PASADENA
DEPARTMENT OF TRANSPORTATION

Date: February 1, 2021

To: Honorable Mayor and City Council

From: Laura Rubio-Cornejo, Director of Transportation

Subject: **CEQA and Local Mobility Analysis Study Session**

On November 16, 2020, City Council adopted an update to the City's California Environmental Quality Act (CEQA) baseline and associated thresholds. As part of the action taken, staff was directed to conduct a workshop in January aimed at enhancing the public's understanding of CEQA and related thresholds.

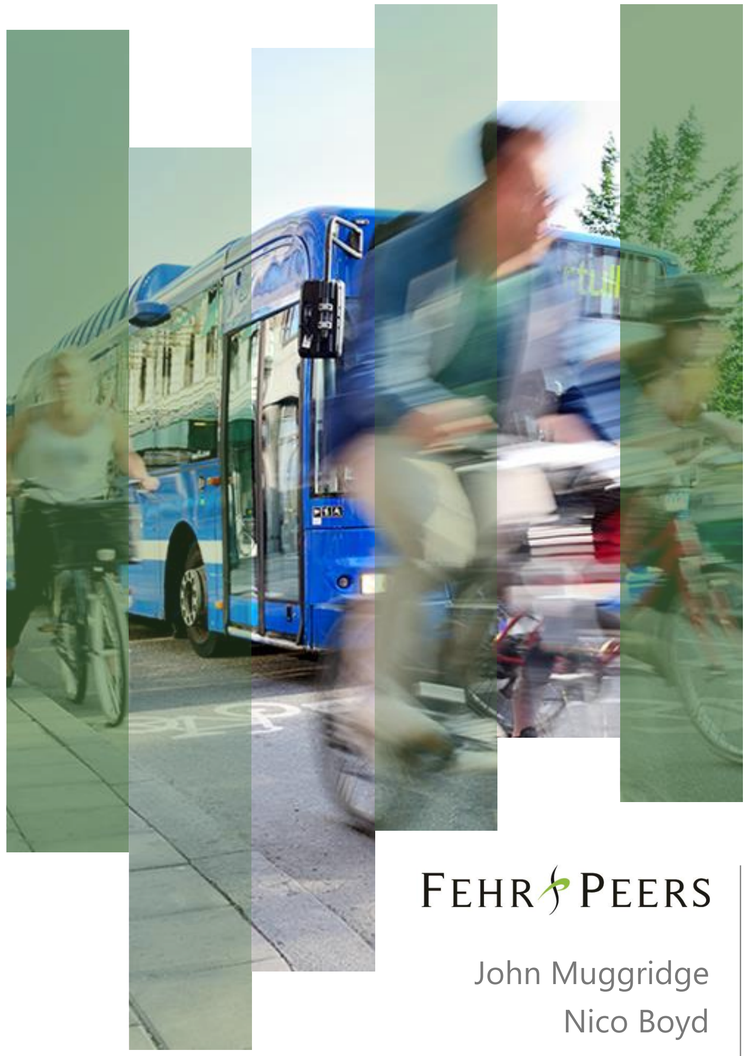
The workshop will be framed as a study session and will provide a brief overview of the CEQA regulatory history, discuss CEQA and the related thresholds as were adopted by the City as well as provide an overview of the Local Mobility Analysis (formerly referred to as Outside CEQA analysis) that the City conducts.

City staff will be joined by Fehr and Peers in providing the presentation.

Attachment (1):

Attachment A – CEQA Presentation

02/01/2021
Item 6



City of Pasadena
CEQA & Local Mobility
City Council Study Session

FEHR PEERS

John Muggridge
Nico Boyd

Meeting Purpose

- Explain how Pasadena arrived at its current transportation analysis framework
- Provide greater clarity on the distinctions and overlaps between the CEQA and Local Mobility processes

Study Session Overview

New Regulatory Environment for Transportation

- *What is SB 743 & how did it change Transportation Impact Analysis?*
- *When did all of these changes go into effect?*
- *What analysis metrics does the City use now?*
- *How is VMT different from LOS, and why don't they measure the same thing?*

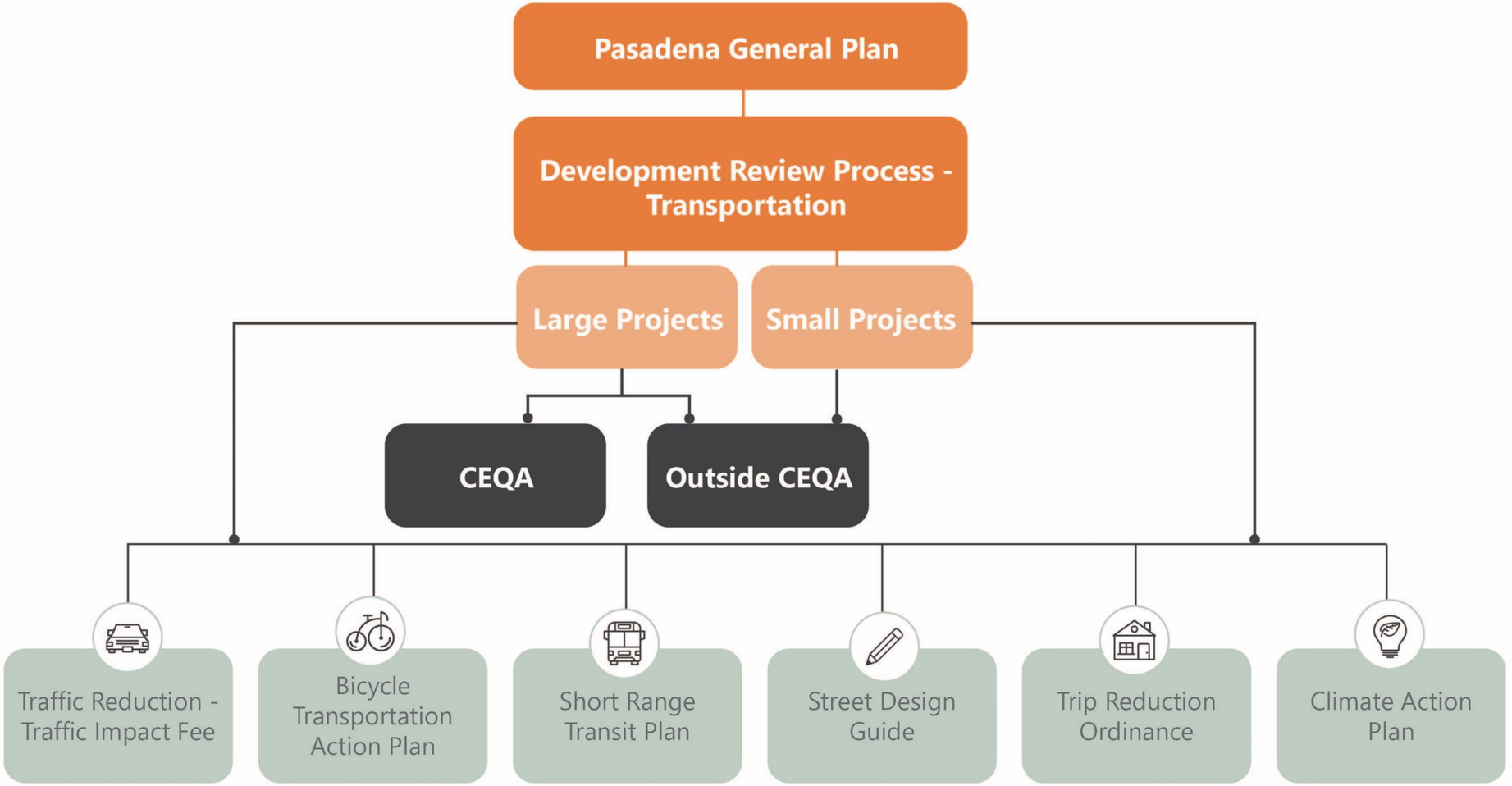
CEQA Process & Metrics

- *How are VMT and the City's other CEQA metrics being implemented?*
- *How does the adoption of the City's new baseline affect the analysis process?*
- *How are CEQA impacts mitigated?*

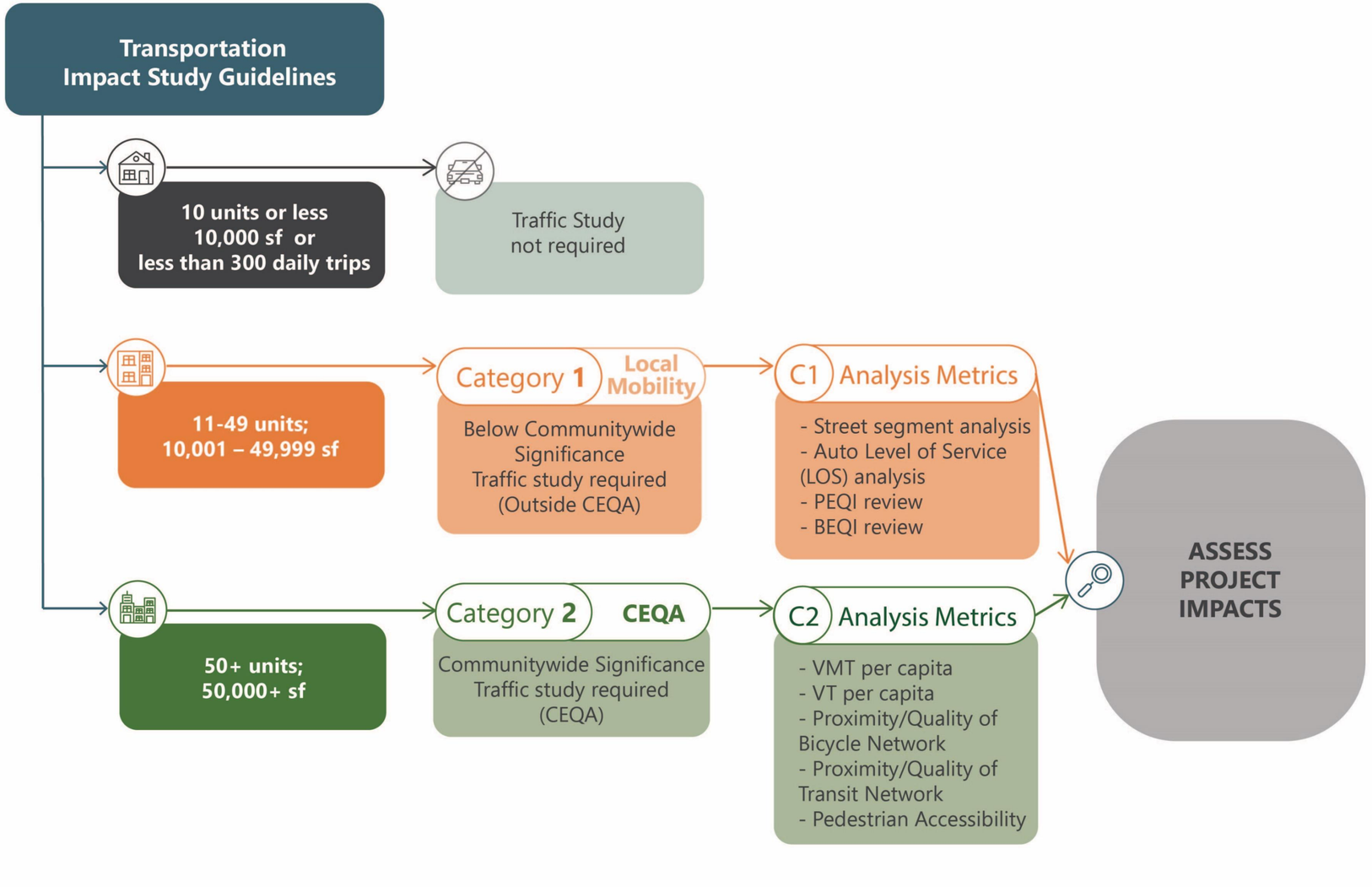
Local Mobility Process & Metrics

- *What does the Local Mobility process involve?*
- *Why does the City have a Local Mobility process?*
- *How are other lead agencies implementing 'Local Mobility' analyses, and what can Pasadena learn from those agencies?*

Development Review Process Overview - Transportation

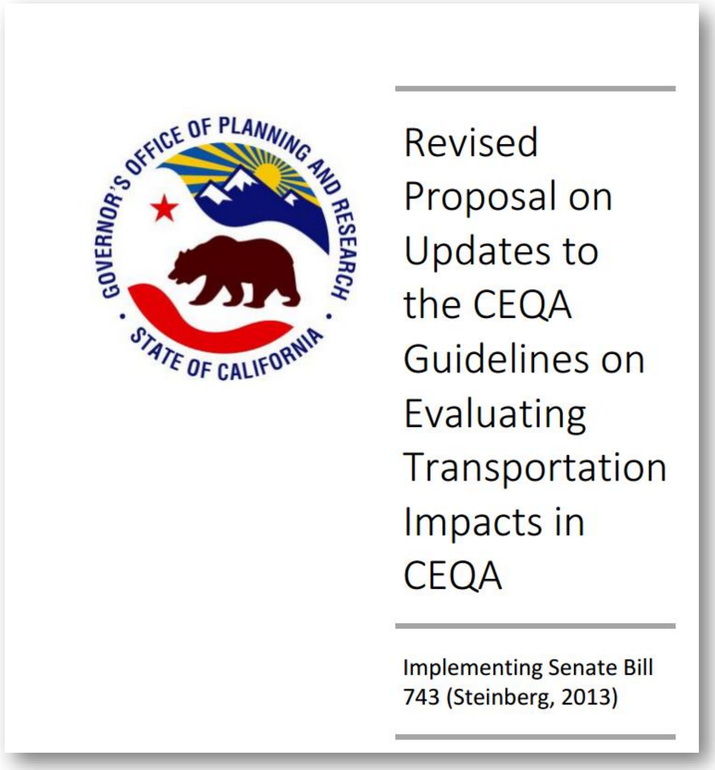


Overview of the Transportation Analysis Process



New Regulatory Environment for Transportation

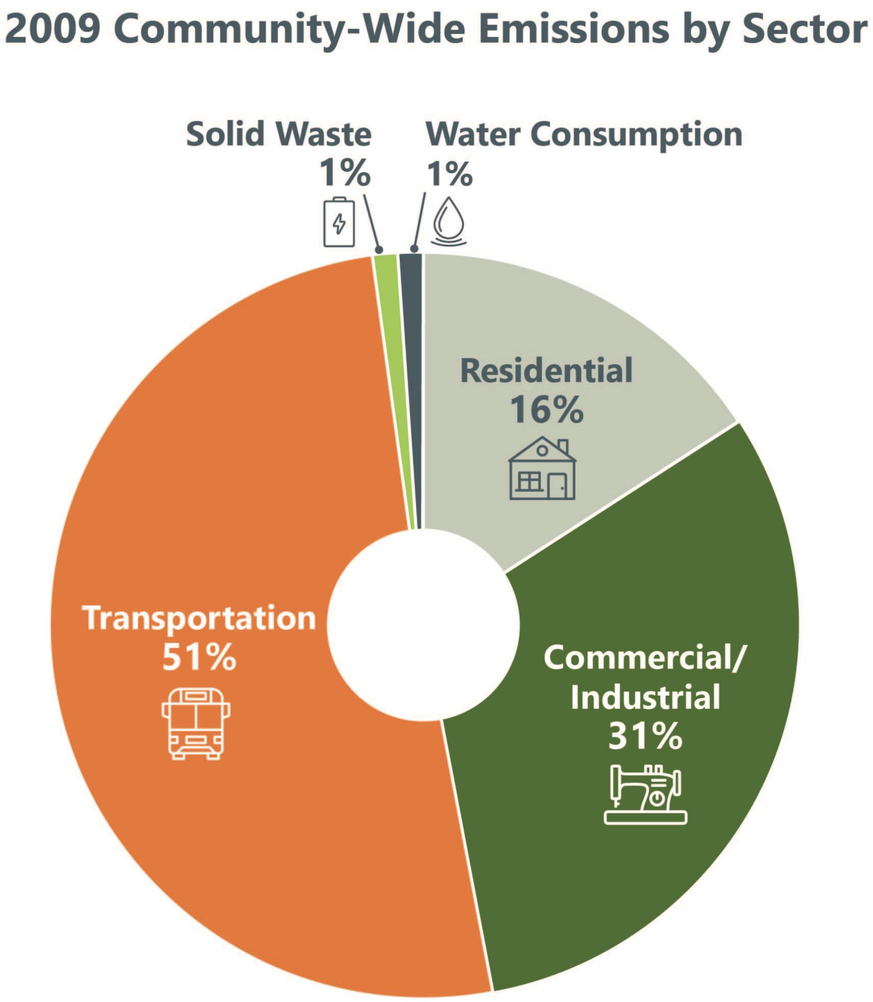
Evolution of the California Environmental Quality Act (CEQA)



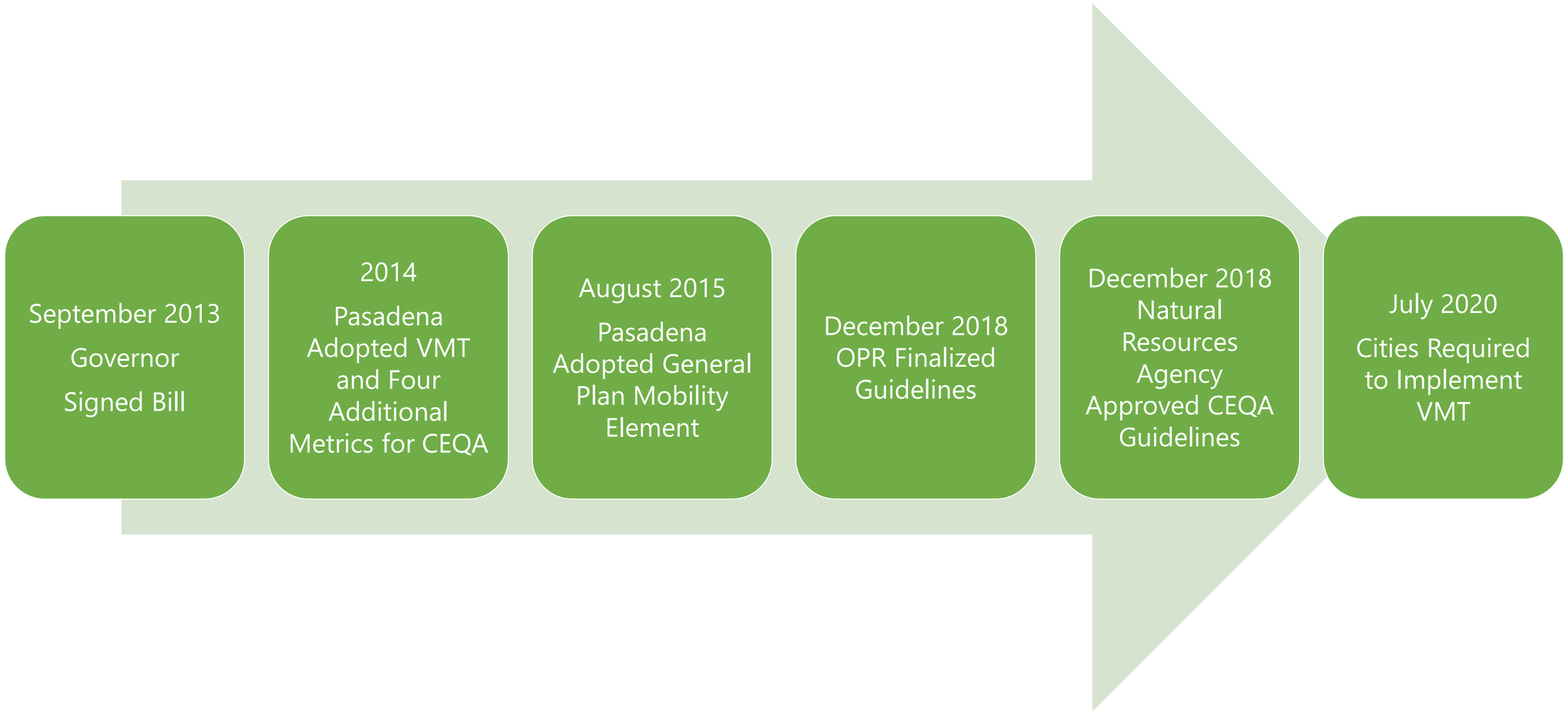
AB 32	2006
SB 97	2007
SB 375	2008
AB 1358	2008
SB 226	2011
AB 2245	2012
AB 417	2013
SB 743	**2013**

Legislative Intent of SB 743

- New transportation analysis criteria should promote:
  - Reduction of greenhouse gas emissions (e.g., Climate Action Plan)
  - Development of multimodal transportation networks
  - Diversity of land uses



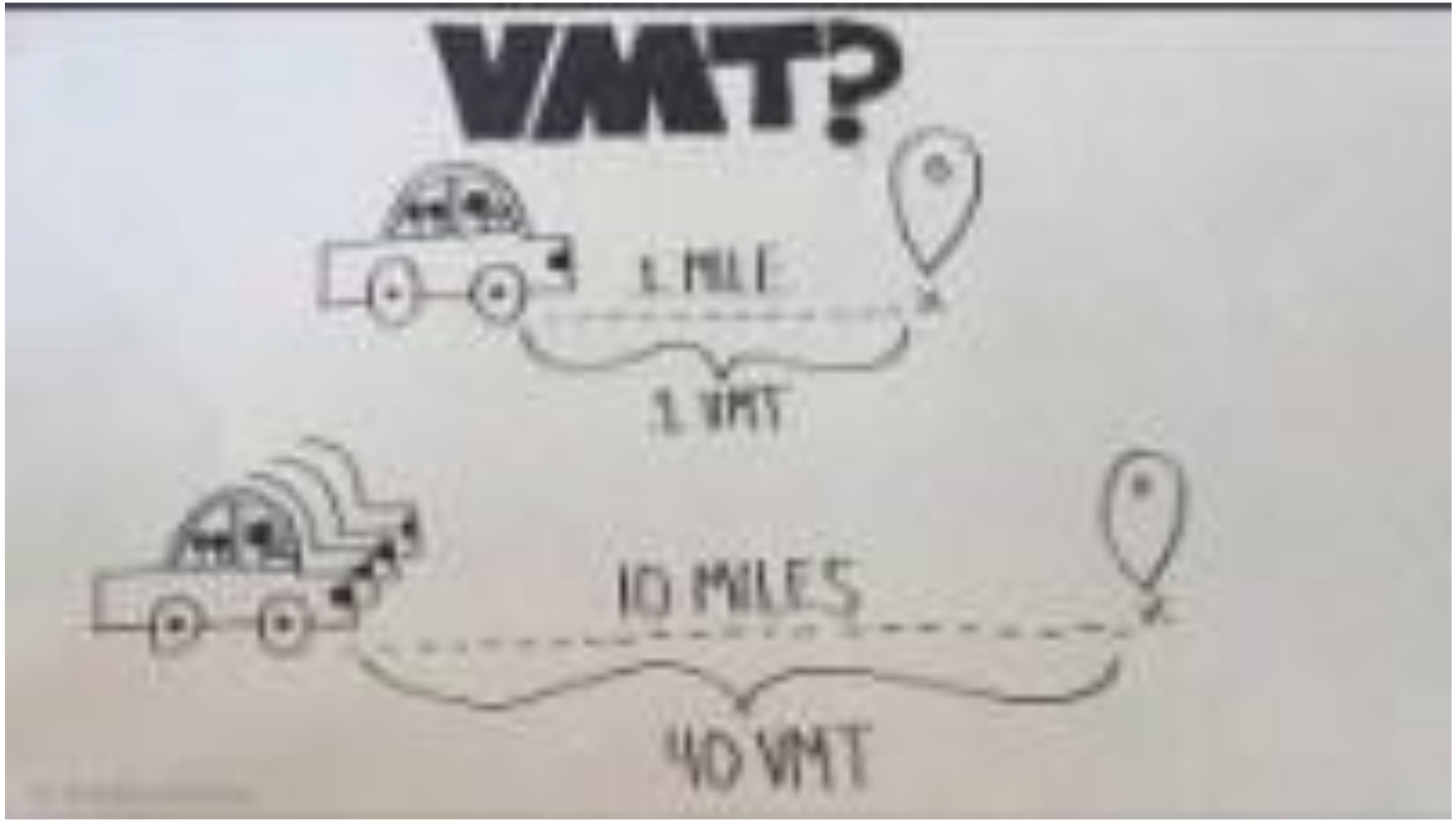
SB 743 Timeline



What Does SB 743 Do?

- Eliminates Level of Service (LOS) / Delay as a CEQA Metric
- Replaces LOS with VMT
- Provides methods and threshold guidance
- Changes where significant impacts occur
- Changes mitigation focus

What is VMT?



How are LOS and VMT Different?

Under LOS

- Project impact sensitive to level of congestion in project area
- Bigger the project bigger the impact
- Mitigation work is done mostly pre-project occupancy
- Cost of mitigation financed upfront
- Code required parking

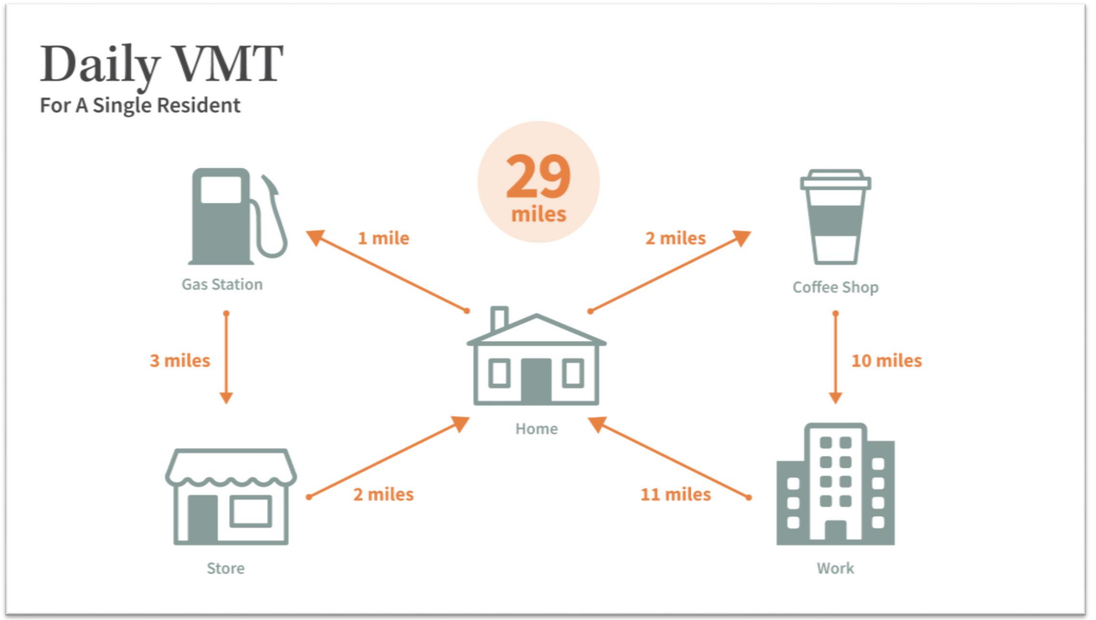
Under VMT

- Project impact sensitive to project location (infill, transit proximity)
- Project size less relevant to degree of project impact
- Mitigation work is done mostly post-project occupancy
- Cost of mitigation financed on an on-going basis
- May want to consider less than code required parking

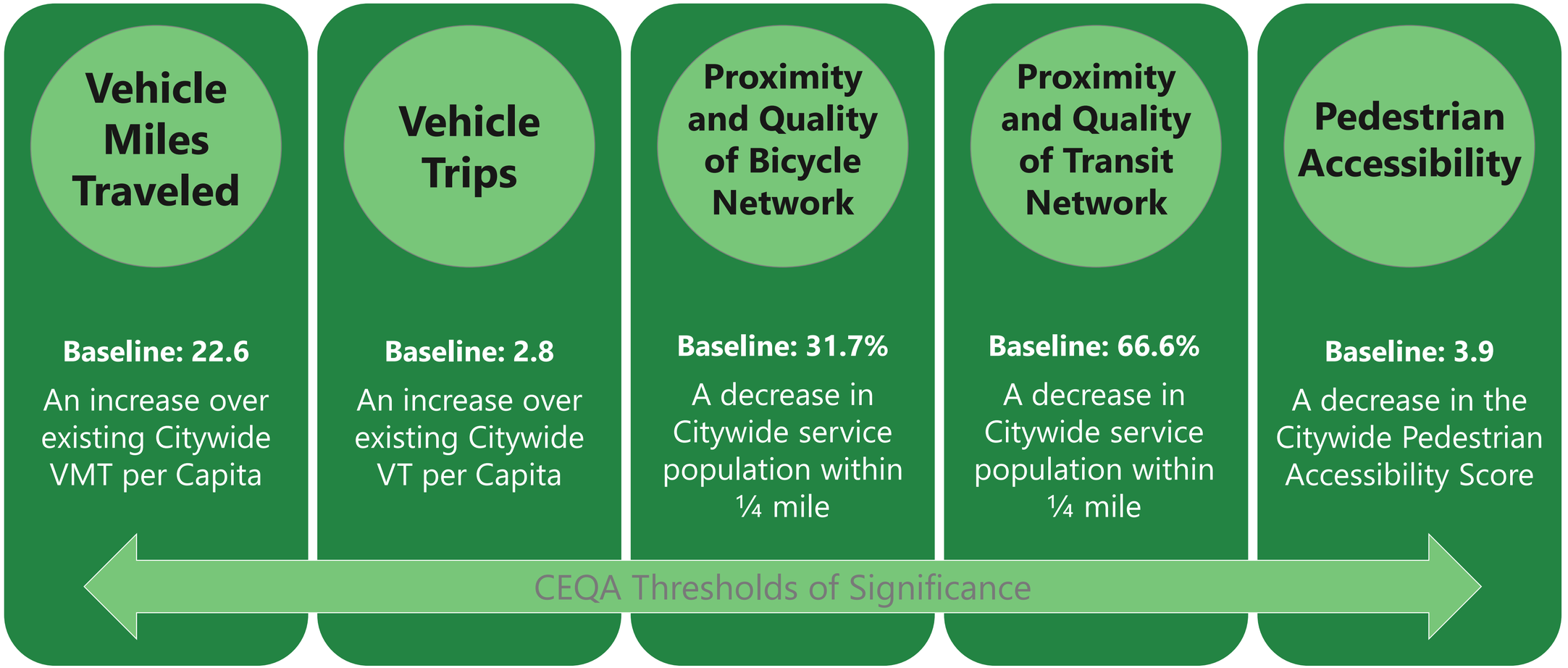
CEQA Process & Metrics

How Does VMT Promote Reduced Travel?

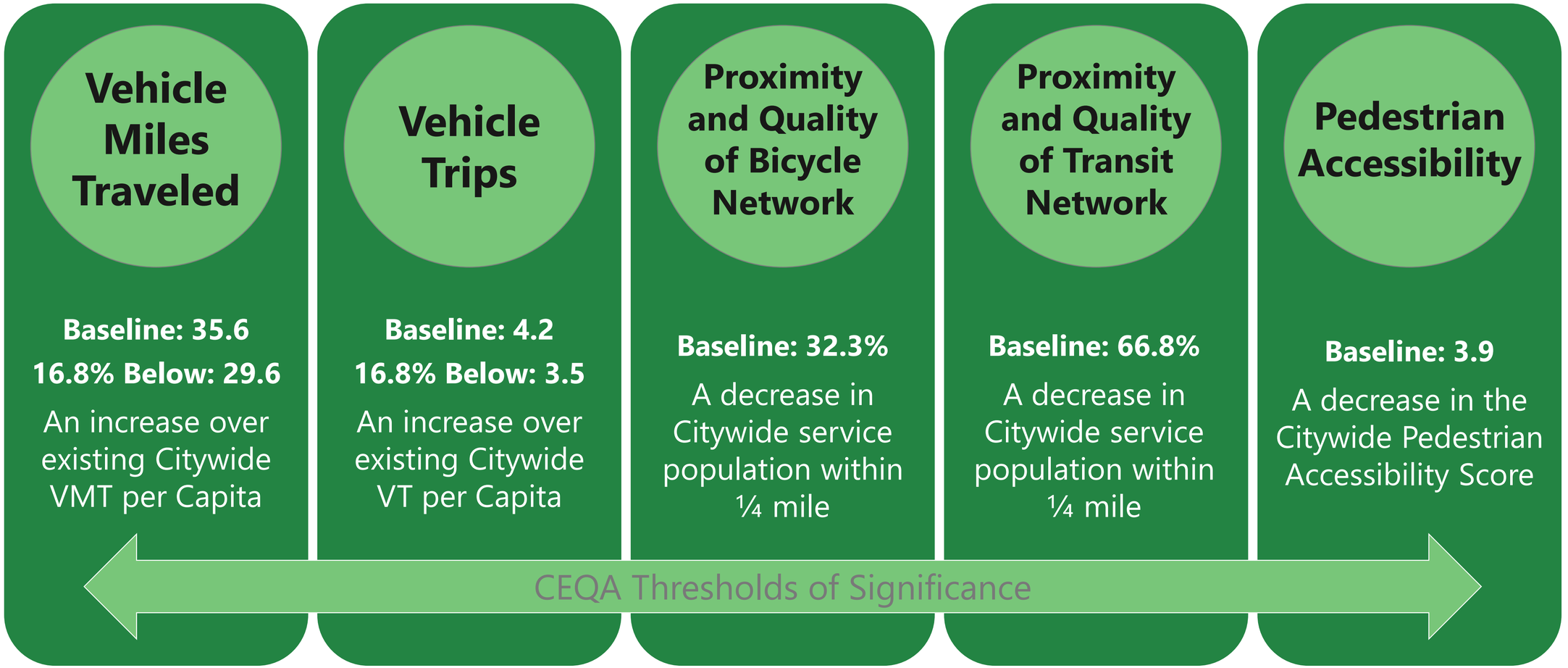
- Encourages increased population and employment density, shortening the distance between destinations
- Encourages land use diversity to promote better balance
- Encourages destination accessibility
  - Walkable streets
  - Bike friendliness
  - Shorter distance to transit



2013 CEQA Thresholds

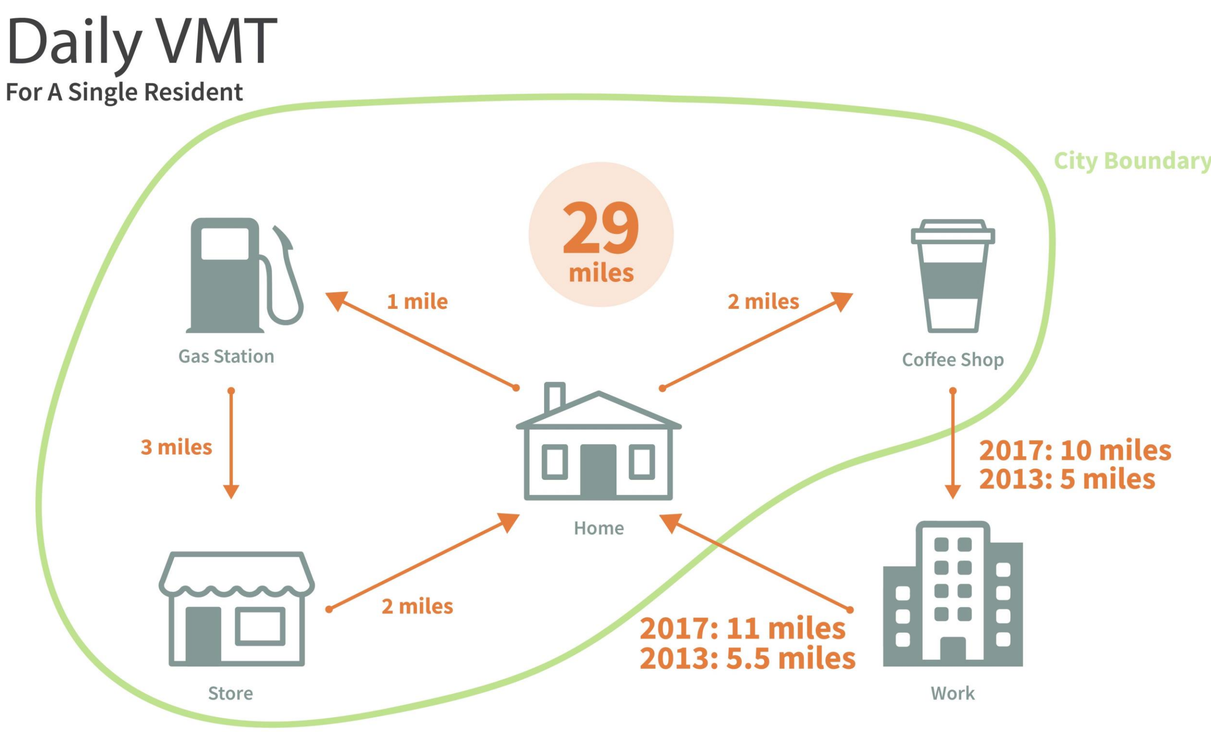


2017 CEQA Thresholds

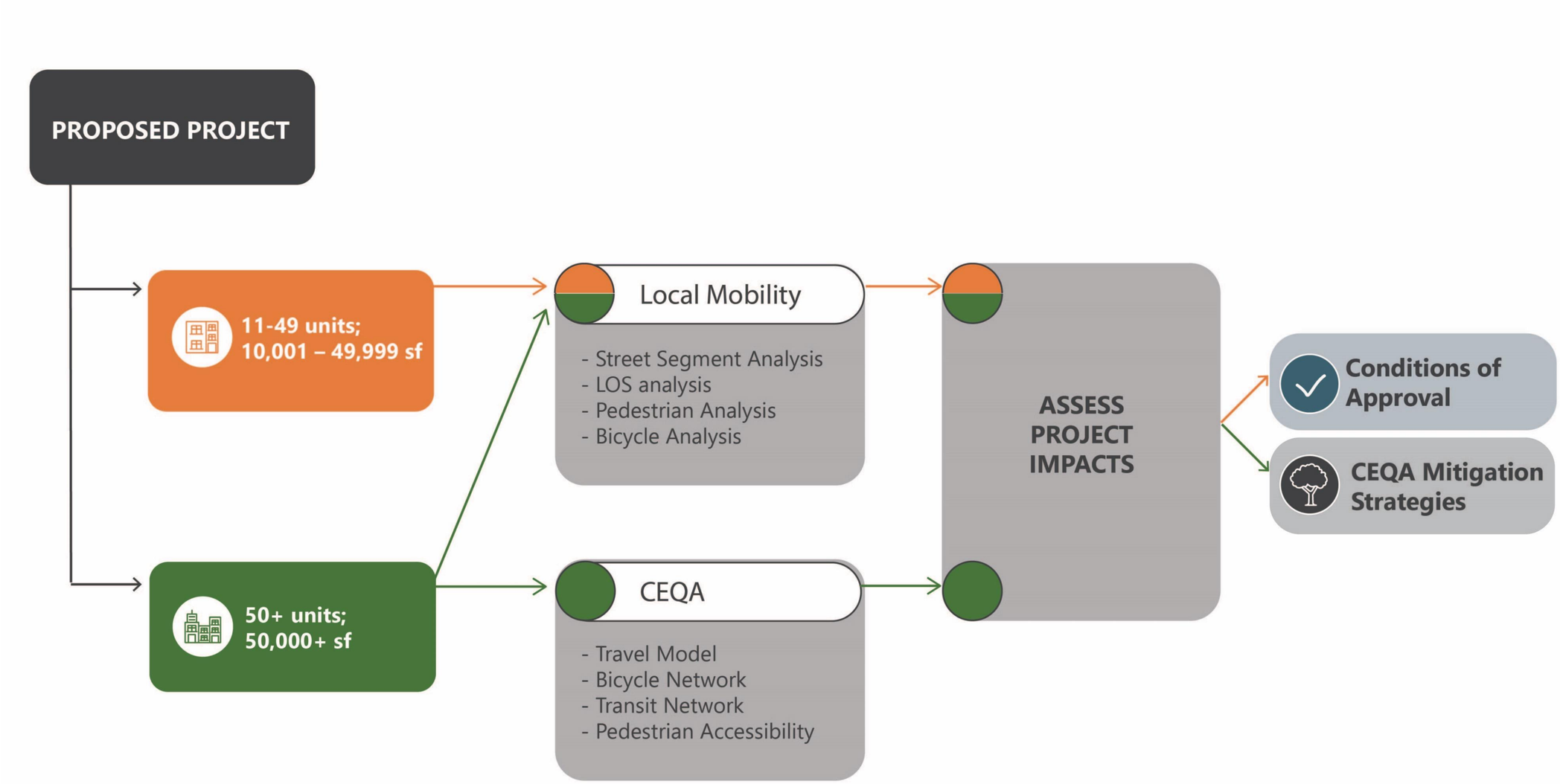


What Changed with the 2017 Threshold Update?

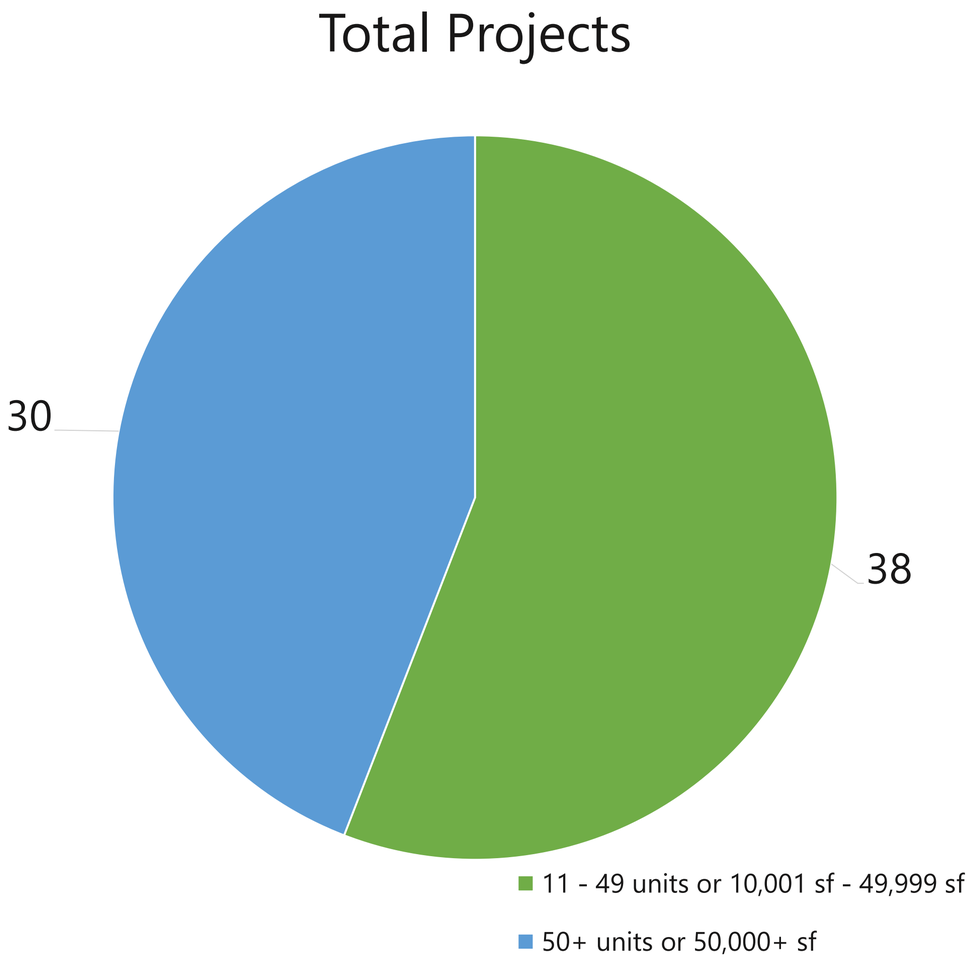
- City's methodology has been updated to capture the full length of trips
- 2017 Baseline reflects changes within the city land use and transportation patterns since 2013
- Reflects 16.8% below baseline as the established threshold of significance for VMT and VT

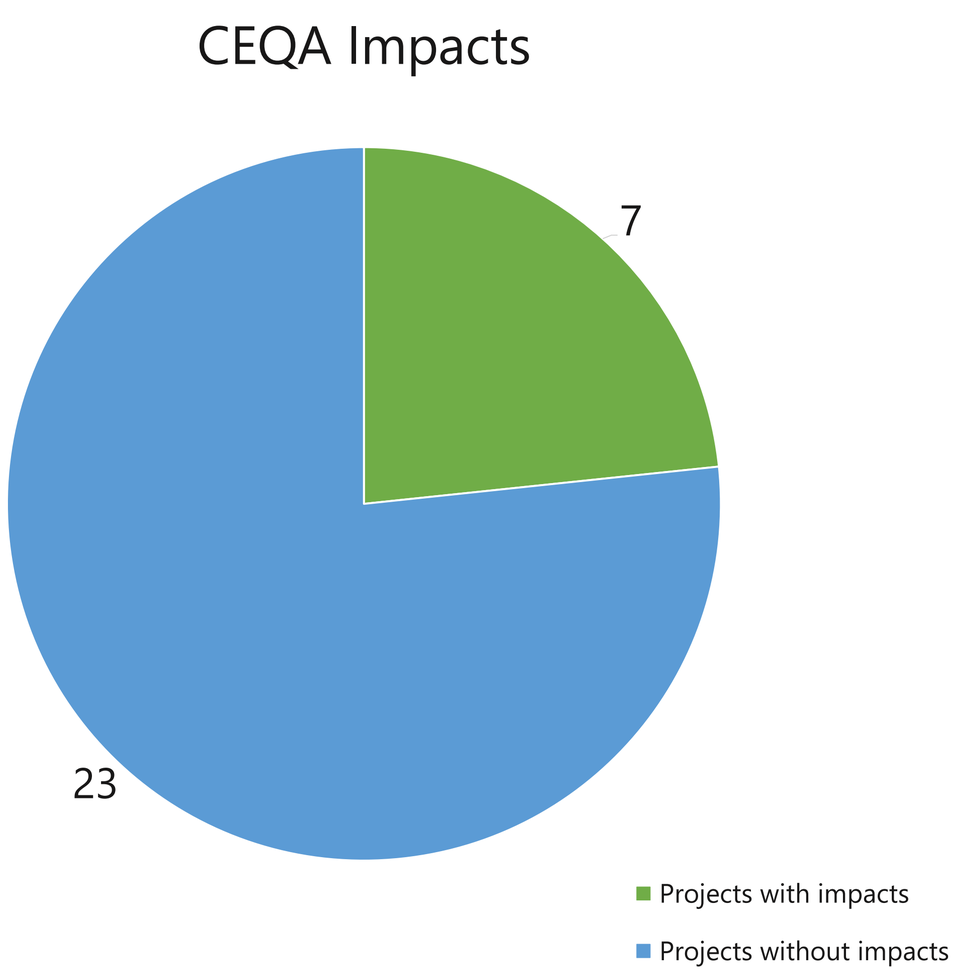


How Does CEQA Analysis Work in Pasadena?



How Many Projects Have Triggered Mitigations?





CEQA Mitigation Measures

CAPCOA
Quantifying Greenhouse Gas Mitigation Measures

Commute Trip Reduction Programs

Description	•A multi-strategy program to reduce commute-related VMT •Strategies include: ride-matching assistance, vanpool assistance, and bicycle end-trip facilities •Can be implemented through a Transportation Management Organization (TMO), which administers the TDM program on behalf of its members (e.g. public and private entities)
VMT Impact	• Encourages alternatives to commuting in single-occupancy vehicle
CAPCOA VMT Reduction	1% - 6.2%

CAPCOA
Quantifying Greenhouse Gas Mitigation Measures

Implement Car-Sharing and Ride-Sharing Programs

Description	•**Shared fleet of vehicles accessible on-site for residents or employees** •**First/Last-Mile solution to connect with transit**
VMT Impact	Reduces need to own a vehicle or the number of household vehicles
CAPCOA VMT Reduction	0.4% - 0.7%

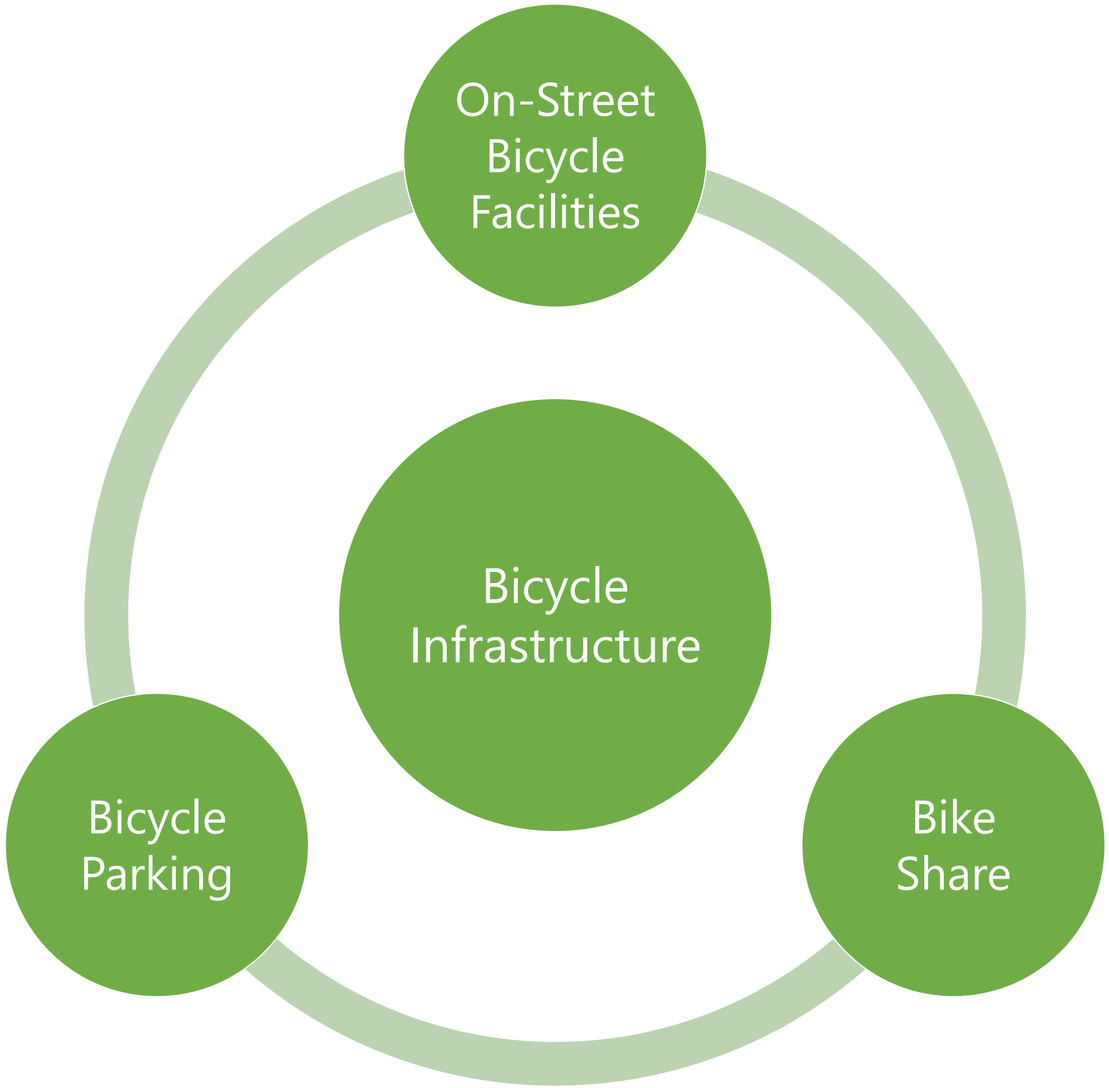
CEQA Mitigation Measures

CAPCOA
Quantifying Greenhouse Gas Mitigation Measures

Parking Management

Strategy	Description and VMT Impact	VMT Reduction
Limit Parking Supply	• Eliminate or reduce minimum parking requirements • Create maximum parking requirements • Could incentive higher density development	5% - 12.5%
Unbundle Parking Costs from Property Cost	• Parking is additional cost to property purchase or rent cost • Removes burden from those who do not need a parking spot	2.6% - 13%
Implement Market-Price Public Parking	• Applicable for on-street parking near central business district and employment or retail centers • Encourages people to park once	2.8% - 5.5%

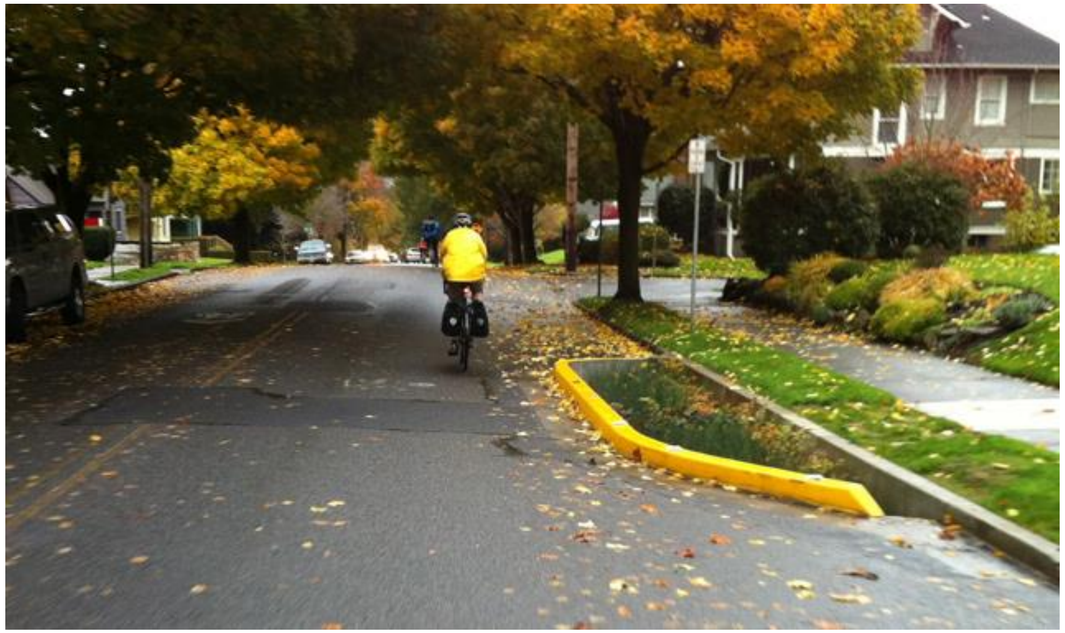
CEQA Mitigation Measures



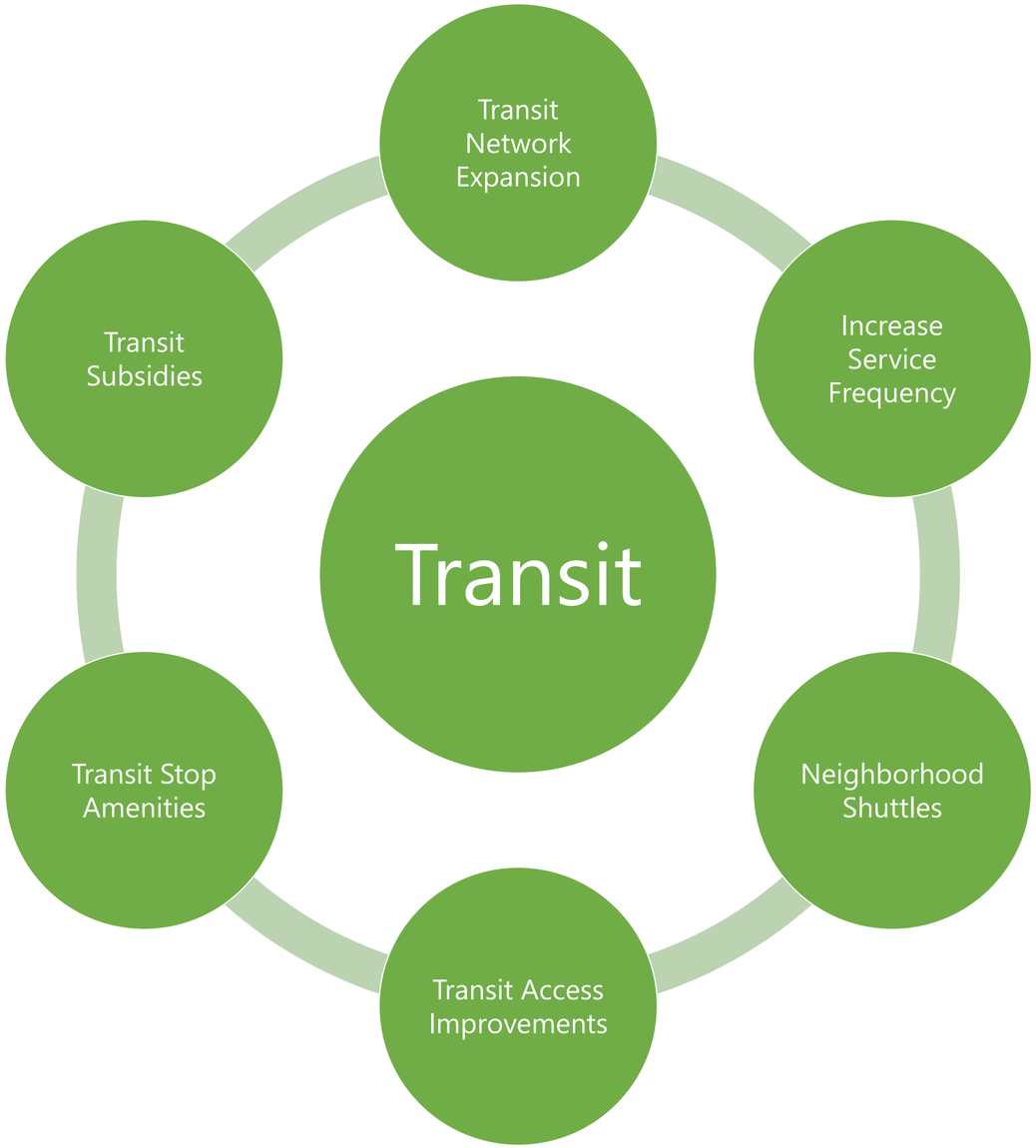
CAPCOA
Quantifying Greenhouse Gas Mitigation Measures

Provide Traffic Calming Measures and Low-Stress Bicycle Network Improvements

Description	•**Creates networks with low vehicle speeds and volumes that support walking and bicycling** •**Electric bicycles could enhance effectiveness of this strategy** •**Could occur through impact fee program for active transportation improvements**
VMT Impact	Encourages people to bicycle, especially for shorter trips
CAPCOA VMT Reduction	0.25% - 1%



CEQA Mitigation Measures



CAPCOA
Quantifying Greenhouse Gas Mitigation Measures

Increase Transit Accessibility

Description	•Locates development within a 5-10 minute walk (~1/4 mile) from a high-frequency transit stop •Enhanced by nearby mixed-used development, streets with traffic-calming design, and parking management •Alternatively, microtransit is a transit service with flexible routing and/or scheduling
VMT Impact	• Encourages transit use to replace vehicle trips
CAPCOA VMT Reduction	0.5% - 24.6%

Q&A

Local Mobility Process & Metrics

CEQA vs. Local Mobility

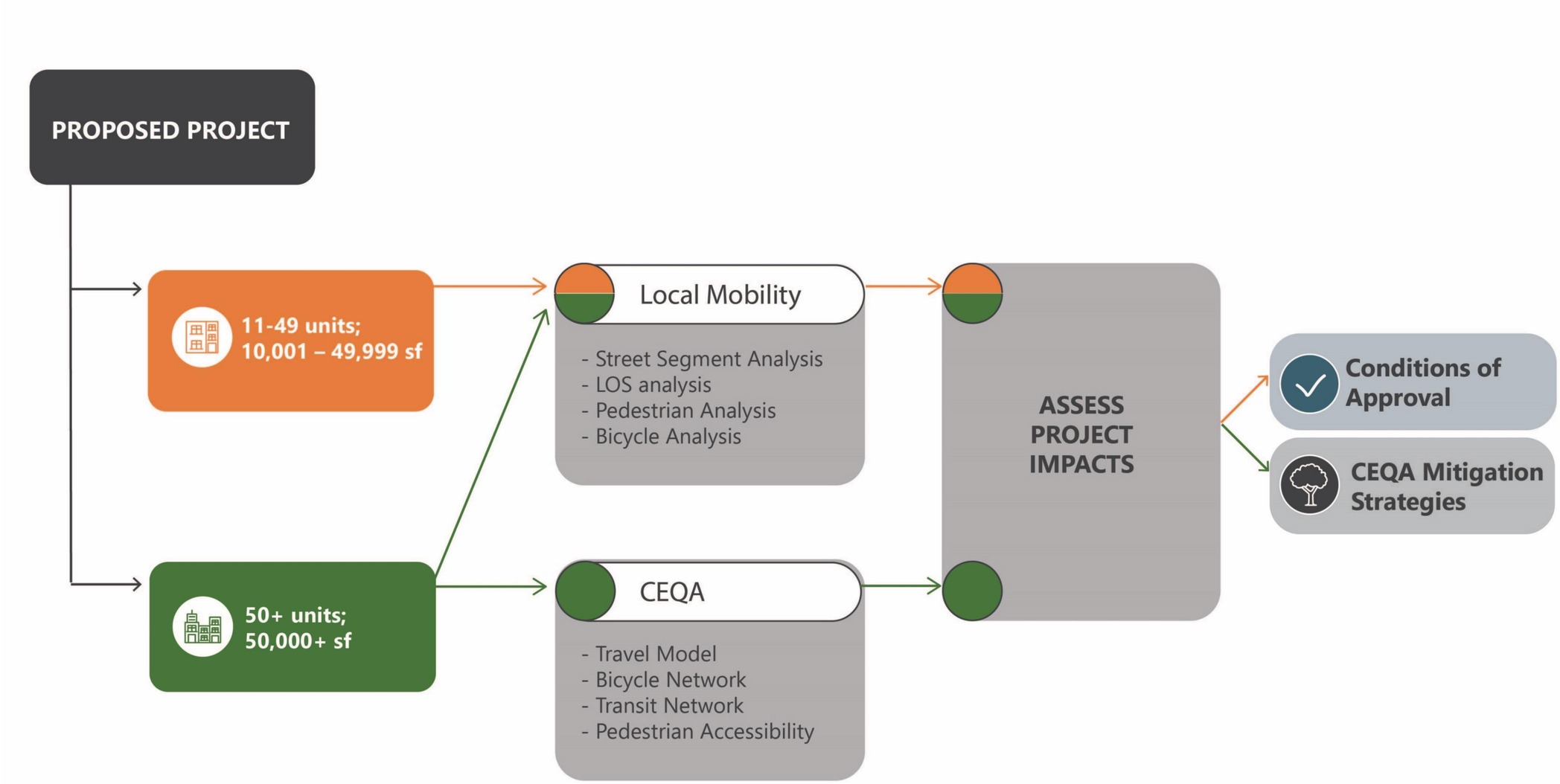
CEQA

- Analysis applied to projects with 50+ residential units or 50,000 sq. feet
- Applies five transportation analysis metrics
- Prioritizes reduction of GHG emissions and multi-modal transportation solutions
- Mitigations are identified for projects that trigger the significance thresholds

Local Mobility

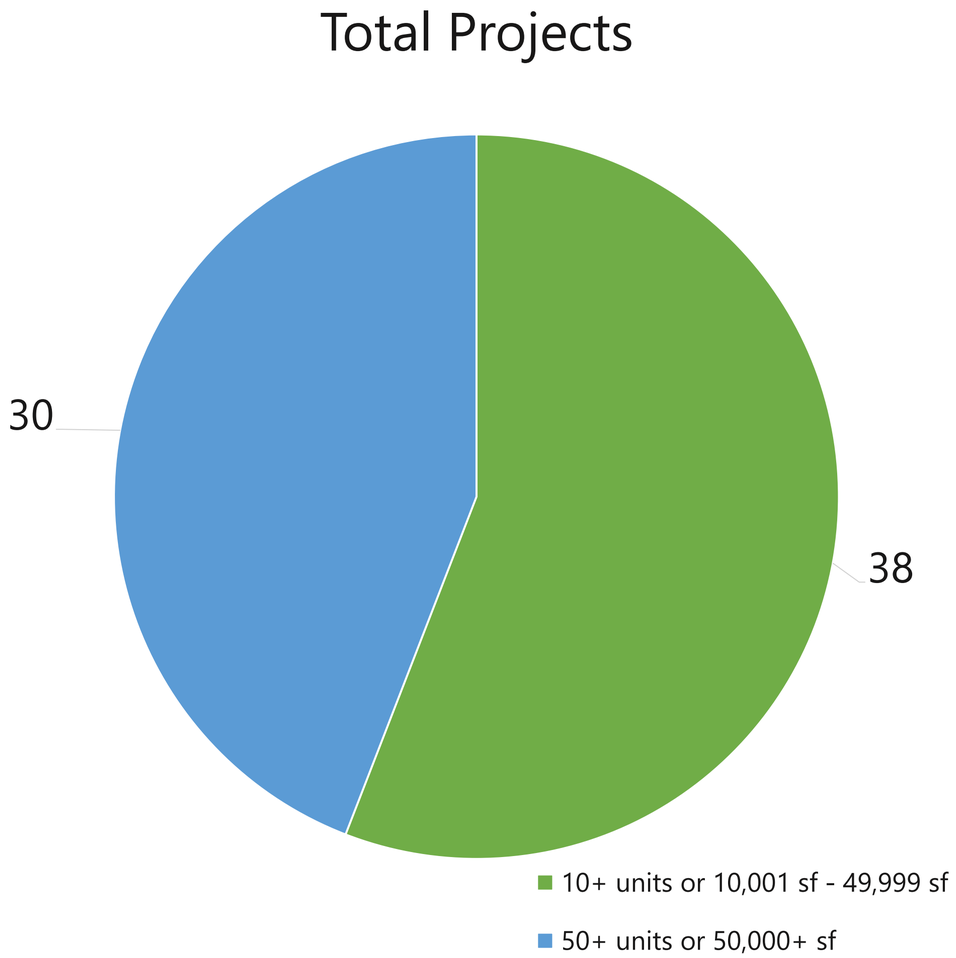
- Analysis applied to projects with 11-49 residential units or 10,001-49,999 sq. feet
- Applies four analysis metrics, **including LOS**
- Prioritizes neighborhood protection measures and street network deficiencies
- Conditions of Approval are identified for caps that are exceeded

How Does Local Mobility Analysis Work in Pasadena?



Local Mobility Analysis

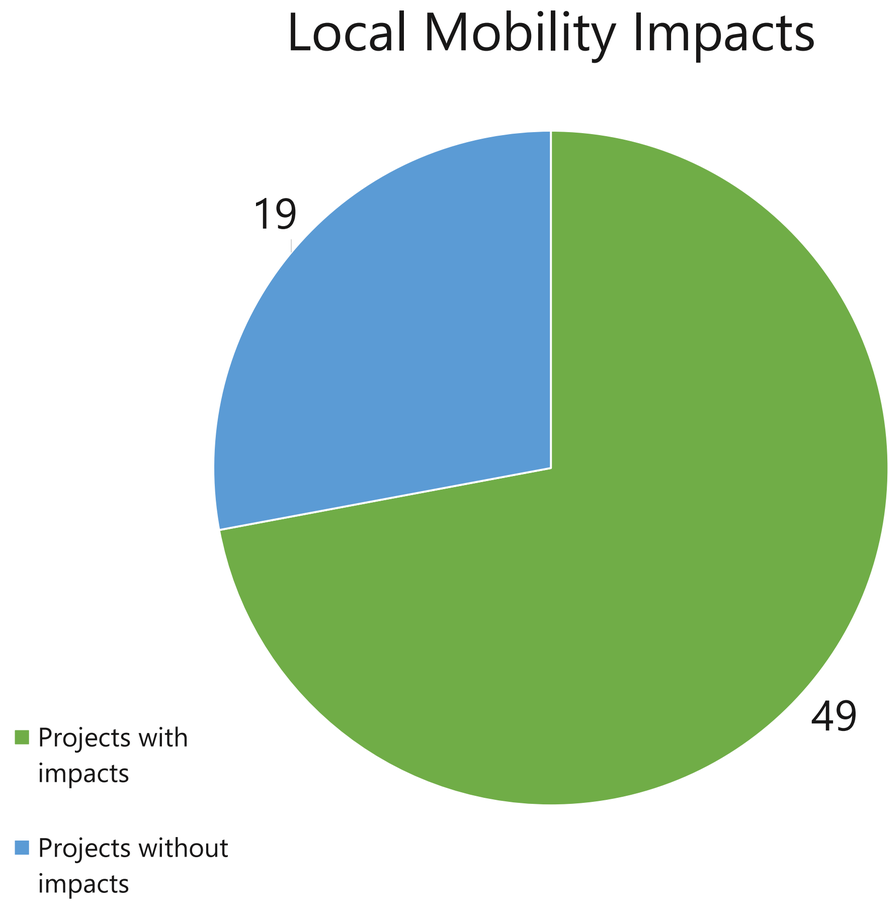
- Conditions of Approval based are aimed at improving vehicular movement and reducing neighborhood traffic intrusion
- Uses current traffic data to analyze the effects of development on traffic operations
- Evaluates intersection performance, vehicle delay, and travel
- Applies four analysis procedures:
  - Street Segment Analysis
  - Auto Level of Service (LOS)
  - Pedestrian Environmental Quality Index
  - Bicycle Environmental Quality Index

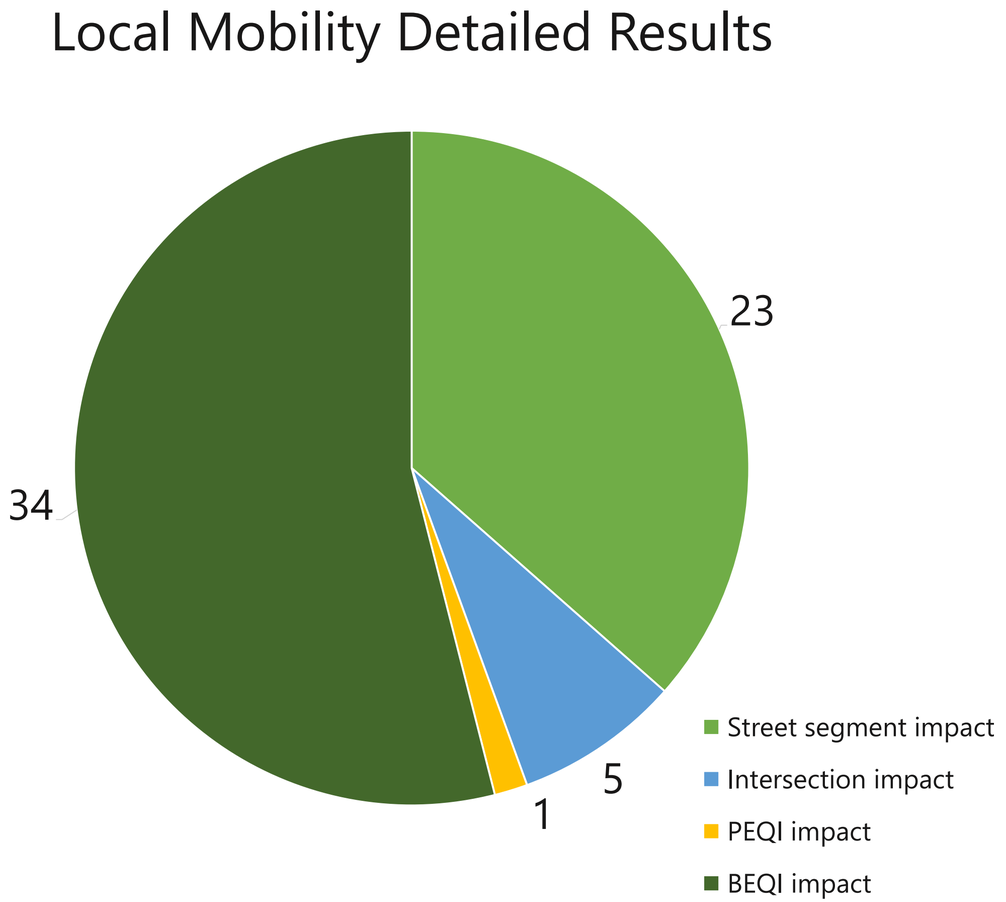


Why Have a Local Mobility Process?

- Pasadena has chosen to undertake Local Mobility analysis because :
  - Provides a localized review of project effects
  - Continuing to utilize LOS results in a more robust analysis
  - Local Mobility captures the more granular level of the driver's experience on the road
  - Retaining Local Mobility helps identify 'on-the-ground' effects that have implications for neighborhood character and quality of life in Pasadena

How Many Projects Have Triggered Conditions of Approval?





Local Mobility Metrics and Caps

METRIC	DESCRIPTION	CAP
Street Segment Analysis	The street segment analysis assesses traffic intrusion on local streets in residential neighborhoods.	Increases of 10-15% above existing on streets with more than 1500 ADT would trigger conditions of approval to reduce project vehicular trips.
Auto Level of Service	Level of Service (LOS) as defined by the Transportation Research Board's *Highway Capacity Manual (HCM)*.	A decrease beyond LOS D Citywide or LOS E within Transit Oriented Districts (TODs) would trigger conditions of approval to reduce project vehicular trips.
PEQI	Pedestrian Environmental Quality Index	Below Average Conditions
BEQI	Bicycle Environmental Quality Index	Below Average Conditions

Street Segment Analysis

Existing ADT	Project-Related Vehicular Increase in ADT
0 to 1,500	150 or more
1,501 to 3,499	10% or more of final ADT
3,500 or more	8% or more of final ADT

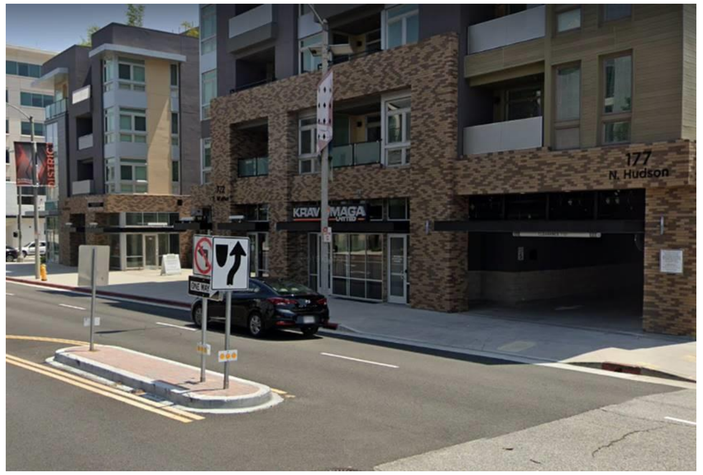
- For projects that exceed the caps, a targeted Complete Streets Plan is required with input from affected residents, council districts, and DOT to encourage use of non-vehicular modes

Local Mobility Complete Streets Plan – Potential Components

Mini Roundabout

Curb Extension

Raised Median



Speed Hump

Local Mobility Conditions of Approval

Intersection LOS Cap Conditions

- Intersection signal modifications
- Coordinated signal system improvements
- Vehicle detection upgrades
- Intersection monitoring devices

Local Mobility Conditions of Approval

Pedestrian Environmental Quality Conditions

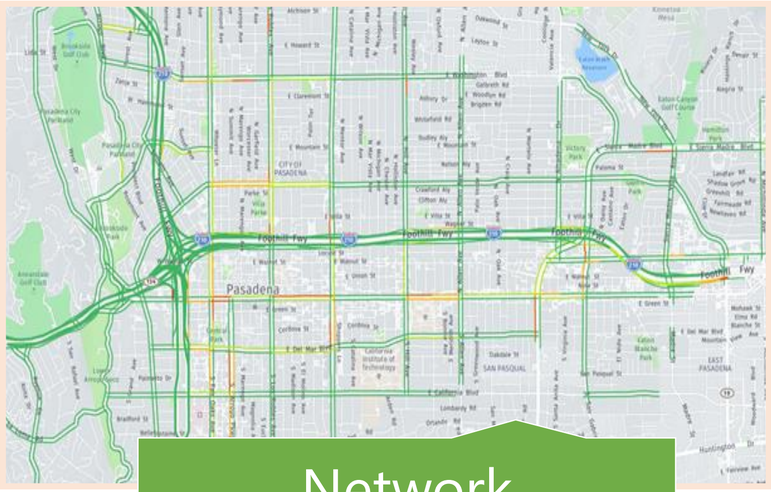
- Pedestrian lighting to the nearest transit station
- Pedestrian signal improvements
- Enhanced pedestrian crossing equipment installations
- Curb extensions
- Sidewalk improvements

Local Mobility Conditions of Approval

Bicycle Environmental Quality Conditions

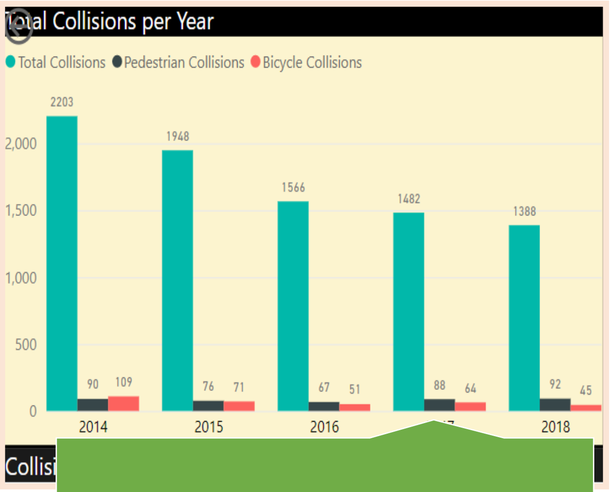
- Private bike share programs
- Bike parking: racks, lockers, or hub
- Contribution of funds to City bike projects adjacent to the proposed development

Traffic Monitoring



Network Monitoring

- Traffic Volumes
- Travel Times



Collision Trends

- By Severity
- Heat Map Analysis

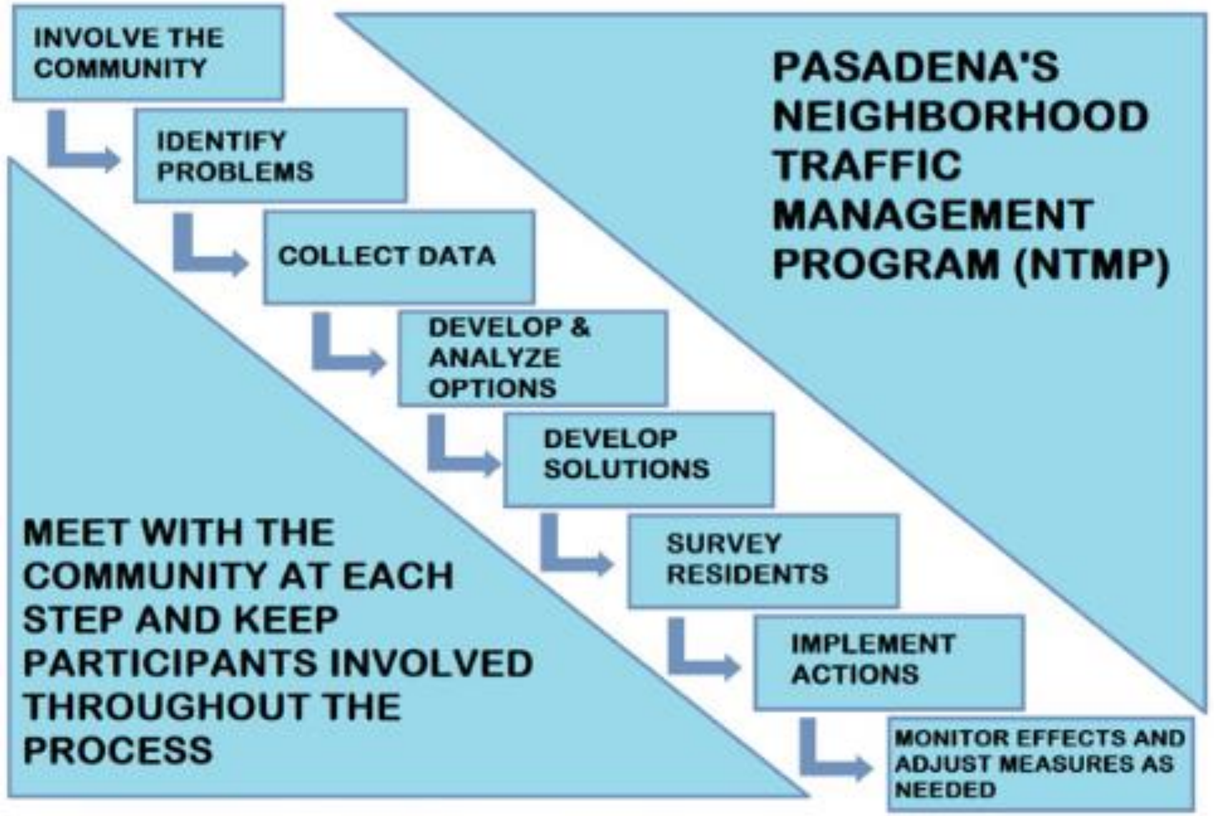
Real Time Operations

- Intersection Operations

Traffic Monitoring

- Traffic Investigations
  - On-Street Parking
  - Stop Signs
  - Speeding
  - Safety

- Neighborhood Traffic Management Program



Project Example

Project Characteristics

- Transit Oriented District
- Demolish existing parking lot
- Project would include:
  - 90 apartment units
  - 4 live-work units
  - 4,000 sf retail
  - 2,000 sf restaurant

2017 Model Results – VMT per Capita

	Project VMT/Cap	Citywide VMT/Cap	16.8% Below Citywide VMT/Cap	Impact?
Results	29.9	35.6	29.6	YES

2017 Model Results – VT per Capita

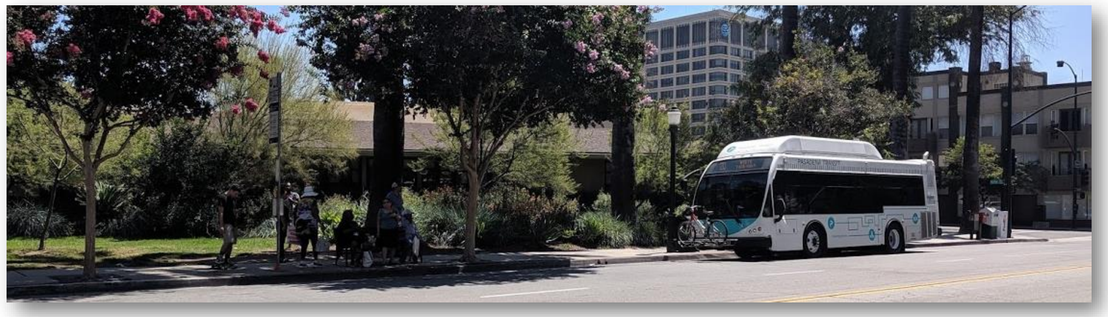
	Project VT/Cap	Citywide VT/Cap	16.8% Below Citywide VT/Cap	Impact?
Results	3.9	4.2	3.5	YES

Local Mobility Analysis Results

	Street Segment Analysis	Level of Service	PEQI	BEQI
Impact?	YES	YES	NO	YES

Project Example – CEQA Mitigation Strategies

- Trip reduction strategies
- Fund various transit stop improvements
- Fund sidewalk improvements to improve accessibility
- Unbundle parking for residential use
- Finance Metro transit passes to residents



Project Example – Local Mobility Conditions of Approval

- No permanent, on-street, overnight parking permits shall be issued to future residents
- Restripe intersection to include a new turn lane – improve Level of Service
- Implementation of a targeted Complete Streets plan
- Fund various transit stop improvements
- Fund bicycle infrastructure improvements

Local Mobility– Examples from Other Jurisdictions

City of Oakland

Topic	Subtopics	Local Mobility (<50 Vehicle Trips During Peak Hour)	Local Mobility (>50 Vehicle Trips During Peak Hour)
Project Summary	Project Description	X	X
	Study Area Description	X	X
Travel Analysis	Trip Generation Letter	X	X
	Transportation Counts		X
	Collision History & Analysis		X
Transportation Demand Management	TDM Plan		X
	TDM Compliance		X
CEQA Analysis	Consistency with Plans		X
	Detailed VMT Analysis		
	Mitigations (if applicable)		
Conditions of Approval	Conditions of Approval	X	X

Local Mobility– Examples from Other Jurisdictions

City of Carlsbad

Land Use	Forecast Project Generated Auto Trips			
	<500 ADT or <50 peak hour trips	500 to 1,000 ADT or 50 to 100 peak hour trips	1,000 to 2,400 ADT or 100 to 200 peak hour trips	>2,400 ADT or >200 peak hour trips
Conforms to Approved Specific Plan or Master Plan	Level I			
Conforms to General Plan or Zoning	Level I	Level III	Level V	Level VII
Does not Conform to General Plan or Zoning	Level II	Level IV	Level VI	Level VIII

							Scenarios to be Evaluated				
	MMLOS (ped, bike, transit)	Study Area Map	Trip Generation Table	Trip Distribution & Assignment Figure	Signalized Intersection Analysis	Unsignalized Intersection Analysis	Existing Conditions Analysis	Cumulative Conditions Analysis	Horizon Year Analysis	Regional Travel Demand Model Run	LFMP Specific TIA
Level I	●	●	●								
Level II	●	●	●	●	●	●	●				●
Level III	●	●	●	●	●	●	●				
Level IV	●	●	●	●	●	●	●	●			●
Level V	●	●	●	●	●	●	●	●			
Level VI	●	●	●	●	●	●	●	●	●		●
Level VII	●	●	●	●	●	●	●	●	●	●	
Level VIII	●	●	●	●	●	●	●	●	●	●	●
Section Reference:	Section 7.6	Section 3.3	Section 5.0	Section 6.0	Section 7.1	Section 7.2	Section 4.0				Section 3.7

Local Mobility– Examples from Other Jurisdictions

City of Chula Vista

ADT Threshold	Intersection Analysis Requirements[1]	Analysis Scenarios	Select Zone Assignment	Multi-Modal Analysis[2]
0-200	• None required	• None	• No	• None
201-500	• Signalized, All-Way Stop Control (AWSC), and Side Street Stop Control (SSSC)[3] Intersections nearest to the project driveway. • All project driveways	• Existing • Existing + Project	• No	• Bicycle and pedestrian facilities along the project frontage.
501-1,000	• All Signalized, AWSC, and SSSC[3] Intersections within ½ mile of the project to which the project adds 50 or more peak hour trips.[4] • All project driveways	• Existing • Opening Year[7] • Opening Year + Project	• No	• Bicycle and pedestrian facilities along the project frontage. • Adjacent transit facilities and services.
1,001-2,400	• All Signalized, AWSC, and SSSC[3] Intersections within 1 mile of the project to which the project adds 50 or more peak hour trips.[4] • All project driveways	• Existing • Opening Year • Opening Year + Project	• No	• Bicycle and pedestrian facilities along Mobility Element facilities within ¼ mile of the project site. • Transit facilities and services within ¼ mile.[5]
2,401+	• All Signalized, AWSC, and SSSC3 Intersections within 1 mile of the project, to which the project adds 50 or more peak hour trips.[4] • All project driveways	• Existing • Opening Year • Opening Year + Project	• Yes	• Bicycle and pedestrian along Mobility Element Facilities within ¼ mile of the project site. • Transit facilities and services within ¼ mile.[5]

Next Steps

- Initiate update to Local Mobility Analysis Guidelines
- Return to City Council in spring 2021
  - Update on Local Mobility Analysis Guidelines
  - Strategy to evaluate stricter CEQA thresholds