APPENDIX N

TRANSPORTATION APPENDICES

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APPENDICES

- Cumulative Growth Rate Project Check

Appendix N
Cumulative Growth Rate Project Check

ID	Project Title	Address	Land Use	Size	Units	Population	Employment
Land Use Development Related Projects							
1	N/A	1011 North Broadway	Hotel	92	rooms		58
			Restaurant	15,000	sf		30
2	N/A	117 West Wilhardt St	Restaurant	10,802	sf		22
3	N/A	1231 North Spring St	Restaurant	26,740	sf		53
4	Buena Vista	1251 North Spring St and 1030-1380 North Broadway	Apartments	986	du	1,972	
			Retail	15,000	sf		30
			Restaurant	23,800	sf		48
5	La Plaza Cultura Village	527 N Spring St	Apartments	345	du	690	
			Retail	44,000	sf		88
			Restaurant	11,000	sf		22
6	N/A	1417 North Main St	Mixed Use: Office & Retail	N/A			
7	N/A	152 North Central Ave	Restaurant	9,626	sf		19
8	N/A	1640 North Spring St	Restaurant	980	sf		2
9	N/A	1646 North Spring St	Restaurant	1,304	sf		3
10	N/A	1715 North Naud St	Restaurant	5,477	sf		11
11	N/A	1726 North Spring St	Office	15,626	sf		63
12	N/A	1729 North Naud St	Restaurant	14,607	sf		29
13	N/A	1730 North Spring St	Restaurant	2,172	sf		4
14	N/A	207 West Ord St	Restaurant	4,965	sf		10
15	N/A	234 North Center St	Apartments	430	du	860	
			Retail	8,742	sf		17
16	N/A	323 East 1st St	Restaurant	1,663	sf		3
17	N/A	414 West Bamboo Lane	Apartments	2	du	4	
			Retail	3,493	sf		7
18	N/A	445 West Cottage Home St	Community Center [a]	8,530	sf		17
19	N/A	475 West Gin Ling Way	Restaurant	3,748	sf		7
20	N/A	508 West Chungking Rd	Retail	1,575	sf		3
21	N/A	534 West Casanova St	Apartments	3	du	6	
22	N/A	700 East Jackson St	Restaurant	16,662	sf		33
23	N/A	727 North Broadway	Restaurant	3,370	sf		7
24	N/A	818 North Hill St	Restaurant	2,558	sf		5
25	N/A	819 North Broadway St	Restaurant	2,826	sf		6
26	N/A	823 North Cleveland St	Apartments	15	du	30	
27	College Station Project	129 West College Street	Apartments	770	du	1,540	
			Retail	51,390	sf		103
28	Harmony	943 N Broadway	Apartments	178	du	356	
			Retail	37,600	sf		75
29	N/A	Restaurant	Restaurant	1,397	sf		3
30	The Llewellyn Apartments	1101 North Main Street	Condominiums	318	du	636	
31	Metro Center	410 Center Street	Office	110,000	sf		440
32	Los Angeles Street Civic Building (LASCB) Project	150 North Los Angeles Street	Mixed Use: Office, Retail, Other	753,740	sf		
33	Hill Mixed Use Project	708 North Hill Street	Apartments	162	du	324	
			Retail	5,000	sf		10
34	Interim Housing Facility	1060 North Vignes Street	Residential	232	du	464	
35	Mixed-Use	211 Alpine Street	Apartments	170	du	340	
			Retail	2,000	sf		4

Appendix N
Cumulative Growth Rate Project Check

ID	Project Title	Address	Land Use	Size	Units	Population	Employment
36	643-655 N Spring St MU	643 North Spring Street	Hotel	142	rooms		89
			Apartments	281	du	562	
			Retail	17,000	sf		34
			Restaurant	2,500	sf		5
37	Data Center	900 North Alameda Street	Data Center [b]	179,000	sf		179
38	843 N Spring St MU	843 North Spring Street	Office	59,964	sf		240
			Restaurant	40,625	sf		81
39	Mixed Use	1457 North Main Street	Apartments	244	du	488	
			Retail	9,829	sf		20
40	Mixed-Use Redevelopment	1201 North Broadway	Apartments	136	du	272	
			Office	9,000	sf		36
41	200 Mesnagers	200 Mesnagers Street	Apartments	285	du	570	
			Retail	20,000	sf		40
42	BOK DTLA	1418 North Spring Street	Restaurant	20,000	sf		40
43	Homeboy Industries	130 W Bruno Street	Residential	157	du	314	
44	942 N Broadway	942 N Broadway	Apartments	178	du	356	
			Retail	532	sf		1
			Restaurant	4,501	sf		9
			Office	31,777	sf		127
45	Mixed-Use Barranca Project	169 N Avenue 21	Apartments	102	du	204	
			Hotel	100	rooms		63
			Retail	4,660	sf		9
46	717 N Hill St Mixed Use Project	717 N Hill St	Apartments	411	du	822	
			Retail	17,096	sf		34
	Total					**10,810**	**2,239**

Notes:
N/A - Information not available
du - Dwelling units
sf - Square Feet

[a] Community Center is not a use in the City of LA model. Retail land use employment multiplier was used.
[b] Data Center is not a use in the City of LA model. Industrial land use employment multiplier was used.

The City of Los Angeles model was used to project future population and employment growth for the evaluation for neighborhood rider estimates of the proposed Project. However, as noted in the transportation section of this EIR, the VMT benefit of this market segment was conservatively not quantified. The City of Los Angeles model includes growth projections for the Cornfields Arroyo Seco Specific Plan and the DTLA 2040 Community Plan updates, so represents the most current and accurate projection for future growth in the study area of the proposed Project.

	Land Use Growth Comparison	
Source	Population	Employment
City of Los Angeles Model Growth	20,303	8,925
Related Project Growth	10,810	2,239

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- Ridership Model Development

Appendix N – Ridership Model Development

This appendix summarizes the model development and analytical work and background research prepared by Fehr & Peers for the analysis of ridership for the Los Angeles Aerial Rapid Transit Environmental Impact Report. The proposed Project would provide a unique mode of public transit to the City of Los Angeles, which would provide a frequent high-capacity transit service to the community, as well as an aerial rapid transit connection between the regional transportation hub of Union Station, and Dodger Stadium, one of the City of Los Angeles' primary sport and event destinations. The proposed Project would also provide a unique customer experience in the City that is expected to attract riders directly because of that experience. The proposed Project would serve the transit needs of a number of distinct market segments including Dodger Stadium game and event attendees, employees, tourists, neighborhood riders including Chinatown, Mission Junction, Elysian Park and Solano Canyon community members, and to destinations in and around the Los Angeles State Historic Park, including for State Historic Park event attendees. Each market segment is described below, along with the methodology used to estimate ridership.

Due to the unique nature of the proposed Project as an aerial gondola system, its unique operating condition in terms of headways, and the frequency of event-related ridership on the system, the Metro ridership forecasting model and the City of Los Angeles travel demand model were both determined to substantially under estimate ridership for Dodger Stadium games and events because the models only include regular weekday employment, and have no mechanism for estimating ridership from attendees since the model excludes such "special generators" such as Dodger Stadium. Additionally, neither model includes an aerial gondola system mode, or transit services with 23 second headways. In order to estimate ridership, a detailed event mode choice model was developed for game and event days, as well as less detailed off-model ridership estimate techniques for non-event related market segments, which are expected to generate fewer riders on a given day. Tourism related ridership is estimated from an analysis prepared by HR&A, which determined the potential for the proposed Project to capture a share of the tourism attractions market in the County of Los Angeles.

Stadium Games & Event Attendees Ridership Model Development & Forecast Methodology

Fehr & Peers developed regression-based game-day ridership models for transit and park and ride access to/from Dodger Stadium to estimate ridership for the proposed Project. The models build on the work Fehr & Peers previously prepared evaluating transit access for basketball games

at the Crypto.com Arena (formerly Staples Center), as well as used to estimate arena mode choice for the Inglewood Basketball and Entertainment Center (IBEC) Environmental Impact Report. Crypto.com Arena is a transit-rich environment, and better reflects the type of transit conditions that will be available in the future with the proposed Project at Dodger Stadium, and so we determined that the surveys collected for fans travelling to the Crypto.com Arena are a reasonable survey sample to understand the travel behavior of Angelenos travelling to sporting events in the City, and so can be adapted to analyze travel behavior for the proposed Project. The model compares the statistical relationship between travel cost and time associated with taking transit to a game with the travel cost and time of driving and parking at a game and calculates the resulting transit mode share for the game, as a relative share of overall game attendance.

For example, driving costs include the cost of gas and parking at Dodger Stadium, which averaged around $25.00 per vehicle in 2019. Transit costs include the cost of fares, such as Metro's $1.75 one way fare. Both driving and taking transit take time, which will depend on where people going to a Dodger Game start their trip, levels of congestion, and the transportation mode that they take. For example drive time to Dodger Stadium gates from zip code 91103 (Old Pasadena) is approximately 25 minutes, with an additional 15 minutes for vehicles to make it through the parking gates to a parking space. Transit to Union Station takes approximately 22 minutes, with an additional 25 minutes for riders to get to the Dodger Stadium Express and ride to Dodger Stadium. The proposed Project is expected to save about 15 minutes of transit travel time in total.

Based on the various cost and time data inputs by zip code, the model estimates predicted transit mode share for each zip code included in a database of Dodger ticket sales based on the travel time and cost characteristics associated with each zip code of origin and travel characteristics to Dodger Stadium. For example:

- Zip code 90012 (Chinatown, Civic Center, Little Tokyo) has the highest ticket sales. Its existing estimated transit mode split is 16% of game attendees from that zip code. With the benefit of the proposed Project and all of the planned regional transit improvements in 2026, the percentage of game attendees from the zip code riding transit to a game is expected to increase to 26% in 2026 and in 2042 it is estimated to increase to 38%.
- Zip code 90044 (South Los Angeles) has average ticket sales. Its existing transit mode split is estimated to be 7% of game attendees from that zip code. With the proposed Project and all of the planned regional transit improvements in 2026 it is estimated to increase to 23% of game attendees, and in 2042 it is estimated to increase to 39% of game attendees. With its greater distance from Dodger Stadium, zip code 90044 has higher driving time and costs relative to zip code 90012 and so the proposed Project and the regional transit improvements make a transit trip more competitive with driving than 90012, which has shorter drives and therefore lower driving costs (even though its transit trips are shorter). It should be noted that 90012 has multiple transit stations, but its

population concentration is greater in the south and east side of the zip code), so analyzed transit travel times reflect this concentration.

Figure 1 illustrates a basic summary of the model structure, and **Table 1** lists the model inputs and the data source for each input, and further detail of the data used for model development, calibration, and forecasting are detailed below.

Figure 1 – Game/Event Model Structure

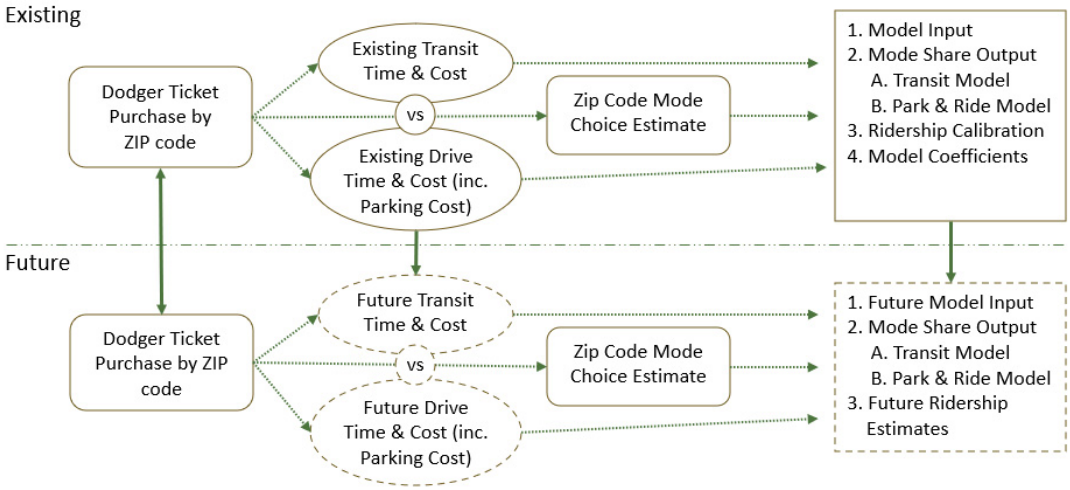


Table 1: Model Inputs and Data Sources

Model Input	Data Source	Example Existing Data: High Ticket Sale Zip Code (90012)	Example Existing Data: Average Ticket Sale Zip Code (90044)
Zip codes from which Dodger fans travel to the game	2019 ticket sales by zip code from Dodgers, used to weight all zip code data (i.e., more ticket sales in a particular zip code means its conditions have a larger effect on analysis)	1.8%	0.1%
Distance and travel time between each zip code and Dodger Stadium, by car	GIS ESRI's "Routable Network" was used to calculate travel times by car between the zip code centroid and Dodger Stadium in GIS. An additional 15-minute drive time was added to account for game day traffic congestion on top of typical peak period congestion, inclusive of queueing at Dodger Stadium parking gates and travel within the stadium.	2.2 miles, 25 min	11 miles, 54 min
Distance and travel time between each zip code and LA Union Station, by car	The same "Routable Network" was used to calculate the travel times by car between the zip code centroid and Union Station.	0.6 miles, 3 min	10 miles, 33 min
Distance and travel time between each zip code and LA Union Station, by transit	Metro and Metrolink timetables, with an additional 15-minute transfer penalty if the transit trip included a transfer for existing scenario and a reduced 10-minute transfer penalty for future scenarios, reflecting expected improvements to transit headways in the future. Includes assumed 10 min travel time to transit station origin and wait time(s) for train(s) (one half peak headway) and transfer times if applicable Additionally, the estimated transit travel times were adjusted to reflect the buildout of the transit network associated with Measure R and M projects. For 2026, these projects include the Regional Connector, the Crenshaw/LAX Transit Corridor (and the associated Metro C Line Operational Plan adopted by the Metro Board in Fall 2019), and the D (Purple Line) Extension (to Century City). (While the Regional Connector will eliminate a transfer and save travel time to Union Station for	21 min	89 min

Model Input	Data Source	Example High Ticket Sales (Zip Code 90012)	Example Average Ticket Sales (Zip Code 90044)
	riders on the A Line, riders on the E Line will still require a transfer, and riders from the E Line (Gold Line Eastside Extension) will now need to transfer to reach Union Station, whereas today they do not.) Transit projects listed in the Metro Measure M expenditure plan for implementation by 2042 were included in the 2042 analysis. In addition to individual transit projects, Measure M also includes substantial funding for bus and rail operations and state of good repair; therefore, an overall adjustment of 5% transit travel time improvement was applied to the 2026 analysis and a 10% transit travel time improvement was applied to the 2042 analysis.		
Travel time between LA Union Station and Dodger Stadium on transit	The total travel time, including transfer time, was assumed to be 25 minutes via the Dodger Stadium Express. An average transit travel time savings of 15 minutes for stadium arrival was estimated with the proposed Project.	25 min (existing)	25 min (existing)
Value of time (applied to both drive travel time and transit travel time)	The value of time for 2019 was estimated to be $18.20/hour by extrapolating the values provided by US DOT in 2009 and 2016. Values of time for 2026 and 2042 were estimated by extrapolating the growth trend from these data.	$18.20 per hour (2019)	$18.20 per hour (2019)

Model Input	Data Source	Example High Ticket Sales (Zip Code 90012)	Example Average Ticket Sales (Zip Code 90044)
Driving costs	The driving cost for 2019 was estimated to be $0.13/mile using vehicle miles per gallon data from the Emission Factors (EMFAC) from the California Air Resources Board (CARB) and average gas price fluctuations from the US Energy Administration. Future driving costs were estimated by extrapolating fuel cost trends to the future and reviewing overall fleet fuel economy for 2026 and 2042 using the EMFAC model. Note that the EMFAC modeling assumes a near universal electric vehicle adoption in the statewide passenger fleet. EV adoption is not proving to match the level needed to achieve this adoption, so we have chosen not to apply this level of EVs to the 2042 analysis. However, EV adoption could work as a headwind to overall transit demand because, barring electrical rates increasing substantially, the incremental cost to operate an EV is substantially less than a gasoline powered vehicle. Future private vehicle ownership is likely to be affected by further shift in technology and mobility services (such as autonomous vehicles and vehicle subscription services), and demographic preferences of millennials and Generation Z, which generally have lower levels of auto ownership than prior generations. These trends could contribute to further increases in transit usage or could contribute to a trend in greater auto usage through AV's or subscription services. This level of uncertainty is difficult to predict, but we do not believe that it will alter the general relationship between preferences for saving time and money.	$0.13/mile	$0.13/mile

Model Input	Data Source	Example High Ticket Sales (Zip Code 90012)	Example Average Ticket Sales (Zip Code 90044)
Parking costs	An average blended parking cost of approximately $25 was applied to the drive to stadium costs. See the following section for more detail on the calculation of this average cost. Parking costs within a ½ mile walking distance of each station vary, ranging from a daily maximum of $4.00 to $17.50, with the majority of lots having a daily maximum less than $8.00. An $8.00 parking cost was assumed for park and ride trips reflecting an average daily parking maximum around the stations.	$25 (2019) Dodger Stadium $8 (2019) LAUS	$25 (2019) Dodger Stadium $8 (2019) LAUS
Transit	The model transit fare assumption for Metro was $1.75 per ride, and the 2019 Metrolink distance-based fare for each station origin within a particular zip code were included in the model calculated transit travel cost.	$1.75 (2019)	$1.75 (2019)

The proposed Project transit access model analyzes the proposed Project ridership that is expected to come from the transit system, primarily Metro and Metrolink services connecting to the proposed Project at Union Station. The park and ride model analyzes proposed Project ridership that would come from riders parking at Union Station, at other parking locations in Downtown Los Angeles, or from vehicle drop-off at Union Station, such as Uber or Lyft.

Calculating Blended Stadium Parking Rate

Fehr & Peers analyzed 2019 Season parking scans and parking rates. for the 2019 season; the blended parking rate was $25.57.

Mode of Access

The proposed Project transit access model analyzes the proposed Project ridership that is expected to come from the transit system, primarily Metro and Metrolink services connecting to the proposed Project at Union Station or the Chinatown/State Park Station. The park and ride model analyzes proposed Project ridership that would come from riders parking within a ½ mile walking distance of either station, or from vehicle drop-offs at either station from a service such as Uber or Lyft.

The existing model was then calibrated to existing conditions for the share of Dodger Stadium Express (DSE) riders that take transit to LA Union Station based on data prepared by Metro in reports to the South Coast Air Quality Management District (SCAQMD) for the 2011-2015 Dodger seasons. Metro also provided Fehr & Peers with intercept survey data collected in the 2014 season. Attachment A includes the 2014 data provided by Metro, as well as summarizes the range in mode of access for Dodger Stadium Express across the years that Metro analyzed. Mode of Access to Dodger Stadium ranged from 91% non-auto to 74% non-auto. Fehr & Peers applied the mode of access percentages from the 2014 data, because they offered substantially higher number of samples compared with the data cited in Metro's reports to SCAQMD. Metro's data indicated an evening game non-auto mode of access of 74%, and a daytime game non-auto mode of access of 91.4%. In the vehicle miles travelled (VMT) benefit calculation in the transportation section of the EIR, Fehr & Peers applied the evening mode of access to all evening games, and the daytime mode of access to day games.

While transit mode of access is expected to improve with the expansion of the Measure R & M network and improved transit travel time competitiveness, for a more conservative estimate, Fehr & Peers held the 2014 mode of access constant for future forecasts. However, even in 2012 when fewer Metro rail stations were open than at present, Metro's intercept survey data for DSE riders indicated that 88% of riders arrived via transit, walking, or biking.

Calibrating Existing Model Coefficients

The ridership model was calibrated to existing conditions for the estimated mode share of attendees that currently use the Dodger Stadium Express (DSE), using average game attendance (48,650) and average Dodger Stadium Express ridership (2,260, including 1,845 riders on the Union Station DSE, and 415 riders on the South Bay DSE) from the 2019 season. Calibration is a typical practice required in the development of a ridership model to ensure that the model coefficients are performing well to predict existing ridership using the input data.

Projecting Future Conditions

The calibrated ridership model was then updated to reflect future conditions (2026 for the opening year of the proposed Project and 2042 Horizon Conditions) for the following inputs:

- The value of time was increased from $18.20/hour to $20.48/hour by extrapolating data from US DOT and projecting forward for 2026 and $25.80/hour for 2042.
- Driving costs were increased from $0.13/mile to $0.14/mile for 2026 and $0.17/mile for 2042 to account for improvements to fuel economy but estimated increases to gas prices.
- The driving time was increased by 10% for drives to Dodger Stadium and to LA Union Station for 2026, and 25% for 2042 to account for expected future increases in travel times due to congestion associated with population growth and further increased automobile usage through transportation network companies and autonomous vehicles. Ten years of freeway speed data was evaluated to inform this assumption. Those data are summarized below.
- As detailed in **Table 1** above, the transit travel time from LA Union Station to Dodger Stadium was decreased by 15 minutes to account for estimated time savings associated with the proposed Project relative to the Dodger Stadium Express. Note that the overall time savings will vary based on the level of queueing at the proposed Project stations, and in some cases, riders may enjoy greater time savings or less time savings depending upon their arrival time and the number of passengers waiting in the queue, as well as the overall proposed Project ridership on a particular game relative to the capacity of the system. While the DSE has travel time benefits associated with the bus lanes on Sunset Boulevard, it experiences congestion at gate entrances to Dodger Stadium because there are no dedicated lanes at the entrances, and the DSE and transportation network companies (TNC) like Uber and Lyft use the same parking booth as the DSE. Based on data provided by Metro, travel times from Union Station to Dodger Stadium (pre-game) ranged from approximately 14 minutes to 24 minutes, with an average travel time of approximately 17 minutes. After a game, travel times ranged from approximately 18 minutes to 49 minutes (which occurred on opening day) for an average of approximately 22 minutes. Excluding the opening day travel time outlier, the post-game travel time ranged from approximately 18 minutes to 24 minutes, with an average travel time of 20 minutes.

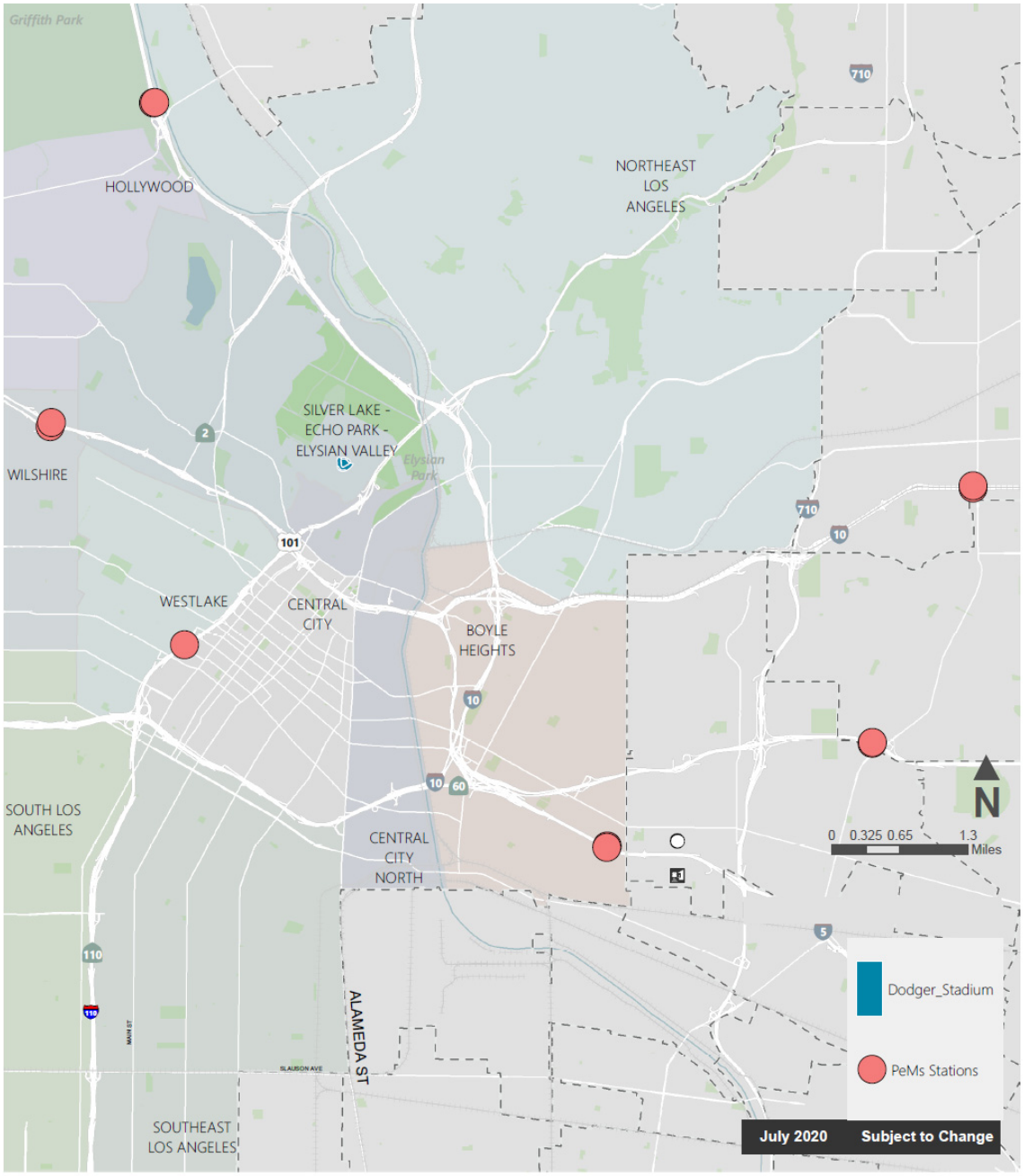
Validating Future Congestion Factors

Freeway speeds are monitored by Caltrans via its Performance Measurement System (PeMS). Ten years of speed data were obtained in the month of May from 2010 through 2019 to evaluate how freeway speeds have changed over time. A PeMS monitoring location was selected for major freeways used to travel to the Dodger Stadium area, including the I-5, US-101, I-110, I-10, and SR-60, as illustrated in **Figure 2**. Sampled speed data were not available for the SR-110 adjacent to Dodger Stadium, which has also experienced speed degradation over time, and is heavily influenced by travel to Dodger Stadium. Speeds across all of those facilities were averaged for each hour of the weekday and summarized in **Table 2**. The most substantial speed degradation occurred 2:00 PM to 6:00 PM, when Dodger fans would be travelling to a weekday evening game. Between 2010 and 2019, the PM peak period speeds declined 12.6% to 14.5% depending on hour. The ridership model includes an assumed 10% increase in travel time for 2026, and a 25% increase in travel time for 2042 conditions relative to 2019 conditions. Based on the freeway speed trends, assuming trends hold, these assumptions are reasonable.

Table 2: Average Weekday Freeway Speed Changes 2010-2019

	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
2010	61.1	54.9	52.3	52.3	53.1	54.0	54.1	54.0	51.0	47.2	46.0	45.3	47.9	57.9	64.4
2011	60.9	55.3	53.7	55.2	56.2	56.9	56.7	56.5	53.9	50.5	49.1	49.8	52.7	60.1	64.8
2012	60.5	55.2	53.6	53.5	54.1	55.2	55.9	55.7	53.1	49.8	47.8	47.7	50.2	58.4	64.7
2013	52.3	45.7	43.1	44.4	47.1	48.8	49.5	48.4	43.8	40.3	38.7	38.9	41.7	50.0	57.6
2014	59.6	51.8	49.1	50.4	52.7	54.4	55.3	53.2	49.1	44.3	41.5	42.8	46.6	58.4	64.8
2015	57.4	50.0	48.1	49.4	51.6	52.2	50.5	47.9	42.5	37.8	36.3	38.3	42.2	53.9	61.8
2016	59.4	53.8	51.6	53.0	54.4	55.1	54.4	51.5	46.7	44.2	42.4	42.5	45.9	57.7	63.9
2017	57.2	50.4	48.7	49.9	50.8	51.7	51.4	49.1	44.2	41.5	40.3	40.4	43.1	53.0	59.7
2018	59.4	54.0	52.3	53.4	54.6	54.5	54.2	52.9	49.9	47.1	46.0	45.9	48.3	56.4	62.5
2019	59.0	52.3	49.8	51.2	52.6	53.1	52.0	48.7	43.6	40.7	39.9	38.6	41.9	53.0	62.1
Change (2010 to 2019)	-3.4%	-4.7%	-4.8%	-2.1%	-1.0%	-1.6%	-4.0%	-9.9%	-14.5%	-13.8%	-13.1%	-14.8%	-12.6%	-8.4%	-3.6%

Figure 2: Analyzed PeMS Monitoring Locations



Customer Experience Factor

The model employed for these estimates reflects the expected mode choice response to cost and time factors. People generally want to save time and money and will make their choices according to the benefits and disbenefits that a particular mode will have for their particular trip. However, overall user experience plays into decisions beyond time and cost factors. For example, in Los Angeles, many people choose to drive, even though it is more expensive and, in some circumstances, can take the same or longer than riding transit, because they appreciate the convenience of driving over that of taking transit.

The growth of ridership on the Dodger Stadium Express is indicative of both the travel experience to the game (with its modest travel time benefits of the bus only lane versus driving on the Sunset Boulevard corridor), cost savings relative to stadium parking, and riders indicate that they appreciate the comradery of being on a bus filled with fans headed to the game.

The proposed Project will provide a unique rider experience in terms of frequency (a cabin departing every 23 seconds) and views across Downtown Los Angeles, the San Gabriel Mountains, and Dodger Stadium. There is no available data source to quantitatively estimate how this user experience alone will impact ridership, but it is believed that actual ridership could ultimately exceed the model estimates due to the unique experience of the system. An assumed factor of 20% was applied on top of the model estimates to reflect this potential to capture riders associated with the proposed Project's customer experience.

This factor accounts for choice riders who are assumed to be less likely to ride connecting transit to the proposed Project and would be more likely to park and ride or take Uber or Lyft than a transit to connect with the proposed Project. A conservative assumed mode of access for these riders is 65% vehicle mode of access, and 35% transit/walk/bike.

Dodger Stadium Employee Rider Estimate Methodology

The Dodgers estimate that there are approximately 300 employees at Dodger Stadium on a non-game/event day and 1,400 employees on game days, including Dodger and vendor employees. Zip code of residence data were not available for Dodgers employees and vendors, but the Dodgers indicated that many of their employees commute to the stadium from neighborhoods to the east, where many have good transit access, including northeast Los Angeles, Boyle Heights, downtown Los Angeles, and east Los Angeles. Commute mode-choice data from the American Community Survey of the United States Census were reviewed in these areas and averaged approximately 10 percent across these neighborhoods, which was used to estimate Stadium Employee ridership. Fehr & Peers conservatively did not include in the Transportation Section of this EIR the VMT reduction benefit of the proposed Project for the Dodger Stadium Employees rider market segment.

Los Angeles State Historic Park Rider Estimate Methodology

The Los Angeles State Historic Park would be served by the proposed Project via an intermediate station, Chinatown/State Park Station, located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on City ROW, while the northern portion of the station would be located within the southern boundary of the Los Angeles State Historic Park. This intermediate station would provide a more direct access to the park than the existing Metro L Line (Gold) station in Chinatown for park users, as well as for event attendees on the days that the Los Angeles State Historic Park hosts events. The proposed Project station would save approximately 5 minutes of walk time compared with the L (Gold) Line Chinatown/State Park Station, but is frequency and headways (cabins every 23 seconds during peak operations) would represent a substantial improvement compared with the L Line headways, which would be another benefit of the more direct access to the Los Angeles State Historic Park provided by the proposed Project. Additional benefits of the proposed Project station to the Park include concessions, restrooms, and a covered breezeway. Beyond connections with the Park, the proposed Project would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating. Ridership for the daily park use is included in the ridership estimates for neighborhood riders.

There were a total of 15 special events hosted at the State Historic Park in 2019, including concerts, craft fairs and festivals with attendance from 6,000 to 22,500 daily attendees, as listed in **Table 3**.

Parking is limited parking adjacent to the State Historic Park, so many event attendees likely take transit (primarily the Metro L Line). Some likely park at Union Station and ride the L Line to the Chinatown Station.

No data are available for mode share of attendees travelling to events at the Park. For the purposes of this analysis, Fehr & Peers assumed a 10% mode split for attendees taking transit from Union Station. **Table 3** details the resulting proposed Project ridership estimates for State Historic Park events. However, because quantitative data to further refine this estimate was not readily available, Fehr & Peers conservatively did not include in the Transportation Section of this EIR the VMT reduction benefit of the proposed Project for this ridership market segment.

Table 3: State Historic Park Event Attendance and Estimated ART Ridership Capture

Date	Day of Week	Event	Attendance	Union Station Access Assumed LAART Attendee Capture 10%
1/19/2019	Saturday	One Life march	8,000	800
4/6/2019	Saturday	Renegade Craft Fair	7,500	750
4/7/2019	Sunday	Renegade Craft Fair	7,500	750
5/5/2019	Sunday	Que Buena Latin Fest	6,000	600
6/22/2019	Saturday	Disclosurefest	8,000	800
7/26/2019	Friday	ODESZA	20,000	2,000
7/27/2019	Saturday	ODESZA	20,000	2,000
8/17/2019	Saturday	88 Rising	22,500	2,250
8/18/2019	Sunday	YOLA Fest	6,000	600
9/7/2019	Saturday	ZEDD	12,000	1,200
9/15/2019	Sunday	Que Buena Latin Fest	6,000	600
10/5/2019	Saturday	Rufus du Sol	20,000	2,000
11/2/2019	Saturday	Day of the Dead	10,000	1,000
11/23/2019	Saturday	Renegade Craft Fair	7,500	750
11/24/2019	Sunday	Renegade Craft Fair	7,500	750
Average Event (Rounded to 100s)			***11,200***	***1,120***

Tourism Rider Estimate Methodology

Tourism ridership would be driven by the proposed Project capturing a share of the existing tourism market in Los Angeles, particularly for tourists to downtown Los Angeles visiting other attractions.

Based on HR&A's evaluation of comparables, attached to this appendix memorandum, with the most similarity to the context of the proposed Project and an evaluation of the tourist market of Los Angeles County, they estimate that the proposed Project would capture they estimated an annual tourist ridership of 915,000.

Tourism ridership would not be consistent on a daily basis and would be variable depending on the seasonality of tourism in Downtown Los Angeles. However, in a tourism market as large as Los

Angeles, the variation is not expected to be substantial, so in order to estimate average daily tourist riders, Fehr & Peers divided the annual number by 365 since the proposed Project would operate every day of the year. On game days, riders destined for Dodger Stadium would receive priority boardings, and so tourist related riders were factored down on game days to account for the hours of Stadium attendee focused service.

Neighborhood Rider Estimate Methodology

Because of the unique nature of the proposed Project, inclusive of its headways and capacities, the use of the Metro model or City of Los Angeles model was determined to be unsuitable off the shelf for an accurate estimate of the potential ridership capture. Therefore, an estimated market capture approach was employed to develop ridership for daily (non-event) transit riders on the proposed Project.

Most ridership is generated from destinations closest to transit stations with a ½ mile walking distance being a typical reasonable walking distance to high-quality fixed route transit. Fehr & Peers used the network analyst tool of the Esri ArcGIS software to calculate the area contained within the half mile of each station based on the actual street network.

The Project Sponsor will request consideration by the Los Angeles Dodgers of the potential for the Dodger Stadium Station to include a mobility hub where outside of game day periods, Passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program and individual bike lockers, to access Elysian Park and other nearby neighborhoods, including Solano Canyon. As such, a 1 mile biking distance was used for the evaluation of Dodger Stadium Station given that it may include a mobility hub to connect the station to the Solano Canyon community and Elysian Park, which are beyond a ½ mile walking distance. **Figure 3** to **Figure 5** illustrate the walk (or bikeshed) around each station. If a mobility hub is not ultimately provided, the estimates ridership would likely be lower. However, to be conservative, neighborhood riders are not included in the estimates of vehicle miles travelled reduction associated with the project, so the conclusions of the transportation impact analysis would be the same.

In addition to providing service on game and event days at Dodger Stadium and events at the Los Angeles State Historic Park, the proposed Project will operate daily to link densely populated residential neighborhoods including El Pueblo, Chinatown, Mission Junction, Elysian Park, Echo Park, and Solano Canyon to the region's rapidly growing regional transit system at LAUS. It is anticipated that the proposed Project would also provide daily service consistent with Metro operations. The proposed Project would also provide convenient transit services that would overcome existing barriers to walking or biking, such as considerable grade differences between Dodger Stadium and its hillside communities and those around the Alameda and Chinatown/State Park Stations.

The American Community Survey and the Longitudinal Employer-Household Dynamics of the United States Census was used to calculate the population and jobs respectively within the station catchment areas. Population and jobs were not double counted when station catchment areas overlapped. The forecast growth in population and jobs for the Central City North Community Plan Area was obtained from the City of Los Angeles travel model run for the *Downtown Community Plan Update / New Zoning Code for Downtown Community Plan Draft Environmental Impact Report* and was applied to the existing population and jobs calculated for the station sheds from the U.S. Census in order to estimate the potential ridership market for 2026 and 2042 conditions.

U.S. Census journey to work mode split was reviewed for the study area to inform the potential market capture of the ART system in serving the travel needs of the population and jobs in the station catchment areas. Fehr & Peers also took into account the proximity between the three proposed Project stations, as well as to the L Line (Gold) in estimating the market capture percentages. **Table 4** detail the population and jobs and estimated ART market capture percentages used to estimate daily transit ridership. The State Historic Park has approximately 750 visitors on weekdays and 1,250 on weekends. A 10% capture was assumed for this market segment.

Fehr & Peers conservatively did not include in the Transportation Section of this EIR the VMT reduction benefit of the proposed Project for the neighborhood rider market segment.

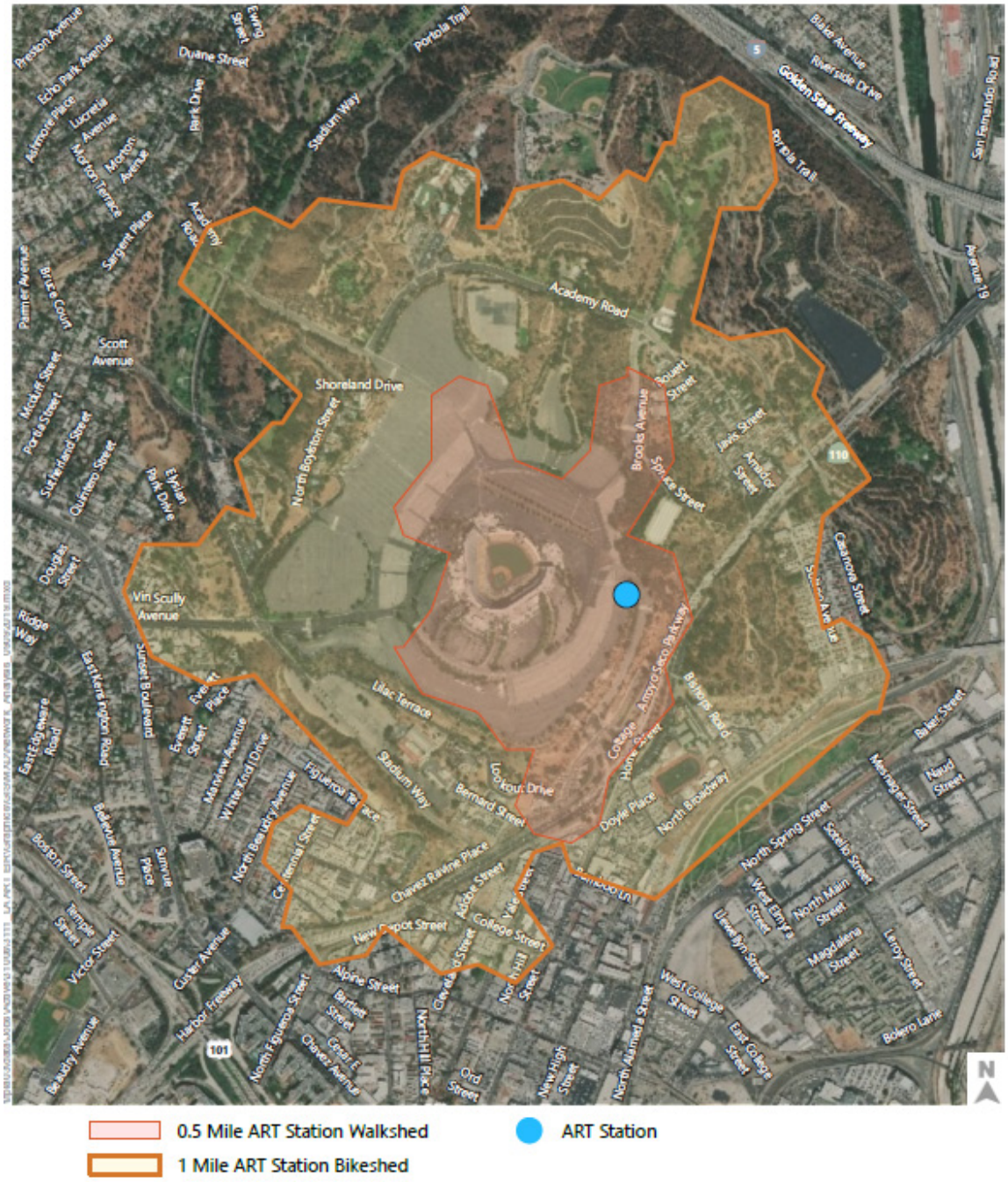
Table 4: Station Catchment Area Job & Population Estimates

	Existing		2026			2042		
	Working Age Pop.	Jobs	Working Age Pop.	Jobs	ART Capture	Working Age Pop.	Jobs	ART Capture
Alameda Station	3,646	13,001	4,874	14,842	2%	6,839	17,789	2%
Chinatown /State Historic Park Station	2,275	2,620	3,041	2,991	6%	4,267	3,585	6%
Dodger Stadium Station	3,757	1,521	5,023	1,736	6%	7,048	2,081	6%

Figure 3: Alameda Station ½ Mile Walkshed

Figure 4: Chinatown / State Park Station ½ Mile Walkshed

Figure 5: Dodger Stadium Station 1 Mile Bikeshed



Ridership Estimates by Market Segment

The proposed Project would serve the transit needs of the distinct market segments described in this memorandum, including Dodger Stadium game and event attendees, employees, tourists, neighborhood riders, and Los Angeles State Historic Park visitors and event attendees.

The total daily rider estimates for each market segment are summarized below and shown in **Table 5** for average weekdays and weekends on "low" (non-event) days, "high" days (days with games or events) for the Project Opening Year (2026) and the Horizon Year (2042) based on the forecasting and estimating methodologies described in this memorandum.

Dodger Stadium Game/Event Attendee Riders

It is estimated that 6,000 game attendees (12,000 trips for round-trip) would ride the proposed Project in 2026 and 10,000 game attendees (20,000 trips for round-trip) would ride the proposed Project in 2042 per game, reaching the estimated capacity of the system.

Based on Dodger ticket sale data, approximately 15 percent of this ridership is expected to access the system at the Chinatown/State Park Station, transferring from the Metro L (Gold) Line, which is accounted for in the game attendee ridership forecast for both stations.

Dodger Stadium Employee Riders

Applying a 10 percent capture rate for the proposed Project, as described for this market segment in Section 3.17.3, it is estimated that 30 employees (60 trips for round trip) would ride the proposed Project on a non-game day and 140 employees (280 trips for round trip) would ride on a game/event day.

Tourist Riders

The daily number of tourists who would ride the ART is estimated to vary between 1,265 tourists (2,530 trips for round trip) and 3,570 tourists (7,140 trips for round trip).

Neighborhood Riders

The daily number of neighborhood transit riders per station is estimated to vary between 200 riders (400 trips for round-trip) to 575 riders (1,150 trips for round-trip).

Los Angeles State Historic Park – Visitors and Event Attendees

It estimated that an average of 1,120 event attendees (2,240 trips for round-trip) would ride the proposed Project to attend an event at the State Historic Park.

Table 5: Proposed Project Estimated Daily Riders

RIDERSHIP MARKET SEGMENT	DAILY WEEKDAY RIDERS				DAILY WEEKEND RIDERS					
	2026		2042		2026			2042		
	LOW DAY	HIGH DAY - GAME	LOW DAY	HIGH DAY - GAME	LOW DAY	HIGH DAY – LASHP	HIGH DAY - GAME	LOW DAY	HIGH DAY - LASHP	HIGH DAY - GAME
Dodger Stadium Access (Game/Stadium Event Ticket Holders)										
Alameda Station		5,100		8,500			5,100			8,500
Chinatown/State Park Station		900		1,500			900			1,500
Tourists	2,575	1,265	2,575	1,265	3,570	3,570	1,210	3,570	3,570	1,210
Dodger Employees	30	140	30	140	30	30	140	30	30	140
Other Special Events										
Special Events at LA State Historic Park						1,120			1,120	
Neighborhood Riders										
Alameda Station	400	400	500	500	200	200	200	250	250	250
Dodger Stadium Station [a]	400	400	550	550	200	200	200	300	300	300
Chinatown/State Park Station (Neighborhood/Regional and Daily Park Access)	425	425	575	575	320	320	320	370	370	370
Total Daily Riders										
Total Daily Riders	3,830	8,630	4,230	13,030	4,320	5,440	8,070	4,520	5,640	12,270

Note: This table shows the number of daily riders. It is assumed that each rider will make two trips.
LASHP = Los Angeles State Historic Park
[a] The Project Sponsor will request consideration by the Los Angeles Dodgers of the potential for the Dodger Stadium Station to include a mobility hub where outside of game day periods, passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program and individual bike lockers, to access Elysian Park and other nearby neighborhoods, including Solano Canyon. If a mobility hub is not ultimately provided, the estimated ridership would likely be lower. However, to be conservative, neighborhood riders are not included in the estimates of vehicle miles travelled reduction associated with the project, so the conclusions of the transportation impact analysis would be the same.

LA ART MODE OF ACCESS DATA CONSIDERED AND ESTIMATED FUTURE MODE OF ACCESS

	Dodger Stadium Express MOA							Metro Systemwide		LA ART					
								Bus	Rail	Model Output [g]	Choice Riders [h]	All Riders	Model Output [g]	Choice Riders [h]	All Riders
	2011 [a]	2012 [b]	2013 [c]	2014 [d]	2014 [d]	2015	8/23/2015 [e]	2015 [f]	2015 [f]	2026			2042		
Samples				1,132	1,150	181	181								
Transit	*80%*	*84%*	*75%*	*84.10%*	*71.30%*	*113*	*62.4%*			*71%*			*71%*		
Walk/Bike		*4%*	*N/A*	*7.30%*	*2.70%*	*21*	*11.6%*			*3%*			*3%*		
Non-Auto		**88%**	N/A	**91.4%**	**74.0%**		**74.0%**	**88%**	**72%**	74%	35%	**67.5%**	74%	35%	**67.5%**
Vehicle		**12%**	N/A	**8.6%**	**26.0%**	**42**	**23.2%**	**12%**	**28%**	26%	65%	**32.5%**	26%	65%	**32.5%**
PNR												***27.6%***			***27.6%***
TNC												***5.0%***			***5%***
Other						5	2.8%								

Footnotes

Data not available from published or provided source or not applicable.

[a] Metro: Final Report MSRC Contract MS11004 to SCAQMD 2011 season

[b] Metro: Final Report MSRC Contract MS12001 to SCAQMD 2012 season

[c] Metro: Final Report MSRC Contract MS14001 to SCAQMD 2013-2014 seasons

[d] Metro: 2014 Dodger Stadium Express survey data provided in response to Fehr & Peers data request.

[e] Metro: Final Report MSRC Contract MS16001 to SCAQMD 2015-2016 seasons

[f] Metro: 2017 Quality of Life Study from 2015 Metro Customer Experience Survey Data. Mode used to get to first train or bus trip.

[g] Fehr & Peers developed ridership model forecast for LA ART for Stadium Game/Event

[h] Choice riders assumed to be an additional 20% of ridership beyond ridership model forecast due to customer experience of LAART. Choice riders assumed to be predominantly vehicle mode of access.

[i] TNC share based on average of 2019 Dodger Season TNC usage at Dodger Stadium. LA ART riders assumed to have the same TNC mode share as Dodger Stadium. Remaining vehicle mode of access for LA ART assumed to be park and ride.

2014 Dodger Stadium Express Rider Survey Results

Day Game: Dodgers vs. Indians (1132 respondents)

84.1% (952) = Used Public Transit (17.9% Used Amtrak/Metrolink)
8.6% (97) = Used Auto
7.3% (83) = Walk/Bike/Other

38.3% (433) = First Time
61.7% (699) = Not First Time

79.9% (904) = Will Pay Fare
20.1% (228) = Will Not Pay Fare

Night Game: Dodgers vs. Angels (1150 respondents)

71.3% (820) = Used Public Transit (12% Used Amtrak/Metrolink)
26% (299) = Used Auto
2.7% (311) = Walk/Bike/Other

39.5% (454) = First Time
60.5% (696) = Not First Time

88.7% (1020) = Will Pay Fare
11.3% (130) = Will Not Pay Fare

APPENDIX N TRANSPORTATION

APPENDICES

- HR&A Analysis of Potential LA

ART Tourist Ridership

HR&A Analyze. Advise. Act.

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MEMORANDUM

Prepared for:	Los Angeles Aerial Rapid Transit Project Draft Environmental Impact Report
By:	HR&A Advisors, Inc.
Date:	April 2022
Re:	HR&A Analysis of Potential LA ART Tourist Ridership

This memorandum summarizes the background research and analytical process undertaken by HR&A to evaluate and estimate potential tourists ridership for the proposed Los Angeles Aerial Rapid Transit project ("Project") from Union Station to Dodger Stadium. The analysis referenced was prepared in coordination with complementary work by Fehr & Peers to estimate Dodger game-day ridership of ticketholders to Dodger Games.

PURPOSE

In addition to serving ticketholders enroute to Dodger Stadium on game and Stadium event days, the proposed Project also has the potential to support tourist riders in non-game day scenarios, due to its unique attractiveness as a transit technology, high-quality design, location and afforded views. To better understand the potential ridership volume for tourist riders on the proposed Project, HR&A initiated a broad review of comparable systems globally and summarized data documenting these systems' share of tourist riders.

PROCESS

To identify existing systems that could be used to benchmark systems' associated capture of tourist riders, HR&A initiated a survey of aerial gondola and aerial tram systems in urban areas across the world. Tourists are defined as anyone riding the system for recreational, non-commuting purposes, and regardless of whether they are local residents. To further enrich this survey, additional kinds of transportation systems (such as ferries and cable cars) were included if they also provided a similar kind of tourist attraction as the proposed Project – i.e. they are a novel form of transportation, and/or provide access to notable views. In addition to reviewing transportation systems, HR&A also considered other kinds of attractions that provide access to notable views, and ultimately included observation decks as another instance of comparable tourist attractions. The preliminary list of over fifty systems, sorted by system type, can be seen below in Figure 1.

Figure 1: Preliminary List of Comparable Systems

System	System Type	Location
Yenimahalle Teleferik	Aerial Gondola/Tram	Ankara, TK
Aspen	Aerial Gondola/Tram	Aspen, CO
Teleférico del Puerto	Aerial Gondola/Tram	Barcelona, SP
Teleférico Montjuic	Aerial Gondola/Tram	Barcelona, SP
Ba Na Cable Car	Aerial Gondola/Tram	Da Nang, VN
Emirates Air Line	Aerial Gondola/Tram	Seattle, WA
Estes Park Aerial Tramway	Aerial Gondola/Tram	Estes Park, CO
Jackson Hole Aerial Tram	Aerial Gondola/Tram	Jackson Hole, WY
Jackson Hole Gondola	Aerial Gondola/Tram	Jackson Hole, WY
Shin-Kobe Ropeway	Aerial Gondola/Tram	Kobe, JP
Mammoth	Aerial Gondola/Tram	Mammoth Mountain, CA
Metrocable Line L	Aerial Gondola/Tram	Medellin, CO
Mexicable	Aerial Gondola/Tram	Mexico City, MX
Table Mountain Aerial Cableway	Aerial Gondola/Tram	Sydney, AU
Roosevelt Island Tram	Aerial Gondola/Tram	Barcelona, SP
Ngong Ping 360	Aerial Gondola/Tram	London, GB
Namsan Cable Car	Aerial Gondola/Tram	London, GB
Palm Springs Aerial Tramway	Aerial Gondola/Tram	Palm Springs, CA
Portland Aerial Tram	Aerial Gondola/Tram	Portland, OR
Sugarloaf Bondinho	Aerial Gondola/Tram	Rio de Janeiro, BR
Mount Faber Line (into Sentosa)	Aerial Gondola/Tram	Sentosa, SG
Hakone Ropeway	Aerial Gondola/Tram	Sounzan, JP
Steamboat Springs Gondola	Aerial Gondola/Tram	Steamboat Springs, CO
Vail	Aerial Gondola/Tram	Vail, CO
Whistler Peak 2 Peak	Aerial Gondola/Tram	Whistler BC, CA
Angels Flight	Cable Car	Los Angeles, CA
St. Charles Streetcar	Cable Car	New Orleans, LA
Montmarte	Cable Car	Paris, FR
San Francisco Cable Cars	Cable Car	San Francisco, CA
Las Colinas Aerial Personal Transit	Elevated Train	Dallas, TX
Detroit People Mover	Elevated Train	Detroit, MI
Seattle Monorail	Elevated Train	Seattle, WA
Star Ferry	Ferry	Jackson Hole, WY
Ferry to Governors Island	Ferry	New York, NY
Staten Island Ferry	Ferry	New York, NY
Alcatraz Island Ferry	Ferry	San Francisco, CA
Sydney Ferry	Ferry	Sydney, AU
The View from the Shard	Observation Deck	London, GB
Calgary Tower	Observation Deck	Calgary, CA
Willis Tower Skydeck	Observation Deck	Chicago, IL
Hancock 360	Observation Deck	Chicago, IL
Petronas Towers	Observation Deck	Kuala Lumpur, MY
Stratosphere Tower	Observation Deck	Las Vegas, NV
OUE Skyspace LA (US Bank Tower	Observation Deck	Los Angeles, CA
One World Observatory	Observation Deck	New York, NY
Top of the Rock	Observation Deck	New York, NY
Empire State Building	Observation Deck	New York, NY
Tour Montparnasse	Observation Deck	Paris, FR
Flags Over Texas	Observation Deck	San Antonio, TX
Coit Tower	Observation Deck	San Francisco, CA
Gran Torre Sky Costanera	Observation Deck	Santiago, CE
Space Needle	Observation Deck	Seattle, WA
Seoul Sky at Lotte World Tower	Observation Deck	Seoul, SK
GatewayArch	Observation Deck	St. Louis, MO
Taipei 101	Observation Deck	Taiwan, CH
Washington Monument	Observation Deck	Washington DC

To identify a set of comparable systems ("comps") most similar to the proposed Project's context in the greater Los Angeles area, this initial list was then further limited to those in places that met the following criteria:

- Urban area with a regional population of more than five million people, representative of a metropolitan area like Los Angeles with many competing tourist experiences
- Relevance to the proposed Project's potential tourist experience, based on the following characteristics: uniqueness, design, expected visitor experience, history, technological status, view, access to other paid attractions, etc.

For each system, HR&A gathered data on systems' annual ridership and the estimated share of tourist riders as both a share of overall ridership and "capture" or penetration of overall tourist market. The estimated tourist capture of each system was calculated based on the percentage of tourist riders out of the destination's regional population and total annual tourism as a combined whole. Qualitative information was also gathered to describe the system's context and what made each system compelling to tourists. The final list of 23 different systems includes aerial gondolas, trams, cable cars, ferries, elevated trains, and observation decks from eight different countries, with approximately half located in the US.

Figure 2: Comparable ART Systems

System	System Type	Location	Annual Ridership/Visitation
Teleférico del Puerto	Aerial Gondola/Tram	Barcelona, SP	392,000
Table Mountain Aerial Cableway	Aerial Gondola/Tram	Cape Town, ZA	1,000,000
Ngong Ping 360	Aerial Gondola/Tram	Hong Kong, CH	1,600,000
Emirates Air Line	Aerial Gondola/Tram	London, GB	1,239,000
Roosevelt Island Tram	Aerial Gondola/Tram	New York, NY	2,140,000
Palm Springs Aerial Tramway	Aerial Gondola/Tram	Palm Springs, CA	546,000
Portland Aerial Tram	Aerial Gondola/Tram	Portland, OR	2,300,000
Namsan Cable Car	Aerial Gondola/Tram	Seoul, KR	600,000
Angels Flight	Cable Car	Los Angeles, CA	600,000
St. Charles Streetcar	Cable Car	New Orleans, LA	3,352,000
Detroit People Mover	Elevated Train	Detroit, MI	1,605,000
Ferry to Governors Island	Ferry	New York, NY	375,000
Alcatraz Island Ferry	Ferry	San Francisco, CA	1,700,000
Sydney Ferry	Ferry	Sydney, AU	1,875,000
Willis Tower Skydeck	Observation Deck	Chicago, IL	1,700,000
The View from the Shard	Observation Deck	London, GB	900,000
One World Observatory	Observation Deck	New York, NY	2,300,000
Top of the Rock	Observation Deck	New York, NY	2,000,000
Empire State Building	Observation Deck	New York, NY	4,000,000
Tour Montparnasse	Observation Deck	Paris, FR	1,200,000
Coit Tower	Observation Deck	San Francisco, CA	200,000
Space Needle	Observation Deck	Seattle, WA	1,300,000
GatewayArch	Observation Deck	St. Louis, MO	3,100,000

ANALYSIS

Given the above characteristics and the wide range of ridership estimates shown in the table above, it was necessary to identify the kind of tourist experience the proposed Project will offer. To better qualify the kinds of tourist experiences associated with the systems in Figure 2, HR&A sorted each system into one of

three categories, based on the following question: what is a tourist's primary motivation for riding these systems?

> **Transit:** Systems that are integrated into a larger public transit network and do not include additional programming to increase the length of visit/ridership or attraction. There is some appeal simply to riding these systems, such as particularly notable views or a novel technology, that motivates tourists to use them. Examples include the Emirates Air Line aerial gondola that crosses the Thames River in London, the Roosevelt Island aerial tram in New York City, or New Orleans' historic street cars.
>
> **Access**: Transportation systems that allow non-exclusive, but highly competitive access (in terms of experience, speed, etc.) to an otherwise free and highly compelling tourist destination. Examples include the aerial gondola to Table Mountain in Cape Town, South Africa, the Teleférico del Puerto cable car in Barcelona's port, or the Palm Springs Aerial Tramway to San Jacinto Peak in California.
>
> **Experiential**: Transportation systems or attractions with views that provide exclusive access to a ticketed experience (educational, recreational, artistic, photo opportunity, etc.) that is compelling to tourists. The programming is often strictly tied to the local context, such as exhibitions of city history that incorporate the views afforded by the ticketed experience. Examples include observation decks, or the ferry to Alcatraz Island in San Francisco.

The proposed Project is likely to attract tourist riders because it is a novel form of transportation with views of Downtown, making the ride in and of itself compelling, regardless of destination programming. This appeal is also the basis for including systems that attract tourist riders because they are any combination of historic, iconic, or unique within their local context. Cable cars and elevated train noted above fit these criteria due to their double service as transit infrastructure – such as Angels Flight (which is technically a funicular) and the St. Charles Streetcar.

Of all the above instances, several are more relevant to the proposed Project's context than others. Both the Portland Aerial Tram and the Roosevelt Island Tram are also aerial systems and located in the United States. While they each service a particular destination, they do not provide exclusive access and are compelling to tourists primarily for the experience of riding them (due primarily to the views they afford), as opposed to programming or end destination.

The experience of riding the proposed Project – both during the actual trip time and at the end destination – will have an effect on the system's tourist capture. The proposed Project design concept is currently envisioned as a striking addition to the Los Angeles urban landscape, which will likely draw tourists on its own, supporting the idea that riding the proposed Project itself will be a compelling tourist experience.

To more closely align the proposed Project's comps to the above considerations, HR&A combined select Transit and Access systems based on the following critical conditions: novelty and/or longer ride times accompanied by views make them compelling to tourists, and their views and physical context are representative of the proposed Project's. HR&A calculated an average "capture" rate for each system, measured as a percentage penetration of the combined local resident population and domestic/ international tourist visitation (as reported by various municipalities or tourism marketing entities. Based on the capture demonstrated by the Transit and Access comps, HR&A estimates an average tourist capture of 1.33 percent for ART, with an average annual tourist yield of 915,000 tourists.

APPENDIX N TRANSPORTATION

APPENDICES

- Detailed Responses in Support of Determining Plans, Programs, Ordinances, or Policies (PPOP) Applicability

Appendix A: Los Angeles Aerial Rapid Transit

Detailed Responses in Support of Determining Plans, Programs, Ordinances, or Policies Applicability

Adapted from Attachment D: Plan Consistency Workshop in Transportation Analysis Guidelines, LADOT, July 2020

I. Screening Criteria for Policy Analysis

If the answer is "yes" to any of the following questions, further analysis is required to demonstrate that the project does not conflict with a plan, policy, or program.

Screening Criteria	Answer
Does the project require a discretionary action that requires the decision maker to find that the decision substantially conforms to the purpose, intent and provisions of the General Plan?	No
Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety?	No
Is the project required to or proposing to make any voluntary modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)?	Yes

II. Plan Consistency Analysis

Question	Guiding Questions	Relevant Plans, Policies, and Programs	Evaluation
A. MOBILITY Plan 2035 PROW Classification Standards for Dedications and Improvements			
A.1	Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone?	MP 2.1, 2.3, 3.2, and Mobility Plan 2035 Street Designations and Standard Roadway Dimensions	Yes, but project elements will not impact street designations and standard roadway dimensions. **The following structures are proposed** The proposed Alameda Station is along Alameda Street, which is designated as an Avenue I along this station frontage. The proposed Alameda Tower is along Alameda Street, designated as Avenue I, and Alhambra Avenue, which is designated as Local Street – Standard. The proposed Alpine Tower is along Alameda Street, designated as an Avenue I, and Alpine Street, designated as an Avenue II west of the intersection with Alameda and an Avenue I east of the intersection. The proposed Chinatown / State Park Station is along Spring Street, designated as a Modified Avenue I along this junction. The proposed Broadway Junction is along N Broadway, designated here as an Avenue II, and Bishops Road, designated as a collector. The zoning is C2-2D The proposed Stadium Tower is adjacent to Stadium Way, which is designated as Collector. The zoning is A1. The proposed Dodger Stadium Station is in the existing Dodger Stadium parking lot. The zoning is A1. The Project is a transportation project and is not proposing additions or new constructions in an area zoned for R3 or a less restrictive zone.
A.2	If A.1 is yes, is the project required to make additional dedications or improvements to the Public Right of Way as demonstrated by the street designation?		No

A.3	If A.2 is yes, is the project making the dedications and improvements as necessary to meet the designated dimensions of the fronting street (Boulevard I, and II, or Avenue I, II, or III)?		N/A
A.4	If the answer to A.3. is NO, is the project applicant asking to waive from the dedication standards?		N/A
B. Mobility Plan 2035 PROW Policy Alignment with Project-Initiated Changes			
B.1	Does the project physically modify the curb placement or turning radius and/or physically alter the sidewalk and parkways space that changes how people access a property?	MP 2.1, 2.3, 3.2, 2.10, and Street Designations and Standard Roadway Dimensions	Yes. The Project will install new and/or improved sidewalks along multiple project elements. The Dodger Stadium Station, which is on private property, would include repaved pedestrian paths through the Dodger Stadium parking lot to channelize pedestrians approaching the station from the Stadium and vice versa. The Stadium Tower will not affect existing sidewalks. The Alpine Tower will not affect existing sidewalks. The Chinatown / State Park Station would improve pedestrian paths traveling around the station and between the Metro L Line Chinatown Station. The Broadway Junction would retain the sidewalks along Broadway and Bishops Road. The Alameda Tower will install a curb extension and sidewalk adjacent to the tower. The Alameda Station would not block existing pedestrian access to Union Station. The Project would be supportive of and not preclude or conflict with *Mobility Plan 2035* policies such as: 2.1 Adaptive Reuse of Streets: Urban streets serve multiple purposes that not only include travel but also play a role in providing other roles such as landscaping and drainage. The Project proposes to increase available pedestrian space with the pedestrian plazas at the stations and will not decrease access on sidewalks. 2.3 Pedestrian Infrastructure: This policy recognizes walking as a component of every trip and ensures high quality pedestrian access is considered in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment. The Project proposes several right-of-way improvements to enhance pedestrian access to, from, and around the Project site:

			• The Project would construct a new pedestrian plaza adjacent to El Pueblo to increase station access and pedestrian circulation space. 3.2 People with Disabilities: When designing developments, it is important to accommodate the needs of all people with varying levels of mobility. The Project proposes to retain ADA-compliant walkways around the stations and will provide elevators to access all elevated stations. 2.10 Loading Areas: When designing developments, it is important to consider a loading area that minimally impacts other travelers such as people driving or walking. The proposed Project will utilize existing curbside passenger loading facilities adjacent to Alameda Station and the Chinatown/State Park Station. Passenger loading activity at the station would have minimal impact on the surrounding street network given that the passenger loading zones already exist.
B.2	Does the project add new driveways along a street designated as an Avenue or a Boulevard that conflict with LADOT's Driveway Design Guidelines?	MP 2.10, PL.1, CDG 2, MPP 321	The Project is not adding any driveways.
B.2.1	Would the physical changes in the public right of way or new driveways that conflict with LADOT's Driveway Design Guidelines degrade the experience of vulnerable roadway users such as modify, remove, or otherwise negatively impact existing bicycle, transit, and/or pedestrian infrastructure?	Mobility Plan 2035: Transit Enhanced Network, Bicycle Enhanced Network, Bicycle Lane Network, Pedestrian Enhanced District, Neighborhood Enhanced Network, High Injury Network, TOC Guidelines	No. Pedestrian Enhanced District: Mobility Plan 2035 identifies Pedestrian Enhanced Districts (PED) where initial analysis suggests arterials can be improved and further analysis and prioritization will occur as funding and projects become available. The Project frontage along Alameda Street at the Alameda Station, along Spring Street at the Chinatown / State Park Station, and along Broadway at the Broadway Junction are parts of the PED. The Project will not narrow or remove pedestrian facilities. Neighborhood Enhanced Network: The Neighborhood Enhanced Network (NEN) is a selection of local streets to provide comfortable and safe routes for localized travel of slower-moving modes, such as walking or biking. None of the Project stations are along streets that are part of the NEN. Transit Network: This policy identifies specific streets as part of the Transit Enhanced Network (TEN) to receive improvements that enhance the performance and reliability of existing and future bus service. The Project frontages on North Broadway at the Broadway Junction is part of the TEN, and the Project enhances the TEN by providing fixed route transit service.

			Bicycle Networks: This policy establishes a Bicycle Enhanced Network (BEN), which is comprised of protected bicycle lanes and bicycle paths, to provide bikeways for a variety of users. The Project frontages along Alameda Street, Spring Street, and Broadway are part of the BEN. The Project will not negatively impact any existing bicycle facilities and would provide a mobility hub, including on-site bicycle parking at the Chinatown / State Park Station and potentially at the Dodger Stadium Station. Bicyclists visiting the Alameda Station would be able to use the existing bicycle parking at Union Station. Vision Zero: The Project frontages along Alameda Street is part of the City's High Injury Network. By providing access to the station platform from the east and west side of Alameda Street, the Project would minimize the need for riders to cross Alameda Street at grade and avoid an intersection where fatalities and significant injuries have occurred. Transit Oriented Community: The Transit-Oriented Community (TOC) guidelines define parameters of housing incentives based on considerations such as proximity to high-quality transit, type of housing, and the land uses being replaced. The Alameda Station is in a Tier 1 TOC, the Chinatown / State Park Station and the Broadway Junction are in a Tier 2 TOC, The Dodger Stadium Station is in a Tier 4 TOC. This is not applicable to the proposed Project as a transportation investment, but would provide enhanced transit service to these TOCs.
B.2.2	Would the physical modifications or new driveways that conflict with LADOT's Driveway Design Guidelines preclude the City from advancing the safety of vulnerable roadway users?		The Project proposes no new driveways and would not preclude the City from advancing the safety of vulnerable roadway users. Connections to the Station Platform on both sides of Alameda Street will reduce the vulnerability of riders by eliminating the need to cross Alameda Street.
C. Network Access			
C1.1	Does the project propose to vacate or otherwise restrict public access to a street, alley, or public stairway?	MP 3.9	The Project does not propose to vacate or restrict public access to any streets, alleys, or public stairways.
C.1.2	If the answer to C.1.1 is Yes, will the project provide or maintain public access to people walking		N/A

	and biking on the street, alley or stairway?		
C.2.1	Does the project create a cul-de-sac or is the project located adjacent to an existing cul-de-sac?	MP 3.10	None of the stations or columns propose to create a cul-de-sac or are located adjacent to an existing one.
C.2.2	If yes, will the cul-de-sac maintain convenient and direct public access to people walking and biking to the adjoining street network?		N/A
D. Parking Supply and Transportation Demand Management			
D.1	Would the project propose a supply of onsite parking that exceeds the baseline amount as required in the Los Angeles Municipal Code or a Specific plan, whichever requirement prevails?	MP 3.8, 4.8, 4.13	4.13 Parking and Land Use Management: This policy states that excessive parking can incentivize undesirable behavior or result in large areas of vacant land that make it harder to reach destinations without a vehicle. The Project will not provide any dedicated vehicle parking. The proposed Project would utilize existing off-street parking facilities with available capacity as identified in a future parking management plan, which would also identify strategies for the City of Los Angeles to implement to minimize riders of the proposed Project parking in undesirable locations.
D.2	If the answer to D.1. is YES, would the project propose to actively manage the demand of parking by independently pricing the supply to all users (e.g. parking cash-out), or for residential properties, unbundle the supply from the lease or sale of residential units?		N/A
D.3	Would the project provide the minimum on and off-site bicycle parking spaces as required by Section 12.21 A.16 of the LAMC?		3.8 Bicycle Parking: Section 12.21 A.16 of the LAMC pertains to land use projects. However, the Project will provide on-site bicycle parking at the Chinatown / State Park Station and potentially the Dodger Stadium Station at the mobility hub under consideration. Bicyclists visiting the Alameda Station would be able to use the existing bicycle parking at Union Station.

D.4	Does the Project include more than 25,000 square feet of gross floor area construction of new non-residential gross floor?		Stations will exceed 25,000 square feet of gross floor area in total, inclusive of passenger circulation, ticketing and station amenities such as restrooms.
D.5	If the answer to D.4. is YES, does the project comply with the City's TDM Ordinance in Section 12.26 J of the LAMC?		The TDM ordinance does not apply to the Project as a transportation project.
E. Consistency with Regional Plans			
E.1	Does the Project or Plan apply one the City's efficiency-based impact thresholds (i.e. VMT per capita, VMT per employee, or VMT per service population) as discussed in Section 2.2.3 of the TAG?		No, the proposed Project applies total VMT for analysis of the potential impacts.
E.2	E.2 If the Answer to E.1 is YES, does the Project or Plan result in a significant VMT impact?		N/A
E.3	If the Answer to E.1 is NO, does the Project result in a net increase in VMT?		No the proposed Project will reduce VMT. Average trip length data was acquired from Teralytics for trips to and from Dodger Stadium and Union Station. The number of vehicles traveling to these locations was multiplied by the average trip length to obtain the total VMT. This method resulted in an estimated Daily Weekday VMT of 576,600 miles, Daily Weekend VMT of 750,900 miles, and Annual VMT of 53,549,000 miles in the existing year (2019) without the project. The future calculations projected a total Daily Weekday VMT of 550,800 miles, Daily Weekend VMT of 719,200, and Annual VMT of 51,115,000 miles in 2026 with the Project, which is a net decrease of 25,800 miles, 31,700 miles, and 2,434,000 miles, respectively. In 2040 with the Project, the Daily Weekday VMT is projected to be 523,300 miles, the Daily Weekday VMT is projected to be 685,000 miles, and the Annual VMT is projected to be

			48,482,000 miles a net decrease of 53,300 miles, 65,900 miles, and 5,067,000 miles, respectively. In all these scenarios, this is a beneficial net decrease in VMT.
E.4	4 If the Answer to E.2 or E.3 is YES, then further evaluation would be necessary to determine whether such a project or land use plan would be shown to be consistent with VMT and GHG reduction goals of the SCAG RTP/SCS		N/A

Review of Consistency with Current Central City North Community Plan

The Central City North Community Plan was adopted in 2000 and amended in 2016 as part of the Mobility Plan 2035 Update. While an updated Community Plan is currently under development, the plan from 2016 is currently in effect and forms the basis for this review of conflicts relating to the transportation system. The following structures of the Project would be located in the Central City North Community Plan:

- Alameda Station – on the border between the Central City North Community Plan and the Central City Community Plan. The Central City North Community Plan was used for analysis because Union Station, which this station will heavily interact with, is fully located in the Central City North Community Plan.
- Alameda Tower
- Alpine Tower
- Chinatown / State Park Station
- Broadway Junction

The Central City North Community Plan (CCNCP) is one of 35 community plans in the City of Los Angeles that establishes the policies and programs that inform the framework for local land use, circulation, and service systems within the selected community plan area. Per the City's new TAG, a review of the CCNCP was conducted to evaluate whether the project conflicts with or precludes the implementation of the community plan framework.

The CCNCP contains transportation-related objectives, policies, and programs in Chapter III, Land Use Plan Policies and Programs. The following objectives, policies, and programs are relevant to the Project:

Policy 2-2.2 New development needs to add to and enhance the existing pedestrian street activity (III-6).

- The Project supports this policy because it is oriented towards pedestrian access, and will provide pedestrian connections to walkable areas such as the State Historic Park.

Policy 2-2.3 and 2-3.4 Require that the first-floor street frontage of structures, including mixed use projects and parking structures located in pedestrian oriented districts, incorporate commercial uses (III-6).

- As the Project is a set of transportation structures, it will not incorporate commercial uses into the first-floor street frontages.

Policy 2-3.1 New development needs to add to and enhance the existing pedestrian activity (III-6).

- As mentioned in response to Policy 2-2.2, the Project will provide more travel opportunities for pedestrians throughout the area.

The CCNCP also provides for various modes of non-motorized transportation/circulation such as walking and bicycle riding by establishing policies and standards to facilitate the development of a bicycle route system which is intended to compliment other transportation modes. The following policies are relevant to the Project:

Policy 13.1.4 encourages the provision of changing rooms, showers, and bicycle storage at new and existing and non-residential developments and public places (III-25).

- The Project will provide short-term bike parking at the Chinatown/State Park Station. The Project will not provide changing rooms or showers.

Review of Consistency with Current Silver Lake – Echo Park – Elysian Valley Community Plan

The Silver Lake – Echo Park – Elysian Valley Community Plan was adopted in 2004 and amended in 2016 as part of the Mobility Plan 2035 update. The following structures of the Project, which are proposed in both alternatives, would be located in the Silver Lake – Echo Park – Elysian Valley Community Plan:

- Stadium Tower
- Dodger Stadium Station

The Silver Lake – Echo Park – Elysian Valley Community Plan (SEECP) is one of 35 community plans in the City of Los Angeles that establishes the policies and programs that inform the framework for local land use, circulation, and service systems within the selected community plan area. Per the City's new TAG, a review of the SEECP was conducted to evaluate whether the project conflicts with or precludes the implementation of the community plan framework.

The SEECP contains transportation-related objectives, policies, and programs in Chapter III, Land Use Plan Policies and Programs. The following objectives, policies, and programs are relevant to the Project:

Policy 2-2.1 New development should preserve existing pedestrian-oriented areas (III-17).

- The Project does not propose any new development on the corridors identified by this policy, so it does not prevent this policy from being followed.

Policy 2-2.2 New developments in pedestrian-oriented areas should add to and enhance the existing pedestrian street activity (III-20).

- While the Project is not located in a designated pedestrian-oriented area, it supports this policy because it is oriented towards pedestrian access and will add a consistent connection from Dodger Stadium that will provide pedestrians access to and from Union Station and other areas via connections on the proposed Project. Additionally, it will increase the clarity of navigation for pedestrians through the Stadium parking lot.

APPENDIX N TRANSPORTATION

APPENDICES

- Plans, Policies and Programs Consistency Worksheet

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Plans, Policies and Programs Consistency Worksheet

The worksheet provides a structured approach to evaluate the threshold T-1 question below, that asks whether a project conflicts with a program, plan, ordinance or policy addressing the circulation system. The intention of the worksheet is to streamline the project review by highlighting the most relevant plans, policies and programs when assessing potential impacts to the City's circulation system.

> ***Threshold T-1***: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

This worksheet does not include an exhaustive list of City policies, and does not include community plans, specific plans, or any area-specific regulatory overlays. The Department of City Planning project planner will need to be consulted to determine if the project would obstruct the City from carrying out a policy or program in a community plan, specific plan, streetscape plan, or regulatory overlay that was adopted to support multimodal transportation options or public safety. LADOT staff should be consulted if a project would lead to a conflict with a mobility investment in the Public Right of Way (PROW) that is currently undergoing planning, design, or delivery. This worksheet must be completed for all projects that meet the Section I. Screening Criteria. For description of the relevant planning documents, **see Attachment D.1.**

For any response to the following questions that checks the box in **bold text** ((i.e.☐ **Yes** or ☐ **No**), further analysis is needed to demonstrate that the project does not conflict with a plan, policy, or program.

I. SCREENING CRITERIA FOR POLICY ANALYSIS

If the answer is 'yes' to any of the following questions, further analysis will be required:

Does the project require a discretionary action that requires the decision maker to find that the project would substantially conform to the purpose, intent and provisions of the General Plan?

☐ Yes ☒ No

Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety?

☐ Yes ☒ No

Is the project required to or proposing to make any voluntary modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)?

☒ Yes ☐ No

II. PLAN CONSISTENCY ANALYSIS

A. Mobility Plan 2035 PROW Classification Standards for Dedications and Improvements

These questions address potential conflict with:

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Plan, Policy, and Program Consistency Worksheet

Mobility Plan 2035 Policy 2.1 *– Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*

Mobility Plan 2035 Policy 2.3 *– Pedestrian Infrastructure. Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.*

Mobility Plan 2035 Policy 3.2 – *People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*

Mobility Plan 2035 Street Designations and Standard Roadway Dimensions

A.1 Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone? ☒ Yes ☐ No

A.2 If **A.1 is yes**, is the project required to make additional dedications or improvements to the Public Right of Way as demonstrated by the street designation. ☐ Yes ☒ No ☐ N/A

A.3 If **A.2 is yes**, is the project making the dedications and improvements as necessary to meet the designated dimensions of the fronting street (Boulevard I, and II, or Avenue I, II, or III)?

☐ Yes ☐ No ☒ N/A

If the answer is to **A.1 or A.2 is NO, or to A.1, A.2 and A.3. is YES**, then the project does not conflict with the dedication and improvement requirements that are needed to comply with the Mobility Plan 2035 Street Designations and Standard Roadway Dimensions.

A.4 If the answer to **A.3. is NO**, is the project applicant asking to waive from the dedication standards?

☐ **Yes** ☐ **No** ☒ N/A

Lists any streets subject to dedications or voluntary dedications and include existing roadway and sidewalk widths, required roadway and sidewalk widths, and proposed roadway and sidewalk width or waivers.

Frontage 1 Existing PROW'/Curb' : Existing
_____Required_____Proposed_____

Frontage 2 Existing PROW'/Curb' : Existing
_____Required_____Proposed_____

Frontage 3 Existing PROW'/Curb' : Existing
_____Required_____Proposed_____

Frontage 4 Existing PROW'/Curb' : Existing
_____Required_____Proposed_____

If the answer to **A.4 is NO**, the project is inconsistent with Mobility Plan 2035 street designations and must file for a waiver of street dedication and improvement.

If the answer to **A.4 is YES**, additional analysis is necessary to determine if the dedication and/or improvements are necessary to meet the City's mobility needs for the next 20 years. The following factors may contribute to determine if the dedication or improvement is necessary:

Is the project site along any of the following networks identified in the City's Mobility Plan?

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network

To see the location of the above networks, see **Transportation Assessment Support Map**.[1]

Is the project within the service area of Metro Bike Share, or is there demonstrated demand for micro-mobility services?

If the project dedications and improvements asking to be waived are necessary to meet the City's mobility needs, the project may be found to conflict with a plan that is adopted to protect the environment.

B. Mobility Plan 2035 PROW Policy Alignment with Project-Initiated Changes

B.1 Project-Initiated Changes to the PROW Dimensions

These questions address potential conflict with:

> ***Mobility Plan 2035 Policy 2.1*** *– Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*
>
> ***Mobility Plan 2035 Policy 2.3*** *– Pedestrian Infrastructure. Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.*
>
> ***Mobility Plan 2035 Policy 3.2 –*** *People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*
>
> ***Mobility Plan 2035 Policy 2.10*** *– Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*
>
> **Mobility Plan 2035 Street Designations and Standard Roadway Dimensions**

B.1 Does the project physically modify the curb placement or turning radius and/or physically alter the sidewalk and parkways space that changes how people access a property?

Examples of physical changes to the public right-of-way include:

[1] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

- widening the roadway,
- narrowing the sidewalk,
- adding space for vehicle turn outs or loading areas,
- removing bicycle lanes, bike share stations, or bicycle parking
- modifying existing bus stop, transit shelter, or other street furniture
- paving, narrowing, shifting or removing an existing parkway or tree well

☒ **Yes** ☐ No

B.2 Driveway Access

These questions address potential conflict with:

Mobility Plan 2035 Policy 2.10 *– Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*

Mobility Plan 2035 Program PL.1. Driveway Access. *Require driveway access to buildings from non-arterial streets or alleys (where feasible) in order to minimize interference with pedestrian access and vehicular movement.*

Citywide Design Guidelines - Guideline 2*: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience.*

Site Planning Best Practices:

- *Prioritize pedestrian access first and automobile access second. Orient parking and driveways toward the rear or side of buildings and away from the public right-of-way. On corner lots, parking should be oriented as far from the corner as possible.*
- *Minimize both the number of driveway entrances and overall driveway widths.*
- *Do not locate drop-off/pick-up areas between principal building entrances and the adjoining sidewalks.*
- *Orient vehicular access as far from street intersections as possible.*
- *Place drive-thru elements away from intersections and avoid placing them so that they create a barrier between the sidewalk and building entrance(s).*
- *Ensure that loading areas do not interfere with on-site pedestrian and vehicular circulation by separating loading areas and larger commercial vehicles from areas that are used for public parking and public entrances.*

B.2 Does the project add new driveways along a street designated as an Avenue or a Boulevard that conflict with LADOT's Driveway Design Guidelines (See Sec. 321 in the Manual of Policies and Procedures) by any of the following:

- locating new driveways for residential properties on an Avenue or Boulevard, and access is otherwise possible using an alley or a collector/local street, or
- locating new driveways for industrial or commercial properties on an Avenue or Boulevard and access is possible along a collector/local street, or
- the total number of new driveways exceeds 1 driveway per every 200 feet[2] along on the Avenue or Boulevard frontage, or

[2] for a project frontage that exceeds 400 feet along an Avenue or Boulevard, the incremental additional driveway above 2 is more than 1 driveway for every 400 additional feet.

- locating new driveways on an Avenue or Boulevard within 150 feet from the intersecting street, or
- locating new driveways on a collector or local street within 75 feet from the intersecting street, or
- locating new driveways near mid-block crosswalks, requiring relocation of the mid-block crosswalk

☐ **Yes** ☒ No

If the answer to **B.1 and B.2 are both NO**, then the project would not conflict with a plan or policies that govern the PROW as a result of the project-initiated changes to the PROW.

Impact Analysis

If the answer to either **B.1 or B.2 are YES**, City plans and policies should be reviewed in light of the proposed physical changes to determine if the City would be obstructed from carrying out the plans and policies. The analysis should pay special consideration to substantial changes to the Public Right of Way that may either degrade existing facilities for people walking and bicycling (e.g., removing a bicycle lane), or preclude the City from completing complete street infrastructure as identified in the Mobility Plan 2035, especially if the physical changes are along streets that are on the High Injury Network (HIN). The analysis should also consider if the project is in a Transit Oriented Community (TOC) area, and would degrade or inhibit trips made by biking, walking and/ or transit ridership. The streets that need special consideration are those that are included on the following networks identified in the Mobility Plan 2035, or the HIN:

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network
- High Injury Network

To see the location of the above networks, see **Transportation Assessment Support Map**.[3]

Once the project is reviewed relevant to plans and policies, and existing facilities that may be impacted by the project, the analysis will need to answer the following two questions in concluding if there is an impact due to plan inconsistency.

B.2.1 Would the physical changes in the public right of way or new driveways that conflict with LADOT's Driveway Design Guidelines degrade the experience of vulnerable roadway users such as modify, remove, or otherwise negatively impact existing bicycle, transit, and/or pedestrian infrastructure?

☐ **Yes** ☐ No ☐ N/A

B.2.2 Would the physical modifications or new driveways that conflict with LADOT's Driveway Design Guidelines preclude the City from advancing the safety of vulnerable roadway users?

☐ **Yes** ☐ No ☐ N/A

[3] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

If either of the answers to either **B.2.1 or B.2.2 are YES**, the project may conflict with the Mobility Plan 2035, and therefore conflict with a plan that is adopted to protect the environment. If either of the answers to both **B.2.1. or B.2.2. are NO**, then the project would not be shown to conflict with plans or policies that govern the Public Right-of-Way.

C. Network Access

C. 1 Alley, Street and Stairway Access

These questions address potential conflict with:

Mobility Plan Policy 3.9 *Increased Network Access: Discourage the vacation of public rights-of-way.*

C.1.1 Does the project propose to vacate or otherwise restrict public access to a street, alley, or public stairway?

☐ Yes ☒ No

C.1.2 If the answer to C.1.1 is Yes, will the project provide or maintain public access to people walking and biking on the street, alley or stairway?

☐ Yes ☐ **No** ☒ N/A

C.2 New Cul-de-sacs

These questions address potential conflict with:

Mobility Plan 2035 Policy 3.10 *Cul-de-sacs: Discourage the use of cul-de-sacs that do not provide access for active transportation options.*

C.2.1 Does the project create a cul-de-sac or is the project located adjacent to an existing cul-de-sac?

☐ Yes ☒ No

C.2.2 If yes, will the cul-de-sac maintain convenient and direct public access to people walking and biking to the adjoining street network?

☐ Yes ☐ **No** ☒ N/A

If the answers to either C.1.2 or C.2.2 are YES, then the project would not conflict with a plan or policies that ensures access for all modes of travel. If the answer to either **C.1.2 or C.2.2 are NO**, the project may conflict with a plan or policies that governs multimodal access to a property. Further analysis must assess to the degree that pedestrians and bicyclists have sufficient public access to the transportation network.

D. Parking Supply and Transportation Demand Management

These questions address potential conflict with:

Mobility Plan 2035 Policy 3.8 *– Bicycle Parking, Provide bicyclists with convenient, secure and well maintained bicycle parking facilities.*

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Mobility Plan 2035 Policy 4.8 – *Transportation Demand Management Strategies. Encourage greater utilization of Transportation Demand Management Strategies to reduce dependence on single-occupancy vehicles.*

Mobility Plan 2035 Policy 4.13 *– Parking and Land Use Management: Balance on-street and off-street parking supply with other transportation and land use objectives.*

D.1 Would the project propose a supply of onsite parking that exceeds the baseline amount[4] as required in the Los Angeles Municipal Code or a Specific plan, whichever requirement prevails?

□ Yes ☒ No

D.2 If the answer to D.1. is YES, would the project propose to actively manage the demand of parking by independently pricing the supply to all users (e.g. parking cash-out), or for residential properties, unbundle the supply from the lease or sale of residential units?

□ Yes ☐ **No** □ N/A

If the answer to **D.2. is NO** the project may conflict with parking management policies. Further analysis is needed to demonstrate how the supply of parking above city requirements will not result in additional (induced) drive-alone trips as compared to an alternative that provided no more parking than the baseline required by the LAMC or Specific Plan. If there is potential for the supply of parking to result in induced demand for drive-alone trips, the project should further explore transportation demand management (TDM) measures to further off-set the induced demands of driving and vehicle miles travelled (VMT) that may result from higher amounts of on-site parking. The TDM measures should specifically focus on strategies that encourage dynamic and context-sensitive pricing solutions and ensure the parking is efficiently allocated, such as providing real time information. Research has demonstrated that charging a user cost for parking or providing a 'cash-out' option in return for not using it is the most effective strategy to reduce the instances of drive-alone trips and increase non-auto mode share to further reduce VMT. To ensure the parking is efficiently managed and reduce the need to build parking for future uses, further strategies should include sharing parking with other properties and/or the general public.

D.3. Would the project provide the minimum on and off-site bicycle parking spaces as required by Section 12.21 A.16 of the LAMC?

□ Yes ☐ **No** N/A

D.4. Does the Project include more than 25,000 square feet of gross floor area construction of new non-residential gross floor?

☒ Yes □ No

D.5 If the answer to D.4. is YES, does the project comply with the City's TDM Ordinance in Section 12.26 J of the LAMC?

□ Yes ☐ **No** ☒ N/A

[4] The baseline parking is defined here as the default parking requirements in section 12.21 A.4 of the Los Angeles Municipal Code or any applicable Specific Plan, whichever prevails, for each applicable use not taking into consideration other parking incentives to reduce the amount of required parking.

If the answer to **D.3. or D.5. is NO** the project conflicts with LAMC code requirements of bicycle parking and TDM measures. If the project includes uses that require bicycle parking (Section 12.21 A.16) or TDM (Section 12.26 J), and the project does not comply with those Sections of the LAMC, further analysis is required to ensure that the project supports the intent of the two LAMC sections. To meet the intent of bicycle parking requirements, the analysis should identify how the project commits to providing safe access to those traveling by bicycle and accommodates storing their bicycle in locations that demonstrates priority over vehicle access.

Similarly, to meet the intent of the TDM requirements of Section 12.26 J of the LAMC, the analysis should identify how the project commits to providing effective strategies in either physical facilities or programs that encourage non-drive alone trips to and from the project site and changes in work schedule that move trips out of the peak period or eliminate them altogether (as in the case in telecommuting or compressed work weeks).

E. Consistency with Regional Plans

This section addresses potential inconsistencies with greenhouse gas (GHG) reduction targets forecasted in the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS).

E.1 Does the Project or Plan apply one the City's efficiency-based impact thresholds (i.e. VMT per capita, VMT per employee, or VMT per service population) as discussed in **Section 2.2.3** of the TAG?

□ Yes ☒ No

E.2 If the Answer to **E.1 is YES**, does the Project or Plan result in a significant VMT impact?

☒ **Yes** ☒ No □ N/A

E.3 If the Answer to **E.1 is NO**, does the Project result in a net increase in VMT?

☒ **Yes** ☒ No □ N/A

If the Answer to **E.2 or E.3 is NO**, then the Project or Plan is shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

E.4 If the Answer to **E.2 or E.3 is YES**, then further evaluation would be necessary to determine whether such a project or land use plan would be shown to be consistent with VMT and GHG reduction goals of the SCAG RTP/SCS. For the purpose of making a finding that a project is consistent with the GHG reduction targets forecasted in the SCAG RTP/SCS, the project analyst should consult **Section 2.2.4** of the Transportation Assessment Guidelines (TAG). **Section 2.2.4** provides the methodology for evaluating a land use project's cumulative impacts to VMT, and the appropriate reliance on SCAG's most recently adopted RTP/SCS in reaching that conclusion.

The analysis methods therein can further support findings that the project is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy for which the State Air Resources Board, pursuant to Section 65080(b)(2)(H) of the Government Code, has accepted a metropolitan planning organization's determination that the sustainable communities strategy or the alternative planning strategy would, if implemented, achieve the greenhouse gas emission reduction targets.

References

BOE Street Standard Dimensions S-470-1
http://eng2.lacity.org/techdocs/stdplans/s-400/S-470-1_20151021_150849.pdf

LADCP Citywide Design Guidelines.
https://planning.lacity.org/odocument/f6608be7-d5fe-4187-bea6-20618eec5049/Citywide_Design_Guidelines.pdf

LADOT Transportation Assessment Support Map https://arcg.is/fubbD

Mobility Plan 2035
https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf

SCAG. Connect SoCal, 2020-2045 RTP/SCS, https://www.connectsocal.org/Pages/default.aspx