



# Memorandum

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To: Jennifer Rice, Trans. Plnr/Engr. Project: Airport Hotel SB 743

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GHD

Subject: 950 Aerio Hotel VMT Analysis

## 1. Introduction

A 218 room hotel is proposed on Aero Drive adjacent to the San Luis Obispo Regional airport. This technical memo provides an assessment of the project's impact on regional Vehicle Miles of Travel under SB 743 and the new CEQA guidelines published by the California Office of Planning & Research as well the City's adopted Multimodal Traffic Impact Study Guidelines as they relate to VMT Thresholds.

California Senate Bill 743 was adopted in 2013 fundamentally changing transportation analysis under CEQA by replacing automobile congestion as expressed in delay and level of service with Vehicle Miles of Travel as the official CEQA metric for Transportation Impact Analysis. However, SB 743 specifically allowed public agencies to retain Automobile Delay & level of service as local policy thresholds.

The City of San Luis Obispo adopted its CEQA Vehicle Miles of Travel (VMT) thresholds of significance follow California Office of Planning & Research guidance and updated its Traffic Impact Study Guidelines retaining level of service as local policy metric consistent with its general plan and impact fee programs in June of 2020.

***The results of this analysis shows a net increase in regional VMT as a result of the project which classifies as a significant impact under CEQA and the City's Adopted Traffic Impact Study Guidelines.***





## **2. Methodology**

### **2.1 Landuse Types & Significance Thresholds**

For the purposes of VMT analysis the City has adopted three categories for analysis:

- I. Residential: Any home based land use including single and multifamily projects. Projects under this category are evaluated using the percent difference in VMT per Capita of the project versus the Region. Projects are considered to have a significant impact if the VMT per capita is above the regional average less 15%.
- II. Work: Any project where the majority of trips are made by employees. Projects under this category are evaluated using the percent difference in VMT per employee of the project versus the Region. Projects are considered to have a significant impact if the VMT per capita is above the regional average less 15%.
- III. Retail & Other: Any project where the majority of trips are made by customers or patrons, this category also includes any type of non-residential and non-work based projects such as infrastructure projects or unique/unusual landuse types. Projects under this category are evaluated using the net change in VMT. Projects are considered to have a significant impact if they result in a net increase in regional VMT.

For mixed use projects each individual landuse type within the project is evaluated independently, however, trip reduction characteristics of mixed use projects such as internal capture are accounted for.

***The proposed project classifies as a Retail / Other landuse because the primary trip making characteristics are non-residential and non-work based. Therefore, the project was evaluated based on its net change to regional VMT.***

### **2.2 City Travel Demand Model**

As part of the City adoption of its VMT Thresholds various methodologies were considered including the City Travel Demand Model, SLOCOG Travel Demand Model, & Big Data Resources. The City ultimately adopted the use of its own travel demand model for the purposes of VMT analysis. A key criteria for any VMT calculation tool is that the tool must account for the full trip length of project trips. It was determined that the City's travel demand model meets this criteria because the model boundaries extend regionally and the volume of trip production/attraction to the model boundaries are insignificant.



Although the average trip length is approximately 8.3 miles, modeled trip lengths ranged from 0 to 100 miles. As shown in table 1 to the right, trips in excess of 30 miles are projected to be infrequent.

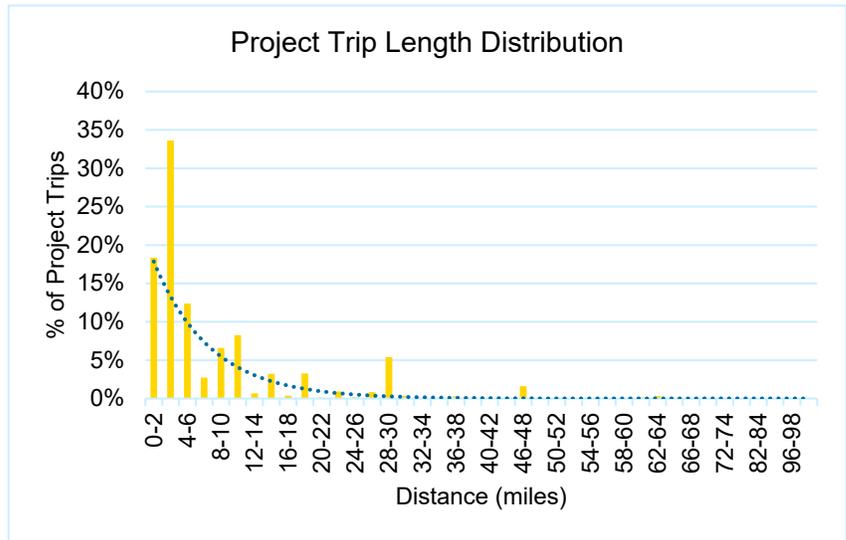


Figure1 Project TAZ Trip Length Distribution

As shown in Figure 2, person trips within the immediate area of the project including the airport are estimated to account for approximately 15% to 20% of project traffic. The predominant travel pattern to and from the project is projected to be the City's downtown core at 3 miles which accounts for approximately 30% to 35% of the project traffic.

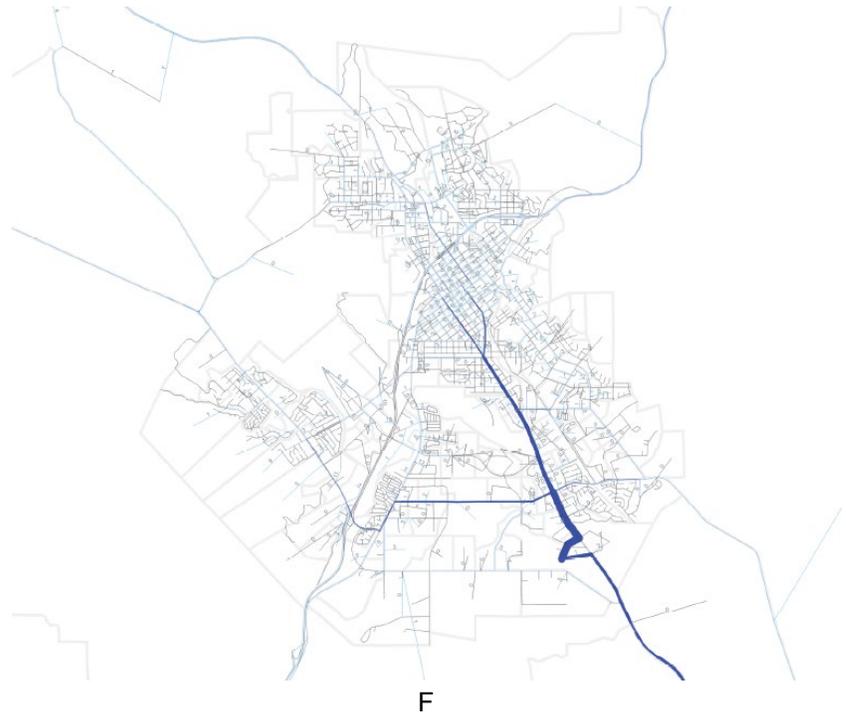


Figure 2 Project TAZ Trip Distribution



## Mitigation

The project will need to implement measures to reduce VMT by 393 or approximately 48 daily trips. The project can accomplish this reduction in three ways:

1. Modification of project description or construction of non-auto infrastructure that inherently reduces trip generation and VMT without the need for an on-going implementation effort and monitoring. However modification of the project description to the extent needed may not be feasible due to zoning limitations. Also construction of non-auto infrastructure solely funded by the project to the extent needed may not be feasible due to costs relative to the cost of the project itself.
2. The project can establish a peer to peer cap and trade or exchange with another property or development in process. This trade would result in lowering the significance threshold for the other property/development by 8.3 VMT and raising the significance threshold for this project by 8.3 VMT to achieve an overall no net increase in VMT. This would require an agreement between property owners and the modified thresholds to be recorded on the property deeds. This method would also not require an on-going implementation effort and monitoring.
3. The project can implement a programmatic trip reduction plan. CAPCOA's "Quantifying Green House Gas Mitigation Measures" is currently one of the most widely used tool boxes of VMT mitigation measures, Attachment A to this report is a summary of the VMT reduction strategies reported by CAPCOA.

Programmatic measures require active and on-going implementation by property occupants/owners in perpetuity as well as monitoring to ensure those measures are being implemented and are achieving the intended effect. Programmatic monitoring also imposes an on-going cost to the City. If a trip reduction plan is the adopted as the mitigation method; it's recommended that the plan be recorded as a deed restriction or other similar means to ensure that future occupants/owners are aware of the requirement and are obligated to the on-going implementation of VMT reduction strategies. An on-going mitigation monitoring program should be included within the plan to ensure programs are being implemented by the occupants/owners and those programs are achieving their intent. The City should consider including requirements for the occupants/owners to fund costs associated with mitigation monitoring.

Chart 6-2: Transportation Strategies Organization

Transportation Measures (Five Subcategories) Global Maximum Reduction (all VMT): urban = 75% compact infill = 40% suburban center or suburban with NEV = 20% suburban = 15%		Global Cap for Road Pricing needs further study	
Transportation Measures (Four Categories) Cross-Category Max Reduction (all VMT): urban = 70% compact infill = 35% suburban center or suburban with NEV = 15% suburban = 10%		Max Reduction = 15% overall work VMT = 25% school VMT = 65%	Max Reduction = 25% (all VMT)
Land Use / Location Max Reduction urban = 65% compact infill = 30% suburban center = 10% suburban = 5%	Neighborhood / Site Enhancement Max Reduction without NEV = 5% with NEV = 15%	Commute Trip Reduction (assumes mixed use) Max Reduction = 25% work VMT	Road Pricing Management Max Reduction = 25%
Density (30%)	Pedestrian Network (2%)	CTR Program Required = 21% work VMT Voluntary = 6.2% work VMT	Road Pricing (22%)
Design (21.3%)	Traffic Calming (1%)	Transit Fare Subsidy (20% work VMT)	Traffic Flow Improvements (45% CO <sub>2</sub> )
Location Efficiency (65%)	NEV Network (14.4) <NEV Parking>	Employee Parking Cash-out (7.7% work VMT)	Required Contributions
Diversity (30%)	Car Share Program (0.7%)	Workplace Parking Pricing (19.7% work VMT)	Utilize Electric or Hybrid Vehicles
Destination Accessibility (20%)	Bicycle Network <large> <small> <land dedication trails>	Alternative Work Schedules & Telecommute (5.5% work VMT)	
Transit Accessibility (25%)	Urban Non-Motorized Zones	CTR Marketing (5.5% work VMT)	
BMR Housing (1.2%)		Employer Sponsored Vanpool/Shuttle (13.4% work VMT)	
Orientation Toward Non-Auto Corridor		Ride Share Program (15% work VMT)	
Proximity to Bike Path		Bike Share Program	
		End of Trip Facilities	
		Preferential Parking Permit	
		School Pool (15.8% school VMT)	
		School Bus (6.3% school VMT)	

Note: Strategies in bold text are primary strategies with reported VMT reductions; non-bolded strategies are support or grouped strategies

