
Effective practices for car trip reduction

Adina Levin, Friends of Caltrain
January 2017

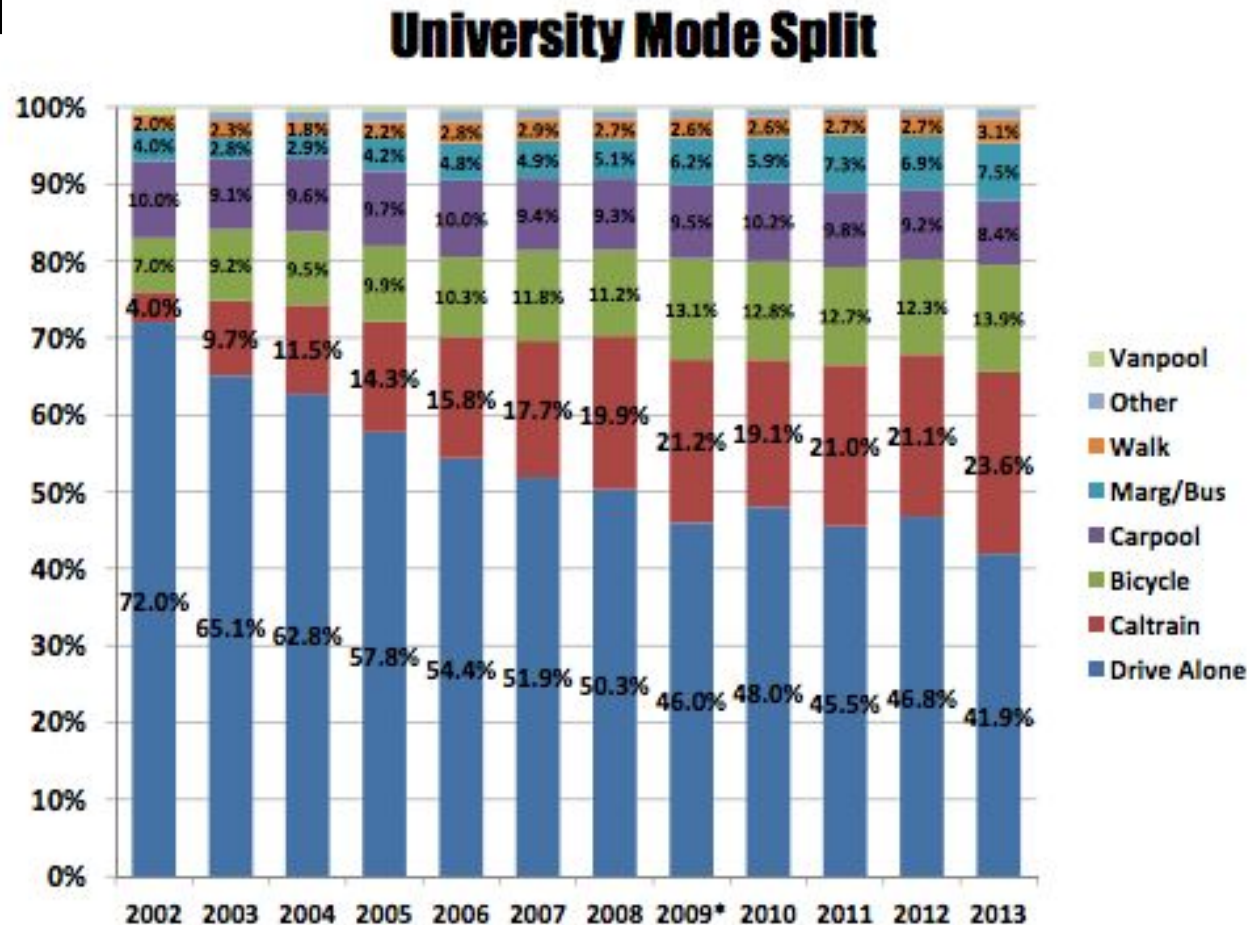
Stanford University's Pioneering Initiatives to Reduce Driving

Trip Cap required
by Santa Clara
County

Drive alone mode
share reduced
from 72% to 42%

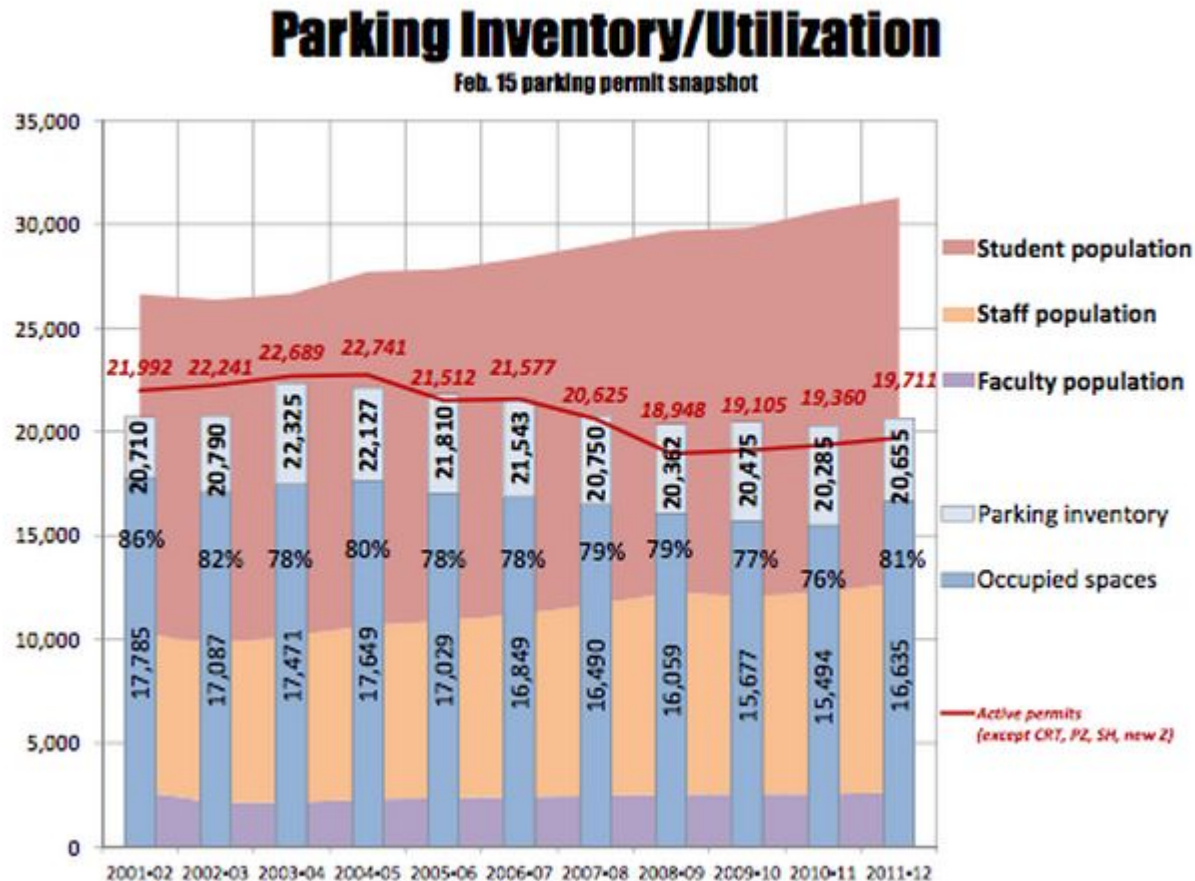
Mode split

- Drive: 42%
- Caltrain: 24%

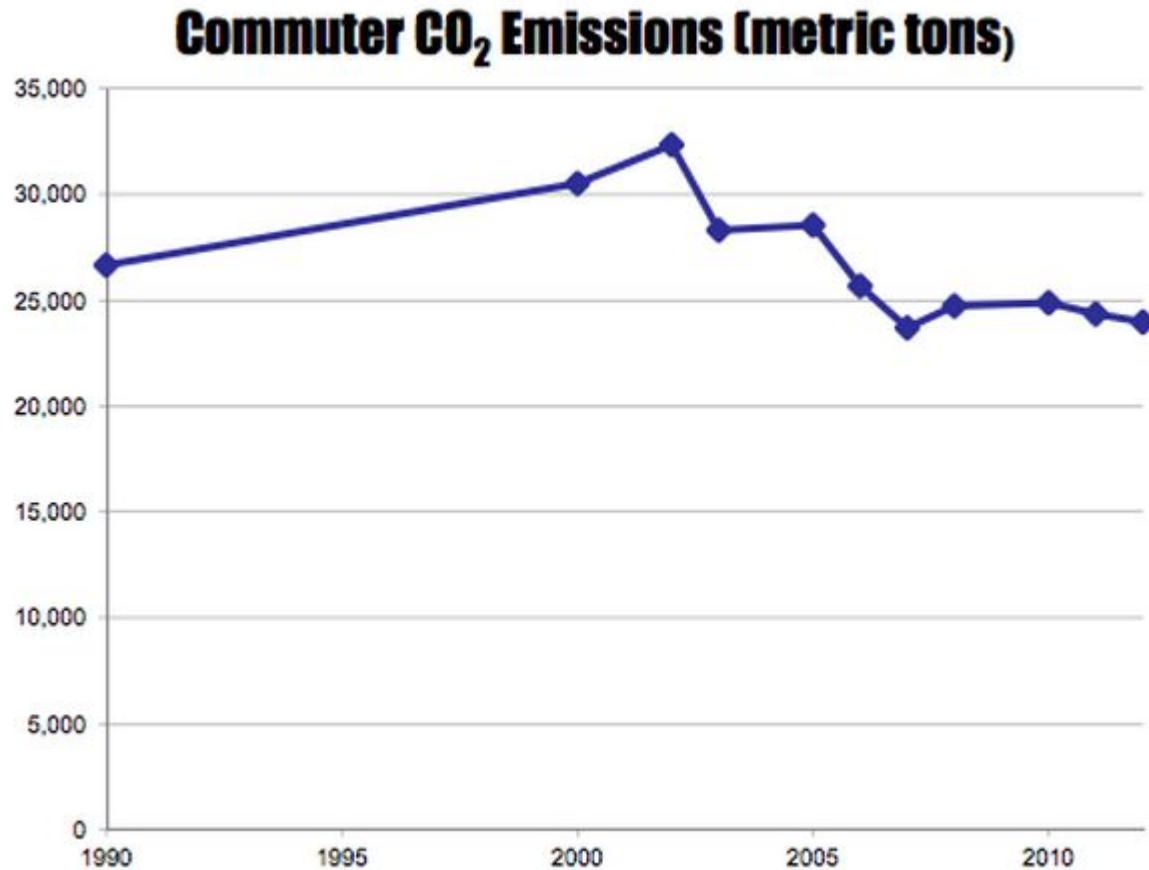


More people, fewer cars

Saved
\$100,000,000
in parking
structures never
built



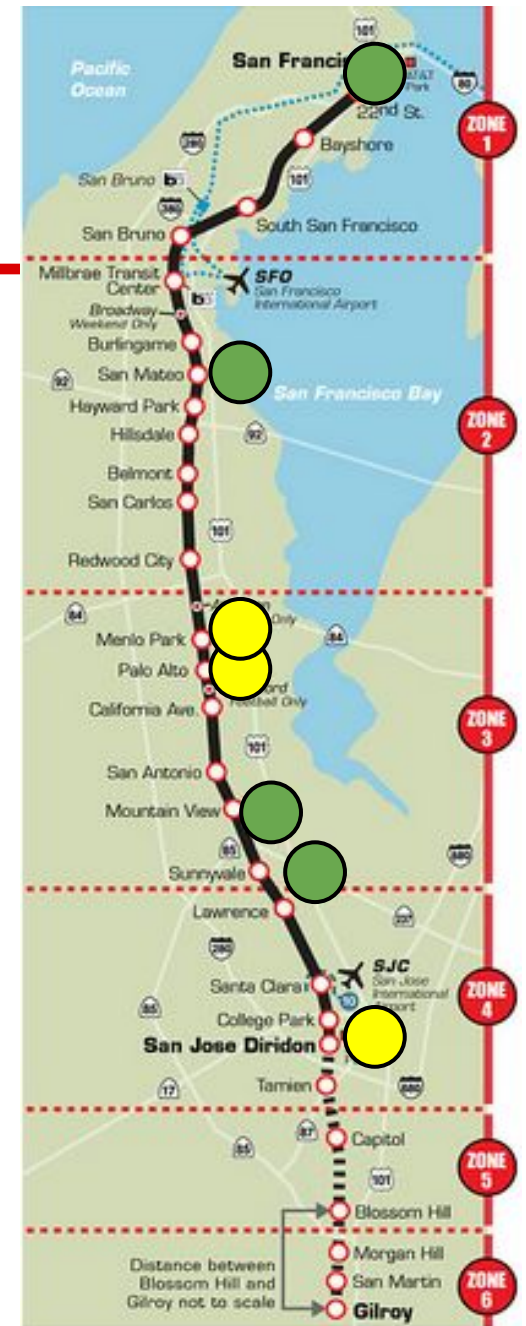
Fewer carbon emissions



Cities take charge to spread best practices

- Strong trip and mode share goals for plan areas
- Transportation Management Associations (nonprofit)
- Manage programs to reduce vehicle trips, parking demand
- Transit passes, shuttles, carpool, vanpool, carshare, more
- Funding sources include employers, developments, parking revenues, grants, etc
- Data and reporting

● Established ● Developing



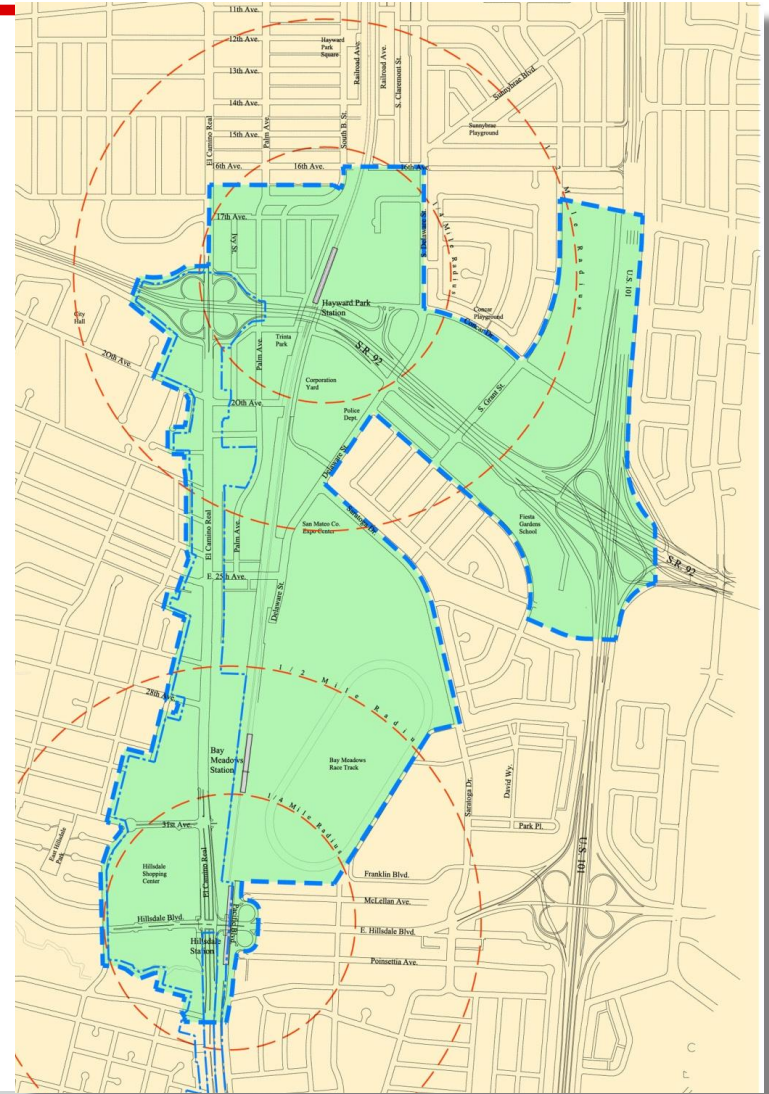
San Mateo Rail Corridor Plan



San Mateo Rail Corridor Plan

Hayward Park to Hillsdale

- 25% trip reduction goal
- Mixed use: commercial, residential, retail
- Each project submits trip reduction goals & TDM plan
- Transportation Management Association (TMA) manages TDM programs.
- Annual reporting to Planning Commission, Council
- 100% goal compliance



San Mateo Report to Council

Annual report to Council and Planning Commission shows development performance on trip limits

San Mateo Corridor Area: Project Trip Thresholds						
Project Name	Project Scope	ITE Trips Generated (PM Peak)	Trip Reduction Required			
			Short-Term		Long-Term	
			%	Trip Cap	%	Trip Cap
Bay Meadows Phase II	1,066 Residential Units	3426	10	3083	25	2569
	746,765 SF Office					
	92,579 SF Retail					
Hines	292,284 SF Office	484	25%	363	25%	363
	123,040 SF Office					
Station Park Green	599 Residential Units	534	25%	401	26% - 36%	395-342
	10k - 45k SF Office					
	25k - 60k SF Retail					
Peninsula Station	68 Residential Units	55	35%	36	54%	25
2000 S. Delaware Street Housing (Old Police Station Site)	120 Residential Units	84	30%	59	47%	45
2090 S. Delaware Street Apts.	111 Residential Units	79	25%	59	40%	47
Concar Village	Development Mix Not Determined					

Mountain View North Bayshore

Sets strong goals for trip limits and mode share required of new development

Goals used to refine transportation projects

TMA collects funding, operates last-mile shuttles

**FIGURE 1-1 NORTH BAYSHORE COMMUTE
MODE SHARE TARGETS**

Travel Mode	Commute Mode Share Target
Ridesharing (Carpools & Vanpools)	10%
Active Transportation (Biking & Walking)	10%
Transit (Public & Private Services)	35%
Single-Occupant Vehicle	45%



LinkedIn: Charging for Parking

City does not require specific features but works with developers to craft program

Paid parking is a powerful tool to reduce driving, increase alternatives

- Drive alone permit - higher cost, less convenient location
 - Shared vehicle permit - lower cost, more convenient location
 - No permit - cash benefit (parking cashout)
-

Palo Alto Downtown TMA

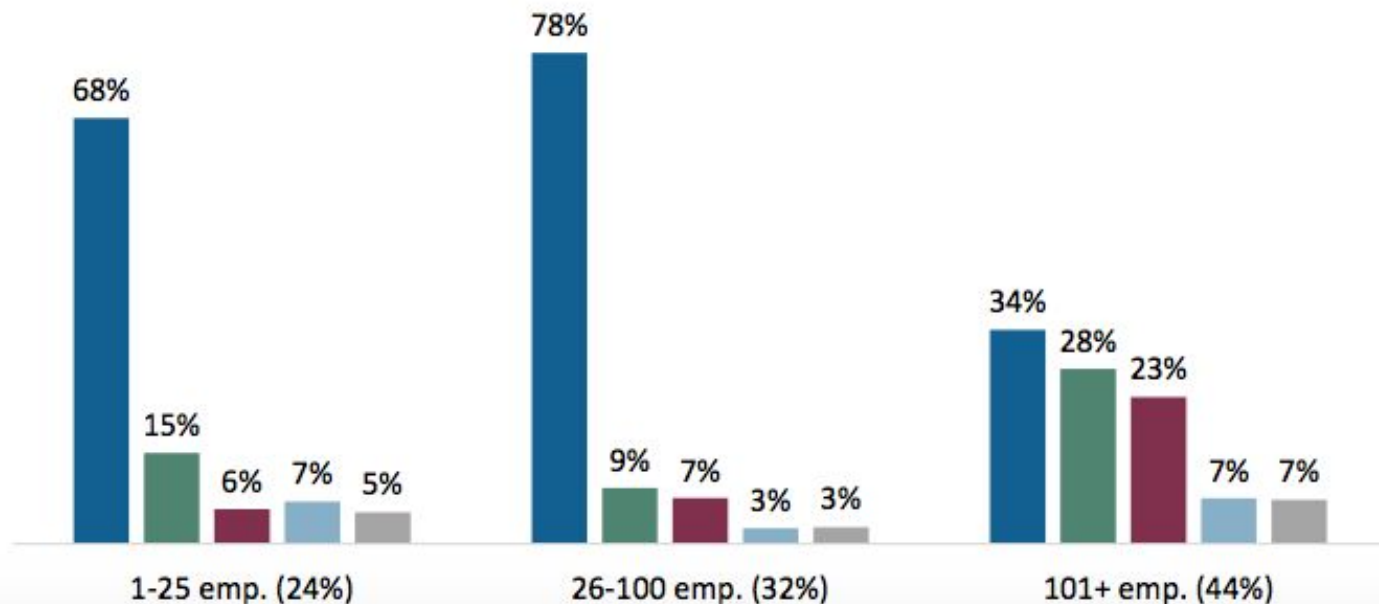


Palo Alto Downtown TMA - Robust data on employee transportation

Mode Share by Worksite Size

Employees working at larger companies drive the least and utilize transit the most.

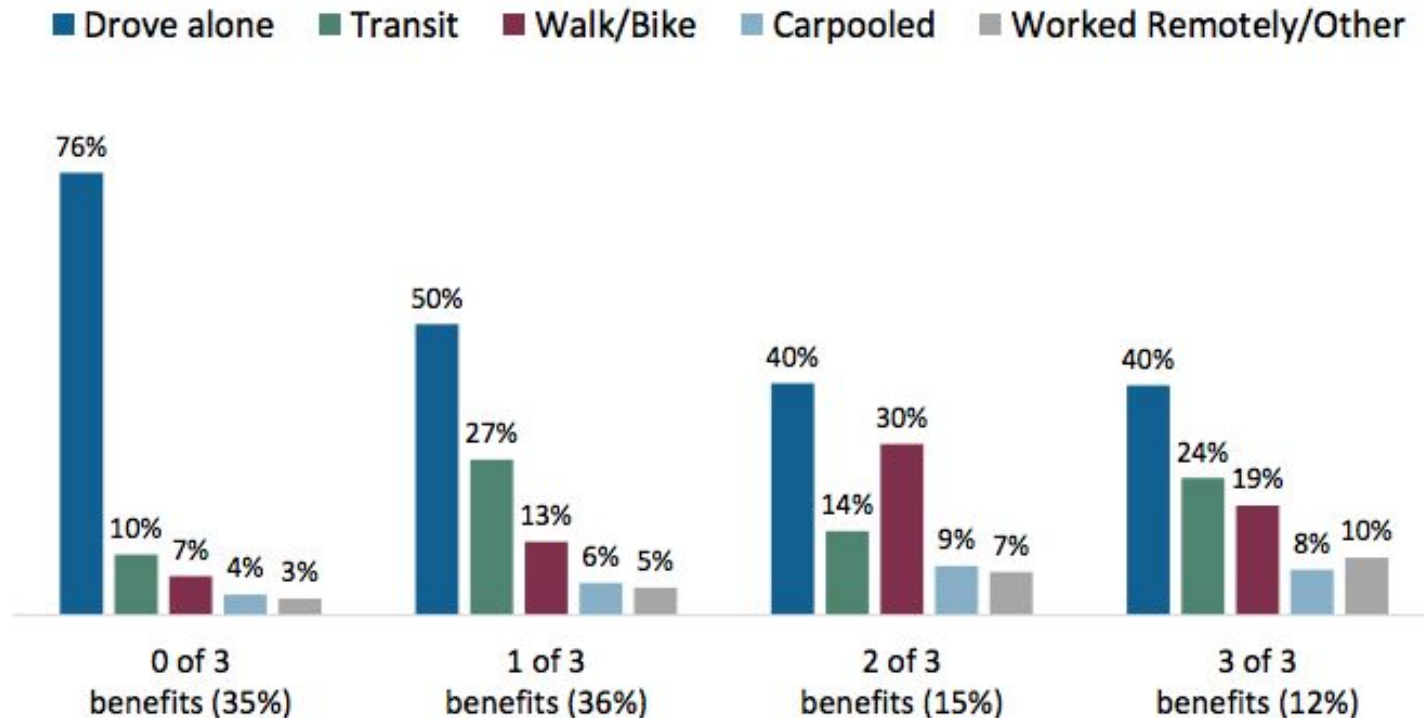
■ Drove alone ■ Transit ■ Walk/Bike ■ Carpooled ■ Worked Remotely/Other



Palo Alto Downtown TMA - Data shows opportunities to invest in reduced driving

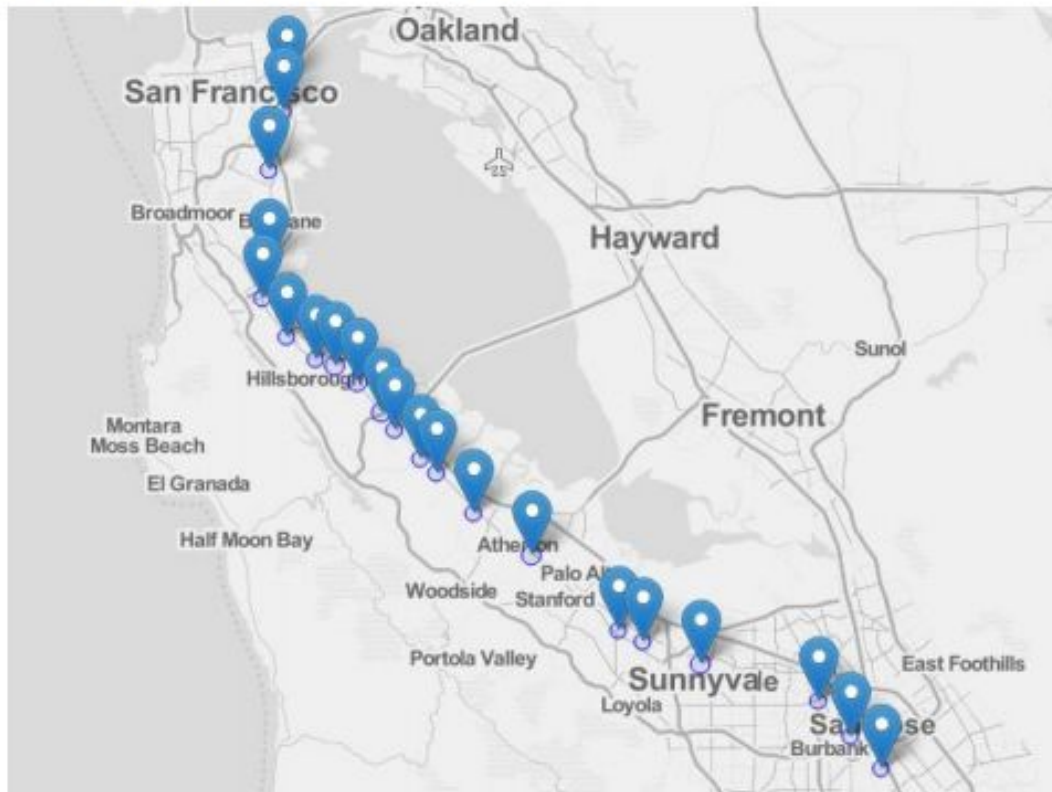
Mode Share by Amount of Transit Benefits

The more transit benefits that a worker receives, the less likely they are to drive alone.



Solutions suggested by data

Lyft to Caltrain Service Area



Lyft Pilot
providing
discounts for
Caltrain
first mile

Menlo Park General Plan

- Focus on aging industrial park area near Facebook, Belle Haven neighborhood, Bay restoration
- After input from community, businesses, experts, decided on “live-work-play” mix of uses
- 5500 units of housing, 4500 newly allowed, with services



Menlo Park General Plan

Option with more housing results in less driving

- Less GHG emissions
- Less pollution

TABLE 4.13-13 DAILY VEHICLE MILES TRAVELED (VMT) PER CAPITA COMPARISON: 2014 EXISTING AND 2040 PLUS PROJECT

Analysis Scenarios	VMT	Residents	Jobs	VMT Per Capita
2014 Existing	934,722	32,900	30,900	15
2040 No Project	1,655,624	38,780	47,750	19
2040 Plus Project	1,449,337	50,350	53,250	14

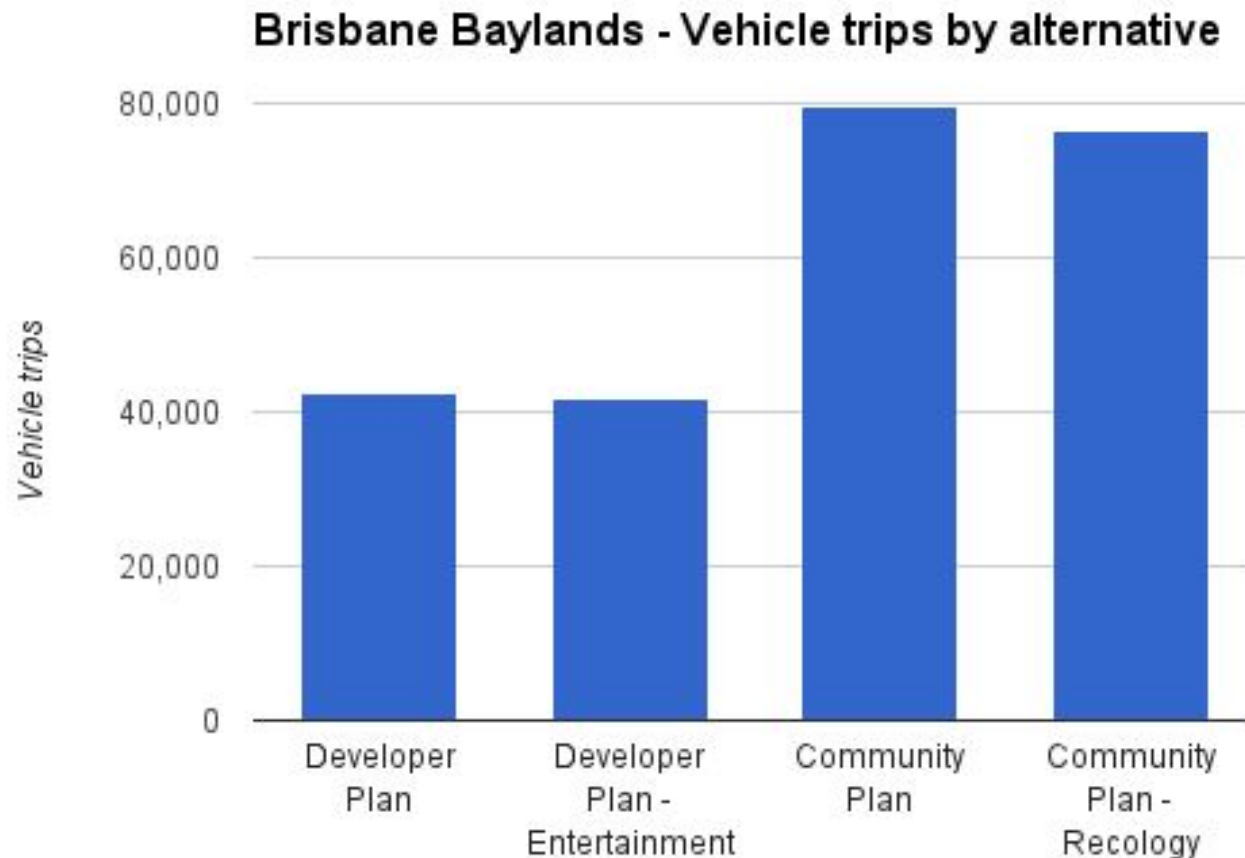
Source: TJKM Transportation Consultants, 2016.

Brisbane Baylands



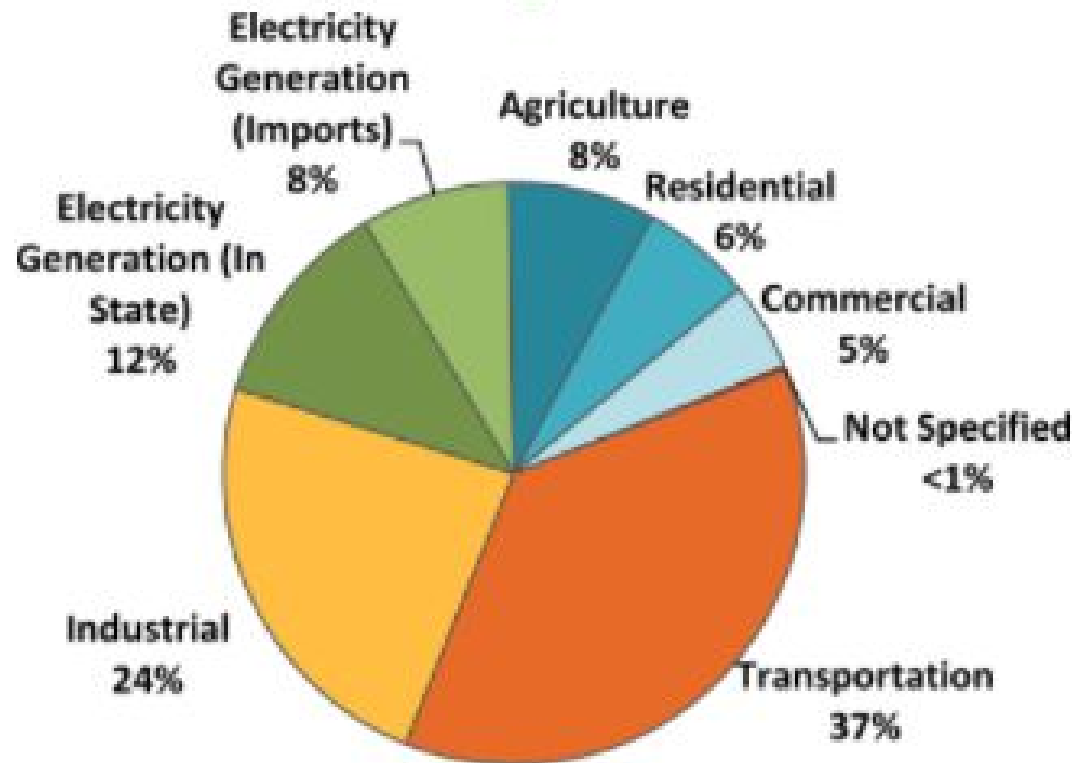
Brisbane Baylands

Current draft has weak goals for car trips - 80%+ driving
Alternatives with Housing - 40K Less Trips, 20% lower GHG emissions



Transportation is largest source of greenhouse gas emissions in CA

Emissions by Economic Sector



2014 Total CA Emissions: 441.5 MMTCO₂e

The Congestion Relief Treadmill

Faster driving

**More people
drive**



Widen roadway

Congestion

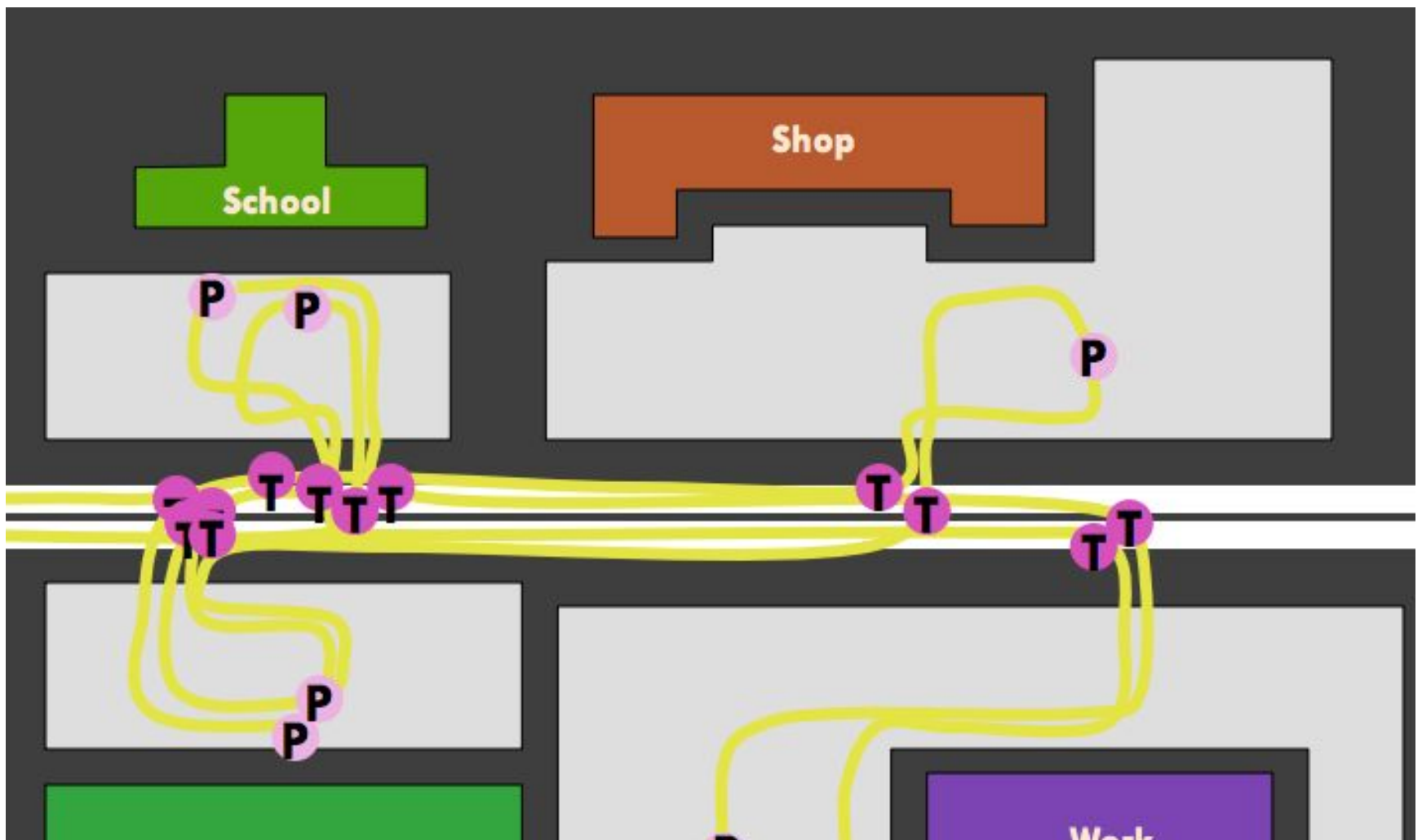
Widen roads to reduce congestion

- Fast driving, less safe/comfortable to walk/bike



The diagram illustrates a hierarchical structure, likely representing a neural network or a complex system. It features a central grid of nodes connected to a larger grid, with various sub-grids and connections representing different layers and pathways.

Design to reduce congestion



Design for easy access



Design for easy access



Summary - practices to reduce trips

Set mode share goal / trip cap

Require monitoring and reporting

Housing and transportation

Funding
