation improvements associated with the Proposed Project would reduce the possibility of safety hazards related to overcrowding." is an inadequate evaluation. The discussion must include the increased difficulty associated with providing more security for more

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square footage. The alternatives to the "possibility of overcrowding," such as smoothing out the schedules so occupancy is leveled out over the day, need to be evaluated. The EIR must consider that reducing the number of persons in the terminal at any one time, with a less square footage to secure, offers greater safety than adding more space and more people at a single time.

Usage fees can be tiered to encourage the airlines to smooth flights over the day and eliminate the safety hazards related to overcrowding. In addition, the EIR should consider that the larger project incrementally increases the attractiveness of the terminal as a terrorist target.

15 cont.

VOLUME I, Page 3.7-13
Project Related Impacts

The discussion fails to adequately cover the alternative that adjusting and leveling flight schedules can alleviate "the possibility of overcrowding." The discussion also fails to fully disclose the role and authority of TSA has to dictate terminal facilities sizing at any airport. It is to imperative publicly disclose, so the public is able to differentiate TSA desire versus TSA mandates. The statement that "TSA staff are concerned that there could be [safety impacts]" is misleading to members of the public. Using TSA staff's "desires" without clearly identifying TSA mandates is an inadequate analysis. No evaluation has been made to quantify or qualify if TSA staff concerns are valid. If TSA is currently handling 3,000,000 passengers per year without incident, what is their argument for new facilities other than the want new facilities? In October, during a District 4 tour, hosted by our Councilmember, tour, we witnessed 8-12 TSA agents at their security screening post, standing around, doing nothing. They had no passenger to screen and the tour was scheduled during a peak period. This is an unacceptable waste of public resources. A failure to address flight smoothing and schedules, as opposed to just building more screening facilities is unacceptable.

16

VOLUME I, Page 3.7-13
Additional Effect Related to Optimized Flights

The discussion acknowledges that TSA is required and will meet the minimum safety screening requirements but without improvements to the facilities, "delays would be expected." This is an absolutely unproven statement. Schedules can be adjusted to accommodate passenger capacity and this needs to be evaluated in the discussion. While the airport cannot mandate airline scheduling, it is reasonable and legal to for the airport to charge usage fees that discourage airlines from scheduling flights on top of one another.

17

VOLUME I, Page 3.7-13
Impact 3.7-1

The impact as stated does not adequately answer the problem. Holdroom capacity is a factor of flight scheduling and it is perfectly reasonable to adjust schedules to alleviate crowding by leveling out the flights across the hours allowable. At this time, Jetblue chooses to book flights that have a significant impact on congestion and crowding is a function of scheduling. Many members of the public believe that the currently scheduling is intended to make the airport look inadequate. This

18

intentional "crowding" enables the tenant to make a case for a larger building. Many in the community think a larger building will create excess capacity that puts the noise ordinance at risk for being challenged in court. The community does not want more flights. This airport is surrounded on all sides by residential neighborhoods.

18 cont.

VOLUME I, Page 3.8-1 through Page 3.8-11
Transportation and Circulation

The discussion fails to consider any utilization of High Occupancy Vehicles (carpools and van pools) to alleviate traffic congestion. The construction related impacts assume onsite parking for all construction workers, which is unnecessary. Providing parking for each and every construction worker is unnecessary when vanpools are commonly used in construction projects across the country.

The discussion fails to consider incentives use for vanpools for passenger traffic. Given that LEED certification is a stated goal of this project, carpooling, vanpooling and public transportation should be considered as attribute that can significantly reduce parking and roadway demand. A shared van ride, with four passengers from Orange County require 0 parking spaces, while each passenger driving his own car requires 4 parking spaces. It is an environmentally superior option for passengers to use van pools than for people to drive their single occupancy vehicles.

19

VOLUME I, Notice of Preparation, Page 7
Summary of the Principal terms of the Existing Settlement Stipulation

Item 7. Provides for the General Aviation Noise Committee formed to monitor and manage the general aviation noise budget. Presently this committee has renamed itself to Noise Abatement Committee and has taken upon itself to redefine its scope beyond General Aviation. It is actively monitoring and managing Commercial and Industrial Carriers. Its membership now includes Commercial and Industrial Carriers. These meetings are not open to the public. The community is currently seeking to correct this misinterpretation of this committee as provided for by the Noise Ordinance.

20

VOLUME I, year 2004 CNEL Contours,
Exhibits 3.6-9, 3.6-10a, 3.6-10b, 3.6-11a, and 3.6-11b,

All the exhibits illustrating noise contours are inadequate. These exhibits fail to show actual noise created at the airport, because they do not include high noise levels when jets are running up their engines at take-off and the high noise levels when the reverse thrusters are turned on during landing. The environmental impact report must include and report actual noise in order for the community to have an accurate assessment of the noise impacts reaching into surrounding neighborhoods. When jets wheels are on the ground, if they create high noise levels, this data cannot be excluded. Additionally, all noise data flights from all flights must be included. It is misleading to the community to have exclusions of data, though military and life flight are not calculated into the ordinance. The cumulative impact all airport noise must be disclosed for adequate and truthful noise assessment.

21

VOLUME I, Generalized Area of Terminal Improvements, Exhibit 2-4

This image is misleading to the public. The actual land use being discussed includes Parcel "O" but Parcel "O" is not depicted in this exhibit. The entire depiction of land use must be shown clearly so as not to mislead the public about the magnitude of the project proposal.

22

VOLUME I, Concept, Exhibit 2-5

This image is misleading to the public. The plan view shows 9 whole plane bodies and 3 partial plane bodies for a depiction totaling 11 ½ planes. The illustration must show the 14 plane parking positions which are currently being discussed in the proposal. Not to show them is highly misleading to members of the community. The public must see the correct amount of jets, which translates to the parking position being considered.

23

VOLUME I, Perspective of Conceptual View from Land Side, Exhibit 3.1-1

This image is misleading to the public. The perspective view is not from the land side as it states, but rather it is an aerial perspective showing the terminal as if the viewer is in a helicopter. It fails to accurately depict the proposed project as if the viewer were on the land side approaching the airport terminal. It fails to depict that the proposed new parking structure will completely obscure the view of the historic terminal. A view of the terminal, when arriving at the airport, is inseparable from

24

The illustration must show the 14-plane parking positions, which are currently being discussed in the proposal. Not to show them is highly misleading to members of the community. The public must see the correct amount of jets, which translates to the parking position being considered.

VOLUME II, Section 3 Emission Estimate Page 3-1

It appears the overwhelming public demand was to have actual air sampling conducted at the airport, in the neighborhoods and schools surrounding the airport was ignored. Instead, this DEIR took the advice from the SCAQMD and CARN and limited air sampling to the existing station upwind of the airport. That location cannot possibly collect and measure the particulate matter, including the high-risk peak exposure of jet emissions at take off and landing. It cannot collect any possible aircraft emissions still using lead-based additives in aviation fuels. Air sampling must be completed to conduct the Environmental review necessary to evaluate health impact of this project. Long Beach is one of the busiest general aviation airports in the nation and therefore, is likely to have the highest emissions in neighborhoods of lead-based aviation fuel. The current air sampling location does not collect this emission source nor can it monitor peak emission condition that may occur at certain high activity times.

25

EVEN if it takes more time, the City must understand, recognize and address the negative human health impact to Long Beach residents of actual air emissions not simply estimates.

Combined with the overwhelming amounts of air pollution created by the Port

of Long Beach, the Port of Los Angeles, the movement of goods from both Ports, and commuter traffic on the 405 and 710 freeways, the City must look more carefully at the cumulative negative impact of airport emissions on human health.

} 25 cont.



Joseph_Valles@ahm.honda.com

01/30/2006 04:34 PM

To: AirportEIR@longbeach.gov, district1@longbeach.gov, district2@longbeach.gov, district3@longbeach.gov, district4, district5@longbeach.gov, district6@longbeach.gov, district7@longbeach.gov, district8@longbeach.gov, district9@longbeach.gov, mayor@longbeach.gov

cc:

Subject: EIR - PUBLIC COMMENTS - FROM JOE VALLES

To Who It May Concern,

I am questioning the validity of the Environmental Impact Report! My neighborhood who happens to be right below the flight take off path is not even included as one of the study's impacted areas.

} 1

Joe Valles
4330 Myrtle Avenue
Long Beach, CA 90807

562-290-8802



"Doug Haubert"
<dhaubert@awattomey
s.com>

To: <AirportEIR@LongBeach.gov>
cc:
Subject: DEIR Comments

01/30/2006 04:54 PM

Douglas P. Haubert<?xml:namespace prefix = o ns =
"urn:schemas-microsoft-com:office:office" />

<?xml:namespace prefix = st1 ns = "urn:schemas-microsoft-com:office:smarttags" />2021

**Snowden Avenue
Long Beach, CA 90815
(562) 208-4614**

January 30, 2006

Angela Reynolds
City of Long Beach
Planning and Building Department
333 W. Ocean Boulevard
Long Beach, CA 90802

RE: Airport Expansion DEIR

Dear Ms. Reynolds:

That you for the opportunity to comment on the DEIR for Long Beach Airport Expansion project. This letter contains my comments on this project from my own personal perspective.

The environmental impact report (EIR) is the heart of the California Environmental Quality Act (CEQA). Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, an EIR is not only a vehicle to protect the environment, but also to inform the City Council and Long Beach residents about the impacts of the project. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112.)

I think it can safely be said that Long Beach residents, as a whole, will support improvements and enlargement of the Airport ***provided such action does not jeopardize***

1

the existing noise ordinance or cost taxpayers money. Some parts of the project will have no impact on the noise ordinance (such as replacing diesel equipment with clean air ground vehicles) because there is not increase in capacity. However, the City needs to look very closely to the parts of the project that will increase capacity. The DEIR does not adequately do this.

1 cont.

The DEIR states that there is no “causal relationship” between the proposed expansion and flight operations:

“[B]oth the full utilization of all 25 commuter flights and the potential increase of up to 11 commercial flights over current operational levels at the Airport are not causally related to the project proposed facilities improvements.”

However, it appears there is a public record disputing such a finding. During several of the scoping meetings, the argument was made over and over again that the current size of the Airport is insufficient to accommodate the number allowed under the noise ordinance. Articles in the Press-Telegram newspaper, including one article January 4, 2006, report that at least one commuter airline, Smooth Flight Holdings, Inc., has tied terminal expansion to the number of flights.

The DEIR falsely suggests one can argue expansion is absolutely necessary to accommodate the permitted flight activity, then turn around and say there is no relationship between the expansion and flight activity.[\[1\]](#) A more honest approach would be to admit that there is a relationship between the size of the terminals, the number of gates and the number of aircraft parking positions, and the capacity for flights and passengers in the future. There may be a minor relationship between size and capacity, but by ignoring this relationship altogether, you are not giving the Council accurate information.

2

In fact, other than the stated assumption that there is no causal relationship between terminal expansion and the number of flights or passengers at LGB, there is no real support for this concept. The Noise Ordinance, *assuming* it is not invalidated, repealed or compromised at a later date, will effectively limit the number of flights at LGB. However, it is just as likely that the current number of flights at LGB (41 commercial flights and 4 commuter flights) represents the existing, reasonable baseline capacity and that the proposed expansion of the Airport terminal and, more importantly, the number of gates and aircraft parking positions, will cause an increase to some greater level of activity.

It is widely accepted that the capacity of an airport is best measured by the number of aircraft and passengers based on the airport’s gates and aircraft parking positions. However, there is no expert analysis in the DEIR of the total true capacity based on

aircraft gates and parking positions.

The DEIR assumes that the current number of gates (8) and the current number of aircraft parking positions (10) is insufficient to meet the number of flights permitted under the Noise Ordinance. There is no analysis, however, supporting this conclusion.

Perhaps 10 parking positions is the most appropriate for the number of flights permitted under law. The DEIR only looks at increasing the number of gates to 11 and the number of parking positions to 12-14. The DEIR fails to analyze any alternatives other than this limited range. This deprives the Council and the public of information it needs to make an informed decision based on true capacity.

The DEIR also does not adequately study the growth inducing impacts of the proposed expansion. As noted above, there is a superficial analysis given in the DEIR that suggests the Noise Ordinance will always limit the number of flights. However, there are many variables that could affect the Noise Ordinance.

For example, the Noise Ordinance could be repealed by the City Council or by act of initiative. The Noise Ordinance, which derives its authority by federal legislation (Airport Noise Capacity Act), could be affected by future federal legislative action that eliminates or limits the grandfather status of Long Beach's Noise Ordinance.

Also, since the Noise Ordinance is a local statute, implemented by the Airport Manager, it is possible that administrative interpretation of the Noise Ordinance could become more relaxed over time. For example, there is currently a dispute over the interpretation of the City's nighttime curfew occurring between 10:00 and 11:00 p.m.. Since the Airport Manager is the one to determine the number of flights (over 41 air carrier and 35 commuter), there are administrative variables that affect the number of flights.

The Noise Ordinance could also be subject to invalidation by a court of law. In fact, Jetblue's Associate General Counsel Robert Land once remarked his belief that a successful challenged could be based on violation of the Commerce Clause of the U.S. Constitution. In previous litigation, the Long Beach noise ordinance was invalidated by a federal judge.

While the City may not be required to forecast which laws will be changed in the future when studying the environmental effects of this Airport Expansion project, in this case it is necessary since changes are reasonably foreseeable unless, as discussed below, additional measures are adopted to protect the noise ordinance. An EIR must consider all "reasonably foreseeable" direct and indirect consequences of a project. (*Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173.) Furthermore, CEQA must be interpreted "to afford the fullest possible protection to the environment within the

2 cont.

reasonable scope of the statutory language.” ([*Friends of Mammoth v. Board of Supervisors* \(1972\) 8 Cal. 3d 247, 259.](#))

In this case, I believe the City has two options. The City can study the true and accurate “growth inducing impacts” of this project, which includes a full analysis of the total number of flights and passengers. This will require a new DEIR that looks at the impacts of noise, pollution, and traffic impacts. Or alternatively, the City could take steps to ensure it is not “reasonably foreseeable” that the Noise Ordinance will be invalidated, repealed or compromised at a later date. Such safeguards may include agreements not to sue executed by airlines, a litigation defense fund, assurances from FAA that it will join Long Beach in protecting the noise ordinance, and other strategic devices.

2 cont.

Moreover, the DEIR includes an analysis of future flight activity, which anticipates in the short term an addition of 9 to 11 more air carrier flights as newer, quieter airplanes are introduced into the fleet mix using LGB. However, the project is expected to be a long-term project. Therefore, the City should look at the trends in the area of making aircraft quieter and project over the long term how many flights could be accommodated at LGB. In other words, if aircraft manufacturers have reduced noise by 20% each decade, we can expect the CNEL level to be reduced to half of its current level in 50 years. How many flights would be permitted under the noise ordinance then?

3

Finally, as to how the DEIR addresses noise impacts, the document is especially inadequate. The DEIR suggests the solution to noise impacts is to offer sound insulation only to property owners who execute avigation easements. As a matter of public policy, I cannot believe the City Council would agree to coercive tactics instead of creating a voluntary program available to property owners whether or not they execute an avigation easement.

4

In addition, a much wider contour than “65 CNEL” should be utilized as there are many homeowners negatively affected by noise who are outside what the consultant concludes is the 65 CNEL contour. Perhaps the unique nature of Southern California, where many people enjoy the space outside their homes, contributes to the fact that a 65 CNEL contour is simply insufficient.

5

I also disagree with the “razor” thin lines drawn to show the 60 and 65 CNEL contours. Some lines show a home’s “living room” within the 65 CNEL level and the “kitchen” outside this area. It is misleading to suggest that noise contours follow such precision, especially when there is deviation in the approach and departure paths of the airlines. This is especially illustrated in the DEIR which finds a “special education” building to be within the 60 CNEL contour, but Bixby Elementary School outside the 60 CNEL contour. ***The special education building is located on Bixby Elementary property.*** To

6

suggest that noise will not affect both schools in the same manner is simply a charade and does not give the Council fair information on which to make decisions.

} 6 cont.

Although I am a member of the City's Airport Advisory Commission, absolutely nothing in this letter should be interpreted as stating the position of the AAC. The AAC has not formally issued any position since the DEIR was released and it is up to each member to state his or her person views, which I am doing here.

} 7

Sincerely,

Doug Haubert

[1] Another way to say it is, you cannot have your cake and eat it too. I'm told this saying dates back to the 1500's, but was put as a question: "Can you eat your cake and then still have it left whole?" If you've already eaten it, you no longer have any left, and hence you cannot have it both ways.

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Laura Sellmer
<lsellmer@verizon.net>

To: AirportEIR@longbeach.gov
cc:
Subject: Comments - Airport Draft EIR

01/30/2006 05:00 PM

Dear Ms. Reynolds

Thank you for the opportunity to provide a response to the Draft EIR. First, I would like to know the following:

1. How and by what method will you answer my questions included with these comments?
2. How and by what methods will the community be able to review the answers to other people's questions, and your answers to comments that we heard posed by others during the public meetings? Many people asked very important, sometimes complex questions. It is important for the community to have an opportunity to review your official and specific responses as we were always told during these meetings that "the questions would be answered later." The public needs to know what the formal and specific responses are.
3. What is the specific protocol for requesting more than 10 days to review the final EIR, before it is submitted to the planning commission? Is this the minimum time allowed for a final EIR approval? By law, what is the maximum time allowable for the public to review? Who, in the City, makes the final determination about how much time is allowed for public review? This is a very complex, technical document and the public needs adequate time to evaluate what concerns were addresses, what answers were provided and what changes took place from the draft EIR.

I am particularly alarmed by the Draft EIR's conclusion that the proposed project of a 103,000 square foot Terminal Building "is the environmentally superior alternative." Why does the Draft EIR fail to discuss alternatives and within the context of LEED components, when LEED is supposed to be a guiding principal for this project? Did you consider that is it very unlikely that after applying the USGBC LEED criteria and principals for sustainable building, that the largest building size would be an environmentally inferior alternative. Examples of LEED considerations are: a larger building requires more materials to build, more energy to light, more energy to air condition, more energy to heat, more chemicals to maintain, and creates more heat source in an urban landscaper. Furthermore this particular larger alternative relies on the development presently undeveloped of Parcel 70? which is now open space. Why is there no discussion of this conflict when LEED principals strive to protect previously undeveloped land? The questionable conclusion of "environmentally superior" also fails to evaluate the environmentally friendlier alternative of creating incentives for vanpooling, carpooling and other high occupancy transportation. Instead it proposes building a parking structure to accommodate passengers driving single accompany vehicles to and from the airport is an environmentally inferior alternative. Isn't this overbuilding posing a significant risk to having overbuilt capacity, which in turn puts the City at high risk that the noise ordinance will be challenges? If not, shouldn't the City state the anticipated costs to defend a challenge and the legal costs the City of Long Beach will have to pay?

Why does the DEIR reference HNTB's 2004 study recommendations for an even larger terminal building? As a member of the public that participated in the public scoping process, hundreds of residents overwhelming want to keep Long Beach Airport Terminal small. Those public comments were completely disregarded and discounted in HNTB study because Airport Management was paying for the study. Why isn't there comment on the hundreds of hours of public testimony of residents who oppose airport expansion? The DEIR's reference to

HNTB study shows an unacceptable bias and is irrelevant to the Airport Terminal Environmental Impact Report. For purposes of this study, the City Council voted to study a stated project.

4 cont.

Noise evaluations in this report are also problematic. Why does this data not include what the public has just recently learned, that the noise calculation disregard the high level of noise when a jet is taking off and landing and aircraft wheels are on the ground? Full public disclosure demands that ALL the airport noise, noise that the surrounding community is exposed to, must be disclosed. This includes all the noise from life-flight, military and any other aviation noise that may be disregarded in the budgets for the Noise Ordinance. Policy makers and the public must have a comprehensive data of all the noise exposure. The noise contours must show all the present and expected noise impacts.

5

Why did the Draft EIR failed to include air quality data of actual air sampling taken at, near and around the airport property? We were told by the public works department that there wasn't enough time to include air sampling? Is not enough time? a legally allowable argument for the City not to provide a full-disclosure of the environmental impact of air quality of a project? In public scoping meetings, there was an overwhelming demanded actual air sampling, because the only existing air collection point is many blocks upwind of the airport. While other public agencies may have suggested that air sampling was unnecessary, members of the community know that when a jet runs up it engines at take off, jet exhaust levels are very high and are blown into residential neighborhoods. Because residential neighborhoods and schools surround Long Beach Airport, it is imperative that this EIR fully and accurately disclose the health impacts associated with aviation and ground support emission. Why is it not noted that aviation fuel today, still contains lead-based additives? The public must have accurate data that deals with airport specific lead-based emission in the community, especially over residences. Doesn't the City think that a single air-sampling site upwind of the airport is inadequate? The cumulative negative impact associated with the ports pollution and the 710 corridor for the movement of goods, must be considered so the public knows the health risk.

6

VOLUME I, Page 2-5

Airport Advisory Committee

The second half of this paragraph should be titled Commuter Slots. It is misleading to have this information buried under a topic Airport Advisory Committee, because it presents key assumptions about the commuter slots, which are inseparable from the arguments for terminal sizing. There is a high probability that average reader, members of the public, would miss this information because of its misleading location under another topic.

The last sentence of paragraph titled "Airport Advisory Commission" states, "All 25 commuter flights are expected to be in regular operation between December 2005 and Spring 2006" is now inaccurate information and must be updated. Furthermore, many members of the community are convinced that the named airline, "Smooth Flight Holdings" was created for the sole function of slot allocation so that Jetblue and Airport Management could build a case for the largest terminal at Long Beach Airport. Smooth Flight Holdings founder, Alec Wilcox a former employee of Jetblue at Long Beach Airport, created his Airline on paper in 30 days for the sole purpose of having LBG slots allocated. He never listed assets, never had a plane, never had an employee, his corporate address is a P.O. Box in Henderson, NV. Smooth Flight Holdings never had routes for commuter flights, not did it have the capital required to start an airline, buy or lease planes, market an airline, pay employees, purchase fuel and insure this kind of business. His suggestion that he was going to "raise the assets" was a highly improbably. Many in the

7

community are convinced Airport Management made no effort whatsoever to qualify the airline as legitimate before it announced and assigned the slots and allowed Mr. Wilcox to make it seem like he was going to have twenty-one 90-passenger flights daily flying at full passenger loads. This propaganda, claiming that there is airline, when said airline is nothing more than a corporation on paper, is inconsistent with the EIR objectives of ?full-disclosure document? to ?inform agency decision makers and the general public.? (page 1-1 General Introduction)

Mr. Wilcox, upon the assignment of slots by Airport Management, publicly stated that his planes were to bring in 90-passenger planes, which allowed Airport Management to inflate expected passenger loads of up to an additional 821,000 annual passengers. The arguments for the largest terminal possible and expansive parking structure are invalid and the community deserves transparency. Previous assumptions for commuter slots are entirely unfounded.

Furthermore, the City Council instructed Airport Management NOT to market the available commuter slots. But with the appearance of, Smooth Flight Holdings original application, Airport Management immediately notified all the airlines, an in effect marketed all slot availability, before notifying Council that the application had been filed. The community believes this strategy was timed to coincide with the Airport Management wanting an argument to build the largest terminal possible.

7 cont.

VOLUME I, Page 2-11

Paragraph 2 (LEED)

The discussion of achieving LEED certification is inadequate and fails to capture or adequately coordinate the environmentally favorable strategies required by USGBC to achieve LEED status. For full public disclosure, this discussion should include more substantive information in order that both policy makers and the public can understand the benefits to the environment proposed by LEED.

Failing to incorporate LEED strategies at this stage, allows the authors of the DEIR to conclude that the largest building option is the ?Environmentally Superior Alternative.? To delay applying any LEED standards at this stage of the project evaluation is not an ?objective? evaluation, but rather appears to have embraced the bias of Airport Management, the entity that is paying for the EIR. Airport Management is on the public record as wanting the largest terminal building possible.

With the City of Long Beach a member of the U. S. Green Building Council (USGBC) and publicly commitment to LEED building, it is impetrative that this project not be accused of ?green washing? in the EIR?s project evaluation stage , but rather the City must acknowledge the principals and standards that are consistent with USGBC?s sustainable building practices. Doing so would reveal the flawed conclusion that the largest building is the ?Environmental Superior Alternative?

8

For example, LEED principals are significantly more likely to point to a smaller building square footage that requires less energy to air condition, less energy to heat, less energy to light, less materials used to build, less fossil fuel to transport building materials, less chemicals used for years of routine maintenance, and no impact on previously undeveloped open space (Parcel O).

LEED strategies apply objective and proven methodologies, and will look beyond the DEIR simplistic conclusion that the largest terminal size is superior because a parking structure would result in fewer round trips and jets would not idle. LEED principals are designed to incorporate enducements for carpools, vanpools, shared rides, public transportation to significantly

reduce the environmental impact of building users transportation to the building. Smaller buildings require fewer resources to build and fewer resources to maintain. The airlines can be legally induced to level schedules to reduce the likelihood of jet engine idling that occurs when too many flights are scheduled in narrow time slots. LEED strategies must be evaluated as they have proven to be the most economical and environmentally superior protocols than ?bigger is better.?

8 cont.

VOLUME I, Page 2-11

Paragraph 4

The written description, ?The new construction would generally be set back from the existing Airport Terminal Building so as not to appear an ?add on? to the exiting airport terminal structure? is inconsistent with the illustrations provided which do create an appearance that the new construction has been added on to the existing terminal.

9

VOLUME I, Page 2-12

Concession Area

The concession area assumption ?to serve the anticipated number of passengers? is an inadequate explanation. In August 2005, there was a questionable allocation of commuter slots to faux airline. The airline was promising an exaggerated 850,000 annual passengers per year. That airline had no assets and had only been in business for 30 days when it was assigned slots. That airline has the slot allocation rescinded and the ?anticipated number of passengers? must be adjusted. Another factor requiring analysis is that commuter travelers on 30-minute flights are unlikely to utilize the concession services for meals. There is a high probability that commuter passengers have a lower demand for full meals.

10

This EIR needs to adequately identify and evaluate alternatives such as if scheduling modifications will level passenger occupancy in holdrooms, and alleviate peak demand at concession areas. Current flight scheduling appears to create a peak periods which distort the evaluation of space requirements for concession area and space will be underutilized for many hours of the day, and thus is overbuilt for the annual passengers loads..

VOLUME I, Page 2-12 through 2-13

Why are the covered open areas in addition to the building area and covered by full structural roofing not calculated into the square footage of the structure? These appear to be structural parts of the building, not open areas, provided for by the City for to protect airline personnel? Providing structurally for roof and foundation, while considered open-air construction right now, is still part of the construction and building design. Has the consultant considered that this design feature appears to be a loop-hole? Ahs the consultant considered that this open air area can be simply enclosed by walls, and in effect adding additional square footage to the terminal size, bypassing the public review that taking place within this terminal improvement forum?

11

VOLUME I, Page 2-12

Baggage Security Screening

Where did the statement ?TSA has indicated that the open?air situation is not sufficient because of the sensitivity of the equipment being used. The Proposed Project would provide a 7,000-square foot structure for security screening of baggage. The structure would house the explosive detection equipment and would include in-line baggage conveyors? originate? Does the City have on file a statement? This statement fails to adequately explain that TSA is currently operating with adequate facilities within the current

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conditions. If current conditions are insufficient and, where is the evidence that TSA is allowing the 3,000,00 passengers per year to travel through Long Beach Airport without adequate screening?

There have been numerous requests by community leaders for TSA to supply actual documented requirements, which apply to all airports nationwide. To date no one has been able to provide the City with TSA mandated requirements. TSA is not requiring high speed, high capacity, in-line explosive detection equipment and that fact should be stated for the public record. If the no-build option is selected, TSA will continue to screen baggage with the same degree of assurance for public safety.

12 cont.

VOLUME I, Page 3.3-5,

Historical Landmark Designation

Criterion B The statement "The airport has been a significant part of the City's economy since its founding in 1924, and an important factor in Long Beach's economic growth" needs to be modified to historical criteria only to conform to the subheading under which it is placed. Economic criteria are a separate and highly controversial topic and not part of the EIR review. In 2004, Dr. Magaddino was paid \$30,000 to prepare an airport economic impact report. This study was conducted with complete disregard for public input and at no time was the negative economic impact evaluated in comparison the neighborhoods that surround LBG. No member of the public were allowed to provide input on that research design, yet members of the aviation community, active advocates of airport growth, were selected by the Airport management to participate on the steering committee. The final report was highly questionable and eventually never made it past the Transportation and Infrastructure Committee. Additionally, when it was presented to the Economic Development Commissioner, the public was not allowed to speak - a Brown Act Violation.

Furthermore, the economic contribution from the manufacturing sector must be clearly distinguished from the Airport Terminal Improvement Project. It is the manufacturing jobs that are the higher paying jobs, and these manufacturing jobs will not be impacted by the terminal improvement project. No independently validated research has ever pointed to a fact that the terminal is an important factor in Long Beach's economic growth. No independently validated research has shown that travelers spend enough money or time in Long Beach to compensate for the negative impacts of having a commercial airlines flying directly over residential neighborhoods at all times of the day and night, often outside the hours allowable by the ordinance.

13

Economic Growth should NOT be criterion of the Airport Terminal Improvement Project. The project will not result in increased passenger loads or significant consumer spending at the terminal. Reduced spending at local food establishments near the terminal will largely offset any new tax revenue as a result of new concessions. If passengers are able to buy a sandwich at the terminal, they won't stop at a local establishment before arriving at the terminal. The public and residents surrounding the airport has been promised that terminal improvements will not generate more passengers, or more flights. Therefore, no increase in the amount of passengers will provide a new source for economic growth. Additionally, the airport properties have been identified as economic enterprise zones and are already enjoying tax advantages that serve to reduce realized revenue to the State and the City.

VOLUME I, Page 3.312

Paragraph 1

Per Secretary Standard #10 "and new construction would be ..compatible in size, massing, scale and style" is Not in conformance. The original terminal

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structure of the Historic Long Beach Terminal is less than 30,000 square feet. The proposed new construction in excess of an additional 70,000 square feet plus unspecified covered areas with a full roof and lighting. This brings the proposed new structure to an increase of about 200% for massing and scale. Furthermore, the proposed new parking structure adds adjacent structure massing that will all serve to significantly dwarf the original terminal which the community is striving to preserve in character and aesthetic appeal.

14 cont.

VOLUME I, Page 3.4-7

Regulated Materials, Aerially-Deposited Lead

The discussion on aerially deposited lead is inadequate. The paragraph fails to mention that lead continues to be an additive to in aviation fuel today and its presence in the near-surface soil may be more widespread than the case outlined by limiting the discussion to automobile fuels before 1990 and limiting the exhaust to adjacent roadways. Full public disclosure requires an evaluation of the hazards of aerially deposited lead that may still be going on today. The likelihood of significantly greater amounts of aerially deposited lead from aviation fuel deposited directly on airport property is high. Because of the lead based additives in aviation fuels into this decade, there needs to be core testing of the soil in advance of the project. Remediation costs could have an significant impact on the project costs and the City and the public need to know what to anticipate. Soil movement when grading for new construction and the high probability of lead within the windblown dust could have significant health impact to neighborhoods surrounding the airport.

15

VOLUME I, Page 3.6-1

Noise

The discussion, while complex, fails to address actual noise impacts in the environment. The community has only recently learned that noise calculations and analysis required by the noise ordinance, entirely disregard the high noise levels created when planes run up their engines at take off, and the noise levels created by reverse thrusters when a plane lands. While this newly uncovered practice of disregarding noise when a plane's wheels are on the ground, this noise is very real and the levels must be revealed to the community. Presenting data of all actual noise levels is the only way the community can adequately address the noise impacts. The noise contours must be reconfigured to publicly disclose actual noise form all planes, even the noise created at take-off and landing. It is also imperative that the noise, disregarded in the monthly noise calculation, such as military and life flights, be publicly disclosed. Accurate and comprehensive data of all actual noise levels is the only way the public can evaluate the full and complete extent the adverse impacts: loss of sleep, annoyance levels, disruption to concentration, disruption to work activities, disruption to classroom activities. The actual noise levels also have impacts the valuation of properties and the public should have an understating of how noise contributes to neighborhood blight.

16

VOLUME I, Page 3.7-5, Project Related Impacts

The statement ? ..the circulation improvements associated with the Proposed Project would reduce the possibility of safety hazards related to overcrowding.? is an inadequate evaluation. The discussion must include the increased difficulty associated with providing more security for more square footage. The alternatives to the ?possibility of overcrowding,? such as smoothing out the schedules so occupancy is leveled out over the day, need to be evaluated. The EIR must consider that reducing the number of persons in the terminal at any one time, with a less square footage to secure, offers greater safety than adding more space and more people at a single time.

17

Usage fees can be tiered to encourage the airlines to smooth flights over the day and eliminate the safety hazards related to overcrowding. In addition, the EIR should consider that the larger project incrementally increases the attractiveness of the terminal as a terrorist target.

VOLUME I, Page 3.7-13
Project Related Impacts

The discussion fails to adequately cover the alternative that adjusting and leveling flight schedules can alleviate the possibility of overcrowding. The discussion also fails to fully disclose the role and authority of TSA has to dictate terminal facilities sizing at any airport. It is to imperative publicly disclose, so the public is able to differentiate TSA desire versus TSA mandates. The statement that TSA staff are concerned that there could be [safety impacts] is misleading to members of the public. Using TSA staff's desires without clearly identifying TSA mandates is an inadequate analysis. No evaluation has been made to quantify or qualify if TSA staff concerns are valid. If TSA is currently handling 3,000,000 passengers per year without incident, what is their argument for new facilities other than the want new facilities? In October, during a District 4 tour, hosted by our Councilmember, tour, we witnessed 8-12 TSA agents at their security screening post, standing around, doing nothing. They had no passenger to screen and the tour was scheduled during a peak period. This is an unacceptable waste of public resources. A failure to address flight smoothing and schedules, as opposed to just building more screening facilities is unacceptable.

VOLUME I, Page 3.7-13
Additional Effect Related to Optimized Flights

The discussion acknowledges that TSA is required and will meet the minimum safety screening requirements but without improvements to the facilities, delays would be expected. This is an absolutely unproven statement. Schedules can be adjusted to accommodate passenger capacity and this needs to be evaluated in the discussion. While the airport cannot mandate airline scheduling, it is reasonable and legal for the airport to charge usage fees that discourage airlines from scheduling flights on top of one another.

VOLUME I, Page 3.7-13
Impact 3.7-1

The impact as stated does not adequately answer the problem. Holdroom capacity is a factor of flight scheduling and it is perfectly reasonable to adjust schedules to alleviate crowding by leveling out the flights across the hours allowable. At this time, Jetblue chooses to book flights that have a significant impact on congestion and crowding is a function of scheduling. Many members of the public believe that the currently scheduling is intended to make the airport look inadequate. This intentional crowding enables the tenant to make a case for a larger building. Many in the community think a larger building will create excess capacity that puts the noise ordinance at risk for being challenged in court. The community does not want more flights. This airport is surrounded on all sides by residential neighborhoods.

VOLUME I, Page 3.8-1 through Page 3.8-11
Transportation and Circulation

The discussion fails to consider any utilization of High Occupancy Vehicles (carpools and van pools) to alleviate traffic congestion. The construction related impacts assume onsite parking for all construction workers, which is unnecessary. Providing parking for each and every construction worker is unnecessary when vanpools are commonly used in construction projects across the country.

The discussion fails to consider incentives use for vanpools for passenger traffic. Given that LEED certification is a stated goal of this project,

carpooling, vanpooling and public transportation should be considered as attribute that can significantly reduce parking and roadway demand. A shared van ride, with four passengers from Orange County require 0 parking spaces, while each passenger driving his own car requires 4 parking spaces. It is an environmentally superior option for passengers to use van pools than for people to drive their single occupancy vehicles.

21 cont.

VOLUME I, Notice of Preparation, Page 7

Summary of the Principal terms of the Existing Settlement Stipulation Item 7. Provides for the General Aviation Noise Committee formed to monitor and manage the general aviation noise budget. Presently this committee has renamed itself to Noise Abatement Committee and has taken upon itself to redefine its scope beyond General Aviation. It is actively monitoring and managing Commercial and Industrial Carriers. Its membership now includes Commercial and Industrial Carriers. These meetings are not open to the public. The community is currently seeking to correct this misinterpretation of this committee as provided for by the Noise Ordinance.

22

VOLUME I, year 2004 CNEL Contours,

Exhibits 3.6-9, 3.6-10a, 3.6-10b, 3.6-11a, and 3.6-11b,

All the exhibits illustrating noise contours are inadequate. These exhibits fail to show actual noise created at the airport, because they do not include high noise levels when jets are running up their engines at take-off and the high noise levels when the reverse thrusters are turned on during landing. The environmental impact report must include and report actual noise in order for the community to have an accurate assessment of the noise impacts reaching into surrounding neighborhoods. When jets wheels are on the ground, if they create high noise levels, this data cannot be excluded. Additionally, all noise data flights from all flights must be included. It is misleading to the community to have exclusions of data, though military and life flight are not calculated into the ordinance. The cumulative impact all airport noise must be disclosed for adequate and truthful noise assessment.

23

VOLUME I, Generalized Area of Terminal Improvements, Exhibit 2-4

This image is misleading to the public. The actual land use being discussed includes Parcel 20 but Parcel 20 is not depicted in this exhibit. The entire depiction of land use must be shown clearly so as not to mislead the public about the magnitude of the project proposal.

24

VOLUME I, Concept, Exhibit 2-5

This image is misleading to the public. The plan view shows 9 whole plane bodies and 3 partial plane bodies for a depiction totaling 11 planes. The illustration must show the 14 plane parking positions which are currently being discussed in the proposal. Not to show them is highly misleading to members of the community. The public must see the correct amount of jets, which translates to the parking position being considered.

25

VOLUME I, Perspective of Conceptual View from Land Side, Exhibit 3.1-1

This image is misleading to the public. The perspective view is not from the land side as it states, but rather it is an aerial perspective showing the terminal as if the viewer is in a helicopter. It fails to accurately depict the proposed project as if the viewer were on the land side approaching the airport terminal. It fails to depict that the proposed new parking structure will completely obscure the view of the historic terminal. A view of the terminal, when arriving at the airport, is inseparable from

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The illustration must show the 14-plane parking positions, which are currently being discussed in the proposal. Not to show them is highly misleading to members of the community. The public must see the correct amount of jets, which translates to the parking position being considered.

VOLUME II, Section 3 Emission Estimate Page 3-1

It appears the overwhelming public demand was to have actual air sampling conducted at the airport, in the neighborhoods and schools surrounding the airport was ignored. Instead, this DEIR took the advice from the SCAQMD and CARN and limited air sampling to the existing station upwind of the airport. That location cannot possibly collect and measure the particulate matter, including the high-risk peak exposure of jet emissions at take off and landing. It cannot collect any possible aircraft emissions still using lead-based additives in aviation fuels. Air sampling must be completed to conduct the Environmental review necessary to evaluate health impact of this project. Long Beach is one of the busiest general aviation airports in the nation and therefore, is likely to have the highest emissions in neighborhoods of lead-based aviation fuel. The current air sampling location does not collect this emission source nor can it monitor peak emission condition that may occur at certain high activity times.

EVEN if it takes more time, the City must understand, recognize and address the negative human health impact to Long Beach residents of actual air emissions not simply estimates.

Combined with the overwhelming amounts of air pollution created by the Port of Long Beach, the Port of Los Angeles, the movement of goods from both Ports, and commuter traffic on the 405 and 710 freeways, the City must look more carefully at the cumulative negative impact of airport emissions on human health.

Sincerely,

Laura Selmer
5474 Daggett Street
Long Beach, CA 90815

27



"Lorraine Fitton"
 <amymcguyver@earthlink.net>

01/30/2006 08:30 PM
 Please respond to
 amymcguyver

To: AirportEIR@longbeach.gov
 cc:
 Subject: Comments to the Draft Environmental Impact Report for the Long Beach Airport

Dear Ms. Reynolds,

My comments to the Draft Environmental Impact Report for the Long Beach Airport Area Terminal Improvement Project are as follows:

- <?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" />
1. I am opposed to the Draft EIR's conclusion that the proposed project of a 103,000 square foot Terminal Building "is the environmentally superior alternative." According to USGBC LEED criteria which is supposed to be a guiding principal for this project, the larger a building is, the more it materials it requires to build, the more energy it requires to light, the more energy it requires to air condition, the more energy it requires to heat, more chemicals it requires to maintain, and it creates more heat source in an urban landscape. Furthermore the larger alternative relies on the development presently undeveloped of Parcel "O" which is now open space and permeable land. According to LEED principals, the larger building would be the environmentally inferior alternative. 1
 2. Building a parking structure to accommodate passengers driving single occupancy vehicles to and from the airport is also an environmentally inferior alternative. 2
 3. Where is all of the public testimony that was given? HNTB's 2004 study recommending an even larger terminal building shows that the residents of the impacted areas were not given attention. City Council approved a smaller size option because HNTB conclusions ignored the voices of hundreds of hours of testimony of residents who oppose airport expansion. For purposes of this study, the City Council voted to study a stated project - nothing more. If the EIR discusses HNTB's recommendations at all, it must also cite all the public testimony that HNTB ignored because airport management was paying for the study. 3
 4. **Noise evaluations in this Draft report are very wrong. The public has just recently learned that the noise calculation disregards the high level of noise when a jet is taking off and landing, when wheels are on the ground. Full public disclosure requires that ALL the airport noise, noise that the surrounding community is exposed to, must be disclosed. This includes ALL the noise from life-flight, military and any other aviation noise that may be disregarded in the budgets for the Noise Ordinance. Policy makers and the public must have a comprehensive data of all the noise exposure. The noise contours must show all the present and expected noise impacts.** 4
 5. It is unacceptable that the Draft EIR failed to include air quality data of actual air sampling taken at, near and around the airport property. In public scoping meetings, there was an overwhelming public demand for actual air sampling. The only existing air collection point is many blocks upwind of the airport. When a jet runs up it engines at take-off, jet exhaust levels 5

are very high and are blown into residential neighborhoods. A single collection point upwind of the runway is unacceptable to evaluate this pollution. Residents demand to know the cumulative negative impact associated with the ports pollution and the 710 corridor for the movement of goods, must be considered so the public knows the health risk. The evaluation of emissions from aircraft still using lead-based additives in aviation fuel, must be conducted. Lead exposure is very hazardous to humans.

5 cont.

Thank you,

Lorraine Fitton
3635 Walnut Avenue
Long Beach, CA 90807

SECTION 3 RESPONSES TO COMMENTS

The attached responses are broken into two categories: Topical Responses and Individual Responses. As part of the Responses to Comments that were circulated on April 24, 2006 Topical Responses were prepared to address issues where multiple comments were made on the same issue. This approach reduces redundancy throughout the Responses to Comments document and provides the reader with a comprehensive response to the broader issue. A total of nine topical responses were prepared. In responding to these nine comment e-mails, reference is made to a number of the Topical Responses. To facilitate the review, the Topical Responses have been reproduced in this supplemental volume.

3.1 TOPICAL RESPONSES

3.1.1 PROJECT DESCRIPTION AND RELATIONSHIP OF IMPROVEMENTS TO INCREASED FLIGHTS AND THE AIRPORT NOISE COMPATIBILITY ORDINANCE

Issue: A concern expressed by a number of the commenters is that by providing terminal and related facilities improvements at the airport, the Proposed Project will encourage or cause the number of flights at the airport to increase above the level of commercial or commuter flights which would otherwise serve the Airport. An associated concern expressed in some comments is that the facility improvements may lead to future modifications to the Airport Noise Compatibility Ordinance, eliminating regulatory constraints on aircraft operations, or increasing the minimum number of daily operations currently permitted under the ordinance. Some comments also raised the related contention that the "Optimized Flights" scenario should have been included as an essential component of the project description.

The following response addresses generally each of these related comments and contentions and is intended as the response to comments on these topics, as referenced in specific responses to individual numbered comments. Where applicable, this response provides information in addition to other information provided in specific numbered responses.

Response: As noted in the Draft Environmental Impact Report (EIR) (page 2-7), the Proposed Project proposes improvements to the existing Airport Terminal Building and related facilities at the Airport in order to accommodate minimum allowable commercial and commuter aircraft and related passenger activity levels with a reasonable level of passenger and operator safety, security and convenience. Increased demands on terminal area facilities resulting from post-9/11 airport security requirements (including, e.g., Transportation Security Administration (TSA) office and operating space), as well as operational efficiencies which can be realized for the movement and processing of passengers and commercial air traffic, indicate that the Proposed Project would provide important safety, security and convenience (and, in certain respects, environmental) benefits to the air traveling public, commercial airport users and the Long Beach community. However, none of the improvements contemplated by the Proposed Project are essential to accommodate existing or forecast passenger or aircraft traffic levels in the sense that existing or forecast passenger or aircraft traffic levels would be reduced in the absence of the Proposed Project. There are numerous existing and historical examples of commercial air terminal and related facilities operating at "densities" greater than those currently existing at the airport. While the "no project" or "existing conditions" scenario of the Proposed Project would impose safety, convenience and environmental burdens on the air traveling public, airport users, and the general community, neither the current nor forecast levels of commercial air service activity (including commuter airline activity) depend upon the completion of the Proposed Project. In other words, the forecast growth in passenger service activity at the airport would occur whether or not the Proposed Project is completed: the absence of the

Proposed Project would simply impose safety, security, convenience and environmental burdens on the air traveling public, airport users and the general Long Beach community.

The aircraft and passenger activity levels, existing and forecast, are consistent with existing City regulation of airport use, principally under the City's Airport Noise Compatibility Ordinance ("Ordinance") and the 1995 Settlement Agreement, which is described in the EIR and summarized in the following paragraph of this response. The terminal and related improvements contemplated by the Proposed Project have been sized in such a manner that they would still be below airport design standards accommodating the minimum commercial flight level activity permitted by the Ordinance (41 air carrier flights and 25 commuter flights). There is no component of the Proposed Project, which proposes, contemplates, permits, or is in any respect dependent upon any increase in aircraft activity levels beyond those currently permitted under the Ordinance. No modifications to the operational and noise related limitations of the Ordinance are part of the Proposed Project, nor would approval and implementation of the Proposed Project require, or in any respect be dependent upon any such future regulatory modifications by the City. The City has repeatedly stated, formally and informally, that any forecast increase in passenger activity, or increase in flight activity above existing conditions, must occur strictly within the existing operational, noise and service constraints of the Ordinance, with or without the Proposed Project; and that the City is fully committed to the continued enforcement of the Ordinance.

To understand the City's current Airport Noise Compatibility Ordinance and its relationship to the Proposed Project, some background is beneficial. As discussed in greater detail in Section 2 of the Draft EIR, in 1981 the City of Long Beach adopted a noise control ordinance, which limited the number of air carrier flights at the Airport to 15 per day and required the use of quieter aircraft. The principle purpose of the ordinance was to reduce the "cumulative" noise exposure generated by the Airport and affecting adjacent residential communities. The ordinance was amended at least once during the 1980s. Eventually, the airport noise control ordinance was challenged on constitutional grounds by various commercial airlines in federal court. In an effort to resolve protracted litigation, the City and the airlines entered into a stipulated settlement agreement, approved by the federal District Court, in 1995. Under the settlement, the City Council adopted the current Airport Noise Compatibility Ordinance, which was enacted as Chapter 16.43 of the *City's Municipal Code* (defined in the previous paragraph as the "Ordinance").

The current Ordinance includes two major components. The first establishes Single Event Noise Exposure Level (SENEL) limits for aircraft operating into and out of the Airport, excluding noisier classes of aircraft otherwise permitted to operate in the United States at the time the Ordinance was adopted. This has important "single event" limit benefits for surrounding residential communities. The second principle component of the Ordinance establishes a Community Noise Equivalent Level (CNEL) "noise budget" and minimum permitted number of daily flights for the various defined categories of aircraft users at the Airport, including commercial air carrier and commuter operators. Chapter 16.43 permits air carriers to operate a minimum of 41 airline flights per day, while commuter carriers are permitted to operate a minimum of 25 flights per day. The Ordinance allows the minimum permitted number of flights per day to be increased in each operator flight restriction category as long as the flights operate at or below the annual CNEL budgets for each class of operator defined in the Ordinance.¹ At no time since adoption of the current Ordinance has the City authorized any increase in the minimum number of permitted

¹ The Airport Noise Compatibility Ordinance is provided as an attachment in Appendix F of the Draft EIR and can also be viewed at the Airport website at www.lgb.org. The key provisions of the settlement agreement are summarized in Section 2.4 of the Draft EIR.

air carrier or commuter flights although, as explained below, such increases might occur in the future, with or without adoption of the Proposed Project.

In order for the minimum number of permitted air carrier or commuter flights to be increased under the Ordinance for any one-year period, the airlines would have to optimize their flight operations at the Airport. For the commercial air carriers, this would include using the quietest feasible models of aircraft for each and every flight at the airport and substantially reducing late night (10:00 p.m. to 7:00 a.m.) operations at the Airport (*i.e.*, curfew violations).²

Under optimal conditions, which have never been achieved at the Airport, the estimated number of increased air carrier flights would range between 7 and 11 flights (“Optimized Flights Scenario”).

As discussed above, an “Optimized Flights Scenario” has never occurred at the airport, and the maximum number of permitted air carrier flights has been limited to 41 daily flights in each year since 1995. However, if the commercial air carriers operating at the Airport did make the equipment, operational and scheduling decisions which could result in an increase in permitted flights for any future year, those decisions can and will be made independent of whether or not the Proposed Project is adopted and implemented. In other words, improved terminal and terminal area facilities (including passenger parking facilities) are not necessary to, nor would they induce, the economic and marketing decisions by the air carriers necessary to reach an “Optimized Flights Scenario” in any future year. The air carrier decisions necessary to reach an Optimized Flights Scenario are, and will continue to be, dependant upon system wide economic, operational, demand and equipment availability factors unrelated to the terminal facilities which exist, or may exist in the future at the Airport.

The DEIR has addressed and analyzed noise levels and potential noise impacts associated with additional commercial flights under an Optimized Flights Scenario. However, this analysis has been provided principally as additional information for the public and the City “decision makers” in considering the Proposed Project. This additional analysis has been provided in recognition of the controversial nature of the airport in certain areas of the Long Beach community, but it is ***not a consequence, foreseeable or otherwise, of the Proposed Project, nor is it an environmental impact of the Proposed Project, significant or otherwise.*** As stated on page 2-7 of the DEIR, neither the full utilization of all 25 commuter flights nor the potential increase of up to 11 air carrier flights over current operational levels at the Airport are causally related to the project proposed facilities improvements. If the operational procedures and aircraft used are optimized so that additional flights could operate within the noise limits (“noise budget”) permitted by the Airport Noise Compatibility Ordinance, then the increased flights would be allowed regardless of whether the Proposed Project is approved or built. Since the Ordinance already permits the airlines to operate in a manner which could result in an increase in flights within the range contemplated by the “Optimized Flights Scenario,” such a future occurrence would not be considered a “discretionary action” within the meaning of CEQA (again, regardless of whether or not the Proposed Project is approved or adopted); therefore, the scenario analysis effectively applies with equal effect or probability of occurrence to all the alternatives analyzed in the EIR, including the “no project” alternative.

A key and stated objective of the Proposed Project is to ensure that the improvements proposed as part of the project are in keeping and consistent with the parameters and operational regulatory limits of the City’s current Airport Noise Compatibility Ordinance. Again, the Proposed

² The noise analysis section of the Draft EIR explains the significance of late night flights to the calculation of CNEL. Essentially, any flight (“noise event”) occurring between 10:00 p.m. and 7:00 a.m. is treated as if it were ten such flights. These flights, when they occur, become significant events in calculating CNEL levels.

Project would not in any way modify the requirements of the Ordinance. There has been no discussion of modifying the Airport Noise Compatibility Ordinance. City staff and the City Council have all voiced their support of continued enforcement of the Ordinance and the importance of ensuring full airline compliance with the provisions of the Ordinance. Further, if any changes to the Ordinance were to be considered in the future (and there is no present reason to believe that any such consideration will ever occur), it would be a “project” under CEQA and would require separate environmental documentation—almost certainly a full EIR—to evaluate the impacts associated with those modifications. This Proposed Project does not propose or contemplate, and therefore this EIR does not address any impacts associated with, a hypothetical future Ordinance amendment, and therefore this EIR could not be considered adequate for such an hypothetical action. It would be purely speculative for this EIR to attempt to consider what airport operational conditions might be at the Airport without the Airport Noise Compatibility Ordinance, with or without the Proposed Project. There simply is no factual basis for structuring or attempting to “analyze” any such purely hypothetical speculation. Addressing modifications to the Ordinance would not be relevant to the project at hand, nor would it serve the interest of the community, which wants the Ordinance maintained. (See generally the provisions of CEQA Guidelines Sections 15144 and 15145).

3.1.2 DETERMINATION OF SIGNIFICANCE

Issue: *Several of the commenters requested clarification on the meaning of the term “significant” and how an impact is determined to be significant.*

Response: The definition of significant in the glossary of the Draft EIR (page 9-4) is taken from the CEQA Guidelines, Section 15382 and reads as follows:

SIGNIFICANT IMPACT: As defined by CEQA, a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant. The lead agency will determine whether a project may have a significant effect on the environment based on substantial evidence in light of the whole record.

Within the body of the Draft EIR this is expounded upon further. For each topical area, thresholds of significance are provided. These are the standards used when making the determination if an impact is considered significant. As defined by the CEQA Guidelines, Section 15064.7, “A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.”

As discussed on page 3-1 of the Draft EIR, the City of Long Beach has not formally adopted thresholds of significance. Therefore, the thresholds of significance for this EIR have been developed in cooperation with the City of Long Beach (Environmental Planning, Engineering, and Airport Bureau) and were derived from several sources, including previous EIRs prepared by the City, the City General Plan, State CEQA Guidelines Checklist, and adopted thresholds from other agencies (such as the Federal Aviation Administration and the South Coast Air Quality Management District).

Pursuant to the thresholds of significance, the Proposed Project would result in significant impacts associated with aesthetics, air quality, cultural resources, and hazards and hazardous materials. The Optimized Flights Scenario would have significant impact on air quality, land use, and transportation. These impacts were identified as significant prior to the consideration of the recommended mitigation program. The mitigation program recommended actions that could be taken which would reduce these potential impacts. For both the Proposed Project and the Optimized Flights Scenario, only the air quality impacts remained significant after the implementation of the mitigation measures. These were impacts that were identified as unavoidable, significant impacts. That means that even with the implementation of mitigation measures, the impact would not be reduced to below the threshold of significance used for the evaluation. This does not mean that the Proposed Project cannot be approved, but it would require the City to adopt a Statement of Overriding Considerations, which states that the specific economic, legal, social, technological, or other benefits of a Proposed Project outweigh the unavoidable adverse environmental effects.

The following are the specific thresholds used as part of the EIR evaluation.

Aesthetic Thresholds

As indicated in the Draft EIR on page 3.1-4, impacts to aesthetics would be considered significant if:

- Components of the project would be inconsistent with applicable plans and policies as set forth by the General Plan, Zoning Ordinance, and Planned Development Ordinance.
- The project would substantially degrade the existing visual character or quality of the site and surroundings.
- The project would adversely impact views of the existing Terminal from the airfield and the street.
- The height and massing of structural elements of the project would not be compatible with the existing historic Terminal Building and nearby residential neighborhoods.
- The project includes reflective glass with a reflectivity greater than 20 percent.

Air Quality and Human Health Risk Thresholds

As indicated in the Draft EIR on page 3.2-31, air quality impacts would be considered significant if the project will result in one or more of the following:

- Violate any ambient air quality standard.
- Contribute substantially to an existing or projected air quality violation. For CO, an increase of ten percent or greater would be considered significant.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in an incremental (future alternative compared to 2005 Baseline) cancer risk greater than ten in one million (1×10^5) or an incremental hazard greater than one for residents, school children, and off-airport workers.

- Exceed occupational standards developed or adopted by Cal/OSHA for airport workers.
- Conflict with or obstruct implementation of the applicable air quality plan.

Cultural Resources Thresholds

As indicated in the Draft EIR on pages 3.3-6 and 3.3-7, the Proposed Project is considered to have a significant impact on cultural or paleontological resources if any of the following occurs:

Archaeological Resources

A significant impact would occur if grading and construction activities would result in a substantial adverse change in the significance of an archaeological resource determined to be “unique” or “historic.” “Unique” resources are defined in *Public Resources Code* Section 21083.2; “Historic” resources are defined in *Public Resources Code* Section 21084.1 and CEQA Guidelines Section 15064.5.

Paleontological Resources

An impact to paleontological materials would be considered a significant impact if the Proposed Project results in the direct or indirect destruction of a unique or important paleontological resource or site. The criteria used to determine if a resource is unique or important are: the past record of fossil recovery from the geologic unit(s); the recorded fossil localities in the project area; observation of fossil material onsite; and type of fossil materials previously recovered from the geologic unit (vertebrate, invertebrate, etc.).

Historical Resources

A significant impact would occur if the Proposed Project would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.

Hazards and Hazardous Materials Thresholds

As indicated in the Draft EIR on page 3.4-10, the project would cause a significant impact if it would:

- Create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to *Government Code* Section 65962.5 and as a result would create a significant hazard to the public or to the environment.
- Be inconsistent with the applicable goals, objectives, and requirements of the City of *Long Beach Public Safety Element or Strategic Plan 2010*.

Land Use and Planning Thresholds

As indicated in the Draft EIR on page 3.5-11, the Proposed Project would be considered to have a significant impact related to land use if it would:

- Conflict with applicable land use plans, policies, or programs of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with the policies of the *Southern California Association of Government's Regional Comprehensive Plan and Guide*.
- Be inconsistent with the applicable goals, objectives, and requirements of the *City of Long Beach General Plan* and its Elements, Zoning Ordinance and the Planned Development Ordinance and Strategic Plan.
- Cause displacement or induced airport land use beyond the Airport boundary.

Noise Thresholds

As indicated in the Draft EIR on pages 3.6-17 and 3.6-18, the project would cause a significant noise-related impact if it would result in:

Construction Noise

- Construction activities that exceed the Noise Ordinance (Title 8 of the *Municipal Code*).
- Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Airport Operations

- Exposure of persons to or generation of noise levels in excess of standards established in the General Plan, Airport Noise Compatibility Ordinance, and applicable standards of State and Federal Agencies.
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Public Services Thresholds

As indicated in the Draft EIR on page 3.7-4, impacts to public services would be considered significant if the Proposed Project:

- Does not conform to the policies of the General Plan pertaining to public services related to the Airport.
- Would result in a substantial increase in demand for public services at the Airport, which cannot be met by existing staff.

- Would result in inadequate emergency access at the Airport.
- Would result in inadequate security as determined by TSA.
- Would conflict with Airport and FAA standards and regulations.
- Would result in an air or ground safety hazard.

Transportation and Circulation Thresholds

As indicated in the Draft EIR on page 3.8-9, impacts to transportation, circulation, and parking would be considered to be significant if:

- The resulting level of service (LOS) at an intersection is E or F, and the project-related traffic causes a volume-to-capacity (V/C) increase of 0.02 or higher to the critical movements.
- The project would contribute 500 or more net daily trips (total both directions) or 50 more net hourly trips (total both directions) to a residential street segment.
- The level of service standard established by the county congestion management agency for designated roads or highways would be exceeded, either individually or cumulatively.
- If the project would result in inadequate parking capacity.
- If the project would result in noncompliance with Southern California Association of Government (SCAG) regional transportation policies or inconsistency with the General Plan or Strategic Plan.

3.1.3 ALTERNATIVES

Issue: *The Draft EIR did not address an adequate range of alternatives.*

Response: CEQA requires an EIR to consider a “range of reasonable alternatives to the project.” CEQA Guidelines Section 15126.6 outlines the considerations required by CEQA in defining and analyzing that “range” of alternatives. First, the alternatives considered must be alternatives which would “... attain most of the basic objectives of the project”, although an alternative is not required to obtain *all* of the project objectives and can be considered in the EIR “... even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly” than implementation of the Proposed Project. Second, alternatives considered in the EIR should be alternatives which would “... avoid or substantially lessen any of the significant [environmental] effects of the [proposed] project,” and the EIR should “... evaluate the comparative merits of the alternatives.” However, an EIR is not required to consider an alternative “... whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.” Thus, just as the analysis of a proposed project cannot and should not be premised upon remote or speculative future consequences or changes in existing public policy, neither should an alternative be selected for analysis which focuses on or considers a speculative future scenario.

An EIR must consider, as one of the alternatives analyzed, the “no project” alternative. The purpose of considering this alternative is “... to allow decision makers to compare the impacts of approving the Proposed Project with the impacts of not approving the proposed project.” The

“no project” case consists of the “existing conditions... as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved ...”

The purpose of this analysis is to “... foster meaningful public participation and informed decision making.” As noted in the CEQA Guidelines, “[t]here is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”

The Draft EIR considers three alternatives to the Proposed Project, identified in the Draft EIR as Alternatives “A”, “B” and “C”. Alternative C is the no project alternative. These alternatives are analyzed and compared to the Proposed Project in Sections 3 and 4 of the Draft EIR. Although there are theoretically an infinite number of possible alternative scenarios to a project, such as the terminal area improvements contemplated by the Proposed Project in this case, CEQA only requires the Lead Agency preparing the EIR to select a reasonable range of alternatives that will foster informed decision-making regarding the project. Alternatives A and B involve lesser facilities improvements (e.g., total “after project” terminal facilities of 97,545 and 79,725 square feet, respectively) than those proposed by the project case (after project facilities of 102,850 square feet), and Alternative C (the no project case) analyzes no facilities improvements (existing terminal facilities of 56,320 square feet).

This analysis complies with the purpose and requirements of CEQA for consideration of alternatives. No comment has been received which compels the conclusion that the selected alternatives do not define a “reasonable range” of alternatives, and no comment has proposed a distinct alternative which would, if analyzed, feasibly attain most of the project objectives while significantly enhancing the environmental analysis of the EIR or fostering significantly improved opportunities for informed decision making by the City at the time it considers the EIR and the Proposed Project.

3.1.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Issue: *How was the environmentally superior alternative selected? Were only a few issues considered?*

Response: As a point of reference, the discussion of how the environmentally superior alternative was selected is provided on pages 4-8 and 4-9 in the Draft EIR and is also summarized on page 1-25. The environmentally superior alternative is determined based on the whole of the information. In determining the environmentally superior alternative for the Long Beach Airport Terminal Improvements Project, the Draft EIR compared the potential environmental impacts associated with each of the alternatives (see Table 4.5-1 on pages 4-10 through 4-12 for a summary comparison of the impacts for each alternative). Based on this comparison, the build alternatives were compared to each other and to the No Project Alternative. Each of the build alternatives (the Proposed Project, Alternative A, and Alternative B) would have similar types of impacts because similar facilities would be provided by each of the alternatives. Significant impacts prior to mitigation were identified for all the build alternatives in these areas: aesthetics (construction related); air quality (construction impacts); cultural resources; hazards and hazardous wastes; and noise (construction impacts). For all these alternatives, only the construction air quality impacts would remain significant after implementation of mitigation measures. Even though Alternatives A and B propose less square footage, the nature of the impacts associated with construction would generally be the same because the same amount of equipment would be operating during a peak construction day, although the duration of construction activities would be slightly less for Alternatives A and B.

The impacts of the build alternatives were then compared to the No Project Alternative. The No Project Alternative would avoid the significant construction-related impacts (i.e., construction air

quality impacts); however, it would have more substantial long-term air quality impacts. The No Project Alternative would not include the mitigation measures associated with the human health risk assessment. Therefore, the reduction in emissions provided for through the mitigation measures would not apply to the No Project Alternative. From an environmental perspective, the long-term air quality benefits of providing the infrastructure for electrification of the ground support equipment would outweigh the short-term construction emissions. Additionally, even if the No Project Alternative were to be considered environmentally superior, CEQA Guidelines Section 15126.6(e)(2) states, “if the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.”

As previously indicated, when comparing the three build alternatives, the impacts would be very similar because the same types of improvements are proposed with each alternative. Therefore, the next step in determining the environmentally superior alternative was to consider the extent to which the alternatives meet the project objectives. Each of the alternatives (including the Proposed Project) would provide additional capacity to Long Beach Airport and would help to accommodate the number of passengers served by the minimum number of flights allowed in accordance with the Airport Noise Compatibility Ordinance. However, it is believed that the Proposed Project would best meet the needs for the passengers, visitors, and tenants because, based on the *Facility Requirements Analysis, Long Beach Municipal Airport* (HNTB, 2004) study which was prepared during the scoping process, the recommended sizes of the facilities actually exceeded the square footage allocation of even the Proposed Project. The HNTB study considered industry standards across the United States for similar types of airports, as well as building and safety codes. The Proposed Project is able to meet all the project objectives, including: (1) complying with the parameters of the adopted Airport Noise Compatibility Ordinance; (2) maintaining the current character of the Airport Terminal Building as a Long Beach Cultural Heritage Landmark; and (3) constructing an operationally, energy-efficient, and value-driven design. Since the Proposed Project would not result in substantially greater impacts than the other build alternatives and would be better able to meet the project objectives, it was determined to be the environmentally superior alternative.

Another consideration when selecting the environmentally superior alternative is the consideration on the number of aircraft parking positions. The Proposed Project was evaluated with 14 parking positions. The project description identifies between 12 and 14 parking positions. However, the reduction to 12 parking positions would potentially result in an increase in air quality emissions. Based on Department of Transportation data, approximately 15 percent of the arrivals at the Airport are late. When aircraft arrive late during peak hours there would not be available parking positions at the terminal. As a result, the aircraft would need to wait until a position becomes available (these aircraft typically hold on a taxiway adjacent to the ramp). In those cases, the overall air emissions would increase from aircraft idling. The Proposed Project does not result in substantially greater impacts than the other build alternatives. Therefore, the Proposed Project is the environmentally superior alternative.

3.1.5 METHODOLOGY FOR THE AIR QUALITY AND HUMAN HEALTH RISK ASSESSMENT

Issue: *The analysis for the air quality and human health risk assessment was not adequate; local air sampling is required.*

Response: The levels of impact that are considered to be significant (“significance thresholds”) are the incremental changes that a given project alternative will cause relative to the existing conditions (sometimes called “environmental baseline conditions”). For air quality analysis, those impact changes (increments) are based on both: (1) air emissions, typically presented in

terms of pounds per day (lbs/day) or tons per year (tpy) and (2) air pollutant concentrations, typically presented in terms of micrograms of pollutant per cubic meter of air ($\mu\text{g}/\text{m}^3$) or parts of pollutant volume per million parts of air volume (parts per million or ppmv). For human health risk assessments, those impact changes are based on calculated risk associated with chronic (long-term) and acute (short-term) exposure to incremental (i.e., project-specific) toxic air contaminant concentrations.

Additionally, in the air quality impact analysis of pollutants which currently meet (i.e., are better than) the ambient air quality standards, the incremental pollutant concentrations associated with a given project alternative must be added to the background concentrations (i.e., the pollutant concentration that would occur without the project) and compared to the ambient air quality standards for those pollutants. If the resulting concentration for a given pollutant exceeds the ambient air quality standard, then the impact is also considered significant for that pollutant and mitigation measures must be adopted.

Therefore, the primary focus of the air quality impact analysis conducted for the Draft EIR was to: (1) define the existing conditions for a specific point or period in time; (2) determine the project-specific incremental emissions and concentrations; and (3) recommend appropriate mitigation measures. The approach for each of these steps is briefly described below.

Ambient Air Quality Measurements

Actual measurements in the vicinity of the project are used to describe existing conditions. The South Coast Air Quality Management District (SCAQMD) operates and maintains over 30 ambient air monitoring stations in the district. The nearest of these stations, the North Long Beach monitoring station (SCAQMD Station No. 072), is located approximately 1.4 miles west of Long Beach Airport's western boundary. The air quality measurements collected at this station are used to describe existing conditions in the vicinity of the Airport. Use of an existing monitoring station to describe existing conditions is acceptable for CEQA, and is standard practice for CEQA documentation in the SCAQMD (emphasis added):

Existing Air Quality. To characterize the site-specific air quality setting, the environmental document should contain a summary of the most current air quality data. *The data must be derived from the nearest District monitoring station located in the same source receptor area(s) (SRA) as the project...*³

The Final Protocol for Conducting an Air Quality Impact Analysis and Human Health Risk Assessment for the Long Beach Airport (Draft EIR, Appendix C, Attachment A), a document reviewed and approved by the SCAQMD,^{4,5} specifically identifies the North Long Beach monitoring station as the station that would be used to describe existing conditions.⁶ The measured ambient air quality data that are used to describe existing conditions in the vicinity of the airport are presented in the Draft EIR, Section 3.2, Table 3.2-6.

The North Long Beach monitoring station also collects toxic air contaminant data. These data are presented in the Draft EIR, Section 3.2, Table 3.2-8. These data are also compared with data collected at the time of the SCAQMD *Multiple Air Toxics Exposure Study II* (MATES II) (conducted around 1998) and have been used to adjust the MATES II risk estimates in the Long Beach area from 1998 to current day. The risk estimate in Table 3.2-8 of the Draft EIR

³ SCAQMD. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA: SCAQMD. Chapter 8.

⁴ Meeting with SCAQMD, June 22, 2005, regarding LGB Terminal Improvement Project – Draft Modeling Protocol dated May 20, 2005.

⁵ Personal communication. Teleconference with SCAQMD (S. Smith, T. Chico) and CDM (J. Perhson, G. Pelletier, K. Tzou), August 30, 2005, Re: Draft Modeling Protocol dated August 9, 2005.

⁶ Final Protocol, Section 1.4 – Existing Conditions.

(including impacts from diesel exhaust) is used as the existing condition cancer risk level in the vicinity of the Airport.

Several commenters question the validity of using the North Long Beach Monitoring Station given its distance from the Airport. It should be noted that the monitoring station includes impacts from the Ports⁷ and the I-710 freeway, as well as impacts from the I-405 freeway, major arterial roadways (such as Long Beach Boulevard), and the Airport. Since this station was used to describe existing air quality concentrations in the vicinity of the Airport and since it includes impacts from all of these sources, the existing concentrations presented in the Draft EIR are conservative (i.e., higher than concentrations that would be measured closer to the Airport). The high, conservative existing concentrations were also used to represent the background air quality around the Airport. Using conservative background concentrations in the air quality impact analysis means that a smaller project incremental increase would result in a potential exceedance of the ambient air quality standards. Thus, using the North Long Beach monitoring station data to represent background concentrations is a conservative approach to analyzing air quality impacts for the project.

Black Carbon Measurements in the Vicinity of the Airport

One commenter provided a summary report (“AMS Report”)⁸ of black carbon measurements collected around the airport between September and December 2005. It should be noted that these measurements are not directly comparable to either the ambient air quality standards or the measured toxic air pollutants collected at the North Long Beach monitoring station. However, Table 1 of the AMS Report provides a summary of average black carbon readings collected in that study. The highest three readings are the three locations closest to the I-710 Freeway, north of the I-405 Freeway. Two of these three locations are described as “background” sites, sites not expected to have significant impacts from the airport. The third highest site for black carbon measurements (the LaLinda “background” site) is approximately three blocks from the North Long Beach Monitoring Station. The measurement ($2.43 \mu\text{g}/\text{m}^3$) for this site is approximately 25 percent higher than the measurement ($1.92 \mu\text{g}/\text{m}^3$) at the highest “source-impacted” site (the site that might be expected to have impacts from aircraft exhaust). This comparison implies that air quality data collected at the North Long Beach Monitoring Station are likely to be as high as or higher than measurements collected nearer to the Airport. It is also likely that the black carbon measurements presented in the AMS Report are dominated by sources other than aircraft, demonstrating the difficulty in collected airport-specific air quality impact measurements.

Several commenters claim that the AMS Report demonstrates that measured concentrations of particulate matter in neighborhoods near the Airport are orders of a magnitude higher than that used in the Draft EIR. Since the AMS Report does not present measurements for PM_{10} or $\text{PM}_{2.5}$, there is no basis for the claim regarding “orders of magnitude higher.” The AMS Report does present measurements of black carbon (a component of particulate matter). The measurements collected at the “source impacted” sites (sites where impacts from the Airport might be expected) are essentially the same order of magnitude as measurements collected at the “background” sites (sites where impacts are not expected from the Airport), as shown in Figures 13 and 14 of the AMS Report. Thus, the data in the AMS Report does not indicate any order of magnitude difference, and does show higher impacts at sites nearest the freeways. The analysis conducted in the Draft EIR can be considered conservative, since it relies on North Long Beach monitoring station (SCAQMD Station No. 072, CARB Station No. 70072) data to define the existing and background concentrations. Note that this station is roughly three blocks

⁷ The “Ports” are the Ports of Long Beach and Los Angeles.

⁸ Winegar, E.D., PhD. 2006 (January). *Summary Report – Community Ambient Air Monitoring: Black Carbon as a Surrogate for Diesel Exhaust Concentrations in Long Beach, California*. Fair Oaks, CA: AMS.

from the LaLinda “background” site (one of the top three highest black carbon sites) in the AMS Report. Therefore, additional data collection for the Draft EIR was not necessary.

One commenter implies that disparities exist between the measured concentrations (assumed to mean measured black carbon [BC] concentrations in the AMS Report) and modeled concentrations, then questions how the “potential for increased risk to the community from increased airport operations” will be addressed.

Applied Measurement Science and others imply that measured data are inherently more reliable than modeled data, and therefore, more believable as a basis for decision-making. However, measured data are also subject to uncertainty, which is why the EPA established a rigorous quality assurance/quality control program for air monitoring systems. In point of fact, the commenter has provided no quality assurance or quality control information in the AMS Report to support the accuracy, precision, representativeness, or comparability of the BC measurements gathered in the vicinity of the airport. As noted in Response to Comment 179-2, uncertainties with the modeling analysis in the Draft EIR are discussed in Appendix C, Section 6 – Uncertainties.

The commenter also implies that the analysis of existing risk in the Draft EIR is based on modeled concentrations from airport sources. However, the discussion of existing health risk in the Draft EIR (page 3.2-26 and Appendix C, Section 2.2.2.3–Existing Health Risk in the Surrounding Area) is quantified based on the results of the MATES II study, a monitoring study and updated in the Draft EIR with recent air toxic monitoring data in the vicinity of the Airport. In that discussion of existing risk, the Draft EIR acknowledges that the majority of the risk is attributable to mobile sources, including those at the Airport, among many others.

The commenter assumes that: (1) the AMS Report demonstrates a relationship between the measured BC concentrations and aircraft operations and (2) the correlation between BC, elemental carbon (EC), and diesel exhaust particulate matter (DPM) developed by Fruin, et al⁹ is applicable to aircraft engine exhaust. In addition, the commenter claims that: (1) concentrations presented in the Draft EIR were based on estimates from other modeling, not measurement data and (2) the North Long Beach monitoring station does not monitor PM_{2.5}. Starting with the latter claims first, the North Long Beach monitoring station (SCAQMD Station 072, ARB Station 70072) has been measuring PM_{2.5} since 1999. Annual average and peak daily PM_{2.5} measurements at north Long Beach from 1999 through 2004 are presented in Section 3.2 of the Draft EIR (Table 3.2-4, page 3.2-22) and in Appendix C (Table 2-3, page 2-11). The peak annual average and peak daily average PM_{2.5} and PM₁₀ measurements between 2002 and 2004 were used in the Draft EIR to represent existing PM_{2.5} and PM₁₀ air quality (Table 3.2-6, page 3.2-24; and Appendix C, Table 2-5, page 2-14). Therefore, representative measurements of PM_{2.5} are used in the air quality impact analysis. Since ambient air quality standards have been promulgated for PM_{2.5} and PM₁₀ by both the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB), PM_{2.5} and PM₁₀ are the appropriate particulate matter indicator parameters to be used in the analysis. In the Human Health Risk Assessment, airport DPM emissions are the PM₁₀ emissions from airport-related diesel engines (primarily in ground support equipment and cargo trucks).

With regard to the AMS Report, no well-defined relationship exists between the measured BC concentrations and aircraft operations, as detailed below:

⁹ Fruin, S.A., A.M. Winer, and C.E. Rhodes. 2004. “Black carbon concentrations in California vehicles and estimation of in-vehicle diesel exhaust particulate matter exposures,” *Atmospheric Environment*. 38:4123-4133.

- Reviewing the monthly wind roses presented in the AMS Report (Figures 17, 18, 19, and 20), it is clear that the prevailing wind was blowing from the west for each month of the study. Other prominent wind directions shown in these wind roses are from the northeast quadrant (with the secondary peak coming from the northeast in September and October; and from the north-northeast in November and December). For all of these wind directions, the “source-impacted” BC monitoring sites are upwind from the airport, indicating that the measured concentrations are likely coming from sources other than the airport. The wind roses suggest that the “source-impacted” BC monitoring sites are downwind from the airport no more than 15 percent of the four-month monitoring period.
- Reviewing the diurnal wind speed and direction patterns presented in the AMS Report (Figures 21 and 22), the averaged early morning wind speed and wind direction appears to show a low-speed wind blowing from the airport to the “source-impacted” BC monitoring sites through the early morning until about 9:00 to 10:00 a.m. (PST). In particular, the 7:00 to 8:00 a.m. hour indicates an average wind speed between 2.5 and 3 mile per hour (mph) and a wind direction of approximately 145 degrees (from the southeast). However, inspection of the North Long Beach hourly average wind directions¹⁰ between 7:00 to 8:00 a.m. for the months of September through December 2005 indicates that the wind comes from the southeast quadrant less than 18 percent of the time. For this same time period, the wind is from the northeast quadrant over 52 percent of the time and from the southwest and northwest quadrants approximately 30 percent of the time. Therefore, the “source-impacted” BC monitoring sites are upwind or crosswind of the airport for the hour of peak impact (per AMS Report, Figures 13 and 15) for 82 percent of the time; again indicating other sources are the major contributors to the monitored results, particularly the broad morning BC concentration peak. Clearly, the diurnal wind patterns presented in Figures 21 and 22 of the AMS Report, which are implied to represent typical wind patterns near the airport, are not consistent with the actual wind data for the four-month monitoring period, as summarized in the wind roses of Figures 17 through 20.
- Figure 15 of the AMS Report claims to show a correlation of Long Beach Airport flights with BC measurements (“Airport BC” measurements in Figure 15 refer to data collected at the corner of Cover Street and Pixie Avenue). However, it is clear from the figure that BC values increase substantially from midnight until 7:00 a.m., even though no aircraft depart during this time period (This rise in BC values can also be seen in all of the “source-impacted” sites shown on Figure 13.). It is also apparent that the 5-minute averaged BC values in Figure 15 do not track very well with the aircraft operations between 7:00 and 9:00 a.m. For example, a fairly long period of low to zero aircraft activity occurs between about 7:30 to 8:00 a.m., yet the BC values remain high until after about 8:30 a.m. After about 9:00 a.m., the wind direction shifts to the west, wind speeds increase, and no correlation with BC values and aircraft operations is readily apparent throughout the remaining hours of the day.
- The “source-impacted” BC measurements presented in Figures 2, 3, 4, 6, and 7 cannot be compared directly with the “background” BC measurements presented in Figure 8-12 because the averaging times displayed are different. The “source-impacted” data is presented in five-minute averages, while any short-term peaks in the “background” sites have been smoothed into one-hour averages. Due to the typical log-normal distribution of air pollutant concentrations, longer averaging times lead to lower average concentrations.

¹⁰ Personal communication, email from SCAQMD (K. Durkee) to CDM (J. Pehrson), February 15, 2006, Re: Hourly Measurements – North Long Beach – September 2005 through December 2005.

- Table 1 of the AMS Report provides a summary of BC measurements for each site. Although not stated in the report, it is assumed that these are 24-hour averaged values since these values are compared to 24-hour averaged values collected at six other cities across the U.S., as presented in Babich, et al.¹¹ The AMS Report compares the mean of the eight (8) Long Beach BC monitoring sites (combined “source-impacted” and “background”) with the mean found for six other U.S. cities indicating that the Long Beach 8-site mean, 2.15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), is 44 percent higher than that for the other cities. It should be noted that the means of the 24-hour averaged BC measurements for the six other cities presented in Babich, et al.¹² ranged from 0.8 to 3.1 $\mu\text{g}/\text{m}^3$, with a six-city mean value of 1.49 $\mu\text{g}/\text{m}^3$. All of the average BC concentrations for the sites studied in the AMS Report fall within the range of mean BC concentrations reported in Babich, et al., except the “background” site on Olive Street, whose average value was above the upper range of values for the six other cities. It should also be noted that of the three sites in the AMS Report with 24-hour averaged concentrations higher than the 8-site mean, two are “background” sites (Olive and LaLinda), and the third site (LaDera) is the farthest “source-impacted” site from the Airport and the closest “source-impacted” site to the I-710 Freeway. The BC data in the AMS Report demonstrates that all but one of the 24-hour averaged BC values in Long Beach fall in the range of values reported for six other cities across the U.S., and the highest BC readings in Long Beach come from the sites closest to the I-710 Freeway. The AMS Report does not demonstrate that BC concentrations are correlated with Airport operations.
- The AMS Report appears to be trying to correlate DPM concentrations with aircraft activity by converting the BC readings to estimated DPM concentrations using a BC-to-DPM relationship developed in Fruin, et al.^{13,14} This is not appropriate, primarily because aircraft exhaust is different from diesel engine exhaust, so much so that the EPA does

¹¹ Babich, P., M. Davey, G. Allen, and P. Koutrakis. 2000. “Method comparisons for particulate nitrate, elemental carbon, and $\text{PM}_{2.5}$ mass in seven cities.” *Journal of the Air and Waste Management Association*. 50:1095-1105.

¹² Babich, Davey, Allen, and Koutrakis. 2000. p.1100.

¹³ Fruin, S.A., A.M. Winer, and C.E. Rodes. 2004. “Black carbon concentrations in California vehicles and estimation of in-vehicle diesel exhaust particulate matter exposures.” *Atmospheric Environment*. 38:4123-4133.

¹⁴ Fruin, et al. summarize the findings of other researchers to support their development of a range of conversion factors to relate BC to DPM. As acknowledged in the AMS Report, there is no generally accepted procedure to convert measured BC concentration to DPM concentration. Fruin, et al. cite four literature references to studies published by other authors of concurrent ambient measurements of BC and elemental carbon (EC) and provide the regression equations derived from those studies. Fruin, et al. then cite a literature reference to a study of a single 1995 diesel vehicle engine with concurrent exhaust measurements of EC and DPM under a variety of engine loads. By combining the BC/EC ratio with the EC/DPM ratio in a root mean square calculation, Fruin, et al. derive a DPM/BC ratio in the range of 1.8 to 5.6. A few points should be noted about the development of this DPM/BC ratio range. First, Fruin, et al. note that the relationship between BC and EC can depend on the optical characteristics of the aerosol being measured. While they mention this as rationale for providing a range of literature values, it suggests that the BC to EC relationship is likely spatially and possibly temporally dependent. Therefore, even taking into account the range of values between BC and EC that Fruin, et al. present does not necessarily guarantee the accuracy of using BC measurements at a new location and time to predict EC concentrations. Second, the EC measurements made in three of the four cited references of BC and EC studies reflect the EC concentrations of aged urban aerosols, whereas the EC measurements made in the single engine study reflect the EC concentrations of fresh diesel exhaust. Therefore, without further evaluation of the literature, it appears possible that the EC measurements made in the various cited references may or may not be directly comparable. Third, Fruin, et al. provide very limited information to describe the relationships between EC and DPM for the large range of types, sizes, and uses of diesel engines that likely exist in a dense urban environment such as southern California. Therefore, at best, based on the references cited by Fruin, et al., measurements of ambient BC concentrations could be used to predict DPM emissions, not ambient concentrations, and only to the extent that a heavy-duty diesel vehicle engine is representative of all sources of DPM in a given location at a given time.

not recommend applying health risk estimates based on diesel exhaust exposure to aircraft exhaust exposure.¹⁵ (See also Response to Comment 2) .

It is not clear that any disparities exist between the measured BC data collected in the AMS Report and the measured PM_{2.5} data collected at the North Long Beach monitoring station, or the modeled PM_{2.5} concentrations presented in the Draft EIR. The BC measurements indicate that BC concentrations in Long Beach are not substantially different from those in other U.S. cities. The BC measurements and the wind speed, wind direction, and PM_{2.5} measurements collected at the North Long Beach monitoring station indicate that major contributors to particulate matter in Long Beach are sources other than the airport. Since the modeled concentrations presented in the Draft EIR are from airport sources only in the future (2011 and 2020), it is not surprising that the modeled values do not appear to predict the existing measured values.

The commenter's emphasis on measuring the existing risk misses the point of the CEQA analysis, namely, to identify whether the Proposed Project, if implemented, would result in unacceptable incremental risks (i.e., risks that exceed the thresholds of significance identified in the Draft EIR). Results of the Human Health Risk Assessment, presented in the Draft EIR, Section 3.2 (Tables 3.2-15 through 3.2-20, pages 3.2-38 through 3.2-42) and Appendix C, Section 5, demonstrate that neither the incremental cancer risk threshold nor the incremental health index threshold would be exceeded.

Finally, with regard to the potential increase in risk from Airport operations, the City has committed to a number of mitigation measures (as presented in the Draft EIR, Section 3.2.3 – Mitigation Program, pages 3.2-50–3.2-58), including the incorporation of electric charging stations and infrastructure in the air carrier ramp design to support operation of electric ground support equipment (GSE) and other on-airport vehicles. These charging stations will allow the conversion of diesel and gasoline GSE to electric power, reducing air quality impacts from the major source of DPM emissions at the Airport.

DEIR Approach to Estimating Particulate Matter Emissions

Several commenters suggest that a network of particulate samplers, measuring black carbon, PM_{2.5}, and PM₁₀, should be installed surrounding the airport. It is assumed that such an exercise would measure ambient air concentrations of these pollutants to establish their current impacts in the immediate vicinity of the airport. However, the existing North Long Beach air monitoring station (SCAQMD Station No. 072), which routinely measures PM₁₀ and PM_{2.5}, was identified in the protocol (Draft EIR, Appendix C, Attachment A) as providing representative background for these pollutants; black carbon is not routinely measured. SCAQMD reviewed the protocol and did not object to the use of this station as providing representative background data. Therefore, no additional ambient air quality data need to be collected to support the Draft EIR.

The South Coast Air Quality Management District conducted a deposition study around Los Angeles International Airport (LAX)¹⁶ in an attempt to determine that airport's impact on local deposition. Two of the conclusions reached in that study were:

¹⁵ Personal communication, J. Pehrson (CDM) and B. Manning (EPA), February 8, 2006.

¹⁶ SCAQMD. 2000 (September). *Inglewood Particulate Fallout Study Under and Near the Flight Path to Los Angeles International Airport*, Report No. MA2000-05, South Coast Air Quality Management District, Monitoring and Analysis, Diamond Bar, CA.

8.2 Fallout Mass Data Summary

Mass data from the fallout filters support the observations made with the use of glass plates. If aircraft were a significant contributor to fallout in the study area, one would expect a gradient to exist with higher fallout mass values closer to the airport. This finding was not observed by the mass data. Indeed the areas of highest ground traffic for the most part correspond to the samples that collected the greatest mass. Samples collected east of the 405 and 110 freeways generally displayed higher mass loading than did samples collected closer to LAX. The highest mass levels were observed at Hollywood Park. There is no discernable pattern of total fallout mass under LAX's flight path which would indicate a predominant influence from aircraft fallout...

8.3 Elemental Carbon Data Summary

The results for elemental carbon, derived from combustion sources, likewise do not point to a specific emissions source. The results plotted on the contour map shown in Figure 5 show the highest EC concentrations around Hollywood Park and east of both the 405 and 110 Freeways. Consistent with both microscopy and fallout mass results, motor vehicles, rather than aircraft, appear to be the significant source of EC measured in the study area since there is not an EC concentration gradient approaching LAX from the east...

Since aircraft activity at LAX is substantially greater than that at Long Beach Airport, it is unlikely that Long Beach Airport aircraft activity have a substantial impact on fallout particulate matter. Instead, re-entrained road dust from traffic traveling to and from the airport is likely to be important with regard to PM₁₀ and PM_{2.5} ambient air quality standards. Re-entrained road dust impacts (listed as fugitive emissions under roadways) are included in the Draft EIR. Fugitive road dust is included as a line item in the emission inventories presented in Section 3.2, Table 3.2-9 (page 3.2-27) and in Tables 3-2 through 3-6 in Appendix C, Tables 3-2 through 3-6 (pages 3-11 through 3-15). Fugitive road dust represents a substantial portion of the project-related incremental PM₁₀ and PM_{2.5} concentrations presented in the Draft EIR, Section 3.2, Table 3.2-13 (page 3.2-35). Please see below for additional information regarding airport deposition studies.

One commenter claims that the methods for collecting PM_{2.5} do not actually collect PM_{2.5}-sized particulates. The City does not agree with this claim. The federal definition of PM_{2.5} is (emphasis added):

...particles with an aerodynamic diameter *less than* or equal to a nominal 2.5 micrometers...¹⁷

For comparison to the National Ambient Air Quality Standards for PM_{2.5}, particulate matter must be collected using a sampler meeting the design and performance specifications of the federal reference method¹⁸ or with an equivalent method designated according to federal procedures.¹⁹

The commenter states that no methodology was included to differentiate the fraction of airport operation particulate matter from other sources (ships, trucks, and trains). This claim is not entirely correct. For the ambient air quality impact analysis, it is not necessary under CEQA to

¹⁷ 40 CFR 50.7(a) (as amended July 30, 2004).

¹⁸ 40 CFR 50, Appendix L, Section 7.0.

¹⁹ 40 CFR 53 Subparts E and F.

apportion the existing air quality to individual sources or source types. Once the measured existing (also used as background) concentrations are determined from data collected at the North Long Beach monitoring station, the incremental concentrations from a given project alternative are added to the background concentrations to determine the anticipated future concentrations associated with that alternative. Note that the incremental project impacts are Airport-specific, and are based on the difference in Airport concentrations between each project alternative and the existing conditions, as documented in the Draft EIR, Appendix C, Attachment I – Airport Contributions to Criteria Pollutant Concentrations. For the human health risk assessment, the Airport-specific project incremental health risks are compared to CEQA significance thresholds, as detailed in the Draft EIR, Appendix C. Apportioning existing condition toxic air contaminant concentrations is also not required under CEQA.

The commenter claims that a report by Petzold and co-workers²⁰ provides an alternative method for estimating black carbon (BC) emissions from aircraft.²¹ In fact, the report provides BC emission indices (in grams per kilogram of fuel burned) for one, older aircraft engine (Rolls-Royce/SNECMA M45H Mk501) at different engine loads. This data was reviewed by FAA and peer reviewers, and was rejected for use in verifying the First Order Approximation (FOA) method because the engine was not in the ICAO database (no smoke number was available for the engine), and the engine is no longer in use in today's commercial aircraft fleets.²² As a matter of fact, the Petzold report states:

Since the Rolls-Royce/SNECMA M45H Mk501 turbofan engine is known as emitting a huge amount of BC compared to more modern engine types, the obtained emission indices represent the upper range of mass emission indices with respect to all jet engines in service. Thus, an estimated overall emission index of 0.05 g kg⁻¹ seems to be reasonable.²³

The commenter also claims that the Petzold report provided a BC “emission factor of 84.1 grams of black carbon per take-off cycle” (assumed to mean landing and take-off cycle, or LTO). This value was not found in the report. The report does provide, in its Table 3 (included below as Table 1 of this Topical Response), a summary of fuel flow and BC emission indices (in grams per kilogram of fuel).²⁴

²⁰ Petzold, A., J. Strom, F.P. Schroder, and B. Karcher. 1999 (August). “Carbonaceous aerosol in jet engine exhaust: emission characteristics and implications for heterogeneous chemical reactions,” *Atmospheric Environment*. 33:2689-2698 (.)

²¹ In Petzold et al. (1999) the exhaust aerosol was sampled on filter substrates which were analyzed for total carbon (TC) and BC by a thermal technique (Petzold and Niessner, 1995; Petzold and Schroder, 1998); filter sampling times were < 5 minutes during the ground test studies. The applied analytical method uses solvent extraction and heating of the filter sample in an oxygen-free atmosphere to remove organic compounds from the filter sample. Subsequently, the BC content of the deposited aerosol is determined from the evolving CO₂ during sample combustion. Hence, the carbonaceous fraction can be split into an organic (i.e. soluble and volatilizable), and a BC fraction which is defined as insoluble, thermally stable up to 500°C in a non-oxidizing atmosphere, and strongly light-absorbing (Petzold and Niessner, 1995). This procedure for determining BC is substantially different than the use of an aethalometer.

²² Wayson, R.L., G.G. Fleming, and B. Kim. 2003 (May). “Status Report on Proposed Methodology to Characterize Jet/Gas Turbine Engine Particulate Matter Emissions.” (FAA-AEE-03-01). Washington D.C.: FAA, Office of Environment and Energy.

²³ Petzold, Strom, Schroder, and Karcher. 1999, 33:2695.

²⁴ Petzold, Strom, Schroder, and Karcher. 1999, 33:2693.

TABLE 1
SUMMARY OF FUEL FLOW AND BLACK CARBON EMISSION INDICES

A. Petzold et al. / Atmospheric Environment 33 (1999) 2689–2698

2693

Table 3

Mass concentration C_{BC} and mass emission index EI_{BC} of BC in the ATTAS exhaust (ground test) at different engine thrust levels and for in-flight conditions (FL 260), specified by the fuel flow m_f and respective air fuel ratio N ; values are obtained from filter sample analysis (ground test) and size distribution analysis (in-flight)

| | Thrust level
(%) | m_f
(kg s ⁻¹) | N | C_{BC}
(mg m ⁻³) | EI_{BC}
(g kg ⁻¹) |
|--------------------|---------------------|--------------------------------|-----|-----------------------------------|------------------------------------|
| <i>Ground test</i> | | | | | |
| | 8 | 0.057 | 70 | 0.26 | 0.015 |
| | 19 | 0.1 | 70 | 0.8 | 0.047 |
| | 30 | 0.146–0.151 | 70 | 2.0–2.5 | 0.118–0.149 |
| | 69 | 0.328 | 60 | 5.4 | 0.272 |
| | 74 | 0.354 | 60 | 5.6 | 0.333 |
| <i>In-flight</i> | | | | | |
| FL 260 | ≈ 30 | 0.151 | 70 | 1.9–2.5 | 0.11–0.15 |

One could use this data, along with the standard EPA times in mode for commercial carrier long- and medium-range jet aircraft operations (26 minutes in taxi/idle, 4 minutes in approach, 2.2 minutes in climbout, and 0.7 minute in takeoff)²⁵ to estimate the characteristic BC emission for a LTO. The calculated emission rate from the Petzold BC emission indices using these standard EPA times in mode is approximately 35 grams/LTO (see Table 2 below), less than one-half the value claimed in the comment. Using the 41 LTOs/day allowed at the Airport, the annual BC emissions using the Petzold emission indices are estimated to be 0.58 ton per year. Applying the FOA factor of 4 to account for both volatile and non-volatile PM in the aircraft exhaust, the annual PM emissions would be 2.32 tons per year using the Petzold BC emission indices, substantially less than the 4.12 tons per year reported in the Draft EIR for existing conditions (Table 3.2-9 in Section 3.2, and Table 3-2 in Appendix C).

TABLE 2
CALCULATED EMISSION RATE FROM THE PETZOLD BLACK CARBON EMISSION INDICES

| Source | BC Emission Index (g/kg fuel) | Fuel Flow Rate (kg/sec) | Percent of rated thrust (%) | Aircraft operating mode | U.S. EPA Time in mode (min) | U.S. EPA Time in mode (sec) | BC Emissions (g/LTO) |
|--|-------------------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-----------------------------|----------------------|
| Petzold et al. (1999) | 0.015 | 0.057 | 8 | Taxi/Idle | 26 | 1560 | 1.33 |
| | 0.047 | 0.100 | 19 | | | | |
| | 0.149 | 0.151 | 30 | Approach | 4 | 240 | 5.40 |
| | 0.272 | 0.328 | 69 | | | | |
| | 0.333 | 0.354 | 74 | | | | |
| Extrapolated to std mode ²⁶ | 0.359 | 0.410 | 85 | Climbout | 2.2 | 132 | 19.43 |
| | 0.423 | 0.482 | 100 | Takeoff | 0.7 | 42 | 8.56 |
| Total BC mass per LTO (grams/LTO) | | | | | | | 34.72 |

²⁵ EPA. 1992. "Procedures for Emission Inventory Preparation. Volume IV: Mobile Sources," EPA-450/4-81-026d (Revised), Ann Arbor, MI and Research Triangle Park, NC: EPA, Office of Air & Radiation and Office of Mobile Sources and Office of Air Quality Planning & Standards. p.141.

²⁶ The data in Petzold et al. (1999) did not include values for ICAO takeoff (100 percent thrust) and climbout (85 percent thrust); therefore, the Petzold BC emission indices and fuel flow data were linearly extrapolated to the 85 and 100 percent levels.

In developing the estimate of aircraft PM emissions in the comment, the commenter applies a factor to convert BC emissions to diesel exhaust particulate matter (DPM). It is not clear why this conversion is necessary, since aircraft engines do not emit DPM. Aircraft engines are combustion turbines fueled on jet kerosene (Jet A), while diesel engines are compression ignition, piston internal combustion engines. Both the fuel types and the engine technologies are different in these two combustion systems, thus one would not expect the exhaust emissions to be the same. In fact, the current general consensus in EPA's Office of Transportation and Air Quality is that the respective compositions of aircraft and diesel engine exhausts, based on measurements taken to date, are sufficiently different so that health impacts associated with one (diesel, for example) cannot be directly applied to the other.²⁷

Therefore, aircraft PM emissions have been conservatively and appropriately assessed in the Draft EIR.

Ultrafine Particulate Matter

As noted by one commenter, an analysis of ultrafine particulate matter is not a current regulatory requirement. No separate ambient air quality standards exist for ultrafine particulate matter beyond the national and California standards for particulate matter with aerodynamic diameters less than or equal to 10 micrometers (PM₁₀) and 2.5 micrometers (PM_{2.5}). Note that these standards were specifically developed to protect the public health with an adequate margin of safety.²⁸ In addition, no defined risk factors, beyond those developed for total diesel particulate matter (DPM) and specific toxic metals (e.g., chromium) which may be components of ultrafine particulate matter, have been developed for general ultrafine particulate matter. Comparison of project-related PM₁₀ and PM_{2.5} impacts with the health-based ambient air quality standards are presented in the Draft EIR, Section 3.2 and Appendix C, Section 4. Risks associated with DPM and toxic metals are addressed in the Draft EIR, Appendix C, Section 5. Ultrafine particulate matter is ubiquitous in the environment. Primary sources of ultrafine particulate matter include anthropogenic sources, such as fuel combustion (e.g., power plants, vehicles) and industrial processes (e.g., welding), and natural sources (e.g., wild fires, volcanoes, sea spray); secondary sources include atmospheric reactions of gases to form particles (e.g., transformation of nitric oxide to form ammonium nitrate).²⁹ The City has proposed a number of mitigation measures to reduce impacts from project-related air pollutants, including particulate matter, as discussed in the Draft EIR, Section 3.2.3 – Mitigation. These include several measures to reduce particulate matter impacts from construction equipment (MM-3.2-1, MM-3.2-2, MM-3.2-5, MM-3.2-6, and MM-3.2-9) and airport operating mobile sources (MM-3.2-12, MM-3.2-13, MM-3.2-14, and MM-3.2-15).

Aircraft PM Emissions Factors

With respect to aircraft engine exhaust emissions, it should be noted that the gaseous pollutant emission factors for carbon monoxide (CO), total hydrocarbons (THC), and oxides of nitrogen (NO_x), are based on the extensive International Civil Aviation Organization (ICAO) aircraft emissions database; and the sulfur dioxide (SO₂) emission factors are based on typical sulfur contents in jet kerosene and aviation gasoline.

Regarding aircraft engine PM emission factors, one commenter claims that only six aircraft engine emission factors from older aircraft were used to estimate emissions from the remaining fleet. This statement is incorrect. The acknowledgement that the only available PM data for

²⁷ Personal communication, J. Pehrson (CDM) and B. Manning (U.S. EPA), February 8, 2006.

²⁸ 42 USC 7409 (b)(1).

²⁹ Wu and Biswas. 2005. "A Summary of the 2005 Critical Review: Nanoparticles and the Environment." *EM: The Magazine for Environmental Managers*. June:33–39.

commercial aircraft engines was over 30 years old that led the FAA to work with the National Aeronautics and Space Administration (NASA), the EPA, and a host of other researchers to begin a series of PM tests on newer aircraft engines. The first set of these PM tests was conducted in 2004, and a second set was conducted in 2005. The results of the first set are available from NASA³⁰ and test data from the second set are being analyzed. The FAA also realized that an interim method to estimate aircraft PM emissions would be appropriate until reliable contemporary measurement data from multiple aircraft engines becomes available. Therefore, the First Order Approximation (FOA) was developed. The FOA relies on measured PM concentrations versus a smoke number from three different researchers^{31,32,33} to determine the non-volatile PM mass emission rate for a given smoke number and fuel flow. The developed relationship³⁴ was verified with data obtained from other researchers³⁵ indicating that the estimate of non-volatile PM emissions from aircraft engines could be based on smoke numbers. Finally, the original FOA (Version 1) developed for non-volatile PM emissions³⁶ was conservatively adjusted upward (Version 2) by a factor of 4 (i.e., 4 times the original FOA values) to account for the volatile fraction of PM³⁷ in aircraft engine exhaust. This conservatism is noted in the part of the FAA's First Order Approximation Qualifier that was omitted (ellipsis in quote on page 2 of 6) by the commenter. The entire qualifier is presented below (emphasis added):

First Order Approximation Qualifier

The Federal Aviation Administration's (FAA) first order approximation (FOA) methodology estimates PM emissions from commercial jet-turbine aircraft engines. The FOA serves an interim purpose of meeting PM compliance issues now, while the science and accuracy of PM measurement techniques mature. The non-volatile portion of PM is based on a correlation between the Smoke Number (SN) from the engine certification test and the fuel flow for a specific mode of operation, namely take-off, climb-out, taxi/idle, and approach. For some engines, a maximum SN is conservatively used because modal-specific SNs are not available. The volatile portion of PM is derived from a limited number of field measurements and theoretical relationships. *Due to the uncertainties associated with the currently available information, the volatile PM estimates include an additional margin to be conservative.* The accuracy and applicability of the FOA will be improved as future field measurements and scientific advances become available. In the future, every effort will be made to provide the statistical uncertainty for the FOA, and any subsequent studies will be structured so that

³⁰ National Aeronautics and Space Administration (NASA). 2005. Aircraft Particle Emissions Experiment (APEX). Available at <https://particles.grc.nasa.gov/apex.html>.

³¹ Champagne, D.L., 1971. "Standard Measurement of Aircraft Gas Turbine Engine Exhaust Smoke," ASME-71-GT-88.

³² Hurley, C.D. 1993. "Smoke Measurements Inside A Gas Turbine Combustor," AIAA 93-2070, Presented at AIAA/SAE/ASME/ASME 29th Joint Propulsion Conference and Exhibit., Monterey, CA (June 28-30).

³³ Whyte, R.B., Ed. 1982. AGARD Advisory Report No. 181 – Volume II. Propulsion and Energetics Panel Working Group 13 on Alternative Jet Engine Fuels. North Atlantic Treaty Organization (NATO), Advisory Group for Aerospace Research and Development.

³⁴ Wayson, R.L., G.G. Fleming, B. Kim, and J. Draper, 2003. "Derivation of A First Order Approximation of Particulate Matter from Aircraft," Paper No. 69970, Presented at the 96th Annual Air & Waste Management Association's Conference & Exhibition, San Diego, CA (June 22-26).

³⁵ Wayson, R.L., G.G. Fleming, and B. Kim. 2003 (May). "Status Report on Proposed Methodology to Characterize Jet/Gas Turbine Engine Particulate Matter Emissions," (FAA-AEE-03-01) Washington D.C.: FAA, Office of Environment and Energy.

³⁶ Wayson, Fleming, Kim, and Draper. 2003.

³⁷ FAA. 2005. Memorandum from Office of Environment and Energy dated May 24, 2005. Subject: Use of the First Order Approximation (FOA) to estimate aircraft engine particulate matter (PM) emissions in NEPA Documents and Clean Air Act General Conformity Analyses.

the statistical uncertainty can be derived for the results. The FOA is only applicable to aircraft engines that have reported SNs and modal fuel flows. In cases where EDMS does not include aircraft PM emission estimates, use the best available information such as the following: averaging the aircraft engine PM data from AP-42 Volume II: Mobile Sources, 4th Edition, September 1995.

Further on, the commenter implies that the following statement comes from Wayson, et al. (2003)³⁸, “At a minimum, it is clear that the smoke number method that has been used does not represent the most current advances in measurement technology and likely does not accurately (sic) represent the actual emissions of aircraft, particularly as it relates to fine and ultrafine particles.” However, the actual literature survey findings reported in Wayson, et al. (2003) are presented below (emphasis added):

- Small PM may be a health concern.
- It is a good approximation that all PM emitted by modern transport aircraft has an aerodynamic diameter of less than 2.5 micrometers. This is an important concern and controlled by the EPA health-based standards for PM_{2.5} as well as PM₁₀.
- The EPA PM standards are mass based (mass/volume of air) at receptor locations. However, the engine certification process does not require the measurement and reporting of the PM mass data. A smoke number is determined during the certification process. The International Civil Aviation Organization (ICAO) has promulgated the most complete aircraft engine emission database includes the measured smoke number and fuel flow rates by engine mode. *Studies show that there is a correlation between the reported smoke number and mass emissions.*
- There is a lack of measured data to assist in the analysis to determine if an airport is in compliance with the EPA standards.
- PM are irregular in shape and often coagulate. This coagulation process results in different PM characteristics for different age plumes. This leads to a bi-modal distribution. A lognormal distribution is still appropriate for the soot component (non-volatile PM primarily containing carbon).
- PM include both volatile and non-volatile components. Soot is the most prevalent, non-volatile component. Metals are emitted, but in extremely small amounts.
- Effects on PM emission indices include fuel flow, engine design/operating conditions, altitude, and fuel composition.
- Efforts to predict emission indices, or more specific emission factors, may be characterized into four groups: simple factor, compound factor, grab samples or nearby measurements, and measurement based factors.

Wayson et al. (2003)³⁹ clearly states that a correlation exists between smoke number and mass emissions, then goes on to develop the FOA algorithm based on this demonstrated relationship.

Finally, the commenter implies that the FAA Emissions and Dispersion Modeling System (EDMS) model was inappropriate based on a Federal Register notice that removed EDMS from

³⁸ Wayson, Fleming, Kim, and Draper. 2003.

³⁹ Wayson, Fleming, Kim, and Draper. 2003.

EPA's list of preferred regulatory air dispersion models.⁴⁰ It should be noted that the FAA requested the removal of EDMS from the list of preferred regulatory air dispersion models because EDMS is not a single model but a linked set of emission and dispersion models and algorithms. Since 2001, EDMS has used the EPA's AERMOD model for dispersion calculations; EPA approved AERMOD for general use in that same Federal Register notice. Therefore, validation studies and performance evaluations are not necessary for use of EDMS as a dispersion model because those studies and evaluations have already been completed for AERMOD. In addition, EDMS has not been removed from the Guideline on Air Quality Models. Section 6.2.4 c. of the Guideline states that (emphasis added):

The latest version of the Emissions and Dispersion Modeling System (EDMS), was developed and is supported by the Federal Aviation Administration (FAA), *and is appropriate for air quality assessment of primary pollutant impacts at airports or air bases*. EDMS has adopted AERMOD for treating dispersion. Application of EDMS is intended for estimating the collective impact of changes in aircraft operations, point source, and mobile source emissions on pollutant concentrations....⁴¹

In conclusion, the best available information was used to estimate aircraft PM emissions, following current FAA guidance. The emission factors used are presented in the *Final Air Quality and Human Health Risk Assessment Protocol*, which is included as Attachment A to Appendix C of the Draft EIR. The 2005 aircraft PM emission inventories are presented in Table 3.2-9, and the incremental (i.e., changes relative to the 2005 inventory) aircraft PM emissions for each future condition are presented in Table 3.2-14 of the Draft EIR. In addition, aircraft PM emission inventories for the existing and each future condition are presented in Appendix C, Tables 3-2 through 3-6. It was noted in Section 3.1.1.3 of Appendix C that the aerodynamic diameter of PM emitted from aircraft turbine engines is smaller than 2.5 micrometers (PM_{2.5}). Therefore, the PM₁₀ and PM_{2.5} emissions rates for these aircraft engines are considered equal. No additional analyses of aircraft engine PM emissions are required for the EIR.

Air Dispersion Modeling

Once the existing conditions are determined, air dispersion modeling is required to estimate the project-specific incremental impacts since the project will be in the future. The specifics for estimating airport source emissions, modeling air dispersion, and calculating health risk are detailed in the Draft EIR, Appendix C, and the results are summarized in the Draft EIR, Section 3.2. The significance thresholds used in the air quality impact analysis and human health risk assessment are presented in Table 5-1 of the final protocol, and are copied below in Table 3 for reference:

With respect to air quality modeling, it should be noted that the FAA requested the removal of EDMS from the list of preferred regulatory air dispersion models because EDMS is not a single model but a linked set of emission and dispersion models and algorithms. Since 2001, EDMS has used the EPA's AERMOD model for dispersion calculations; EPA approved AERMOD for general use in the same Federal Register notice that removed EDMS from the list of preferred air dispersion models. Therefore, validation studies and performance evaluations are not necessary for use of EDMS as a dispersion model because those studies and evaluations have already been completed for AERMOD. In addition, EDMS has not been removed from the Guideline on Air Quality Models. Section 6.2.4 c. of this Guideline states that (emphasis added):

⁴⁰ 70 FR 68217, "Revision to the Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions; Final Rule." (November 9, 2005).

⁴¹ 40 CFR 51, Appendix W, Section 6.2.4 c. (as amended November 9, 2005).

The latest version of the Emissions and Dispersion Modeling System (EDMS), was developed and is supported by the Federal Aviation Administration (FAA), *and is appropriate for air quality assessment of primary pollutant impacts at airports or air bases.* EDMS has adopted AERMOD for treating dispersion. Application of EDMS is intended for estimating the collective impact of changes in aircraft operations, point source, and mobile source emissions on pollutant concentrations....⁴²

The specific changes to AERMOD Version 04300 as compared to AERMOD Versions 02222 and 04079 are presented below. In addition, Version 04300 includes the Plume Volume Molar Ratio Method (PVMRM) and Ozone Limiting Method (OLM) options for modeling conversion of NO_x to NO₂. Since the Long Beach Airport air quality analysis did not require special handling of NO₂, these options were not necessary. The changes and corrections noted below⁴³ also do not impact the results of the analysis conducted using AERMOD Version 02222; the dispersion modeling results provided in the Draft EIR would be the same whether using AERMOD Version 2222 or AERMOD Version 04300.

1. Dry depletion (DRYDPLT) and wet depletion (WETDPLT) are no longer optional for deposition applications. These options for removal of mass from the plume due to dry and/or wet deposition processes will automatically be invoked for applications in which dry and/or wet deposition are considered. The DRYDPLT and WETDPLT options on the MODELOPT card will be ignored, and need not be removed from the model input file for the model to run.
2. Correction made to area source algorithm, subroutine PLUMEF, to include a call to CRITDS to calculate the critical dividing streamline height for gaseous pollutants. Also modified PLUMEF to correct a problem with the AREADPLT option.
3. Corrections made to area source and openpit algorithms, in subroutines ACALC and OCALC, to include tilted plume for point source approximation of particle emissions, and to include reinitialization of _VAL arrays at end of receptor loop (reinitializations also included in PCALC and VCALC for point and volume sources for consistency). The latter correction fixes a potential problem with particle emissions for area sources when the point source approximation is used under the TOXICS option.
4. Corrected calling arguments for call to WAKE_SIG from subroutine WAKE_DFSN2, to use wakiz and wakiy instead of turbz and turby.
5. Minor correction made to wet deposition calculations to include lateral term (FSUBY) in weighting of direct and penetrated source contributions for WETFLUX.
6. Modified subroutine PRMCALC to place receptor on centerline of cavity plumes by setting Y2 = 0.0 for SCREEN option.

⁴² 40 CFR 51, Appendix W, Section 6.2.4 c. (as amended November 9, 2005).

⁴³ AERMOD Version 04300 Readme.txt file. Available at http://www.epa.gov/scram001/dispersion_prefrec.htm

TABLE 3
SCAQMD AIR QUALITY AND HEALTH RISK SIGNIFICANCE THRESHOLDS

| Daily Mass Thresholds | | |
|--|---|-------------|
| Pollutant | Construction | Operation |
| Oxides of Nitrogen (NO _x) | 100 lbs/day | 55 lbs/day |
| Volatile Organic Compounds (VOC) | 75 lbs/day | 55 lbs/day |
| Respirable Particulate Matter (PM ₁₀) | 150 lbs/day | 150 lbs/day |
| Sulfur Oxides (SO _x) | 150 lbs/day | 150 lbs/day |
| Carbon Monoxide (CO) | 550 lbs/day | 550 lbs/day |
| Lead (Pb) | 3 lbs/day | 3 lbs/day |
| Toxic Air Contaminants (TACs) | | |
| TACs (including carcinogens and non-carcinogens) | Maximum Incremental Cancer Risk ≥ 10 in 1 million | |
| | Hazard Index ≥ 1.0 (project increment) for any specific target organ system | |
| Ambient Air Quality for Criteria Pollutants ^a . | | |
| Nitrogen Dioxide (NO ₂) ^b . | 0.25 ppm 1-Hour Average CAAQS | |
| | 0.053 ppm Annual Average NAAQS | |
| Respirable Particulate Matter (PM ₁₀) | 10.4 µg/m ³ 24-Hour Average – Construction ^c . | |
| | 2.5 µg/m ³ 24-Hour Average – Operations | |
| | 20 µg/m ³ Annual Arithmetic Average – All | |
| Carbon Monoxide (CO) ^b . | 20 ppm 1-Hour Average CAAQS | |
| | 9.0 ppm 8-Hour Average CAAQS & NAAQS | |
| Source: SCAQMD (1993).
Notes for Table 5-1:
a. - Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.
b. - SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the attainment standards listed.
c. - Ambient air quality threshold based on SCAQMD Rule 403.
lbs/day = pounds per day.
ppm = parts per million by volume.
µg/m ³ = micrograms per cubic meter. | | |

7. Modified subroutine SRCQA to calculate equivalent XINIT and YINIT values for AREAPOLY sources to allow for calculation of area of source under TOXICS option and for PVMRM option. Also modified SRCQA to include a more refined computation of centroid for AREAPOLY sources.
8. Included check in subroutine METQA for absolute values of Monin-Obukhov length (OBULEN) less than 1.0. Adjustment of OBULEN is made to limit ABS (OBULEN) .GE. 1.0. The sign of OBULEN is assigned the opposite of the sign of the heat flux if OBULEN is 0.0. This limit on OBULEN is already applied in AERMET, so this change in AERMOD will only affect input data generated by other means.
9. Moved call to SUB. METDAT ahead of call to SUB. SET_METDATA to avoid potential problem with negative (missing) precipitation for first hour.
10. Added range check on gas deposition parameters to trap on input of zero (0.0) values.
11. Modified subroutine METQA to reduce number of extraneous warning messages, especially for hours with missing meteorological data. Also modified range check for missing wind direction in subroutine CHKMSG.

12. Modified PLOTFILE output to include date field.
13. Modifications to some debug output statements based on code provided by ENSR.

Regarding the use of Long Beach Airport meteorological data with AERMOD versus EPA's *Meteorological Monitoring Guidance for Regulatory Modeling Applications*⁴⁴ (herein referred to as Monitoring Guidance), it should be noted that the Monitoring was published in early 2000 and predates AERMOD. It was developed for cases where no reasonable representative meteorological data are available or in cases where regulations require on-site measurements to be taken. Furthermore, the Monitoring Guidance does not provide guidance on collection procedures or acceptable data for use in AERMOD. Specifically, AERMOD is designed to accept the Solar and Meteorological Surface Observational Network (SAMSON) data, through its meteorological preprocessor, AERMET.

Several commenters imply that the airport meteorological data were inappropriate for use in this regulatory modeling project using AERMOD. This statement is not supported by the EPA Meteorological Monitoring Guidance for Regulatory Modeling Applications.⁴⁵ The last paragraph of Section 6.7 of that document states (emphasis added):

Although data meeting this guidance are preferred, airport data continue to be acceptable for use in modeling. In fact observations of cloud cover and ceiling, data which traditionally have been provided by manual observation, are only available routinely in airport data;...

AERMOD is designed to use upper air soundings provided in the TD6201 format. The TD6201 sounding data for San Diego Montgomery Field (Station ID 03131) was used in this analysis. This is the nearest, coastal upper air station with soundings for the same year as the surface data.

The measurement height for the profile data was consistently set at 9.4 meters. Additionally, the wind speed at the measurement height ranged from 1.1 miles per hour (mph) to 27.5 mph, while the temperature ranged from 35.1 degrees Fahrenheit (°F) to 107.1°F. The mean wind speed and temperature were 7.0 mph and 64.2°F, respectively. The mean wind direction was at 333 degrees, indicating the wind is predominantly blowing from the northwest. Information regarding the standard deviation of the wind direction fluctuations and the standard deviation of the vertical wind speed fluctuations were reported as missing in all cases. The wind direction sectors and surface parameters for the meteorological data file were set to an urban land use type. The default parameters for urban land use were selected; therefore, the albedo, Bowen ratio, and surface roughness were uniformly set to 0.2075, 1.625, and 1, respectively.

One commenter makes an extensive data request for all of the air dispersion modeling input and output. The air quality impact analysis and human health risk assessment were conducted following the protocol developed in coordination with the South Coast Air Quality Management District and California Air Resources Board, as presented in the Draft EIR, Appendix C, Attachment A – Final AQIA and HHRA Protocol. Additional modeling output is provided in this FEIR as Attachment C to these Responses to Comments. Pertinent input and output data are presented in the Draft EIR, Appendix C:

⁴⁴ EPA, 2000 (February). *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA-454/R-99-005, Research Triangle Park, NC: EPA, Office of Air Quality Planning and Research. p.1-1.

⁴⁵ EPA, 2000 (February). "Meteorological Monitoring Guidance for Regulatory Modeling Applications." (EPA-454/R-99-005). Research Triangle Park, NC: EPA, Office of Air Quality Planning & Standards.

Attachment B – Hourly, Daily, and Monthly Temporal Profiles;
Attachment C – Baseline Aircraft Operations Summary;
Attachment D – 2020 Forecast Operations Report;
Attachment E – Roadway Fleet Mix;
Attachment F – Construction Emissions;
Attachment G – Meteorological Data Selection Report;
Attachment H – Receptor Locations;
Attachment I – Airport Contributions to Criteria Pollutant Concentrations; and
Attachment J – Incremental Risk and Hazard Calculations for Peak Receptors.

Since the Long Beach Airport Terminal Improvement Project does not change the Airport Noise Ordinance which limits the allowable airport activity, the operational air quality impacts are not much different between the project and no project scenarios. The only project-related air quality impacts are from construction emissions as the facilities are being built. Construction air quality impacts are summarized in the Draft EIR, Section 3.2; discussed in Appendix C, Sections 3.2.1, 4.2.1.1 and 5.6.2.4, and detailed construction emission calculations are presented in Appendix C, Attachment F. This analysis presents a good faith effort to disclose the important parameters that affect the results.⁴⁶

Dispersion Coefficients

With respect to the dispersion coefficients for aircraft, one commenter claims that these are based on stationary sources and thus highly uncertain for moving sources. This implication is not correct. The dispersion coefficients used in EDMS/AERMOD were developed from LIDAR analysis of aircraft exhaust plume behavior on an operating airport.^{47,48} As such, these coefficients represent the best available data for modeling aircraft engine exhaust plume dispersion.

Source Type

One commenter indicates that the source type being used (area sources in the case of aircraft) is a “gross approximation of the actual configuration of the emission source,” and thus introduces a great amount of uncertainty. Uncertainty is inherently associated with mathematical/computer modeling of any physical phenomena, because it is often difficult to develop a mathematical model or computer algorithm that is sufficiently sophisticated to address every nuance of the physical world. This uncertainty is acknowledged in the Draft EIR, Appendix C, Section 6 - Uncertainties. As noted above, the dispersion coefficients, as well as initial source

⁴⁶ The purpose of CEQA is to compel government at all levels to make decisions with environmental consequences in mind (14 C.C.R. Section 15003[g]). CEQA does not require technical perfection in an EIR, but rather adequacy, completeness, and a good-faith effort at full disclosure (14 C.C.R. Section 15003[i]). An EIR is an informational document which will inform public agency decision-makers and the general public of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project (14 C.C.R. Section 15121[a]). An EIR shall identify and focus on the significant environmental effects of the proposed project. The discussion should include relevant specifics of the “...health and safety problems caused by the physical changes...” (14 C.C.R. Section 15126.2[a]). Comments [on a draft EIR] are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects....When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.” (14 C.C.R. Section 15204[a]).

⁴⁷ Wayson, R.L., G.G. Fleming, B. Kim, W.L. Eberhard, W.A. Brewer, J. Draper, J. Pehrson, and R. Johnson, 2003. “The Use of LIDAR to Characterize Aircraft Exhaust Plumes,” Paper No. 69965, Presented at the 96th Annual Air & Waste Management Association’s Conference & Exhibition, San Diego, CA (June 22-26).

⁴⁸ Wayson, R.L., G.G. Fleming, B. Kim, W.L. Eberhard, and W.A. Brewer. 2004 (February). *Final Report: The Use of LIDAR to Characterize Aircraft Initial Plume Characteristics*. (FAA-AEE-04-01/DTS-34-FA34T-LR3). Washington D.C.:FAA, Office of Environment and Energy.

height for aircraft on taxiways and runways were developed from measurements of aircraft plume behavior at an operating commercial airport. Also, it should be noted that the modeling methods used in the analysis were presented to the SCAQMD^{49,50} and California Air Resources Board (ARB)^{51,52} for review and comment, and comments from these agencies were incorporated into the final Protocol (Draft EIR, Appendix C, Attachment A– Final: Protocol for Conducting an Air Quality Impact Analysis and Human Health Risk Assessment for the Long Beach Airport).

Based on the responses above, the modeling process utilized for this analysis appropriately and adequately addresses the balance between prudent conservatism and wholesale erroneous overestimation while maintaining a level of accuracy that reflects the state of the art. Ambient concentrations were predicted by adding the modeled incremental scenario-related change in ambient concentrations to the existing ambient monitored concentrations or estimated future background concentrations, as described in Section 3.2 of the Draft EIR (page 3.2-6) and Appendix C (Section 4.1, page 4-1). Although the long-term trend in monitored air quality indicates that ambient pollutant concentrations are decreasing over time, it was assumed for this EIR that the monitored 2005 pollutant concentrations would be the same as the background pollutant concentrations in 2020. Ten-year trends in ambient pollutant measurements are presented in Section 3.2 of the Draft EIR (Table 3.2-4, page 3.2-22) and in Appendix C (Table 2-3, page 2-11). The estimated future concentrations in the airport vicinity are shown in Section 3.2 of the Draft EIR (Table 3.2-13, page 3.2-35) and Appendix C (Table 4-1, page 4-8; and Table 4-7, page 4-15).

Meteorological Data Set Used in the Air Quality and Health Risk Analysis

The selection of the meteorological data set for use in the DEIR's Air Quality and Human Health Risk Assessment was reviewed and approved by the South Coast Air Quality Management District (SCAQMD),⁵³ the primary air pollution control agency with jurisdiction over the project site. In accordance with the *Health and Safety Code*, Section 40412, the SCAQMD is the sole and exclusive local agency within the South Coast Air Basin with the responsibility for comprehensive air pollution control, and it has the duty to represent the citizens of the Basin in influencing the decisions of other public and private agencies whose actions might have an adverse impact on air quality in the Basin.⁵⁴ In its role as a commenting agency under CEQA, it is charged with advising the lead agency on appropriate methods for evaluating the air quality impacts of a proposed project. The opinions of the commenter notwithstanding, consultations with SCAQMD regarding selection and use of the meteorological data for these analyses should indeed provide the reader a high degree of comfort, since (1) the EPA's Monitoring Guidance indicated that airport data are acceptable for use in modeling; (2) the meteorological data used were collected at the Long Beach Airport; (3) the data was obtained in a format that AERMOD is designed to accept; and (4) the meteorological data used in the analysis was approved by the SCAQMD. There are no compelling reasons to collect "pre-construction" meteorological data for use in the modeling to support the air quality and human health risk analyses in the Draft EIR.

⁴⁹ Meeting with SCAQMD, June 22, 2005, regarding LGB Terminal Improvement Project – Draft Modeling Protocol dated May 20, 2005.

⁵⁰ Meeting with SCAQMD, August 30, 2005, regarding LGB Terminal Improvement Project – Draft Modeling Protocol dated August 9, 2005.

⁵¹ Personal communication, conference call with ARB (G. Honcoop, G. Harris, L. Hunsacker, J. Lerner, T. Servin), BonTerra (K. Brady, C. Krebs), and CDM (J. Pehrson, K. Tzou), June 7, 2005, regarding LGB Terminal Improvement Project – Draft Modeling Protocol dated May 20, 2005.

⁵² Personal communication, telephone conversation with CARB (G. Honcoop) and CDM (J. Pehrson), June 23, 2005, regarding Aircraft Speciation Profiles.

⁵³ Personal communication, email from SCAQMD (T. Chico) to CDM (J. Pehrson) on September 2, 2005.

⁵⁴ SCAQMD. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA: SCAQMD. p. 2-4.

The approach used to select the meteorological data is described in the Draft EIR, Appendix C, Attachment G – Meteorological Data Selection Report.

Several commenters state that the airport meteorological data used in the modeling should not be used since its measurements are biased due to airport activities. Although localized activities may have an effect on the meteorological data, these same activities are the sources being evaluated in this Draft EIR. As such, the airport meteorological data used in the modeling is the most representative of the location and is acceptable for use in AERMOD.

Any assertion that the meteorological data used in the preparation of the Draft EIR is unsuitable due to the continued refinement of air dispersion models is not valid. While models have changed over time, airport collection of meteorological data has not changed as a result of developments in air quality models. Models have been developed with the intent to allow the users to use available, acceptable data. As with any analysis, there are optimal tools, acceptable tools, and ill-advised tools. This analysis was performed using tools and data which are acceptable to SCAQMD which and adhere to applicable regulatory modeling guidelines. Santa Barbara County Air Pollution Control District rules are irrelevant and not applicable to this analysis. The CEQA process is not a permitting process, and even if the Proposed Project were being proposed in Santa Barbara County, that county's PSD Rule would not apply to it.

The process of meteorological data for the Long Beach Terminal Improvement Project Draft EIR is detailed in Appendix C, Attachment G – Meteorological Data Selection Report. As noted in that report, the selection of 1985 meteorological data was based on comparison of pollutants (NO_x and VOC) with different characteristics and sources; comparison of model years with different emission factors and scenarios; and comparison of different averaging periods for the same pollutant and scenario. The selection of one-hour and annual averaging periods in a given model run represent the widest variation achievable in a one-year analysis. As noted in Attachment G, the maximum one-hour and annual average concentrations for all runs occurred with the 1985 meteorological data. Therefore, it is very likely that the maximum 24-hour average concentration would have occurred in 1985 as well.

In addition, the 24-hour averaging period is associated with the ambient air quality standards (AAQS) for particulate matter (both PM_{10} and $\text{PM}_{2.5}$), and sulfur dioxide (SO_2). As is shown in the Draft EIR, Section 3.2, Table 3.2-13 (page 3.2-35) and Appendix C, Table 4-7 (page 4-15), the existing measured PM_{10} 24-hour average concentration exceeds the California AAQS, and the project incremental PM_{10} impact is above the significance threshold and unavoidable, even after mitigation. Therefore slight modifications of the results by additional modeling will not change this conclusion. The existing measured $\text{PM}_{2.5}$ 24-hour average concentration is less than (i.e., better than) the national AAQS, and the modeled project contribution to $\text{PM}_{2.5}$ concentrations would need to increase by more than a factor of 5 (or by approximately 500 percent) to exceed the national AAQS. This is not likely, based on the variation seen in the modeled results presented in Appendix C, Attachment G. The emissions of SO_2 did not exceed significance thresholds; therefore, no dispersion modeling was required for SO_2 .⁵⁵

Finally, since acute hazard indices are based on the one-hour averaging period in the model, as are the one-hour CO and NO_2 project impacts, these impacts have been adequately identified in the Draft EIR since 1985 produced the highest one-hour average of the years identified. Again, the variations in concentrations shown in Attachment G to Appendix C of the Draft EIR are not

⁵⁵ The existing measured 24-hour average SO_2 concentration is a factor of 3 lower than (i.e. better than) the California AAQS (Draft EIR, Section 3.2, Table 3.2-6, page 3.2-24). Modeling of SO_2 concentrations is typically not required unless a project's SO_2 emissions exceed the emission CEQA thresholds set by SCAQMD.

sufficient to warrant additional modeling of CO or NO₂ concentrations based on the project incremental impacts shown in the Draft EIR, Section 3.2, Table 3.2-13 (page 3.2-35).

Airport Deposition Studies

One commenter claims that re-entrained dust from aircraft operations create a "...fallout plume measurable for miles downwind in ground samples..." but does not provide any citations that demonstrate this claim. To the contrary, the airport deposition studies conducted to date have found very little evidence of aircraft- or airport-specific contaminants beyond the airport property line. Several recent studies conducted specifically around airports include:

1. Two deposition studies conducted at Boston Logan International Airport, using different methods to determine deposition and sources concluded that:

The deposition samples from community sites expected to be affected by aircraft operations did not differ significantly from the sample at the background site which was not expected to be affected by aircraft. The deposition sample from Runway 22, which was expected to reflect aircraft operations to the greatest degree, did not differ significantly from either the community sites or the background site. The similarities in the hydrocarbon distributions in the ambient deposition samples, and their similarity to reference data for urban contamination, suggest that the sources are not directly linked to Logan Airport, but are most likely associated with regional atmospheric sources of combustion.

The ambient deposition samples did not contain significant levels of jet soot compared to the engine wipe sample, nor did they contain significant evidence of contribution from raw jet fuel.⁵⁶

and

It can be concluded that:

- the method did identify airport sources of inorganic elemental deposition;
- the method was not interfered with by fuel oil burning; and
- the maximum potential contribution of airport sources to deposition in the nearby communities is 0.3 percent.⁵⁷

2. A deposition study conducted at Chicago O'Hare International Airport found that:

...deposited particles at all of the sites monitored near O'Hare bore little chemical resemblance to either unburned jet fuel or soot from jet exhaust. Instead, the collected material was chemically similar to general urban pollution, particles from burning heavy fuels and motor vehicle exhaust.

⁵⁶ Chng, KM. 1997 (January). *Soot Deposition Study: Logan Airport and Surrounding Communities*, Waltham, MA: KM Chng Environmental Inc. p.iii.

⁵⁷ TRC. 1997 (January). *Soot Deposition Study: Logan Airport and Surrounding Communities*, Windsor, CT: TRC Environmental Corporation. p.i.

These findings indicate that soot and oily deposits in communities near O'Hare are primarily the result of non-Airport emissions.⁵⁸

3. In a deposition study conducted at Los Angeles International Airport which collected both metals data as well as polycyclic aromatic hydrocarbon (PAH) data, the findings were:

The gravimetric data collected at the six monitoring stations tend to eliminate the airport as the major deposition source for the areas adjacent to the airport. The deposition rate data implicates freeway traffic for high daytime concentrations observed at the Felton Avenue School site. The nighttime concentrations data, highest at the Warren Lane School and Felton Avenue School during off-airport wind conditions implicate non-airport related particulate emissions sources to the east of the airport.

The copper composition data indicates that a small fraction of the total deposition seen in the daytime is potentially from aircraft braking. The flourene [sic] found deposited on nighttime samples collected north and west of the airport, appear to [be] the result of residential wood combustion. The fluoranthene found deposited on nighttime samples collected south of the airport appear to be the result of either residential wood combustion, or road paving that was being performed near the Imperial Avenue School during the monitoring period.⁵⁹

4. Finally, the South Coast Air Quality Management District conducted a gridded deposition study for total mass and elemental carbon fallout around LAX and concluded that motor vehicles, rather than aircraft, appear to be the major contributor to deposition.⁶⁰

Because the major source of fallout (including metallic elemental deposition) is from re-entrained roadway dust, fugitive particulate emissions from paved roads were included in the Draft EIR. Fugitive road dust is included as a line item in the emission inventories presented in Section 3.2, Table 3.2-9 (page 3.2-27) and in Appendix C, Tables 3-2 through 3-6 (pages 3-11-3-15). Fugitive road dust represents a substantial portion of the project-related incremental PM₁₀ and PM_{2.5} concentrations presented in the Draft EIR, Section 3.2, Table 3.2-13 (page 3.2-35). In addition, impacts from toxic metals found in paved road dust were included in the human health risk assessment by applying the California Air Resources Board PM Speciation Profile No. 471 to the fugitive roadway PM₁₀ emissions (as noted in the Draft EIR, Appendix C, Section 3.1.4). The toxic air contaminant emission inventories presented in the Draft EIR, Appendix C, Table 3-8 include toxic metals associated with re-entrained road dust.

Airport Emissions and Link with Adverse Health Effects

The following discussions are taken from a recent airport EIR⁶¹ and are provided solely for the commenter's information.

⁵⁸ Chng, KM. 1999 (December). *Findings Regarding Source Contributions to Soot Deposition – O'Hare International Airport and Surrounding Communities*. Burlington, MA: KM Chng Environmental Inc.. p.ii.

⁵⁹ LAWA. 2001 (January). *LAX Master Plan Technical Report – Deposition Monitoring*, Los Angeles World Airports, Draft Environmental Impact Statement/Environmental Impact Report, Technical Report 4, Attachment Z.

⁶⁰ SCAQMD. 2000 (September). *Inglewood Particulate Fallout Study Under and Near the Flight Path to Los Angeles International Airport*. (Report No. MA2000-05). Diamond Bar, CA: South Coast Air Quality Management District, Monitoring and Analysis.

⁶¹ Los Angeles International Airport, *Proposed Master Plan Improvements Final Environmental Impact Report (Final EIR)*, SCH No. 1997061047, April 2004. (Part II, Volume 1, Topical Response TR-HRA-2)

“The term ‘health risk assessment’ is sometimes misinterpreted. A health risk assessment does not indicate whether a specific, observed health problem or symptom was caused by chemical exposure. Epidemiological studies are used to evaluate whether past chemical exposures may be responsible for actual health problems observed in real populations. Health risk assessments are used to estimate potential health impacts resulting from current or future chemical exposures in a population. In order to avoid underestimating chemical exposure, the health risk assessment prepared for the Draft EIR estimated risks for the maximally exposed individual (MEI), a hypothetical individual that lives, works, or goes to school at a location with the highest predicted concentrations of Toxic Air Contaminant (TAC) in air, and who has other characteristics, such as inhalation rate and years of exposure, that result in maximum intake of TAC. In addition, toxicity criteria used in all health risk assessments are developed to be protective of groups that may be exceptionally sensitive to a chemical, such as children and the elderly. The result is a conservative estimate of potential health impacts associated with the Project. Health risk assessment is the appropriate tool to evaluate whether estimated future emissions associated with the Project may potentially result in human health impacts.”

“Health risk assessment cannot be used to link individual illnesses to past chemical exposures, nor can health risk assessments and epidemiological studies prove that a specific toxic substance caused an individual’s illness.⁶² It would be difficult to substantiate potential health risks estimated by risk assessment for an airport through epidemiological studies because of the typical lack of exposure information about the study population. It is necessary to understand all of the factors that may lead to an adverse effect. The population evaluated in the epidemiological study may have lived in the area for many years or just a few years. They may have had exposure to chemicals from other sources, such as work or emissions from other sources (i.e., automobile exhaust). They may have engaged in behavior such as smoking, drinking, overeating, or other lifestyle habits that increased their risk of adverse health effect. An observation of an adverse effect would not necessarily correlate with exposure to airport emissions.”

“Although subject to a number of uncertainties common to epidemiological studies, these types of studies have been performed at other airports in large metropolitan areas to determine whether individuals living near airports have a greater incidence of disease than populations living in other areas. For example, the Illinois Department of Public Health examined actual cancer incidence observed in communities near Chicago’s O’Hare and Midway airports between 1987 and 1997.⁶³ Results of the study showed no elevation in cancer incidence for all cancers combined among whites, non-whites, males and females living near the airports. Trend analysis did not indicate a higher cancer burden for populations near the airports as compared to populations living farther away. This observation held true for all cancers combined as well as site-specific cancers. A study conducted by the Washington State Department of Health (1999) provided an examination of actual cancer cases near Washington State’s

⁶² California EPA. 2001. *A Guide to Health Risk Assessment*. Sacramento: Office of Environmental Health Hazard Assessment.

⁶³ Illinois Department of Public Health. 2001 (November). *Cancer Incidence in Populations Living Near Chicago O’Hare and Midway Airports, Illinois. 1987 – 1997*. Chicago: Office of Epidemiology and Health Systems Development.

SeaTac airport.⁶⁴ Results of the study indicated that incidence of cancer was not statistically significantly higher for the SeaTac area.”

“One of the limitations to airport epidemiological studies is that they treat living adjacent to an airport as an approximation for increased likelihood of exposure to carcinogens. This approximation would be invalid if people living near airports have a shorter duration of residence than people living further away. This lack of knowledge about the length of residence as well as the inability to assess actual exposure of individuals renders the use of distance a crude and unreliable measure of exposure. Other factors likely to impact the studies include population migration patterns, occupational exposures, and personal and lifestyle habits⁶⁵. Health risk assessment is the best method to evaluate potential health impacts for Master Plan alternatives. Epidemiological studies cannot predict future impacts associated with estimated future emissions and inherent uncertainties, as discussed above, exist for the performance and use of epidemiological studies to determine potential health impacts of living near an airport. Health risk assessments performed in the Draft EIR used up-to-date risk assessment methodologies and modeling as well as conservative measures of exposure and toxicity to provide conservative estimates of potential risk and impact associated with the Project.”

“Determining the cause of a current health problem or symptom is difficult. Many factors may influence if and how severe air pollution affects human health. For example, respiratory problems and cancer may be a result of workplace exposure, environmental exposure, or some other factor (e.g., personal habits such as smoking cigarettes). Further, air quality in the South Coast Air basin is degraded by many TACs from a variety of sources, of which traffic is the largest and most important.”

“Epidemiological studies have been performed for populations living near other airports. As described above under Airport Emissions and Link with Adverse Health Effects, these studies have found no evidence of increased cancer incidence in areas near Chicago's O'Hare field or Seattle's SeaTac airport. Thus, no evidence is available to corroborate general concerns about of cancer risk at or near major airports.”

“Epidemiological studies differ from risk assessments in that they describe actual incidence of cancer or other adverse health effects observed in real populations, and attempt to relate health effects to specific sources or causes. Risk assessments estimate potential health impacts using environmental data and exposure assumptions (e.g., lifetime exposure). Substantiating potential health risks estimated by risk assessment for an airport through epidemiological studies is very difficult because of the typical lack of exposure information about the study population. Further, understanding all of the factors that may lead to an adverse effect is necessary to related health effects to specific causes. The population evaluated in the epidemiological study may have lived in the area for many years or just a few years. They may have had exposure to chemicals from other sources, such as at work. They may have engaged in behavior such as

⁶⁴ Washington State Department of Health. 1999 (February). *Cancer Rates in the Proximity of SeaTac International Airport (Questions 1 and 2 of the August 1998 Work Plan)*. Seattle: Office of Epidemiology.

⁶⁵ Illinois Department of Public Health. 2001 (November). *Cancer Incidence in Populations Living Near Chicago O'Hare and Midway Airports, Illinois. 1987 – 1997*. Chicago: Office of Epidemiology and Health Systems Development.

smoking, drinking, overeating, or other lifestyle habits that increased their risk of adverse health effect. Simple observations of adverse effects cannot be used to establish a link between these effects and any source, including airport emissions. Given inherent uncertainties associated with epidemiological studies and the subsequent difficulties posed in trying to tie observed effects to a cause, use of approved risk assessment methodologies is the most appropriate way to evaluate potential health impacts associated with Airport emissions.”

“Some reports, including ones from studies conducted in the Los Angeles area, do suggest some association between some respiratory illnesses, such as asthma and allergies, and levels of some criteria pollutants and/or TAC. Some people may be more sensitive than the majority of the population to the effects of TAC. These people are considered ‘sensitive’ receptors, and may include children, the elderly, people in poor health and/or those suffering from illness, such as chronic bronchitis. Sensitive individuals may form a subpopulation of people living in the Los Angeles basin that do suffer some health impacts due to poor air quality. Possible associations between illness and air quality, and the existence of sensitive individuals suggest that common sources of air pollutants could cause some health impacts at the concentrations in air found in the Los Angeles basin. However, concentrations of TAC in the vicinity of the Airport do not appear to be greater than those in other parts of the basin, according to SCAQMD studies. In fact, some of the higher pollution levels are found in areas such as Pomona and Riverside, at substantial distances from the Airport. This observation suggests that any health impacts are due to general air pollution due mainly to car and truck traffic, not single sources, such as the Airport, that would have locally greater impacts within the immediate area.”

“Many TAC could, in theory, cause impacts to human health, particularly in sensitive individuals. However, not all TAC in air in the Los Angeles basin have been studied using epidemiological approaches. Possible emissions for all sources were, however, examined in the assessment of possible human health impacts prepared for the Draft EIR. In particular, jet fuel emissions were included in the evaluation in as much as tank farm emissions and emissions during fueling and aircraft operation were accounted for in the emissions inventory conducted to support the EIR. Jet fuel is composed of many compounds, and potential health effects associated with exposure to jet fuel emissions were evaluated in terms of the toxic components of jet fuel.”

As discussed above under Airport Emissions and Link with Adverse Health Effects, the best available means to assess the potential for impacts to human health is a health risk assessment as performed for the Draft EIR. Results of the health risk assessment presented in the Draft EIR indicate that human health risk and hazards estimated for the Project would be less than CEQA thresholds of significance. No mitigation would be required. In 2020, implementation of the Project is likely to reduce the impact of the airport over that for current operations for residents and school children, and could result in slightly less exposure to TAC

Estimation of Incremental Health Risk Impacts in the DEIR

Several commenters imply that the “nature and severity of the Health Risk from current operations” is known and was ignored in the Draft EIR. In fact, no data exist that can begin to separate the specific impacts, if any, of airport operations from those associated with the myriad of sources in Long Beach and the South Coast Air Basin (SCAB), in general, that affect air quality. Separation of impacts due to airport operations from those of other sources is extremely

difficult because many sources in the SCAB emit similar chemicals; varying wind speeds and weather conditions complicate measurements; and amounts and timing of emissions from airport and other sources vary hourly, daily, and seasonally. Any attempt to actually measure airport contributions would require a large and long-term research study that is clearly not within the scope of CEQA requirements.

Fortunately, a useful analysis does not require the type of information envisioned in the comment. The key to this analysis is estimation of incremental impacts that might be associated with airport improvements. The modeling analysis is completely appropriate for this type of estimation, since the assumptions that go into estimation of current and future impacts are the same. Thus, the increment that might be due to changes in airport operations is likely to be reasonably accurate even if the modeling over- or underestimates total impacts. This type of analysis has been and will continue to be the most useful approach for assessment of new projects under CEQA.

The baseline conditions developed in the Draft EIR did include measured data of both criteria air pollutants and toxic air contaminants (TAC), as presented in the Draft EIR, Section 3.2, Table 3.2-6 (page 3.2-24) and Table 3.2-8 (page 3.2-26). This measured data would include contributions from all sources in the area. Data gathered for estimation of baseline conditions did not include any direct measurement of Airport contribution to total TACs in the air. As noted in the *City of Long Beach Baseline Air Quality and Noise Human Health Risk Assessment*,⁶⁶ sufficient measured air quality data are lacking and cannot be reasonably collected to differentiate airport contributions to total TACs in air.

As part of the environmental baseline conditions used in the Human Health Risk Assessment, an air toxic emission inventory was developed for airport sources, as presented in the Draft EIR, Appendix C, Table 3-8 (page 3-17). Important TAC sources associated with Airport operations evaluated include: aircraft, auxiliary power unit/ground service equipment (APU/GSE) on-Airport motor vehicles, and stationary sources such as on-site heating facilities and fuel storage tanks. TACs of concern were selected based on a comprehensive review of TACs potentially emitted from these various Airport sources. The selection of speciation profiles (TAC emission factors) used for each source type was included in the modeling protocol (presented in the Draft EIR, Appendix C, Attachment A) that was reviewed by the California Air Resources Board and South Coast Air Quality Management District. Baseline concentrations for TACs of concern from airport sources were then modeled based on emissions estimates and local meteorology. This approach provides the best available estimates of possible baseline impacts to air quality in neighborhoods surrounding the Airport, and thus provides the best available basis for examining possible incremental impacts of the future project and no project alternatives. Details of the source identification process, selection of TACs of concern, and estimation of baseline air quality impacts are defined in Appendix C, Air Quality Impacts and Human Health Risk Assessment technical report prepared in support of the Draft EIR. Additional and summary information is provided in Section 3.2, Air Quality and Human Health Risk Assessment of the Draft EIR.

Finally, one commenter claims that, due to variable meteorological conditions, multiple real-time, continuous readout monitoring stations with meteorology are required to determine health risk. The City disagrees with this claim. Health risks, as determined by methods developed by the California Office of Environmental Health Hazard Assessment and implemented in Appendix C of the Draft EIR, are estimated based on either annual or one-hour average toxic air pollutant

⁶⁶ MWH Americas, Inc. and Alliance Acoustical Consultants, Inc. 2005 (February 4). *Final Report: Baseline Air Quality and Noise Human Health Risk Assessment*, prepared for City of Long Beach, Department of Health and Human Services. Long Beach: MWH and AAC.

concentrations. As such, a year of representative hourly meteorological data observations is sufficient to estimate cancer, chronic non-cancer, and acute risks. Since the meteorological data used in the analysis was collected on the Airport (see Appendix C, Attachment G for the method used to select the meteorological data), the results of the analysis are considered reasonable. Note that in *Summary Report – Community Ambient Monitoring: Black Carbon as a Surrogate for Diesel Exhaust Concentrations in Long Beach, California*,⁶⁷ it is noted that meteorological data obtained from the North Long Beach monitoring station “is representative of area wind conditions as it is a 10 meter tower.” If the North Long Beach monitoring station is representative, then so is data collected at the Airport since the sources of concern with this project are also located at the Airport.

3.1.6 NIGHTTIME NOISE VIOLATION REVIEW PROCESS

Issue: *What is the process for dealing with nighttime noise violations?*

Response: The rules pertaining to the monitoring of noise, the enforcement of the allowable noise limits, and the assessment of noise violation surcharges are contained in the City's Airport Noise Compatibility Ordinance (*Long Beach Municipal Code* [LBMC] Chapter 16.43). These rules were adopted in 1995 as part of the settlement of extensive litigation between the City and several air carriers over the City's right to control flights and noise emanating from the Airport. The Noise Ordinance is recognized as being one of the most restrictive in the country.

Under the Ordinance, air carriers are required to schedule all flight departures and arrivals such as take offs and land landings will occur between the hours of 7:00 a.m. and 10:00 p.m. The Airport Noise Compatibility Ordinance (the Ordinance) also sets certain maximum Single Event Noise Exposure Levels (SENEL) that cannot be exceeded at specified times during the day and night. For example, the maximum SENEL limit on Runway 30 between the hours of 7:00 a.m. to 10:00 p.m. is 102.5 decibels (dB) (at monitoring station 9) for departures and 101.5 dB (at monitoring station 10) for arrivals. Between the hours of 10:00 p.m. and 11:00 p.m. the maximum noise level for departures and arrivals on Runway 30 is 90 dB, and between the hours of 11:00 p.m. and 7:00 a.m. the noise limit is 79 dB for both departures and arrivals at these same monitoring stations.

Noise violations are monitored by the Airport through its Airport Noise and Operations Monitoring System (ANOMS). There are 18 monitors in proximity to the Airport that capture flight-related noise events. The information obtained by the ANOMS system identifies the time of day, the aircraft or air carrier involved, whether the flight is an arrival or departure, and the noise produced by a particular flight (i.e., SENEL). The information is provided to Airport staff on a daily basis in the form of a written report. The staff uses this information to track noise violations and to take appropriate enforcement action. The Airport reports that its violation identification rate exceeds 99 percent and a recent noise control audit resulted in a 100 percent validation of the noise analysis data as captured and reported by the Airport.

Enforcement

The penalties for violating the City's Airport Noise Ordinance are set forth in Chapter 16.43 of the LBMC. These penalties were originally adopted in 1995 as part of the settlement agreement between the City and the various air carriers involved in the federal litigation. As part of the litigation, the City proposed significantly higher penalties which were rejected by the Federal

⁶⁷ Winegar, E.D. 2006 (January 30). *Summary Report - Community Ambient Monitoring: Black Carbon as a Surrogate for Diesel Exhaust Concentrations in Long Beach, California* Fair Oaks, CA: Applied Measurement Sciencep.22.

District Court. Since the adoption of the penalties in 1995, there has been no adjustment in the enforcement provisions of the Ordinance.

The Airport Noise Ordinance and its penalty provisions were adopted in an attempt to deter noise violations, to penalize willful violators, and to curtail flight operations during the late night and early morning hours (i.e., during the “curfew”). The regulatory scheme was designed to be “progressive” in nature.

The first violation by an aircraft operator results in a written notice from the Airport Manager informing him/her that a violation has occurred. The second violation also results in a written notice of violation from the Airport Manager together with a demand that the aircraft operator prepare and implement a written compliance program. The compliance program is required to contain “feasible steps, consistent with safety, by which the [operator] expects to achieve compliance with the [Ordinance] and to minimize the noise of its operations.” The third violation results in a “surcharge” of 100 dollars if the violation occurs within 24 months of the requirement to prepare a compliance program, and a \$300 “surcharge” is imposed for subsequent violations occurring within 12 months of date the third violation (and 100 dollar surcharge) were issued.

As a requirement of the Federal Aviation Administration (FAA) and in some cases the State, the Ordinance exempts certain types of operations from complying with the City’s noise limits/curfew. These operations include flights by “public aircraft” (e.g., military aircraft); law enforcement; emergency, fire, or rescue aircraft operated by any governmental entity; aircraft used for emergency purposes during an officially declared emergency; Civil Air Patrol (engaging in actual search and rescue missions); aircraft experiencing an in-flight emergency; aircraft operating pursuant to the explicit directions of Air Traffic Control; and aircraft conducting operations in response to a medical emergency. Finally, the Airport Manager is permitted to exempt certain landings or takeoffs provided that the aircraft is conducting tests to determine whether or not a flight procedure can be conducted in accordance with the noise restrictions of the Ordinance.

Criminal Enforcement

In addition to the \$100–\$300 administrative “surcharges,” the Ordinance also provides criminal sanctions as an alternative means of enforcement. Under the Ordinance it is a misdemeanor for any aircraft operator to exceed any established SENEL limits if the operator has reason to believe that a particular flight will not meet the applicable limit. For example, it would not be reasonable for an operator to land or take-off a fully loaded MD-80 aircraft anytime after 11:00 p.m. when the SENEL limit is 79 dB. A fully loaded MD-80 is known to produce (on average) noise at the 99.2 dB level take-off and 94.2 dB at landing, and if an operator were to fly in such a circumstance it would most certainly violate the criminal provisions of the Ordinance unless the flight was “exempt” from the application of the Ordinance (e.g., emergencies, government flight, Civil Air Patrol, etc.). Misdemeanor convictions carry a fine of up to 1,000 dollars and/or imprisonment in the county jail for periods of up to six months for each proven violation.

Consent Decree

On May 30, 2003, and on July 25, 2003, the City Prosecutor’s office entered into a “Consent Decree” with, respectively, JetBlue Airways and American Airlines. Each Consent Decree was for a term of three years. The Consent Decree for JetBlue commenced on July 1, 2003, and will terminate on June 30, 2006. The Consent Decree for American Airlines commenced on June 1, 2003, and will terminate on May 31, 2006. Each Consent Decree carries an “option” period whereby the terms of the agreement can be extended in one-year increments. The Consent

Decree establishes predetermined sanctions for criminal violations of the ordinance. Pursuant to the Consent Decree, JetBlue made an initial payment of \$90,000 while American Airlines paid 6,000 dollars. Thereafter, each carrier is required to pay penalties in the amount of 3,000 dollars for the first six violations that occur during any given quarter. For any violations over six occurring during any quarter, each of the carriers pays \$6,000 per violation.

Since the third quarter of 2003 through and including December 2005, JetBlue has incurred 75 separate penalties that are subject to the Consent Decree and American Airlines has incurred one penalty. During this time period, JetBlue has paid penalties totaling 393,000 dollars and American Airlines has paid penalties totaling 3,000 dollars. All penalties collected pursuant to the Consent Decree are required to be remitted to the Long Beach Public Library Foundation to be used solely for the purchase of library materials and books by the Long Beach Public Library.

Unanticipated Delays

The Ordinance establishes a so-called “bridge period” between the hours of 10:00 p.m. and 11:00 p.m. During this period, violations of the noise restrictions are required to be waived provided that the violations are the result of “unanticipated delays beyond the reasonable control of the aircraft owner/operator.” During this “bridge period,” delays caused by mechanical failure (but not routine maintenance), by weather, or by Air Traffic Control are considered to be conditions beyond the control of the operator and therefore subject to relief from the enforcement provisions of the Ordinance. In order to avail itself of this “exemption”, an aircraft operator is required to provide satisfactory written proof to the Airport Manager that the late flight was the result of a delay beyond its control.

During this period, the exemptions established by the FAA/State and discussed previously in this memorandum are also in effect. For example, emergency flights; police or fire operations; or other government flights are permitted to either land or take off during the 10:00 p.m.–11:00 p.m. period without violating the Ordinance.

3.1.7 TRAFFIC GENERATION RATES

Issue: Questions were raised on the methodology used for determining traffic related impacts.

Response: As discussed on page 3.8-2 of the Draft EIR, it was determined that the airport traffic generation rate provided by the Institute of Transportation Engineers (ITE) Trip Generation report⁶⁸ would not be appropriate because it is based on an airport with a minimum of 150 to 200 flights per day, with a percentage of the passengers having connecting flights (and do not enter or leave the airport in a vehicle). The Long Beach Airport is unique in its flight types and differs from the ITE case studies (non-connecting flights in Long Beach), number of flights (much lower than 150 to 200), and airport operating hours. Instead, a set of specialized trip-generation rates, based upon those that were developed for John Wayne Airport and Ontario International Airport, were calculated. These airports were selected because they are southern California airports with similar operating characteristics.

The John Wayne Airport study (conducted in 2001) showed the daily trip generation rate for the Average Day-Peak Month (ADPM) was 1.84 Trips/Daily Passenger, with the AM peak hour trips as five percent of daily trips, and the PM peak hour trips as eight percent of the daily trips. The Ontario International Airport study uses a formula to estimate the ADPM for non-connecting passengers, which provides an equivalent of 1.73 trips per non-connecting daily passenger in 2002, and their research further showed an eight percent peak hour factor. Thus, the two

⁶⁸ Institute of Transportation Engineers. 2003. Trip Generator (7th Ed). Washington D.C.: ITE.

comparable studies in Southern California yield ADPM trip rates varying from 1.73 trips/passenger to 1.84 trips/passenger and from five to eight percent of daily trips in the peak hour.

For this Long Beach Airport study, a similar estimate of daily and peak trips per passenger was made. Daily traffic volumes were taken over two days on Donald Douglas Drive west of Lakewood Boulevard. Concurrently, passenger volumes for arriving and departing flights were estimated for the same two days, using flight arrival and departure times. Using this data, the ratio of vehicle trips (in and out of the airport) per passenger was calculated for both days, and an estimate of the 7–9 a.m. and 4–6 p.m. peak periods traffic volumes were made. The resulting trip generation was 1.77 daily trips per passenger. The a.m. traffic peak hour represented approximately 6.0 percent of the daily trips and the p.m. traffic peak hour trips represented approximately 5.5 percent of the daily trips. This traffic generation factor expresses the trips with regards to the number of daily trips per passenger, but the number factors in employee trips and delivery trips as well.

Table 3.8-1 in the DEIR provided a comparison of the three different methodologies for determining trip generation. The methodologies resulted in very similar results (within a four percent variance on a daily basis). For this analysis the Long Beach Airport trip generation, the Daily Trip Rate of 1.77 was selected, along with a six percent a.m. and p.m. peak hour factor. As shown in Table 3.8-1, the 1.77 trip rate falls between the two local studies at Ontario International and John Wayne Airports, thereby validating the use of the trip generation rates.

3.1.8 VISUAL IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT

Issue: *Several of the commenters expressed concern about the scale and layout of the proposed terminal improvements and parking structure.*

Response: Both the City Zoning Ordinance⁶⁹ and the May 7, 1991 Memorandum of Understanding adopted by the Cultural Heritage Commission and City Council⁷⁰ establish design guidelines for improvements at the Airport. With respect to building siting, or placement, the guidelines stipulate that space be maintained between the various buildings within the terminal area to avoid a wall-like appearance. With respect to building heights, the guidelines state that all new construction must (a) comply with Federal Aviation Administration (FAA) height restrictions and (b) integrate with the existing buildings. The guidelines also require that any new parking structures provide rooftop landscaping planters and observe FAA height restrictions. In addition, the guidelines specify that the overall design of any improvements in the terminal area should preserve the unique architectural features of and be in harmony with the existing historic terminal building. The conceptual designs prepared for the terminal building, as presented in Exhibits 2-5 and 2-6 of the DEIR, honor and comply with these guidelines. It should also be noted that the overall footprint of proposed improvements would not be significantly greater than that of the existing on-site land uses within the terminal area, as illustrated in Conceptual Design Overlay included in Attachment A to this Response to Comments volume.

With respect to the placement of the proposed parking structure and its potential visual impacts, it should be noted that another building used to occupy most of the space where the proposed parking structure would be located. Specifically, until recently, the Executive House Hotel occupied the northeast corner of that site (refer to Attachment A to this Response to Comments,

⁶⁹ Specifically, the *Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan*.

⁷⁰ Which focuses on new construction considerations for the historic Long Beach Airport Terminal Building.

which provides an aerial photograph of the Proposed Project site in 1999). In addition, an office building which used to occupy the site just south of the hotel significantly obstructed views toward the Airport terminal building. From the 1960s through early 1990s, Rochelle's Hotel and Conference Center occupied the southwest corner of Lakewood Boulevard and Donald Douglas Drive. This two-story facility occupied the site of the current Airport Employee Parking Lot and a substantial portion of Lot C further blocking sight lines to the terminal building from Lakewood Boulevard. Attachment A also includes an aerial photo dated 1991 a view of the Proposed Project site showing Rochelle's Hotel and Conference Center. Therefore, unobstructed views from Lakewood Boulevard toward the Airport terminal have not been available historically. The Proposed Project would protect the current line of sight from the intersection of Donald Douglas Drive and Barbara London Drive. An exhibit depicting the placement of the parking structure and a line of sight to the terminal building is provided in Attachment A to these Responses to Comments. It should also be noted that the proposed parking structure would be consistent with the Long Beach General Plan's land use designations, the Long Beach Zoning Ordinance requirements, and applicable Federal Aviation Administration standards and requirements. Preliminary concept plans provide a setback from Donald Douglas Drive, which would further protect the line of sight. The preliminary concept plan is depicted in Attachment A of these responses to comments.

3.1.9 CUMULATIVE IMPACTS ANALYSIS

Issue: *The Draft EIR did not adequately address cumulative impacts. By addressing regional growth projections, the site-specific impacts were minimized.*

Response: As discussed in Section 5.3, Cumulative Impacts, the CEQA Guidelines (Section 15130[b][1]) allows either a discussion of a list of projects or a summary of projections contained in the adopted general plan or related planning document. It does not require both methods of analysis to be used; however, as stated in the Draft EIR, the cumulative impacts analyses use a combination of the two methods. The Draft EIR identified that the shortcoming of only using a listing of projects is that the projects identified would mostly be completed within five years and therefore, would not adequately consider the regional or long-term growth. The concern raised that this approach would mask the site-specific cumulative impacts is unfounded because the analysis considered both the regional growth projections and the projects in the immediate vicinity. If the analysis had only evaluated the effects of the projects identified by the local jurisdictions, the larger impacts associated with overall regional growth would not be incorporated. The methodology used ensured the impacts in the immediate vicinity of the project were adequately addressed.

As indicated in the Draft EIR, the traffic analysis which was also the basis of the long-term cumulative air quality analysis, used the traffic modeling effort developed for the Douglas Park traffic analysis. In developing the database for the Douglas Park project, not only were the regional growth projections used, an extensive list of projects was compiled based on input from the cities of Long Beach, Signal Hill, and Lakewood. This approach ensured the traffic model considered how the development was loading onto the circulation network. As part of the Proposed Project, these jurisdictions were contacted to determine if there were any new projects being considered that would influence the study area and that should be considered as part of the cumulative analysis. The cities of Lakewood and Signal Hill each provided a list of projects. Based on our review of the projects and discussions with the cities, it was determined that these projects were either already incorporated into the Douglas Park traffic modeling effort or were within regional growth assumptions. Therefore, the listings were duplicative, not additive, to the modeling already done. Though the regional projections were used, the traffic modeling did focus on the local network. Therefore, the local traffic impacts were fully considered. Because of length of the listings, they were included in Appendix H, which was

inadvertently not posted on the website, but was available through the City and is included as Attachment B to these Responses to Comments.

While the regional growth projections are most relevant for the evaluation of traffic and air quality impacts, the effects of specific projects as well as the regional growth were also considered for other topical areas. The importance of specific project and regional consideration varies by topical area. For example, as indicated in the Draft EIR, when evaluating cumulative aesthetic impacts, the proposed elements of the cumulative projects would need to be seen together or in proximity to each other for there to be a cumulative aesthetic impact. If the projects were not in proximity to each other, the viewer would not perceive them in the same viewshed. Therefore, regional growth projections would not be applicable. Even other projects which are not in close proximity to the Airport would not contribute to a cumulative aesthetic impact. For aesthetics, considerations focused on what would be seen in conjunction with the Proposed Project improvements and their affect on community character.

One area where specific projects were identified as being very important pertained to cumulative construction air emissions. The Draft EIR stated that, for there to be cumulative construction air quality impacts, there would need to be other projects under construction at the same time and in close enough proximity that the construction emissions would combine and result in cumulative impacts. The Douglas Park project was identified as being immediately north of the Airport and construction is expected to occur at the same time as the Proposed Project. Therefore, the Draft EIR concluded that there was the potential for cumulative construction air quality impacts.

For other topical areas (such as the cumulative impacts on cultural resources or hazards) the nature of the impacts associated with the Proposed Project were site specific and would not be applicable to other projects; therefore, other projects would not contribute the impacts of the same nature (i.e., impacts to the historic Terminal Building) or would be addressed through established federal, state, and local regulations.

3.2 RESPONSES TO INDIVIDUAL COMMENT LETTERS

COMMENTS 286 SARAH ROBBINS
Dated: January 30, 2006

Response 1

There is a commitment to construct the new facilities to meet high standards for energy efficiency and environmental design. The intention is to construct the facilities consistent with the LEED standards. LEED, which stands for Leadership in Energy and Environmental Design is 'based on well-founded scientific standards, LEED standards emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED standards recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.' (U.S. Green Building Council, <http://www.usgbc.org>). This would be implemented through a variety of design features. Precise methods for accomplishing the LEED standards would be determined through project design.

It is recognized that construction of facilities in excess of what is required to serve the demand would not be efficient; however, it is also necessary to provide sufficient facilities to serve the demand. Construction of terminal improvements that would not serve the demand and necessitate other improvements or use of temporary modular buildings, similar to existing conditions, would not be environmentally superior. As indicated in the Draft EIR (page 1-25),

...based on the *Facility Requirements Analysis, Long Beach Municipal Airport*⁷¹ study which was prepared during the scoping process, the recommended sizes of the facilities to best meet the needs for the passengers, visitors, and tenants actually exceeded the square footage allocation of even the Proposed Project.

Refer to Topical Response 3.1.4 regarding the environmentally superior alternative.

Response 2

The number of parking spaces required was calculated from a professional parking study entitled "Long Beach Airport Parking Adequacy Analysis", which was conducted for the City in 2001. The study showed a need for 2.75 parking spaces for each 1,000 annual enplanements. Currently, during peak travel periods the existing parking structure at the Airport is full. This results in vehicles driving around looking for parking and needing to go out to the remote lot (Lot D). If sufficient parking were not provided, there would be an increase in the number of passenger drop-off and pick-up trips because some of the passengers would have no other option but to be dropped off, increasing the overall amount of traffic at the airport. In addition to increasing the overall amount of traffic at the Airport, this would also result in greater air quality impacts. Therefore, the DEIR's conclusion that additional parking is an integral part of the environmentally superior alternative is accurate.

Response 3

All of the public testimony that was given at the public meeting on November 29, December 3, December 5, and December 15, 2005 is provided in the Responses to Comments document dated April 24, 2006. These meetings, which were held after the release of the Draft EIR,

⁷¹ HNTB 2004.

constitute all of the official public meetings on the Draft EIR. It should be noted that after the original Notice of Preparation for the proposed project was released, the Airport Advisory Commission (AAC) held a series of 15 public meetings between November 2003 and July 2004 at which the proposed project was discussed. Though not part of the formal scoping process, the AAC used these meetings to consider the public's recommendations regarding possible Airport improvements. The AAC's recommendations were then forwarded to the City Council which, on February 8, 2005, directed the DEIR consultant team not to carry forward the AACs recommended facility size (133,000 square feet), opting instead for a smaller (102,850 square feet) proposed project. Each of the project alternatives that is evaluated in the DEIR is smaller than the proposed project.

Response 4

Refer to Topical Response 3.1.6, Nighttime Noise Violation Review Process, regarding the types of operations that are, by federal law, exempted from complying with the City's noise limits/curfew.

Response 5

Please see Topical Response 3.1.5, Methodology for the Air Quality Impact Analysis and Human Health Risk Assessment, regarding air sampling data near the Airport.

Regarding lead emissions, the emissions inventory does include lead emissions from piston-driven aircraft fueled on leaded aviation gasoline, as noted in the Draft EIR, Appendix C, Section 3.1.1.4. Lead emissions are summarized in Table 3-8 of Appendix C. Concentrations of lead are included in the Draft EIR, Section 3.2, Tables 3.2-13, 3.2-17, and 3.2-20. These lead concentrations do not exceed any significance thresholds or ambient air quality standards.

Quantitative analysis of any cumulative impacts of future projects at the Ports of LA and Long Beach and the 710 Freeway expansion are beyond the scope of this Draft EIR. The City has no way of knowing if and when such projects will be undertaken and what the timing and scope of the projects, if approved, might be. Any such projects conducted in the future would be subject to CEQA and would have to account for cumulative impacts, including those associated with airport improvement. Only at such time would sufficient information be available to assess potential cumulative health risks.

COMMENTER 287 STEVE WRIGHT
Dated: January 30, 2006

Response 1

Consistent with CEQA, the Draft EIR provides an analysis of the Proposed Project's potential environmental impacts. As stated on pages 2-7 and 2-8 of the DEIR, the Proposed Project provides improvements to the existing Airport Terminal Building and related facilities at the Airport in order to accommodate recent increases in flight activity at the Airport consistent with operational limitations of the Airport Noise Compatibility Ordinance and the 1995 Settlement Agreement. The terminal area improvements are being designed to accommodate the demand based on the *minimum* requirements of the Ordinance, which allows 41 daily commercial and 25 daily commuter airline flights.

It should be noted that many of the commenter's remarks are based upon a flawed understanding of the provisions in the Airport Noise Compatibility Ordinance. Specifically, the commenter appears to believe that the Ordinance establishes 41 daily commercial and 25 daily

commuter flights as maximum limits. In fact, the Ordinance sets these flight levels as *minimums*. The commenter is, therefore, referred to Topical Response 3.1.1 for additional information regarding the Proposed Project and the relationship of the proposed improvements to increased flights and the Airport Noise Compatibility Ordinance.

Response 2

Refer to Topical Response 3.1.4 regarding the environmentally superior alternative.

Response 3

Refer to Topical Response 3.1.3 regarding the alternatives evaluated in the DEIR.

Response 4

The Douglas Park EIR evaluated the potential impact of current and future⁷² Airport operations on the proposed new residences north of the Airport and provided that the residences will fall within an avigation easement. If built, the Douglas Park residences could be subject to the same potential inputs whether or not the airport terminal improvements are constructed. This is because the permitted number of flights will remain the same with or without the construction of the project.

Response 5

Refer to Topical Response 3.1.8 regarding the visual impacts associated with the Proposed Project, including the proposed parking structure.

Response 6

Refer to Topical Response 3.1.1 for information regarding the Proposed Project and the relationship of the proposed improvements to increased flights and the Airport Noise Compatibility Ordinance.

Response 7

Refer to Topical Response 3.1.8 regarding the visual impacts associated with the Proposed Project.

Response 8

Refer to Topical Response 3.1.1 for information regarding the Proposed Project and the relationship of the proposed improvements to increased flights and the Airport Noise Compatibility Ordinance.

Response 9

Demolition of the existing parking structure would exacerbate the traffic and air quality impacts that are currently experienced at the Airport during peak periods, resulting in more significant impacts. Further, the existing structure is needed to accommodate existing demand.

⁷² Flight levels consistent with the Airport Noise Compatibility Ordinance.

Response 10

Refer to Topical Response 3.1.8 regarding the visual impacts associated with the Proposed Project.

Response 11

As the commenter notes, the list provided on page 3.3-2 of the DEIR is incomplete. The entire list of criteria that the City uses for designation of landmarks and landmark districts is as follows:

- A. It possesses a significant character, interest or value attributable to the development, heritage or cultural characteristics of the city, the southern California region, the state or the nation; or
- B. It is the site of a historic event with a significant place in history; or
- C. It is associated with the life of a person or persons significant to the community, city, region or nation; or
- D. It portrays the environment in an era of history characterized by a distinctive architectural style; or
- E. It embodies those distinguishing characteristics of an architectural type or engineering specimen; or
- F. It is the work of a person or persons whose work has significantly influenced the development of the city or the southern California region; or
- G. It contains elements of design, detail, materials, or craftsmanship which represent a significant innovation or
- H. It is a part of or related to a distinctive area and should be developed or preserved according to a specific historical, cultural or architectural motif; or
- I. It represents an established and familiar visual feature of a neighborhood or community due to its unique location or specific distinguishing characteristic; or
- J. It is, or has been, a valuable information source important to the prehistory or history of the city, the southern California region or the state; or
- K. It is one of the few remaining examples in the city, region, state or nation possessing distinguishing characteristics of an architectural or historical type; or
- L. In the case of the designation of a tree(s) based on historic significance, that the tree(s) is (are) associated with individuals, places and/or events that are deemed significant based on their importance to national, state and community history; or
- M. In the case of the designation of a tree(s) based on cultural contribution, that the tree(s) is (are) associated with a particular event or adds (add) significant aesthetic or cultural contribution to the community. (Ord. ORD-05-0026 § 1, 2005; Ord. C-6961 § (part), 1992).

It should be noted that CEQA Guidelines §15064.5 was used as the basis for determining whether implementation of the Proposed Project would result in a significant impact to historic resources (as stated on page 3.3-7).

Response 12

Refer to Topical Response 3.1.1 for information regarding the Proposed Project and the relationship of the proposed improvements to increased flights and the Airport Noise Compatibility Ordinance.

Response 13

Refer to Section 3.3, Cultural Resources, of the DEIR for a detailed discussion of the Proposed Project's potential impacts to historic resources. As stated on page 3.3-12,

“The Proposed Project would result in alterations to a designated landmark that would be considered significant. Development of the Proposed Project consistent with the Guiding Principles (Appendix B) and implementation of Mitigation Measures MM 3.3-1 through MM 3.3-6 and Standard Condition 3.3-3 would reduce the potentially significant impacts to a level considered less than significant.”

Response 14

The tower portion of the building is not considered a character defining feature because it is not the original tower. The existing tower was constructed in 1958 and has been modified multiple times since it was constructed.

Response 15

Although not required, the Draft EIR analyzed the Proposed Project's potential impacts to all sensitive receptors (including schools) within a four kilometer (2.6 mile) radius of the Airport. The environmental impact analysis for sensitive receptors is provided for all topical areas addressed in the DEIR (e.g., air quality, noise, hazardous and hazardous wastes, etc.).

Response 16

The DEIR recognizes that currently the Airport is not fully implementing the minimum number of flights provided for by the Airport Noise Compatibility Ordinance. As the commuter flights are phased in there will be increased demand on the Airport facilities. Additionally, the existing facilities are only marginally serving the people using the Airport at this time. Currently during peak periods, the gates at the Airport are completely utilized. Holdroom spaces during peak periods are at capacity. Increases in the number of passengers would pose potential safety issues and the City's ability to meet fire and safety codes would be compromised. Additionally, the Transportation Security Administration (TSA) has indicated that they need permanent, covered facilities to properly do the challenging job entrusted to them under the Aviation and Transportation Security Act. Additionally, there is desire to enhance the facilities by having one unified design rather than the clutter of various trailers used as temporary holdrooms and tents that have been set up to provide cover for security screening.

Response 17

Goal 2, *Create a Work Force Development Plan to Promote Better Jobs and Wages*, is not listed because it is not relevant to the Proposed Project.

Response 18

With respect to consistency with regional planning documents, it should be noted that the Proposed Project would not change the flight assumptions for Long Beach Airport used in the planning documents. The Regional Transportation Plan reflects the 41 commercial flights and 25 commuter flights. There is a variance in the calculation of the number of passengers projected. Passenger levels are associated with the 41 minimum air carrier and 25 minimum commuter flights. The difference between the 3.8 MAP and the 4.2 MAP reflects an updated calculation based on aircraft used and load factors. Mike Armstrong, with SCAG's Planning and Policy Department, identified this as a technical refinement, rather than inconsistency. As indicated in the SCAG's response to the NOP and the DEIR, SCAG did not identify the Proposed Project as a regionally significant project (see Commenter 5).

Response 19

The Proposed Project would not result in any new uses at the Airport, rather it would improve current conditions at the Airport. Refer to Topical Response 3.1.1 regarding the project description.

COMMENTER 288 SONDRA N. LAVOIE
Dated: January 30, 2006

Response 1

Your comments are noted and have been forwarded to the decision makers as part of the Final EIR submittal. Responses to all of the comments received on the Draft EIR are provided in the Responses to Comments document.

Response 2

There is a commitment to construct the new facilities to meet high standards for energy efficiency and environmental design. The intention is to construct the facilities consistent with the LEED standards. LEED, which stands for Leadership in Energy and Environmental Design is 'based on well-founded scientific standards, LEED standards emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED standards recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.' (U.S. Green Building Council, <http://www.usgbc.org>). This would be implemented through a variety of design features. Precise methods for accomplishing the LEED standards would be determined through project design.

It is recognized that construction of facilities in excess of what is required to serve the demand would not be efficient; however, it is also necessary to provide sufficient facilities to serve the demand. Construction of terminal improvements that would not serve the demand and necessitate other improvements or use of temporary modular buildings, similar to existing conditions, would not be environmentally superior. As indicated in the Draft EIR (page 1-25),

...based on the *Facility Requirements Analysis, Long Beach Municipal Airport*⁷³ study which was prepared during the scoping process, the recommended sizes of the facilities to best meet the needs for the passengers, visitors, and tenants actually exceeded the square footage allocation of even the Proposed Project.

Refer to Topical Response 3.1.4 regarding the environmentally superior alternative.

Response 3

Refer to Topical Response 3.1.6, Nighttime Noise Violation Review Process, regarding the types of operations that are, by federal law, exempted from complying with the City's noise limits/curfew.

Response 4

The number of parking spaces required was calculated from a professional parking study entitled "Long Beach Airport Parking Adequacy Analysis", which was conducted for the City in 2001. The study showed a need for 2.75 parking spaces for each 1,000 annual enplanements. Currently, during peak travel periods the existing parking structure at the Airport is full. This results in vehicles driving around looking for parking and needing to go out to the remote lot (Lot D). If sufficient parking were not provided, there would be an increase in the number of passenger drop-off and pick-up trips because some of the passengers would have no other option but to be dropped off, increasing the overall amount of traffic at the airport. In addition to increasing the overall amount of traffic at the Airport, this would also result in greater air quality impacts. Therefore, the DEIR's conclusion that additional parking is an integral part of the environmentally superior alternative is accurate.

Response 5

All of the public testimony that was given at public meetings on November 29, December 3, December 5, and December 15, 2005 is provided in the Responses to Comments document dated April 24, 2006. These meetings, which were held after the release of the Draft EIR, constitute all of the official public meetings on the Draft EIR. It should be noted that after the original Notice of Preparation for the proposed project was released, the Airport Advisory Commission (AAC) held a series of 15 public meetings between November 2003 and July 2004 at which the proposed project was discussed. Though not part of the formal scoping process, the AAC used these meetings to consider the public's recommendations regarding possible Airport improvements. The AAC's recommendations were then forwarded to the City Council which, on February 8, 2005, directed the DEIR consultant team not to carry forward AAC's recommended facility size, opting instead for a smaller (102,850 square feet) proposed project. Each of the project alternatives that is evaluated in the DEIR is smaller than the proposed project.

Response 6

Please see Topical Response 3.1.5, Methodology for the Air Quality Impact Analysis and Human Health Risk Assessment, regarding air sampling data near the Airport.

Regarding lead emissions, the emissions inventory does include lead emissions from piston-driven aircraft fueled on leaded aviation gasoline, as noted in the Draft EIR, Appendix C, Section 3.1.1.4. Lead emissions are summarized in Table 3-8 of Appendix C. Concentrations of

⁷³ HNTB 2004.

lead are included in the Draft EIR, Section 3.2, Tables 3.2-13, 3.2-17, and 3.2-20. These lead concentrations do not exceed any significance thresholds or ambient air quality standards.

Quantitative analysis of any cumulative impacts of future projects at the Ports of LA and Long Beach and the 710 Freeway expansion are beyond the scope of this Draft EIR. The City has no way of knowing if and when such projects will be undertaken and what the timing and scope of the projects, if approved, might be. Any such projects conducted in the future would be subject to CEQA and would have to account for cumulative impacts, including those associated with airport improvement. Only at such time would sufficient information be available to assess potential cumulative health risks.

Response 7

Your comments are noted and have been forwarded to the decision makers as part of the Final EIR submittal. The fiscal considerations of the project are not a topic pursuant to CEQA. The EIR addresses potential physical impacts.

COMMENTS 289 BOB WILLIFORD
Dated: January 30, 2006

Response 1

There is a commitment to construct the new facilities to meet high standards for energy efficiency and environmental design. The intention is to construct the facilities consistent with the LEED standards. LEED, which stands for Leadership in Energy and Environmental Design is 'based on well-founded scientific standards, LEED standards emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED standards recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.' (U.S. Green Building Council, <http://www.usgbc.org>). This would be implemented through a variety of design features. Precise methods for accomplishing the LEED standards would be determined through project design.

It is recognized that construction of facilities in excess of what is required to serve the demand would not be efficient; however, it is also necessary to provide sufficient facilities to serve the demand. Construction of terminal improvements that would not serve the demand and necessitate other improvements or use of temporary modular buildings, similar to existing conditions, would not be environmentally superior. As indicated in the Draft EIR (page 1-25),

...based on the *Facility Requirements Analysis, Long Beach Municipal Airport*⁷⁴ study which was prepared during the scoping process, the recommended sizes of the facilities to best meet the needs for the passengers, visitors, and tenants actually exceeded the square footage allocation of even the Proposed Project.

Refer to Topical Response 3.1.4 regarding the environmentally superior alternative.

Response 2

The number of parking spaces required was calculated from a professional parking study entitled "Long Beach Airport Parking Adequacy Analysis", which was conducted for the City in 2001. The study showed a need for 2.75 parking spaces for each 1,000 annual enplanements.

⁷⁴ HNTB 2004.

Currently, during peak travel periods the existing parking structure at the Airport is full. This results in vehicles driving around looking for parking and needing to go out to the remote lot (Lot D). If sufficient parking were not provided, there would be an increase in the number of passenger drop-off and pick-up trips because some of the passengers would have no other option but to be dropped off, increasing the overall amount of traffic at the airport. In addition to increasing the overall amount of traffic at the Airport, this would also result in greater air quality impacts. Therefore, the DEIR's conclusion that additional parking is an integral part of the environmentally superior alternative is accurate.

Response 3

All of the public testimony that was given at public meetings on November 29, December 3, December 5, and December 15, 2005 is provided in the Responses to Comments document dated April 24, 2006. These meetings, which were held after the release of the Draft EIR, constitute all of the official public meetings on the Draft EIR. It should be noted that after the original Notice of Preparation for the proposed project was released, the Airport Advisory Commission (AAC) held a series of 15 public meetings between November 2003 and July 2004 at which the proposed project was discussed. Though not part of the formal scoping process, the AAC used these meetings to consider the public's recommendations regarding possible Airport improvements. The AAC's recommendations were then forwarded to the City Council which, on February 8, 2005, directed the DEIR consultant team not to carry forward AAC's recommended facility size (133,000 square feet), opting instead for a smaller (102,850 square feet) proposed project. Each of the project alternatives that are evaluated in the DEIR is smaller than the proposed project.

Response 4

Refer to Topical Response 3.1.6, Nighttime Noise Violation Review Process, regarding the types of operations that are, by federal law, exempted from complying with the City's noise limits/curfew.

Response 5

Please see Topical Response 3.1.5, Methodology for the Air Quality Impact Analysis and Human Health Risk Assessment, regarding air sampling data near the Airport.

Regarding lead emissions, the emissions inventory does include lead emissions from piston-driven aircraft fueled on leaded aviation gasoline, as noted in the Draft EIR, Appendix C, Section 3.1.1.4. Lead emissions are summarized in Table 3-8 of Appendix C. Concentrations of lead are included in the Draft EIR, Section 3.2, Tables 3.2-13, 3.2-17, and 3.2-20. These lead concentrations do not exceed any significance thresholds or ambient air quality standards.

Quantitative analysis of any cumulative impacts of future projects at the Ports of LA and Long Beach and the 710 Freeway expansion are beyond the scope of this Draft EIR. The City has no way of knowing if and when such projects will be undertaken and what the timing and scope of the projects, if approved, might be. Any such projects conducted in the future would be subject to CEQA and would have to account for cumulative impacts, including those associated with airport improvement. Only at such time would sufficient information be available to assess potential cumulative health risks.

COMMENTS 290 HELEN MANNING-BROWN
Dated: January 30, 2006

Response 1

There is a commitment to construct the new facilities to meet high standards for energy efficiency and environmental design. The intention is to construct the facilities consistent with the LEED standards. LEED, which stands for Leadership in Energy and Environmental Design is 'based on well-founded scientific standards, LEED standards emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED standards recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.' (U.S. Green Building Council, <http://www.usgbc.org>). This would be implemented through a variety of design features. Precise methods for accomplishing the LEED standards would be determined through project design.

It is recognized that construction of facilities in excess of what is required to serve the demand would not be efficient; however, it is also necessary to provide sufficient facilities to serve the demand. Construction of terminal improvements that would not serve the demand and necessitate other improvements or use of temporary modular buildings, similar to existing conditions, would not be environmentally superior. As indicated in the Draft EIR (page 1-25),

...based on the *Facility Requirements Analysis, Long Beach Municipal Airport*⁷⁵ study which was prepared during the scoping process, the recommended sizes of the facilities to best meet the needs for the passengers, visitors, and tenants actually exceeded the square footage allocation of even the Proposed Project.

Refer to Topical Response 3.1.4 regarding the environmentally superior alternative.

Response 2

The noise contours for the year 2004 presented in the Draft EIR included the military flights logged at the airport. These same assumptions were used for the Optimized Flights Scenario. Table 3-1 in Appendix F of the Draft EIR lists the military flights used in the study. On the average day, there are 4.4 military and government operations. It should be noted that military aircraft are exempt from the Airport Noise Compatibility Ordinance and the City of Long Beach cannot regulate military aircraft in any way.

Response 3

Please see Topical Response 3.1.5 regarding the methodology for the air quality and human health risk assessment.

Response 4

Your comment is noted. Topical Response 3.1.8 provides discussion of the potential visual effects of the parking structure. The visual corridor that is protected by the setback provided for the parking structure.

The commenter suggests that public transit service should be incorporated as an access alternative to and from the Airport in the future development plan. It should be noted that the

⁷⁵ HNTB 2004.

Airport currently provides Long Beach Transit (LBT) access to the Airport and intends to include an accessible, convenient LBT stop in any future improvements. The Airport is planning a “ground transportation plaza” as well as other changes in traffic circulation to facilitate multiple ground transportation services. The City has committed to work with LBT to ensure that transit design guidelines are considered in the design of these areas and in the location of LBT bus stop(s).

The number of parking spaces does not provide for a parking space for each passenger, as suggested by the comment. The parking demand was calculated from a professional parking study entitled “Long Beach Airport Parking Adequacy Analysis”, which was conducted for the City in 2001. The study showed a need for 2.75 parking spaces for each 1,000 annual enplanements. If sufficient parking were not provided, there would be an increase in the number of passenger drop-off and pick-up trips because some of the passengers would have no other option but to be dropped off, increasing the overall amount of traffic at the airport. Additionally, there would be spill over parking into the adjacent neighborhoods. It should also be noted, the parking structures at the Airport will serve not just passengers, but also employees and tenant parking.

Response 5

The fact that the EIR was addressing the impacts associated with the commuter flights was not “buried under a topic Airport Advisory Committee” as the commenter indicates. This was identified as a key assumption of the document. It is discussed in multiple locations throughout the EIR, including at a minimum seven times prior to the referenced discussion under the Airport Advisory Committee.

In Section 1.0, Executive Summary there are the following references to commuter flights:

- Section 1.4, Project Description, “The terminal area improvements are being designed to accommodate the 41 airline flights and 25 commuter flights, passengers associated with those flights, and security requirements imposed by TSA. This number of flights is already permitted by Chapter 16.43 of the Municipal Code.”
- Section 1.4, Project Description, “Though not a component of the Proposed Project, the EIR also addresses the impacts associated with up to 52 commercial flights and full utilization of 25 commuter flights. At the time the baseline for this EIR was established, there were no commuter flights operating out of the Airport. Subsequently, America West has initiated daily commuter flights and Delta and Smooth Flight Holdings have been conditionally granted commuter flights. All 25 commuter flights are expected to be in regular service between December 2005 and Spring 2006.” This is the same discussion referenced as being “buried” in Section 2.4.2.
- Section 1.5, Project Objectives, “The key project objective is to provide Airport facilities to accommodate the minimum permitted number of flights at the Airport (i.e., 41 commercial flights and 25 commuter flights) and the associated number of passengers served on those flights, in full compliance with all applicable fire, building, safety codes and other applicable standards.”
- Section 1.6, Areas of Controversy and Issues to be Resolved, “As discussed in Section 3.6, Noise, the Airport Noise Compatibility Ordinance provides noise thresholds or “noise budgets” for various types of aircraft. While the Airport Noise Compatibility Ordinance provides for a minimum of 25 commuter flights, historically there have been very few commuter flight operations. Some members of the community have expressed a concern

that by providing additional facilities that would serve commuter aircraft, the project would encourage commuter operations at the Airport, resulting in greater impacts than currently are experienced. Given that commuter aircraft could operate out of the existing facilities, market factors rather than provision of additional aircraft gates designed for commuter aircraft would have greater influence on whether commuter airlines operate out of the Airport. ... In recognition of the concern associated with any increase in flight levels over current levels, the EIR has addressed the potential impacts associated with the full utilization of 25 commuter flights, even though these flights have already been provided for as part of the Airport Noise Compatibility Ordinance and were addressed in the 1995 environmental documentation for the Ordinance.”

- Section 1.6, Areas of Controversy and Issues to be Resolved, “In response to this concern, a Health Risk Assessment (HRA) has been prepared for the Proposed Project. The HRA addresses not only the terminal area improvements, but also the possible addition of the 11 commercial carrier flights and the full utilization of the 25 commuter flights.”
- Section 1.12, Alternatives, the following is provided as part of the description for each of the alternatives evaluated, “Other aspects of the project, such as the number of gates, aircraft parking and vehicular parking would be the same for Alternative A as for the Proposed Project. As with all the alternatives, the EIR evaluates 52 commercial flights and 25 commuter flights for Alternative A. These assumptions are constant with all the alternatives because the number of flights is not causally related to the project proposed facilities improvements, and any impacts would be applicable to all alternatives because they could occur without any project-proposed improvements.”

In Section 2.0, Project Description, there are the following references to commuter flights prior to the Section referenced by the commenter:

- Section 2.2.2, Regulatory Setting, in the summary of the principle terms of the existing settlement agreement, “Provide flight activity limits at the Airport of a minimum of 41 daily airline (commercial) flights and 25 daily commuter flights, assumed to be all Stage 3 aircraft;”

The discussion of commuter flights was also included two additional times in Section 2.0, Project Description, subsequent to the section referenced by the commenter. This included the actual project description (Section 2.5), the discussion of operational considerations (Section 2.6).

The opinion of members of the community as to the viability of the Smooth Flight Holdings is irrelevant to the analysis in the EIR. The City Council directed that the EIR address the potential impacts associated with the commuter flights prior to the application of Smooth Flight Holdings. At the time the NOP was issued, there were no commuter flights. This point too was reflected in the EIR. The fact is that the provision of the commuter flights is outlined in the Airport Noise Compatibility Ordinance and can occur with or without the Proposed Project.

Response 6

As indicated on page 2-11 of the Draft EIR, LEED, which stands for Leadership in Energy and Environmental Design, would be implemented through a variety of design features. Precise methods for accomplishing the LEED standards would be determined through project design. Until a design of the terminal facilities is established it is not possible to state with certainty which measures would be implemented. The web site for the U.S. Green Building Council,

(<http://www.usgbc.org>), which was provided in the EIR, is a good resource that identifies the type of measures that can be implemented to obtain the LEED certification. The web site outlines the rating and certification processes. Certification is done at the design or construction stage.

While LEED does not advocate overbuilding, nor does it require that a facility be designed to inadequately accommodate the use being proposed, which for the Proposed Project is provide Airport terminal facilities to adequately accommodate the minimum number of flights provided for in the Airport Noise Compatibility Ordinance, as well as the number of passengers served by those flights. The project design must provide for the following be able to meet all applicable, federal, State and local standards including the City's fire, building, and safety codes. An airport has special space requires to accommodate the special needs of travelers. The size of the facility was based on an evaluation of the needs of the travelers, as well as applicable codes. The size terminal building for all of the alternatives is substantially less than what was recommended by the study conducted as part of scoping.

It should be noted, that the commenter incorrectly infers that the smaller terminal building would reduce the impact on previously undeveloped open space (Parcel O). The development of Parcel O is associated with the displacement of general aviation aircraft to accommodate the aircraft parking spaces. This parcel has been designated for development for general aviation tie downs and hangars.

As indicated in response to Comment 4, above, the Proposed Project does provide for transit and other ride-sharing methods, such as shuttle buses.

Response 7

The new facilities would be connected to the existing Terminal Building, per TSA requirements. The reference to the new construction being setback from the existing building was intended to communicate that the existing Terminal Building would not be surrounded on all sides by the proposed addition. The existing building would still be distinct from the proposed new space. The exhibits showing the relationship of the existing Terminal Building to the proposed additions was provided to more fully communicate what is being proposed.

Response 8

As indicated in response to Comment 5, above, the City Council directed that the EIR address the potential impacts associated with the commuter flights provided for in the Airport Noise Compatibility Ordinance, which would include accommodating the passengers associated with those flights. There was nothing in the Project Description to indicate that the size of the concession facilities assumed that commuter passengers would be interested in full meals. When sizing the concession facilities, it must be recognized that all passengers are required to be at the Airport substantially before their flight to allow sufficient time for security screening and that most commercial flights provided limited food service.

The distribution of flights throughout the day is market driven. Except for provisions of the curfew, the City cannot dictate the time of day when the airlines must schedule their operations. The City would not be able to have the airlines schedule flights to alleviate peak demand in concession areas.

Response 9

The concept design provides four areas that would be covered, but open air (not enclosed). These are the baggage make-up areas, the ticketing and queuing areas, an area for “meeters and greeters,” and the baggage claim area. A covered area for baggage make-up area (where the airlines receive screened bags from TSA, which are then sorted and loaded onto baggage carts) is needed to protect the screened baggage from the elements. Currently, this area is provided for in one of the tents used by TSA. The intention of the project is to eliminate the need for tent facilities at the Airport. Leaving baggage out in inclement weather is not a reasonable alternative. The ticketing and queuing area, as well as the area for “meeters and greeters,” is intended to eliminate congestion in front of the terminal building and provide for protected spaces for these uses. Having a designated area for “meeters and greeters” enhances safety. This space is most effective outside of the terminal building. The final area, the baggage claim area, is currently outside the existing terminal building and was designated as such by the City Council when defining the scope of the Proposed Project and alternatives.

Response 10

TSA has indicated that the current open-air baggage security screening area is not sufficient because of the sensitivity of the equipment being used. TSA has further indicated its requirement for a fully enclosed, air-conditioned building for checked baggage screening. These requests are memorialized in a document entitled, *Transportation Security Administration Space Requirements at Long Beach Airport*. The in-line baggage conveyors that are currently being used are placed within a tent with the equipment placed on pallets to keep them dry. The Aviation and Transportation Security Act establishes TSA's authority for passenger and baggage screening.

Response 11

As footnoted in the Draft EIR, the referenced text was taken verbatim from the March 22, 1990 Memorandum used when the Terminal Building was nominated as a historical landmark. The Memorandum was documenting the contribution of McDonnell Douglas and the Douglas Aircraft Company's contribution to the development of the economy of Long Beach since its founding in 1924. This section has nothing to do with criterion for selecting a terminal improvement. The criterion that are cited are the criterion that the Long Beach Cultural Heritage Commission considered when evaluating the terminal building for landmark status. Economic factors are not used as a consideration in evaluating the Proposed Project or the alternatives.

The appropriateness of the economic report prepared in 2004 is not relevant to this EIR because it was not used as the basis for determining the scope of the project, in the evaluation of the project, or as part of any recommendations associated with this EIR.

Response 12

Your opinions are noted and have been forwarded to the decision-makers as part of the Final EIR. The Cultural Heritage Commission would determine the conformance of the design with the Secretary of Interior's standards at the time of issuance of the Certificate of Appropriateness.

Response 13

Page 3.4-7 of the Draft EIR does acknowledge the potential contribution of aerially deposited lead associated with use of jet fuel and diesel fuel. It states that elevated concentrations of lead

are likely to be found in near-surface soil at the Airport, especially in those areas where unpaved soil and medians will be disturbed as a result of project grading/construction. As such, the standard condition requiring testing of the soil for aerially deposited lead has been applied. Should quantities of aerially deposited lead exceed acceptable thresholds, the City shall develop a remediation program to dispose of soil material consistent with state and federal regulations. It should be noted that testing done in March 2006 for a pavement rehabilitation project for Taxiways L and C did not identify lead deposits in excess of standards. The Airport took 3 samples at 13 locations for a total of 39 tests samples. The Total Lead ranged from 2.3 to 29.0 mg/kg. The California Modified Preliminary Remediation Goal is 150 mg/kg and the Caltrans' variance with the Department of Toxic Substance Control does not require remediation if Total Lead is less than 350 mg/kg. Therefore, so, at 2.3 to 29.0 mg/kg, no remediation for aerially deposited lead is required.

Additionally, it should be noted that the air quality analysis evaluated the potential impact associated with lead in air emissions as a criteria pollutant (see Section 3.2 of the Draft EIR). The lead specification for 100LL (0.56 g/gal) was used to estimate lead emissions from piston aircraft.

Response 14

The noise contours do take into account landings and take offs from both directions, as well as the military aircraft utilizing the Airport. The methodology for developing the noise contours is described on page 3.6-11 of the Draft EIR. Aircraft flight patterns, number of operations, and types of aircraft are used to develop the noise contours.

Response 15

As discussed on page 3.7-6, staffing levels for airport security, police, fire, paramedic, and TSA personnel are tied to the number of passengers and flights served by the Airport. Because the Proposed Project would not alter the number of passengers or flights at the Airport, there would be no impact on staffing levels. As indicated above, the distribution of flights throughout the day is market driven and is not controlled by the City.

Response 16

The EIR does not state that the TSA mandates the improvements. The improvements are necessary to effectively meet the security requirements imposed by TSA, which includes passenger and baggage screening. Space and facilities must be provided to accommodate the employees and equipment associated with the security screening. Given the sensitivity of the equipment that is used for the screening, the current conditions are not adequate for long-term operations.

Response 17

The flight assumptions for the Optimized Flights Scenario are presented in the Draft EIR on pages 3.6-12 through 3.6-14. For purposes of analysis, it was assumed that all new flights would be distributed throughout day according to the present distribution of flights, with reduced night operations. It assumed the airlines would continue to use the current fleet mix and operate within current markets. Therefore, it is a reasonable assumption that without any improvements to the existing facilities, that there would be additional congestion with the No Project Alternative as the Airport attempts to serve the additional 850,000 annual passengers associated with the Optimized Flights without providing any physical improvements. It is not reasonable to assume that flights at the Airport would be evenly distributed throughout the day to avoid peak hour

demands on facilities. As indicated above, the distribution of flights throughout the day is market driven. The occurrences of peaks in flight activity can be found at all airports. The airlines respond to the times that passengers want to fly. Except for provisions of the curfew, the City cannot dictate the time of day when the airlines must schedule their operations.

Response 18

As discussed above, the distribution of flights throughout the day is market driven. Just as freeways and roadways experience peak hour demands due to driver demand, the Airport experiences peak hour in flight demand. There is no indication that Jet Blue or any other airline has manipulated scheduling to make the Airport look inadequate. The occurrences of peaks in flight activity can be found at all airports.

Response 19

A review of the trip generation rates used in the analysis demonstrates that some ride-sharing, transit use, or shuttle services are being used at the Airport. As noted in the Draft EIR on page 3.8-3, the trip generation of 1.77 daily trips per passenger expresses the trips with regards to the number of daily trips per passenger, but factors in employee trips and delivery trips as well. As indicated above, the Airport currently provides Long Beach Transit access to the Airport and intends to include an accessible, convenient LBT stop in any future improvements. The proposed improvements would provide for a “ground transportation plaza” as well as other changes in traffic circulation to facilitate multiple ground transportation services.

The construction traffic analysis provided for a worse case peak-hour traffic analysis, which assumed up to 50 peak hour trips. No specific parking assumptions were made for the construction trips. It is assumed that the construction-related parking would occur within the construction area or in a designed area on the Airport.

Response 20

The City's Airport Noise Compatibility Ordinance, LBMC 16.43, Section 16.43.090 A, established and defined the role and responsibility of the General Aviation Noise Committee (GANC). The commenter is correct that several years ago the group changed their working name to the Aviation Noise Abatement Committee (ANAC). Per the Ordinance, this committee is not mandatory and the decision to organize such a committee is at the discretion of the Airport's General Aviation Owner/Operators. Their stated purpose is “to encourage voluntary noise abatement efforts.”

Response 21

The noise contours do take into account landings and take offs from both directions, as well as the military aircraft utilizing the Airport. The methodology for developing the noise contours is described on page 3.6-11 of the Draft EIR. Aircraft flight patterns, number of operations, and types of aircraft are used to develop the noise contours.

Response 22

Your comment is noted. Exhibit 2-4 is identified as the generalized location of the terminal improvements. Parcel O is the location for the relocation of general aviation tie-down spaces. The location of Parcel O is depicted in Exhibit 2-7. Exhibit 2-3 depicts the location of the terminal area, as well as Parcel O. This provides the reader perspective of two locations where improvements are proposed.

Response 23

Your comment is noted. An exhibit is provided at the end of these responses to comments that depict the maximum 14 aircraft parking spaces.

Response 24

Discussion of the visual aspects of the project, including a line of site drawing for the parking structure is provided in Attachment A of these responses to comments.

Response 25

The Final Protocol for Conducting an Air Quality Impact Analysis and Human Health Risk Assessment for the Long Beach Airport (Draft EIR, Appendix C, Attachment A), was reviewed and approved by the SCAQMD, the agency with expertise in this area. There is further discussion of the methodology for the air quality analysis in Topical Response 3.1.5.

COMMENTER 291 JOSEPH VALLES
Dated: January 30, 2006

Response 1

Your comments are noted and have been forwarded to the decision makers as part of the Final EIR submittal.

COMMENTER 292 DOUGLAS P. HAUBERT
Dated: January 30, 2006

Response 1

Your comments are noted and have been forwarded to the decision makers as part of the Final EIR submittal.

Response 2

The utilization of the 25 commuter flights is currently permitted by the City's Airport Noise Compatibility Ordinance (Long Beach Municipal Code Chapter 16.43, "Commuter Carriers shall be permitted to operate not less than twenty-five flights per day, the number of Flights operated on November 5, 1990", See LBMC Sec. 14.43.060 D1) Such commuter flight levels are permitted whether or not proposed terminal improvements are constructed. Further, under the Optimized Flight Scenario discussed in the DEIR, there is a potential for an additional number (over minimum 41 daily flight) of Air Carrier flights provided that the existing air carriers operate within existing noise budgets. Although no additional air carrier flights have been added since the adoption of the Airport Noise Compatibility Ordinance in 1995, such a possibility theoretically exists should the carriers either fly quieter aircraft or fly within exiting established curfews (or both). The potential for adding such additional air carrier flights exists under the Ordinance whether or not any terminal improvements are made. The above is the rationale for stating that there is no causal relationship between the proposed improvements and the number of flights emanating from the Airport.

Even with existing flight levels at the Airport (which currently includes the minimum 41 air carrier flights and only 4 commuter flights out of a permitted minimum of 25 daily flights), the Airport and the parking areas have experienced overcrowding during peak hours. Further, as discussed

in the DEIR, the existing TSA security areas, baggage claim areas, passenger holdroom areas, passenger gates, and airplane parking areas experience overcrowding during peak times. This condition will only become exacerbated when additional permitted commuter flights are added. Terminal improvements are currently needed to relieve such existing conditions. The project does not propose any changes to the existing regulatory Ordinance and none has been proposed by the City Council. In fact, it has been oft stated that the Council and the community is desirous of protecting the existing Ordinance, and there has been no suggestion that the Ordinance will be repealed or modified in any significant way. Therefore, the construction of the project will not lead to any flights beyond those already permitted by existing regulations.

The capacity of the Long Beach Airport for air carrier and commuter flights is measured by its existing Airport Noise Compatibility Ordinance which sets parameters on the number of flights to and from the Airport. The need for additional passenger gates and additional aircraft parking areas as discussed in the DEIR is to accommodate the existing passenger and air carrier loads at the Airport. Additional aircraft parking spaces will relieve existing congestion and will permit aircraft to more quickly board and unload passengers, and importantly will reduce the idling time of Aircraft, which idling contributes to existing air and noise pollution. Additional aircraft parking areas will likewise allow the aircraft to connect to proposed electrical outlets which will further reduce air and noise pollution. The EIR does cover a reasonable range of alternatives in regard to the number of proposed aircraft parking positions and passenger gates in that the DEIR discusses a range from the “no project” (i.e., no change) alternative to scenarios ranging from 12 to 14 parking positions and an increase in the number of gates to 11. Further, the DEIR has complied with CEQA in regard to studying a reasonable range of “project” alternatives given that the number of gates and the number of parking positions are simply features of the overall project designs.

It is not reasonable to suggest that the existing Airport Noise Compatibility Ordinance will be repealed by the City Council or invalidated by a court of law. As previously stated, the City Council has made clear its desire to retain the existing Ordinance intact. The Ordinance (as explained in the DEIR) was the product of approximately 11 years of litigation in the Federal Courts. The Ordinance has not been challenged in the State or Federal Courts since its adoption and there is no presently pending litigation regarding its viability. Furthermore, the Airport Noise and Capacity Act (ANCA) of 1990 specifically exempts the City from its application in regard to the basic provisions of the Ordinance. There has been no indication from the FAA or Congress of any effort to amend or repeal ANCA so as to affect Long Beach’s existing ordinance. In short, it is not reasonably foreseeable to suggest that there will be a change to the existing regulatory framework regarding the Airport’s Noise Compatibility Ordinance.

In addition, please see Topical Responses 3.1.1 and 3.1.3.

Response 3

The assumptions used to identify potential future optimized flights are described on page 3.6-13 of the Draft EIR. For each airline operating at the airport the assumption was made that the airline would operate the quietest aircraft in its fleet or has on order. The commenter suggests that the EIR look 50 years into the future and estimate noise levels and operations at that point in time. Such an estimate is not feasible or reasonable. First, the dominant airline at Long Beach is Jet Blue and their aircraft fleet is nearly brand new. Airliners have shown to have a very long life span. There are airliners flying today that were built in the early 1970’s. The commenter is correct that aircraft manufacturers are producing quieter aircraft. It is also likely that they will continue to produce ever quieter aircraft. But there is no basis to assume that airliners will get 20% quieter each decade for the next 50 years. The newest aircraft designs are emphasizing noise control, emissions reductions and fuel economy. It is not clear that noise control will

remain a dominant design factor in light of the current emphasis on fuel economy and emissions reduction. Any analysis out to the 50 year mark would be speculative at best and most likely just simply wrong. The question of how many additional flights could be accommodated if the CNEL were reduced to half its current level can be answered. Reducing the CNEL by half would allow twice the number of air carrier operations to occur.

Response 4

The final characteristics of the sound insulation program will be developed within 24 months of the certification of the EIR (MM 3.6-2). The Draft EIR recommends that the City obtain an aviation easement. The terms of that easement have not been determined and will be part of the program development. Ultimately, the terms of any aviation easement or even the requirement for the easement will be determined by the City Council.

Response 5

The 65 CNEL contour is used as a criterion contour consistent with the State of California Airport Noise Regulations, the City of Long Beach Airport Noise Ordinance, and FAA Noise/Land Use Guidelines. It is also important to note that under current FAA policy, federal funding for sound insulation would only be available for homes within the 65 CNEL contour.

Response 6

Each noise contour is drawn as a line according to current state of the art practices and is the most common way of depicting lines of equal loudness. The Draft EIR makes no attempt to slice homes as suggested in the comment. When counting the number of homes in the contours, a home was counted as in the contour if any part of the parcel touched or was within the contour. City of Long Beach parcel maps were used to make this assessment. In terms of the sound insulation program for the schools, the extent to which specific buildings touched by or within the contour or the entire school is insulated will be addressed during the development of the sound insulation program. It is common in sound insulation programs, and permitted for FAA funding, to 'round off' the contours to existing geographic features when determining which homes and buildings to insulate. It is important to recognize that the sound insulation program was developed to mitigate existing or future noise impacts that may occur with or without the project. These impacts are existing or may occur whether or not this project proceeds.

Response 7

Your comments are noted and have been forwarded to the decision makers as part of the Final EIR submittal.

COMMENTS 293 LAURA SELLMER
Dated: January 30, 2006

Response 1

All comments received in writing or provided at the public meetings will be responded to in writing. Copies of all the comments received, as well as the responses to those comments have been posted on the City web site (www.longbeach.gov). In addition, paper copies have been provided to each of the libraries in the City of Long Beach, as well as the main library in the cities of Lakewood and Signal Hill. Notices of the availability of the responses to comments have been sent to all the commenters, as well as to other individuals that have signed up to be on the notification list.

Response 2

The initial set of responses to comments were posted on the City's web site on April 24, 2006. This remaining set of nine comments, which were forwarded to the environmental consultant but did not get included in the original transmittal, were posted on May 10, 2006. Section 15088 of the CEQA Guidelines requires a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report. The Guidelines do not specify any timeframe for public review of the responses to comments or need to distribute the responses to the public. CEQA does not have any maximum time for review of the Final EIR. However, Section 15108 of the CEQA Guidelines, states, "With a private project, the Lead Agency shall complete and certify the final EIR as provided in Section 15090 within one year after the date when the Lead Agency accepted the application as complete. Lead Agency procedures may provide that the one-year time limit may be extended once for a period of not more than 90 days upon consent of the Lead Agency and the applicant." This project does not have a private applicant.

Response 3

The selection of the Proposed Project as the environmentally superior alternative is discussed in Topical Response 3.1.4. The assumption that the smallest alternative or the No Project alternative is the environmentally superior alternative just because it is the smallest does not consider the function of the building and the ability of the project to meet the established project objectives. If the building does not adequately accommodate the passengers associated with the minimum number of flights, it would not accomplish the goals established when undertaking the project. If the holdrooms and screening areas are too limited, it would strain the ability of the project to meet the basic objective of maximizing safety and security of passengers, visitors, and tenants by adhering to Transportation Security Administration, FAA and all applicable State and local standards including the City's fire, building, and safety codes.

It should be noted, that the commenter incorrectly infers that the smaller terminal building would reduce the impact on previously undeveloped open space (Parcel O). The development of Parcel O is associated with the displacement of general aviation aircraft to accommodate the aircraft parking spaces. This parcel has been designated for development for general aviation tie downs and hangars. This parcel has limited value as open space. It is not accessible to the public, has no biological resources, and does not provide any scenic value.

The size of the Proposed Project would not have an influence of the viability of the Airport Noise Compatibility Ordinance. Please see Topical Response 3.1.1 regarding the relationship of the Proposed Project to the Airport Noise Compatibility Ordinance.

Response 4

The HNTB 2004 study was referenced in the EIR because this analysis was done as part of the scoping process for the EIR. This study used to establish the projected minimum facility needed at the Airport based on the projected number of passengers and industry standards for Airport facilities. HNTB presented their findings as a basis from which alternatives could be developed. They presented both optimum and reduced facilities alternatives. The EIR did consider only the alternatives by the City Council; however, when determining the projects ability to meet the project objectives, the full demand should be considered. It is recognized that it is within the City's prerogative to select alternatives that may not fully meet demand, though this does not reduce the inherent demand associated with up to 4.2 million annual passengers. The need to be able to meet applicable codes and standards still has been established as part of the project

objectives. The commenter provides no basis for the conclusion that the HNTB study findings are biased.

Response 5

The noise contours do take into account landings and take offs from both directions, as well as the military aircraft utilizing the Airport. The methodology for developing the noise contours is described on page 3.6-11 of the Draft EIR. Aircraft flight patterns, number of operations, and types of aircraft are used to develop the noise contours. The commenter does not provide the source for the statement, "...the public has just recently learned, that the noise calculations disregard the high (sic) level of noise when a jet is taking off and landing and aircraft wheels on the ground;" therefore, it is not possible to provide further clarification to this basis for this statement.

Response 6

The Final Protocol for Conducting an Air Quality Impact Analysis and Human Health Risk Assessment for the Long Beach Airport (Draft EIR, Appendix C, Attachment A), was reviewed and approved by the SCAQMD, the agency with expertise in this area. In their professional opinion, there was no need to do air quality sampling to assess the potential effect of the Proposed Project. There is further discussion of the methodology for the air quality analysis in Topical Response 3.1.5.

The Draft EIR did evaluate lead as a criteria pollutant, as well as a toxic air contaminant. Specifically, on page 3.2-3, the Draft EIR states, "Metal speciation profiles are distinct for turbine and piston aircraft. For piston aircraft, lead is the only major metal pollutant, due to the use of leaded aviation gas. The lead specification for 100LL (0.56 g/gal) was used to estimate lead emissions from piston aircraft. For turbines, a profile was developed from elemental analysis of Jet A fuel conducted by the U.S. Navy (Shumway 2000). The elemental analysis is included in the protocol Attachment A of the *Air Quality Impact Analysis and Human Health Risk Assessment for the Long Beach Airport* (refer to Appendix C)." Again on page 3.2-12, it states, "The analysis identified eleven TACs of concern for Airport-related sources, including diesel particulate matter (PM), acrolein, formaldehyde, 1-3-butadiene, benzene, chromium VI, acetaldehyde, lead, and manganese, cobalt and naphthalene." Again on Page 3.2-12, the EIR states, "The analysis identified three multi-pathway TACs of concern polycyclic aromatic hydrocarbons (PAHs), dibenzo(a,h)anthracene, and lead. All of these TACs have MP factors greater than one, suggesting that non-inhalation exposure pathways could be important." There are many other references to lead in the health risk assessments, as well as in the public presentations made in November and December 2005.

Response 7

The fact that the EIR was addressing the impacts associated with the commuter flights was not "buried under a topic Airport Advisory Committee" as the commenter indicates. This was identified as a key assumption of the document. It is discussed in multiple locations throughout the EIR, including at a minimum seven times prior to the referenced discussion under the Airport Advisory Committee.

In Section 1.0, Executive Summary there are the following references to commuter flights:

- Section 1.4, Project Description, "The terminal area improvements are being designed to accommodate the 41 airline flights and 25 commuter flights, passengers associated with

those flights, and security requirements imposed by TSA. This number of flights is already permitted by Chapter 16.43 of the Municipal Code.”

- Section 1.4, Project Description, “Though not a component of the Proposed Project, the EIR also addresses the impacts associated with up to 52 commercial flights and full utilization of 25 commuter flights. At the time the baseline for this EIR was established, there were no commuter flights operating out of the Airport. Subsequently, America West has initiated daily commuter flights and Delta and Smooth Flight Holdings have been conditionally granted commuter flights. All 25 commuter flights are expected to be in regular service between December 2005 and Spring 2006.” This is the same discussion referenced as being “buried” in Section 2.4.2.
- Section 1.5, Project Objectives, “The key project objective is to provide Airport facilities to accommodate the minimum permitted number of flights at the Airport (i.e., 41 commercial flights and 25 commuter flights) and the associated number of passengers served on those flights, in full compliance with all applicable fire, building, safety codes and other applicable standards.”
- Section 1.6, Areas of Controversy and Issues to be Resolved, “As discussed in Section 3.6, Noise, the Airport Noise Compatibility Ordinance provides noise thresholds or “noise budgets” for various types of aircraft. While the Airport Noise Compatibility Ordinance provides for a minimum of 25 commuter flights, historically there have been very few commuter flight operations. Some members of the community have expressed a concern that by providing additional facilities that would serve commuter aircraft, the project would encourage commuter operations at the Airport, resulting in greater impacts than currently are experienced. Given that commuter aircraft could operate out of the existing facilities, market factors rather than provision of additional aircraft gates designed for commuter aircraft would have greater influence on whether commuter airlines operate out of the Airport. ... In recognition of the concern associated with any increase in flight levels over current levels, the EIR has addressed the potential impacts associated with the full utilization of 25 commuter flights, even though these flights have already been provided for as part of the Airport Noise Compatibility Ordinance and were addressed in the 1995 environmental documentation for the Ordinance.”
- Section 1.6, Areas of Controversy and Issues to be Resolved, “In response to this concern, a Health Risk Assessment (HRA) has been prepared for the Proposed Project. The HRA addresses not only the terminal area improvements, but also the possible addition of the 11 commercial carrier flights and the full utilization of the 25 commuter flights.”
- Section 1.12, Alternatives, the following is provided as part of the description for each of the alternatives evaluated, “Other aspects of the project, such as the number of gates, aircraft parking and vehicular parking would be the same for Alternative A as for the Proposed Project. As with all the alternatives, the EIR evaluates 52 commercial flights and 25 commuter flights for Alternative A. These assumptions are constant with all the alternatives because the number of flights is not causally related to the project proposed facilities improvements, and any impacts would be applicable to all alternatives because they could occur without any project-proposed improvements.”

In Section 2.0, Project Description, there are the following references to commuter flights prior to the Section referenced by the commenter:

- Section 2.2.2, Regulatory Setting, in the summary of the principle terms of the existing settlement agreement, "Provide flight activity limits at the Airport of a minimum of 41 daily airline (commercial) flights and 25 daily commuter flights, assumed to be all Stage 3 aircraft;"

The discussion of commuter flights was also included two additional times in Section 2.0, Project Description, subsequent to the section referenced by the commenter. This included the actual project description (Section 2.5), the discussion of operational considerations (Section 2.6).

The opinion of members of the community as to the viability of the Smooth Flight Holdings is irrelevant to the analysis in the EIR. The City Council directed that the EIR address the potential impacts associated with the commuter flights prior to the application of Smooth Flight Holdings. At the time the NOP was issued, there were no commuter flights. This point too was reflected in the EIR. The fact is that the provision of the commuter flights is outlined in the Airport Noise Compatibility Ordinance and can occur with or without the Proposed Project.

Response 8

There is a commitment to construct the new facilities to meet high standards for energy efficiency and environmental design. The intention is to construct the facilities consistent with the LEED standards. LEED, which stands for Leadership in Energy and Environmental Design is 'based on well-founded scientific standards, LEED standards emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED standards recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.' (U.S. Green Building Council, <http://www.usgbc.org>). Precise methods for accomplishing the LEED standards would be determined through project design. Until a design of the terminal facilities is established it is not possible to state with certainty which measures would be implemented. The web site for the U.S. Green Building Council, (<http://www.usgbc.org>), which was provided in the EIR, is a good resource that identifies the type of measures that can be implemented to obtain the LEED certification. A variety of measures and options are available. The web site outlines the rating and certification processes. Certification is done at the design or construction stage.

While LEED does not advocate overbuilding, nor does it require that a facility be designed to inadequately accommodate the use being proposed, which for the Proposed Project is provide Airport terminal facilities to adequately accommodate the minimum number of flights provided for in the Airport Noise Compatibility Ordinance, as well as the number of passengers served by those flights. The project design must provide for the following be able to meet all applicable, federal, State and local standards including the City's fire, building, and safety codes. An airport has special space requires to accommodate the special needs of travelers. The size of the facility was based on an evaluation of the needs of the travelers, as well as applicable codes. The size terminal building for all of the alternatives is substantially less than what was recommended by the study conducted as part of scoping. Construction of terminal improvements that would not serve the demand and necessitate other improvements or use of temporary modular buildings, similar to existing conditions, would not be environmentally superior. As indicated in the Draft EIR (page 1-25),

...based on the *Facility Requirements Analysis, Long Beach Municipal Airport*⁷⁶
study which was prepared during the scoping process, the recommended sizes

⁷⁶ HNTB 2004.

of the facilities to best meet the needs for the passengers, visitors, and tenants actually exceeded the square footage allocation of even the Proposed Project.

Refer to Topical Response 3.1.4 regarding the environmentally superior alternative.

It should be noted, that the commenter incorrectly infers that the smaller terminal building would reduce the impact on previously undeveloped open space (Parcel O). The development of Parcel O is associated with the displacement of general aviation aircraft to accommodate the aircraft parking spaces. This has nothing to do with LEED standards.

Provisions for public transit service have been incorporated into the Airport in the future development plan. It should be noted that the Airport currently provides Long Beach Transit (LBT) access to the Airport and intends to include an accessible, convenient LBT stop in any future improvements. The Airport is planning a “ground transportation plaza” as well as other changes in traffic circulation to facilitate multiple ground transportation services. The City has committed to work with LBT to ensure that transit design guidelines are considered in the design of these areas and in the location of LBT bus stop(s).

Response 9

The new facilities would be connected to the existing Terminal Building, per TSA requirements. The reference to the new construction being setback from the existing building was intended to communicate that the existing Terminal Building would not be surrounded on all sides by the proposed addition. The existing building would still be distinct from the proposed new space. The exhibits showing the relationship of the existing Terminal Building to the proposed additions was provided to more fully communicate what is being proposed.

Response 10

As indicated in response to Comment 7, above, the City Council directed that the EIR address the potential impacts associated with the commuter flights provided for in the Airport Noise Compatibility Ordinance, which would include accommodating the passengers associated with those flights. There was nothing in the Project Description to indicate that the size of the concession facilities assumed that commuter passengers would be interested in full meals. When sizing the concession facilities, it must be recognized that all passengers are required to be at the Airport substantially before their flight to allow sufficient time for security screening and that most commercial flights provided limited food service.

The distribution of flights throughout the day is market driven. Except for provisions of the curfew, the City cannot dictate the time of day when the airlines must schedule their operations. The City would not be able to have the airlines schedule flights to alleviate peak demand in concession areas.

Response 11

The concept design provides four areas that would be covered, but open air (not enclosed). These are the baggage make-up areas, the ticketing and queuing areas, an area for “meeters and greeters,” and the baggage claim area. A covered area for baggage make-up area (where the airlines receive screened bags from TSA, which are then sorted and loaded onto baggage carts) is needed to protect the screened baggage from the elements. Currently, this area is provided for in one of the tents used by TSA. The intention of the project is to eliminate the need for tent facilities at the Airport. Leaving baggage out in inclement weather is not a reasonable alternative. The ticketing and queuing area, as well as the area for “meeters and greeters,” is

intended to eliminate congestion in front of the terminal building and provide for protected spaces for these uses. Having a designated area for “meeters and greeters” enhances safety. This space is most effective outside of the terminal building. The final area, the baggage claim area, is currently outside the existing terminal building and was designated as such by the City Council when defining the scope of the Proposed Project and alternatives.

Response 12

TSA has indicated that the current open-air baggage security screening area is not sufficient because of the sensitivity of the equipment being used. TSA has further indicated its requirement for a fully enclosed, air-conditioned building for checked baggage screening. These requests are memorialized in a document entitled, *Transportation Security Administration Space Requirements at Long Beach Airport*. The in-line baggage conveyors that are currently being used are placed within a tent with the equipment placed on pallets to keep them dry. The Aviation and Transportation Security Act authorizes TSA to conduct the passenger and baggage screening.

Response 13

As footnoted in the Draft EIR, the referenced text was taken verbatim from the March 22, 1990 Memorandum used when the Terminal Building was nominated as a historical landmark. The Memorandum was documenting the contribution of McDonnell Douglas and the Douglas Aircraft Company's contribution to the development of the economy of Long Beach since its founding in 1924. This section has nothing to do with criterion for selecting a terminal improvement. The criterion that are cited are the criterion that the Long Beach Cultural Heritage Commission considered when evaluating the terminal building for landmark status. Economic factors are not used as a consideration in evaluating the Proposed Project or the alternatives.

The appropriateness of the economic report prepared in 2004 is not relevant to this EIR because it was not used as the basis for determining the scope of the project, in the evaluation of the project, or as part of any recommendations associated with this EIR.

Response 14

Your opinions are noted and have been forwarded to the decision-makers as part of the Final EIR. The Cultural Heritage Commission would determine the conformance of the design with the Secretary of Interior's standards at the time of issuance of the Certificate of Appropriateness.

Response 15

Page 3.4-7 of the Draft EIR does acknowledge the potential contribution of aurally deposited lead associated with use of jet fuel and diesel fuel. It states that elevated concentrations of lead are likely to be found in near-surface soil at the Airport, especially in those areas where unpaved soil and medians will be disturbed as a result of project grading/construction. As such, the standard condition requiring testing of the soil for aurally deposited lead has been applied. Should quantities of aurally deposited lead exceed acceptable thresholds, the City shall develop a remediation program to dispose of soil material consistent with state and federal regulations. It should be noted that testing done in March 2006 for a pavement rehabilitation project for Taxiways L and C did not identify lead deposits in excess of standards. The Airport took 3 samples at 13 locations for a total of 39 tests samples. The Total Lead ranged from 2.3 to 29.0 mg/kg. The California Modified Preliminary Remediation Goal is 150 mg/kg and the Caltrans' variance with the Department of Toxic Substance Control does not require remediation

if Total Lead is less than 350 mg/kg. Therefore, so, at 2.3 to 29.0 mg/kg, no remediation for aurally deposited lead is required.

Additionally, it should be noted that the air quality analysis evaluated the potential impact associated with lead in air emissions as a criteria pollutant (see Section 3.2 of the Draft EIR). The lead specification for 100LL (0.56 g/gal) was used to estimate lead emissions from piston aircraft.

Response 16

The noise contours do take into account landings and take offs from both directions, as well as the military aircraft utilizing the Airport. The methodology for developing the noise contours is described on page 3.6-11 of the Draft EIR. Aircraft flight patterns, number of operations, and types of aircraft are used to develop the noise contours.

Response 17

As discussed on page 3.7-6, staffing levels for airport security, police, fire, paramedic, and TSA personnel are tied to the number of passengers and flights served by the Airport. Because the Proposed Project would not alter the number of passengers or flights at the Airport, there would be no impact on staffing levels. As indicated above, the distribution of flights throughout the day is market driven and is not controlled by the City.

Response 18

The EIR does not state that the TSA mandates the improvements. The improvements are necessary to effectively meet the security requirements imposed by TSA, which includes passenger and baggage screening. Space and facilities must be provided to accommodate the employees and equipment associated with the security screening. Given the sensitivity of the equipment that is used for the screening, the current conditions are not adequate for long-term operations.

Response 19

The flight assumptions for the Optimized Flights Scenario are presented in the Draft EIR on pages 3.6-12 through 3.6-14. For purposes of analysis, it was assumed that all new flights would be distributed throughout day according to the present distribution of flights, with reduced night operations. It assumed the airlines would continue to use the current fleet mix and operate within current markets. Therefore, it is a reasonable assumption that without any improvements to the existing facilities, that there would be additional congestion with the No Project Alternative as the Airport attempts to serve the additional 850,000 annual passengers associated with the Optimized Flights without providing any physical improvements. It is not reasonable to assume that flights at the Airport would be evenly distributed throughout the day to avoid peak hour demands on facilities. As indicated above, the distribution of flights throughout the day is market driven. The occurrences of peaks in flight activity can be found at all airports. The airlines respond to the times that passengers want to fly. Except for provisions of the curfew, the City cannot dictate the time of day when the airlines must schedule their operations.

Response 20

As discussed above, the distribution of flights throughout the day is market driven. Just as freeways and roadways experience peak hour demands due to driver demand, the Airport experiences peak hour in flight demand. There is no indication that Jet Blue or any other airline

has manipulated scheduling to make the Airport look inadequate. The occurrences of peaks in flight activity can be found at all airports.

Response 21

A review of the trip generation rates used in the analysis demonstrates that some ride-sharing, transit use, or shuttle services are being used at the Airport. As noted in the Draft EIR on page 3.8-3, the trip generation of 1.77 daily trips per passenger expresses the trips with regards to the number of daily trips per passenger, but factors in employee trips and delivery trips as well. As indicated above, the Airport currently provides Long Beach Transit access to the Airport and intends to include an accessible, convenient LBT stop in any future improvements. The proposed improvements would provide for a “ground transportation plaza” as well as other changes in traffic circulation to facilitate multiple ground transportation services.

The construction traffic analysis provided for a worse case peak-hour traffic analysis, which assumed up to 50 peak hour trips. No specific parking assumptions were made for the construction trips. It is assumed that the construction-related parking would occur within the construction area or in a designed area on the Airport.

Response 22

The City's Airport Noise Compatibility Ordinance, LBMC 16.43, Section 16.43.090 A, established and defined the role and responsibility of the General Aviation Noise Committee (GANC). The commenter is correct that several years ago the group changed their working name to the Aviation Noise Abatement Committee (ANAC). Per the Ordinance, this committee is not mandatory and the decision to organize such a committee is at the discretion of the Airport's General Aviation Owner/Operators. Their stated purpose is “to encourage voluntary noise abatement efforts.”

Response 23

The noise contours do take into account landings and take offs from both directions, as well as the military aircraft utilizing the Airport. The methodology for developing the noise contours is described on page 3.6-11 of the Draft EIR. Aircraft flight patterns, number of operations, and types of aircraft are used to develop the noise contours.

Response 24

Your comment is noted. Exhibit 2-4 is identified as the generalized location of the terminal improvements. Parcel O is the location for the relocation of general aviation tie-down spaces. The location of Parcel O is depicted in Exhibit 2-7. Exhibit 2-3 depicts the location of the terminal area, as well as Parcel O. This provides the reader perspective of two locations where improvements are proposed.

Response 25

Your comment is noted. An exhibit is provided at the end of these responses to comments that depict the maximum 14 aircraft parking spaces.

Response 26

Discussion of the visual aspects of the project, including a line of site drawing for the parking structure is provided in Attachment A of these responses to comments.

Response 27

The Final Protocol for Conducting an Air Quality Impact Analysis and Human Health Risk Assessment for the Long Beach Airport (Draft EIR, Appendix C, Attachment A), was reviewed and approved by the SCAQMD, the agency with expertise in this area. There is further discussion of the methodology for the air quality analysis in Topical Response 3.1.5.

COMMENTER 294 LORRAINE FITTON

Dated: January 30, 2006

Response 1

There is a commitment to construct the new facilities to meet high standards for energy efficiency and environmental design. The intention is to construct the facilities consistent with the LEED standards. LEED, which stands for Leadership in Energy and Environmental Design is 'based on well-founded scientific standards, LEED standards emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED standards recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.' (U.S. Green Building Council, <http://www.usgbc.org>). This would be implemented through a variety of design features. Precise methods for accomplishing the LEED standards would be determined through project design.

It is recognized that construction of facilities in excess of what is required to serve the demand would not be efficient; however, it is also necessary to provide sufficient facilities to serve the demand. Construction of terminal improvements that would not serve the demand and necessitate other improvements or use of temporary modular buildings, similar to existing conditions, would not be environmentally superior. As indicated in the Draft EIR (page 1-25),

...based on the *Facility Requirements Analysis, Long Beach Municipal Airport*⁷⁷ study which was prepared during the scoping process, the recommended sizes of the facilities to best meet the needs for the passengers, visitors, and tenants actually exceeded the square footage allocation of even the Proposed Project.

Refer to Topical Response 3.1.4 regarding the environmentally superior alternative.

Response 2

The number of parking spaces required was calculated from a professional parking study entitled "Long Beach Airport Parking Adequacy Analysis", which was conducted for the City in 2001. The study showed a need for 2.75 parking spaces for each 1,000 annual enplanements. Currently, during peak travel periods the existing parking structure at the Airport is full. This results in vehicles driving around looking for parking and needing to go out to the remote lot (Lot D). If sufficient parking were not provided, there would be an increase in the number of passenger drop-off and pick-up trips because some of the passengers would have no other option but to be dropped off, increasing the overall amount of traffic at the airport. In addition to increasing the overall amount of traffic at the Airport, this would also result in greater air quality impacts. Therefore, the DEIR's conclusion that additional parking is an integral part of the environmentally superior alternative is accurate.

⁷⁷ HNTB 2004.

Response 3

All of the public testimony that was given at public meetings on November 29, December 3, December 5, and December 15, 2005 is provided in the Responses to Comments document dated April 24, 2006. These meetings, which were held after the release of the Draft EIR, constitute all of the official public meetings on the Draft EIR. It should be noted that after the original Notice of Preparation for the proposed project was released, the Airport Advisory Commission (AAC) held a series of 15 public meetings between November 2003 and July 2004 at which the proposed project was discussed. Though not part of the formal scoping process, the AAC used these meetings to consider the public's recommendations regarding possible Airport improvements. The AAC's recommendations were then forwarded to the City Council which, on February 8, 2005, directed the DEIR consultant team not to carry forward AAC's recommended facility size (133,000 square feet), opting instead for a smaller (102,850 square feet) proposed project. Each of the project alternatives that is evaluated in the DEIR is smaller than the proposed project.

Response 4

Refer to Topical Response 3.1.6, Nighttime Noise Violation Review Process, regarding the types of operations that are, by federal law, exempted from complying with the City's noise limits/curfew.

Response 5

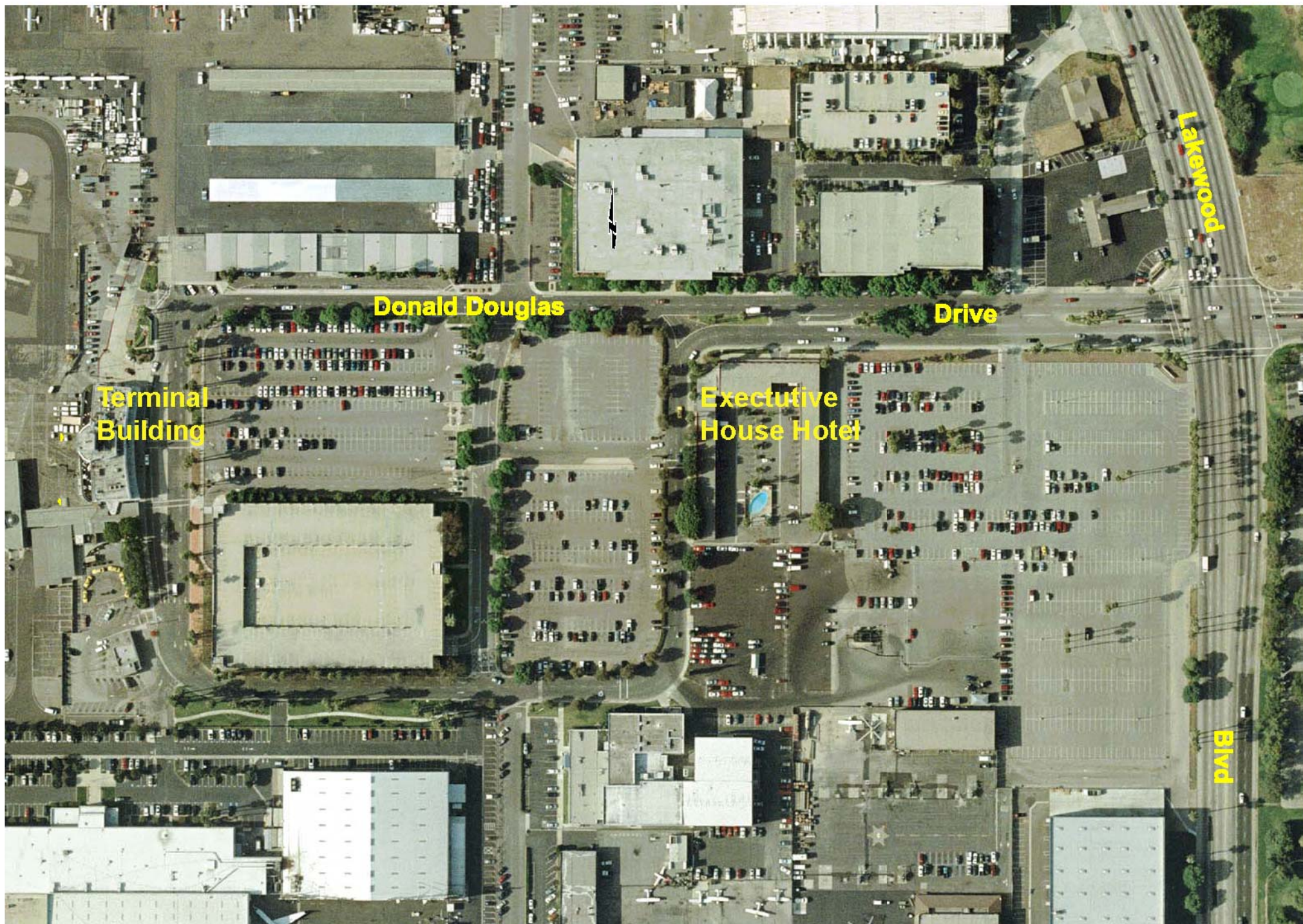
Please see Topical Response 3.1.5, Methodology for the Air Quality Impact Analysis and Human Health Risk Assessment, regarding air sampling data near the Airport.

Regarding lead emissions, the emissions inventory does include lead emissions from piston-driven aircraft fueled on leaded aviation gasoline, as noted in the Draft EIR, Appendix C, Section 3.1.1.4. Lead emissions are summarized in Table 3-8 of Appendix C. Concentrations of lead are included in the Draft EIR, Section 3.2, Tables 3.2-13, 3.2-17, and 3.2-20. These lead concentrations do not exceed any significance thresholds or ambient air quality standards.

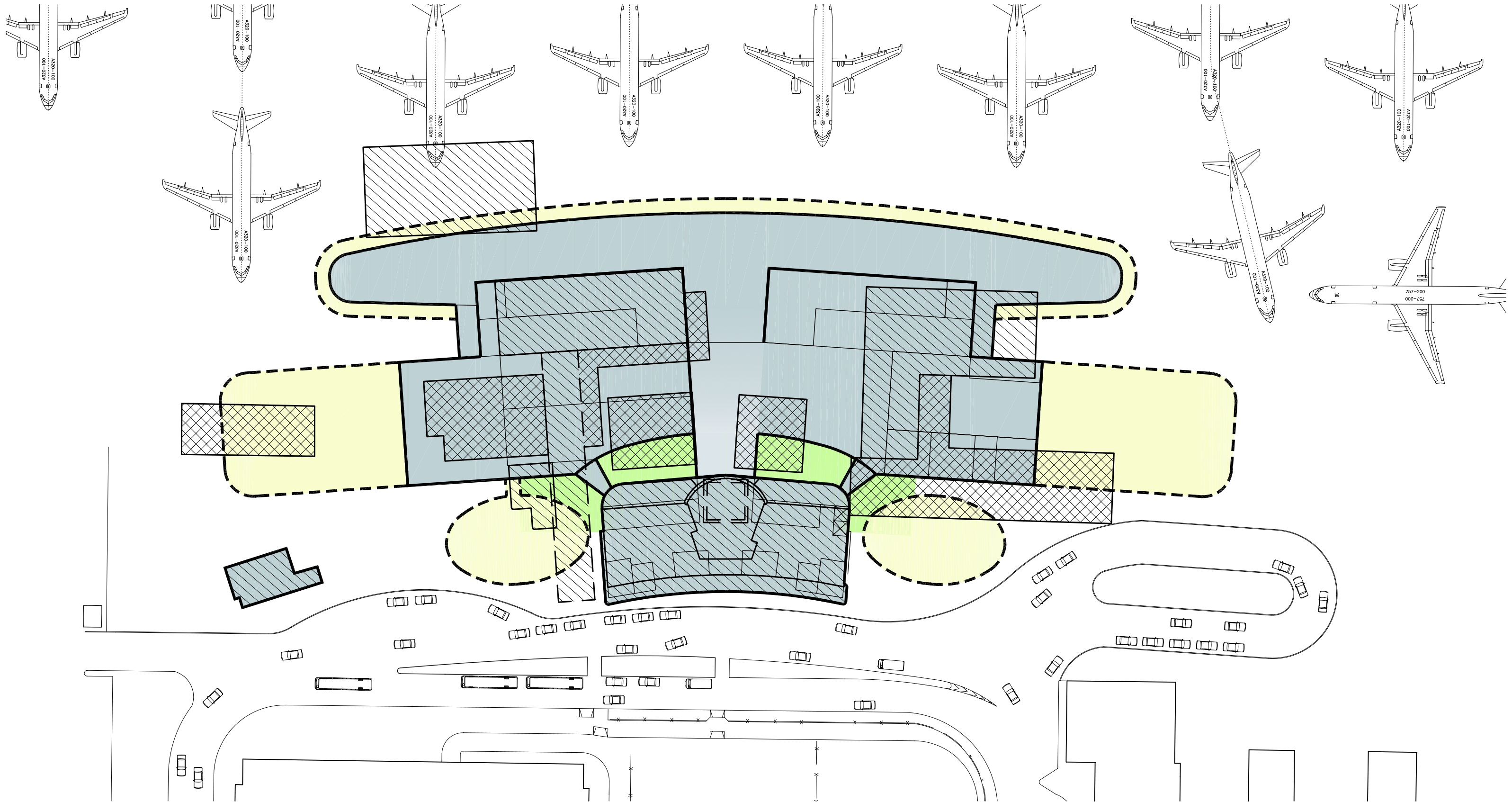
Quantitative analysis of any cumulative impacts of future projects at the Ports of LA and Long Beach and the 710 Freeway expansion are beyond the scope of this Draft EIR. The City has no way of knowing if and when such projects will be undertaken and what the timing and scope of the projects, if approved, might be. Any such projects conducted in the future would be subject to CEQA and would have to account for cumulative impacts, including those associated with airport improvement. Only at such time would sufficient information be available to assess potential cumulative health risks.

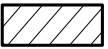
ATTACHMENT A

SUPPLEMENTARY VISUAL ANALYSIS EXHIBITS



Long Beach Terminal Area Improvement Project
1999 Aerial Photo of Terminal Area

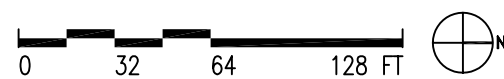


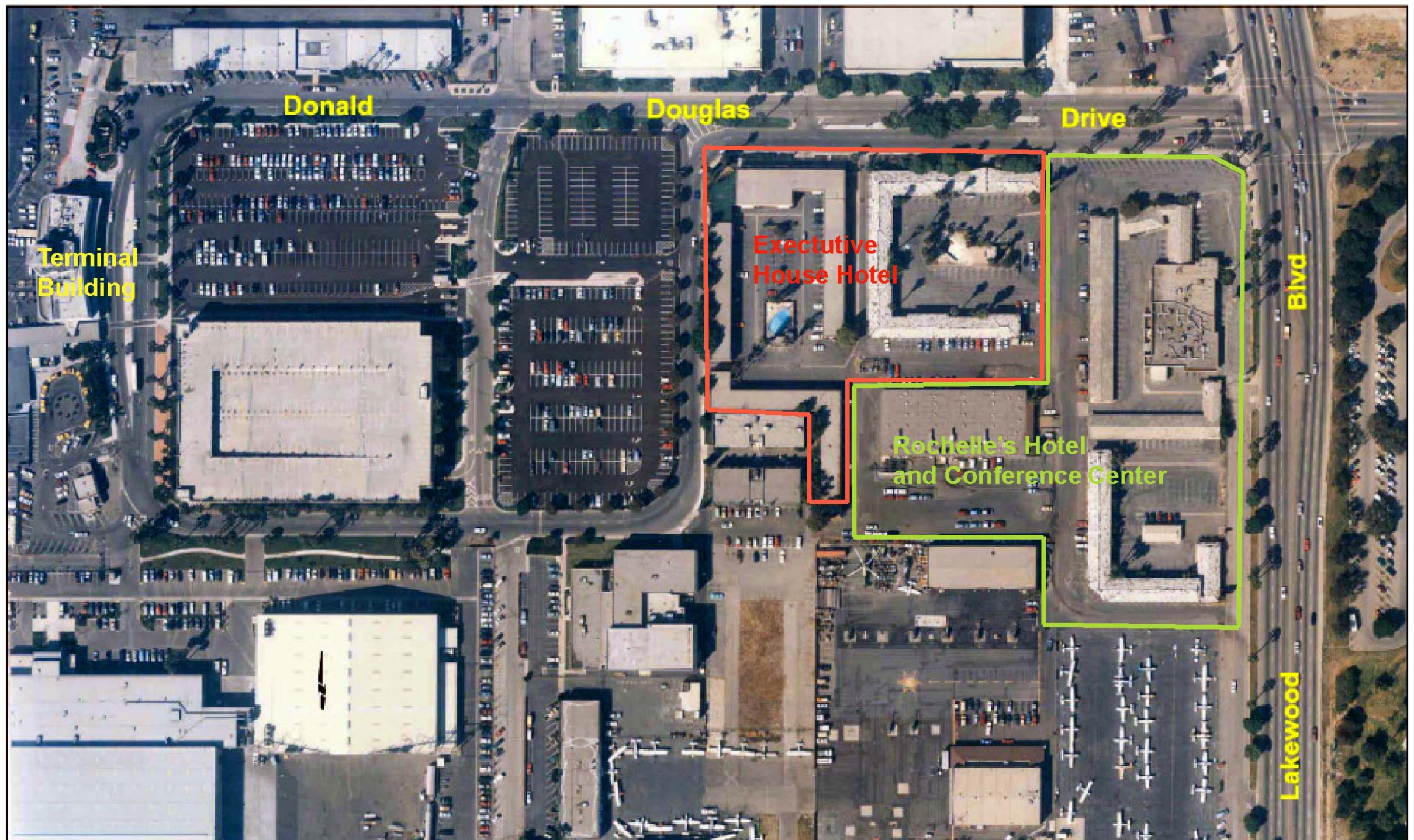
- | | | | |
|---|---------------------------------------|---|----------------------------------|
|  | PROPOSED COVERED AREA / ROOF OVERHANG |  | EXISTING TERMINAL FACILITIES |
|  | PROPOSED ENCLOSED AREA |  | EXISTING OUTDOOR / COVERED AREAS |
|  | PROPOSED GREEN AREA | | |

EXISTING / PROPOSED OVERLAY

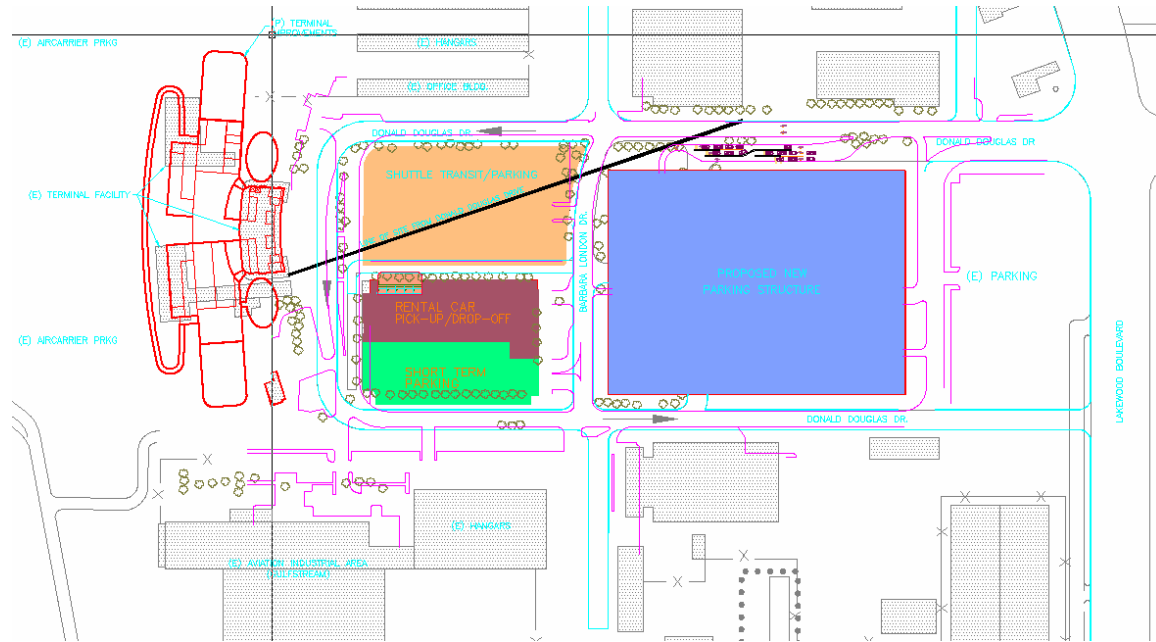


Long Beach Airport Terminal Improvement Project
2005.12.06



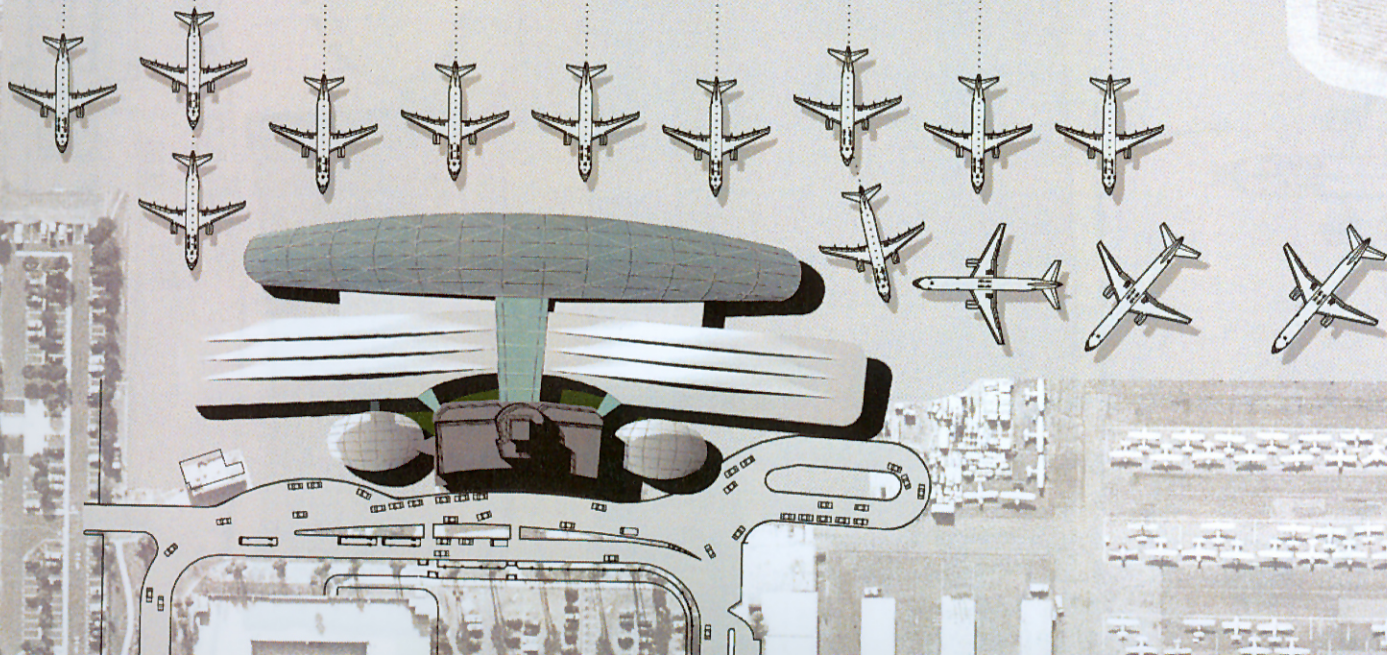


Long Beach Terminal Area Improvement Project
1991 Aerial Photo of Terminal Area



Long Beach Airport Terminal Area Improvements
Line of Sight from Donald Douglas Drive to the Airport Terminal

LONG BEACH



ATTACHMENT B
CUMULATIVE PROJECTS LIST

APPENDIX H
CUMULATIVE PROJECTS LISTS

1. Cumulative Projects List From Douglas Park EIR Traffic Study
2. Cumulative Projects List from the City of Signal Hill
3. Cumulative Projects List from the City of Lakewood

Table 11
Related Projects Description and Trip Generation

| Map No. | Jurisdiction | Size | Description | Location | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---------|--------------|------------|---|---|--------|--------------|-----|-------|--------------|-----|-------|
| | | | | | | I/B | O/B | Total | I/B | O/B | Total |
| 1 | Lakewood | 1,131 sf | Market Expansion | 5453 South Street | 130 | 0 | 0 | 0 | 10 | 10 | 20 |
| 2 | Lakewood | 16,500 sf | Church | 3114 South Street | 150 | 6 | 6 | 12 | 6 | 5 | 11 |
| 3 | Lakewood | 11 du | Apartment | 20808 Seine Avenue | 200 | 1 | 8 | 9 | 17 | 8 | 25 |
| 4 | Lakewood | 15 du | Apartment | 20603 Seine Avenue | 220 | 2 | 9 | 11 | 18 | 9 | 27 |
| 5 | Lakewood | 19,676 sf | Shopping Center | 4116-4128 South Street | 2,400 | 37 | 24 | 61 | 103 | 112 | 215 |
| 6 | Lakewood | 94,268 sf | Department Store (Kohl's) | 2650 Carson Street | 6,560 | 94 | 60 | 154 | 290 | 314 | 604 |
| 7 | Lakewood | 8,015 sf | Restaurant/Bar | 4634 Candlewood Street | 720 | 5 | 1 | 6 | 40 | 20 | 60 |
| 8 | Lakewood | 6,853 sf | Restaurant | 4404 Candlewood Street | 620 | 5 | 1 | 6 | 34 | 17 | 51 |
| 9 | Lakewood | 168,000 sf | Department Store (Target) | Del Amo and Lakewood (Lakewood Center Mall) | 9,520 | 133 | 85 | 218 | 424 | 460 | 884 |
| 10 | Lakewood | 14,436 sf | Drug Store (Walgreens) | 5829 Lakewood Boulevard | 1,290 | 41 | 29 | 70 | 54 | 56 | 110 |
| 11 | Lakewood | 35,192 sf | Retail (tenant improvement) | Del Amo and Lakewood (Lakewood Center Mall) | 1,430 | 108 | 118 | 226 | 39 | 52 | 91 |
| 12 | Lakewood | 9,587 sf | Commercial Retail | 2700-18 Carson Street | 390 | 29 | 32 | 61 | 11 | 14 | 25 |
| 13 | Lakewood | 12,000 sf | Drug Store (CVS) | 4909 Paramount Boulevard | 1,070 | 28 | 19 | 47 | 45 | 47 | 92 |
| 14 | Lakewood | 2,700 sf | Commercial Retail | 4925-63 Paramount Boulevard | 110 | 8 | 9 | 17 | 3 | 4 | 7 |
| 15 | Lakewood | 10 du | Condominium | 11716-24 205th Street | 90 | 1 | 7 | 8 | 6 | 3 | 9 |
| 16 | Lakewood | 8 du | Condominium | 11711-19 216th Street | 80 | 1 | 6 | 7 | 5 | 3 | 8 |
| 17 | Lakewood | 20 du | Condominium | 20741-20809 Seine Avenue | 170 | 2 | 12 | 14 | 11 | 5 | 16 |
| 18 | Lakewood | 8 du | Single-Family Residential (planned development) | 5813 Allington Street | 100 | 5 | 13 | 18 | 8 | 4 | 12 |
| 19 | Lakewood | 20 du | Single-Family Residential (planned development) | SE corner of Paramount and Candlewood | 240 | 7 | 19 | 26 | 17 | 9 | 26 |
| 20 | Long Beach | 430 rm | Hotel | 100 East Ocean Boulevard | 3,840 | 177 | 129 | 306 | 149 | 155 | 304 |
| 21 | Long Beach | 16,200 sf | Drug Store (Sav-On) | 6000 Atlantic Avenue | 1,450 | 51 | 36 | 87 | 61 | 63 | 124 |
| 22 | Long Beach | 160 du | Apartment | 3801 Pacific Coast Highway | 1,090 | 13 | 70 | 83 | 70 | 35 | 105 |
| 23 | Long Beach | 106 du | Single-Family Residential | 2080 Obispo Avenue | 1,090 | 22 | 65 | 87 | 74 | 41 | 115 |
| 24 | Long Beach | 500,000 sf | Commercial/Entertainment | Shoreline Drive & Pine Avenue | 19,190 | 254 | 163 | 417 | 872 | 944 | 1,816 |
| 25 | Long Beach | 162 rm | Hotel | 201 The Promenade | 1,450 | 56 | 41 | 97 | 49 | 50 | 99 |
| 26 | Long Beach | 400,000 sf | Technology Park Industrial/R&D | 2000 West 19th Street | 3,240 | 412 | 84 | 496 | 65 | 367 | 432 |

Table 11 (cont.)
Related Projects Description and Trip Generation

| Map No. | Jurisdiction | Size | Description | Location | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---------|--------------|------------|--|--------------------------------------|--------------|--------------|------------|------------|--------------|------------|------------|
| | | | | | | I/B | O/B | Total | I/B | O/B | Total |
| 27 | Long Beach | 82 du | Condominium (50 adaptive reuse/ 32 new construction) | 835 Locust Street | 550 | 7 | 37 | 44 | 35 | 17 | 52 |
| 28 | Long Beach | 92,000 sf | Self Storage | 4200 Pacific Coast Highway | 220 | 8 | 6 | 14 | 14 | 8 | 22 |
| 29 | Long Beach | 66 du | Condominium | 1000 E. Ocean Boulevard | 460 | 6 | 31 | 37 | 29 | 15 | 44 |
| 30 | Long Beach | 770 du | Apartment | 300 W. Ocean Boulevard | 4,750 | 62 | 324 | 386 | 291 | 144 | 435 |
| | | 500 rm | Hotel | | 4,460 | 209 | 152 | 361 | 177 | 185 | 362 |
| | | 25,000 sf | Commercial | | <u>2,800</u> | <u>43</u> | <u>27</u> | <u>70</u> | <u>121</u> | <u>131</u> | <u>252</u> |
| | | | | | 12,010 | 314 | 503 | 817 | 589 | 460 | 1,049 |
| 31 | Long Beach | 302 du | Residential | 6400 E. Pacific Coast Highway | 2,870 | 56 | 169 | 225 | 186 | 104 | 290 |
| | | 199 rm | Hotel | | <u>1,780</u> | <u>73</u> | <u>53</u> | <u>126</u> | <u>61</u> | <u>64</u> | <u>125</u> |
| | | | | | 4,650 | 129 | 222 | 351 | 247 | 168 | 415 |
| 32 | Long Beach | 470,000 sf | Retail | 301 Long Beach Boulevard | 18,440 | 245 | 157 | 402 | 837 | 907 | 1,744 |
| | | 250 du | Apartment | | <u>1,630</u> | <u>20</u> | <u>107</u> | <u>127</u> | <u>103</u> | <u>51</u> | <u>154</u> |
| | | | | | 20,070 | 265 | 264 | 529 | 940 | 958 | 1,898 |
| 33 | Long Beach | 75,100 sf | Self Storage | 2323 South Street | 180 | 6 | 5 | 11 | 12 | 6 | 18 |
| 34 | Long Beach | 179,000 sf | General Office | 5950 Spring Street | 2,080 | 261 | 36 | 297 | 48 | 232 | 280 |
| 35 | Long Beach | 15,200 sf | Drug Store | 1250 E. Pacific Coast Highway | 1,360 | 46 | 32 | 78 | 57 | 59 | 116 |
| 36 | Long Beach | 34 du | Condominium | 834 E. 4th Street | 260 | 4 | 18 | 22 | 17 | 8 | 25 |
| | | 6,900 sf | Commercial | | <u>280</u> | <u>21</u> | <u>23</u> | <u>44</u> | <u>8</u> | <u>10</u> | <u>18</u> |
| | | | | | 540 | 25 | 41 | 66 | 25 | 18 | 43 |
| 37 | Long Beach | 20,000 sf | Police Station | 4891 Atlantic Avenue | 1,380 | 99 | 19 | 118 | 164 | 57 | 221 |
| 38 | Long Beach | 10 du | Condominium | 23 4th Place | 90 | 1 | 7 | 8 | 6 | 3 | 9 |
| 39 | Long Beach | 556 du | Condominium | 350 E. Ocean Boulevard | 2,800 | 34 | 165 | 199 | 170 | 84 | 254 |
| 40 | Long Beach | 48 du | Apartment | 248 W. Broadway | 420 | 4 | 23 | 27 | 30 | 15 | 45 |
| | | 9,000 sf | Commercial | | <u>370</u> | <u>28</u> | <u>30</u> | <u>58</u> | <u>10</u> | <u>13</u> | <u>23</u> |
| | | | | | 790 | 32 | 53 | 85 | 40 | 28 | 68 |
| 41 | Long Beach | 105,800 sf | Hospital | 2702 Long Beach Boulevard | 3,020 | 101 | 37 | 138 | 30 | 96 | 126 |
| 42 | Long Beach | 8,000 sf | Specialty Retail Center | 2302 Bellflower Boulevard | 330 | 24 | 27 | 51 | 9 | 12 | 21 |
| 43 | Long Beach | 66 du | Apartment | 1601 Pacific Avenue | 530 | 6 | 30 | 36 | 36 | 18 | 54 |
| 44 | Long Beach | | Boeing - Cleanup and Abatement Order 95-048 | Lakewood Boulevard and Carson Street | nom. | nom. | nom. | nom. | nom. | nom. | nom. |
| 45 | Long Beach | 63 du | Senior Citizens Assisted Living (conversion) | 117 E. 8th Street | N/A | 5 | 8 | 13 | 9 | 5 | 14 |

Table 11 (cont.)
Related Projects Description and Trip Generation

| Map No. | Jurisdiction | Size | Description | Location | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---------|--------------|-----------------------|--|-----------------------------------|------------------|--------------|-------------|---------------|----------------|---------------|----------------|
| | | | | | | I/B | O/B | Total | I/B | O/B | Total |
| 46 | Long Beach | 50,000 sf
1,300 sp | Queen Mary Expanded Attractions
Attraction Venue
Parking Structure | 1126 Queen's Highway ¹ | 4,370 | 65 | 41 | 106 | 191 | 206 | 397 |
| 47 | Long Beach | 52 du | Single-Family Residential | 301 Manila Avenue | 570 | 12 | 37 | 49 | 39 | 22 | 61 |
| 48 | Long Beach | 69 rm | Hotel | 517 E. 1st Street | 620 | 14 | 10 | 24 | 18 | 19 | 37 |
| 49 | Long Beach | | Parking Structure for Carnival Cruise Ships | 1126 Queen's Highway ¹ | nom. | nom. | nom. | nom. | nom. | nom. | nom. |
| 50 | Long Beach | 7,000 sf
1,500 sf | Retail
Fast-Food Restaurant with Drive-Thru | 3400 Long Beach Boulevard | 280
740 | 22
38 | 23
37 | 45
75 | 8
26 | 10
24 | 18
50 |
| 51 | Long Beach | 19,500 sf | Commercial | 190 Marina Drive | 2,380 | 37 | 23 | 60 | 102 | 111 | 213 |
| 52 | Long Beach | 16 du | Residential Lofts (conversion) | 829 Pine Avenue | 230 | 2 | 9 | 11 | 18 | 9 | 27 |
| 53 | Long Beach | 35 du | Condominium | 6000 Loynes Drive | 270 | 4 | 18 | 22 | 17 | 9 | 26 |
| 54 | Long Beach | 71,536 sf
1,100 sf | Self-Storage
General Office | 5400 Paramount Boulevard | 170
40
210 | 6
4
10 | 5
1
6 | 11
5
16 | 11
14
25 | 6
67
73 | 17
81
98 |
| 55 | Long Beach | 106,636 sf | Self-Storage Facility and RV Parking | 6897 Paramount Boulevard | 250 | 9 | 7 | 16 | 17 | 9 | 26 |
| 56 | Long Beach | 58,500 sf | Shopping Center | 120 Studebaker Road | 4,830 | 71 | 45 | 116 | 212 | 229 | 441 |
| 57 | Long Beach | 6,172 sf
2,714 sf | Commercial
Fast-Food Restaurant with Drive-Thru | 3918-3926 Long Beach Boulevard | 250
1,350 | 19
69 | 21
66 | 40
135 | 7
47 | 9
44 | 16
91 |
| 58 | Long Beach | 11,984 sf | Commercial | 1570-1598 Long Beach Boulevard | 490 | 37 | 40 | 77 | 13 | 18 | 31 |
| 59 | Long Beach | 3,200 sf | Fast-Food Restaurant with Drive-Thru | 1840 Long Beach Boulevard | 1,590 | 82 | 78 | 160 | 56 | 51 | 107 |
| 60 | Long Beach | 519,135 sf | Self-Storage | 712 W. Baker Street | 1,250 | 46 | 32 | 78 | 83 | 46 | 129 |
| 61 | Long Beach | 11,550 sf | Drug Store with Drive-Thru | 3570 Atlantic Avenue | 1,030 | 25 | 18 | 43 | 43 | 45 | 88 |
| 62 | Long Beach | 30,000 sf | Education Building | 2244 Clark Avenue | 1,570 | 24 | 10 | 34 | 91 | 98 | 189 |
| 63 | Long Beach | 15,000 sf | Commercial | 2005-2011 Long Beach Boulevard | 610 | 46 | 50 | 96 | 17 | 22 | 39 |
| 64 | Long Beach | 5 du | Single-Family Residential | 315 Flint Avenue | 70 | 4 | 12 | 16 | 5 | 3 | 8 |
| 65 | Long Beach | 11 du | Condominiums (conversion) | 201-205 E. Broadway | 100 | 2 | 7 | 9 | 7 | 3 | 10 |
| 66 | Long Beach | 10,000 sf | Office/Retail | 1900 Atlantic Avenue | 230 | 26 | 4 | 30 | 15 | 76 | 91 |
| 67 | Long Beach | 4,000 sf | Expansion/Remodel of Target Store
(net increase) | 2270 Bellflower Boulevard | 160 | 12 | 14 | 26 | 4 | 6 | 10 |

Table 11 (cont.)
Related Projects Description and Trip Generation

| Map No. | Jurisdiction | Size | Description | Location | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---------|--------------|------------|--|--|--------------|--------------|-----------|------------|--------------|-----------|------------|
| | | | | | | I/B | O/B | Total | I/B | O/B | Total |
| 68 | Long Beach | 41,000 sf | Church Expansion | 5950 E. Willow Street | 370 | 16 | 14 | 30 | 15 | 12 | 27 |
| 69 | Long Beach | 6,356 sf | Industrial Building | 1690-1694 Cota Avenue | 44 | 5 | 1 | 6 | 1 | 5 | 6 |
| 70 | Long Beach | 201 rm | Transitional Housing Facility | 2001 River Avenue | 1,340 | 16 | 87 | 103 | 85 | 42 | 127 |
| 71 | Long Beach | 16,000 sf | Public Library | 1401 E. Anaheim Street | 1,020 | 12 | 4 | 16 | 52 | 57 | 109 |
| 72 | Long Beach | 5,750 sf | Commercial Shopping Center | 1422 W. Willow Street | 230 | 18 | 19 | 37 | 6 | 9 | 15 |
| 73 | Long Beach | 26,000 sf | Self-Storage Facility | 3401 Golden Avenue | 60 | 2 | 2 | 4 | 4 | 2 | 6 |
| 74 | Long Beach | 7,200 sf | Medical Office | 2760 Atlantic Avenue | 80 | 14 | 3 | 17 | 7 | 20 | 27 |
| 75 | Long Beach | 5,800 sf | Retail | 4085 Atlantic Avenue | 240 | 18 | 19 | 37 | 6 | 9 | 15 |
| 76 | Long Beach | | California State University Long Beach Expansion | Atherton Street and Palo Verde Avenue | nom. | nom. | nom. | nom. | nom. | nom. | nom. |
| | | 120,000 sf | Recreation Center | | | | | | | | |
| | | | New Parking Structure | | | | | | | | |
| 77 | Long Beach | | Long Beach Airport Terminal Area Improvements | 4100 Donald Douglas Drive | 3,177 | 92 | 75 | 167 | 97 | 82 | 179 |
| | | 43,000 sf | Building Improvements | | | | | | | | |
| | | 4,000 sp | Parking Structure | | | | | | | | |
| 78 | Long Beach | 156 du | Senior Assisted Housing | SW corner of Cherry Avenue and Willow Street | N/A | 12 | 21 | 33 | 23 | 13 | 36 |
| 79 | Signal Hill | 270 du | Single-Family Residential | Hill Street between | 2,590 | 51 | 151 | 202 | 168 | 95 | 263 |
| | | 44 du | Duplexes | Cherry Avenue/Temple Avenue | 320 | 5 | 22 | 27 | 21 | 10 | 31 |
| | | 150 du | Multi-Family Residential | | <u>1,030</u> | <u>12</u> | <u>66</u> | <u>78</u> | <u>67</u> | <u>33</u> | <u>100</u> |
| | | | | | 3,940 | 68 | 239 | 307 | 256 | 138 | 394 |
| 80 | Signal Hill | 172 du | Single-Family Residential | North of Hill Street at Hathaway Avenue | 1,710 | 33 | 100 | 133 | 113 | 63 | 176 |
| 81 | Signal Hill | 20 du | Single-Family Residential | Hathaway Avenue and Temple Avenue | 240 | 7 | 19 | 26 | 17 | 9 | 26 |
| 82 | Signal Hill | 120,000 sf | Self Storage Facility | California and 32nd Street | 280 | 11 | 7 | 18 | 19 | 10 | 29 |
| 83 | Signal Hill | 4 du | Single-Family Residential | Freeman Avenue and 20th Street | 50 | 4 | 11 | 15 | 4 | 2 | 6 |
| 84 | Signal Hill | 130,000 sf | Retail | Atlantic Avenue and Spring Street | 8,070 | 114 | 73 | 187 | 359 | 388 | 747 |
| 85 | Long Beach | | Kilroy (est. remaining entitlement) | South of Spring Street between Lakewood | | | | | | | |
| | | 359 ksf | 359,000 sf Office | Boulevard and Redondo Avenue | 20 | 454 | 62 | 516 | 82 | 400 | 482 |
| | | 220 rm | 220-Room Hotel | | <u>1,960</u> | <u>82</u> | <u>60</u> | <u>142</u> | <u>69</u> | <u>72</u> | <u>141</u> |
| | | | | | 1,980 | 536 | 122 | 658 | 151 | 472 | 623 |

Table 11 (cont.)
Related Projects Description and Trip Generation

| Map
No. | Jurisdiction | Size | Description | Location | Daily | AM Peak Hour | | | PM Peak Hour | | |
|------------|--------------|--------|-------------------------------------|--|-------|--------------|-----|-------|--------------|-----|-------|
| | | | | | | I/B | O/B | Total | I/B | O/B | Total |
| 86 | Long Beach | | Airport Business Park | SE Corner of Lakewood Boulevard and
Spring Street | | | | | | | |
| | | | (est. remaining entitlement) | | | | | | | | |
| | | 288 sf | 288,000 sf Office | | 10 | 381 | 52 | 433 | 68 | 334 | 402 |
| | | 105 rm | 105-Room Addition to Existing Hotel | | 940 | 30 | 22 | 52 | 29 | 31 | 60 |
| | | | | | 950 | 411 | 74 | 485 | 97 | 365 | 462 |

* The improvements will accommodate a total of 41 air carrier flights and 25 commuter flights per day (approximately 3.8 MAP per year).



10/21/03

FN: BOEING-LNGBCH\RELPROJS-PCR

CA

2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508

83

**City of Signal Hill
Cumulative Projects List**

| | A | B | C | D | E | F | G | H |
|----|------------|---|----------------------|-------------------------------------|--------------------------|---|--|---|
| 1 | Size | Description | Location | Applicant | Application | Approval Date | Expiration Date | Status |
| 2 | 150,000 sf | Self-Storage (U. S. Self-Storage) | 3199 California Ave. | Signal Hill
Petroleum | SPDR 03-01 | PC approved
4/15/03; CC
approved
5/27/03 | 5/27/2005;
5/27/2005;
11/27/2004 | Plans returned with revisions; modifications approved at July meeting; Planning Commission denied extension request; approved alternative color palate at December 2004 meeting; a 6 month extension for SPDR granted to applicant to 5/27/05; grading started. Applicant may not proceed due to construction costs. |
| 3 | 4,000 sf | 2-story office building. A lot merger will be required. | 2020 Cherry Ave | Drew and Ikumi
Baker of REMCO | | | | In plan check; staff has completed view analysis. |
| 4 | | A proposal for tenant improvements for a Well Fargo Bank (Shoe City will be vacating) | 2598 Cherry Ave | Rinaldi Lamar | Administrative
Review | | | Staff is reviewing plans for exterior signs and wall treatments and interior improvements. |
| 5 | 4,250 sf | Office/Warehouse. | 2637 Dawson | RPP for Jay
Feinberg | Administrative
review | | | Lot merger in process. |
| 6 | 2,300 sf | industrial building | 2780 Dawson | Bill Reseigh | Administrative
review | | | Demolition of existing house complete. Proposed building still in plan check. |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | 5,400 sf | Warehouse Addition | 2652 Gundry Ave | Bob Littrell | | | | Needs deposit to continue review. |
| 10 | | Proposed second story deck. | | Laird | Administrative | | | In plan check. |
| 11 | 55 foot | Wireless Telecom Facility (monpalm) | 2875 Junipero | Nextel | CUP 05-02 | 5/10/2005 | 6/10/2006 | CC approval on May 10, 2005; in plancheck |
| 12 | 19,000 sf | Tenant Improvement for food service wholesale store | 1901 Obispo | Cash and Carry
(Smart and Final) | Administrative
Review | | | Under construction, nearing completion |
| 13 | | Structural plans to repair fire damage | 3301 Olive | Adium Dental | | | | Under construction |
| 14 | 65 foot | Wireless Telecom Facility (monpalm) | 2550 Orange | Nextel | CUP 04-02 | 11/9/2004 | | Under construction |
| 15 | | Wireless Telecom Facility on existing 2-story office building | 1850 Redondo Ave. | Alaris Group for
AT&T | CUP 05-01 | 11/25/2005 | | Under construction, nearing completion |
| 16 | | A new above-ground storage tank and Tentative Parcel map to create two parcels. | 2457 Redondo Ave. | Shell | TPM 61910 | PC 1/18/05 | | Tank construction is 99.99% complete; support facilities are under construction. |

**City of Signal Hill
Cumulative Projects List**

| | A | B | C | D | E | F | G | H |
|----|--------------------|--|--|----------------------------------|---|---------------------|--|---|
| 1 | Size | Description | Location | Applicant | Application | Approval Date | Expiration Date | Status |
| 17 | | Home Depot shopping center on a 23.5-acre site on the north side of Spring Street between Atlantic and California Avenues. | 751 Spring St. (formerly 3100 Atlantic Ave.) | Greenburg, Farrow for Home Depot | TPM 26222;

SPDR 01-15;
SPDR 03-18 | Expired;
7/15/03 | Extended 3 years to 7/15/06

7/15/04 | Under construction. Projected opening November 2005. |
| 18 | 4,250 sf | Office/Warehouse | 2646 St. Louis Ave. | RPP for Jay Feinberg | Administrative Review | | | Lot merger in process. |
| 19 | 60,000 sf | 6 light industrial buildings on six lots | 2665-2745 Temple Ave. | Fu-Lyons | SPDR 04-27
TTM 062045 | 2/15/05
12/21/04 | 38763 | In plan check. |
| 20 | 12,494 sf | 9-unit industrial warehouse building | 1598 27th St. | William Halpin | SPDR 04-28 | 38342 | 38707 | In plan check. |
| 21 | | Turbine generator to produce electricity for oil field | 1215 29th St. | Signal Hill Petroleum | | | | Under construction |
| 22 | | A request to install a tanker interior washing facility for company fleet truck use only. | 1710 E. 29th St. | System Transport | | | | Under construction |
| 23 | 14,893 sf | Addition and exterior improvements | 950 E. 33rd St. | Pacific Land Services for Target | | | | Perliminary plan check. PC review required. |
| 24 | | | | | | | | |
| 25 | RESIDENTIAL | | | | | | | |
| 26 | | | | | | | | |
| 27 | 27 du | A proposed subdivision for 27 detached 3-story single-family homes with a private street at the northeast corner of Walnut and Crescent Heights Street | Crescent Square | Signal Hill Petroleum | ZOA 05-03
ZOA 05-04
SPDR 05-03
TTM 62582 | | | Approval recommended by PC on 3/15/05.
CC hearing date TBD. |
| 28 | 24 du | 2-story townhome units in the PA 1-B of the HASP | Planning Area 1-B Skyline Villas | McCune Dev. | TTM 53480 | | | Project complete as of 8/8/05. |
| 29 | | Phase II Las Brisas | 2400 California Ave. | LA Community Design Center | SPDR 04-34 | 1/25/2005 | 1/25/2006 | Approved by CC on 1/25/05; Phase II demolition completed. Minor revisions approved by PC at July meeting. |
| 30 | 659 sf | Addition to SFR | 3200 California | Reliant Development | SPDR 04-26 | | | Completed. |
| 31 | 900 sf | Construct second unit and two 2-car garages | 2320 Cerritos Ave. | Antonio Quintero | SPDR 02-27 | | | Under construction. |
| 32 | | Addition to a SFD and a new 2-story second unity | 3240 Cerritos | Jim Trevillyan | SPDR 05-01 | 1/18/2005 | 1/18/2006
Letter: Nov. 05 | Not submitted for building plan check |

**City of Signal Hill
Cumulative Projects List**

| | A | B | C | D | E | F | G | H |
|----|-----------------------|---|---|----------------------------------|--|------------------------|-----------------|---|
| 1 | Size | Description | Location | Applicant | Application | Approval Date | Expiration Date | Status |
| 33 | 15 du | 10 triplex 2-story townhomes on Cherry Avenue between 19th and 20th Streets; and 5 single-family detached homes south of 19th Street | Cherry Ave.
1900 Block and 2024-32 19th Street | Anastasi | VTTM 061056
VTTM 061055
VTTM 061054
VTTM 060711 | 4/13/04 (same for all) | | Under construction. |
| 34 | | Addition to a single-family dwelling | 2014 Cherry Ave. | Keith Moler | SPDR 05-05 | 5/17/2005 | 5/17/2006 | |
| 35 | 4175 sf | New SFD in Crescent Heights Historic District | 1698 Cresenct Heights St. | Oren Ofir | SPDR 03-29 | 12/16/2003 | 12/16/2005 | In plan check; 6 month extension granted by PC to 12/16/05. Owner is selling property. |
| 36 | 2,529 sf and 2,594 sf | Parcel map waiver and request to construct two new SFD | 1781/01 Creston | Loren Ferris | SPDR 04-15 | 7/20/2004 | 7/20/2005 | SPDR expired; applicant has sold lot. |
| 37 | | An addition to existing and 2nd unit over garage | 3341 Falcon Ave. | Udoff for Forkeotes | | | | Under construction. |
| 38 | 153 sf | addition to SFD | 3363 Falcon Ave. | Thomas | | | | Under construction. |
| 39 | 384 sf | addition to SFD | 3347 Falcon Ave. | Rafael Reyes | | | | Nearing completion |
| 40 | 6 du | Proposal for construction of six single-family dwellings on lots located between Freeman and Obispo Ave., north of 20 th St. | Freeman Heights | Signal Hill Petroleum | | | | View analysis complete. Scheduled for a public workshop in August. |
| 41 | 1 du | Proposed 2-story single family dwelling and a detached garage with a rental unit in the Crescent Heights Historical District. | 2450 Gaviota Ave. | Ronnie Robinson | SPDR 05-02 | 1/18/2005 | 1/18/2006 | In plan check |
| 42 | 11 du | SFD on vacant property located on the east side of Gundry Avenue, south of Willow Street | 2550 Gundry Ave.
"Villagio" | Bozena Jaworski for Loren Miller | SPDR 04-31
ZOA 04-09
ZOA 04-10
TTM 54375 | 38335 | 38700 | Approved by PC on 11/16/04
Approved by CC on 12/14/04; in plan check |
| 43 | 17 du | 17 two and three-story single-family homes at Hathaway and Temple Avenues. | Hathaway Ridge | Signal Hill Petroleum | SPDR 04-08
TTM | 3/16/2004
5/11/04 | | CC approval of TTM on 5/11/04. In building plan check awaiting resubmittal; seismic review completed. Project sold to HQT Homes; permit for rough grading issued. |

**City of Signal Hill
Cumulative Projects List**

| | A | B | C | D | E | F | G | H |
|----|------------------|--|---|-------------------------------|-----------------|---------------|-----------------------|--|
| 1 | Size | Description | Location | Applicant | Application | Approval Date | Expiration Date | Status |
| 44 | 2 du | 2 SFD | Hill Street east of Temple Ave. in Long Beach | Wayne Ballinger | in-house review | | | The applicant has obtained permits to build two single-family dwellings, but is asking for driveway and utility access from Hill Street from the City of Signal Hill. The applicant is currently pursuing gaining all utilities and vehicle access from Orizaba Ave. in Long Beach; roof and exterior stucco completed. <i>The properties are in foreclosure.</i> |
| 45 | 4,465 sf | SFD and 3-car garage | 2551 Hill Street | N. Reddy | SPDR 03-23 | 12/21/2003 | | Under construction. |
| 46 | 4955 sf | SFD and 3-car garage | 2601 Hill Street | Thien Ta | SPDR 03-14 | 1/20/2004 | | Under construction. |
| 47 | 2320 sf + 254 sf | SFD with 254 sf guest house | 1914 Junipero Ave. | Jesus Heredia | SPDR 05-08 | | | Scheduled for August PC meeting. |
| 48 | | A 2-story SFD on an existing lot with an existing 946 sf rear unit at the rear. | 1993 Junipero Ave. | Scott and Theresa Chamberlain | SPDR 03-22 | 9/16/2003 | | Under construction. |
| 49 | | Proposed 2nd unit over 4-car garage | 2361 Lewis | Barrera | | | | Preliminary review. |
| 50 | | Proposed second unit over 4-car garage | 2364 Lewis | Chhun | | | | Preliminary review. |
| 51 | | A proposal for a 1,011 sf second unit over a new 4-car garage. | 3215 Lewis Ave | Jon Udoff | SPDR 04-32 | 12/21/2004 | 12/21/2005 | Under construction. |
| 52 | 600 sf | Single story addition | 3270 Lewis Ave | Chris Vandeven | SPDR 04-33 | 12/21/2004 | | Under construction. |
| 53 | | A 2,500 sf addition to a single-family dwelling. Additional 1,400 sf remodel proposed w/new 504 sf garage. Demolition of existing garage proposed. | 1955 Molino Ave. | Henry Morales | SPDR 04-13 | 5/18/2004 | 5/19/2005
11/19/05 | Building plans approved; Grading and retaining wall permits issued; Administrative 6 mo. extension granted to 11/19/05 |
| 54 | 3,670 sf | SFD with attached 3-car garage. | 2214 Molino Ave. | Thien Ta | SPDR 03-13 | 2/10/2004 | | 1/20/04 PC approval; 2/10/04 CC upheld PC decision with modification to lower height limit 6 inches; construction nearing completion. |
| 55 | 1 du | A new single family dwelling and attached 3-car garage. | 2230 Molino Ave. | John Rees for Ted Nucum | SPDR 03-08 | 8/19/2003 | | Completed. |
| 56 | 2,919 sf | SFD in PA-2 of the HASP | 2250 Molino | Renaissance Company | SPDR 04-18 | 7/20/2004 | | Under construction. |

**City of Signal Hill
Cumulative Projects List**

| | A | B | C | D | E | F | G | H |
|----|----------|--|-------------------------|--|-------------|---------------|-----------------|---|
| 1 | Size | Description | Location | Applicant | Application | Approval Date | Expiration Date | Status |
| 57 | 2,864 sf | SFD in PA 2 of the HASP. | 2260 Molino | Renaissance Company | SPDR 04-19 | 7/20/2004 | | Under construction. |
| 58 | 3,632 sf | SFD and in PA 2 of the HASP | 2251 Molino Ave | Renaissance Company | SPDR 04-16 | 7/20/2004 | | Under construction. |
| 59 | 3,674 sf | SFD in PA 2 of the HASP | 2263 Molino Ave | Renaissance Company | SPDR 04-17 | 7/20/2004 | | Under construction. |
| 60 | 2,934 sf | SFD in PA 2 of the HASP. | 2278 Molino Ave. | Bozena Jaworski for Dan Tran | | | | Revised plan to be submitted shortly. |
| 61 | 3,644 sf | SFD in PA-2 of the HASP. | 2277 Molino Ave. | David and Kim Emery-Chira | SPDR 02-04 | | | Under construction. |
| 62 | 2,600 sf | SFD in PA-2 of the HASP. | 2299 Molino | Nader Ghassemlou | SPDR 02-04 | | | Under construction. |
| 63 | 2 du | A proposal to construct 2 new 3 story SFD units with 3 and 2 car garages respectively. | 2352 & 2354 Molino | Bozena Jaworski for Lynn McCune | TTM 62308 | | | PC approved plans on 1/20/04. PC decision upheld at CC appeal hearing on 2/10/04; applicant to pay impact fees; Tract Map to allow units to be sold separately as condominiums approved at April Planning Commission meeting; under construction. |
| 64 | 1,596 sf | A 1,596 SF 2-story addition and a 528 SF attached garage to a SFD. | 3312 Myrtle Ave. | Pan/Teuk | SPDR 02-09 | | | Under construction. |
| 65 | 2,816 sf | SFD on a vacant lot. | 2001 Obispo Ave. | Jose Miramontes | SPDR 03-15 | 6/17/2003 | | Under construction. |
| 66 | 1 du | New single-family dwelling | 2100 Ohio Ave. | Jose Miramontes (formerly Wayne Ballinger) | SPDR 03-25 | | | Under construction. |
| 67 | 1 du | A new single-family dwelling | 2190 Ohio Ave. | Jose Miramontes (formerly Wayne Ballinger) | SPDR 03-20 | | | Under construction. |
| 68 | 1 du | A new single family dwelling | 2218 Ohio Ave. | Jose Miramontes (formerly Wayne Ballinger) | SPDR 03-19 | | | Under construction. |
| 69 | 1 du | A new single family dwelling | 2226 Ohio Ave. | Jose Miramontes (formerly Wayne Ballinger) | SPDR 03-11 | | | Under construction. |
| 70 | 2 du | 2-story condominium units each on duplex lot | 2281 & 2285 Ohio Avenue | Bozena Jaworski, for M/M Floresca | SPDR 04-12 | 5/18/2004 | | Under construction. |

**City of Signal Hill
Cumulative Projects List**

| | A | B | C | D | E | F | G | H |
|----|-----------------------|--|---|--|--------------------------------------|--------------------|-------------------------------|--|
| 1 | Size | Description | Location | Applicant | Application | Approval Date | Expiration Date | Status |
| 71 | 3,352 sf | single family dwelling and attached garage | 2270 Ohio Ave. | George Papadakis/Falanai Ala | SPDR 04-07 | 4/20/2004 | | Under construction. |
| 72 | 3,600 sf | single family dwelling and attached garage | 2280 Ohio Ave. | George Papadakis/Falanai Ala | SPDR 04-11 | 4/20/2004 | | Under construction. |
| 73 | 498 sf | Addition to a single-family dwelling. | 1938 Orizaba Ave. | Ramon Torres | | | | Under construction. |
| 74 | 81 du | City View – proposed 81 townhome condominium units on Orizaba, near PCH - former Beach City Chevy site | 1835 – 1899 Orizaba | Scott Choppin for Urban Pacific | TTM 60693
SPDR 05-07
ZOA 05-06 | 5/24/05
5/24/05 | 38861 | Revised plans show 81 townhome style units (each with private 2-car garages) instead of 109. Approved by CC on 5/24/05 with second reading on 6/14/05. Developer awaiting approval from AQMD for demolition permit after a recent fire to existing structures; demo permits issued 8/5/05. |
| 75 | 3,684 sf | SFD in PA 2 of the HASP | 2600 Skyline Drive | Renaissance Company | SPDR 04-20 | 7/20/2004 | | Under construction. |
| 76 | 3,629 sf | SFD in PA 2 of the HASP | 2650 Skyline Drive | Renaissance Company | SPDR 04-21 | 7/20/2004 | | Under construction. |
| 77 | 3,139 sf | single-family dwelling and an attached 3-car garage. | 2700 Skyline | Bill Meyer for Skytop LLC. | SPDR 04-01 | 2/17/2004 | | Under construction, nearing completion. |
| 78 | 2,390 sf and 2,619 sf | Detached condominiums | 1888 Stanley & 2548 19 th Street | Chancellor Invest | SPDR 04-22 | 8/17/2004 | 8/17/2005 | SPDR expired. |
| 79 | | Two detached single-family dwellings | 1942-44 Stanley Ave | Nancy Nguyen | SPDR 04-30 | 11/16/2004 | 11/16/2005
Letter: Sept 05 | In plan check |
| 80 | 186 sf | Addition and remodel | 1952 Stanley Ave. | Sarin Ek | In house | | | Under construction |
| 81 | 2,986 sf | 2 story SFD with a 508 sf attached garage | 2179 Temple | Tizita Bekele | SPDR 04-25 | 9/21/2004 | | Under construction. |
| 82 | 3,435 SF | SFD in PA-2 of the HASP. | 2229 Temple Avenue | Julie Leakhena/Pel | SPDR 05-09 | | | Project has been revised and resubmitted. View notice sent out and view analysis in process. Tentatively scheduled for September PC meeting. |
| 83 | 500 sf | Addition to a SFD | 2415 19 th Street | Salvador Medina | In-house review | | | Under construction. |
| 84 | 1 du | Single-family dwelling | 2749 21 st St | Jose Miramontes (formerly Wayne Ballinger) | SPDR 03-26 | | | Under construction. |

**City of Signal Hill
Cumulative Projects List**

| | A | B | C | D | E | F | G | H |
|----|----------|--|---------------------------------|---|-------------|---------------|-----------------|--|
| 1 | Size | Description | Location | Applicant | Application | Approval Date | Expiration Date | Status |
| 85 | 1 du | Single-family dwelling | 2799 21 st St. | Jose Miramontes
(formerly Wayne Ballinger) | SPDR 03-27 | | | Grading and walls under construction. |
| 86 | 1,200 sf | Single family dwelling (second unit) with two 2-car garage. | 925 25 th Street | Efren Corona | SPDR 02-01 | | | Under construction. |
| 87 | 1,070 sf | A proposal for a 1,070 sf second unit and a new 3-car garage | 1501 E. 33 rd Street | Jon Udoff for John Neff | SPDR 05-04 | 5/17/2005 | 5/17/2006 | Awaiting submittal for building plancheck. |

**City of Lakewood
Cumulative Projects List**

| Size | TYPE PROJECT/DESCRIPTION | PROJECT LOCATION | STATUS | Jurisdiction |
|---|--|--------------------------------------|--------|--------------|
| sf unknown | New pharmacy | 5615 Woodruff Avenue | 1 | Lakewood |
| sf unknown | Zone Change to Mixed Use | 11124-11144 Del Amo Blvd. | 1 | Lakewood |
| sf unknown | Bldg for new stereo installation | 11747 Carson Street | 2 | Lakewood |
| 5,839 sf | New Commercial Center | 3500 South Street | 2,3,8 | Lakewood |
| 16 du | Planned Unit Development | SWC Pioneer & 205 th | 2,6 | Lakewood |
| 9 du | Condominiums | 11342-11346 215 th Street | 3 | Lakewood |
| 16 du | Condominiums | 11730 216 th Street | 3,4,6 | Lakewood |
| 9 du | Condominiums | 11610-18 207 th Street | 3,4,6 | Lakewood |
| 300 sf | Carwash/Convenience Store | 4870 Bellflower Boulevard | 3,5 | Lakewood |
| 4 du | Condominiums | 11656 215 th Street | 3,5,6 | Lakewood |
| 4 du | Condominiums | 11540 216 th Street | 3,5,6 | Lakewood |
| 2,940 sf | 7 Eleven with Service Station | 5301 Paramount Boulevard | 3,5,8 | Lakewood |
| sf unknown | Center remodel (Henry's) | 4217 Woodruff Avenue | 3,8 | Lakewood |
| 3,675 sf | Shopping Center "Pioneer Retail" | 11761 Carson Street | 3,9 | Lakewood |
| sf unknown | CVS Pharmacy | 5505 Carson Street | 4,6,8 | Lakewood |
| 20 du | 20-Unit Condominiums | 20741-20809 Seine Avenue | 5,6,8 | Lakewood |
| 5,178 sf | Commercial Center | 5320 Clark Avenue – Pad "A" | 8 | Lakewood |
| 6,676 sf | Commercial Center | 5115 Candlewood – Pad "B" | 8 | Lakewood |
| 7,525 sf | Commercial Center | 5125 Candlewood – Shell | 8 | Lakewood |
| sf unknown | Self Storage Facility-PHASE III | 3969 Paramount Boulevard | 8 | Lakewood |
| 11,449 sf showroom and a 30,448 sf service bldg | New Lincoln Mercury Mazda | 3520 – 3540 Cherry Avenue | 8 | Lakewood |
| 8 du | Apartments | 20723 Elaine Avenue | 8 | Lakewood |
| 3,773 sf | Carwash | 21003 Bloomfield Avenue | 9 | Lakewood |
| 15,250 sf | Shopping Center | 3205 Carson Street | 9 | Lakewood |
| 6,613 sf | Shopping Center | NEC Palo Verde & Del Amo | 9 | Lakewood |
| 4,800 sf | Shopping Center | 5910 Del Amo Boulevard | 9 | Lakewood |
| 2,750 sf | Restaurant | 5310 Lakewood Boulevard | 9 | Lakewood |
| 8 du | Residential Development | 5813 Allington Street | 10 | Lakewood |
| | Shopping Center (Remodel) existing bldg | 5715-5729 Lakewood Boulevard | 9 | Lakewood |
| 6 du | Apartments | 11711-19 216 th Street | 10 | Lakewood |
| | Self Storage Facility-PHASES I & II | 3969 Paramount Boulevard | 9 | Lakewood |
| | Retail Shops (Paramount Plaza) | 4929-43 Paramount Boulevard | 9 | Lakewood |
| | Remodel Site (Pacific Ford) | | | Lakewood |
| | <i>separate project from the listing below</i> | 3600 Cherry Avenue | 9 | Lakewood |
| | Expansion (Pacific Ford) | 3600 Cherry Avenue | 9 | Lakewood |
| | Shopping Center (exterior T.I.) | 4128-4140 South Street | 9 | Lakewood |

1. Inquiries-Possible Project
2. Proposal before DRB
3. Approved by DRB
4. Proposal before PEC
5. Approved by PEC

6. Processing Parcel or Tract Map
7. Environmental Impact Report Process
8. Plan Check or awaiting permits
9. Permits issued/under construction
10. Project completed
- ** City permit not required for construction

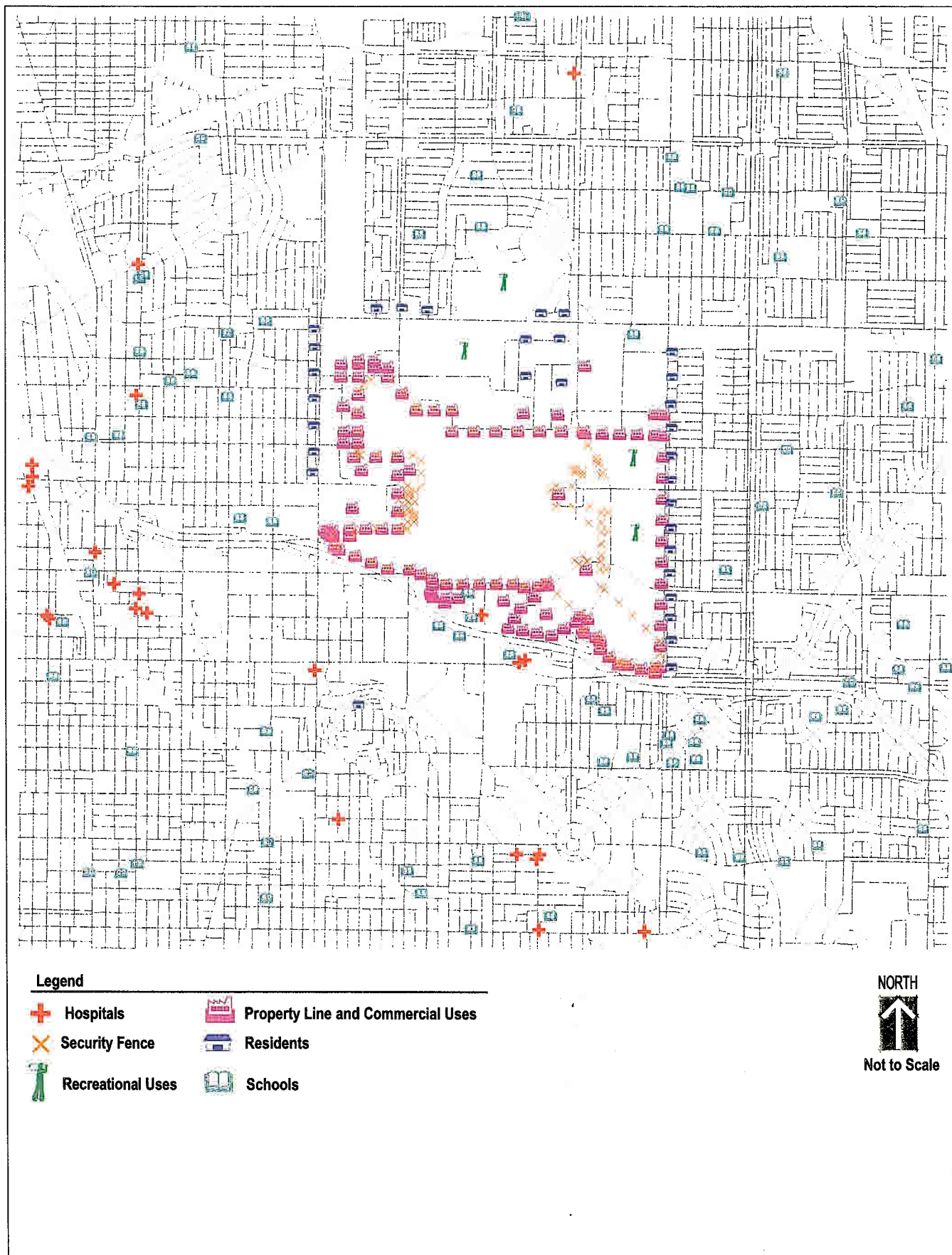
ATTACHMENT C

AIR QUALITY ANALYSIS WORKSHEETS

(Attachment C is available for download on the internet at <http://www.longbeach.gov>)

ATTACHMENT D

SENSITIVE RECEPTORS (SCHOOLS AND HOSPITAL) LOCATIONS



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