



Transportation Impact Analysis (TIA) Guidelines and General Plan Amendment

Presentation to:

San Mateo City Council
Monday July 20, 2020

Presentation Overview

- ▶ SB 743 Overview
- ▶ Transportation Impact Analysis (TIA) Guidelines
 - CEQA Analysis
 - Non-CEQA Local Analysis Guidelines
- ▶ General Plan Circulation Element Amendments
- ▶ Planning Commission Recommendation



Level of Service and VMT



Level of Service

- ▶ Vehicle-focused metric
- ▶ Assesses congestion and vehicle delay
- ▶ Mitigations: roadway widening, signalization changes, intersection modifications

Vehicle Miles Traveled

- ▶ SB 743 aims to reduce emissions through trip reduction
- ▶ Focused on multimodal transportation
- ▶ Mitigations: TDM measures to encourage multimodal transportation (transit use, walking, bicycling, etc.)

SB 743 and VMT Overview



- ▶ Senate Bill 743 signed into law (September 2013)
- ▶ Changes to guidelines for California Environmental Quality Act (CEQA)
- ▶ Aligns analysis of development impacts with state goals of emissions reduction and increase in multimodal transportation options
- ▶ Eliminates LOS as the metric to assess transportation impacts under CEQA
- ▶ Office of Planning and Research (OPR) provided Technical Advisory (December 2018)
 - Recommended Vehicle Miles of Travel (VMT) as new metric
 - Recommended thresholds
 - OPR's recommendations are not binding- agencies can deviate from OPR recommendations if they provide "substantial evidence"
- ▶ SB 743 compliance becomes mandatory on July 1, 2020

Transportation Impact Analysis (TIA) Guidelines



- ▶ The TIA guidelines provide processes for analyzing land use and transportation projects for both CEQA review and the City's adopted local plans.
- ▶ The TIA guidelines provide a consistent methodology to analyze environmental impacts and operational effects for local projects.
- ▶ The TIA guidelines include:
 - Parameters for when transportation analysis is required;
 - Guidance on determination of impacts and negative effects;
 - Technical processes for calculating VMT for projects;
 - Mitigation measures for VMT impacts and local plan requirements
 - Required analysis for CEQA and local transportation purposes.



CEQA Transportation Analysis (VMT)

► For land use projects

- Staff has identified which projects are exempt (screened out) from detailed VMT analyses
- VMT detailed analysis requires application of the City's travel demand model
- City has adopted VMT impact thresholds consistent with OPR recommendations
- City is adopting the County as the most appropriate region for comparison

► For transportation projects

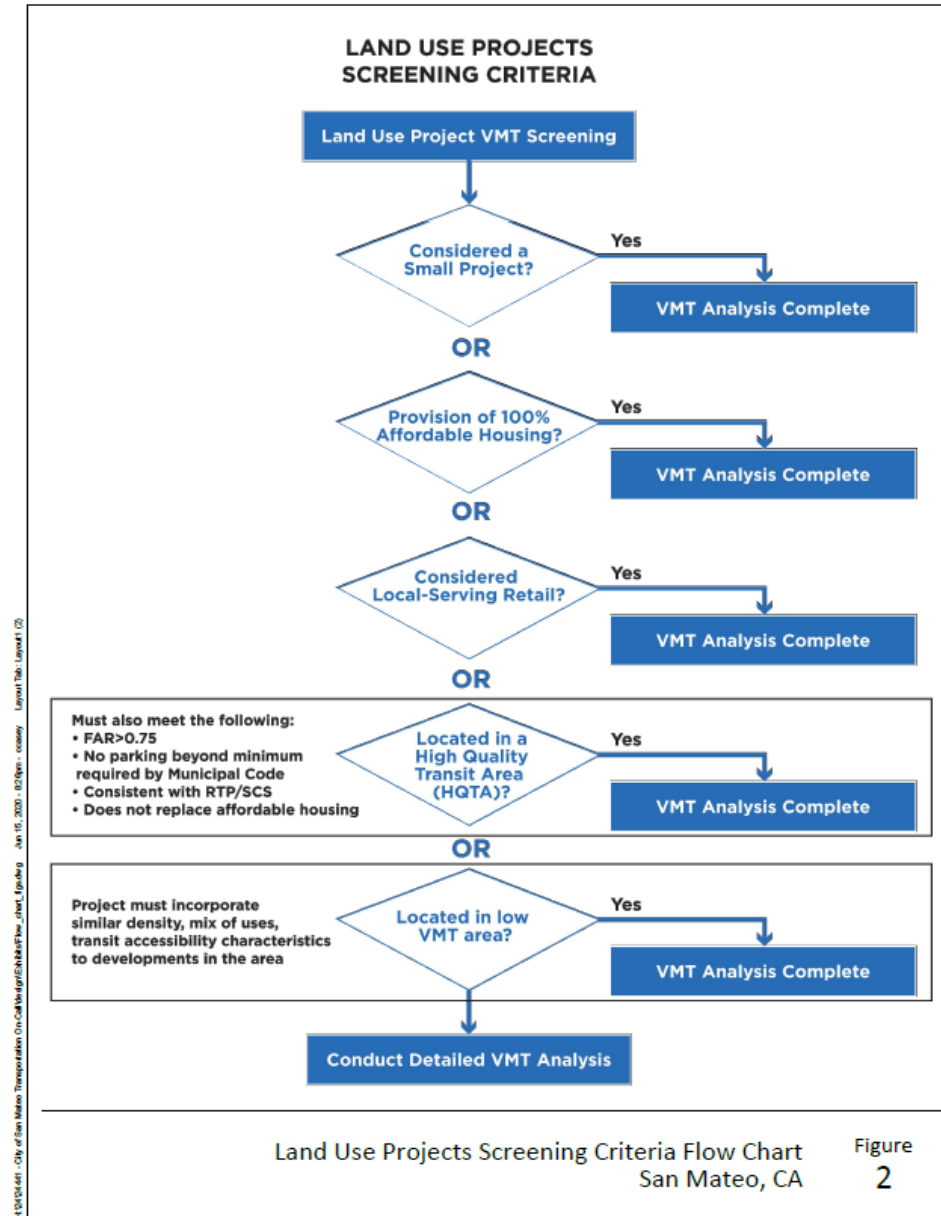
- Travel demand model required to estimate the "change" in VMT
- Consider induced demand - additional travel due to additional capacity

- 4441 - City of San Mateo Transportation On-Call to assist with the short-term - Jun 15, 2020 - 02:28pm - economy Layout Tab Layout 1



Project Screening

- ▶ Exempts projects from a detailed VMT analysis.
- ▶ Benefits:
 - “Right size” VMT analysis for a project
 - Streamline projects that would not substantially increase VMT
 - Encourage dense, mixed-use, infill, transit-adjacent development



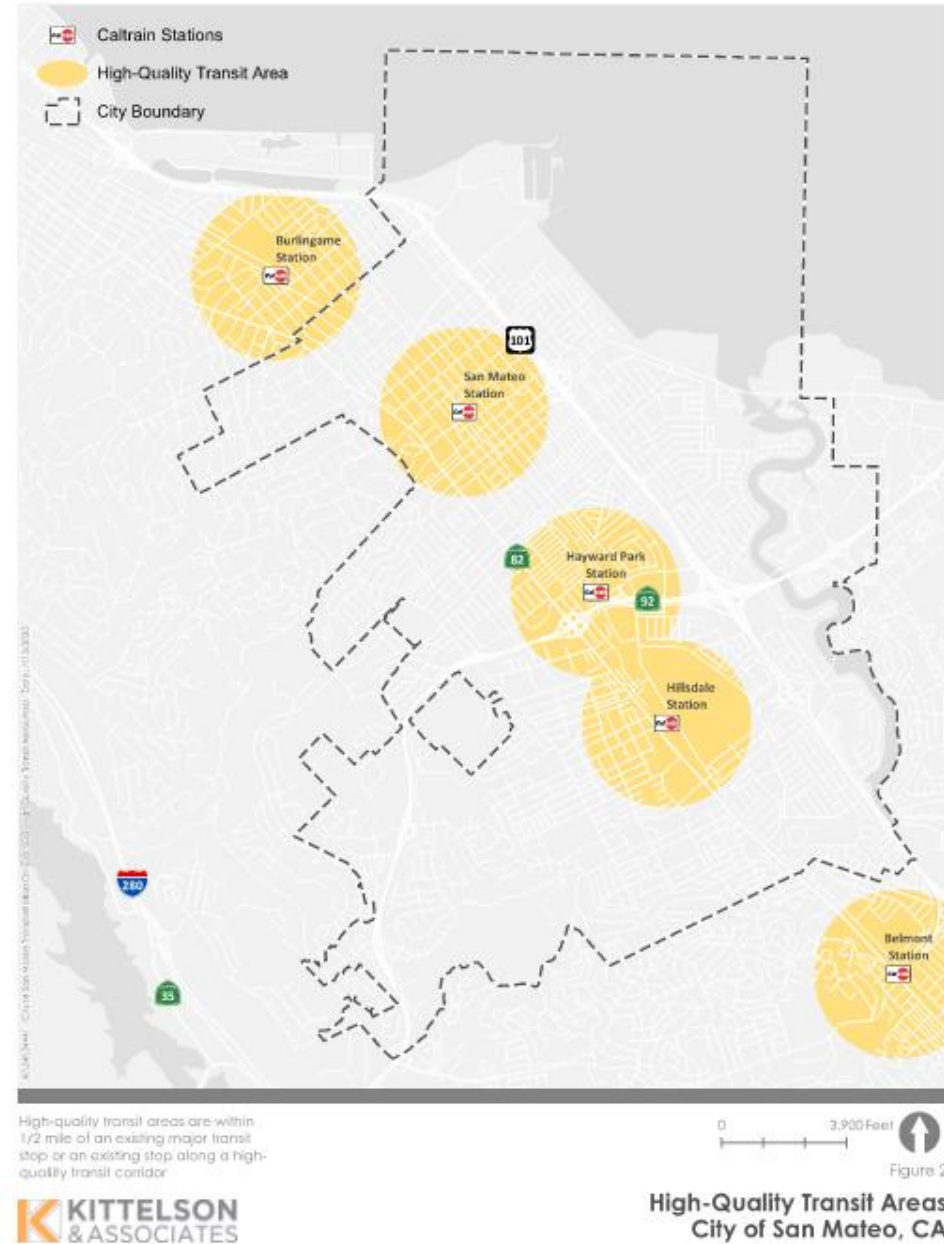
Screening Criteria - Small Projects



Land Use Type	Number of Units/ Square Feet	Corresponding Daily Trips
Single Family Residential	10 Dwelling Units	110
Multi-Family Residential	11 Dwelling Units	104
Office	11 TSF ¹	107

Screening Criteria - High Quality Transit Areas

- ▶ Areas within ½ mile of an existing major transit stop or high-quality transit corridor stop
- ▶ Currently Caltrain stations are the only locations that meet this criteria
- ▶ SamTrans ECR meets the criteria during regular service; staff will monitor transit service for future additions



Screening Criteria - Affordable Housing



- ▶ OPR Recommendation
 - 100% affordable housing projects in infill locations near transit
- ▶ City Modification
 - 100% affordable housing projects, regardless of location, may be screened out
- ▶ Aligns with City Council goals for provision of affordable housing
- ▶ Streamlines CEQA process; projects still required to conduct local transportation analysis



VMT Impact Thresholds

- ▶ Residential and Office uses: VMT efficiency metric

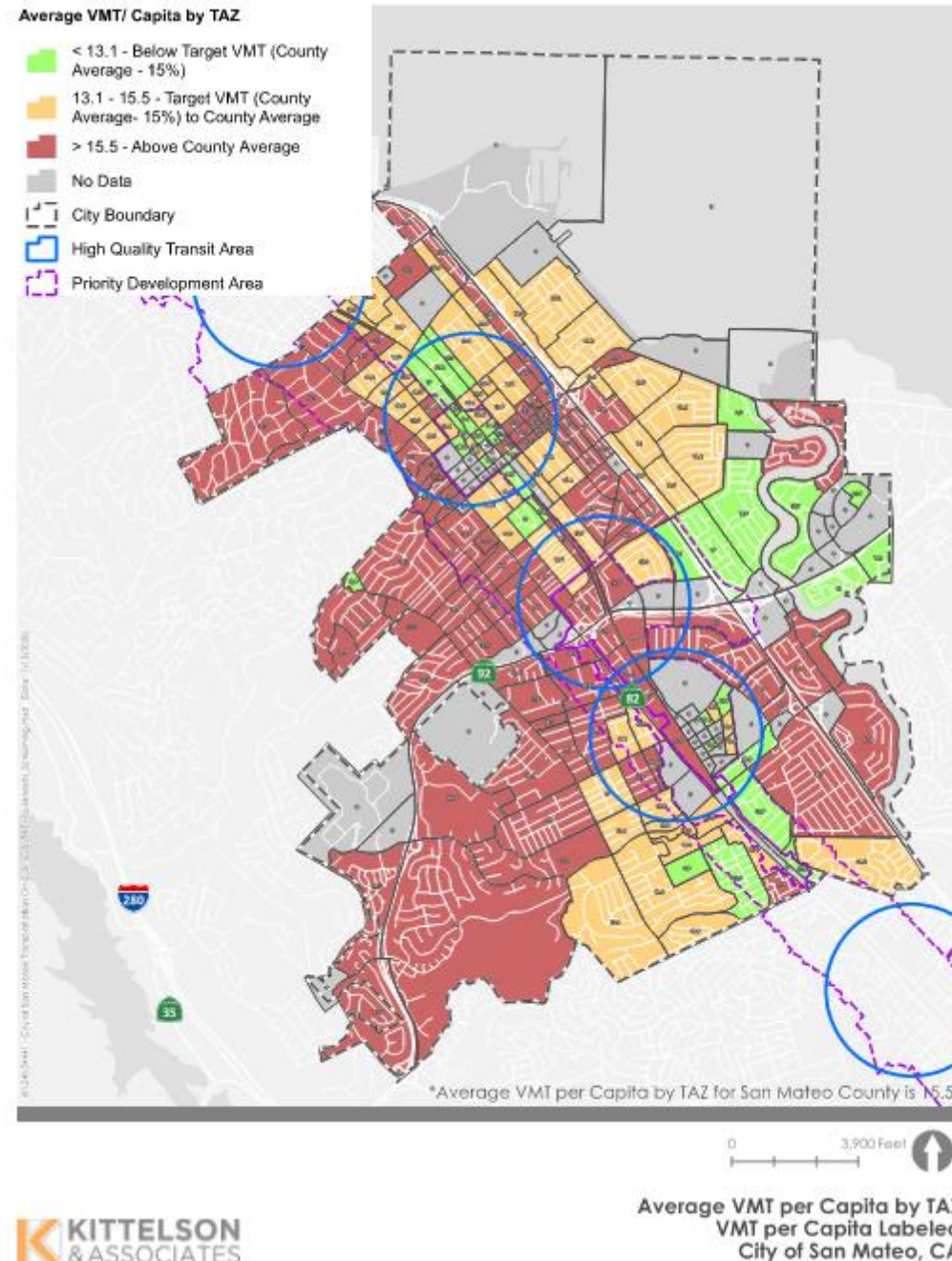
Project Type	Baseline Geography	VMT Average	VMT 15% Below Average ¹
Residential	City	16.0 VMT/capita	13.6 VMT/capita
	County	15.5 VMT/capita	13.1 VMT/capita
Office	City ²	16.7 VMT/employee	14.2 VMT/employee
	County	18.0 VMT/employee	15.3 VMT/employee

- ▶ Note: City has established the County for comparison purposes

- ▶ Retail uses: change in total VMT

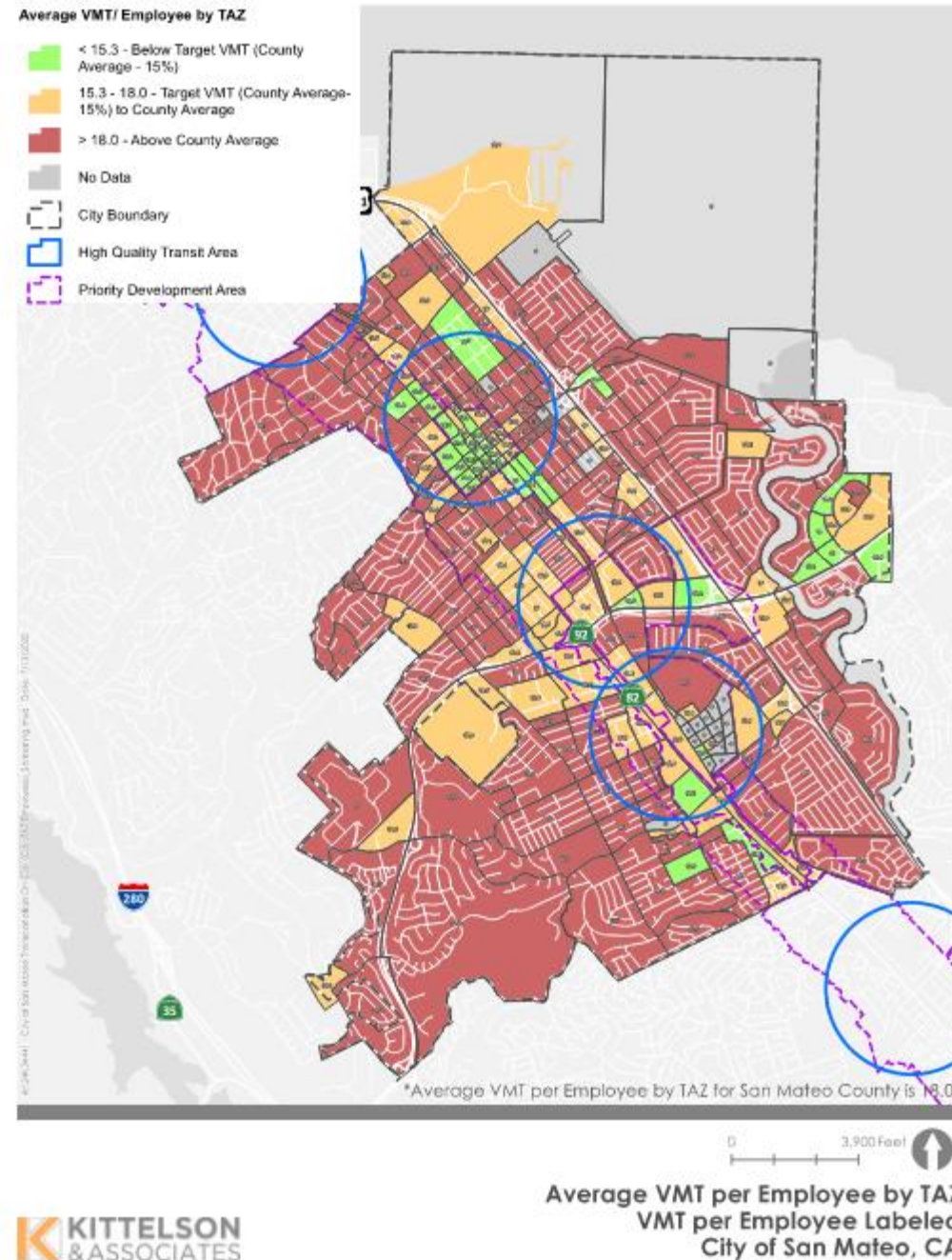
VMT Maps - Residential - VMT Per Capita

- ▶ Green - screens out
- ▶ Orange - within 15% of threshold
- ▶ Red - higher than 15% of threshold



VMT Maps - Employment - VMT Per Employee

- ▶ Green - screens out
- ▶ Orange - within 15% of threshold
- ▶ Red - higher than 15% of threshold



CEQA Mitigation



- ▶ Mitigations under CEQA are now focused on TDM and multimodal transportation; no longer focused on increasing roadway capacity
- ▶ If there is a VMT impact, then Applicant would apply TDM measures for Trip Reduction:
 - TDM tools are being prepared to streamline the process
 - Options include San Jose and SANDAG tools
- ▶ Many TDM Options:
 - Transit incentives
 - Bicycle infrastructure
 - Shared mobility
 - Commute trip reduction
 - Parking management
 - Education and encouragement
 - Neighborhood enhancement
 - VMT Impact Fees
 - Mitigation Exchange Banks



Local Transportation Analysis

- ▶ All projects will be reviewed for consistency with City-adopted plans
- ▶ City Council directed staff to maintain Level of Service (LOS) for local analysis
 - Smaller geographic area for analysis
 - Focused on project access and circulation
 - Assess potential negative effects on local roadways to determine if off-site improvements are necessary
- ▶ Local transportation analysis includes:
 - Forecasting based on travel demand model
 - Operational analysis
 - Queueing
 - Internal circulation
 - Code consistency

General Plan Amendment



- ▶ General Plan Circulation Element is based on LOS
- ▶ Policy C2.1
 - “Maintain a Level of Service no worse than LOS D, average delay of 45.0 seconds, as the acceptable Level of Service for all intersections within the City.”
- ▶ Policy C2.7
 - Development projects may be required to fund off-site circulation improvements if project-generated traffic does not meet these thresholds.
 - Based on a determination of ‘significant impact’ under CEQA
- ▶ With CEQA now based on VMT, findings of significant impacts under LOS are not possible
- ▶ Staff recommends amendments to the General Plan Circulation Element to sever the tie between CEQA and LOS
 - Allows local transportation analysis consistent with City Council direction
 - Allows City to require operational improvements necessary beyond environmental impacts

Planning Commission Recommendation



- ▶ Presented to Planning Commission June 23
- ▶ No substantial revisions requested
- ▶ Unanimous motion to recommend City Council adoption

Questions?



Contact:

- ▶ Sue-Ellen Atkinson, Principal Transportation Planner

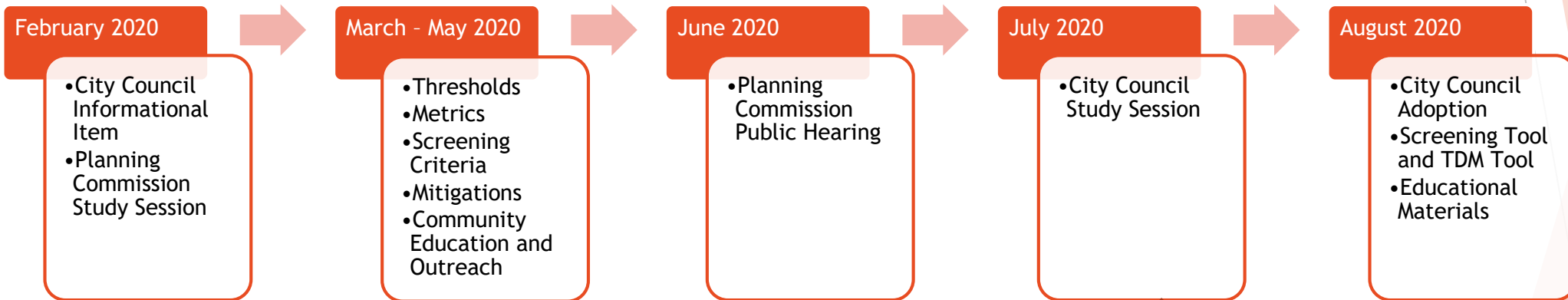
seatkinson@cityofsanmateo.org

(650) 522-7288

Pocket Slides

The following are detailed slides for Q&A.

Timeline



We are here

TDM Tools

Some jurisdictions are developing tools to estimate VMT reduction

IV. Project Information

Project Name (optional):	<input type="text"/>	
Project Address (optional):	<input type="text"/>	Not applicable if scale of analysis is city/community.
Project Type (optional):	<input type="text"/>	E.g., residential, commercial
Scale of Analysis:	<input type="text"/>	"Project/site" refers to strategies that occur at the scale of a parcel, employer, or development project. "City/community" refers to strategies that occur at a scale of a neighborhood, corridor, on entire municipality.
Analysis Location:	<input type="text"/>	If necessary, determine location using SANDAG's online Parcel Lookup Tool . Be sure to turn on the Jurisdictions and Community Plan Areas layers.
CPA (if applicable):	<input type="text"/>	If the Analysis Location is in a CPA in San Diego City or Unincorporated San Diego County, select the CPA from the dropdown list. See the Parcel Lookup Tool above for more information. If the Analysis Location is the entire San Diego City or entire Unincorporated San Diego County, leave the CPA input blank. Follow hyperlinks below for lists of CPAs in San Diego City and Unincorporated County.
Is analysis in a rural area? See Question #11 of the FAQ page for information about tool applicability.		CPAs: San Diego City Unincorporated County

V. Mobility Management Strategies

Project/Site-Level Strategies

[Project-Level Results](#)

Employer Commute Programs

Strategies implemented by employers that encourage workers to commute by modes other than auto

1A	Voluntary Employer Commute Program
1B	Mandatory Employer Commute Program
1C	Employer Carpool Program
1D	Employer Transit Pass Subsidy
1E	Employer Vanpool Program

Community/City-Level Strategies

[Community-Level Results](#)

Neighborhood Enhancements

Strategies that improve or encourage neighborhood-level bicycle, pedestrian, and other multimodal travel options

4A	Street Connectivity Improvement
4B	Pedestrian Facility Improvement
4C	Bikeway Network Expansion
4D	Bike Facility Improvement
4E	Bikeshare

1C. Employer Carpool Program

[Return to Main](#) [Results Summary](#)

Level of application: **Project/Site**
Type of VMT affected: **Employee commute trips**
Max VMT reduction: **8.0%**

Description: Employers can encourage carpooling by providing ridematching assistance to employees; providing priority parking for carshare vehicles; and providing incentives for carpooling.

Place type of project/site	<input type="text"/>	user input, source (1)
% of employees eligible	<input type="text"/>	user input
% change in commute VMT	<input type="text"/>	coefficient, source (2, 3, 4)
Change in VMT	<input type="text"/>	<input type="checkbox"/> Exclude from Results

Formula: % Change in VMT = % of employees eligible * % change in commute VMT

Sources:

- (1). Ewing, R. 1993. "TDM, Growth Management and the Other Four out of Five Trips." Transportation Quarterly, Vol. 48,
- (2). Victoria Transport Policy Institute. "Ridesharing: Carpooling and Vanpooling." TDM Encyclopedia. www.vtpi.org/tdm/tdm34.htm
- (3). California Air Pollution Control Officers Association. 2010. "Quantifying Greenhouse Gas Mitigation Measures." www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
- (4). New York State Department of Transportation. 2019. Data from 511NYRideshare program participants.



Transportation Impact Analysis Guidelines

Guidelines can cover a variety of topics, including:

- ▶ Traffic impact studies
- ▶ Projects could require a blend of both VMT and LOS analyses
- ▶ Improvements to meet LOS standards cannot be required by CEQA (EIRs, or MNDs, etc.)
- ▶ Impact thresholds and significance criteria
- ▶ Which projects are exempt
- ▶ Standards for non-automotive impact analyses
- ▶ Guidance on TDM mitigation measures and other improvements

Case Studies



- ▶ Reviewed recent approved or pending projects to select case study projects

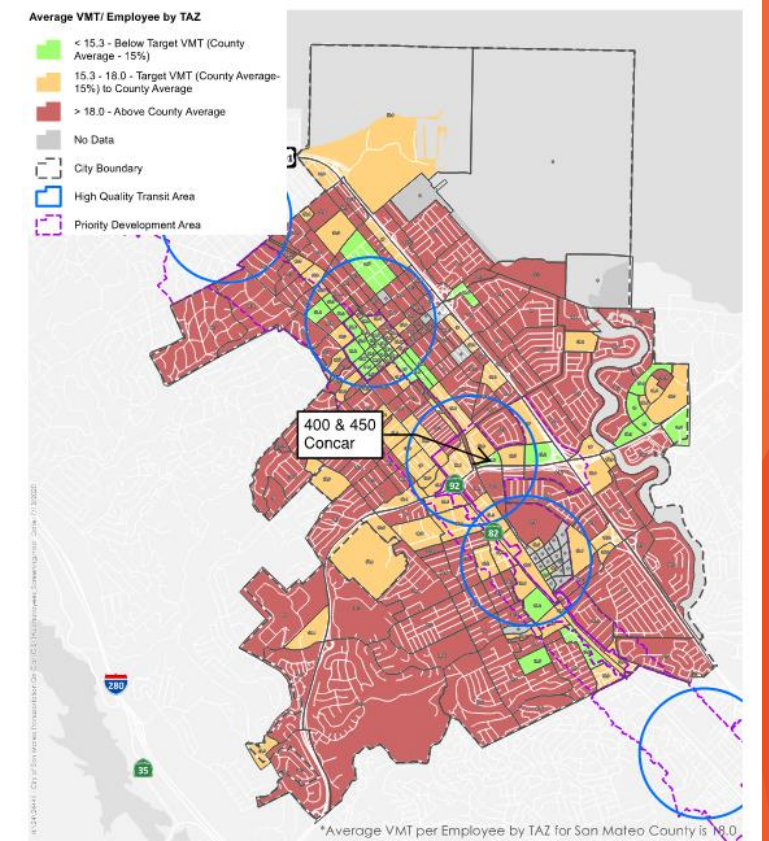
- ▶ Compared methods and study requirements under previous and proposed TIA guidelines for:
 - Methodologies required
 - Opportunities for screening
 - Analyses study area
 - Impacts
 - Mitigation measures
 - Findings conclusion

Case Study 1 - 400 & 450 Concar Drive

325,000 s.f. office space¹



	Old Guidelines	Updated Guidelines	
		CEQA Requirements	Local Transportation Analysis (outside CEQA)
Methodology	<ul style="list-style-type: none"> Based on Intersection LOS 3 study intersections 	<ul style="list-style-type: none"> Based on VMT Screens out based on: <ol style="list-style-type: none"> Location in a HQTA (Hayward Park Caltrain Station) and Location in a low VMT area 	<ul style="list-style-type: none"> Based on Intersection LOS 3 study intersections
Impacts (Without Mitigation)	1 intersection would exceed acceptable LOS	No impacts	1 intersection would exceed acceptable LOS (not a CEQA impact)
Mitigation	<ul style="list-style-type: none"> Restriping and signal modification Developer required to pay transportation mitigation fee 	None	<ul style="list-style-type: none"> Restriping and signal modification Developer required to pay transportation mitigation fee
Conclusion	Less than significant	Less than significant	Less than significant



1. s.f. was revised after the TIA was complete to be 276,467 s.f.

Case Study 2- Hillsdale Terrace

Mixed-Use: 13,987 s.f. Commercial, 74 condos, 3-level parking garage



	Old Guidelines	Updated Guidelines	
		CEQA Requirements	Local Transportation Analysis (outside CEQA)
Methodology	<ul style="list-style-type: none"> Based on Intersection LOS 10 study intersections 	<ul style="list-style-type: none"> Based on VMT 8 of the 74 units are affordable housing and would be able to be screened out Commercial and residential would be analyzed separately 	<ul style="list-style-type: none"> Based on Intersection LOS 4 study intersections
Impacts (Without Mitigation)	No impacts	A reduction of about 5% would be needed to meet the thresholds	No impacts
Mitigation	Developer required to pay transportation mitigation fee	TDM measures. Could include: <ul style="list-style-type: none"> Transit pass subsidies On-site car-sharing programs Bicycle parking Market-rate residential parking charges 	Developer required to pay transportation mitigation fee
Conclusion	Less than significant	Less than significant	Less than significant

