SB 743 Implementation Guidelines City

of Santa Cruz

May 12, 2022

Background

In 2013, SB 743 was signed into law by California Governor Jerry Brown with a goal of reducing Greenhouse Gas (GHG) emissions, promoting the development of infill land use projects and multimodal transportation networks, and to promote a diversity of land uses within developments. One significant outcome resulting from this statue is the removal of automobile delay and congestion, commonly known as level of service (LOS), as a basis for determining significant transportation impacts under the California Environmental Quality Act (CEQA).

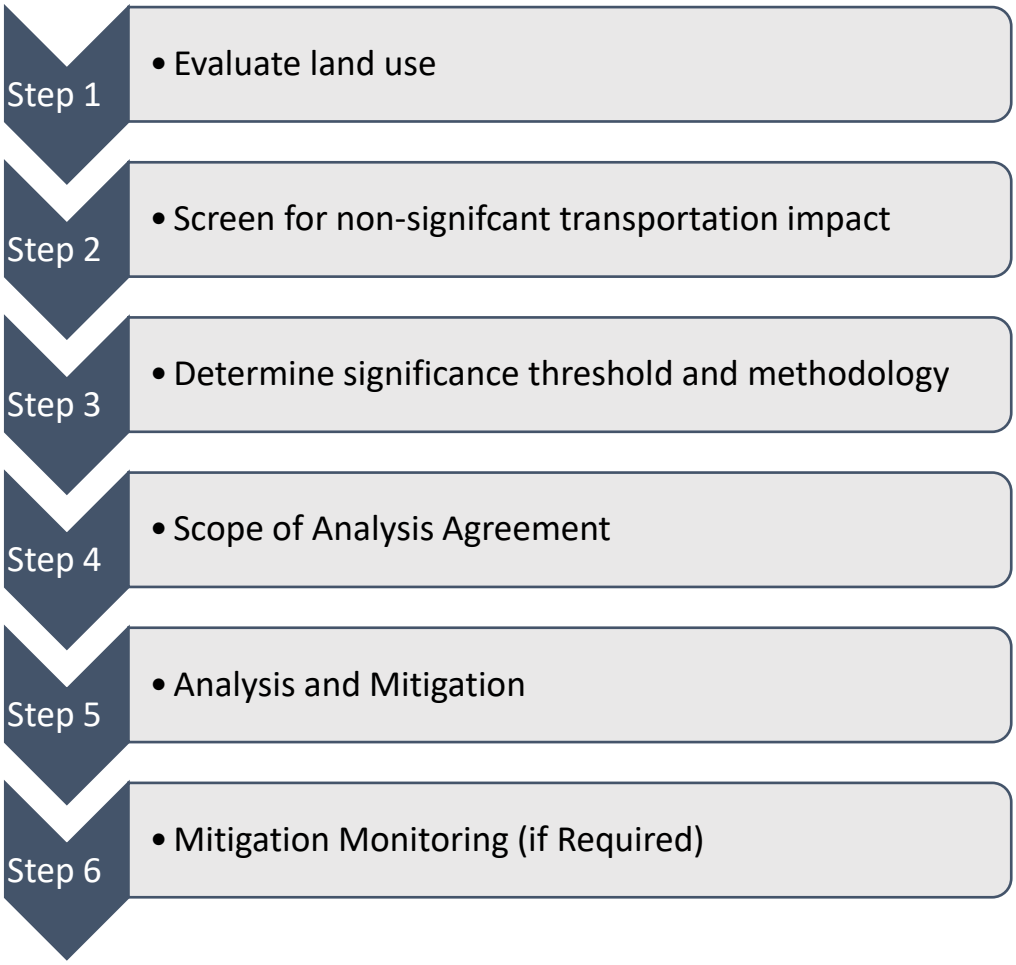
The Governor's Office of Planning and Research (OPR) selected Vehicle Miles Traveled (VMT) as the principal measure to replace LOS for determining significant transportation impacts. VMT is a measure of total vehicular travel that accounts for the number of vehicle trips and the length of those trips. OPR selected VMT, in part, because jurisdictions are already familiar with this metric. VMT is already used in CEQA to study other potential impacts such as GHG, air quality, and energy impacts and is used in planning for regional Sustainable Communities Strategies (SCS).

VMT also allows for an analysis of a project's impact throughout the jurisdiction rather than only in the vicinity of the proposed project allowing for a better understanding of the full extent of a project's transportation-related impact. It should be noted that SB 743 does not disallow an City of Santa Cruz to use LOS for other planning purposes outside the scope of CEQA.

Land Use Projects

An approach to identify transportation impacts under CEQA for land-use that closely align with guidance provided within the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018). While the OPR guidance related to SB 743 has been a helpful introduction to using VMT to evaluate projects, it does not provide a complete solution. There are a multitude of complex practical issues that are not addressed by the OPR guidance. OPR Guidance does not specifically address land uses beyond residential, office and retail, and it provides latitude on some elements of implementation. In response to this, a specific series of analysis steps for SB 743 project evaluation have been developed to clarify requirements and reduce potential confusion. **Exhibit 1** provides a graphical representation of this analysis process.

Exhibit 1 – Process for CEQA VMT Analysis for Land Use Projects



Step 1: Evaluate Land Use Type

During the initial step the land use projects will need to be evaluated for the following considerations:

- ***Land use type.*** For the purposes of analysis, the Institute of Transportation Engineers (ITE) land use codes serve as the basis of land use definitions. Although it is recognized that VMT evaluation tools and methodologies are typically not fully sensitive to some of the distinctions between some ITE categories, the use of ITE land use codes is useful for maintaining consistency across analyses, determining trip generation for other planning level tools, and maintaining a common understanding of trip making characteristics amongst transportation professionals. The ITE land use code is also used as an input into the sketch planning tool.
- ***Mixed Use.*** If there are multiple distinct land uses within the project (residential, office, retail, etc.), they will be required to be analyzed separately unless they are determined to be insignificant to the total VMT. Mixed use projects are permitted to account for internal capture which depending on the methodology may require a distinct approach not covered in this documentation.
- ***Redevelopment projects.*** As described under the Non-Significant Screening Criteria section, redevelopment projects which have lower VMT than the existing on-site use can be determined to have a non-significant impact.

Step 2: Screen for Non-Significant Transportation Impact

The purpose of this step is to determine if a presumption of a non-significant transportation impact can be made on the facts of the project. The guidance in this section is primarily intended to avoid unnecessary analysis and findings that would be inconsistent with the intent of SB 743. A detailed CEQA transportation analysis will not be required for land use elements of a project that meet the screening criteria shown in **Exhibit 2**. If a project is mixed use in nature, only those elements of the project that do not comply with the elements in **Exhibit 2** would require further evaluation to determine transportation significance for CEQA purposes.

Exhibit 2 – Screening Criteria

Screening Criteria	OPR Guidance
SMALL PROJECTS[1]	**Expected to cause a less-than-significant impact:** ▪ Project generation is less than 110 trips per day **CEQA transportation analysis required if:** ▪ It is inconsistent with the Sustainable Communities Strategy as determined by the City of Santa Cruz
PROJECTS NEAR HIGH QUALITY TRANSIT[2]	**Expected to cause a less-than-significant impact:** ▪ Within a ½ mile of an existing major transit stop. ▪ Maintains a service interval frequency of 15 minutes or less during the morning and afternoon peak commute periods. **CEQA transportation analysis required if:** ▪ 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 City of Santa Cruz ▪ It is inconsistent with the Sustainable Communities Strategy as determined by the City of Santa Cruz ▪ Replaces affordable residential units with a smaller number of moderate- or high-income residential units
LOCAL-SERVING RETAIL[3]	**Expected to cause a less-than-significant impact:** ▪ No single store on-site exceeds 50,000 square feet ▪ Project is local-serving as determined by the City of Santa Cruz **CEQA transportation analysis required if:** ▪ If the nature of the service is regionally focused as determined by the City of Santa Cruz
AFFORDABLE HOUSING[4]	**Expected to cause a less-than-significant impact:**

[1] *2018 OPR Guidance*, page 12
[2] *2018 OPR Guidance*, page 13
[3] *2018 OPR Guidance*, page 16
[4] *2018 OPR Guidance*, page 14. As described, "Evidence supports a presumption of less than significant impact for a 100 percent affordable residential development (or the residential component of a mixed-use development) in infill locations. Lead agencies may develop their own

Exhibit 2 – Screening Criteria

Screening Criteria	OPR Guidance
	▪ A high percentage of affordable housing is provided as determined by the City of Santa Cruz **CEQA transportation analysis required if:** ▪ The percentage of affordable housing is determined by the City of Santa Cruz to not be high in relation to the residential element of a project
LOCAL ESSENTIAL SERVICE[5]	**Screening allowed if:** ▪ Day care center ▪ Public K-12 School ▪ Police or Fire facility ▪ Medical/Dental office building ▪ Government offices (in-person services such as post office, library, and utilities) ▪ Supportive Housing Types (assisted living, permanant supportive housing, memort care, etc) **CEQA transportation analysis required if:** - If the nature of the service is regionally focused as determined by the City of Santa Cruz
MAP-BASED SCREENING[6]	**Expected to cause a less-than-significant impact:** ▪ Area of development is under threshold as shown on screening map as allowed by City of Santa Cruz **CEQA transportation analysis required if:** ▪ Represent significant growth as to substantially change regional travel patterns as determined by the City of Santa Cruz
REDEVELOPMENT PROJECTS[7]	**Expected to cause a less-than-significant impact:** ▪ Project replaces an existing VMT-generating land use and does not result in a net overall increase in VMT

presumption of less than significant impact for residential projects (or residential portions of mixed-use projects) containing a particular amount of affordable housing, based on local circumstances and evidence."

[5] Based on assumption that, like local-serving retail, the addition of necessary local in-person services will reduce VMT given that trips to these locations will be made irrespective of distance given their non-discretionary nature.

[6] *2018 OPR Guidance*, page 12

[7] *2018 OPR Guidance*, Page 18

Exhibit 2 – Screening Criteria

Screening Criteria	OPR Guidance
	CEQA transportation analysis required if: ▪ Project replaces an existing VMT-generating land use and results in a net overall increase in VMT

Step 3: Significance Threshold and Methodology

The purpose of this step is to determine the threshold of significance for application to a land use project. Significance thresholds are based on land use type, broadly categorized as efficiency and net change metrics. Efficiency metrics include VMT/Capita and Work VMT/employee[8]. As described in **Table 1**, "Net Change" refers to the net change in regional VMT. "Net Change" is used for elements that include a significant customer base, such as commercial uses although it can extend to a variety of uses that have similar characteristics as shown in **Exhibit 3**.

Exhibit 3 - Significance Threshold and Methodology

Threshold Basis	Efficiency	Net Change
Example Land Use	Residential, Professional Office, Industrial	Retail, Medical Office, Sports Venue
Example VMT Thresholds	Per capita, per employee	Region VMT change
Customer Component	No	Yes
Allowable Methods	Non-Significant Screening Criteria, The City of Santa Cruz Sketch Planning Tool, Travel Demand Model	Non-Significant Screening Criteria, Travel Demand Model

For projects with a significant customer basis it is typically appropriate to separate employee trip characteristics from the customer base unless the customer base is minimal in nature. Under these circumstances, it is most appropriate to evaluate the total of the delta in regional VMT resultant from the customer base plus the delta of VMT resultant from employees based on the following formula:

(number of employees) x (estimated VMT/employee – threshold VMT/employee)

The threshold of significance will accordingly correspond to the "Net Change" threshold as described in **Exhibit 3**. Under these circumstances, it is most appropriate to evaluate this total Net Change as the basis for evaluating the outcome of mitigations in terms of determining transportation significance although each element of the project should be tallied separately for the purposes of clarity.

[8] Work VMT specifically applies to commute trips as represented by the attractions in the Travel Demand Model. Refer to Appendix A for additional information

VMT Thresholds of Significance

OPR suggests a 15 percent VMT reduction relative to existing local or regional average VMT levels. The thresholds of significance recommended by OPR, as they relate to the City of Santa Cruz, are summarized in **Exhibit 4**.

Exhibit 4 - OPR suggested VMT Thresholds of Significance

Land Use	OPR Guidance[9]
Residential	15% below existing county-wide average VMT per capita
Office	15% below existing county-wide average VMT per employee
Retail	Net increase in total VMT

Based on these criteria the VMT thresholds of significance shown in **Exhibit 5** have been established.

Exhibit 5 - VMT Thresholds of Significance

Land Use	VMT Threshold	Basis
Residential	11.9 VMT/capita[10]	15% below existing county-wide average VMT per capita.
Office	6.4 Work VMT/Employee[11]	15% below existing county-wide average Work VMT per employee
Retail	Net regional change	Using the county as the basis
Other Employment	Work VMT/Employee[12]	15% below existing county-wide average Work VMT per employee for similar land uses
Other Customer	Net regional change	Using the county as the basis

Note that the inclusion of "Other Employment" and "Other Customer" refers to all other service and goods providers that are not included in the basic office/retail categories. As shown they follow a similar approach to the office/retail categories with the principal difference being that the average/basis for of the threshold would the aggregation of the specific "other" land use across the county (i.e. an industrial project would use industrial uses, etc.).

[9] *2018 OPR Guidance*, Pages 15-16

[10] Residential VMT specifically applies to all Home-Based trips residential trips as represented in the Travel Demand Model. Refer to Appendix A for additional information.

[11] Work VMT specifically applies to commute trips as represented in the Travel Demand Model. Refer to Appendix A for additional information

[12] Work VMT specifically applies to commute trips as represented in the Travel Demand Model. Refer to Appendix A for additional information

Based on improvements to methods and data as well as other modeling modifications there will be periodic updates to the numerical threshold values shown, however the relative approach for calculating them should remain the same. The values in the current sketch planning tool, discussed in the next section, will supersede the information provided in the table above. Additional thresholds for various employment types are also provide in the sketch planning tool.

Sketch Planning Tool

The City of Santa Cruz has developed a sketch planning tool for use in SB 743 land use project analysis. The purpose of the tool is to calculate VMT for a land use project. As with any sketch planning tool, there are distinct limitations in terms of its application including limits on the type and size of development that can be applied to. Note that it is anticipated that the tool will continue to evolve in response to data or methodological changes and as such it is important that the most current version of the tool be utilized. Broadly, the sketch planning tool provides the following information:

- Institute of Transportation Engineers (ITE) Trip Generation
- VMT Threshold Analysis
- Greenhouse Gas (GHG) Estimation
- Transportation Demand Management (TDM) Evaluation

The VMT Analysis methodology is summarized in **Appendix A.**

Step 4: Scope of Analysis Agreement

Prior to undertaking VMT analysis, a scope compliant with the City of Santa Cruz's requirements should be prepared and submitted for approval. Given the potential complexities of some uses, particularly those not identified as residential, retail, or office, an agreement regarding the threshold and methodology is important to avoid analysis that is not compliant with the City of Santa Cruz's requirements.

Step 5: Analysis and Mitigation

During this step the analysis agreed to under Step 4 should be completed. Relevant documentation providing enough detail that assumptions are clearly understandable, and methods that can be replicated should be provided along with the results of the VMT analysis for the proposed project.

If a significant transportation impact is identified, feasible mitigation measures to avoid or reduce the impact must be identified. CEQA requires that the mitigation measures are included in the project's environmental assessment. OPR provides a list of potential measures to reduce VMT but gives the lead City of Santa Cruz full discretion in the selection of mitigation measures.

The type and size of the project will determine the most appropriate mitigation strategies for VMT impacts. For large projects such as general plans or specific plans, VMT mitigations should concentrate on the project's density and land use mix, site design, regional policies, and availability of transit, bicycle, and pedestrian facilities. For smaller projects such as an individual development project, VMT mitigations will typically require the preparation of a transportation demand management (TDM)

program. A TDM program is a combination of strategies to reduce VMT. The program is created by an applicant for their land use project based on a list of strategies agreed to with the City of Santa Cruz.

The City of Santa Cruz has developed a list of potential TDM strategies appropriate for their jurisdiction and what magnitude of VMT reduction could be achieved. The selection process was guided by the California Air Pollution Control Officers Association (CAPCOA) recommendations found in the 2010 publication *Quantifying Greenhouse Gas Mitigation Measures*. The area context of the City of Santa Cruz also influenced the type of TDM strategies that were selected. CAPCOA has found strategies with the largest VMT reduction in rural areas include vanpools, telecommute or alternative work schedules, and master planned communities with design and land-use diversity to encourage intra-community travel. Based on empirical evidence, CAPCOA found the cross-category maximum for all transportation-related mitigation measures is 15% for suburban settings.

Appendix B summarizes available TDM strategies along with the maximum VMT reduction, applicable land use application, and complementary strategies. The City of Santa Cruz's sketch planning tool includes the TDMs summarized in **Appendix B**.

Step 6: Mitigation Monitoring

As required by CEQA, the City of Santa Cruz will require ongoing mitigation monitoring and reporting. The specifics of this will be developed on a project basis.

Transportation Projects

Depending on the specific nature of a transportation project; it can alter trip patterns, trip lengths, and even trip generation. Research has determined that capacity-enhancing projects can and often do increase VMT. This phenomenon is commonly referred to as "induced demand". While methods are generally less developed for the analysis of induced demand compared to other areas of transportation analysis, there is still the need to quantify and understand its impact to the transportation system considering the requirements of SB 743.

Similarly, to land use projects, the approach to transportation project analysis closely align with the 2018 OPR Guidance. In terms of analysis, the analyst should first determine whether the transportation project has been prescreened and determined to have a non-significant impact as described in the following section.

Screen for Non-Significant Transportation Impact

The following non-significant impact examples are provided directly from the 2018 OPR Guidance[13]:

- Rehabilitation, maintenance, replacement, safety, and repair projects designed to improve the condition of existing transportation assets (e.g., highways; roadways; bridges; culverts;
- Transportation Management System field elements such as cameras, message signs, detection, or signals; tunnels; transit systems; and assets that serve bicycle and pedestrian facilities) and that do not add additional motor vehicle capacity

[13] *2018 OPR Guidance*, Page 20

- Roadside safety devices or hardware installation such as median barriers and guardrails
- Roadway shoulder enhancements to provide "breakdown space," dedicated space for use only by transit vehicles, to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes
- Addition of an auxiliary lane of less than one mile in length designed to improve roadway safety
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, two-way left turn lanes, or emergency breakdown lanes that are not utilized as through lanes
- Addition of roadway capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit
- Conversion of existing general-purpose lanes (including ramps) to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel
- Addition of a new lane that is permanently restricted to use only by transit vehicles
- Reduction in number of through lanes
- Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane in order to separate preferential vehicles (e.g., HOV, HOT, or trucks) from general vehicles
- Installation, removal, or reconfiguration of traffic control devices, including Transit Signal Priority (TSP) features
- Installation of traffic metering systems, detection systems, cameras, changeable message signs and other electronics designed to optimize vehicle, bicycle, or pedestrian flow
- Timing of signals to optimize vehicle, bicycle, or pedestrian flow
- Installation of roundabouts or traffic circles
- Installation or reconfiguration of traffic calming devices
- Adoption of or increase in tolls
- Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase
- Initiation of new transit service
- Conversion of streets from one-way to two-way operation with no net increase in number of traffic lanes
- Removal or relocation of off-street or on-street parking spaces
- Adoption or modification of on-street parking or loading restrictions (including meters, time limits, accessible spaces, and preferential/reserved parking permit programs)

- Addition of traffic wayfinding signage
- Rehabilitation and maintenance projects that do not add motor vehicle capacity
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way
- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve nonmotorized travel
- Installation of publicly available alternative fuel/charging infrastructure
- Addition of passing lanes, truck climbing lanes, or truck brake-check lanes in rural areas that do not increase overall vehicle capacity along the corridor

Significance Threshold and Methodology

For projects that increase roadway capacity and are not identified under the Non-Significant Screening Criteria in the prior section, the significance criterion should be change in regional VMT. A finding of a significant impact would be determined if a transportation project results in a net increase in regional VMT.

Appendix A

VMT Analysis Methodology

Travel Demand Models (TDMs) are broadly considered to be amongst the most accurate of available tools to assess regional and sub-area VMT. While the Association of Monterey Bay Area governments (AMBAG) maintains the regional travel demand model as a part of the Metropolitan Transportation Plan/Sustainable Communities Strategy program (MTP/SCS), Santa Cruz County maintains its own travel demand model (SCC TDM) as part of the General Plan. The latest available version of the SCC TDM was developed as part of the 2020 General Plan update was determined to be the best fit for developing the VMT thresholds as it has the most up to date land use information for the County, as well as detailed roadway and transit networks in the model.

The 2019 Base Year model scenario was used for the baseline conditions and 2040 Future Year model scenario was used for the cumulative conditions in the City. The four incorporated cities included in the model (City of Capitola, City of Santa Cruz, City of Scotts Valley, and the City of Watsonville) are major contributors of the trips throughout the County during a typical weekday.

As many of the County's daily trips originate from or are destined for areas outside of the County such as the Bay area and Monterey County (external trips), their total length could not be computed solely using the SCC TDM, additional analysis was required. The length of these trips was determined using two main processes, using Big Data and SCC TDM output files. Data was obtained from Teralytics that summarized the number of trips to and from the County to the surrounding Counties at the Census Tract level for the entire month of October 2019. The distance between each Census Tract was determined by using the TransCAD software, the modeling platform the SCC TDM runs on. The multipath analysis function within the TransCAD software was used to determine the point to point distance between the centroid of each Census Tract using the internal pathing algorithm that determines the shortest path along the roadway network between the centroid of each Census Tract pair. The shortest path between each County Census Tract and each non-County Census Tract that contained at least one trip was multiplied by the share of the total trips to and from each Census Tract within the County to determine the average trip length to and from the County Census Tract. The average trip length was applied to each TAZ based on the TAZ to Census Tract association and multiplied by the number of externa trips to and from that TAZ to determine the total external VMT by TAZ.

However, before beginning the Countywide VMT analysis, the zonal structure and various components of the SCC TDM were thoroughly reviewed to make the best use of model results to determine the VMT thresholds.

Model Zone Structure

VMT was computed at Traffic Analysis Zone (TAZ) level to determine the thresholds as well as to allow for comparisons among different areas throughout the County. There are 696 TAZs within the County, including 364 TAZs within the unincorporated parts of the County.

Socio-Economic Data

Socioeconomic data (SED) and other model inputs are associated with each TAZ. Out of several different variables in the model SED, the VMT analysis mainly focused on population, the number of households, the number of students, and types of employment that are used in the trip generation component. VMT

computation was focused on the number of households in each TAZ and employment variables by 6 industries to determine rest of the trips. Employment variables used in the model are listed below.

Employment by Industry type:

1. Agriculture
2. Construction
3. Industrial and Manufacturing
4. Retail and Food
5. Service (White Collar, non-government jobs)
6. Public Administration (Government jobs)

Trip Generation

The SCC TDM runs a series of complex steps to estimate daily trip productions and attractions by various trip purposes for each TAZ. The trip purposes are listed below.

Model Trip Purpose:

1. Home-Based Work (HW)
2. Home-Based Other (HO)
3. Home-Based School, K-12 (HK)
4. Home-Based College (HC)
5. Home-Based Shopping (HS)
6. Work-Based Other (WO)
7. Other-Based Other (OO)

The production model uses several variables such as number of workers, household income, age, household size and car availability depending on the trip purpose. Trip productions for every TAZ in the model were compiled separately by each trip purpose. The attraction model uses employment categories for the HW trip purpose, whereas it uses the employment categories and number of students (K-12 and University) for all non-HW trip purposes. The attraction model estimates trip attractions to each TAZ by regression coefficients that vary by employment type. Trip attractions for every TAZ were compiled by each purpose and by each employment type based on these regression coefficients.

Person Trips, Vehicle Occupancy, Trip Distance

Trip productions and attractions were compiled after the mode choice step, and only auto trips were used for the analysis. After the vehicle trip productions and attractions were computed for each trip purpose, trip lengths were applied for each zone pair from the skim matrices in the model to compute the production and attraction VMT by purpose.

VMT by Land Use Type

The residential VMT was computed by combining the production VMT for all the Home-Based trip purposes. VMT for non-residential land uses was computed from the attraction VMT by appropriate trip purposes and regression coefficients used in the attraction model.

Residential and non-residential VMT by each TAZ were computed and average VMT were determined by City, County and Region levels to determine City's thresholds.

Appendix B

City of Santa Cruz					
TDM Measure #	**Transportation Demand Management Measure**	**Description**	**TDM Type**	**Max VMT Reduction**	**VMT Reduction Type**
Transit Strategies					
1	Transit Stops	Coordinate with local transit agency to provide bus stop near the site. Real time transportation information displays support on-the-go decision making to support sustainable trip making. Only get a reduction on a non-HQT line, cannot get both.	Infrastructure	3%	All
2	Safe and Well-Lit Access to Transit	Enhance the route for people walking or bicycling to nearby transit (typically off-site). Provide Emergency 911 phones along these routes to enhance safety.	Infrastructure	1%	All
3	Implement Neighborhood Shuttle	Implement project-operated or project-sponsored neighborhood shuttle serving residents, employees, and visitors of the project site	Incentive	5%	All
4	Transit Subsidies	Involves the subsidization of transit fare for residents and employees of the project site. This strategy assumes transit service is already present in the project area. Pays for employees to use local transit. This could either be a discounted ticket or a full-reimbursed transit ticket. Include Trolley considerations.	Incentive	5%	All

City of Santa Cruz					
TDM Measure #	**Transportation Demand Management Measure**	**Description**	**TDM Type**	**Max VMT Reduction**	**VMT Reduction Type**
Communication & Information Strategies					
5	Mandatory Travel Behavior Change Program	Involves the development of a travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. Provide a web site that allows employees to research other modes of transportation for commuting. Employee-focused travel behavior change program that targets individuals attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits.	Incentive	4%	All
6	Promotions & Marketing	Involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices with passive educational and promotional materials. Marketing and public information campaign to promote awareness of TDM program with an on-site coordinator to monitor program.	Incentive		All

City of Santa Cruz					
TDM Measure #	**Transportation Demand Management Measure**	**Description**	**TDM Type**	**Max VMT Reduction**	**VMT Reduction Type**
Commuting Strategies					
7	Employer Sponsored Vanpool or Shuttle	Implementation of employer-sponsored employee vanpool or shuttle providing new opportunities for access to connect employees to the project site.	Incentive / Infrastructure	5%	Commute
8	Preferential Carpool / Vanpool Parking Spaces	Reserved carpool / vanpool spaces closer to the building entrance.	Infrastructure	1%	
9	Passenger Loading Zones for Carpool / Vanpool	Provide easy access for carpools or vanpools.	Infrastructure	1%	
10	On-site Carts or Shuttles or bikes	Provide on-site cart or shuttle for employees to travel across campus.	Incentive / Infrastructure	2%	All
11	Emergency Ride Home (ERH) Program	Provides an occasional subsidized ride to commuters who use alternative modes. Guaranteed ride home for people if they need to go home in the middle of the day due to an emergency or stay late and need a ride at a time when transit service is not available. Ecology Action is preferred vendor. This supplemental to the other trip reduction strategies. ADD to 5 and 6	Incentive	4%	Commute
12	On-site Childcare	Provides on-site childcare to remove the need to drive a child to daycare at a separate location.	Infrastructure	4%	All

City of Santa Cruz					
TDM Measure #	**Transportation Demand Management Measure**	**Description**	**TDM Type**	**Max VMT Reduction**	**VMT Reduction Type**
13	Telecommuting	Four-Ten work schedule results in 20% weekly VMT reduction, 10% trip reduction equals 15% VMT reduction		20%	
14	Alternative work schedule	Alternative Fridays off (Nine-Ten schedule)			
Shared Mobility Strategies					
15	Mandatory Ride Amigos-Share Program	Increases vehicle occupancy by providing ride-share matching services, designating preferred parking for ride-share participants, designing adequate passenger loading/unloading and waiting areas for ride-share vehicles, and providing a website or message board to connect riders and coordinate rides. Need a point person form the business on-site	Incentive	10%	Commute
16	Employee/Employer Car Share	Implement car sharing to allow people to have on-demand access to a vehicle, as-needed. This may include providing membership to an existing program located within 1/4 mile, contracting with a third-party vendor to extend membership-based service to an area, or implementing a project-specific fleet that supports the residents and employees on -site.	Incentive	1%	All

City of Santa Cruz					
TDM Measure #	**Transportation Demand Management Measure**	**Description**	**TDM Type**	**Max VMT Reduction**	**VMT Reduction Type**
		Provide an on-site car vehicle for employees to use for short trips. This allows for employees to run errands or travel for lunch.	Incentive	2%	Commute
17	School Carpool Program	Implements a school carpool program to encourage ride-sharing for students.	Incentive	15%	School
Bicycle Infrastructure Strategies					
18	Bike Share	Sign up for shared bikes.	Incentive / Infrastructure	7%	All
19	Implement/Improve On-street Bicycle Facility	Implements or provides funding for improvements to corridors and crossings for bike networks identified within a one-half mile buffer area of the project boundary, to support safe and comfortable bicycle travel.	Infrastructure	4%	All
20	Include Bike Parking in excess of City Code	Implements long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations	Infrastructure	1%	All
21	Include Secure Bike Parking and Showers in excess of City Code	Implements additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel.	Infrastructure	2%	
22	Bicycle Repair Station / Services	On-site bicycle repair tools and space to use them supports on-going use of bicycles for transportation.	Infrastructure	1%	

City of Santa Cruz					
TDM Measure #	**Transportation Demand Management Measure**	**Description**	**TDM Type**	**Max VMT Reduction**	**VMT Reduction Type**
Neighborhood Enhancement Strategies					
23	Traffic Calming Improvements	Implements traffic calming measures throughout and around the perimeter of the project site that encourage people to walk, bike, or take transit within the development and to the development from other locations.	Infrastructure	3%	All
24	Pedestrian Network Improvements	Implements pedestrian network improvements throughout and around the project site that encourages people to walk.	Infrastructure	2%	All
Miscellaneous Strategies					
25	Virtual Care Strategies for Hospitals/Health care providers/MOB/Clinic	Resources to allow patients to access healthcare services or communicate with healthcare staff through online or off-site programs.	Infrastructure	5%	Hospital Visitors
26	On-site Affordable Housing	Provides on-site affordable housing in excess of inclusionary rates % of units is the % reduction developer can get.	Infrastructure	TBD	All
Parking Strategies					
27	Reduce Parking Supply	Changes on-site parking supply to provide less than the amount required by municipal code. Permitted reductions could utilize mechanisms such as TOC, Density Bonus, Bike Parking ordinance, or locating in a Specific Plan Area.	Infrastructure	10.0%	All

City of Santa Cruz					
TDM Measure #	**Transportation Demand Management Measure**	**Description**	**TDM Type**	**Max VMT Reduction**	**VMT Reduction Type**
28	Unbundle Parking	Unbundles parking costs from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost. Implementation of residential permit parking zones for long-term use of on-street parking in residential area at the expense to the developer.	Incentive	10%	Residential
29	Parking Cash-Out	Provide employees a choice of forgoing current parking for a cash payment to be determined by the employer. The higher the cash payment, the higher the reduction.	Incentive	5.0%	Commercial Only
30	Residential Area Parking Permits		Incentive	0.25%	Only in non-Coastal Commission areas
31	Parking Management Strategies	Strategies to encourage efficiency in parking facilities and improve the quality of service to parking users	Incentive	1%	Valet