
Effective practices for car trip reduction

Adina Levin, Friends of Caltrain
January 2017

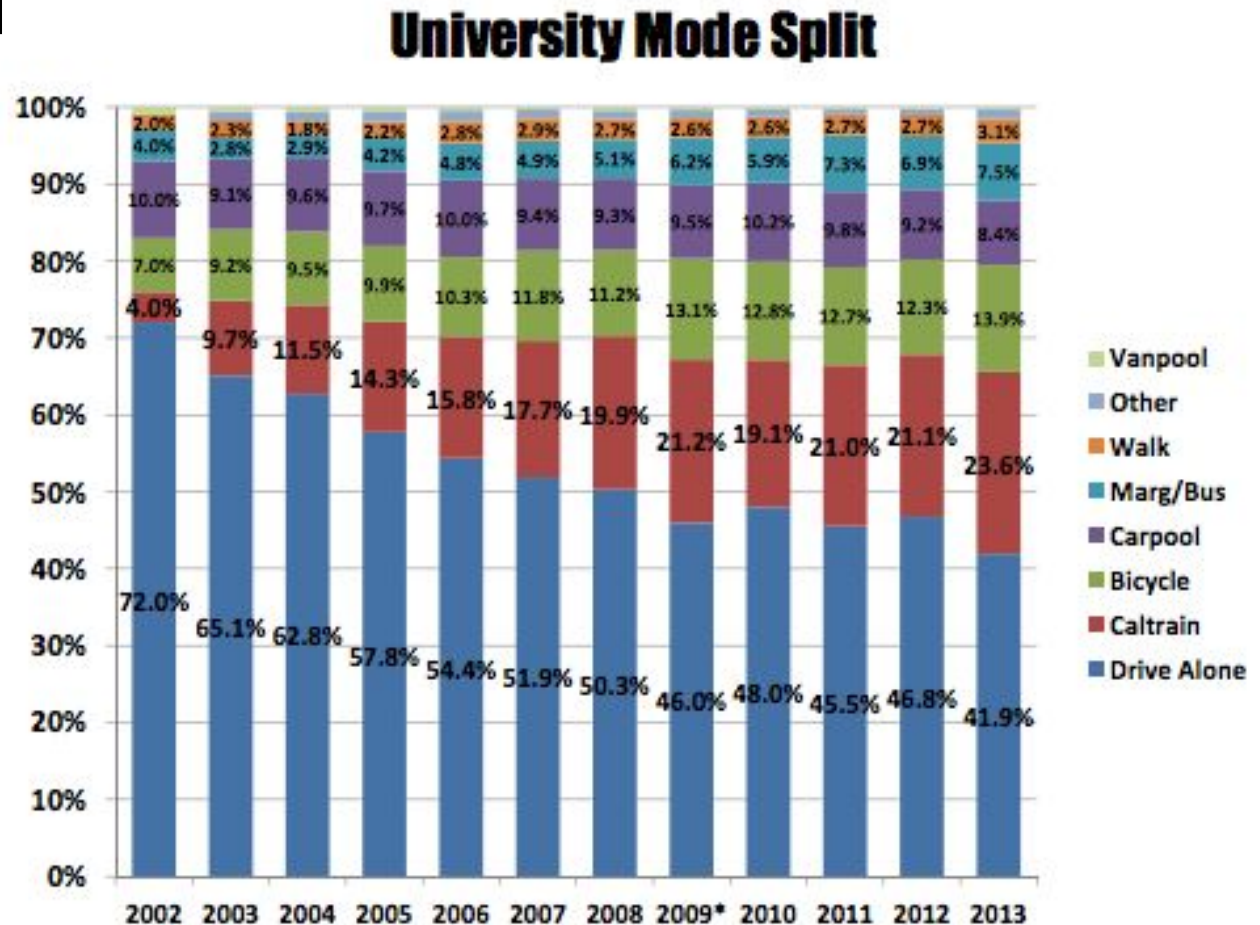
Stanford University's Pioneering Initiatives to Reduce Driving

Trip Cap required by Santa Clara County

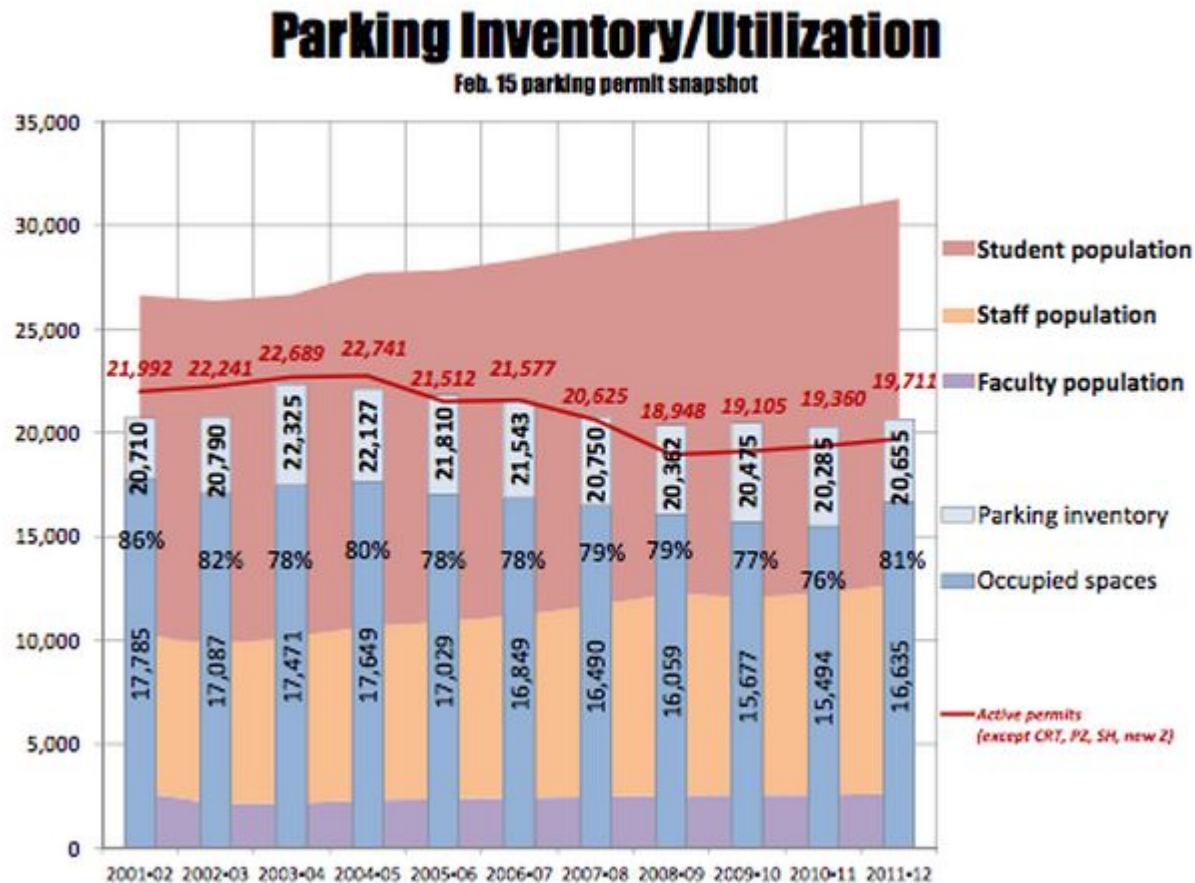
Drive alone mode share reduced from 72% to 42%

Mode split

- Drive: 42%
- Caltrain: 24%

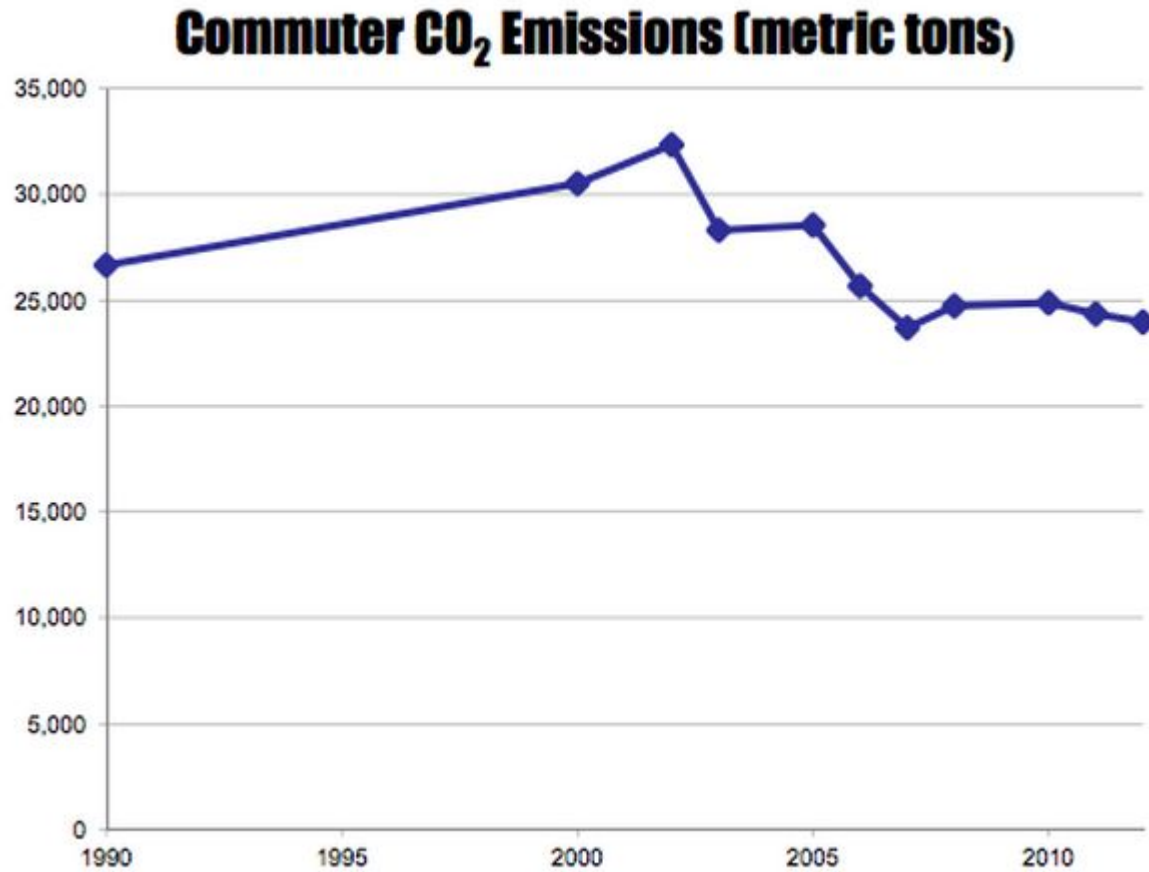


More people, fewer cars



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

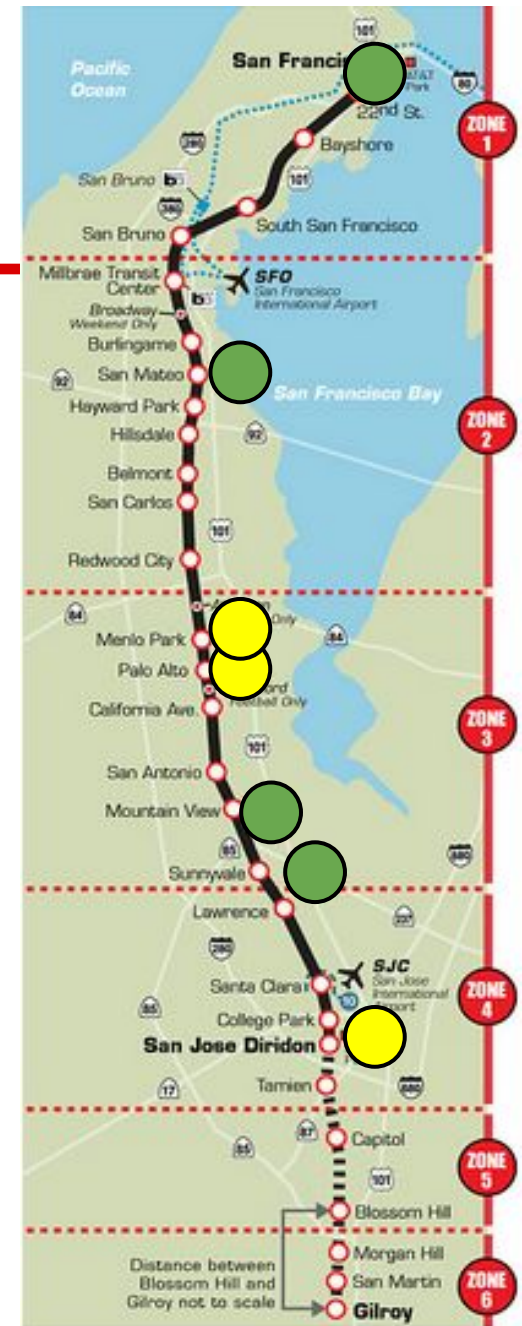
Fewer carbon emissions



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



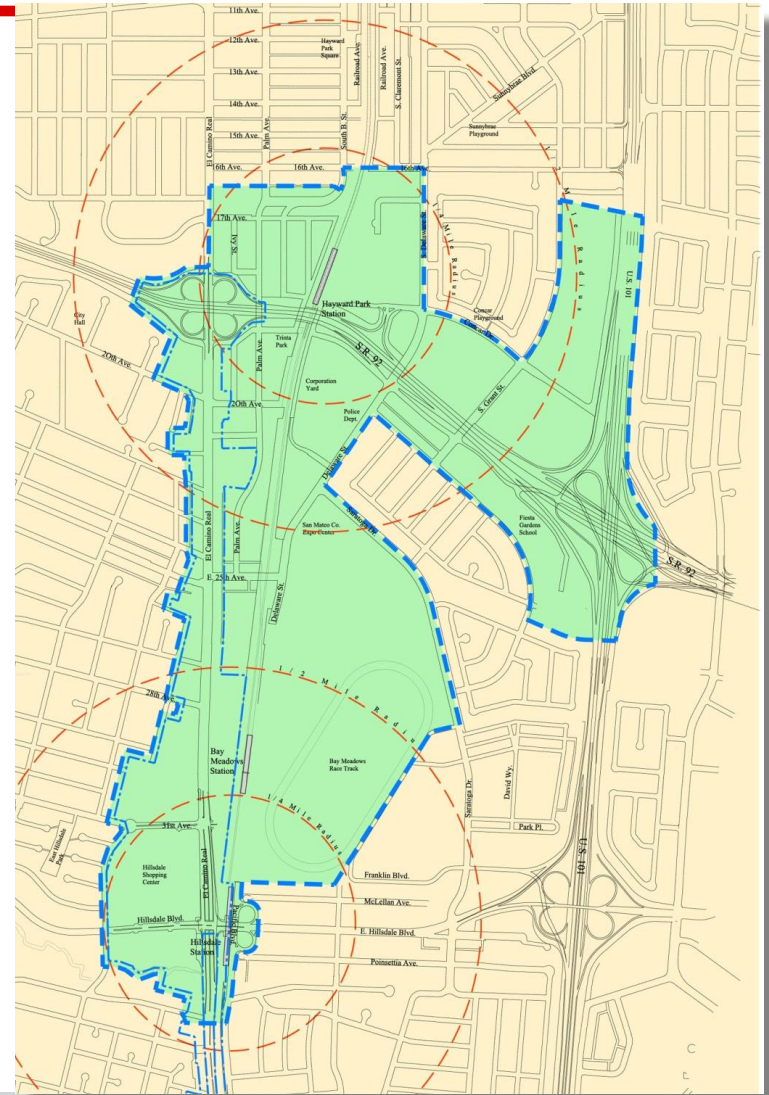
San Mateo Rail Corridor Plan



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 how developments are performing 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					

Palo Alto Downtown TMA

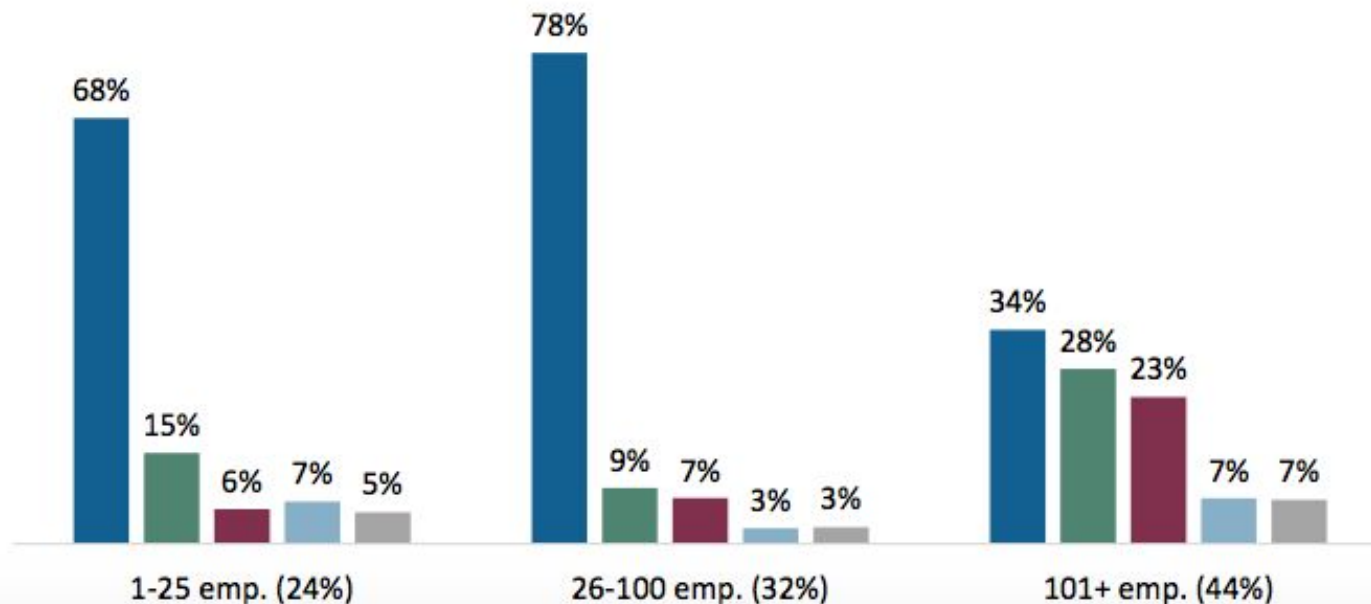


Palo Alto Downtown TMA - Robust data on employee transportation

Mode Share by Worksite Size

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

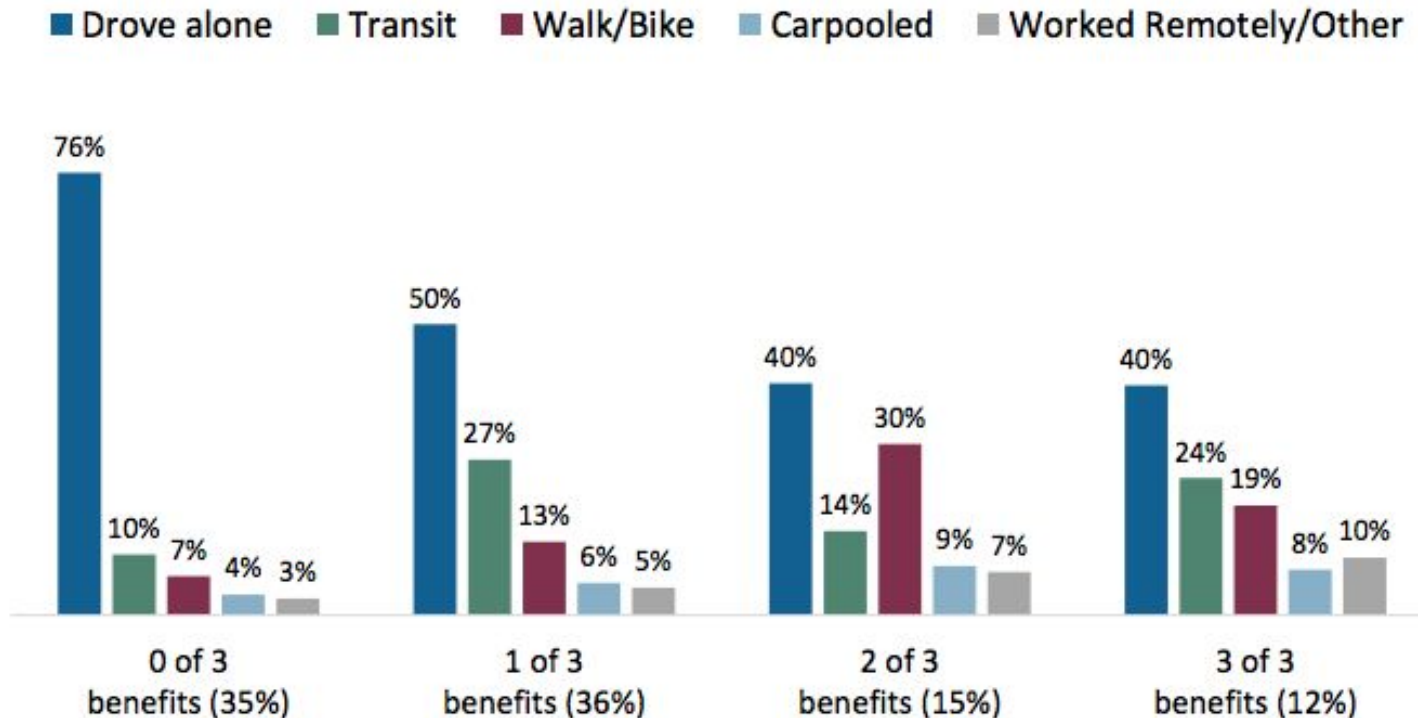
■ Drove alone ■ Transit ■ Walk/Bike ■ Carpooled ■ Worked Remotely/Other



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

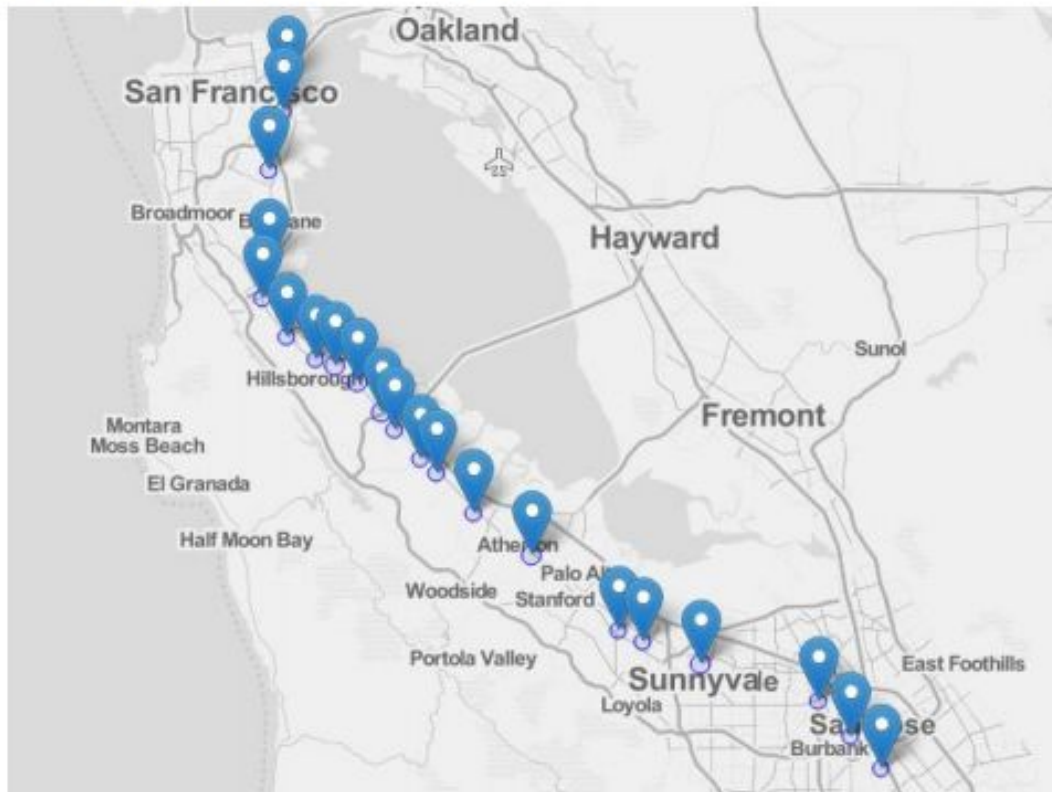
Mode Share by Amount of Transit Benefits

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



Pilot programs:

- Providing 100 transit passes to service workers (mostly Caltrain)
- Scoop carpool
- Lyft Pilot providing discounts for Caltrain first mile

Mountain View North Bayshore

Precise Plan 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%



Mountain View North Bayshore Plan

- Updating plan to add housing
- Adding housing & services near jobs would reduce vehicle miles travelled per person by ~7%
- Experts recommended at least 5,000 housing units to support robust services



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

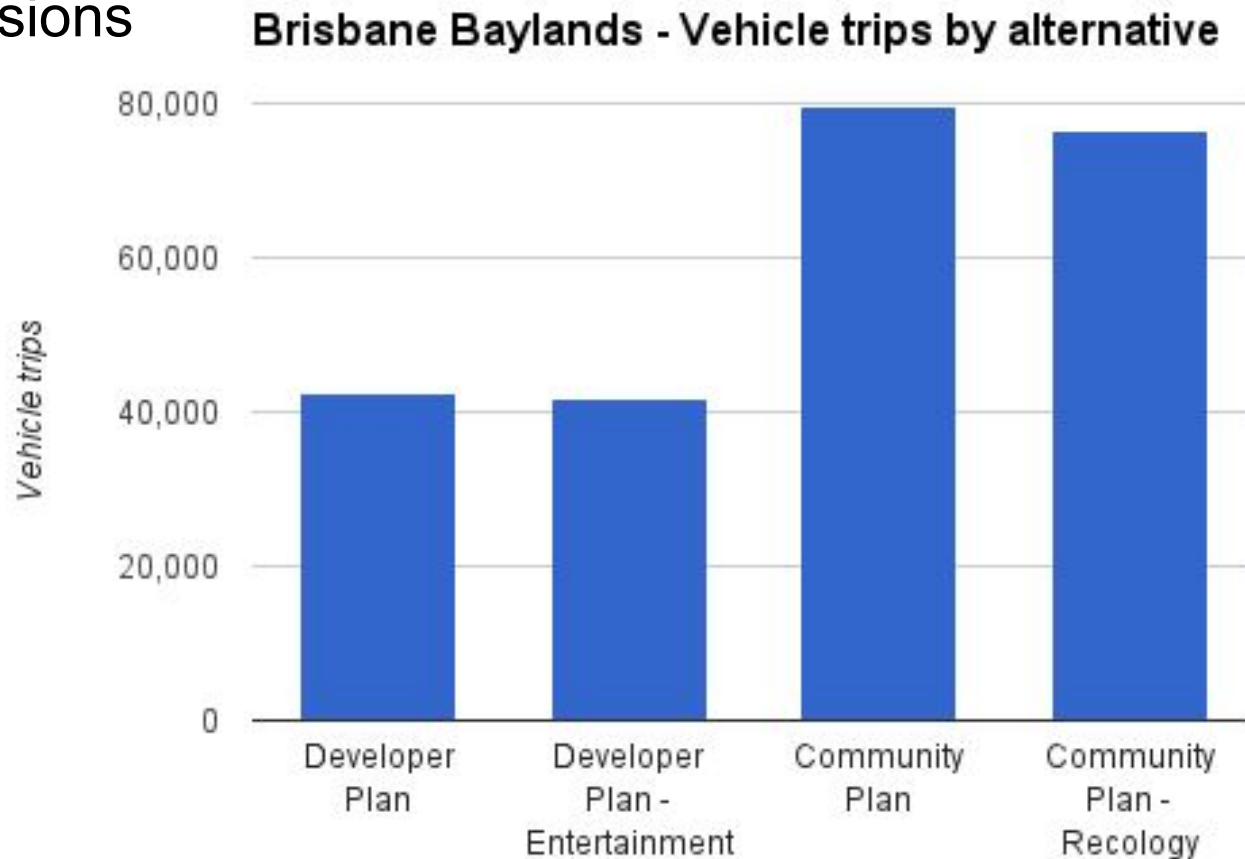
Source: TJKM Transportation Consultants, 2016.

Brisbane Baylands



Brisbane Baylands

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



The Congestion Relief Treadmill

Faster driving

More people
drive



Widen roadway

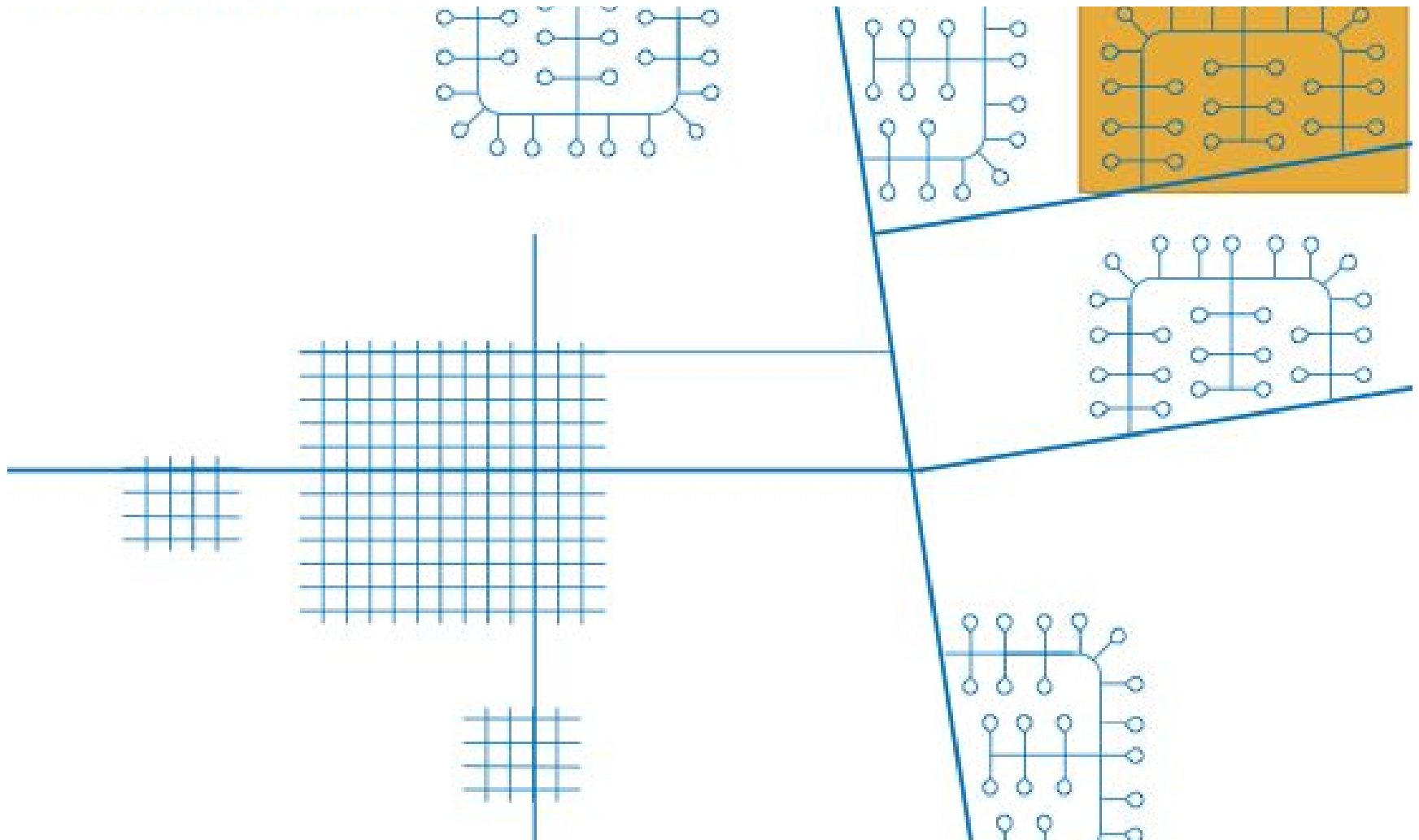
Congestion

Widen roads to reduce congestion

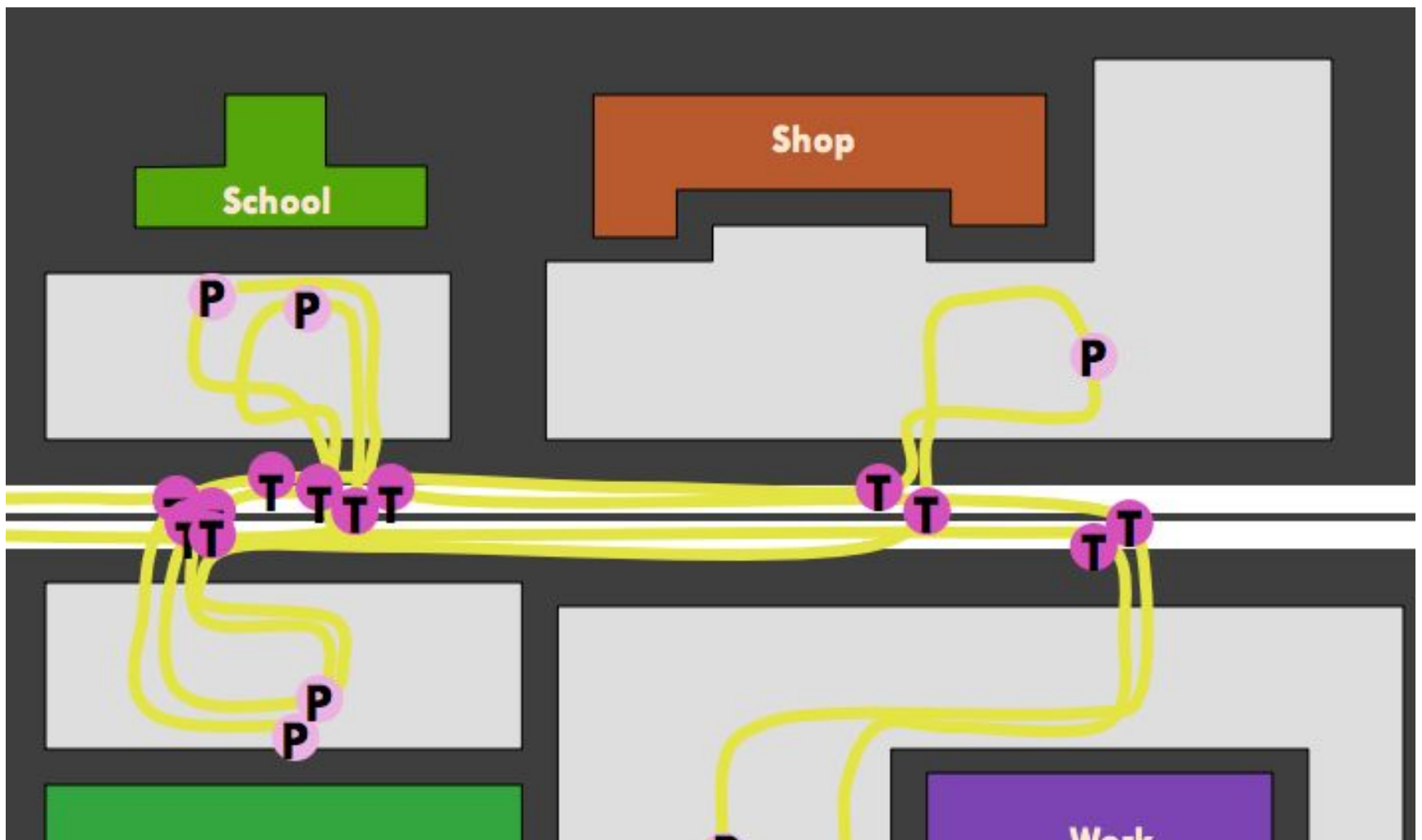
- Fast driving, less safe/comfortable to walk/bike



Design to reduce congestion



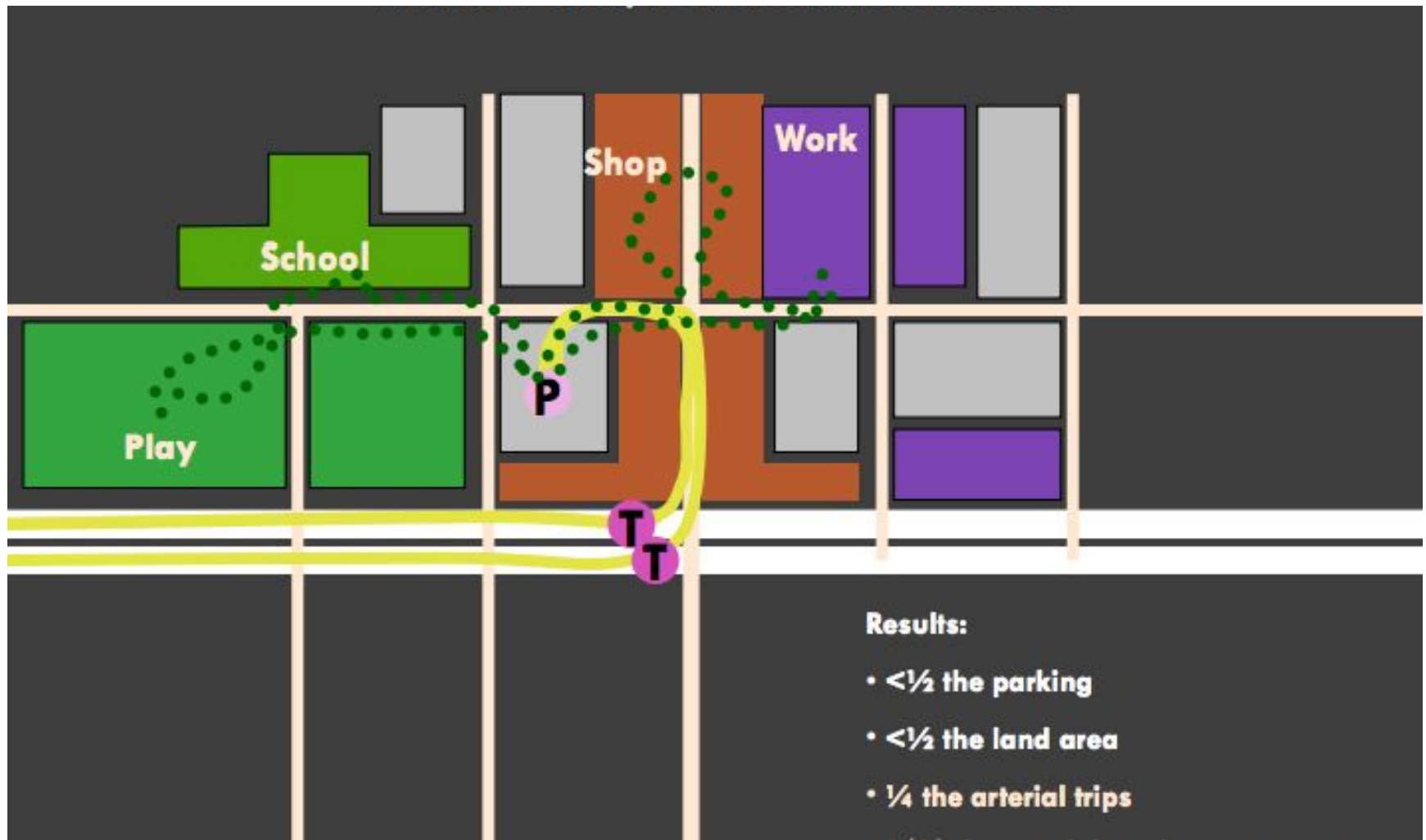
Design to reduce congestion



Design for easy access

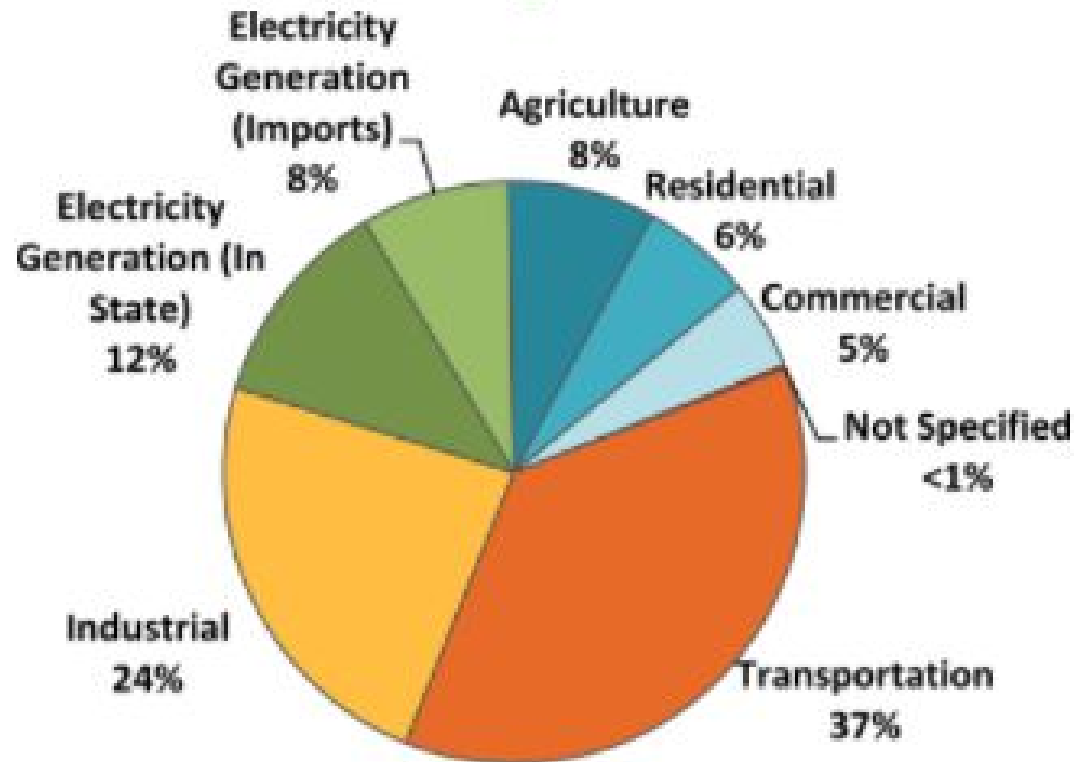


Design for easy access



Transportation is largest source of greenhouse gas emissions in CA

Emissions by Economic Sector



2014 Total CA Emissions: 441.5 MMTCO₂e

SB743 - CEQA update

- Changes how transportation impact is measured under CEQA
 - Replaces LOS (measure of congestion) with Vehicle Miles Traveled per person
 - VMT correlated to GHG emissions and particulate pollution
 - LOS discourages infill
 - LOS encourages widening roads, making walking, biking, transit less safe and appealing
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Summary - practices to reduce trips

- Set mode share goal / trip cap
 - Require monitoring and reporting
 - Housing near jobs and services reduces car trips per person
 - SB743 update - Nexus study and funding plan to reduce vehicle trips
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