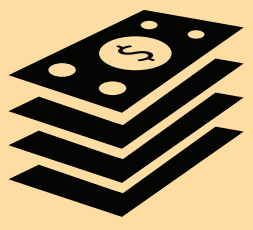


Programming & Communications

TDM Strategies

Programmatic and marketing strategies can be used to give people more information about their commute options, and to provide a balance of incentives and disincentives to make it easier to change commute behaviors.



Economic Strategies

Commuter Financial Incentives

- Pay users to arrive using mode other than driving alone. Some companies pay employers a per daily or monthly incentive to not drive alone.
- Can also include free/reduced transit passes, pre-tax transportation benefits, or purchasing discounts (bike, helmet, etc).

Commuter Financial Disincentives

- Makes driving alone seem less financially viable.
- Some companies charge employees a daily parking fee.



Human Behavior

Flextime/ Alternative Scheduling

- Provides flexibility in daily work schedule to have some people to come in earlier and leave earlier or come in later and leave later.
- Results in lower number of people arriving at the same time.

Telecommuting

- Allows people to work from home, using internet, email, and telephone to stay connected.
- Reduces number of people commuting in general.



Guaranteed Ride Home

- Guarantees users a free ride home from work if they have an emergency and have not driven alone to work.
- Companies will reimburse or pay for a taxi or rideshare service.

Promotions/ Competitions

- Encourages friendly competitions between individuals, departments, or residential buildings to use alternative transportation modes.
- Tracks peoples' green commute days, GHG emissions saved, etc.



Mobility Concierge

- A person who provides information to new residents or employees about their commute options.
- Mobility concierges can connect with new residents when they move-in and attend orientations for new employees.

Social Events

- Social events on-site encourages people to stay in an area for an additional reason.
- Includes work-out classes, festivals, and other social gatherings.



Communications and Information

Real Time Displays

- Provides users real time information on their transportation options.
- Provides arrival times for bus, train, or light rail service

Multimodal Wayfinding

- Helps people navigate an area using different modes of transportation with on-street and in building signage.



Transportation Marketing / Information Sharing

- Provides communication portals (i.e. websites, apps) to help people explore their commute options.

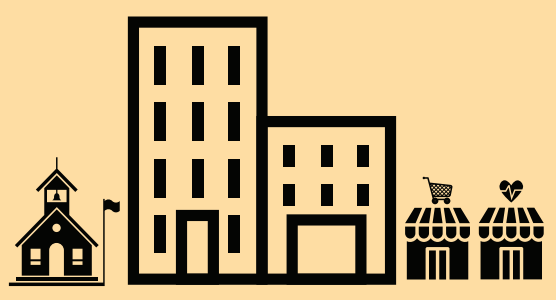


Land Use and Parking

TDM Strategies

The combination of land use and parking standards play a role in shaping the travel behavior of residents and workers. When retail, residential, and office uses are within close proximity of each other, it reduces the need for vehicle trips and increases the likelihood of walking and biking trips, therefore reducing traffic impacts. Decreasing the amount of free parking will also reduce vehicle trips.

Land Use Strategies



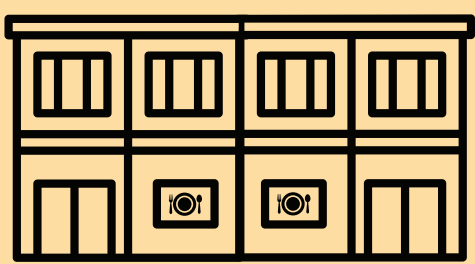
Residential Supportive Uses

Reduces vehicle trips by providing amenities for residents to use on a daily or weekly basis such as grocery stores, pharmacies, schools, day care facilities, restaurants and others within walking distance



Office Supportive Uses

Reduces vehicle trips by providing on-site amenities for office workers including dry cleaning, day care, restaurants, and other retail and service businesses

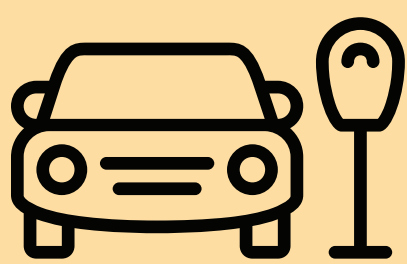


Mixed-use to Promote Live/Work

Reduces vehicle trips by providing residential, office, and retail in close proximity to each other so people can live and work in the same area

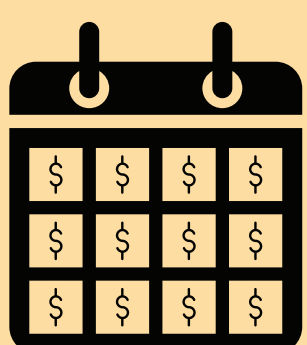


Parking Strategies



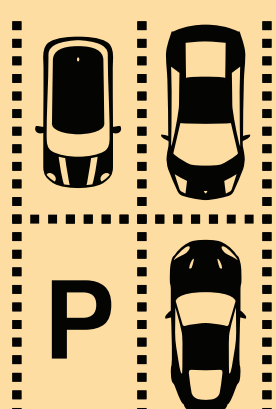
Charging for Parking

Influences driving behavior when the price of parking is more expensive than transit and other alternative transportation modes. Parking revenue can be invested in transit, active transportation, and TDM incentives.



Daily Fee

Removes monthly or annual payment options, which makes paying for parking a daily choice, discouraging people from driving.



Parking Supply Management

Reduces the overall supply of parking which helps prioritize non-SOV trips. Available parking should be flexible to serve a variety of uses. For example, curbside parking can be prioritized for retail users.



Transportation

TDM Strategies

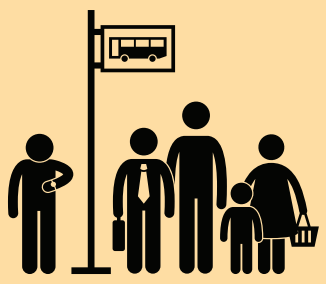
Reducing single occupancy vehicle trips (SOVs) will require a suite of strategies to shift vehicle trips to active and shared modes of transportation. By improving the speed, efficiency, and financial incentives for shared and active modes, travel behavior can be changed for workers, residents, and visitors.

Transit Strategies



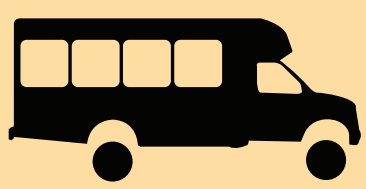
Bus Rapid Transit (BRT)

Provides fast, reliable transit options. Discounted/free passes can be distributed to workers & residents



Bus

Provides reliable transit options. Discounted/free passes can be distributed to workers and residents. Can provide links to other mass transit options such as Caltrain



HOVs/Shuttles/Vanpool

Provides alternatives to SOV trips. Shuttles connect employees to employment or residents to shopping or transit. Circulators can connect transit, offices, residential, and retail uses together. Ride sharing, vanpool, and carpool websites can make it easier for people to connect and ride together



Shared Vehicles

Provides an alternative to driving alone. Car share users can be given priority parking spaces and memberships can be provided at discounted rates.

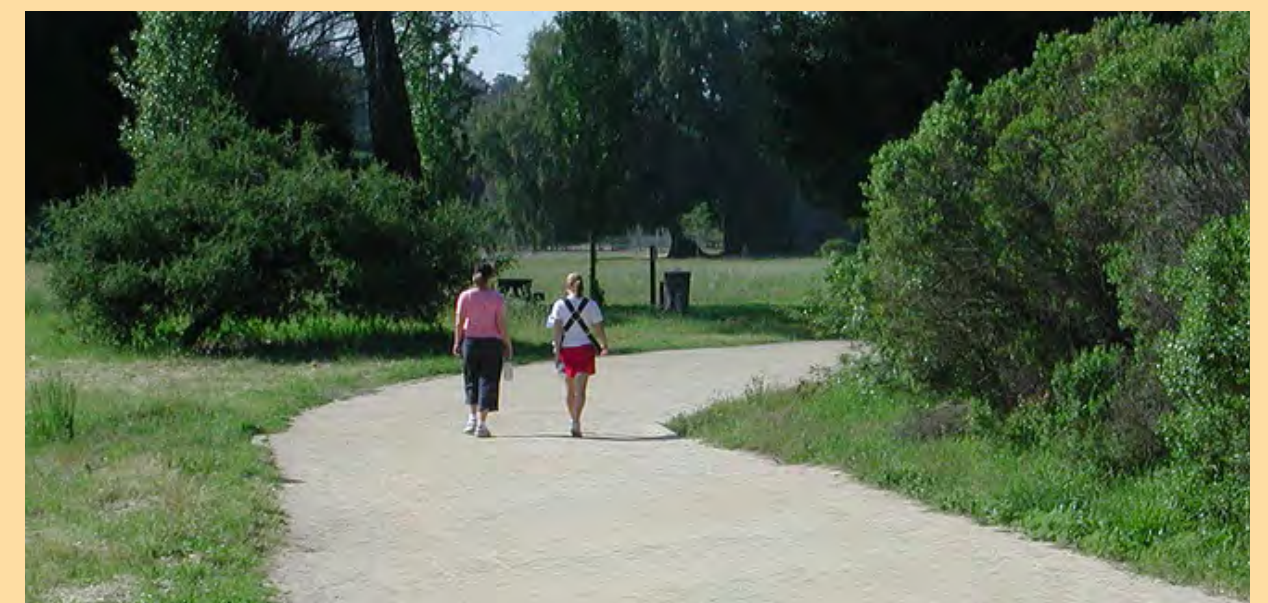


Active Transportation Strategies



Walking

Provides a healthy and environmentally friendly way to get around. A well connected pedestrian network will support walking as a mode for shorter trips. Streetscapes with pedestrian amenities and wide sidewalks create a more enjoyable place to walk.

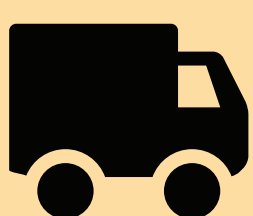


Bicycling

Provides a healthy and environmentally friendly way to travel. Invest in infrastructure that improves the bicycle network. Include secure short-term and long-term parking, shower and locker facilities, and bike repair stations. Offer bike share options at a free or discounted rate.



Delivery Supportive Strategies



Package Delivery Coordination

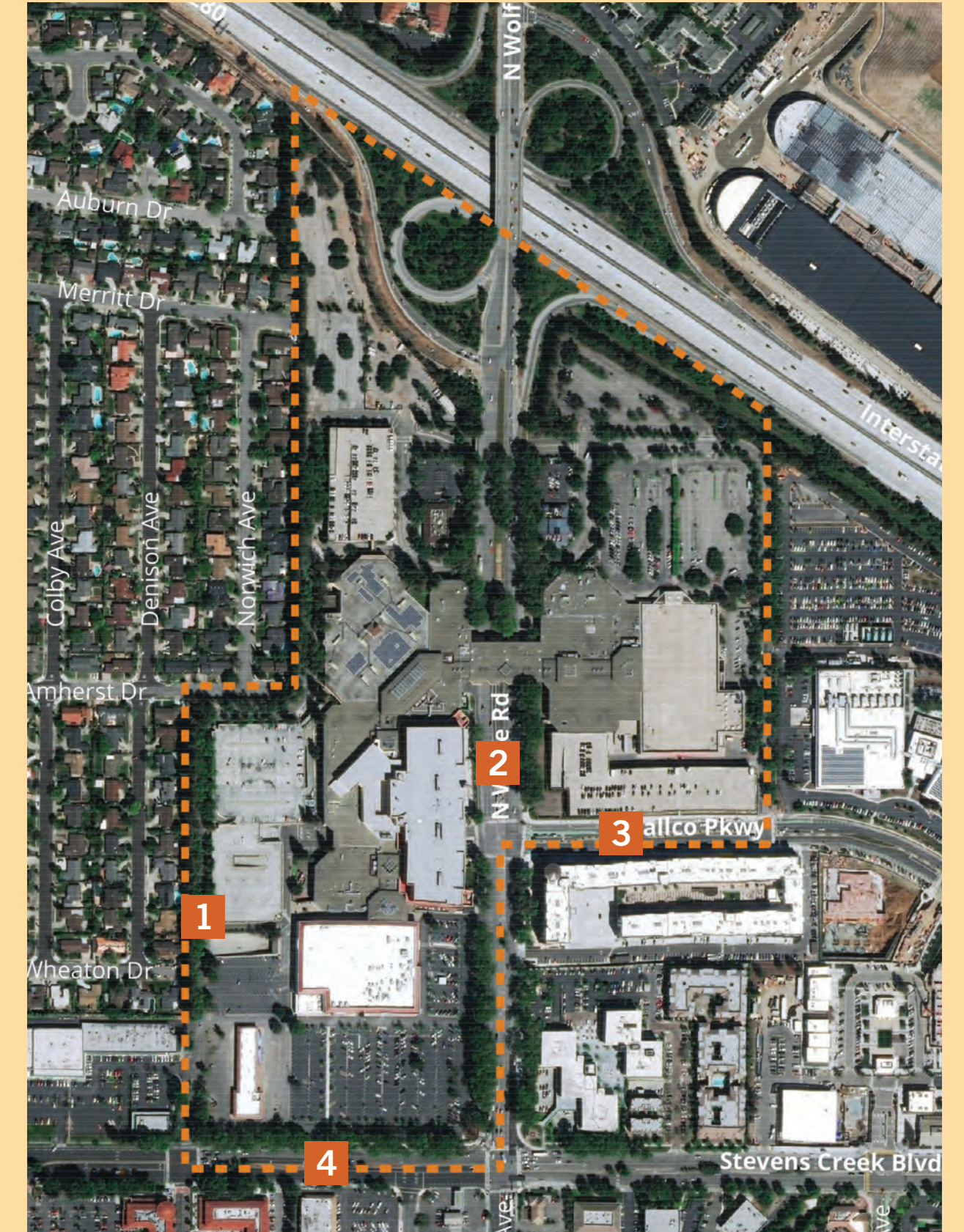
Reduces vehicle trips and VMT by reducing the need for trips to the store. This can be accomplished by providing Amazon Lockers or other systems to collect and temporarily store employee and residential packages



Existing Streets

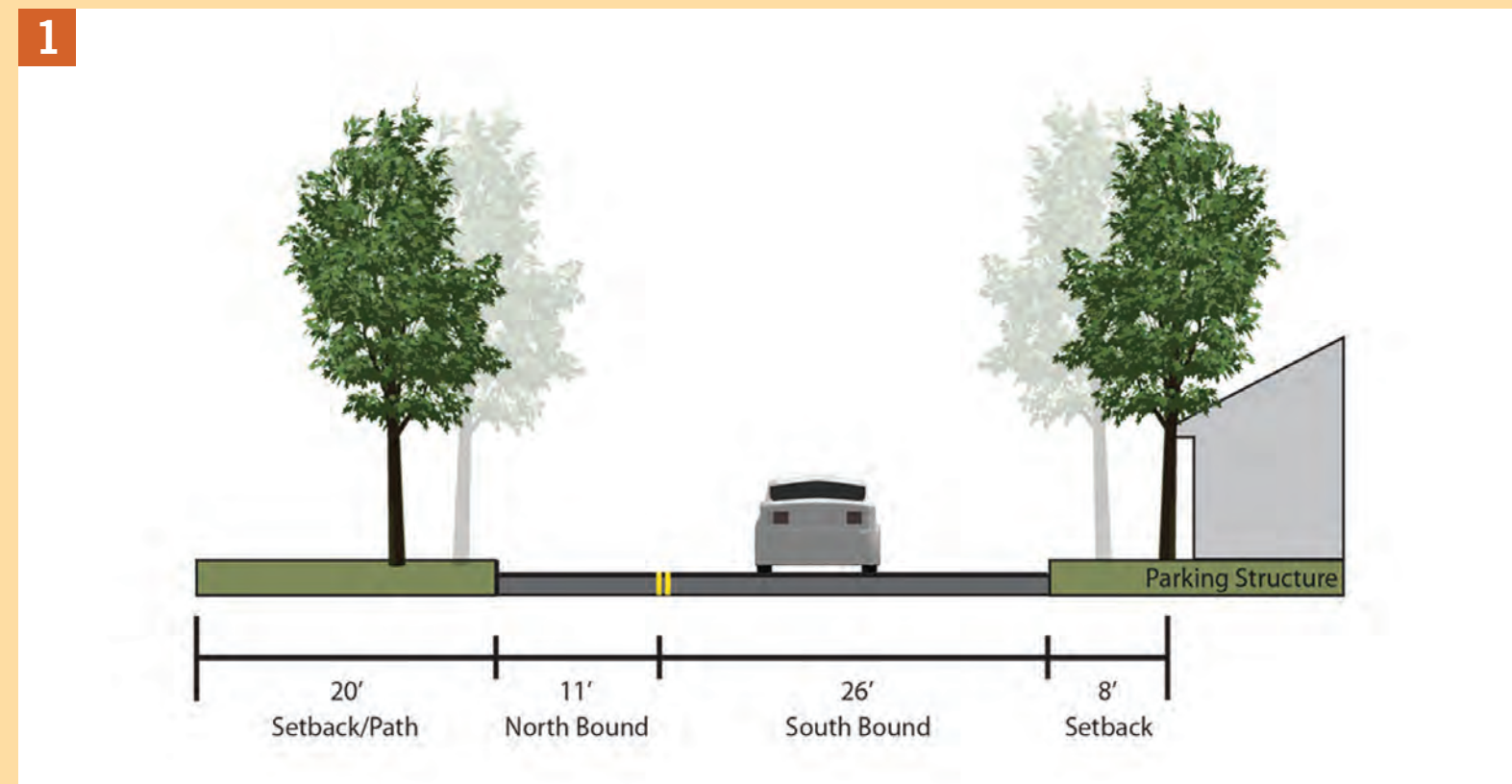


North Wolfe Road facing Vallco Parkway

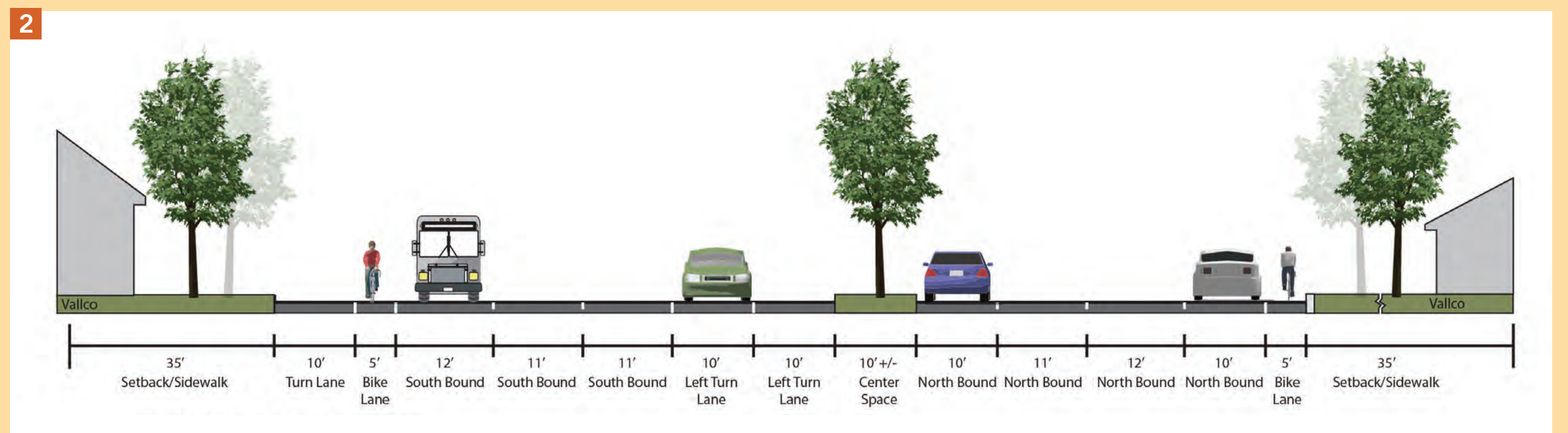


Vallco Site Area Map

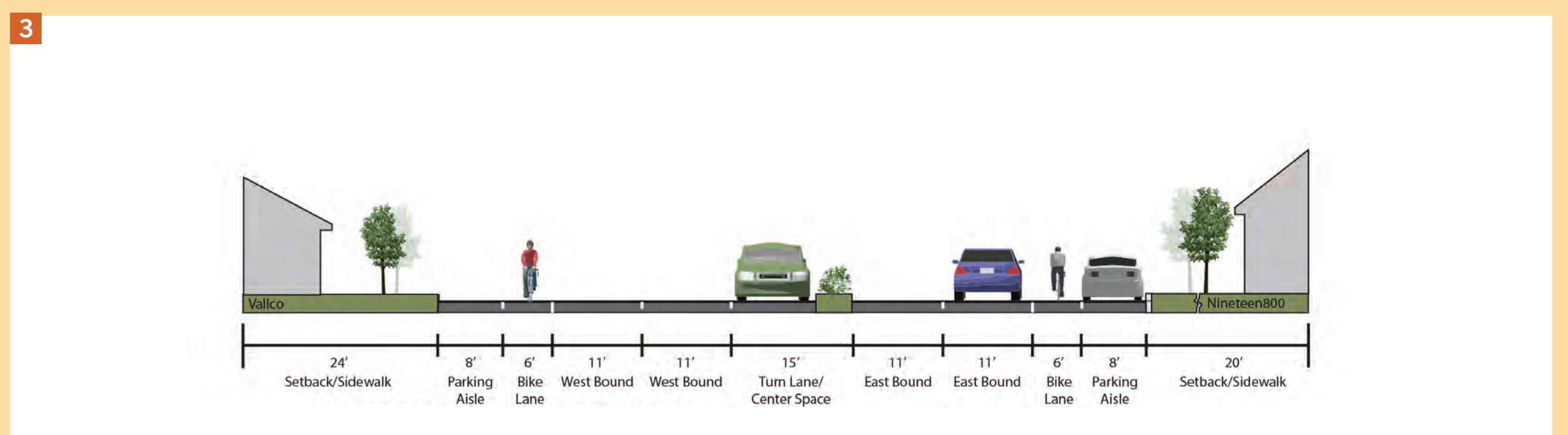
Perimeter Road



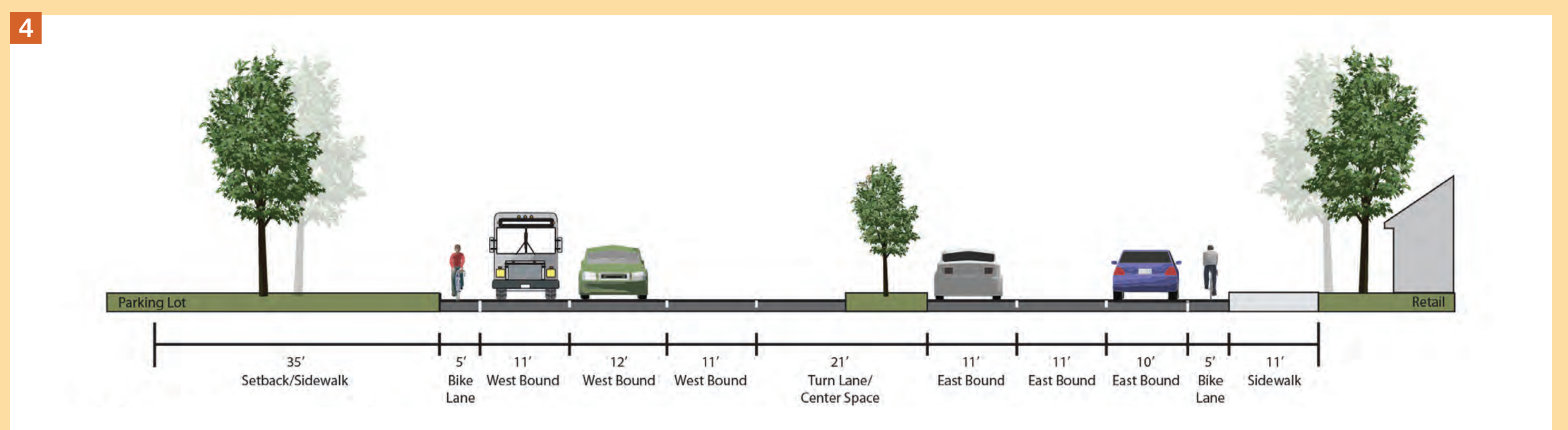
North Wolfe Road



Vallco Parkway



Stevens Creek Boulevard



Roadway Types

LOCAL STREET



ARTERIAL



MULTIWAY BOULEVARD



Bicycle Facilities

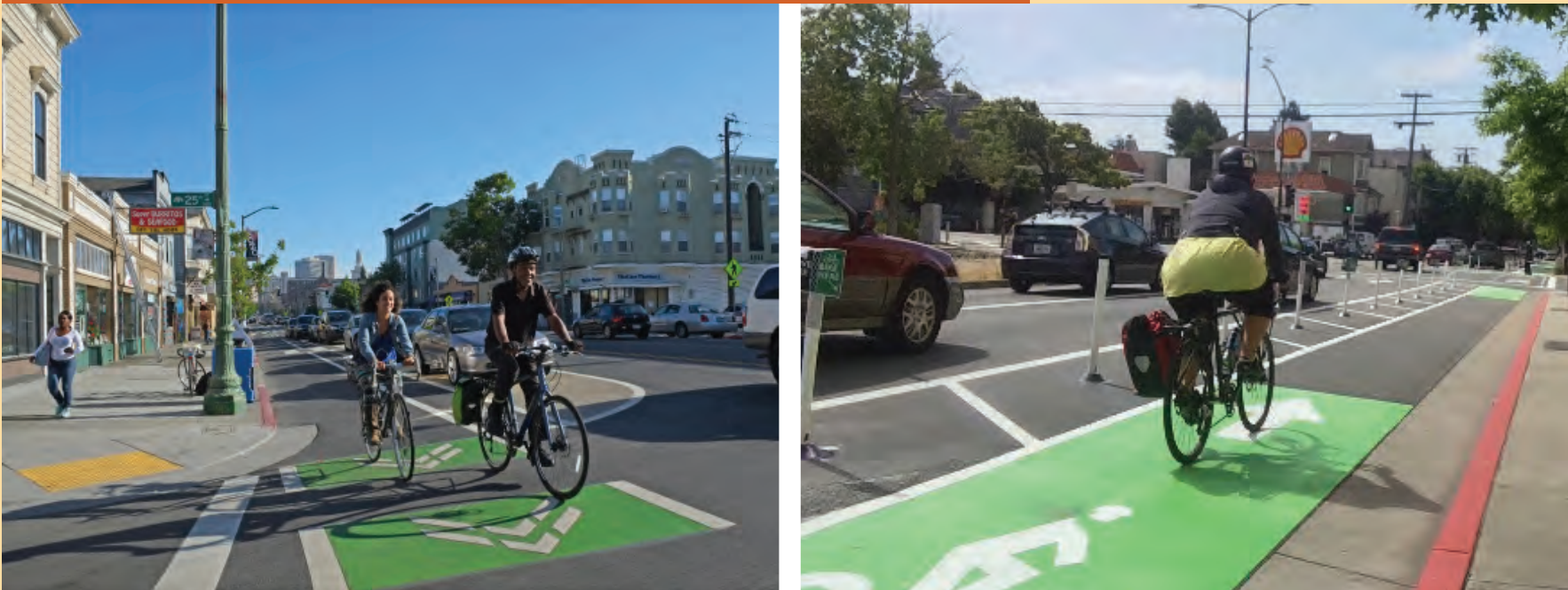
MOST SEPARATION

SHARED USE PATHS



- Paths shared by people walking and biking completely separated from motor vehicle traffic
- Comfortable for people of all ages and abilities
- Typically located within or along parks, rail corridors, rivers, or other bodies of water

PROTECTED BIKE LANE



- On-street bike lane separated from motor vehicle traffic by curb, median, planters, parking, or other physical barrier
- Ideal for when a fully separated path is not feasible
- More comfortable for people of all ages and abilities

BICYCLE LANES/BUFFERED BICYCLE LANES



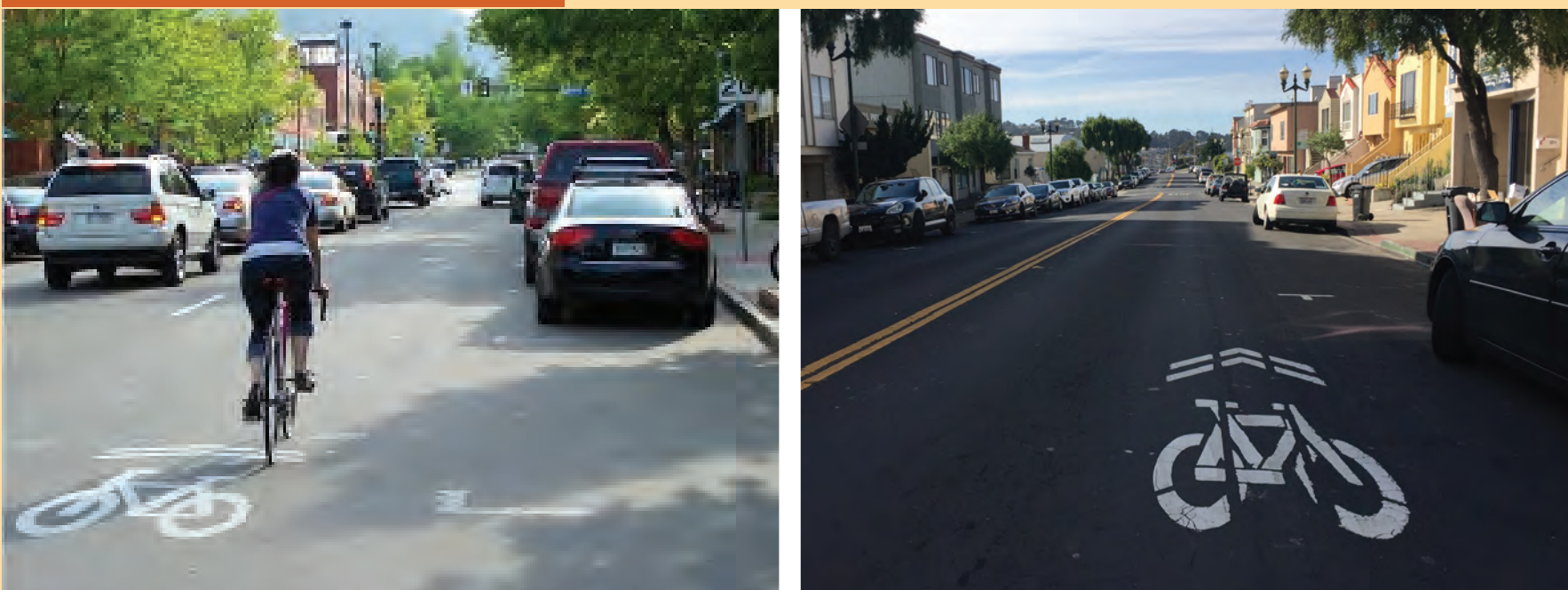
- Dedicated lane for bicycle travel adjacent to traffic
- Separated from traffic or parking by painted lane line or buffer
- Adding a buffer provides additional comfort and space from motor vehicles and/or parking

BIKE BOULEVARD



- Signed bike route, sharing the roadway with motor vehicles on quiet neighborhood streets
- Includes shared roadway road markings on pavement and additional traffic calming measures like speed bumps
- Comfortable for a wider range of biking abilities

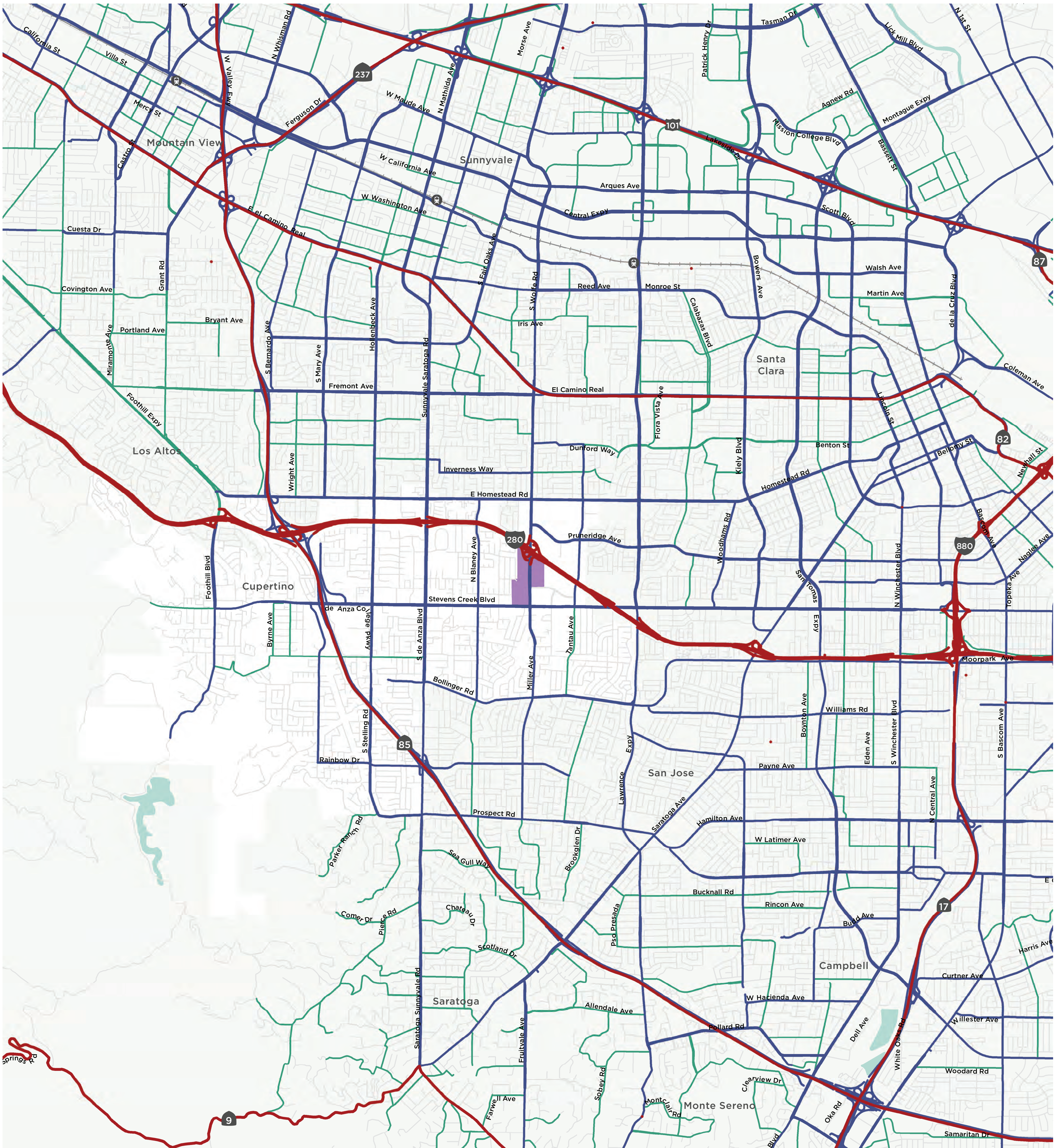
BIKE ROUTE



- Signed bike route, sharing the roadway with motor vehicles
- Can include pavement markings
- Comfortable for more confident people biking
- Used when space for bike lane may not be feasible

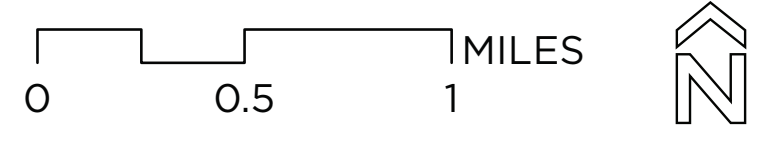
LEAST SEPARATION

Transportation Network



TRANSPORTATION NETWORK

VALLCO SPECIAL AREA SPECIFIC PLAN, CUPERTINO CA



- ROADWAYS**
- Highway
 - Arterial
 - Collector
 - Local
- Vallco Special Area
- RAILWAYS**
- C Caltrain Station
 - - - Caltrain Line

Source: HPMS. Map produced April 2018.



Vallco Special Area Specific Plan and Form-Based Code

Cupertino, CA
Public Charrette
April 2018



Seattle Children's Hospital

Seattle, WA

Comprehensive Transportation Plan

Seattle Children's Hospital hosts over 7,000 active employees and has over 400,000 patient visits a year. The main campus is located in the Laurel Hurst neighborhood in Seattle and is not well served by buses or trains. Seattle Children's Hospital continues to plan for new facilities and wants to reduce vehicle traffic to its buildings.

Issues Addressed

As part of an agreement with the City for a permit to build a new clinical space, Seattle Children's developed a target to reduce solo car commuters to 30% by 2028. The Comprehensive Transportation Plan lays out a strategy to aggressively reduce the number of single occupancy vehicles parking at the hospital and invest in making Northeast Seattle a better place to bike and walk.

Outcomes

Between 2004 and 2006, the percentage of daytime employees who solo car commuted reduced from 50% to 38%.

Key Strategies

- Commuter financial incentives
- Daily parking fees
- Vanpool and carpool coordination
- Mixed use on campus
- Investment in neighborhood bike/ped projects

TDM Approach

Daily Parking Fees

Parking fees are charged daily instead of monthly and are variable, costing more if you arrive during commute hours.



Vanpool Programs

35 vans serve the hospital and about 19% of the hospital's employees use vanpool or carpool to get to work.



On Campus Amenities

The hospital attracts business and services for employees that reduce their need for daytime trips, such as restaurants and daycare.



Northeast Seattle Improvements

Seattle Children's invested over \$3M in bike/ped and traffic flow projects in Northeast Seattle.



Tysons Corner Center

Tysons, VA

Access Tysons TDM Program

Tysons Corner Center was built in 1968 and was originally a suburban mall complex in Tysons, Virginia, an “edge-city” outside of Washington D.C. The developer Macerich Company bought the mall and built a high-density, mixed use center that, along with retail, includes a hotel and two residential buildings. “Access Tysons” is Macerich’s TDM program.

Issues Addressed

As part of a comprehensive planning process for the site, the developer had to come up with a TDM program to help shoppers, residents, and workers find their way around the development without expanding road systems and building extensive parking lots.

Outcomes

Macerich surveyed residents at their onsite residential buildings. Between 2015 and 2016, drive alone rates have decreased between 3-9% while walk to work rates have increased from 11% to 24%.

Key Strategies

- Communications and decision making tools
- On-site amenities and events
- Coordination with city-wide TMA

TDM Approach

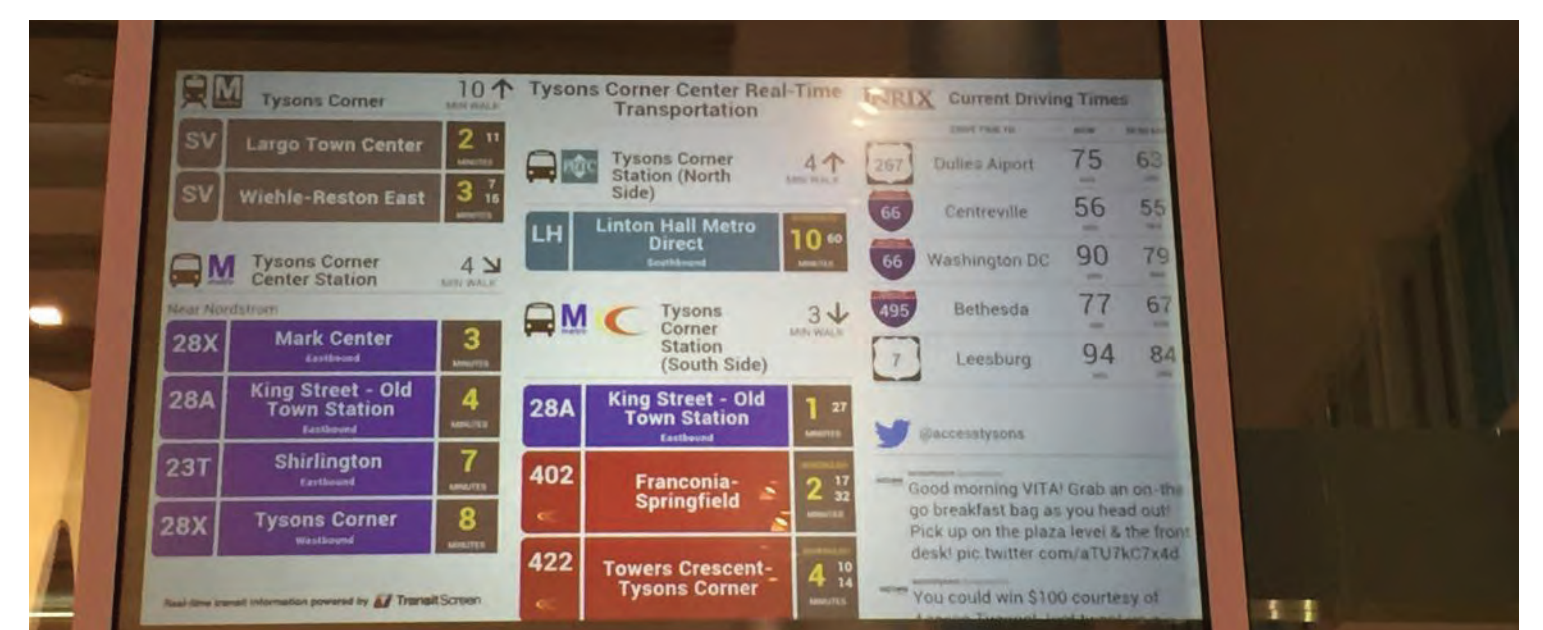
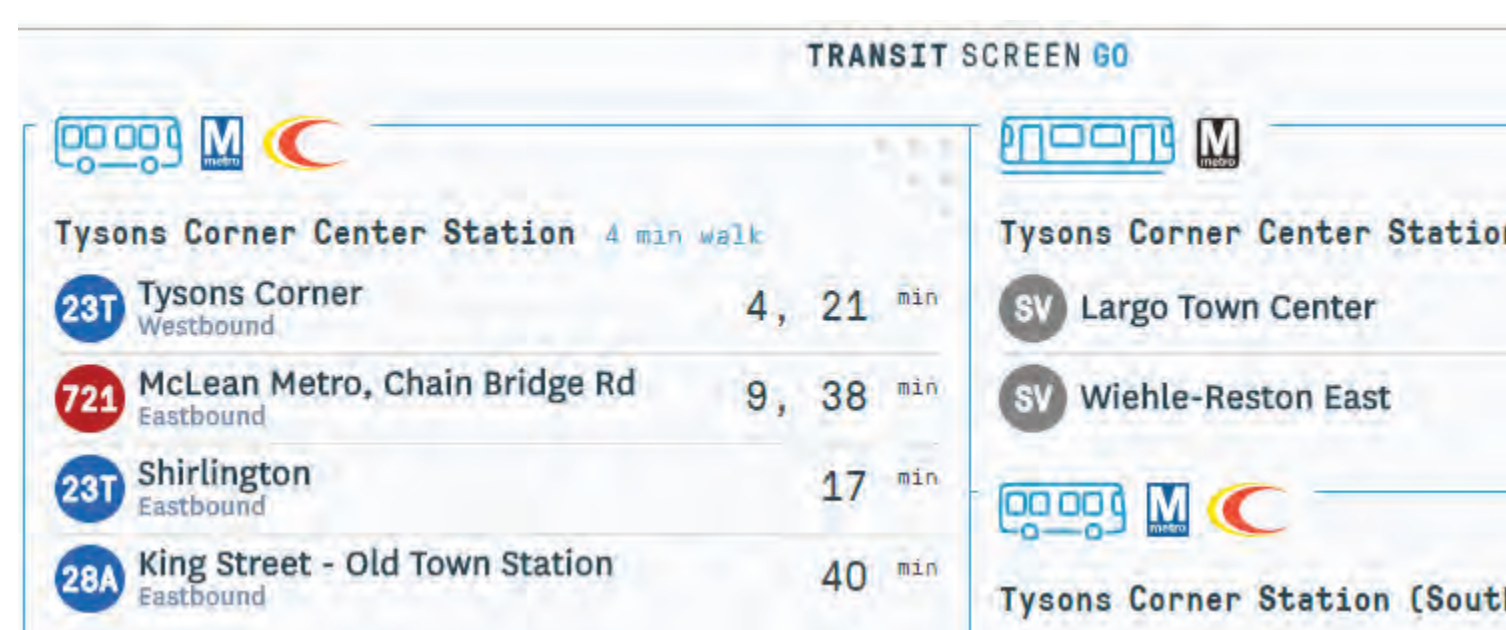
TMA

The developers is part of a Transportation Management Association that coordinates transportation demand with businesses city-wide.



Real-time transportation displays

Displays show real-time transportation options, such as for Metro buses and trains.



Website

AccessTysons.com provides detailed information on travel options, resources, and routes.



Community Events

Macerich hosts events such as free on site work out classes, campus fairs, and markets.



Stanford University

Palo Alto, CA

Transportation Strategy for No Net New Trips

Over 18,000 students, faculty, and staff study, teach, or work on the Stanford University campus, located centrally in Palo Alto. As the University plans for growth and expanding its campus, it has committed to a transportation strategy that produces no net new vehicle trips during commute times.

Issues Addressed

To address additional transportation impact during commute times, Stanford developed a “no net new commute trips” standard. The resulting transportation strategy is part of Stanford’s 2000 and 2018 General Use Permit which provides strategies to minimize the impact of Stanford’s future development.

Outcomes

Single occupancy vehicles have decreased from 69% in 2002 to 43% in 2016.

TDM Approach

Clean Air Cash

\$25/month incentive for those who commute to campus by bike, transit, carpool or vanpool)

Free Bus Shuttle

Includes “first-mile/last mile” routes between the Palo Alto Transit Center and campus, as well as the “East Bay Express” providing service to Fremont and Union City. Shuttles are publicly available.

Bicycle Programs and Infrastructure

Stanford has been named a Platinum Bicycle Friendly University by the League of American Bicyclists.

Subsidized Vanpool

Users can sign up for one of 19 existing vanpools or form their own 5+ person vanpool that is fully subsidized.

Key Strategies

- Commuter financial incentives
- Parking disincentives
- Walking and bicycle improvements
- Shuttle services
- Bicycle parking and repair facilities
- Carpool and vanpool incentives

