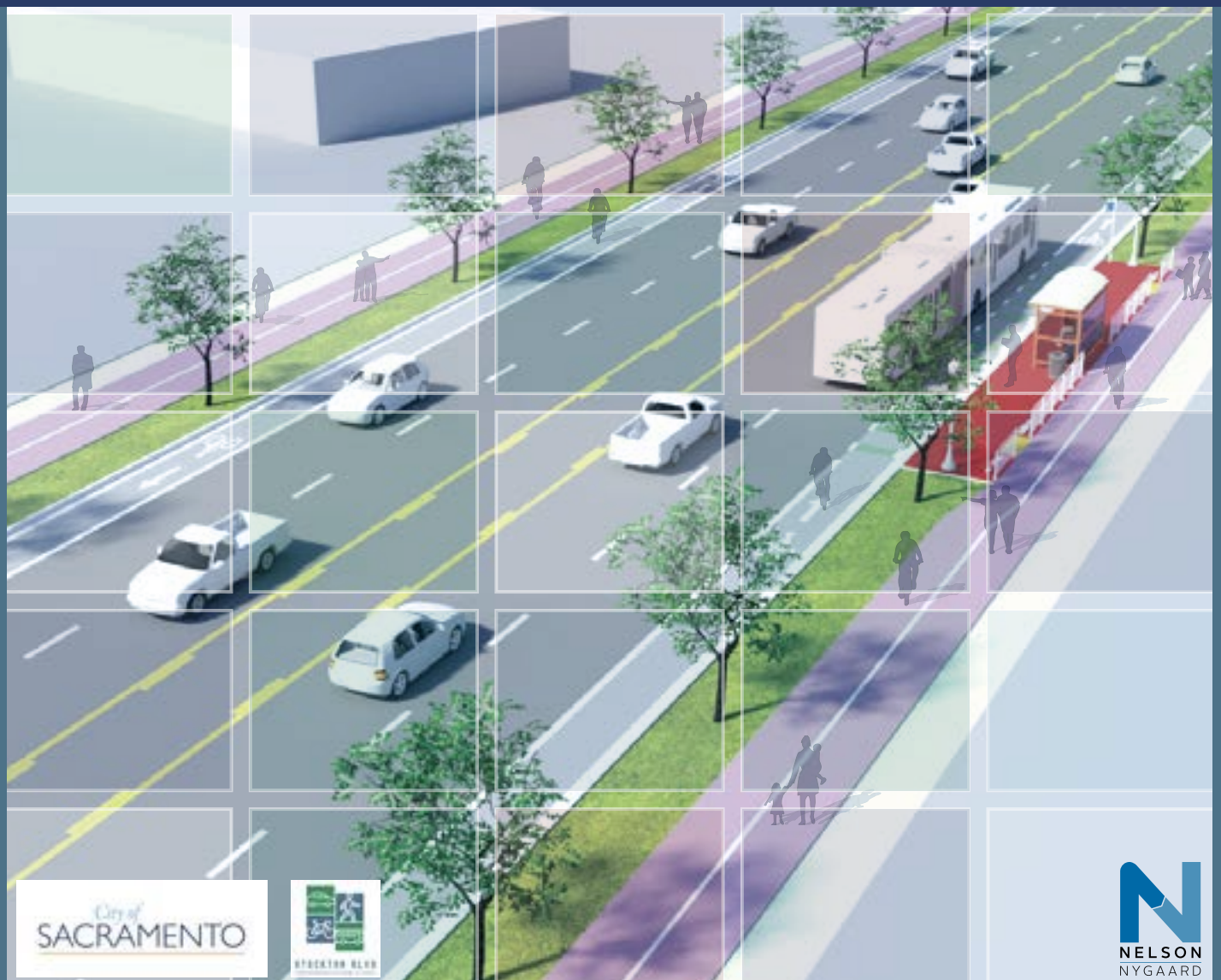


# STOCKTON BOULEVARD CORRIDOR PLAN

APRIL 2021 DRAFT



# CONTENTS

## THE PLAN FOR STOCKTON BOULEVARD

<b>WHY STOCKTON BOULEVARD?</b>	<b>01</b>
- Project overview and goals/Conditions today/Community Ideas and Input/Corridor Vision	
<b>A BETTER CORRIDOR</b>	<b>18</b>
- Corridor-wide planned improvements	
<b>ENHANCING PLACES</b>	<b>32</b>
- Location-specific planned improvements	
<b>IMPLEMENTATION</b>	<b>44</b>
- Cost/Next Steps	

## PROJECT APPENDICES

<b>A:</b>	<b>Community Engagement Summary</b>
<b>B:</b>	<b>Planning Level cost Estimates</b>
<b>C:</b>	<b>Concept Plan Set</b>
<b>D:</b>	<b>Existing Conditions Report</b>
<b>E:</b>	<b>Existing Conditions Report Appendix</b>
<b>F:</b>	<b>Frequently Asked Questions</b>

# ACKNOWLEDGEMENTS

## CITY OF SACRAMENTO

### CITY STAFF

**Drew Hart**, Project Manager  
**Jennifer Donlon Wyant**, Transportation Planning Manager  
**David Edrosolan**, City Traffic Engineer

### PROJECT DEVELOPMENT TEAM

**Ryan Billeci**, Traffic Operations Center  
**Matthew Ilagan**, Assistant Engineer  
**Megan Johnson**, Senior Engineer  
**Alex Goloveshkin**, Associate Engineer  
**James Boyle**, SacRT Planning Director  
**Pelle Clarke**, Senior Engineer  
**Kyle Hines**, Senior Civil Engineer

## CONSULTANT TEAM

**Nelson\Nygaard**  
**Stephanie Wright**, Project Manager  
**James McGrath**  
**Rogelio Pardo**  
**Adrianna Stanley**  
**Mohammad Hotak**  
**Layne Wyse**  
**Briana Weisgerber**  
**DIYSL**  
**Isaac Gonzalez Jr.**  
**Veritable Good**  
**Jackie Cole**  
**WSP**  
**Don Hubbard**  
**Daniel Block**  
**Sergio Arellano**

## Photographs

All photographs courtesy of the project team or the City of Sacramento unless otherwise noted.

# 01

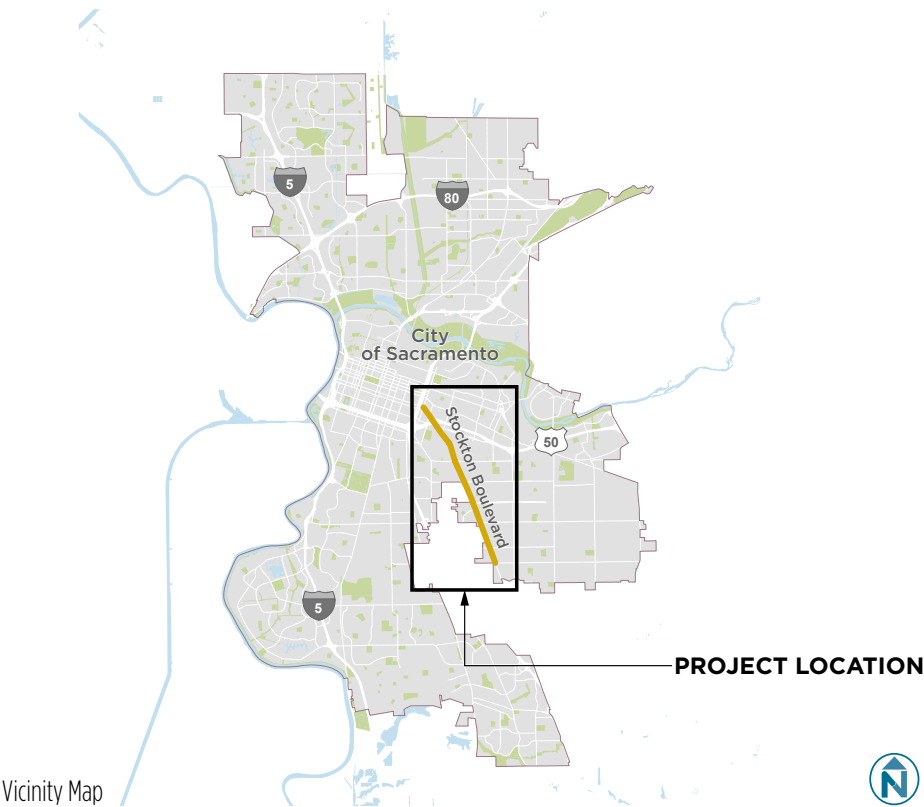
# WHY STOCKTON BOULEVARD?

Stockton Boulevard is a five-lane arterial connecting the Central City to South Sacramento. The corridor serves the UC Davis Medical Center at its north end, a growing retail node around 14th Avenue, and Little Saigon to the south.

Many people walk, bicycle, and take the bus along the corridor, but the design of the street prioritizes fast-moving drivers. There is a safety problem – two out of the five worst areas in the city for traffic injuries and fatalities are on Stockton Boulevard.

The City of Sacramento undertook a plan to understand community transportation needs and how safety and mobility could be strengthened for all users – in particular, those who are not in a car.

The result is a conceptual design for the layout of Stockton Boulevard based on community goals.



The plan area covers 4.2 miles from Alhambra Boulevard to 47th Avenue





# Stockton Boulevard Today

The plan area covers 4.2 miles from Alhambra Boulevard to 47th Avenue.

Stockton Boulevard is parallel to State Route 99. There is access to US 50 at the north end. Sacramento Regional Transit District's (SacRT) Gold Line light rail crosses Stockton at street level at 34th Avenue.

Stockton Boulevard varies along its length in many ways, so a context-sensitive approach was taken. This means the design considers land use, travel patterns, and qualities of the street. The corridor was divided into three segments:

## ☑ North (Alhambra Boulevard to Broadway)

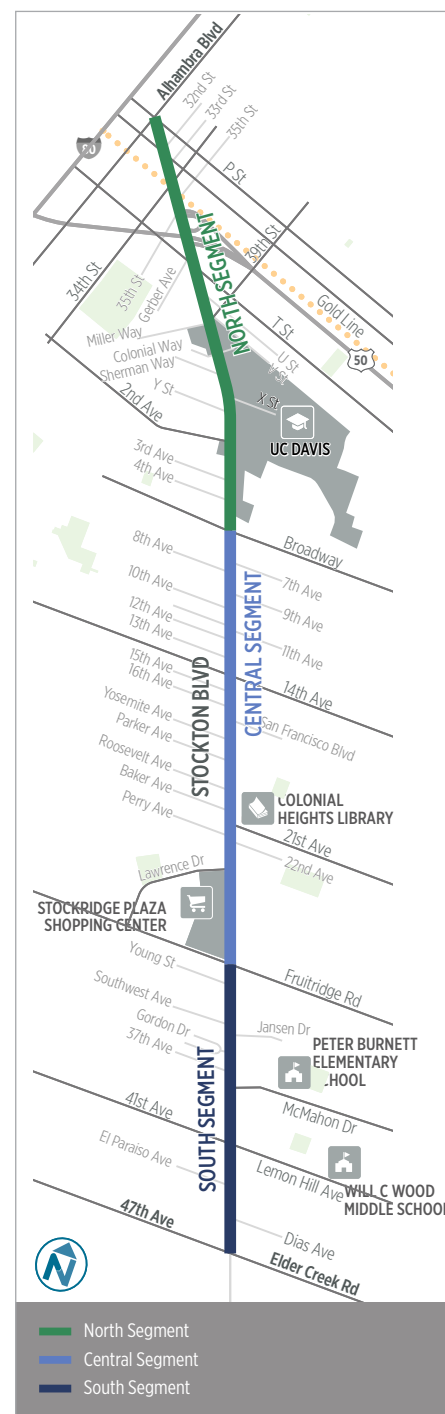
- Includes the eastern edge of the Midtown Association business district, the US 50 overpass, UC Davis, and a retail node at Broadway. Generally, the street feels comfortable for walking, with street trees and continuous sidewalks. But the area from 34th Avenue to US 50 is a major barrier, with high-speed highway ramps and missing sidewalks. There are no bike facilities. This portion is served by SacRT Route 38, which runs every half hour on weekdays.

## ☑ Central (Broadway to 21st Avenue)

- This segment has the feeling of an historic main street, with small-scale, street-fronting retail (including the Colonial Theater). Single-family housing with alley access is present along much of the east side. The sidewalk is narrow and has an inconsistent tree buffer. Bike lanes are present. SacRT's Route 51 runs every 12 minutes.

## ☑ South (21st Avenue to 47th Avenue)

- This segment feels loud and uncomfortable for walking or biking, with high traffic volumes and high-speed drivers. Land uses are generally big box or strip mall retail, with wide setbacks, many driveways, and large parking lots. Bike lanes are present. SacRT's Route 51 runs along this section.



## WANT TO LEARN MORE?

Detailed information about the corridor – bus ridership, sidewalk conditions, traffic counts, community input, and more – can be found in the [Existing Conditions Report](#) and [Appendices](#) at [www.stocktonblvd.org](http://www.stocktonblvd.org).



# Existing Street Configuration

Current typical street configuration is shown below:

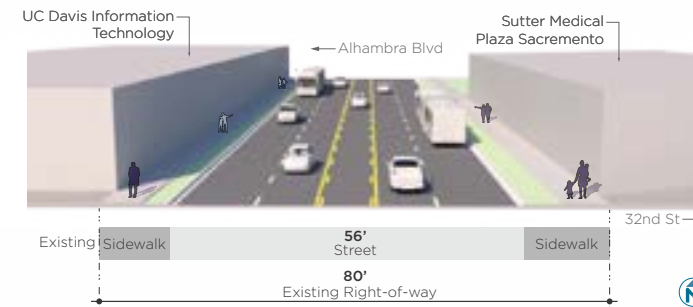
NORTH

CENTRAL

SOUTH

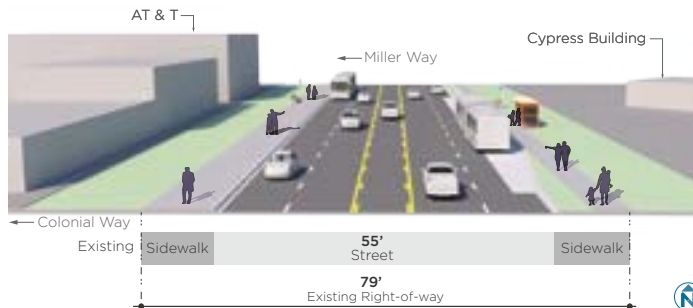
## Alhambra Blvd to 33rd Street

- Continuous Sidewalks
- No Bike Facilities
- No Service
- 5 Travel Lane



## T Street to 2nd Ave

- Continuous Sidewalks
- No Bike Facilities
- Route 38
- 5 Travel Lane



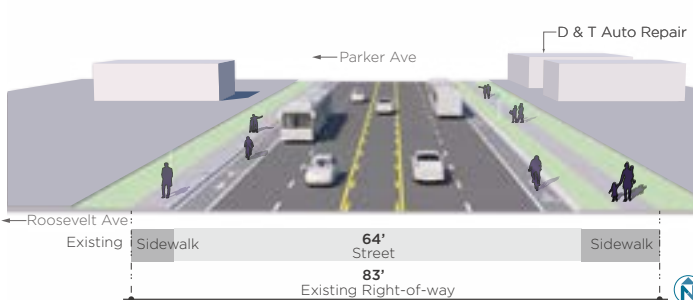
## 2nd Ave to Broadway

- Continuous Sidewalks
- No Bike Facilities
- Route 38
- 5 Travel Lane



## Broadway to 21st Ave

- Continuous Sidewalks
- Bike Facilities
- Route 51
- 5 Travel Lane



## 21st Ave to 47th Ave

- Continuous Sidewalks
- Bike Facilities
- Route 51
- 5 Travel Lane





# Community Listening

## COMMUNITY LISTENING GOALS

- ✓ Get input from people living, working, and going to school all along the corridor
- ✓ Go to the community in places they are already gathering
- ✓ Gather diverse input from the Spanish-speaking and Vietnamese communities by engaging with community partners, such as Asian Resources and La Familia

## ENGAGEMENT METHODS

Engagement happend in two phases:

- ✓ Summer 2019 – input on existing challenges and opportunities through surveys, pop-ups, and community presentations.
- ✓ Summer 2020 – input on design alternatives. Due to COVID-19, all engagement was conducted virtually. Extra efforts to publicize outreach helped the team gather 2,000 responses to the design alternatives survey!

Engagement methods used in this project included:

- ✓ Online surveys, included translated surveys in Spanish and Vietnamese
- ✓ Transit rider surveys on board Route 51
- ✓ Pop-ups at community gathering places (South Sacramento Christian Center, George Sims Community Center, Junior Giants Little League game, Colonial Heights Library, Oak Park Farmer’s Market, Mutual Housing Lemon Hill)
- ✓ Presentations at regularly scheduled community events (Veterans of Foreign Wars, Stockton Boulevard Partnership, Neighborhood Associations)
- ✓ Phone interviews with stakeholders (including Caltrans, business owners, Police Department, school district)
- ✓ Informal focus groups with the Vietnamese community administered by Asian Resources
- ✓ Virtual town hall
- ✓ Flyers placed in free fruit and vegetable boxes distributed during the pandemic



14  
pop-ups and community presentations



2,479  
survey responses




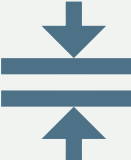
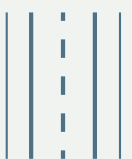

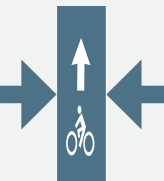

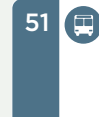



292  
bus riders contributed





## TOP COMMUNITY TRANSPORTATION ISSUES

01 High-speed traffic 	02 Turning drivers do not yield to pedestrians 
03 Long distance between crosswalks 	04 Narrow sidewalks 
05 No buffer between sidewalk and traffic 	06 Frequent driveways challenging for walking and driving 
07 Skinny bike lanes 	08 No bike lanes north of Broadway 
09 Limited transit amenities (shelter, seating) 	10 Poor lighting 

## ADDITIONAL HIGH PRIORITY ISSUES

Several common concerns voiced were outside the focus of this plan, but could be tackled in the Stockton Boulevard Specific Plan.

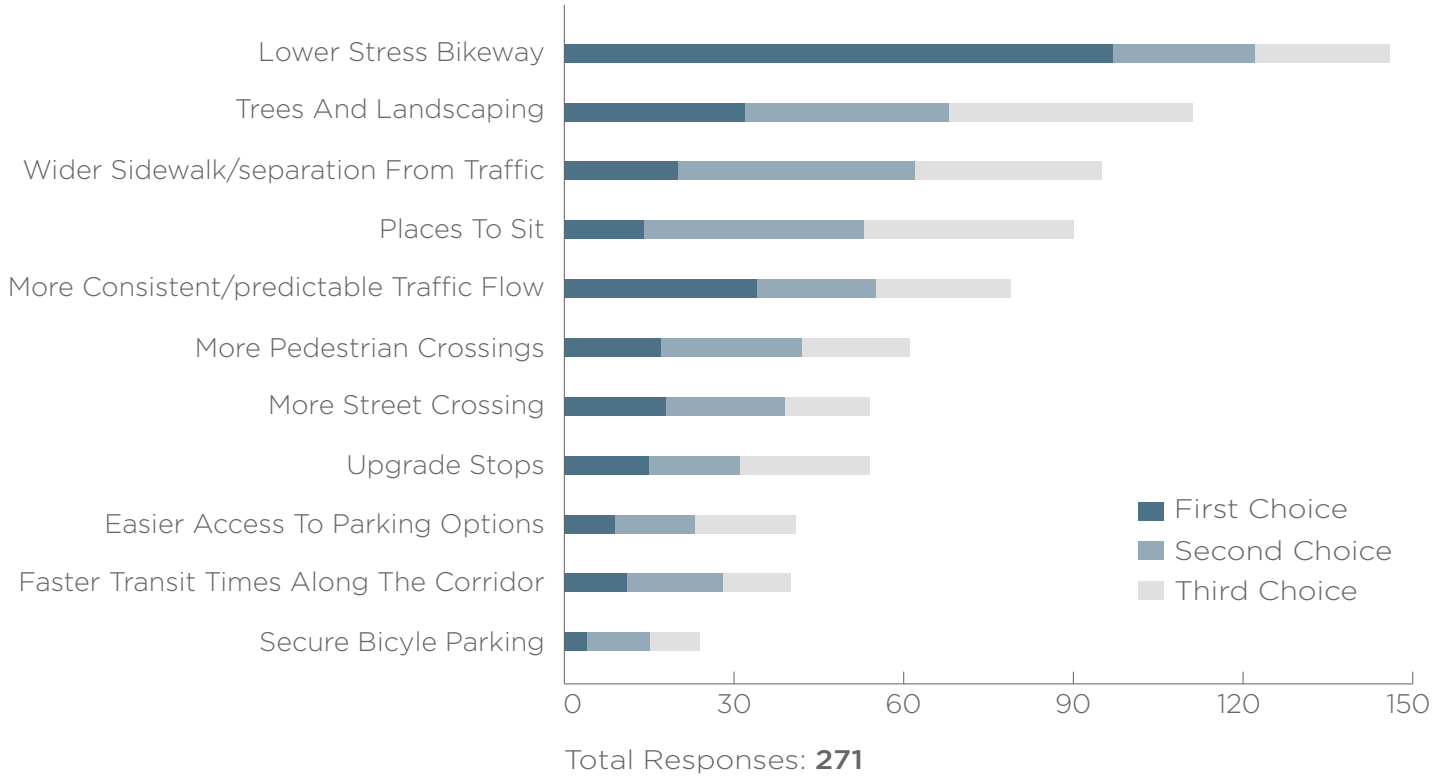
- ✓ There’s no “there” there
- ✓ Personal safety concerns
- ✓ Litter and lack of maintenance
- ✓ No family-oriented land uses
- ✓ Vacant parcels



# Community Priorities

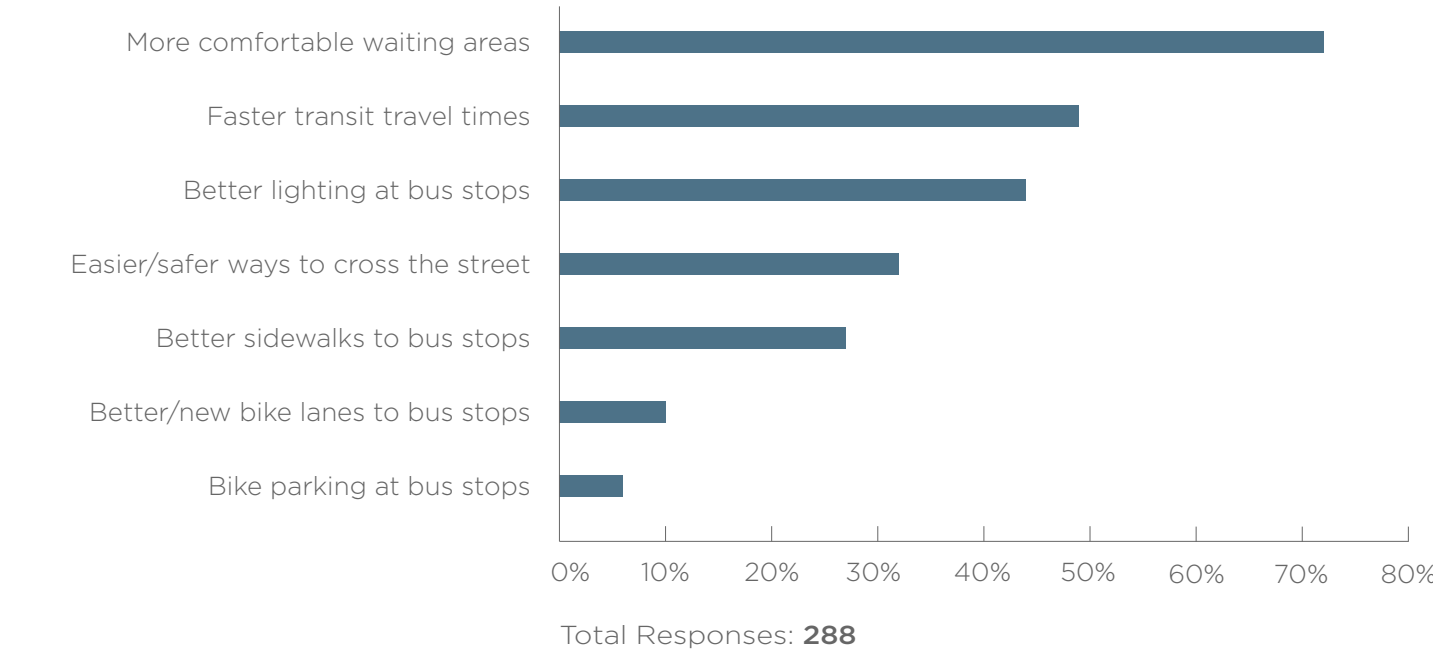
## TOP TRANSPORTATION PRIORITIES

The graphic below shows results of a survey question asking people to rank the top three things that would make Stockton Boulevard better.



## BUS RIDER PRIORITIES

A survey of bus riders showed that better waiting areas was a top priority.



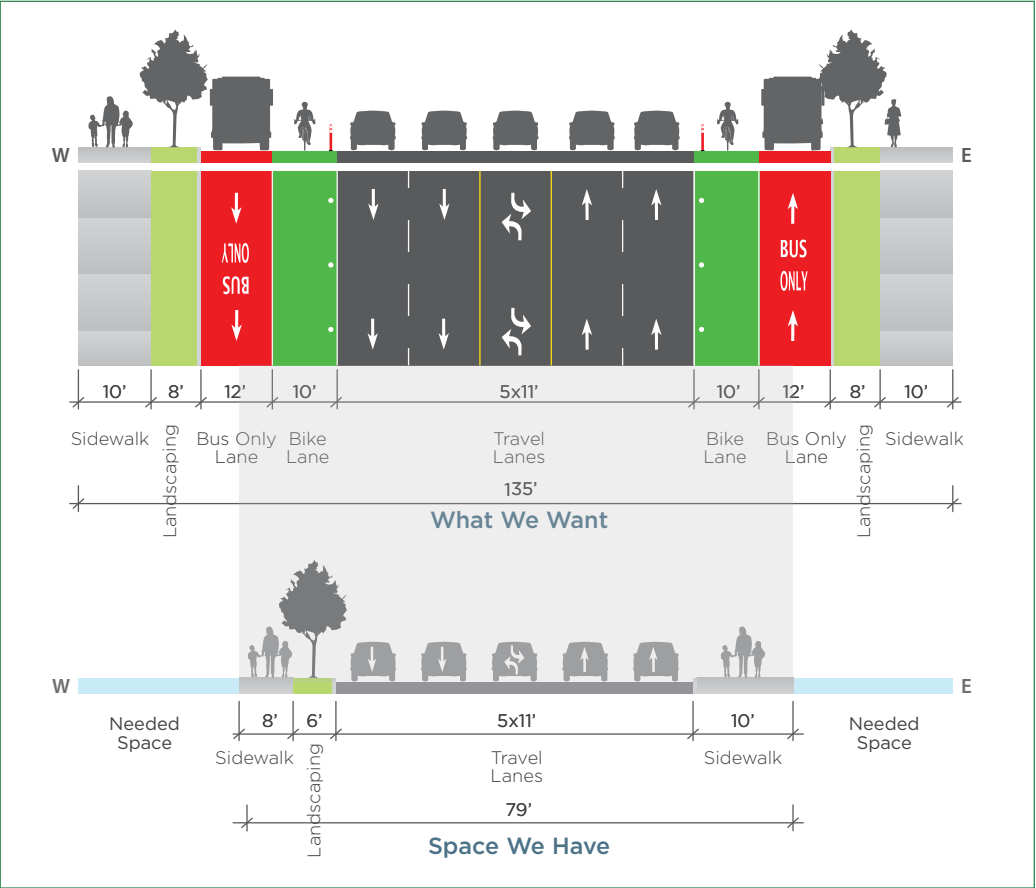
# Our Challenge

Ideas voiced by the community included a desire for low-stress bike facilities (meaning there would be a separator between bikes and car traffic), more trees, wider sidewalks, faster bus travel times, more comfortable bus stops, and maintaining the current five driving lanes.

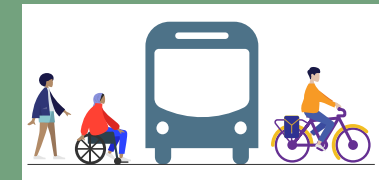
There is not enough space to construct all these desires, and the City does not view widening Stockton Boulevard as a viable option. The design had to make tradeoffs to put forth the option that best met project goals within existing roadway space.

WHAT WE WANT

SPACE WE HAVE



## Creating the CONCEPT DESIGN



The final design weighed a series of tradeoffs and decision factors.

- ✓ **Community input** – Balancing ideas brought forth with available space
- ✓ **Safety** – Developing the design to improve safety
- ✓ **Traffic impacts** – Using traffic modeling to make sure the design does not cause major delays to drivers
- ✓ **Cost** – Calibrating costs to be comparable to other corridors in Sacramento
- ✓ **Parallel efforts** – Find opportunities to integrate and implement portions of this design into other city projects or property development



# THE VISION FOR STOCKTON BOULEVARD

This is a summary of how the design meets community goals for the whole corridor (pages 10-17). Additional detail on each vision element can be found on pages 18-31.



## SAFETY



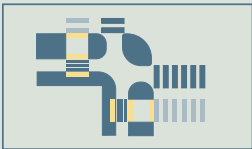
01 **MORE PEDESTRIAN CROSSINGS**  
Add **15 new crossings** and reduce average spacing from **930'** today to **580'**



02 **SIGNALIZED CROSSINGS**  
Add pedestrian signals at **3 existing** unsignalized locations and all **15 new crossings**. Includes **4 new full signals** controlling movement for all users (drivers, pedestrians, bicyclists).



03 **BETTER YIELDING TO PEDESTRIANS**  
Add Leading Pedestrian Interval and no right turn on red at **5 major intersections**



04 **PROTECTED INTERSECTIONS**  
Make it safer to navigate major intersections on a bicycle at **4 major intersections**

## MOBILITY



01 **CONTINUOUS BIKE FACILITIES**  
**Build 1.4 miles of new bike facilities** in both directions, and **upgrade 2.7 miles** of existing bike lanes by providing more separation from traffic.  
  
Bike facilities will include **2.4 miles of shared-use paths** - giving people a more pleasant place to walk as well as bike.



02 **FASTER TRANSIT**  
**1.1 miles of bus-bike lanes** provide mobility for bus riders and bicyclists



03 **MORE RELIABLE VEHICLE OPERATIONS**  
Design that is easy to navigate and reduced delay at **3 major intersections** - T Street, US 50, and 14th Avenue

## COMMUNITY



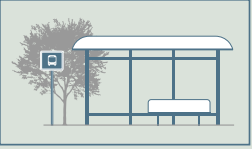
01 **STRENGTHENING PLACES**  
Focus investment around **14** existing and future activity nodes



02 **NEW COMMUNITY SPACES**  
Repurpose some roadway space for plazas or gathering places in **2 locations**



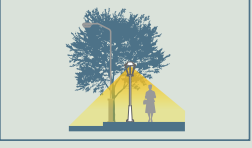
03 **MORE LANDSCAPING**  
**Add 0.7 miles of trees** on both sides from 21st Avenue to 47th Avenue



04 **MORE COMFORTABLE TRANSIT**  
Add shelters and seating at **23 bus stops**



05 **MAINTAINING ACCESS**  
Support local destinations by adding U-turn opportunities at **5 locations**



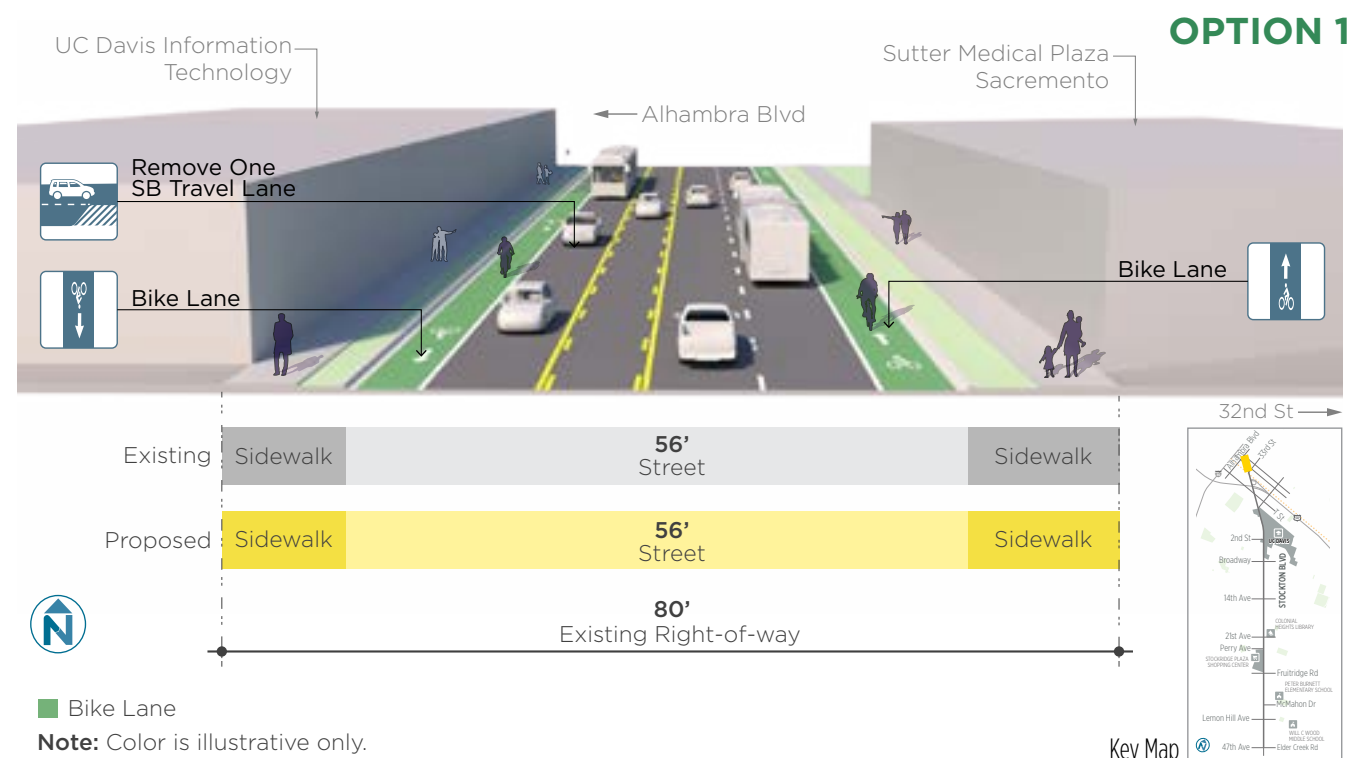
06 **PEDESTRIAN-SCALE LIGHTING**  
**Add 3 linear miles of lighting** that illuminate sidewalks, crosswalks, and bus stops

## 01 North Alhambra Blvd to 33rd Street

There is strong support for two design options from Alhambra Boulevard to 33rd Street.

1. **Option 1:** Adds standard striped bicycle lanes by converting one southbound vehicle lane.
2. **Option 2:** Adds buffered bicycle lanes by converting one southbound and one northbound vehicle lane. Bicycle facilities with buffers may attract more users.

Resident and business priorities must be balanced with safety concerns. Northbound traffic could spill back onto the light rail crossing at 34th Street. Further coordination and analysis is needed to determine which option to move forward.



### SAFETY



- Add signalized pedestrian crossing at 32nd Street

### MOBILITY



- Add bicycle lanes

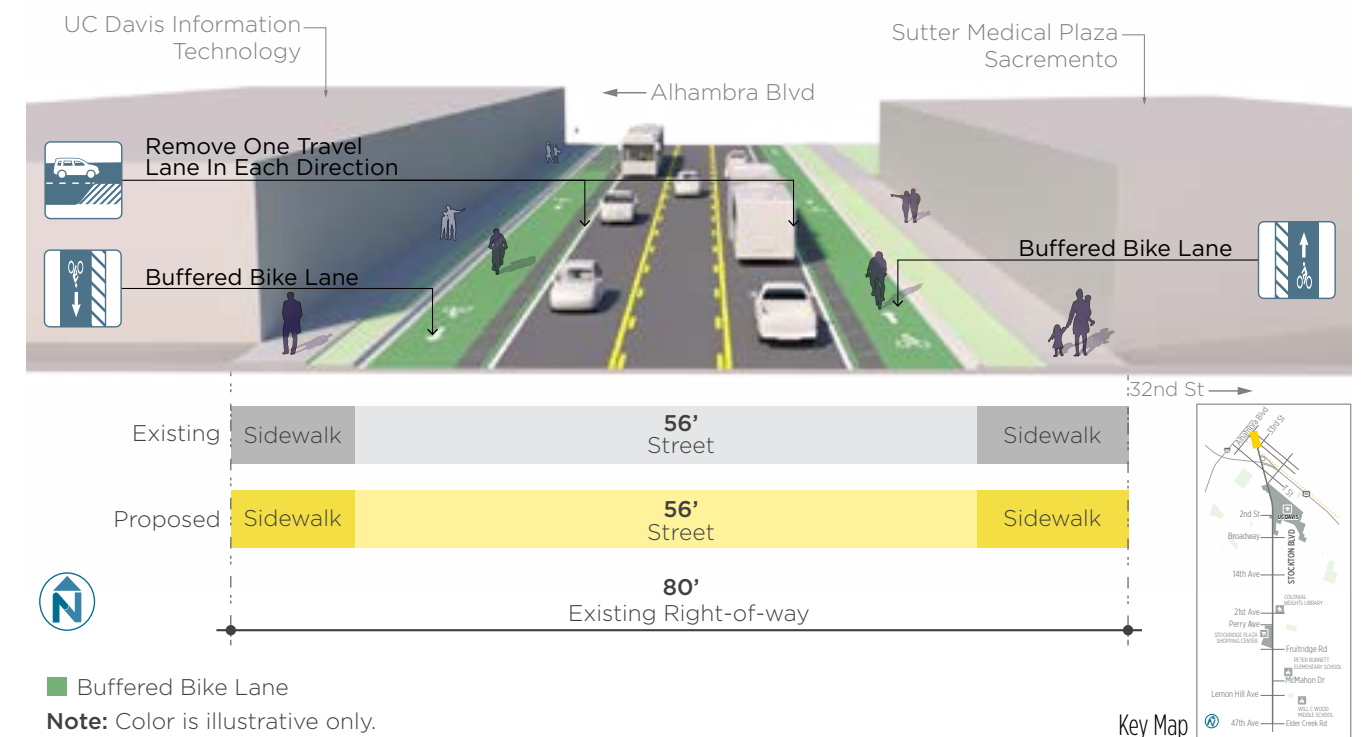
### COMMUNITY



- Potential for landscaped median in collaboration with Midtown Association

## 01 North Alhambra Blvd to 33rd Street

### OPTION 2



### SAFETY



- Add signalized pedestrian crossing at 32nd Street

### MOBILITY



- Add buffered bicycle lanes

### COMMUNITY

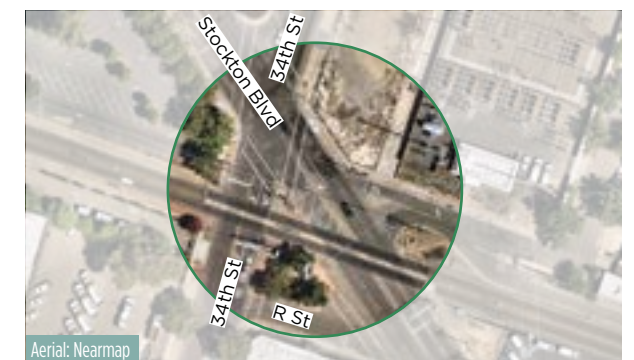


- Potential for landscaped median in collaboration with Midtown Association

### UNIQUE CHALLENGE

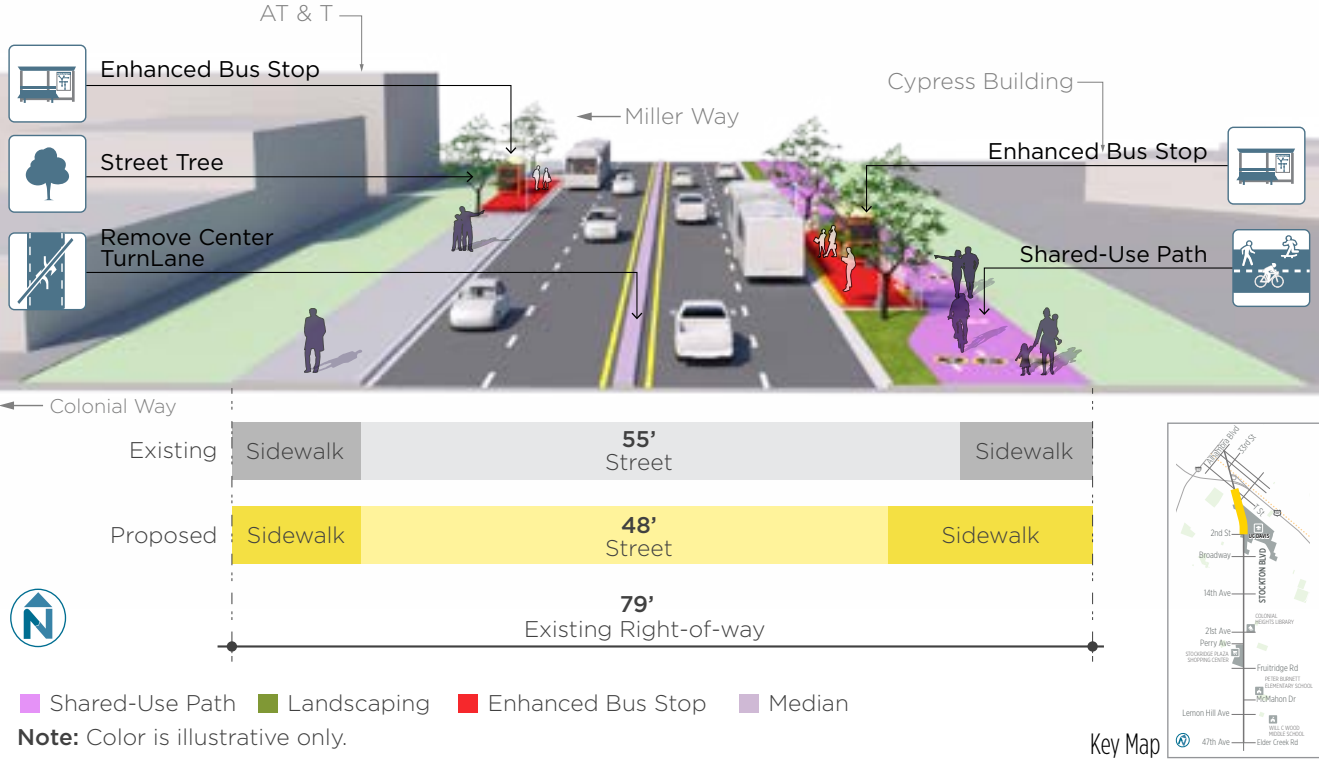
The intersection of **34th Street, R Street, and the SacRT Gold Line crossing** is hard to navigate for all users. It has complex movements for drivers, missing sidewalks, and no bike lanes.

Changes to this intersection require multi-agency collaboration beyond this scope of this plan.





02 North  
T Street to 2nd Avenue



SAFETY



- Enforce better yielding to pedestrians by adding Leading Pedestrian Interval with right turn on red restriction at T Street

MOBILITY



- Add shared-use path (bi-directional for walking and bicycling) on east side
- Preserve all existing travel lanes

COMMUNITY



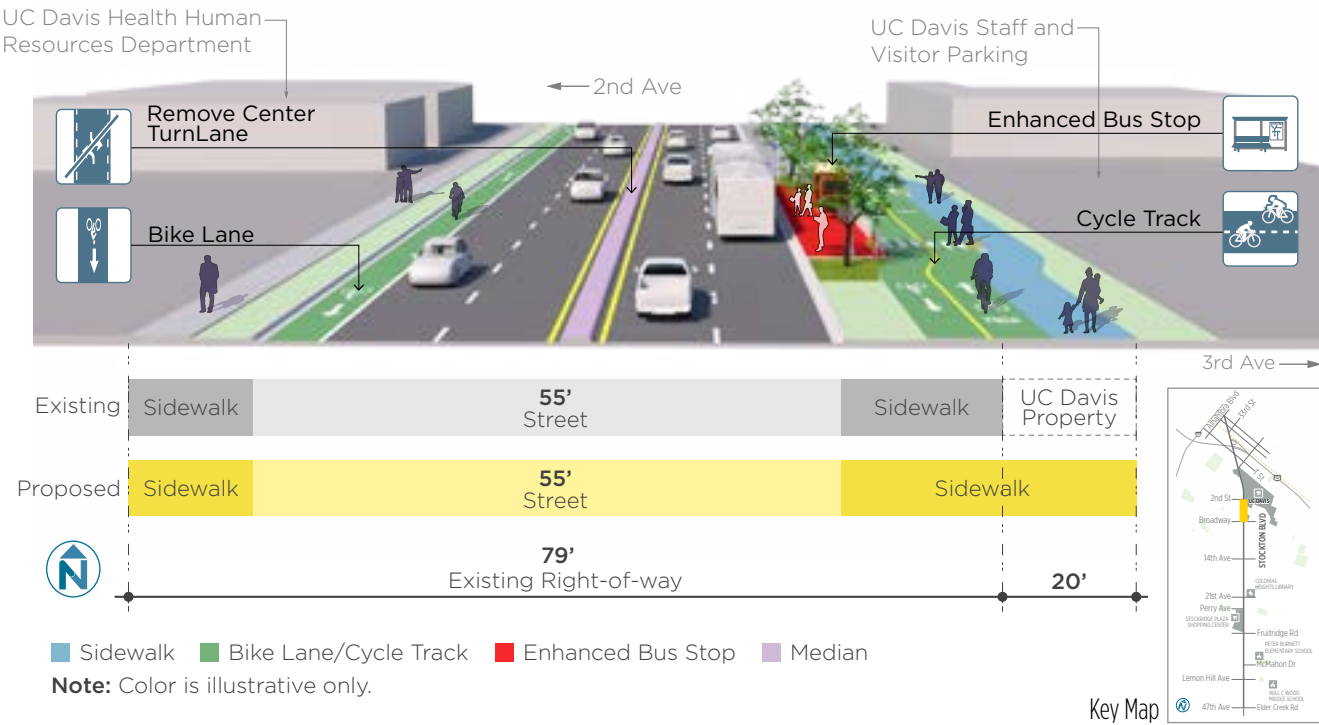
- Preserve most of the existing trees
- Add bus shelters at Colonial Way, X Street, 2nd Avenue
- Add pedestrian-scale lighting along east side
- Add U-turn opportunities at 39th Street, X Street, 2nd Avenue

UNIQUE CHALLENGE

**Stockton Boulevard at T Street** has many complexities. The angle of the streets causes visibility issues and high-speed driver turns. T Street is a major bike route but this location is a high-stress point. Waiting at the traffic signal can take a long time because access from Gerber Avenue is included as its own signal phase.



03 North  
2nd Avenue to Broadway



SAFETY



- Add signalized pedestrian crossings at 3rd Avenue and 4th Avenue

MOBILITY



- Add cycle track (bi-directional, for use by bicyclists) and sidewalk on east side
- Add bike lane southbound on west side for confident riders
- Preserve all existing vehicle travel lanes

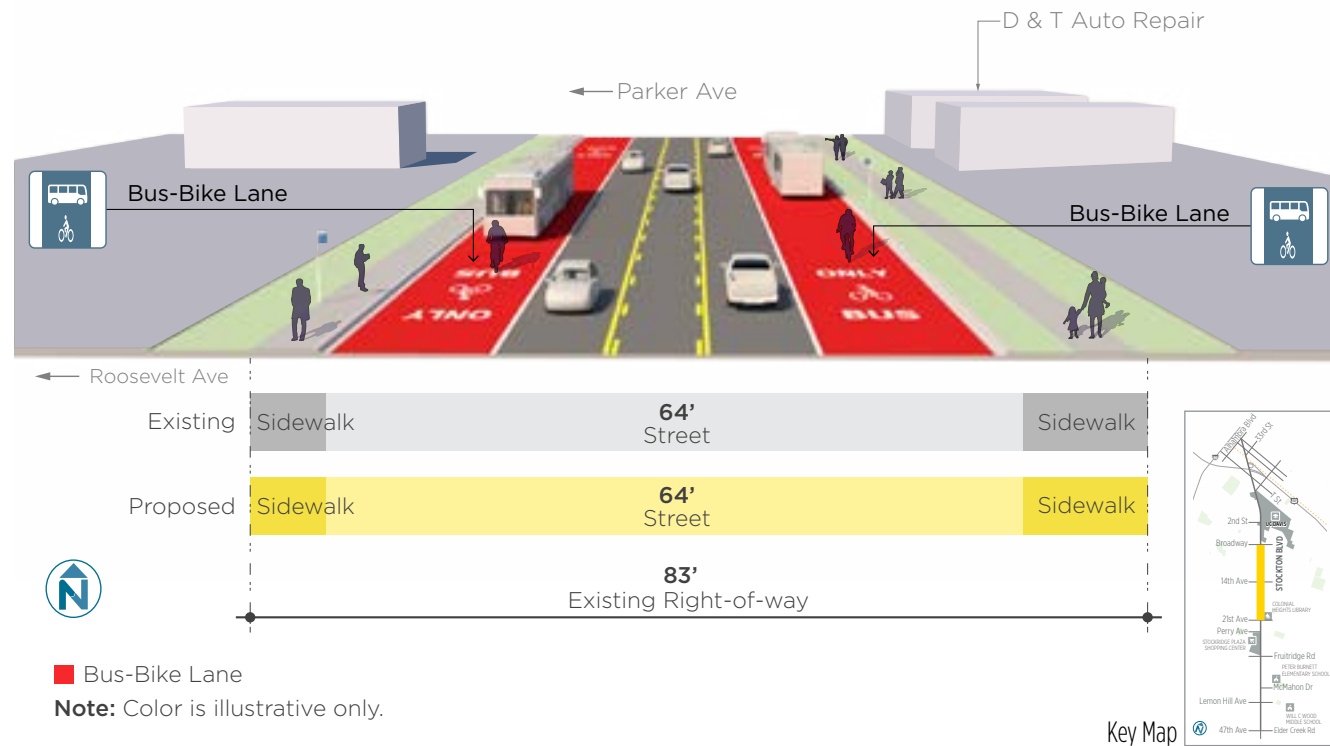
COMMUNITY



- Add bus shelter at 3rd Avenue southbound
- Preserve most of the existing trees

## 04 Central

### Broadway to 21st Avenue



#### SAFETY



- Add signalized pedestrian crossings at 17th Avenue/San Francisco Boulevard, Parker Avenue, and Roosevelt Avenue
- Upgrade crossings from 7th Avenue to 13th Avenue per Vision Zero Top 5 study, including new crossing at 9th Avenue
- Add protected intersections for bicyclists at Broadway and 21st Avenue
- Bus-bike lane provides a buffer between people walking and general car traffic

#### MOBILITY



- Add bus-bike lanes to increase bus travel time reliability
- Significantly widens existing bike lanes to bus-bike lanes
- Bus-bike lanes can be used by emergency vehicles
- Reduce delay for drivers by making 14th Avenue a two-phase signal

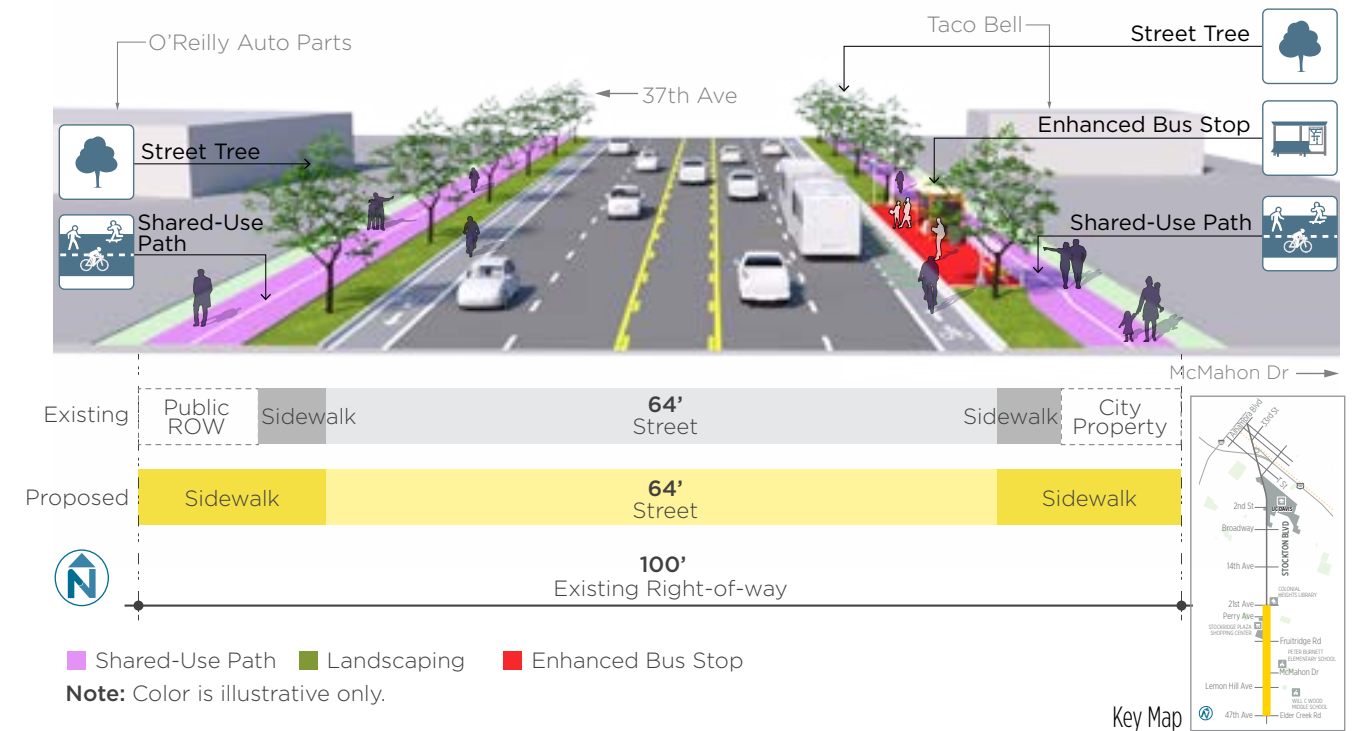
#### COMMUNITY



- Add bus shelters at 8th Avenue, 11th Avenue, and Roosevelt Avenue

## 05 South

### 21st Avenue to 47th Avenue



#### SAFETY



- Add signalized pedestrian crossings at 8 locations
- Enforce better yielding to pedestrians by adding Leading Pedestrian Interval with right turn on red restriction at Fruitridge Road, McMahon Drive, Lemon Hill Avenue, and 47th Avenue
- Add protected intersections for bicyclists at Lemon Hill Drive and 47th Avenue

#### MOBILITY



- Add shared-use path (bi-directional for walking and bicycling) on both sides
- Preserve all existing vehicle travel lanes and turn lane

#### COMMUNITY



- Add eight bus shelters at all stops without a shelter today
- Add trees on both sides
- Add pedestrian-scale lighting on both sides



## 02

## A BETTER CORRIDOR

The design addresses issues heard throughout the entire corridor. Pages 18 to 31 illustrate planned improvements applied to the entirety of Stockton Boulevard.

## Land and Development Patterns

Transportation needs are directly tied to land uses – both present and future patterns. This plan focuses on transportation, but thinking about the land uses along Stockton Boulevard and where energy exists along the corridor can help target investment. Changes in areas along the corridor with lots of residents or destinations can benefit the most people.

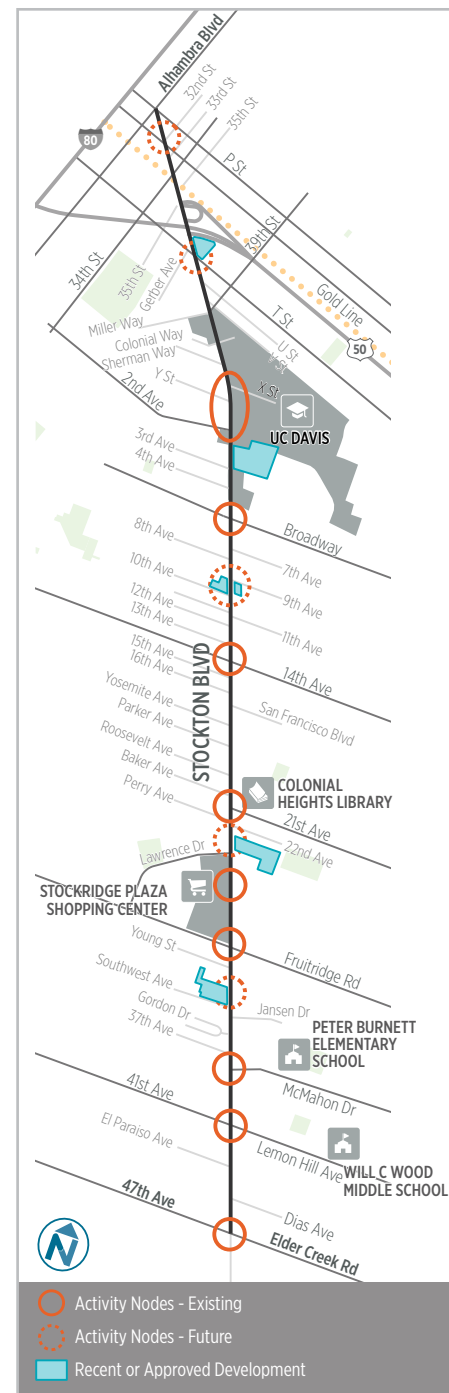
### ACTIVITY NODES

☑ Current activity nodes include:

- Community destinations (UC Davis, Colonial Heights Library)
- School access routes
- Shopping centers

☑ Future activity nodes are places where many people may live, work or shop in the future. These include:

- Recent developments (The Gio at T Street)
- Approved developments

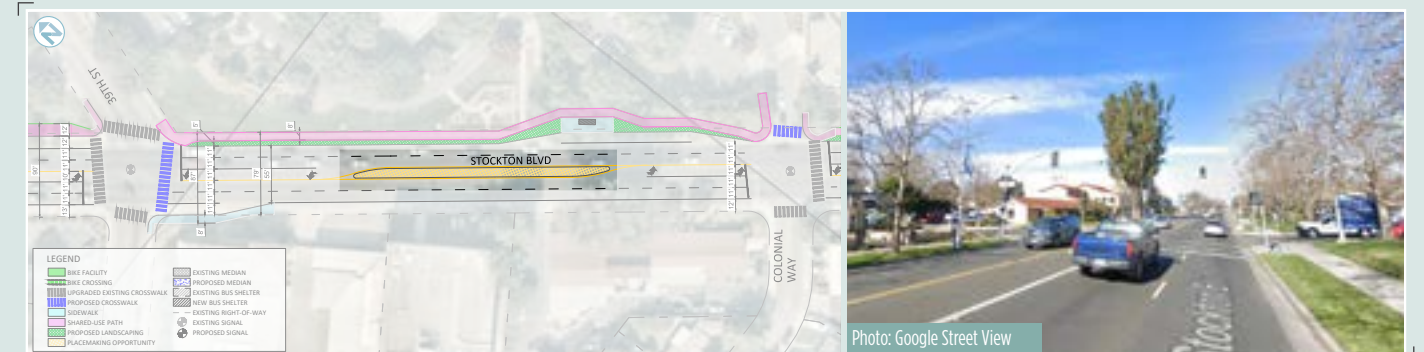


## NEW COMMUNITY SPACES

Streets can be places to dwell and gather, not just pass through. Streets can be places for art, community symbols and events. Three locations near activity nodes were identified to explore re-allocation of roadway space for community use.

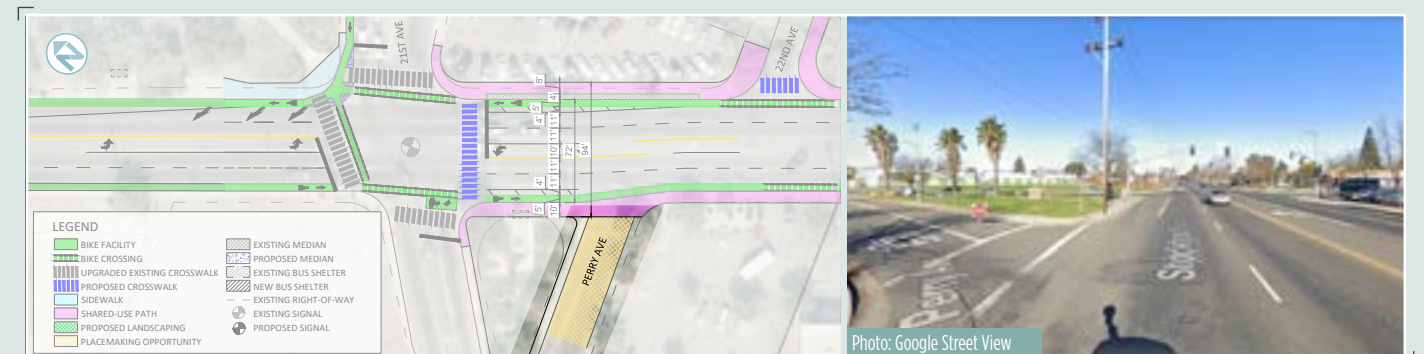
### 39th Street to Colonial Way

Between left turn pockets at 39th Street and Colonial Way, space exists in the median to add a gateway treatment. Gateways could be art or signage welcoming people to the neighborhood.



### Perry Avenue

The intersection of 21st Avenue has one leg on the west side that is likely little used (further traffic analysis would be needed). There is opportunity to close this leg and turn it into a community space.



# More Pedestrian Crossings

## CURRENT CHALLENGES

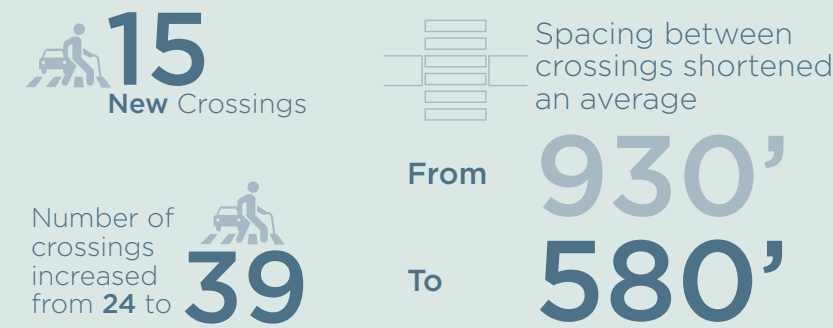
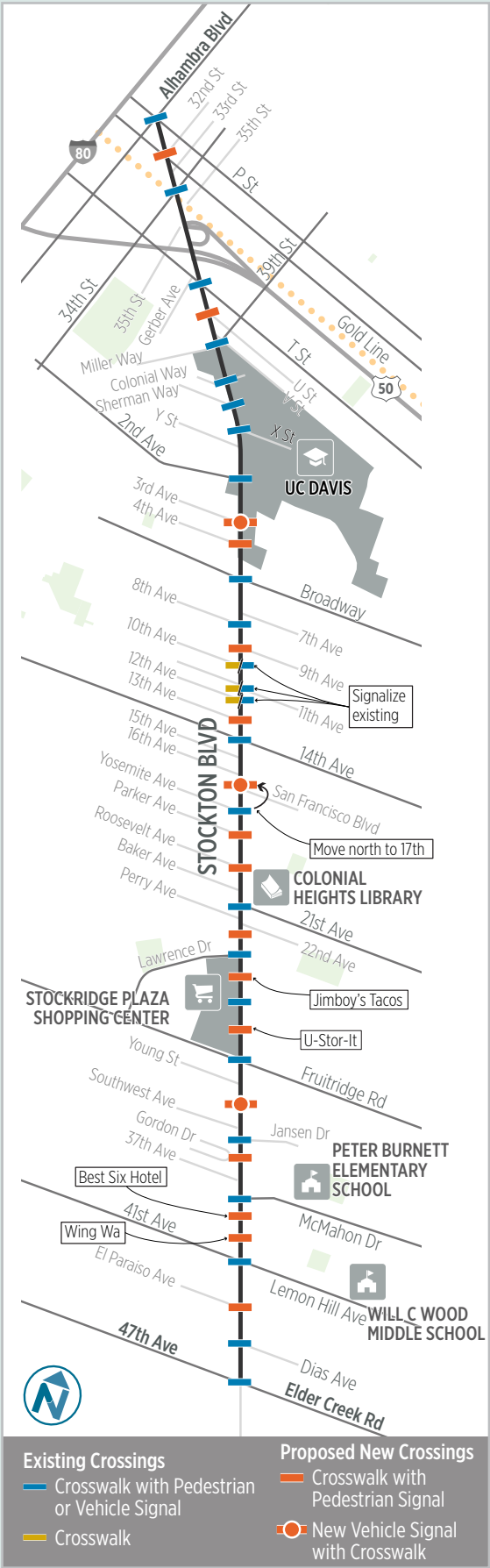
- ❑ Insufficient marked crosswalks. 24 marked crossings (meaning there is a striped crosswalk) in 4 miles does not accommodate pedestrians
- ❑ 930’ average spacing between marked crossings
- ❑ There are nine stretches where crossings are more than 1,000 feet apart – that is nearly a five-minute walk just to get to a striped crosswalk

## COMMUNITY INPUT

- “
- Lack of crossing opportunities.”
  - “Limited safe crossings.”
  - “Not enough places to cross Stockton Blvd between Broadway and 11th Ave.”
  - “Once off the bus the option is to jaywalk or walk all the way to a cross walk and then back to the residential street that you need to walk down”

## PLANNED IMPROVEMENTS

- ❑ Add crossing locations based on:
  - Community input
  - Vision Zero recommendations
  - City spacing standard
  - Presence of bus stop
  - Safety history
  - Demand (school, retail hub, etc.)
  - Future development



# Enhanced Crossings

The width, traffic speeds, and traffic volumes of Stockton Boulevard mean all new crossings must be enhanced with a signal.

The design also adds a signal at three existing crosswalks that do not have protection – at 10th, 11th, and 12th Avenues.



This crosswalk at 11th Avenue serves bus stops and needs signalization to improve safety

## PEDESTRIAN SIGNAL TYPES

A **signalized intersection** for pedestrian crossings, like this one between 9th and 10th Avenues, use a standard red-yellow-green signal for drivers and are the preferred signal type.

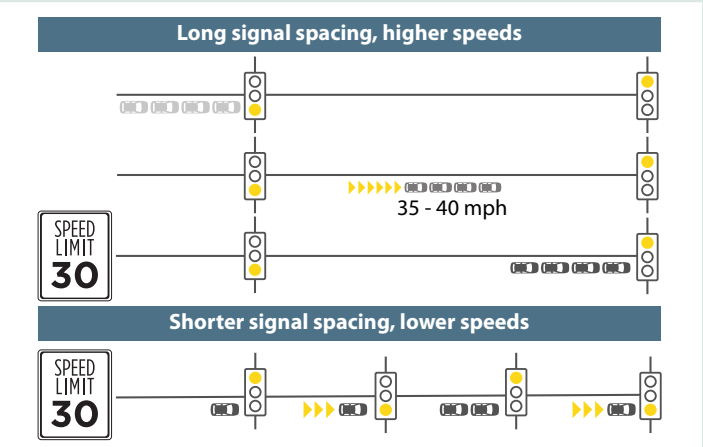


**Pedestrian Hybrid Beacons** are dark until activated by a push button. They cycle through a flashing yellow, all-red, and flashing red phase to allow a person to cross the street.



## HOW SIGNALS CAN REDUCE SPEEDING

Speeding was cited as a problem by all road users, and adding signals was proposed as a solution, even by drivers. Long signal spacing leads to drivers speeding between signals. Shorter spacing gives more opportunities to cross the street but also can reduce speeding while having little to no impact on total travel times.





# Better Yielding to Pedestrians

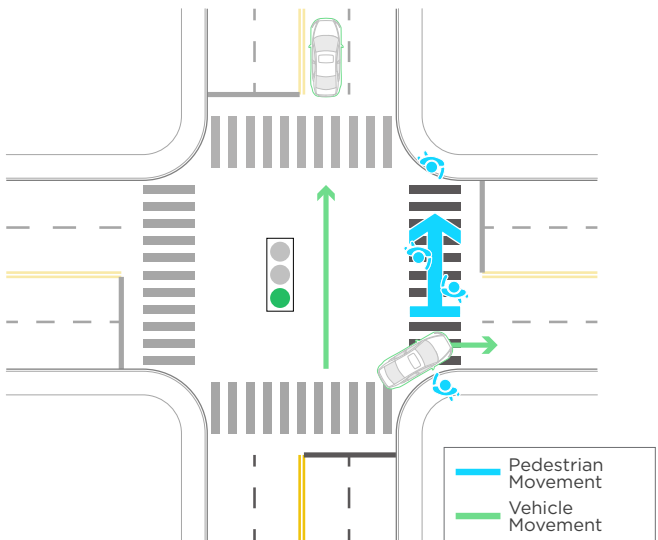
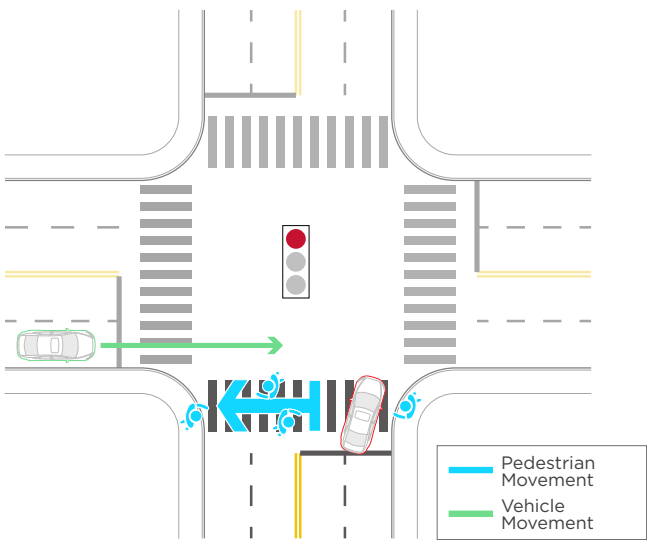
People walking reported that drivers do not yield when turning right. The problem was particularly bad at Broadway.



- “
- When the walk sign is on, drivers turning do not yield to pedestrians.”
  - “As a pedestrian, I have to watch out for the traffic turning right onto Broadway as they do not always stop and look for people in the crosswalk.”
  - “Traffic that turns from Broadway on the right [to NB Stockton Boulevard] is unsafe for pedestrians.”
  - “Seniors coming from Greenfair [on Broadway east of Stockton Boulevard] have a hard time making it across the street during the walk signal.”

## CURRENT PROBLEM

- 01 Drivers trying to turn right on red drive into the crosswalk while looking left for a gap in traffic, blocking people trying to cross the street.
- 02 When the light turns green, drivers turning right whip around the corner, cutting off people trying to cross.



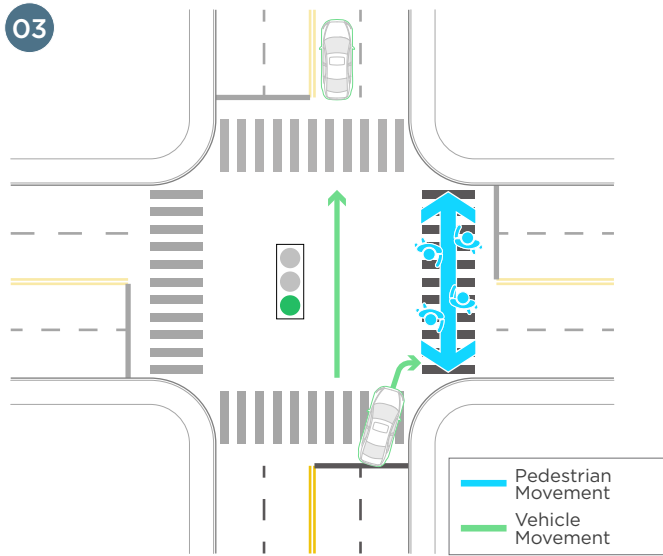
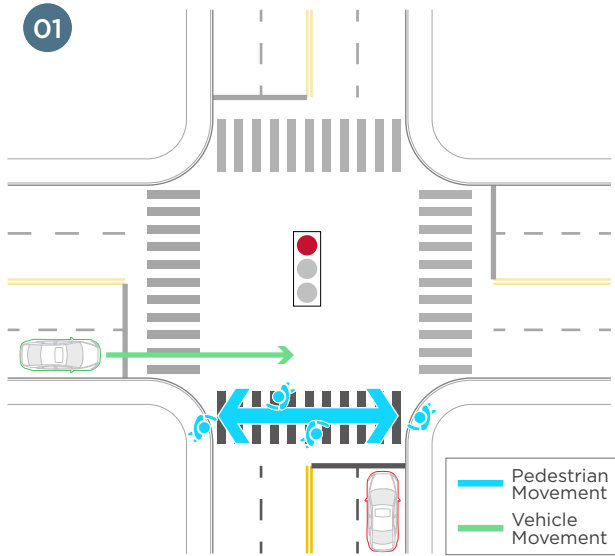
## PLANNED IMPROVEMENTS

Leading Pedestrian Interval and no right turn on red allowed:

- Restricting right turn on red through signage helps keep crosswalks clear and supports Leading Pedestrian Interval. Right turns are already restricted from T Street to Stockton Boulevard.
- Leading Pedestrian Interval (LPI) provides a “head start” for people walking. The WALK sign goes on 3-4 seconds before the driver green signal. This allows people walking to establish themselves in the intersection.
- Leading Pedestrian Interval combined with no right turn on red is proposed at T Street, Fruitridge Road, McMahon Drive, Lemon Hill Avenue, and 47th Avenue.

### HOW IT WORKS: LEADING PEDESTRIAN INTERVAL (LPI) AND NO RIGHT TURN ON RED

- 01 When drivers cannot turn right on red, the crosswalk is kept clear for people walking.
- 02 A Leading Pedestrian Interval means the WALK sign goes on before drivers get the green light.
- 03 This lets people walking get a head start to visually enforce that drivers must yield to pedestrians.



## ADDITIONAL MEASURES

- These planned improvements do not address the problem of drivers not yielding once the WALK signal has been on for several seconds. Designs at specific locations cited as dangerous - including T Street, Broadway, and Fruitridge Road, are shown in the Enhancing Places section.

# Continuous Bike Facilities



— All of Stockton is unsafe for cyclists. Neighbors want to bike with their families, but there's not enough space on the road, people don't pay attention to bike lanes, and everyone drives too fast."

The design includes a continuous bike facility, but that facility type varies due to land use context, balancing mobility needs for all users, and development opportunities. Recommended bike facilities are described below.

## SHARED-USE PATH

A shared-use path is used by people walking and bicycling. Standards based on Caltrans and the City include a 5' buffer between the driving lane and path, an 8-12' path for bi-directional travel, and a 2' shoulder next to the path. At intersections, the path will run along the curb and users will cross with the pedestrian WALK signal.

### Applicable areas:

- ☑ T Street to 2nd Avenue
- ☑ 21st Avenue to 47th Avenue

## CYCLE TRACK + SIDEWALK

A cycle track is used only by bicyclists. It measures 11' wide and is marked down the center to clarify which direction users should travel. There is a sidewalk next to the cycle track for walking.

### Applicable areas:

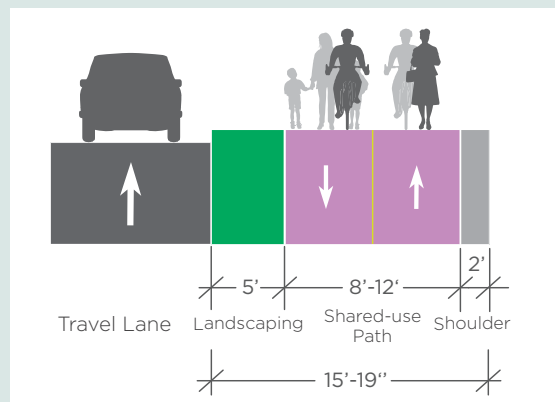
- ☑ 2nd Avenue to just north of Broadway. This would be built in tandem with the Aggie Square development.

## BUS-BIKE LANES

Bus-bike lanes are shared by bicyclists and buses and may not be comfortable for novice riders. Route 51 runs every 12 minutes, meaning a typical bicyclist may not encounter many buses. The lanes are 15-17' wide to provide passing space. There is opportunity to add a vertical separator like a bollard. Other cities with bus-bike lanes allow emergency vehicles to use them.

### Applicable area:

- ☑ Broadway to 21st Avenue



Shared-use path dimension standards from Caltrans and Sacramento



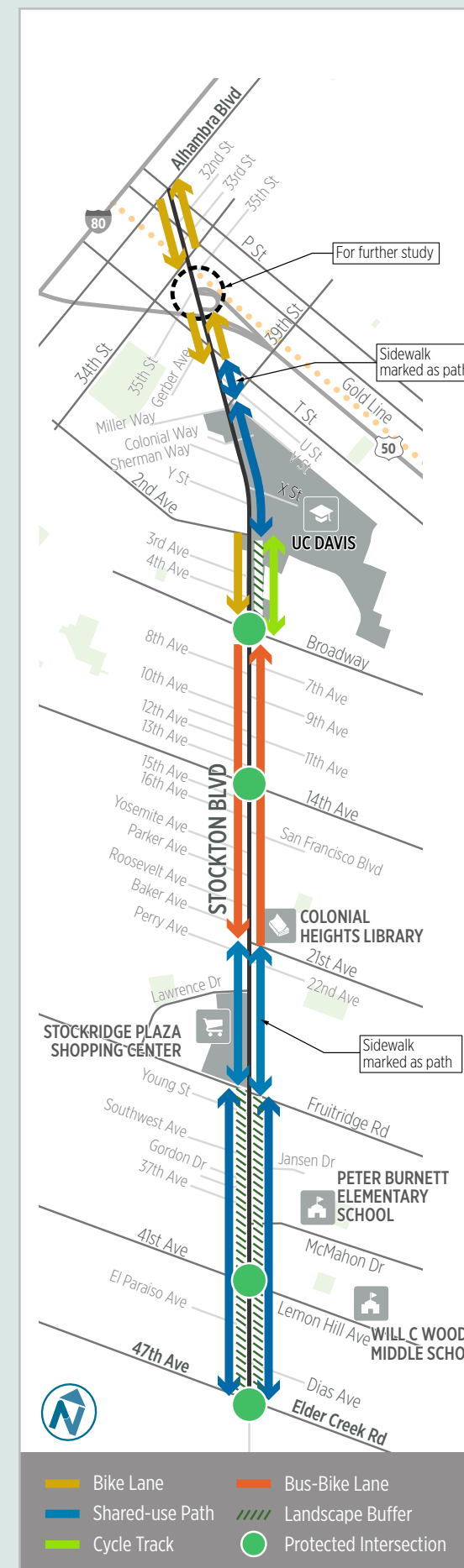
Natomas Boulevard shared-use path users cross with the WALK signal



Cycle track next to sidewalk in Portland, OR



Bus-bike lane shared space in Portland, OR



# Protected Intersections

Protected intersections keep bicyclists and pedestrians physically separate from drivers. Features include:

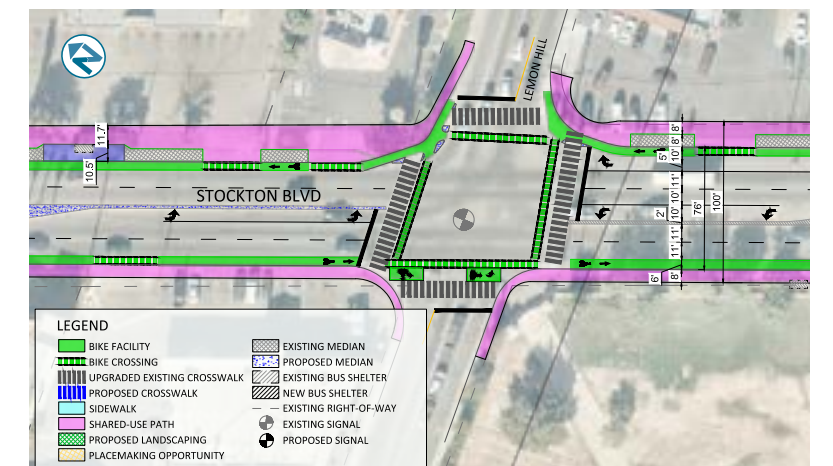
- ☑ **Visibility** – the setback between bike lane and driving lane means the bicyclist is more visible to a turning driver compared to a typical intersection
- ☑ **Separation** – corner islands reduce the speed of turning drivers and create a bicyclist waiting area
- ☑ **Shorter crossings** – people walking benefit as well, from a shorter crossing due to a more compact intersection

## APPLICATION TO STOCKTON BLVD

The design includes partially or fully protected intersections at Broadway, 21st Avenue, and 47th Avenue, which have east-west bike facilities. A partially protected intersection was also included at Lemon Hill Avenue to support access by bike to Will C. Wood Middle School. Some corners at these intersections are still exposed to traffic.



Protected intersection in Lincoln, Nebraska





# Faster Transit

“ Rt 51 has [the] highest ridership for a reason. Design Stockton for the transit-using community already there.”

People want to be on time. Reliable buses that stick to the schedule benefit riders and can also attract new users.

Analysis of Route 51 travel times during the afternoon rush hour showed that the bus can be more than 3 minutes behind schedule at Broadway, Fruitridge, and Florin Town Centre. These minutes add up and can result in missing a transfer.

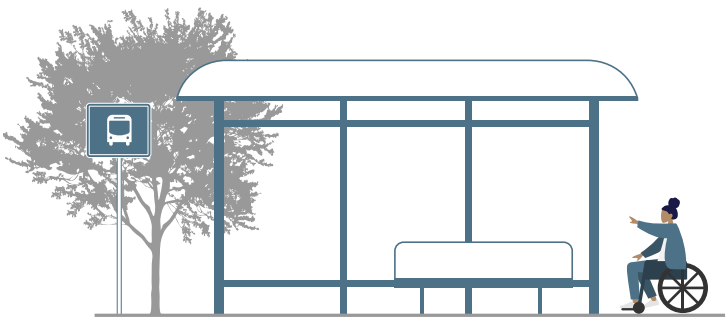
Bus-bike lanes have been built in cities like Boston and Portland and achieve two main things:

- ✓ Make buses more reliable by giving buses dedicated space.
- ✓ Separate bicyclists from general driving traffic. Bicyclists report they feel more comfortable sharing a lane with a trained bus driver.

The design adds bus-bike lanes from Broadway to 21st Avenue.

# More Comfortable Transit

The top priority for bus riders is more comfortable waiting areas.



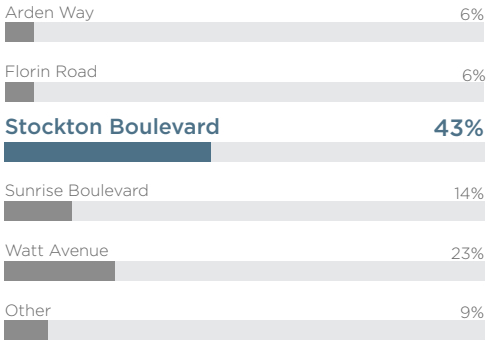
TODAY  
42 BUS STOPS  
14 SHELTERS



PROPOSED  
23 ADDED BUS SHELTERS



Public Outreach for SacRT’s High Capacity Transit project showed a lot of interest in bus lanes on **Stockton Boulevard**



Bus-bike lane in Portland, OR lets the bus bypass traffic

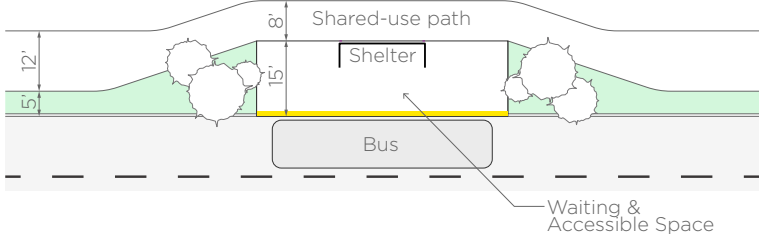
# CONSIDERATIONS

Sidewalks along Stockton Boulevard are narrow. And in places with proposed paths, the paths are routed behind bus shelters so people walking and biking are not traveling through the bus stop area. This means that in many cases, adding bus shelters with accessible boarding areas requires an easement.

There are a few different ways the bus stop and path could be laid out to reduce the need for easements, if easements pose a particular challenge at a location.

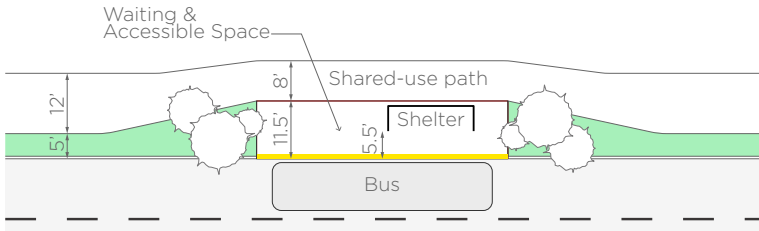
## Option 1

Path behind shelter, accessible space and waiting space in front of shelter



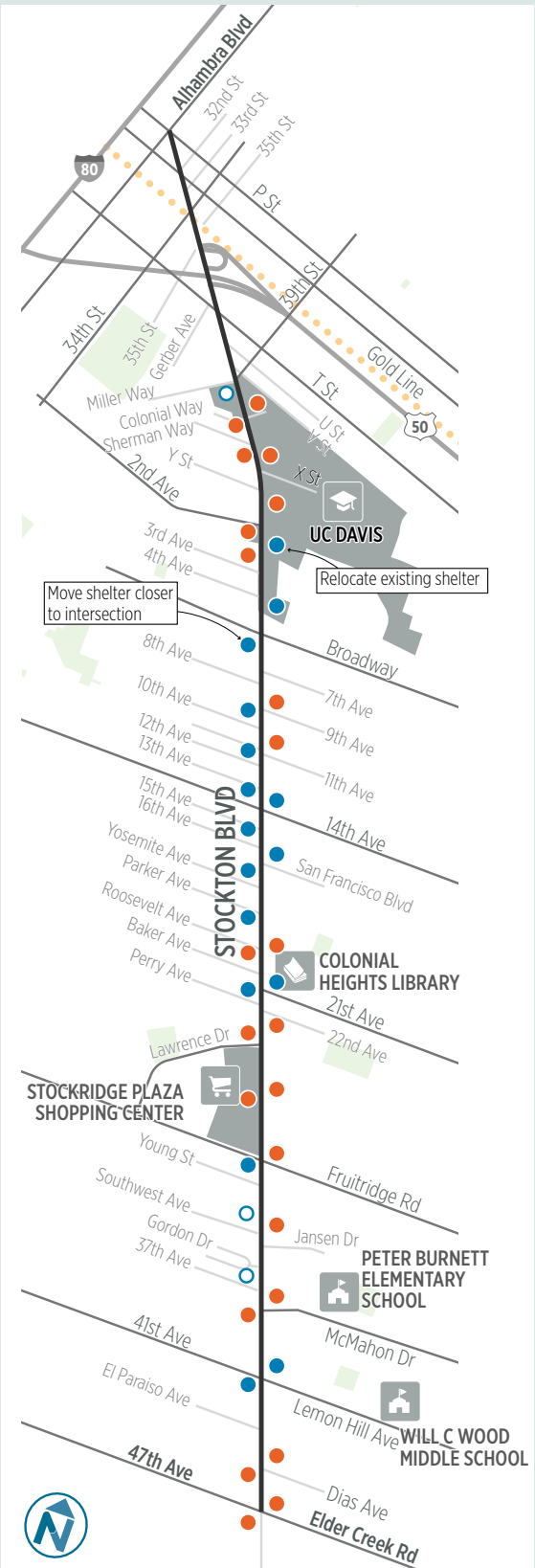
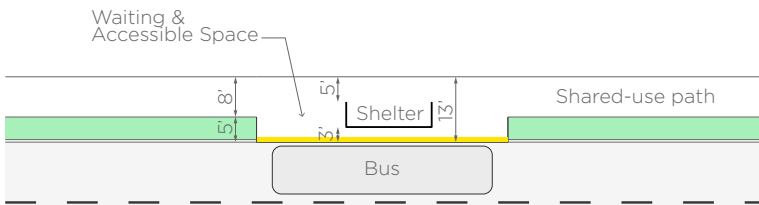
## Option 2

Path behind shelter, narrow accessible space to the side of shelter



## Option 3

Combined waiting space, path, and bus stop with shelter facing away from the street



- Existing stop with added shelter and bench
- Existing stop - Has shelter
- Existing stop - No change

# Maintaining Access

## THE CHALLENGE

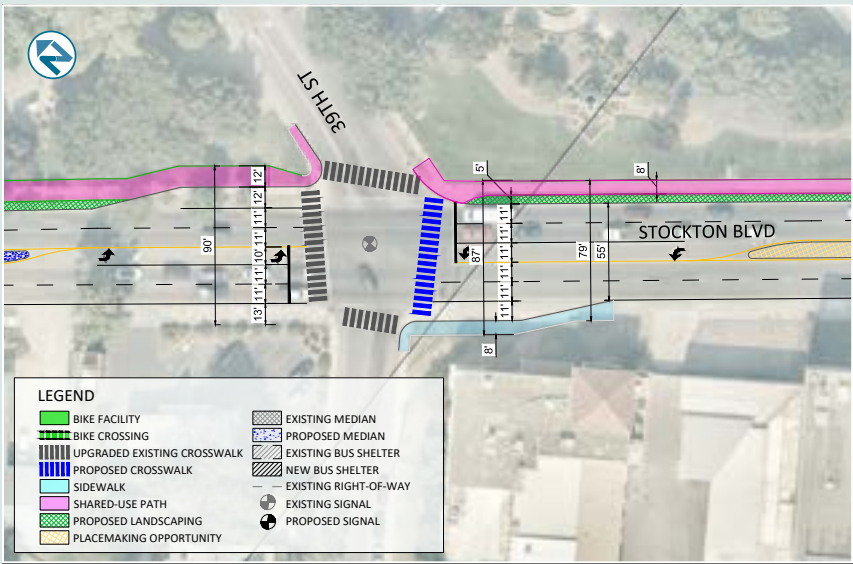
U-turns are signed as permitted today at 35th Avenue, Broadway Fruitridge, Dias Avenue, and 47th Avenue. This gives drivers ways of accessing local destinations if they miss a turn. From T Street to Broadway, the center turn lane will be removed to provide space for people walking, bicycling, and taking the bus.



Photo: Google Street View  
City standards require 44' from the outside of the left turn lane to the curb to allow U-turns, like at this location at Broadway

## PLANNED IMPROVEMENTS

U-turns have been added at 39th Street, X Street, and 2nd Avenue for local access. In some cases, this requires some widening into the existing sidewalk or landscaped areas between the sidewalk and travel lanes.



Slight widening at 39th Street would allow for U-turns

# More Reliable Vehicle Operations

The community wanted less delay and smoother operations for those who drive. Planned improvements at three main locations are highlighted below.

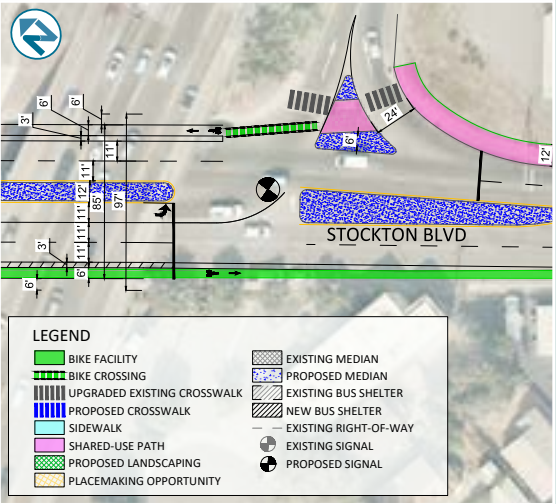
## T STREET

- Issues
  - Current eastbound/westbound street layout allows left turns when driver finds break in traffic - no dedicated left turn arrow
  - For eastbound movement, means through drivers can get stuck behind left turners
- Planned Improvements
  - Restrict left turns from T Street to Stockton Boulevard, which can reduce delay to drivers



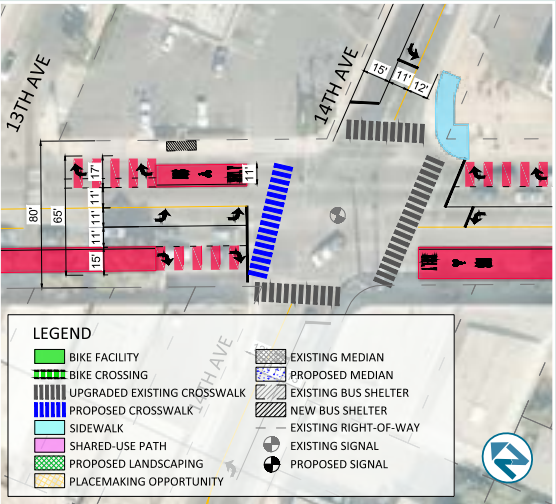
## US 50

- Issues
  - No signal today for southbound drivers to access US 50 eastbound ramp; drivers must cut across when they see a gap
- Planned Improvements
  - Add full signal, which provides dedicated phase to access ramp



## 14TH AVE

- Issues
  - Long delay due to three-phase signal
  - Confusing operations for people driving and walking
- Planned Improvements
  - Add left turn pockets on 14th Avenue so the signal can be changed to two phases - one phase for Stockton Boulevard and one phase for 14th Avenue. This reduces delay





# Add Pedestrian-Scale Lighting

## THE CHALLENGE

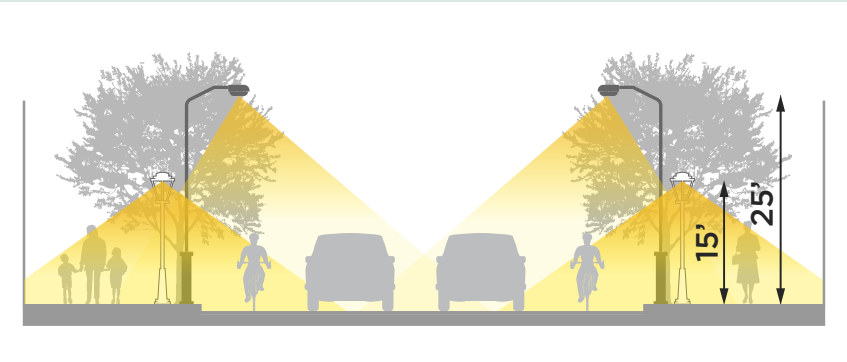
Personal security issues voiced by the community are perpetuated and made worse by inadequate lighting. Typical roadway lighting uses High Pressure Sodium (HPS) lamps placed high up (around 25’ high) to illuminate the driving area.

## PLANNED IMPROVEMENTS

Pedestrian-scale lighting adds light fixtures at a lower height (typically around 15 feet high) that light up crosswalks, sidewalks, and bike lanes.

The design adds pedestrian-scale lighting:

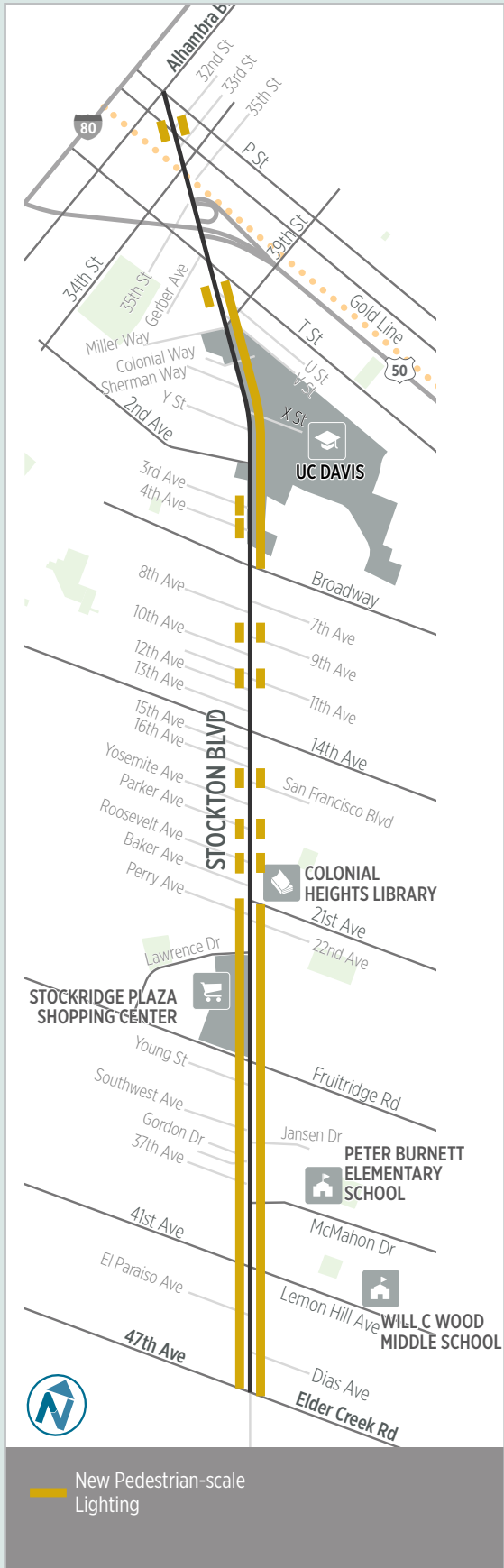
- ✓ From T Street to 2nd Avenue on the east side, where curbs will be moved in
- ✓ At new crossings
- ✓ Along the entire south segment from 21st Avenue to 47th Avenue



Lighting at different heights supports all users



Pedestrian-scale lighting illuminates the pedestrian and bicycling zones



# More Landscaping

- “
- The corridor feels unsafe and there is no shade.”
  - “We don’t walk on Stockton (unless to/from the bus stop) because it’s not pleasant. Even as more businesses take root, the number of lanes and the speed of traffic make it not inviting to explore the area on foot.”

Trees and landscaping have the ability to reduce the negative impacts of fast traffic, provide shade, and generally add beauty to a street. It was a top priority voiced by the community.

## PLANNED IMPROVEMENTS

The design integrates trees and landscaping in the following ways:

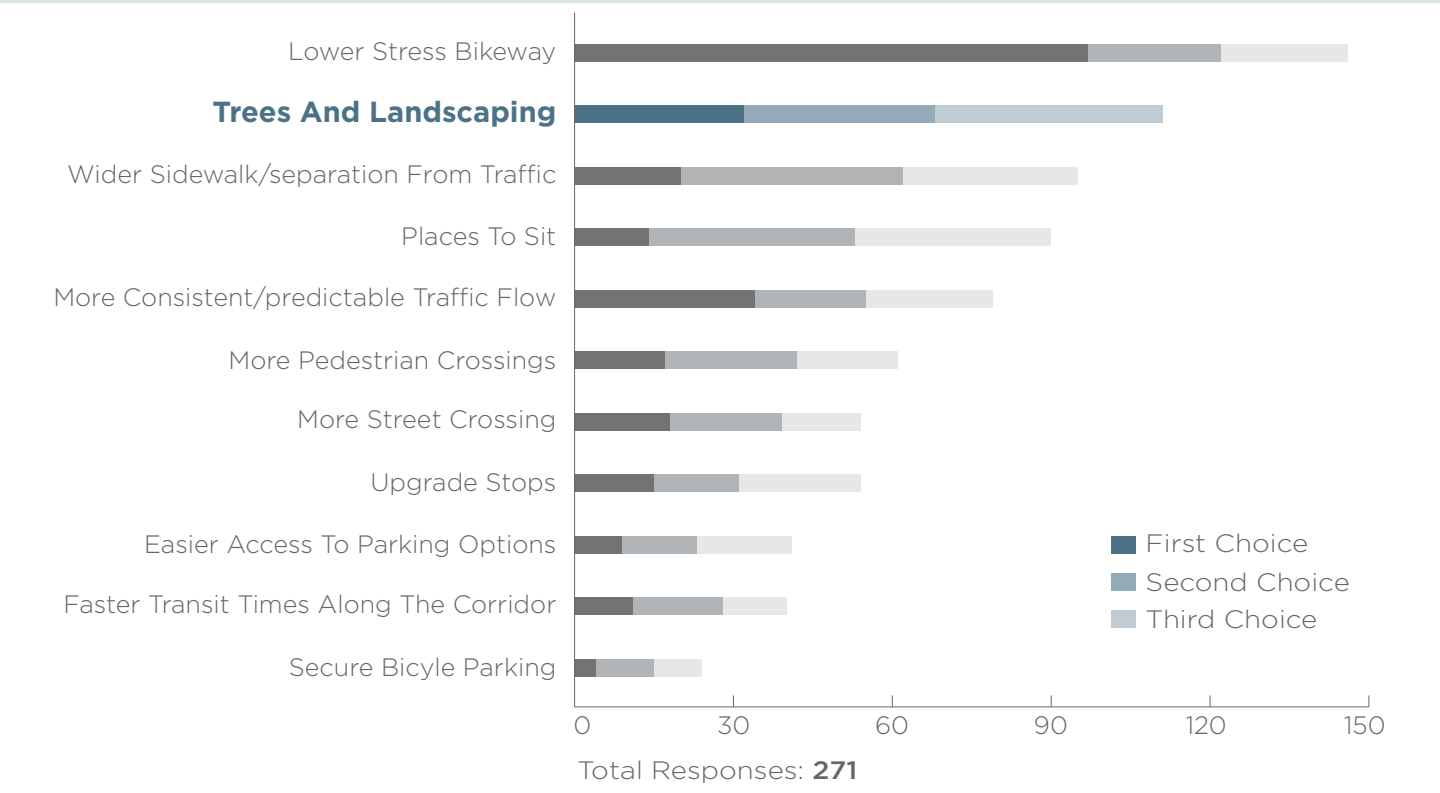
- ✓ Potential for tree median from Alhambra Boulevard to 33rd Street in collaboration with the Midtown Association
- ✓ Preservation of existing trees from T Street to Broadway when implementing paths and cycle track
- ✓ Addition of trees between the travel lanes and shared-use path from Fruitridge Road to 47th Avenue



Many parts of the corridor lack landscaping



Trees add shade and a buffer between people walking and driving.



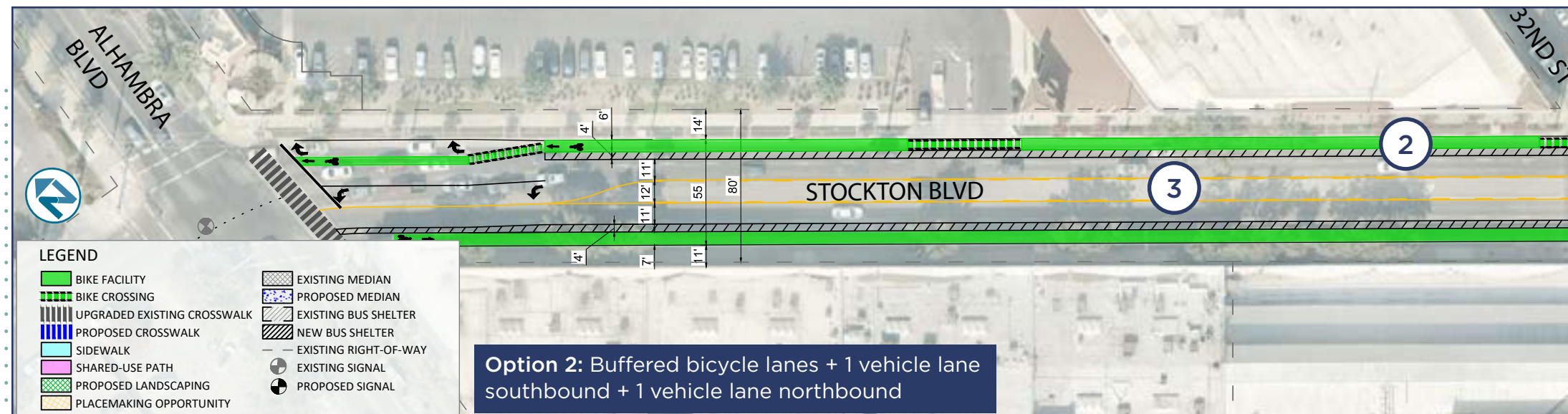
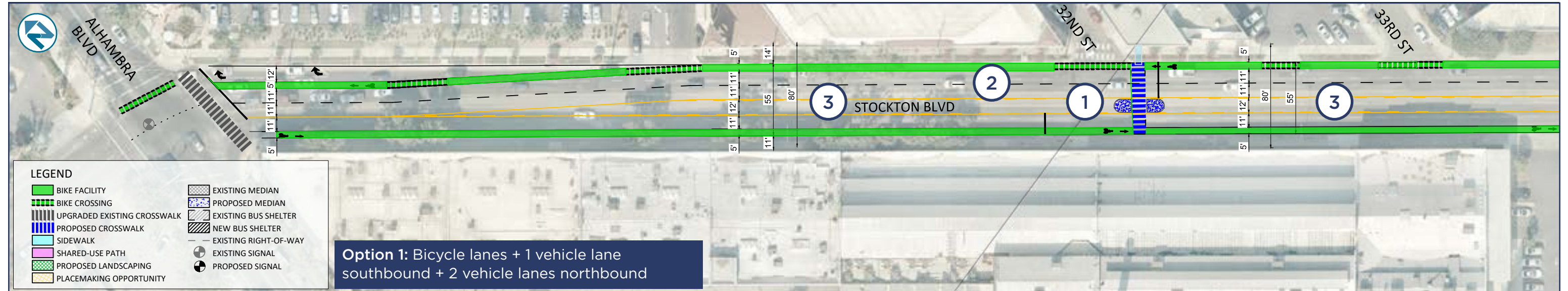


## 03

## ENHANCING PLACES

Key activity nodes are shown in plan view, or from above, on pages 33-43.

## Alhambra Boulevard to 33rd Street



## CHALLENGES



## Safety

- No crossings between Alhambra and 34th Street



## Mobility

- No bike facilities



## Community

- Street design needs to support business community

## PLANNED IMPROVEMENTS



## Safety

1. Add signalized crossing at 32nd Street



## Mobility

2. Add bicycle lanes (option 1) or buffered bicycle lanes (option 2)

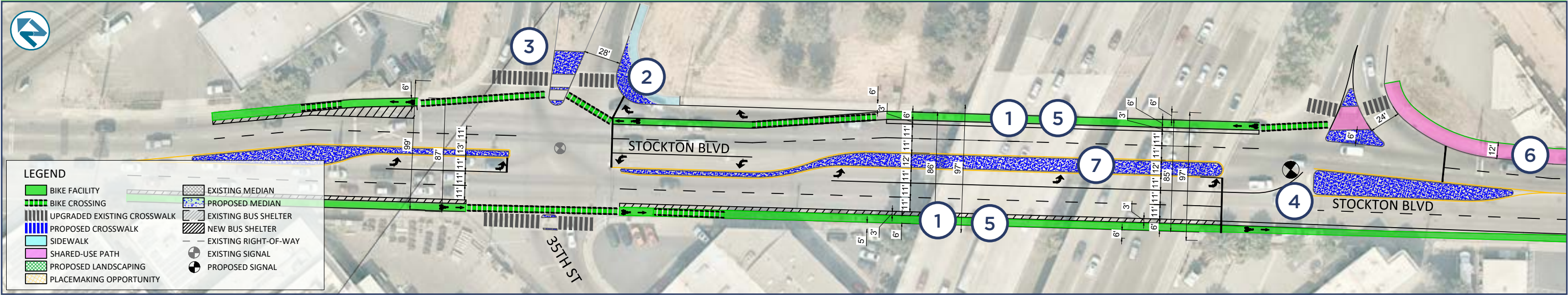


## Community

3. Potential to add landscaped median in partnership with Midtown Association



US 50



“Very scary biking here as cars are turning right into the freeway where there is no bike lane and hard to see bikers.”

CHALLENGES

- Safety**
- Traffic volumes too high to have on-street parking under US 50 overpass
  - High-speed US 50 eastbound on-ramp makes walking/bicycling uncomfortable
  - Long, exposed crossing at US 50 westbound off-ramp
- Mobility**
- No bike facilities
  - Skinny sidewalk
  - Community
  - US 50 underpass is dark and scary

PLANNED IMPROVEMENTS

- Safety**
1. Remove on-street parking under overpass
  2. Square off corner at US 50 westbound on-ramp to reduce driver turning speed. Large trucks can make the turn using a mountable truck apron.
  3. Extend median and add crosswalk protection at US 50 westbound off-ramp
  4. Add signal at US 50 eastbound on-ramp to facilitate driver turning movement
- Mobility**
5. Add buffered bike lanes, which also provide more space between people walking and driving
  6. Mark new sidewalk in front of The Gio Apartments as shared-use path to transition bicyclists from the T Street path to buffered bike lanes
- Community**
7. Add lighting under overpass in tandem with Caltrans US 50 widening project

INTERCHANGE INSPIRATION



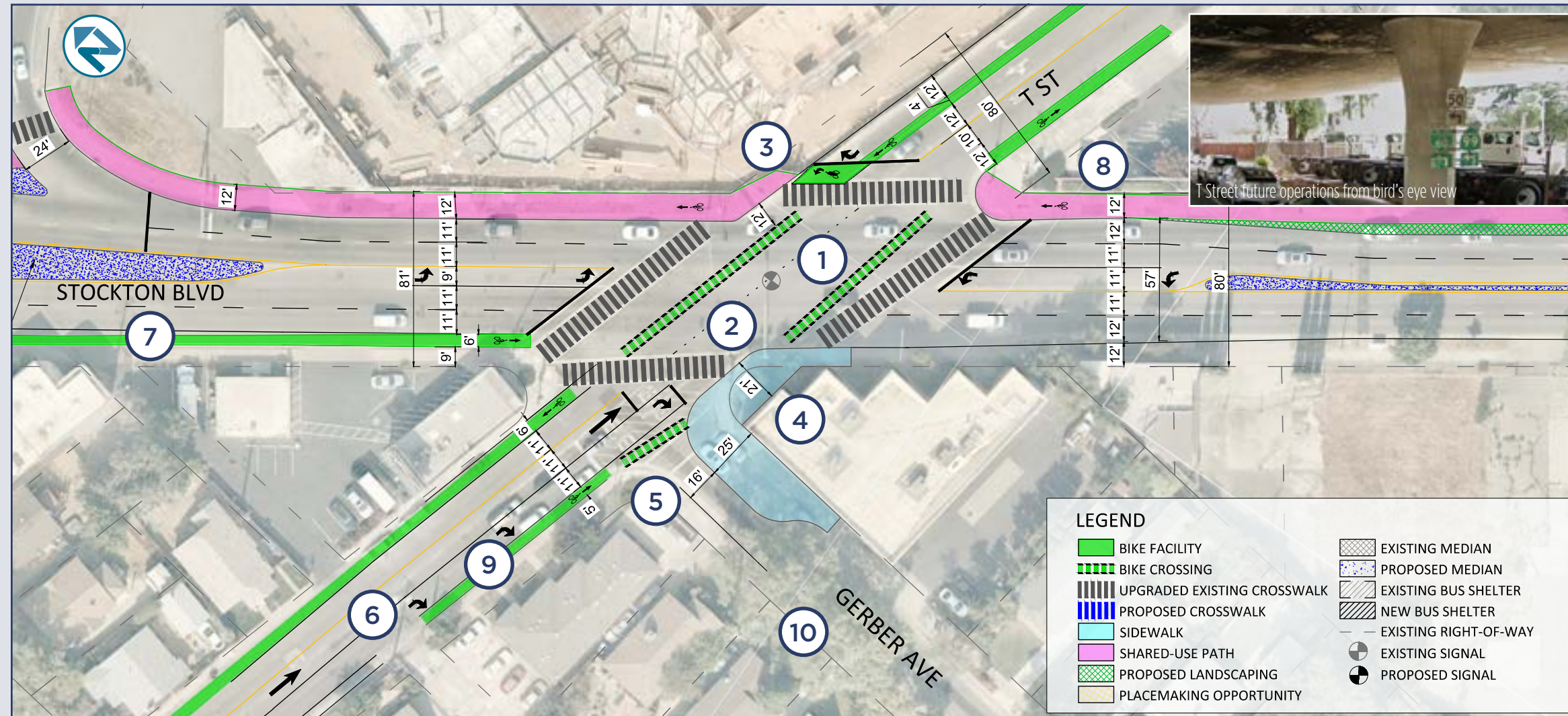
Today, the US 50 interchange includes high-speed ramps hard to navigate on foot or bike. The overpass creates a dark unpleasant condition.



The US 101 ramps in Windsor, CA include green bike lanes, compact design, and a raised crosswalk across the on-ramp.



# T Street



Stockton and T St is another scary intersection for bicyclists – large intersection to get through and I don't think cars notice us."

## CHALLENGES



### Safety

- Eastbound through drivers on T Street weave around drivers waiting to turn left
- Angled intersection causes wide, high-speed turns at the opposite corners
- Skinny sidewalk with tree and poles at the southwest corner of



the street impede visibility

### Mobility

- Eastbound T Street bike lane drops blocks before Stockton Boulevard
- No bike facilities
- Long signal cycle with multiple phases adds to delay



T Street future operations from bird's eye view

## PLANNED IMPROVEMENTS



### Safety

1. Ban left turns from T Street to Stockton Boulevard. Westbound drivers can turn left at 39th Street. Eastbound drivers can turn left on 35th Street.
2. Add Leading Pedestrian Interval and restrict right turns on red to better enforce yielding to people in crosswalks.
3. Add a bike box westbound on T Street to get bicyclists at the head of the queue.
4. Widen sidewalk at clinic for better visibility at the southwest corner.



### Mobility

5. Remove Gerber Avenue phase from signal cycle, reducing delay.
6. Restripe eastbound T Street from a through left and through right lane to a through lane and a right turn lane.
7. Add a bike lane southbound to close a gap in the network.
8. Add a two-way shared-use path on the east side of the street.
9. Extend eastbound T Street bike lane through the intersection by removing parking. Sign as "no truck right turns" from Stockton Boulevard southbound to T Street westbound.

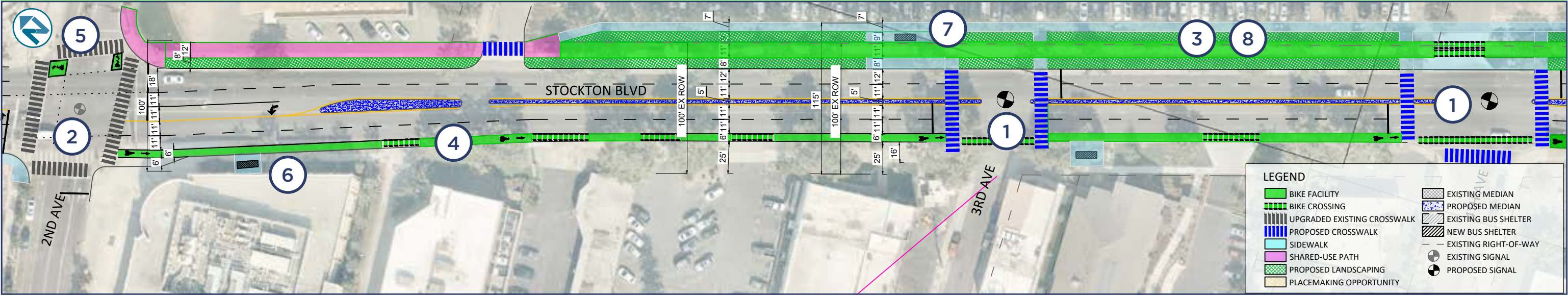


### Community

10. Make Gerber Avenue access from T Street right-in only and build out a generous space for people walking and bicycling. This facilitates getting southbound bicyclists from the bike lane across to the two-way shared-use path on the east side of the street.



# UC Davis – Aggie Square (2nd Avenue to 4th Avenue)



## CHALLENGES

- Safety**
  - High levels of activity on both sides of the street but long distance between crossings (1,600' between 2nd Avenue and Broadway – equivalent to a 7-8 minute walk)
- Mobility**
  - No bike facility
- Community**
  - Major new development at Aggie Square will bring more activity

## PLANNED IMPROVEMENTS

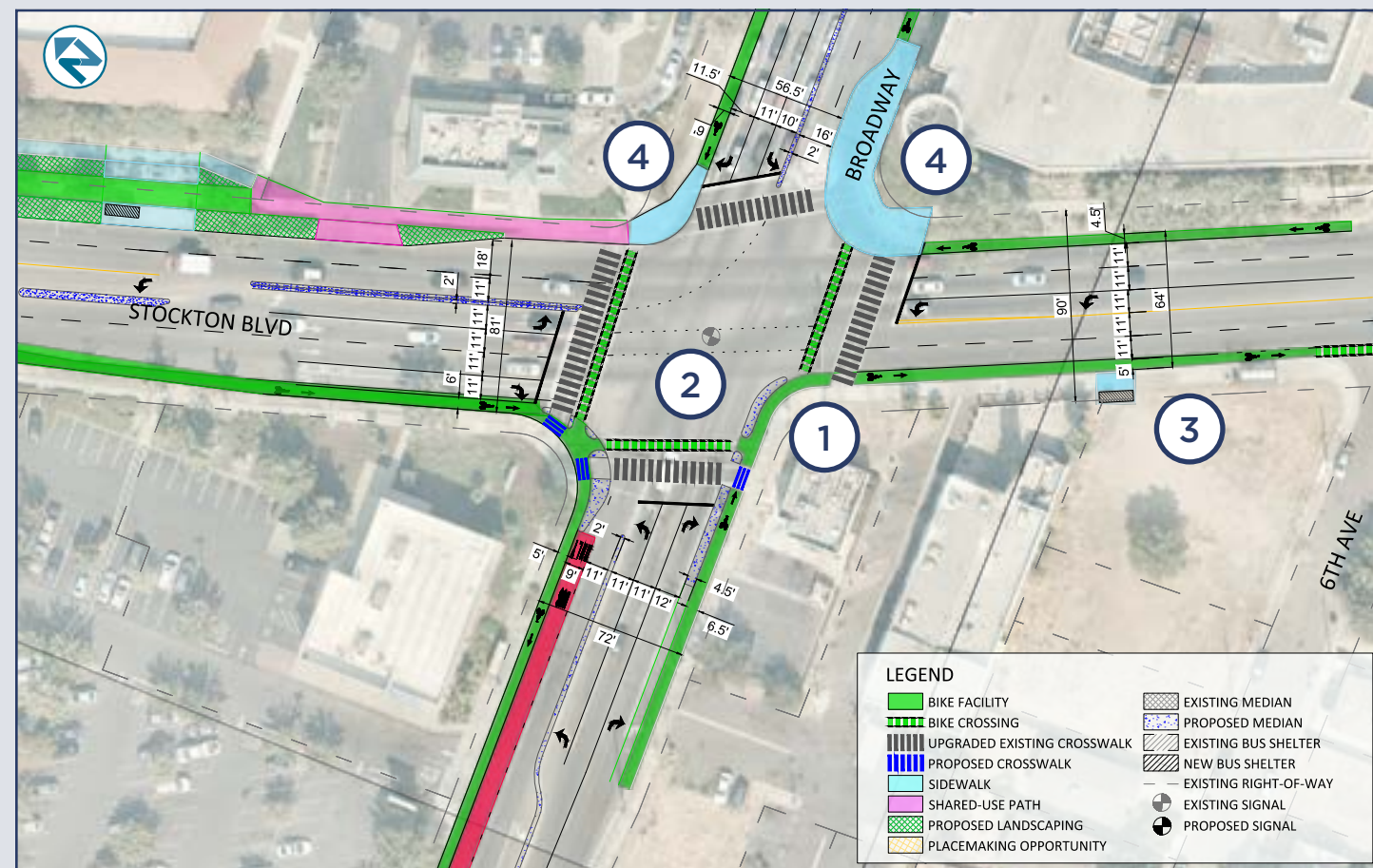
- Safety**
  1. Add signalized pedestrian crossings at 3rd Avenue and 4th Avenue
  2. Add two-stage bike boxes for eastbound and westbound bicyclists to wait in when turning left
- Mobility**
  3. Build out a two-way cycle track and sidewalk on the east side of the street
  4. Add a bike lane southbound for more confident riders by removing the center turn lane
- Community**
  5. Maintain local access by adding a southbound U-turn opportunity at 2nd Avenue
  6. Add bus shelters at 2nd Avenue and 3rd Avenue
  7. Move bus stops currently north of 3rd Avenue to the new signalized intersection so bus riders can easily cross
  8. Preserve existing trees on the east side



Two-way cycle track and sidewalk on the east side of the street can be achieved in collaboration with UC Davis as part of the Aggie Square development



## Broadway



“Broadway and Stockton is another important bus connection location that needs improving.”

### CHALLENGES



#### Safety

- Turning drivers do not yield to pedestrians



#### Mobility

- Challenging for bus riders to cross Broadway
- Both Stockton Boulevard and Broadway are major bike routes – challenging for bicyclists to turn left and right between corridors



#### Safety

1. Separate bicycles from cars at northwest and southwest corners
2. Use corner islands and curb extensions to make the intersection more compact, reducing turning speeds



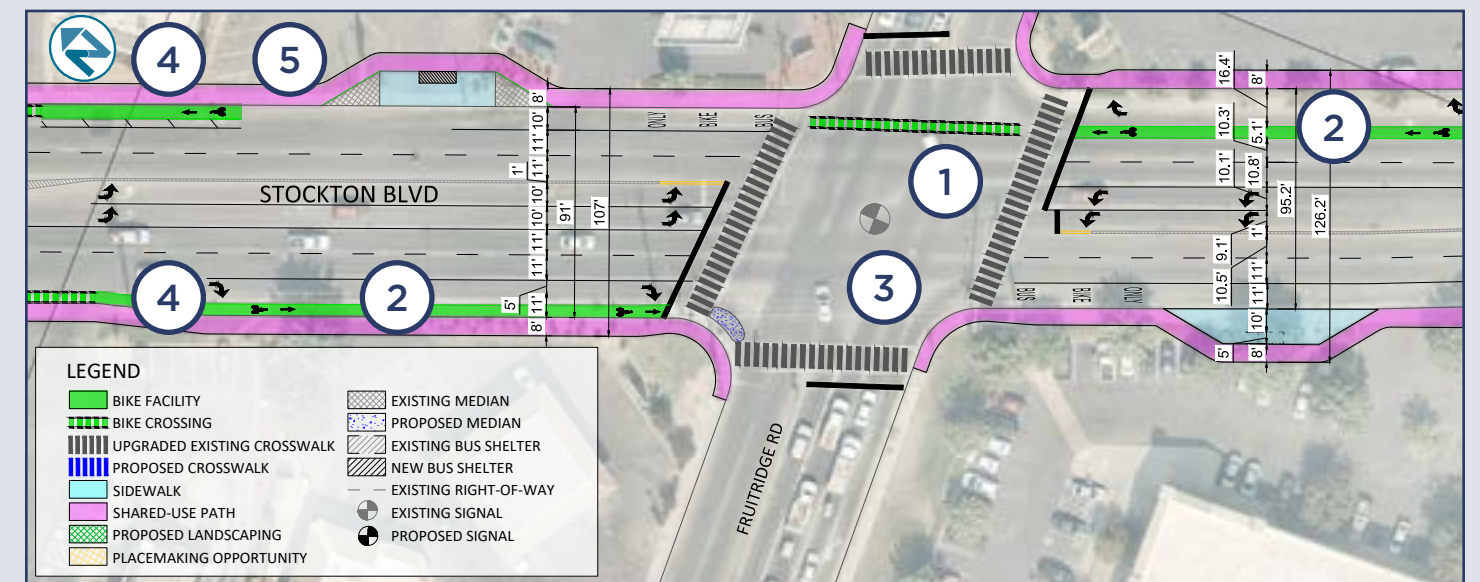
#### Mobility

3. Move southbound stop just past Boon Boon Café to facilitate street crossings.
4. Provide large mixing areas at the northeast and southeast corners to help bicyclists go straight, left, or right at Broadway

### PLANNED IMPROVEMENTS

This design integrates planned changes to Broadway from another project.

## Fruitridge Road



“... this intersection is extremely hostile to pedestrians.”

### CHALLENGES



#### Safety

- High-speed turning drivers
- Existing bike lanes are dropped approaching the intersection, causing a high-stress environment



#### Mobility

- Major bus ridership location, but also experiences delays in the afternoon rush hour
- Existing bike lanes are skinny



#### Community

- No bus shelter at northbound stop – 99 boardings per day

### PLANNED IMPROVEMENTS



#### Safety

1. Add Leading Pedestrian Interval and restrict right turns on red to better enforce yielding to people in crosswalks.



#### Mobility

3. Add signal priority for buses northbound and southbound – this means if a bus is approaching Fruitridge Road, the green signal can be extended so the bus can make it through the light to the bus stop.

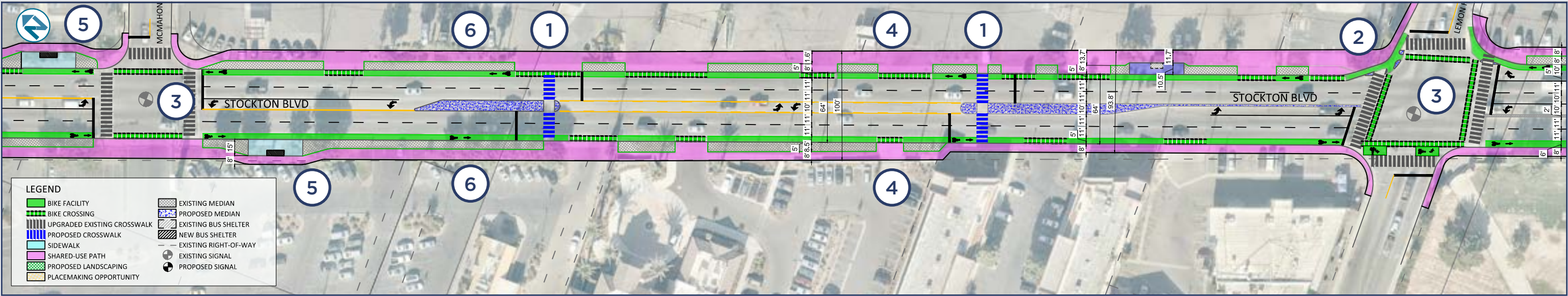


#### Community

5. Add bus shelter at northbound stop



# McMahon-Lemon Hill



## CHALLENGES



### Safety

- Long distance between marked crossings
- Turning drivers do not yield to pedestrians



### Mobility

- Skinny bike lanes
- Skinny sidewalks with no buffer from fast, loud traffic

## PLANNED IMPROVEMENTS



### Safety

1. Add two signalized crossings - one near the Best Six Motel and one near Wing Wa supermarket
2. Add protected intersection corners at Lemon Hill Avenue on the east side of Stockton Boulevard to facilitate bicycle access to Will C. Wood Middle School



### Mobility

4. Create a shared-use path for walking and bicycling on both sides of the street with a row of trees between the path and drivers. The path relies upon expanding the pedestrian area behind the existing back of sidewalk. The publicly-owned right of way is wider than Stockton Boulevard is today.



### Community

5. Add bus shelters at McMahon Drive
6. Add trees on both sides

## TRAVEL TIME IMPACTS

Traffic modeling was used to understand how long it will take to drive the whole corridor compared to today. The design has minimal impacts on travel time - a typical trip in a car will take less than 2 minutes longer.

Direction	Existing (min)	Future (min)	Difference (min)	% Change (min)
Northbound	17	18.75	1.75	10%
Southbound	15	16.41	1.41	9%



Narrow bike lanes include the gutter



No existing bus shelter

# 04 IMPLEMENTATION

## Project Cost


A project of this magnitude costs a significant amount of money to bring to reality.

Projects like Stockton Boulevard rely upon local funds and grants from the state and federal government to take this concept further. There are many grant sources available, but competition is strong and grants still require matching local funds.

State and federal funds are made available through competitive funding rounds which are typically announced every two to three years. Typical awards for corridor improvements range from \$3 – 9M, depending on the administering agency. When the grant programs become available, the City identifies a segment for which to request funding based on the program and its typical award amounts. If successful in receiving grant awards, it can take between 4 to 7 years to perform the design, environmental clearance, and right of way, and be ready for construction. For this planning document, the corridor has been described as three different segments, but the actual implementation phasing may occur differently based on the funding being pursued.

## Major Cost Categories

Projects like Stockton Boulevard are managed through two departments in the Engineering Services Division: **Funding & Project Development**, and **Construction Inspection and Survey**. These groups manage the three major milestones needed to construct major capital projects.



### Preliminary Design and Environmental Clearance

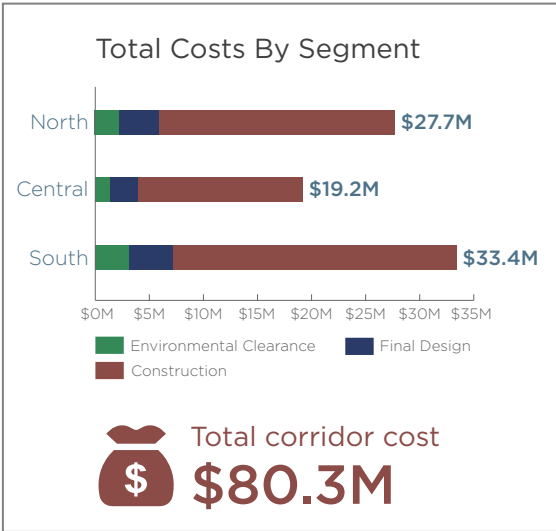
- Conducts public and stakeholder engagement to refine the proposed concepts developed from the planning study, and ensure it meets the community and stakeholder needs.
- Advances the engineering and design of the project to a 30% level of completion. Better defines project solutions, footprint, feasibility and costs.
- Identifies a project's potential impacts and mitigates significant impacts on the community and the environment.

### Final Design Documentation

- Advances the engineering and design of the project to a 60%, 90% and 100% level of design.
- Determines implementation pathways, including how the project will be phased and built.
- Public and stakeholder engagement continues during the final design phase, to inform the community of the proposed project and what to anticipate during construction.

### Construction, Inspection and Certification

- Includes hiring contractors and building the work to city standards.
- Includes opportunities for local contractors and businesses to work on the project.



# The Path to Implementation

01

PRELIMINARY DESIGN  
AND ENVIRONMENTAL  
CLEARANCE

YEAR 1 2 3

STEPS

OUTCOMES

- Evaluates project impacts on many aspects of the natural, social, and economic environment
- Required to continue a project into final design and construction by State of California or if using Federal funding



Understand community needs, issues, and ideas

Approved preliminary design and environmental clearance



02

FINAL DESIGN  
DOCUMENTATION

YEAR 4 5 6 7

- Pass federal environmental review to open up opportunity for federal funding
- Conduct field survey, understand details of existing infrastructure, grading and utilities
- Develop construction drawings with three or four rounds of review by City technical staff
- Coordinate with utility and property owners to identify adjustments and temporary construction impacts
- Acquire right-of-way or obtain agreements, as appropriate



Stakeholder review of design progression as specific solutions are developed

Final Construction Plan Set



03

CONSTRUCTION,  
INSPECTION AND  
CERTIFICATION

YEAR 8 9 10 11 12 13 14 15

- Create bid documents, advertise the project, and award construction contract based on bid price
- File all permits to allow work in the right-of-way
- Manage traffic during construction
- Provide ongoing quality inspection of work
- Project testing, certification and opening



Construction notifications

Completed Project





## MOVING FORWARD



“

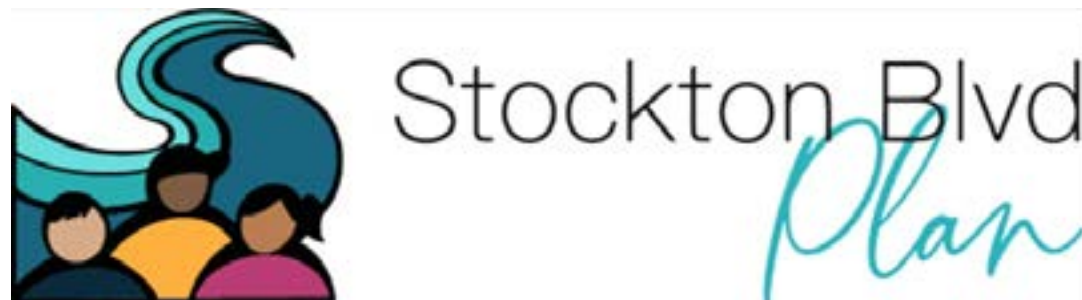
- I can't tell you the number of times we've almost been hit crossing the street in the crosswalk”
- “It's hard to walk with so few crossings “
- “The bike lanes are not wide enough. Traffic moves too quickly.”
- “Biking on Stockton can be sketchy, but it's the most direct”

The community surrounding Stockton Boulevard wants a safer street for everyone, however they travel. Some voiced concerns about traffic delays and impacts from this project that might affect driving, but for the most part people were interested in a street that makes them feel comfortable walking, bicycling, and visiting businesses. People who drive cited concerns about speeding. Overall, the corridor is uncomfortable for all users.

The design resulting from this plan is a bold but feasible step toward giving the community a better street to call home.

### BEYOND TRANSPORTATION

The City of Sacramento is partnering with community members and business owners to transform Stockton Blvd into a thriving corridor that expands opportunities for, and supports the cultures of, existing residents and small businesses while accommodating growth. The plan will address strategies to address housing and anti-displacement; inclusive economic development; placemaking, arts, & culture; and environment & public health. [Sign up](#) to hear about upcoming discussions and other information.



“

- More events on Stockton. A good location is where the K-Mart was - now a Goodwill - there are vacant lots nearby. Stockton needs a facelift. Needs something to liven it up.”
- “Lots of closed businesses. Need activities to attract pedestrians.”

## Stockton Boulevard's Future is Rooted in Today's Community



“

- If they make it so cars couldn't go 65 mph and if they made it better for walking and biking, I bet these businesses would come back.”
- “A couple more stop lights between 14th Avenue and 21st to slow cars down”
- “Create a pedestrian zone 14th to Broadway”
- “Wider sidewalks and trees to make it safer for families to take the street back”



