## January 31, 2019



# **Otis Drive**

Traffic Calming and Safety Improvements Project



# Introductions

City of Alameda team



## Parisi Transportation Consulting team



# **Tonight's Agenda**

- Project goals
- Community input to date
- Current safety and traffic concerns
- Traffic calming and safety tools
- Questions
- Break-out session
- Community feedback

# **Project Goal: Improve Safety for All Users**

- Reduce driving speeds;
- Improve safety at pedestrian crossings;
  - Improve bicycle safety;

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Improve transit bus stops and operations; and



Incorporate green infrastructure and stormwater management best practices where possible

# **Phased Approach**

- Limited initial funding (\$500,000 from the 2017-19 Capital Budget)
- Phase 1
  - Solicit community input and explore alternatives,
  - Develop conceptual (30%) plans for the corridor
  - Construct initial (and inexpensive) improvements
- Phase 2
  - Solicit grant funding
  - Complete final design with public input

# **Project Schedule**

- Workshop #1 Ideas, Concepts, Feedback: Tonight
- Workshop #2 Preliminary Recommendations: March 2019
- Transportation Commission: May 2019
- City Council: Summer 2019
- Phase 1 Design: Fall 2019
- Phase 1 Implementation: Spring 2020
- Apply for Phase 2 Funds: 2020

# **History**



### 







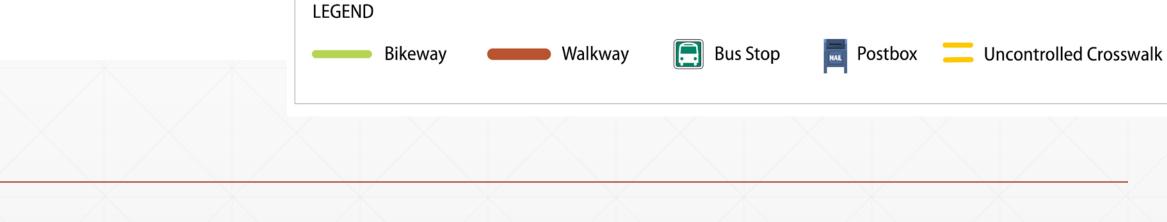
# **Recent Enhancements**

- 2010: "Leading Pedestrian Interval" (LPI) installed at Otis Drive/Willow Street
- 2011: Repaying of Otis Drive, including installation of ADA-compliant curb ramps
- 2015: Added "protected" left-turns (signal arrows) at Otis Drive/Westline Drive
- 2015: Installed accessible pedestrian signal push buttons at Grand/Otis
- 2016: Speed monitoring by community using radars





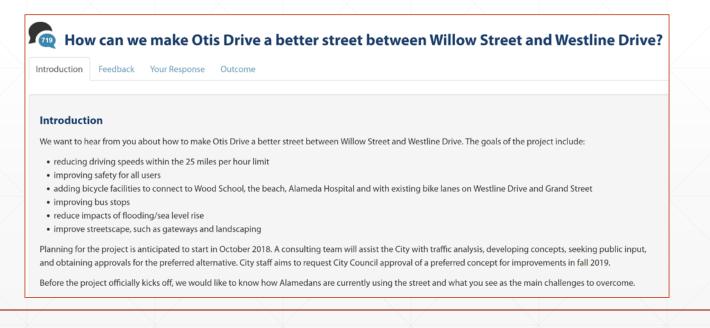




# **Otis Drive**



- Community survey administered by the City of Alameda
- Online survey conducted August 10 to September 19, 2018
- 261 responses received



#### What is your typical destination when using Otis Drive? (select all that apply)

	Response Percent	Response Count
Home	47.5%	123
Work	20.1%	52
Wood Middle School	12.7%	33
Other school	6.9%	18
Robert Crown Memorial State Beach	31.7%	82
Rittler Park	12.4%	32
Little League fields	11.2%	29
Alameda Hospital	5.8%	15
Shopping	76.4%	198
Visiting friends/relatives/neighbors in the area	25.1%	65
Other	19.7%	51

#### What to do you find most challenging when using Otis Drive?

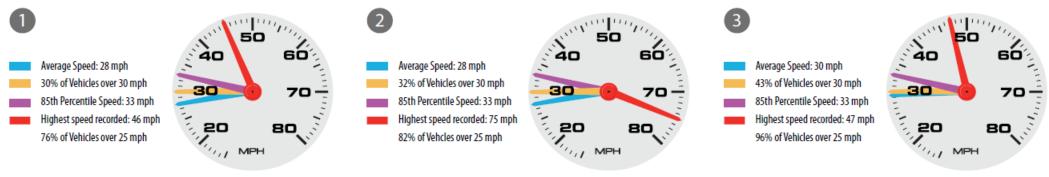
- 1. Traffic speeds
- 2. Safety of people biking (including yourself or others)
- 3. Safety of people walking (including yourself or others)
- 4. Traffic congestion
- 5. Condition of the Roadway
- 6. Appearance
- 7. Noise
- 8. Finding parking

- "Speeding is the biggest issue"
- "People drive on it like it's a freeway"
- "More opportunities for pedestrians to cross safely"
- "My children fear riding (their bikes) to school in Alameda due to cars and reckless drivers"
- "The intersection of Otis and Grand desperately needs a left turn signal and dedicated turning lanes"
- "I would love to see more trees on Otis; it would help with noise"

# **Speed Limit**



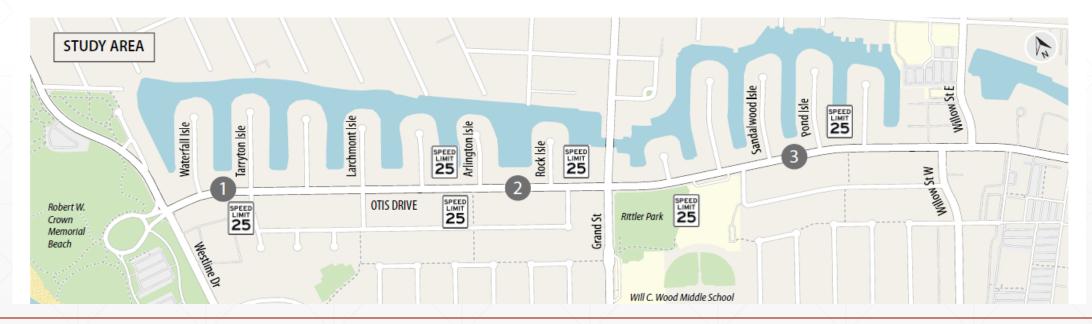
# **Vehicular Speeds**

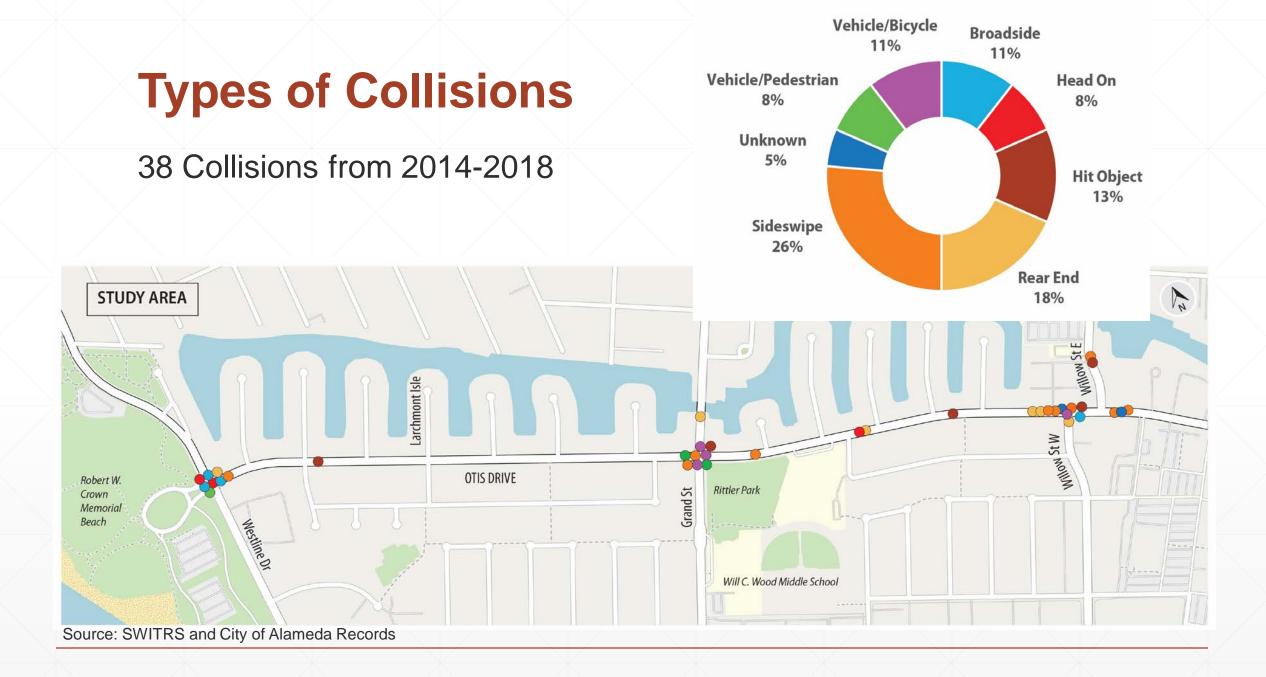


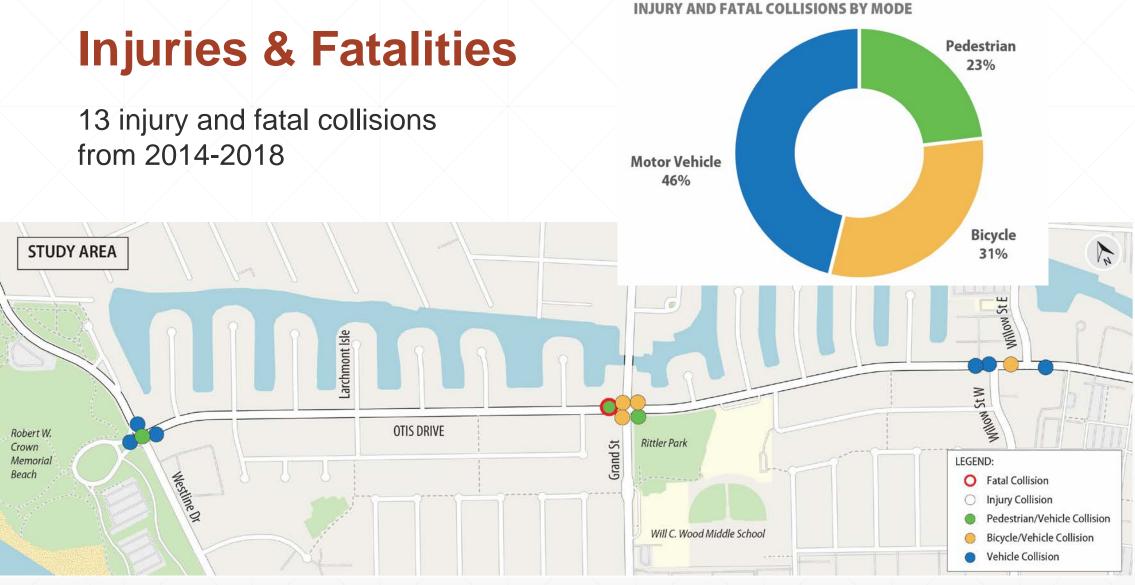
Daily speed data collected on Wednesday, 2/15/2017

Daily speed data collected on Wednesday, 2/15/2017

AM peak hour speed data collected on Tuesday, 3/1/2016







#### Source: SWITRS and City of Alameda Records

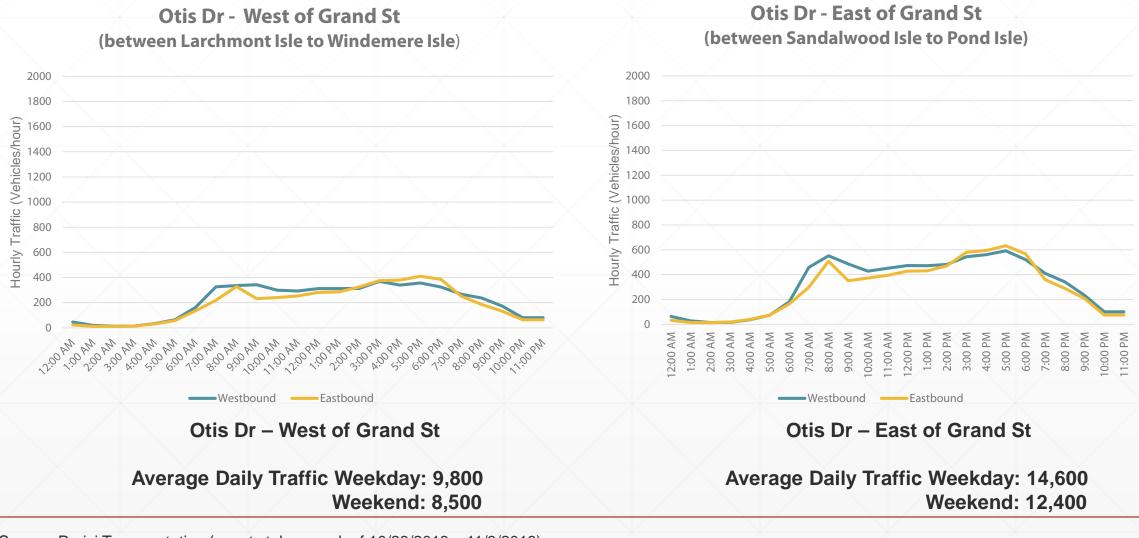
# **Injuries & Fatalities**



# **Traffic Volumes**



# **Traffic Volumes**



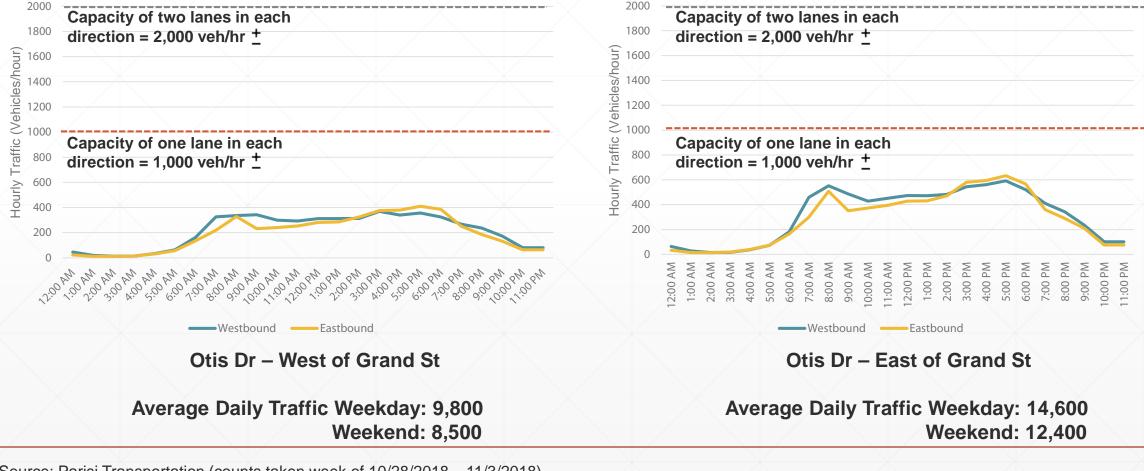
Source: Parisi Transportation (counts taken week of 10/28/2018 - 11/3/2018)

# **Traffic Volumes**

Otis Dr - West of Grand St

(between Larchmont Isle to Windemere Isle)

#### Otis Dr - East of Grand St (between Sandalwood Isle to Pond Isle)

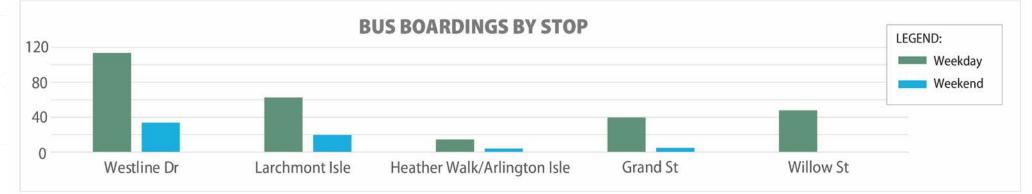


Source: Parisi Transportation (counts taken week of 10/28/2018 - 11/3/2018)

# **Bus Stops**



# **Bus Stops**





Source: AC Transit, 2017

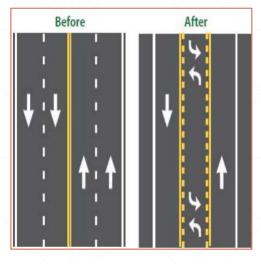
# **Bus Stops**

AC Transit Major Corridors Study recommendations for Otis Drive:

- Smarter traffic signals that are coordinated and give buses more green lights
- Longer bus stops and wider sidewalks make getting on and off the bus faster and safer
- Better bus stop placement for a quicker ride



# **Traffic Calming & Safety Tools**















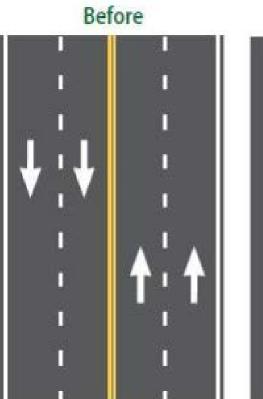


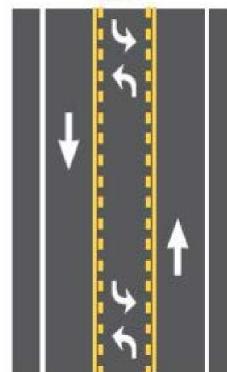
# **Traffic Calming & Safety Tools**

- Physical measures to improve safety
- Encourage more responsible driving and appropriate travel speeds
- Improve visibility and safety of pedestrian crossings
- Increase pedestrian and bicycle comfort

# **Advantages of a 3-Lane Street**

After







Fernside Boulevard



## **Advantages of a 3-Lane Street**

According to the Federal Highway Administration:

- Reduces collisions by at least 19%
- Decreases speeds by at least 3 mph
- Results in less severe collisions
- Provides fewer vehicle lanes to cross
- Enables better visibility for pedestrians
- Allows space for bicyclists
- Provides smoother travel flow

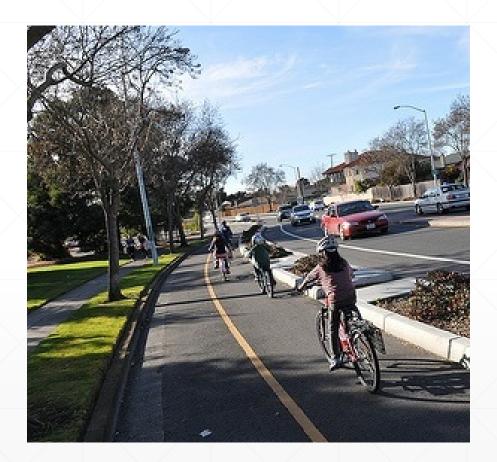
# **Buffered Bicycle Lanes**



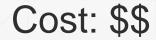




# **Physically Separated Bicycle Facility**





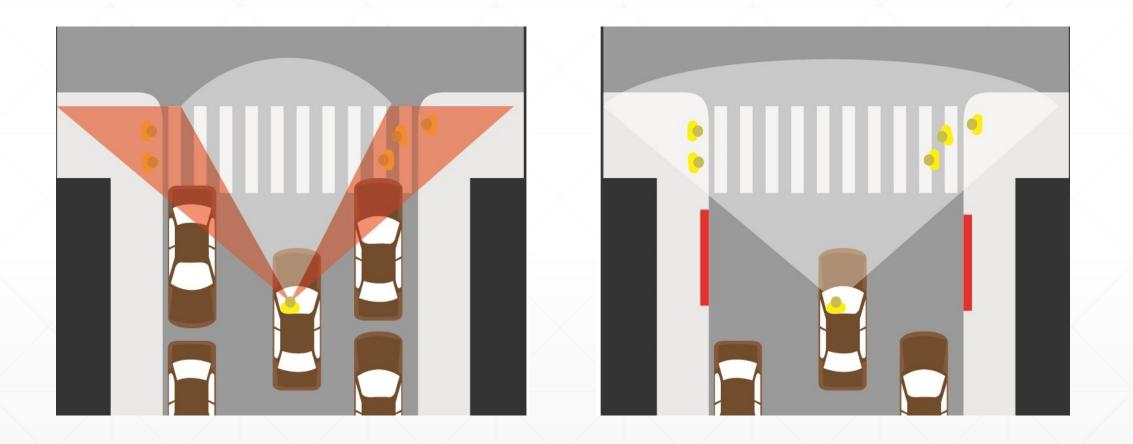


# **High-Visibility Crosswalks**





# **Improved Sight Lines**

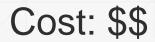




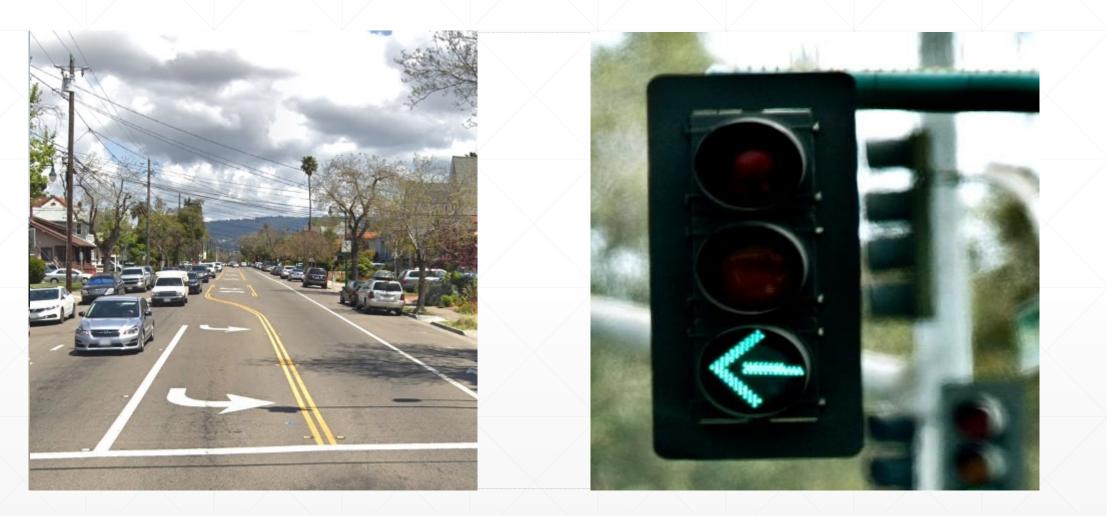
# **Flashing Beacons**

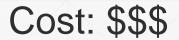






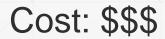
# **Turn Lane & Traffic Signal Enhancements**





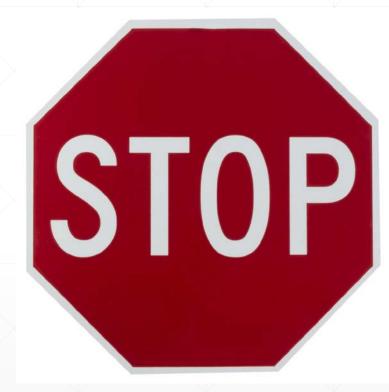
# **Modern Roundabout**





# Why Not Stop Signs?

- Stop signs don't necessarily slow speeds
- Unnecessary stop signs decrease driver compliance



# What About Parking?

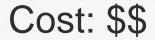
Limited parking prohibitions to be considered to improve safety at specific spot locations, such as increasing visibility at crosswalks or corners at intersections



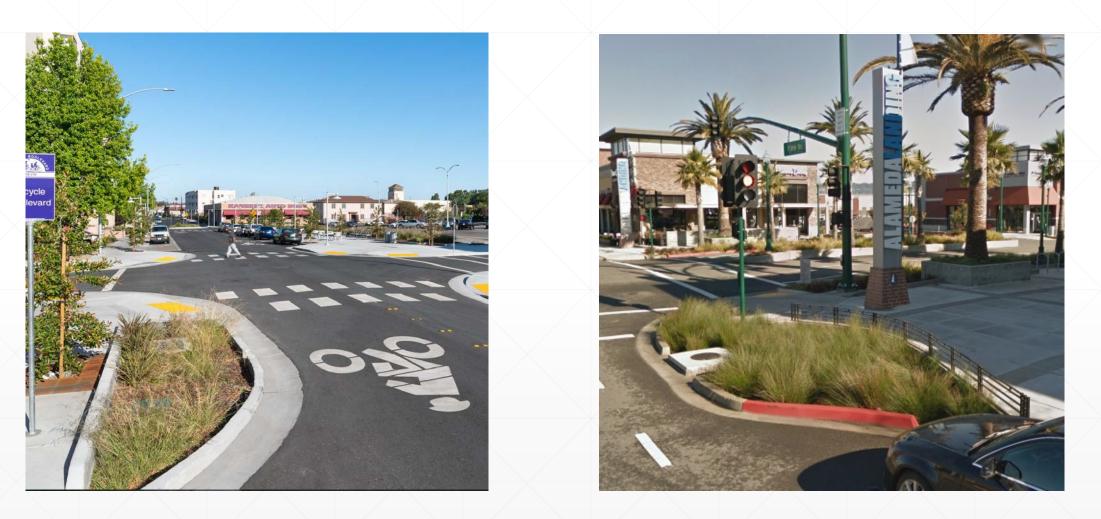
#### Landscaped Medians & Pedestrian Refuge Islands







#### **Bulb-outs & Rain Gardens**



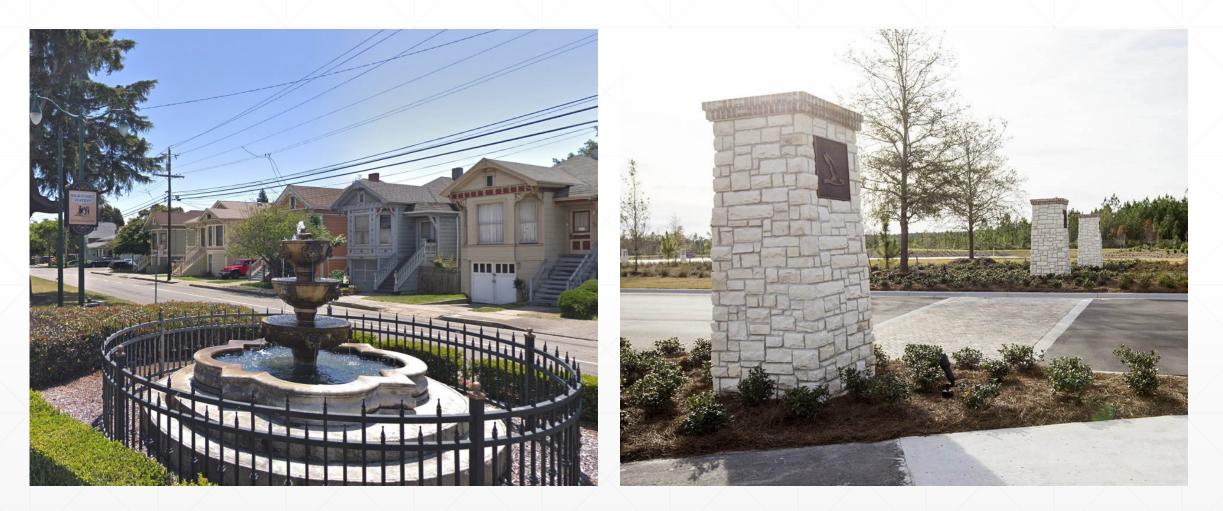
Cost: \$\$

#### **Low-cost Bulb-outs**



Cost: \$

## **Gateway Treatments**



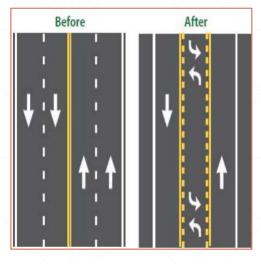
Cost: \$\$

## **Bus Stop Enhancements**



Cost: \$\$

# **Traffic Calming & Safety Tools**

















# **Questions?**

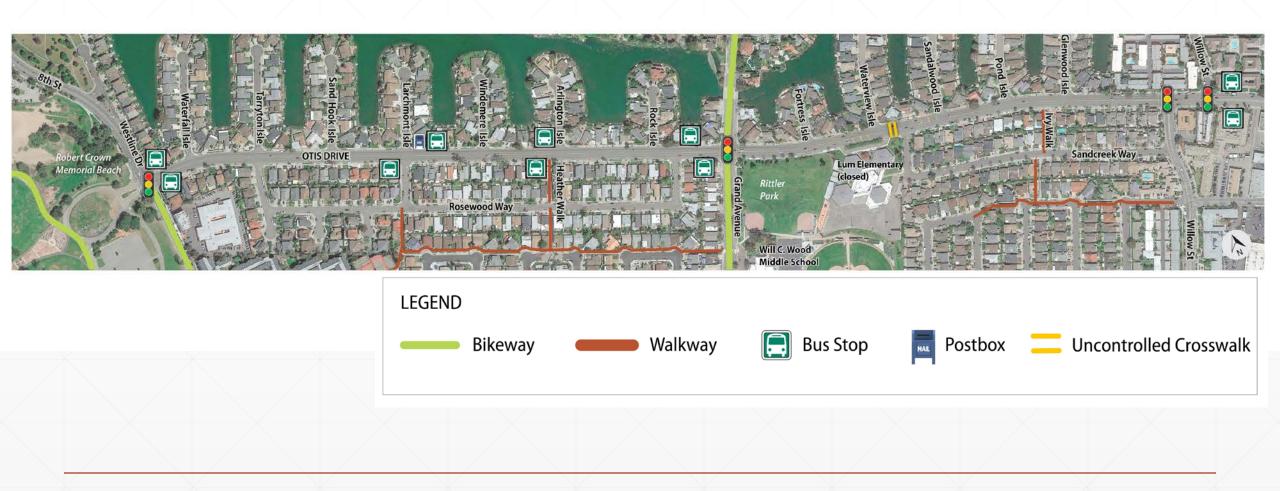


#### **Break-out Session**

- Break out into 6 groups
- Discuss issues and toolkit options for about 20 minutes
- Come back to present findings to the group



# **Community Input**



### **Next Steps**

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- Workshop #2 Preliminary Recommendations: March 2019
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