

Westlake Cycle Track Project

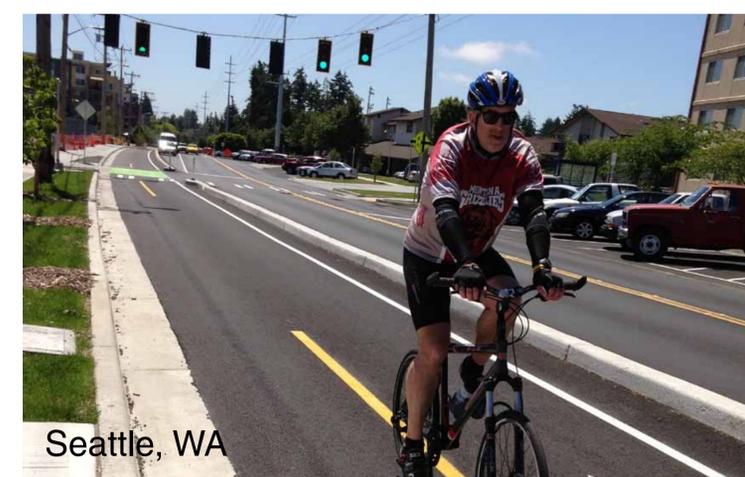
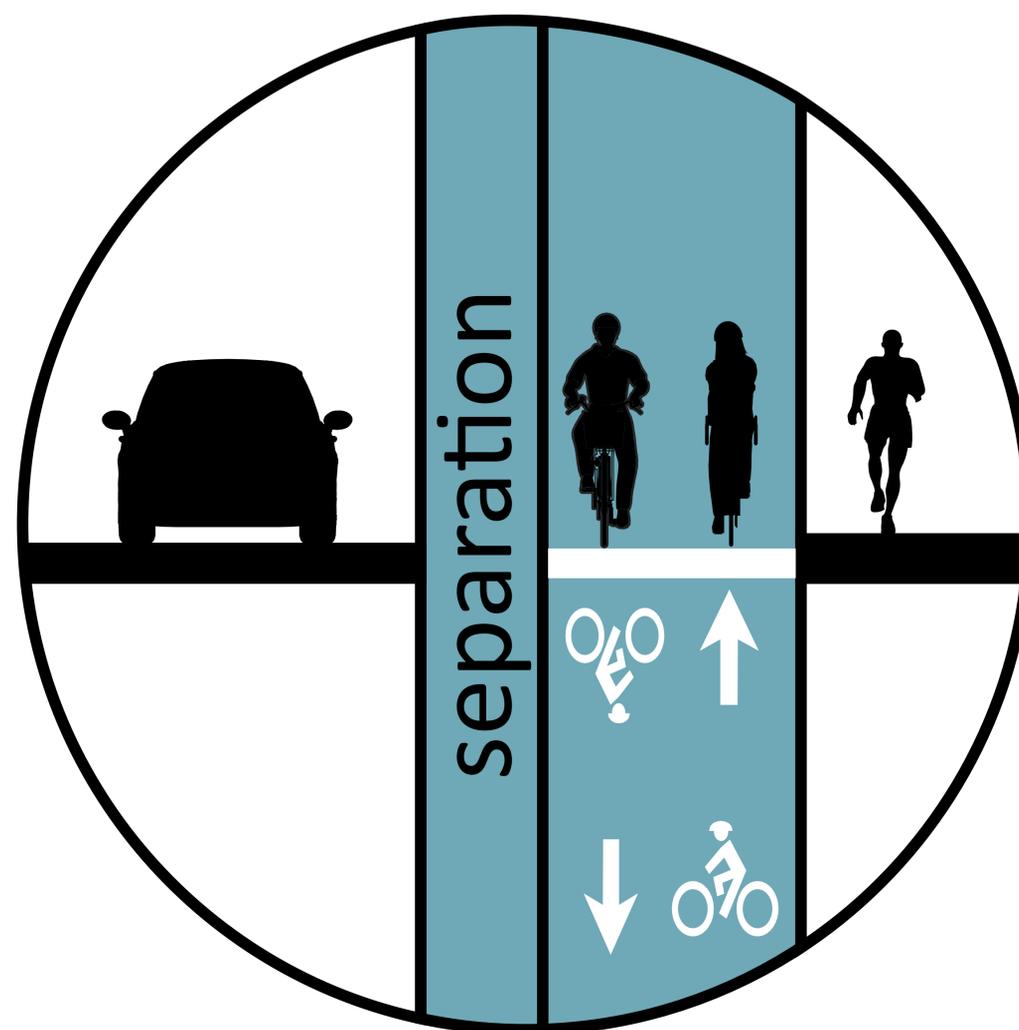
What is a Cycle Track?

A Cycle Track is...

- Space primarily used for bicycles
- Physically separated (by grade or barrier) from motor vehicle travel lanes, parking lanes and sidewalks
- Supports novice bicyclists

What Are the Benefits of a Westlake Cycle Track?

- Enhanced parking lot safety
- Improved access and circulation
- Upgraded crossing improvements
- Opportunities for linear placemaking



Intersection Treatments and Methods of Separation to Improve Safety

- A** Advisory and educational signage
- B** Pavement markings, green or special pavement
- C** Signal timing adjustments and/or bike signals
- D** Sight distance adjustments to improve ingress and egress at driveways
- E** Plantings
- F** Flexible posts/bollards
- G** Landscaping
- H** Free standing planters
- I** Curbs
- J** Parking



Westlake Cycle Track Project

Project Overview

What: SDOT will develop and study alternatives for a two-way cycle track

Where: Between Lake Union Park and south of the Fremont Bridge

Why has SDOT identified Westlake Avenue North for a cycle track:

- Safety: All modes
- Connectivity: High use multi-modal link
- Inclusiveness: Serve more users



Project Overview

Planning History

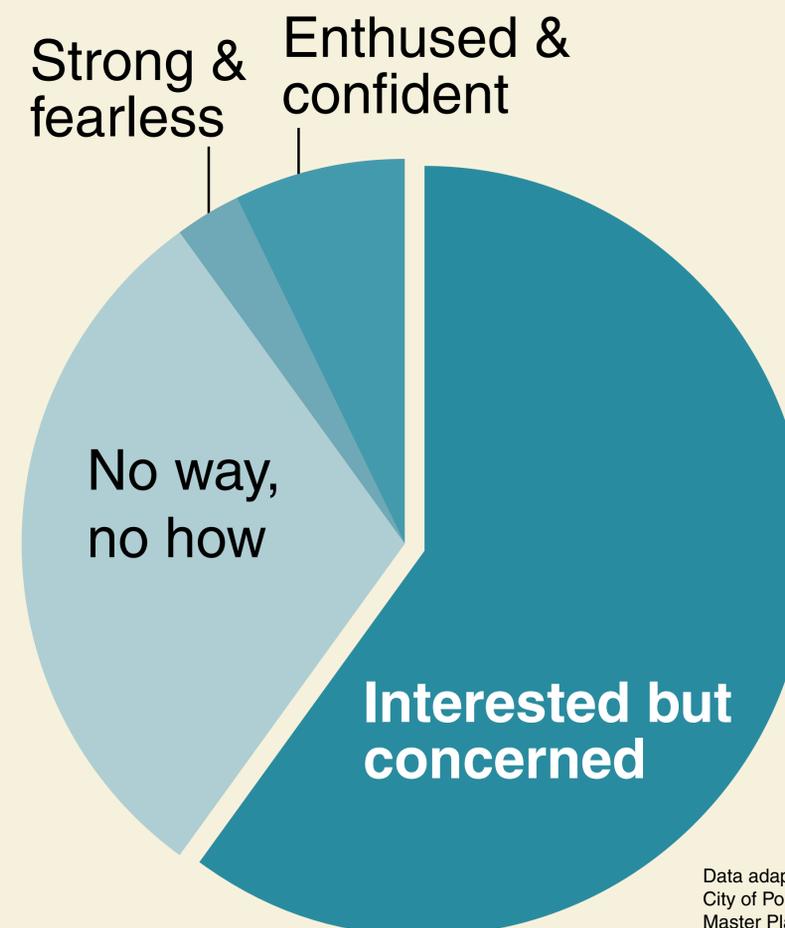
- Westlake Avenue North was the second most requested facility for bicycle safety improvements in the 2007 Bicycle Master Plan (BMP)
- Seattle Parks Foundation's Bands of Green Report led to the 2009 Cheshiahud Lake Union Loop Master Plan, proposed improvements to Westlake Avenue North
- Following the 2007 BMP, the Seattle Bicycle Advisory Board identified improvements to Westlake Avenue North on the list of Top 15 bicycle project priorities

Funding

- Project has an estimated budget of \$3.6M
- Funding provided by a \$1.7M Puget Sound Regional Council Grant and local bonds

Bicycle Rider Demographics

Studies have researched people's bicycle habits and found that approximately 60% are "interested but concerned" about safety.



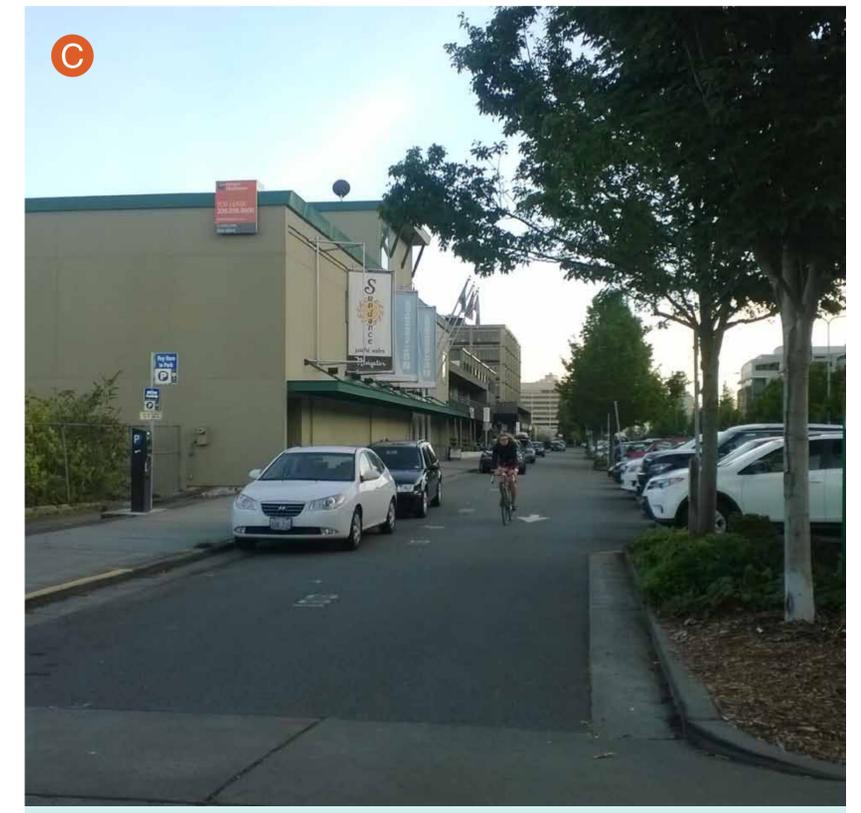
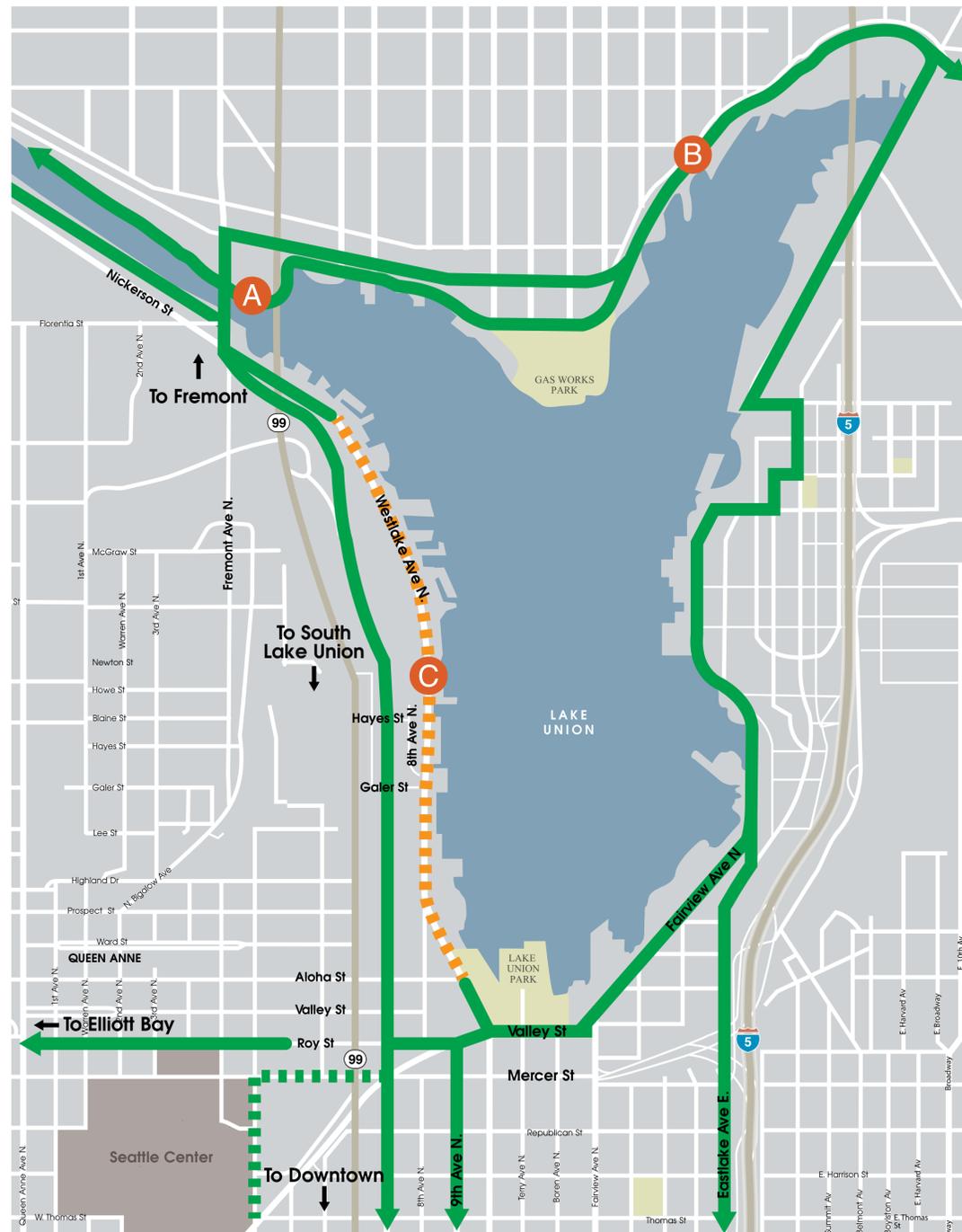
Data adapted from Roger Geller, City of Portland (Seattle Bicycle Master Plan, page 3)

Westlake Cycle Track Project

Bicycle and Trail Network

- ■ ■ ■ Project Area
- High Demand Route - Existing
- - - - High Demand Route - Planned

The Cheshiahud Lake Union Loop takes advantage of existing streets and trails. It is missing a good bicycle connection along Westlake Avenue North.



Westlake Cycle Track Design

Design Goals - Right Design Encourages Right Use

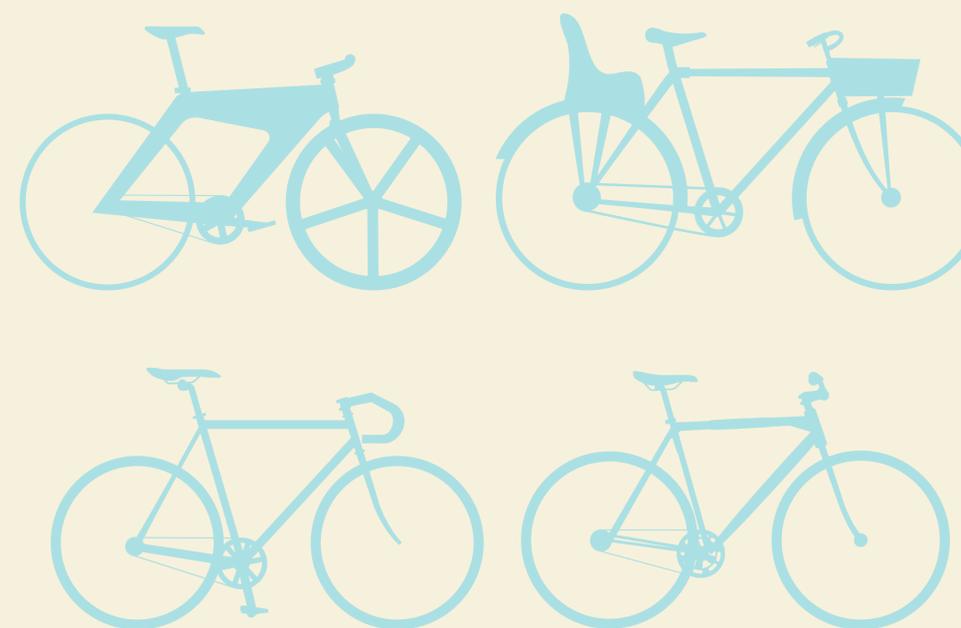
- Separate bicyclists, pedestrians and motor vehicles
- Reduce conflicts between modes
- Encourage slower/safer traffic
- Provide bicycle connectivity

Guidelines

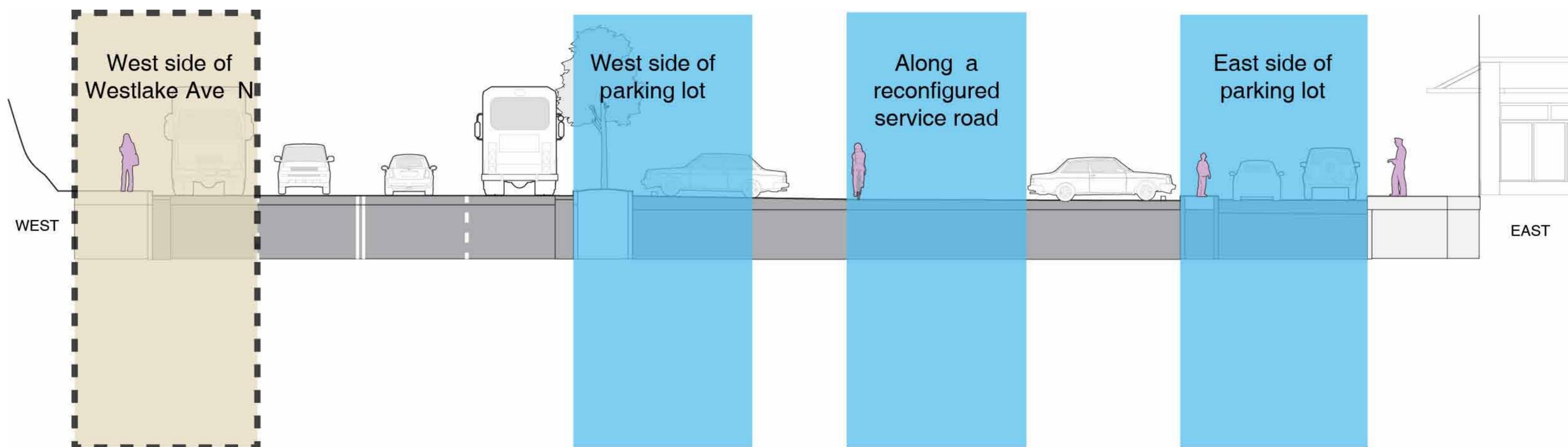
- Design speed – design for safe bicycle speeds
- Sight distance – design for optimum visibility of all modes
- Separation methods – design for motorist, pedestrian and bicyclist safety
- Materials – design for durability, value and aesthetics

Westlake Cycle Track Features

- Two-way, 10 feet minimum width – safely allows two directions of travel
- Special treatments at crossings of driveways/street ends and traffic signals for visibility and safety
- Pavement markings – lines, symbols and colored pavement
- Advisory and educational signs



Possible Cycle Track Alignments



*A hybrid alignment — combination of above

How Parking Could Change to Accommodate a Cycle Track

- Redesign entire parking lot for greater efficiency
- Change parking stall angles (allows narrower drive aisles)
- Change drive aisles to one-way (allows narrower drive aisles)

Westlake Cycle Track Project

How Do You Use the Westlake Avenue North Corridor?

Use a sticker to indicate.



Bicycling



Driving



Walking



Transit or freight



Business



Marine usage



Parking



Residence/floating home

Other, please indicate:

Goals and Objectives

Use a sticker to indicate.

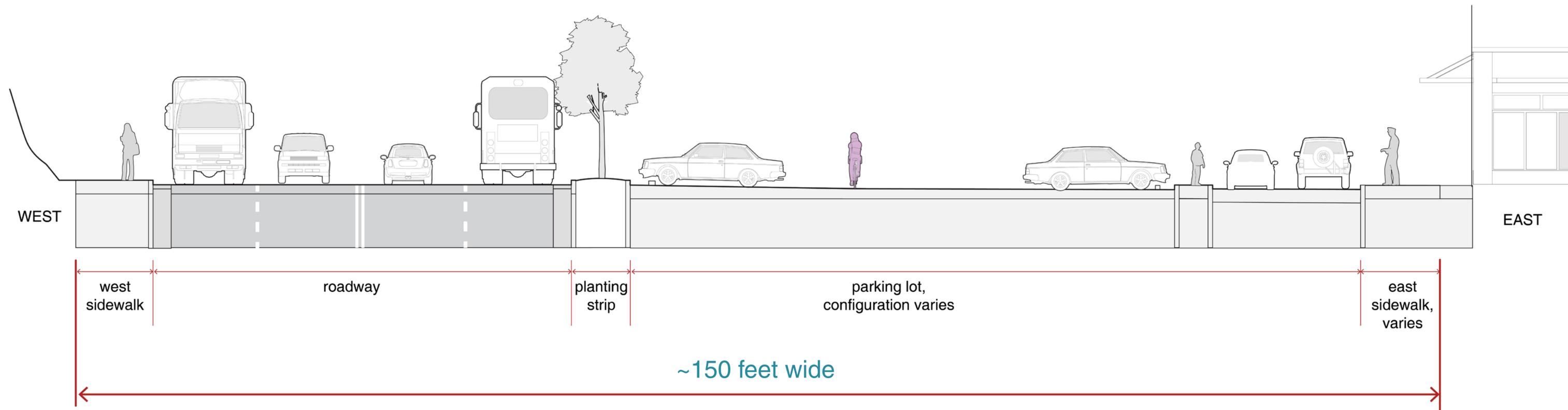
| | Not important | Somewhat important | Important | Very important |
|--|---------------|--------------------|-----------|----------------|
| Reduce bicycle collisions | | | | |
| Increase pedestrian safety | | | | |
| Provide safe access to businesses | | | | |
| Provide convenient parking | | | | |
| Provide a flat, low-stress facility | | | | |

Anything else?

Westlake Cycle Track Project

Existing Conditions

Typical cross section – configuration varies



Features of Westlake Avenue North Right of Way:

4 lane roadway

- Carries ~24,000 cars a day
- 35 mph speed limit
- Designated Major Truck Street

Parking for ~1,220 cars

Additional features:

- 14 entry/exit points (street ends and driveways)
- 3 traffic signals and the remainder stop controlled
- ~1.25 miles long

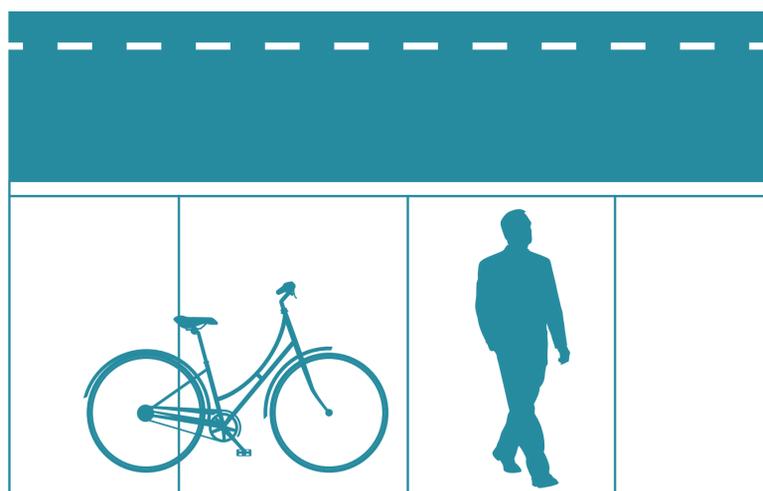
Access road (some areas)

Pedestrian pathways (location varies)

What We Learned About Bicycle Use

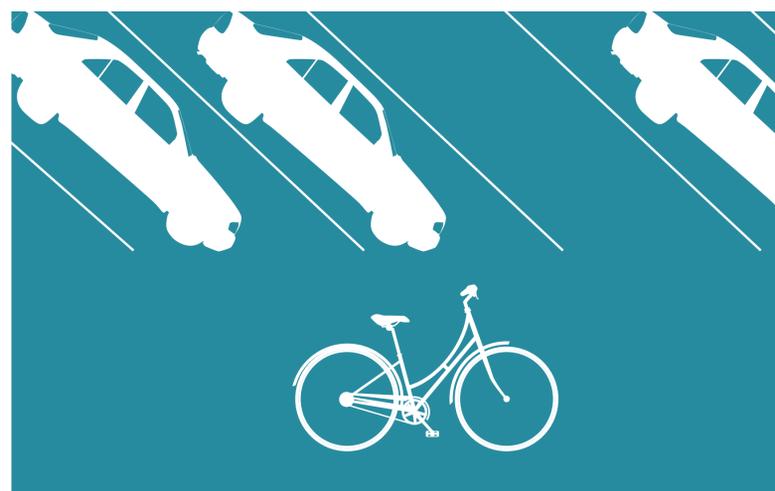
Bicyclists currently have three options for where to ride in the corridor:

1 Existing wide sidewalk with pedestrians on east side of parking lot



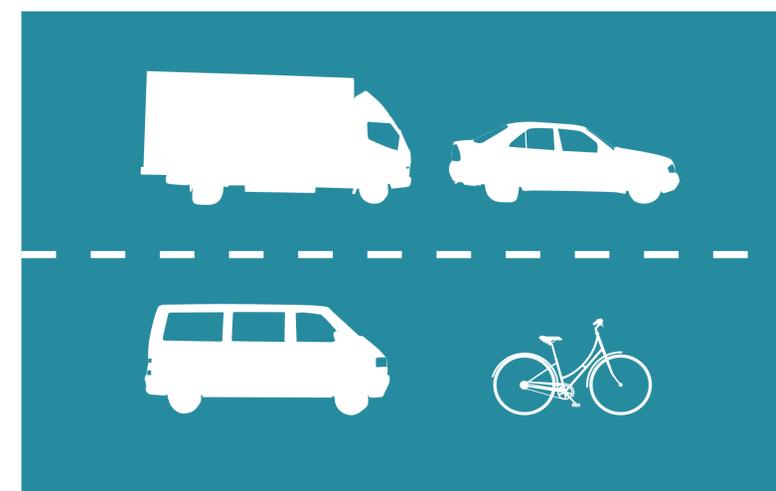
- The sidewalk is too narrow to be comfortably shared by bicyclists, walkers, joggers, skateboarders, etc.

2 Parking lanes with multiple options



- Most bicyclists choose to ride in the parking drive aisles
- Motorists and bicyclists in the parking lot are concerned about bicycle safety due to visibility and lack of predictability

3 On Westlake Avenue North roadway: major truck street, high volume, higher speed



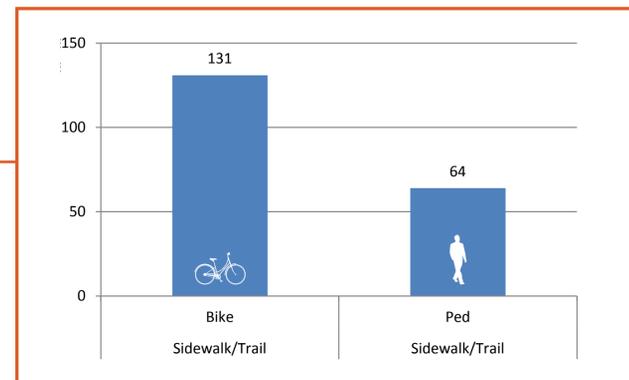
- Few bicyclists use the Westlake Avenue North roadway

Traffic and Circulation

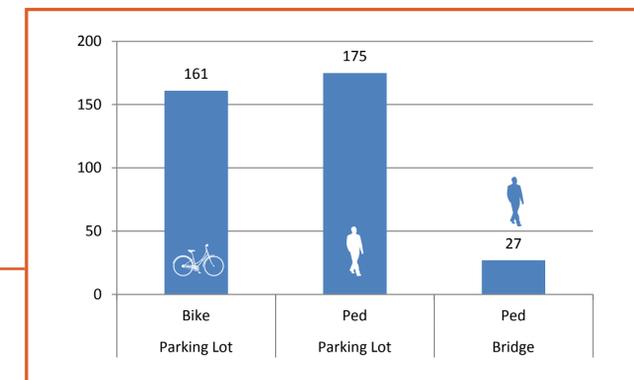
Turning Movements



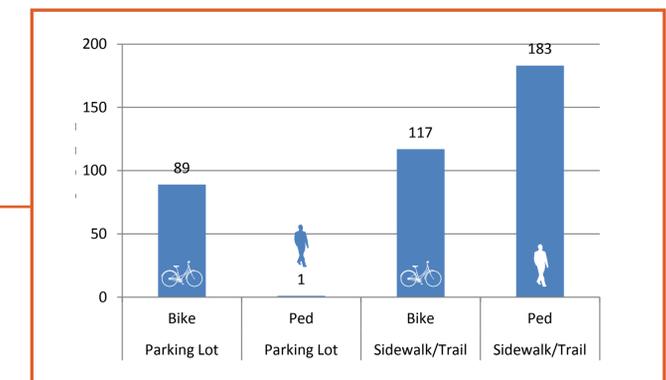
Bicycle and Pedestrian Counts



North parking lot



Middle parking lot



South parking lot

Traffic Study Sample Findings

Traffic Speeds in the Parking Aisle

- 66% of motorists travel less than 15 mph
- 8% of motorists travel over 20 mph

Signalized and Driveway Intersections

- Intersections have limited queuing space for vehicles exiting the parking lot
- Vehicles queue on the exit from the parking lot and can block both vehicle and bicycle travel north-south through the parking lot
- Motorists exiting at driveways experience sight distance limitations

Several Conflicts Were Identified, for Example:

- Bicyclists using the parking aisle have conflicts with motorists maneuvering in and out of parking spaces and pedestrians in the drive aisle
- At northernmost driveway, bicyclists transitioning from existing sidewalk have conflicts with motorists going north-south



Note: Cameras were set at 4 locations and the observations above represent a sampling of observations for the PM peak hour.

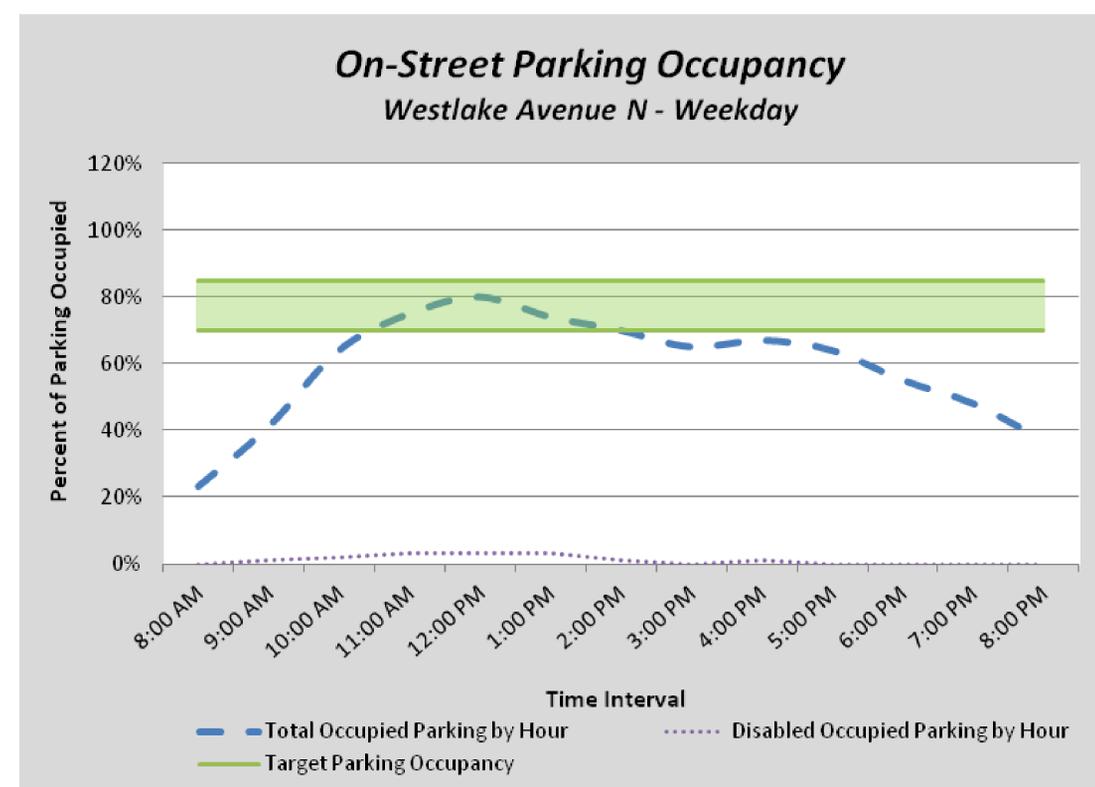
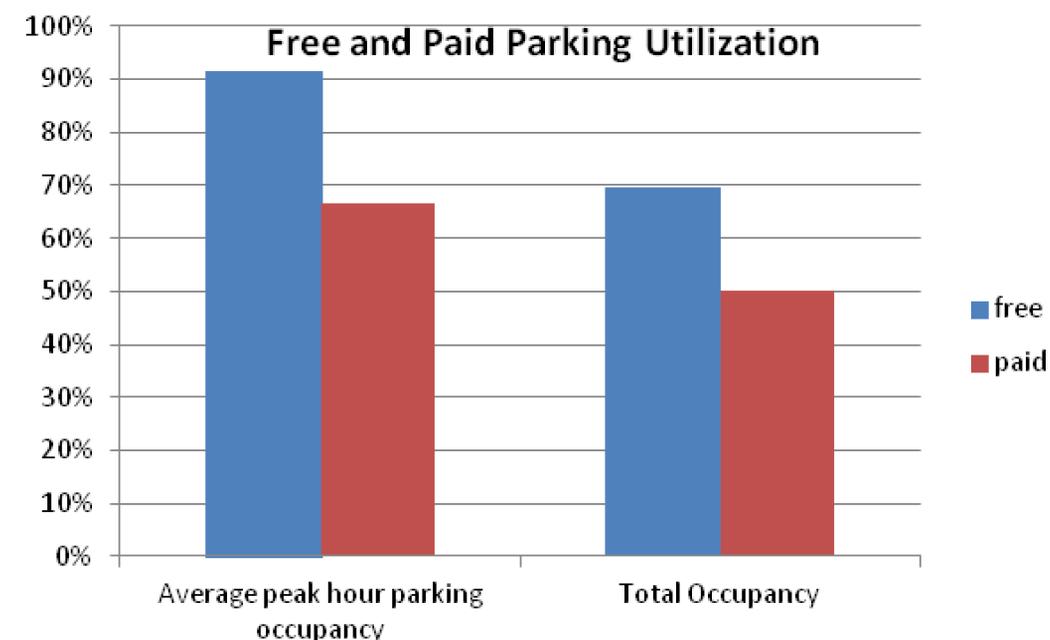
Parking Duration

Free Parking

- 726 free parking stalls
- Overall, occupancy for free parking is 70% and 91% during the peak hour
- Cars park up to 72 hours
- Most of the corridor is within Residential Parking Zone 25 (RPZ). RPZ permit holders are exempt from pay station parking fees.

Paid Parking

- There are 472 seven-hour hour parking stalls and 26 two-hour hour parking stalls
- Paid parking is enforced 9 am to 4 pm weekdays
- Parking rates are \$1.00 per hour
- The target percentage of parking occupancy is 78% to 89%
- Overall, parking occupancy is 50% and 67% during peak hour
- On average cars parked for 2.5 hours



Westlake Cycle Track Project

Project Schedule

FALL 2013

**Data Collection
& Analysis**

WINTER/SPRING 2014

**Alternatives
Evaluation**

SPRING/SUMMER 2014

**Preferred
Alternative
& Design Begins**

