

Otis Drive Traffic Calming and Safety Improvements Project



March 20, 2019

Agenda

- Project goal and objectives
- Existing conditions
- Community input to date
- Traffic calming and safety tools
- Preliminary improvement concepts



Project Goal: Improve Safety for All Users



Reduce driving speeds;



Improve safety at pedestrian crossings;



Improve bicycle safety;



Improve bus stops and operations; and



Provide green infrastructure and
stormwater management best practices

Phased Approach

- Limited initial funding (\$500,000 from the 2017-19 Capital Budget)
 - Short-term:
 - Solicit community input and explore alternatives
 - Develop plans for the corridor
 - Construct initial (and inexpensive) improvements
 - Long-term:
 - Solicit grant funding
 - Complete final design with public input
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Project Schedule

- Workshop #1 – Ideas, Concepts: January 31
 - Transportation Commission (Information): February 27
 - **Workshop #2 – Preliminary Recommendations: March 20**
 - Transportation Commission (Concept Approval): May 22
 - City Council: Summer 2019
 - Short-term Design: Fall 2019
 - Short-term Implementation: Spring 2020
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History

1946



1958



1968



Recent Enhancements

- 2010: “Leading Pedestrian Interval” (LPI) installed at Otis Drive/Willow Street
- 2011: Repaving 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



Vehicular Speeds

1

Average Speed: 28 mph
30% of Vehicles over 30 mph
85th Percentile Speed: 33 mph
Highest speed recorded: 46 mph
76% of Vehicles over 25 mph



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

2

Average Speed: 28 mph
32% of Vehicles over 30 mph
85th Percentile Speed: 33 mph
Highest speed recorded: 75 mph
82% of Vehicles over 25 mph



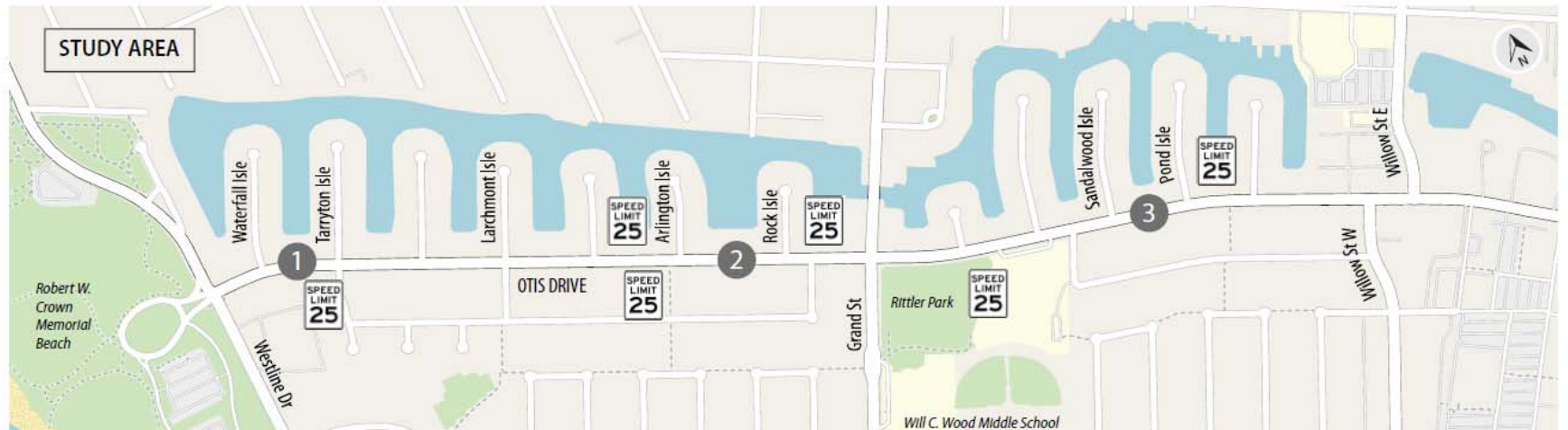
Daily speed data collected on Wednesday, 2/15/2017

3

Average Speed: 30 mph
43% of Vehicles over 30 mph
85th Percentile Speed: 33 mph
Highest speed recorded: 47 mph
96% of Vehicles over 25 mph

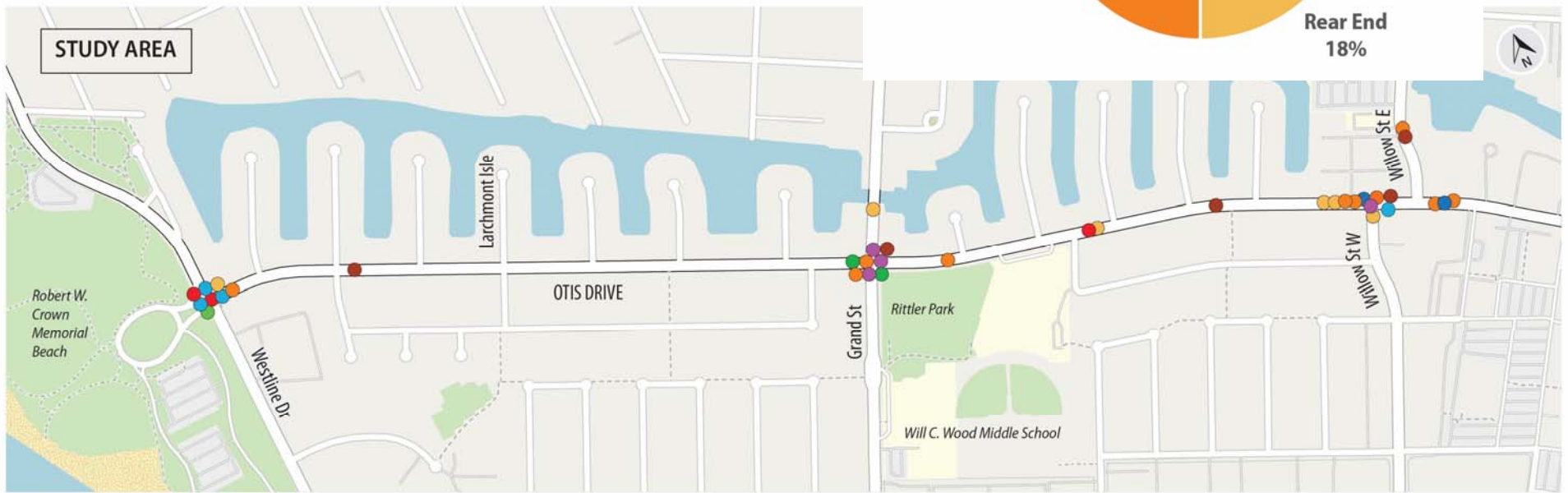
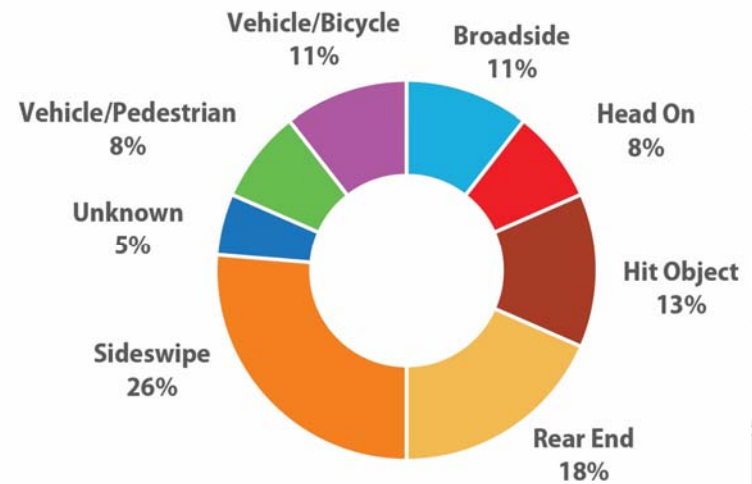


AM peak hour speed data collected on Tuesday, 3/1/2016



Types of Collisions

38 Collisions from 2014-2018

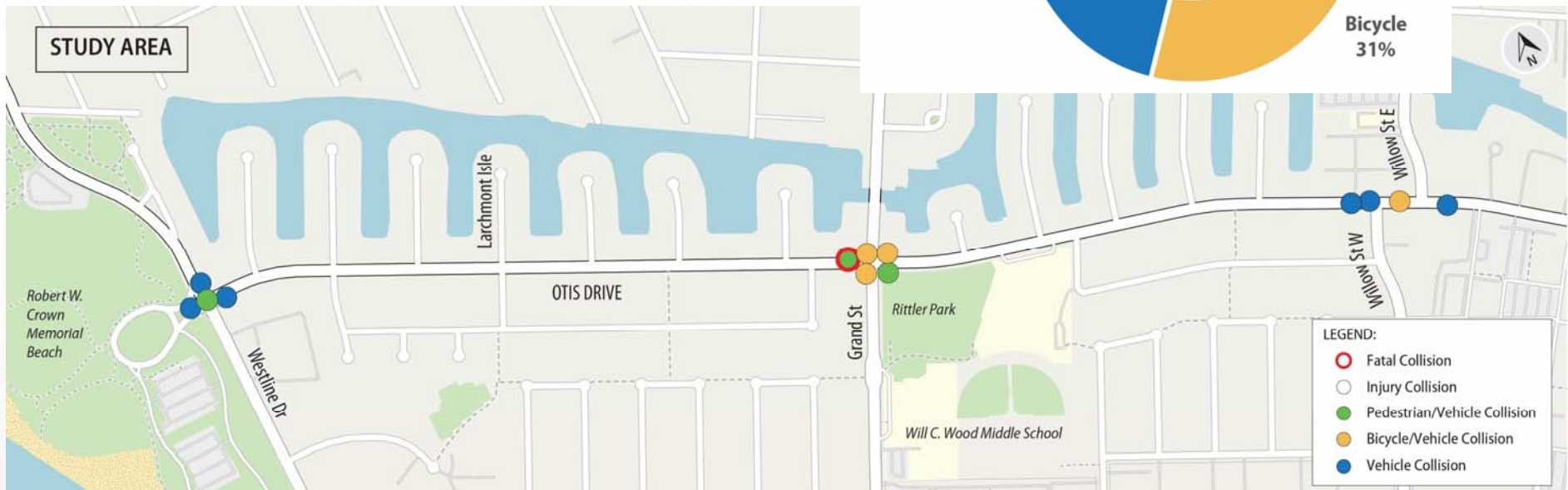
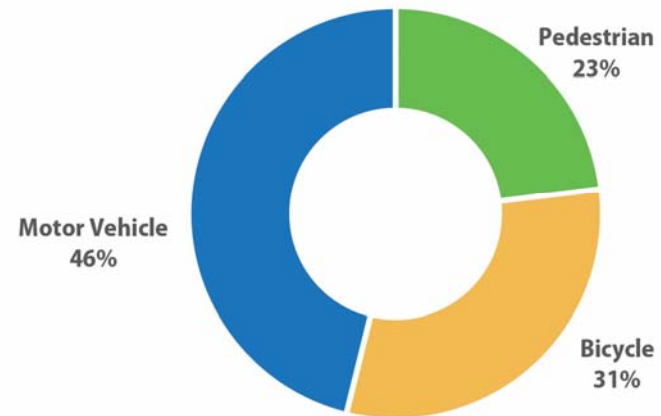


Source: SWITRS and City of Alameda Records

Injuries & Fatalities

13 injury and fatal collisions
from 2014-2018

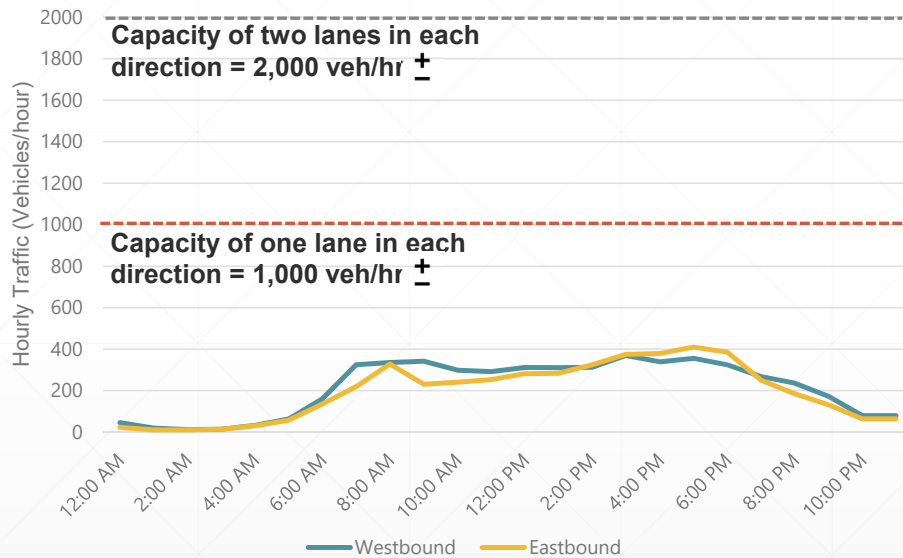
INJURY AND FATAL COLLISIONS BY MODE



Source: SWITRS and City of Alameda Records

Traffic Volumes

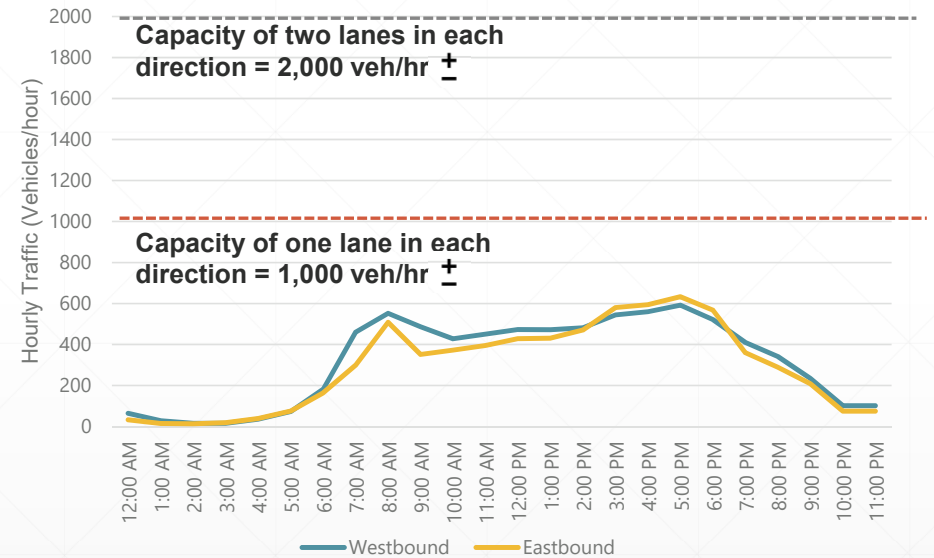
Otis Dr - West of Grand St
(between Larchmont Isle to Windemere Isle)



Otis Dr – West of Grand St

Average Daily Traffic Weekday: 9,800
Weekend: 8,500

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

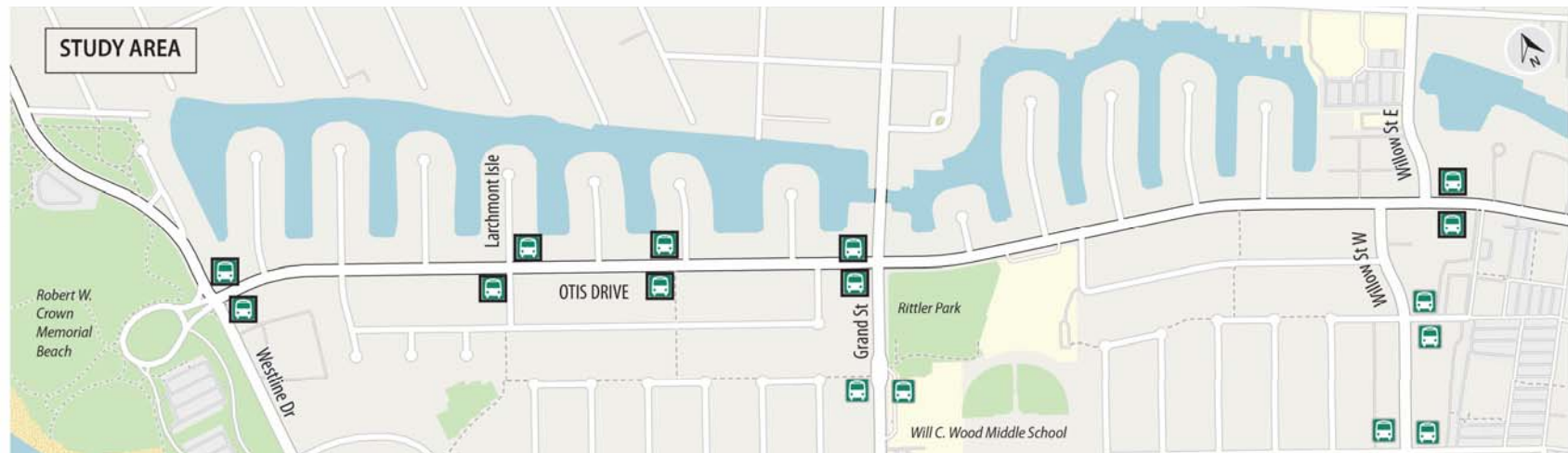


Otis Dr – East of Grand St

Average Daily Traffic Weekday: 14,600
Weekend: 12,400

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

Bus Stops



Source: AC Transit, 2017

Community Survey

- Community survey administered by the City of Alameda
- Online survey conducted August 10 to September 19, 2018
- Almost 600 responses received

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

Community Workshop #1



Community Workshop #1

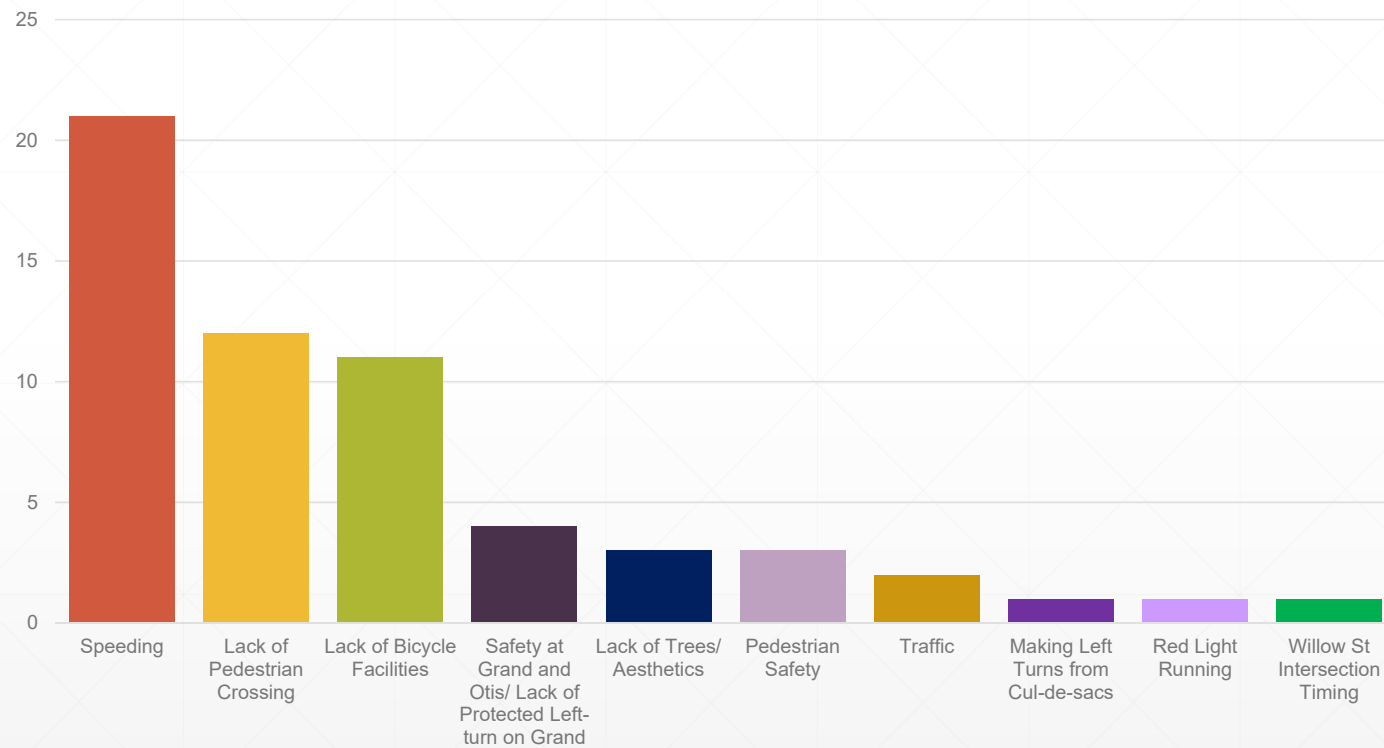


Community Workshop #1

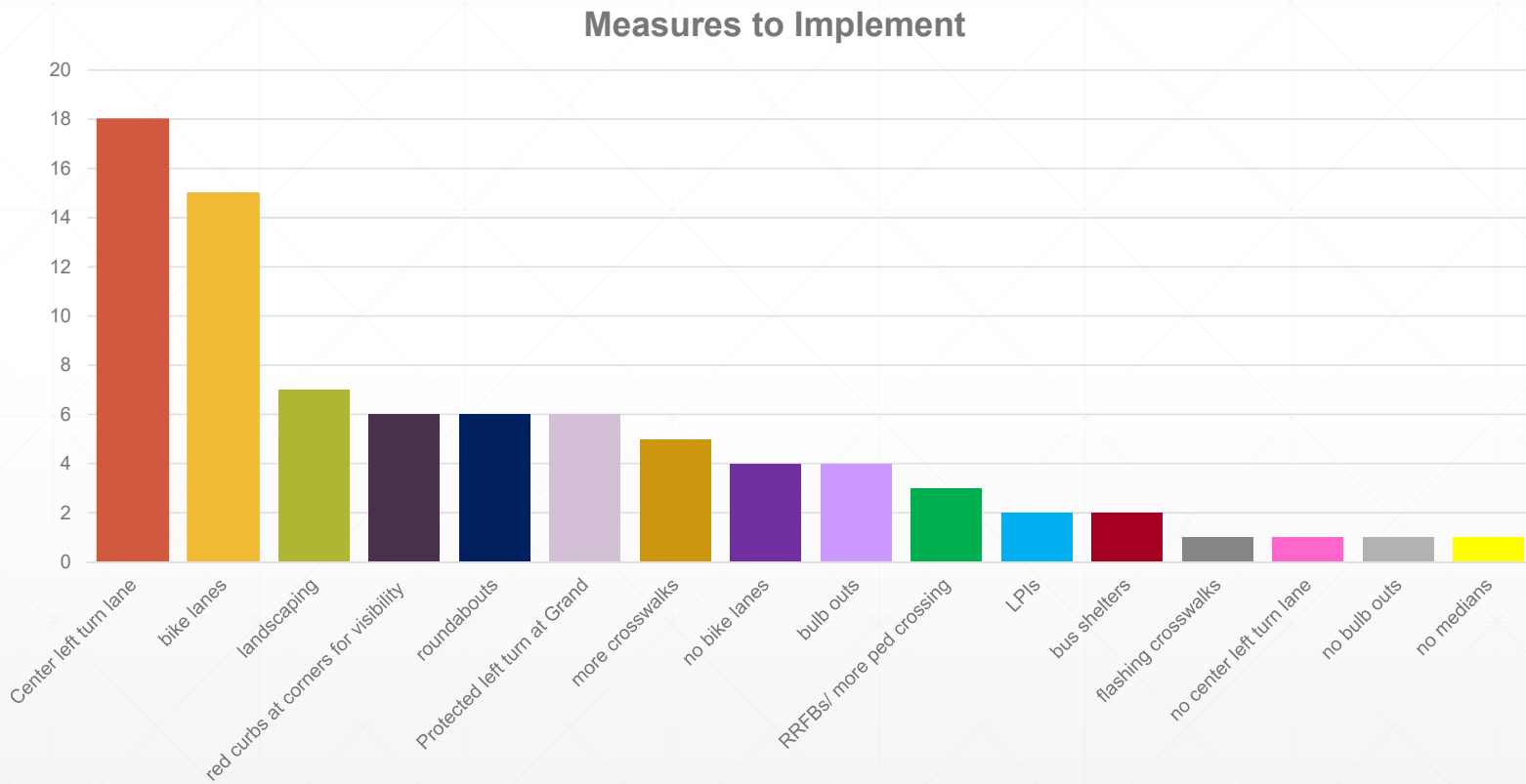


Community Workshop #1

Key Issues Affecting Otis Drive

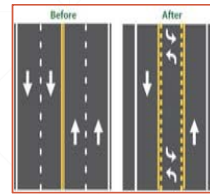


Community Workshop #1



Traffic Calming & Safety Tools

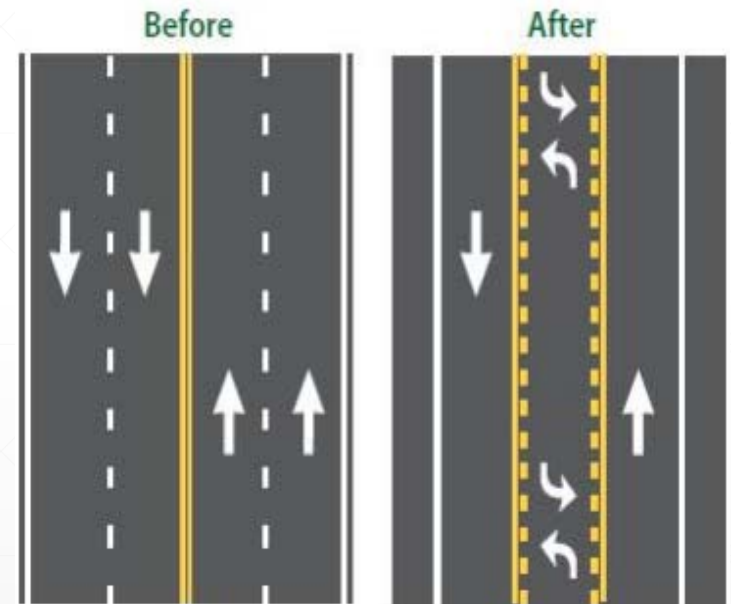
- Physical measures to improve safety
- Encourage more responsible travel speeds
- Improve visibility and safety of pedestrian crossings
- Increase pedestrian and bicycle comfort



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

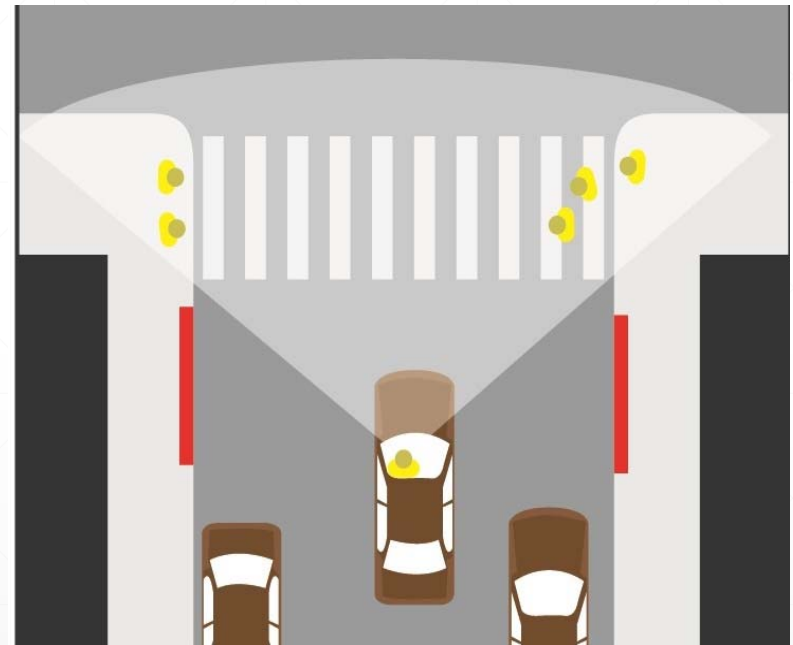
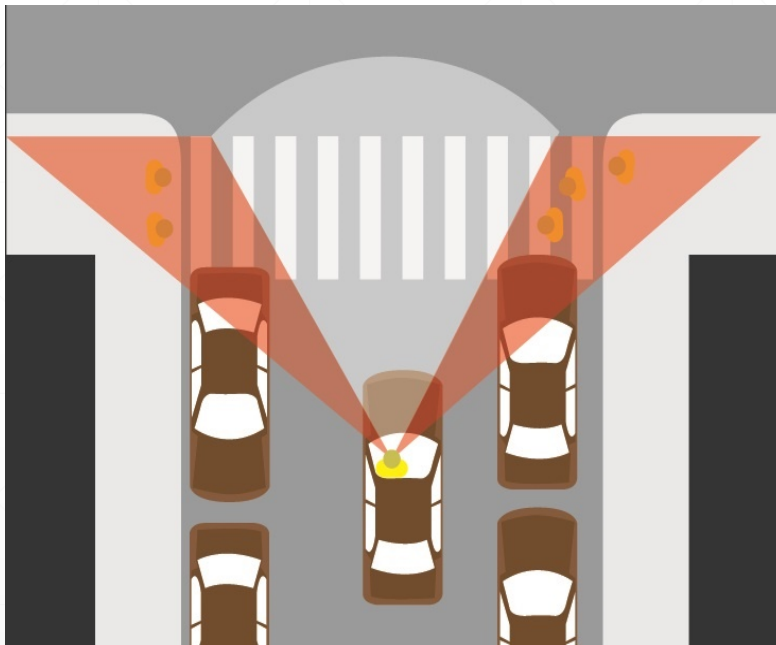


Buffered Bicycle Lanes



Cost: \$

Improved Sight Lines



Cost: \$

High-Visibility Crosswalks w/Beacons



Cost: \$\$

Turn Lane & Traffic Signal Enhancements



Cost: \$\$\$

Bulb-outs



Cost: \$\$

Low-cost Bulb-outs



Cost: \$

Modern Roundabouts



Cost: \$\$\$

Street Trees



Melaleuca
Quinquenervia



Hymenosporum
Flavum



Metrosideros
Excelsa

Cost: \$

Street Trees

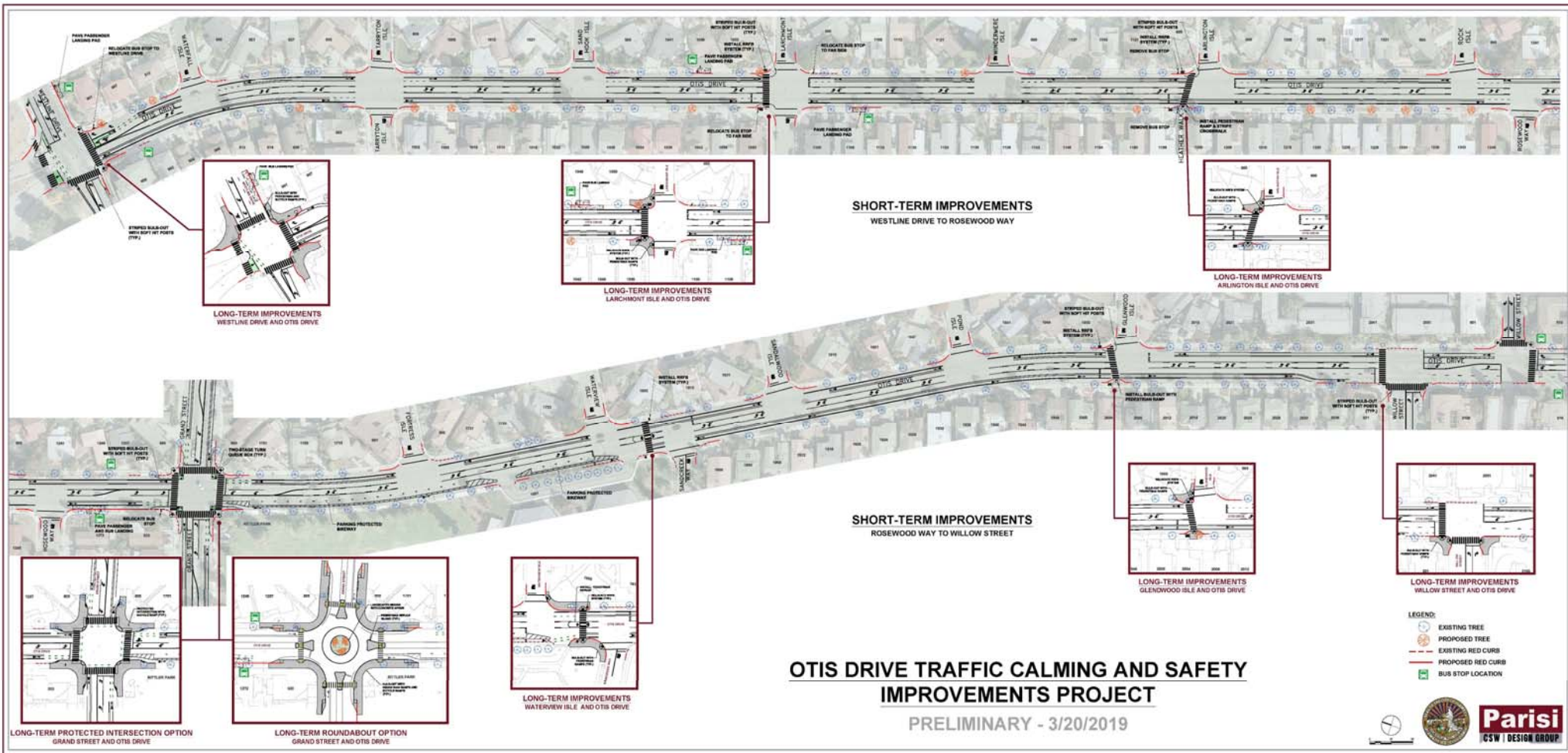


Corymbia Ficifolia

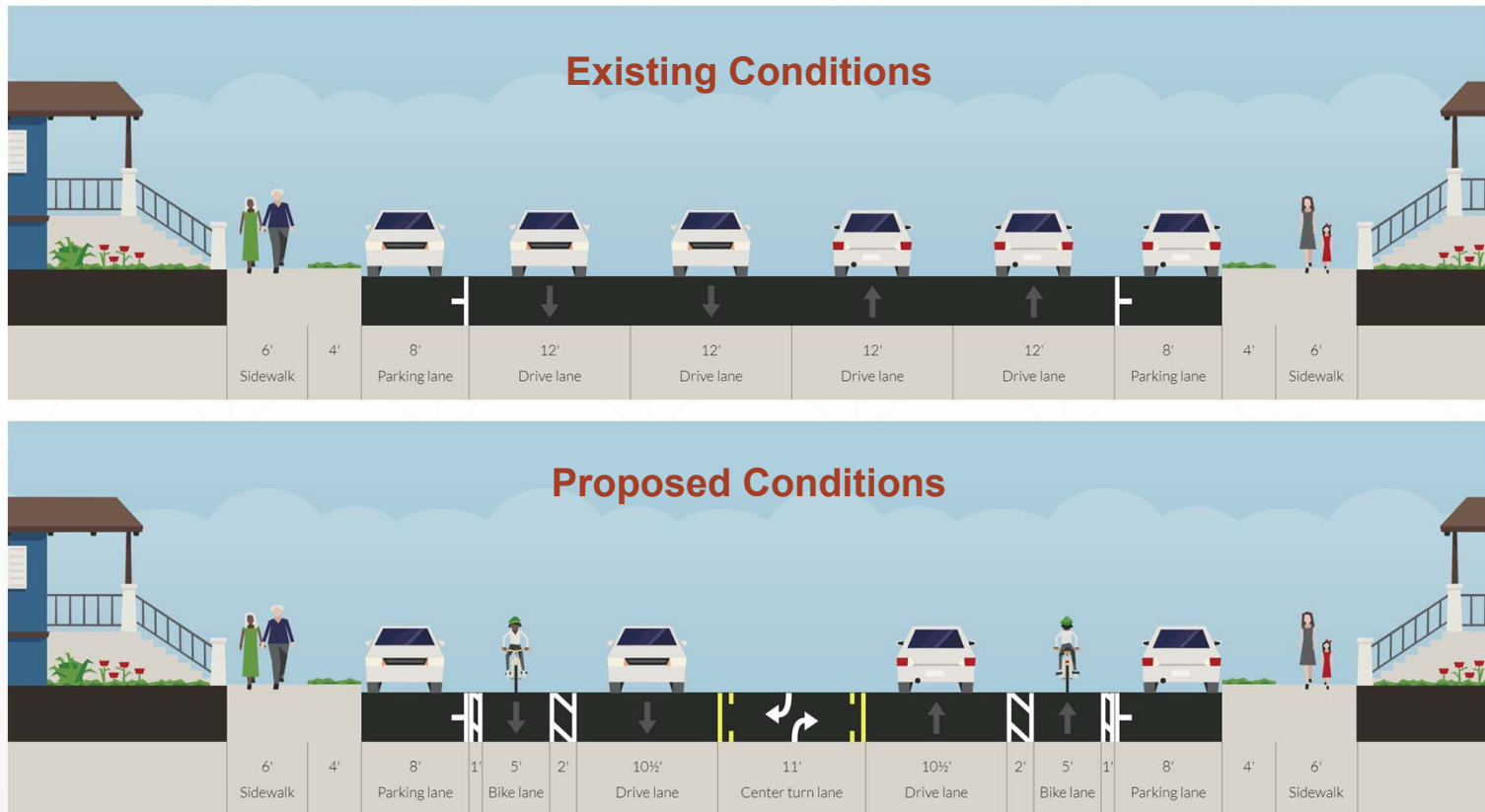


Lophostemon Confertus

Cost: \$



4-Lane to 3-Lane Conversion

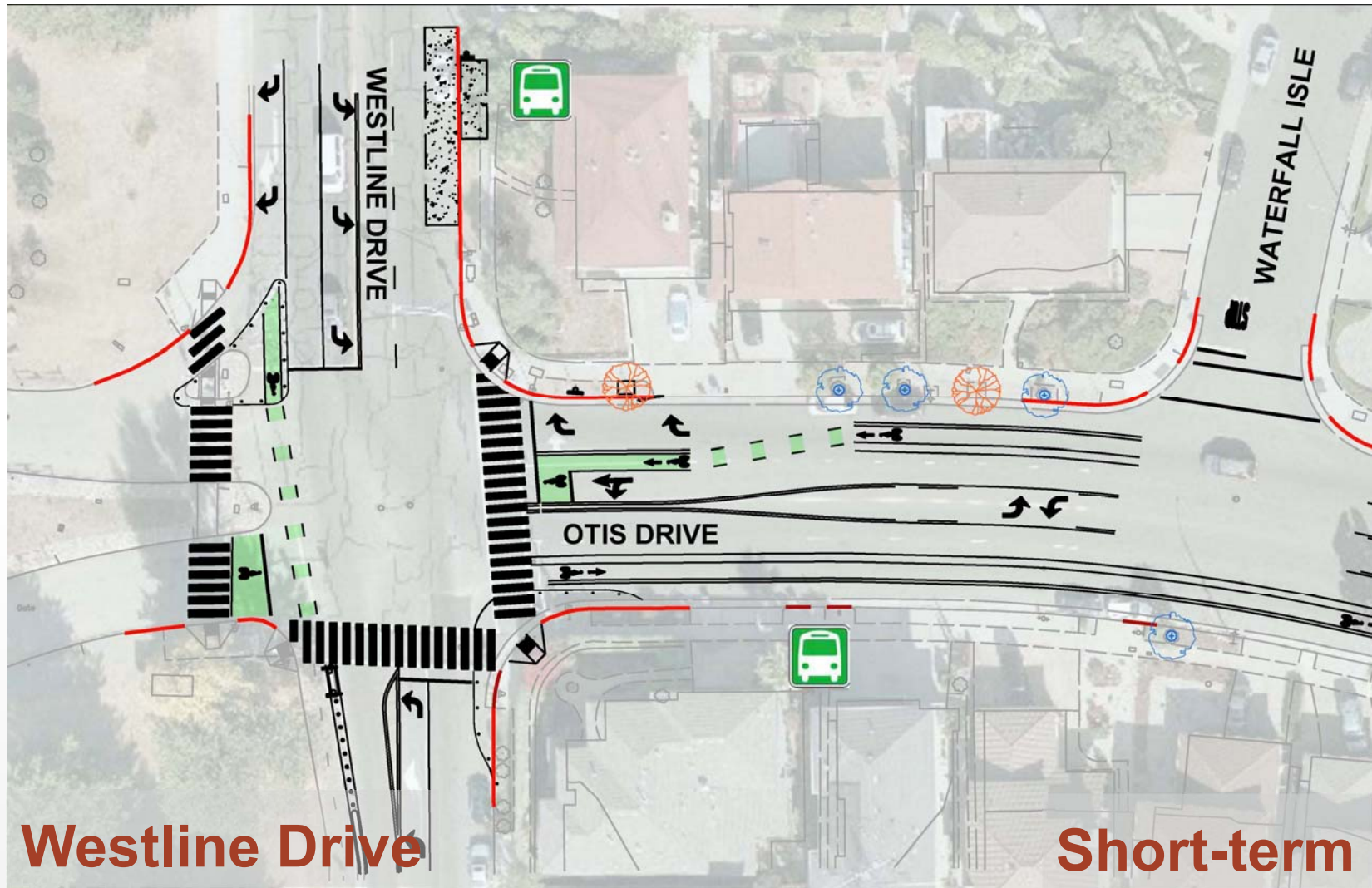


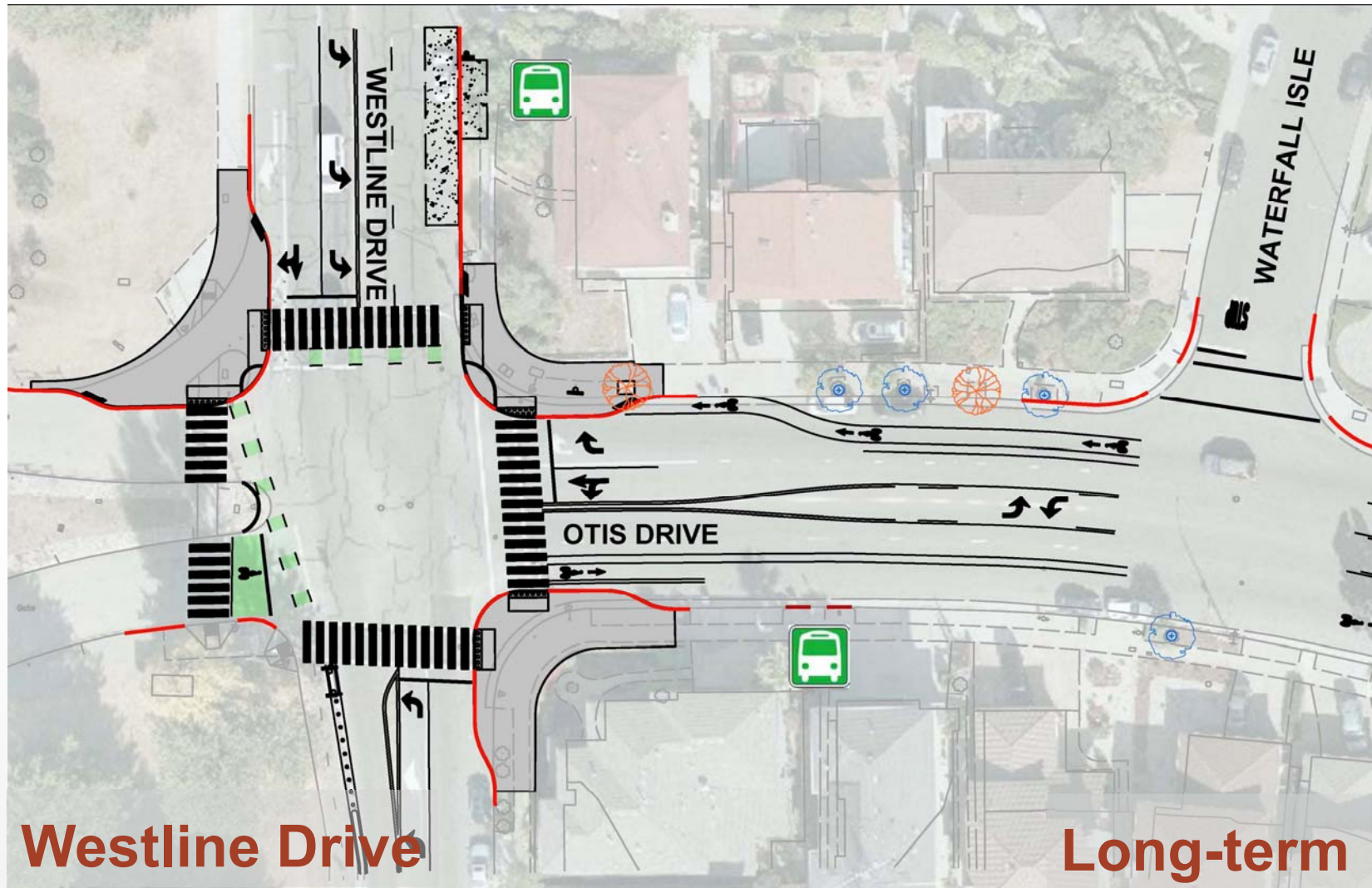


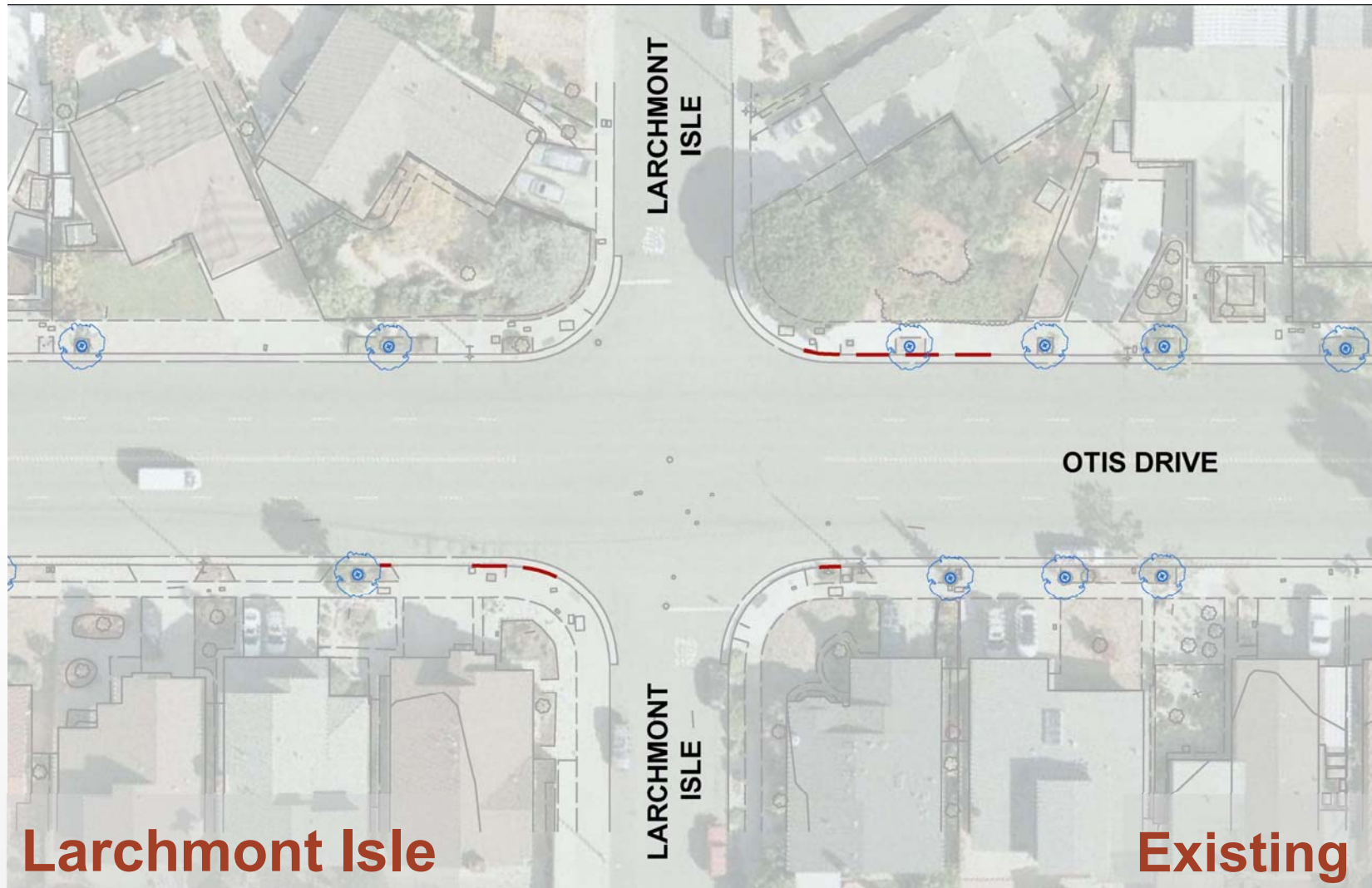


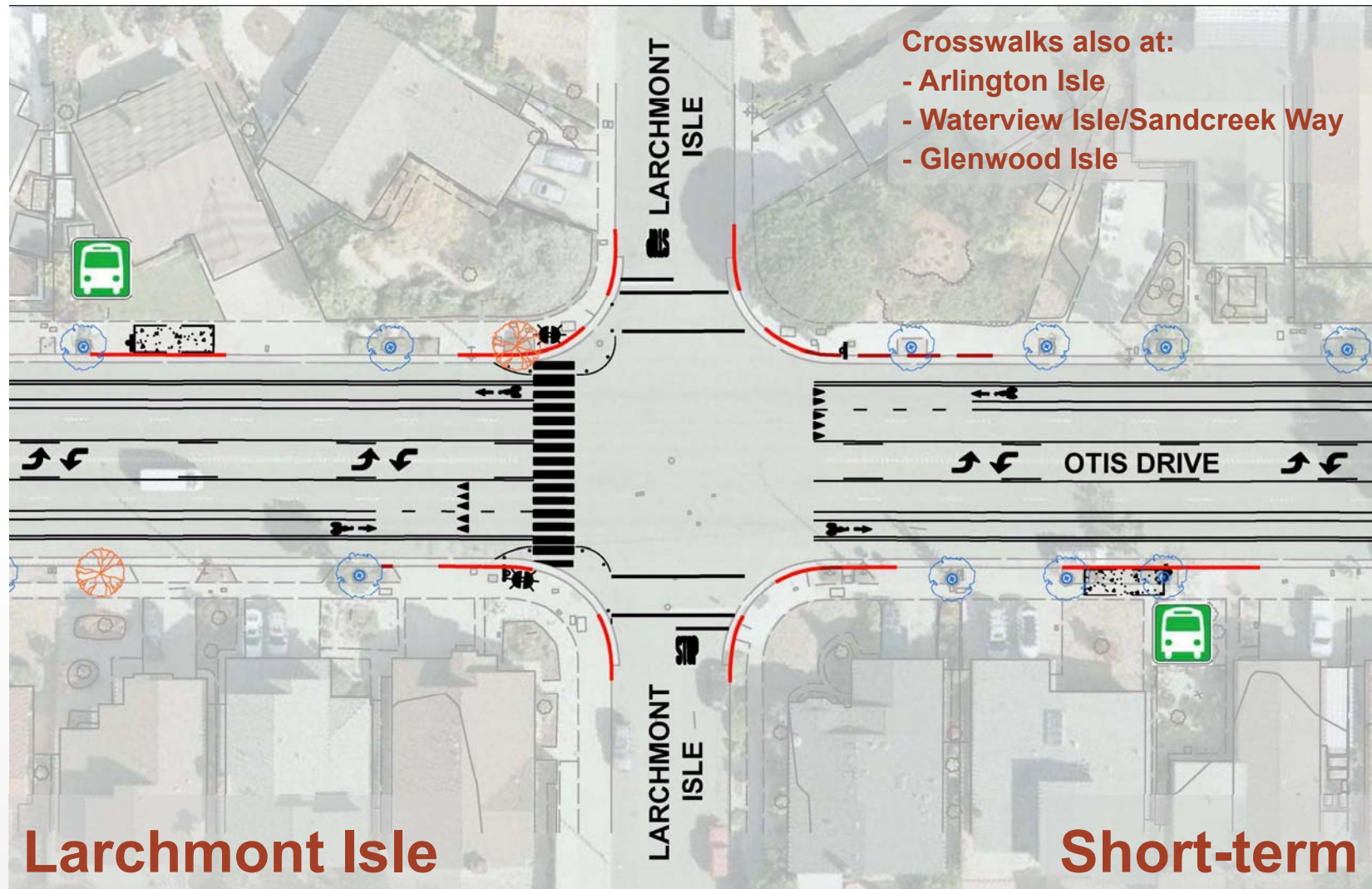


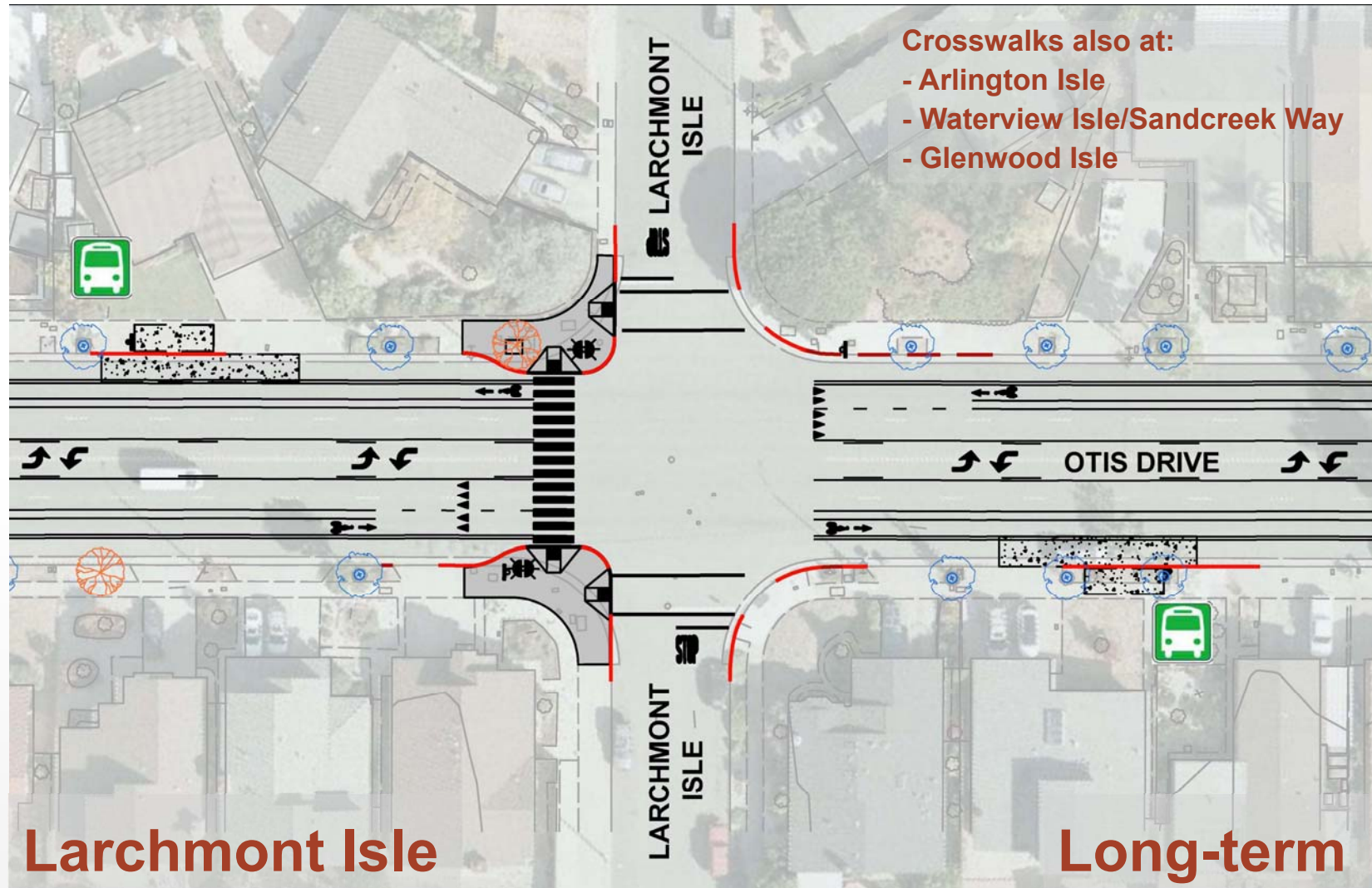


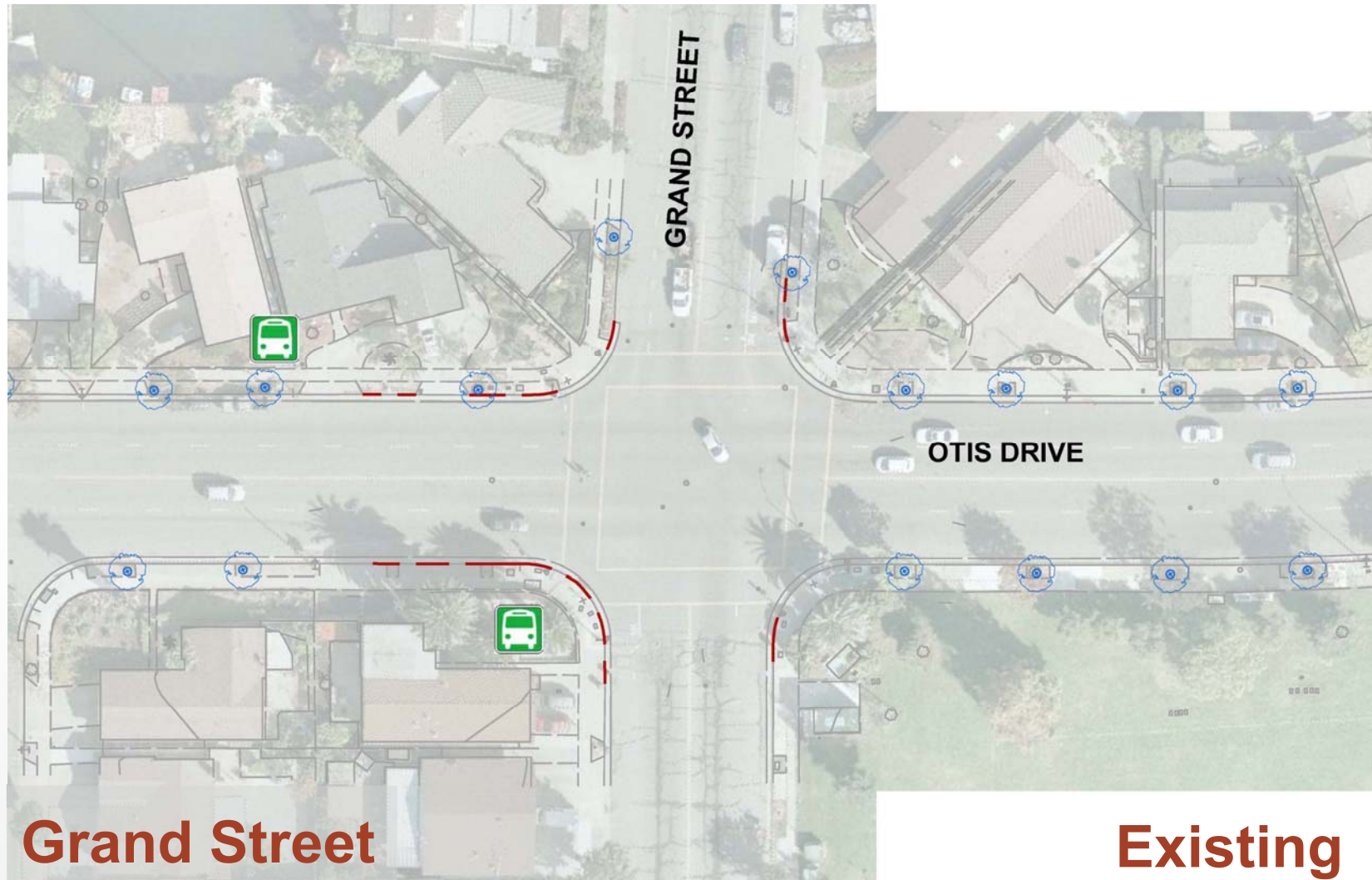






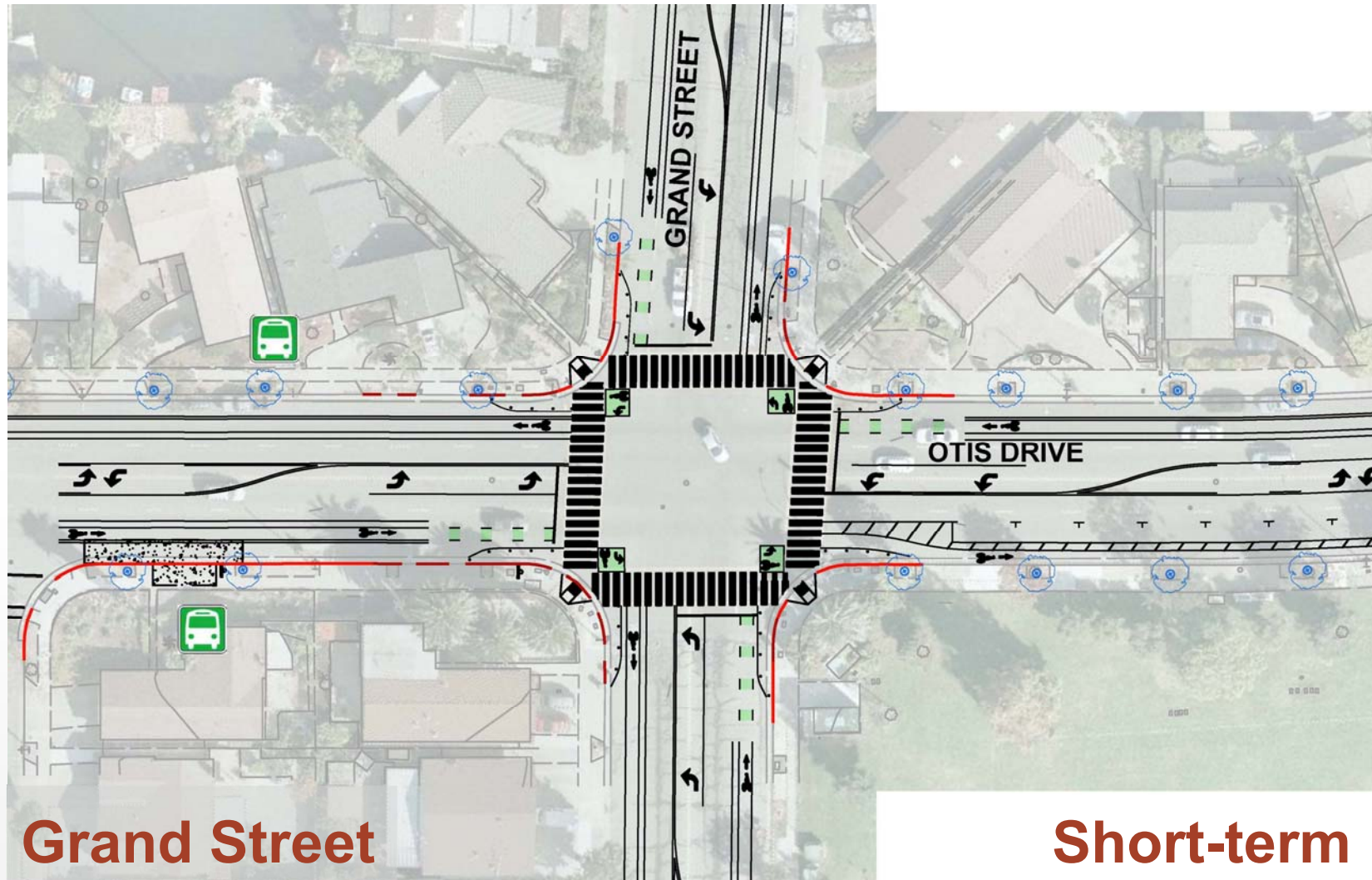






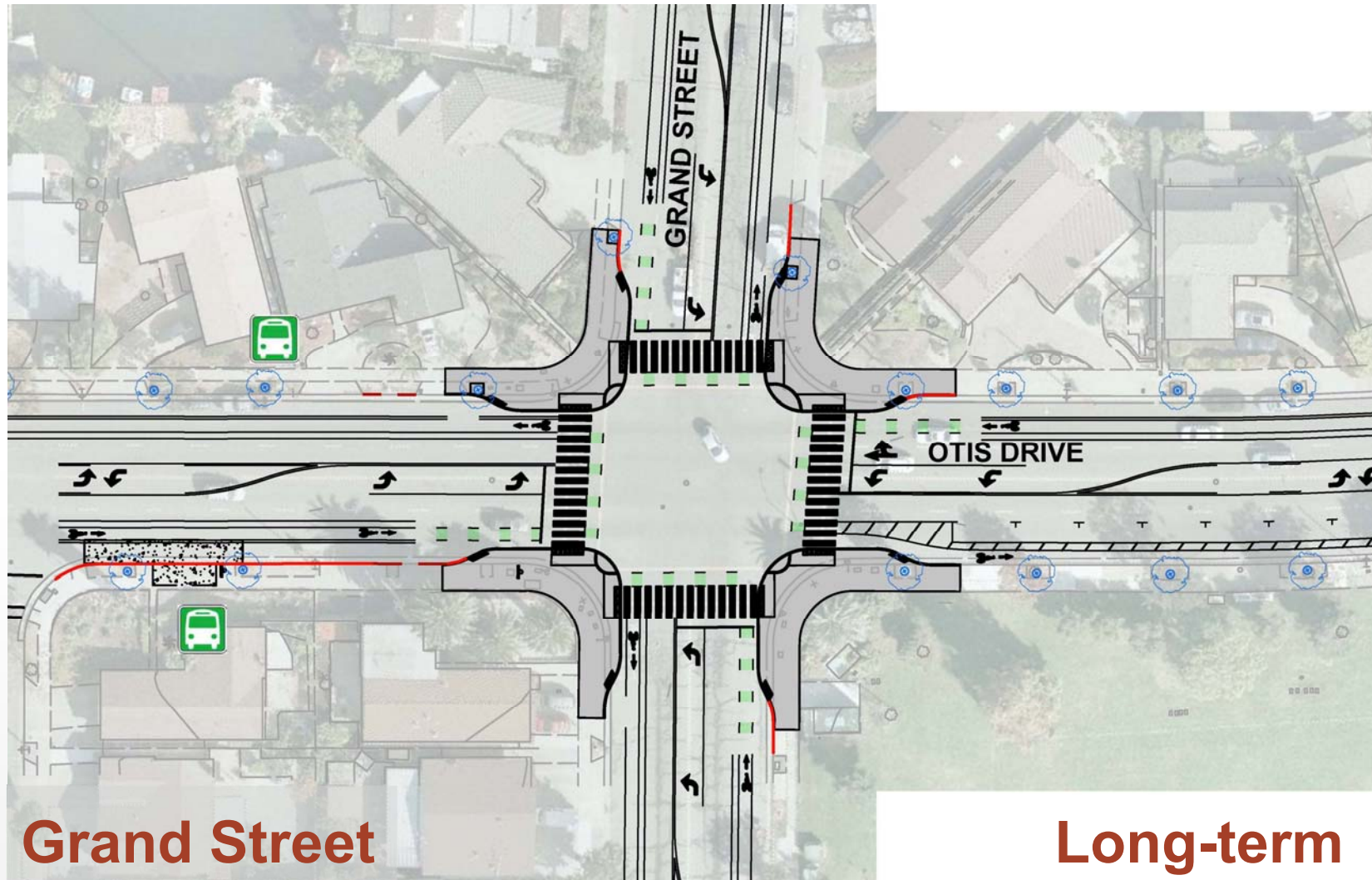
Grand Street

Existing



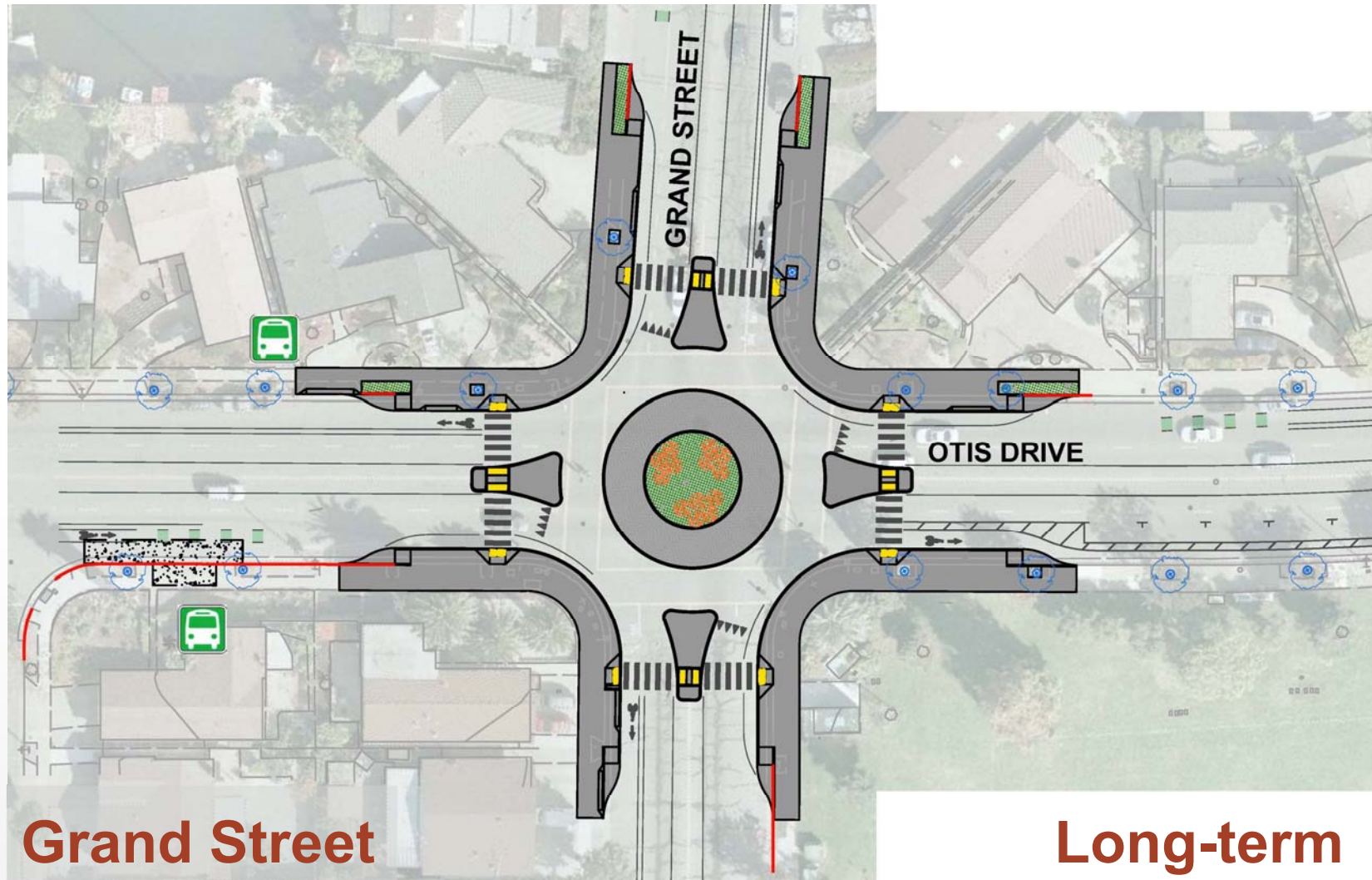
Grand Street

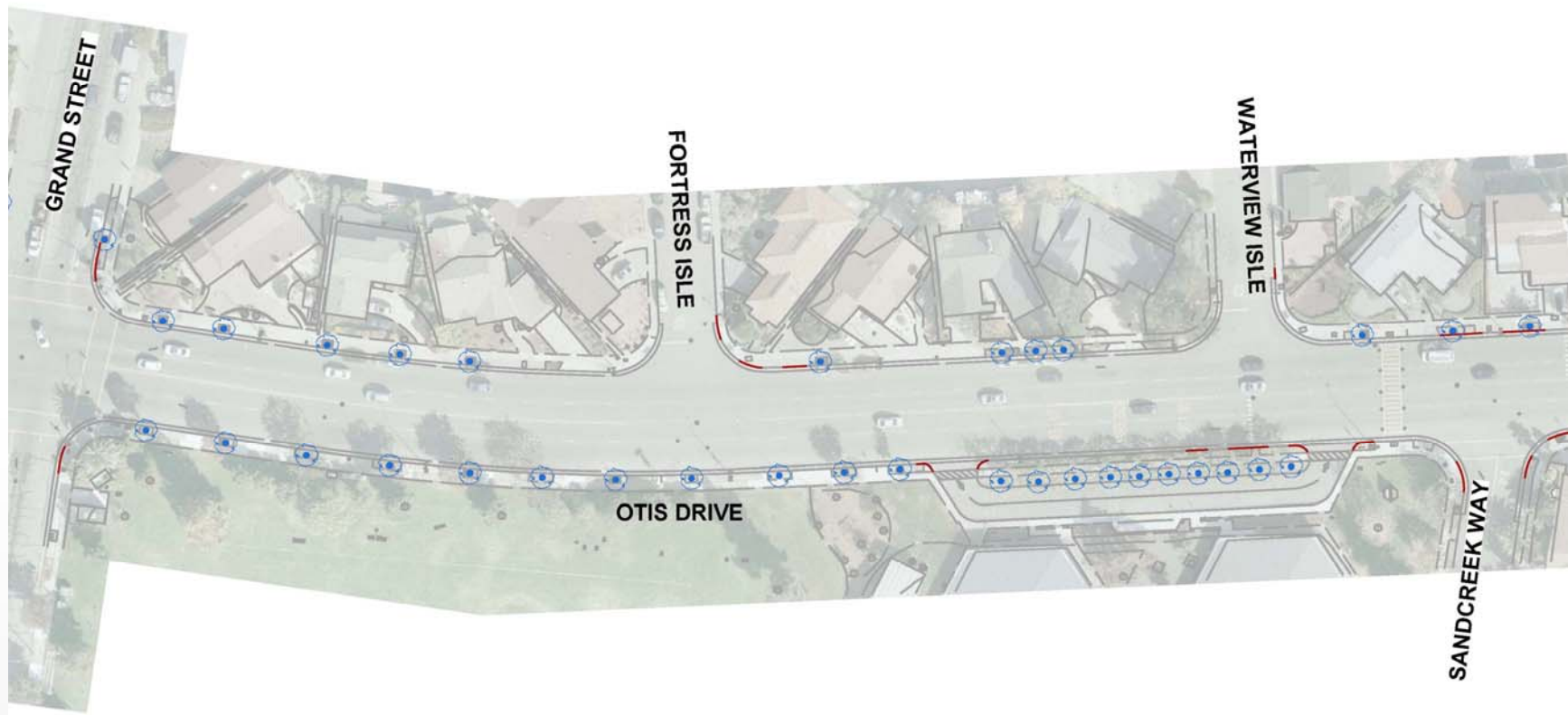
Short-term



Grand Street

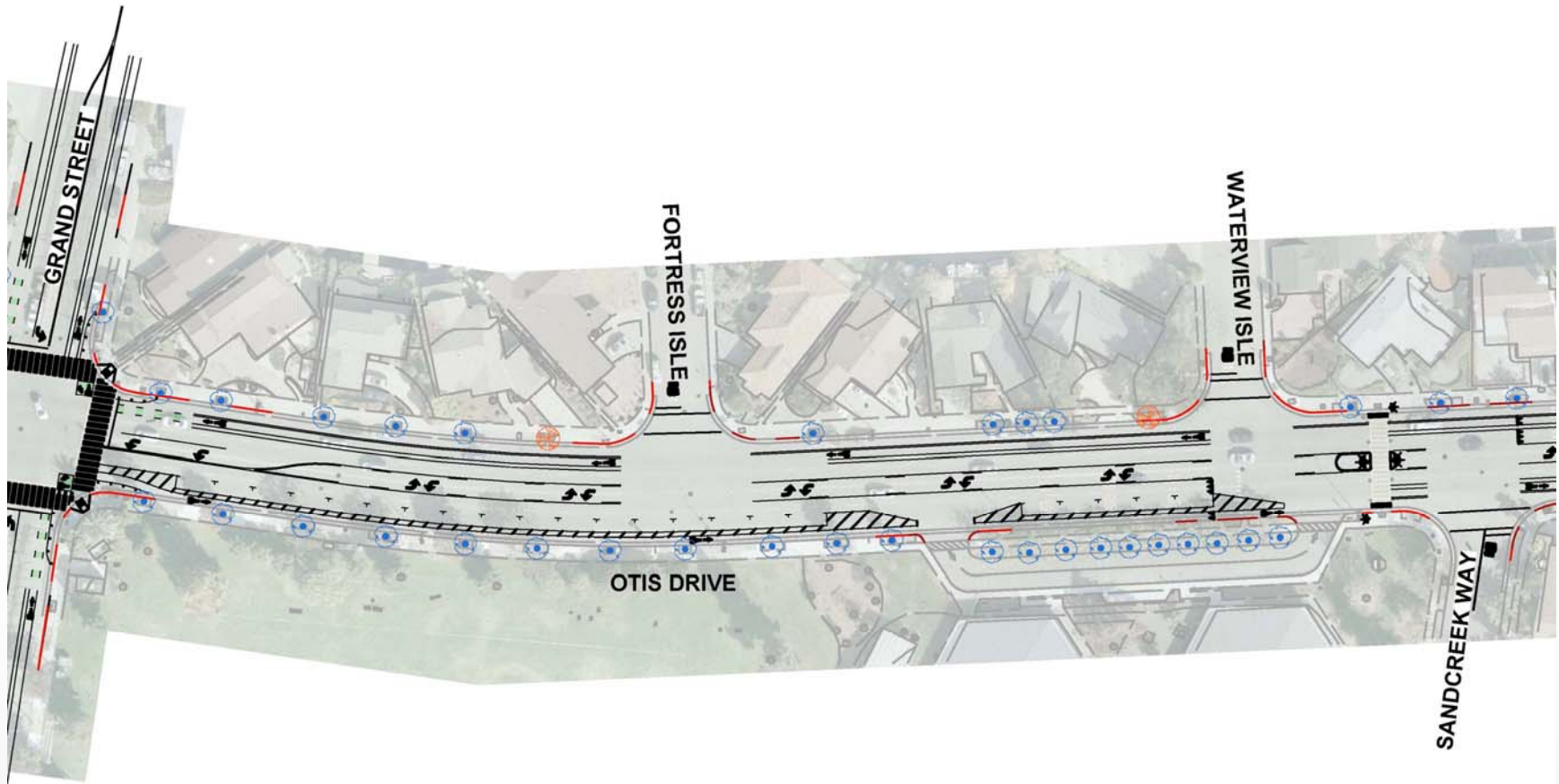
Long-term





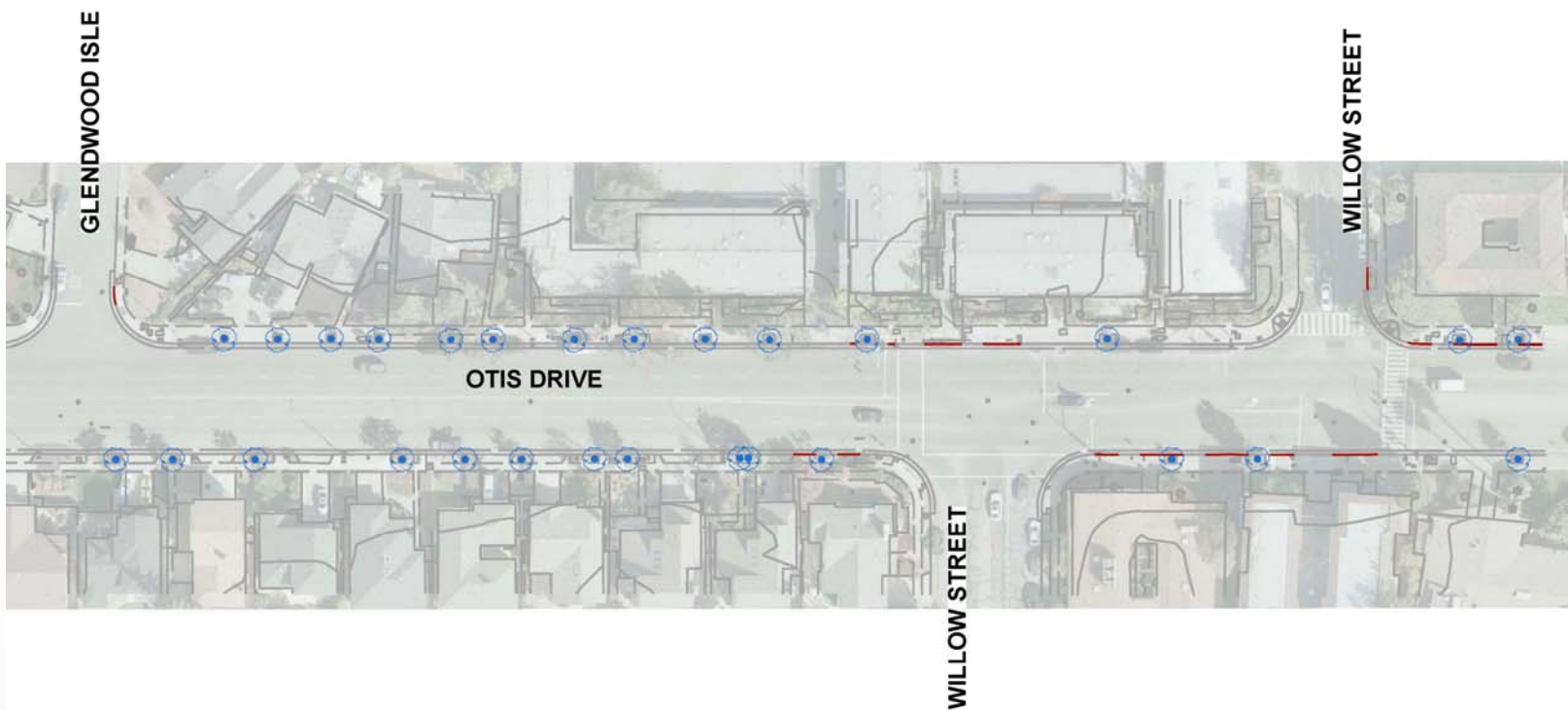
Ritter Park Frontage

Existing



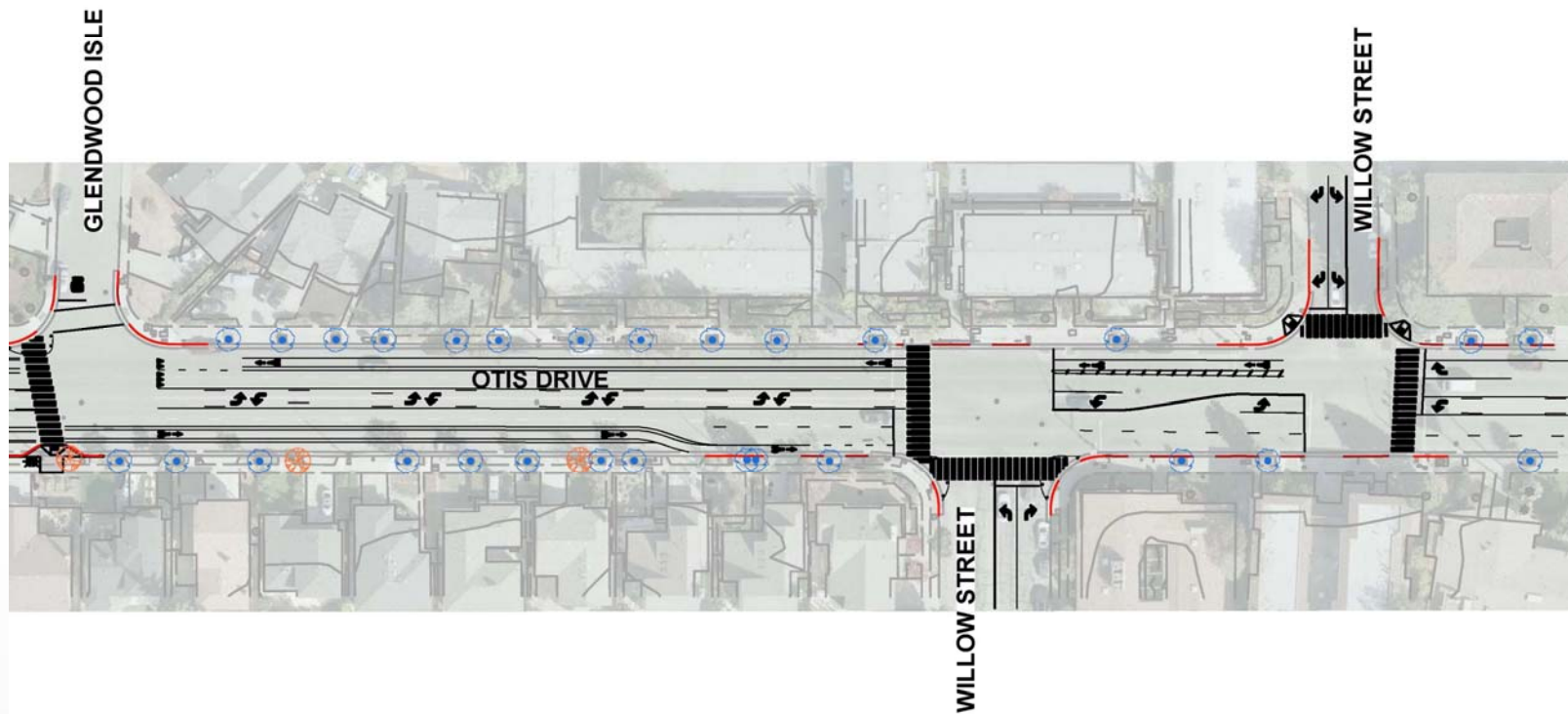
Ritter Park Frontage

Short-term & Long-term



Willow Street

Existing



Willow Street

Short-term & Long-term

Next Steps

- Transportation Commission: May 22, 2019
 - City Council: Summer 2019
 - Short-term Design: Fall 2019
 - Short-term Implementation: Spring 2020
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Break-out Session

