

A photograph of a street intersection. In the foreground, there are traffic lights and a person on a bicycle crossing the street. In the background, there are cars, trees, and houses under a clear blue sky. An orange banner is overlaid on the bottom half of the image.

# Clement/Tilden Way Public Workshop

Public Workshop #2

Tuesday, October 11, 2022, 6:30pm

# Agenda

1. Introduction & Background
2. Existing Conditions
3. Concept Development
4. Input
5. Next Steps

# Introduction

## Clement Avenue Extension Alternatives at Tilden Way



### Project Team:

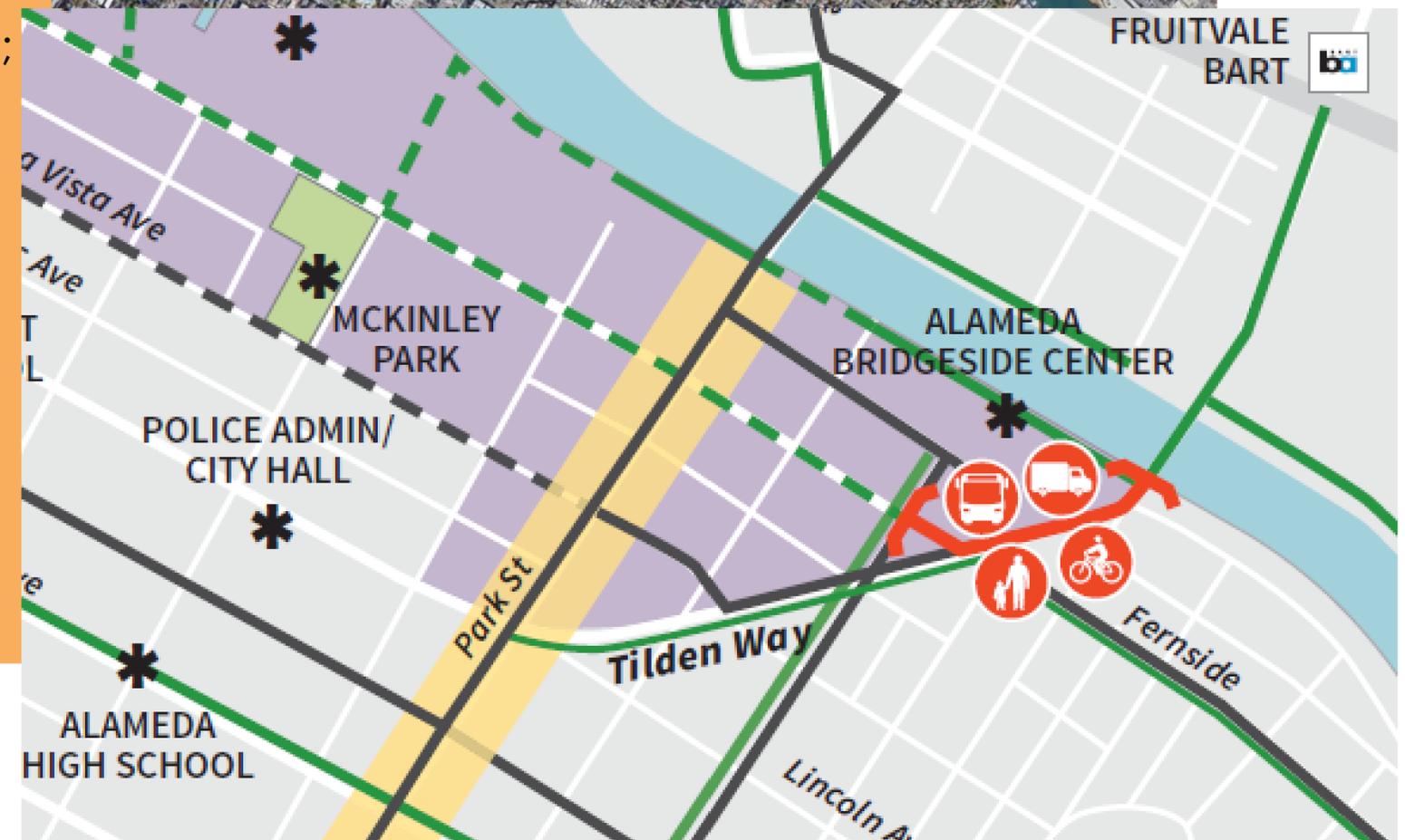
- **City of Alameda:** Gail Payne & Robert Vance
- **Kittelson & Associates, Inc:** Mike Alston, EIT; Laurence Lewis, AICP; Hermanus Steyn, PE

### Project Stakeholders:

- City, AC Transit, County, Alameda Unified School District, Nob Hill shopping area, Bike Walk Alameda, Downtown Area Business Association, Alameda Housing Authority, Members of the Public

### Engagement and Outreach Update:

- Letter to adjacent properties
- Outreach via social media, emails and sandwich boards
- Website: [www.alamedaca.gov/ClementTilden](http://www.alamedaca.gov/ClementTilden)



# Project Goals and Intended Outcomes

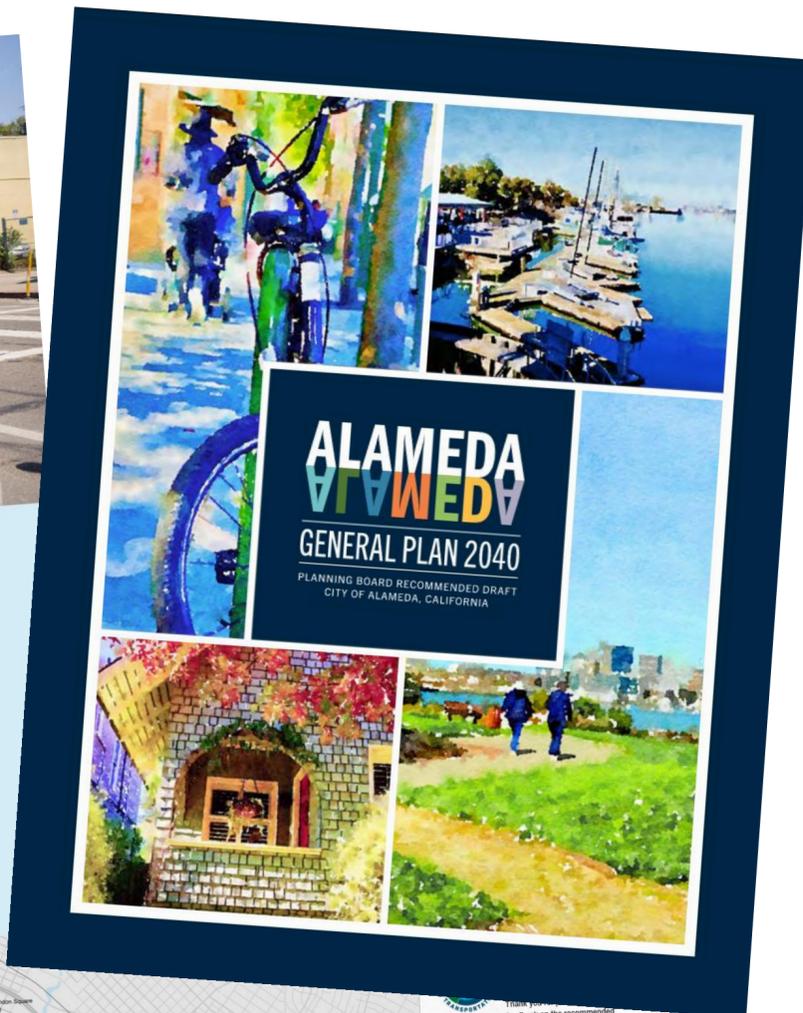
- Prioritize **safety**
- Improve **mobility** for all roadway users
- Provide **flood reduction** and **landscaping** opportunities
- **Reduce greenhouse gas** emissions
- **Comply** with City plans and policies



Alameda  
Vision Zero Action Plan



November 3, 2021



Active Transportation  
Plan Draft Bicycle  
Network

# Background

- Measure BB grant for \$10 million
- Union Pacific property acquisition
- Environmental clean-up
- Fill gap in active transportation and truck network



**Clement Avenue & Tilden Way  
Existing Routes/Facilities by Mode**



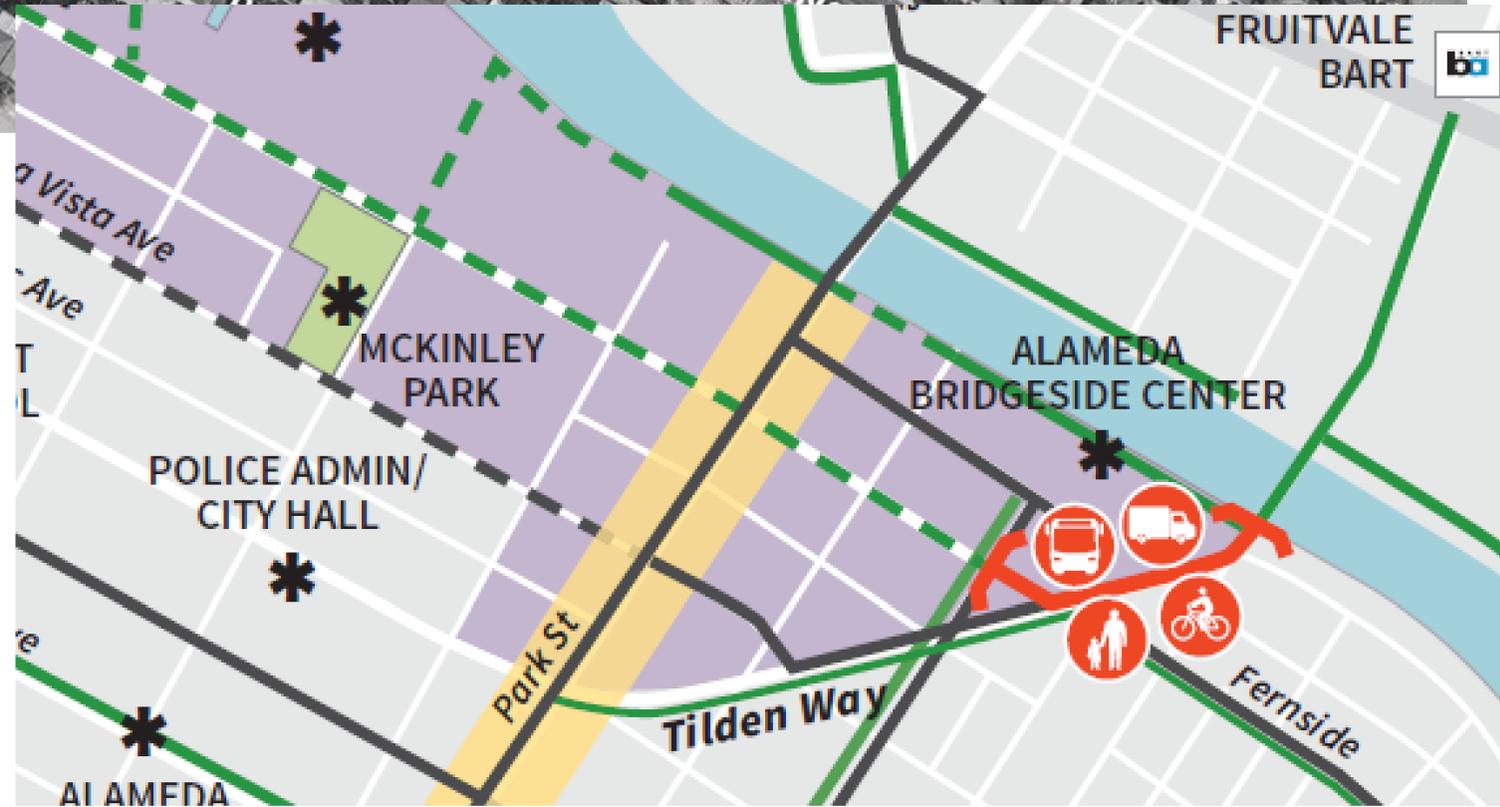
# Project Timeline

Project webpage:  
[www.alamedaca.gov/ClementTilden](http://www.alamedaca.gov/ClementTilden)



# Meeting Purpose

- Discuss draft concepts and next steps
- Hear from you on:
  - Initial draft concepts
  - Performance criteria

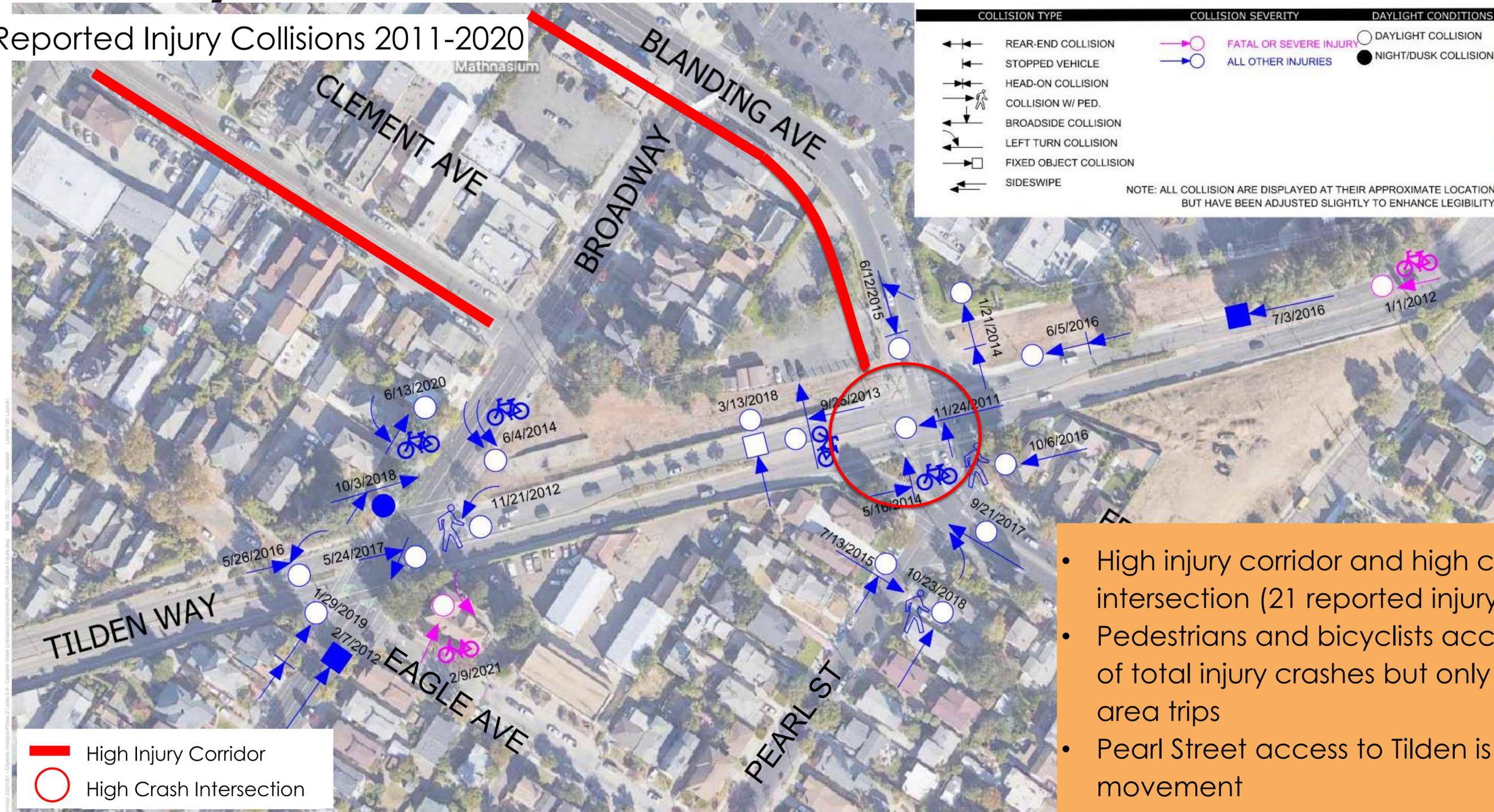


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2. **Existing Conditions**
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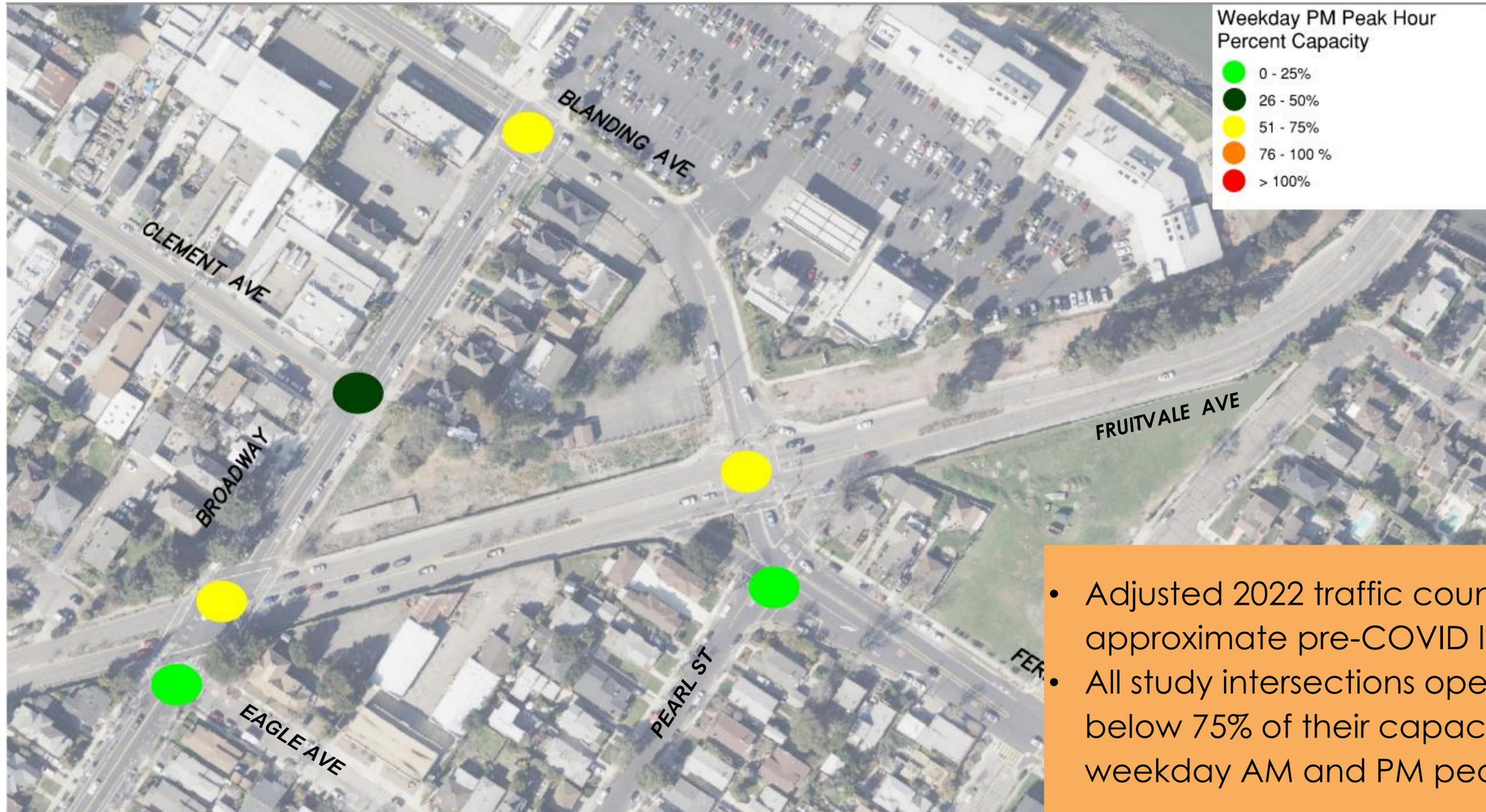
# Safety

Reported Injury Collisions 2011-2020



- High injury corridor and high crash intersection (21 reported injury crashes)
- Pedestrians and bicyclists account for 38% of total injury crashes but only 9% of study area trips
- Pearl Street access to Tilden is high conflict movement

# Traffic Operations - Existing



- Adjusted 2022 traffic counts to approximate pre-COVID levels
- All study intersections operate at or below 75% of their capacity during the weekday AM and PM peak hour

# Study Area AC Transit Bus Service



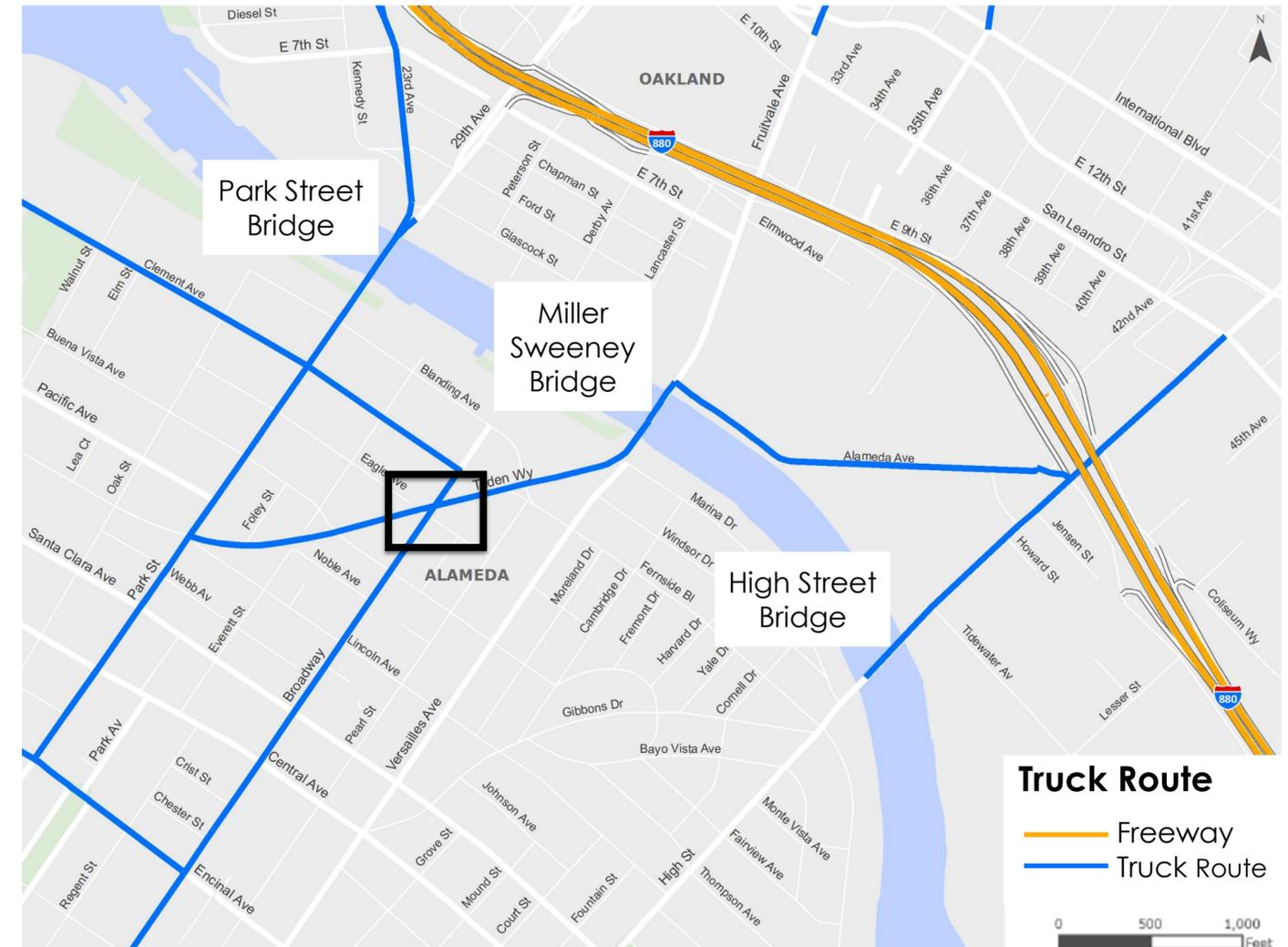
# Truck Connections

## Designated Truck Routes

- Alameda: Park St. Bridge and Miller-Sweeney Bridge
- Oakland: Park St. Bridge, Miller-Sweeney Bridge, and High St. Bridge

## Truck Usage

- Trucks east of Broadway are funneled to Miller-Sweeney Bridge
- Trucks west of Broadway use Park Street (heavy truck usage on Park St)
- Clement eastbound truck extension may be redundant

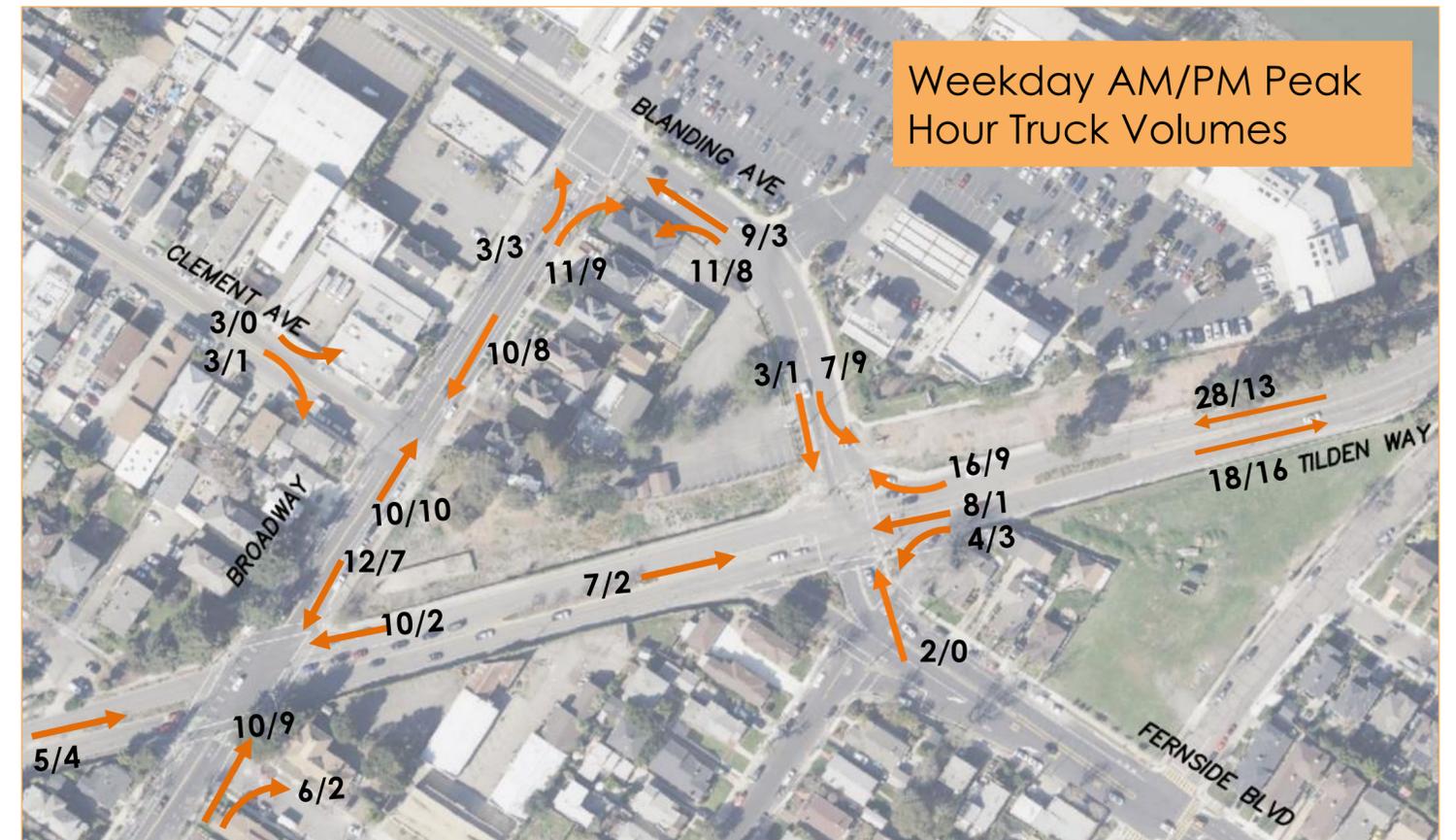


Note: Sharp right turn from Tilden to Broadway is on designated truck route.

# Truck Volumes

## Miller-Sweeney Bridge 2022 Truck Volumes

- Trucks account for 3.2% of daily traffic to/from Alameda (537 daily truck trips across bridge)
- Majority of truck volume along bridge is entering and exiting Broadway on Blanding Ave.
- Nearby Bridge Access:
  - Park Street Bridge (To the North)
  - High Street Bridge (To the South)
- **The project should continue to provide truck access to/from Nob Hill shopping center.**
- **Eastbound truck connections along Clement may be less important than westbound.**



Note: For legibility, truck movements with 0 or 1 truck in both peak periods are excluded.

# Public Input

## Virtual Open House

- 31 attendees and 21 responses

## In-Person Open House

- 19 attendees

## Online Survey

- 175 respondents

- Most people supported a **roundabout**
- Many people favored **one-way extension** over a **two-way extension** of Clement Ave.
- Project team received requests to consider **extension for only biking and walking.**

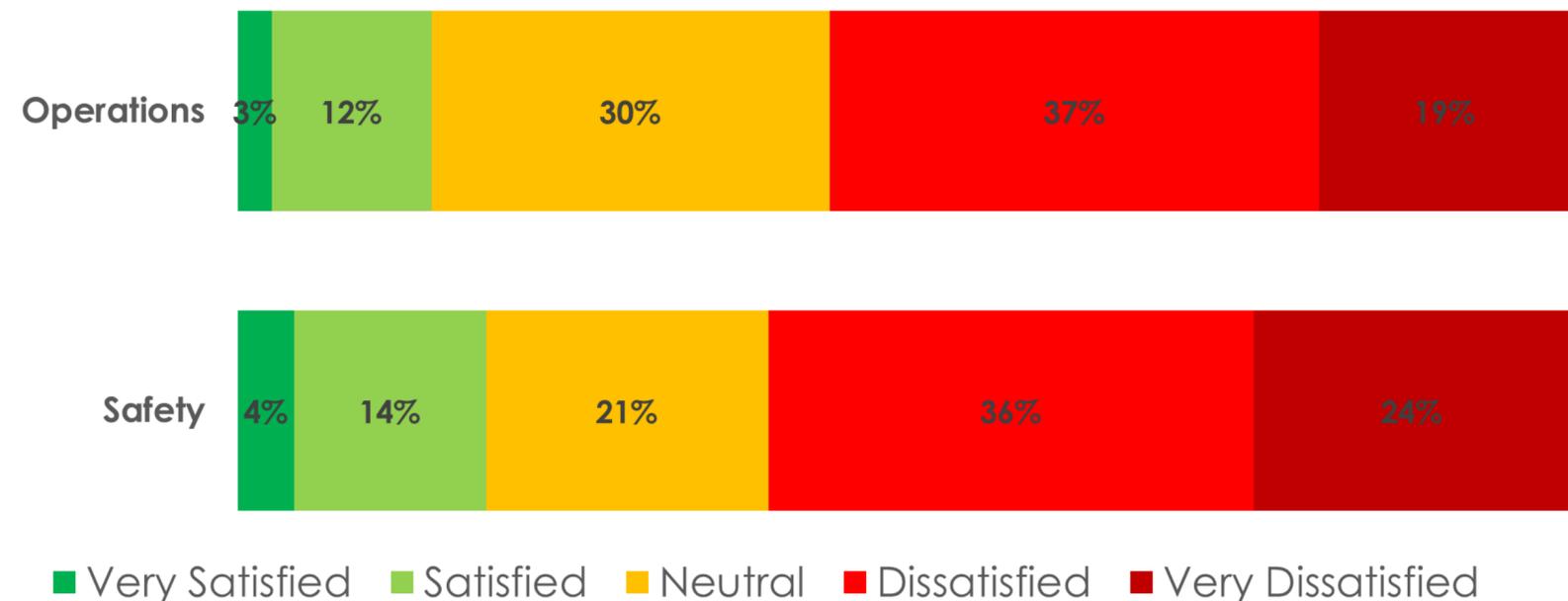
## Desires:

- Safety improvements and slower speeds
- Better connectivity for bicyclists
- Better crossings for pedestrians
- More greenery and community space

## Concerns:

- Through traffic and speeding on Clement Ave.
- Increase of truck traffic with extension
- Drivers' unfamiliarity with roundabouts
- Speeding along Pearl St and Fernside Blvd

How satisfied are you with the Clement/Tilden project area?



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# Concept Development

- Align Alternatives to Intended Project Outcomes
  - Improve Safety
  - Provide mobility for all modes
  - Provide direct truck access to Clement per General Plan
  - Provide bike connections per Active Transportation Plan
  - Preserve existing bus operations
- Avoid “overbuilding” but consider projected travel demand
- Prepared roundabout and signal concepts at Fernside/Tilden

# Draft Concepts

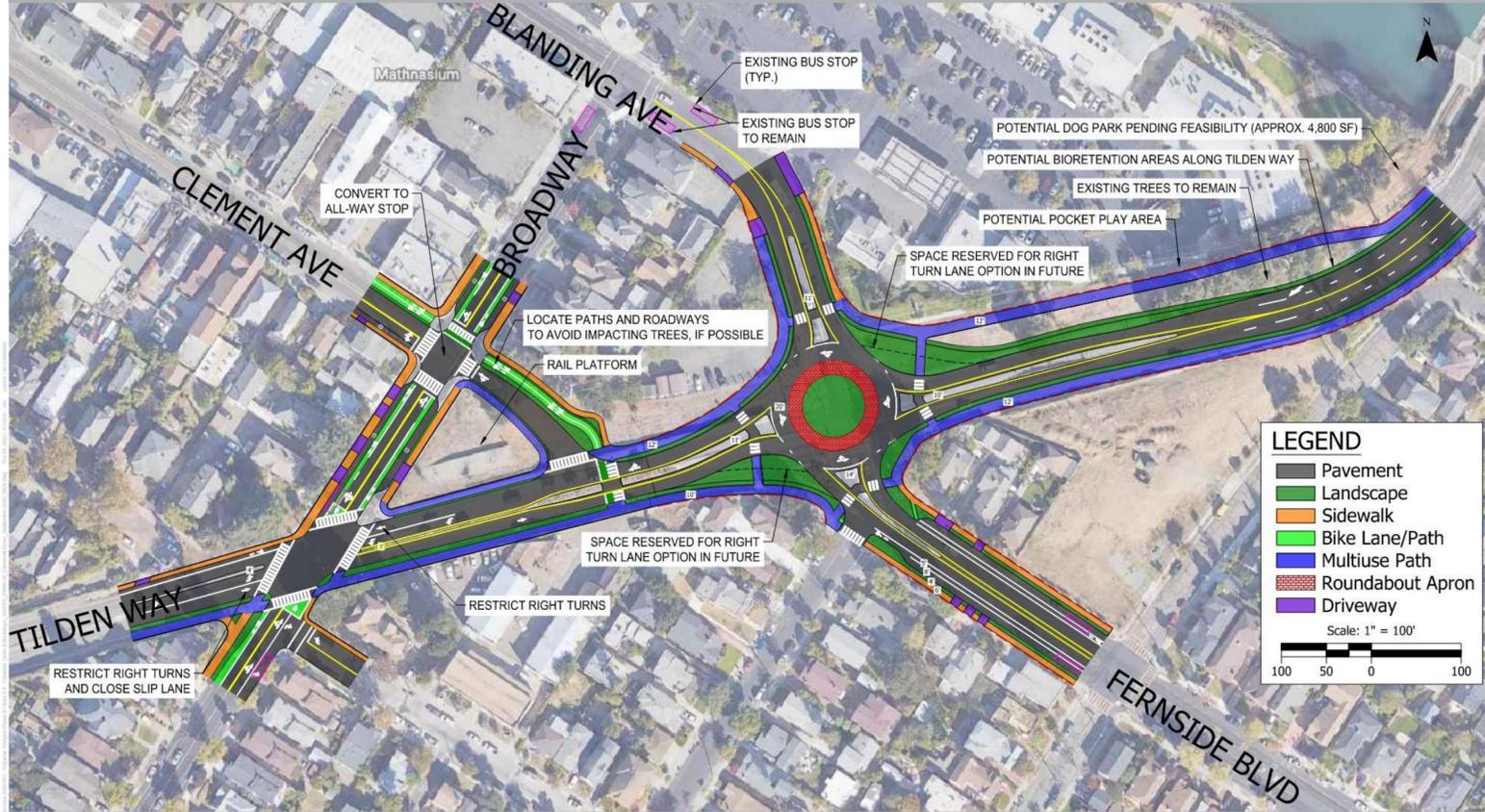
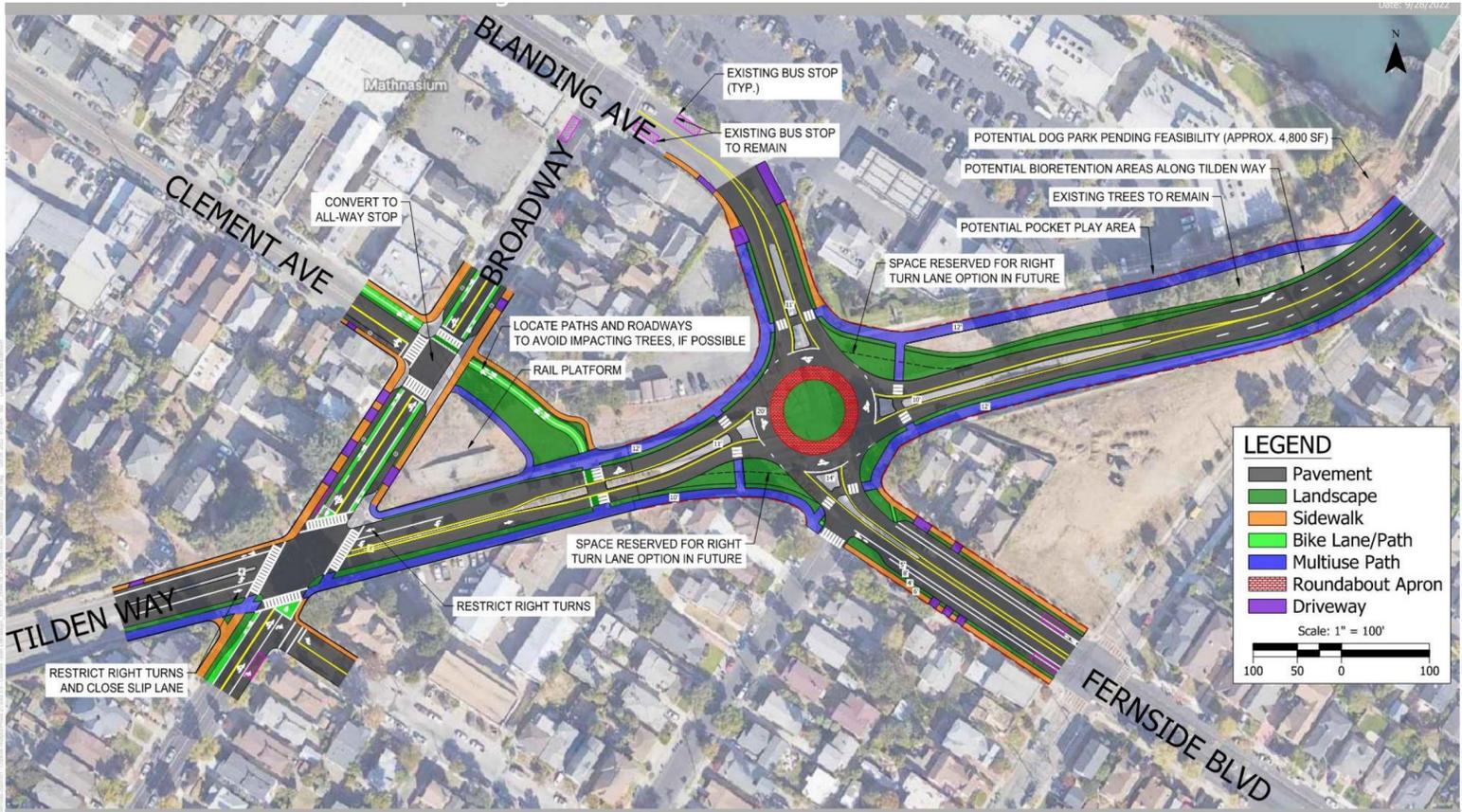
## Cross Alameda Trail Clement Extension

Roundabout with active transportation Clement Extension (not motorists/trucks)

## Westbound Clement Avenue Vehicle Extension w/ Cross Alameda Trail

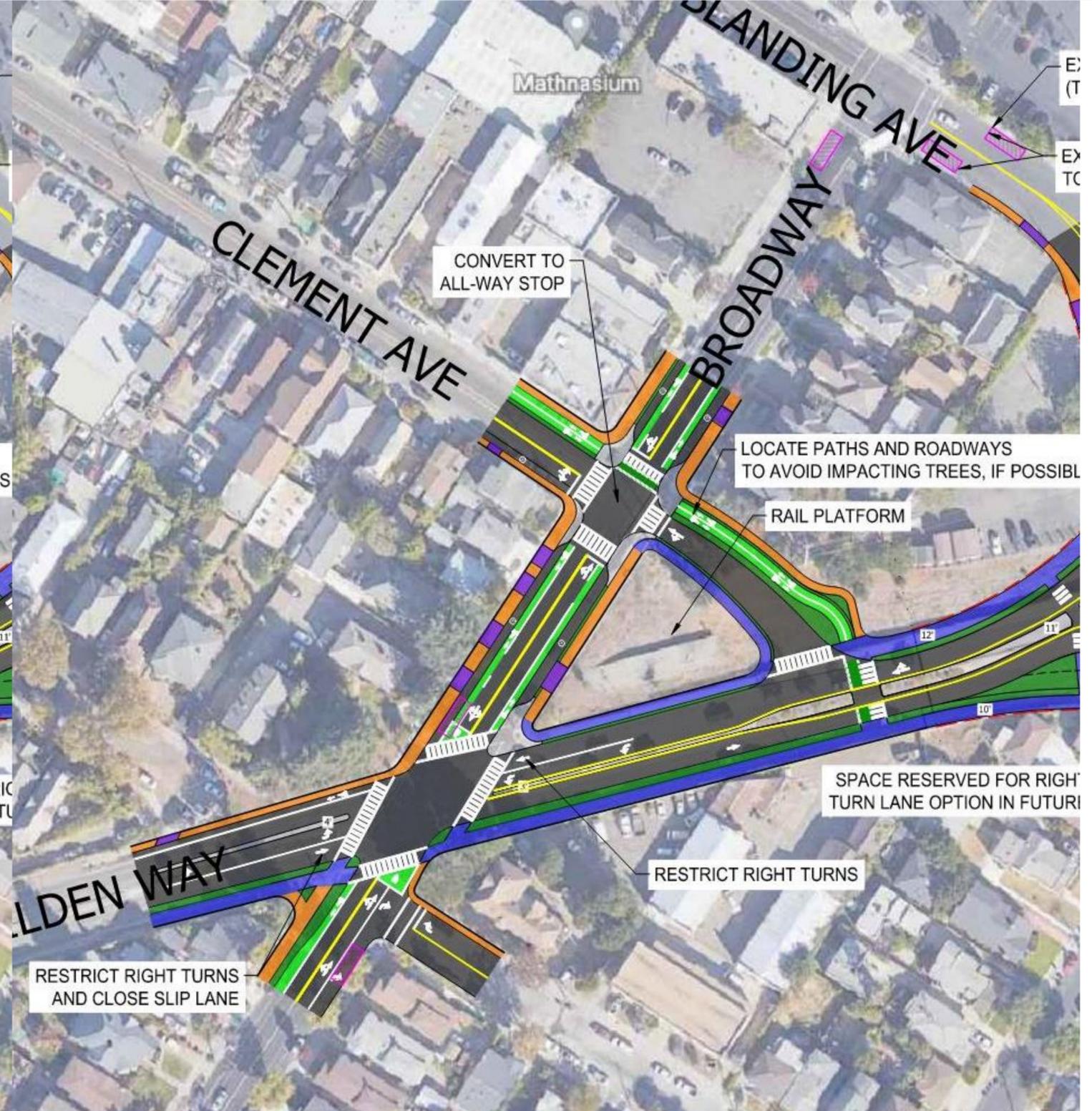
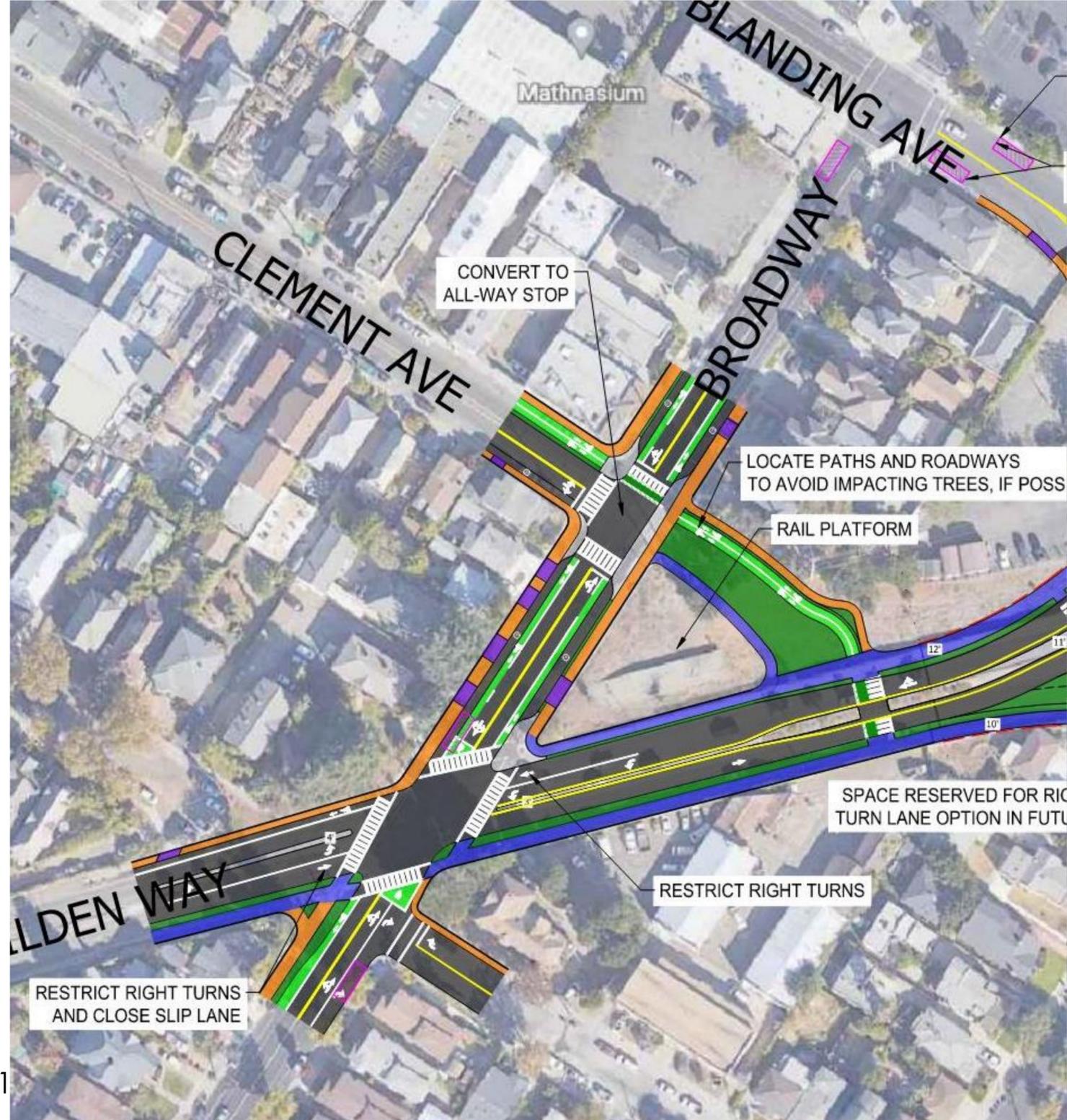
Roundabout and one-way Clement extension for westbound motorists and both directions for active modes

Question: What are the pros and cons of draft concepts?



# Cross Alameda Trail Extension (not for motorists/trucks)

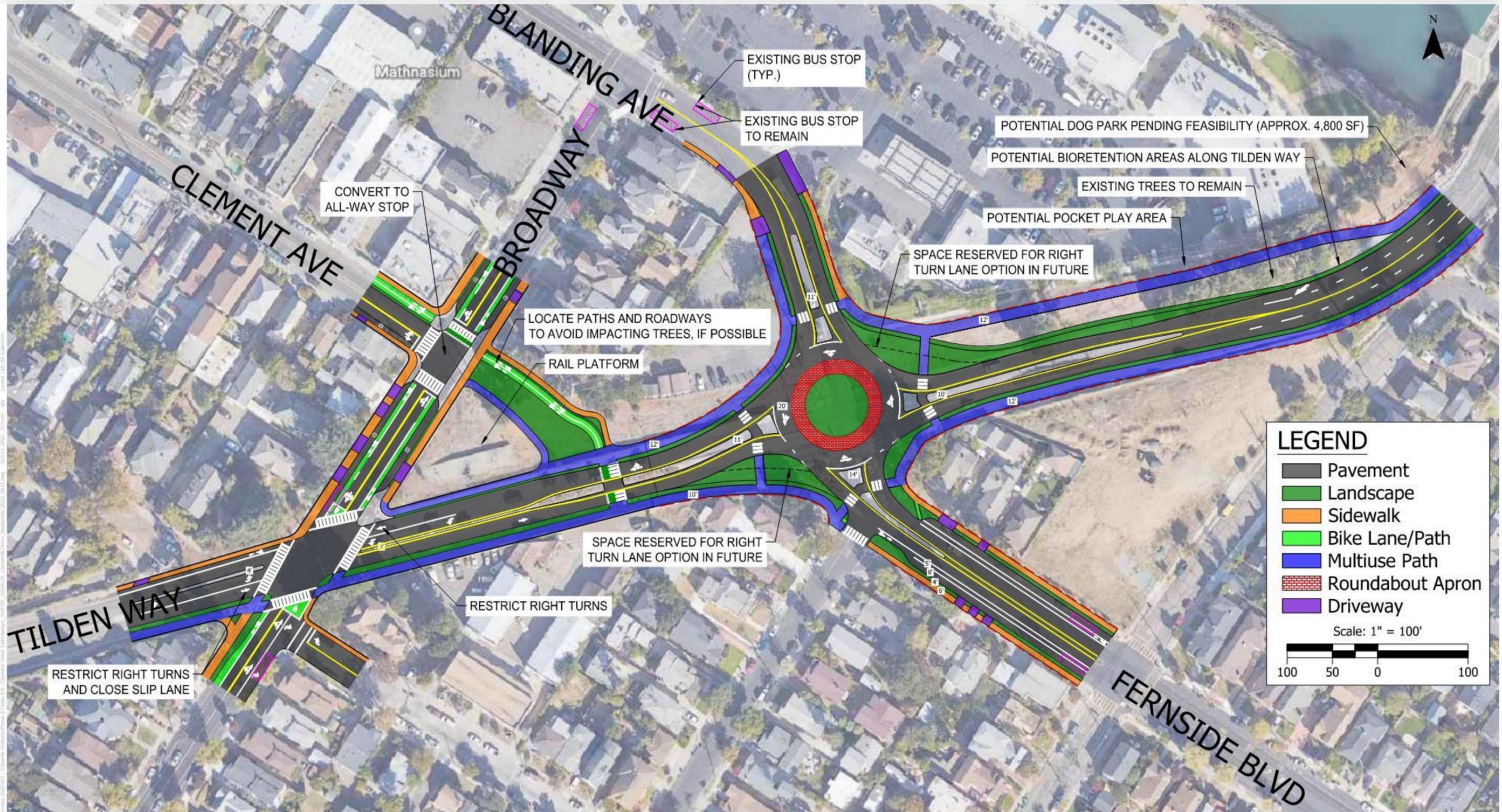
# Westbound Clement Vehicle Extension with Cross Alameda Trail



# Alternative A - Cross Alameda Trail Clement Avenue Extension

DRAFT Roundabout Concept Design - Phase 1

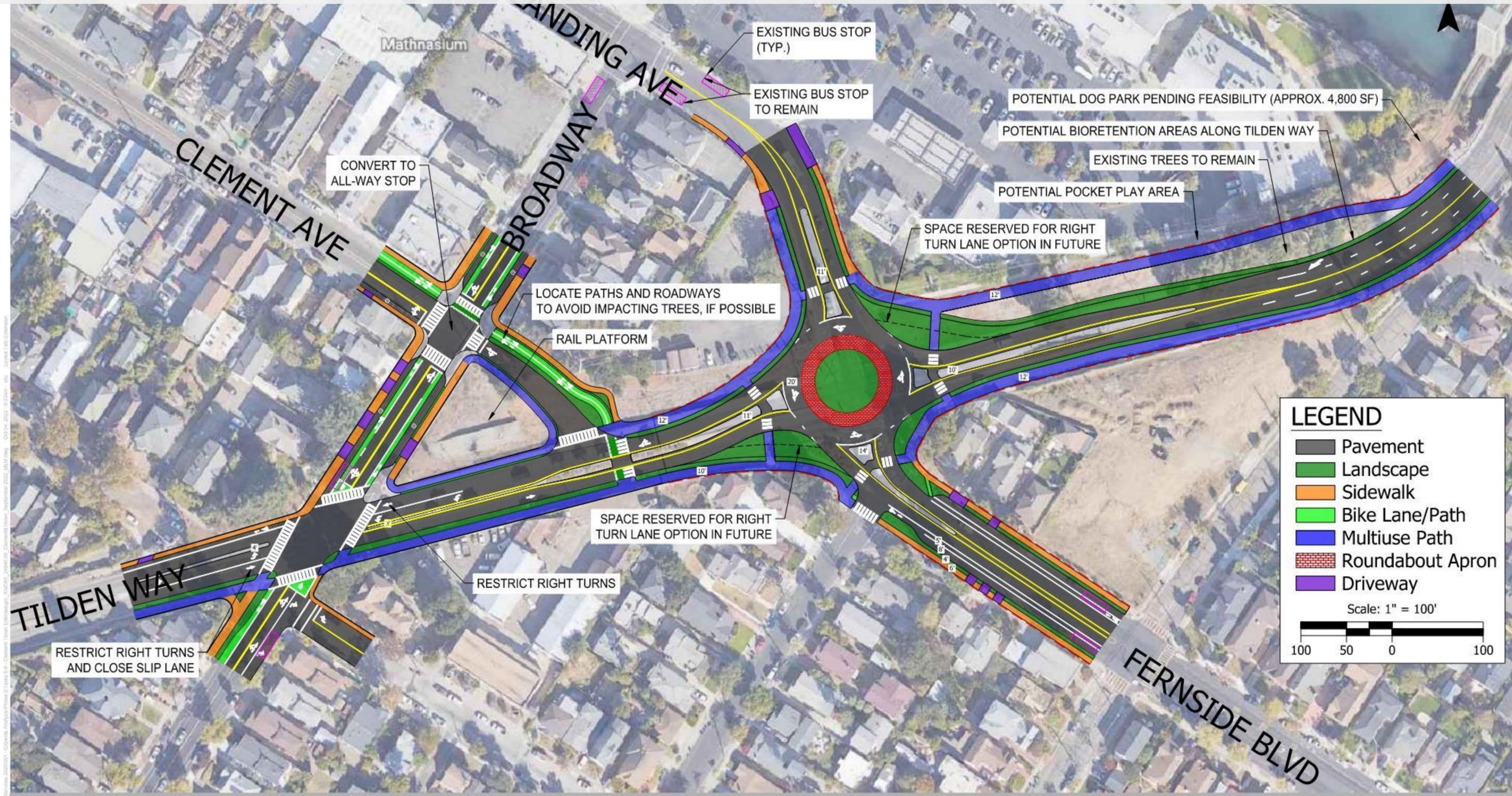
DRAFT Concept Design Subject to Change  
Date: 9/28/2022



# Alternative B – Westbound Clement Avenue Vehicle Extension with Cross Alameda Trail

DRAFT Roundabout Concept Design Phase 2

DRAFT Concept Design Subject to Change Date: 9/28/2022



# Overall Evaluation

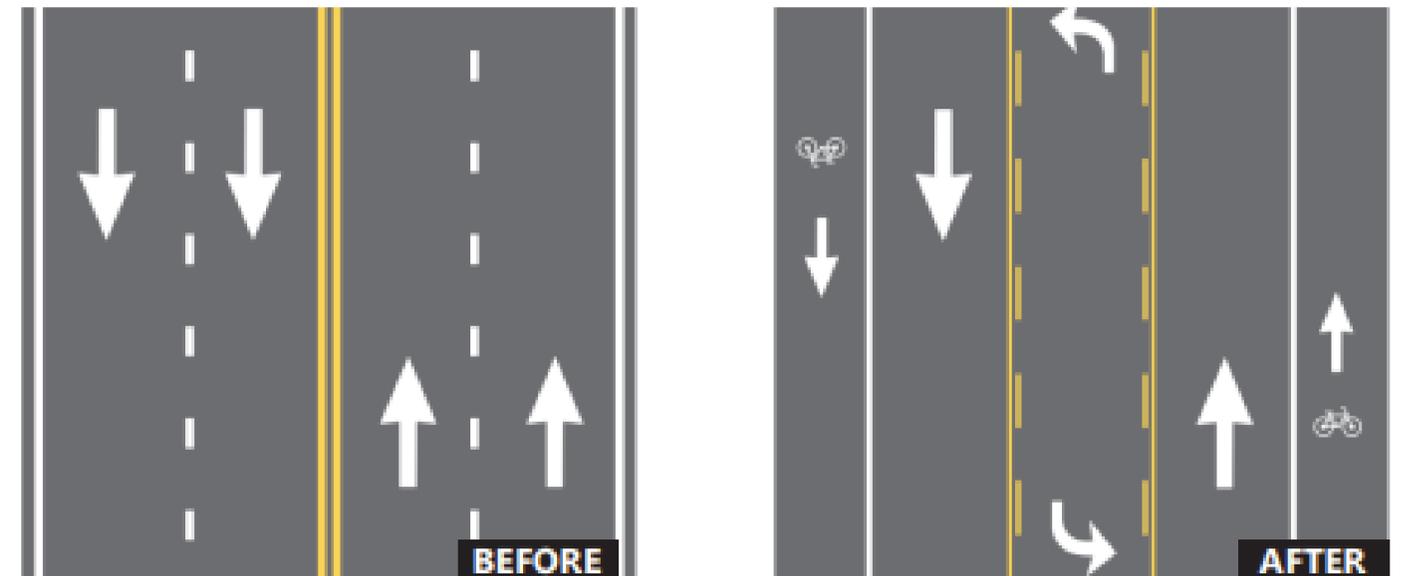
No clear “winner” – there are tradeoffs!

	Alternative A: Cross Alameda Trail Extension	Alternative B: Westbound Clement Vehicle Extension with Cross Alameda Trail
Benefits Both Options Provide	<ul style="list-style-type: none"> <li>• Reduce speeds improve safety for everyone</li> <li>• Improve biking/walking facilities and connections in study area</li> <li>• Improve bus access</li> <li>• Add pocket park areas and reserves space for dog park</li> </ul>	
Considerations	<ul style="list-style-type: none"> <li>• Open space, landscaping opportunities</li> <li>• No right-turn vehicle conflict at Clement/Tilden</li> <li>• Westbound trucks continue to use existing paths (Park Street, Blanding, Tilden)</li> <li>• Does not complete General Plan truck network</li> </ul>	<ul style="list-style-type: none"> <li>• Improves truck connections by providing one-way extension</li> <li>• Completes General Plan truck network</li> <li>• Reduces volumes at Broadway/Blanding</li> <li>• Reduces truck volumes along Park Street</li> </ul>

# Lane Reduction

Reduce number of travel lanes (commonly called “Road Diet”)

- Lower speeds
- 19 – 47% crash reduction (right-angle, turning, rear end crashes)
- Shorter pedestrian crossings



Source: FHWA

# Why Build Roundabouts?

## Roundabout benefits include:

- Safety performance
- Lower delay
- Environmental benefits (emissions, fuel savings)
- Access management
- Operations and maintenance costs
- Aesthetics

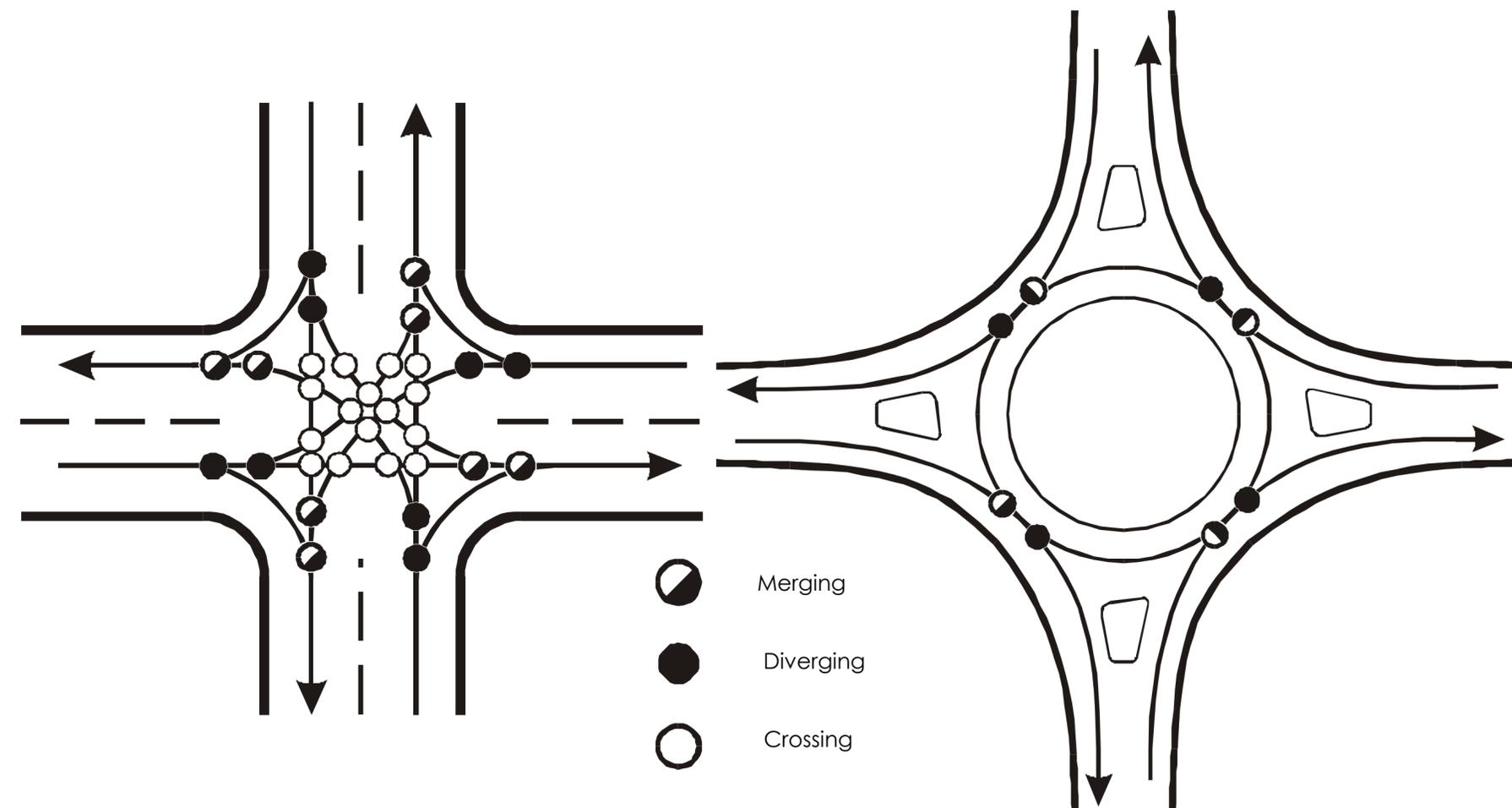


# Safety Performance

## Safety Statistics

- 90-100% reduction in fatalities
- 75% reduction in injuries
- 35% reduction in total crashes
- Lack of pedestrian and bicyclist crash frequency
- Reduction in conflict number and speeds

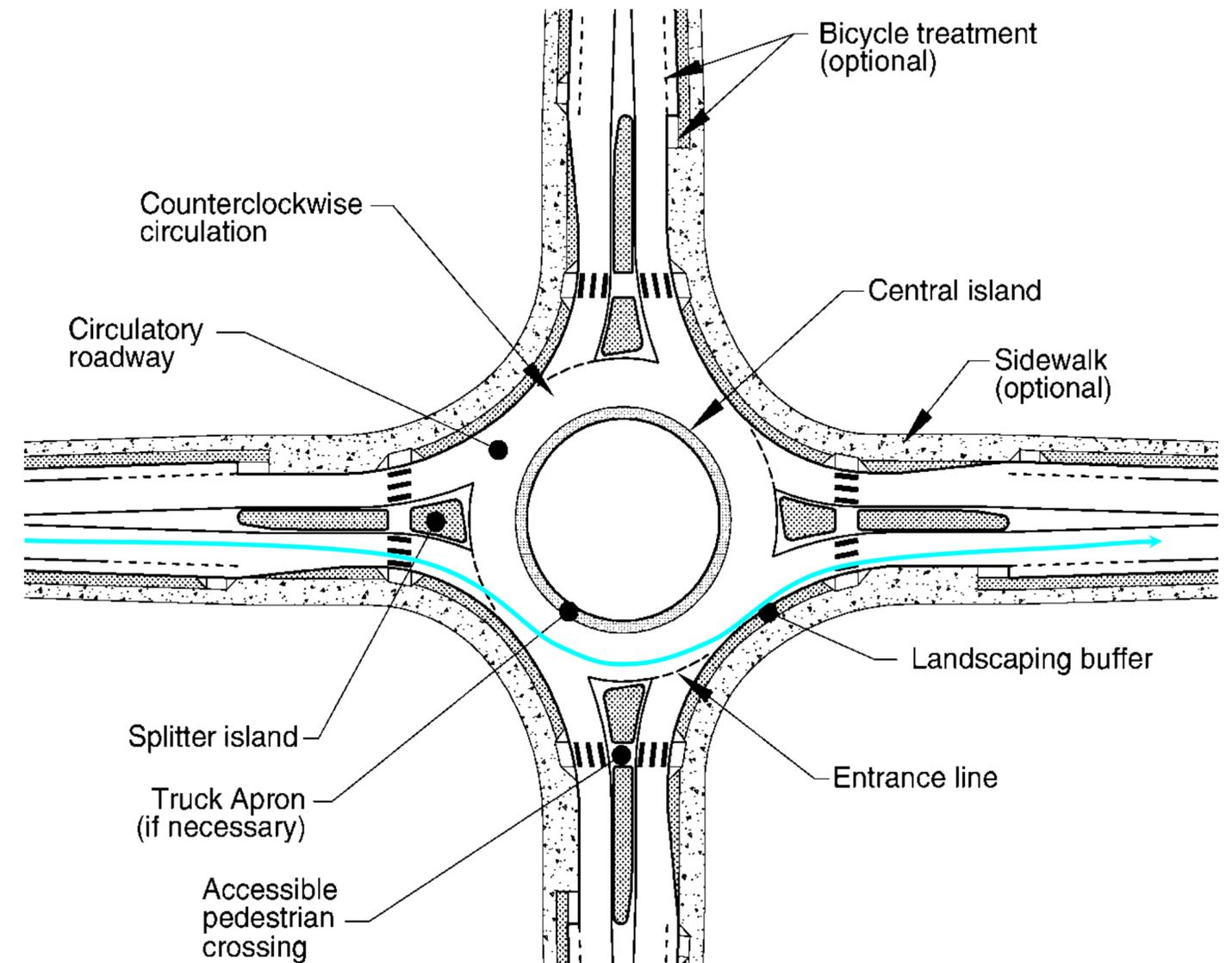
Roundabouts reduce conflict point number and severity



Source: NCHRP Report 572, NCHRP Report 672

# Vehicle Speeds: Reduced

- Geometry controls speeds
  - Max entry speed:
    - 25 mph for single-lane
    - 30 mph for two-lane
  - Circulating speeds 10 to 12mph
- Increased time for driver reaction
- Decreased chance for injury or fatality



# Roundabouts and Pedestrians

- Benefits:
  - Slow vehicle speeds
  - Two-stage crossing
- Considerations:
  - Crosswalk alignment
  - Width of splitter island
  - Space for exiting vehicles to yield to pedestrians
  - Yield-controlled crossings



Sources: Google Earth; Kittelson

# Roundabouts and Accessibility

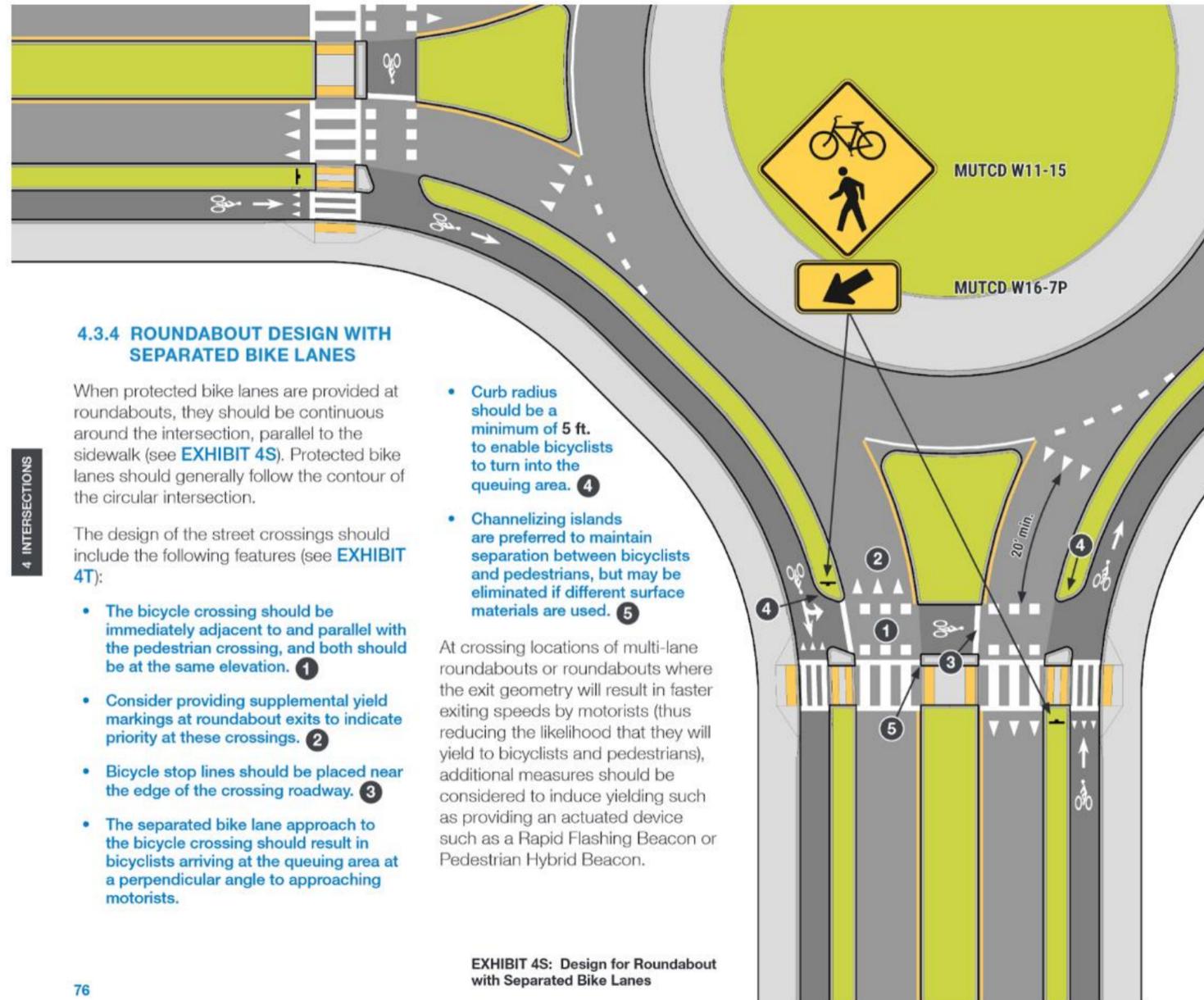
Considerations for Visually Impaired:

1. Well defined walkway edges
2. Separated walkways
3. Aligned detectable warnings
4. Perpendicular crossings
5. Contrasting crosswalk markings

*Performance assessment detailed in NCHRP Report 834*



# Separate Bike/Ped Options

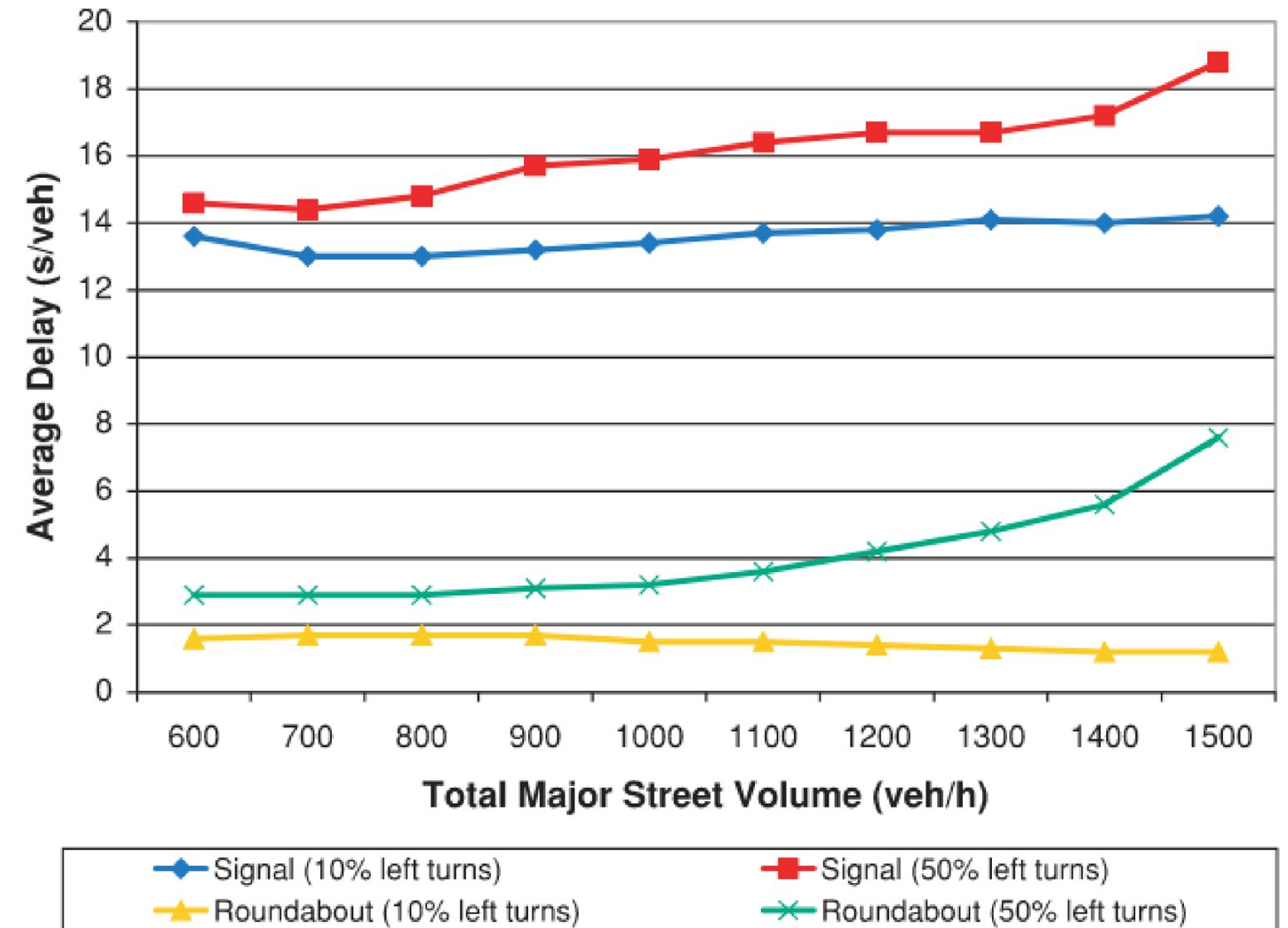


San Luis Obispo, California  
Source: Brian Ray

# Reduced Travel Delay

- May solve existing or projected operational problem
  - Heavy delay on minor road
  - Large traffic signal delays
  - Heavy left-turning traffic
  - Stop control with large delays

**Comparative Delay, Signal versus Roundabout**  
Intersection that meets Signal Warrants



Source: NCHRP Report 672, NCHRP Exhibit 3-19

# Roundabouts and Large Vehicles

- “Design” versus “accommodate” larger vehicles
- Accommodations include:
  - Truck aprons
  - Placement of landscaping
  - Reinforced curbs



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# Questions & Input

- Are the draft concepts aligned with project and City goals? Why or why not?
- What do you see as most important decision criteria for this project?

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5. **Next Steps**

# Next Steps

- Will compile input received today for:
- **In-person Open House** - Thurs, Oct 13 at 11 a.m. to 1 p.m. - drop in at the Main Library's Stafford Room, 1550 Oak Street
- Stay up to date via the project webpage: [www.alamedaca.gov/ClementTilden](http://www.alamedaca.gov/ClementTilden)

Gail Payne

Senior Transportation Coordinator

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