Gibson transportation consulting, inc.

TO: Hunter Weaver, Carmel Partners

FROM: Brian Hartshorn

DATE: December 1, 2022

RE: Parking Utilization Analysis for Long Beach Marketplace
Residential Mixed-Use Component
Long Beach, California **Ref:** J2021

Gibson Transportation Consulting, Inc. (GTC) conducted a parking utilization estimate for a proposed mixed-use development on the southern end of Long Beach Marketplace.

PROJECT DESCRIPTION

Long Beach Marketplace is located on the east side of Pacific Coast Highway (PCH) between the San Gabriel River and 2nd Street in the City of Long Beach, California (City). The northern portion of the site generally provides retail establishments, including grocery, restaurants, and services. The southern portion of the site is primarily composed of commercial office uses.

For the purposes of parking utilization, this study focused on the southern office component where a proposed development will demolish and rebuild two office buildings (#6615 and #6695) into 390 multi-family units with approximately 5,013 square feet of local-serving retail near the northeast corner of PCH & Studebaker Road (Project). A third building (#6621) will remain and operate as office. The Project will provide 570 parking spaces in a seven-story structure to accommodate residential tenants, residential guests, and patrons of the retail component.

Figure 1 depicts the entire boundary of the Long Beach Marketplace with the Project building areas defined.

PROJECT PARKING UTILIZATION

The City requested specific analyses to determine utilization rates for anticipated parking demand for the Project components. As such, this parking utilization study was conducted to determine the required parking supply minimum for the Project using a shared parking calculation estimation. GTC prepared a shared parking analysis using the Shared Parking Calculation Model (Urban Land Institute, International Council of Shopping Centers and National Parking Association) (Shared Parking Model).

The Shared Parking Model calculates peak estimates of parking demand throughout a calendar year, including peak monthly demand, as well as hourly demand for projects that include more than a single land use component. In the case of the Project, with both residential and retail components, it is expected that some amount of parking demand would be shared between uses (i.e., a resident of the apartments may utilize the retail portion of the Project but not require an additional parking space).

The Shared Parking Model utilizes years of data development to generate adjustment factors (such as mode-split, captive ratio, driving adjustments, etc.) and to estimate parking supply for the interaction between specific land uses. For the purposes of this analysis and to remain conservative, no alterations were made to the Shared Parking Model's calculating factors.

Inputs to the Shared Parking Model include individual residential unit types (i.e., one-bedroom, two-bedroom, etc.) and the retail component. Because the Project is primarily residential, the Shared Parking Model reserves parking spaces specifically for tenants that cannot be shared with retail at any time. The Shared Parking Model also calculates the guest spaces, the employee spaces, and the patron spaces during the peak periods throughout the year.

The output for the Shared Parking Model is provided in the Attachment. Table A1 of the Attachment provides the summary of shared parking output for the peak month (calculated as December) and the weekday and weekend peak demand (occurring at 7:00 PM). For this peak, the minimum weekday parking demand is 499 spaces and the minimum weekend parking demand is 518 spaces. Table B2 reflects the hour-by-hour results for the peak month of December.

Figures A1-A3 of the Attachment provide a graphical representation of the peak parking demand compared to the proposed parking supply of 570 spaces. As shown, the peak parking demand of 518 spaces can be accommodated within the Project's proposed parking supply of 570 spaces.

LONG BEACH MARKETPLACE WITH PROJECT DETAILS

FIGURE
1

Attachment

Shared Parking Model

TABLE A1
PARKING DEMAND SUMMARY FOR
LONG BEACH MARKETPLACE (RESIDENTIAL MIXED USE COMPONENT)

Shared Parking Demand Summary																		
Peak Month: DECEMBER -- Peak Period: 7 PM, WEEKEND																		
			Weekday					Weekend					Weekday			Weekend		
Land Use	Project Data		Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Peak Hr Adj 7 PM	Peak Mo Adj December	Estimated Parking Demand	Peak Hr Adj 7 PM	Peak Mo Adj December	Estimated Parking Demand
	Quantity	Unit																
Retail																		
Retail (<400 ksf)	5,013	sf GLA	2.90	100%	80%	2.31	ksf GLA	3.20	100%	85%	2.72	ksf GLA	90%	100%	11	60%	100%	9
Employee			0.70	100%	39%	0.27		0.80	100%	55%	0.44		100%	100%	2	80%	100%	2
Food and Beverage																		
Entertainment and Institutions																		
Hotel and Residential																		
Residential, Urban																0%		
Studio Efficiency	61	units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	75%	100%	-	55%	100%	-
1 Bedroom	205	units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	75%	100%	-	55%	100%	-
2 Bedrooms	116	units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	75%	100%	-	55%	100%	-
3+ Bedrooms	8	units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	75%	100%	-	55%	100%	-
Reserved	100%	res spaces	1.15	100%	100%	1.15	unit	1.15	100%	100%	1.15	unit	100%	100%	448	100%	100%	448
Visitor	390	units	0.10	100%	100%	0.10	unit	0.15	100%	100%	0.15	unit	100%	100%	39	100%	100%	59
Office																		
Additional Land Uses																		

Customer/Visitor	50	Customer	68
Employee/Resident	2	Employee/Resident	2
Reserved	448	Reserved	448
Total	499	Total	518

TABLE A2
PEAK MONTH PARKING DEMAND SUMMARY FOR
LONG BEACH MARKETPLACE (RESIDENTIAL MIXED USE COMPONENT)

December

Weekday Estimated Peak-Hour Parking Demand

Land Use	Monthly Adjustment	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM	**Overall Pk 7 PM**	AM Peak Hr 11 AM	PM Peak Hr 5 PM	Eve Peak Hr 7 PM
Retail																								
Retail (<400 ksf)	100%	0	1	2	4	7	10	12	13	13	13	11	10	11	11	10	6	4	1	0	11	10	10	11
Employee	100%	0	0	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	0	0	2	2	2	2
Food and Beverage																								
Entertainment and Institutions																								
Hotel and Residential																								
Residential, Urban																					-	-	-	-
Studio Efficiency	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
1 Bedroom	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2 Bedrooms	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
3+ Bedrooms	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Reserved	100%	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448
Visitor	100%	0	4	8	8	8	8	8	8	8	8	8	16	23	39	39	39	39	31	20	39	8	16	39
Office																								
Additional Land Uses																								
Customer/Visitor		0	5	10	12	15	18	20	21	21	20	18	26	34	50	49	45	43	32	20	50	18	26	50
Employee/Resident		0	0	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	0	0	2	2	2	2
Reserved		448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448
Total		448	453	458	461	465	468	470	471	471	471	469	475	484	499	499	494	491	481	468	499	468	475	499

December

Weekend Estimated Peak-Hour Parking Demand

Land Use	Monthly Adjustment	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM	**Overall Pk 7 PM**	AM Peak Hr 11 AM	PM Peak Hr 5 PM	Eve Peak Hr 7 PM
Retail																								
Retail (<400 ksf)	100%	0	1	1	5	9	13	15	15	15	15	13	12	9	9	8	7	5	2	0	9	13	12	9
Employee	100%	0	0	1	2	2	3	3	3	3	3	3	3	2	2	2	2	1	0	0	2	3	3	2
Food and Beverage																								
Entertainment and Institutions																								
Hotel and Residential																								
Residential, Urban																								
Studio Efficiency	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
1 Bedroom	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2 Bedrooms	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
3+ Bedrooms	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Reserved	100%	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448
Visitor	100%	0	12	12	12	12	12	12	12	12	12	12	24	35	59	59	59	59	47	30	59	12	24	59
Office																								
Additional Land Uses																								
Customer/Visitor		0	13	13	17	21	24	27	27	27	27	25	35	45	68	67	66	64	49	30	68	24	35	68
Employee/Resident		0	0	1	2	2	3	3	3	3	3	3	3	2	2	2	2	1	0	0	2	3	3	2
Reserved		448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448
Total		448	461	462	467	471	475	477	477	477	477	476	486	495	518	517	516	513	498	478	518	475	486	518

FIGURE A1
PEAK MONTH PARKING DEMAND BY HOUR
LONG BEACH MARKETPLACE

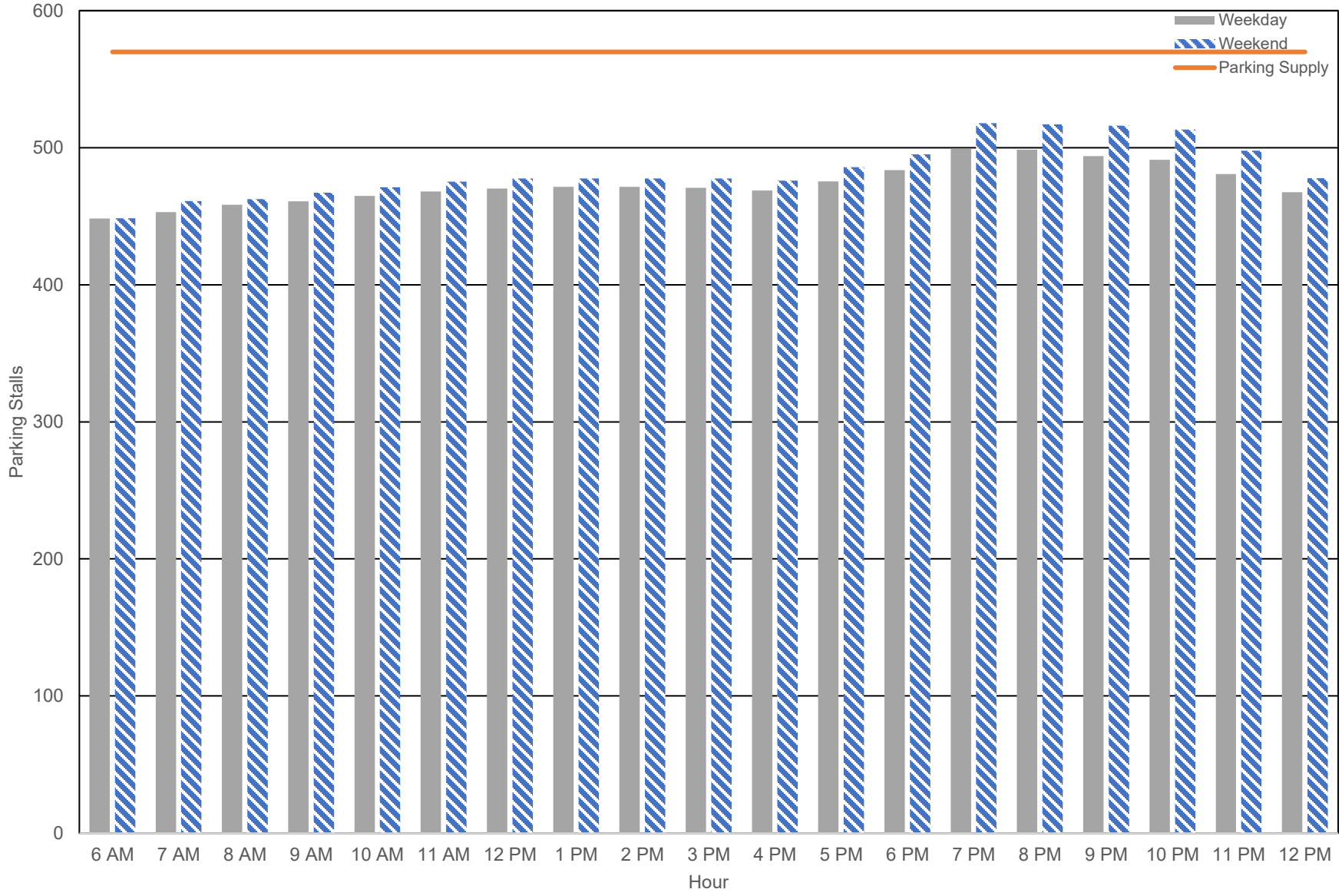

FIGURE A2
WEEKDAY MONTH-BY-MONTH ESTIMATED PARKING DEMAND
LONG BEACH MARKETPLACE

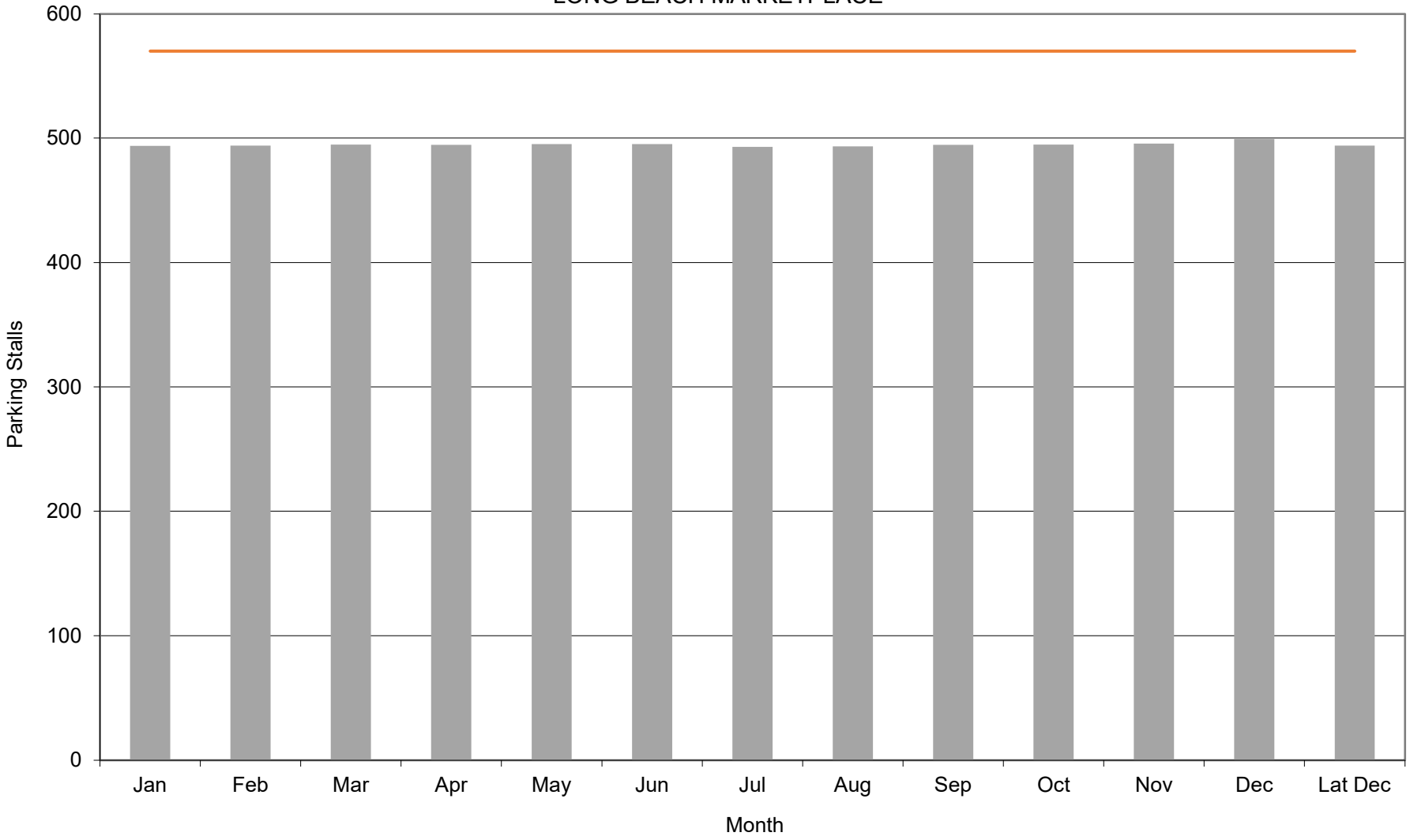

FIGURE A3
WEEKEND MONTH-BY-MONTH ESTIMATED PARKING DEMAND
LONG BEACH MARKETPLACE