



Active Transportation Workshop

CITY COUNCIL

OCTOBER 16, 2023



Overview



1) Introduction & Background

- Benefits of Active Transportation & Alignment with Council Goals
- Complete Streets & Active Transportation Design Principles

2) Update on Active Transportation Planning Efforts, Projects, & Initiatives

- Planning Efforts
- Projects
- Initiatives

3) Discussion

What is Active Transportation?



Any form of mobility that is permitted to use bicycle and pedestrian infrastructure (sidewalks, bike lanes, multi-use trails, etc.):

- Walking, Jogging
- Using Assistive Mobility Devices (wheelchairs, adaptive scooters, etc.)
- Bicycling
- Riding scooters, skateboards, etc.

Benefits of Active Transportation

Improves
public health

Reduces air
and water
pollution

Reduces
transportation
costs

Improves
equity

Provides
universal basic
mobility

Supports more
efficient land
use patterns



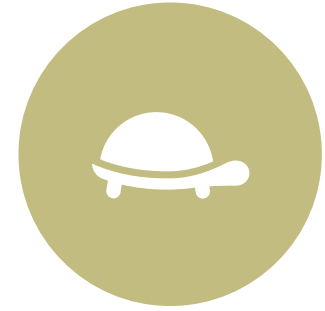
VISION ZERO



CARBON
NEUTRALITY



SAFE STREETS
PRIORITY



TRAFFIC CALMING
(SLOW STREETS)

Alignment with Recent Council Actions



Complete Streets and Active Transportation Design Principles

Complete Streets & Active Transportation Design Principles

- **Accessibility**
- All Ages & Abilities
Bikeways
- Traffic Calming &
Vision Zero
- Streets for People
- Resilient / Green
Streets



Provide universal access on streets and sidewalks for people with visual, hearing, and mobility impairments

Complete Streets & Active Transportation Design Principles

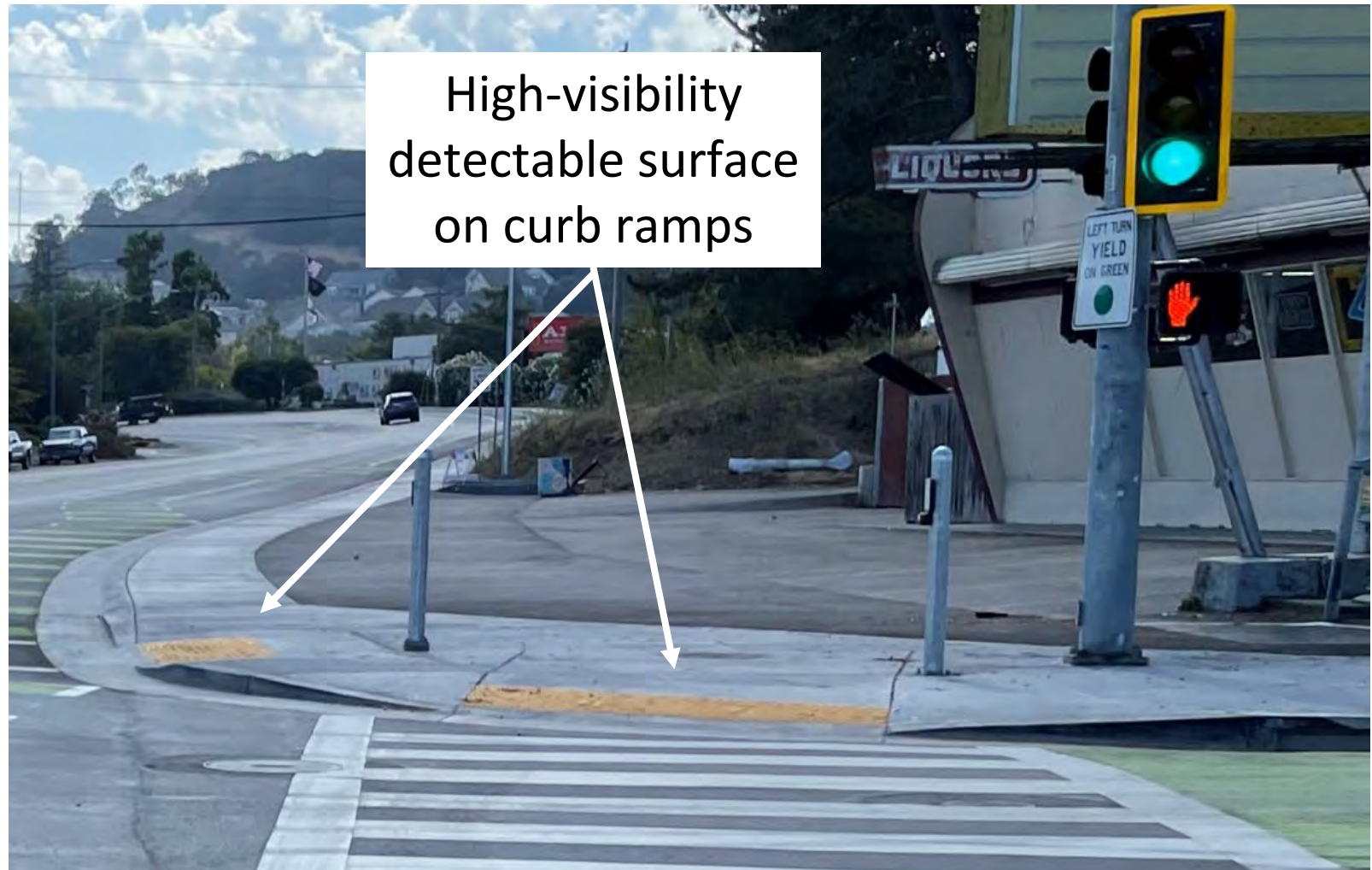
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Complete Streets & Active Transportation Design Principles

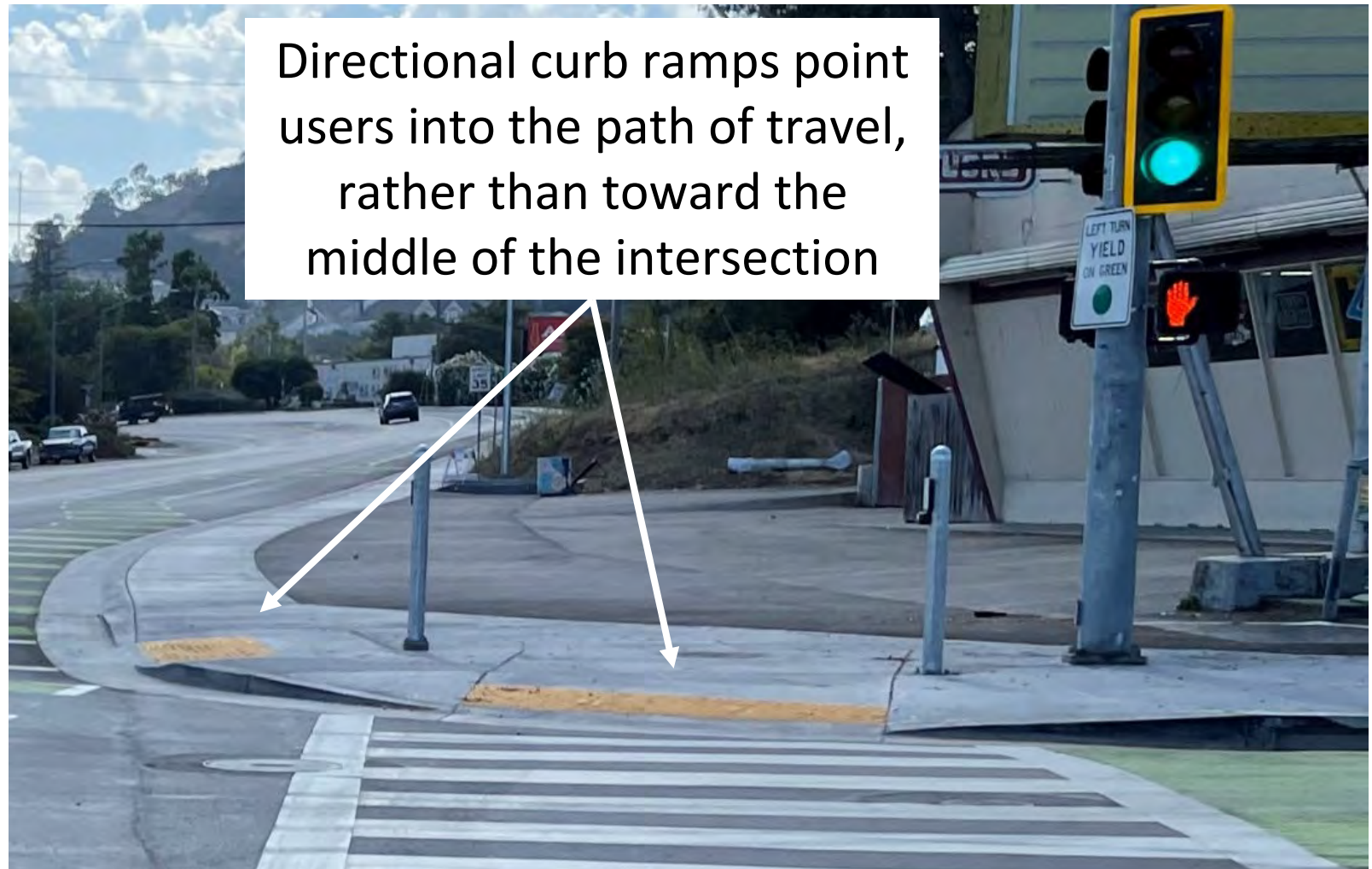
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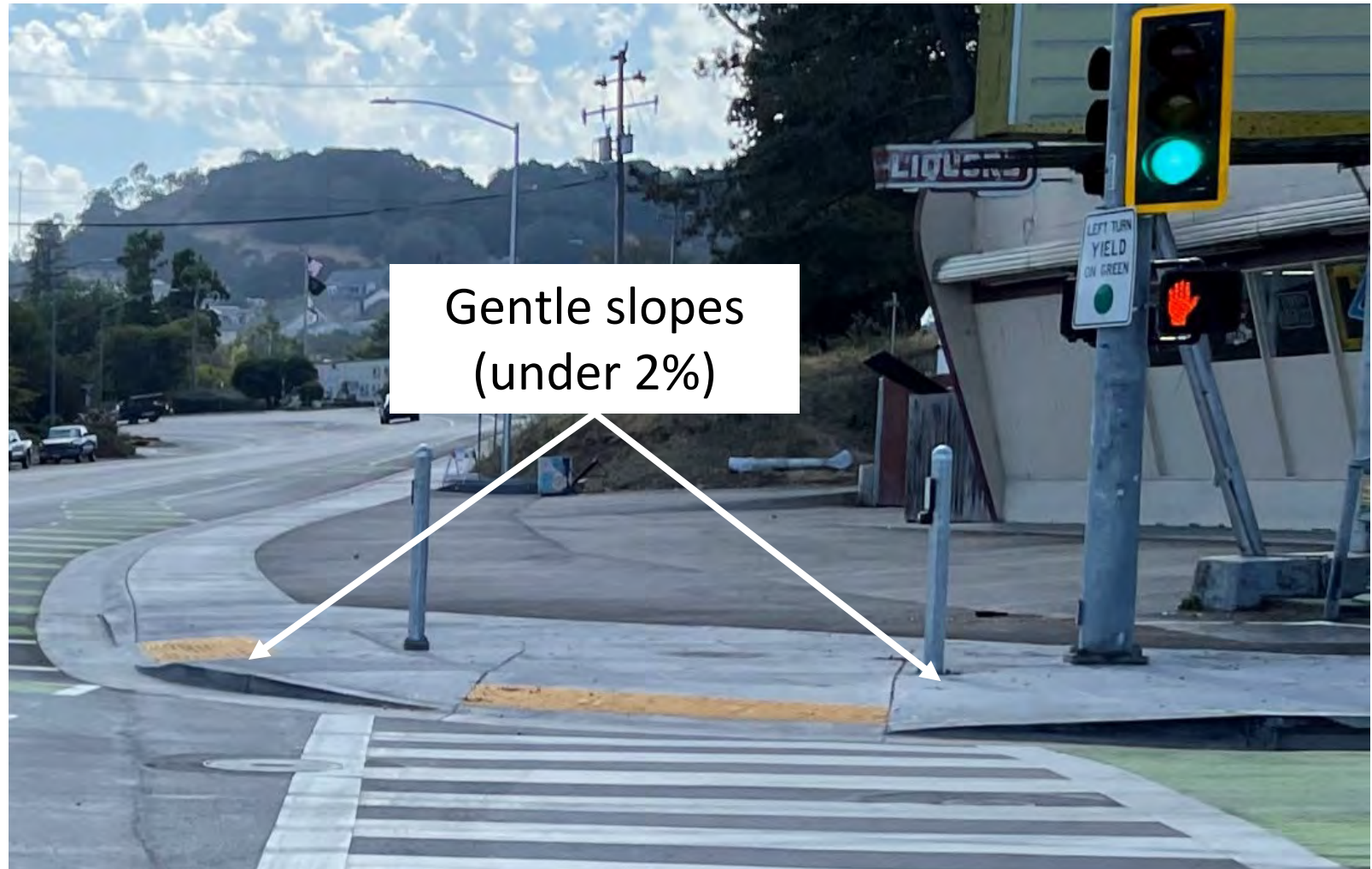
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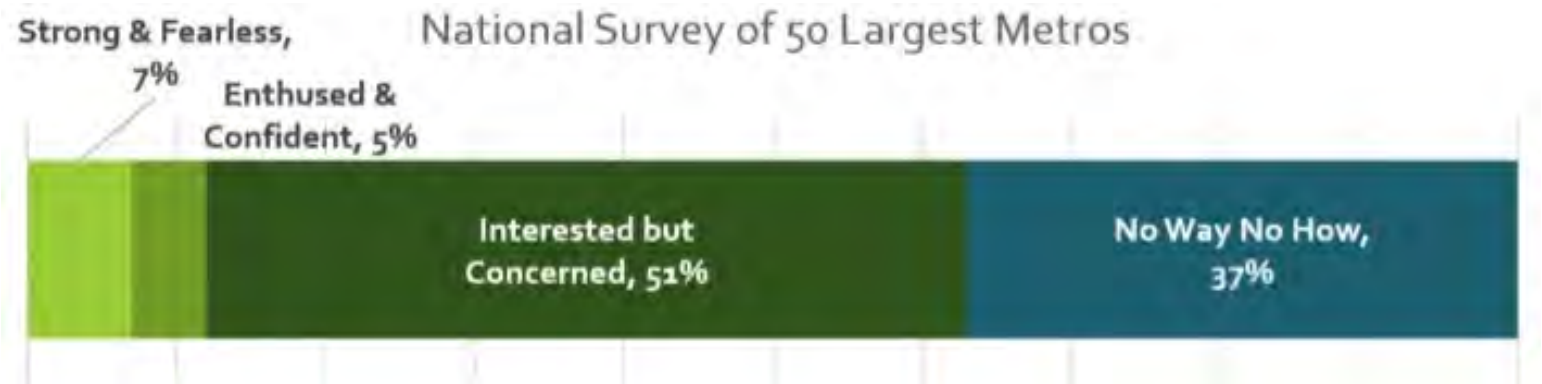
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THE FOUR TYPES OF BICYCLISTS

1. **Strong and Fearless (7%):** People willing to bicycle with limited or no bicycle-specific infrastructure
2. **Enthusied and Confident (5%):** People willing to bicycle if some bicycle-specific infrastructure is in place
3. **Interested but Concerned (51%):** People willing to bicycle if high-quality bicycle infrastructure is in place
4. **No Way, No How (37%):** People unwilling to bicycle even if high-quality bicycle infrastructure is in place

Complete Streets & Active Transportation Design Principles

- Accessibility
- **All Ages & Abilities Bikeways**
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GUIDANCE FOR ALL AGES & ABILITIES (AAA) BIKEWAYS

- As traffic speed and volume increase, so does the need for separation from vehicle traffic.
- On streets with more than 6000 vehicles/day, speeds exceeding 25 MPH, or multiple lanes in each direction, **protected bike lanes** are needed.



Major Street
Shared Use Lane



Painted Bicycle
Lane



Paint Buffered
Bike Lane



Local Street
Bikeway



Protected Bike
Lane



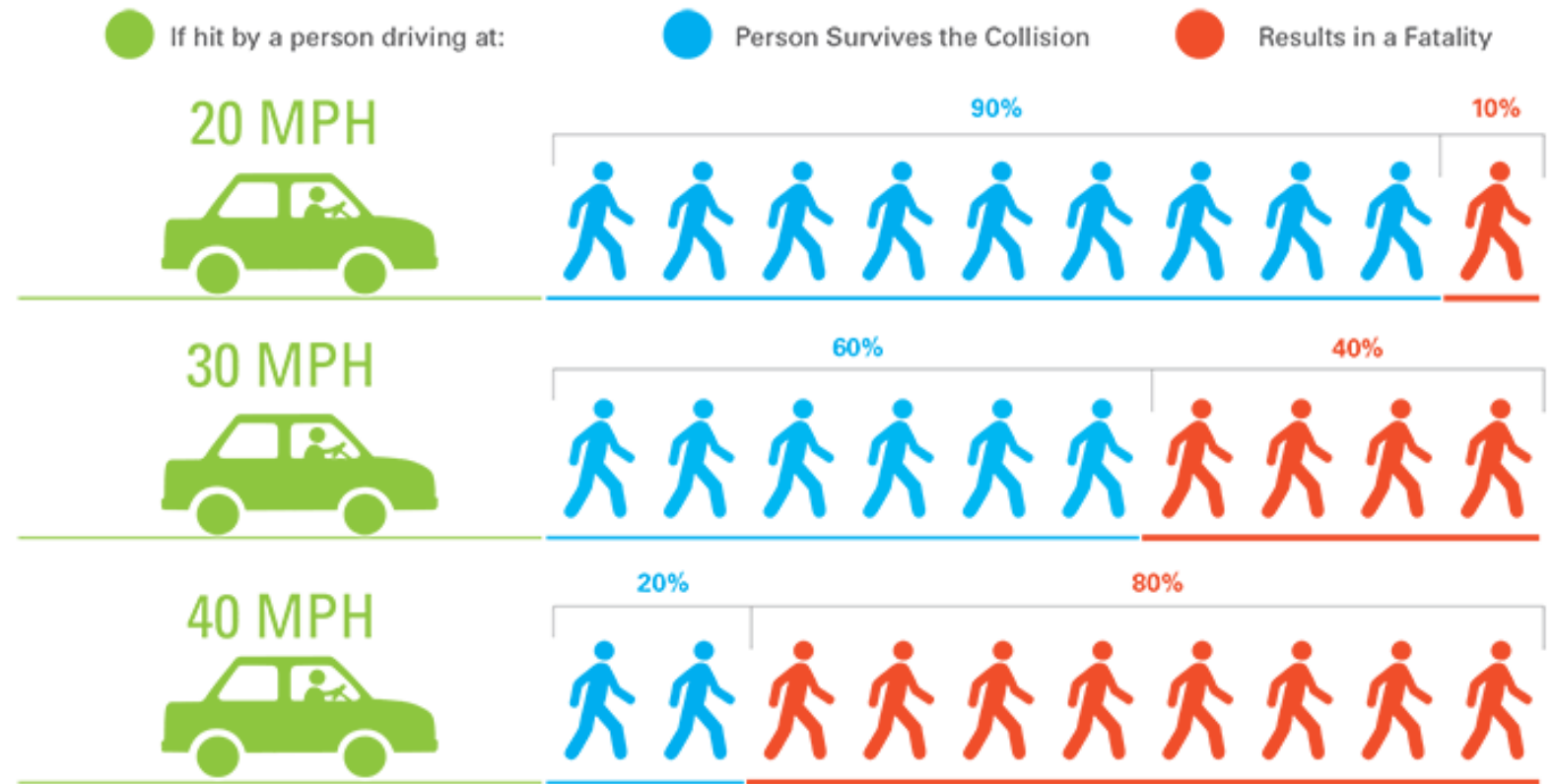
Off-Street
Pathway

Unsuitable for AAA facility

Suitable for AAA facility

Complete Streets & Active Transportation Design Principles

- Accessibility
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- **Traffic Calming & Vision Zero**
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Complete Streets & Active Transportation Design Principles

- Accessibility
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Quick-Build
Bulb-out

Permanent
Bulb-out



Complete Streets & Active Transportation Design Principles

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Streets

Chicanes



Speed Cushions



Traffic Circles



Complete Streets & Active Transportation Design Principles

- Accessibility
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- **Streets for People**
- Resilient / Green
Streets

Slow / Shared Streets

Photo: Crissy Pascual / Argus Courier



Parklets & Outdoor Dining

Photo: Susan Wood / North Bay Journal

Complete Streets & Active Transportation Design Principles

- Accessibility
- All Ages & Abilities
Bikeways
- Traffic Calming &
Vision Zero
- Streets for People
- **Resilient / Green
Streets**

Tree Canopy



Stormwater Filtering &
Capture



Planning Efforts

Planning Efforts

- **Active Transportation Plan**
- CityThread
- 101 Crossings Study (Corona, Rainier, Lynch Creek, McKenzie)
- Lakeville Corridor Study

OVERVIEW

- Update to Bicycle & Pedestrian Master Plan (2008)
- Blueprint for active transportation (AT) network and priorities:
 - Infrastructure Projects
 - Engineering / Education / Encouragement / Enforcement
- Current draft goal areas:
 - Vision Zero by 2030
 - Build the Network by 2030
 - Beautiful & Well-Maintained Streets & Trails
 - Normalize & Celebrate

Planning Efforts

- **Active Transportation Plan**
- CityThread
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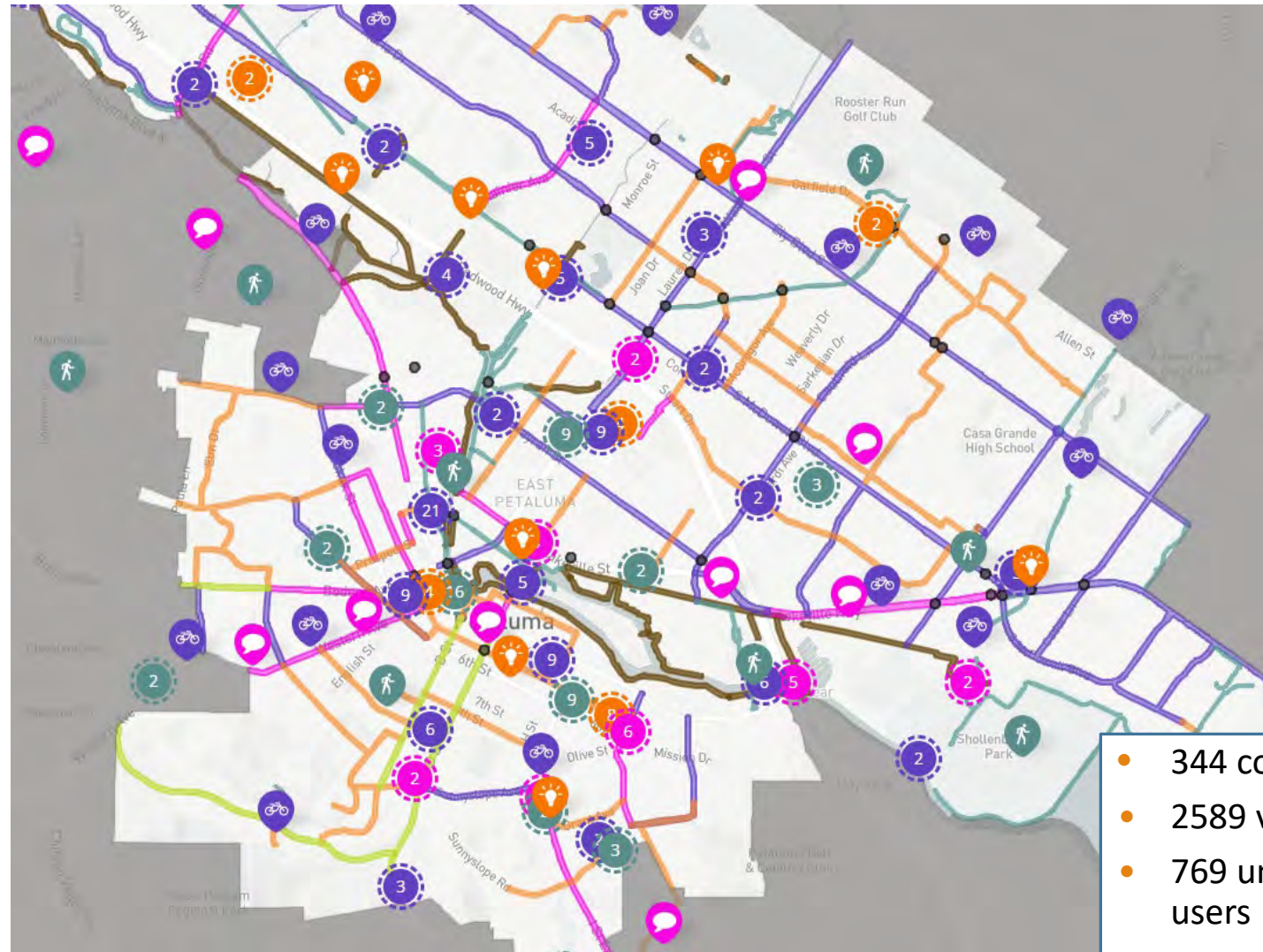
PLAN DEVELOPMENT

- Updated projects from Bicycle & Pedestrian Master Plan (2008) to reflect current best practices
- Review of Local Road Safety Plan, Sonoma County Vision Zero Action Plan, and Safe Routes to School studies/surveys
- Recommendations from Petaluma Equitable Climate Action Coalition
- PBAC Ad Hoc Committees
- Online & In-Person Engagement

Planning Efforts

- **Active Transportation Plan**
- CityThread
- 101 Crossings Study (Corona, Rainier, Lynch Creek, McKenzie)
- Lakeville Corridor Study

INTERACTIVE PROJECT MAP



<https://fehrandpeers.mysocialpinpoint.com/petaluma-atp/#/>

- 344 comments
- 2589 views
- 769 unique users
- Draft map update pending

Active Transportation Plan Timeline

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Interactive Map, Feedback Form, & Open House									
PBAC Status Updates & Targeted Feedback									
Draft Plan - Staff Review									
Draft Plan - PBAC Review									
Draft Plan - Planning Commission Review									
Draft Plan - City Council Review									



Active Transportation Plan Open House

- Wednesday, October 25, 6-8 PM at Community Center
- Provide input on proposed projects, vision, goals, and actions
- cityofpetaluma.org/active-transportation-plan

Planning Efforts

- Active Transportation Plan
- **CityThread**
- 101 Crossings Study (Corona, Rainier, Lynch Creek, McKenzie)
- Lakeville Corridor Study



National, non-profit 501(c)(3) consulting team

Helped 5 U.S. cities construct 335 miles of new bikeways in 2 years

Developed the Accelerated Mobility Playbook (AMP) to help other cities advance mobility projects

Launched the grant-funded AMP Technical Assistance program in 10 U.S. cities in 2023

Planning Efforts

- Active Transportation Plan
- **CityThread**
- 101 Crossings Study (Corona, Rainier, Lynch Creek, McKenzie)
- Lakeville Corridor Study



ACCELERATED MOBILITY PLAYBOOK KEY TAKEAWAYS

- City has great potential for mode shift
- AT Plan will be key to establishing shared vision and priorities
- Simplify messaging & community engagement process
- Community coalition building: “Less Stress, More Safe”
- 25 miles mobility corridors by 2026
- Prioritize easy-to-implement projects / key gap closures

Planning Efforts

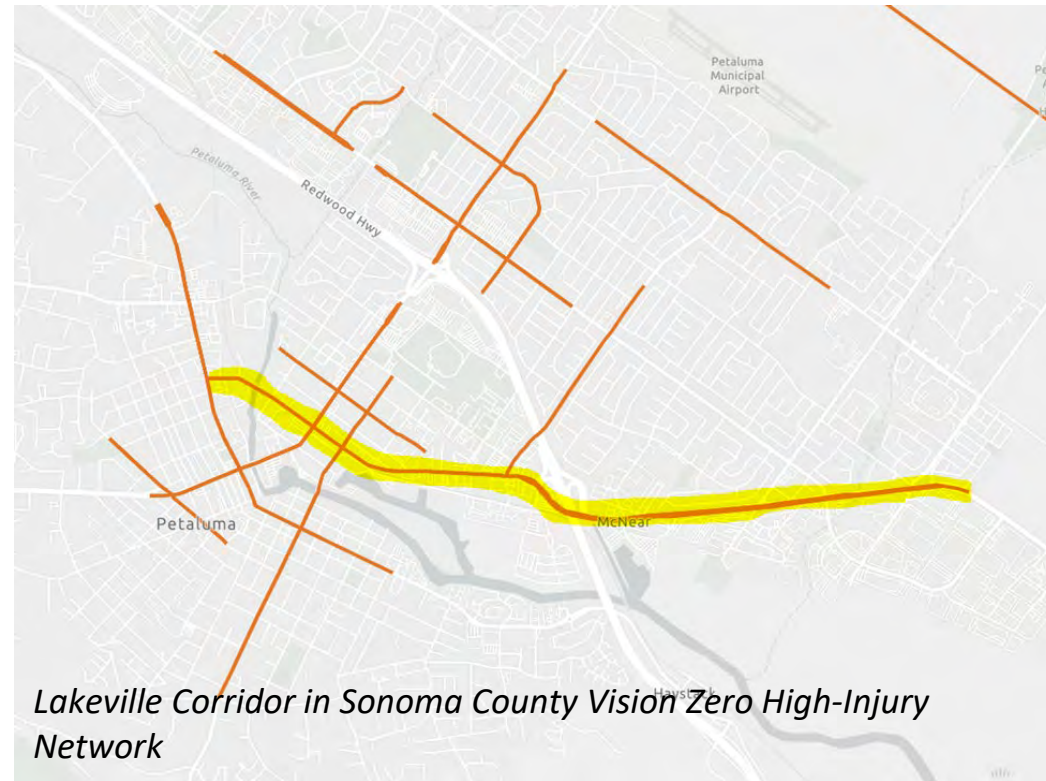
- Active Transportation Plan
- CityThread
- **101 Crossings Study (Corona, Rainier, Lynch Creek, McKenzie)**
- Lakeville Corridor Study



- Develop conceptual plans for new or improved active transportation crossings of US-101 at **Corona Road, Rainier Avenue, Lynch Creek Trail, & McKenzie Avenue**
- Funded by Sonoma County Transportation Authority
- Expected study completion late 2024

Planning Efforts

- Active Transportation Plan
- CityThread
- 101 Crossings Study (Corona, Rainier, Lynch Creek, McKenzie)
- **Lakeville Corridor Study**



- Develop near, mid, and long-term recommendations for Lakeville corridor (Petaluma Blvd. North – City Limits), including potential parallel AT alternatives
- Engage Caltrans on study
- Currently unfunded (two grant applications submitted)

Projects

- 1) Citywide Overview
 - 2) Case Studies:
 - Rainier Avenue
 - D Street
 - 5th Street
-



Petaluma Boulevard South Complete Streets Project - Before and After



I Street Speed Reduction and Lane Markings - Before and After



Windsor Drive Ped Crossing Safety and Bike Lane Markings - Before and After



N. McDowell Blvd. Complete Streets Project - Before and After
(K-71 pylons in the bike lane buffer zone)

Citywide Projects

- **Grant Activity**
- CIP Projects

GRANT FUNDED / PARTIALLY FUNDED

- Downtown Parking Study
- Bike Lanes on Sunnyslope Ave. and Windsor Dr.
- Citywide Bike Parking (76 racks in FY24)
- Caulfield Lane Complete Streets Project

GRANT APPLICATIONS PENDING

- Lakeville Corridor Study
- Citywide Intersection & Crosswalk Improvements
- Design Assistance for AT Plan Buildout

GRANT APPLICATION IN DEVELOPMENT

- River Trail / 101 Undercrossing

Citywide Projects

- Grant Activity
- **CIP Projects**

CONSTRUCTION

- N. McDowell Complete Streets
- Garfield Drive Improvements
- Citywide Bike Parking (76 racks in FY24)
- Maria Drive Street Rehabilitation (*out to bid*)

DESIGN

- Lynch Creek Trail Improvements
- Howard Street Improvements
- Rainier Avenue Complete Streets
- Caulfield Bridge Crosstown Connector
- D Street Traffic Calming Quick-Build
- 5th Street Neighborhood Greenway Quick-Build

Citywide Projects

- Grant Activity
- **CIP Projects**

PLANNING

- River Trail / 101 Undercrossing
- Citywide Bike/Ped Wayfinding
- 101 Crossings Study
- Casa Grande Road Complete Streets
- Caulfield Lane Complete Streets
- St. Francis Drive Improvements
- N. Webster Street Improvements
- Western Avenue Improvements

Rainier Avenue Parking-Protected Bike Lane Demonstration

- **Project Overview**
- Community Engagement & Design Development
- Demonstration Project
- Feedback & Data
- Feedback Needed



- **Demonstration Location:** N. McDowell Blvd. – Maria Dr.
- **Paving Project:** N. McDowell Blvd. – Sonoma Mtn. Pkwy.

Rainier Avenue Parking-Protected Bike Lane Demonstration

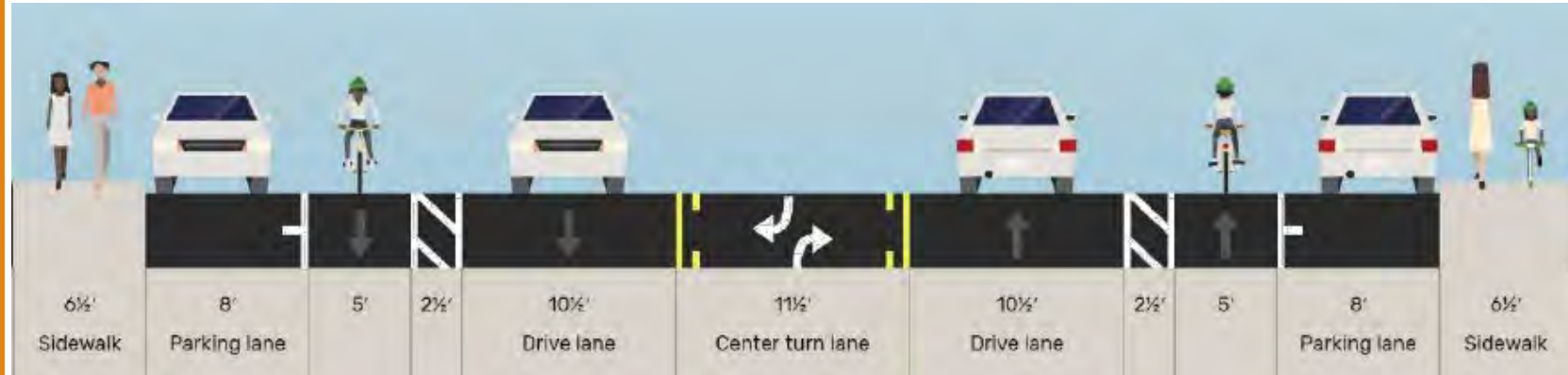
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ISSUES & CONSIDERATIONS

- **Utilities to be improved/replaced**
- **Pavement replacement needed**
- **Arterial roadway, but traffic volume well below capacity of four-lane road**
- **Low parking utilization**
- **Documented speeding issues**
- **Existing Class II (painted) bike lanes**

Rainier Avenue Parking-Protected Bike Lane Demonstration

- Project Overview
- **Community Engagement & Design Development**
- Demonstration Project
- Feedback & Data
- Feedback Needed



**Initial Proposal: Paint-Buffered Bike Lanes
Presented to PBAC in June & July 2021**

PBAC FEEDBACK

- Strong preference for protected bike lanes

Rainier Avenue Parking-Protected Bike Lane Demonstration

- Project Overview
- **Community Engagement & Design Development**
- Demonstration Project
- Feedback & Data
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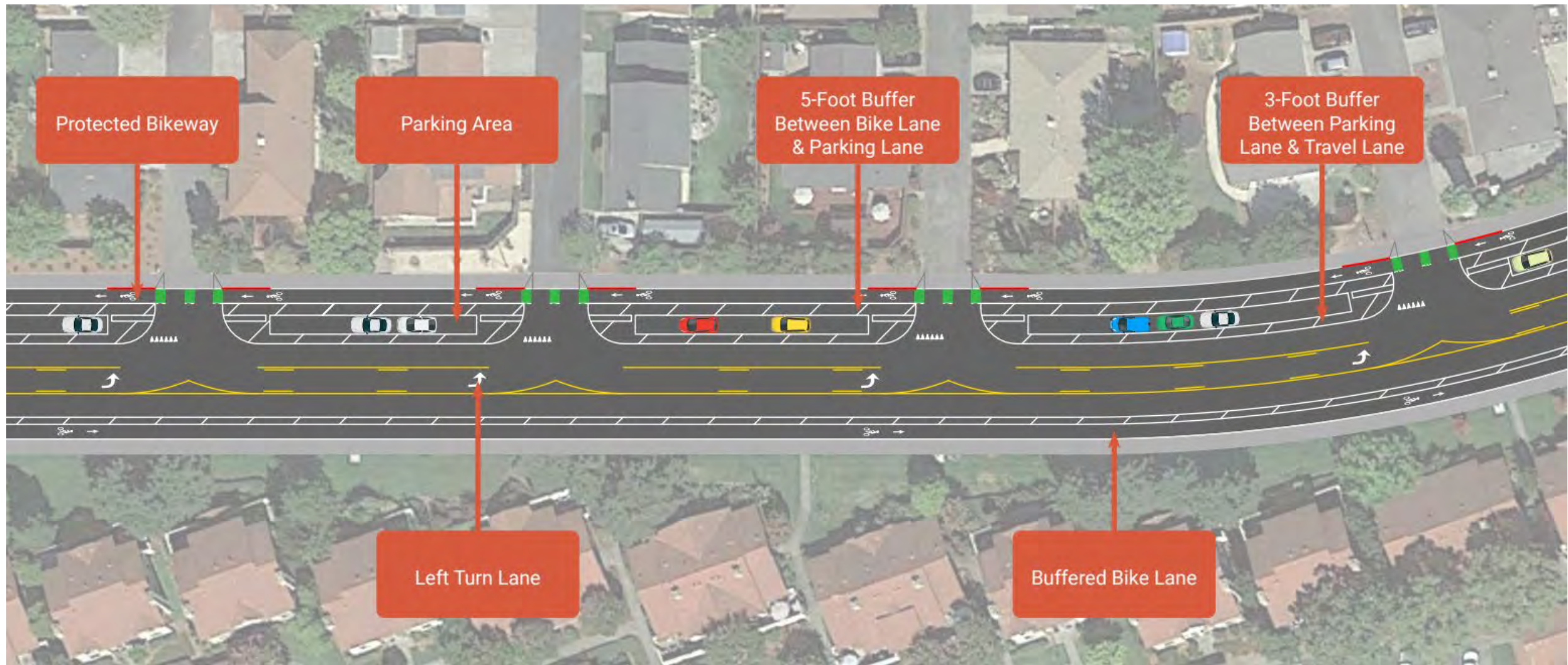


Updated Proposal: Westbound Parking-Protected Bike Lane / Eastbound Paint-Buffered or Protected Bike Lane (Presented to Rainier Avenue Residents February & March 2022)

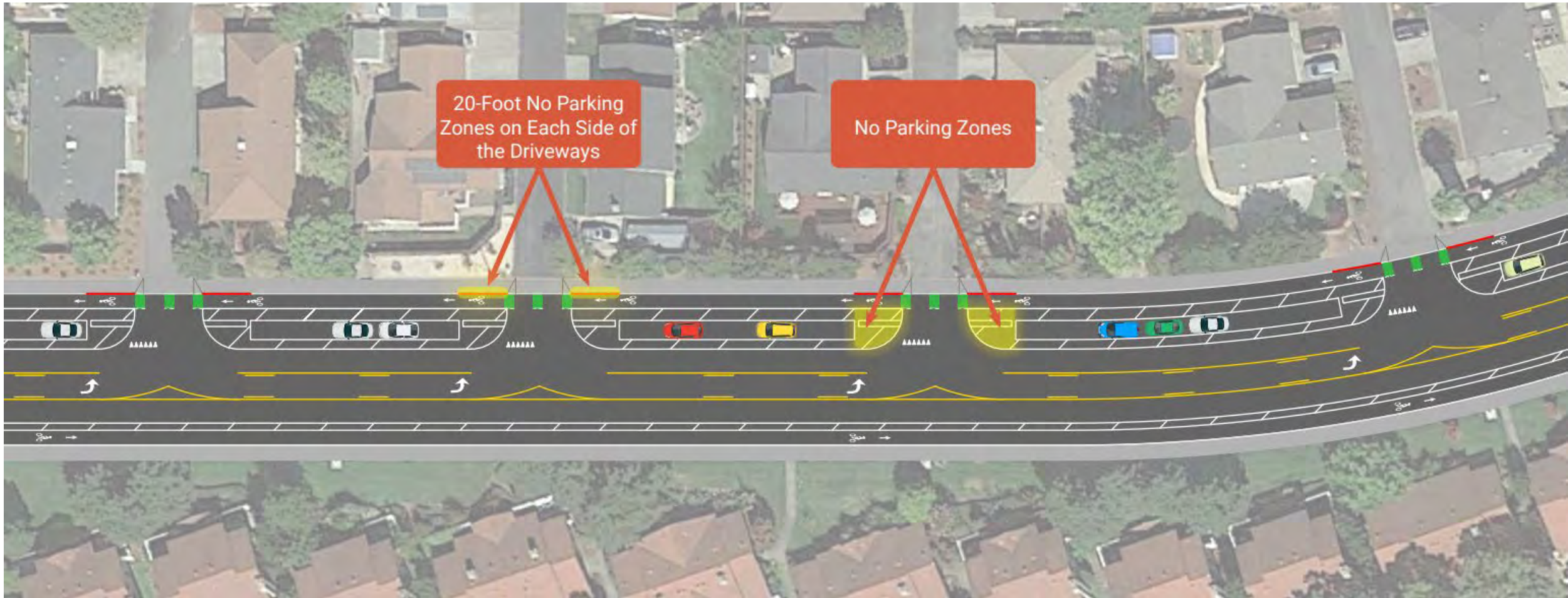
NEIGHBORHOOD CONCERNS

- On-street parking supply
- Entering and exiting parked cars
- Sight distance from driveways
- Garbage collection and mail delivery
- Street sweeping

Demonstration Project Overview



Demonstration Project Overview



Demonstration Project Overview



Rainier Avenue Parking-Protected Bike Lane Demonstration

- Project Overview
- Community Engagement & Design Development
- Demonstration Project
- **Feedback & Data**
- Feedback Needed

COMMUNITY FEEDBACK

- Challenges seeing oncoming traffic when pulling out of driveways
- Some complaints about difficulty entering/exiting parked cars on driver side
- Unpopular among drivers who responded to survey; general confusion / unfamiliarity with configuration, opposition to lane reduction
- Popular among people who bike

Rainier Avenue Parking-Protected Bike Lane Demonstration

- Project Overview
- Community Engagement & Design Development
- Demonstration Project
- **Feedback & Data**
- Feedback Needed

TRAFFIC DATA

- **Before & After Comparison on Demonstration Stretch**
 - 85% speed reduced 3 MPH (40 to 37 MPH)
 - No outlier speeds over 45 MPH (before: outlier speeds over 50 MPH)
- **Comparison with Non-Demonstration Stretch (north of Maria)**
 - 85% speed 5 MPH lower in demonstration section
- **No adverse congestion impacts**
- **No reported collisions since demonstration installation in Summer 2022**
 - Average of 0.6/year prior to demonstration



EXISTING: Pre-demonstration configuration



OPTION 1: Demonstration configuration (with addition of delineators in eastbound buffer)



OPTION 2: Westbound parking; eastbound wide protected bike lane / westbound paint-buffered bike lane

Rainier Avenue Parking-Protected Bike Lane Demonstration

- Project Overview
- Community Engagement & Design Development
- Demonstration Project
- Feedback & Data
- **Feedback Needed**

DISCUSSION POINTS

- Seeking comments and feedback on Option 1 demonstration project
- Data supports 4-to-3 lane conversion
- All Ages & Abilities design guidance supports protected bikeways in both directions (Option 1)
- Seeking feedback on Options 1 and 2

D Street Traffic Calming Quick-Build

- **Project Overview**
- Community Engagement & Design Development
- Baseline Improvements
- Bike Lanes & Parking
- Feedback Needed



Location: Petaluma Boulevard South – City Limits

D Street Traffic Calming Quick-Build

- **Project Overview**
- Community Engagement & Design Development
- Baseline Improvements
- Bike Lanes & Parking
- Feedback Needed

ISSUES & CONSIDERATIONS

- Water and sewer main replacement
- Pavement replacement
- Identified in Sonoma County Vision Zero Action Plan High-Injury Network
- Four priority intersections identified in Local Road Safety Plan
- Documented speeding issues south of 6th Street
- Designated truck route
- Proposed Class II (painted) bike lanes in *Bicycle & Pedestrian Master Plan* (2008)

D Street Traffic Calming Quick-Build

- Project Overview
- **Community Engagement & Design Development**
- Baseline Improvements
- Bike Lanes & Parking
- Feedback Needed

ENGAGEMENT & DESIGN DEVELOPMENT

- Review existing plans, including feedback in Local Road Safety Plan
- Review collision, speed, and parking data
- Community Workshop #1 (October 2022)
 - 70 attendees
- Presentation to Pedestrian & Bicycle Advisory Committee (November 2022)
- Round 1 Online survey (October – November 2022)
 - 138 responses

D Street Traffic Calming Quick-Build

- Project Overview
- **Community Engagement & Design Development**
- Baseline Improvements
- Bike Lanes & Parking
- Feedback Needed

COMMUNITY PRIORITIES FROM INITIAL OUTREACH



Improve pedestrian crossings



Slow down traffic



Improve traffic congestion



Improve bike lanes

D Street Traffic Calming Quick-Build

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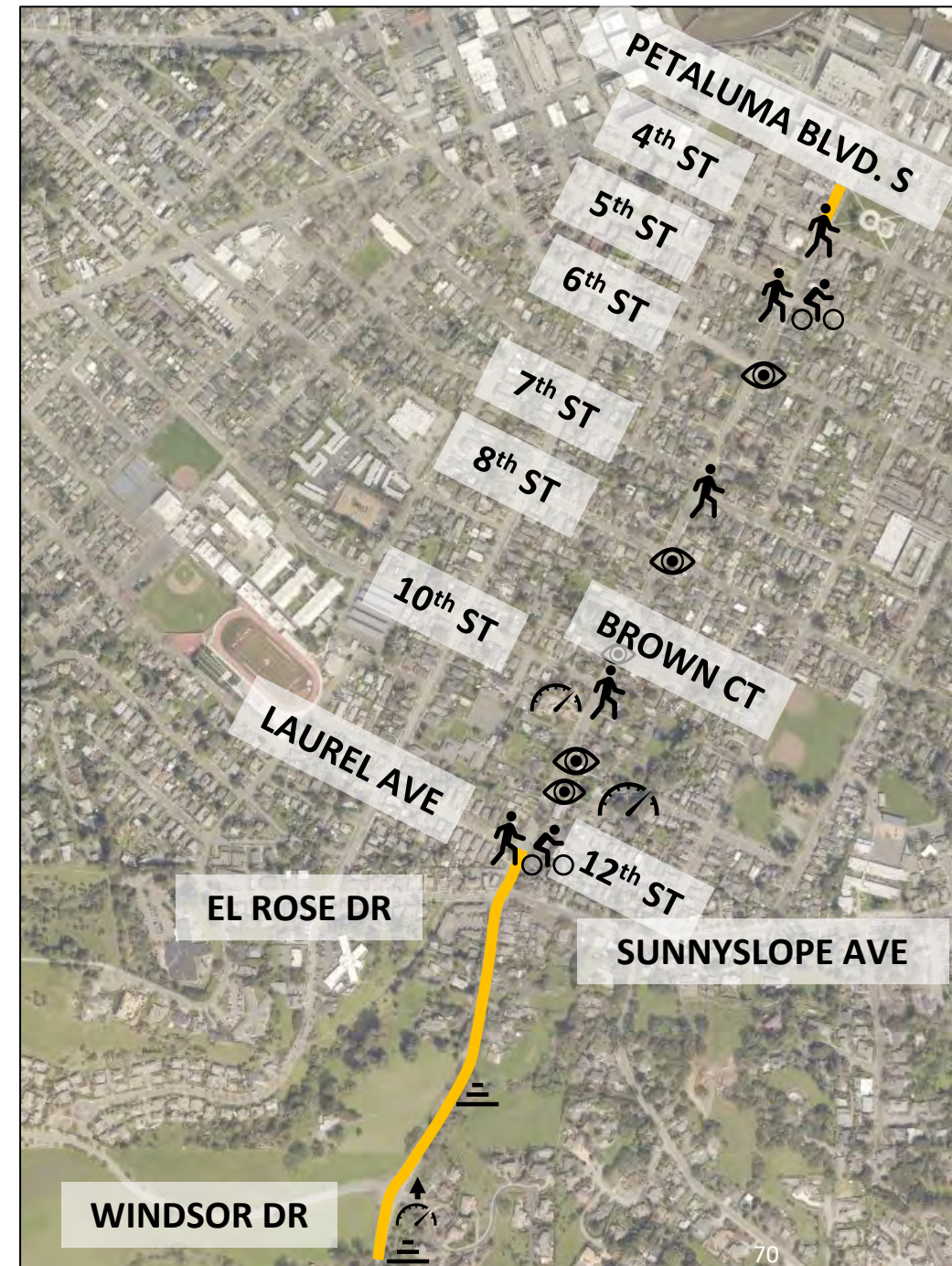
BASELINE IMPROVEMENTS (Phase I)

D Street Traffic Calming Quick-Build

- Project Overview
- Community Engagement & Design Development
- **Baseline Improvements**
- Bike Lanes & Parking
- Feedback Needed

BASELINE IMPROVEMENTS (Phase I)

-  New / improved crosswalks
-  Install bulb-outs
-  Install speed feedback radar sign
-  Install bike crossing
-  Install speed reduction lane markings
-  Install bike lanes

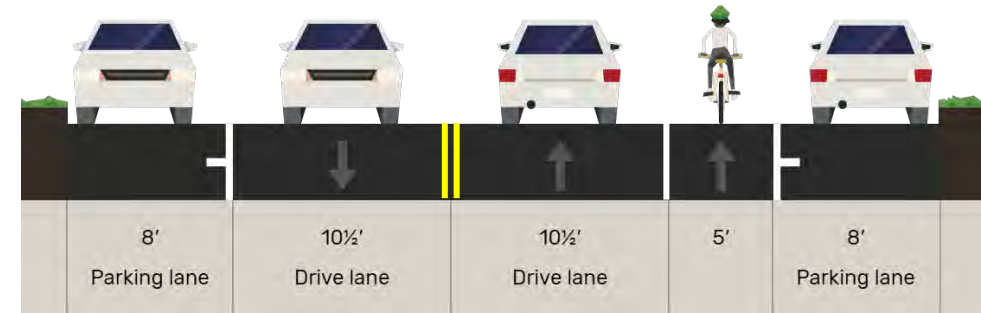


Initial Bike Lane/Parking Options

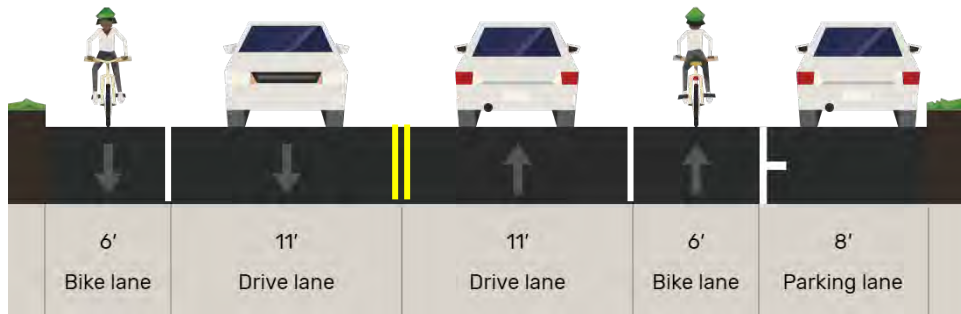
4th St. to Laurel Ave.



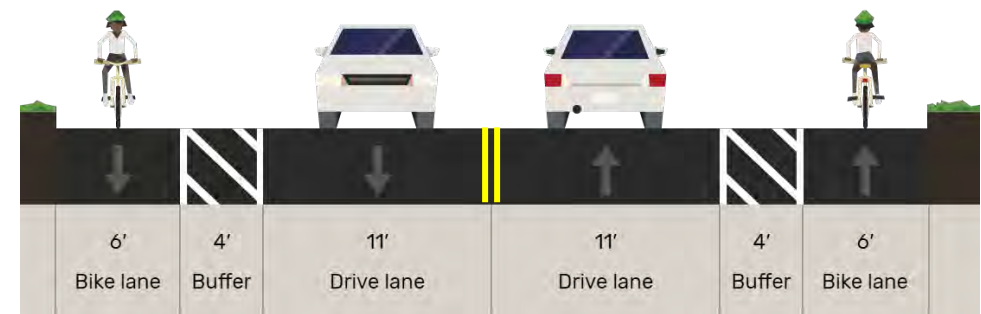
EXISTING: No bike lanes; parking in both directions



OPTION B: Bike lane in one direction; parking in both directions



OPTION A: Bike lanes in both directions; parking in one direction (PROPOSED)



OPTION C: Buffered/protected bike lanes in both directions; no parking

D Street Traffic Calming Quick-Build

- Project Overview
- Community Engagement & Design Development
- Baseline Improvements
- **Bike Lanes & Parking**
- Feedback Needed

4th Street – 8th Street

Direction	Average # Cars	Average Utilization
Outbound	5	9%
Inbound	14.3	26%

8th Street – Laurel Avenue

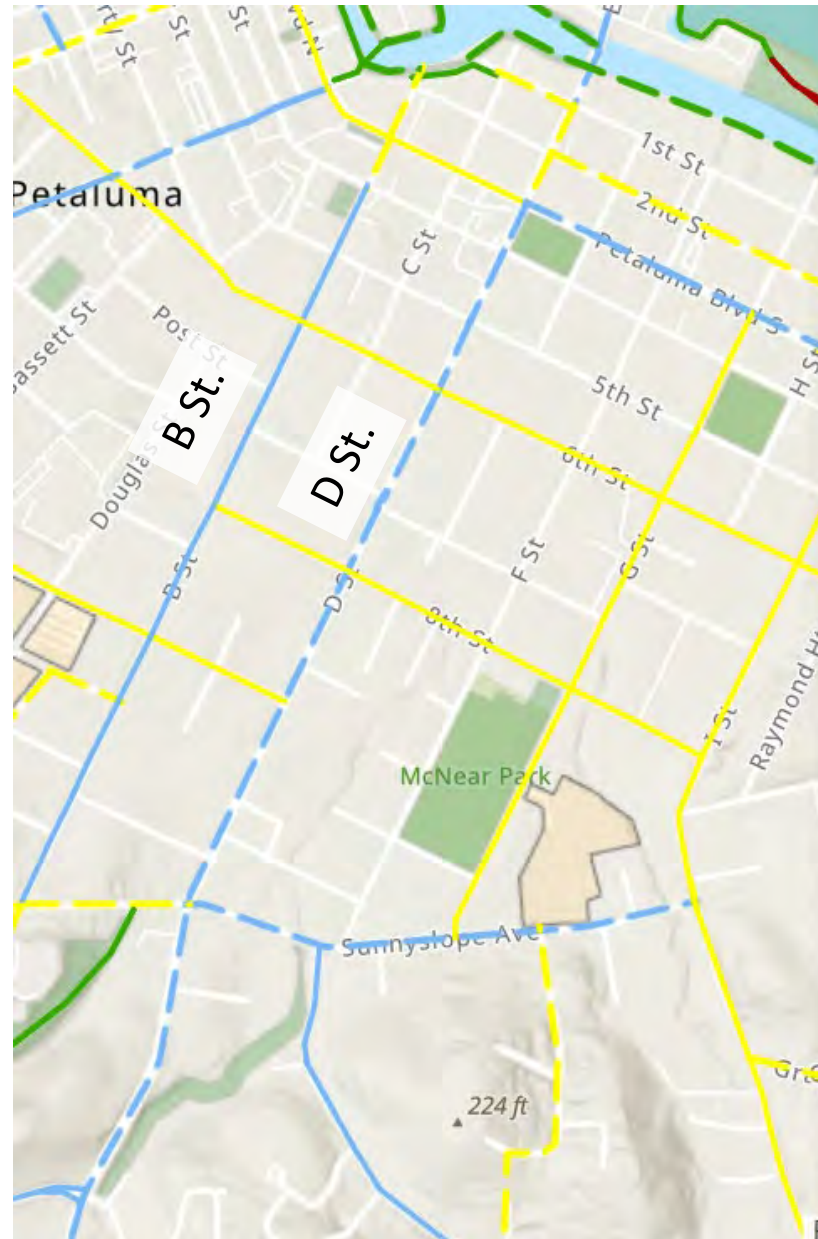
Direction	Average # Cars	Average Utilization
Outbound	6.7	12%
Inbound	2.7	5%

- Conducted three counts (weekdays, non-holiday, school in session) at 7 AM, 2:30 PM, and 12 AM
- Utilization ranged from 12-15% (14% avg.)
- On street parking is important or needed for some
- Proposed design provided parking on side of street where utilization is higher in each segment

D Street Traffic Calming Quick-Build

- Project Overview
- Community Engagement & Design Development
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- **Bike Lanes & Parking**
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BIKE LANE CONSIDERATIONS



Bike Routes

- Class I - Off Street - Existing
- - Class I - Off Street - Proposed
- Class II - On Street, Striped - Existing
- - Class II - On Street, Striped - Proposed
- Class IIB - On Street, Buffered - Existing
- Class III - On Street, Signed - Existing
- - Class III - On Street, Signed - Proposed
- Recreational Trail - Existing
- - Recreational Trail - Proposed

Schools

Schools



Parks

Parks



D Street Traffic Calming Quick-Build

- Project Overview
- Community Engagement & Design Development
- Baseline Improvements
- Bike Lanes & Parking
- **Feedback Needed**

DISCUSSION POINTS

- Proceeding with Phase 1 (Baseline Improvements)
 - Design underway
 - D Street Phase 1 & 5th Street quick-build projects to be bid together in late 2023/early 2024
- Future Policy Considerations for Phase 2:
 - In cases where proposed bike lanes require parking removal or consolidation, how does the City decide which is the better use of limited right-of-way?
 - Potential criteria could include compatibility with plans, parking utilization, adjacent land use, availability of a parallel bike route, etc.

5th St. Neighborhood Greenway

- **Project Goals**
- Why 5th Street?
- Feedback Received

PROJECT GOALS

- Safe, slow, quiet street (traffic calming elements)
- Inviting for walking, bicycling, and rolling
- Easy crossings of major streets
- Pilot and inspire future neighborhood greenways throughout Petaluma



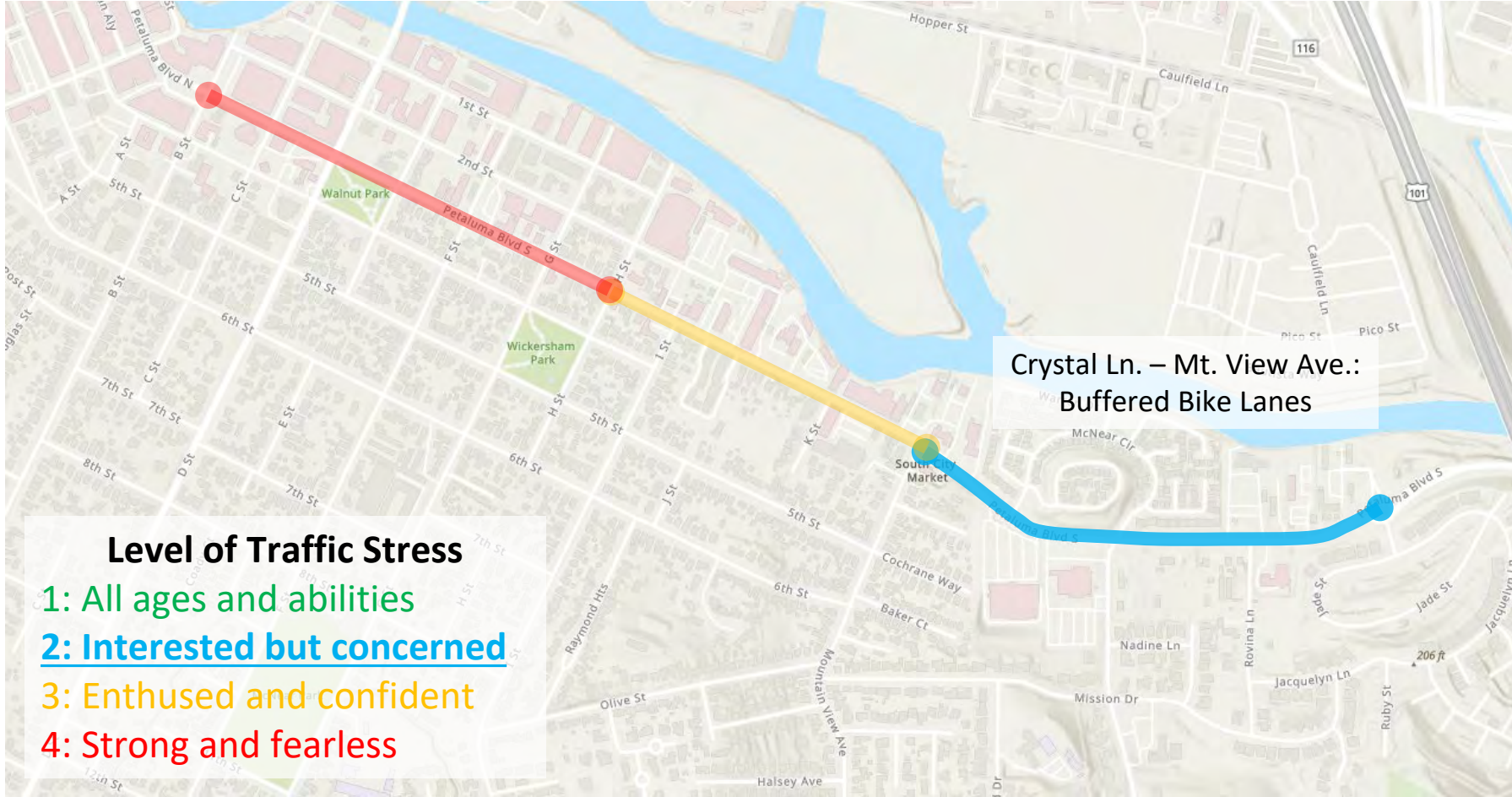
Why 5th Street?

3 streets run between
Downtown and Mt. View
Avenue:

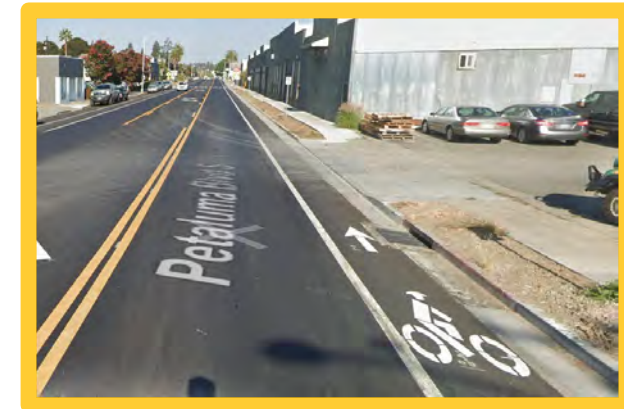
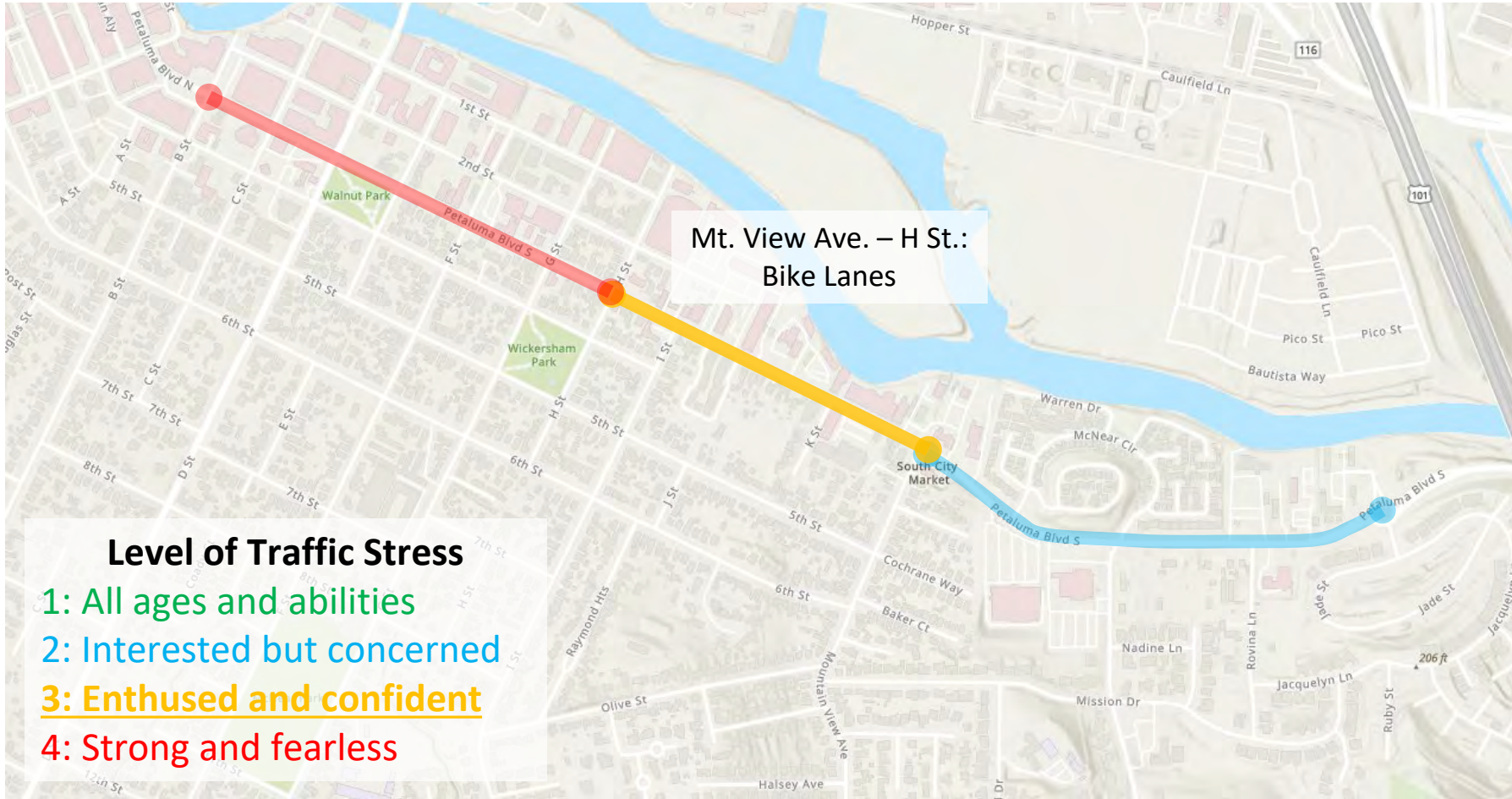
- Petaluma Boulevard South
- 5th Street
- 6th Street



Why 5th Street?



Why 5th Street?



Why 5th Street?

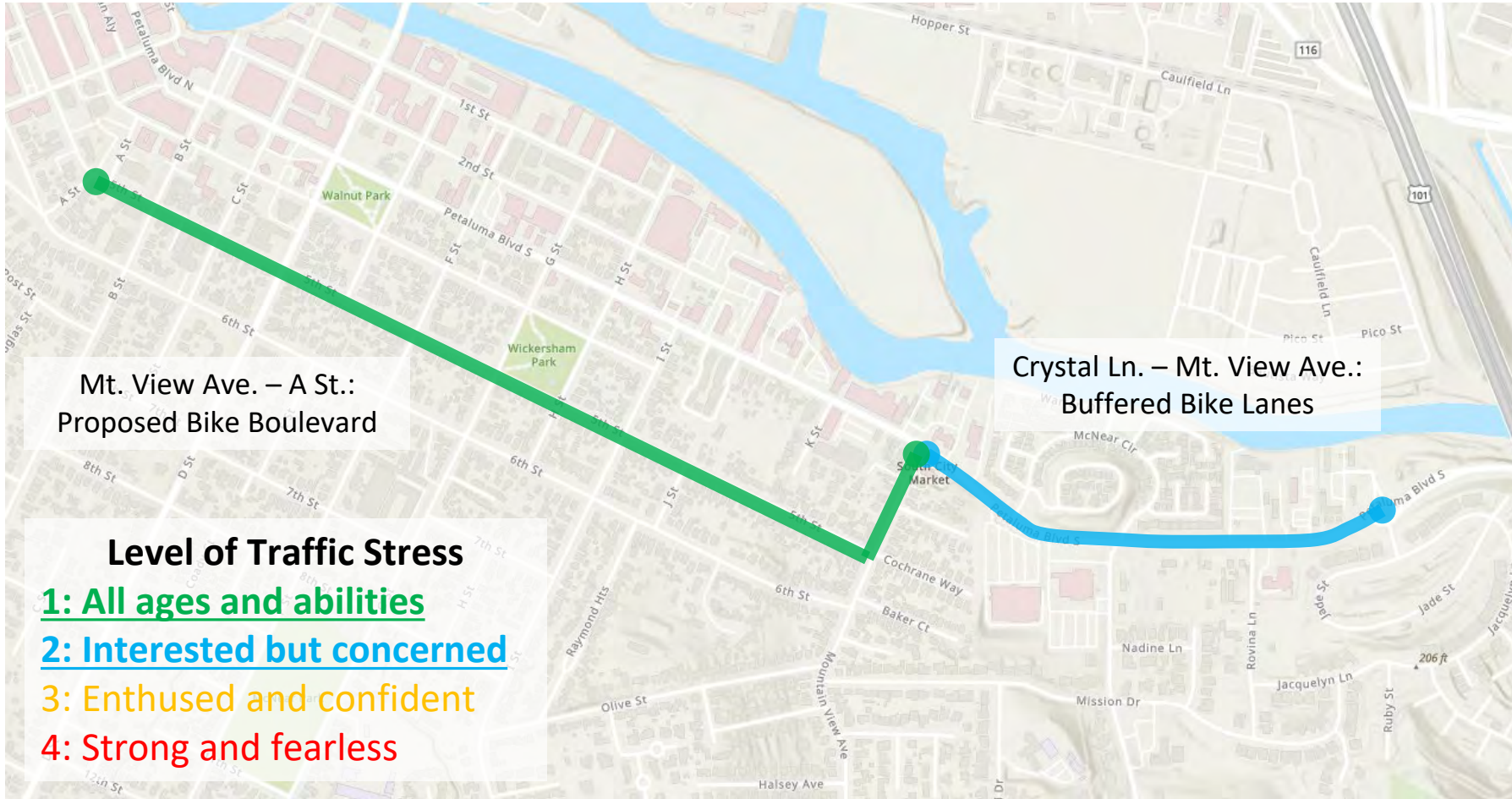
H St. – Downtown:
Shared Lane Markings

Level of Traffic Stress

- 1: All ages and abilities
- 2: Interested but concerned
- 3: Enthusied and confident
- 4: Strong and fearless



Why 5th Street?



Neighborhood Greenway Design Elements

- Lane Markings
- Speed Cushions
- Curb Extensions / Bulb-outs
- High Visibility Crosswalks
- Traffic Circles
- Traffic Diverter



5th St. Neighborhood Greenway

- Project Goals
- Why 5th Street?
- **Feedback
Received to Date**

FEEDBACK RECEIVED TO DATE

- Need safe, easy crossing at major intersections (especially D Street)
- Incorporate street trees, greenery, and public art
- Broad support for traffic calming
- Lower speed limit 20 MPH
- Concerns about poor pavement quality
- Concerns about too much striping and signage negatively affecting neighborhood character
- Concerns about of diverted traffic on parallel streets – particularly 6th Street

NEXT STEPS

- D Street Phase 1 & 5th Street quick-build projects to be bid together in late 2023/early 2024
- Data collection, community engagement, and adjustments to follow throughout 2024
- D Street Utility & Pavement Project scheduled for FY25-26



Initiatives

Initiatives

- **Safe Routes to School Task Force**
- Safe Streets Nomination Program

SAFE ROUTES TO SCHOOL TASK FORCE

- Forum for school staff, City staff, and community members
- Remove barriers to active transportation for students using four E's:
 - **Engineering**
 - **Education**
 - **Encouragement**
 - **Enforcement**
- Meets monthly on third Thursday from 4-5:30 PM
- First meeting October 19 at Community Center (meetings alternate between City Hall & Community Center)

Initiatives

- Safe Routes to School Task Force
- **Safe Streets Nomination Program**

SAFE STREETS NOMINATION PROGRAM

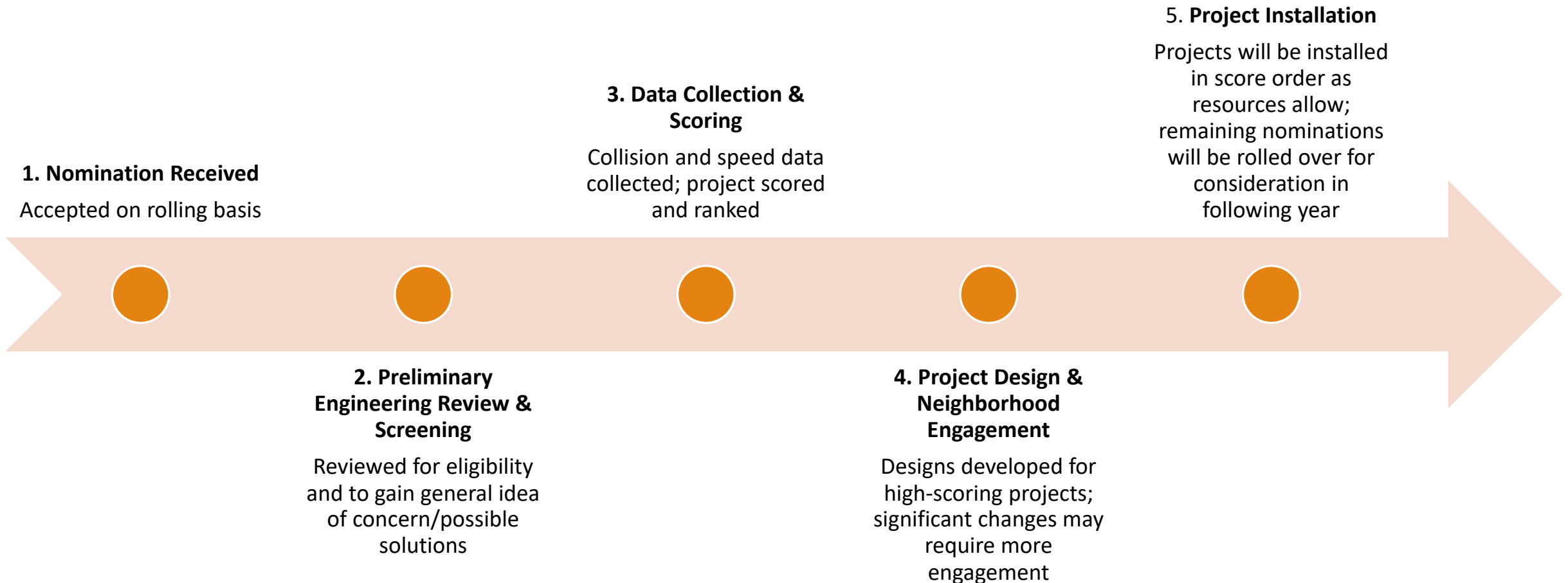
**Nominate streets
for traffic calming
or safety
improvements**

**Accessible,
transparent, data-
driven**

**Scoring criteria
prioritizes streets with
most significant
speeding and safety
issues, especially near
schools and parks**

**NOW LIVE at:
[cityofpetaluma.org/safe-
streets-nomination-
program/](https://cityofpetaluma.org/safe-streets-nomination-program/)**

Safe Streets Nomination Program Overview



Safe Streets Nomination Program

Preliminary Baseline Scoring Criteria

5 Year Collision History

- 1 point per **solo collision**
- 3 points per **vehicle vs. vehicle collision (no injury)**
- 5 points per **vehicle vs. vehicle collision (injury)**
- 7 points per **vehicle vs. bike/ped collision (no injury)**
- 9 points per **vehicle vs. bike/ped collision (injury)**

Speeding

- 1 point/vehicle **5-9 MPH** over posted speed limit in one hour
- 3 points/vehicle **10-14 MPH** over posted speed limit
- 5 points/vehicle **15 MPH+** over posted speed limit

Proximity to Schools & Parks (Multiplier)

- 1.5x points if within **¼ mile** of school or park
- 1.25x points if within **½ mile** of school/park

NOTE: Staff will exercise additional discretion and professional judgment in assigning project priorities and recommendations.

Discussion