







# Central Avenue Recommended Safety Improvements

Transportation Commission | November 18, 2015

#### Agenda

- Overview & Purpose
- Outreach
- Safety Improvement Recommendations
- Next Steps
- Q & A

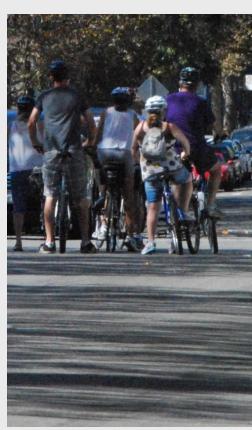




#### Overview

- Creates Substantial Safety Benefits in Area Concentrated with Schools
- Adds Improvements Making It Easier and Safer to Walk, especially at Encinal High
- Installs Continuous Bikeway for 95% of Corridor Compared to 12% Existing
- Creates Bay Trail connection
- Implements General Plan and Bike Plan
- Minimizes Motorist Delay
- Provides Net Gain of Parking No Loss Near Webster Street





# Overview: Stakeholder Support

- Caltrans (owns Sherman-Webster)
- Paden School (315 students)
- Encinal High School / Junior Jets (1,330 students)
- AUSD Superintendent
- San Francisco Bay Trail / Association of Bay Area Governments (proposed 500 mile trail)
- Bike Walk Alameda



#### Implementing General Plan

- General Plan Transportation Element (2009)
  - Truck Route
  - Transit and Bicycle Priority Streets
- City of Alameda Bicycle Plan (2010)



#### Issues to Balance

- 1.7 mile study area / residential area
- AC Transit, truck, commercial, jobs and ferry access
- Partial SF Bay Trail / Partial Caltrans facility SR 61
- Multiple schools (approx. 4,500 students/9 schools)



#### Schools

- West Alameda (approx. 4,500 students)
  - Academy of Alameda Middle School
  - Alameda Community Learning Center \*
  - Alameda Science and Technology Institute \*
  - Child Unique Montessori School
  - Encinal High School
  - Junior Jets Middle School
  - Nea
  - Paden Elementary School
  - Ruby Bridges Elementary School



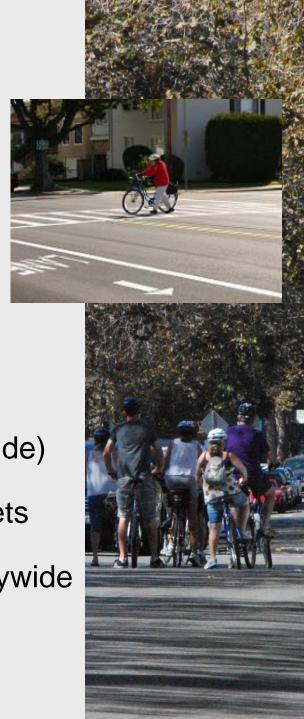
#### **Alternatives Considered**

- Do nothing different leave as is status quo
- Santa Clara Avenue
- Sharrows
- East End Section:
  - Buffered Bike Lanes
  - One-way Separated Bikeway
  - Median Separated Bikeway
  - Two-way Separated Bikeway on one Side of the Street
- Education/Enforcement



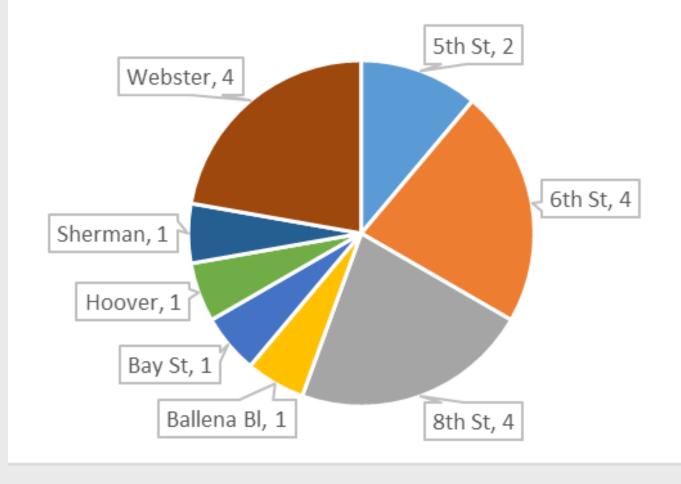
#### Safety

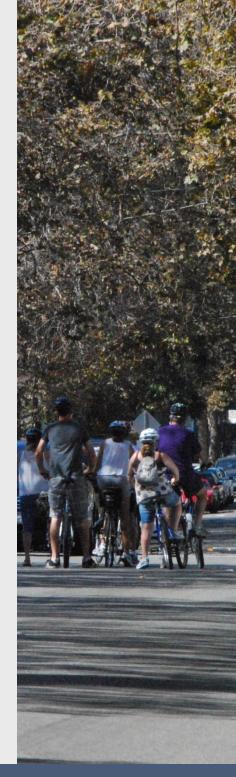
- Roadway Safety
  - Actual Speeds: 30-33 mph
  - 89 injuries from collisions past 10 years
    - 18 walking = 20% (16% citywide)
    - 22 bicycling = 25% (16% citywide)
  - Bicycling/walking injuries = 45% (32% citywide)
  - Study Area mileage = 1.4% of citywide streets
  - Study Area injuries = 4.1% (compared to citywide injuries)



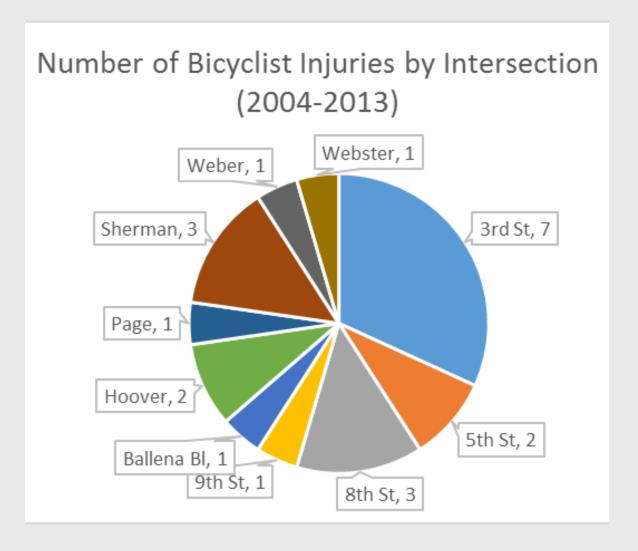
# Safety: Ped Injuries at Uncontrolled Intersection and Highly Concentrated Areas

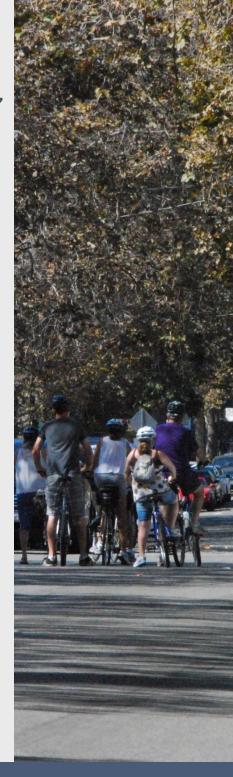
Number of Pedestrian Injuries by Intersection (2004-2013)



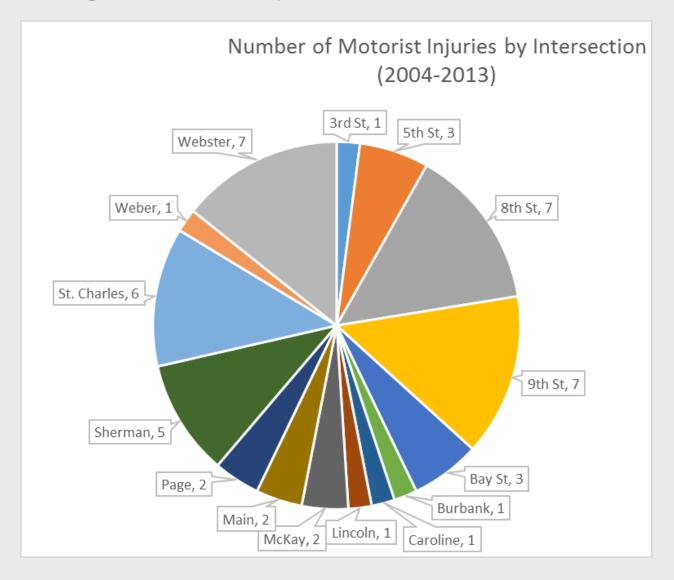


# Safety: Bike Injuries Concentrated at Third Street near Encinal High and 5 out of 7 during Drop-Off/Pick-Up Times





# Safety: Motorist Injuries More Dispersed throughout Study Area





#### Outreach: Process

- Community Workshops: April, June and September
- Transportation Commission Meetings: May and Nov.
- Advisory Committee: met three times and individually
- Outreach Materials
- Project Email List Serv: 350 emails and growing
- Web Page: <a href="http://alamedaca.gov/public-works/central-avenue-complete-street">http://alamedaca.gov/public-works/central-avenue-complete-street</a>
- Open Forum: <a href="http://alamedaca.gov/public-works/open-forum">http://alamedaca.gov/public-works/open-forum</a> attracted almost 500 visitors
- City Council: Recommended Concept (early 2016)



# Outreach: Survey Results

 Two-way separated bikeway in West End = favorable response How would you rank Corridor Segment #1's preferred option? (1 as favored and 5 as not favored)

|   | Response<br>Percent | Response<br>Count |
|---|---------------------|-------------------|
| 1 | 65.8%               | 77                |
| 2 | 10.3%               | 12                |
| 3 | 3.4%                | 4                 |
| 4 | 2.6%                | 3                 |
| 5 | 17.9%               | 21                |

Bike lanes in east section = mixed support How would you rank Corridor Segment #4's preferred option? (1 as favored and 5 as not favored)

| 1 28.4% | 33 |
|---------|----|
|         | 55 |
| 2 18.1% | 21 |
| 3 12.1% | 14 |
| 4 16.4% | 19 |
| 5 25.0% | 29 |

#### Concept: Goals

- 1. Encourage bicycling and walking
- 2. Improve safety
- 3. Improve the streetscape
- 4. Traffic calming
- 5. Encourage transit use
- 6. Revitalize West Alameda
- 7. Improve public access to the SF Bay
- 8. Minimize disruption to motorists
- 9. Improve truck access



# Concept: Demographics

# Millennials: the Generation that Walks the Talk

- Walked to Work/School
  - Millennials: 32%
  - Generation X: 19%
  - Baby Boomers: 13%

**Source: National Association of Realtors & Portland State University** 

 22% of young people plan on never getting a driver's license

**Source: University of Michigan survey** 

Encinal HS student parking lot is not full



#### Recommended Concept

- East End Section
  - Bike Lanes
- West End Section
  - Two-way Separated Bikeway
  - Westbound Bike Lane



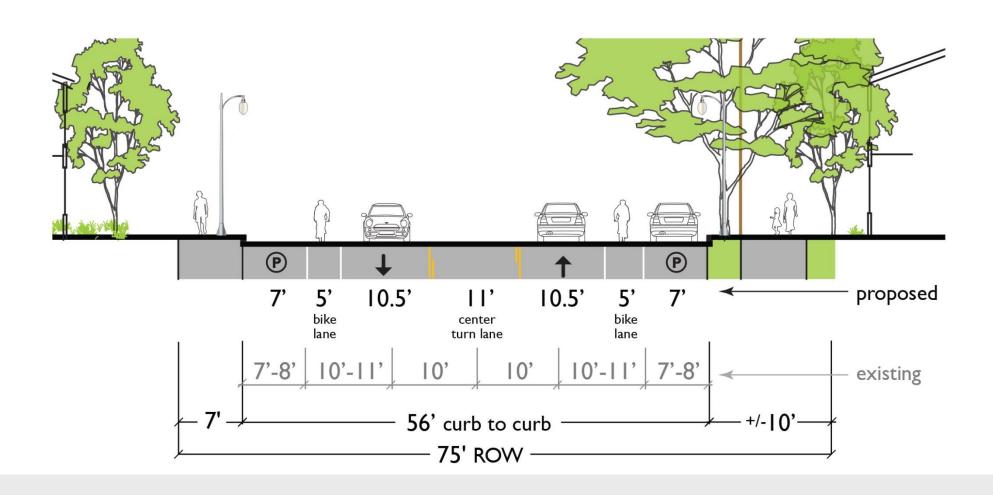
#### Concept: Bikeway (Sherman-Paden School)

- Do nothing different
- Sharrow markings
- Bike lanes + center turn lane

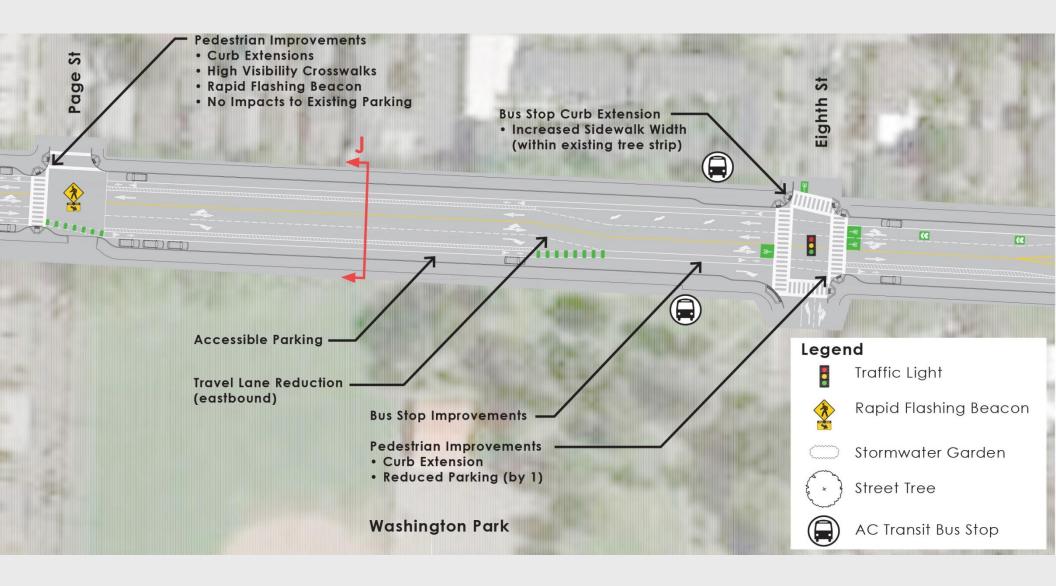
- Two-way separated bikeway
- One-way separated bikeway
- Buffered bike lanes



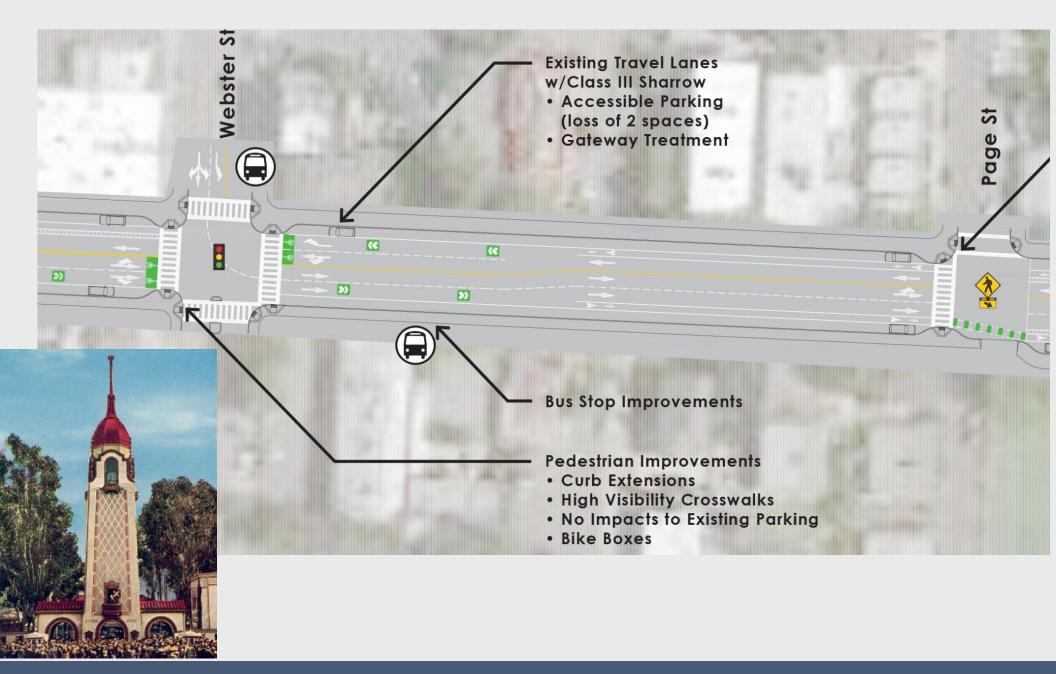
#### Concept: Sherman – Paden School



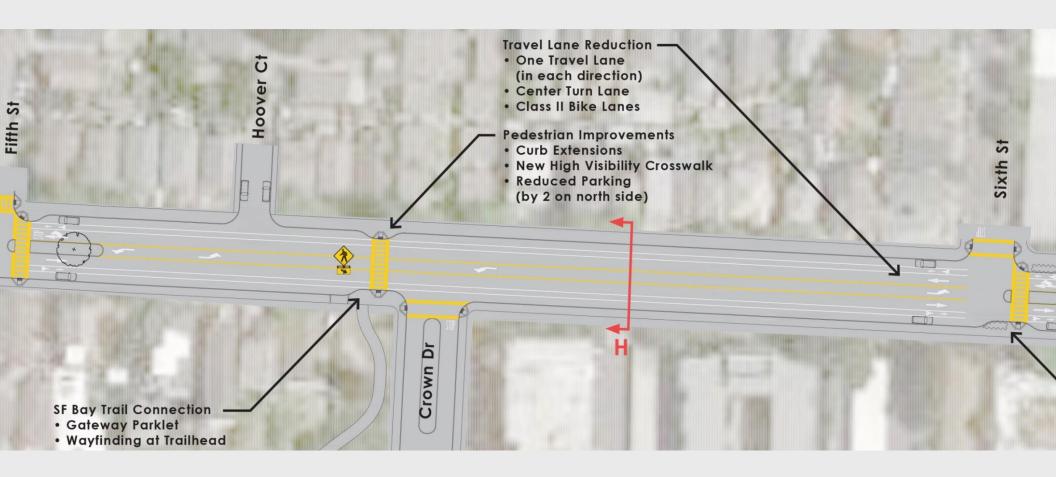
# Concept: Eighth St - Page St



#### Concept: Page St – Webster St



#### Concept: Fifth St – Sixth St



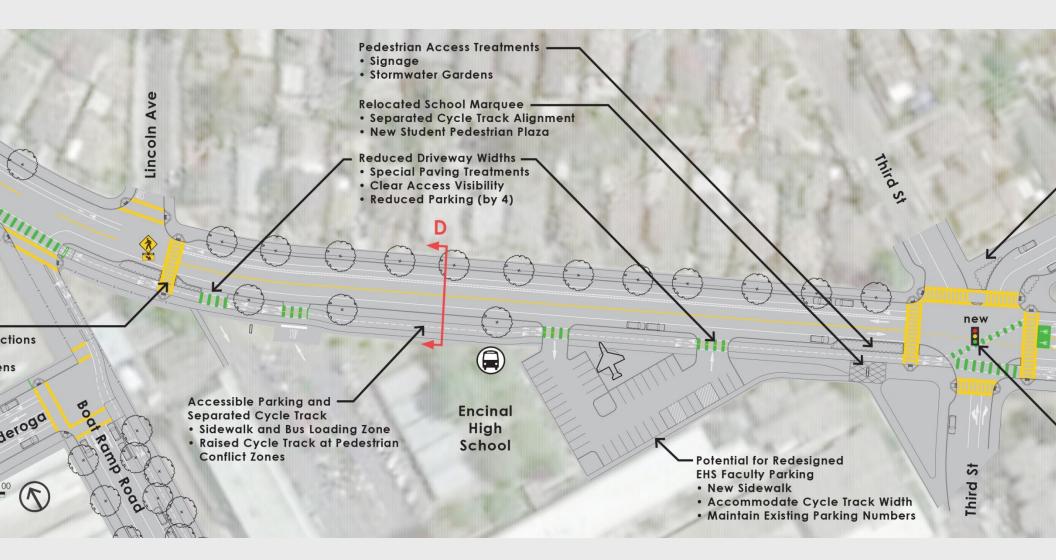
#### Concept: Bikeway - West End

- Two-way separated bikeway by
  - Paden, Encinal and Junior Jets Schools
  - SF Bay Trail
  - Alameda Point
- Westbound bike lane

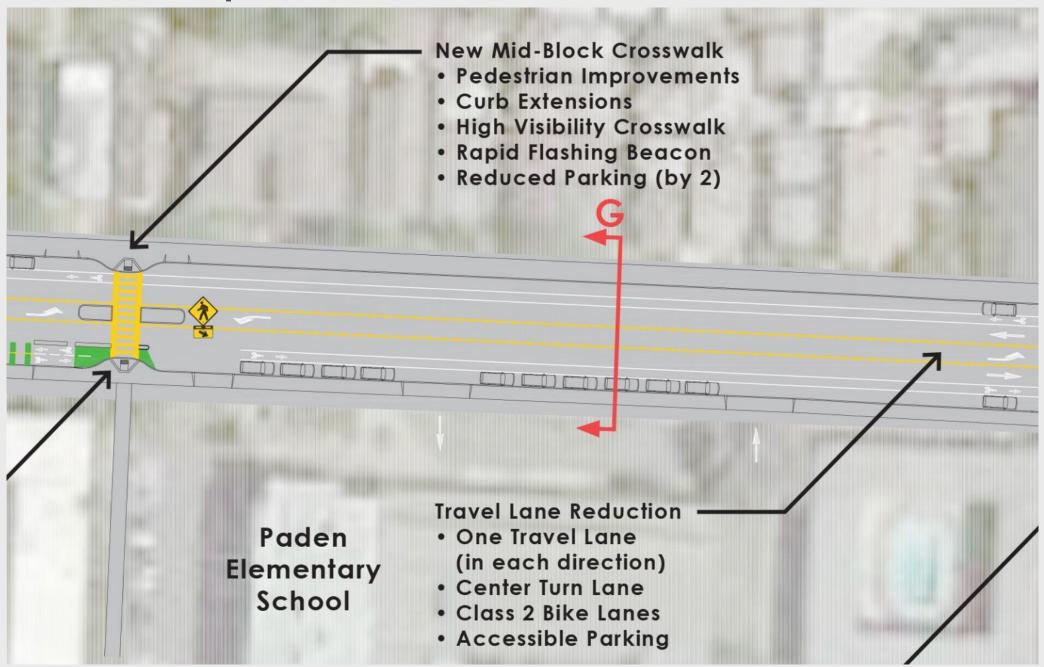




# Concept: Encinal High School



#### Concept: Paden School



# Concept: Improves Safety

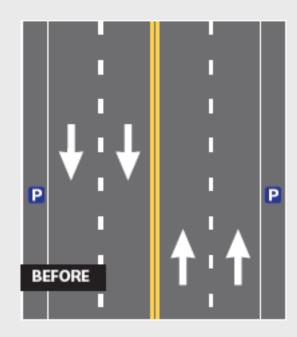
Federal Highway Administration (FHWA) identifies volumes below 20,000 motorists/day as feasible for lane reduction.

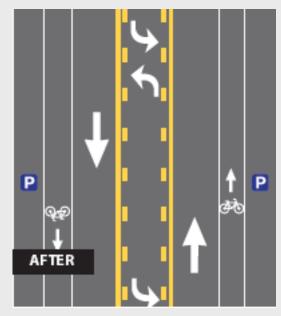
| Street Name                                 | Veh/Day |
|---|---------|
| Atlantic Ave. (Buena Vista to Constitution) | 10,956  |
| Broadway (Santa Clara Ave to Otis Dr)       | 10,552  |
| Fernside Blvd. (Tilden Way to High St)      | 8,550   |
| Central Avenue (max.)                       | 9,327   |
| Central Avenue: FUTURE (average)            | 12,000  |
| Central Avenue: FUTURE (max.)               | 16,000  |

#### Concept: Benefits

#### According to FHWA:

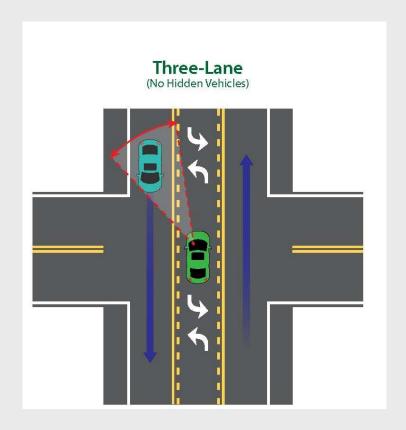
- Reduces collisions by at least 19%
- Reduces speeds by at least 3 mph
- Less severe collisions
- Fewer vehicle lanes to cross
- Better visibility of pedestrians
- Space for bicyclists
- Smoother travel flow





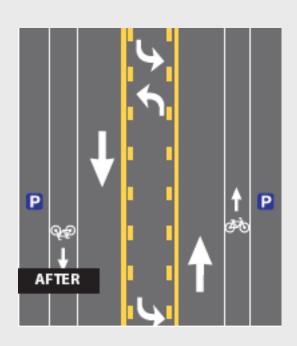
#### Concept: Motorist Safety

- Simpler crossings for side street motorists
- Fewer conflict points for sideswipe and rear-end collisions
- More visibility for left turning vehicles



#### Concept: Pedestrian and Bicyclist Safety

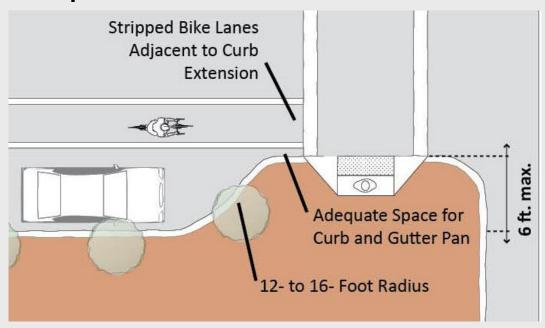
- Fewer motor vehicle travel lanes to cross
- More visibility for pedestrians and bicyclists
- Space for bicyclists
- Slower vehicle speeds lead to fewer and less severe crashes
- Shorter pedestrian crossing distances



# Concept: Achieves Key Goals

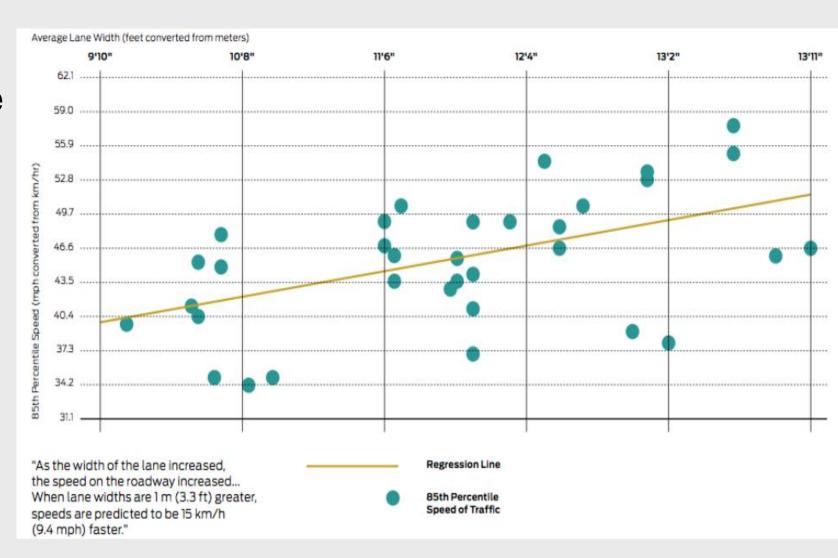
- Safer Street Center Lane
- Bikeway
- Pedestrian Improvements
- Streetscape Improvements
  - gateway, trees, stormwater, landscape
- SF Bay Trail Access
- Minimizes Motorist Delay
- Net Gain of Parking





#### Concept: Addresses Concerns

- Accessible parking
- Minimal delay
- Bus/truck access

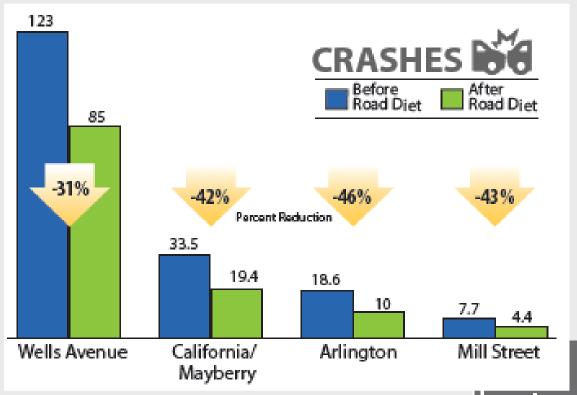


#### Concept: Local 3-Lane Examples

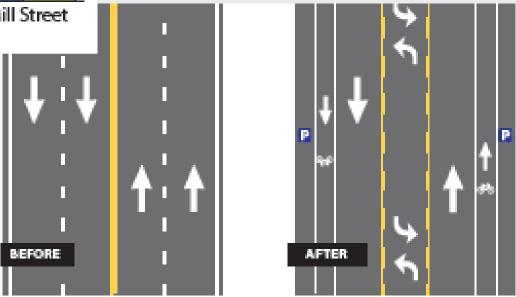
- Atlantic Avenue
- Broadway (mid-section)
- Fernside (Tilden-High)
- Fernside (San Jose-Otis)
  - Two-way separated bikeway installed in 2009
  - Increase in bicycling
  - Slower speeds
  - One bicyclist/motorist collision in bikeway



#### Concept: Lane Reductions



- Reno, Nevada corridors
  - Reduction in collisions between 31% and 46%



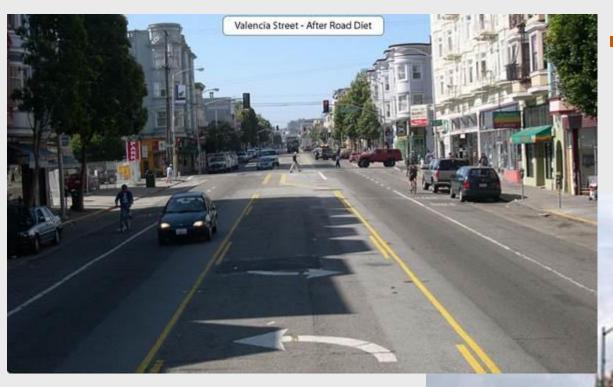


- Santa Monica Ocean Park Blvd
  - 65% reduction in collisions
  - 60% reduction in injury collisions





- Seattle, Washington Stone Way
  - More than 80% reduction in top speeders
  - 14% reduction in collisions
  - 33% reduction in injury collisions
  - 80% reduction in pedestrian collisions
  - 35% increase in bicyclists
  - No motorist diversions



Valencia St in San Francisco

Lakeshore Avenue by Lake Merritt in Oakland

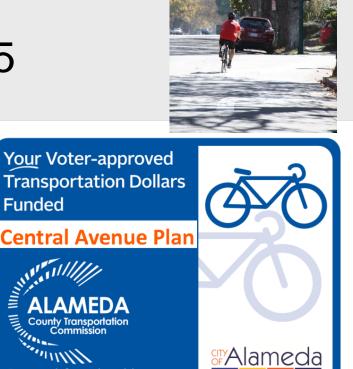


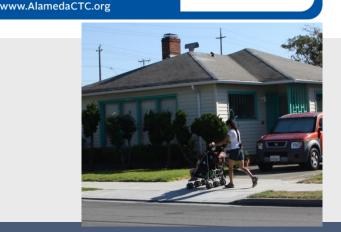
Story/Lincoln in San Jose

Charleston-Arastradero in Palo Alto

#### Next Steps

- Transportation Commission Approval – November 18, 2015
- City Council- Early 2016
- Next Phase
  - Seek Funding
  - Design
  - Transportation Commission Design **Approval**
  - City Council Approve Construction Bid





**Funded** 

For more information, visit

#### Comments or Questions?

#### Contact:

Gail Payne 510-747-6892 or gpayne@alamedaca.gov



#### Project web page:

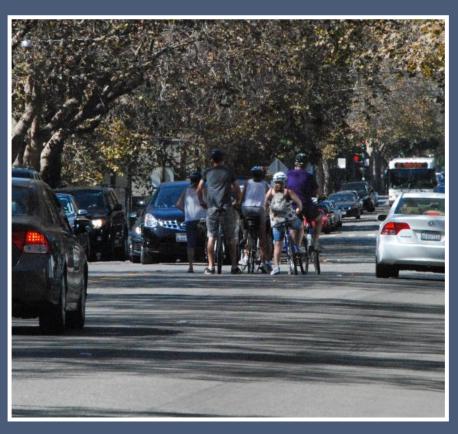
http://alamedaca.gov/public-works/central-avenue-complete-street

















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