ADDENDUM

To:	Paul Lam, City of Alhambra Dennis Pascua, Dudek
From:	Mehul Champaneri Sri Chakravarthy Matt Stewart Kimley-Horn and Associates, Inc.
Date:	May 6, 2021
Subject:	Alhambra Residential Project – CEQA VMT Analysis

The memorandum documents Vehicle Miles Traveled (VMT) Analysis for the proposed Villages at The Alhambra project for The Ratkovich Company (Applicant) in the City of Alhambra.

Project Description

The proposed project consists of a master planned mixed-use development by The Ratkovich Company on a 38.38-acre site located at 1000 S. Fremont Avenue in the City of Alhambra, CA. The site is currently occupied by office buildings (including three private university tenants) and a fitness center. The remainder of the site is occupied by surface parking lots and other buildings that are mostly unused. For the current phase of the project, The Ratkovich Company plans to redevelop these unused sections as residential apartments, condominiums, and townhouses.

The site is divided into four plan areas – North, East, Corner, and South. The existing offices will be in the Office Plan area. The North Plan area is proposed to include podium buildings with 230 condominiums and townhomes, and an amenity pool and courtyard. The East Plan area is proposed to be a five-story, 490-space, parking structure to accommodate trips to the existing land use that currently use surface parking lots that would be removed. The Corner Plan area is proposed to be a single wrap building with 153 apartment units. The South Plan area is proposed to include two wrap buildings with 392 apartment units. The site is bound by Fremont Avenue to the west, Mission Road to the south, Date Street to the east, and Orange Avenue to the north. The land-use and building area summary associated with the proposed project is shown in **Table 1**:

Table 1 – Land Use and Building Area Summary

Project Component	Units
For-Sale Condominiums and Townhomes	230
Rental Apartments	545
TOTAL NEW	**775**
Source: The Ratkovich Company, 2021	

Detailed description about the project and construction phases can be found in the Traffic Impact Analysis (TIA) report dated March 2019. The project description was changed since the 2019 TIA, and the number of residential units were reduced. The revised daily trip generation estimates based on the 775 residential units are shown in **Table 2** below. The project is estimated to generate 4,262 daily vehicle trips.

Table 2 – Project Daily Trip Generation

ITE Code	Building	Land Use Description	Units	No. of Units	Daily Vehicle Trips
220	S1-2, C	Apartment	DU	545	3,626
230	N1-4	Residential Condominium/Townhouse*	DU	230	1,840
Subtotal of Trips Generated					**5,466**
Trip Credits					
710	S1	General Office Building***	KSF	10.145	-112
Drive Ratio Reduction (11%)					-601
Internal Capture (9%)					-491
Subtotal of Trip Credits					**-1,204**
Net Project Total					**4,262**

A second Project Alternative was analyzed in a CEQA VMT Analysis memorandum dated March 16, 2021. The Project Alternative included 839 residential units.

Senate Bill 743 (SB 743)

SB 743, approved in 2013, mandated a change in the way transportation impacts are determined according to the California Environmental Quality Act (CEQA). The Governor's Office of Planning and Research (OPR) has directed the use of VMT as the replacement for automobile delay-based Level of Service (LOS) for the purposes of determining a significant transportation impact under CEQA. As of December 2018, the Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT). To assist in the implementation of VMT as the primary measure of a transportation impact under CEQA, the OPR published an updated Technical Advisory on Evaluating Transportation Impacts in CEQA in December 2018. Statewide application of the new guidelines went into effect on July 1, 2020.

In anticipation of the change to VMT, the San Gabriel Valley Council of Governments (SGVCOG) undertook the SGVCOG SB 743 Implementation Study to assist with answering important implementation questions about the methodology, thresholds, and mitigation approaches for VMT impact analysis in its member agencies. The study includes the following main components.

1. Analysis Methodologies Memorandum – Identification of potential thresholds that can be considered when establishing thresholds of significance for VMT assessment and recommendations of analysis methodologies for VMT impact screening and analysis

2. Mitigation Memorandum – Types of mitigation that can be considered for VMT mitigation

3. VMT Assessment Tool – A web-based tool based on the Southern California Association of Government (SCAG) Travel Demand Model that can be used for VMT screening and mitigation recommendation

The City of Alhambra utilized the information produced through the Implementation Study to adopt a methodology and significance thresholds for use in CEQA compliance. Consistent with the implementation study, the City recommends utilizing the SCAG Travel Demand Model as its methodology to measure VMT.

VMT Screening

This section documents Vehicle Miles Traveled (VMT)/SB 743 considerations for the project. The City of Alhambra Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment (October 2020) provides details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without conducting a more detailed level analysis. Screening thresholds are broken into the following three steps:

1. Transit Priority Areas (TPA) Screening

As described in the OPR Guidelines, projects located within half mile from an existing major transit stop or within half of a mile from an existing stop along a high-quality transit corridor can be screened out. The Project site is served by public transit provided by Los Angeles County Metropolitan Transportation Authority (Metro) and Alhambra Community Transit (ACT). Bus stops located at Fremont Avenue and Mission Road serve the project with Metro Line 258 (from 8:20 AM to 10:03 PM), which runs along Fremont Avenue. ACT lines (Green and Blue) also serve the project area. Metro Line 76 operates along Valley Boulevard within the project vicinity. Per the most recent LA Metro NextGen study, Line 76 would be operating at a 12 minute headway during the peak commute periods. The combination of the ACT Lines (Green and Blue) is also less than a 15 minute frequency during the peak commute periods. The bus stops for both the ACT lines and Metro Line 76 are located within half mile distance of the Project site.

The Project may be presumed to have a less than significant impact based on TPA screening absent substantial evidence to the contrary. The Guidelines also state that this presumption may NOT be appropriate if the project:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the City), with input from the Metropolitan Planning Organization);

The project does not meet any of the criteria that would disqualify it from TPA screening with the exception of the inconsistency with the Sustainable Communities Strategy. The proposed project was checked against the SCAG Regional Transportation Plan 2016 (RTP2016) 2040 forecasts, and the project is not included in the future growth in the SCAG forecasts. Therefore, the project is not screened out based on TPA screening criteria.

2. Low VMT-Generation Area Screening

Projects generating VMT below 15% below regional average can be screened out. City of Alhambra has selected SGVCOG regional average VMT screening. The project area does not have any existing residential land use and therefore, based on the SGVCOG VMT tool, the project area VMT cannot be compared against the regional average. Therefore, the project is not screened out based on the low VMT-Generation Area screening.

3. Project Type Screening

Some project types have been identified in the City guidelines as having the presumption of a less than significant impact. Some of the uses that are related to residential projects can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:

1. Affordable, supportive, or transitional housing
2. Assisted living facilities
3. Senior housing (as defined by HUD)
4. Student housing projects on or adjacent to a college campus
5. Projects generating less than 110 daily vehicle trips

Since the proposed project does not fall under the above categories and would generate 4,262 daily vehicle trips, the Project is not screening out based on Project Type screening.

As the proposed project does not fully qualify to have less than significant impact under the initial screening criteria, a full VMT analysis has been conducted to provide a conservative analysis and to further analyze any VMT impacts.

VMT Thresholds

The City of Alhambra has adopted the following VMT significance criteria.

Project VMT Impacts

The City guidelines provide general VMT thresholds as well as land use specific thresholds that are to be used to evaluate project impacts. A project would result in a significant project generated VMT impact if either of the following conditions are satisfied.

1. The baseline project generated VMT per service population exceeds the 15% below the SGVCOG baseline VMT per service population, or
2. The cumulative project generated VMT per service population exceeds 15% below the SGVCOG baseline VMT per service population

If a project is consistent with the regional RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence.

The City guidelines also provides VMT threshold for residential projects which was used for this VMT analysis. As mentioned earlier, the project area does not have residential land uses and therefore cannot be compared to the VMT threshold adopted by the City for residential uses in this specific area. Therefore, a full VMT analysis has been conducted for one Project alternative according to the City of Alhambra guidelines. The proposed project was checked against the SCAG Regional Transportation Plan 2016 (RTP2016) 2040 forecasts, and the project is not included in the future growth in the SCAG forecasts. Therefore, the cumulative VMT analysis was also conducted.

VMT Analysis for Project Alternative

A VMT analysis was conducted for the previously defined project alternative which includes 839 units. An explanation of how this analysis and conclusions are applicable to the 775 project alternative is provided in the next section.

The City VMT threshold for the residential use is shown in **Table 3**.

Table 3 – Project Area VMT and City Threshold

Land Use	VMT Threshold (SGVCOG Average)	Existing Project Area VMT
Residential: Home-Based VMT per Capita	16.21	Not Available

For residential uses, City recommends analyzing the project VMT using Production-Attraction (PA) methodology, and the VMT thresholds based on the PA methodology would change from general thresholds recommended in the City guidelines. A project would result in a significant project generated VMT impact if either of the following conditions are satisfied.

1. The baseline project generated Home-Based VMT per capita exceeds 15% below the SGVCOG baseline Home-Based VMT per capita for residential projects, or

2. The cumulative project generated Home-Based VMT per capita exceeds 15% below the SGVCOG baseline Home-Based VMT per capita for residential projects

Project VMT for the project alternative with 839 units was derived using the SCAG Regional Transportation Plan 2016 (RTP2016) model. The SCAG model is a trip-based model and considers interaction between different land uses based on socio-economic data such as population, households and employment. Adjustments in socio-economic data (households, population and employment) were made to the appropriate traffic analysis zone (TAZ) within the SCAG model to reflect the Project's proposed land use. **Table 4** shows the Project household numbers added to the appropriate project TAZ, as well employment numbers removed from the project TAZ in the SCAG model. Model runs were conducted for the existing (2012 – base year for the SCAG RTP2016 model) and cumulative (2040) conditions to evaluate project VMT impacts. The project TAZ and SGVCOG region is shown in the map included in the attachment.

Table 4 – SCAG Model Project Socio-Economic Data (839-unit alternative)

TAZ (Tier 2)	Additional Households	Reduced Employment
TAZ # 22101100	839	133

A logical way to evaluate residential land use is to consider different trip purposes originating from the project and calculating travel distances for each purpose. The following discussion is provided regarding the trip types in the model.

Home-Based trips. These are the primary automobile trips associated with residential uses such as the proposed project. The residential use is expected to generate several trips related to work, shopping, school, etc. in the region. The SCAG model includes eight home-based trip purposes, home-based work direct, home-based work strategic, home-based shopping, home-based social-recreational, home-based

service-passenger and home-based other. These trip purposes capture the interactions between the residential and non-residential land uses. The attractiveness of the home-based trips to adjacent offices, shopping centers, intermediate school trips, and other social, recreational locations is determined by several factors in the model such as proximities, income levels, types of employment in the region, available roadway and transit facilities etc. These model variables determine the trips generated from the project specific zone and how far they will travel. The efficiency of VMT associated with home-based trips has been assessed based on the SCAG Travel Demand Model consistent with the City's guidelines.

The calculation of vehicle miles traveled has two components – the total number of trips generated and the average trip length of each vehicle. As the proposed project is a residential development, only trip production was used from the home-based trip purpose matrices in the SCAG model. Using the peak and off-peak person trip matrices, skim (distances) matrices and appropriate occupancy rates, VMT was calculated for the project traffic analysis zone (TAZ). The following discussion is provided regarding these three broad trip types.

Project Home-Based VMT per Capita

The home-based VMT per capita is the Home-Based production VMT divided by population derived from the SCAG model. The Home-Based VMT per Capita is used to measure efficiency of VMT generated by residential uses. **Table 5** and **6** shows the project area Home-Based VMT per Capita for the existing plus project and cumulative plus project conditions, determined using the SCAG model.

Potential Impacts

As mentioned earlier, the initial screening process was not conclusive of the project's VMT impacts as the existing project VMT is not available in the SGVCOG VMT tool. Therefore, a complete VMT analysis for the project was conducted using the SCAG travel demand model. As shown in **Tables 5** and **6**, both the existing and cumulative project area Home-Based VMT per Capita will be less than 15% below SGVCOG average VMT per Capita.

Table 5 – Project VMT Impact Evaluation (839-unit alternative)

Landuse	VMT Threshold (SGVCOG Average)	Existing With Project VMT per Capita	% of SGVCOG Average	Significant Threshold	Potentially Significant
Residential: Home-Based VMT per Capita	16.27	12.97	79.7%	>85%	No

Note: VMT Thresholds are calculated based on the 2012 Base Year SCAG model run

Table 6 – Cumulative Project VMT Impact Evaluation (839-unit alternative)

Landuse	VMT Threshold (SGVCOG Average)	Cumulative With Project VMT per Capita	% of SGVCOG Average	Significant Threshold	Potentially Significant
Residential: Home-Based VMT per Capita	16.27	11.81	72.6%	>85%	No

Note: VMT Thresholds are calculated based on the 2040 Baseline SCAG model run

The numerical threshold values shown in **Table 5** and **6** are based on the methodology recommended by City's draft SB 743 Implementation Guidelines. It should be noted that this value may slightly differ from the draft City of Alhambra threshold value, but the outcome of the analysis will be consistent with the City's guidelines as the threshold of significance is based on the percentage of the with and without project VMT and not the absolute value. The results also indicate that the project is in a low VMT generating area.

Improvements to methods and data as well as other modeling modifications may also result in periodic updates to the numerical threshold adopted by the City, therefore it is recommended to recalculate base year threshold values for consistent evaluation.

Substantial Evidence of Low VMT-Generation Area

The VMT per capita results for the project area for the 839-unit project alternative can be used as substantial evidence to show that the project area is within the Low VMT-Generation Area. Therefore, a project alternative with fewer units, including the proposed 775 unit alternative, would be in the Low VMT-Generation Area and can be screened out from additional analysis based on the City of Alhambra and SGVCOG VMT screening guidelines.

Conclusion

The Project's transportation impact based on the existing and cumulative VMT screening as well as the previously conducted VMT analysis, would be less than significant based on City of Alhambra and OPR's recommended thresholds. No mitigation measures are required.

Exhibit 1: Project Location

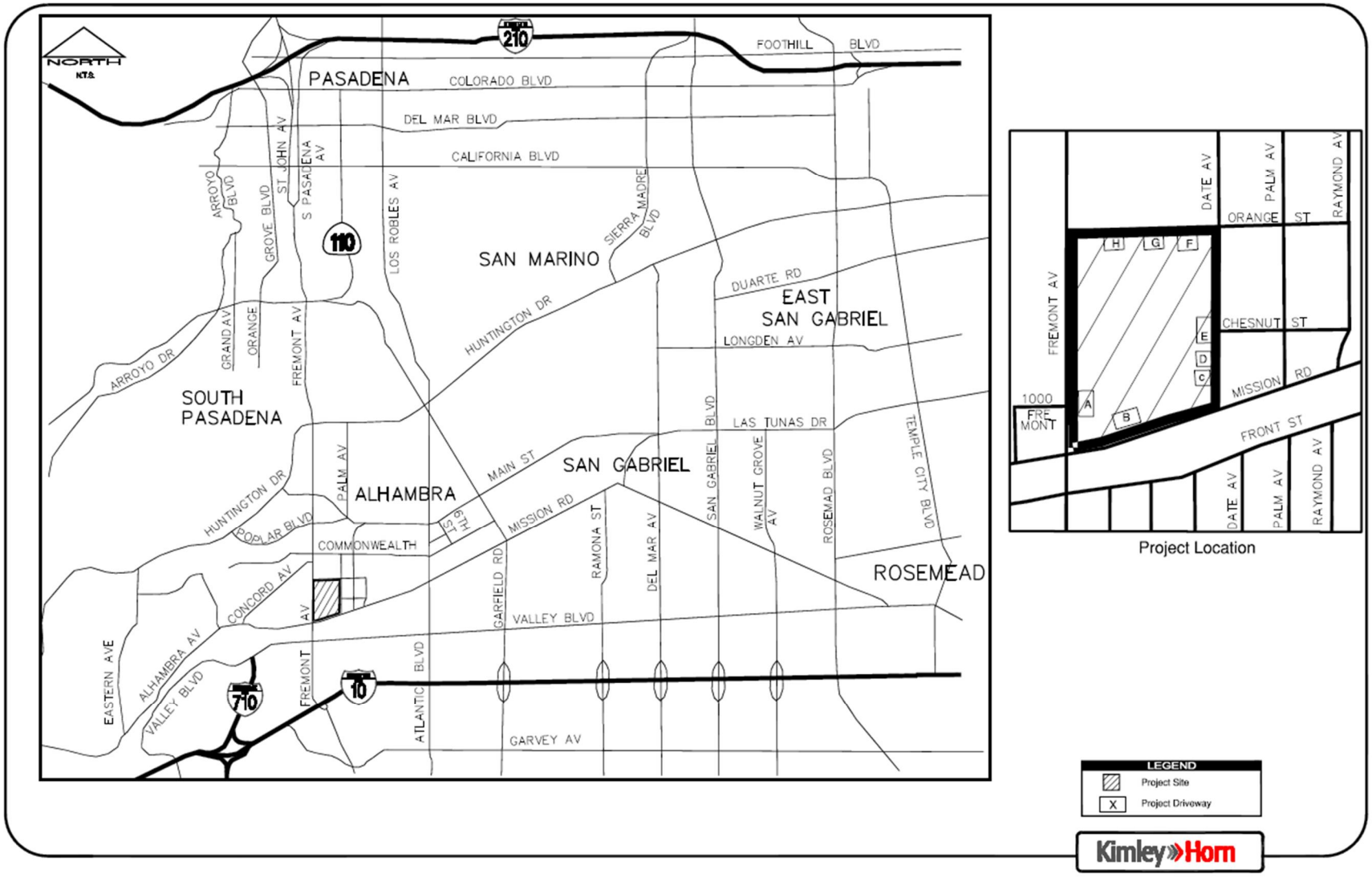

Exhibit 2: SCAG Model Project TAZ

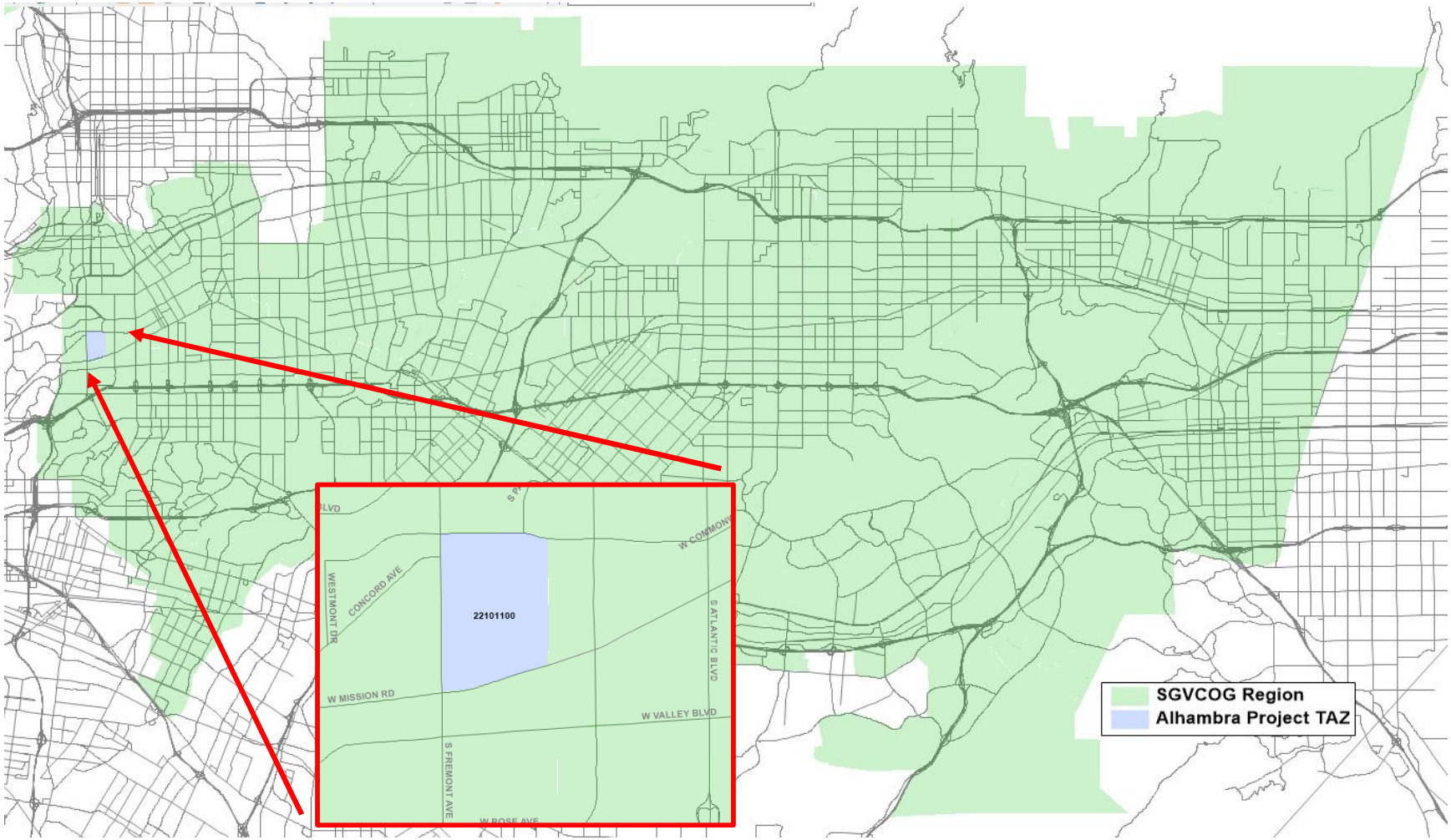

Exhibit 3: Model Data used for Base Year Conditions VMT Calculations

TAZ2	HBW_P_VMT	HBSC_P_VMT	HBNW_P_VMT	2012 Population	2012 Household
22095200	11673.45	1286.70	9852.17	2160	583
22095300	11782.32	762.65	8728.29	2072	573
22096100	12868.60	463.29	12698.13	1887	600
22096200	12495.85	600.03	12054.85	1701	577
22096300	16206.18	727.03	15567.76	2237	757
22097100	8316.90	555.46	6696.12	873	280
22097200	22441.44	1463.02	18406.11	2042	715
22097300	20746.63	1859.98	19158.88	1859	699
22098100	23832.27	1294.92	23271.31	3417	1218
22099100	31797.95	791.54	25190.66	4559	1871
22100100	12411.14	518.79	10816.31	1892	732
22100200	2921.33	123.86	2190.29	424	121
22100300	7572.28	239.51	6800.42	1172	392
22101100	16294.00	851.89	14225.52	2570	839.00
22101200	9769.71	500.30	7965.11	1541	503
22102100	11855.19	595.05	9985.23	1766	513
22103100	12788.22	366.56	13114.82	2069	764
22103200	5542.92	83.17	6144.75	946	352
22103300	6855.43	249.36	7772.41	1209	433
22103400	13795.62	446.65	14884.37	2804	991
22104100	18365.30	664.43	14953.63	2747	1024
22104200	14011.92	672.89	10952.47	2298	835
22105100	14364.43	1153.85	8861.14	2834	845
22105200	5027.32	219.62	3210.56	812	274
22105300	6304.81	585.94	3826.18	1563	586
22106100	324.48	36.48	293.74	160	149

VMT = (HBW_VMT + HBSC_VMT + HBNW_VMT) / Population

Note:
HBW_P_VMT = Vehicle Miles Traveled for Home-Based-Work Trips, Productions
HBSC_P_VMT = Vehicle Miles Traveled for Home-Based-School/College Trips, Productions
HBNW_P_VMT = Vehicle Miles Traveled for Home-Based-NonWork Trips, Productions

Exhibit 4: Model Data used for Cumulative Conditions VMT Calculations

TAZ2	HBW_P_VMT	HBSC_P_VMT	HBNW_P_VMT	2040 Population	2040 Household
22095200	11847.32	1351.04	11348.93	2391	675
22095300	11763.08	801.24	10208.24	2289	663
22096100	13112.97	534.06	14594.25	2086	685
22096200	12746.44	702.70	13748.56	1884	660
22096300	16436.64	844.45	17614.57	2473	865
22097100	7600.51	515.45	7115.29	880	284
22097200	20475.39	1419.15	19757.67	2075	730
22097300	19390.94	1818.51	20356.94	1885	714
22098100	24485.87	1500.78	27012.38	3793	1390
22099100	29443.29	747.69	26252.55	4764	1976
22100100	13369.67	591.70	12788.33	2171	865
22100200	3010.60	127.02	2560.75	470	143
22100300	7995.37	269.38	7902.44	1328	463
22101100	14084.14	823.74	14207.34	2466	839
22101200	10090.17	577.03	9238.40	1746	594
22102100	11832.72	665.43	11457.29	1941	586
22103100	13240.57	368.86	15012.98	2269	845
22103200	5709.28	80.81	6962.83	1038	390
22103300	7059.62	245.67	8578.67	1333	479
22103400	14270.33	434.08	16895.07	3074	1097
22104100	19300.27	745.18	17988.18	3135	1210
22104200	14553.64	761.69	12940.20	2611	987
22105100	14199.57	1251.84	10541.04	3142	978
22105200	4757.96	235.28	3773.74	905	318
22105300	6604.54	634.85	4591.13	1719	659
22106100	402.41	46.19	369.68	188	168

Note:
HBW_P_VMT = Vehicle Miles Traveled for Home-Based-Work Trips, Productions
HBSC_P_VMT = Vehicle Miles Traveled for Home-Based-School/College Trips, Productions
HBNW_P_VMT = Vehicle Miles Traveled for Home-Based-NonWork Trips, Productions

VMT = (HBW_VMT + HBSC_VMT + HBNW_VMT) / Population