Transportation Analysis Updates in Santa Clarita

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Chapter 1 – Introduction

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law and started a process intended to fundamentally change transportation impact analysis as part of CEQA compliance. In summary, SB 743 eliminates level of service (LOS) as a basis for determining significant transportation impacts under CEQA and provides a new performance metric – vehicle miles of travel (VMT). With this change, the State is shifting the focus from measuring a project's impact to drivers (LOS) to measuring the impact of driving (VMT) to achieve their goals of reducing greenhouse gas (GHG) emissions, encouraging infill development, and improving public health through active transportation.

In response to SB 743, the City of Santa Clarita is adopting new transportation impact thresholds to adhere to CEQA requirements and providing guidance on conducting transportation studies in the City. The City began the process of implementing SB 743 earlier this year. The process began by collecting Baseline VMT data for the City, and then using the VMT data to consider options for the preferred VMT methodology, thresholds, and potential mitigation strategies. The City has also prepared Local Transportation Assessment Guidelines to inform the scope and analysis methodologies for future studies in the City.

Background Info & Data Gathering Define VMT Thresholds & Mitigation

Prepare Local Guidelines

Approve & Implement

The remaining chapters of this report describe the City's implementation of SB 743 and the corresponding updates to transportation analysis requirements as follows:

- **Chapter 2: Transportation Analysis Implications for SB 743** This chapter provides an overview of SB 743 and what it means for transportation impact analysis in the City of Santa Clarita. This chapter is structured as a series of frequently asked questions about the implications of this change for the City.
- **Chapter 3: Baseline VMT** This chapter describes the process for determining the City's Baseline VMT and describes the analysis methodology and VMT metrics.
- Chapter 4: CEQA VMT Screening This chapter discusses screening criteria that exempt certain projects from a full VMT analysis. There are screening criteria for land use projects based on projects size and location. Transportation projects can be screened from analysis based on the type of infrastructure change being proposed.

- Chapter 5: CEQA Methodology, Thresholds, and Mitigation This chapter outlines the methodology for calculating VMT for projects and plans in the City of Santa Clarita, provides the threshold of significance, and discusses mitigation options for projects that are found to have a VMT impact.
- **Chapter 6: Local Transportation Assessment Guidelines** This chapter outlines the City's guidelines for studying a project's effects on the transportation system. While CEQA requirements have changed, the City can continue to dictate the types of analysis to be conducted for land use and transportation projects, such as continuing to include LOS. While LOS would no longer constitute a CEQA impact, it can still be used to inform decision makers on the overall effects of a project.

Chapter 2 – Transportation Analysis Implications for SB 743

What is SB 743?

In 2013, Governor Brown signed SB 743 into law. The primary purpose of SB 743 was eliminating measures of roadway vehicular capacity and traffic congestion, most commonly LOS, as the basis for determining significant transportation impacts under CEQA. The law directed the Governor's Office of

Planning and Research (OPR) to update the CEQA Guidelines to include new performance criteria for determining the significance of transportation impacts.

In response to SB 743, OPR recommended VMT as the new transportation impact metric. OPR then submitted updates to the CEQA Guidelines, and these updates were certified by the Natural Resources Agency in December 2018. Lead agencies have been granted a grace period until July 1, 2020 to opt-in to implementing a VMT analysis as part of their environmental review process.

CEQA refers to the California Environmental Quality Act. This statute requires identification of any significant environmental impacts of state or local action including approval of new development or infrastructure projects. The process of identifying these impacts is typically referred to as the environmental review process.

To help aid lead agencies with SB 743 implementation, OPR produced a Technical Advisory¹. The Technical Advisory helps lead agencies think about the variety of implementation questions they face with respect to shifting to a VMT metric. However, lead agencies must still make their own specific decisions about VMT methodology, impact thresholds, and mitigation approaches. These decisions should be consistent with the City's goals as expressed in their General Plan.

Why did the State adopt SB 743?

The intent of SB 743 is to better support the following State goals:

- Reducing greenhouse gas (GHG) emissions
- Encouraging infill development
- Improving public health through active transportation

¹ <u>Technical Advisory on Evaluating Transportation Impacts in CEQA</u>, OPR, December 2018 <u>http://opr.ca.gov/docs/20190122-743</u> Technical Advisory.pdf

While changes to driving conditions that increase travel times are an important consideration for traffic operations and management, these changes do not fully describe environmental effects associated with fuel consumption, emissions, and public health. VMT based impact criteria will help to incorporate these environmental effects and move toward achieving the State goals listed above.

Reducing VMT is not the only way that the transportation sector can reduce GHG emissions, increasing vehicle efficiency and reducing fuel carbon content are also important parts of moving toward the State's GHG emissions targets. However, as reported in OPR's Technical Advisory, California Air Resources Board (CARB) projects that changes to vehicle efficiency and fuel will not be enough to reach the State's GHG emissions reduction targets.² Therefore, reductions in VMT are an important part of the path to reducing GHG emissions.

How does SB 743 align with the City of Santa Clarita General Plan?

The City of Santa Clarita General Plan³ includes goals related to vehicle trip reduction and promoting alternative modes of travel. The General Plan identifies goals and objectives which align with the anticipated outcomes of SB 743. The comprehensive list of goals and objectives below shows that the overall goals of implementing SB 743 – reducing GHG emissions, promoting infill development, and improving active transportation, through limiting VMT growth – are well aligned with the City's General Plan.

The relevant goals and objectives are listed, along with some supporting policies; there are other policies that support these goals which are not enumerated here. In addition, the City has a variety of goals and objectives aimed at reducing vehicle trips and emissions through effective management of travel demand, transportation systems, and parking supply that are discussed in more detail in Chapter 5 as VMT mitigation strategies.

Multi-Modal Circulation Network

- Goal C 1: An inter-connected network of circulation facilities that integrates all travel modes, provides viable alternatives to automobile use, and conforms with regional plans.
 - Objective C 1.1: Provide multi-modal circulation systems that move people and goods efficiently while protecting environmental resources and quality of life.
 - Policy C 1.1.1: Reduce dependence on the automobile, particularly singleoccupancy vehicle use, by providing safe and convenient access to transit, bikeways, and walkways.

² <u>2018 Progress Report on California's Sustainable Communities and Climate Protection Act</u> (pp. 4, 5), California Air Resources Board, November 2018, <u>https://ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report SB150 112618 02 Report.pdf</u>

³ <u>City of Santa Clarita General Plan – Circulation Element</u>, City of Santa Clarita, June 2011, https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/4%20-%20Circulation%20Element.pdf

- Policy C 1.1.2: Promote expansion of alternative transportation options to increase accessibility to all demographic and economic groups throughout the community, including mobility-impaired persons, senior citizens, low-income persons, and youth.
- Policy C 1.1.3: Work with local and regional agencies and employers to promote an integrated, seamless transportation system that meets access needs, including local and regional bus service, dial-a-ride, taxis, rail, van pools, car pools, bus pools, bicycling, walking, and automobiles.
- Policy C 1.1.4: Promote public health through provision of safe, pleasant, and accessible walkways, bikeways, and multi-purpose trail systems for residents.
- Policy C 1.1.5: Plan for efficient links between circulation systems at appropriate locations, including but not limited to bus-rail connections and pedestrian-bus connections.
- Policy C 1.1.6: Provide adequate facilities for multi-modal travel, including but not limited to bicycle parking and storage, expanded park-and-ride lots, and adequate station and transfer facilities in appropriate locations.
- Policy C 1.1.7: Consider the safety and convenience of the traveling public, including pedestrians and cyclists, in design and development of all transportation systems.
- Policy C 1.1.8: Acquire and/or reserve adequate right-of-way in transportation corridors to accommodate multiple travel modes, including bus turnouts, bus rapid transit (BRT), bikeways, walkways, and linkages to trail systems.
- Policy C 1.1.9: Incorporate funding for all modes of transportation in the capital improvement program, and seek funding from all available sources for multimodal system development.
- Policy C 1.1.10: Provide for flexibility in the transportation system to accommodate new technology as it becomes available, in order to reduce trips by vehicles using fossil fuels where feasible and appropriate.
- Policy C 1.1.11: Promote use of multi-modal facilities by providing adequate and attractive way-finding programs directing users to transit stations, park-and- ride lots, bicycle storage, and other facilities.
- Policy C 1.1.12: Implement recommendations of the City's Non-Motorized Transportation Plan to expand opportunities for alternative travel modes.
- Policy C 1.1.13: Design new activity centers and improve existing activity centers to prioritize walking, bicycling and circulator transit for internal circulation of person-travel.
- Objective C 1.2: Coordinate land use and circulation planning to achieve greater accessibility and mobility for users of all travel modes.

- Policy C 1.2.1: Develop coordinated plans for land use, circulation, and transit to promote transit-oriented development that concentrates higher density housing, employment, and commercial areas in proximity to transit corridors.
- Policy C 1.2.2: Create walkable communities, with paseos and walkways connecting residential neighborhoods to multi-modal transportation services such as bus stops and rail stations.
- Policy C 1.2.3: Require that new commercial and industrial development provide walkway connections to public sidewalks and transit stops, where available.
- Policy C 1.2.4: Consider location, availability, and accessibility of transit in evaluating new development plans.
- Policy C 1.2.5: In mixed use projects, require compact development and a mix of land uses to locate housing, workplaces, and services within walking or bicycling distance of each other.
- Policy C 1.2.6: Provide flexible standards for parking and roadway design in transit-oriented development areas to promote transit use, where appropriate.
- Policy C 1.2.7: In pedestrian-oriented areas, provide a highly connected circulation grid with relatively small blocks to encourage walking.
- Policy C 1.2.8: Provide safe pedestrian connections across barriers, which may include but are not limited to major traffic corridors, drainage and flood control facilities, utility easements, grade separations, and walls.
- Policy C 1.2.9: Emphasize providing right-of-way for non-vehicular transportation modes so that walking and bicycling are the easiest, most convenient modes of transportation available for short trips.
- Policy C 1.2.10: Protect communities by discouraging the construction of facilities that sever residential neighborhoods.
- Policy C 1.2.11: Reduce vehicle miles traveled (VMT) through the use of smart growth concepts.
- Policy C 1.2.12: Balance the anticipated volume of people and goods movement with the need to maintain a walkable and bicycle friendly environment.
- Objective C 1.3: Ensure conformance of the Circulation Plan with regional transportation plans.
 - Policy C 1.3.3: Through trip reduction strategies and emphasis on multi-modal transportation options, contribute to achieving the air quality goals of the South Coast Air Quality Management District Air Quality Management Plan.
 - Policy C 1.3.9: Support the expansion of Palmdale Regional Airport and the extension of multi-modal travel choices between the airport and the Santa Clarita Valley, in conformance with regional planning efforts.
 - Policy C 1.3.10: Apply for regional, State, and federal grants for bicycle and pedestrian infrastructure projects.

Street and Highway System

- Goal C 2: A unified and well-maintained network of streets and highways which provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character.
 - Objective C 2.2: Adopt and apply consistent standards throughout the Santa Clarita Valley for street design and service levels, which promote safety, convenience, and efficiency of travel.
 - Policy C 2.2.5: Adopt common standards for pavement width in consideration of capacity needs to serve projected travel demand, provided that a reduction in pavement width may be allowed in order to reduce traffic speeds, protect resources, enhance pedestrian mobility, or as otherwise deemed appropriate by the reviewing authority.
 - Policy C 2.2.6: Within residential neighborhoods, promote the design of "healthy streets" which may include reduced pavement width, shorter block length, provision of on-street parking, traffic-calming devices, bike routes and pedestrian connectivity, landscaped parkways, and canopy street trees.
 - Policy C 2.2.7: Where practical, encourage the use of grid or modified grid street systems to increase connectivity and walkability; where cul-de-sacs are provided, promote the use of walkways connecting cul-de-sac bulbs to adjacent streets and/or facilities to facilitate pedestrian access; where street connectivity is limited and pedestrian routes are spaced over 500 feet apart, promote the use of intermediate pedestrian connections through or between blocks.

Rail Service

- Goal C 4: Rail service to meet regional and inter-regional needs for convenient, cost-effective travel alternatives, which are fully integrated into the Valley's circulation systems and land use patterns.
 - Objective C 4.1: Maximize the effectiveness of Metrolink's commuter rail service through provision of support facilities and land planning.
 - Objective C 4.2: Access to a high-speed rail system connecting the Santa Clarita Valley with other regions, and other regional rail service connections.

Bus Transit

- Goal C 5: Bus transit service as a viable choice for all residents, easily accessible and serving destinations throughout the Valley.
 - Objective C 5.1: Ensure that street patterns and design standards accommodate transit needs.
 - Objective C 5.2: Maximize the accessibility, safety, convenience, and appeal of transit stops.

- Objective C 5.3: Explore opportunities to improve and expand bus transit service.
- Objective C 5.4: Provide adequate funding to expand transit services to meet the needs of new development in the Valley.

Bikeways

- Goal C 6: A unified and well-maintained bikeway system with safe and convenient routes for commuting, recreational use and utilitarian travel, connecting communities and the region.
 - Objective C 6.1: Adopt and implement a coordinated master plan for bikeways for the Valley, including both City and County areas, to make bicycling an attractive and feasible mode of transportation.
 - Objective C 6.2: Encourage provision of equipment and facilities to support the use of bicycles as an alternative means of travel.

Pedestrian Circulation

- Goal C 7: Walkable communities, in which interconnected walkways provide a safe, comfortable and viable alternative to driving for local destinations.
 - Objective C 7.1: A continuous, integrated system of safe and attractive pedestrian walkways, paseos and trails linking residents to parks, open space, schools, services, and transit.

How does LOS compare to VMT?

Conventional approaches to transportation impact analysis tend to focus on vehicle LOS related to driver

delay and roadway congestion. SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers (LOS), to measuring the impact of driving (VMT).

While LOS measures the drivers experience traveling through a specific point on the roadway system (e.g., through an intersection), VMT captures both the number of trips and the length of those trips on the roadway network. For example, a proposed retail development intended to serve nearby residents can result in an LOS impact because it adds vehicle trips to an already congested intersection, whereas it may not result in the VMT impact because it adds a shopping option closer to where people live, allowing them to drive shorter distances. In comparison, a proposed office building in an industrial area may not result in any LOS impacts because it is

LOS refers to "Level of Service," a metric that assigns a letter grade to network performance based on the amount of congestion experienced by drivers, ranging from LOS A to LOS F. LOS is typically reported for individual intersections during the most congested time of day.

VMT refers to "Vehicle Miles Traveled," a metric that accounts for the number of vehicle trips generated plus the length or distance of those trips. For transportation impact analysis, VMT is generally expressed as VMT per capita for a typical weekday.

surrounded by multi-lane roadways with plenty of vehicle capacity, but it may result in a VMT impact

because it attracts trips from many miles away and results in a larger burden on the transportation network and the environment.

Can Santa Clarita still consider LOS?

SB 743 does not prevent a city from continuing to analyze LOS as part of development review, area plans, or on-going network monitoring, but LOS will no longer constitute the basis for CEQA impacts. Cities can still use vehicle LOS outside of the CEQA process if they determine it is an important part of their transportation analysis process. This is addressed in more detail in Chapter 6.

Which projects are affected by SB 743?

Two types of projects, land use development projects and transportation infrastructure projects, are affected by SB 743.

- Land Use Development projects and area plans (e.g., General Plan or Housing Element) will continue to require a transportation impact analysis. However, transportation impact studies conducted as part of the CEQA process will now be required to base project impacts on VMT.
- Transportation Infrastructure Prior to SB 743, transportation projects that had the potential to
 worsen vehicle delay, such as narrowing a roadway to provide bicycle lanes, may have resulted in
 an environmental impact under CEQA. With SB 743 in place, transportation projects that promote
 travel by non-auto modes are no longer considered to result in an environmental impact.
 Conversely, roadway widening projects need to consider potential impacts from inducing more
 travel and therefore increasing VMT.

Chapter 3 – Baseline VMT

This chapter summarizes local transportation characteristics, Baseline VMT, and the VMT methodology for the City of Santa Clarita. The purpose of this chapter is to provide context for understanding the City's VMT trends and describe the process of establishing the City's Baseline VMT. This Baseline VMT data is used to inform the City's VMT screening and thresholds options as part of the SB 743 implementation process, presented in Chapters 4 and 5.

Local Transportation Characteristics

As shown in Figure 1, approximately 78 percent of Santa Clarita residents work outside the City, and approximately 68 percent of people who work in Santa Clarita live outside the City according to data provided by the U.S. Census Bureau. About 21,300 Santa Clarita residents are employed within the City, accounting for a about 22 percent of Santa Clarita residents.



Figure 1 - Daily Commute Inflow and Outflow

These commute characteristics have implications for the City's VMT metrics because they affect the distance that commuters need to travel to reach their jobs, a large component of a City's VMT. As shown in the tables below, people who live in Santa Clarita typically have a longer commute than people who work in Santa Clarita, which suggests that many people who work in Santa Clarita but do not live there reside close by, while many people who live in Santa Clarita travel great distances for work. Table 1 summarizes commute distance for people who live in Santa Clarita, whether they work in the City or elsewhere, and Table 2 summarizes commute distance for people who work in Santa Clarita commute less than 10 miles, whereas only 28 percent of people who live in Santa Clarita commute less than 10 miles.

Table 1 – Commute Distance for People Who Live in Santa Clarita

Commute Distance	Count	Share
Less than 10 miles	26,828	28.4%
10 to 24 miles	26,916	28.5%
25 to 50 miles	26,811	28.4%
Greater than 50 miles	13,752	14.6%
Total Primary Jobs	94,307	100.0%

Source: 2017 US Census Center for Economic Studies Longitudinal Employer-Household Dynamics, onthemap.ces.census.gov

Table 2 – Commute Distance for People Who Work in Santa Clarita

Commute Distance	Count	Share
Less than 10 miles	26,866	41.1%
10 to 24 miles	14,380	22.0%
25 to 50 miles	13,863	21.2%
Greater than 50 miles	10,296	15.7%
Total Primary Jobs	65,405	100.0%

Source: 2017 US Census Center for Economic Studies Longitudinal Employer-Household Dynamics, onthemap.ces.census.gov According to the U.S. Census Bureau and presented in

Table 3, nearly 77 percent of workers who live in Santa Clarita typically drive alone to work, while approximately 11 percent carpool, 7 percent work at home, and 3 percent commute using public transit. Transit service available in Santa Clarita includes service provided by Santa Clarita Transit (SCT) which provides circulation within the City, along with connections south into Los Angeles. The City also has three Metrolink stations on the Antelope Valley Line which connects Downtown Los Angeles with the Antelope Valley.

Means of Transportation to Work	Share
Drive Alone	76.6%
Carpool 2 people	8.1%
Carpool 3 people	1.7%
Carpool 4 or more people	1.5%
Public Transportation	3.0%
Walk	1.2%
Bike	0.5%
Other	0.8%
Worked at home	6.6%

Table 3 – Means of Transportation to Work for People Who Live in Santa Clarita

Source: 2017 US Census 5-Year Estimates, https://factfinder.census.gov

Santa Clarita residents commute an average of 34.9 minutes, which is longer than the average U.S. worker's commute of 25.1 minutes. Approximately 6 percent of Santa Clarita residents have a 'super commute,' which is a commute longer than 90 minutes. Similar to national trends, approximately 40 percent of Santa Clarita households have two cars, but diverging from national trends, 43 percent of households in Santa Clarita have three or more cars compared to the national statistic of 34 percent.

SCAG Travel Model Overview

The City of Santa Clarita maintains a local travel demand model, the Santa Clarita Valley Consolidated Traffic Model (SCVCTM), that contains a detailed roadway network and land use database for the City. The City's model is the best tool available when forecasting vehicle volumes for local roadways and intersections in Santa Clarita. The SCVCTM roadway network covers only the Santa Clarita Valley; therefore, the length of trips extending outside the model boundaries are truncated, meaning that the full distance of these trips cannot be captured using the City's model. When forecasting VMT, it is important to capture the full distance vehicles are traveling both within the City and when they leave the City boundaries.

The Southern California Association of Governments (SCAG) model covers the entire SCAG region, and therefore, captures a more complete assessment of trip length and VMT. In addition, comparing the VMT trends in the City to the broader region is helpful in establishing the appropriate Baseline VMT metrics. Using the SCAG model also allows the City to follow established methods for calculating the particular types of VMT used for SB 743 analysis. Therefore, the SCAG model was selected as the most appropriate tool for the SB 743 implementation process to ensure that the VMT generated by Santa Clarita that occurs outside the City limits is captured and to allow for comparison between the City's VMT data and regional VMT data.

The most recent version of the SCAG Model has a base year of 2012 and future year of 2040 and was developed for the *2016 Regional Transportation Plan / Sustainable Communities Strategy*. Figure 2 displays the SCAG Transportation Analysis Zones (TAZs)⁴, used as the unit of analysis in the SCAG model, for the City of Santa Clarita. The boundaries of these TAZs do not align exactly with the City boundaries, but for the metrics used in this process, they are sufficient to estimate VMT for Santa Clarita. The parts of the City that are not covered by any TAZs in Figure 2 are generally undeveloped. Where the selected TAZs extend beyond the City boundaries, the VMT metrics for these TAZs used for this process (VMT per capita and per employee), would adequately represent the VMT metric for the area within Santa Clarita because the character of development is the same as it is in the area outside of Santa Clarita.

⁴ TAZs are geographic polygons similar to Census block groups used to represent areas of homogenous travel behavior in the SCAG Model.



Santa Clarita Santa Clarita Tier 1 TAZ

Included in Analysis

Excluded from Analysis

Figure 2 Santa Clarita SCAG TAZs

VMT Methodology for Land Use Projects and Plans

An origin-destination (OD) VMT methodology was determined to be the appropriate methodology for estimating the VMT of land use projects and plans as guided by SB 743 legislation. The OD VMT method estimates the VMT generated by land uses in a specific geographic area, such as the City or a larger geographic area such as Los Angeles County. All vehicles traveling to/from the defined geographic area are tracked within the SCAG model and the number of trips and length of trips are used to calculate the OD VMT.

For the City of Santa Clarita, the VMT methodology includes all trips within the SCAG model for each of the following variable formats:

- **Total VMT per Service Population (all vehicles and all trip purposes)**: The total VMT to and from all zones in Santa Clarita is divided by the total service population (employees and residents) in Santa Clarita to get the efficiency metric of VMT per service population.
- Home-Based VMT per Capita (automobile only): Includes all VMT for home-based auto vehicle trips that are traced back to the residence of the trip-maker (non-home-based trips are excluded). This VMT is then divided by the population within Santa Clarita to get the efficiency metric of Home-Based VMT per Capita. The diagram below illustrates the home-based trips that are included in this VMT metric.



Figure 3 - Home-Based VMT

This figure shows a representative day for one person. Of all their daily trips, Home-Based VMT includes trips with an origin or destination at their home. These trips are categorized as home-based work (HW), or home-based other (HO), trips between their home and any location other than their workplace. While the person produces 29 miles of VMT, 16 of those miles are considered Home-Based VMT.

 Home-Based Work VMT per Employee (automobile only): Includes all VMT for auto vehicle trips between home and work. This VMT is then divided by the number of employees within Santa Clarita to get the efficiency metric of Home-Based Work VMT per Employee. The diagram below illustrates the home-based work trip that is included in this VMT metric.



Figure 4 - Home-Based Work VMT

This figure shows the same representative day as the previous figure. Of all their daily trips, Home-Based Work VMT includes only trips the individual makes between their home and their workplace. While the person produces 29 miles of VMT, 11 of those miles are considered Home-Based VMT.

VMT Methodology for Transportation Projects and Plans

The VMT methodology for transportation projects is based on the net change in total VMT. The SCAG model is used to estimate the Baseline VMT within the City and then forecast the change in VMT with the project in operation. The VMT will be calculated based on the boundary method which considers all travel on roadways in the study area, including vehicles that are traveling on the roadways but don't have an origin or destination in the area (i.e., pass-through or external trips). The VMT for transportation projects is calculated as defined below.

• **Total Roadway VMT (all vehicles)**: The total daily VMT can be measured using the SCAG model by multiplying the daily volume on every roadway segment by the length of every roadway segment in Santa Clarita.

In addition to VMT changes forecasted by the SCAG model, induced travel demand resulting from increasing the number of lane-miles should be considered.

Baseline VMT

To understand the VMT trends for the City of Santa Clarita, the SCAG model was used to estimate the Baseline VMT metrics. The VMT data is based on the TAZs in the City during the Base Year 2012, the Future Year 2040 conditions, and interpolated conditions to estimate the 2020 Baseline. Table 4 presents VMT estimates for Santa Clarita and the SCAG region. As shown, the average VMT for the entire SCAG region is generally lower than the City's VMT. Of the three types of VMT shown in the table, Home-Based Work VMT per Employee for the City is the closest to the SCAG average, showing that the commute distances for those working in Santa Clarita generally follow the patterns across the region. For those living in Santa Clarita, the VMT trends are higher than the regional average due to longer commute distances.

			Average VMT	
VMT Metrics	VMT Metrics		2020	2040 Future
		Year Model	Baseline	Year Model
Total VMT	SCAG Region	32.3	31.1	28.6
per Service Population	Santa Clarita	40.8	37.5	31.1
Home-Based VMT	SCAG Region	15.0	14.4	13.0
per Capita	Santa Clarita	24.4	22.7	19.5
Home-Based Work VMT	SCAG Region	19.0	17.2	13.9
per Employee	Santa Clarita	21.0	18.4	13.5

Table 4 -	VMT	Metrics	in	Santa	Clarita
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OPR recommends that projects are compared to a Baseline VMT to determine if a project would perform better, or worse, than current VMT levels. Lead agencies have the jurisdiction to select how they define their Baseline VMT which can range from the broader regional average to a smaller defined area. The City of Santa Clarita is defining their Baseline VMT as the average VMT for the City. This ensures that projects are considered in relation to the current built environment, transportation network, and travel options in Santa Clarita.

Chapter 4 – VMT Screening

The first step in a VMT CEQA evaluation is to determine when a VMT analysis is required. This chapter provides an overview of the VMT screening criteria used to determine if a detailed VMT analysis is required for land use and transportation projects. OPR recommends that projects be screened from a VMT analysis based on their size, location, or accessibility to transit. In addition, transportation projects that do not add new travel lanes or vehicle capacity may be screened from further VMT analysis.

VMT Screening Criteria - Land Use Projects

VMT is heavily dependent on land use and location. For example, a development site located in an urban area will have lower VMT because people have more options to walk, bike and take transit or drive short distances to nearby destinations in comparison to a suburban development where most people drive longer distances for their everyday work and household needs. Therefore, OPR has provided guidance related to several opportunities for screening projects from requiring a detailed VMT analysis.

Screening opportunities in the City of Santa Clarita are described below. A project only needs to satisfy one of the screening criteria to be exempt from requiring further VMT analysis. If a project is mixed-use and satisfies one of the screening criteria that applies to a specific land use, only that component of the project is exempt from requiring further VMT analysis.

Project Size Screening

Projects that generate less than 110 daily trips may be screened from conducting a VMT analysis. Local serving retail projects with less than 50,000 square feet may be presumed to have a less than significant VMT impact, absent substantial evidence to the contrary. This is because local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.

OPR Recommendation

Screen the following project types from VMT analysis:

- Projects that generate less than 110 daily trips
- Local serving retail uses (<50 ksf)

What this means for Santa Clarita

The City is following OPR guidance which means that projects that generate less than 110 daily trips and local serving retail uses less than 50 ksf would not need to complete a VMT analysis.

Low VMT Area Screening

Residential and office projects located within a low VMT generating area may be presumed to have a less than significant impact, as long as the new development in the TAZ is similar to the development already in the TAZ and absent substantial evidence to the contrary. In addition, other employment-related projects may qualify for screening if the project can reasonably be expected to generate VMT that is similar to the existing land uses in the low VMT area.

Low VMT areas for residential projects are defined as TAZs that generate VMT per capita that is at least 15 percent lower than the Baseline VMT. The VMT metrics for the City of Santa Clarita and the 15 percent below threshold are shown in Table 5.

	Santa Clarita Average VMT		
VMT Metrics	2012 Base Year Model	2020 Estimate	2040 Future Year Model
City Home-Based VMT per Capita	24.4	22.7	19.5
15% Below	20.7	19.3	16.6

Table 5 – City of Santa Clarita Residential VMT (Home-Based VMT) per Capita

Figure 5 illustrates the Home-Based VMT per Capita in the City of Santa Clarita by TAZ in comparison to the citywide average. TAZs with Home-Based VMT per Capita at least 15 percent lower than the Baseline VMT are concentrated in the western half of the City where there is higher population density and more frequent transit service.

The VMT metrics illustrated in Figure 5 can be used to screen residential projects in low VMT areas. Specifically, if a residential project is proposed in a TAZ that has VMT at least 15 percent lower than the citywide average, the project would also be expected to generate VMT at least 15 percent lower than the citywide average.



Santa Clarita

Greater than 15% below City Baseline

Between 15% below City Baseline and City Baseline

Above City Baseline

Less than 50 Residents

Figure 5

Daily Home-based VMT per Capita Compared to City Average (2020) Low VMT areas for office projects are defined as TAZs that generate VMT on a per employee basis that is at least 15 percent lower than the citywide average. The VMT metrics for the City of Santa Clarita and the 15 percent below threshold are presented in Table 6.

Table 6 – City of Santa Clarita Employment VMT (Home-Based Work VMT) per Employee

	Santa Clarita Average VMT			
VMT Metrics	2012 Base Year	2020	2040 Future Year	
	Model	Estimate	Model	
City Home-Based Work VMT per Employee	21.0	18.4	13.5	
15% Below	17.9	15.7	11.5	

Figure 6 shows Home-Based Work VMT per Employee for TAZs in the City of Santa Clarita in comparison to the citywide average. TAZs with Home-Based Work VMT per Employee lower than the citywide average are concentrated around the Via Princessa Metrolink station and along the Railroad Avenue Corridor. Additionally, several TAZs have no or few employees (less than 50 employees), and thus the Home-Based Work VMT per Employee metric is not displayed in the map.

OPR's guidance for residential and office project screening and the implications of this guidance for the City of Santa Clarita are presented below.

OPR Recommendation

Screen the following project type from VMT analysis:

- <u>Residential</u> and <u>Office</u> projects located in low VMT generating TAZs, defined as VMT per capita or VMT per employee that is at least 15% lower than the Baseline VMT.

What this means for Santa Clarita

The City is following OPR guidance which means that residential and office projects located in low VMT areas, defined as 15% below the Baseline VMT for the City, would not need to complete a VMT analysis.



🔲 Santa Clarita

Greater than 15% below City Baseline

Between 15% below City Baseline and City Baseline

Above City Baseline

Less than 50 Employees

Daily Home-based Work VMT per Employee Compared to City Average (2020)

Figure 6



Transit Priority Area (TPA) Screening

Projects located within Transit Priority Areas (TPAs) may also be exempt from VMT analysis. TPAs are defined in the OPR Technical Advisory as a ½ mile radius around an existing or planned major transit stop or an existing stop along a high-quality transit corridor (HQTC). HQTCs are defined in the Technical Advisory as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. Figure 7 shows the TPAs within the City of Santa Clarita. Transit service may change over time; Figure 7 represents the TPAs in Santa Clarita in the Spring of 2020. As project applicants seek to use this screening criteria, they are responsible for reviewing the current transit service and demonstrating how their project qualifies for this screening criteria.

The Metrolink stations in Santa Clarita meet the definition of a major transit stop referenced in the OPR Technical Advisory. The TPA map includes the three existing and one planned Metrolink stations. Once the Vista Canyon station opens and the Via Princessa station is removed, the area around Via Princessa will no longer qualify as a TPA.

Two bus routes provided by Santa Clarita Transit (SCT) meet the definition of a HQTC presented above: routes 799 and 797. Based on the OPR Technical Advisory, the area around all stops on a HQTC qualify as a TPA. For Santa Clarita these stops include the McBean Regional Transit Center, Newhall Ave/Sierra Highway Park & Ride, and other stops along McBean parkway and Orchard Village Road. With these transit stations and stops, approximately 15 percent of the City is within a TPA.

Based on OPR guidance, projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, 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 than required by the City
- Is inconsistent with the regional Sustainable Communities Strategy (as determined by the City)
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units

OPR's guidance for TPA project screening and the implications of this guidance for the City of Santa Clarita are presented below.

OPR Recommendation

Screen the following project types from VMT analysis:

- Project is located in TPA and does NOT have the following characteristics:
 - Floor Area Ratio (FAR) < 0.75
 - o More parking than required by City
 - o Inconsistent with the applicable RTP/SCS (as determined by the City)
 - Replaces affordable residential units with a smaller number of moderate- or high-income residential units

What this means for Santa Clarita

The City is following OPR guidance which means that projects located within a ¹/₂ mile from the Metrolink stations and SCT routes 799 and 797 would not need to complete a VMT analysis. The project should also not have the following characteristics:

- Floor Area Ratio (FAR) < 0.75
- More parking than required by City
- Inconsistent with the applicable RTP/SCS (as determined by the City)
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units

Affordable Housing Screening

Affordable housing is known to generate lower VMT than market-rate housing. In addition, affordable housing in infill areas can shorten commutes by providing housing closer to where people work, thereby reducing VMT. Affordable housing units can be presumed to have a less than significant impact on VMT, absent substantial evidence to the contrary, and can be screened from requiring further VMT analysis. The screening can be applied to projects containing all affordable housing units or to only those units that meet affordable housing requirements within a larger development.

VMT Screening Criteria - Transportation Projects

Transportation projects that promote active transportation, such as transit, bicycle and pedestrian facilities, are presumed to generally reduce VMT and can be screened from further analysis. In addition, projects that improve safety or improve traffic operations at current bottlenecks, such as intersection traffic control (e.g., traffic signals or roundabouts), or widening at intersections to provide new turn lanes are not expected to increase VMT. The following types of transportation projects can be screened from further VMT analysis.

- Rehabilitation, maintenance, replacement, safety, and repair projects designed to improve the condition of existing transportation facilities and do not add additional motor vehicle capacity
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, or two-way left turn lanes

- Addition of roadway capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit
- Reduction in number of travel lanes
- Installation, removal, or reconfiguration of traffic control devices
- Timing of signals to optimize vehicle, bicycle, or pedestrian flow
- Installation of roundabouts or traffic circles
- Installation or reconfiguration of traffic calming devices

VMT Screening Summary

Table 7 provides a summary of VMT screening criteria for projects in the City of Santa Clarita based on the screening options described above. A project only needs to satisfy one of the screening criteria to be exempt from requiring further VMT analysis. For mixed-use projects where only one land use component meets the screening criteria (e.g., locally serving retail or affordable housing), only those components of the project are screened from VMT analysis and the other components of the project must be analyzed. For land use projects, screening criteria numbers one and four in Table 7 apply to the entire project, whereas numbers two, three, and five apply only to the relevant land use component.

Scr	eening Categories	Project Requirements to Meet Screening Criteria
1.	Project Size	A project that generates 110 or fewer daily trips.
2.	Locally Serving Retail	A project that has locally serving retail uses that are 50,000 square feet or less, including specialty retail, shopping center, grocery store, pharmacy, financial services/banks, fitness center or health club, restaurant, and café. If the project contains other land uses, those uses need to be considered under other applicable screening criteria.
3.	Project Located in a Low VMT Area	A residential or office project that is located in an area that is already 15% below the Baseline VMT.
4.	Transit Proximity	 A project that is located within a ½ mile of the Metrolink station or within a ½ mile of a bus stop with service frequency of 15 minutes or less during commute periods. In addition, the project should have the following characteristics: A floor Area Ratio (FAR) of 0.75 or greater Is consistent with the applicable SCAG SCS (as determined by the City) Does not provide more parking than required by the City Does not replacing affordable housing units
5.	Affordable Housing	A residential project that provides affordable housing units; if part of a larger development, only those units that meet the definition of affordable housing satisfy the screening criteria.
6.	Transportation Facilities	Transportation projects that promote non-auto travel, improve safety, or improve traffic operations at current bottlenecks, such as transit, bicycle and pedestrian facilities, intersection traffic control (e.g., traffic signals or roundabouts), or widening at intersections to provide new turn lanes.

Table 7 – VMT Screening Criteria



🛄 Santa Clarita

Transit Screening Areas in Santa Clarita

Chapter 5 – VMT Thresholds and Mitigation

This chapter presents the thresholds of significance and discusses mitigation options for projects that are found to have a VMT impact.

Overview

The implementation of new CEQA guidance in the City of Santa Clarita includes the following:

- VMT Analysis Methodology: If the project is not screened from needing a VMT analysis, the City can use the SCAG regional travel demand model to estimate a project's VMT as described in Chapter 3. OPR recommends that VMT be reported as Home-Based VMT per Capita for residential projects and Home-Based Work VMT per Employee for office projects. Total VMT or VMT per Service Population can be reported for area plans, large-scale retail projects, or other project types, such as special event venues.
- 2. VMT Impact Thresholds: The City has discretion to develop and adopt their own impact thresholds, or rely on thresholds recommended by other agencies, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence. OPR recommends that projects exceeding a level of 15 percent below existing VMT per capita or per employee when compared to the citywide average may indicate an impact.
- 3. **VMT Mitigation**: The types of mitigation that effect VMT are those that reduce the number of single-occupant vehicle trips generated by the site and their trip lengths. This can be accomplished by changing the land uses being proposed or by implementing transportation demand management (TDM) measures.

Each of these topics are discussed in further detail below.

VMT Analysis Methodology

For projects that do not meet any of the screening criteria above, a VMT analysis would be required. The VMT analysis would rely on the best available data to inform trip generation and trip length estimate for the project uses. The VMT analysis should also be done using the same tools used to set the thresholds, for an appropriate comparison. For land use plans (e.g., Specific Plan or General Plan) and projects consisting of residential, office, and retail land uses, the VMT analysis can be conducted using the SCAG model. For other project types, such as a performing arts center or special event venue, the VMT analysis

should be customized to determine the unique trip generation and trip length characteristics of the proposed uses.

As required under current practice, the VMT analysis should consider the potential impacts of the project under both existing and future/cumulative conditions as follows:

- Existing/Baseline Conditions: Project-generated VMT should be estimated for the proposed land uses under existing/Baseline conditions. VMT can be estimated using the SCAG regional travel demand model and should be reported as VMT per capita (residential projects), VMT per employee (office or employment-generating projects), or VMT per service population (all other land uses). For land use plans and regional retail projects, VMT per service population or Total VMT can be used to determine potential impacts.
- **Cumulative Conditions**: A less than significant impact under Existing/Baseline conditions would also result in a less than significant cumulative impact as long as the project is consistent with the SCAG RTP/SCS.

In some cases, the Project-effect on VMT should be estimated under cumulative conditions to determine if VMT in the study area would be higher/lower in the future with the project in place. This analysis would be applicable to large planning efforts that may result in changes to regional travel patterns. To evaluate the project's effect on VMT, the future year travel demand model should be updated to reflect the project and determine whether the Citywide VMT increases with the project. The user may elect to complete a redistribution of land use to ensure that the "no project" assessment and the "with project" assessment contain the same land use control totals for the City, especially if the project is large enough that it would affect land use absorption elsewhere.

VMT Impact Thresholds

CEQA Guidelines Section 15064.7, *Thresholds of Significance*, encourages lead agencies to develop and publish thresholds of significance. Pursuant to Section 15064.7(b), the City can adopt thresholds of significance for VMT by ordinance, resolution, rule or regulation through a public review process supported by substantial evidence. OPR's Technical Advisory has identified 15 percent below the Baseline average as the threshold for identifying a significant VMT impact for land use projects and plans. This threshold is based on research conducted to determine the VMT reduction needed in order to help the State achieve its climate goals. CARB has quantified the need for VMT reduction in order to meet the State's long-term climate goals and OPR sees reducing VMT to 15 percent below existing conditions as a reasonable threshold for new development projects.

OPR guidance is also provided for transportation projects. For roadway widening projects, a significant impact would occur if the project increased the Baseline VMT in the study area.

The VMT thresholds for projects and plans in the City of Santa Clarita are summarized below in Table 8.

Project Type	Threshold for Determination of Significant VMT Impact
Residential Project	Project exceeds 15% below citywide Baseline VMT for Home-Based VMT per Capita
Employment (Commercial or Industrial) Project	Project exceeds 15% below citywide Baseline VMT for Home-Based Work VMT per Employee
Regional Retail Project	Project results in a net increase in total VMT in comparison to the citywide Baseline VMT
Mixed-Use Projects	Evaluate each project land use component separately using the criteria above
Land Use Plans	Plan exceeds 15% below citywide Baseline VMT for Total VMT per service population
Other land use types	Project exceeds 15% below citywide Baseline VMT.
	For land use types not listed above, the City can determine the appropriate VMT metric depending on the project characteristics. For projects that are generally producing job-related travel, the employment generating VMT (Home-Based Work VMT per Employee) can be compared to the Baseline. For other projects, the total VMT per service population can be compared to the citywide Baseline, or the net change in Total VMT can be estimated.
Transportation Projects	Project results in an increase in VMT in the study area in comparison to Baseline conditions

Table 8 – VMT Thresholds of Significance

VMT Mitigations

For projects with VMT impacts, it is important to have mitigation options available for implementation to try to remove or lower the impact. The types of mitigation that affect VMT are those that reduce the number of single-occupant vehicles generated by the site. This can be accomplished by changing the land uses being proposed or by implementing TDM strategies. TDM strategies are reductions to a project's trip generation based on certain types of project site modifications, programming, and operational changes.

The goals of TDM align with goals laid out in the City's Non-Motorized Transportation Plan and General Plan. The Non-Motorized Transportation Plan⁵ outlines strategies to improve and promote walking and bicycling in Santa Clarita. A subset of the recommendations in the plan focus on TDM, including TDM incentive programs for employers, parking pricing and management, and telecommuting, In addition to

⁵ <u>City of Santa Clarita Non-Motorized Transportation Plan</u>, City of Santa Clarita, August 2014, <u>https://www.santa-</u> <u>clarita.com/home/showdocument?id=9307</u>

the General Plan goals and policies listed in Chapter 2, there is a goal specifically about Vehicle Trip reduction with two corresponding objectives:

- General Plan Goal C 3: Reduction of vehicle trips and emissions through effective management of travel demand, transportation systems, and parking.
 - Objective C 3.1: Promote the use of travel demand management strategies to reduce vehicle trips.
 - Objective C 3.3: Make more efficient use of parking and maximize economic use of land, while decreasing impervious surfaces in urban areas, through parking management strategies.

The effectiveness of TDM strategies, when applied to a project, should be based on the best and most recent available research.

Research documented in the 2010 California Air Pollution Control Officers Association (CAPCOA) publication, *Quantifying Greenhouse Gas Mitigation Measures* (CAPCOA, 2010). CAPCOA offers methodology based on preferred literature, along with methodology based on alternative literature, to estimate the effectiveness of each strategy.

Specific mitigation strategies need to be tailored to the project characteristics and their effectiveness needs to be analyzed and documented as part of the environmental review process to determine if impacts could be mitigated or if they would remain significant and unavoidable. Given that research on the effectiveness of TDM strategies is continuing to evolve, feasible mitigation measures should be considered based on the best data available at the time a project is being considered by the City.

The strategies described below are a sample of the options most effective in areas like Santa Clarita, many of which correspond to objectives and policies in the General Plan.

Strategy	Description	VMT Benefit	General Plan Policy
Land Use & Location	-		•
Increase Density	Designing a Project with increased densities, where allowed by the General Plan and/or Zoning Ordinance reduces GHG emissions associated with traffic in several ways.	Minimizes number and length of vehicle trips and provides greater options for use of alternative modes.	C 1.2.1
Increase Diversity of Urban and Suburban Developments (Mixed Use)	Includes mixed uses within Projects or in consideration of surrounding area.	Minimizes number and length of vehicle trips.	C 1.2.5
Increase Destination Accessibility	Destination accessibility is measured in terms of the number of jobs or other attractions reachable within a given travel time, which tends to be highest at central locations and lowest at peripheral ones.	Minimizes number and length of vehicle trips.	C 1.2.5
Increase Transit Accessibility	Locating a project with high density near transit will facilitate the use of transit by people traveling to or from the Project site. The use of transit results in a mode shift and therefore reduced VMT.	Encourages transit use to replace vehicle trips.	C 4.1, C 5.3, C 5.4

Strategy	Description	VMT Benefit	General Plan Policy
Neighborhood / Site Enh	ancement		
Provide Pedestrian Network Improvements	Providing a pedestrian access network to link areas of the Project site encourages people to walk instead of drive. This mode shift results in people driving less and thus a reduction in VMT.	Encourages people to walk within and to a Project	C 7.2
Implement a Neighborhood Electric Vehicle (NEV) Network	NEVs offer an alternative to traditional vehicle trips and can legally be used on roadways with speed limits of 35 MPH or less. They are ideal for short trips up to 30 miles in length.	Minimizes length of vehicle trips; electrification reduces GHG emissions.	C 3.2
Provide Traffic Calming Measures	Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift will result in a decrease in VMT. Project design will include pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction requirements.	Encourages people to walk or bicycle, especially for shorter trips.	C 1.1.7

Strategy	Description	VMT Benefit	General Plan Policy
Commute Trip Reduction	2		
Implement Car- Sharing Program	Projects can implement a car-sharing program to allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis. Car-sharing programs may be grouped into three general categories: residential- or citywide-based, employer-based, and transit station-based.	Reduces need to own a vehicle or the number of household vehicles.	NA
Encourage telecommuting and Alternative Work Schedules	Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered start times, flexible schedules, or compressed work weeks.	Reduces the number of days employees need to work and/or shifts commute time outside of peak periods to avoid adding congestion.	C 3.1.3
Commute Trip Reduction Programs	Projects can implement a voluntary Commute Trip Reduction program with employers to discourage single-occupancy vehicle trips and encourage alternative modes of transportation. Alternatively, a jurisdiction can implement a Commute Trip Reduction Ordinance with the intent of reducing drive-alone travel mode share.	Encourages alternatives to commuting in single- occupancy vehicles.	C 3.1.1, C 3.1.4, C 3.1.5, C 3.1.6

Strategy	Description	VMT Benefit	General Plan Policy
Parking Policy/Pricing			
Limit Parking Supply	Projects can change parking requirements and types of supply within the Project site to encourage "smart growth" development and alternative transportation choices by project residents and employees.	Encourages alternatives to the use of single- occupancy vehicles.	C 3.3.1, C 3.3.4
Unbundle Parking Costs from Property Cost	Unbundling separates parking from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost from the property cost.	Encourages alternatives to the use of single- occupancy vehicles.	NA
Implement Market- Price Public Parking	Price all central business district/employment center/retail center on-street parking to encourage "park once" behavior. This deters parking spillover from project-supplied parking to other public parking nearby to avoid undermining the VMT benefits of pricing project-supplied parking.	Encourages people to park once and walk between destinations instead of driving.	C 3.3.8

Chapter 6 – Local Transportation Assessment Guidelines

This section outlines the City's guidelines for studying a project's effects on the transportation system. While CEQA requirements have changed, the City can continue to dictate the types of analysis to be conducted for land use and transportation projects, such as continuing to include LOS. While LOS would no longer constitute a CEQA impact, it can still be used to inform decision makers on the overall effects of a project.

Upon adoption of the new transportation impact thresholds to comply with CEQA under SB 743, the City would implement the following process for conducting transportation studies.

- 1. Transportation Impact Analysis for CEQA: Projects would first be reviewed to determine if there is a potential for significant environmental impacts. If the project does not meet the VMT screening criteria, a VMT analysis would be required to determine if the project exceeds the thresholds adopted by the City of Santa Clarita. Following the VMT screening process and/or analysis, the City would make the determination on the appropriate environmental documentation needed based on all potential environmental impacts. If an EIR is required, the VMT impact analysis and findings of significance would be included in the Transportation section.
- 2. Local Transportation Assessment: The purpose of the Local Transportation Assessment is to provide the in-depth project review that the City has historically undertaken to determine if operational improvements are needed to accommodate a project. However, this report would be prepared separately from the documentation required under CEQA. Similar to current practice, the City's Traffic Engineer defines the requirements for the Local Transportation Assessment.

The guidelines below generally maintain the current process and stipulate that current thresholds of significance can be applied to determine if improvements are needed to accommodate a proposed project as part of the Local Transportation Assessment but cannot be used to evaluate impacts under CEQA. The previous requirements of the County's Congestion Management Program (CMP) no longer apply.

Study Area

The study area shall be determined by the City's Traffic Engineer based on the project's vehicle-trip generation and distribution. Analyzed locations should primarily consist of major signalized and unsignalized intersections that are likely to be affected by the project. Intersections where the proposed

project would add 50 or more net new trips during the AM and PM peak hours should be included in the study. Projects generating less than 50 peak hour trips are not required to complete a Local Transportation Assessment. However, the City may require a site access evaluation.

Study Scenarios

Project's should continue to consider traffic operational effects under both existing and future (project opening year, also called cumulative year) conditions. The following scenarios should be included:

- I. Existing
- II. Existing Plus Project
- III. Cumulative
- IV. Cumulative Plus Project

The following additional scenarios may be required for larger multi-phased projects, Specific Plans, and General Plan updates:

- I. Long-term Buildout
- II. Long-term Buildout Plus Project

Project Trip Generation

Trip generation estimates should be based on the best available data. In most cases, data published by the Institute of Transportation Engineers provides reasonable trip generation estimates for land uses in the City. However, where available, trip generation should be based on local data.

Volume Forecasts

The Santa Clarita Valley Consolidated Traffic Model (SCVCTM) should be used to forecast traffic volumes. The model is regularly updated as development projects in the City open, and is the best available tool to projecting intersection volumes. The future scenario of the model is based on the City's and County's General Plans.

Vehicle Operations

The latest version of the *Highway Capacity Manual (HCM*) method of intersection capacity calculation is the preferred methodology to analyze signalized intersections within the City of Santa Clarita. The table below lists the recommended delay methodology for signalized, stop-controlled, and roundabout intersections.

Calculation Methodology

Level of service based on "average vehicle delay" calculated as follows:

- Synchro/HCM delay based intersection methodology for traffic signals
- HCM 2010 delay based intersection methodology for stop sign control
- Sidra delay based intersection methodology for roundabouts

The LOS definitions for roadway segments and signalized, stop-controlled, and roundabout intersections are as follows:

LOS	Roadway Volume-to- Capacity (v/c) Ratio Ranges	HCM Average Delay (sec/veh) for Signalized Intersections and Roundabouts	HCM Average Delay (sec/veh) for Unsignalized Intersections
Α	0.00-0.60	≤ 10.0	≤ 10.0
В	0.61-0.70	> 10.0 to 20.0	> 10.0 to 15.0
С	0.71-0.80	> 20.0 to 35.0	> 15.0 to 25.0
D	0.81-0.90	> 35.0 to 55.0	> 25.0 to 35.0
E	0.91-1.00	> 55.0 to 80.0	> 35.0 to 50.0
F	Above 1	> 80.0	> 50.0

Source: Highway Capacity Manual, Transportation Research Board, 2010.

Under current practice, a significant impact is triggered when the level of service is degraded by Projectadded trips from LOS D to LOS E or F, or if an intersection is already operating at LOS D or worse, an impact is triggered by increases in delay, as described in the table below. These criteria would continue to be applied to determine if intersection improvements are needed to accommodate the proposed development.

Criteria for Traffic Operational Changes with a Project

An intersection is considered to be affected if the Project would:

- Worsen an intersection maintained by the City of Santa Clarita from LOS D or better to LOS E or F
- Cause the following increase in delay at an intersection maintained by the City of Santa Clarita that operated (with the project) at LOS D or worse
 - LOS D with the project: more than 4-second increase in delay is significant
 - LOS E or F with the project: more than 2-second increase in delay is significant

One of the improvements the City may consider for unsignalized intersections is installation of a traffic signal. The City of Santa Clarita uses a combination of warrants to see if a signal is justified. Traffic signal warrants are defined in the California Manual on Uniform Traffic Control Devices (CA MUTCD). The MUTCD is published by the Federal Highway Administration and then adapted by Caltrans to provide uniform standards and specifications for all official traffic control devices in California. The signal warrant analysis is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals and should not serve as the only basis for deciding whether and when to install a signal. The City's traffic engineer should make the ultimate determination on the appropriate types of improvements to implement (if any) for unsignalized intersections.

Active Transportation

Projects should also be reviewed for potential conflicts with adopted plans and policies related to active transportation, such as the City's Non-Motorized Transportation Plan and General Plan. Any planned improvements in the immediate vicinity of the project site should be noted and incorporated into the project site plan, as necessary.

Documentation

The methodology and analysis results based on the requirements above should be documented in a Local Transportation Assessment Report, which would remain separate from the CEQA report. The Local Transportation Assessment Report includes vehicle operations analysis (intersection and segment LOS) and identifies any local transportation improvements that may be required to accommodate the development site. This report will be reviewed by the City's Traffic Engineer and submitted to Planning Commission and City Council as part of the decision-making process.