

Megan Johnson, PE  
Senior Engineer

Avtar Banwait  
Project Manager



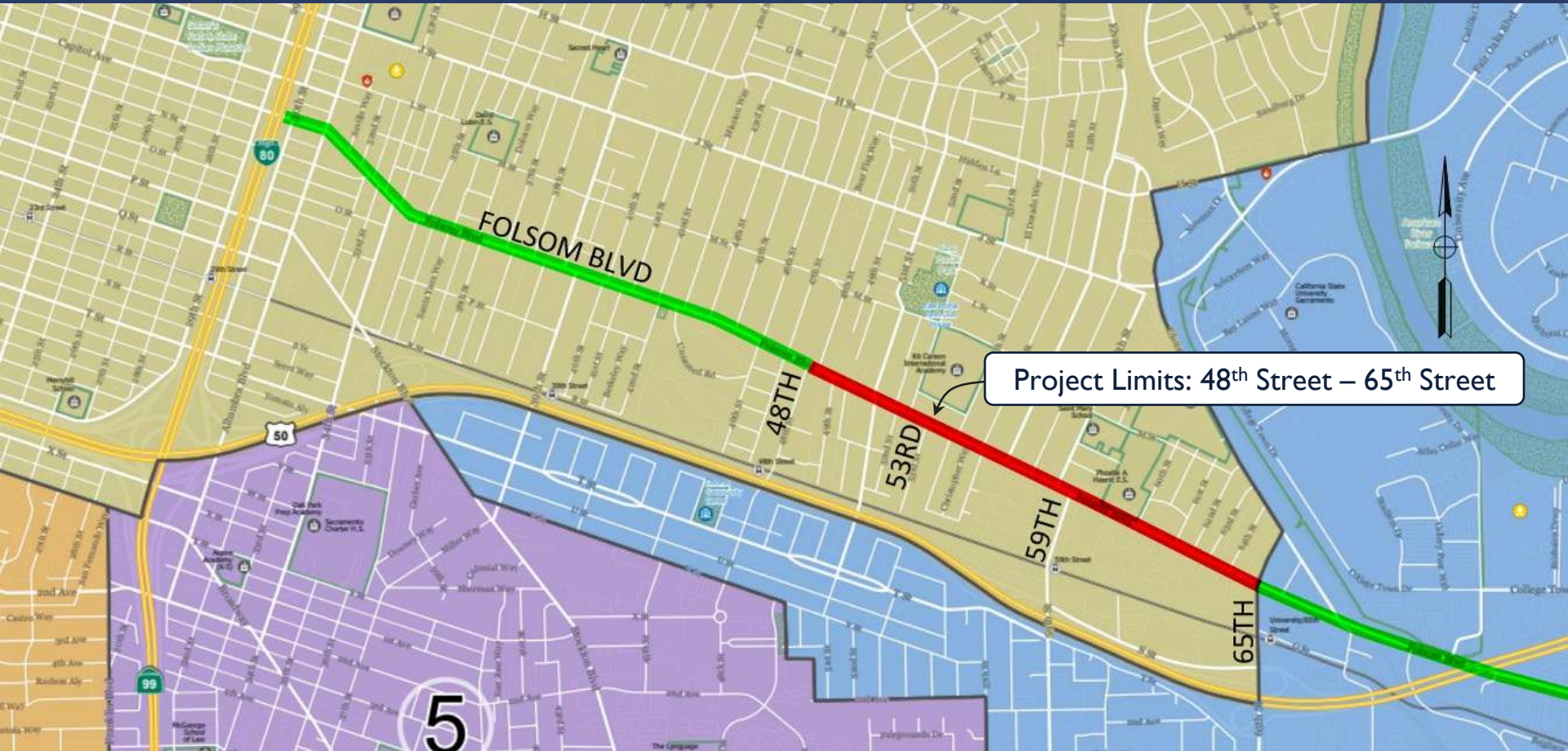
**P S O M A S**  
Consultant Team



# FOLSOM BLVD SAFETY IMPROVEMENTS PROJECT

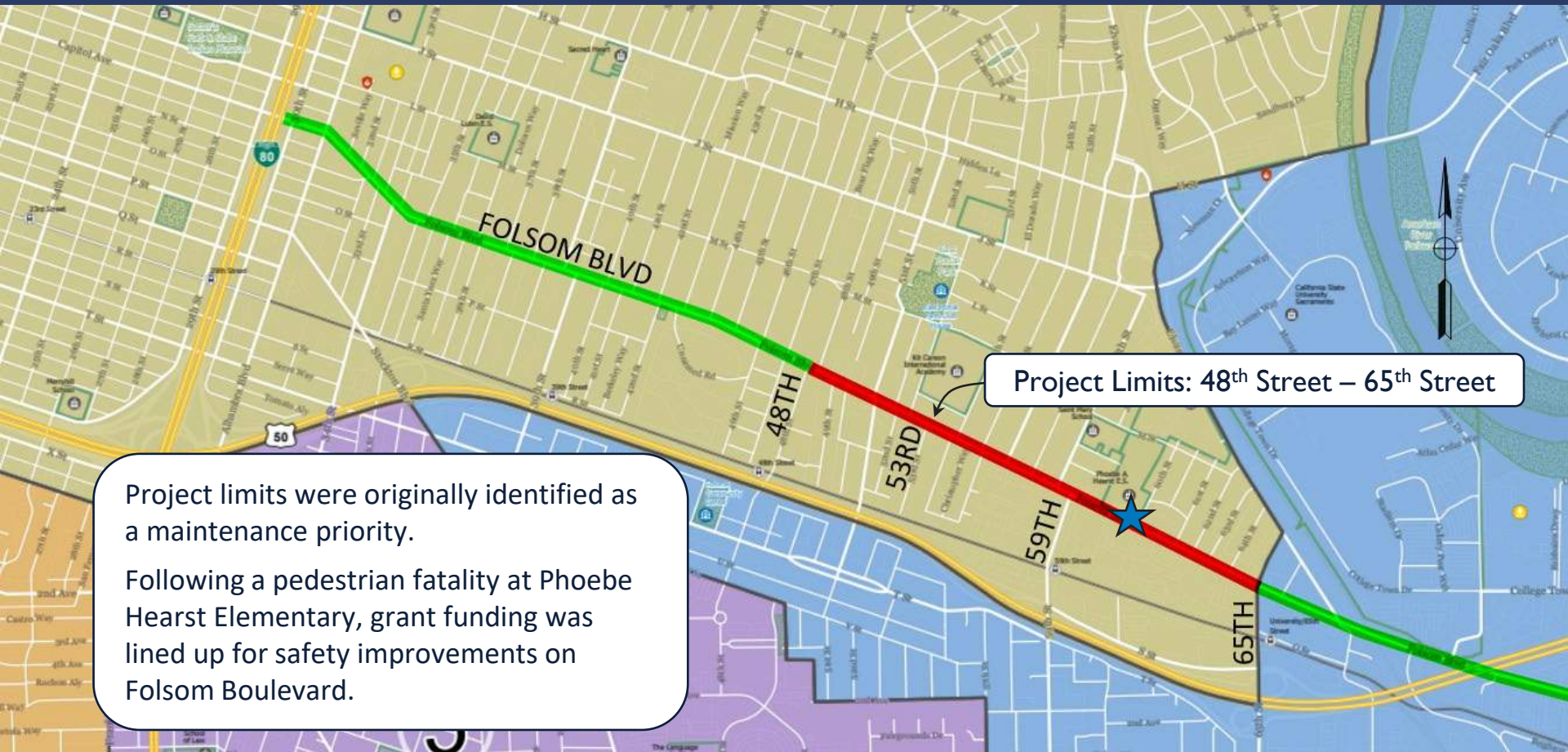
Open House

# Background





# Background



Project Limits: 48<sup>th</sup> Street – 65<sup>th</sup> Street

Project limits were originally identified as a maintenance priority.

Following a pedestrian fatality at Phoebe Hearst Elementary, grant funding was lined up for safety improvements on Folsom Boulevard.

# Background



Existing Average Daily Traffic: 15,000 – 17,000 cars/day

## 48<sup>th</sup> Street to 59<sup>th</sup> Street

- 1 Lane Each Direction
- Two-Way Left Turn Lane
- Some Locations of On-Street Parking
- Some Class II Bike Lanes
- Mix of Residential & Businesses



## 59<sup>th</sup> Street to 65<sup>th</sup> Street

- 2 Lanes Each Direction
- No Two-Way Left Turn Lanes
- No On-Street Parking
- No Bike Lanes
- Businesses/School





# Background



Factors contributing to crashes:

## 48<sup>th</sup> Street to 59<sup>th</sup> Street

- Wide lanes (13'-18') encourage speeding
- Signals do not have dedicated left turn phases
- Gaps in bike lanes force people on bikes into the traffic lane or onto sidewalk
- Conflicts at driveways with people on bikes



## 59<sup>th</sup> Street to 65<sup>th</sup> Street

- Multiple lanes encourage speeding
- Lack of center turn lane leads to rear end collisions
- No dedicated space for bicyclists



# Project Goals

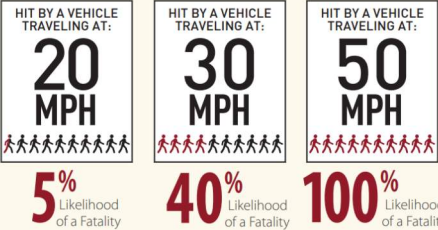
- Reduce crashes involving serious injuries or fatalities
- Slow cars down!
- Improve safety for vulnerable users – bicyclists and pedestrians
- Close gaps in the bike lanes on Folsom Boulevard



# Safety and Vision Zero

Crash victims who walk are **10 times more likely to be killed or seriously injured** in Sacramento than crash victims who drive

Unsafe speed is the leading cause of crashes. **2/3 of fatal crashes** occur on streets with a posted speed of 40+ mph, which account for just **10% of the City's street network**



### ROAD DIETS

Reduction in number of travel lanes, often paired with a center turning lane. Road diets can allow for additional space for other uses, including for pedestrians, bike lanes and parking.

**EFFICACY:** ●●●●

**COST:** ●●●○

**COMPLEXITY:** ●●●●

## VISION ZERO SACRAMENTO

### ROAD DIETS

Reduction in number of travel lanes, often paired with a center turning lane. Road diets can allow for additional space for other uses, including for pedestrians, bike lanes and parking.

**EFFICACY:** ●●●●

**COST:** ●●●○

**COMPLEXITY:** ●●●●

### FACTORS

Primary collision factor was "unsafe speed"

Crash occurred on an arterial or collector street

### STATS

77 KSI CRASHES

\* Accounts for 10% of all KSI crashes and 17% of vehicle KSI crashes

### MODES

### STATS

77 KSI CRASHES

\* Accounts for 10% of all KSI crashes and 17% of vehicle KSI crashes

### PROFILE 1: UNSAFE SPEED ON NON-LOCAL STREETS

### COUNTERMEASURES

#### STREET NARROWING

Several countermeasures fall within the Intersection Narrowing toolkit, including curb extensions (bulbouts), lane narrowing and visual narrowing. Curb extensions are raised devices, usually constructed from concrete and/or landscaping, that reduce the corner radius or narrow the roadway in order to reduce speeds of turning vehicles, improve sight lines, and shorten crossing distances. In addition to physically narrowing intersection or lane widths, visual narrowing techniques can help to slow speeds and increase driver attentiveness. Visual narrowing techniques include adding street trees, vertical lighting elements, street furniture, special paving treatments, or roadway markings.

**EFFICACY:** ●●●○

**COST:** ●●●○

**COMPLEXITY:** ●●●○

### ROAD DIETS

Reduction in number of travel lanes, often paired with a center turning lane. Road diets can allow for additional space for other uses, including for pedestrians, bike lanes and parking.

**EFFICACY:** ●●●●

**COST:** ●●●○

**COMPLEXITY:** ●●●●

### SIGNAL SYNC, SLOW GREEN WAVE

Signals can be synchronized to give a progressive green band for cars traveling at a specified speed, resulting in vehicles traveling faster than the specified speed having to stop more frequently.

**EFFICACY:** ●●●○

**COST:** ●●●○

**COMPLEXITY:** ●●●○

### Automated Speed Enforcement

Automated speed detection devices can identify speeding violations and provide citations. California is currently considering legislation to allow this type of enforcement and the City of Sacramento plans to support this effort.



# Impacts of Road Diets

The segment of Folsom Blvd east of 59<sup>th</sup> Street was road dieted in 2000 to calm traffic and improve safety.

Comparing the road diet segment with the existing 4-lane segment east of 59<sup>th</sup> Street:

- Lower Average Travel Speeds (20-30 mph vs. 30-40 mph) with fewer lanes
- Lower “85<sup>th</sup> Percentile” Observed Speeds (30-40 mph vs. >40 mph) with fewer lanes





# Project Elements



## 48<sup>th</sup> Street to 59<sup>th</sup> Street

- Maintain current lane configuration with reduced lane widths
- Eliminate the isolated locations of on-street parking to provide continuous bike facilities
- Add buffers to bike lanes up to 53rd
- Signal modifications / video detection / audible signals

## 59<sup>th</sup> Street to 65<sup>th</sup> Street

- Road diet to calm traffic
- New two-way left turn lane
- Install new bike lanes
- Signal modifications / video detection / audible signals



# Project Elements



## ROAD DIET

Road diets generally reassign space in the roadway from vehicle travel lanes

to create room for bike facilities, wider sidewalks, or center turn lanes. Road diets optimize street space to benefit all users by improving the safety and comfort of pedestrians and bicyclists, and reducing vehicle speeds and the potential for rear end crashes.



## NARROW LANES

A reduction in lane width, to 11 feet, produces a traffic calming effect by

encouraging drivers to travel at slower speeds, lowering the risk of crashing with bicyclists, pedestrians, and other drivers.



## INTERSECTION TIGHTENING

Uses temporary materials like paint, plastic bollards,

and reflective markers to visually and physically narrow the street at intersections, which can create a shorter crossing for pedestrians and slows vehicles approaching the intersection and turning.



## PEDESTRIAN WARNING SIGNS

Signs such as "Yield Here to Pedestrians" or "Stop Here

for Pedestrians" that can be placed at the roadway surface level in advance of the crosswalk, on posts, or overhead.



## SEPARATED/ BUFFERED BIKEWAY

Dedicated bike lanes, horizontally separated from vehicle traffic and/ or parked cars with a striped buffer.



## BIKE CONFLICT ZONE

Markings Green pavement within a bike lane to increase visibility of bicyclists and

to reinforce bike priority. The green pavement is used as a spot treatment in conflict areas such as driveways.



## SPEED FEEDBACK SIGN

Radar signs that display the speed limit as well as

the speed of the approaching vehicle in real-time, and in some cases have changeable message display boards.



## FLASHING BEACON

Pedestrian-activated flashing beacons

highlighting crosswalks and pedestrian crossing signs. Flashing beacons provide a high-visibility, bright strobe-like flashing frequency.



## PROTECTED LEFT TURNS

Protected left turns provide an exclusive phase

for leftturning vehicles to enter an intersection separate from any conflicting vehicle or pedestrian movements.



## NEW TRAFFIC SIGNAL

Green pavement within a bike lane to increase visibility of bicyclists and

to reinforce bike priority. The green pavement is used as a spot treatment in conflict areas such as driveways.



## COUNTDOWN PEDESTRIAN SIGNAL HEADS

Displays countdown\* of

seconds remaining on the pedestrian signal. Countdown indications improve safety for all road users, and are required for all newly installed traffic signals where pedestrian signals are installed.



## EXTEND PEDESTRIAN CROSSING TIME

Increases time for pedestrian walk phases, and can better

accommodate vulnerable populations such as children and the elderly.



## REDUCED SPEED SCHOOL ZONE

State legislation (AB 321) allows for speed

limit reductions to 15 or 20 mph near schools in environments that meet certain conditions. All other streets are subject to speed-limit setting based on existing travel speeds, and therefore can only be reduced if vehicles start traveling more slowly.



## BULBOUT

Raised devices, usually constructed from concrete, landscaping, or paint

and plastic materials, that narrow the roadway to reduce speeds of turning vehicles, improve sight lines, and shorten pedestrian crossing distances.



## HIGH VISIBILITY CROSSWALK

A crosswalk designed to be more visible to approaching

drivers, striped with ladder markings using high-visibility material such as thermoplastic tape instead of paint.



## PARKING PROHIBITION NEAR INTERSECTIONS

By restricting parking

at curbs in front of intersection crosswalks, sight lines are cleared between pedestrian crossings and oncoming drivers, reducing the risk of crashing (also called "daylighting.")



## PEDESTRIAN REFUGE ISLAND

Pedestrian refuge islands provide a protected area

for pedestrians at the center of the roadway. They reduce the exposure time for pedestrians crossing the intersection and simplify crossings by allowing pedestrians to focus on one direction of traffic at a time.



## CO-LOCATE BUS STOPS AND PEDESTRIAN CROSSINGS

Place bus stops and pedestrian crossings in close proximity to allow transit riders to cross the street safely.



## RAISED MEDIAN

Curbed sections in the center of the roadway that are physically

separated from vehicular traffic. Raised medians can also help control access to and from side streets and driveways, reducing conflict points.



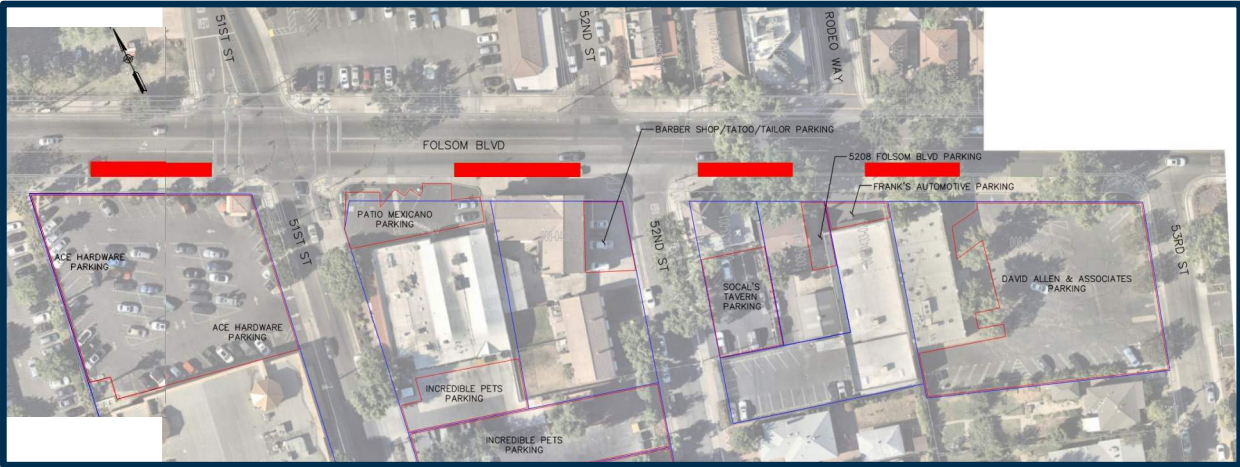
# Project Elements – Parking Removal



- Continuous bike lanes are needed for safety.
- Westbound direction currently has no parking and bike lanes
- Eastbound direction has some locations with bike lanes. At other locations, on-street parking prevents the ability to have a bike lane.
- Parking removal is needed to accommodate bike lanes in the eastbound direction.

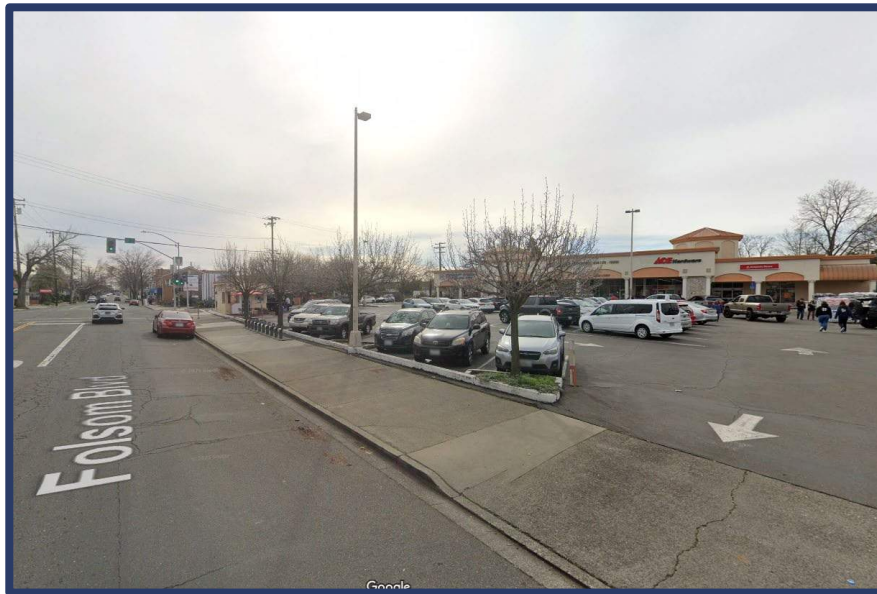


# Project Elements – Parking Removal



# Project Elements – Parking Removal

City of  
SACRAMENTO



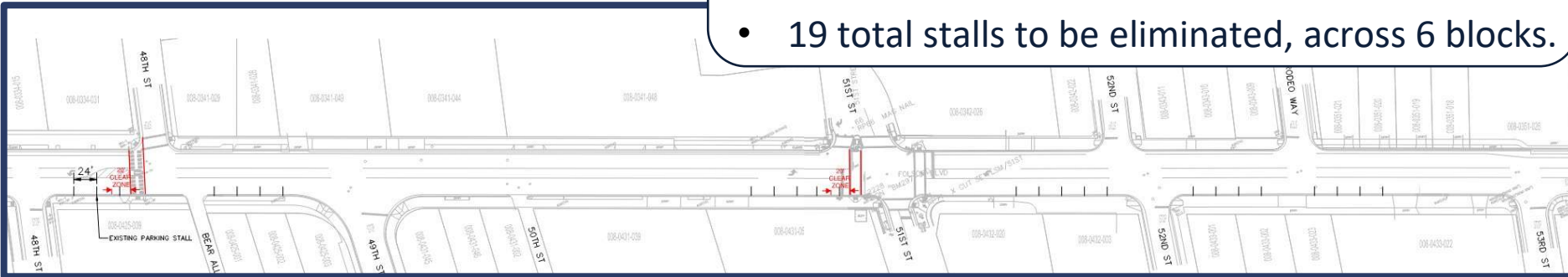


# Project Elements – Parking Removal

City of  
SACRAMENTO



- Some parking elimination is otherwise required by AB 413, which requires “daylighting” near pedestrian crossings.
- 19 total stalls to be eliminated, across 6 blocks.





# Project Elements – Existing / Proposed



Existing Condition at 52nd



Existing Condition at 60th



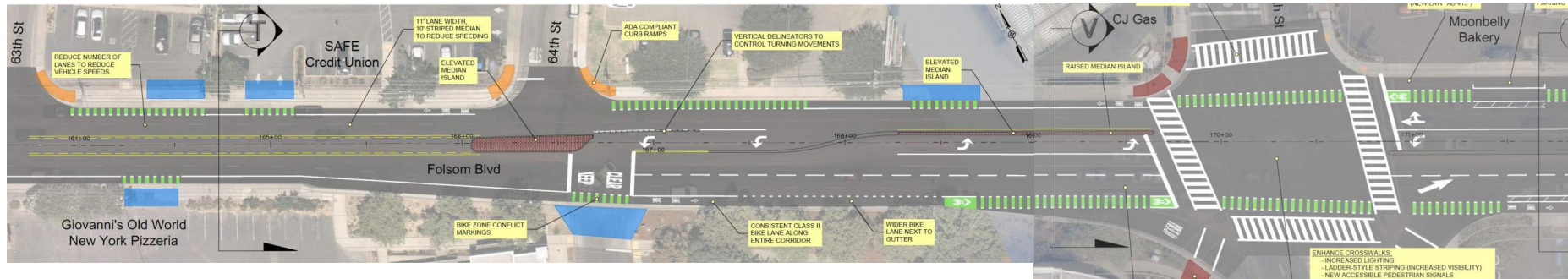
Proposed Condition at 52nd



Proposed Condition at 60th

# Traffic

- Average Daily Traffic is between 15k-17k cars per day
- Traffic analysis was performed to model the effects of the lane reduction.
- Road diet works, with a second lane provided on the approach to 65<sup>th</sup> Street to accommodate queuing.



# Project Constraints

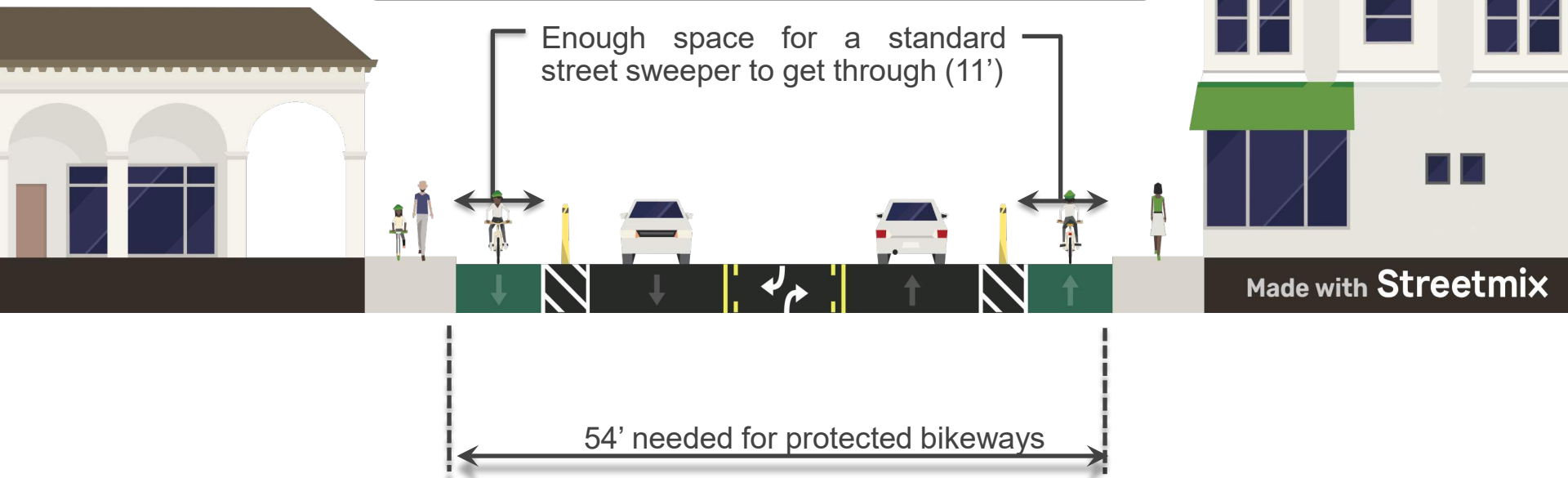
- Budget – The City of Sacramento has a budget deficit. Need to stay within the available budget



# Project Constraints

- Budget – The City of Sacramento has a budget deficit. Need to stay within the available budget
- Roadway Widths and Existing Features:

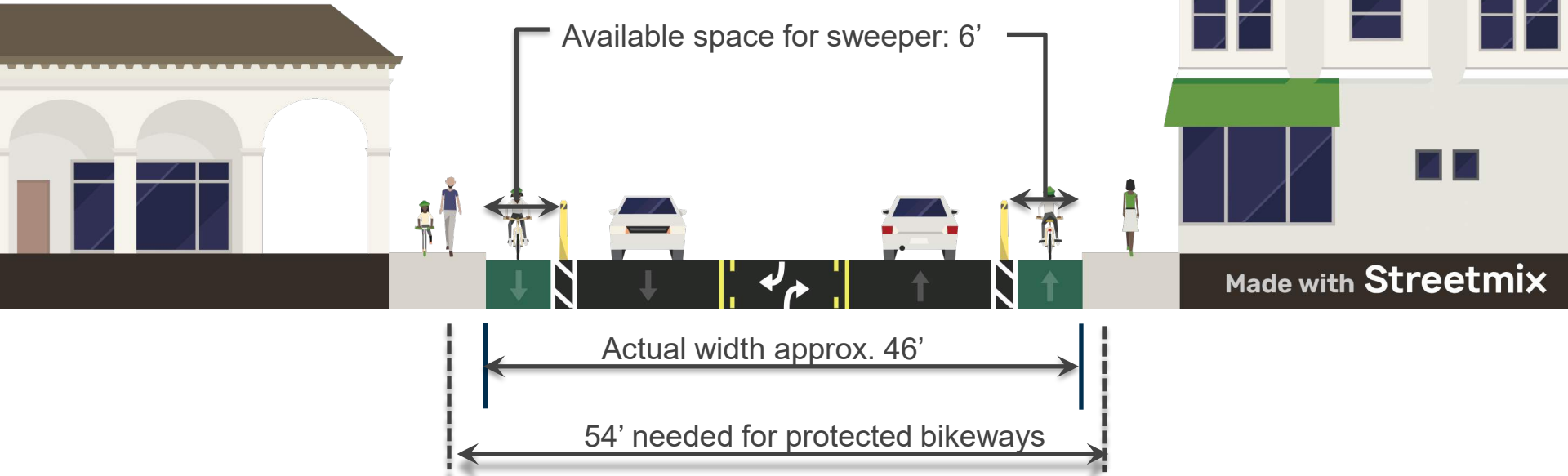
Protected bikeways have specific requirements to meet design standards and allow for maintenance.



# Project Constraints

- Budget – The City of Sacramento has a budget deficit. Need to stay within the available budget
- Roadway Widths and Existing Features:

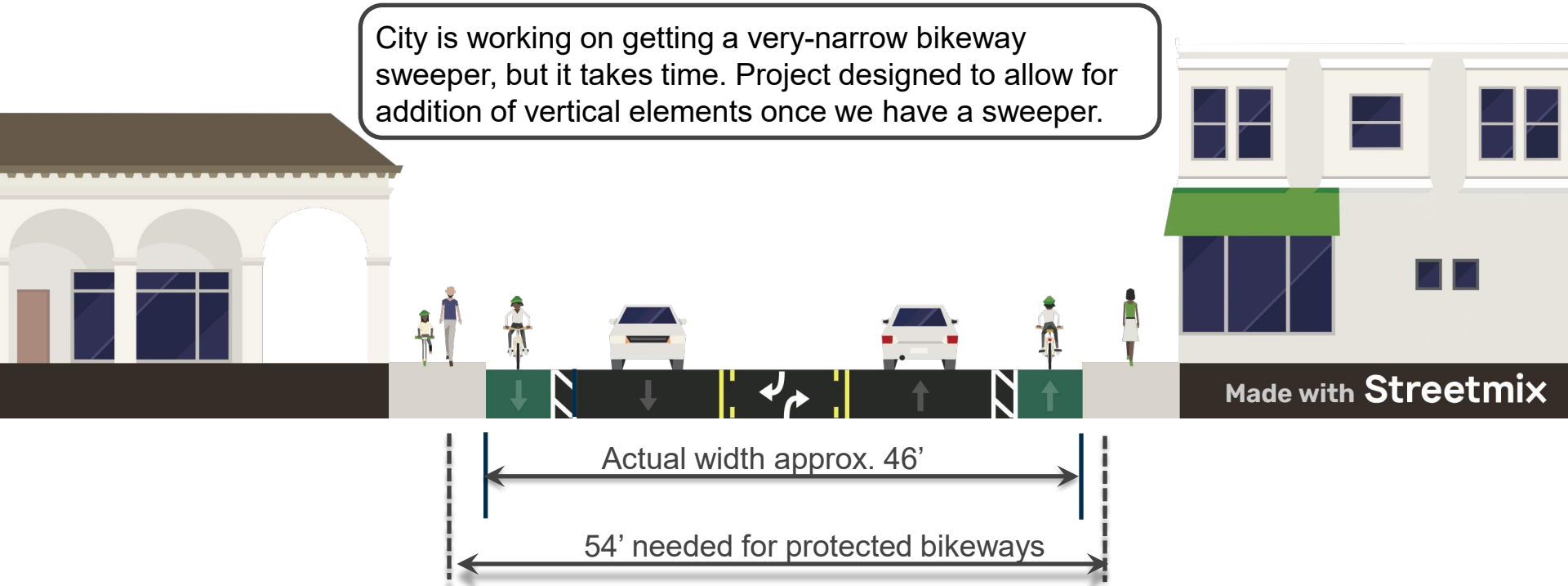
Folsom Blvd is narrow. It isn't even wide enough for our bikeway sweepers!



# Project Constraints

- Budget – The City of Sacramento has a budget deficit. Need to stay within the available budget
- Roadway Widths and Existing Features:

City is working on getting a very-narrow bikeway sweeper, but it takes time. Project designed to allow for addition of vertical elements once we have a sweeper.

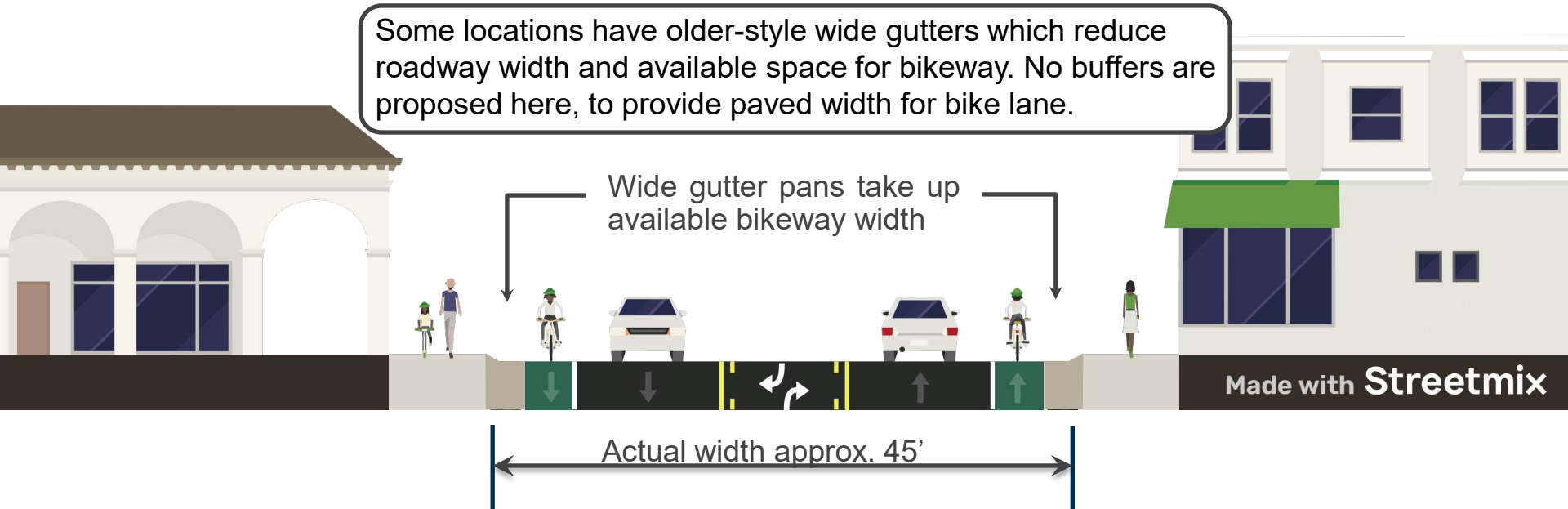




# Project Constraints

- Budget – The City of Sacramento has a budget deficit. Need to stay within the available budget
- Roadway Widths and Existing Features:

Some locations have older-style wide gutters which reduce roadway width and available space for bikeway. No buffers are proposed here, to provide paved width for bike lane.



## Funding

Total Project Budget: \$6M

Funding Sources:

- State grant funds through California Natural Resources Agency (\$5M)
- Local transportation funds





## Milestones and Next Steps

---

Complete Preliminary  
Engineering/Environmental  
Clearance – Summer 2025

Final Design Complete –  
Summer 2026

Begin Construction – Fall  
2026/Spring 2027



Please join us at  
the boards to  
review the  
preliminary  
design and talk  
with the team!

*City of*  
SACRAMENTO

