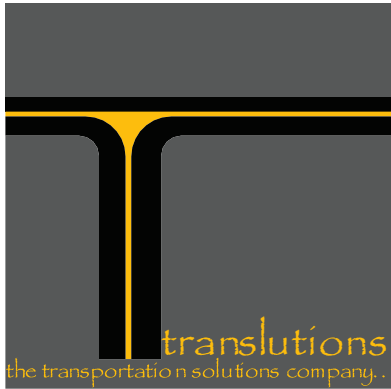# Appendix D
Vehicle Miles Traveled (VMT) Memorandum

memorandum

DATE: September 15, 2025
TO: Sabita Tewani, AICP, PTP
FROM: Sandipan Bhattacharjee, P.E., T.E., AICP, ENV-SP
SUBJECT: VMT Methodology & Outputs for B-2 Hotel, City of Garden Grove

This memorandum describes the analysis methodology and findings of the Vehicle Miles Traveled (VMT) analysis conducted for the proposed B-2 Hotel project in the City of Garden Grove. The proposed project includes a 500-room hotel and ancillary facilities that will be primarily used by the hotel guests. This analysis was conducted based on the City of Garden Grove (City) *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (Guidelines). The Guidelines identify the methodology and significance thresholds for purposes of preparing a CEQA compliant analysis of a project's potentially significant VMT impacts. The City of Garden Grove uses the Orange County Transportation Analysis Model (OCTAM) for projects that require a detailed VMT.

METHODOLOGY AND THRESHOLDS OF SIGNIFICANCE

The Guidelines require that projects complete VMT analysis and forecasting through the OCTAM model to determine if they have a significant VMT impact. This analysis includes both 'project generated VMT' for the project's traffic analysis zone(s) (TAZ or TAZs) and 'project effect on VMT' estimates. Project generated VMT includes the VMT generated by the project trips. The project effect on VMT is the link based VMT for a geographic region which evaluates how a proposed development changes travel behavior in the region. In comparison, the project generated VMT identifies the VMT of the project but does not account for changes to trips in the region due to the project. Consistent with the Guidelines, this VMT includes an analysis of both the project effect on VMT and the project generated VMT.

Project Generated VMT. The Guidelines require that for purposes of SB 743 compliance, a VMT analysis should be conducted for land use projects that have the potential to increase the baseline VMT[1] per service population (e.g. population plus employment) for the City of Garden Grove. A project's VMT can be calculated from the OCTAM model by using Origin/Destination methodology or Production/Attraction methodology as described below:

- The Origin/Destination (OD) method calculates VMT by summing all VMT from trips that either start or end within the analysis zones. It considers all vehicle trips, with "origins" being the starting points in a specific traffic analysis zone and "destinations" being the ending points in another. This method tracks all VMT from the analysis zone including intermediate stops.
- The Production/Attraction (PA) method focuses on trips originating or ending within a study area. This calculation occurs before trips are converted from person trips to vehicle trips and while their purpose is still identifiable. The PA method is useful for evaluating VMT based on specific trip purposes, such as commute VMT per employee. For uses with a significant number of customer trips such as retail, hotel, restaurant, etc. this method helps identify commute VMT related to the project which evaluates one of the primary goals of jobs-housing balance per SB-743.

Normalizing VMT per service population (e.g. creating a rate by dividing VMT as the numerator with the service population serving as the denominator) provides a transportation efficiency metric that the analysis is based on. VMT is calculated per the OD or PA methodology as described above and the service population is estimated using socio-economic data as described later in this memo.

Based on the Guidelines, the project-generated VMT shall be extracted from the travel demand forecasting model using the OD trip matrix and multiplying that matrix by the final assignment skims[2]. The Guidelines also state that using the PA trip matrix may be

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[1] Baseline VMT is the VMT from the base year of the model (2019 for OCTAM)

[2] "Skimming" sums impedances along selected paths identified as the route or path on the transit network that has the lowest cost for a traveler.

appropriate when a project is entirely composed of retail or office uses, and there is a need to isolate the home-based-work (HBW) VMT for the purposes of isolating commute VMT. Since the project has a hotel guest component, the project use is similar to a retail use (i.e. some hotel guests may go to other hotels in the area if the project is not there, similar to shopping somewhere else if a certain shopping center is not there) as well as office (employees come to work at the hotel, just like they would at an office). To account for both hotel guests and employees from the OCTAM model output, the project- generated VMT was analyzed using both the OD (for employees and guests, or Service Population) and PA (for employee trips) methodologies described above. Therefore, this memorandum presents the project generated VMT evaluation for both the OD VMT and PA VMT, going above and beyond the requirements under the Guidelines.

Project's Effect on VMT. The project's effect on VMT was calculated using the City boundary and extracting the total link level VMT for both the no project and with project condition. The total link level VMT is estimated by multiplying the number of trips on each roadway segment within the selected boundary by the length of that segment.

VMT Impact Thresholds. The Guidelines include the following VMT thresholds to determine potential project generated VMT impacts and project's effect on VMT impacts.

Project Generated VMT. 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 County of Orange baseline VMT per service population, or
2. The cumulative project generated VMT per service population exceeds 15% below the County of Orange baseline VMT per service population.

For this analysis, the evaluation of project generated VMT has been conducted for both the OD method and the PA method. The OD method quantifies the total VMT per service population and the PA method quantifies the home-based work VMT per employee.

Project's Effect on VMT. The project's effect on VMT would be considered significant if it resulted in either of the following conditions being satisfied:

1. The baseline link-level boundary Citywide[3] VMT per service population increases under the plus project condition compared to the no project condition, or
2. The cumulative link-level boundary Citywide VMT per service population increases under the plus project condition compared to the no project condition.

TRANSPORTATION MODEL

Based on the Guidelines, the Orange County Transportation Analysis Model (OCTAM) Version 5.1 was used for the analysis. As described above, the Guidelines recommend use of OCTAM for purposes of performing VMT analysis in the City because the OCTAM is developed and maintained by Orange County Transportation Authority (OCTA) and is designed to provide a greater level of consistency, detail and sensitivity in Orange County compared to the regional model developed by the Southern California Association of Governments (SCAG) and the statewide model developed by Caltrans. The use of OCTAM is also recommended for VMT assessment by the cities within the Orange County. . The OCTAM has also been used as the basis for VMT analysis of other resort/hotel uses in Orange County, including the Disneyland Forward project. The OCTAM's Base Year (Baseline) is 2019 and the Horizon Year (Cumulative) is 2050. The OCTAM has 3142 Traffic Analysis Zones (TAZs), of which 1741 are in Orange County. The project site is

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Depending on the model structure, cost may be actual dollar values (fares) or monetized values of time, distance, or a combination of these and other price components. An O/D trip matrix, also known as the O/D table, is formed by a two-dimensional matrix, where the value of each cell denotes the number of trips between the row number (origin zone) and column number (destination zone). These are generated by the travel demand model (in this case, the OCTAM)

[3] The Guidelines require that for projects near the City boundary, a potential exists for use of a different boundary so as not artificially truncate the VMT analysis at the City boundary. Although the project site is within 0.3 miles of the City boundary from the Harbor Boulevard and Chapman Avenue intersection, Citywide VMT is the appropriate boundary for the VMT analysis based on review of the project location, regional access, location of nearby destinations, the fact that most guests are anticipated to visit the project with the specific intention to enjoy the project amenities and attractions making this project different from traditional business hotels and limited amenity tourist hotels..

located within TAZ 521 an area that is depicted on Exhibit 1 with the project site identified.

MODEL SOCIOECONOMIC DATA (SED)

The Guidelines require that the project land use would be added to the parent TAZ or a separate TAZ be created to contain the project land uses. On a TAZ with multiple land uses, the trips generated by each land use cannot be identified or isolated consistent with the Guidelines and our professional judgment, a separate TAZ was created to estimate a project's VMT. It should be noted that the OCTAM does not have a built in feature for the creation of a new TAZ. Therefore, consistent with established modeling practices and the methodology we have used in other studies, a TAZ is "borrowed" (i.e. modeling data for relevant uses in an existing TAZ are copied from that TAZ and added to a TAZ with characteristics such as external trips and employee numbers similar to the TAZ at issue) and located in the project's geographic area. This modeling approach allows traffic engineers to isolate the effect of the project consistent with the Guidelines and CEQA standards. In this case, the project was coded into TAZ 386 which was selected based on approximately similar number of external trips and employee numbers to TAZ 521 where the project is located. Then the TAZ was connected to the adjacent roadways in the model and the socio-economic data was updated to reflect the project's 446 employees and 1,000 guests. The methodology used is consistent with the Guidelines, OCTAM our professional experience, and discussions with City professional transportation staff as discussed below:

a. **Population or Hotel Guests:** As a resort hotel, with on-site entertainment and many amenities designed to attract families, the applicant and City expect the per room occupancy and the average occupancy rate to exceed the average business or tourist hotel in the City and surrounding area. For comparison, a review of occupancy data from another nearby resort hotel in the City, The Great Wolf Lodge, discloses an average occupancy of approximately 3 persons per room. Based on the relevant data and use of engineering judgment, and to present a conservative analysis, an occupancy rate of 80% and an average occupancy of 2.5 was used for the proposed project. Therefore, the VMT analysis relies on a total occupancy of 1,000 hotel guests for the 500-room resort hotel. This approach to the number of guests overstates project VMT per SP because it keeps the number of guests (and as a result, the Service Population) at a conservative level (denominator) while keeping the project generated VMT (numerator) the same.

b. **Employees:** Hotel employees were coded as service employment per OCTAM Guidelines and consistent with the nature of the work and because OCTAM does not have a separate category for Hotel Employment. This approach is consistent with the North American Industry Classification System (NAICS) methodology that characterizes hotel employees as Service Employees and the Standard Industrial Classification (SIC) Codes incorporated into OCTAM. Based on applicant provided information, discussions with the City, other sources such as a SCAG Employment Density Study (2001), comparisons to ITE employee trip rates, review of industry sources, and SANDAG model inputs used for a High-Rise Hotel, the VMT analysis conservatively uses 446 employees. (see Attachment A).

MODEL NETWORK UPDATES

No changes to roadway or transit were made for the baseline or horizon scenarios since the City's thresholds are based on the network assumptions in the model and the project does not propose any changes to the network.

MODEL RUNS AND OUTPUTS

Model Runs were conducted for the 2019 and 2050 conditions for both without the project and with the project with the above discussed SED and networks. Consistent to our traffic engineering judgment, good modeling practices as required by the Guidelines and recommendation from the SCAG, each model was run with feedback loops[4] which is an iterative or cyclical process that refines the travel behavior predictions with each successive model run. This process ensures that the model reflects the changes in travel behavior in a

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[4] Models are run with feedback loops wherein the output of one run becomes the basis of the next run. In this process, the predicted speeds are used to re- compute highway and transit travel times, and the entire model sequence is repeated until input and output speeds are generally consistent with each other. Each iteration is referred to as a loop. The percentage change in systemwide total travel cost (the goal of a model is to optimize travel cost which is a function of costs associated with travel time and operating cost) between one iteration and the next is referred to as "convergence". A convergence of 0.01 means that the change in travel cost between one run and the next is 1%. Models in the SCAG region generally run for 5 loops or until a convergence of 0.01 is achieved.

realistic manner which considers alternate routes and destinations available to the trip making population. Detailed model outputs are shown in Attachment B.

The model outputs were obtained from OCTAM for both Project generated VMT and Project effect on VMT, as explained below, and consistent with the Guidelines:

Project Generated VMT: As discussed earlier, project generated VMT can be of two types – Origin Destination VMT (OD VMT) and Production-Attraction VMT (PA VMT). OD VMT emphasizes that the VMT being considered is directly tied to trips from an Origin to each Destination throughout the course of the day. PA VMT emphasizes that the VMT being considered is directly tied to trips that are "produced" by certain activities (like living in a home) or "attracted" to certain activities (like working at an office or shopping at a store). Project generated OD VMT numbers includes trips associated with both employees and hotel guests as both would have origins and destinations within the project TAZ. To exclude one of the contributors to the project's VMT from the service population numbers or the results would inappropriately skew the conclusions. PA VMT numbers includes only employee trips as that analysis is based on the type of trip (trip from home to work in this case). It should also be noted that the comparison to determine impacts are based on the corresponding baseline (i.e. OD VMT for the project is compared to OD VMT thresholds and PA VMT is compared to the PA VMT threshold).

> **OD VMT.** The OD methodology for calculating VMT sums all VMT generated by trips with at least one trip end in the study area (i.e. Project boundary) and tracks those trips to their estimated origins/destinations. Origins are all vehicle trips that start in a specific TAZ and destinations are all trips that end in a specific TAZ. This methodology includes both passenger car and truck trips. The VMT per service population is then calculated by dividing the OD VMT by service population.

> **PA VMT.** The PA methodology for calculating VMT uses the outputs of a model run where trips are converted from person trips to vehicle trips but their purpose is still identifiable (e.g., home-based work). This method is primarily focused on automobile traffic and trip purpose. The PA method is particularly useful for evaluating VMT for evaluating employees contributions as it allows for analysis based on specific trip purposes, such as commute VMT per employee, which is calculated by taking the total homebased work VMT for the study area (or project) and dividing that by the corresponding number of employees.

Project's Effect on VMT: The VMT Guidelines specify that the "project's effect on VMT is the link based VMT for a geographic region which is more appropriate to review to evaluate how these developments change travel behavior in the region." Per the VMT Guidelines, for a project that does not increase the link based VMT for the City, the project effect on VMT would be less than significant. To estimate the Project-effect on VMT, as required by the VMT Guidelines, citywide roadway VMT (using boundary method) for the without and with Project conditions are obtained from the OCTAM. The boundary method is utilized to measure the Project's effect on VMT, and estimates VMT by multiplying the number of trips on each roadway segment within the selected boundary by the length of that segment. This approach includes all trips, including those trips that do not begin or end in the designated boundary, and captures the effect of cut-through and/or displaced (i.e. trips that change route due to increased congestion) traffic. The project effect on VMT is calculated by dividing the citywide roadway VMT with the City's service population, under with and without project conditions.

To present a conservative analysis, the evaluation of project effect on VMT includes only hotel employees and does not include hotel guests in the service population calculation since the evaluation is based on a regional level. This, therefore, does not double count guests that visit the hotel from the City. While some guests would come from outside the City, not including them in the SP presents a more conservative result (i.e. higher VMT/SP since the SP does not include guests).

Model Outputs. Table A shows the project generated VMT based on OD-VMT/SP. Table B shows the project generated VMT based on PA-VMT/Employee. Table C shows the project effect on VMT.

Table A: Project Generated OD VMT/SP

	Project Baseline	Project Cumulative	Orange County Baseline
Service Population	1,446	1,446	5,784,934
OD VMT	21,914	19,659	146,761,959
OD VMT per service population	15.2	13.6	25.4
Impact Threshold			21.6
Impact?	**No**	**No**	

Table B: Project Generated PA VMT/Employee

	Project Baseline	Project Cumulative	Orange County Baseline
Employees	446	446	1,805,476
PA VMT (HBW)	6,823	6,224	31,109,803
VMT/Employee	15.3	14.0	17.2
Impact Threshold			14.6
Impact?	Yes	No	

Table C - Project Effect on VMT

	Baseline		Cumulative	
	With Project	Without Project	With Project	Without Project
Roadway VMT	2,920,280	2,916,309	3,114,170	3,110,743
Service Population	266,418	265,972	277,941	277,495
VMT per service population	10.96	10.96	11.20	11.21
Impact?	No		No	

ANALYSIS FINDINGS

Baseline Project Generated OD VMT Based on Service Population. As seen on Table A, the baseline VMT/SP for the County is 25.4, which results in a threshold of 21.6 with the required 15% reduction. Table A also shows that the baseline project generated OD VMT/SP for the proposed project is below the 21.6 threshold at 15.2, and therefore, the project impact on VMT is less than significant.

Baseline Project Generated PA VMT Based on Employee VMT. As seen on Table B, the baseline VMT/Employee for the County is 17.2, which results in a threshold of 14.6 with the required 15% reduction. Table B also shows that the baseline project generated PA VMT/Employee for the proposed project is above the 14.6 threshold of 15.3 without mitigation, and therefore, the project impact on VMT would be significant without mitigation.

Baseline Project Effect on VMT. As seen on Table C, the Citywide segment level VMT/SP under baseline no project conditions is 10.96 and under the baseline with project conditions it is 10.96. Because the proposed project would not increase the VMT/SP compared to no project conditions, therefore, has a less than significant impact.

Cumulative Project Generated OD VMT Based on Service Population. As seen on Table A, the baseline VMT/SP for the County is 25.4, which results in a threshold of 21.6 with the required 15% reduction. Table A also shows that the cumulative project generated VMT/SP for the proposed project is below the 21.6 threshold at 13.6, and therefore, the project impact on VMT is less than significant.

Cumulative Project Generated PA VMT Based on Employee VMT. As seen on Table B, the baseline VMT/Employee for the County is 17.2, which results in a threshold of 14.6 with the required 15% reduction. Table B also shows that the cumulative project generated VMT/Employee for the proposed project is below the 14.6 threshold at 14.0, and therefore, the project impact on VMT is less than significant.

Cumulative Project Effect on VMT. As seen on Table C, the Citywide segment level VMT/SP under cumulative no project conditions is 11.21 and under the cumulative with project conditions it is 11.20. Therefore, the proposed project effect on VMT results in a lower VMT/SP and therefore, has a less than significant impact.

MITIGATION MEASURES

Since the project has a significant impact under Project Generated VMT/Employee under baseline conditions, the following mitigation measures are proposed to reduce Project Generated employee VMT:

1. **T-7: Implement Commute Trip Reduction Marketing:** This measure will implement a marketing strategy to promote the project site employer's CTR program. Information sharing and marketing promote and educate employees about their travel choices to the employment location beyond driving such as carpooling, taking transit, walking, and biking, thereby

reducing VMT and GHG emissions. To ensure that CTR achieves VMT reduction of at least 4%, the following measures will be incorporated:

- The applicant shall provide onsite or online commuter information services to employees. The applicant shall also distribute a quarterly newsletter with tips, success stories and updates to ensure education and encouragement for the CTR program.
- The CTR shall require the Project applicant or their designee to appoint a Commute Program Coordinator to oversee the implementation and management of the marketing strategy.
- The applicant shall ensure on-site or online transit pass sales are available to all employees. Additional VMT reduction can be achieved if the applicant provides subsidized or free transit passes. (See T-9B)
- The applicant shall provide guaranteed ride home service by matching employees with other employees or providing access to platforms such as Rideharing.com and Lyft which connect riders for daily commutes with nearby drivers.
- A minimum of 10 preferential parking spaces for carpools/vanpools shall be provided.

2. **T-10: Provide End-of-Trip Bicycle Facilities:** This measure will install and maintain end-of-trip facilities for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle, thereby reducing VMT and GHG emissions. The applicant shall secure on-site bicycle racks to accommodate a minimum of 38 bicycle parking spaces and provide bicycle rentals for hotel guests on the ground level. On the lower level, the applicant shall install a minimum of 32 secure bicycle parking spaces and additionally, locker and shower facilities will be provided for employees.

3. **T-9B- Implement Subsidized or Discounted Transit Program:** This measure includes providing subsidized or discounted or free transit passes for employees. Reducing out of pocket cost for choosing transit improves the competitiveness of transit against driving, increasing the total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT and reduction in GHG emissions. It is anticipated that 30% of the employees will receive a subsidy of 50% of the monthly transit cost. This measure can be bundled as part of T-7 as a comprehensive CTR program.

VMT reductions due to these measures have been quantified based on the Handbook for *Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, California Air Pollution Control Officers Association (CAPCOA), October 2024. Detailed calculations are shown in Appendix C. As seen on Appendix C, the implementation of T-7 results in the reduction of VMT/Employee under baseline conditions from 15.3 to 14.69 (i.e. 4% reduction), the implementation of T-10 further reduces the VMT/Employee from 14.69 to 14.58 (i.e. 0.75% reduction), which brings the VMT/Employee below the threshold of 14.60. Implementation of Mitigation Measure T-9B will further reduce the VMT/Employee from 14.58 to 14.55 (i.e. 0.17% reduction), for a total of 4.88% VMT reduction[5]. These measures will also reduce the future year VMT/Employee, which is below the threshold of significance even without any mitigation measures.

CONCLUSION

As demonstrated by the analysis in this technical report, as it relates to VMT and utilizing the City's adopted Guidelines for determining the potential significance of project impacts, the project will have less than significant impacts.

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[5] VMT Reduction% = $1 - [(1 - 4\%) * (1 - 0.75\%) * (1 - 0.17\%)] = 4.88\%$
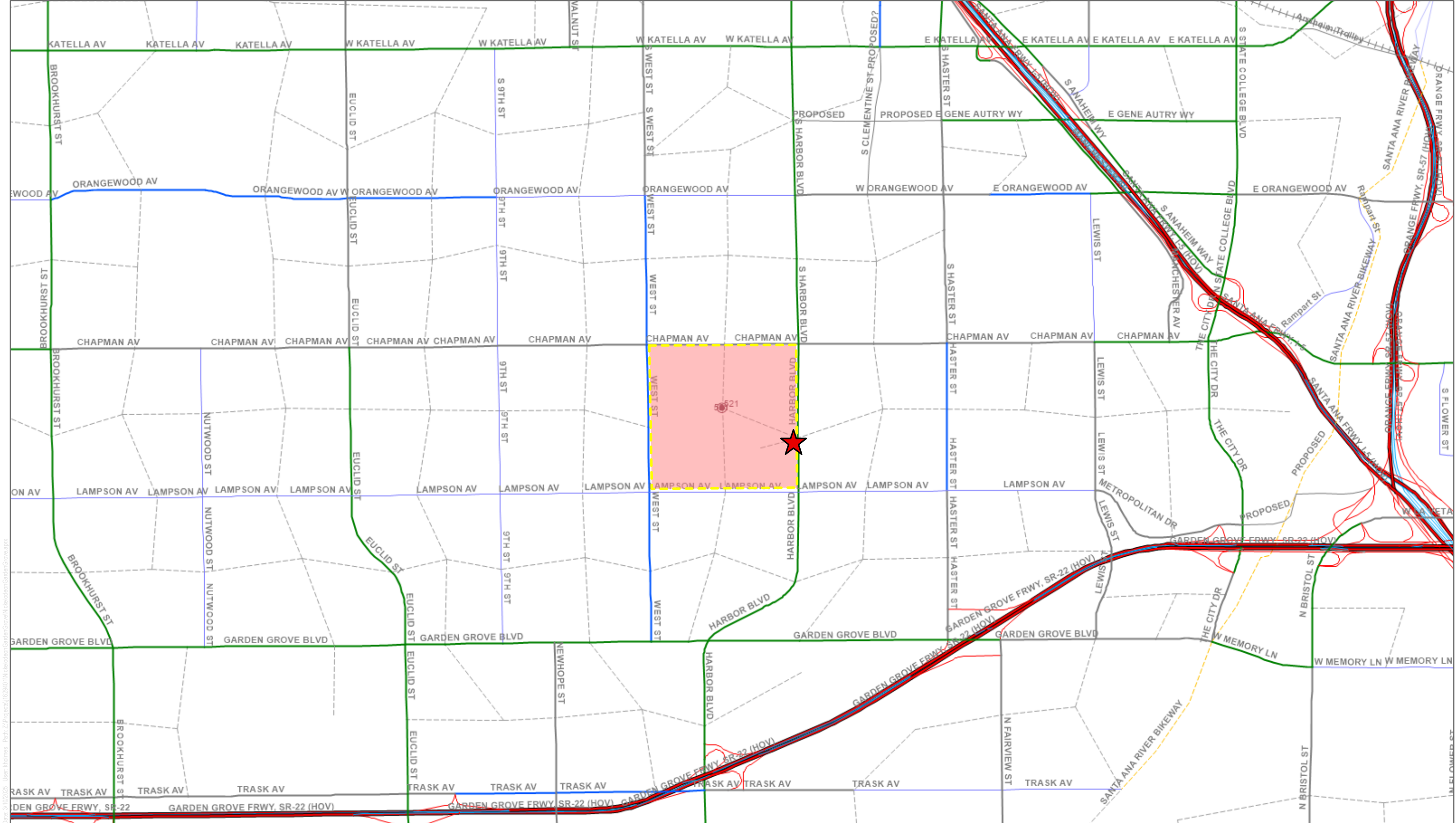
Exhibit 1
Project Traffic Analysis Zone
B-2 Hotel Project

Attachment A: Employee Estimation

Table 1. Employee Estimation

Land use	Sq ft /Employee per SANDAG[1] Modeling inputs	No. of Employees using SANDAG rate	Employee per room estimate Range per Industry sources[2]	No. of Employees using Industry sources	**Recommended No. of Employees for Project**
Hotel	1,550	691,693/1,550 = 446	0.8 – 1.2	500 * 0.8 = 400 500 * 1.2 = 600	**446**

[1] Hotel Employee ratio from the land use input file of the San Diego Association of Government (SANDAG) Activity Based Model (ABM 2+)

[2] Recommendation of World Tourist Organization https://www.city-of-hotels.com/165/hotel-staff-en.html

Attachment B: Nickelodeon Hotel - VMT Analysis

2019	Nickelodeon Hotel (Project)	County of Orange*
Households	-	-
Population	-	3,196,231
Employment	446	1,805,476
Enrollment		783,227
Guests	1,000	
Service Population	1,446	5,784,934
Homebased Work (HBW) VMT	6,823	31,109,803
PA VMT	20,813	135,174,523
OD VMT	21,914	146,761,959
OD VMT per service population	15.2	25.4

2050	Nickelodeon Hotel (Project)	County of Orange*
Households	-	-
Population	-	3,327,124
Employment	446	2,018,954
Enrollment		760,658
Guests	1,000	
Service Population	1,446	6,106,736
Homebased Work (HBW) VMT	6,224	32,260,520
PA VMT	19,311	144,579,683
OD VMT	19,659	157,665,420
HBW VMT per employee	14.0	16.0
PA VMT per service population	13.4	23.7
OD VMT per service population	13.6	25.8

Attachment C: VMT Reduction from Mitigation Measures

T-7: Implement Commute Trip Reduction Marketing

ID	Formula	Variable	Value		Unit	Source	Calculation
Project VMT Before Measure							15.30
Output							
A	A=B*C*D	Percent reduction in GHG emissions from project/site employee commute VMT	0-4%		%	calculated	-4.0%
User Inputs							
B		Percentage of employees eligible for program	0-100%	100.0%	%	user input	100.0%
Constants, Assumptions, Defaults							
C		Percent reduction in employee commute vehicle trips		-4.0%	%	TRB 2010	-4.0%
D		Adjustment from vehicle trips to VMT		1	unitless	assumed	1
Project VMT after Mitigation							**14.69**

T-10: Provide End-of-Trip Bicycle Facilities

ID	Formula	Variable	Value		Unit	Source	Calculation
Project VMT Before Measure							14.69
Output							
A	A=(C*(E-(B*E)))/(D*F)	Percent reduction in GHG emissions from employee project/site employee commute VMT	0.1-4.4%		%	calculated	-0.75%
User Inputs							
Constants, Assumptions, Defaults							
B		Bike mode adjustment factor	1.78 or 4.86	4.86	unitless	Buehler 2012	4.86
C		Existing bicycle trip length for all trips in region	Table T-10.1	1.70	miles	FHWA 2017a	1.70
D		Existing vehicle trip length for all trips in region	Table T-10.1	9.7	miles	FHWA 2017a	9.7
E		Existing bicycle mode share for work trips in region	Table T-10.2	1.0%	%	FHWA 2017b	1.0%
F		Existing vehicle mode share for work trips in region	Table T-10.2	90.7%	%	FHWA 2017b	90.7%
Project VMT after Mitigation							**14.58**

Note: Percent reduction in VMT is the same as the percent reduction in GHG emissions.

T-9(B): Implement Subsidized or Discounted Transit Program

ID	Formula	Variable	Value		Unit	Source	Calculation
Project VMT Before Measure							14.58
Output							
A	A=(C/B)*G*D*E*F*H*I	Percent reduction in GHG emissions from employee/resident vehicles accessing the site	0-5.5%		%	calculated	-0.17%
User Inputs							
B		Average transit fare without subsidy		69	$	user input	69
C		Subsidy amount		34.5	$	user input	34.5
D		Percent of employees/residents eligible for subsidy	0-100%	30.0%	%	user input	30.0%
E		Percent of project-generated VMT from employees/residents	0-100%	100.0%	%	user input	100.0%
Constants, Assumptions, Defaults							
F		Transit mode share of all trips or work trips	Table T-3.1 or T-9.1	5.39%	%	FHWA 2017	5.39%
G		Elasticity of transit boardings with respect to transit fare price		-0.43	unitless	Taylor et al. 2008	-0.43
H		Percent of transit trips that would otherwise be made in a vehicle		50.0%	%	Handy & Boarnet 2013	50.0%
I		Conversion factor of vehicles trips to VMT		1	unitless	assumption	1
Project VMT after Mitigation							**14.55**

Note: Percent reduction in VMT is the same as the percent reduction in GHG emissions.