Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report

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FEHR PEERS

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Chapter 1 – Introduction

In response to Senate Bill (SB) 743, Los Angeles County is adopting new transportation impact thresholds to adhere to CEQA requirements. To develop the guidance associated with SB 743, a Steering Committee was created with members of several County Departments. The purpose of this report is to describe the County's process of implementing SB 743 and the recommendations developed through the Steering Committee.

An overview of the new CEQA guidance and the County's implementation process is summarized below.

SB 743 Overview

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process intended to fundamentally change transportation impact analysis as part of CEQA compliance. In response to SB 743, the Office of Planning and Research (OPR) selected vehicle miles of travel (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.*

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 – 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.

To help aid lead agencies with SB 743 implementation, OPR produced a Technical Advisory[1]. 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, thresholds, and mitigation. These decisions should be consistent with the County's goals as expressed in their relevant plans and policies.

[1] *Technical Advisory on Evaluating Transportation Impacts in CEQA*, OPR, December 2018 http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

Projects 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 plans (e.g., Community Plan or Specific Plan) 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. In addition, some projects, such as those located adjacent to transit, may be screened from requiring a detailed VMT analysis.

- **Transportation Infrastructure** – Prior to SB 743, transportation projects that had the potential to worsen vehicle delay, such as narrowing a roadway to enhance travel for bicyclists and pedestrians, may result 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. Roadway widening projects will now need to consider the potential to induce vehicle travel demand due to increased capacities which may make driving a more attractive travel option.

SB 743 does not prevent the County from continuing to analyze LOS as part of the development review process to determine if transportation improvements are needed to accommodate the proposed land uses, but LOS will no longer constitute the basis for CEQA impacts. In parallel with this technical document, the County is updating the Transportation Impact Analysis Report Guidelines to lay forth the requirements for CEQA and Non-CEQA sections of transportation studies.

VMT Implementation Overview

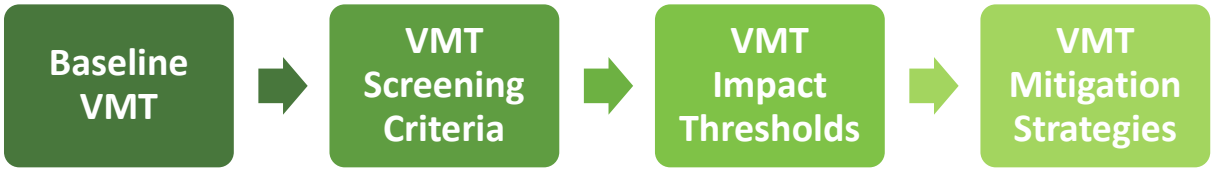
The updated CEQA guidelines have a new section for determining the significance of transportation impacts (Section 15064.3). While OPR produced a Technical Advisory to help lead agencies think about the variety of implementation questions to consider when adopting the new CEQA guidance, lead agencies must still make their own specific decisions about VMT methodology, thresholds, and mitigation.

To develop the guidance associated with SB 743 in Los Angeles County, a Steering Committee was created in December 2019 with members of several County Departments. The Steering Committee members represented the Departments of Public Works, Regional Planning, Parks and Recreation, Public Health, and the Chief Executive Office.

The County's process included defining its Baseline VMT, developing VMT screening criteria, defining its impact thresholds, and determining potential mitigation strategies. The Steering Committee considered multiple options for each of these components of the implementation process. This report presents the Steering Committee's recommendations and explains how they comply with CEQA guidance. The implementation process is illustrated below.

Other jurisdictions are currently updating their transportation impact thresholds and traffic study guidelines to comply with the State's SB 743 CEQA mandate. Most agencies are following state guidance provided by the OPR technical advisory and customizing the guidance to reflect the needs and context of each individual jurisdiction. The City of Los Angeles released their updated Transportation Assessment Guidelines (TAG) in July of 2019. Caltrans also recently released draft guidance for assessing VMT impacts on the state highway system[2]. Their draft Transportation Analysis Framework (TAF) and draft Transportation Analysis under CEQA (TAC) are currently undergoing informal review.

Implementation Overview



Report Overview

The following chapters describe the County's process of implementing SB 743 and the recommendations from the Steering Committee as follows:

- **Chapter 2: Baseline VMT** – This chapter describes the process for determining the County Baseline VMT and describes the analysis methodology and VMT metrics for Los Angeles County.
- **Chapter 3: VMT Screening** – This chapter provides the options for project screening to determine if a VMT analysis is required and summarizes the VMT analysis process for projects that do not meet the screening criteria.
- **Chapter 4: VMT Impact Thresholds** – This chapter summarizes the threshold options considered by the County and presents the VMT impact thresholds for land use and transportation projects.
- **Chapter 5: VMT Mitigation Strategies** – For projects that are determined to have potential VMT impacts, mitigation options to reduce VMT and meet the County's thresholds are provided.

Timing

All environmental documents, including negative declarations and environmental impact reports, that are released for public review starting July 1, 2020 must use VMT to analyze the significance of a project's transportation impact.

[2] https://dot.ca.gov/programs/transportation-planning/office-of-smart-mobility-climate-change/sb-743

Chapter 2 – Baseline VMT

This chapter summarizes the baseline VMT methodology and associated data in Los Angeles County. Defining the County's Baseline VMT is an important initial step in the implementation process because a project's VMT will be compared to the County Baseline VMT to determine if the project exceeds the County's thresholds for VMT impacts. To determine the appropriate Baseline VMT for Los Angeles County, the Steering Committee considered the VMT trends throughout the County and region.

SCAG Travel Model Overview

The regional Southern California Association of Governments (SCAG) model is the best available tool to estimate VMT in Los Angeles County. The most current version of the SCAG Model has a base year of 2012 and future year of 2040 and was developed for the 2016 *SCAG Regional Transportation Plan and Sustainable Communities Strategy*, April 2016. The model contains traffic analysis zones (TAZs) that contain socio-economic data reflecting the population, employment, and land use development characteristics throughout the region. The TAZ's are characterized as Tier 1 and Tier 2 zones, and each Tier 1 zone contains multiple Tier 2 zones. The Tier 2 zones represent a smaller geographic area that allows the model to produce more refined trip assignment forecasts. Both Tier 1 and Tier 2 zones are used to calculate VMT. Total VMT is calculated using the Tier 1 zones and VMT by trip purpose (e.g., home-based VMT) is calculated using the Tier 2 zones. The 2040 model used to produce VMT forecasts reflects future baseline (or business as usual) conditions.

While the SCAG model was used to estimate VMT in Los Angeles County, the model contains the socio-economic data and transportation network for the entire SCAG region including the incorporated Cities. The model also contains neighboring, external zones that are used to estimate travel demand that occurs between the SCAG region and adjacent areas, as well as estimate regional travel demand for those traveling through the SCAG region.

A key limitation of the SCAG model (and all regional models) is that it excludes the VMT associated with internal to external and external to internal trips (i.e., trips that begin or end outside the SCAG region). To account for the portion of trips traveling outside of the model area, the length of trips leaving the model boundary can be adjusted by appending the additional travel distance at model gateway zones (or external centroids) from a larger scale travel demand model. For this purpose, the California Statewide Travel Demand Model was used to calculate the weighted average trip length beyond the SCAG model boundaries, such as Kern County to the north. **Table 1** below provides a summary of the percentage of external trips leaving from or arriving to the SCAG region from the unincorporated areas of Los Angeles County.

TABLE 1: PERCENTAGE OF TRIPS TRAVELING TO/FROM SURROUNDING REGIONS

Geographic Area	% of Trips From/To External Zones			
	North (Kern)	West (Santa Barbara)	South (Orange & South Riverside)	Southeast (Imperial San Bernardino & North Riverside)
Unincorporated LA County	21%	4%	3%	7%

VMT Methodology for Land Use Projects and Plans

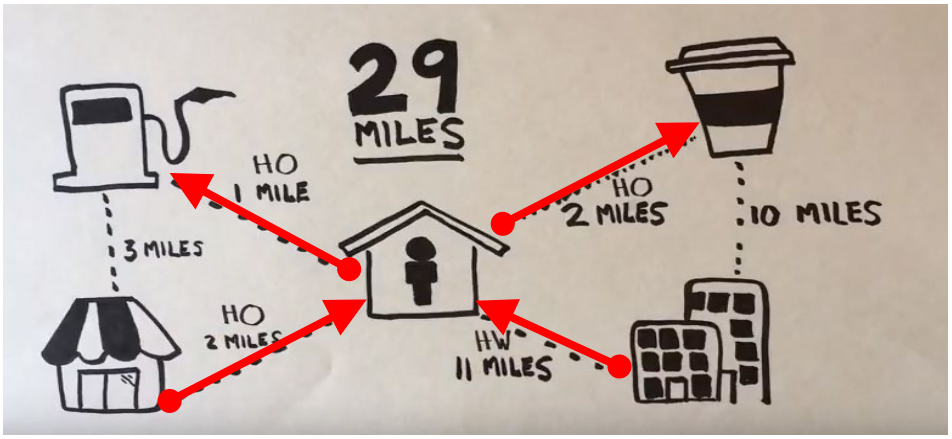
The VMT methodology for land use projects and plans is based on the Origin-Destination (OD) VMT method. The OD VMT method estimates the VMT generated by land uses in a specific geographic area, such as the entire County or a smaller area, such as a Regional Planning area or project site. All vehicles 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.[3]

For land use projects and plans, the OD VMT methodology is the most appropriate method because it tracks all trips by trip purpose and the full length of those trips generated by the proposed land uses. The methodology can be used to report the following VMT metrics:

- **Total VMT per Service Population** (all vehicles and all trip purposes): The total VMT to and from all zones in the geographic area are divided by the total service population to get the efficiency metric of VMT per service population. The total service population is the sum of the number residents and the number of employees.

[3] The OD VMT method requires two major data inputs. The first data input is the set of vehicle trip tables (including all vehicle trips by vehicle mode and by time of day) that contain the number of trips between each zone in the model. The second data input is the set of highway distance skims (by vehicle mode and by time of day) that allows the trip distances for each OD pair to be based on congested travel time, speed, and cost from the final highway assignment. The total VMT matrices are then generated by multiplying the final OD trip tables with the corresponding highway distance skims.

- **Residential (Home-based) VMT per capita** (automobile only): All home-based auto vehicle trips are traced back to the residence of the trip-maker (non-home-based trips are excluded) and then divided by the population within the geographic area to get the efficiency metric of home-based VMT per capita (or per resident). The diagram below illustrates the home-based trips that are included in this VMT metric.



- **Employment (Home-based work) VMT per employee** (automobile only): All auto vehicle trips between home and work are counted, and then divided by the number of employees within the geographic area 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.

VMT Methodology for Transportation Projects and Plans

The VMT methodology for transportation projects is based on the boundary method which considers all travel on roadways in a given 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 SCAG model is used to estimate the baseline VMT within the study area and then forecast the change in VMT with the project in operation. The study area should reflect the area of influence of the project. Large projects affecting regional travel may define the study area for VMT analysis as the entire County, while others may only consider the local community. The VMT for transportation projects is calculated as defined below.

- **Total Roadway VMT** (all vehicles): The total daily VMT estimated by multiplying the daily volume on every roadway segment by the length of every roadway segment within a given area.

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

VMT Trends

Defining the County's Baseline VMT is an important initial step in the implementation process because a project's VMT will be compared to the County Baseline VMT to determine if the project exceeds the County's thresholds for VMT impacts. To determine the appropriate Baseline VMT for Los Angeles County, the Steering Committee considered the VMT trends throughout the County and region as described below.

Unincorporated County VMT Trends

The first step in understanding the VMT trends in the unincorporated areas of the County were to compare the VMT metrics to the broader SCAG region. **Table 2** shows the baseline VMT for the entire Los Angeles County unincorporated area (as illustrated **Figure 1** below) in comparison to the SCAG region. As shown, the VMT metrics for the unincorporated areas of Los Angeles County range from 5% higher than SCAG when considering total VMT per service population to 13% higher than SCAG when considering residential VMT per capita.

TABLE 2: UNICORPORATED COUNTY VMT METRICS

Region	Total VMT per Service Population	Residential VMT per Capita	Employment VMT per Employee
Unincorporated LA County Average	35.9	17.0	20.7
SCAG Region	34.2	15.0	19.0
% Difference	+5%	+13%	+9%

Regional Planning Areas VMT Trends

To better understand the VMT trends within the County, VMT metrics were developed for each of the 10 regional planning areas shown in **Figure 2**. The planning area boundaries and VMT metrics include both the unincorporated areas and the incorporated cities within each area. By including the incorporated Cities in the VMT estimate, it provides a more accurate representation of the level of VMT activity generated within each of the planning areas instead of only including the pockets of unincorporated land within each area. For example, the San Fernando Valley planning area covers a relatively large area of land, but only a few SCAG model TAZs capture the unincorporated areas along the northern edge of the valley.

Figure 1: Unincorporated County VMT Boundary

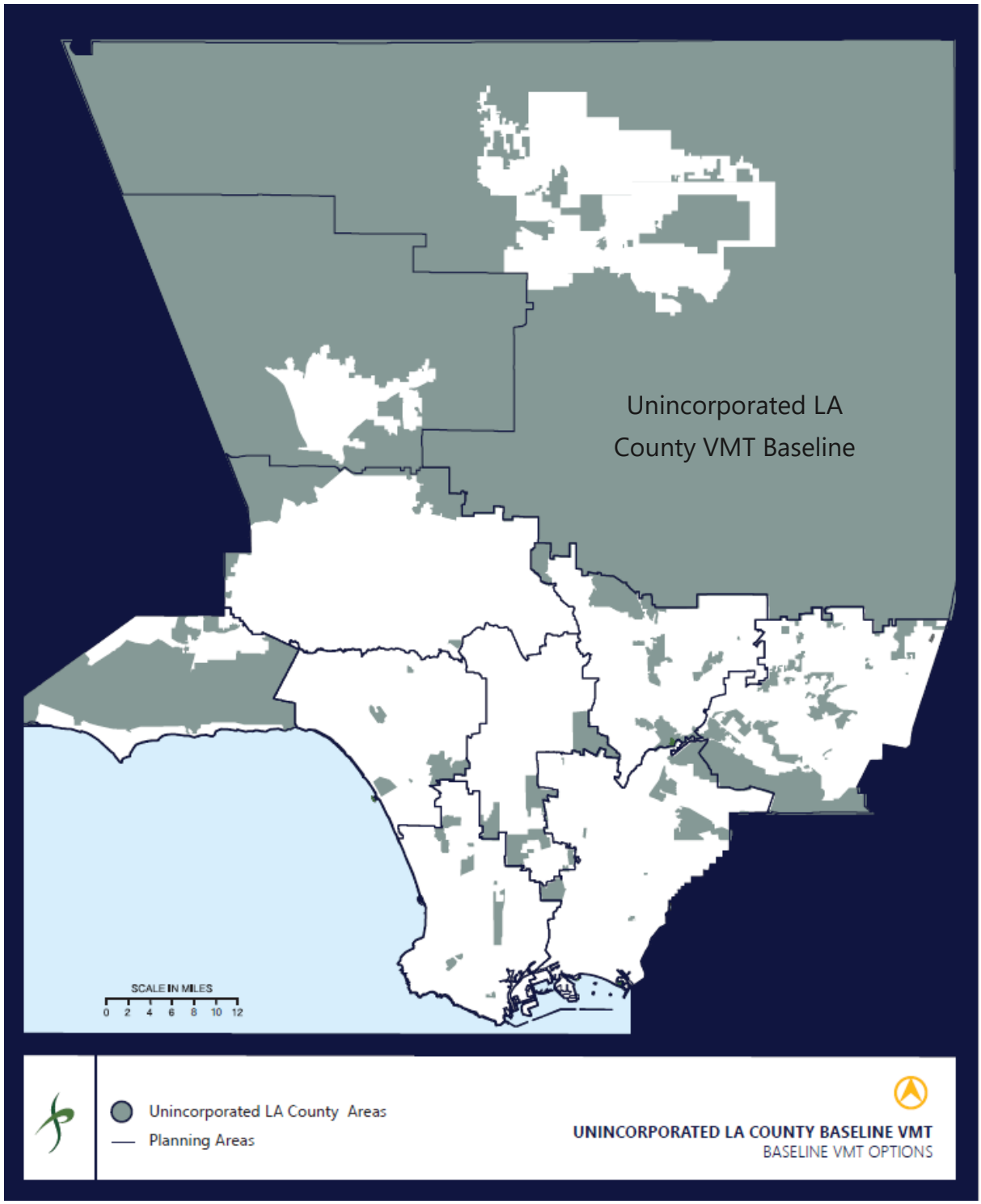


Figure 2: Regional Planning Areas of Los Angeles County

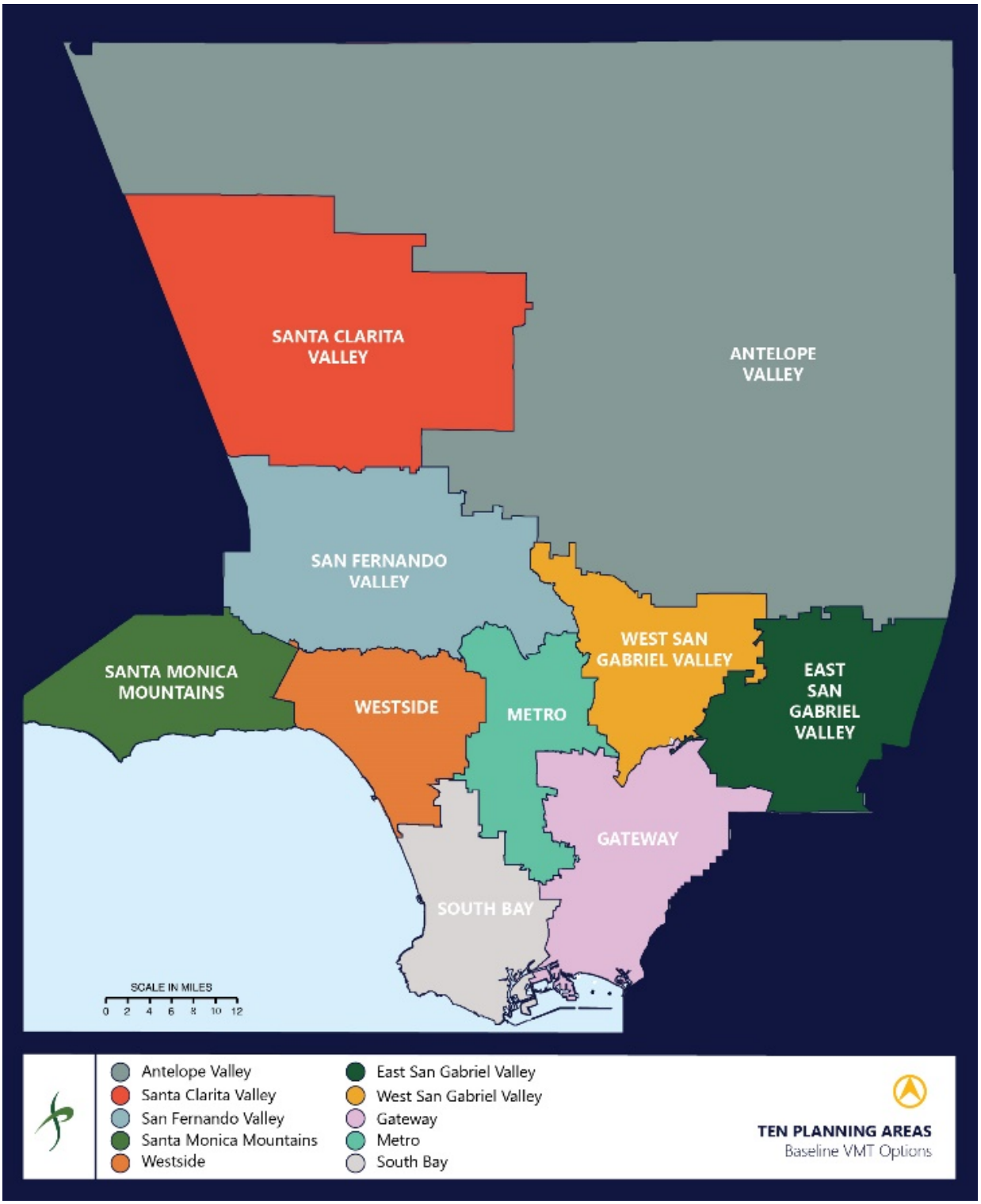


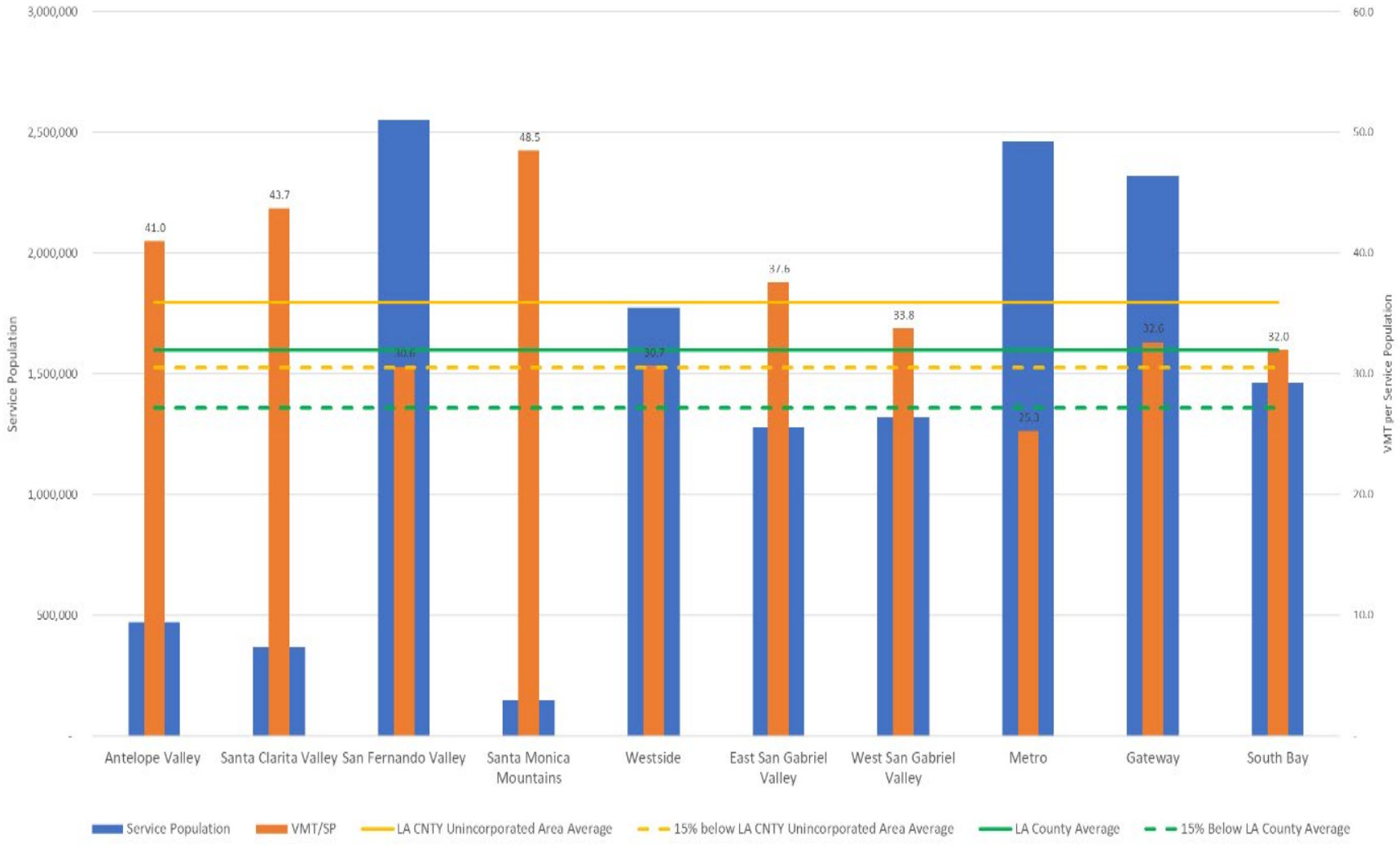
Table 3 shows the VMT metrics for each of the ten planning areas. **Figure 3** also illustrates the total VMT per service population for each of the 10 areas. As shown in the figure, the regional planning areas with the highest densities (as measured by service population) have the lowest baseline VMT levels. The Metro area has the lowest VMT per service population in the County followed by the San Fernando and Westside planning areas. In comparing the trends across the County, the planning in areas in the south generate substantially lower VMT (per service population) than the northern planning areas.

TABLE 3: REGIONAL PLANNING AREA VMT METRICS

Planning Area	Total VMT/Service Pop	Residential VMT/Capita	Employment VMT/Employee
Antelope	41.0	21.0	11.0
Santa Clarita	43.7	24.1	22.1
San Fernando	30.6	13.4	17.4
Santa Monica Mountains	48.5	21.9	25.7
Westside	30.7	9.0	17.6
E San Gabriel	37.6	18.1	21.7
W San Gabriel	33.8	14.1	19.5
Metro	25.3	9.8	17.5
Gateway	32.6	13.3	18.7
South Bay	32.0	13.1	18.6

The VMT metrics for residential VMT per capita and employment VMT per employee generally follow the same trends as the total VMT per service population. However, when only capturing the VMT generated by residents (home-based trips) or by employees (home-based work trips) in each of the planning areas, the VMT trends capture the travel characteristics and land use context within each area. For example, the Antelope Valley has one of the lowest levels of employment VMT but one of the highest levels of residential VMT. This is because if someone works in the Antelope Valley, they are likely to live nearby resulting in shorter commute trips for those living and working in the Antelope Valley and lower employment VMT. However, due to the minimal number of jobs in the areas, many residents travel far distances to reach their employment location resulting in longer commute trips for many residents in the Antelope Valley and higher levels of residential VMT. **Attachment A** contains summary tables and charts comparing the VMT trends in the regional planning areas to the County and SCAG averages.

Figure 3: Planning Area Baseline VMT per Service Population



Los Angeles County Baseline VMT

Given the differences in the VMT trends between the northern and southern planning areas in Los Angeles County, the Steering Committee's recommendation was to develop a North and South Baseline VMT. As shown in **Figure 4**, the North Baseline VMT contains the Antelope Valley, Santa Clarita Valley, and Santa Monica Mountains planning areas in the more rural portion of the County and the South Baseline VMT contains the remaining planning areas in the more urban portion of the County. By establishing a North and South Baseline VMT, the County is acknowledging the differences in travel behavior in these areas given the land use context and transportation network to represent a more realistic and reasonable picture of VMT activity levels, and thus a more appropriate and feasible baseline for VMT analysis.

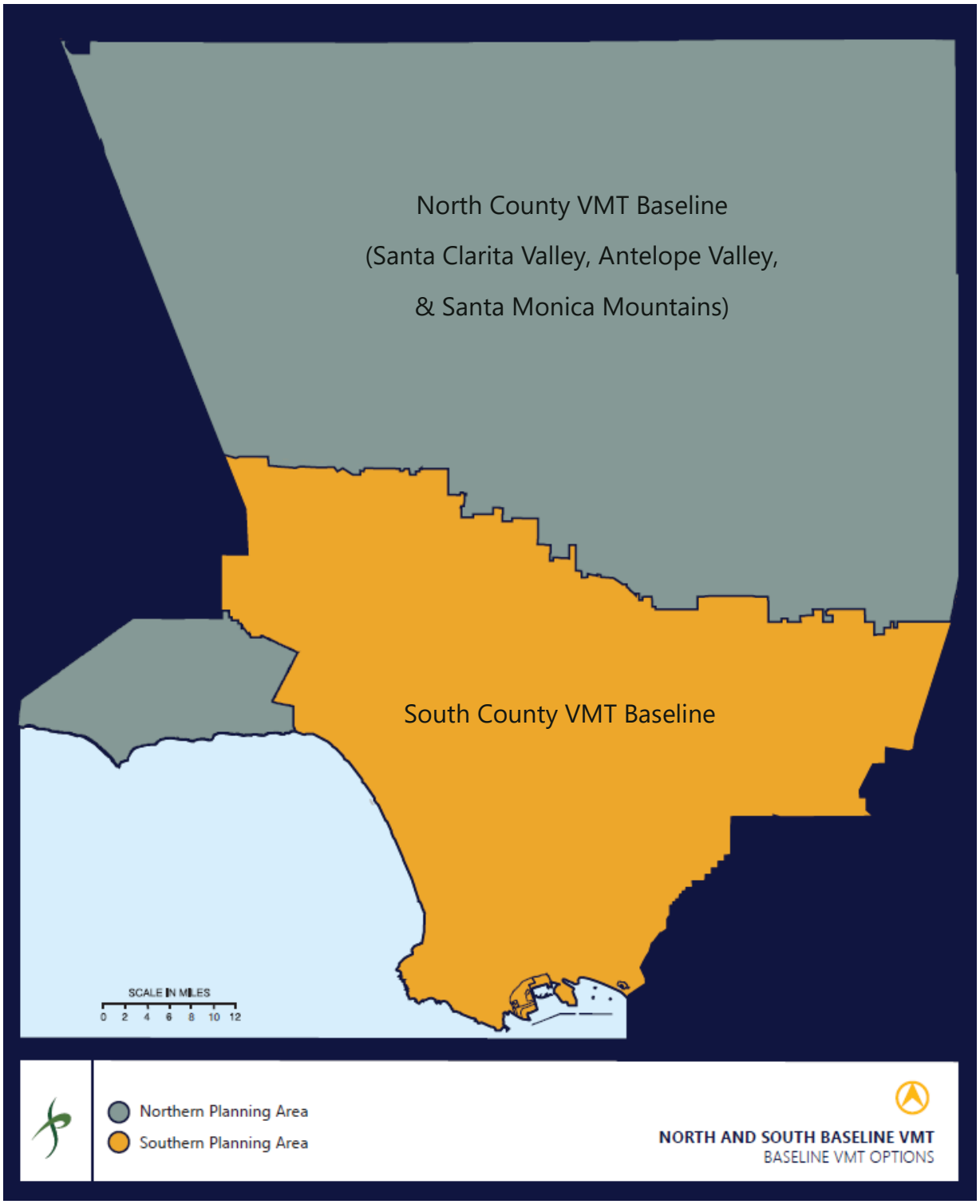
Table 4 below shows the North and South Baseline VMT metrics for the County. Future development projects and plans in each of these areas will be compared to the applicable Baseline VMT metrics to determine if they meet the County's thresholds for a VMT impact. The higher North Baseline VMT is acknowledging that projects and plans in the northern portion of the County will generate higher levels of VMT and should be compared to current VMT trends when determining the significance findings for VMT impacts. The lower South Baseline VMT is holding projects and plans in the southern portion of the County to a higher standard than if they were allowed to be compared to the average VMT for the overall County. However, projects and plans should be compared to current VMT trends in the southern portion of the County with similar land use context when determining if VMT impacts may occur. **Attachment B** shows the VMT trends by TAZ in comparison to the North and South Baseline VMT.

TABLE 4: NORTH AND SOUTH COUNTY BASELINE VMT

Region	Total VMT per Service Population	Residential VMT per Capita	Employment VMT per Employee
North County	**43.1**	**22.3**	**19.0**
South County	**31.1**	**12.7**	**18.4**

While the baseline VMT trends included in this table reflect the base year of the SCAG model, baseline conditions for CEQA purposes will be specific to the release date of a project's notice of preparation (NOP). The CEQA baseline can be estimated by interpolating between the 2012 and 2040 VMT data in the SCAG model to establish specific VMT values associated with a specific baseline year. The interpolated data will be contained in the County's VMT Tool.

Figure 4: North and South County Baseline VMT Boundaries



Chapter 3 – VMT Screening

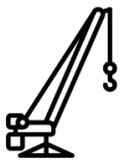
This chapter presents the VMT screening criteria to determine if a project requires a detailed VMT analysis. The County's options for screening projects from requiring a VMT analysis are generally based on a project's travel characteristics and their influence on VMT.

Screening Options

SB 743 allows lead agencies to use an impact screening method to streamline land use project review for VMT impacts, and OPR has provided guidance related to opportunities for screening projects that would be expected to generate low VMT. If a project does not pass an initial screening test, which means the project may generate VMT that exceeds a defined threshold, then a full VMT impact analysis would be conducted. The County's Steering Committee reviewed various options for VMT screening and recommends that the following screening criteria be used to determine if a VMT analysis is required. A project needs to meet only one of the screening criteria to be screened from further VMT analysis.

Project Size and Type Screening

OPR guidance states that projects that generate less than 110 daily trips may be screened from conducting a VMT analysis as shown below. In addition, local serving retail projects less than 50,000 square feet (50 ksf) may be presumed to have a less than significant 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. The County will allow the project size and type screening recommended by OPR.

Screening Option	Background	OPR Guidance
1. Project Size 	Small projects that would generate minimal VMT could be screened	**OPR Guidance** Projects with **<110 daily trips**[1] or local serving retail uses **<50 ksf**[2] **What does this mean for the County?** All projects generating fewer than 110 daily trips AND retail projects less than 50 KSF would not require a VMT analysis. A site access or queuing study could still be required.

1. 11 single-family units, or 20 multifamily units, generate < 110 daily trips (ITE, 10th edition).
2. Note that "local serving retail" screening can include general retail, pharmacy/drugstore, supermarket, bank, health club, café, or restaurant if project size is less than 50 KSF. Local serving retail will be defined in the County's VMT analysis guidelines.

Transit Proximity Screening

OPR guidance states that projects located within Transit Priority Areas (TPAs) or High-Quality Transit Corridor (HQTCs) may be screened from conducting a VMT analysis as shown below. 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. HQTCs are defined as a corridor with fixed route bus service frequency of 15 minutes (or less) during peak commute hours. More information on the definitions for major transit stops and HQTCs is provided in the figure below.

Screening Option	Background	OPR Guidance
2. Transit Proximity 	Projects located in high frequency areas may be presumed to generate less VMT due to higher transit usage	**OPR Guidance** Projects located within a **½ mile** of a major transit stop[1] or high-quality transit corridor[2] **What does this mean for the County?** The County can allow screening for projects within ½ mile of a major transit stop or for projects within a ½ mile of a bus stop along a high-quality transit corridor if they meet the requirements shown on the next slide. A traffic study could still be required.

1. A "major transit stop" is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (CA Public Resource Code, § 21064.3)

2. "High-quality transit corridor" (HQTC) means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (CA Public Resource Code, § 21155)

After reviewing OPRs guidance, the Steering Committee agreed that placing new development next to transit aligns with the County goals. However, the Steering Committee also agreed that OPRs definition of projects along HQTCs may be too broad given that the more suburban areas of the County have transit routes that qualify but the bus stops can be far apart. Therefore, the Steering Committee recommends that the following criteria be used to determine project screening due to transit proximity:

- Project is located within a ½ mile radius of an existing or planned major transit stop
- Project is located within a ½ mile radius of an existing or planned stop along a HQTC

Transit proximity screening can apply to a "planned" major transit station/stop or planned stop along a HQTC if the planned facility is fully funded by the transit agency (Metro for example) or being proposed and funded by the project. Projects located in high quality transit areas may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may not be appropriate if the project:

1. Has a Floor Area Ratio[4] (FAR) of less than 0.75
2. Includes more parking than required by the County
3. Is inconsistent with the applicable SCAG SCS (as determined by the County)
4. Replaces affordable[5] residential units with a smaller number of moderate- or high-income residential units

Figure 5 shows an example of major transit stop screening for areas near Metro and Metrolink rail stations in the County. **Figure 6** shows an example of high-quality transit corridor screening for major stops in Los Angeles County. Projects located within ½ mile of these transit stations and bus stops will not need to conduct a VMT analysis if they also meet the characteristics described above.

Affordable Housing Screening

OPR guidance suggests that affordable housing projects in infill locations improve jobs-housing match and that affordable housing generates less VMT than market-rate housing, and therefore does not require a VMT analysis. This screening option aligns with County and State goals to streamline affordable housing projects. OPR guidance suggests that projects consisting of 100% affordable residential development, in infill locations, can be screened as shown below. The County will allow screening for affordable housing, whether the units are part of a larger mixed-use development project of if the project is 100% affordable housing. In the case of mixed-use development projects, the affordable housing component can be screened out from the analysis with the remaining land uses undergoing a VMT assessment. It is recommended that the applicant confirm with County staff that the units meet the definition of affordable housing, based on the project type and location.

Screening Option	Background	OPR Guidance
3. Affordable Housing 	Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT	**OPR Guidance** Projects consisting of 100% affordable residential development, in infill locations, can be screened. **What does this mean for the County?** The County can allow screening for affordable housing.

Typically, affordable housing is defined as housing costs that absorb no more than 30% of household income. Source: "LA County Affordable Housing Outcomes Report, 2017."

[4] In the County of Los Angeles, the Floor Area Ratio (FAR) shall be the numerical value obtained through dividing the above ground gross floor area of a building or buildings located on a lot by the total area of such lot. Floor area ratio is expressed as a decimal number and shall be rounded to the tenths place. Source: Title 22 (Planning and Zoning) obtained from http://file.lacounty.gov/SDSInter/bos/supdocs/97129.pdf.

[5] Typically, affordable housing is defined as housing costs that absorb no more than 30% of household income. Source: LA County Affordable Housing Outcomes Report, 2017.

Figure 5: Example of Major Transit Stop Screening for Rail Stations in Los Angeles County

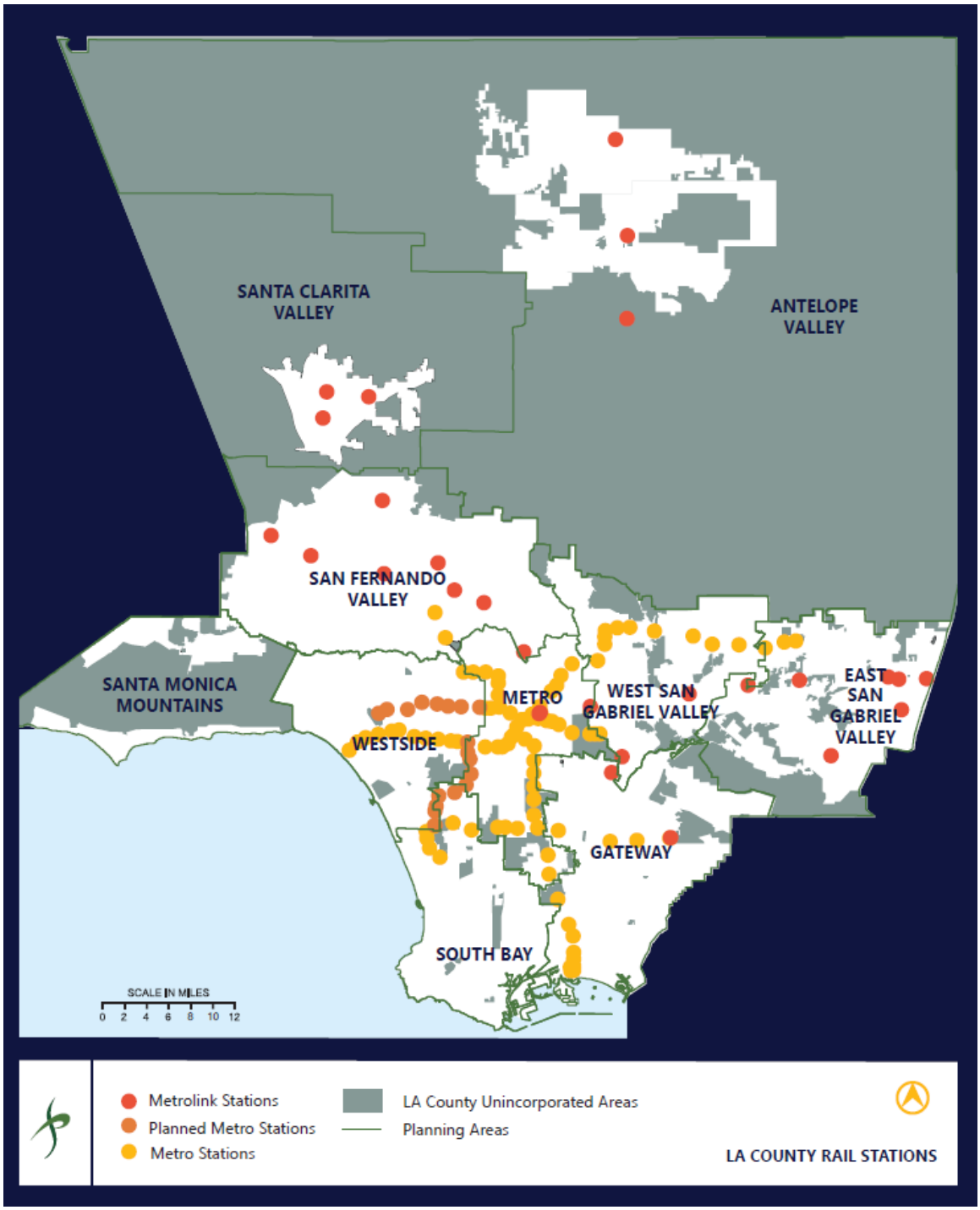
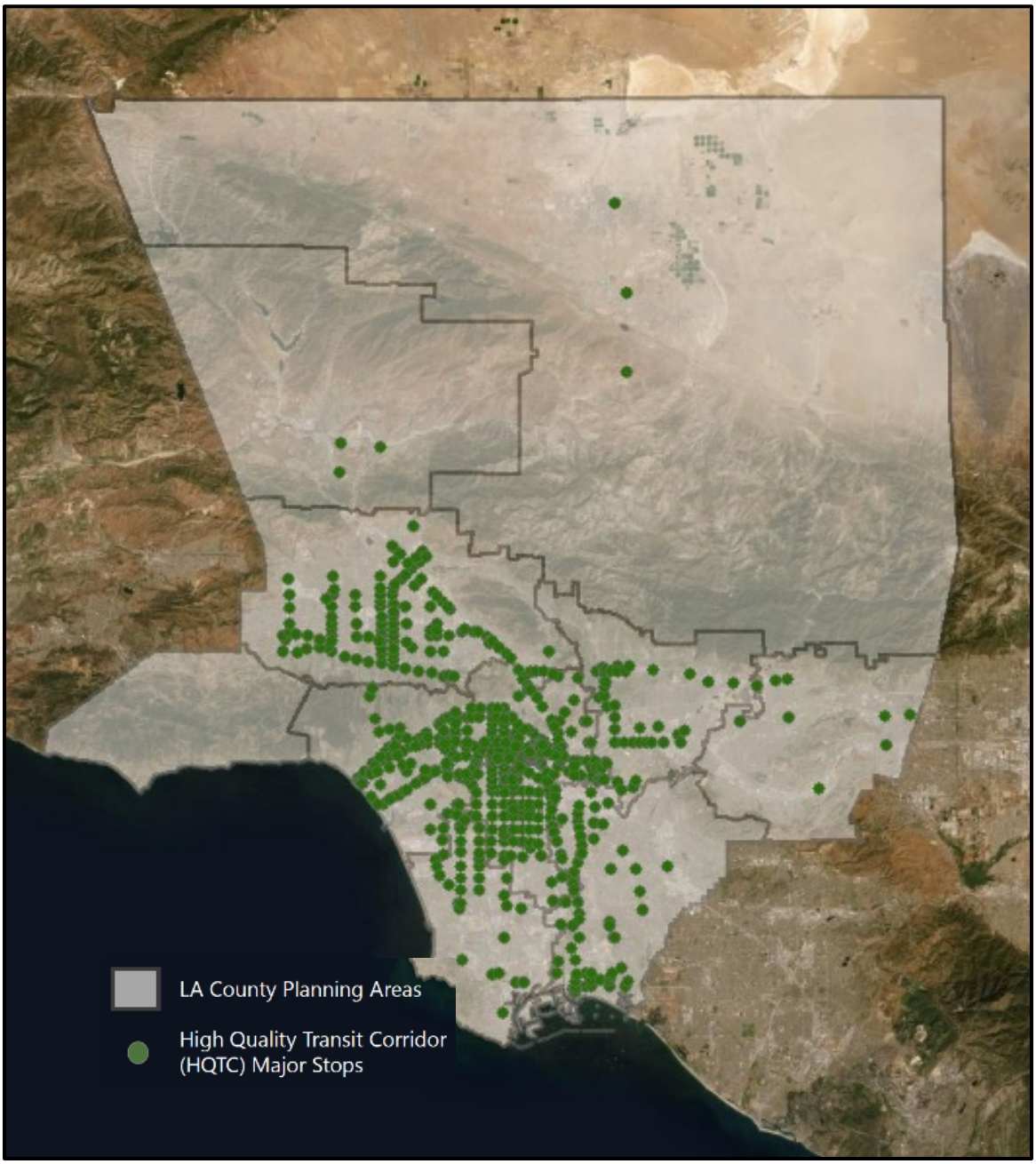


Figure 6: Example of Metro High-Quality Transit Corridor Screening in Los Angeles County



Please note that the green data points represent major stops as reported by LA Metro.

Transportation Projects Screening

Transportation projects that promote non-auto travel, improve safety, or improve traffic operations at current bottlenecks may be screened from VMT analysis. This includes transit, bicycle and pedestrian facilities, intersection traffic control (e.g., traffic signals or roundabouts), or widening at intersections to provide new turn lanes. Transportation projects that add roadway vehicle capacity, such as road-widening or adding a through-lane at an intersection, may lead to a substantial and measurable increase in VMT. Therefore, these types of transportation projects should generally not be exempt from VMT analysis. In the case where a road-widening project also includes a new bicycle facility as part of the design, a VMT analysis is still required.

The following list provides example transportation projects that may be screened from VMT analysis (please see **Attachment C** for a more detailed list):

- 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
- 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
- Addition of a new lane that is permanently restricted to use only by transit vehicles
- Reduction in number of through lanes
- Installation, removal, or reconfiguration of traffic control devices, including Transit Signal Priority (TSP) features
- Timing of signals to optimize vehicle, bicycle, or pedestrian flow
- Installation of roundabouts or traffic circles
- Installation or reconfiguration of traffic calming devices
- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve non-motorized travel

Los Angeles County VMT Screening Criteria

Table 5 provides a summary of VMT screening options for projects in the County as recommended by the Steering Committee. A project would only need to meet one of the following criteria to be screened from further VMT analysis.

TABLE 5: LOS ANGELES COUNTY VMT SCREENING CRITERIA SUMMARY

Screening Categories	Project Requirements to Meet Screening Criteria
Project Size	A project that generates 110 or fewer daily trips.
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.
Transit Proximity	A project that is located within a ½ mile of a major transit stop or within a ½ mile of a bus stop on a high-quality transit corridor (HQTC). A major transit stop is a rail station or a stop with two or more intersecting bus routes with service frequency of 15 minutes or less during commute periods. A HQTC is a corridor with fixed route bus service with frequency of 15 minutes or less during peak 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 Sustainable Communities Strategy (as determined by the County) - Does not provide more parking than required by the County - Does not replacing affordable housing units
Affordable Housing	A residential project that provides affordable housing units.
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 (see **Attachment C** for detailed list).

Note: More detailed explanations of the above screening categories can be found in Chapter 3 of this report.

Chapter 4 – VMT Impact Thresholds

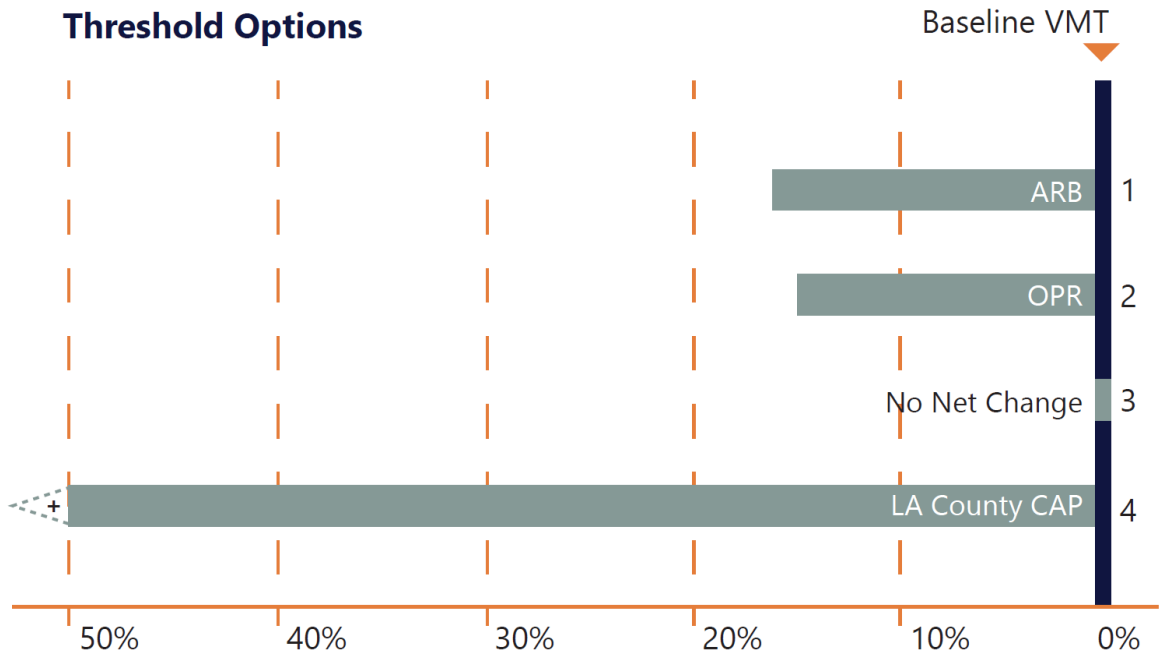
CEQA Guidelines Section 15064.7, Thresholds of Significance, encourages lead agencies to develop and publish thresholds of significance. Pursuant to Section 15064.7(b), the County will adopt a threshold of significance for VMT by resolution based upon the recommendations of the Steering Committee and approval by the County Board of Supervisors. This chapter presents the threshold options considered along with the Steering Committee's recommended threshold for determining VMT impacts.

VMT Threshold Options

Lead agencies have multiple options for setting thresholds. Under any option, the lead agency must develop its own substantial evidence to support its preferred threshold and should consider multiple perspectives. These perspectives include those from the community in general as well as specific stakeholder perspectives from the development community and environmental protection groups. A threshold that is too stringent could lead to a permanent significant and unavoidable VMT impact finding increasing the complexity of environmental review process. Conversely, a threshold that does not result in any significant impacts could lead to missed opportunities to reasonably reduce VMT and related environmental impacts. If a project impact (or lack thereof) is challenged, there needs to be substantial evidence supporting the lead agency's decisions.

The Steering Committee considered multiple VMT threshold options based on state guidance and regional plans including VMT reduction targets prepared by OPR and Air Resources Board (ARB). The sustainability goals contained in the County's Climate Action Plan ("*OurCounty*") were also considered. **Figure 7** illustrates the range of VMT threshold options for the County.

Figure 7: VMT Threshold Options



Source: Fehr and Peers, 2020
[1]California Air Resources Board 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals (Figure 3), January 2019. Accessed https://ww2.arb.ca.gov/sites/default/files/2019-01/2017_sp_vmt_reductions_jan19.pdf on 2/7/20.
[2]Office of Planning Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA, December 2018. Accessed http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf on 2/7/20.
[3]No net change in average VMT per service population compared to the regional baseline (planning area or north/south TBD).
[4]LA County Draft 2020 Climate Action Plan VMT targets for mobility element

OurCounty 2020 Climate Action Plan

The County has identified a robust package of sustainability goals and policies as part of its Draft 2020 Climate Action Plan, "*OurCounty*". The County's CAP promotes transit-oriented communities, the reduction of single occupancy vehicle trips, and dramatically increasing the number of trips by taken by transit, biking, walking, or micro-mobility. The following goals and policies also align with the anticipated outcomes of SB 743:

- **Goal 8: Circulation System** – A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency
  - Strategy 8A – Reduce VMT by prioritizing alternatives to single-occupancy vehicles
  - Strategy 8B – Improve transportation health and safety outcomes
- **VMT Targets**
  - 2025 Target – Reduce VMT per capita to 20 miles by increasing new housing built within ½ mile of high frequency transit to 50%
  - 2025 Target – Reduce VMT per capita to 15 miles by increasing new housing built within ½ mile of high frequency transit to 65%

- 2025 Target – Reduce VMT per capita to 10 miles by increasing new housing built within ½ mile of high frequency transit to 75%

The County's CAP provides both short-term and longer-term strategies to reduce GHG emissions resulting from a variety of sources, including VMT. Given that the VMT reduction goals in the CAP will be achieved through a combination of reductions to existing VMT levels as well as new development being placed in more VMT efficient areas of the County, the specific VMT reduction goals are not directly tied to the amount of VMT reduction that should be required by new development projects. Therefore, VMT reduction targets from OPR and ARB were considered for the development of VMT impact thresholds.

OPR Threshold Option

OPR recommends that lead agencies select a significance threshold that aligns with all three statutory goals listed in Section 21099 of the Public Resources Code: (1) reduction of greenhouse gas emissions, (2) development of multimodal transportation networks and (3) a diversity of land uses. The State has clear quantitative targets for GHG emissions reduction set forth in law and based on scientific consensus, and the depth of VMT reduction needed to achieve those targets has been quantified. Tying VMT thresholds to GHG reduction also supports the two other statutory goals of promoting land use diversity and providing multimodal travel options. Therefore, to ensure adequate analysis of transportation impacts, OPR recommends using quantitative VMT thresholds linked to GHG reduction targets.

Based on OPR's review of the applicable research, and in light of an assessment by ARB in quantifying the need for VMT reduction in order to meet the State's long-term climate goals, OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development (i.e., 15% below the Baseline VMT) may be a reasonable threshold.

Air Resources Board Threshold Option

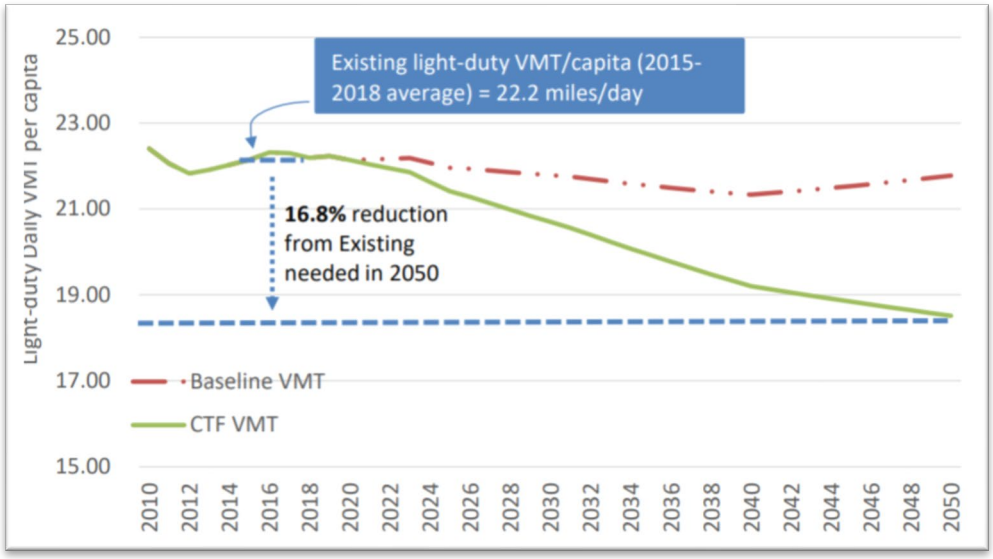
The California Air Resources Board (ARB) is responsible for developing a plan[6] to detail how the State will achieve its GHG emissions reduction targets mandated by law (SB 375, SB32 and Executive Order S-3-05). In the transportation sector, GHG emissions reducing measures include low carbon fuels, cleaner vehicles, and strategies to promote sustainable transportation choices that result in reduced VMT.

ARB developed a scenario-based modeling system (called *Vision*) that was used to identify foreseeable emission reductions associated with existing mobile-source regulations, and to explore different combinations of further advancements in technologies, fuels, and transportation system efficiencies. They modeled two scenarios: Baseline and Cleaner Technologies and Fuel (CTF).

[6]California Air Resources Board (Jan. 2019) *California Air Resources Board 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals*, available at https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-and-relationship-state-climate

Figure 8 shows the results of the two modeled scenarios produced by ARB. The results show that a 16.8% reduction in VMT per capita for light-duty vehicles, below existing levels, is needed in order to achieve the state required target of 80% reduction in GHGs by 2050. Additionally, a 14.3% reduction in total VMT per capita, which includes truck VMT, is recommended. Since the goals of SB 743, along with the OPR state guidance, focus on passenger vehicle VMT, the goal of achieving a 16.8% reduction in VMT per capita is more applicable for VMT analysis in the County. ARB notes that this is a "non-binding," supportive recommendation but can serve as an alternated assessment tool for jurisdictions that choose to use them to complete the analyses directed by the CEQA Guidelines.

Figure 8: ARB VMT Reductions and Relationship to State Climate Goals



Source: California Air Resources Board Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals (Figure 3), January 2019.

Los Angeles County VMT Thresholds

Land Use Projects and Plans

The Steering Committee recommends that the County define VMT impacts for land use projects and plans based on the ARB target of a 16.8% reduction from Baseline VMT. Doing so will align the County with the latest state climate goals and help achieve its own targets as outlined in the *OurCounty* CAP. A 16.8% VMT reduction threshold is also setting a higher bar than the suggested OPR threshold of 15% based on the latest research available.

Transportation Projects

For roadway widening projects, a significant impact would occur if the project increased the total amount of VMT in the study area when compared to baseline conditions. The VMT thresholds for all projects and plans in Los Angeles County are summarized below in **Table 6**.

TABLE 6: LOS ANGELES COUNTY VMT THRESHOLDS

Project Type	Threshold for Determination of Significant VMT Impact
Residential Project	Project exceeds 16.8% below the North or South County Baseline VMT for home-based VMT per capita
Employment (Commercial or Industrial) Project	Project exceeds 16.8% below the North or South County Baseline VMT for home-based work VMT per employee
Regional Retail Project	Project results in a net increase in total VMT per service population in comparison to the North or South County Baseline VMT
Mixed-Use Projects	Evaluate each project land use component separately using the criteria above
Land Use Plans (Community Plan, Specific Plan)	Total VMT per service population generated by the Plan exceeds 16.8% below the North or South County Baseline VMT
Other land use types	Project exceeds 16.8% below the North or South County Baseline VMT. For land use types not listed above, the County 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 applicable County baseline. For other projects, the total VMT per service population can be compared to the County baseline, or the net change in VMT can be compared within the study area.
Transportation Projects or Plans	Project results in an increase in VMT in comparison to the baseline VMT in the study area

VMT Analysis Methodology

For projects that do not meet any of the screening criteria described in Chapter 3, a VMT analysis would be required to determine if the project or plan exceeds the County's VMT thresholds presented above. The VMT analysis would rely on the best available data to inform trip generation and trip length estimates for the project uses. For land use plans (e.g., specific plans or community plans) and projects consisting of typical land use types, such as residential, office, and retail land uses, the VMT analysis can be conducted using the most recent version of the SCAG model. For other project types, such as a sports venue, conference center, or performing arts center, the VMT analysis should be customized to determine the unique trip generation and trip length characteristics of the proposed uses.

As part of the SB 743 implementation process, a VMT estimating tool will be developed for the County. This tool will include a database of VMT information for every County TAZ using data from the SCAG model. The VMT data will be reported as daily VMT per service population, VMT per capita, and VMT per employee. The screening criteria will also be built into the tool. The County or project applicant will need to run the SCAG model for large projects (bigger than one TAZ) or for projects with land uses that are not already located within that area of the County (i.e., not reflected in the applicable TAZ).

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 (using the County's VMT tool described above or conducting a model run) and should be reported as VMT per capita (residential projects), VMT per employee (office projects), or VMT per service population (other land uses).

- **Cumulative Conditions**: A project that is below the County's thresholds based on VMT per capita (residential projects), VMT per employee (office projects), or VMT per service population (other land uses) and does not have a VMT impact compared to baseline conditions would also not have a cumulative impact as long as it is aligned with long-term environmental goals and relevant plans.

Project effects on VMT can also be considered under cumulative conditions to determine if community plans or countywide VMT would be higher/lower in the future with the project in place. To evaluate the project's effects on VMT, the future year travel demand model can be updated by the transportation planner/engineer completing the VMT analysis to reflect the project and determine if VMT increases or not with the project. A redistribution of land use can be completed to ensure that the "no project" assessment and the "with project" assessment contain the same land use control totals, especially if the project is large enough that it would affect land use absorption elsewhere.

Chapter 5 – VMT Mitigation Strategies

The land use context of Los Angeles County presents a challenge to the effectiveness of common TDM strategies for VMT reduction at individual project sites in the more suburban are rural areas of the County. Despite this challenge, identifying mitigations that reduce the number of single-occupant vehicle trips and miles traveled generated by proposed projects is still relevant. Land use and transportation plans, such as Community Plans or Active Transportation Plans, provide an opportunity to reduce VMT through defining land uses mixes and densities and providing a circulation network that minimizes longer distance trips and promotes travel through active modes of transportation. This chapter summarizes the near-term TDM strategies suited to the County's transportation and land use context and identifies potential longer-term mitigation programs that may be worthy of further evaluation.

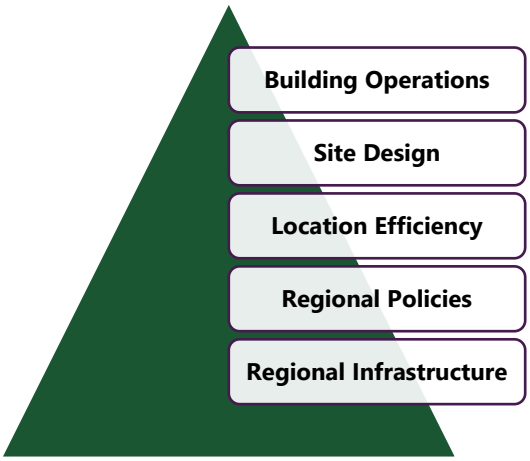
VMT Mitigation through TDM

Projects with VMT impacts should have mitigation options available for implementation. 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 proposed land uses, modifying the project design features, or by implementing TDM strategies. TDM strategies have been determined to be among the most effective VMT mitigators. TDM strategies are reductions made through project site modifications, programming, and operational changes.

The scale of a TDM strategy is an important consideration for mitigation effectiveness. The biggest effects of TDM strategies on VMT (and resultant emissions) derive from regional policies related to land use location efficiency and infrastructure investments that support taking transit, walking, and bicycling. While there are many measures that can influence VMT and emissions related to site design and building operations, those measures have smaller effects that are often dependent on final building tenants.

Figure 9 presents a conceptual illustration of the relative importance of scale.

Figure 9: Transportation-Related GHG Reduction Measures



TDM strategies in *Quantifying Greenhouse Gas Mitigation Measures*[7] and other research papers published since its release can be used to quantify the VMT reduction benefits for various strategies. Of the 53 transportation measures presented in the CAPCOA report, 41 are applicable at the building and site level. The remaining nine are functions of, or depend on, site location or actions by local and regional agencies. **Table 7** summarizes the strategies according to the scope of implementation and the agents who would implement them.

TABLE 7: SUMMARY OF TRANSPORTATION-RELATED CAPCOA MEASURES

Scope	Agents	CAPCOA Strategies
Building Operations	Employer, Manager	**26 total** from five CAPCOA strategy groups: • **3** from 3.2 Site Enhancements group • **3** from 3.3 Parking Pricing Availability group • **15** from 3.4 Commute Trip Reduction group • **2** from 3.5 Transit Access group • **3** from 3.7 Vehicle Operations group
Site Design	Owner, Architect	**15 total** from three strategy groups: • **6** from 3.1 Land Use group • **6** from 3.2 Site Enhancements group • **1** from 3.3 Parking group • **2** from 3.6 Road Access group

[7] California Air Pollution Control Officers Association (CAPCOA), *Quantifying Greenhouse Gas Mitigation Measures,* 2010. https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/capcoa_quantifying_ghg_measures.pdf.

Location Efficiency	Developer, Local Agency	**3 shared** with Regional and Local Policies
Alignment with Regional and Local Policies	Regional and local agencies	**3 shared** with Location Efficiency
Regional Infrastructure and Services	Regional and local agencies	**6 total**

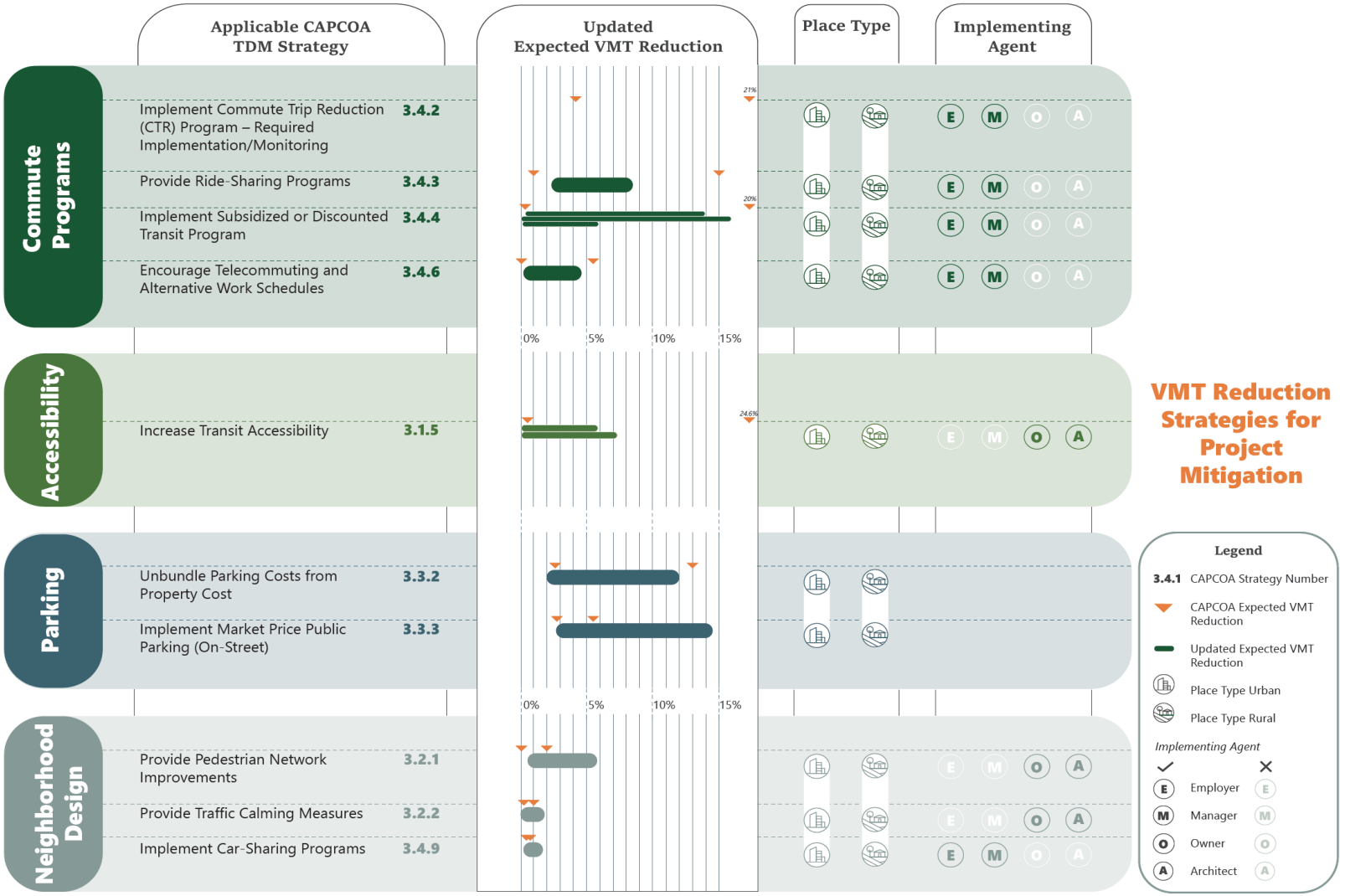
TDM Strategies: Near-Term

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 County.

The research provided by CAPCOA estimates the effectiveness of VMT reductions by land use type, such as residential or office, and place type, such as urban or suburban. The TDM strategies illustrated below in **Figure 10** can be considered for VMT mitigation measures in Los Angeles County. **Table 8** also provides an overview of the TDM strategies that are applicable in Los Angeles County and shows how they relate to the County's Sustainability Plan. **Attachment D** provides a detailed table showing these project-specific TDM strategies and the range of VMT reduction based on CAPCOA research.

To ensure that mitigation measures are implemented and effective, mitigation monitoring will be required once the project is in operation. Potential organizations have been listed for mitigation monitoring in Table 8. The actual reporting structure will be determined through further County discussions, or upon project review and approval.

Figure 10: Near-Term VMT Mitigation TDM Strategies



Note: Please note that each reduction is independent, so any combination is not cumulative.

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TABLE 8: TDM STRATEGIES AND RELATIONSHIP TO LA COUNTY SUSTAINABILITY PLAN

LA County Sustainability Plan Strategy	Applicable CAPCOA TDM Category	Applicable CAPCOA TDM Strategy	County Monitoring Body[1]
Strategy 8A: Reduce vehicle miles traveled by prioritizing alternatives to single-occupancy vehicles	Commute Trip Reduction Programs	Implement Commute Trip Reduction Program – Required Implementation/Monitoring	Possible DPW, DRP, TMO, or Self Report
		Provide Ride-Sharing Programs	Possible DPW, DRP, TMO, or Self Report
		Implement Subsidized or Discounted Transit Program	Possible DPW, DRP, TMO, or Self Report
		Encourage Telecommuting and Alternative Work Schedules	Possible DPW, DRP, TMO, or Self Report
	Land Use/Location	Increase Transit Accessibility	Possible DPW or Self Report
	Parking Policy/ Pricing	Unbundle Parking Costs from Property Cost	Possible DPW or DRP
		Implement Market Price Public Parking (On-Street)	Possible DPW or DRP
	Neighborhood/ Site Enhancements	Implement Car-Sharing Programs	Possible TMO or Self Reporting
Strategy 8B: Improve transportation health and safety outcomes	Neighborhood/ Site Enhancements	Provide Pedestrian Network Improvements	Possible DPW or DRP
		Provide Traffic Calming Measures	Possible DPW

Note: 1. DPW - Department of Public Works; DRP - Department of Regional Planning; TMO - Transportation Management Organization (possible future organization that may be in place to administer and monitor VMT reduction strategies).

VMT Mitigation Programs: Long-Term Strategies

In addition to the conventional TDM programs described above, two new concepts that are not yet available but being explored for feasibility by other jurisdictions are described below. These mitigation programs are currently being researched by the County and may be available as mitigation options in the future.

- **VMT Mitigation Exchange** – An exchange program is a concept where VMT generators can select from a pre-approved list of mitigation projects that may be located within the same jurisdiction or possibly from a larger area. The intent is to match the project's needed VMT reduction with a specific mitigation project of matching size and to provide evidence that the VMT reduction will reasonably occur.

- **VMT Mitigation Bank** – A mitigation bank is intended to serve as an entity or organization that pools fees from development projects across multiple jurisdictions to spend on larger scale mitigation projects. This concept differs from the more conventional impact fee program approach described above in that the fees are directed to a few larger projects that have the potential for a more significant reduction in VMT and the program is regional in nature.

As these new mitigation program concepts are still evolving, the specific descriptions and elements of the programs will likely change. The first resource document to describe and assess these programs was recently published by U.C. Berkeley and is entitled, "*Implementing SB 743, An Analysis of Vehicle Miles Traveled Banking and Exchange Frameworks*," (The University of California Institute of Transportation Studies, October 2018). This document is a useful starting place for a dialogue about these programs.

The findings of the report are supportive of these concepts noting the following about the reasoning for their consideration.

> *Yet while methods for reducing VMT impacts—such as mileage pricing mechanisms, direct investments in new public transit infrastructure, transit access subsidies, and infill development incentives—are well understood, they may be difficult in some cases to implement as mitigation projects directly linked or near to individual developments. As a result, broader and more flexible approaches to mitigation may be necessary. In response, state and local policy makers are considering the creation of mitigation "banks" or "exchanges." In a mitigation bank, developers would commit funds instead of undertaking specific on-site mitigation projects, and then a local or regional authority could aggregate these funds and deploy them to top-priority mitigation projects throughout the jurisdiction. Similarly, in a mitigation exchange, developers would be permitted to select from a list of pre-approved mitigation projects throughout the jurisdiction (or propose their own), without needing to mitigate their transportation impacts on-site. Both models can be applied at a city, county, regional, and potentially state scale, depending on local development patterns, transportation needs and opportunities, and political will.*

This reasoning is important in Los Angeles County because mitigating VMT impacts on a project-by-project basis is challenging, especially in suburban and rural land use contexts where travel choices are limited. That said, the report and research conducted for this study identified the following key challenges with these types of programs.

- **Challenges for Mitigation Exchanges**
  - Potential mismatch between funds and mitigation projects available
  - Potential for reduced oversight of project selection
  - Difficulty in verifying VMT reductions and their sustainability, especially with VMT generation changing over time due to disruptive transportation trends such as TNCs and autonomous vehicles (AVs)
  - Difficulty in demonstrating an essential nexus
  - Potential opposition to mitigation not directly occurring in the project impact area, especially if impacts are concentrated in or near disadvantaged communities and the mitigation occurs in more affluent areas

- **Challenges for Mitigation Banks**
  - Increased need to conduct careful CEQA/Mitigation Fee Act analysis
  - Accounting challenge in delay from fee payment to project funding
  - Greater need for program administration budget
  - Political difficulty in distributing mitigation projects and coordinating across County
  - Difficulty in verifying VMT reductions and their sustainability, especially with VMT generation changing over time due to disruptive transportation trends such as TNCs and AVs
  - Difficulty in demonstrating an essential nexus
  - Potential opposition to mitigation not directly occurring in the project impact area especially if impacts are concentrated in or near disadvantaged communities and the mitigation occurs in more affluent areas

Another important element for either of these concepts is to have an entity that is responsible for establishing, operating, and maintaining the program. This is a potential role for a regional entity (such as SCAG) or sub-regional entity, especially for programs that would extend mitigation projects beyond individual jurisdictional boundaries. A key part of 'operations' is that the entity will need the capability to provide verification of the VMT reduction performance and to adjust the program projects over time. A more localized entity could help minimize potential concerns about mitigation not occurring near the project site or in the same community,

The potential desire for VMT mitigation exchanges or banks may depend on how lead agencies and developers respond to the initial implementation of SB 743 following statewide implementation on July 1, 2020. If many projects are found to have significant VMT impacts and problems occur with finding feasible mitigation measures for individual projects, then interest may grow for more program-based mitigation.

ATTACHMENTS

Attachment A – Tables and Charts showing VMT Data

Attachment B – SCAG VMT maps by TAZ

Attachment C – Screened Transportation Projects

Attachment D - VMT Reduction Strategies for Project Mitigation

Attachment A: Tables and Charts Showing VMT Data

Table A1: VMT for County and 10 Planning Areas in Comparison to SCAG Regional Average

Region	Baseline VMT/Service Population	Comparison to Regional VMT/Service Population	Baseline Home-Based VMT/Capita	Comparison to Regional Home-Based VMT/Capita	Baseline Home-Based Work VMT/Employee	Comparison to Regional Home-Based Work VMT/Employee
SCAG [Regional Average]	34.2	-	15.0	-	19.0	-
Los Angeles County	32.0	-6%	13.4	-11%	18.4	-3%
Los Angeles County Unincorporated	35.9	5%	17.0	13%	20.7	9%
Planning Areas						
Antelope Valley	41.0	20%	21.0	40%	11.0	-42%
Santa Clarita Valley	43.7	28%	24.1	61%	22.1	16%
San Fernando Valley	30.6	-11%	13.4	-11%	17.4	-8%
Santa Monica Mountains	48.5	42%	21.9	46%	25.7	35%
Westside	30.7	-10%	9.0	-40%	17.6	-7%
East San Gabriel Valley	37.6	10%	18.1	21%	21.7	14%
West San Gabriel Valley	33.8	-1%	14.1	-6%	19.5	3%
Metro	25.3	-26%	9.8	-35%	17.5	-8%
Gateway	32.6	-5%	13.3	-11%	18.7	-2%
South Bay	32.0	-6%	13.1	-13%	18.6	-2%

Table A2: VMT for 10 Planning Areas in Comparison to Los Angeles County Average

Region	Baseline VMT/Service Population	Comparison to County VMT/Service Population	Baseline Home-Based VMT/Capita	Comparison to County Home-Based VMT/Capita	Baseline Home-Based Work VMT/Employee	Comparison to County Home-Based Work VMT/Employee
Los Angeles County	32.0	-	13.4	-	18.4	-
Planning Areas						
Antelope Valley	41.0	28%	21.0	57%	11.0	-40%
Santa Clarita Valley	43.7	37%	24.1	80%	22.1	20%
San Fernando Valley	30.6	-4%	13.4	0%	17.4	-5%
Santa Monica Mountains	48.5	52%	21.9	63%	25.7	40%
Westside	30.7	-4%	9.0	-33%	17.6	-4%
East San Gabriel Valley	37.6	18%	18.1	35%	21.7	18%
West San Gabriel Valley	33.8	6%	14.1	5%	19.5	6%
Metro	25.3	-21%	9.8	-27%	17.5	-5%
Gateway	32.6	2%	13.3	-1%	18.7	2%
South Bay	32.0	0%	13.1	-2%	18.6	1%

Chart A1: Daily Total VMT per Service Population (Baseline) for Each Planning Area

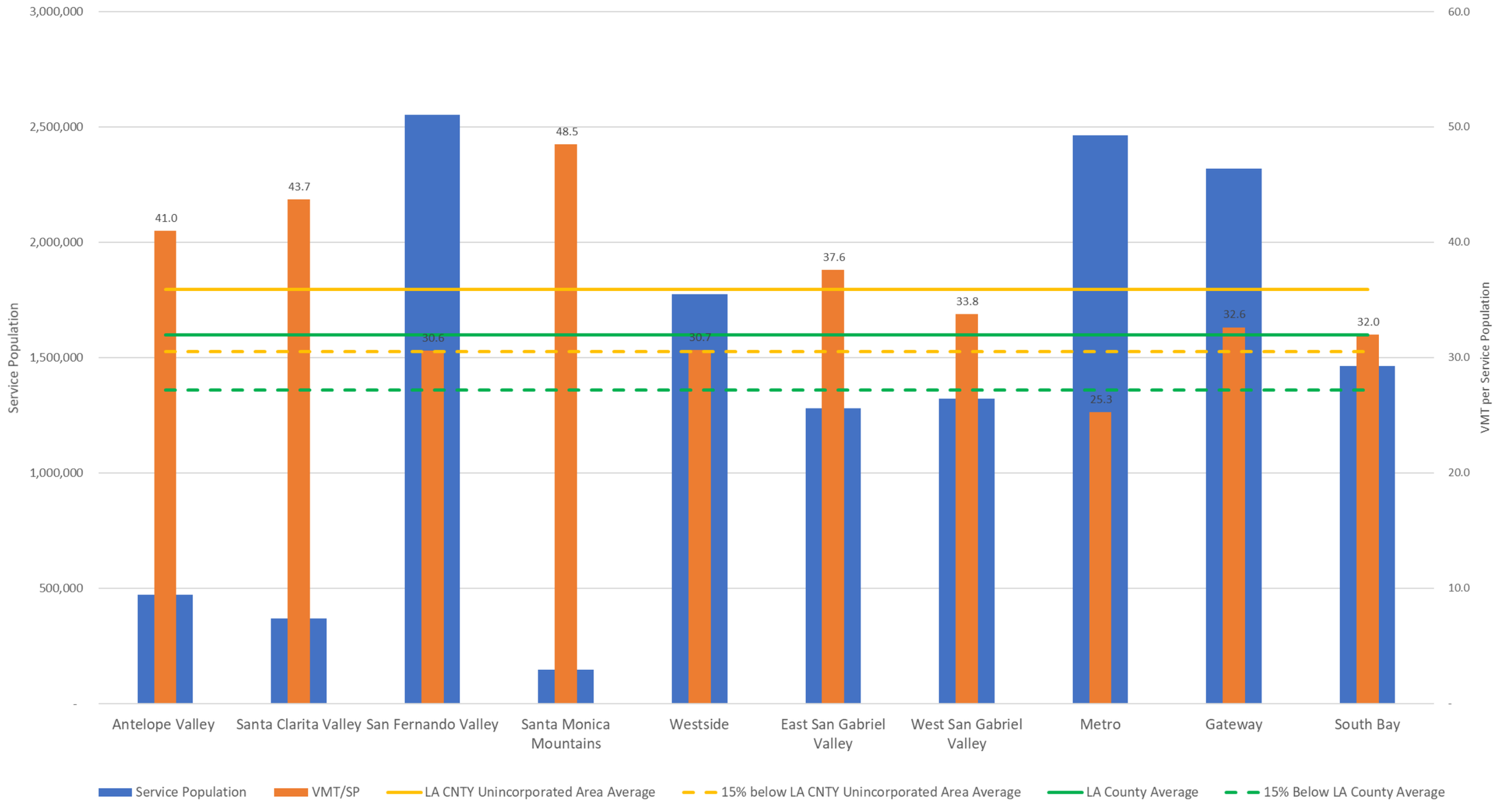


Chart A2: Daily Home-Base VMT per Capita (Baseline) for Each Planning Area

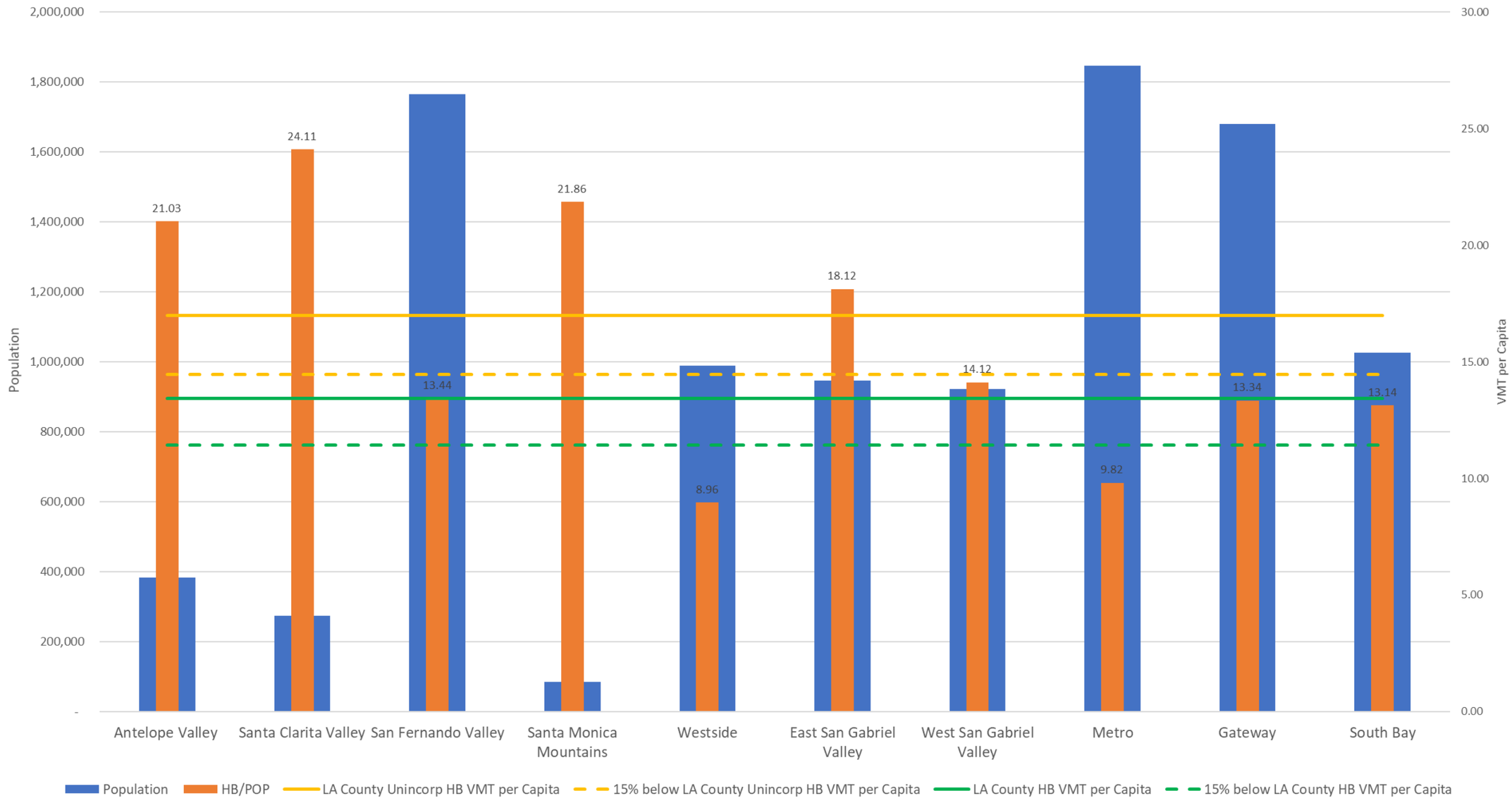
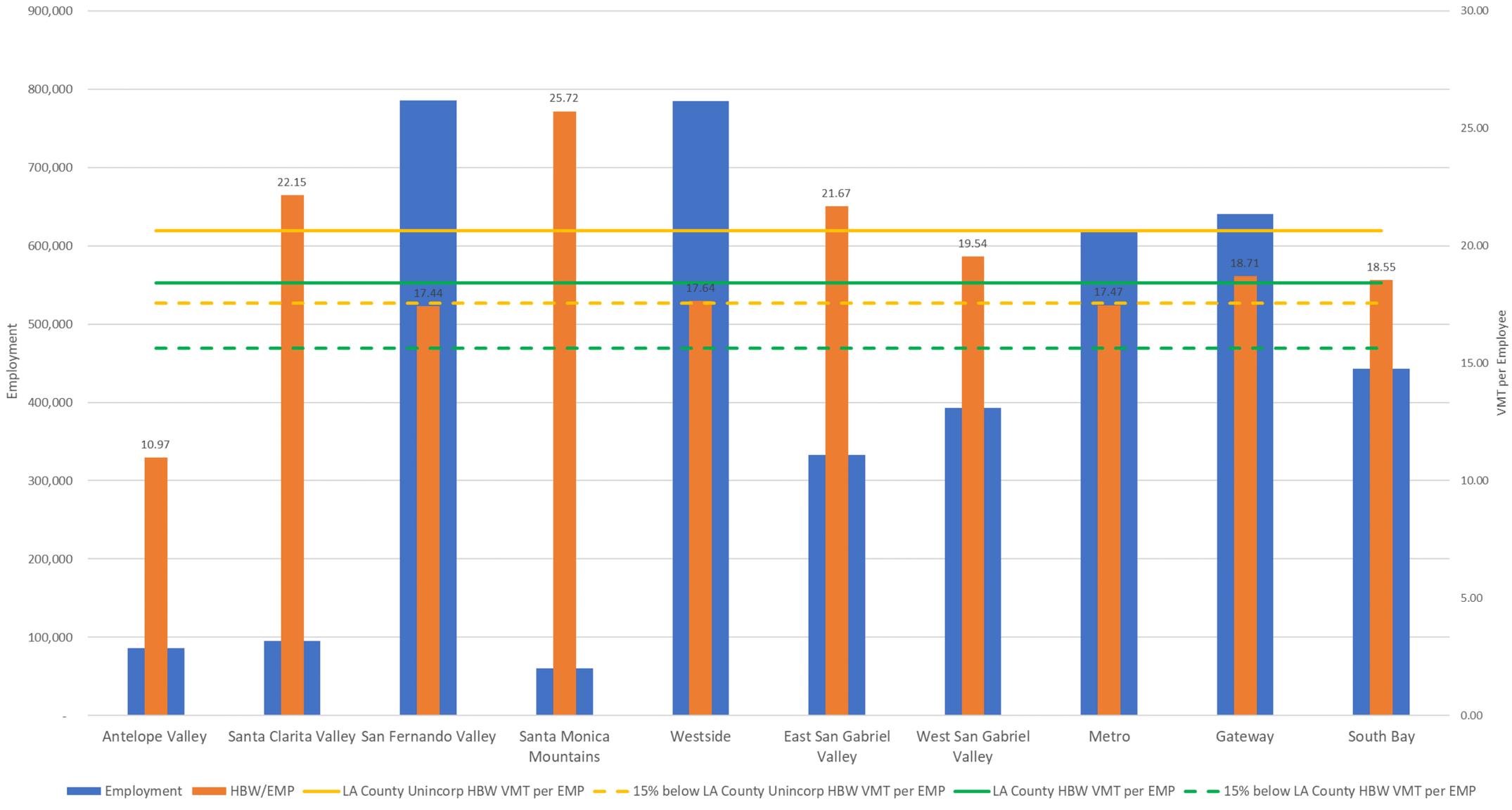
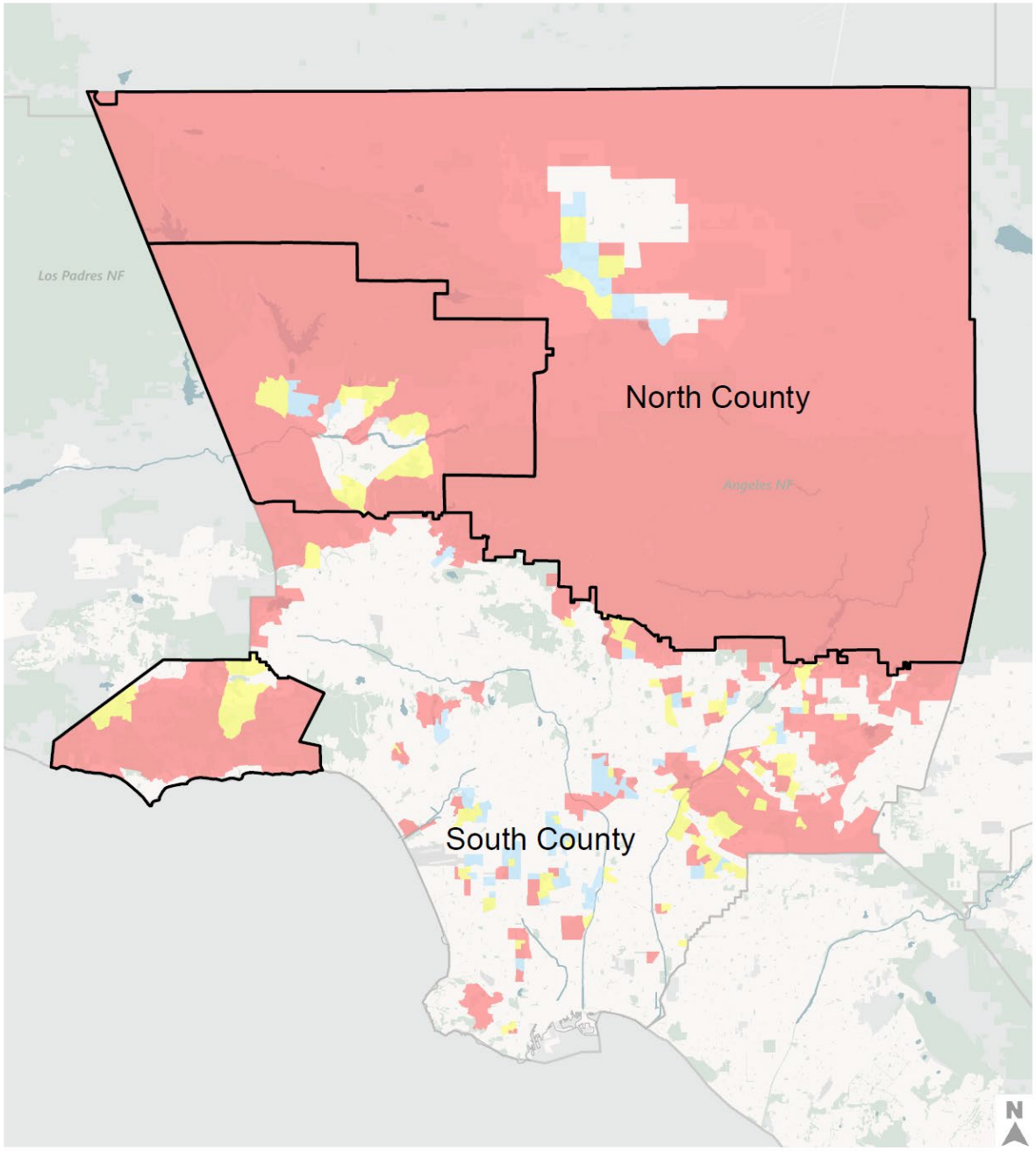


Chart A3: Daily Home-Base Work VMT per Employee (Baseline) for Each Planning Area



Attachment B: SCAG VMT Maps by TAZ

Figure B1: VMT per Service Population Compared to the North and South Baseline VMT



North County
Less than 16.8% below North or South Avg
0 to 16.8% below North or South Avg
Higher than North or South Avg

VMT per Service Population compared to North & South Area Average

Figure B2: Home-Based VMT per Resident compared to the North and South Baseline VMT

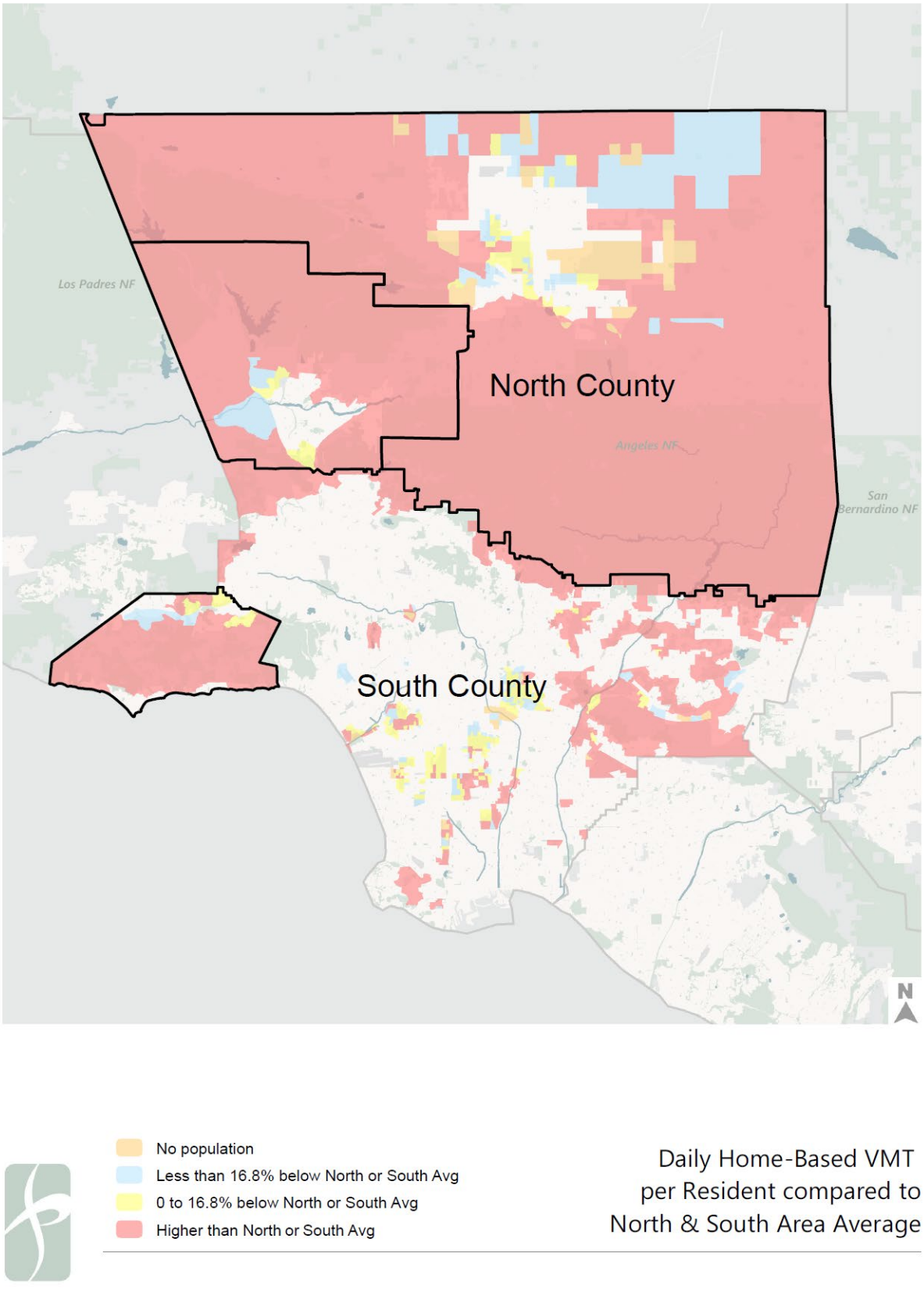
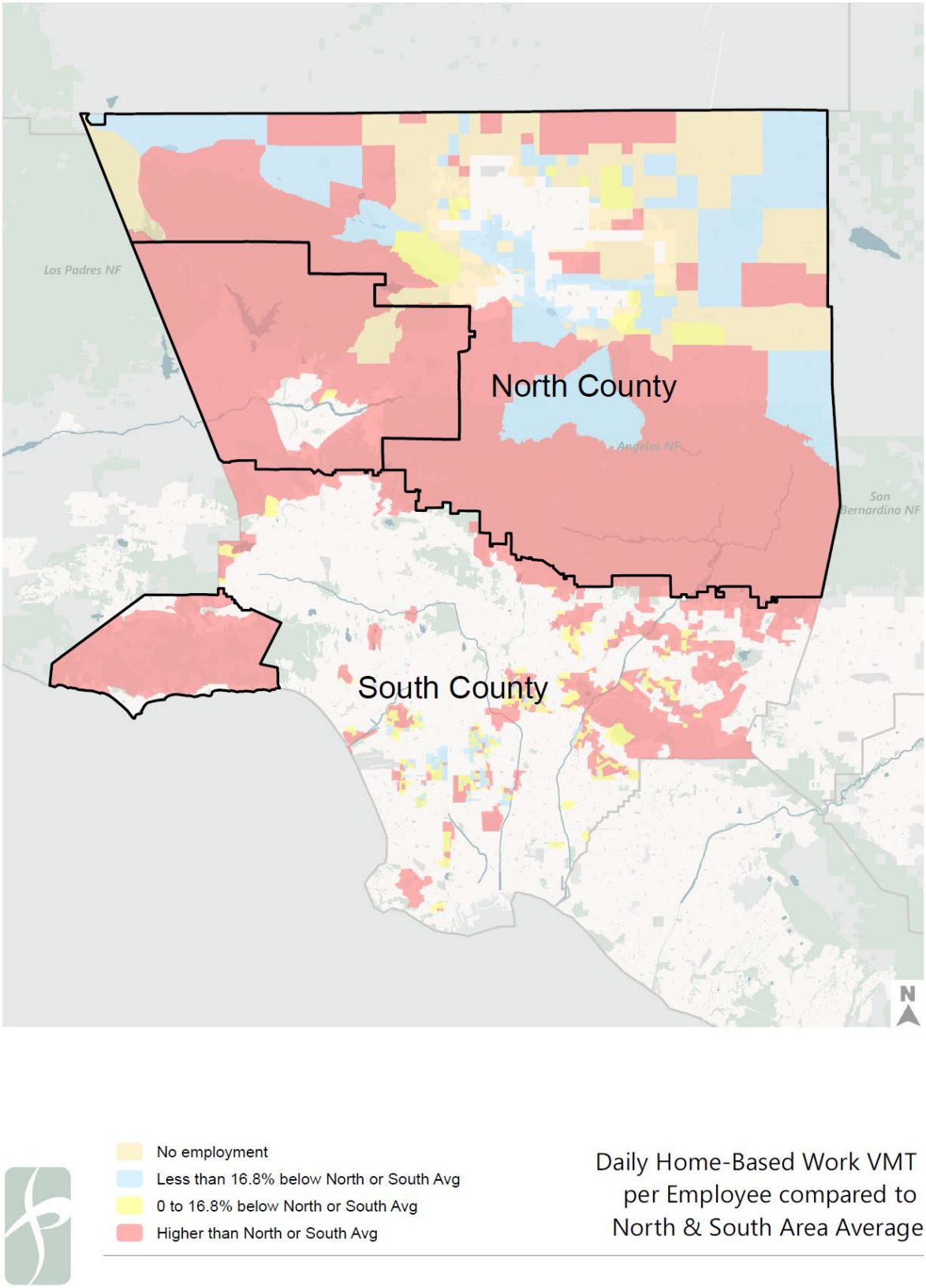


Figure B3: Home-Based Work VMT per Employee compared to the North and South Baseline VMT



Attachment C: Screened Transportation Projects

Transportation Projects That Do Not Require VMT Analysis

The following complete list is provided in the OPR Technical Advisory for transportation projects that would not likely lead to a substantial or measurable increase in vehicle travel, and therefore generally should not require an induced travel analysis:

- 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
- 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 non-motorized 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

Attachment D: VMT Reduction Strategies for Project Mitigation

VMT Reduction Strategies for Project Mitigation

LA County CEQA Updates for SB 743 Implementation

Relationship to LA County Sustainability Plan

Applicable CAPCOA TDM Category [1]	Applicable CAPCOA TDM Strategy	CAPCOA Strategy Number	CAPCOA Expected VMT Reduction and Notes	Updated Expected VMT Reduction [2]	Place Type	Scope	Implementing Agent	County Monitoring Body [3]	GOAL	GOAL LANGUAGE	STRATEGY	STRATEGY LANGUAGE	ACTION	ACTION LANGUAGE
Commute Trip Reduction Programs	Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring	3.4.2	**4.2%-21%**		Urban or rural	Building operations	Employer, Manager	Possible DPW, DRP, TMO, or Self Report	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8A	Reduce vehicle miles traveled by prioritizing alternatives to single-occupancy vehicles	Action 101	Develop and implement a transportation demand management (TDM) ordinance that requires developers to incorporate measures such as subsidized transit passes and car share.
Commute Trip Reduction Programs	Provide Ride-Sharing Programs	3.4.3	**1%-15%**	**2.5%-8.3%**	Urban or rural	Building operations	Employer, Manager	Possible DPW, DRP, TMO, or Self Report	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8A	Reduce vehicle miles traveled by prioritizing alternatives to single-occupancy vehicles	Action 101	Develop and implement a transportation demand management (TDM) ordinance that requires developers to incorporate measures such as subsidized transit passes and car share.
Commute Trip Reduction Programs	Implement Subsidized or Discounted Transit Program	3.4.4	**0.3%-20%**	**Three possible ranges:** **1] 0.3%-14%** **2] 0%-16%** **3] 0.1% to 6.9%**	Urban or rural	Building operations	Employer, Manager	Possible DPW, DRP, TMO, or Self Report	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8A	Reduce vehicle miles traveled by prioritizing alternatives to single-occupancy vehicles	Action 100	Offer free transit passes for students, youth, seniors, disabled, and low income populations.
Commute Trip Reduction Programs	Encourage Telecommuting and Alternative Work Schedules	3.4.6	**0.07%-5.5%**	**0.2%-4.5%**	Urban or rural	Building operations	Employer, Manager	Possible DPW, DRP, TMO, or Self Report	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8A	Reduce vehicle miles traveled by prioritizing alternatives to single-occupancy vehicles	Action 104	Pilot an alternative work site program for County employees.
Land Use/Location	Increase Transit Accessibility	3.1.5	**0.5%-24.6%**	**1] 0%-5.8%** **2] 0%-7.3%**	Urban or rural	Site design	Owner, Architect	Possible DPW or Self Report	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8A	Reduce vehicle miles traveled by prioritizing alternatives to single-occupancy vehicles	Action 102	Develop a transportation technology strategy to proactively address how evolving tech-enabled mobility options can support public transit and advance OurCounty goals.
Parking Policy/Pricing	Unbundle Parking Costs from Property Cost	3.3.2	**2.6%-13%**	**2.0%-12%**	Urban or rural			Possible DPW or DRP	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8A	Reduce vehicle miles traveled by prioritizing alternatives to single-occupancy vehicles	Action 103	Evaluate and implement demand-based priced parking at County facilities and on County streets where appropriate.
Parking Policy/Pricing	Implement Market Price Public Parking (On-Street)	3.3.3	**2.8%-5.5%**	**2.8%-14.5%**	Urban or rural			Possible DPW or DRP	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8A	Reduce vehicle miles traveled by prioritizing alternatives to single-occupancy vehicles	Action 103	Evaluate and implement demand-based priced parking at County facilities and on County streets where appropriate.
Neighborhood/ Site Enhancements	Provide Pedestrian Network Improvements	3.2.1	**0%-2%**	**0.5%-5.7%**	Urban or rural	Site design	Owner, Architect	Possible DPW or DRP	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8B	Improve transportation health and safety outcomes	Action 106	Develop and implement plans for active transportation that are inclusive of and accessible to all levels of physical ability, built to be comfortable, inviting and safety-enhancing, and work collaboratively with cities to ensure continuity of active transportation networks between jurisdictions.
Neighborhood/ Site Enhancements	Provide Traffic Calming Measures	3.2.2	**0.25%-1%**	**0%-1.7%**	Urban or rural	Site design	Owner, Architect	Possible DPW	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8B	Improve transportation health and safety outcomes	Action 105	Implement the County's Vision Zero Action Plan within unincorporated communities and work with local jurisdictions to implement transportation safety enhancements that reduce traffic injuries and deaths.
Neighborhood/ Site Enhancements	Implement Car-Sharing Programs	3.4.9	**0.4%-0.7%**	**0.3%-1.6%**	Urban or rural	Building operations	Employer, Manager	Possible TMO or Self Reporting	Goal 8	A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency	Strategy 8A	Reduce vehicle miles traveled by prioritizing alternatives to single-occupancy vehicles	Action 101	Develop and implement a transportation demand management (TDM) ordinance that requires developers to incorporate measures such as subsidized transit passes and car share.

[1] *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* , 2010, California Air Pollution Control Officers Association

[2] Adjusted expected VMT/GHG reduction based on new research conducted since publication of CAPCOA guidance in 2010

[3] Potential organizations have been listed for Mitigation Monitoring. Actual reporting structure will be determined through further County discussions, or upon project review and approval.

DPW - Department of Public Works; DRP - Department of Regional Planning; TMO - Transportation Management Organization (possible future organization that may be in place to administer and monitor VMT reduction strategies)

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