# TOP 5 CORRIDORS

REPORT
DECEMBER 2020

SACRAMENTO

Vision
ZERØ

# Acknowledgements

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Vice Mayor

**Angelique Ashby**
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**Allen Warren**
District 2

**Steve Hansen**
District 4

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**Stockton Boulevard (South) at Riza Avenue**

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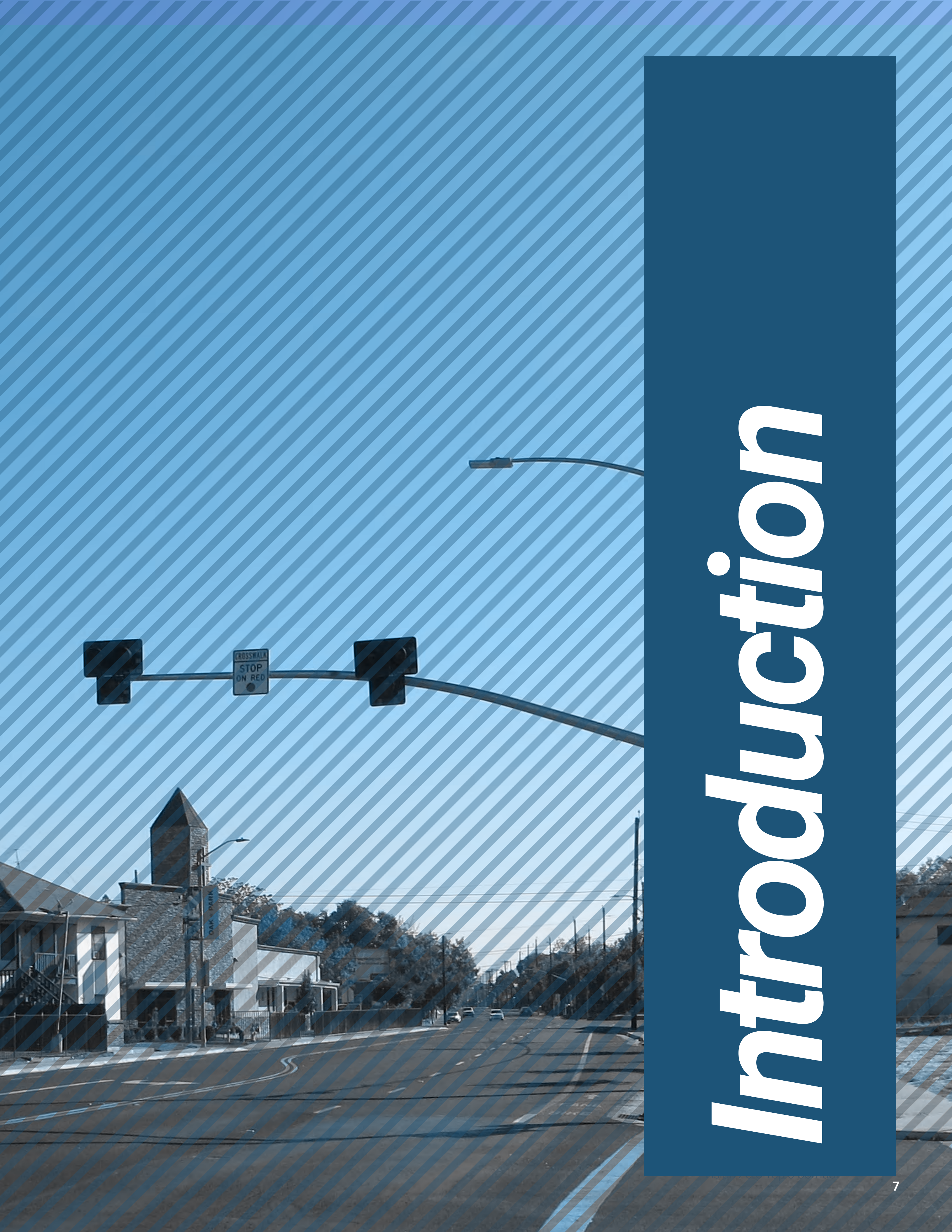
Broadway at 39th Street




# Introduction

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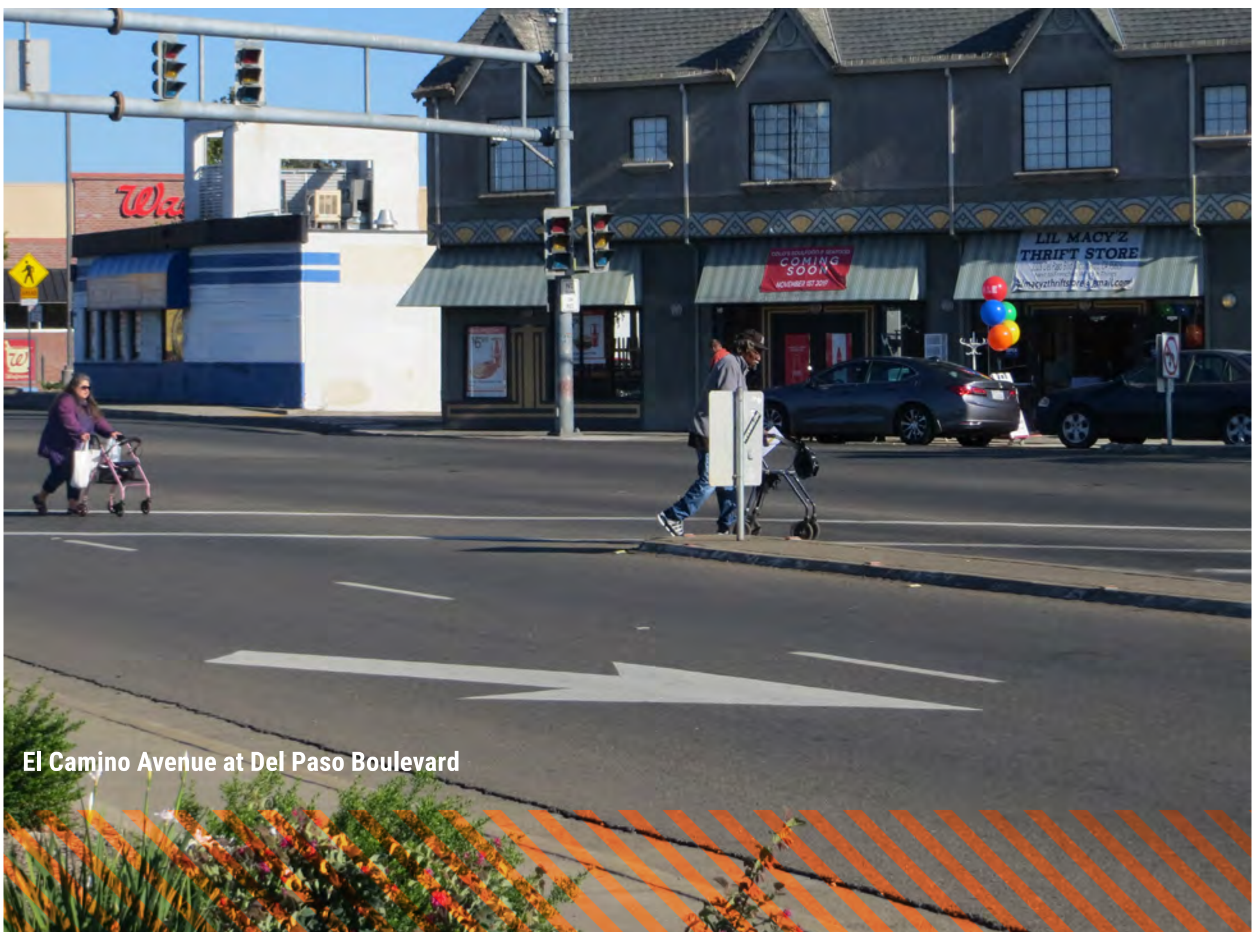
This report presents recommended roadway safety projects for the five one-mile roadway segments with the highest numbers of fatal and serious crashes involving pedestrians, bikes, and motor vehicles in the City of Sacramento. These corridors are:

- **Broadway/Stockton Boulevard:** Martin Luther King Jr. Boulevard to Stockton Boulevard and Broadway to 13th Avenue
- **El Camino Avenue:** Del Paso Boulevard to Steelhead Creek trail crossing
- **Florin Road:** 24th Street to Munson Way
- **Marysville Boulevard**: North Avenue to Arcade Boulevard
- **Stockton Boulevard (South):** McMahon Drive to Patterson Way

Each corridor has its own chapter documenting key features along the corridor such as neighborhood demographics, destinations, and travel statistics, as well as its crash analysis and proposed countermeasures, including their cost and effect on travel.




**El Camino Avenue at Del Paso Boulevard**

## Top 5 Corridors

## What is Vision Zero?


Vision Zero is a traffic safety philosophy that rejects the notion that traffic crashes are simply "accidents," but instead preventable incidents that can and must be systematically addressed. Vision Zero starts with the belief that everyone has the right to move safely in their communities, and that system designers and policy makers share the responsibility to ensure safe systems for travel. Through Vision Zero, the City of Sacramento and its partners are committed to working together to create safer streets.In January 2017, the City Council issued a call to action by adopting a resolution with the following goal: **The City of Sacramento will work corroboratively in a data-driven effort to eliminate traffic fatalities and serious injuries by 2027.** Thus, the Vision Zero Action Plan was created, and the document was approved by City Council August 2018.

## What is the Vision Zero Top 5 Corridor Study?

This study represents a critical next step in the implementation of Sacramento's Vision Zero program, focusing efforts on implementing near-term roadway improvements on the five corridors within the City that have the highest rates of crashes that result in fatalities and severe injuries. These five corridors were identified through developing of the High Injury Network (HIN), which was developed as a part of the Vision Zero Action Plan. The HIN is based on seven years of crash data (2009 through 2015) for all travel modes, analyzed from the statewide Transportation Injury Mapping System (TIMS).

**1. El Camino Ave**

Del Paso Boulevard
to
Steelhead Creek trail crossing

**2. Marysville Boulevard**

North Avenue
to
Arcade Boulevard

**3. Broadway/Stockton Boulevard**

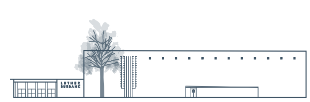
Martin Luther King Jr. Boulevard
to
Stockton Boulevard

Broadway
to
13th Avenue

**4. Stockton Boulevard (South)**


McMahon Drive
to
Patterson Way

**5. Florin Rd**



24th Street
to
Munson Way

The "existing conditions" of these corridors (e.g., current travel trends and collision analysis for the years 2009 through 2017) were presented in the Vision Zero Top 5: Existing Conditions Report (see Appendix A).. The Top 5 Corridors Report  contains the proposed countermeasures for each of the five corridors, including measured statistics on how implementation of the countermeasures will affect travel and how much they will cost.

## Relationship to Vision Zero Action Plan

To help reach its goal of eliminating traffic fatalities and serious injuries by 2027, the City of Sacramento developed a Vision Zero Action Plan, which was adopted by the City Council in August 2018. The Plan used historic crash data to pinpoint the factors contributing to traffic deaths and serious injuries, and it identified proven safety countermeasures to address those factors through education, engineering, enforcement, and evaluation. This Top 5 Corridor Study represents a critical next step in the implementation of City of Sacramento's Vision Zero Program, focusing efforts on implementing near-term improvements on the five corridors within the City that have the highest rates of crashes that result in fatalities and severe injuries.

## Identification of Segments

A High Injury Network (HIN) was developed for the City of Sacramento as part of the Vision Zero Action Plan. The HIN identifies corridors with the highest number of fatal and severe crashes for all travel modes (i.e., vehicle, bike, and pedestrian) to better understand existing transportation safety challenges in the City. Seven years of crash data, from 2009 through 2015, was analyzed from the statewide Transportation Injury Mapping Systems (TIMS). TIMS data includes only those crashes that resulted in an injury, ranging from "complaint of pain" to "fatal." Crashes resulting in only property damage, either to a vehicle or other property, are not included in the TIMS data set and were not analyzed as part of the Vision Zero Action Plan and HIN development.

A weighted crash score was created for each roadway segment; crashes involving a fatality or severe injury were given a score of 3, and all other injury crashes were given a score of 1. Weighted crash scores were then analyzed as a rate based on segment length. Segments with a weighted crash score greater than 1 per 300 ft of roadway were included on the HIN.

Once the HIN was developed, the network was divided into corridors approximately one mile in length, to allow for direct comparison and selection of the highest priority corridors. Fehr & Peers identified the ten corridors on the HIN with the highest number of fatal and severe injury crashes per mile.

Each of these corridors have between 10.4 and 7.1 fatal or severe injury crashes per mile. The next five ranked corridors (#6-10) have fatal and severe injury collision rates between 6.2 and 2.1.

**Stockton Boulevard (South) south of 48th Avenue**


**Marysville Boulevard south of Harris Avenue**

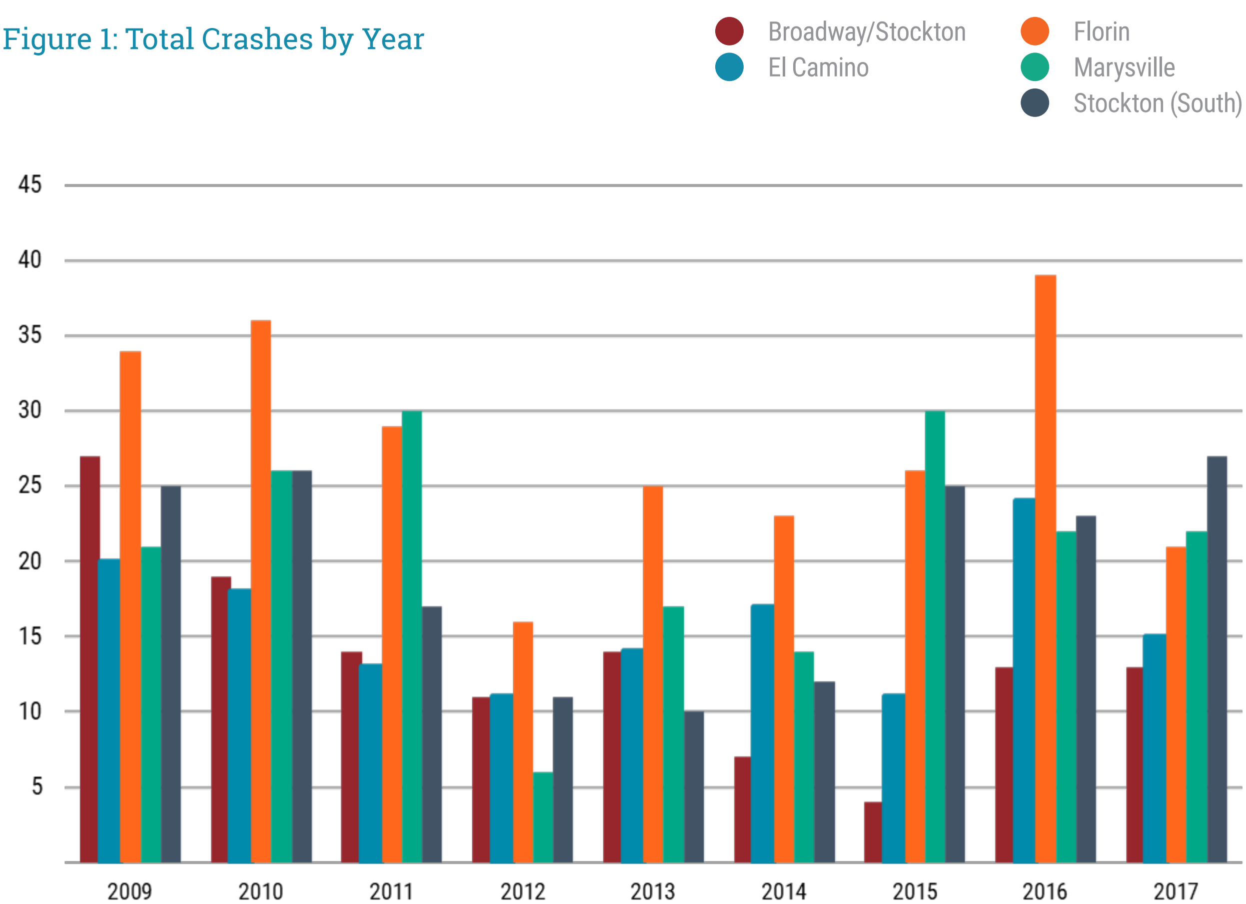
# Safety Context Overview

## Total Crashes by Year

**Figure 1** displays the number of annual injury crashes along each corridor between 2009 and 2017. This figure shows the following:

- The fewest crashes in a year occurred on the Broadway/Stockton Boulevard corridor in 2015, and the highest number of crashes in a year occurred on Florin Road in 2016.
- During the study period, Broadway/Stockton Boulevard is the corridor with the lowest number of total crashes, and Florin Road is the corridor with the highest number of crashes.
- While there were fewer overall crashes between 2012 and 2014, crashes are trending back up to peak numbers seen in 2009 and 2010.

### Figure 1: Total Crashes by Year

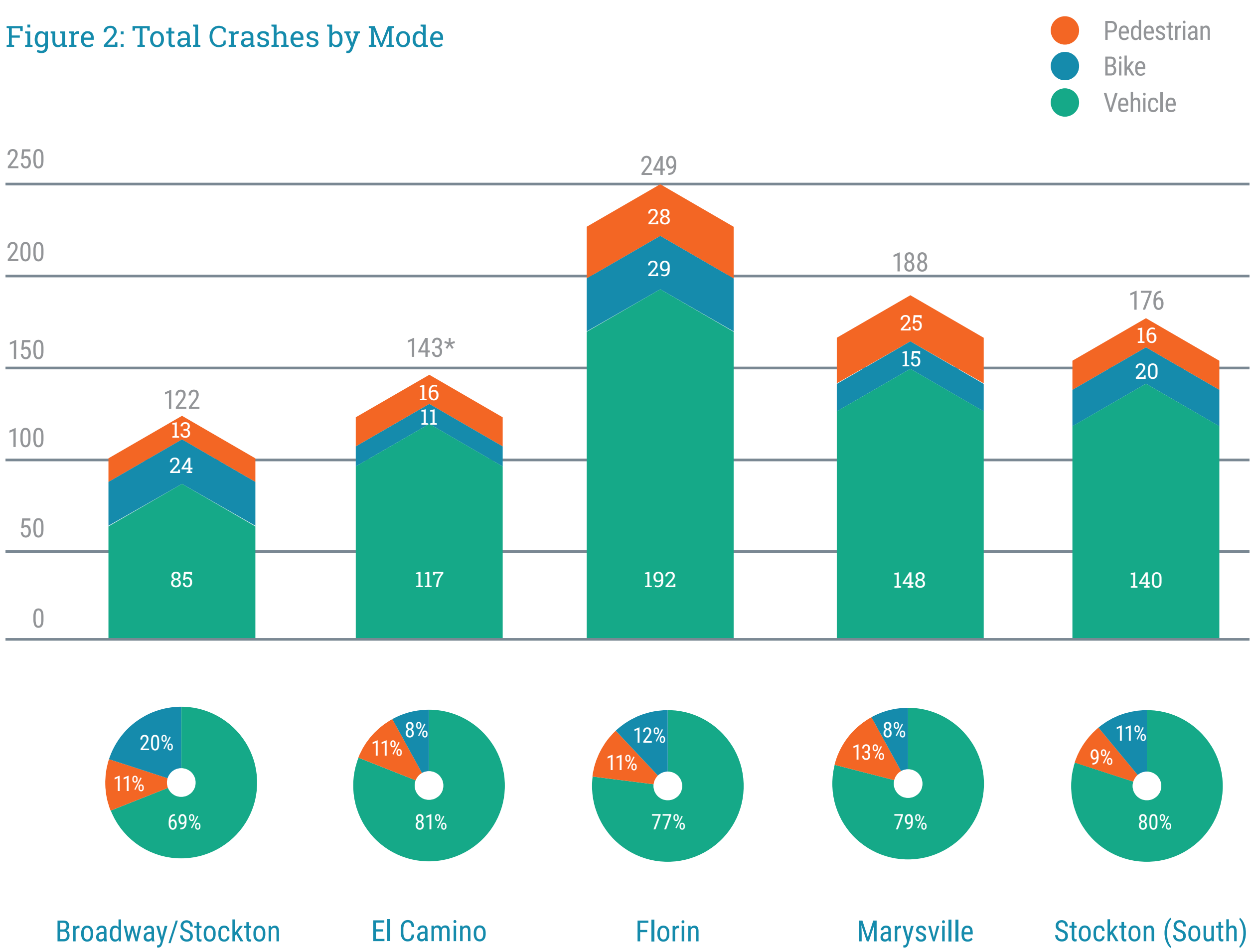


# Total Crashes by Mode

**Figure 2** displays the number of injury crashes by mode along each corridor between 2009 and 2017 as total and percentages. This figure shows the following:

- Despite having the lowest number of crashes overall, the Broadway/Stockton Boulevard corridor has the largest share of crashes involving a bicyclist (24 crashes, or 20 percent).
- The Marysville Boulevard corridor has the largest share of crashes involving a pedestrian (25 crashes, or 13 percent).
- In absolute numbers, the Florin Road corridor accounts for the highest number of crashes involving pedestrians (28 crashes), bicyclists (29 crashes), and vehicle-vehicle crashes (192 crashes).

## Figure 2: Total Crashes by Mode




*One crash on El Camino involved both a pedestrian and a bicyclist.

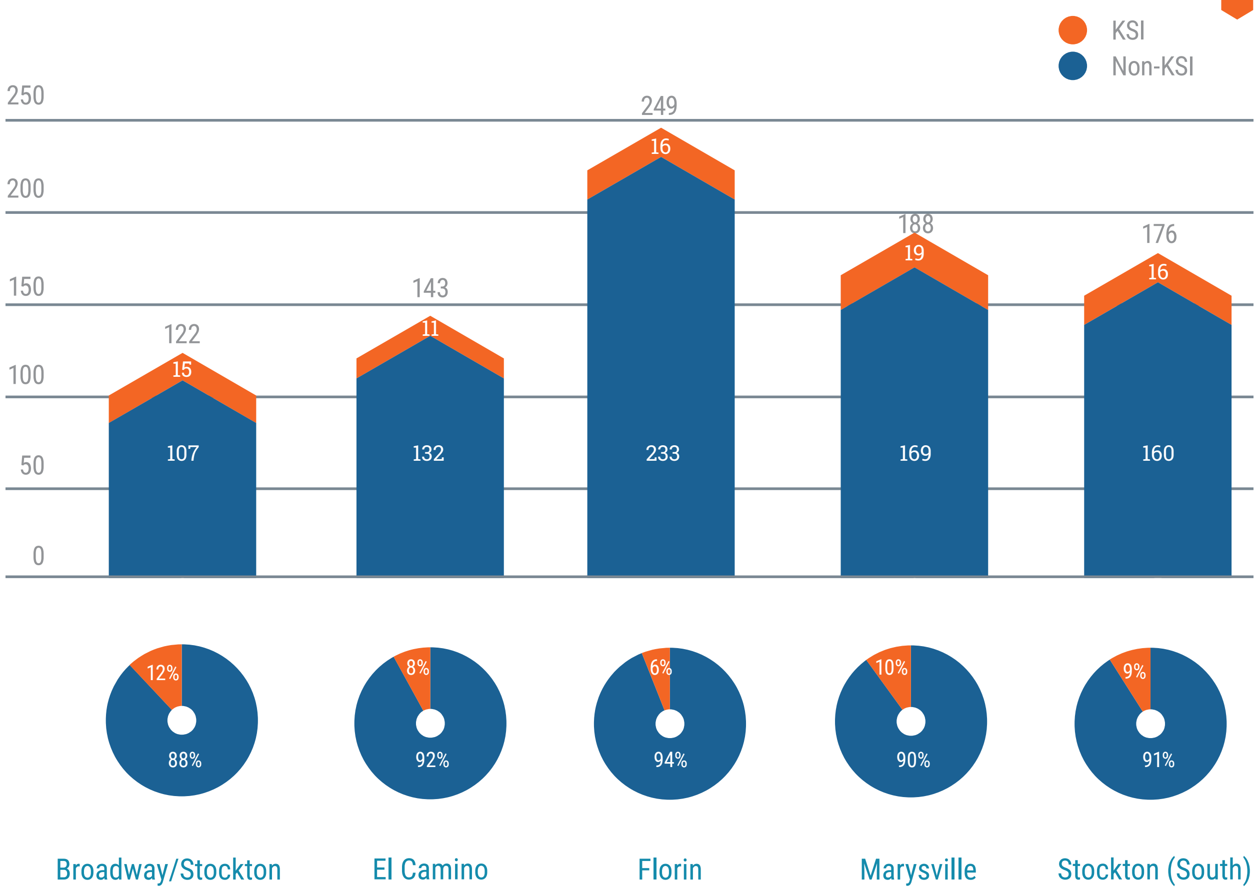
## Total Crashes by Severity

**Figure 3** displays the number of crashes that resulted in a fatality or serious injury (also called a KSI) along each corridor between 2009 and 2017. This figure shows the following:

- Despite having the lowest number of total crashes overall, the Broadway/Stockton Boulevard corridor has the largest share of crashes that result in a fatality or serious injury (15 crashes, or 12 percent of all injury crashes).
- The Marysville Boulevard corridor has the highest absolute number of crashes resulting in a fatality or serious injury (19 crashes).

Throughout this report, the acronym KSI is used to denote crashes where someone was killed or seriously injured.

### Figure 3: Total Crashes by Severity

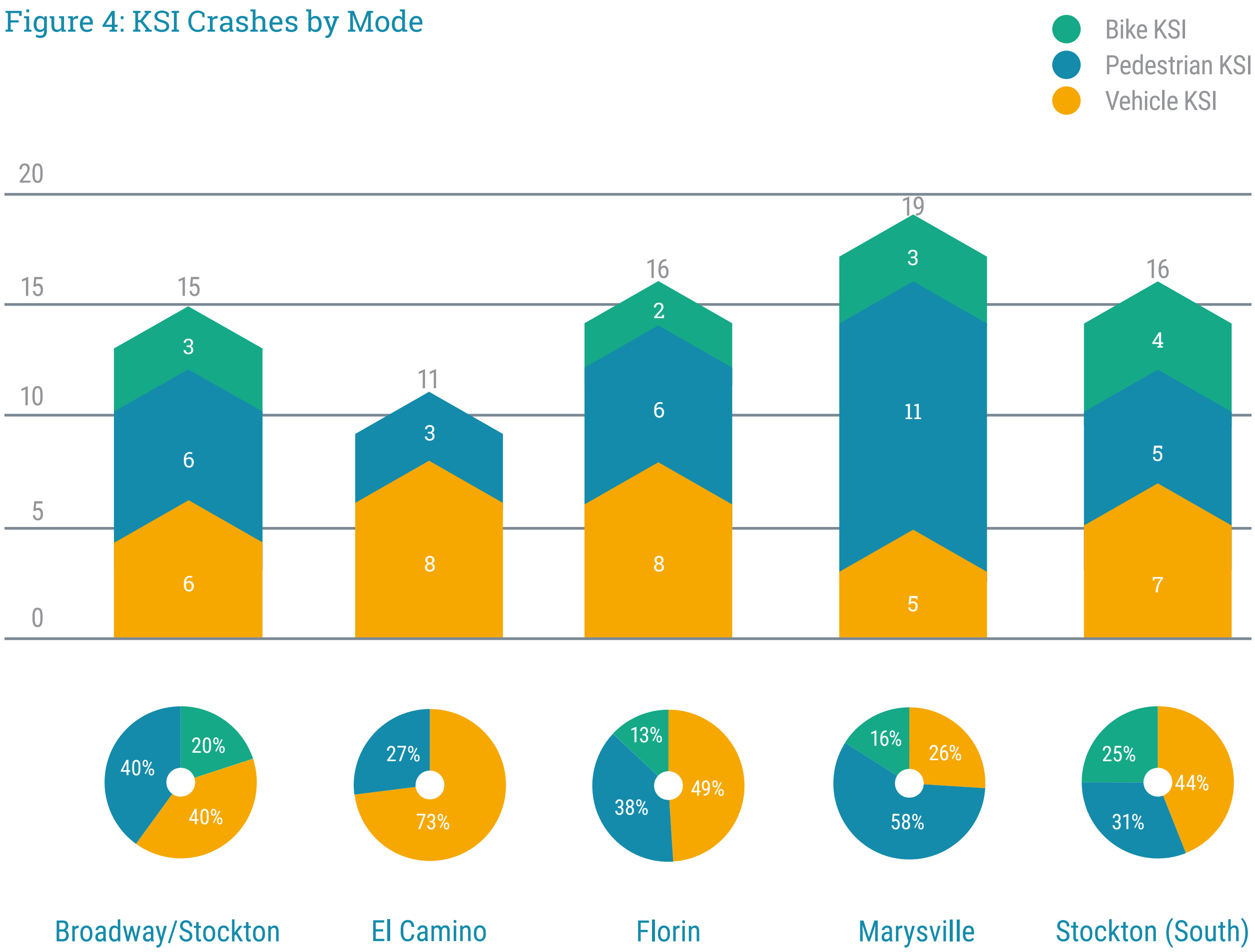


# KSI Crashes by Mode

**Figure 4** displays the number of crashes by mode that resulted in a fatality or serious injury between 2009 and 2017. This figure shows the following:

- The Marysville Boulevard corridor has the highest number and largest share of KSI crashes that involved a pedestrian (11 crashes, or 58 percent of KSI crashes).
- The Stockton Boulevard (South) corridor has the highest number and largest share of KSI crashes that involved a bicyclist (four crashes, or 25 percent of KSI crashes).
- The El Camino Avenue corridor does not have any bike crashes that resulted in a fatality or serious injury.

## Figure 4: KSI Crashes by Mode




El Camino Avenue at Rio Linda Boulevard

# Countermeasure Toolbox

# Countermeasure Toolbox

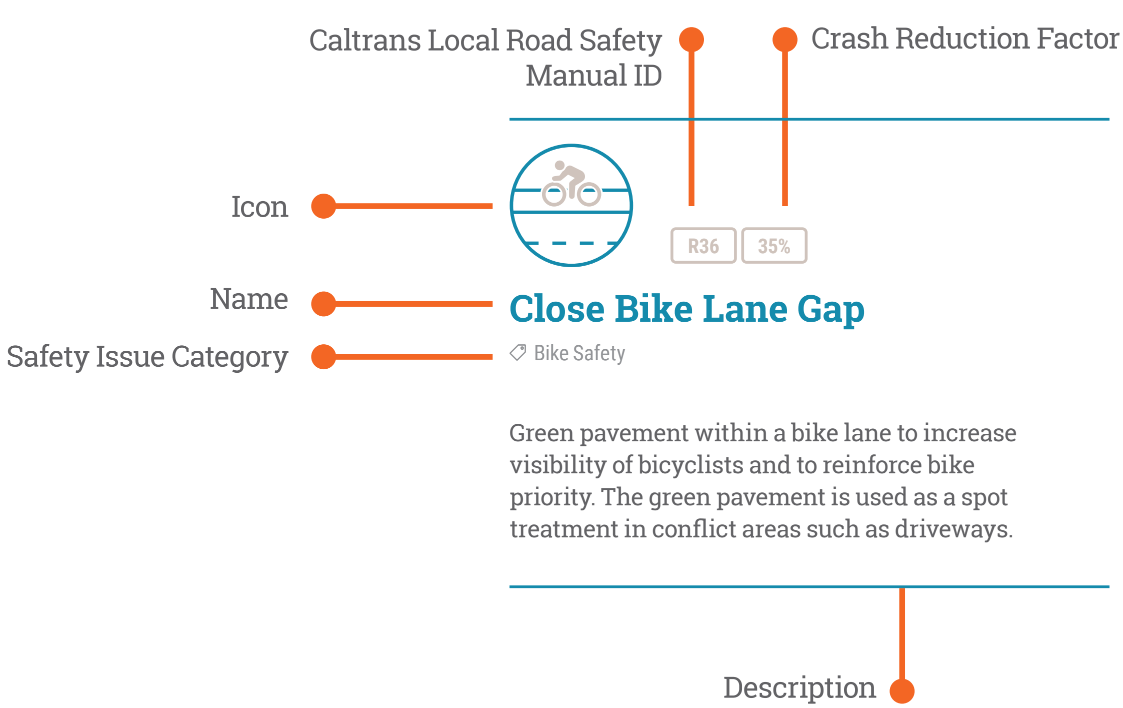
## Introduction

This toolbox presents the roadway safety countermeasures applicable on each of the Top 5 Corridors. These countermeasures have been selected specifically for their efficacy in creating safer environments for people traveling on Sacramento's streets, regardless of mode. Many of the countermeasures are included in the Caltrans Local Roadway Safety Manual (LRSM) and can be advantageous for use in Caltrans Highway Safety Improvement Program (HSIP) grant funding applications. In the toolbox, these countermeasures are noted by an LRSM ID numbers, and include a Caltrans-approved Crash Reduction Factor (CRF) as defined in the LRSM. The higher the CRF, the greater the expected reduction in crashes. There are many effective safety countermeasures beyond those listed in the LRSM, and several are included in this toolbox. Some of these countermeasures include an associated CRF, which is based on academic research and before-and-after studies, as compiled and reported by the Federal Highway Administration (FHWA).

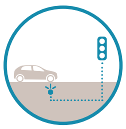
## How to use the Toolbox

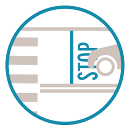
### A-Z

The countermeasure tools are listed in alphabetical order.

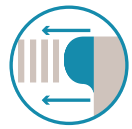


## List of Countermeasures


Advanced Dilemma-Zone Detection


Advanced Stop Bar

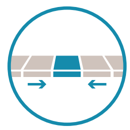

Bike Conflict Zone Markings


Bulbout

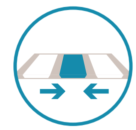

Bus Boarding Islands

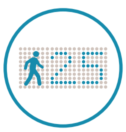

Class II Bike Lane


Close Bike Lane Gap

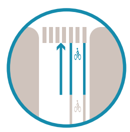

Close Sidewalk Gap


Co-Locate Bus Stops & Pedestrian Crossings

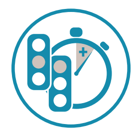

Consolidate Driveways


Countdown Pedestrian Signal Heads

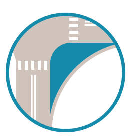

Dual Curb Ramps

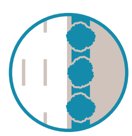

Extend Bike Lane to Intersection


Extend Pedestrian Crossing Time

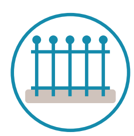

Extend Signal Clearance Time

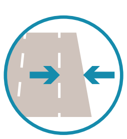

High Visibility Crosswalk


Intersection Tightening


Landscape Buffer


Leading Pedestrian Interval

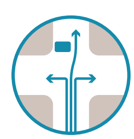

Median Barrier Fencing


Narrow Lanes


New Pedestrian Signal


New Traffic Signal

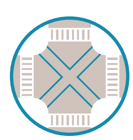

Parking Prohibition


Partial Closure


Pedestrian Recall Signal Timing


Pedestrian Refuge Island


Pedestrian Scale Lighting


Pedestrian Scramble

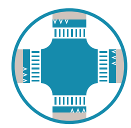

Prohibit Left Turn

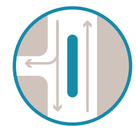
## List of Countermeasures (cont.)

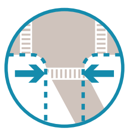

Prohibit Turns During Pedestrian Phase


Protected Left Turns

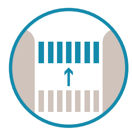

Provide Green Time For Bikes

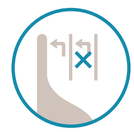

Raised Intersection

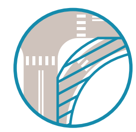

Raised Median


Realign Intersection to 90 Degrees

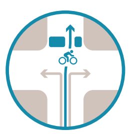

Red Light Camera

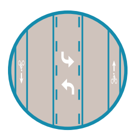

Relocate Crosswalk

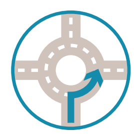

Remove Dual Left Turn Lanes

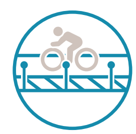

Remove Right Turn Slip Lane


Remove Sight Obstruction


Road Closure

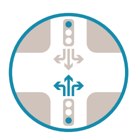

Road Diet


Roundabout


Separated/Buffered Bikeway

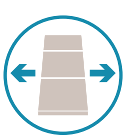

Shorten Signal Cycle Length


Slow Green Wave

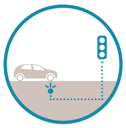

Split Signal Phase

Stop Sign


Straighten Crosswalk


Widen Sidewalk

# Countermeasures A-C



S4 40%

## Advanced Dilemma-Zone Detection

Signals/Signage

Advanced dilemma-zone detection enhances safety at signalized intersections by modifying traffic control signal timing on the fly to reduce the number of drivers that may have difficulty deciding whether to stop or proceed during a yellow phase. This may reduce rear-end crashes associated with unsafe stopping and angle crashes due to red light running.


S20 15%

## Advanced Stop Bar

Crossing, Pedestrian Safety

A stop bar placed ahead of the crosswalk at stop signs and signals reduces instances of vehicles encroaching on the crosswalk.

## Bike Conflict Zone Markings

Bike Safety

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.

## Bulbout

Crossings, Pedestrian Safety, Speed, Visibility

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.

## Bus Boarding Islands

Bike Safety, Pedestrian Safety

Dedicated waiting and boarding areas for passengers that are separated from the sidewalk by a bike channel, eliminating conflicts between transit vehicles and bikes at stops.

R32 35%

## Class II Bike Lane

Bike Safety

Five to seven foot wide designated lanes for bicyclists adjacent to vehicle travel lanes, delineated with pavement markings.

# Countermeasures C - D

R32 35%

## Close Bike Lane Gap

Bike Safety

Closing gaps between bike lanes increases the amount of dedicated facilities bicyclists can use, reducing mixing of bicyclists and drivers and increasing network connectivity and visibility of bicyclists in the roadway.

R34 80%

## Close Sidewalk Gap

Pedestrian Safety

Providing continuous sidewalks for pedestrians provides a separated facility for people to walk along the roadway, and can help minimize crashes with pedestrians walking in the road.

## Co-Locate Bus Stops and Pedestrian Crossings

Crossing, Pedestrian Safety

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

## Consolidate Driveways

Bike Safety, Pedestrian Safety, Visibility

Reducing the number of driveway entrances/exits through consolidation limits the exposure of bicyclists, pedestrians, and drivers to vehicles entering or exiting driveways, reducing conflicts.

S17 25%

## Countdown Pedestrian Signal Heads

Crossings, Pedestrian Safety, Signals/Signage

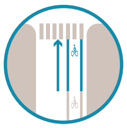
Displays "countdown" of seconds remaining on the pedestrian signal. Countdown indications improve safety for all road users, and are required for all newly installed traffic signals where pedestrian signals are installed.

## Dual Curb Ramps

Pedestrian Safety

Dual curb ramps, opposed to single angled curb ramps, improve ADA accessibility at all intersection approaches so that pedestrians with mobility challenges, or those pushing carts or strollers, can safely enter and exit all crosswalks. These are curb ramps that provide a slope for two directions of the curb, instead of single angled curb ramps.

# Countermeasures E - L



## Extend Bike Lane to Intersection

Bike Safety

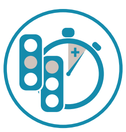
In locations where a bike lane is dropped due to the addition of a right turn pocket, the intersection approach may be restriped to allow for  bicyclists to move to the left side of right-turning vehicles ahead of reaching the intersection.

S3 15%

## Extend Pedestrian Crossing Time

Crossings, Pedestrian Safety

Increases time for pedestrian walk phases, and can better accommodate vulnerable populations such as children and the elderly.



S3 15%

## Extend Signal Clearance Time

Signals/Signage

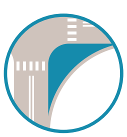
Extending yellow and all red time allows drivers and bicyclists to safely cross through a signalized intersection before conflicting traffic movements are permitted to enter the intersection.

S18/NS20 25%

## High Visibility Crosswalk

Crossings, Pedestrian Safety, Visibility

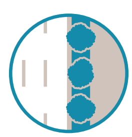
A crosswalk designed to be more visible to approaching drivers, striped with ladder markings using high-visibility material such as thermoplastic tape instead of paint.



## Intersection Tightening

Crossings, Pedestrian Safety, Speed, Visibility

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.



## Landscape Buffer

Pedestrian Safety

Separating drivers from bicyclists and pedestrians using landscaping provides more space between the modes and can produce a traffic calming effect by encouraging drivers to drive at slower speeds, lowering the risk of crashing.

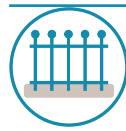
# Countermeasures L - P

S21 60%

## Leading Pedestrian Interval

Crossings, Pedestrian Safety, Visibility

Traffic signals timed to allow pedestrians a short head start in crossing an intersection to minimize conflicts with turning vehicles and improve pedestrian visibility.

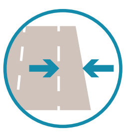


R3 25%

## Median Barrier Fencing

Crossings, Pedestrian Safety

Pedestrian median barriers restrict pedestrians from crossing the median at locations where nearby crossings are available and midblock crossings may have poor sight lines or insufficient safety enhancements for the conditions.



## Narrow Lanes

Speed

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.

## New Pedestrian Signal

Crossings, Pedestrian Safety

Pedestrian signals (also called “half signals”) can be implemented at mid-block crossing locations to enhance crosswalk safety and increase driver yielding. The signals consist of standard (red-yellow-green) signal heads controlling the roadway approaches, and function similar to a standard traffic signal when actuated by a pedestrian or bike push-button or detection.

NS3 30%

## New Traffic Signal

Signals/Signage

New traffic signals help organize travel of all modes at an intersection, limiting interactions between vehicles, pedestrians, and bicyclists with conflicting movements. New signals can have a traffic calming effect on long, high-speed straightaways.

30%

## Parking Prohibition Near Intersections

Bike Safety, Crossings, Pedestrian Safety, Signals/Signage

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).

# Countermeasures P - P

## Partial Closure

Bike Safety, Crossings, Pedestrian Safety

Partial closures, using a physical barrier across one direction of traffic at an intersection allow full bicyclist and pedestrian passage while restricting vehicle access in one direction. This strategy can be used to minimize conflict points at complicated intersections.

## Pedestrian Recall Signal Timing

Pedestrian Safety, Signals/Signage

Signals can be put in "recall" for key time periods of the day such as peak business hours or school drop-off/pick-up times. The "WALK" signal would be displayed every signal cycle without prompting by a pedestrian push button.

S12/NS14 25%

## Pedestrian Refuge Island

Crossings, Pedestrian Safety, Speed, Visibility

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.

S1/NS1/R1 35-40%

## Pedestrian Scale Lighting

Crossings, Pedestrian Safety, Visibility

Appropriate quality and placement of lighting can enhance an environment as well as increase comfort and safety. Pedestrian-scale lighting is lower in height than standard streetlighting and is spaced closer together.

S19 40%

## Pedestrian Scramble

Crossings, Pedestrian Safety, Signals/Signage

Restricts vehicular movements to provide an exclusive signal phase allowing pedestrians to cross in all directions, including diagonally.

S15/NS16 50%

## Prohibit Left Turn

Bike Safety, Crossings, Pedstrian Safety, Signals/Signage

Prohibitions of left turns at locations where a turning vehicle may conflict with pedestrians in the crosswalk or where opposing traffic volume is high. Reduces pedestrian interaction with vehicles when crossing.

# Countermeasures P - R

## Prohibit Turns During Pedestrian Phase

Crossings, Pedestrian Safety, Signals/Signage

Restricts left or right turns during the pedestrian crossing phase at locations where a turning vehicle may conflict with pedestrians in the crosswalk. This restriction may be displayed with a blank-out sign.

S6/S7 | 30-55%

## Protected Left Turns

Signals/Signage

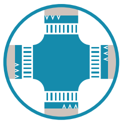
Protected left turns provide an exclusive phase for left-turning vehicles to enter an intersection separate from any conflicting vehicle or pedestrian movements.

S3 | t15%

## Provide Green Time For Bikes

Bike Safety, Signals/Signage

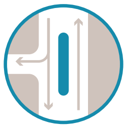
Provide or prolong the green phase when bicyclists are present to provide additional time for bicyclist to clear the intersection. Can occur automatically in the signal phasing or when prompted with bike detection. Topography should be considered in clearance time.



## Raised Intersection

Crossings, Pedestrian Safety, Speed

Raised intersections are flush with the sidewalk and ensure that drivers traverse the crosswalk slowly. Similar to speed humps and other vertical speed control elements, they reinforce slow speeds and encourage motorists to yield to pedestrians at the crosswalk.

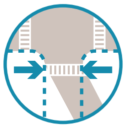


S12/NS14/R8 | 25%

## Raised Median

Crossings, Pedestrian Safety, Speed

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.



## Realign Intersection to 90 Degrees

Crossings, Pedestrian Safety, Speed, Visibility

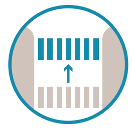
By eliminating acute or obtuse angles between intersection roadways, intersection sight distance may be improved, allowing drivers to see pedestrians more easily. Right-angle intersections can also help to slow down turning vehicles.

# Countermeasures R - R

## Red Light Camera

Signals/Signage

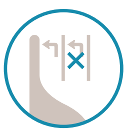
Red light cameras can be used for automated enforcement to issue citations to drivers running red lights at signalized intersections, and may discourage this behavior.



## Relocate Crosswalk

Crossings, Pedestrian Safety, Visibility

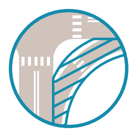
Relocating existing crosswalks can help improve pedestrian visibility, shorten crossing distances, and minimize conflicts with vehicles. In some cases, crosswalks currently located between two legs of an offset intersection may be moved to the far side of the intersection to minimize the number of conflicting vehicle turning movements.



## Remove Dual Left Turn Lanes

Signals/Signage

Restriping an approach so there is a single left-turn lane instead of dual lefts can help simplify an intersection and create room for a road diet or other geometric improvements.



## Remove Right Turn Slip Lane

Bike Safety, Pedestrian Safety, Speed

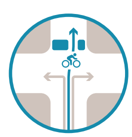
Closing a free-flow right-turn slip lane can help slow right turning drivers, eliminates an uncontrolled crossing for pedestrians, and shortens pedestrian crossing distances. The space reclaimed in closing the slip lane can be reused as pedestrian space to widen sidewalks, enhance curb ramps, or provide more space for street furniture.

NS11 20%

## Remove Sight Obstruction

Visibility

Remove objects that may prevent drivers and pedestrians from having a clear sightline. May include trimming or removing landscaping, or removing or relocating large signs.

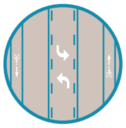


## Road Closure

Bike Safety, Crossings, Pedestrian Safety

Road closures, using a physical barrier, allow full bicyclist and pedestrian passage while restricting vehicle access. This strategy can be used to minimize conflict points at complicated intersections or to minimize conflicting movements due to turning vehicles.

# Countermeasures R - S

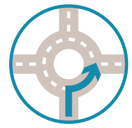


R14 30%

## Road Diet

Speed, Pedestrian Safety, Bike Safety, Crossings

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.

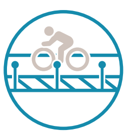


S16/NS4/NS5 35-67%

## Roundabout

Bike Safety, Crossings, Pedstrian Safety, Signals/Signage

Roundabouts are large circular islands, placed in the middle of an intersection, which direct flow in a continuous circular direction around the intersection. Roundabouts can reduce the number of conflict points, compared to an uncontrolled intersection, and decrease vehicle speeds due to intersection geometry. Converting signalized intersections to roundabouts can be especially effective at complex intersections or intersections with high left-turn volumes.



R33 45%

## Separated/Buffered Bikeway

Bike Safety

Designated bike lanes, separated from vehicle traffic by a physical barrier, usually bollards, landscaping, or parked cars. These facilities can increase safety by decreasing opportunities for crashing with over-taking vehicles, and reducing the risk of dooring.

S3 15%

## Shorten Signal Cycle Length

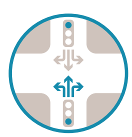
Signals/Signage

Reducing the cycle length at intersections may reduce the delay experienced by vehicles, bicyclists, and pedestrians. When delay is significant, road users are more inclined to ignore signal indications.

## Slow Green Wave

Signals/Signage, Speed

A series of traffic signals coordinated to allow for slower vehicle travel speeds through several intersections along a corridor. Coordinating signals for slower travel  speeds gives bicyclists and pedestrians more time to cross safely and encourages drivers to travel at slower speeds.



## Split Signal Phase

Signals/Signage

Opposing legs of an intersection each receive their own phase.

# Countermeasures S - W


## Stop Sign

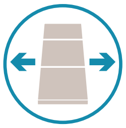
Signals/Signage

When warranted, stop signs provide a cue to drivers to stop and wait for vehicles, bicyclists, and pedestrians to cross before proceeding.

## Straighten Crosswalk

Crossings, Pedestrian Safety, Visibility

Straightening crosswalks improves sight lines, making pedestrians more visible to oncoming drivers, and may shorten the crossing distance, reducing the length of time required for pedestrians to cross an intersection.



## Widen Sidewalk

Pedestrian Safety

Wide sidewalks can provide space for both pedestrians and bicyclists to use a shared facility. Wide sidewalks can be important for locations with high volumes of pedestrians.


Broadway west of Stockton Boulevard


30

# Policy Toolbox

# Policy Toolbox

## Introduction

As part of the Vision Zero Action Plan, adopted by City Council in August 2018, the City committed to a series of actions that focus on achieving the Vision Zero goal of eliminating traffic fatalities and serious injuries. The development of the Top 5 Corridor Study has provided additional insight into specific tools to consider when updating policies to achieve the Vision Zero goal. Clearly defining policies will allow them to be regularly incorporated into future plans and projects.

## Signal Policies

Consistent with Vision Zero Action 5.4 it is recommended that the City update its signal timing policy to improve safety for all modes.

Based upon experience on the Top 5 corridors, some signal timing policies to consider as part of this update include the following:

### Maximum Cycle Length

*Recommend that the City consider establishing a practice to determine a maximum cycle length for a corridor or intersection, especially along the High Injury Network.*

**What is Maximum Cycle Length?**

A cycle length is the amount of time required to display all phases (red, yellow, green) for each direction of an intersection before returning to the starting point. Cycle lengths are based on traffic volumes and work best within a certain range depending on the conditions of the corridor and intersection. Shorter signal cycles can reduce overall pedestrian wait times and result in improved pedestrian compliance.

### Minimum Green Time

*Recommend that the City review industry best practices, State and Federal guidance to update the practice for calculating minimum green time with the next update to City signal timing policy.*

**What is Minimum Green Time?**

The minimum green time is the least amount of time that a green signal will be displayed for a specific movement. The time for pedestrians and/or bicyclists crossing with a phase must also be considered and included in the minimum phase length.

## Flash Don’t Walk Time

*Recommend that the City review its practice for calculating pedestrian clearance time with the next update to City signal timing policy.*

### What is Walk/Flash Don’t Walk Time?

The “Flashing Don’t Walk” interval follows the “Walk” interval and is often accompanied by a countdown signal. It is used to alert pedestrians that they need to finish crossing and if there is a countdown, it lets pedestrians know how long they have to do so.

## Yellow and All Red Clearance Time

*Recommend that the City review its practice for calculating intersection clearance times with the next update to City signal timing policy.*

### What are Clearance Times?

Clearance times include the yellow light and the “all-red” signal time. The yellow signal provides time for approaching vehicles to slow and stop and the “all-red” is the time when a signal is changing from one phase (red, yellow, green) to the next giving time for all vehicles to clear the intersection.

## Slow Green Wave

*Recommend that the City investigate controlling the travel speed of vehicles by optimizing the cycle length, splits, and offsets to the posted speed or lower where appropriate.*

### What is a Slow Green Wave?

The concept of a “slow green wave” is a series of traffic signals coordinated to allow for uninterrupted traffic flow of vehicles traveling at the speed limit or lower and require those traveling at faster speeds to stop more frequently.

## Pedestrian Recall

*Recommend that the City consider implementing pedestrian recall mode to traffic signals on the High Injury Network where appropriate.*

### What is Pedestrian Recall and Detection?

Activating pedestrian recall mode initiates the pedestrian phase automatically with its corresponding phase for every traffic signal cycle. This means that the pedestrian would not have to push a button in order to see the “Walk” phase. This is typically implemented in areas with high levels of pedestrian activity.

## Street Design Policies

Consistent with Vision Zero Action 2.1 it is recommended that the city update street design standards to reflect complete streets and designs reflective of crash reduction factors.

Based upon experience on the Top 5 corridors, some tools to consider as part of this update include the following:

### Pedestrian Countdown Signals

*Recommend that the City continue its efforts to install pedestrian countdown signals at all signalized intersections.*

**What are pedestrian countdown signals?**

Per the City's draft Pedestrian Crossing Guidelines, pedestrian countdown signals are particularly useful to pedestrians at longer distance crossings, so pedestrians know how much time remains to fully cross the street before the signal changes.

### Bikeway Selection

*Recommend that the City install the appropriate bike facility based on the guidance in the Sacramento Bicycle Master Plan.*

**How are bikeways selected?**

The Sacramento Bike Master Plan contains a "Bikeway Facility Selection Guidelines" chart to provide a starting point to help identify which bikeway type is appropriate for a road based on its traffic volume and speed limit. Using this chart to build appropriate bike facilities will create a low stress network that is comfortable for riders of all ages and abilities to use.

### Sidewalk Widths

*Recommend that the City consider a contextual approach to setting the minimum widths of sidewalks with the next update to the street design standards.*

**How are sidewalk widths determined?**

In accordance with ADA accessibility guidelines, sidewalks should at least 5 feet in width. A contextual approach for sidewalk width setting could take into consideration the street type and surrounding land use, requiring wider sidewalks on some streets to enhance safety and comfort for pedestrians.

### Lane Widths

*Recommend that the City consider exemptions to the standard minimum lane width on the Top 5 Corridors and remaining High-Injury Network, where appropriate.*

**How are lane widths determined?**

City street design standards require minimum lane widths for specific scenarios. A reduction in lane width produces a traffic calming effect by encouraging drives to travel at slower speeds. Other considerations for setting minimum lane widths are truck routes, transit routes, and locations where adjacent lanes are in the opposite direction..

# Other Policies

This section documents additional recommended policy modifications based upon experience on the Top 5 corridors:

## Speed Limit Setting

*Recommend that the City continue to pursue efforts to reduce posted speed limits on the HIN.*

**How are speed limits set?**

State guidelines require surveys of current speeds to be used as the basis for speed limit setting. While continuing to operate within State guidance the City has some tools to ensure that speed limits on the HIN are context sensitive and prioritize the safety and comfort of all road users.

## Speed Safety Cameras

*Recommend that the City support the use of automated speed enforcement in State Legislation.*

**What are speed safety cameras?**

Speed safety cameras are devices that can identify speeding violations and issue citations. This type of speed enforcement is allowed in many States, it is not allowed in California. The City of Sacramento should continue to support legislative efforts to allow speed safety cameras in California.

## Bus Stop Placement and Supportive Facilities

*Recommend that the City prioritize pedestrian and bike safety improvements that provide connections to light rail stations and bus stops. At minimum, bus stops should be co-located with an adjacent crosswalk (within 100 feet).*

**How are bus stop placements determined?**

Consistent with the City's draft Pedestrian Crossing Guidelines, recommend that bus stops are placed on the far side of intersections and downstream of adjacent crosswalks, to ensure bus stop does not conflict with crosswalk approach. Recommend that the City also provide adequate sidewalk width on streets with bus routes to provide stop amenities while maintaining space for pedestrian flow.

## Newly Adopted or In Process Policies

### Complete Streets Policy

*In December 2019, the City adopted a Complete Streets Policy to promote safe and convenient travel options on Sacramento's streets for all users of all abilities and ages.*

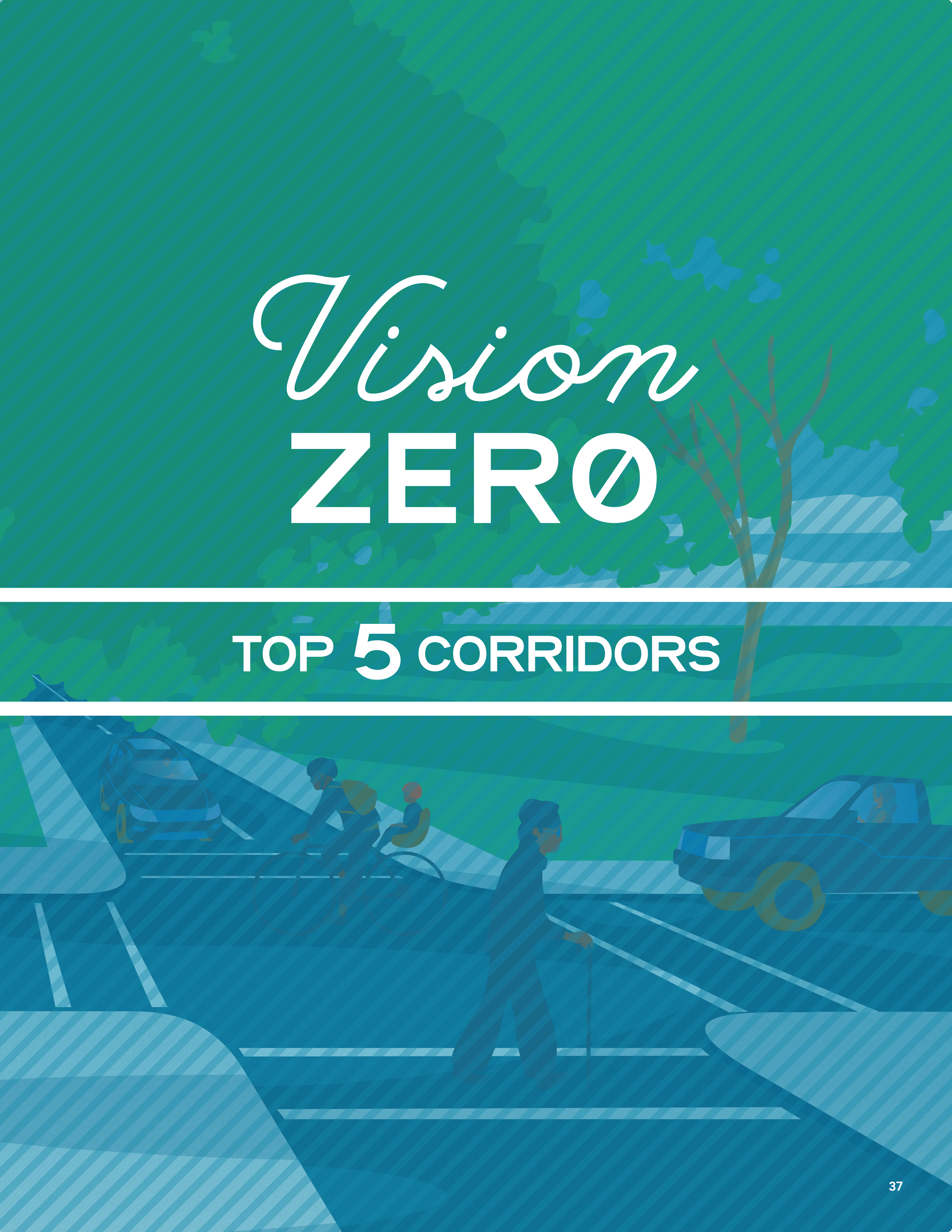
This policy aligns with and supports projects and policies recommended as part of this report, as well as the Action Items listed in the Sacramento Vision Zero Action Plan.

### Pedestrian Crossing Guidelines

*Recommend that the City update the Pedestrian Crossing Guidelines later this year. The updated guidelines, currently in draft form, will include recommendations related to crosswalk spacing, markings, and safety enhancement facilities.*

Key considerations included in the draft Guidelines support the crosswalk safety enhancement recommended in this report. Additionally, marked crosswalk spacing is recommended at least as frequently as shown below:

- Every 800 feet on the Grid
- Every 1,200 feet on the HIN
- Within 100 feet of new transit stops



# Vision ZERØ

## TOP 5 CORRIDORS




El Camino Avenue at Del Paso Boulevard

# El Camino

**Vision Zero**
**Top 5 Corridor**

# El Camino Avenue

## Vision Zero Top 5 Corridor

El Camino Ave & Del Paso Blvd

**What is going on?**
Between 2009 and 2017, 11 crashes that resulted in a fatality or severe injury (KSI) occurred on the segment of El Camino Avenue between Ueda Parkway and Del Paso Boulevard, three of which involved a pedestrian.

**What are the key issues?**
Many of the vehicular crashes involved rear-ends, proceeding straight, and driving at an unsafe speed. Additionally, two-thirds of pedestrian crashes involved people crossing the street in a marked crosswalk.

**What is the community concerned about?**
During outreach, residents spoke of drivers traveling too fast on the corridor, which can make it difficult to cross the street or pull out of driveways.

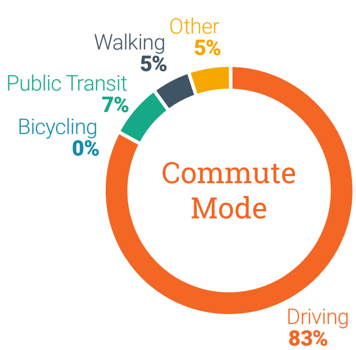
The following pages lay out the existing conditions along the corridor, feedback heard from residents at outreach events, and roadway safety recommendations focused on reducing vehicle speed, improving visibility, increasing compliance with signals and signs, and providing additional crossing opportunities for pedestrians.

# Table of Contents

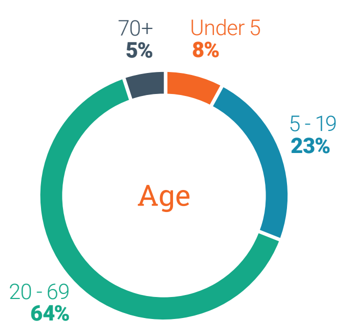
# In the Neighborhood

## Corridor

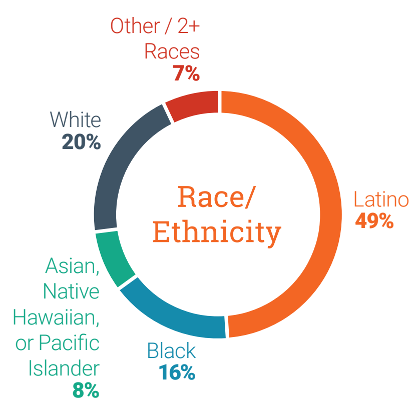

## About the Neighborhood




Residents in this neighborhood take transit and walk to work at a higher rate than the City as a whole.




This neighborhood has a higher share of residents age 5-19 than the City as a whole.




65% of the residents in this neighborhood are Black or Latino, compared with 42% citywide.

El Camino Avenue at Edgewater Road

El Camino Avenue at Forrest Street

El Camino Avenue at Traction Avenue

## Key Destinations Along the Corridor

### Parks

2

### Regional Trails

2

### Libraries

1

### Food Markets

2

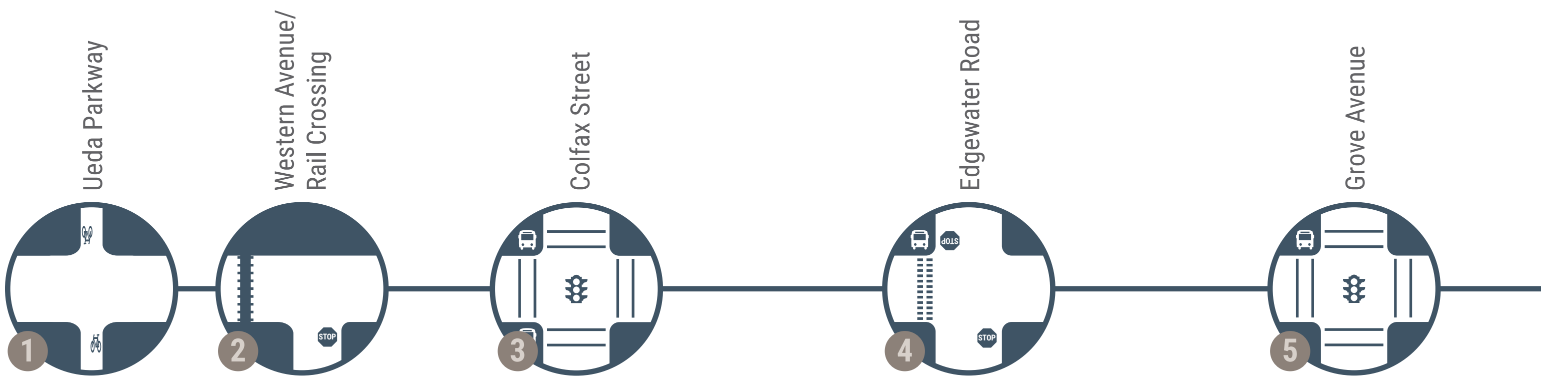
### Houses of Worship

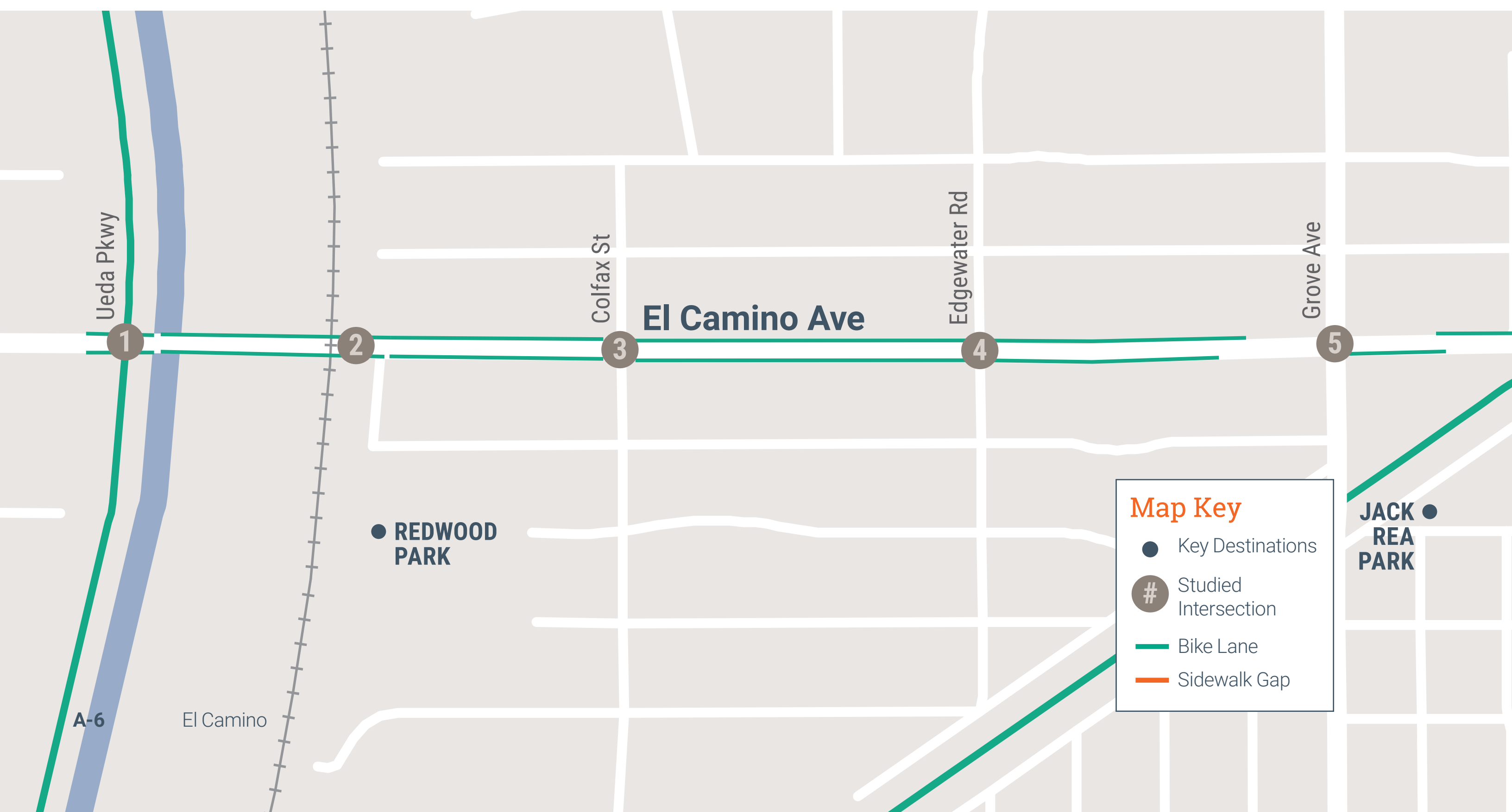
2

# Travel on El Camino

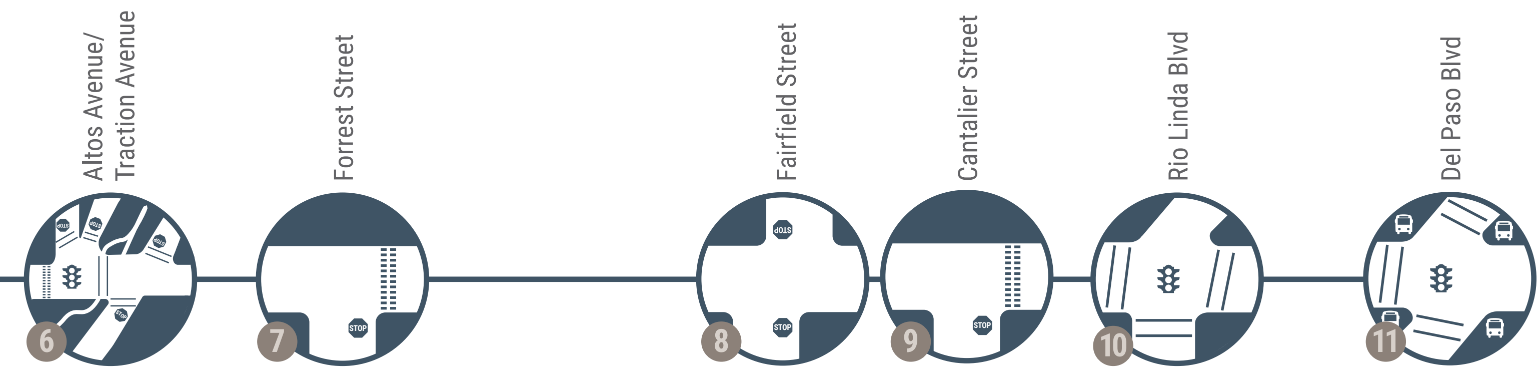
## Key Statistics

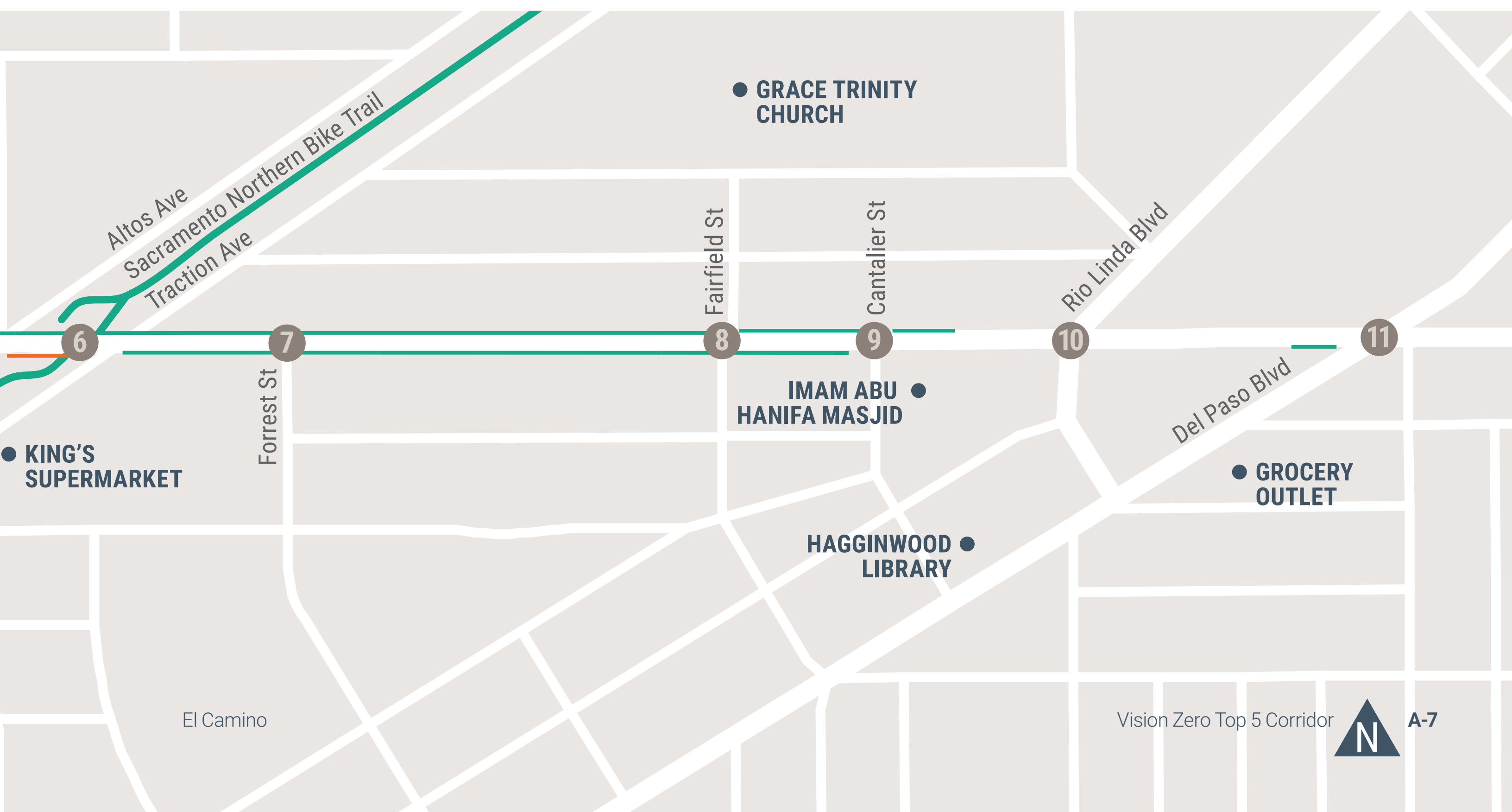
| Posted Speed Limit | Daily Vehicles | Maximum PM Intersection Vehicle Volume | PM Rush Hour People Walking | PM Rush Hour People Biking |
|---|---|---|---|---|
| **30 MPH** | **13,500** | **1,288** | **151** | **158** |



| Number of Transit Routes | Bikeway Type | Longest Distance Between Marked Crosswalks | Sidewalk Coverage |
|---|---|---|---|
| ***2*** ***#15, #88*** | ***On-Street Bike Lanes with gaps*** | ***2,100 Ft*** | ***97%*** |



# Crashes on El Camino

## Vehicle Crash Types

### Unsafe Speed

"Unsafe Speed" was the most common violation, cited in 40% of all crashes.

1 2 3 4 5 6
7 8 9 10 11

### Proceeding Straight

80% of drivers were proceeding straight or stopped at the time of the crash.

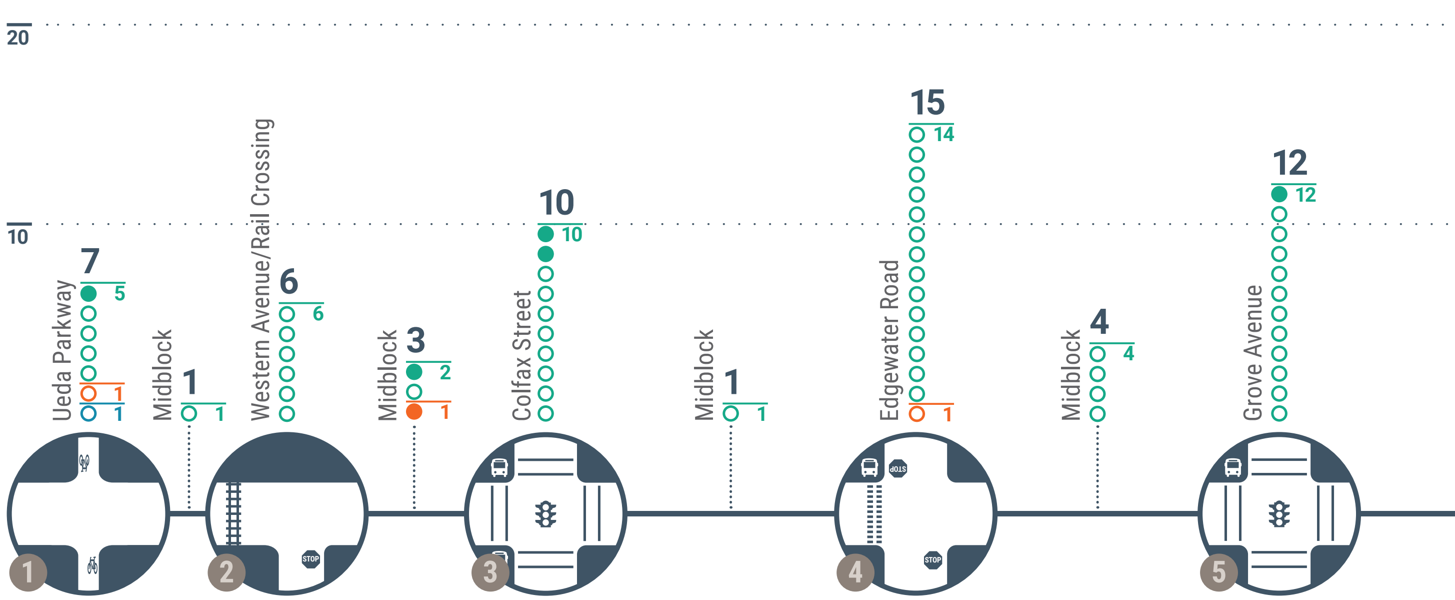
1 2 3 4 5 6
7 8 9 10 11

### Rear End

Over 40% of all crashes were rear end.

1 2 3 4 5 6
7 8 9 10 11

## Crash Locations



## Pedestrian Crash Types

### Pedestrian Crossing

The majority of people hit while walking were crossing. 2/3 of people were in the crosswalk.

1 2 3 4 5 6
7 8 9 10 11

### Weekend

Nearly 2/3 of pedestrian crashes occurred on Friday, Saturday or Sunday.

1 2 3 4 5 6
7 8 9 10 11

## Bike Crash Types

### Daytime

10 of 11 total bike crashes occured between 9 AM and 6 PM.

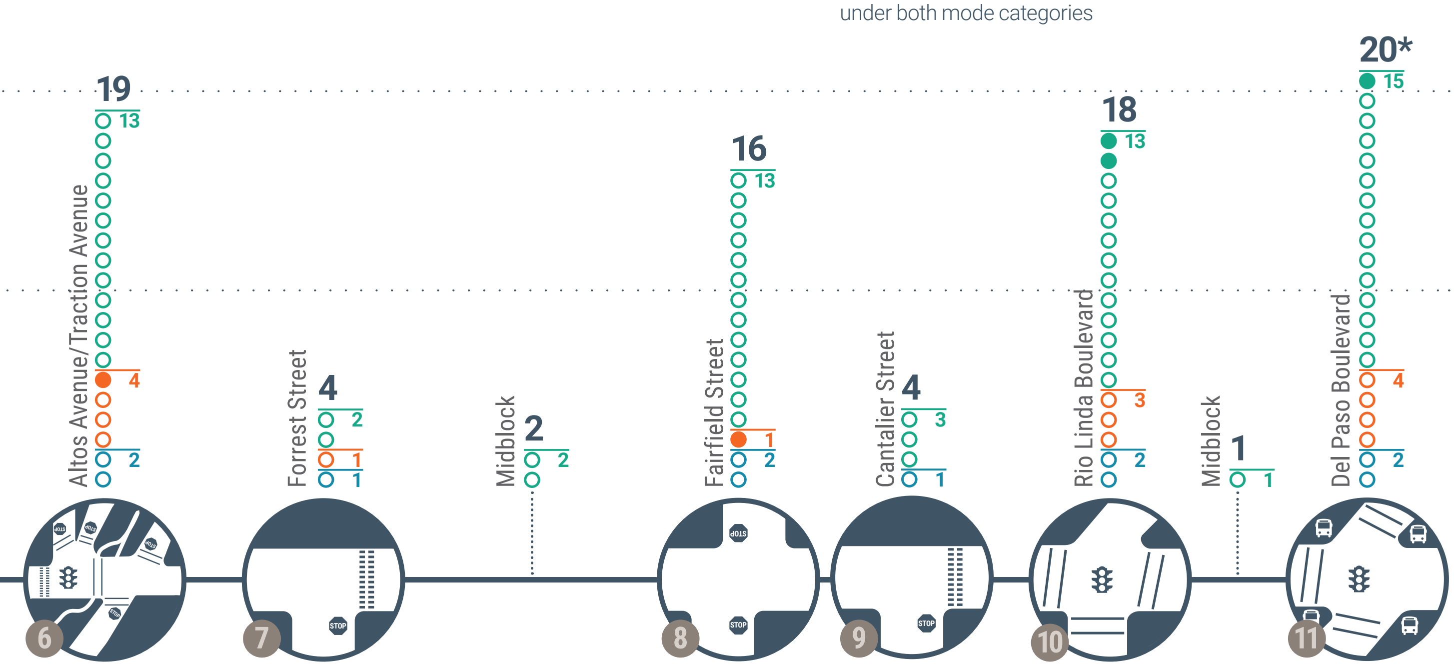
1 2 3 4 5 6
7 8 9 10 11

1 Numbers that are turned on represent a location where crash type has occurred at least three times.

### Total Crashes

| | All Injury Crashes | Fatal and Severe Crashes |
|---|---|---|
| Vehicle | 117 | 8 |
| Pedestrian | 16 | 3 |
| Bike | 11 | 0 |

*One crash involved both a pedestrian and bicyclist and is identified under both mode categories



# Feedback from the Community

"At the intersection of Del Paso and El Camino, it is hard to cross the street."

"A lot of homes have their driveways backing into El Camino—there is unsafe backing out due to high speeds and visibility issues."

Grocery Outlet Store Pop-Up Event

## Key Themes

### Visibility

Residents provided feedback related to nighttime visibility issues due to insufficient lighting, and difficulty turning onto El Camino from driveways and side streets due to sight line issues.

### Signals/Signage

Residents described drivers often running red lights and pedestrians crossing against the light - both behaviors theorized to be because of long traffic signal cycle lengths.

### Crossings

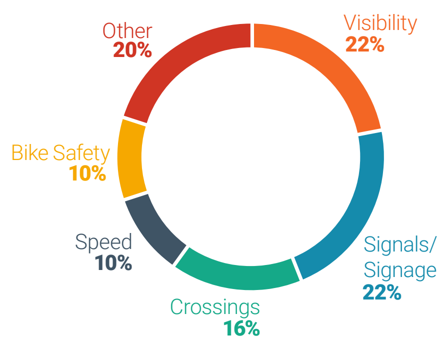
Residents described difficulty in crossing the street at the El Camino/Del Paso intersection due to long distances, long waits, and a missing marked crosswalk.

### Speed

Residents described drivers traveling at speeds they felt were too fast, which makes driving and walking along and crossing El Camino feel uncomfortable for them.

### Bike Safety

Residents provided feedback that the existing bike lanes are too narrow and often obstructed, and that fast-moving vehicle traffic makes biking uncomfortable.




## Engagement Events

November 10, 2018
Old North Sacramento / Dixieanne Community Association Meeting

December 4, 2018
Grocery Outlet Store Pop-Up Event

June 6, 2019
Greater Sacramento Urban League Open House Event

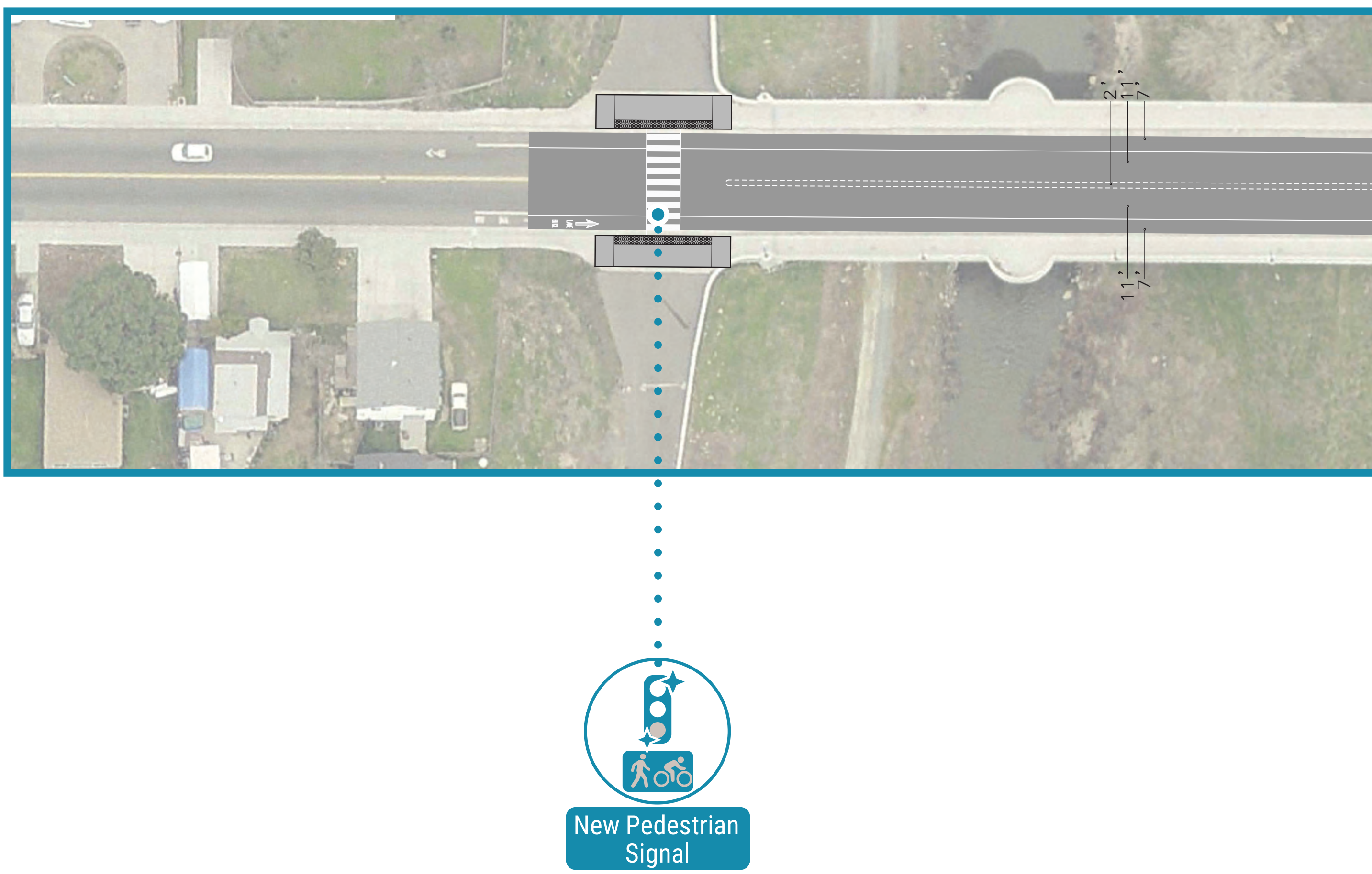
# Investments to Enhance Safety

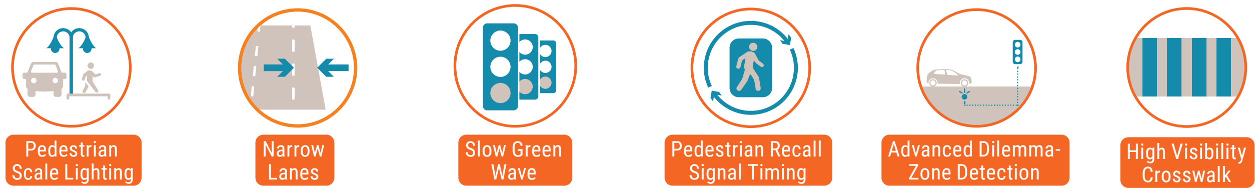
## Key Crash Countermeasures

| Countermeasure | | Crash Type | Feedback Key Theme |
|---|---|---|---|
| Slow Green Wave | TO ADDRESS | Unsafe Speed | Speed |
| Add New Signal | TO ADDRESS | Pedestrian Crossing | Visibility |
| Advanced Dillemma-Zone Detection | TO ADDRESS | Rear End | Signals/Signage |
| Pedestrian Scramble | TO ADDRESS | Pedestrian Crossing | Crossings |

El Camino Avenue at Traction Avenue

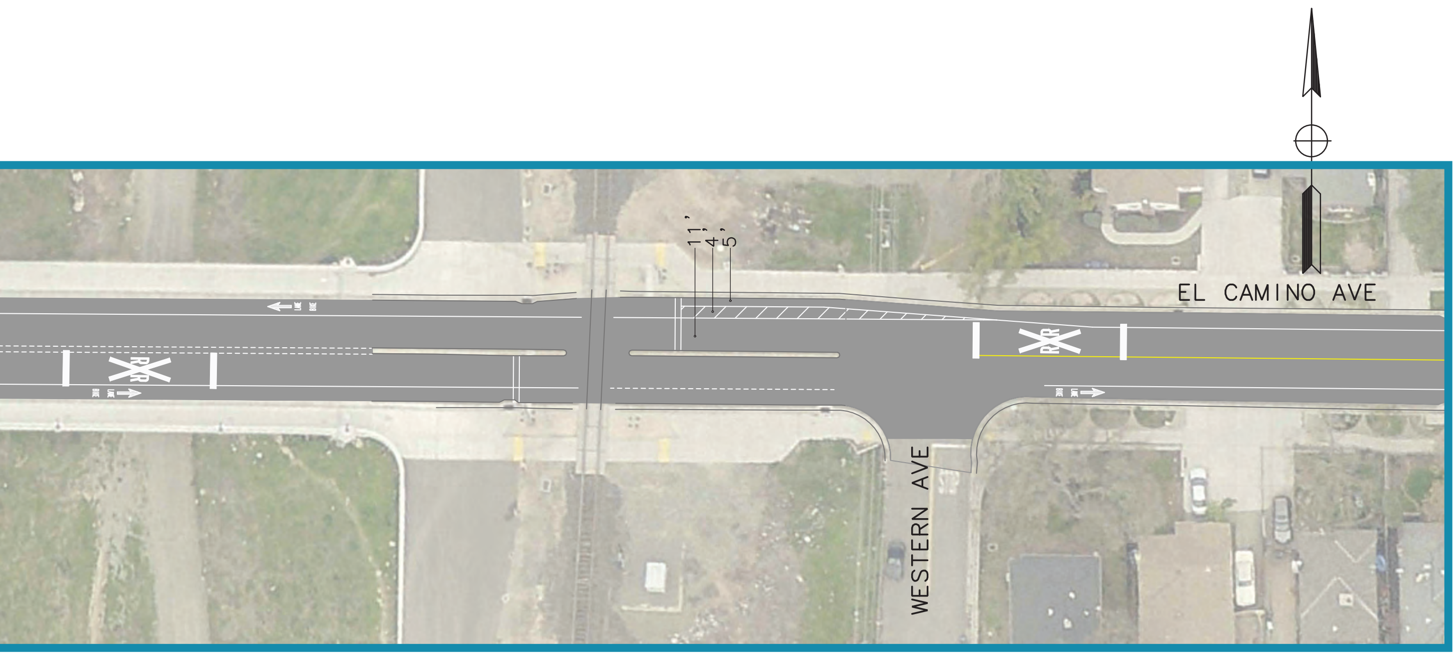
# Conceptual Design for El Camino





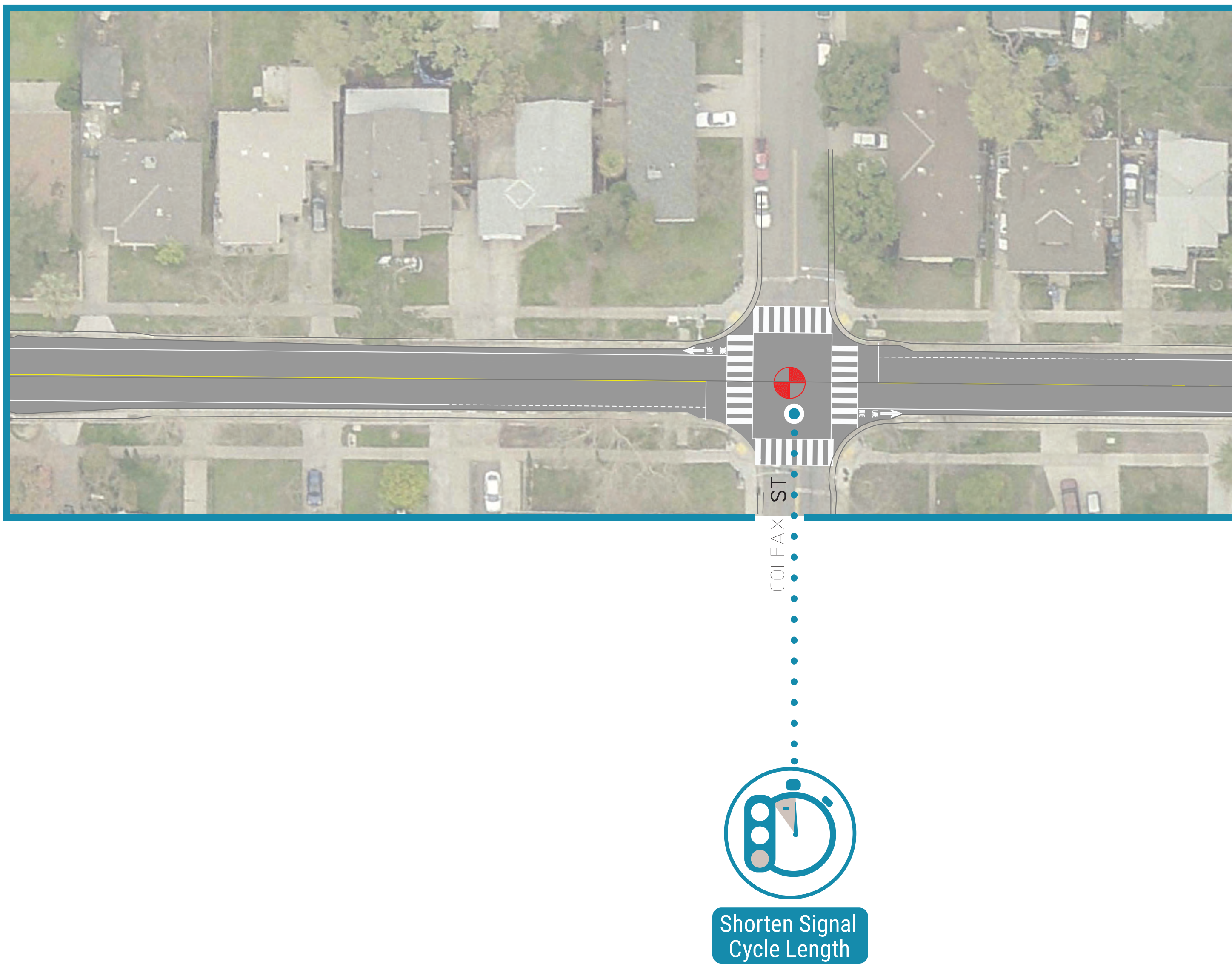

## Corridor-Wide Recommendations

## Location-Specific Recommendations




Note: Maintain existing 10 foot travel lanes on El Camino Avenue

# Conceptual Design for El Camino



Pedestrian Scale Lighting

Narrow Lanes

Slow Green Wave

Pedestrian Recall Signal Timing

Advanced Dilemma-Zone Detection

High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations

# Conceptual Design for El Camino

Pedestrian Scale Lighting

Narrow Lanes

Slow Green Wave

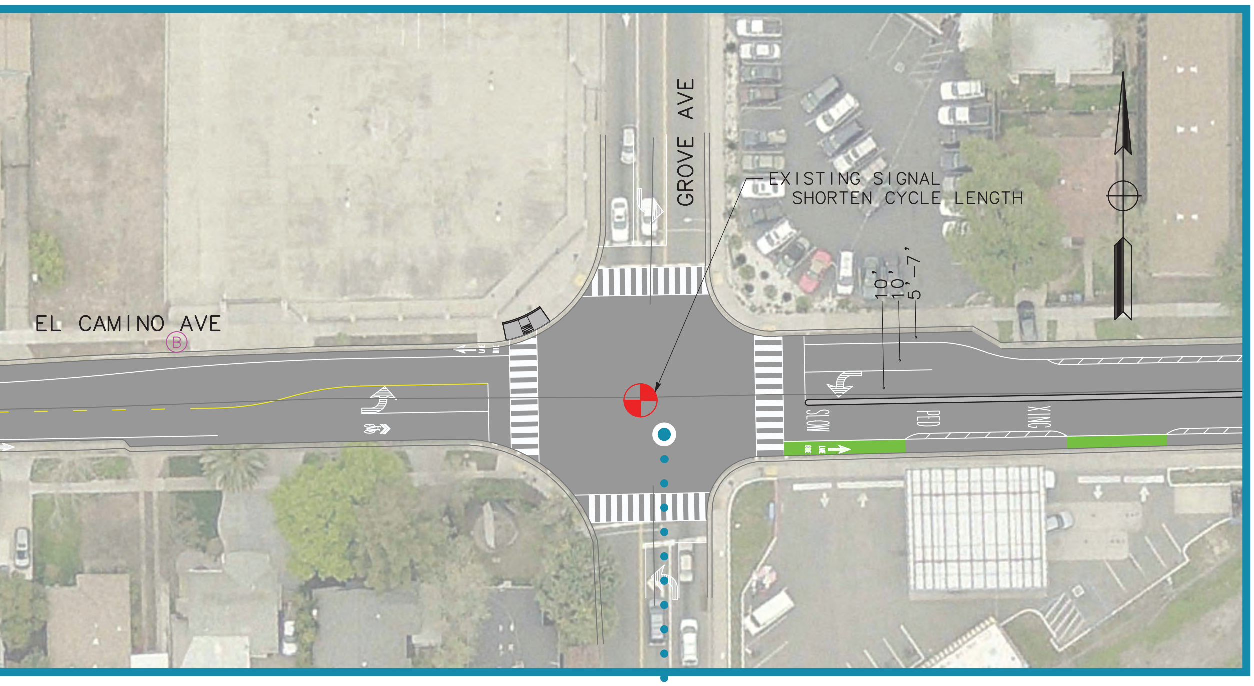
Pedestrian Recall Signal Timing

Advanced Dilemma-Zone Detection

High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations

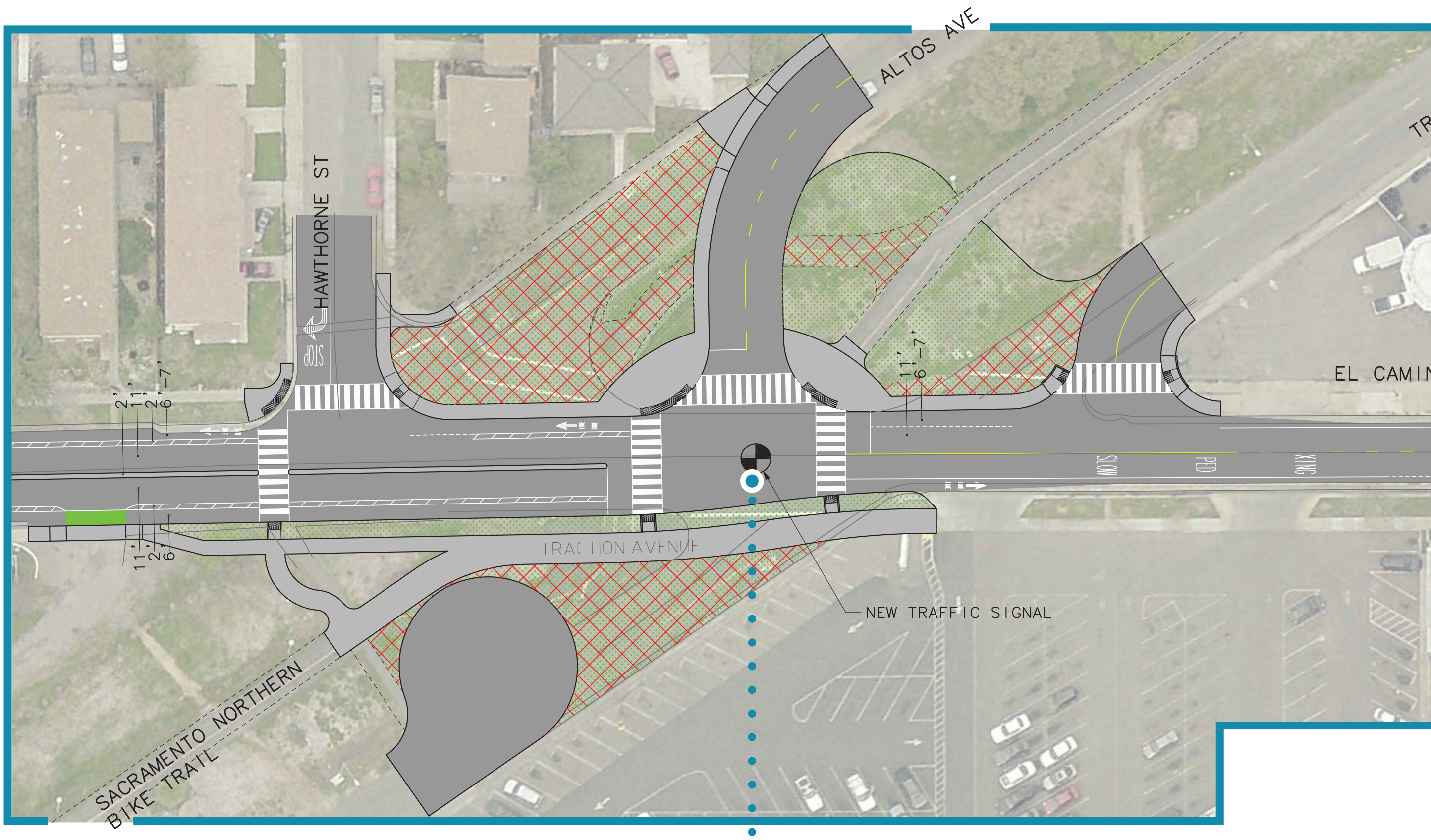


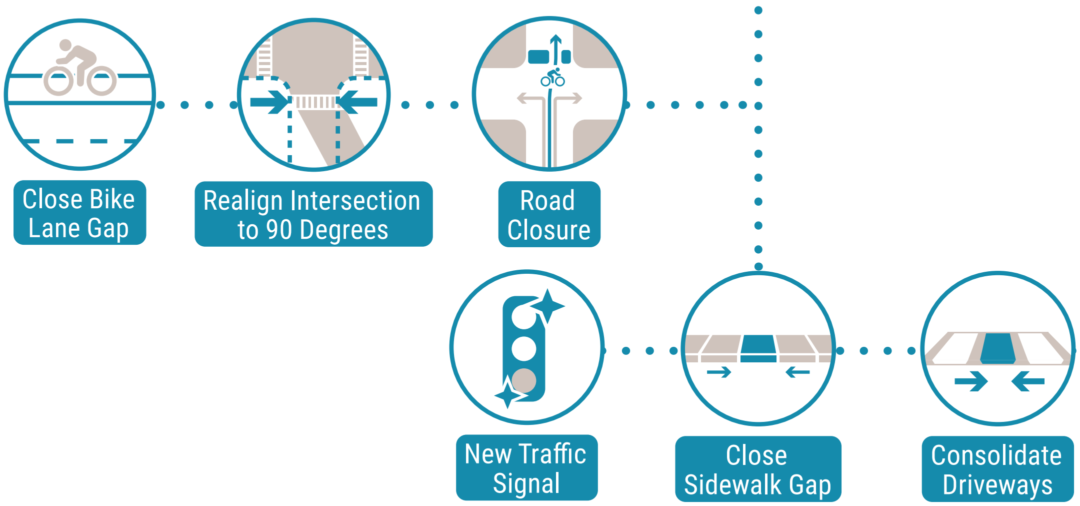

Shorten Signal Cycle Length

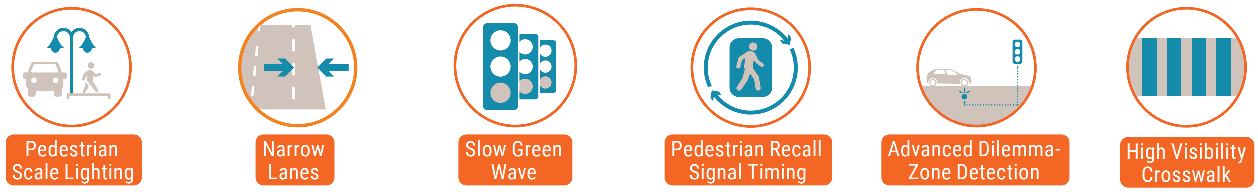
Raised Median

Protected Left Turns

# Conceptual Design for El Camino

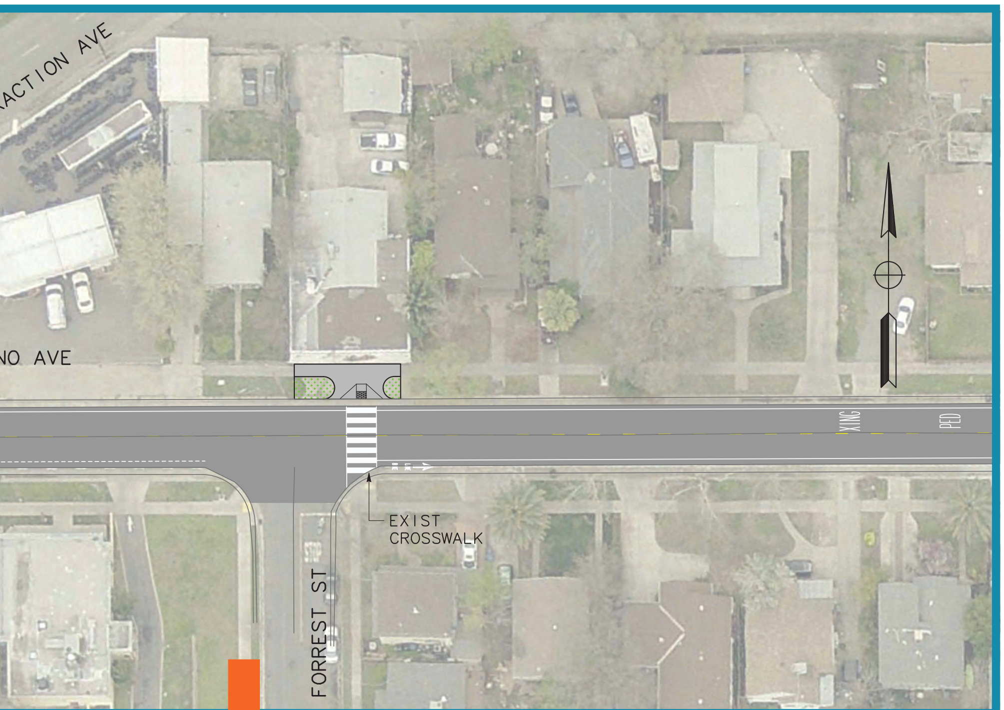





## Corridor-Wide Recommendations

## Location-Specific Recommendations

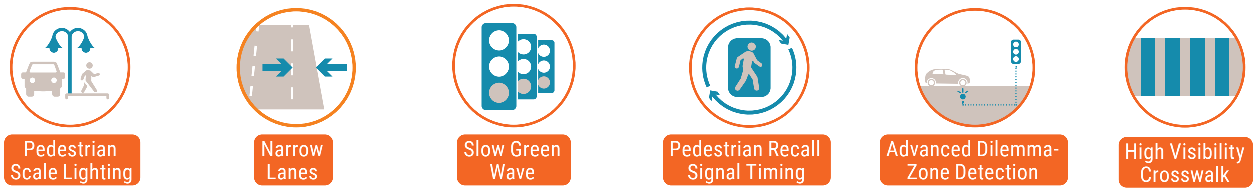



### Project Options

**Option 1:** Close south leg of Traction Ave, north leg of Traction Ave, south leg of Altos Ave, and Hawhtorne Ave is right-in/right-out only. Square up north leg of Altos Ave and install a traffic signal.

**Option 2:** Close north leg of Traction and south leg of Altos Ave. Hawthorne Ave is right-in/right-out. Square up north leg of Altos Ave and south leg of Traction Ave. Install raised intersection and traffic signal with pedestrian scramble to serve bike and pedestrian traffic using Sacramento North Bike Trail. This option is shown in the concept plans.

# Conceptual Design for El Camino




## Corridor-Wide Recommendations

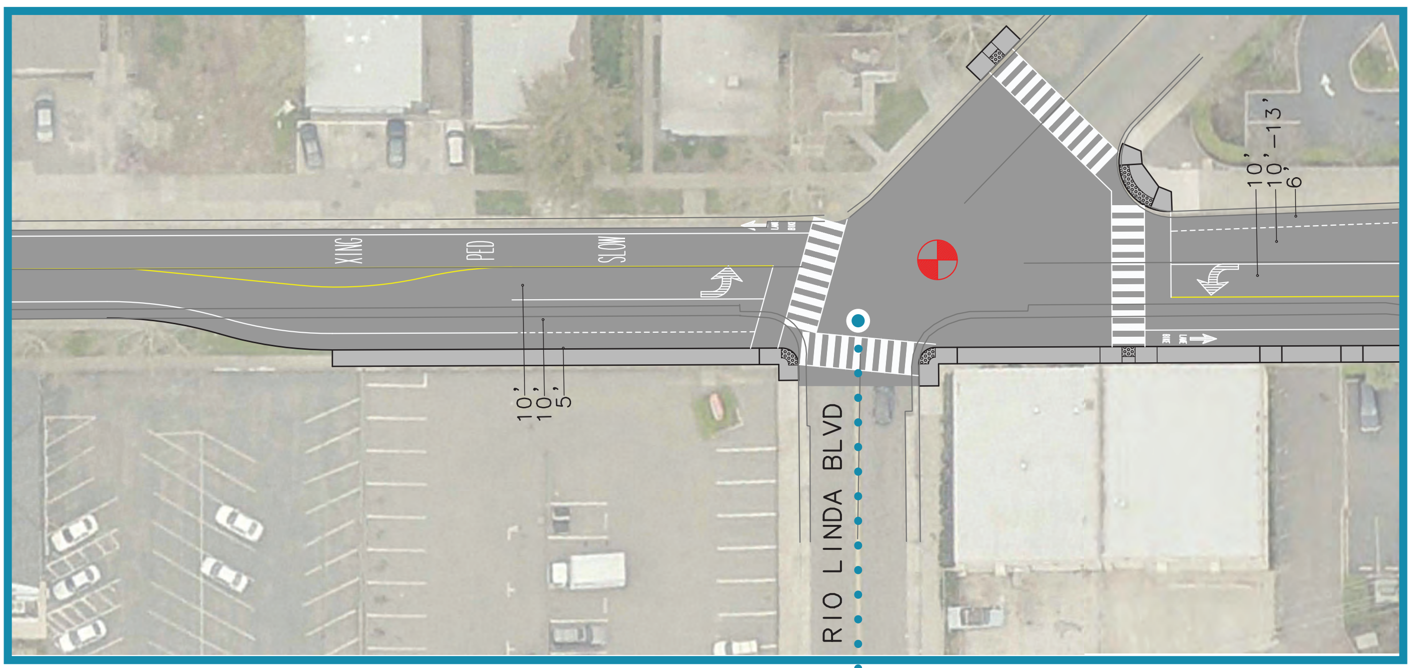
## Location-Specific Recommendations


# Conceptual Design for El Camino

Pedestrian Scale Lighting | Narrow Lanes | Slow Green Wave | Pedestrian Recall Signal Timing | Advanced Dilemma-Zone Detection | High Visibility Crosswalk

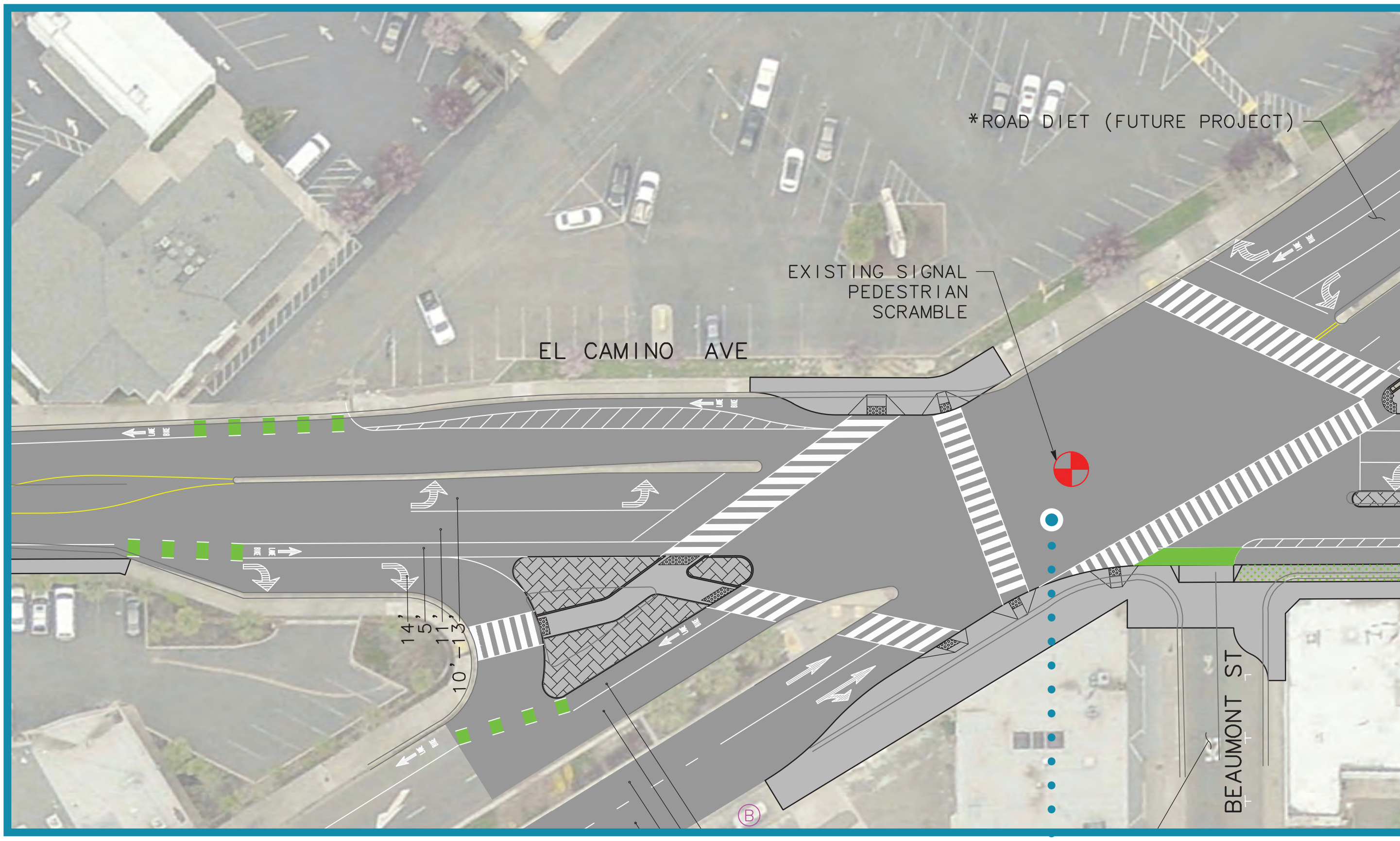
## Corridor-Wide Recommendations

## Location-Specific Recommendations

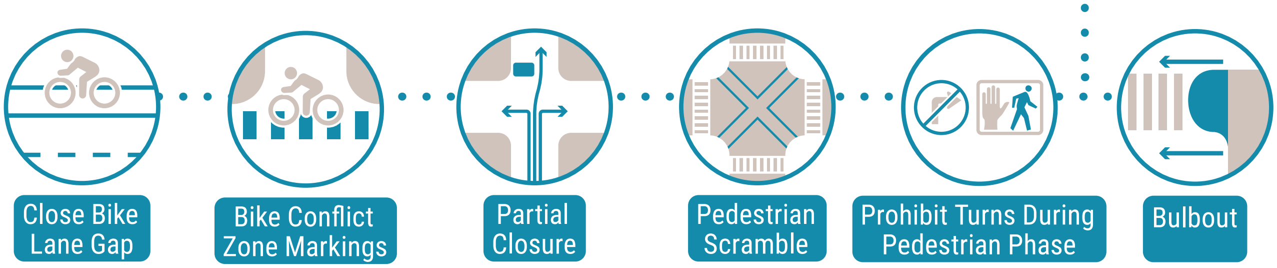


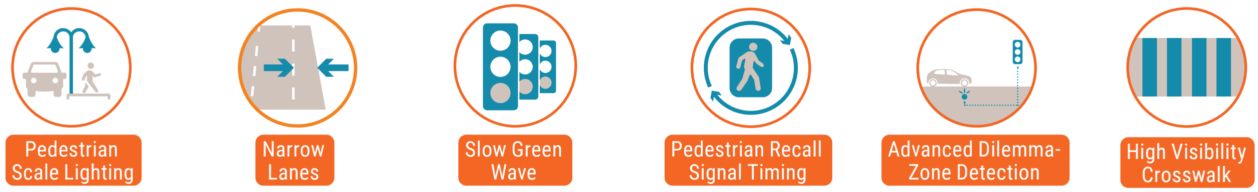

Dual Curb Ramps | Extend Signal Clearance Time | Straighten Crosswalk

# Conceptual Design for El Camino




* The Del Paso Boulevard Road Diet is not a part of the Top 5 Corridors Plan






## Corridor-Wide Recommendations

## Location-Specific Recommendations


### El Camino Avenue/Del Paso Boulevard/Beaumont Street Queues

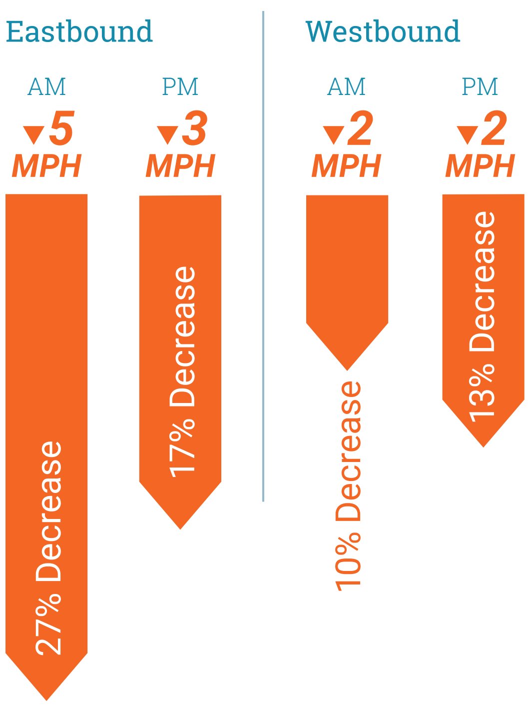
El Camino Avenue is a two-lane, 30-miles-per-hour roadway for most of the study corridor, but east of Del Paso Boulevard, it widens to four-lanes and the posted speed limit increases to 35-miles per hour. It provides an east-west connection over Steelhead Creek and to I-80 Business Loop. As a result, the El Camino Avenue/Del Paso Boulevard/Beaumont Street intersection is very busy. Conditions may be exacerbated with the Vision Zero recommended road diet on Del Paso Boulevard. According to the City's General Plan, the intersection is exempt from the City's LOS D standard and can operate at LOS E conditions during peak hours acceptably.

# How Will Travel Change?

## Estimated Changes with Project

### Average Vehicle Speed

Average vehicle speed along the corridor during peak periods is expected to decrease between 2 and 5 mph as a result of the proposed project. While slower travel speeds result in longer travel times, they reduce traffic fatalities and severe injuries that result from crashes. Additionally, the new traffic signals will create gaps in traffic that will improve access from side-streets and driveways.



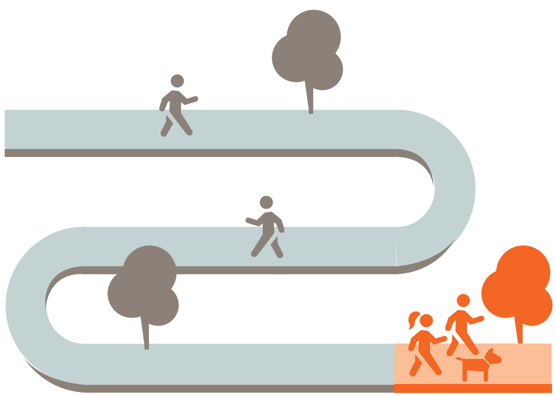


### Vehicle Travel Time

Average vehicle travel time along the one-mile corridor during peak periods is expected to increase between 31 and 84 seconds as a result of the proposed project.

# Estimated Changes with Project

## Sidewalk Coverage

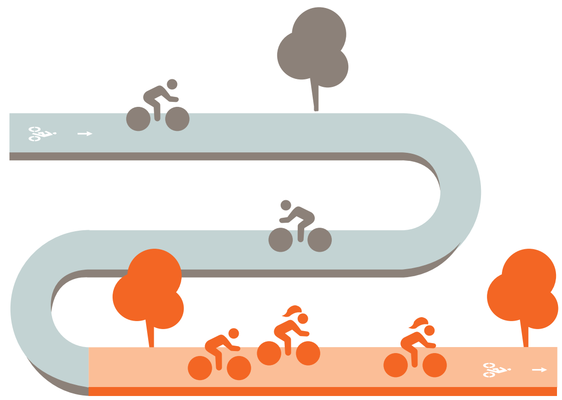


Without project
**97%**
**(12,150 ft)**

▶

With project
**100%**
**(12,500 ft)**

## Bike Lane Coverage



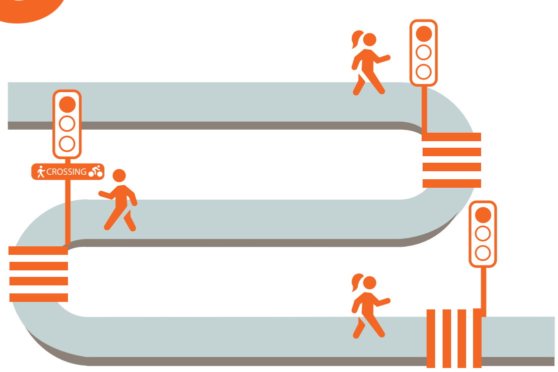
Without project
**69%**
**(8,580 ft)**

▶

With project
**100%**
**(12,500 ft)**

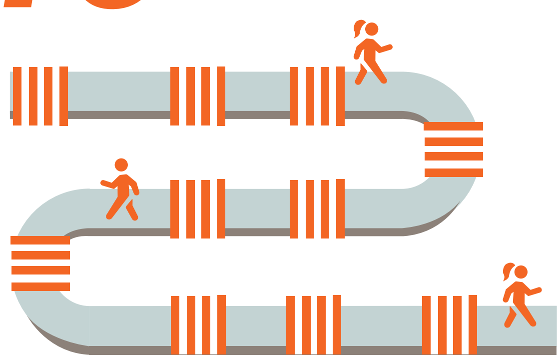
## Number of Locations Upgraded to Controlled Crossings

**3**



## Number of Marked Crosswalks

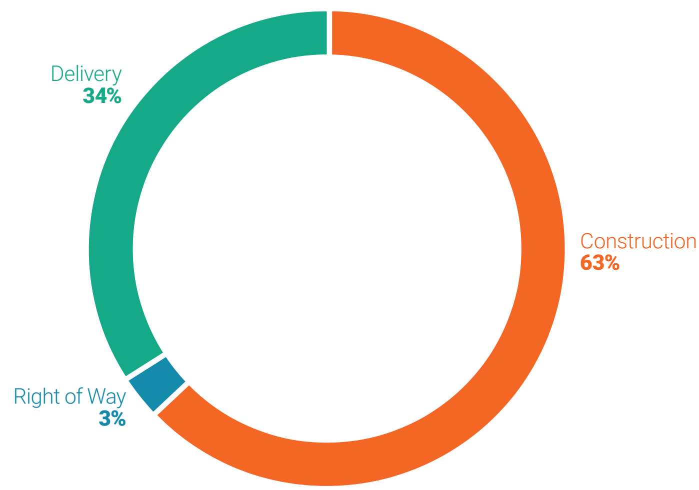
**10** ***new crossings***



# How Much Will the Project Cost?

## El Camino Avenue Cost Summary

# $16,450,000




### Construction

Construction costs include the cost to build the primary items associated with the safety countermeasures for the corridor. The items were estimated based on the preliminary design concepts and recent construction bid unit costs with an escalation factor to account for future construction. The costs were broken down into two categories that consisted of major roadway items and electrical items such as traffic signals and lighting. A contingency factor was included to account for refinement of project design, changes in project details, or unforeseen changes in construction costs.

Actual project costs will be determined by surveyed base mapping, geotechnical reports, concept refinement, environmental reviews, right of way availability, project phasing, and bid conditions at the time of advertisement. Project costs should be reviewed prior to any grant application or initiation of a Capital Improvement Project to revalidate and update the assumptions in this study as necessary.

The total project costs shown in the summary chart have been escalated at an assumed 3% per year escalation factor to 2025, the anticipated year of construction.

### Right of Way

In addition to construction costs, right of way costs were assumed that include temporary construction easements for items such driveway modifications, curb ramps reconstruction, signal equipment poles and cabinets. It was assumed that each project could be constructed almost exclusively within the roadway prism and right of way acquisition would not be needed along the entire project frontage. Further refinement of the base mapping in subsequent phases of design will more accurately identify specific right of way needs.

### Delivery

Project delivery costs are included in the estimates provided in this study. These costs encompass all of the work to complete subsequent phases including preliminary engineering, environmental documentation, final design, right of way engineering, and construction oversight. A breakdown of these costs is provided in Appendix C.

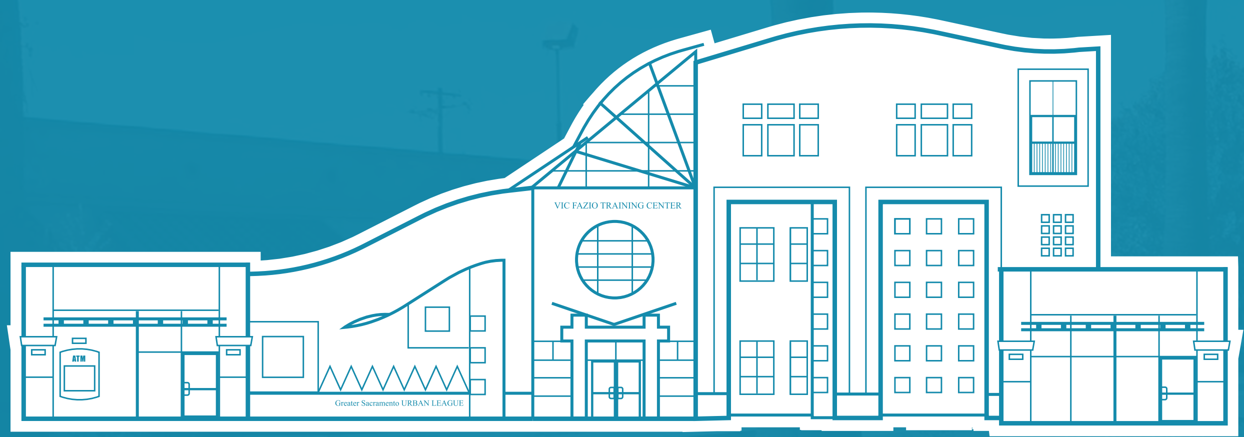
# Marysville

Vision Zero
Top 5 Corridor

Marysville Boulevard south of North Avenue

# Marysville Boulevard

## Vision Zero Top 5 Corridor




Marysville Blvd - Greater Sacramento Urban League/Vic Fazio Training Center

**What is going on?**
Between 2009 and 2017, 19 crashes that resulted in a fatality or severe injury (KSI) occurred on Marysville Boulevard between North Avenue and Arcade Boulevard. Three of these crashes involved a bicyclist and 11 of the crashes involved a pedestrian.

**What are the key issues?**
Two-thirds of drivers were proceeding straight or stopped at the time of the crash, and alcohol was involved in over half the crashes that resulted in a KSI. Additionally, two thirds of pedestrian crashes involved a person crossing the street in a marked crosswalk, and three-fourths of bike crashes were broadside, or T-Bone, crashes.

**What is the community concerned about?**
During outreach events, local residents talked about aggressive driving behaviors that included driving at an unsafe speed and lack of attention paid to crossing pedestrians. Residents also described the difficulty crossing the street as a pedestrian because there are not enough marked crosswalks on the corridor.

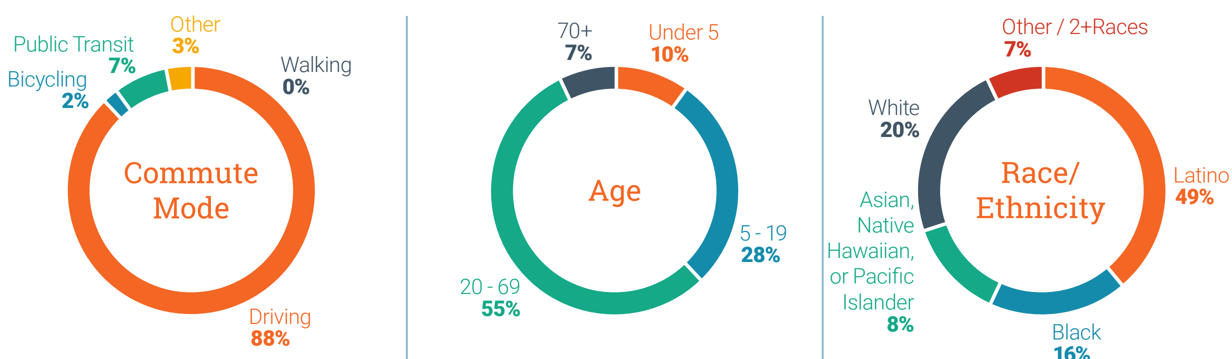
The following pages lay out the existing conditions along the corridor, feedback heard from residents at outreach events, and a set of roadway safety recommendations focused on slowing drivers down and discouraging traffic signal/sign violations as well as providing more opportunities for pedestrians to cross the street at controlled, marked crossings.

# Table of Contents

# In the Neighborhood

## Corridor


## About the Neighborhood




Residents of this neighborhood are more likely to take transit, but less likely to walk to work, when compared with the rest of the city.

Nearly 40% of the residents in this neighborhood are age 19 or under.

57% of the residents in this neighborhood are Black or Latino, compared with 42% citywide.

Marysville Boulevard north of Harris Avenue

Marysville Boulevard at Grand Avenue

Grand Avenue just east of Marysville Boulevard

## Key Destinations Along the Corridor

### Parks

1

### Schools

1

### Food Markets

3

### Houses of Worship

7

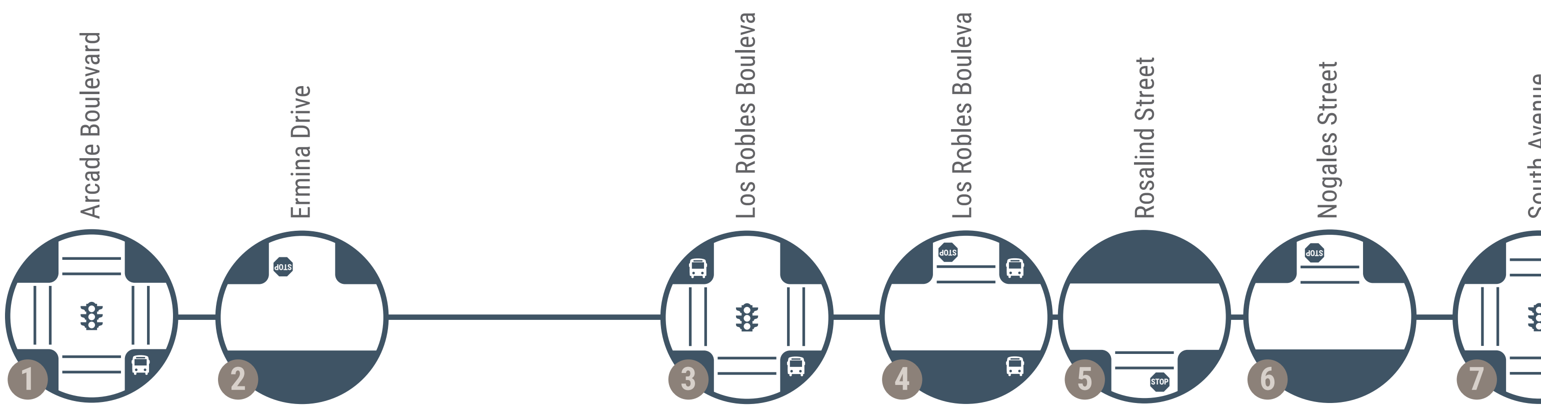
### Community Centers

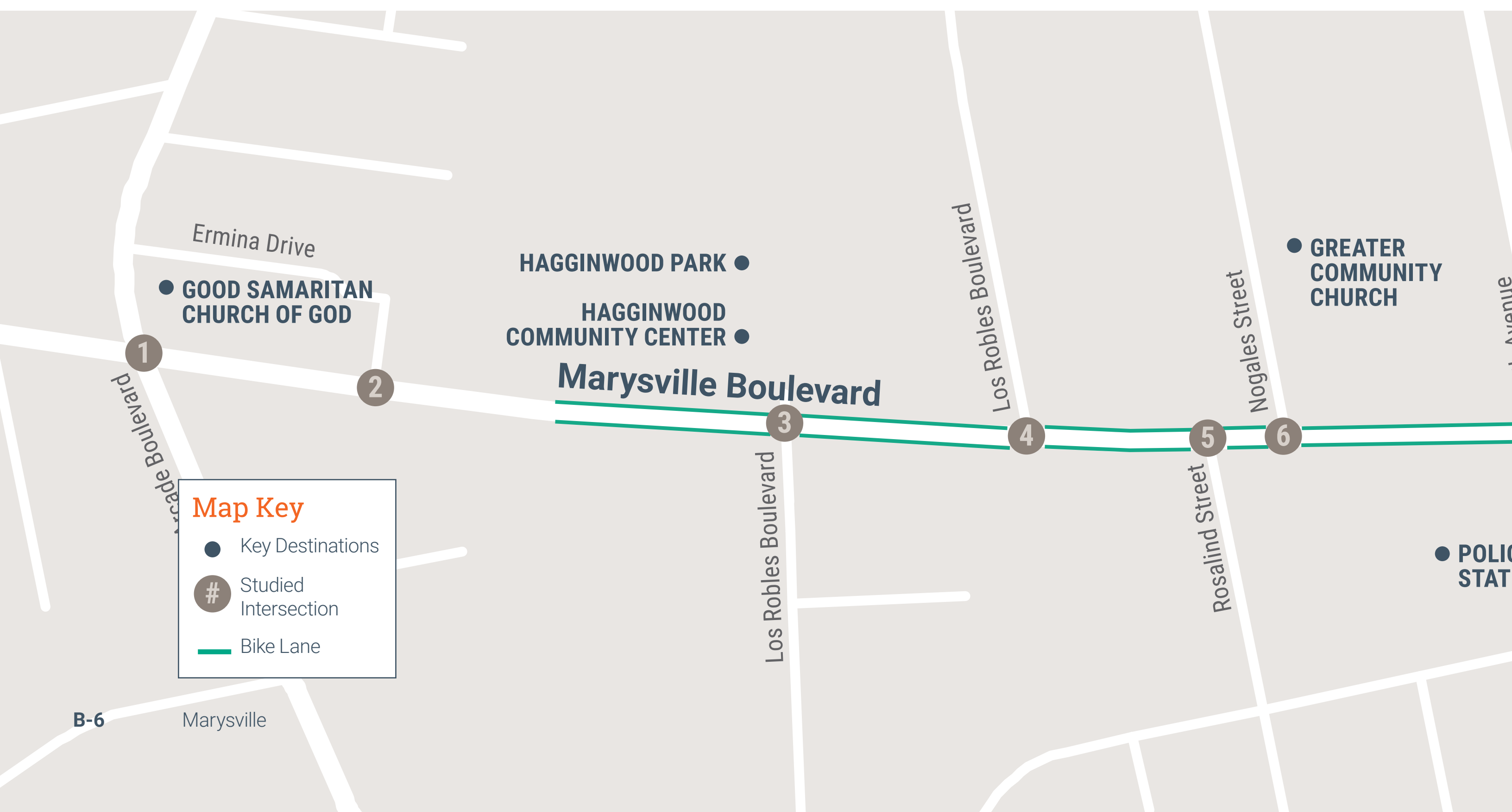
2

# Travel on Marysville

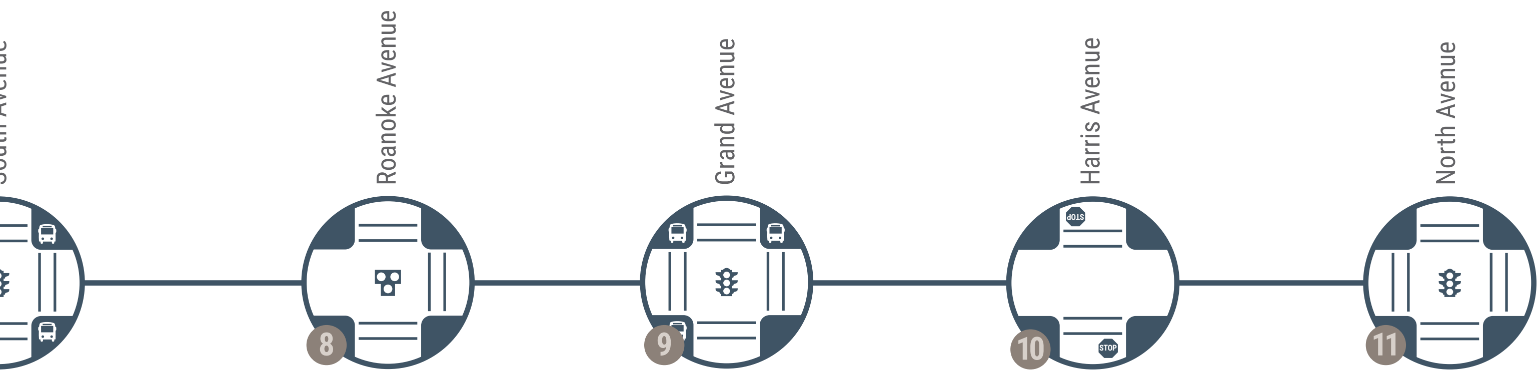
## Key Statistics

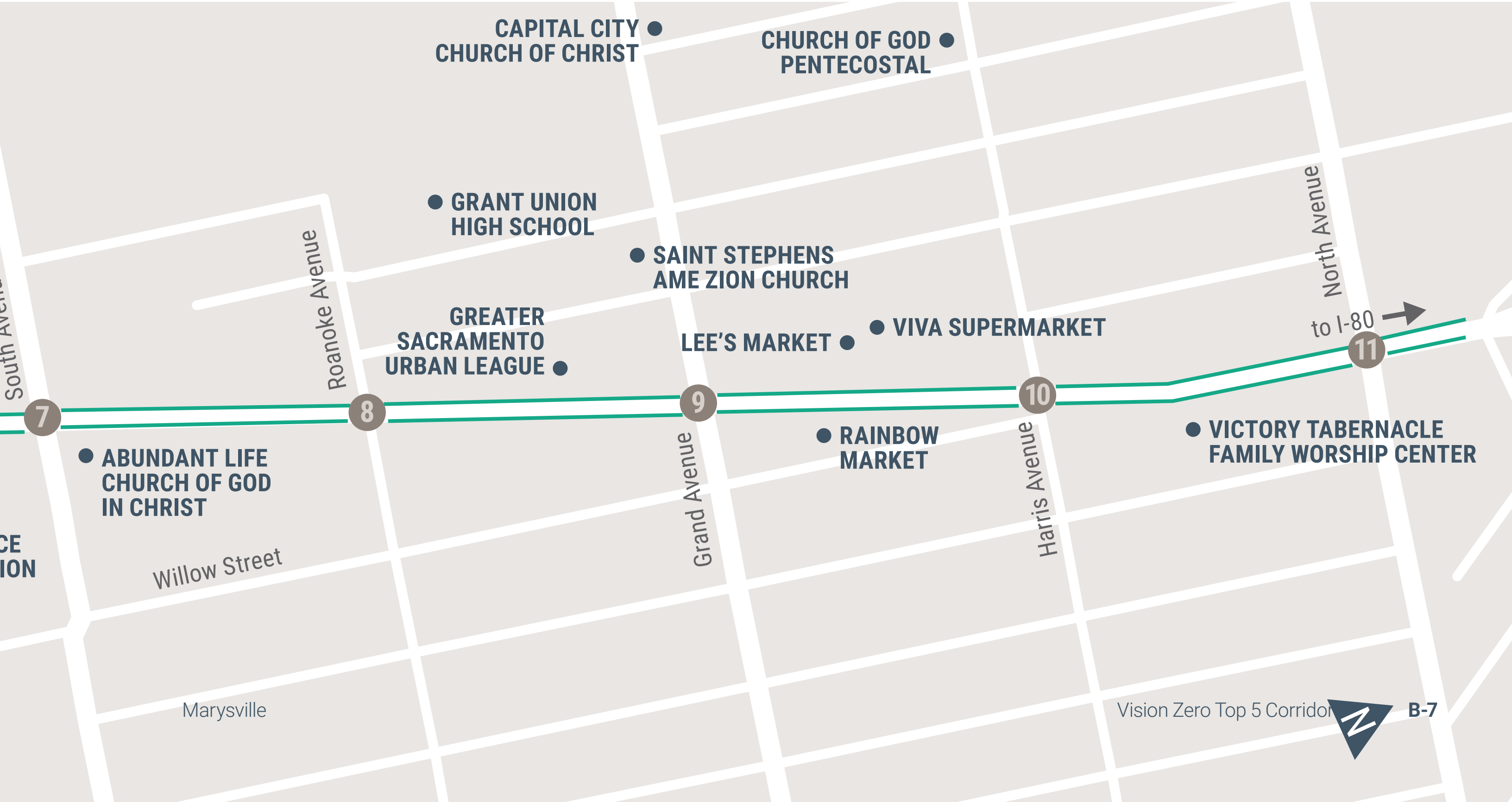
| Posted Speed Limit | Daily Vehicles | Maximum PM Intersection Vehicle Volume | PM Rush Hour People Walking | PM Rush Hour People Biking |
|---|---|---|---|---|
| **35 MPH** | **26,300** | **2,071** | **201** | **98** |



| Number of Transit Routes | Bikeway Type | Longest Distance Between Marked Crosswalks | Sidewalk Coverage |
|---|---|---|---|
| **2** *#15, #86* | ***On-Street Bike Lanes, with gap*** | **2,550** *Ft* | **100%** |



# Crashes on Marysville

## Vehicle Crash Types

### Proceeding Straight

2/3 of drivers were proceeding straight or stopped at the time of the crash.

1 2 3 4 5 6
7 8 9 10 11

### Left Turns

More than 20% of drivers were making a left turn at the time of the crash.

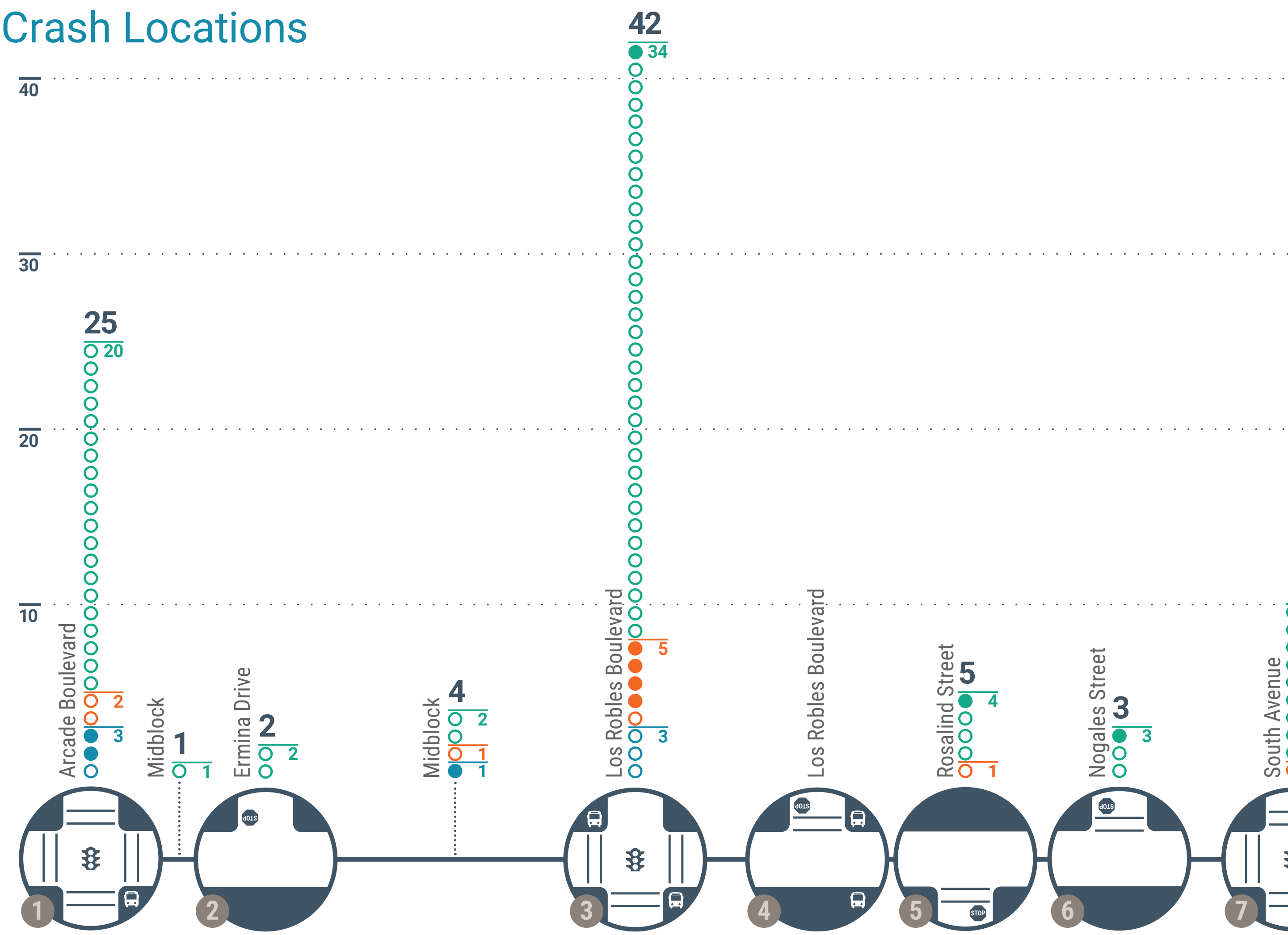
1 2 3 4 5 6
7 8 9 10 11

### Broadside

40% of all crashes were broadside, also called T-Bone.

1 2 3 4 5 6
7 8 9 10 11

## Crash Locations



## Ped Crash Types

## Bike Crash Types

### KSI & Alcohol Involved

Alcohol was involved in over half of crashes resulting in a fatality or severe injury.

1 2 **3** 4 5 6
7 8 9 10 11

### Pedestrian Crossing

Almost all people hit while walking were crossing. 2/3 of people were in the crosswalk.

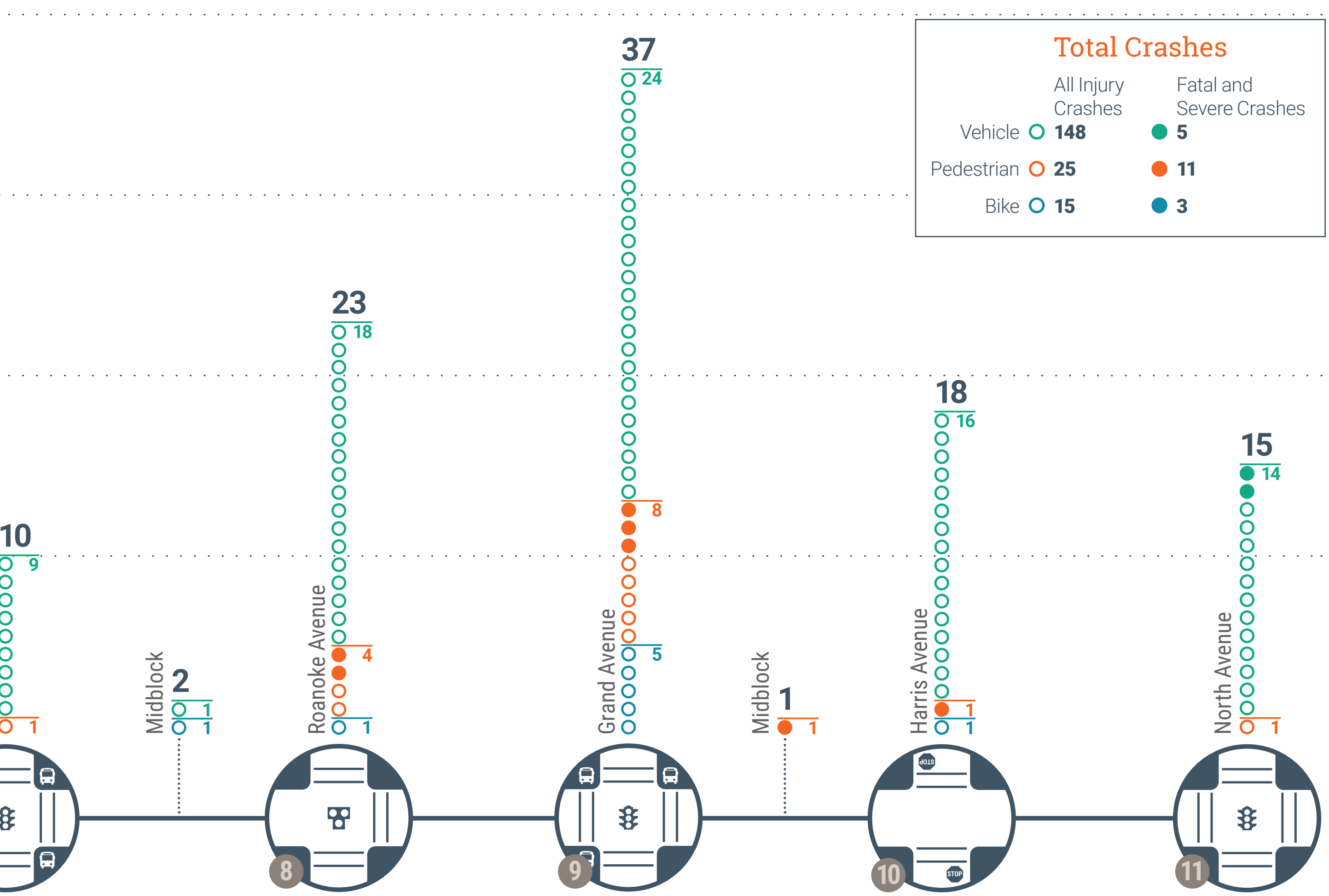
1 2 **3** 4 5 6
7 **8** **9** 10 11

### Broadside

3/4 of bike crashes were broadside, also called T-Bone.

1 2 3 4 5 6
7 8 **9** 10 11

1 Numbers that are turned on represent a location where crash type has occurred at least three times.



# Feedback from the Community

"Slow down traffic, drivers go over 35 MPH."

"More signals and more crosswalks would make Marysville safer."

Mutual Assistance Harvest Festiva

## Key Themes

### Visibility

Residents described visibility issues due to skew of intersections and presence of sight obstructions.

### Signals/Signage

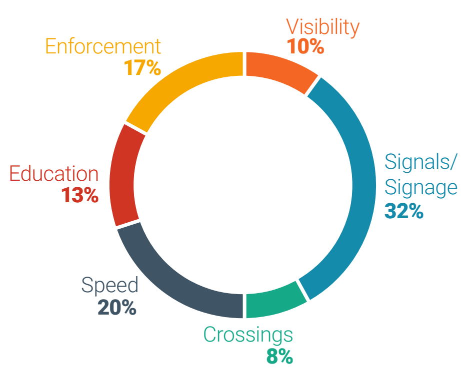
Residents suggested that more signals or flashing beacons could make it safer for pedestrians to cross the street.

### Crossings

Residents described difficulty in crossing the street as a pedestrian because crosswalks are located far apart, and drivers do not pay attention to their presence.

### Speed

Residents described drivers traveling at speeds they felt were too fast and driving aggressively along Marysville Boulevard.




## Engagement Events

October 27, 2018
Mutual Assistance Harvest Festival, Robertson Community Center

December 5, 2018
Hagginwood Community Association Meeting

June 6, 2019
Greater Sacramento Urban League Open House Event

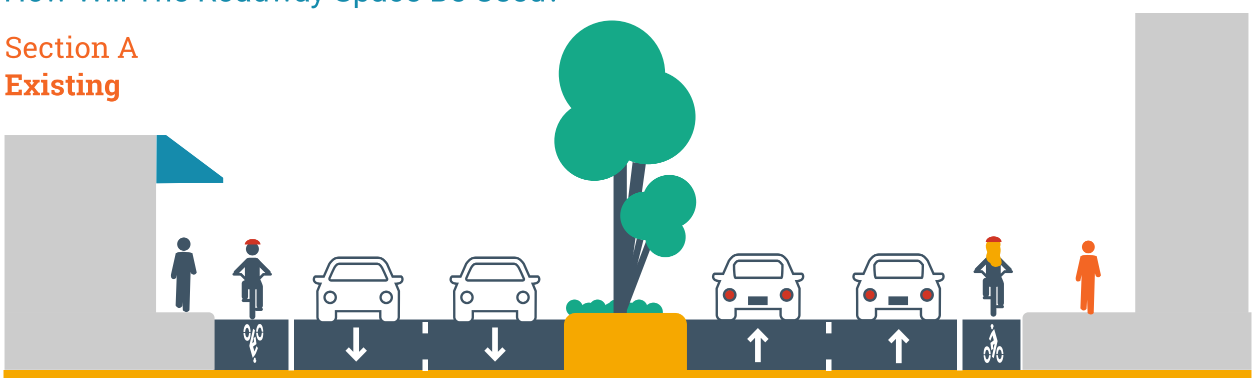
# Investments to Enhance Safety

## Key Crash Countermeasures

| Countermeasure | | Crash Type | Feedback Key Theme |
|---|---|---|---|
| Slow Green Wave | TO ADDRESS | Unsafe Speed | Speed |
| Add New Signal | TO ADDRESS | Pedestrian Crossing | Visibility |
| Shorten Signal Cycle Length | TO ADDRESS | Signal or Sign Violation | Signals/Signage |

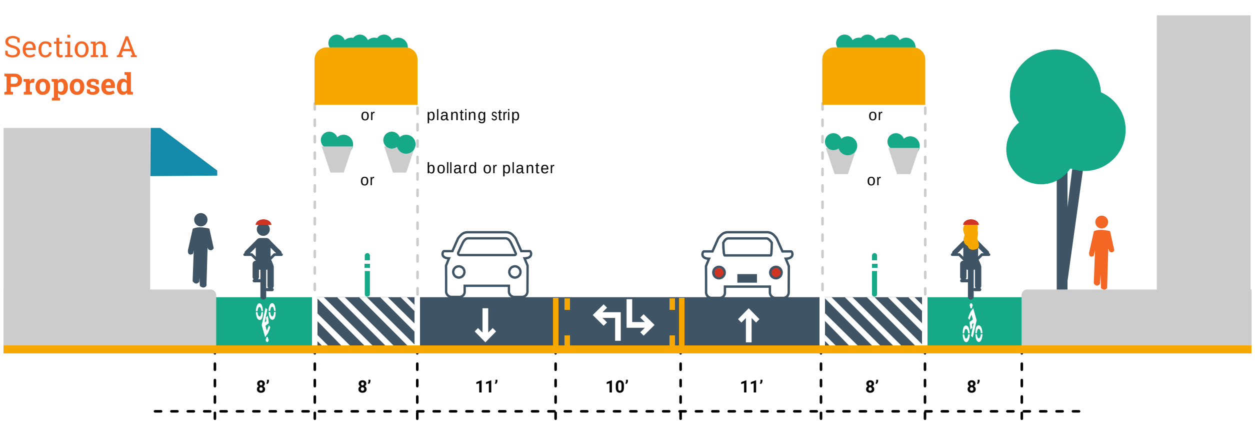
### How Will The Roadway Space Be Used?

Section A
**Existing**

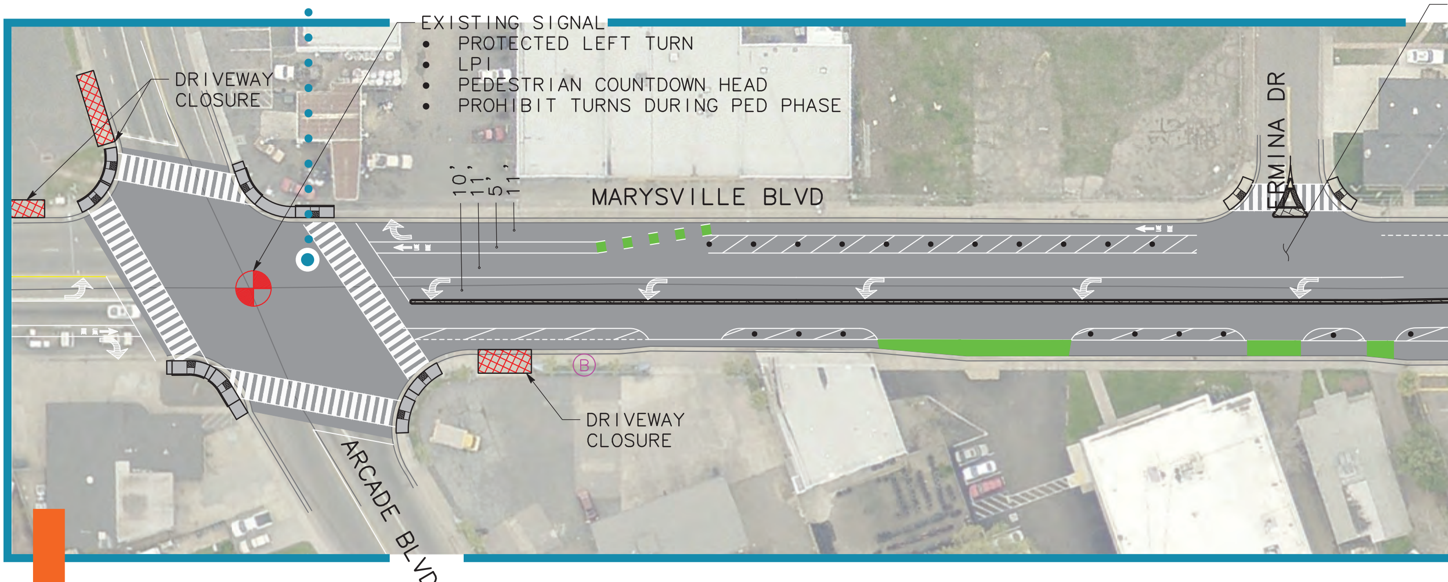


SEE PAGE B-13

Section A
**Proposed**



# Conceptual Design for Marysville


## Marysville Boulevard/Arcade Boulevard Queues

During peak hours, drivers use Marysville Boulevard and Arcade Boulevard between I-80 and the Arden-Arcade neighborhood. Therefore, there is a large southbound left-turn volume (595-vehicles) during the AM peak hour, and a large westbound right-turn volume (575-vehicles) during the PM peak hour. The southbound left-turn queue currently spills out of the available storage length of the turn pocket during peak hours, and this condition could be exacerbated by the recommended road diet. However, the recommendations also include the extension of the southbound left-turn lane to 750-feet, which would include restricting the Marysville Boulevard Boulevard/Ermina Drive intersection to right-in/right-out access only. The resulting maximum peak hour queues are shown in Appendix B.

Extend Signal Clearance Time

Slow Green Wave

Road Diet

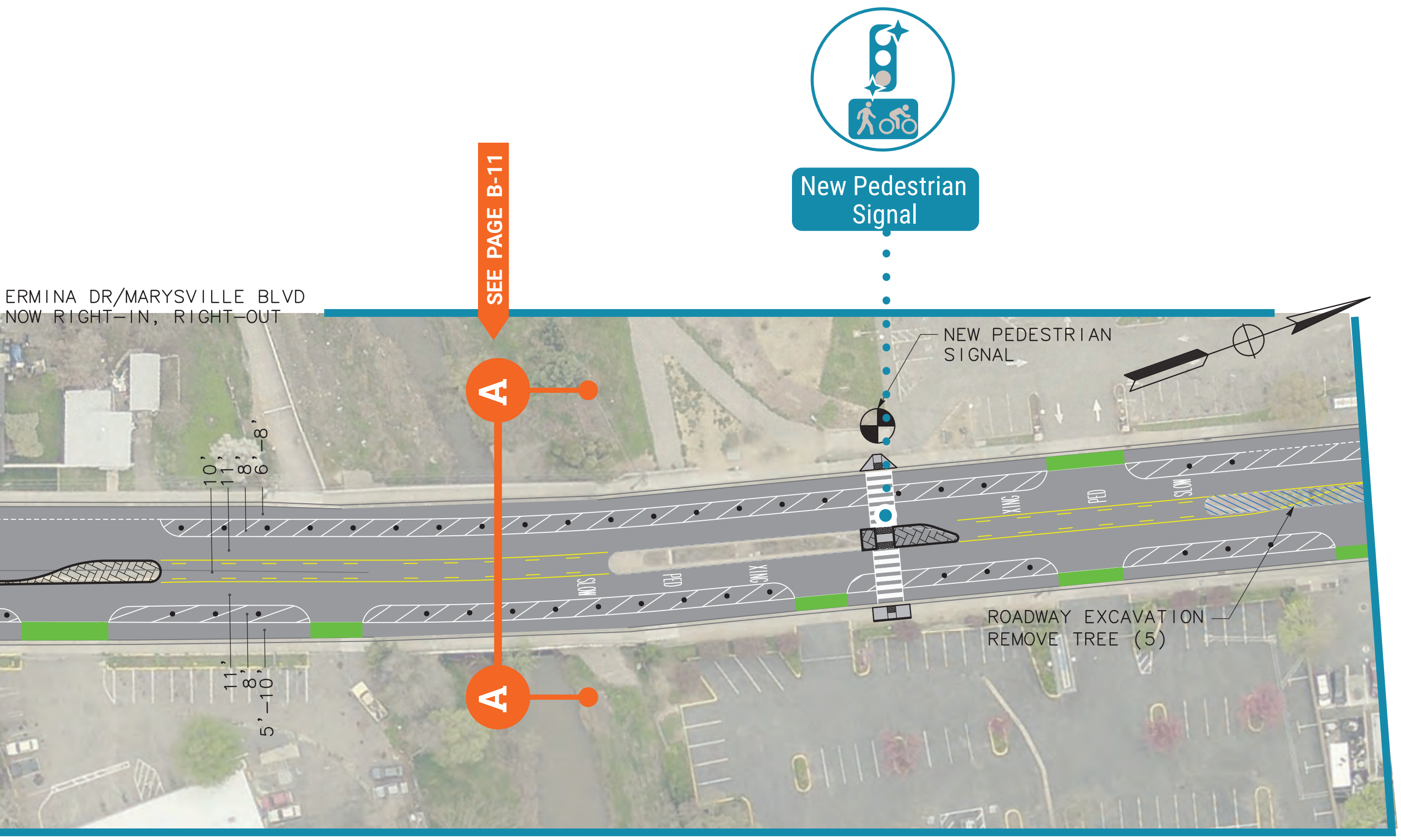
Separated Bikeway

Advanced Dilemma-Zone Detection

High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations



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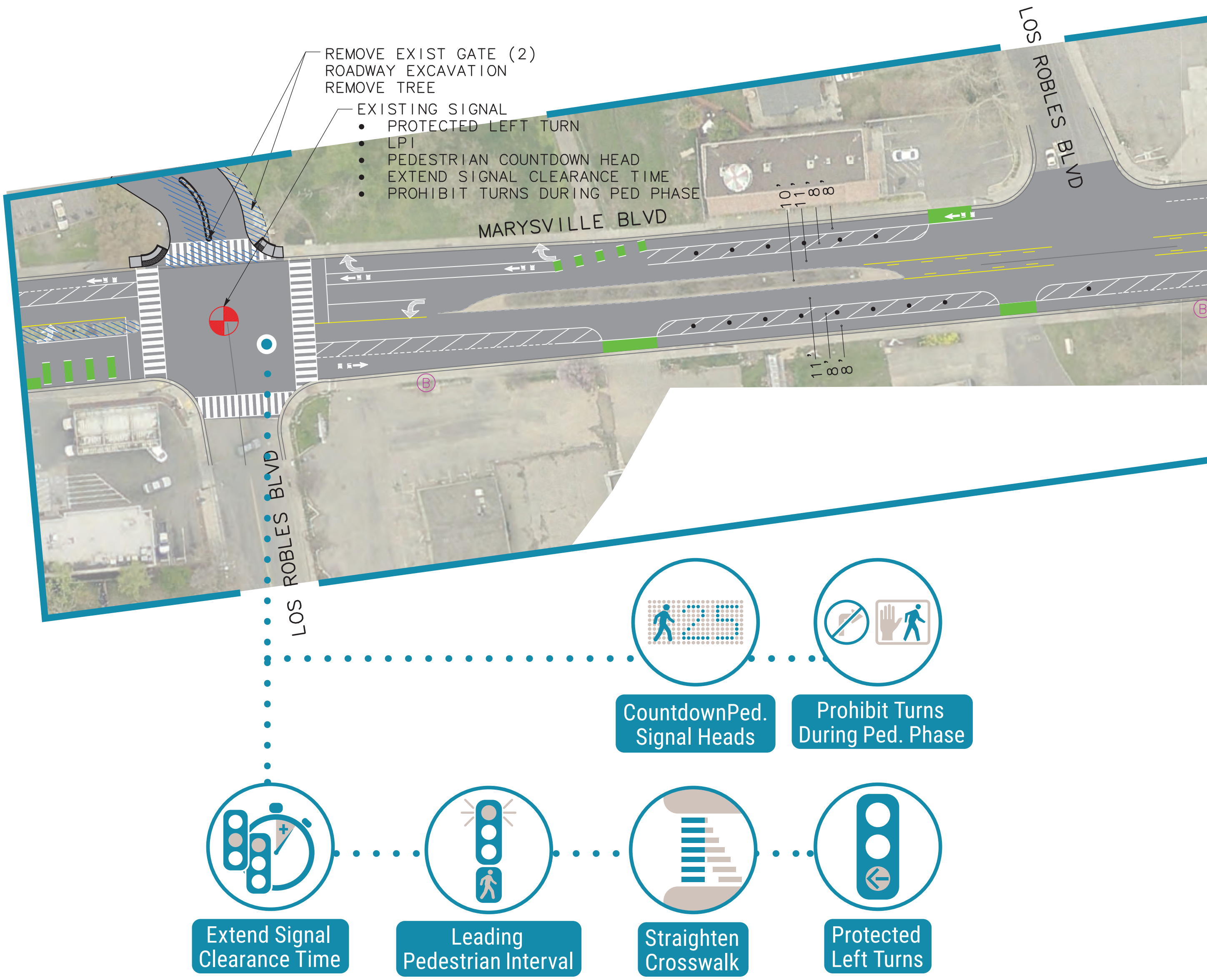

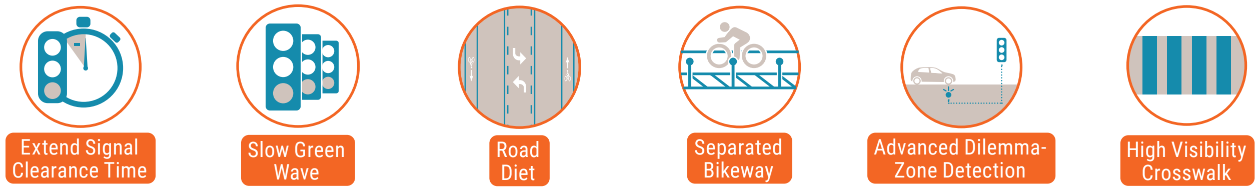


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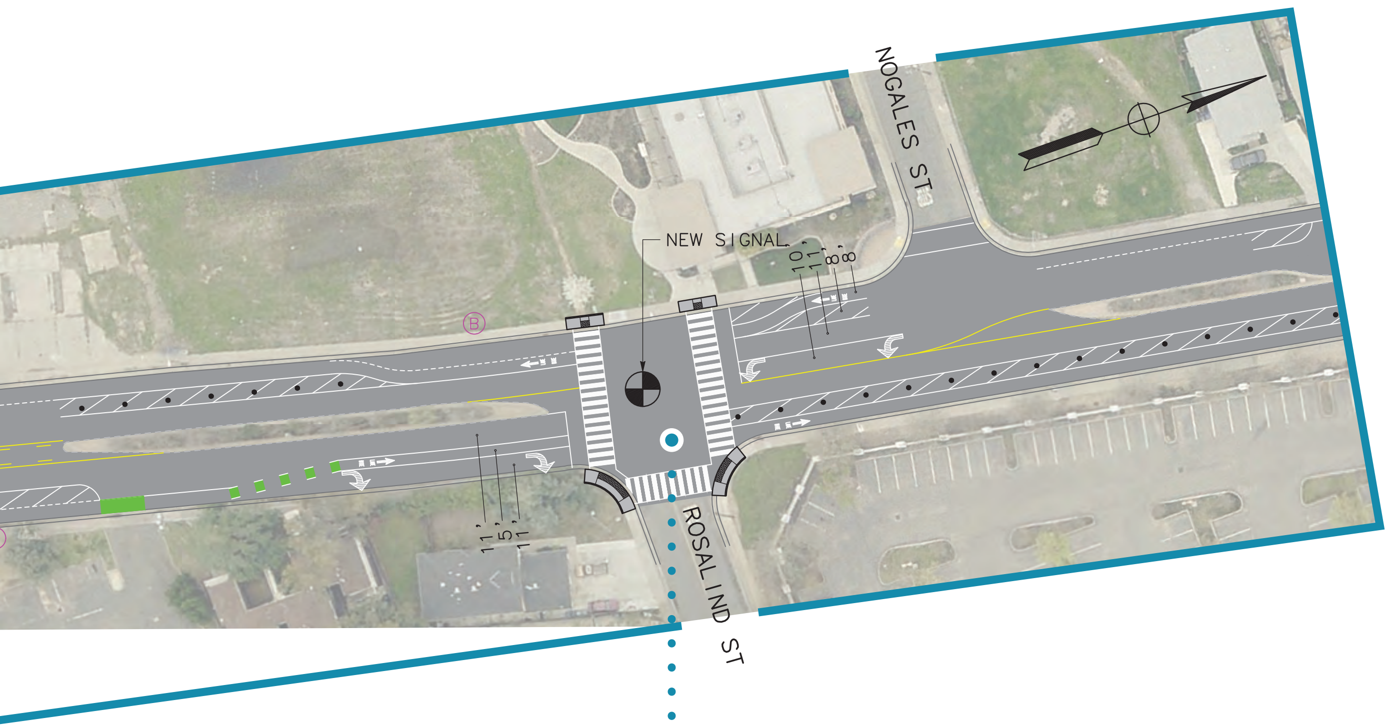


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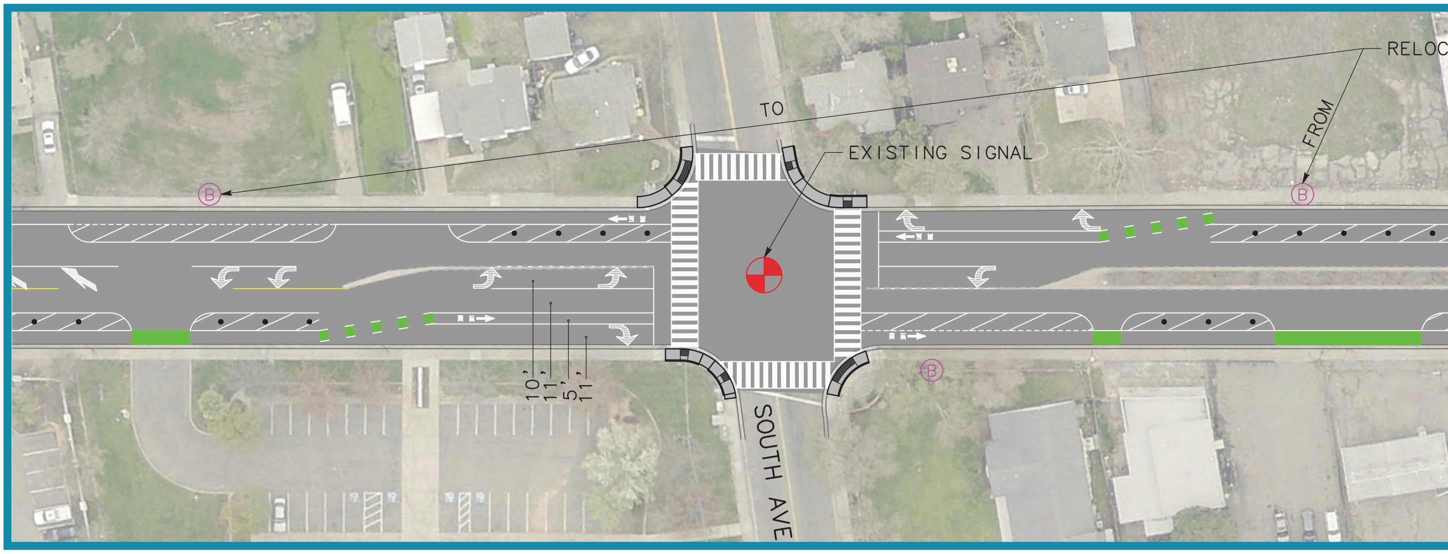

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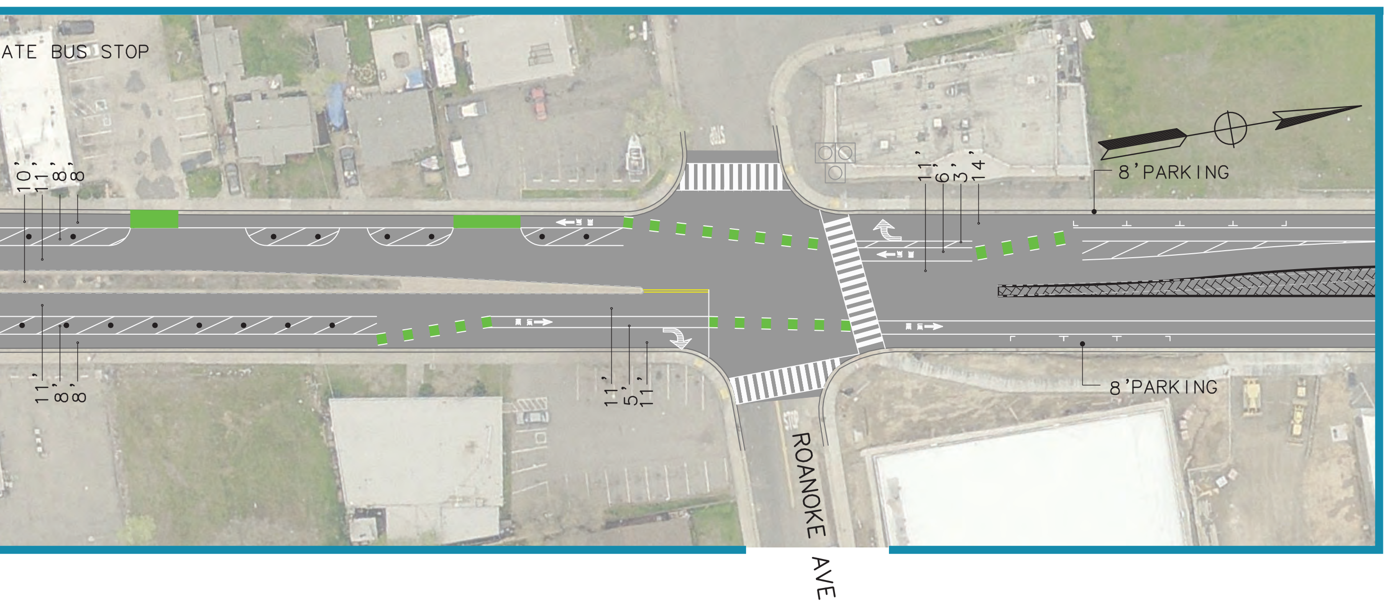

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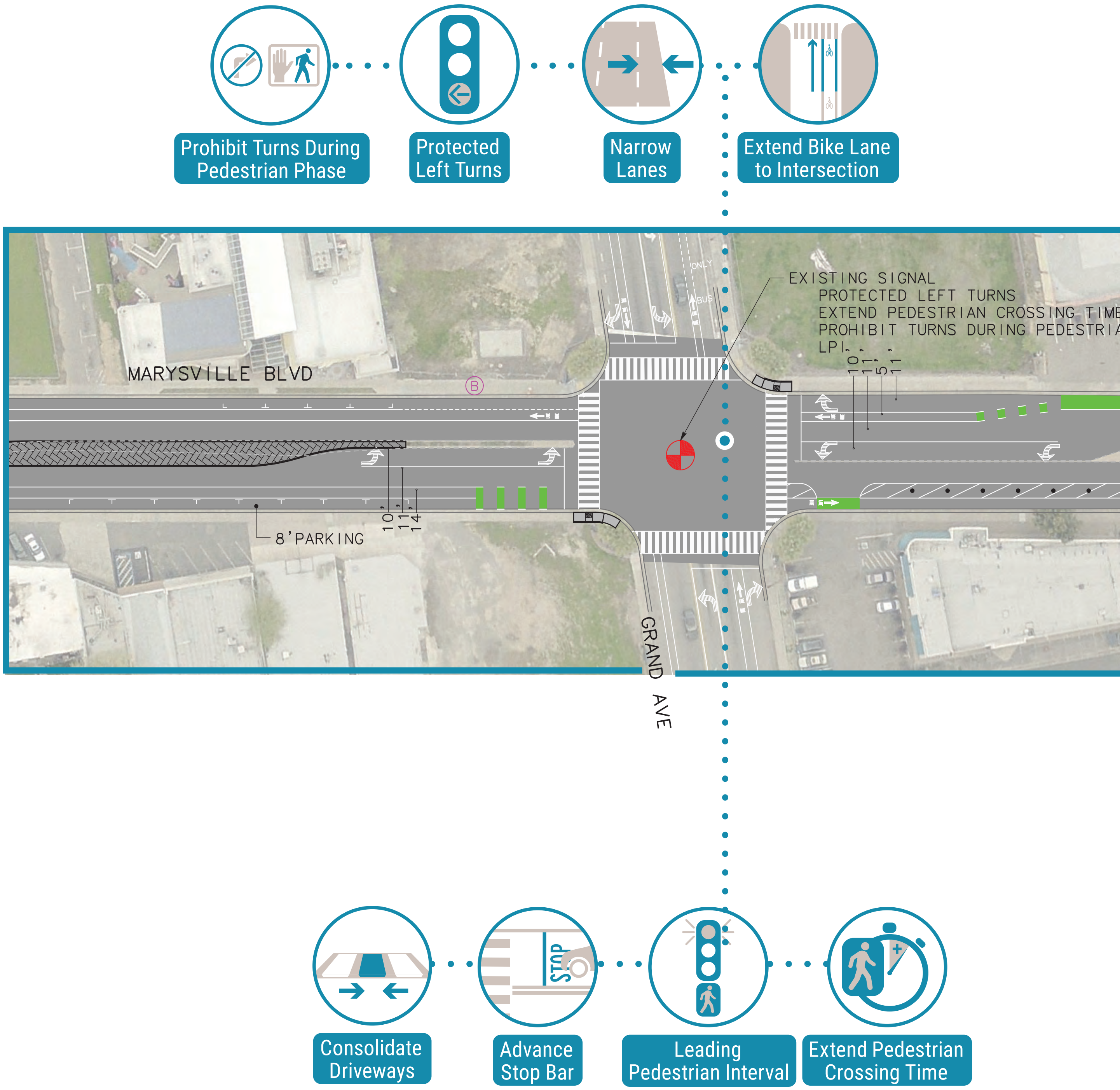

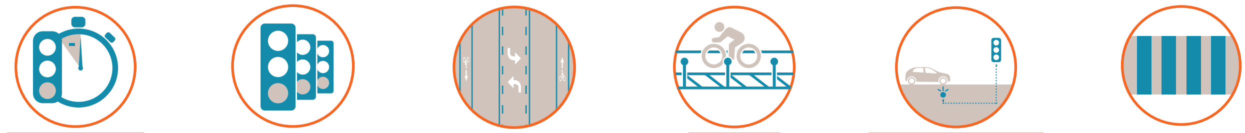

Extend Signal Clearance Time

Slow Green Wave

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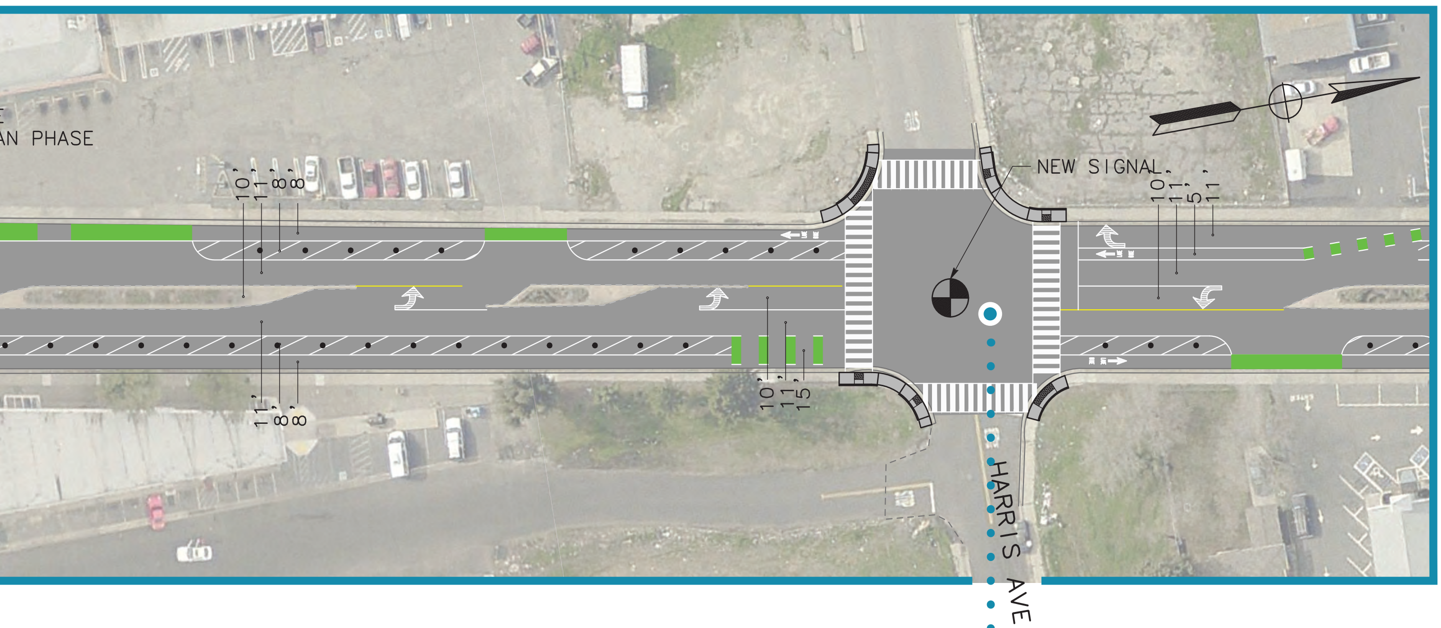
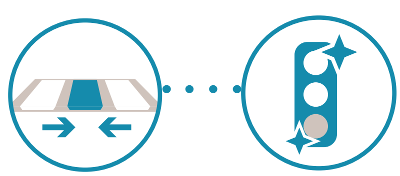


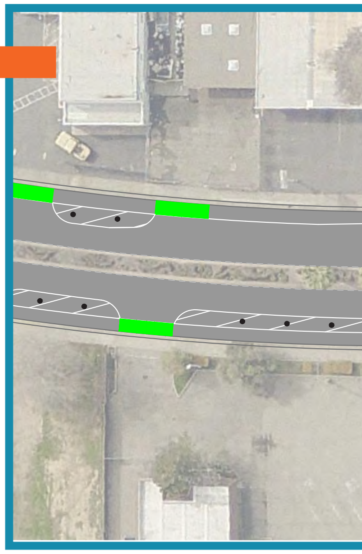
Consolidate Driveways

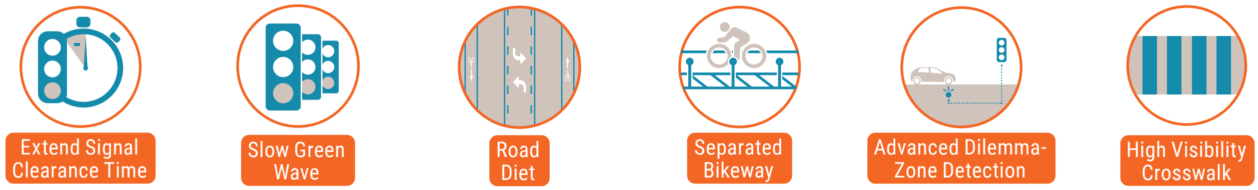
New Traffic Signal

# Conceptual Design for Marysville

### Marysville Boulevard/North Avenue Queues

The Marysville Boulevard/North Avenue intersection is 475 feet away from the merge point of the I-80 eastbound off-ramp to the north. Measures should be taken to ensure that the southbound queue at the intersection does not spill back to the off-ramp. The conceptual plans show the southbound approach is comprised of two-through lanes with a lane drop as the road continues south. The peak hour maximum queues result from this configuration are in Appendix B.



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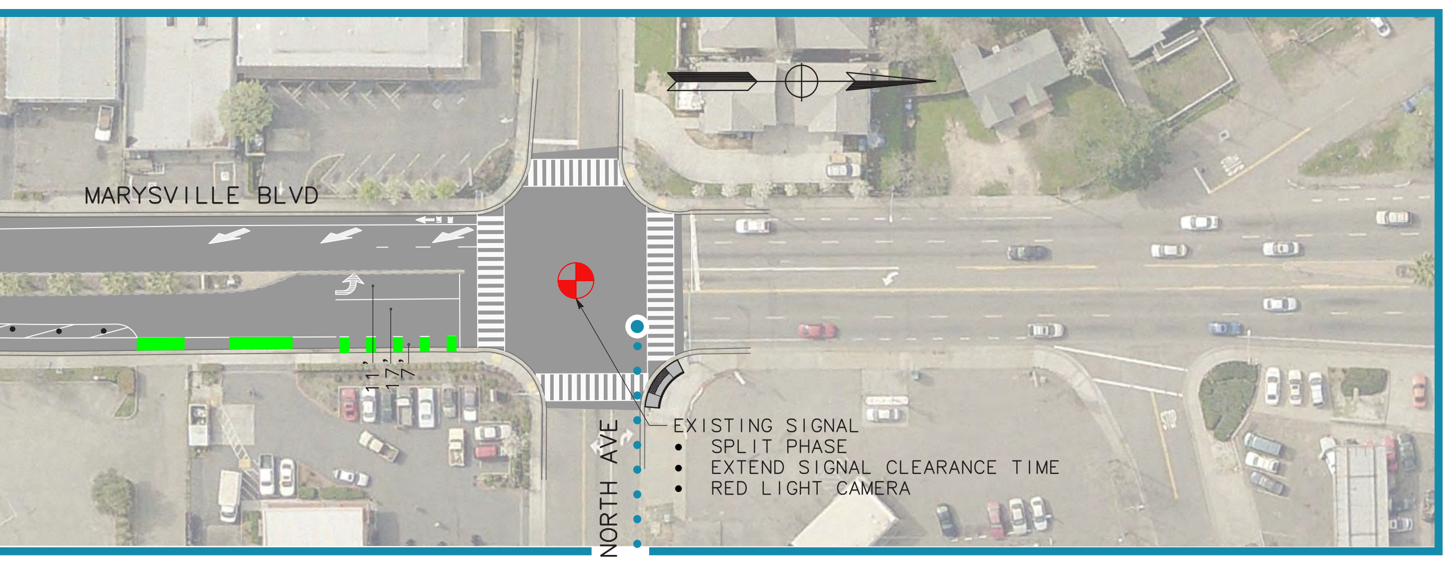


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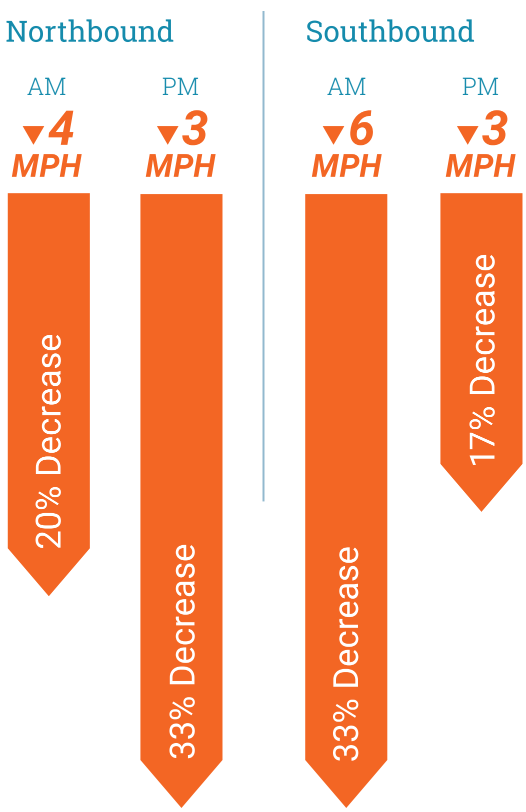
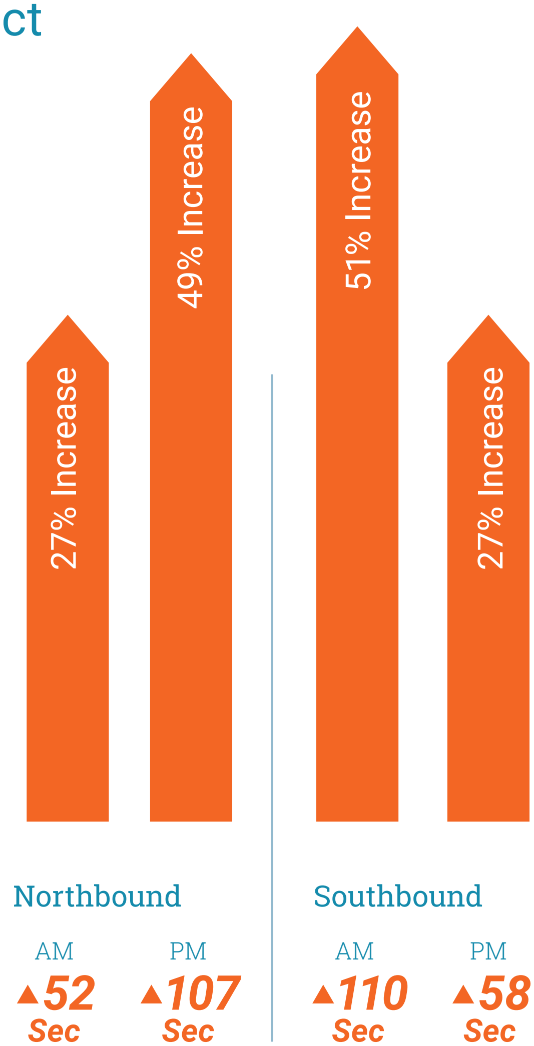
## Estimated Changes with Project

### Average Vehicle Speed

Average vehicle speed along the corridor during peak periods is expected to decrease between 3 and 6 mph as a result of the proposed project.While slower travel speeds result in longer travel times, they reduce traffic fatalities and severe injuries that result from crashes.



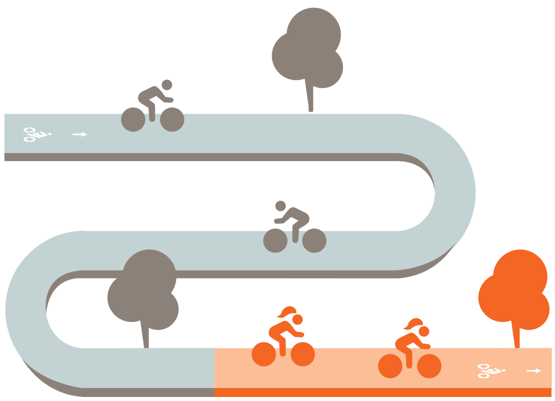




### Vehicle Travel Time

Average vehicle travel time along the one-mile corridor during peak periods is expected to increase between 52 and 110 seconds as a result of the proposed project.

## Estimated Changes with Project

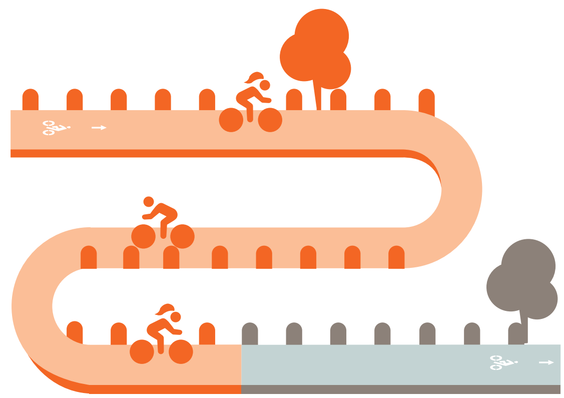
### Bike Lane Coverage



Without project ▶ With project

**82% (9,740 ft)** ▶ **100% (11,830 ft)**

### Share of Bike Lanes with Vertical Separation

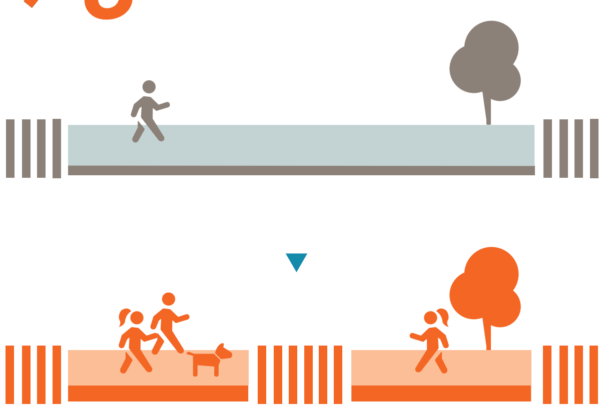


Without project ▶ With project

**0% (0 ft)** ▶ **78% (9,280 ft)**

### Distance Between Crosswalks

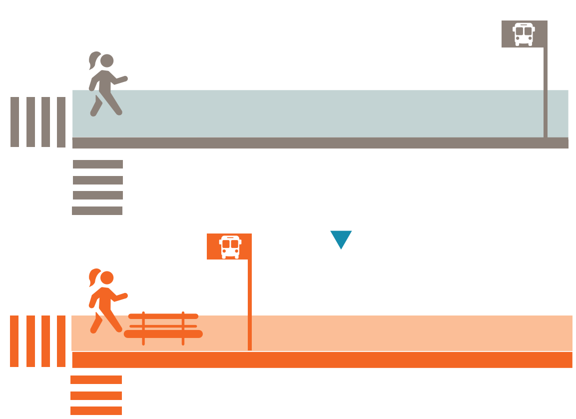
**2/3** ***of the existing distance***



*Longest distance between crosswalks reduced from 1,230 to 800 ft.

### Distance Between Crosswalks and Bus Stops

**1/3** ***of the existing distance***

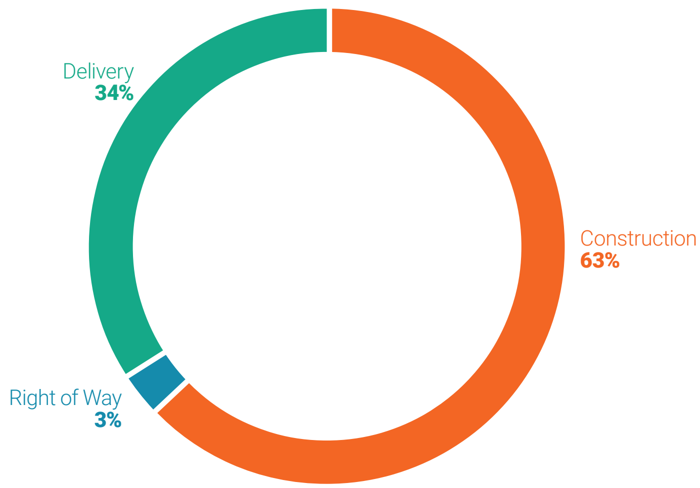


*Longest distance between a bus stop and the closest crosswalk reduced from 630 to 230 ft.

# How Much Will the Project Cost?

## Marysville Boulevard Cost Summary

**$12,850,000**




The total project costs shown in the summary chart have been escalated at an assumed 3% per year escalation factor to 2025, the anticipated year of construction.

### Construction

Construction costs include the cost to build the primary items associated with the safety countermeasures for the corridor. The items were estimated based on the preliminary design concepts and recent construction bid unit costs with an escalation factor to account for future construction. The costs were broken down into two categories that consisted of major roadway items and electrical items such as traffic signals and lighting. A contingency factor was included to account for refinement of project design, changes in project details, or unforeseen changes in construction costs.

Actual project costs will be determined by surveyed base mapping, geotechnical reports, concept refinement, environmental reviews, right of way availability, project phasing, and bid conditions at the time of advertisement. Project costs should be reviewed prior to any grant application or initiation of a Capital Improvement Project to revalidate and update the assumptions in this study as necessary.

### Right of Way

In addition to construction costs, right of way costs were assumed that include temporary construction easements for items such driveway modifications, curb ramps reconstruction, signal equipment poles and cabinets. The preliminary design assumes that the project can be constructed almost exclusively within the roadway prism and right of way acquisition along entire project frontage is not needed. Further refinement of the base mapping in subsequent phases of design will more accurately identify specific right of way needs.

### Delivery

Project delivery costs are included in the estimates provided in this study. These costs encompass all of the work to complete subsequent phases including preliminary engineering, environmental documentation, final design, right of way engineering, and construction oversight. A breakdown of these costs is provided in Appendix C.

# Broadway/Stockton

## Vision Zero Top 5 Corridor


Stockton Boulevard at Broadway

# Broadway/Stockton Boulevard

## Vision Zero Top 5 Corridor


Broadway/Stockton Blvd - Colonial Theater

**What is going on?**
Between 2009 and 2017, 15 crashes that resulted in a fatality or severe injury (KSI) occurred on Broadway/Stockton Boulevard between Martin Luther King Jr. Boulevard and 14th Avenue. Six of these crashes involved a pedestrian and three of these crashes involved a bicyclist. Of the 122 crashes studied on this corridor, 34 crashes (27 percent) occurred at the Broadway/Stockton Boulevard intersection.

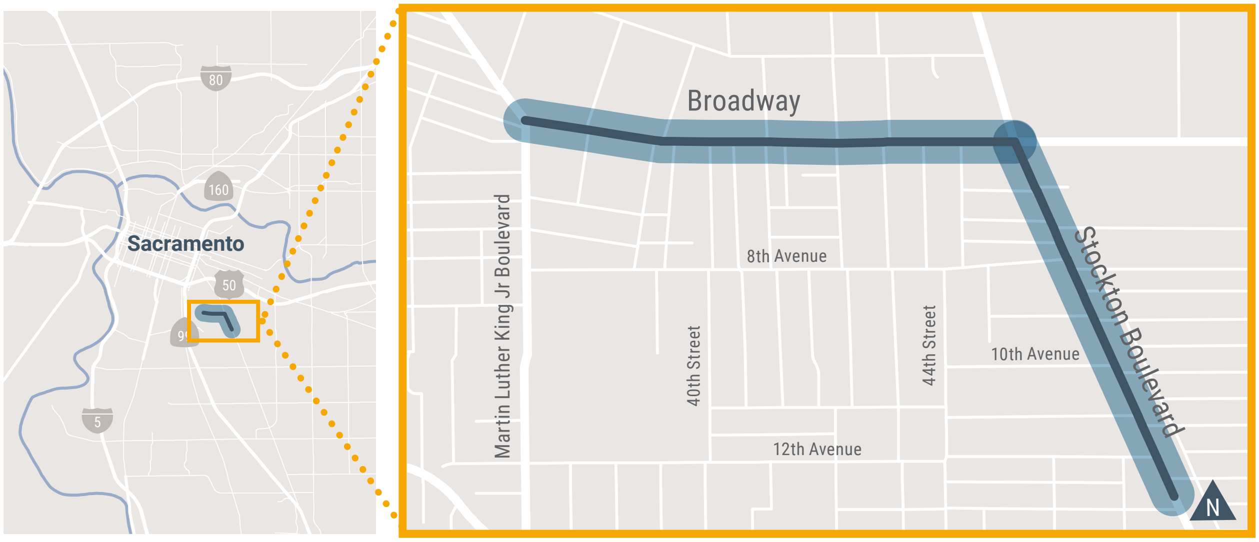
**What are the key issues?**
Unsafe speed was the most common violation for vehicular crashes, and many drivers were proceeding straight or stopped at the time of the crash. On Broadway, half of the pedestrian crashes involved a pedestrian crossing the street outside of a crosswalk, whereas on Stockton Boulevard, 60 percent of pedestrians hit by drivers were crossing the street in a marked crosswalk. Bike crashes on this corridor involved broadside, or T-Bone, and sideswipe crashes.

**What is the community concerned about?**
Residents described frequent jaywalking activity throughout the corridor and suggested that it is result of lack of crosswalks, specifically near bus stops. Residents said it is uncomfortable to bike since there are gaps in the bike lanes and drivers tend to speed while traveling. The segment of Stockton Boulevard overlaps with the Stockton Boulevard Corridor Study.
The following pages lay out the existing conditions along the corridor, feedback heard from residents at outreach events, and a set of roadway safety recommendations focused on slowing drivers down, providing separated space for bicyclists, and giving pedestrians more opportunities for safe crossings.

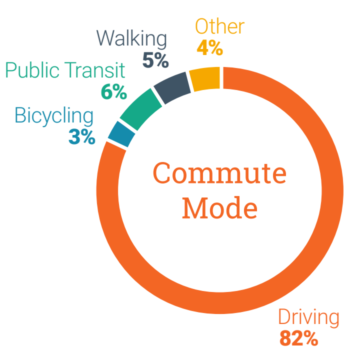
# Table of Contents

# In the Neighborhood

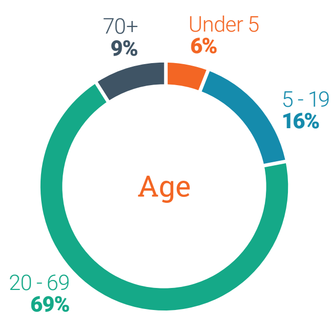
## Corridors



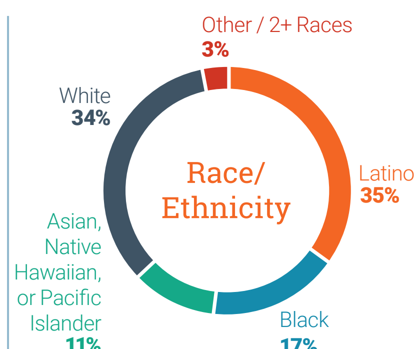

## About the Neighborhood




Residents take transit, walk, or bike to work at a higher rate than the city as a whole.




A larger share of residents in this neighborhood are age 20-69, compared with the city as a whole.




52% of the residents in this neighborhood are Black or Latino, compared with 42% citywide.

Broadway at 39th Street

Stockton Boulevard at 8th Avenue

Broadway at Stockton Boulevard

## Key Destinations Along the Corridors

**Parks**

1

**Schools & Libraries**

2

**Food Markets**

1

**Houses of Worship**

5

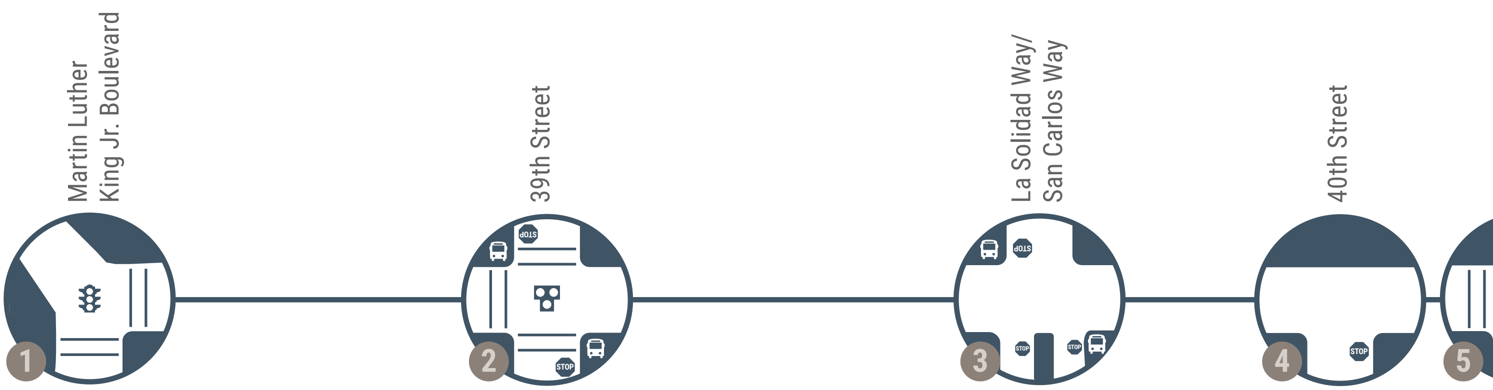
**Theaters**

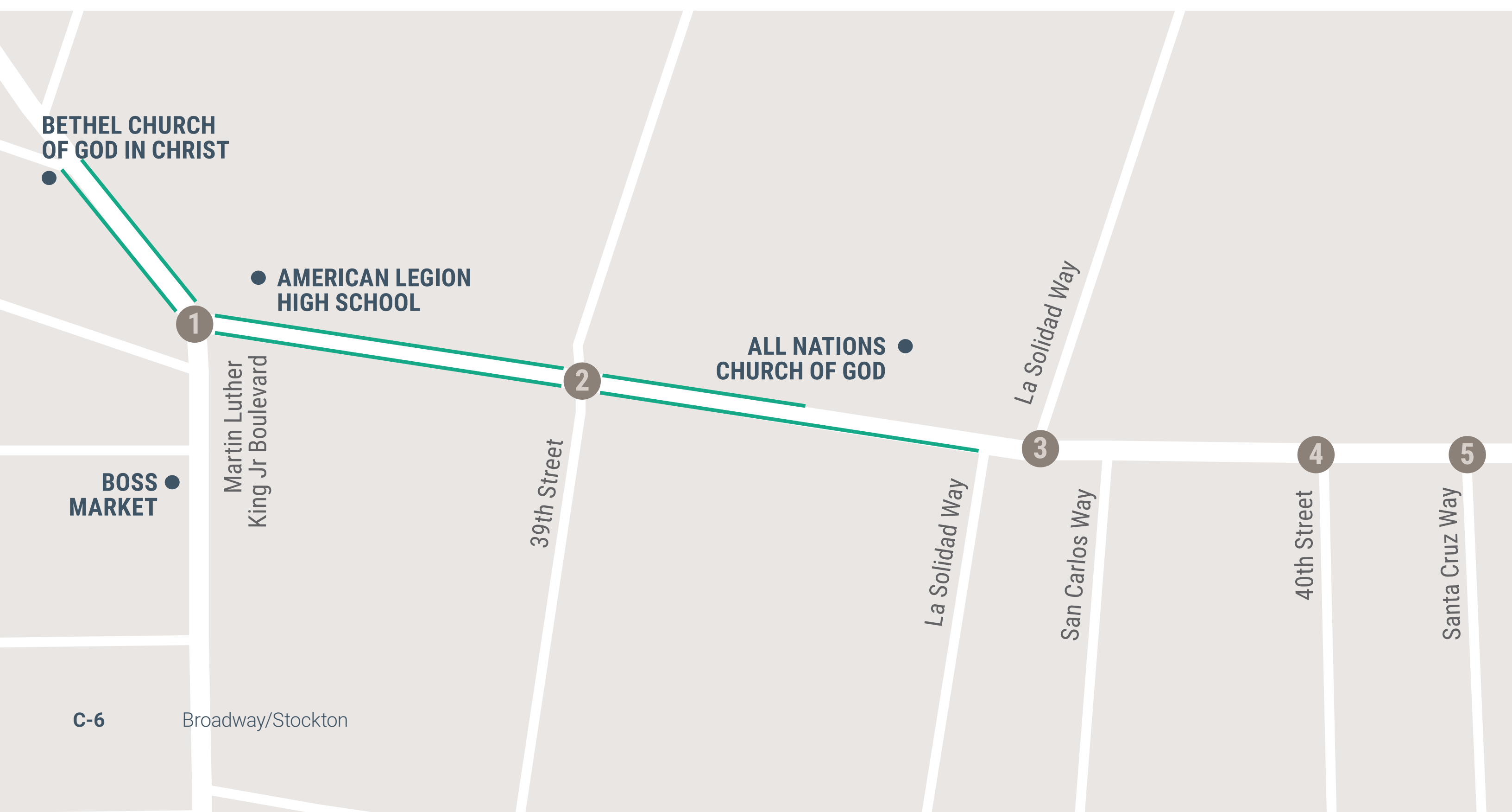
1

# Travel on Broadway

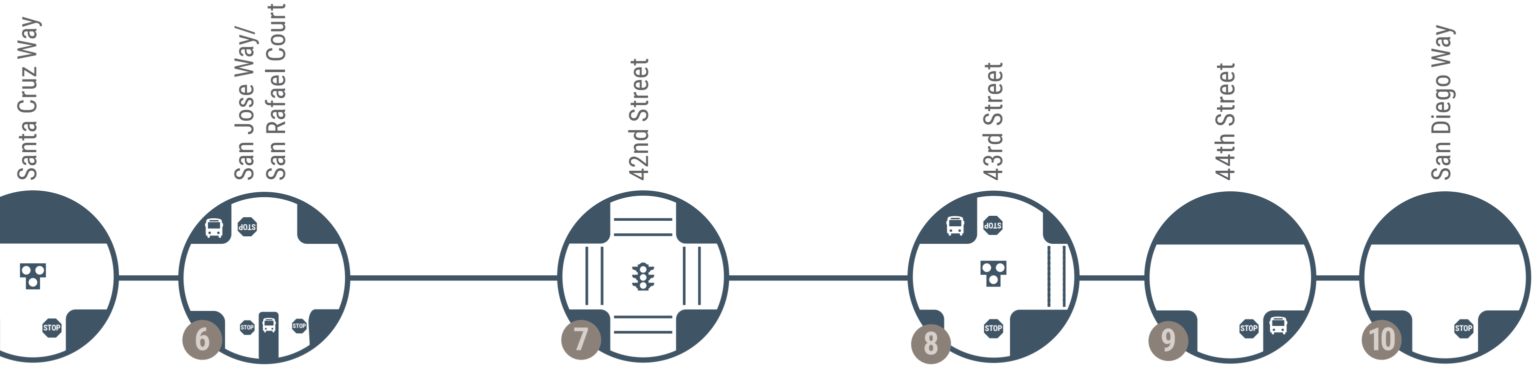
## Key Statistics

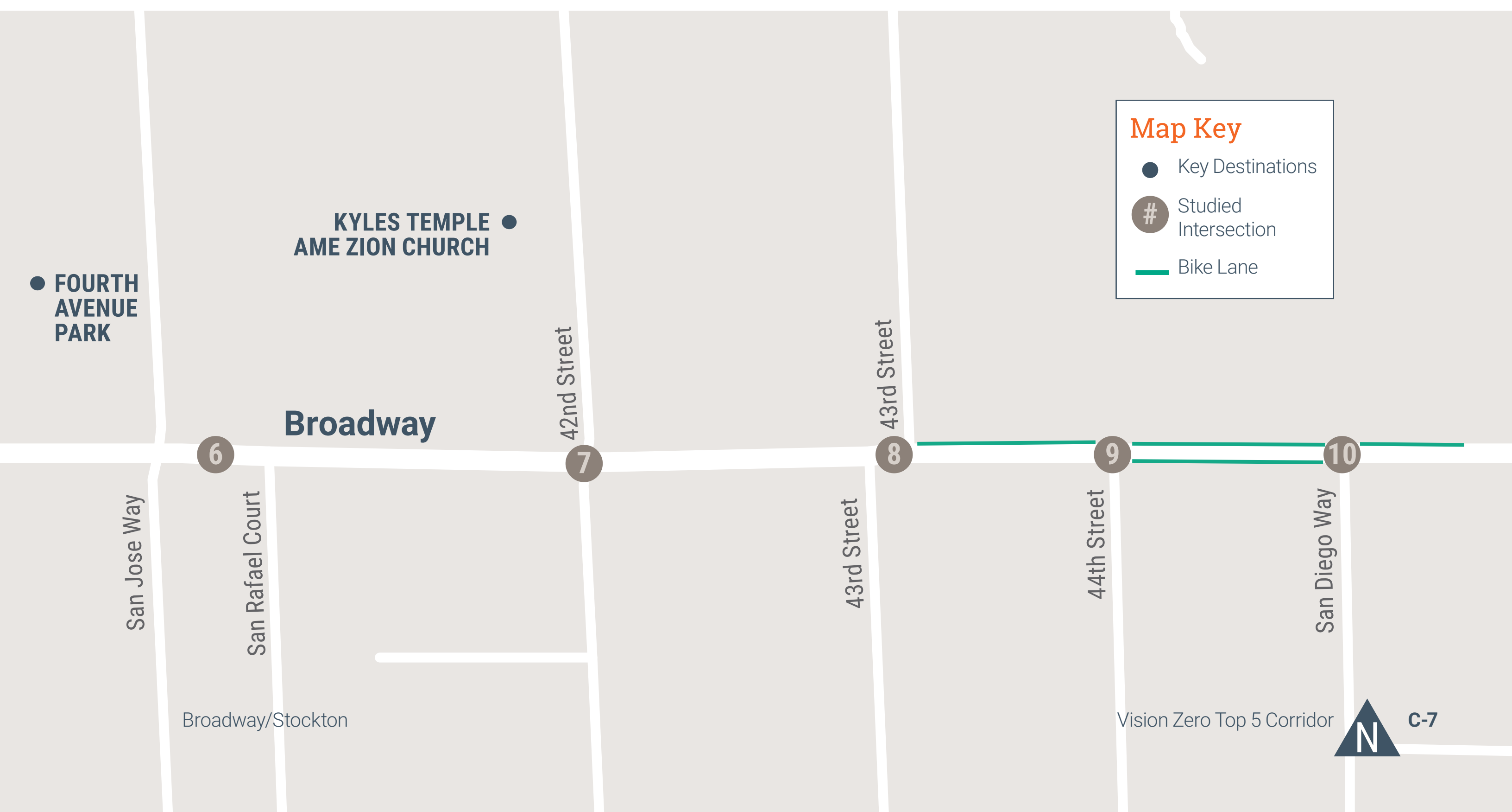
| Posted Speed Limit | Daily Vehicles | Maximum PM Intersection Vehicle Volume | PM Rush Hour People Walking | PM Rush Hour People Biking |
|---|---|---|---|---|
| **30 MPH** | **15,800** | **1,744** | **126** | **92** |



| Number of Transit Routes | Bikeway Type | Longest Distance Between Marked Crosswalks | Sidewalk Coverage |
|---|---|---|---|
| ***3*** ***#51, #206, #214*** | ***On-Street Bike Lanes, with long gaps*** | ***930 Ft*** | ***100%*** |

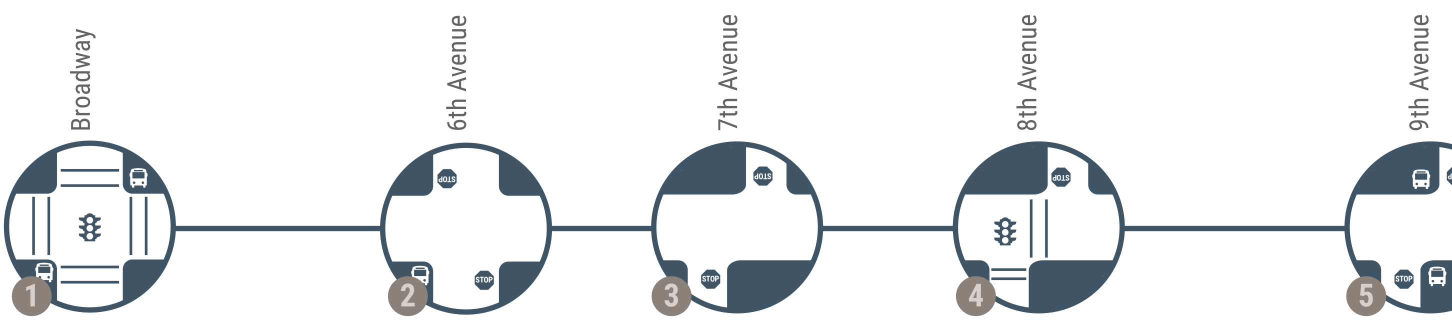


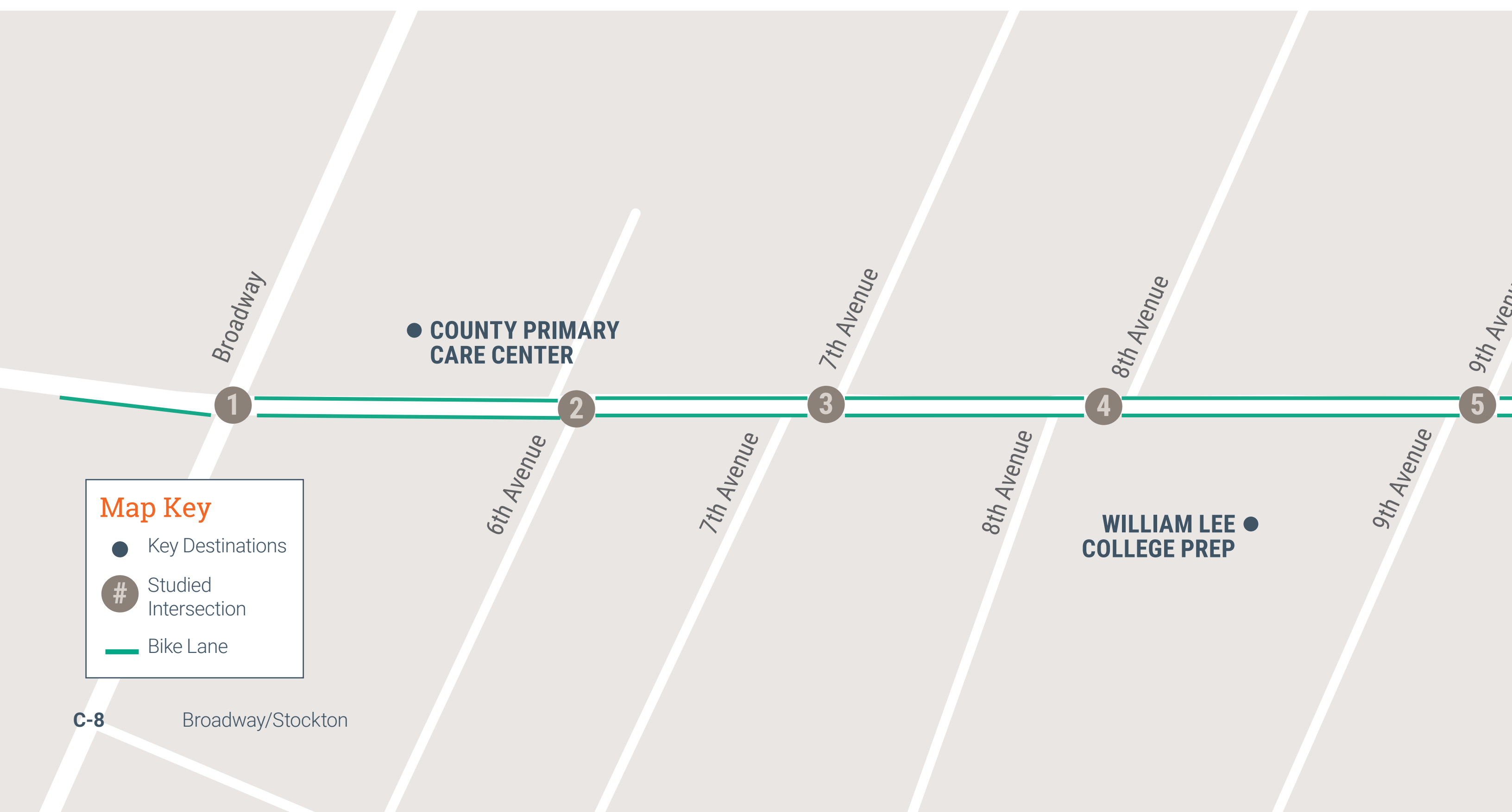



# Travel on Stockton

## Key Statistics

| Posted Speed Limit | Daily Vehicles | Maximum PM Intersection Vehicle Volume | PM Rush Hour People Walking | PM Rush Hour People Biking |
|---|---|---|---|---|
| 35 MPH | 19,600 | 1,843 | 151 | 134 |



Number of Transit Routes

**2**

**#51, #213**

Bikeway Type

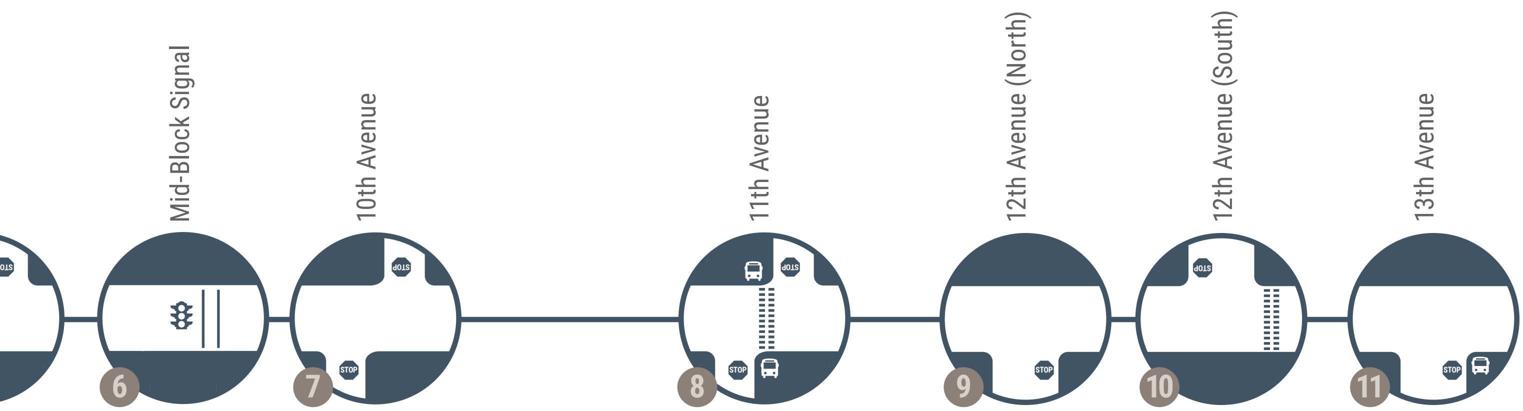
**On-Street Bike Lanes**

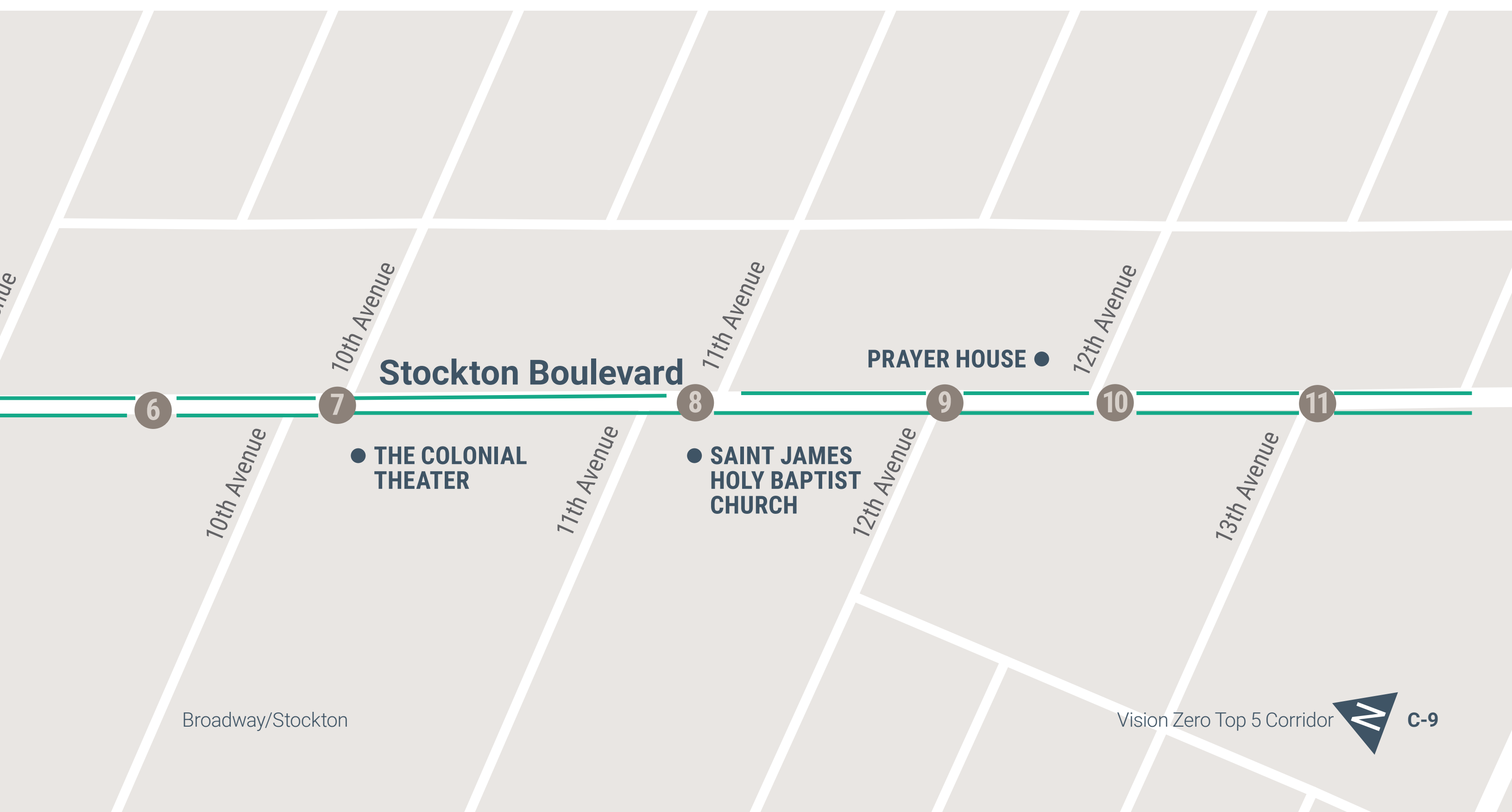
Longest Distance Between Marked Crosswalks

**1,560 Ft**

Sidewalk Coverage

**100%**



# Crashes on Broadway

## Vehicle Crash Types

### Unsafe Speed

"Unsafe Speed" was the most common violation, cited in 28% of all crashes.

1 2 3 4 5 6
7 8 9 10

### Proceeding Straight

More than 2/3 of drivers were proceeding straight or stopped at the time of the crash.

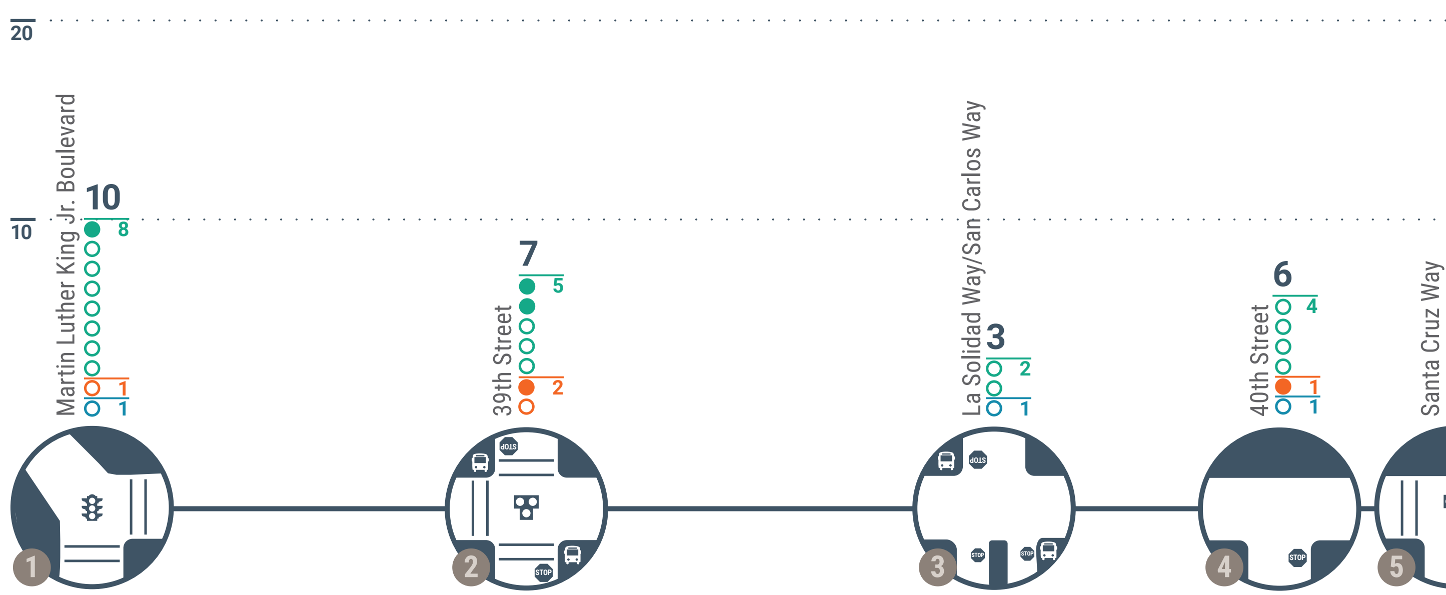
1 2 3 4 5 6
7 8 9 10

### Left Turns

Nearly 2/3 of drivers who were turning at the time of the crash were making a left turn.

1 2 3 4 5 6
7 8 9 10

## Crash Locations



## Pedestrian Crash Types

### Not in Crosswalk

Half of pedestrians hit were crossing outside of a crosswalk at the time of the crash.

1 2 3 4 5 6
7 8 9 10

### Weekend

Nearly 2/3 of pedestrian crashes occurred on Friday or Saturday.

1 2 3 4 5 6
7 8 9 10

## Bike Crash Types

### Sideswipe

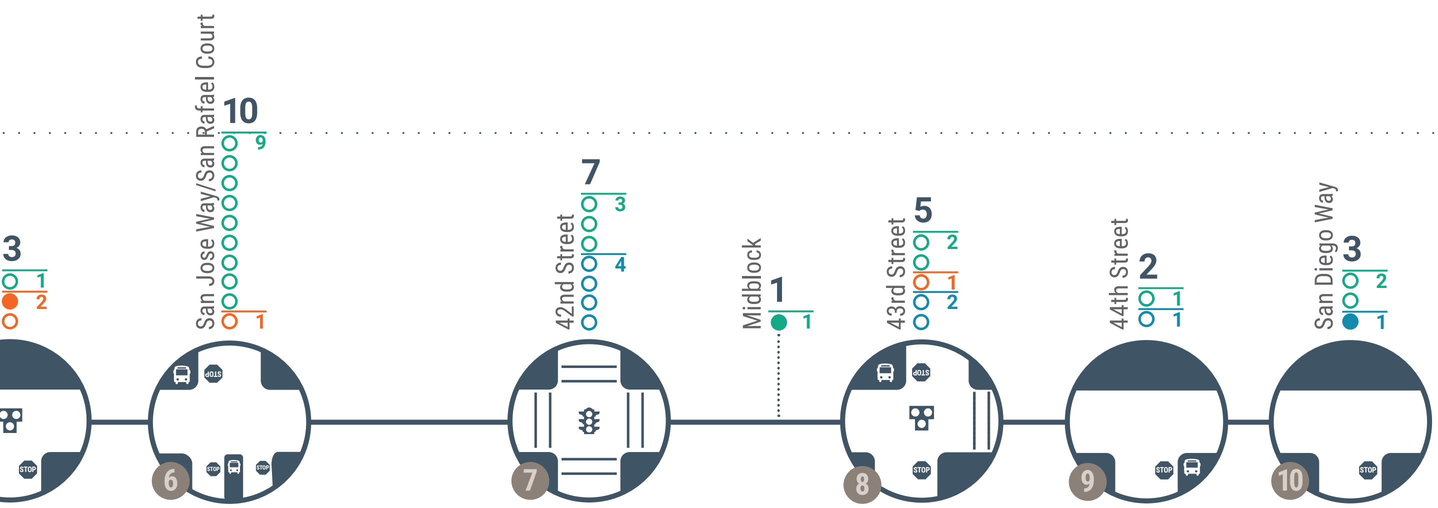
45% of bike crashes were sideswipe.

1 2 3 4 5 6
7 8 9 10

1 Numbers that are turned on represent a location where crash type has occurred at least three times.

### Total Crashes

| | All Injury Crashes | Fatal and Severe Crashes |
|---|---|---|
| Vehicle | 38 | 4 |
| Pedestrian | 8 | 3 |
| Bike | 11 | 1 |



# Crashes on Stockton

## Vehicle Crash Types

### Unsafe Speed

“Unsafe Speed” was the primary violation cited in 23% of all crashes.

1 2 3 4 5 6
7 8 9 10 11

### Proceeding Straight

More than 60% of drivers were proceeding straight or stopped at the time of the crash.

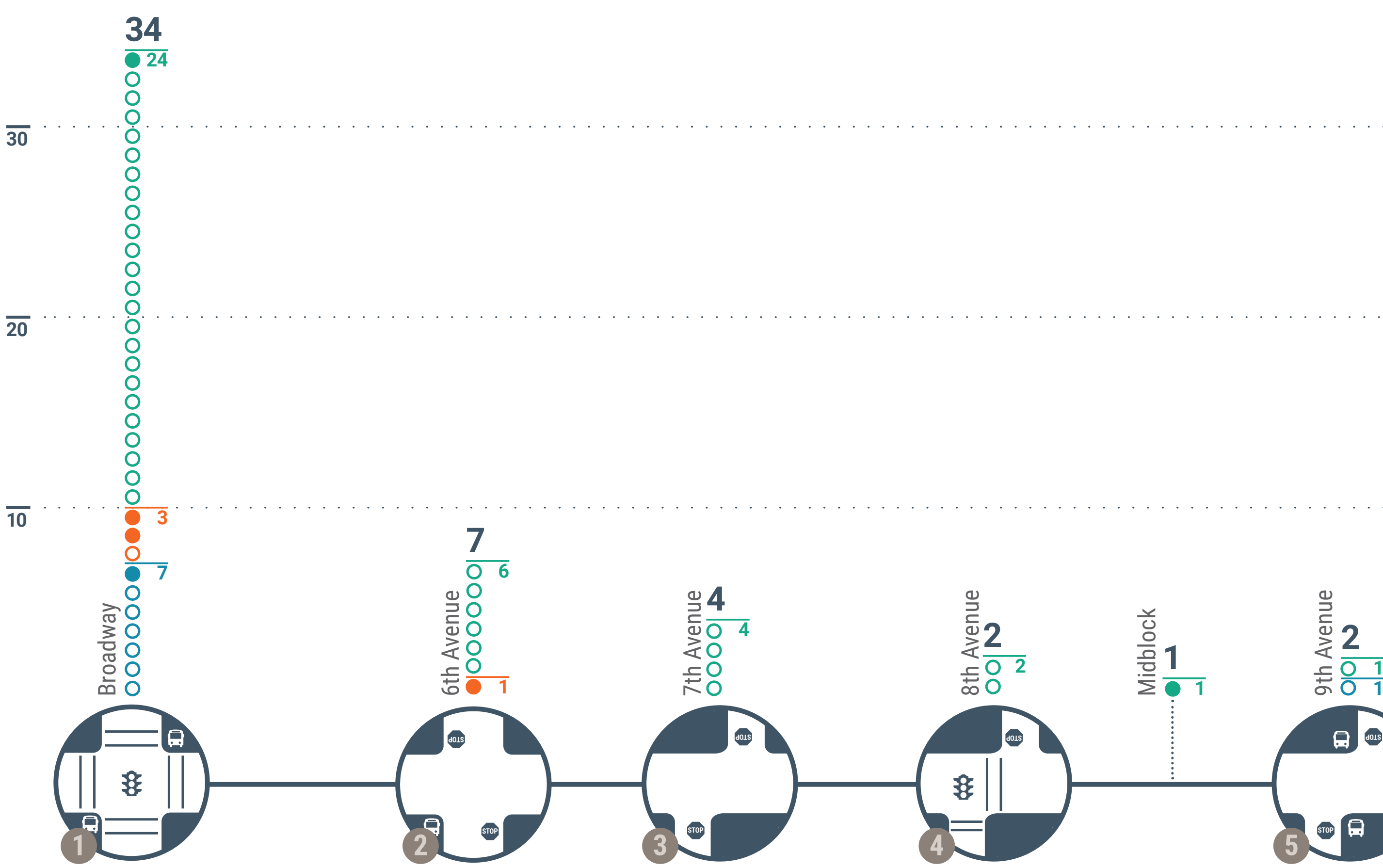
1 2 3 4 5 6
7 8 9 10 11

### Broadside

40% of all crashes were broadside, also called T-Bone.

1 2 3 4 5 6
7 8 9 10 11

## Crash Locations



## Ped Crash Types

### Crossing in Crosswalk

60% of pedestrians hit by drivers were crossing in a crosswalk at the time of the crash.

1 2 3 4 5 6 7 8 9 10 11

## Bike Crash Types

### Broadside

More than 60% of bike crashes were broadside, also called T-Bone.

1 2 3 4 5 6 7 8 9 10 11

### Morning

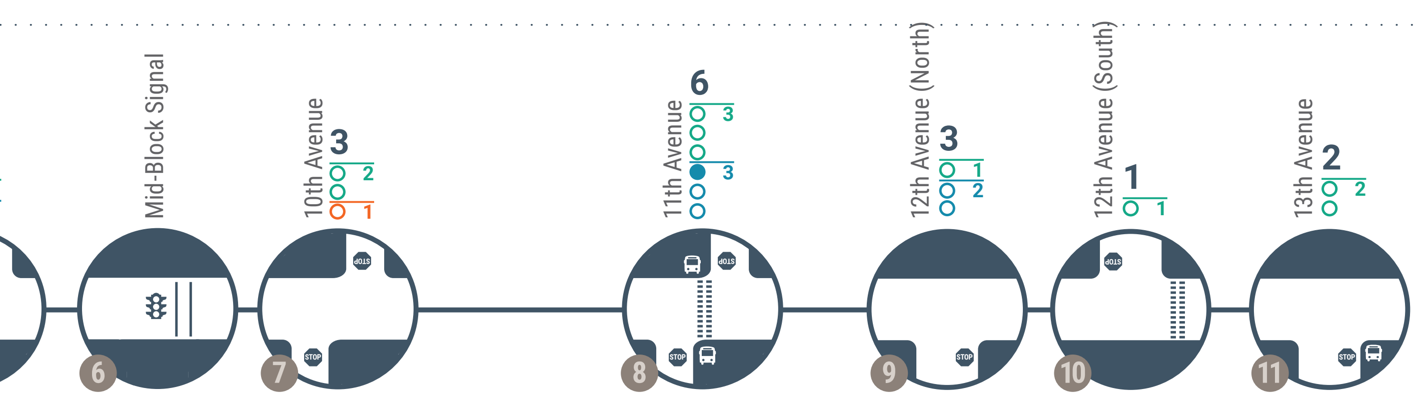
More than 60% of bike crashes occurred before noon.

1 2 3 4 5 6 7 8 9 10 11

1 Numbers that are turned on represent a location where crash type has occurred at least three times.

### Total Crashes

| | All Injury Crashes | Fatal and Severe Crashes |
|---|---|---|
| Vehicle | 47 | 2 |
| Pedestrian | 5 | 3 |
| Bike | 13 | 2 |



# Feedback from the Community

"People drive too fast and run the right turn red lights at the Broadway/Stockton intersection."

"More crosswalks! Cars do not stop, and there are bus stops not too far from crosswalks."


Fall Family Festival

## Key Themes

### Pedestrian Safety

Residents said that this corridor has a lot of pedestrian activity but believed that drivers should travel more cautiously, specifically when making right-turns on the corridor or driving near crosswalks.

### Signals/Signage

Residents described red light running at traffic signals and suggested that more traffic signals could slow down traffic.

### Crossings

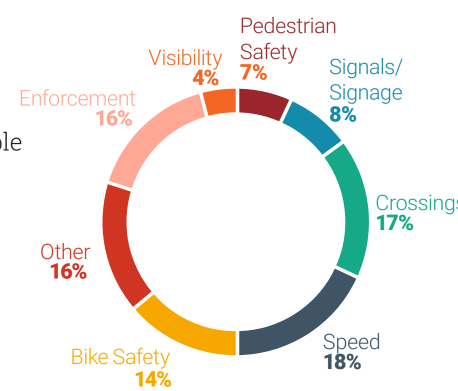
Residents described jaywalking throughout the corridor and suggested that it is result of lack of crosswalks specifically near bus stops.

### Speed

Residents described drivers speeding and traveling aggressively through the corridor and said they were uncomfortable walking and biking as a result.

### Bike Safety

Residents said it is uncomfortable to bike along the corridor since the bike lanes are inconsistent.




## Engagement Events

October 25, 2018
Fall Family Festival, Oak Park Community Center

November 7, 2018
Transit Stop at Broadway/ Stockton Pop-up

May 31, 2018
Let's Move! Event, McClatchy Park

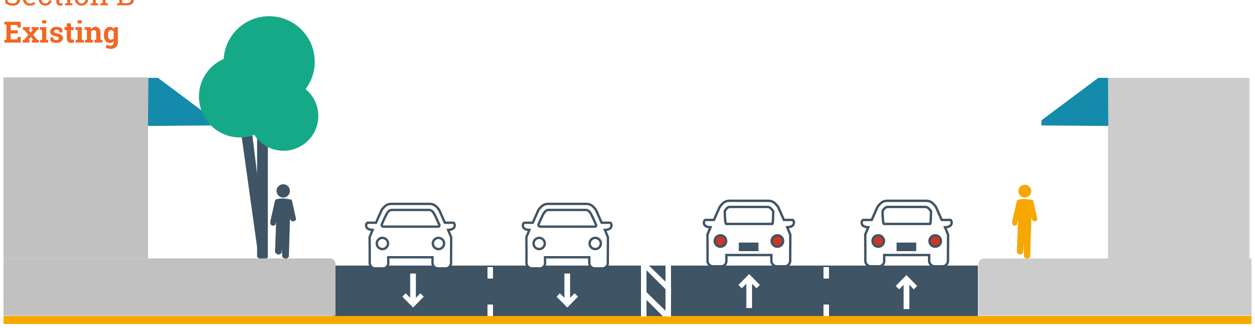
# Investments to Enhance Safety

## Key Crash Countermeasures for Broadway

| Countermeasure | | Crash Type | Feedback Key Theme |
|---|---|---|---|
| Road Diet | TO ADDRESS | Unsafe Speed | Speed |
| Add New Signal | TO ADDRESS | Not in Crosswalk | Crossings |
| Separated Bikeway | TO ADDRESS | Sideswipe (Bike) | Bike Safety |

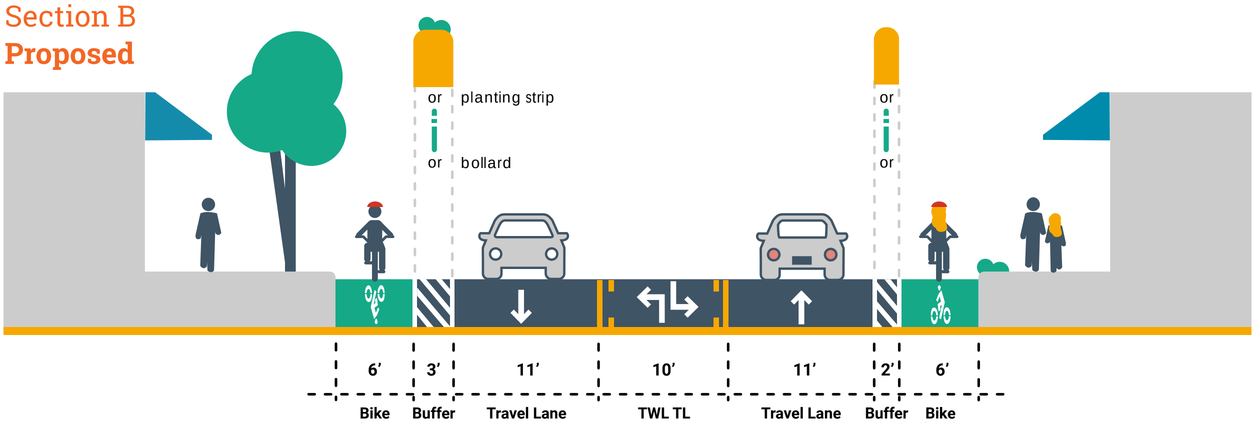
### How Will The Roadway Space Be Used?

Section B
**Existing**



SEE PAGE C-20

Section B
**Proposed**



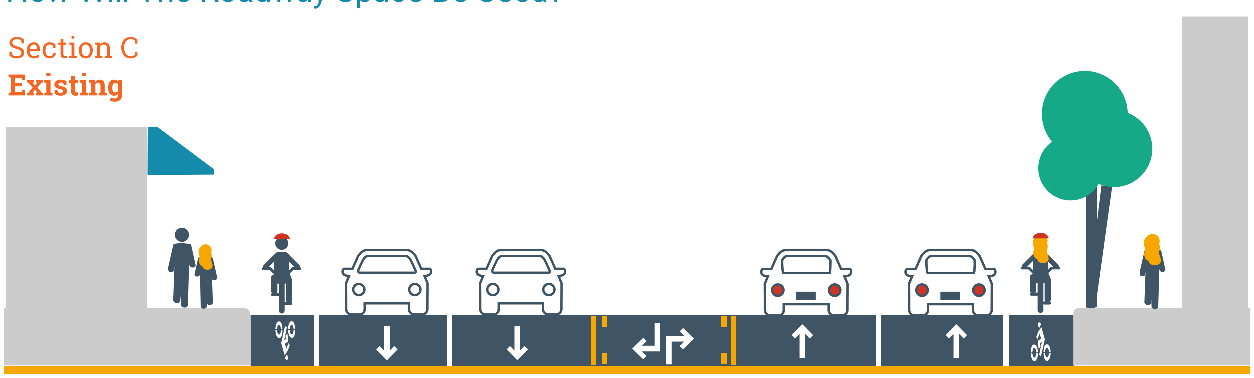
# Investments to Enhance Safety

## Key Crash Countermeasures for Stockton

| Countermeasure | | Crash Type | Feedback Key Theme |
|---|---|---|---|
| Road Diet | TO ADDRESS | Unsafe Speed | Speed |
| Leading Pedestrian Interval | TO ADDRESS | Crossing in Crosswalk | Crossings |
| Extend Signal Clearance Time | TO ADDRESS | Broadside | Signals/Signage |

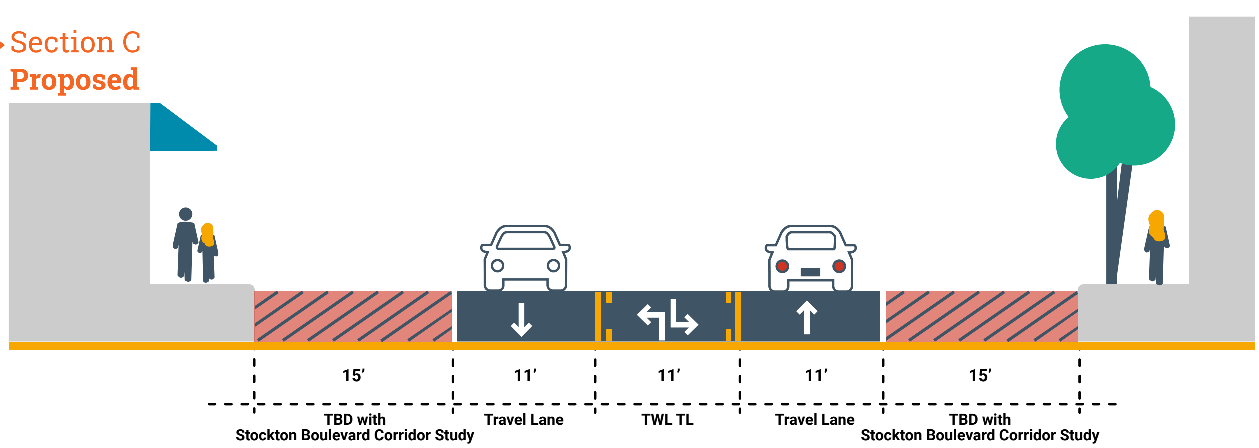
### How Will The Roadway Space Be Used?

Section C
**Existing**



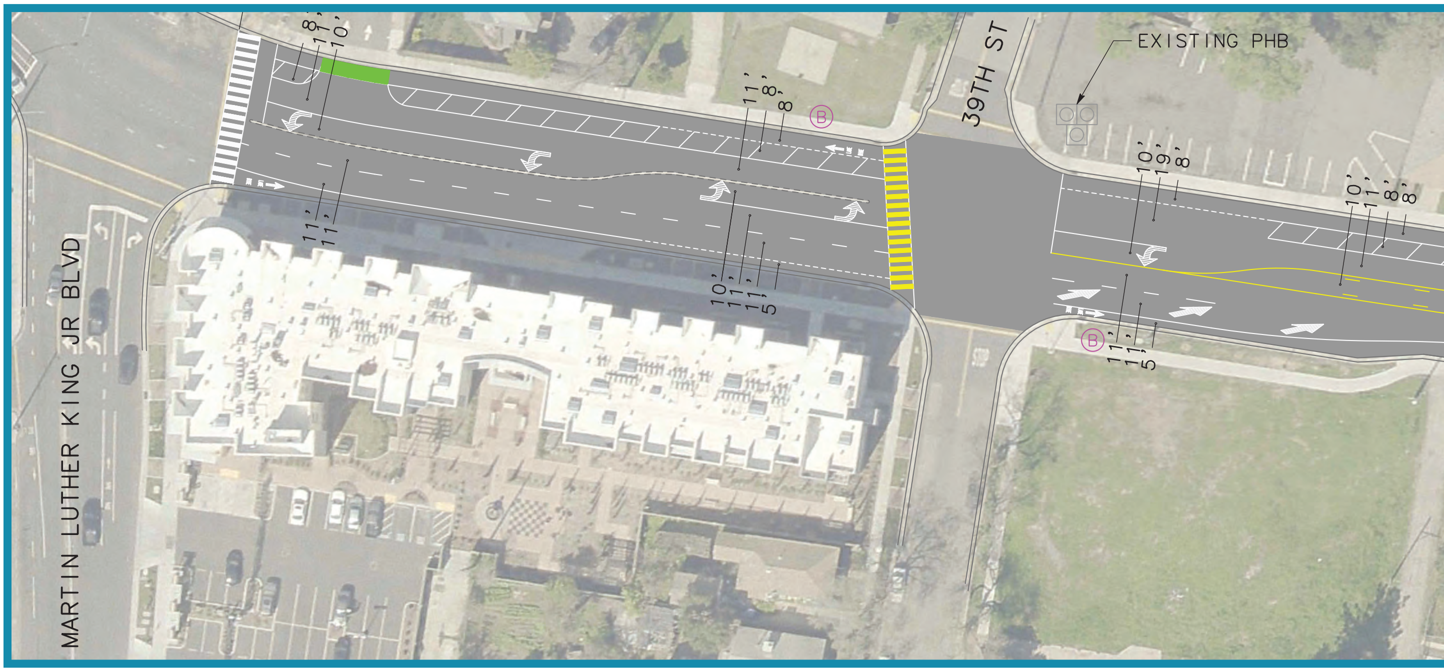
SEE PAGE C-27

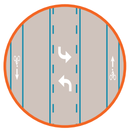
Section C
**Proposed**



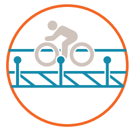

Broadway at 39th Street

# Conceptual Design for Broadway

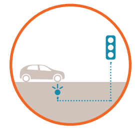




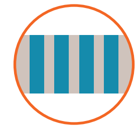
Road Diet



Separated Bikeway



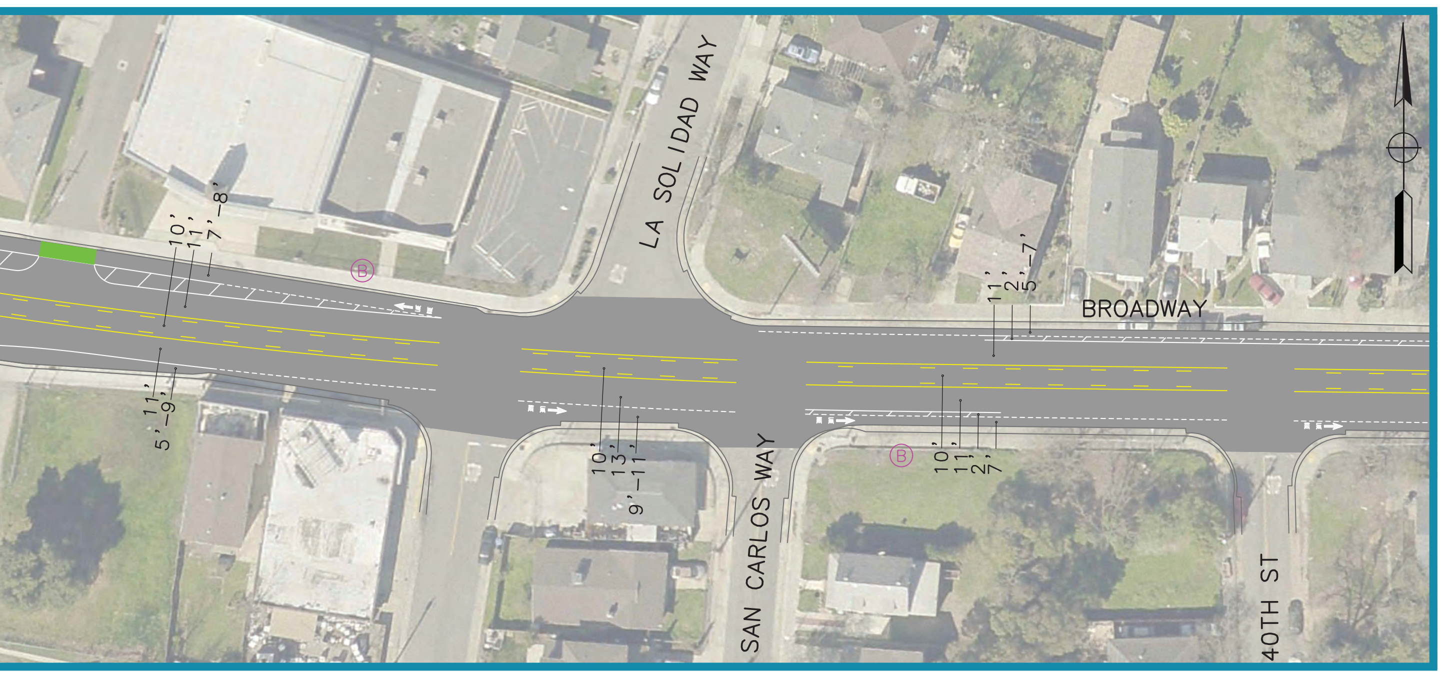
Advanced Dilemma-Zone Detection



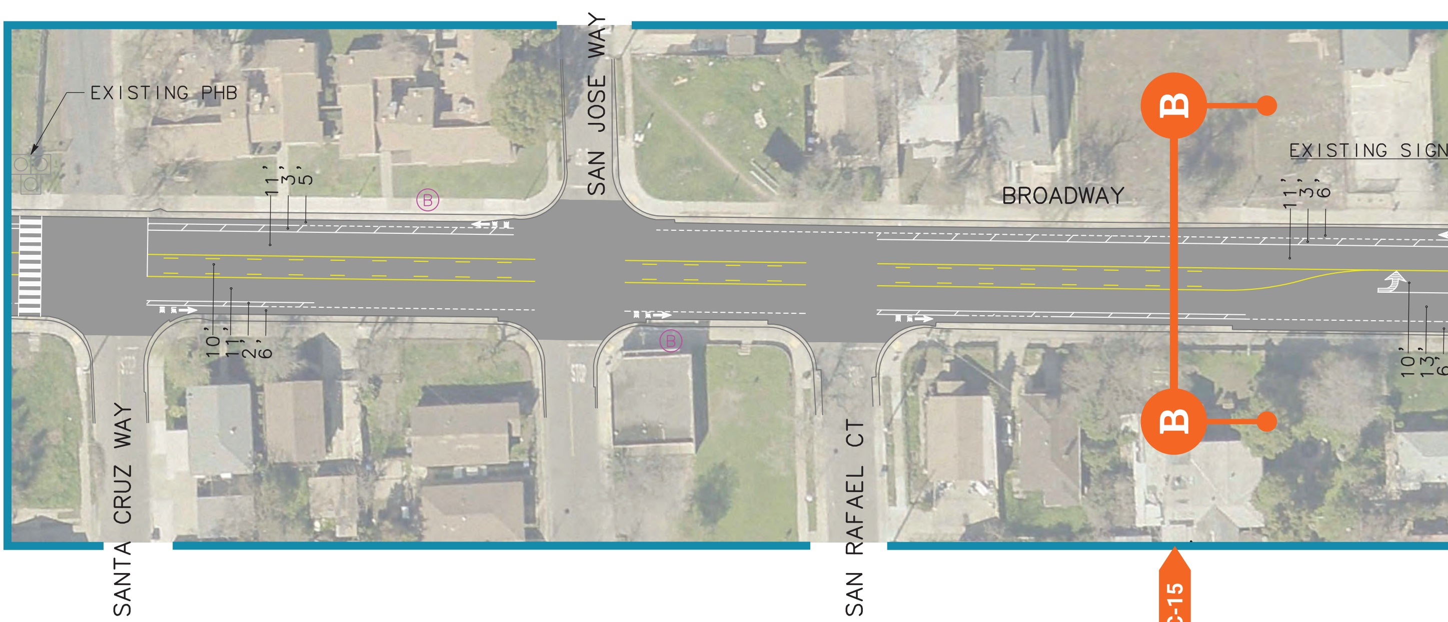
High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations



# Conceptual Design for Broadway




SEE PAGE C-15

Road Diet

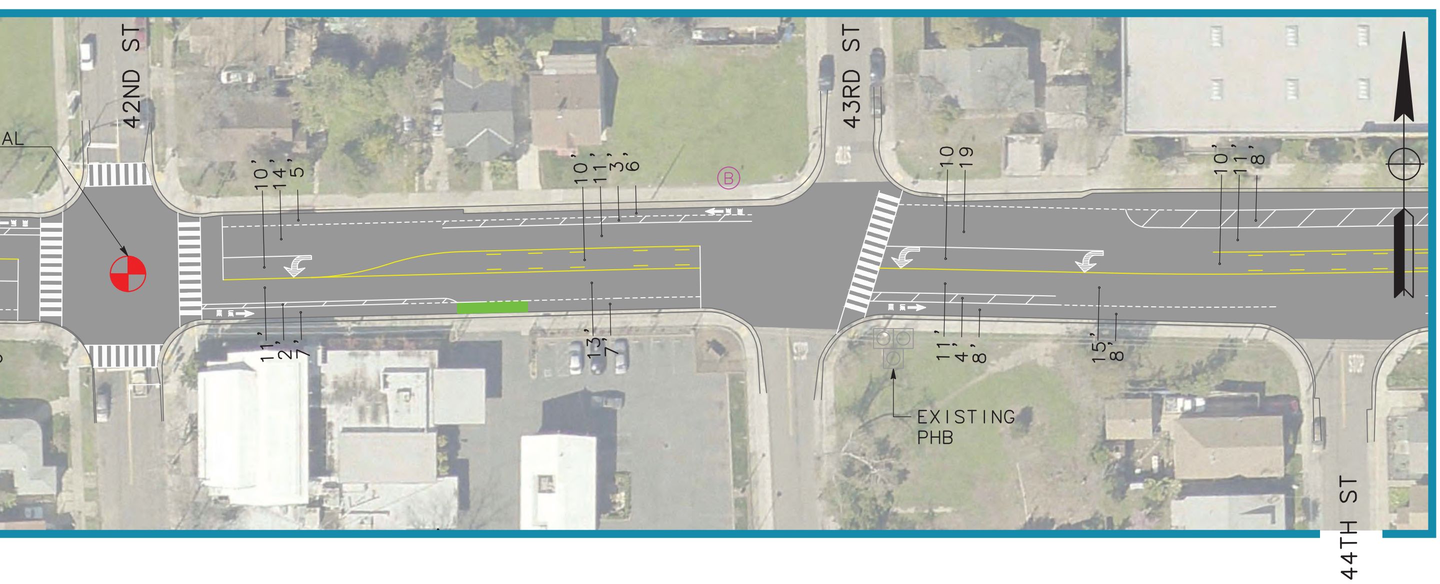
Separated Bikeway

Advanced Dilemma-Zone Detection

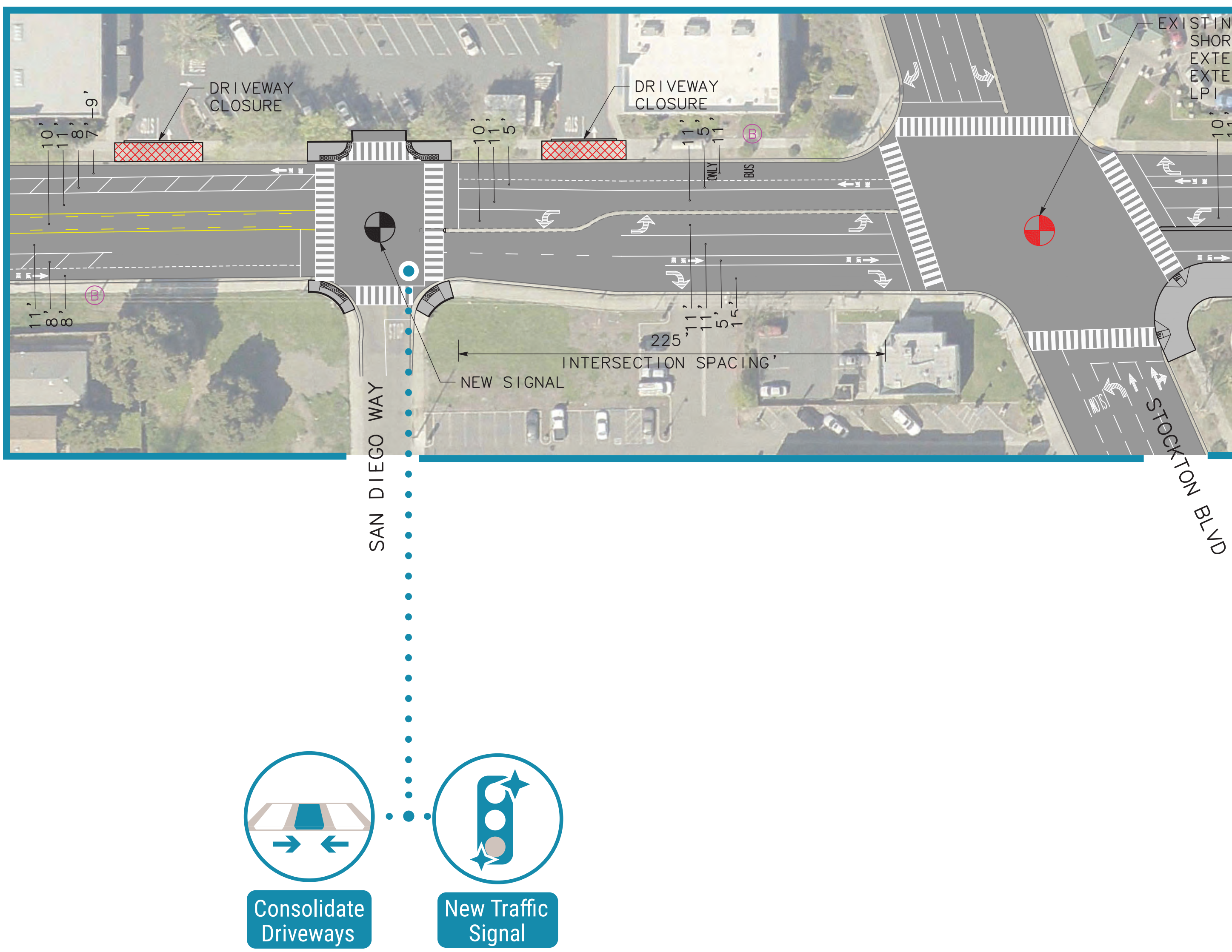
High Visibility Crosswalk

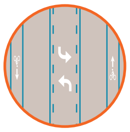
## Corridor-Wide Recommendations

## Location-Specific Recommendations

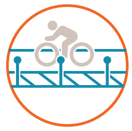


# Conceptual Design for Broadway

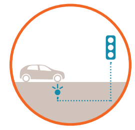




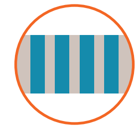
Road Diet



Separated Bikeway



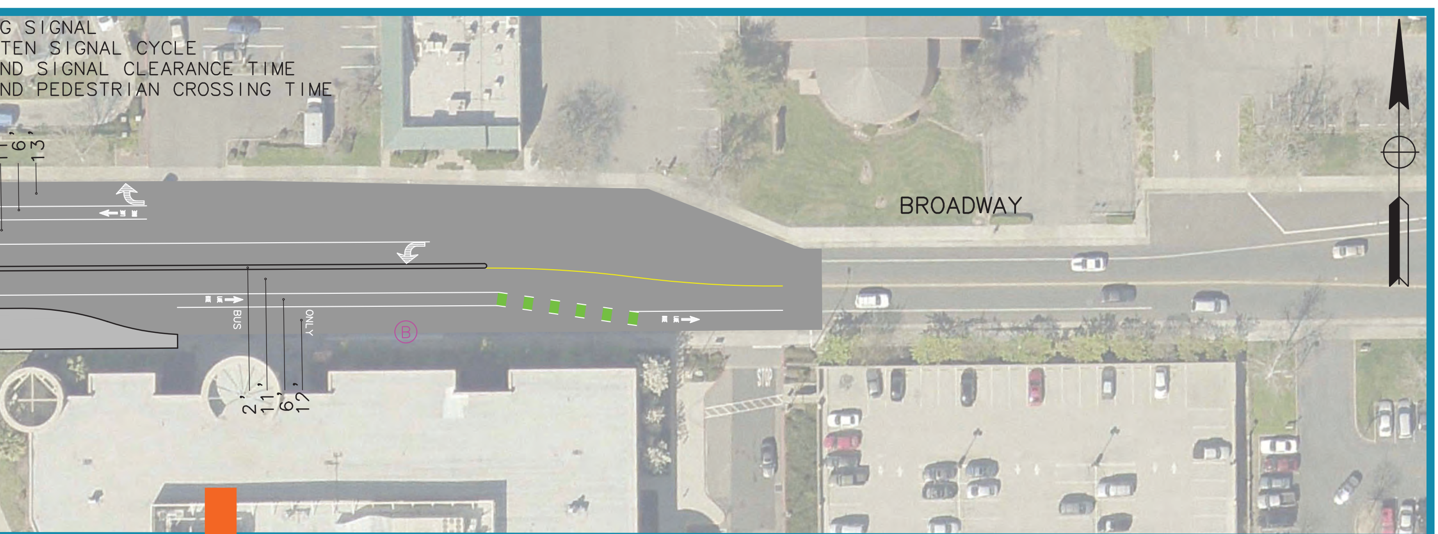
Advanced Dilemma-Zone Detection



High Visibility Crosswalk

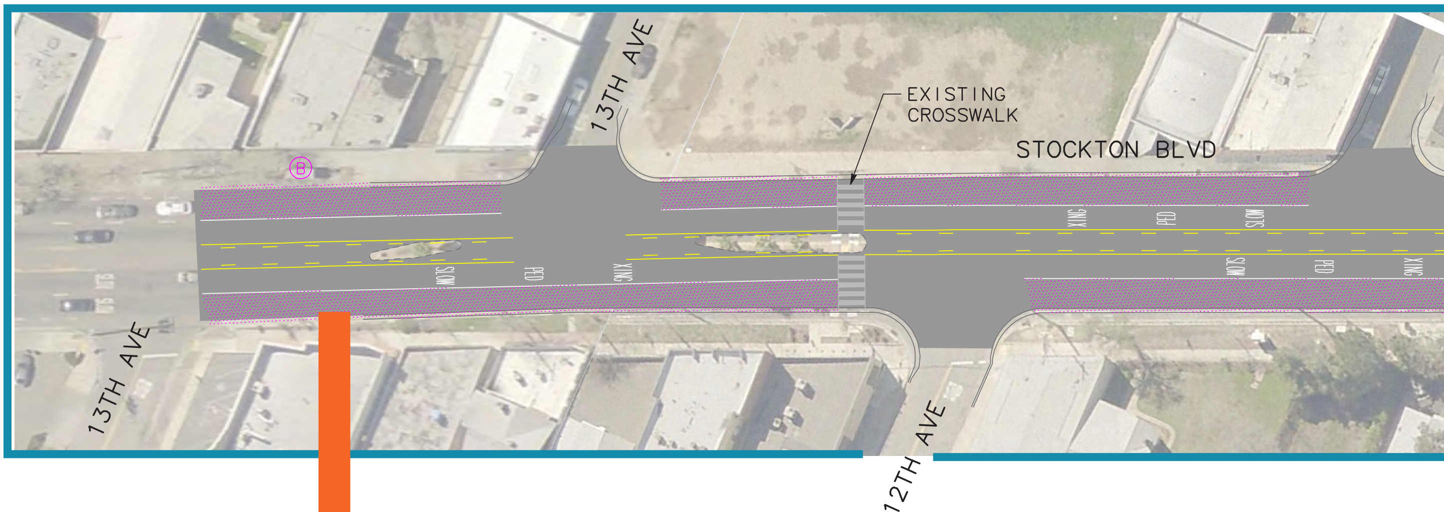
## Corridor-Wide Recommendations

## Location-Specific Recommendations

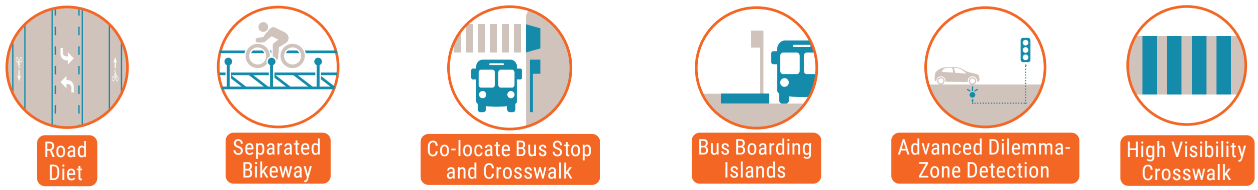



The Vision Zero recommendations include installation of traffic signals at Broadway/San Diego Way and Stockton Boulevard/6th Avenue. This would give pedestrians more opportunities to cross Broadway and Stockton Boulevard at desirable locations. However, City standard for minimum intersection spacing is 250-feet. The traffic signals at Broadway/San Diego Way and Stockton/6th Avenue would be 225-feet from the Broadway/Stockton Boulevard intersection, so the City would need to make exceptions to its Street Design Standards for this location. Traffic signals at these locations add more opportunities for controlled pedestrian crossings for popular pedestrian desire lines.

# Conceptual Design for Stockton

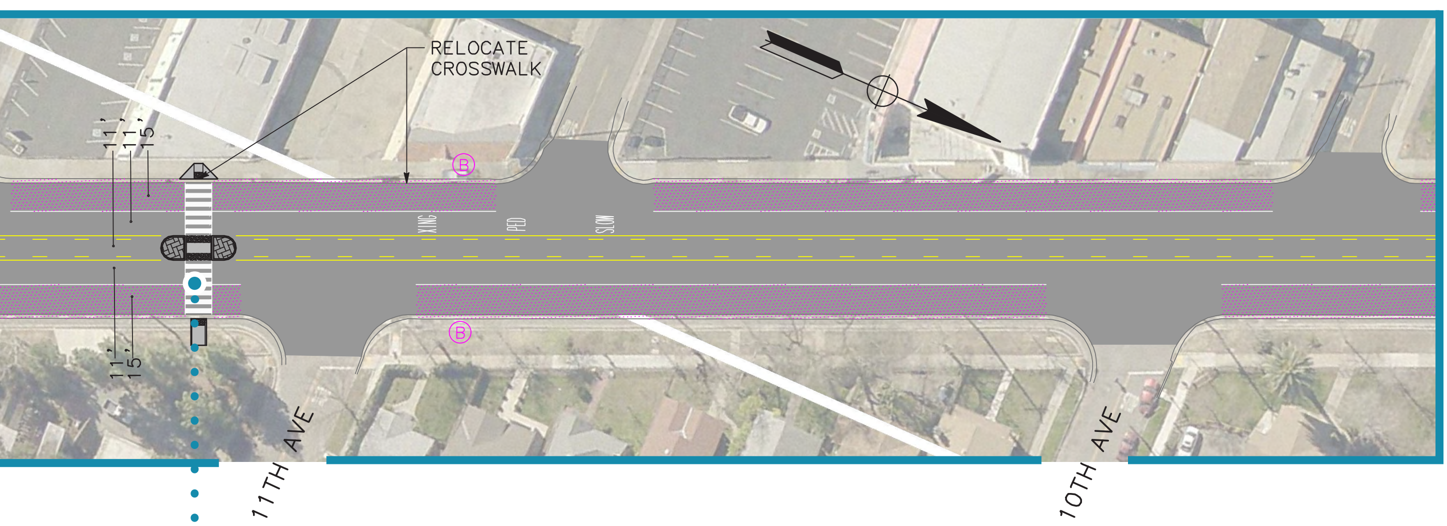


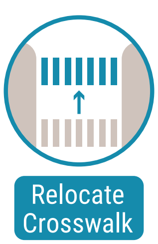

Specific use of shaded area to be determined as part of on-going Stockton Boulevard Corridor Study.



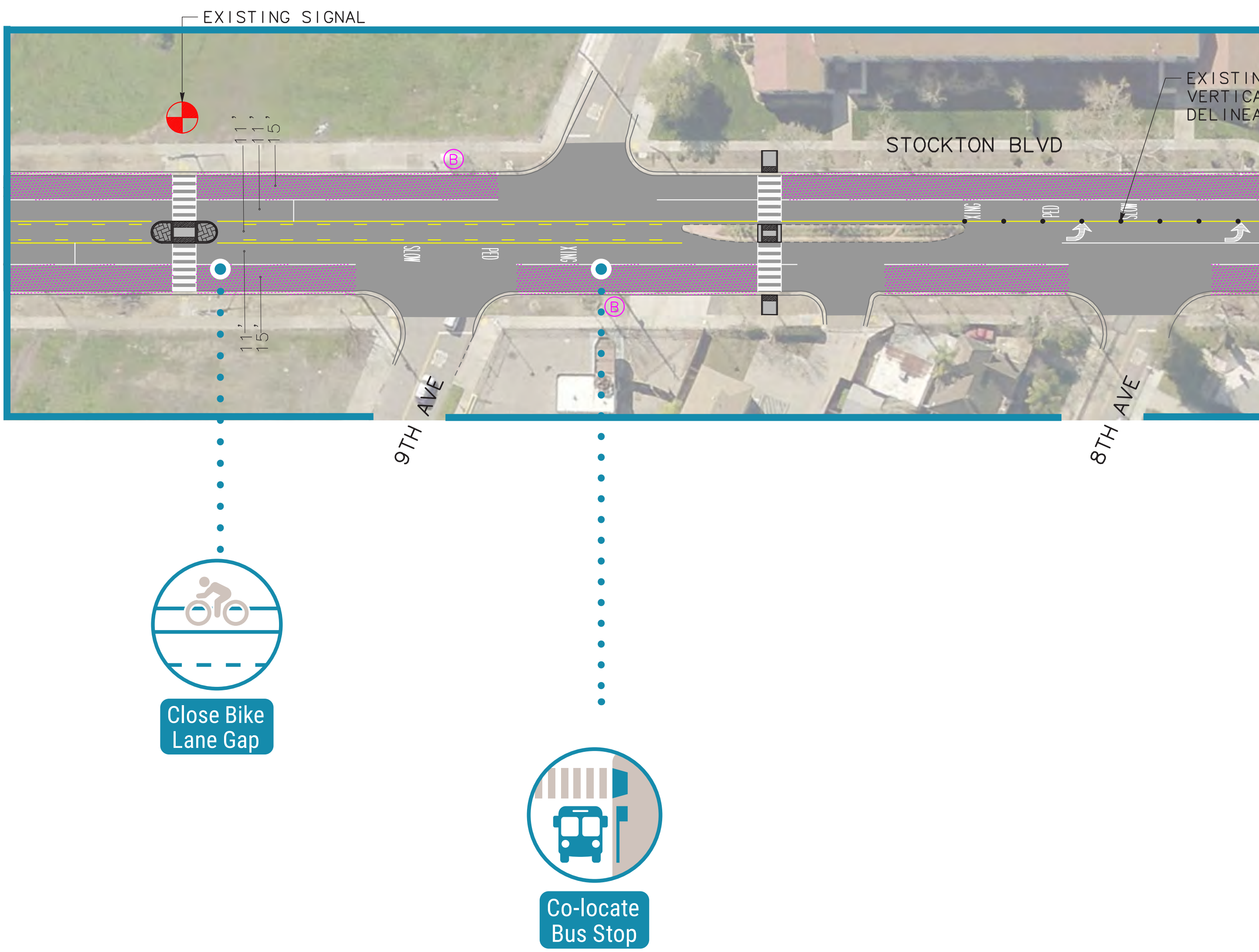

## Corridor-Wide Recommendations

## Location-Specific Recommendations



# Conceptual Design for Stockton



Road Diet

Separated Bikeway

Co-locate Bus Stop and Crosswalk

Bus Boarding Islands

Advanced Dilemma-Zone Detection

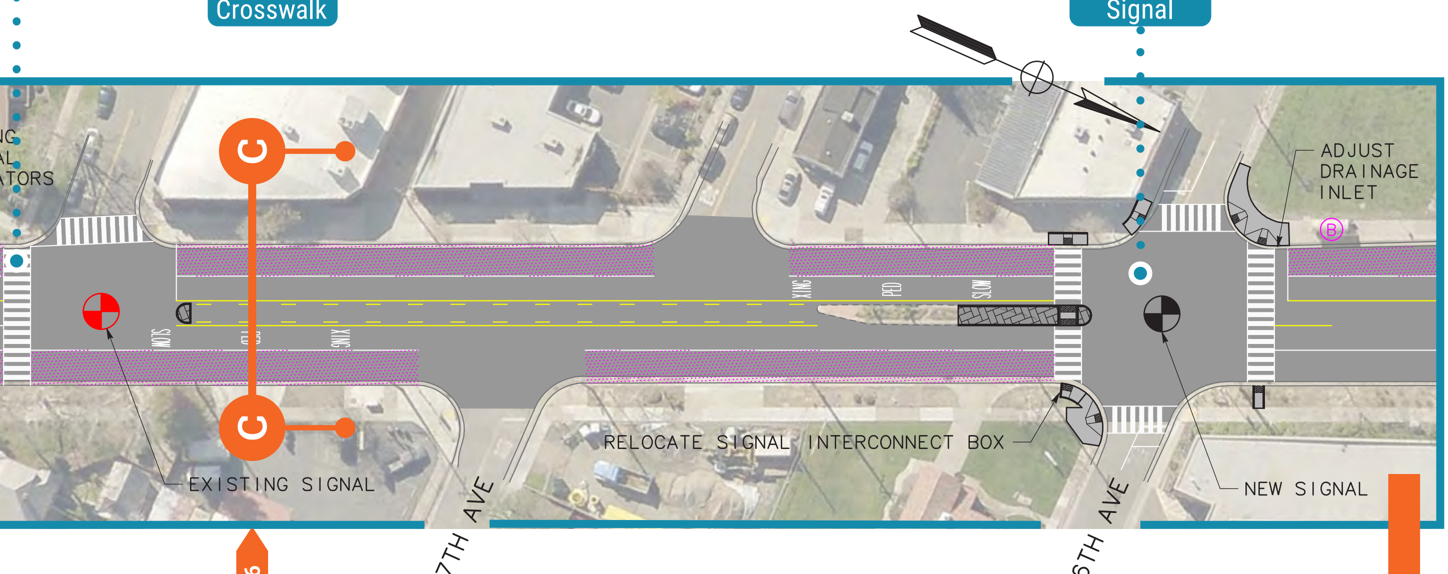
High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations

Relocate Crosswalk

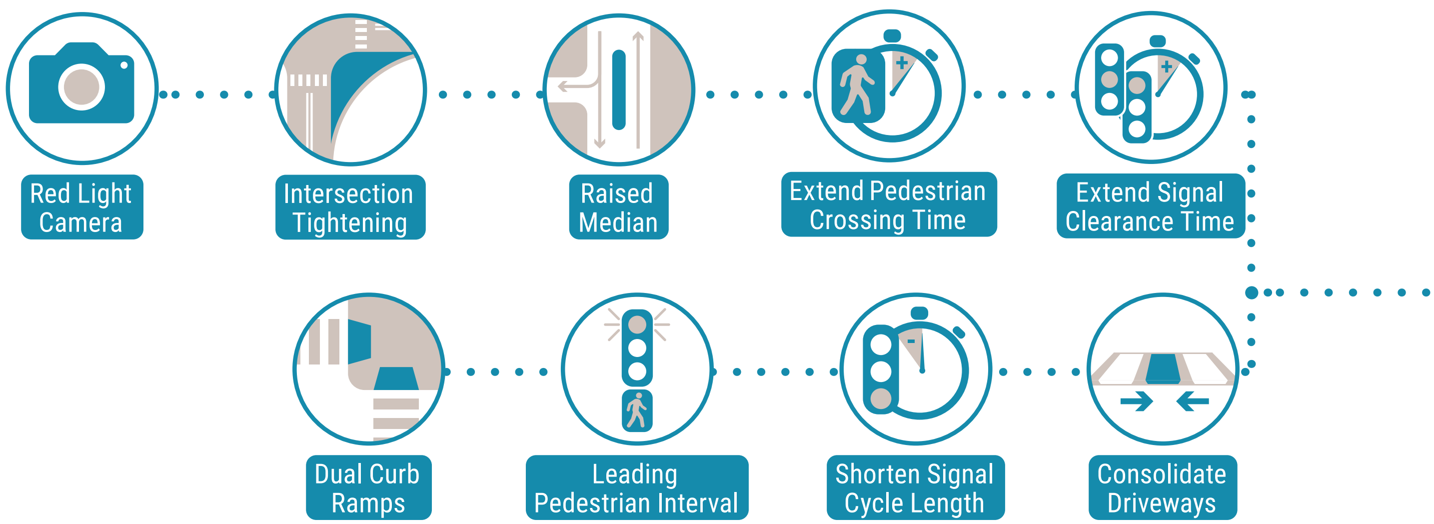
New Traffic Signal

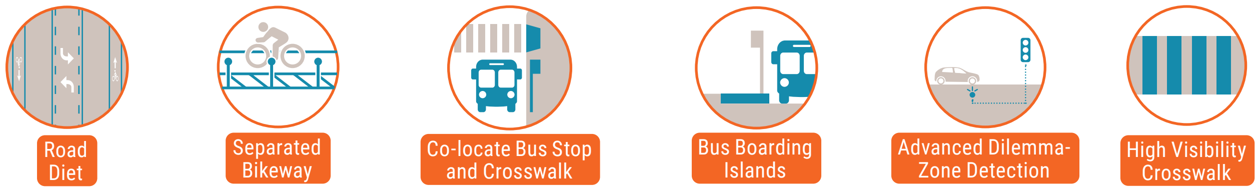



SEE PAGE C-16

The Vision Zero recommendations include installation of traffic signals at Broadway/San Diego Way and Stockton Boulevard/6th Avenue. This would give pedestrians more opportunities to cross Broadway and Stockton Boulevard at desirable locations. However, City standard for minimum intersection spacing is 250-feet. The traffic signal at Broadway/San Diego Way would be 260-feet from the Broadway/Stockton Boulevard intersection. The traffic signal at Stockton/6th Avenue would be 225-feet from the Broadway/Stockton Boulevard intersection, so the City would need to make an exception to its Street Design Standards for this location

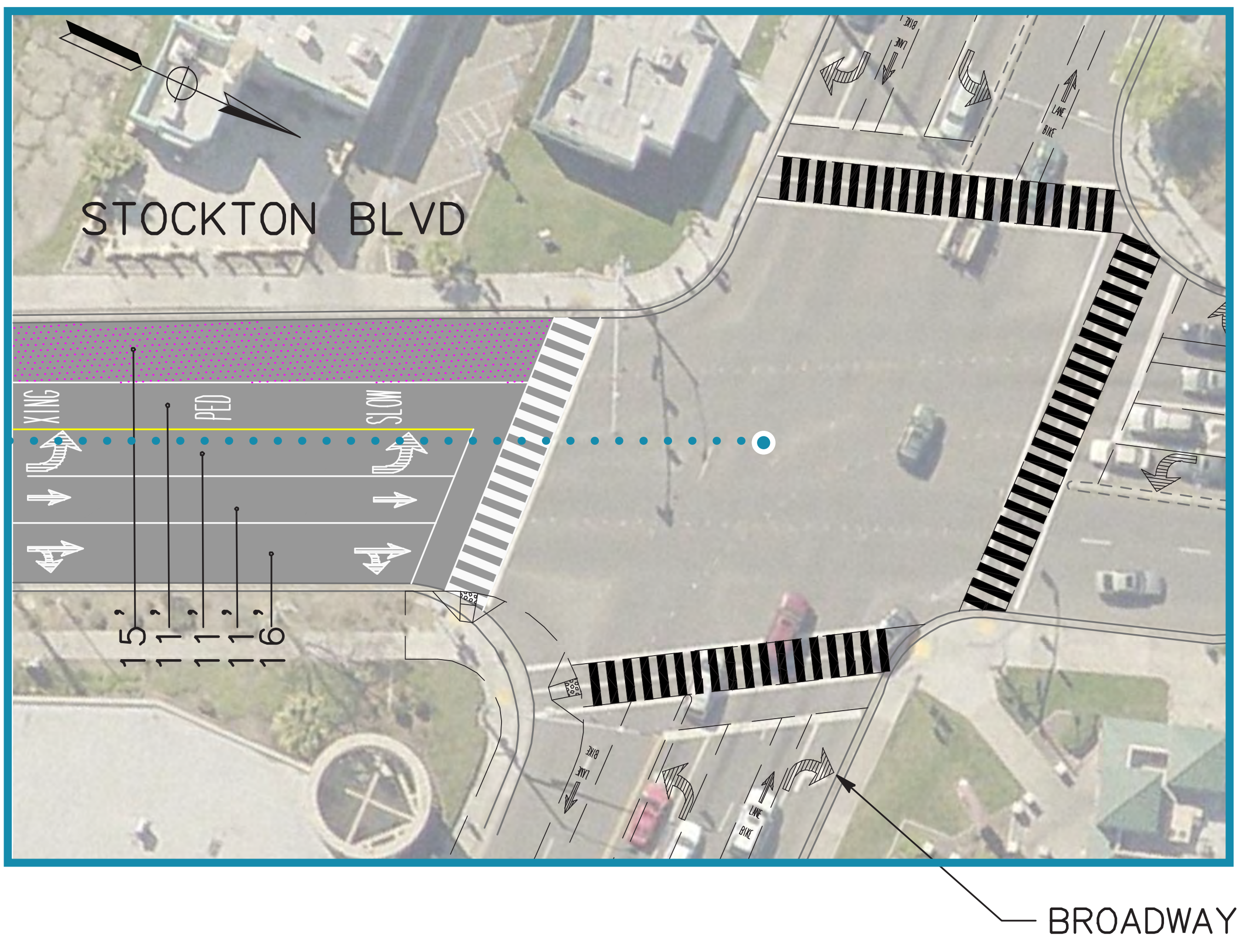
# Conceptual Design for Stockton






## Corridor-Wide Recommendations

## Location-Specific Recommendations

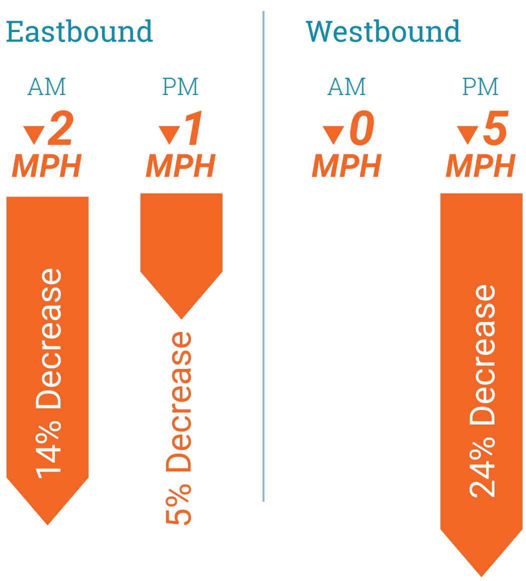


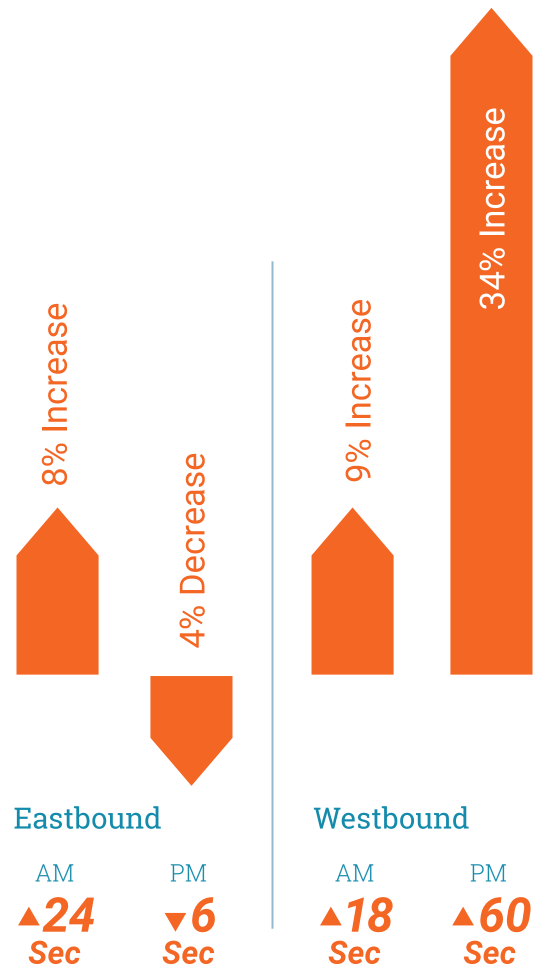
# How Will Travel Change on Broadway?

## Estimated Changes with Project

### Average Vehicle Speed

Average vehicle speed along the corridor during peak periods is expected to decrease between 1 and 5 mph as a result of the proposed project. While slower travel speeds result in longer travel times, they reduce traffic fatalities and severe injuries that result from crashes.



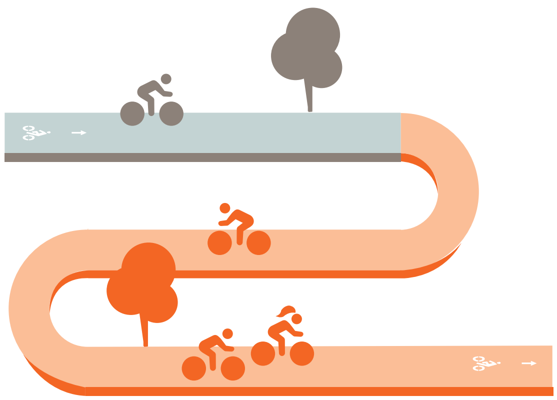




### Vehicle Travel Time

Average vehicle travel time along the one-mile corridor during peak periods is expected to change ranging from a 6 second decrease to a 60 second increase seconds as a result of the proposed project.

# Estimated Changes with Project

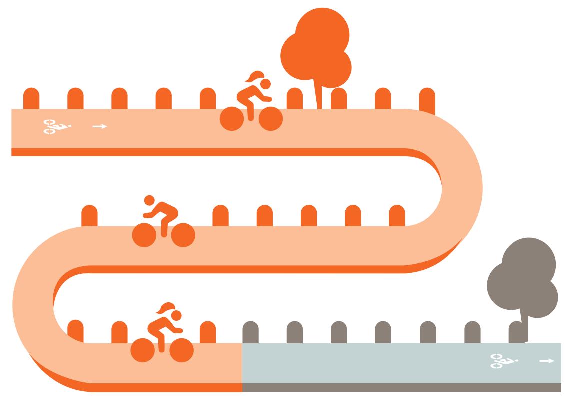
## Bike Lane Coverage



Without project
**30% (2,180 ft)**

With project
**100% (7,240 ft)**

## Share of Bike Lanes with Vertical Separation

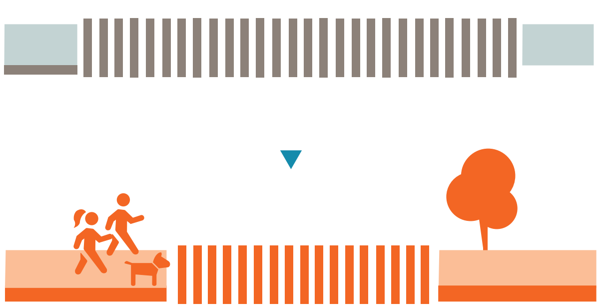


Without project
**0% (0 ft)**

With project
**72% (5,200 ft)**

## Typical Pedestrian Crossing Width

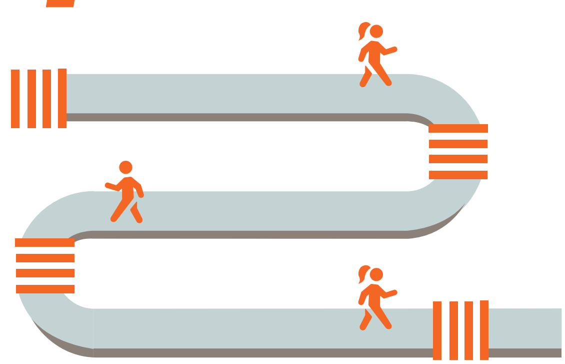
**2/3** ***of the existing width***



*Longest pedestrian crossing width reduced from 49 to 31 ft.

## Number of Marked Crosswalks

**4** ***new crossings***

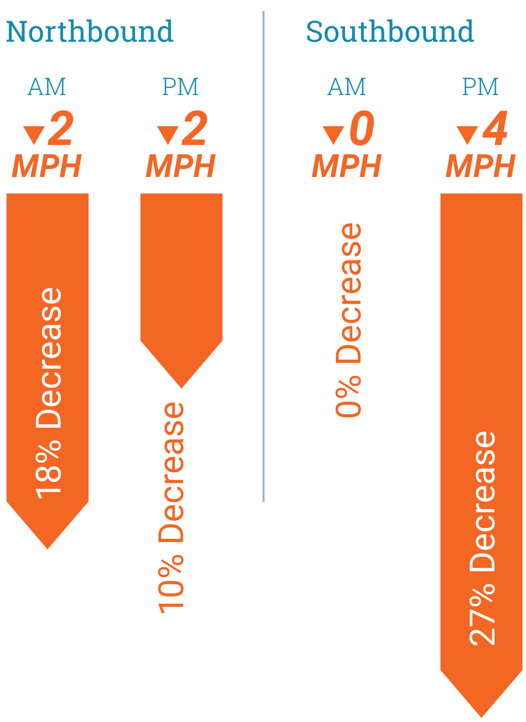


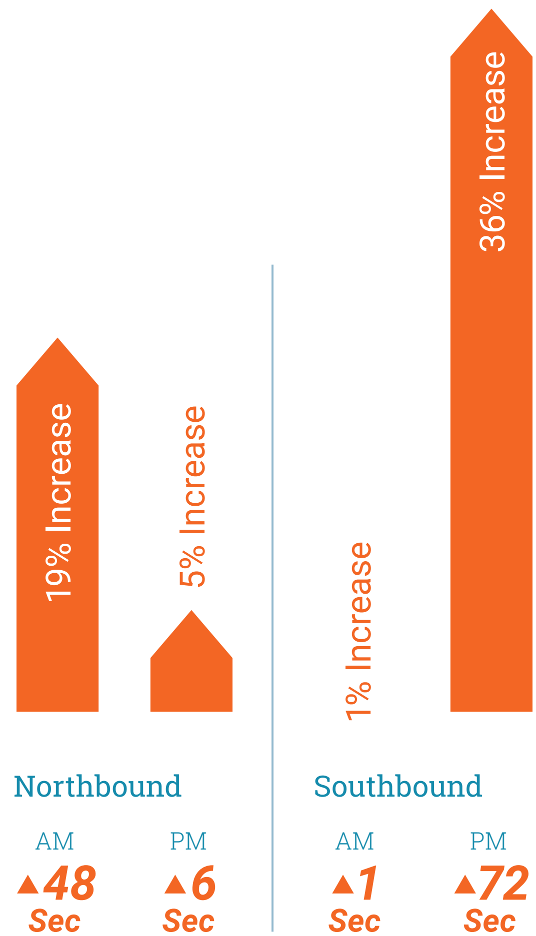
# How Will Travel Change on Stockton?

## Estimated Changes with Project

### Average Vehicle Speed

Average vehicle speed along the corridor during peak periods is expected to decrease between 0 and 4 mph as a result of the proposed project. While slower travel speeds result in longer travel times, they reduce traffic fatalities and severe injuries that result from crashes.



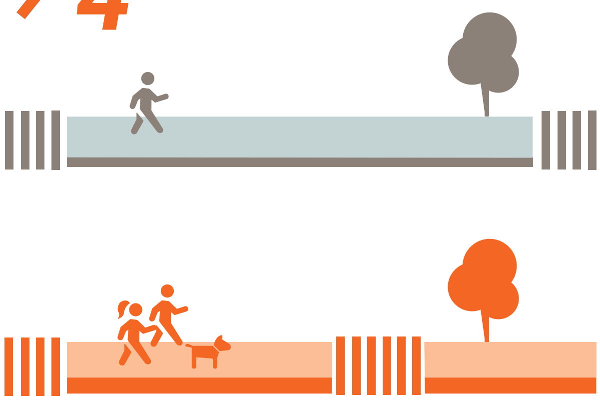

### Vehicle Travel Time

Average vehicle travel time along the one-mile corridor during peak periods is expected to increase up to 72 seconds as a result of the proposed project.

## Estimated Changes with Project

### Longest Distance Between Crosswalks

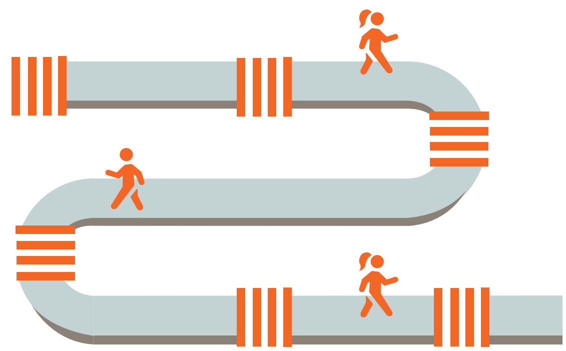
**1/4** *of the existing distance*



*Longest pedestrian crossing distance reduced from 780 to 200 ft.

### Number of Marked Crosswalks

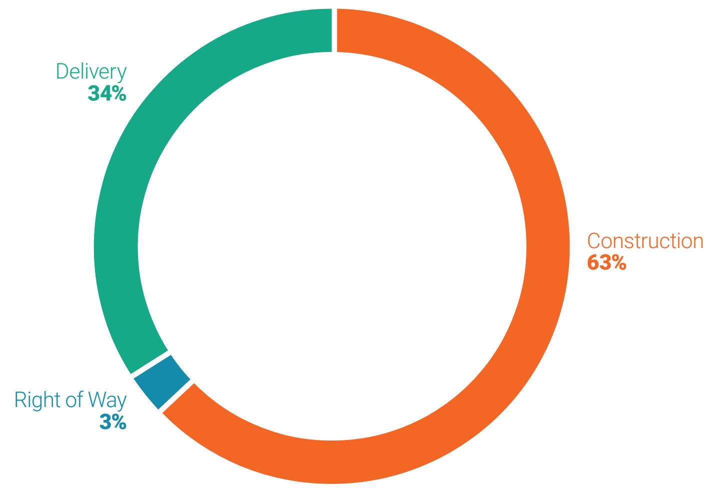
**6** *new crossings*



# How Much Will the Project Cost?

## Broadway/Stockton Boulevard Cost Summary

# $8,760,000




### Construction

Construction costs include the cost to build the primary items associated with the safety countermeasures for the corridor. The items were estimated based on the preliminary design concepts and recent construction bid unit costs with an escalation factor to account for future construction. The costs were broken down into two categories that consisted of major roadway items and electrical items such as traffic signals and lighting. A contingency factor was included to account for refinement of project design, changes in project details, or unforeseen changes in construction costs.

Actual project costs will be determined by surveyed base mapping, geotechnical reports, concept refinement, environmental reviews, right of way availability, project phasing, and bid conditions at the time of advertisement. Project costs should be reviewed prior to any grant application or initiation of a Capital Improvement Project to revalidate and update the assumptions in this study as necessary.

The total project costs shown in the summary chart have been escalated at an assumed 3% per year escalation factor to 2025, the anticipated year of construction.

### Right of Way

In addition to construction costs, right of way costs were assumed that include temporary construction easements for items such driveway modifications, curb ramps reconstruction, signal equipment poles and cabinets. It was assumed that each project could be constructed almost exclusively within the roadway prism and right of way acquisition would not be needed along the entire project frontage. Further refinement of the base mapping in subsequent phases of design will more accurately identify specific right of way needs.

### Delivery

Project delivery costs are included in the estimates provided in this study. These costs encompass all of the work to complete subsequent phases including preliminary engineering, environmental documentation, final design, right of way engineering, and construction oversight. A breakdown of these costs is provided in Appendix C.

# Stockton (South)

Vision Zero
Top 5 Corridor

Stockton Boulevard (South) south of 48th Avenue

# Stockton Boulevard (South)

## Vision Zero Top 5 Corridor


South Stockton Blvd - Vinh Phat Supermarket

### What is going on?

Between 2009 and 2017, 16 crashes that resulted in a fatality or severe injury (KSI) occurred on Stockton Boulevard between McMahon Drive and Patterson Way. Nine of these crashes involved a person walking or biking.

### What are the key issues?

Unsafe speed was the most commonly cited violation, while nearly three-fourths of driving were proceeding straight or stopped at the time of the crash. Additionally, nearly half of all pedestrians hit by a driver were crossing in a marked crosswalk. One-third of drivers who hit a bicyclist were making a right-turn.

### What is the community concerned about?

At outreach events, residents described aggressive driving behavior along the corridor that included driving at unsafe speeds and traffic signal violations. Many residents also said they avoid biking on this segment of Stockton Boulevard because of gaps in the bike lane. The following pages lay out the existing conditions along the corridor, feedback heard from residents at outreach events, and a set of roadway safety recommendations focused on slowing drivers down, improving compliance with signals and signs, and improving safety for people walking and biking.

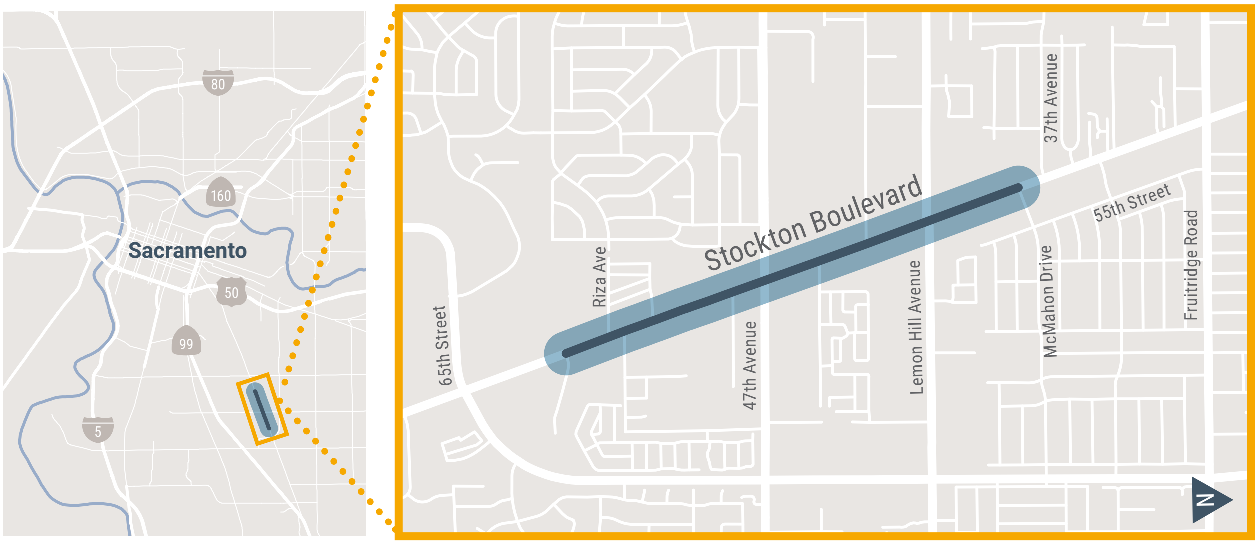


Stockton Boulevard (South) south of 48th Avenue

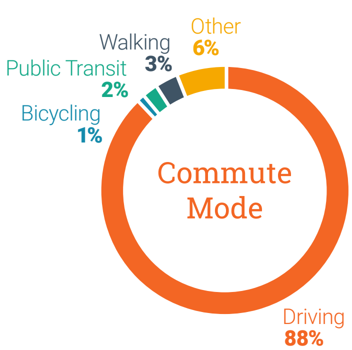
# Table of Contents

# In the Neighborhood

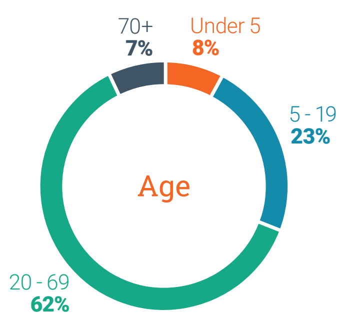
## Corridor



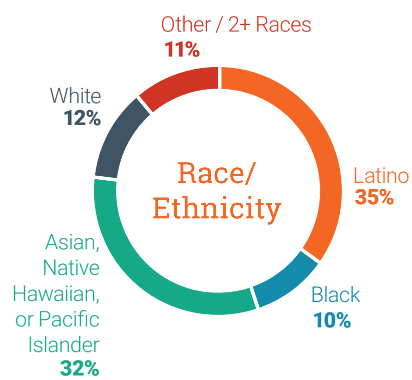

## About the Neighborhood




A larger share of residents drive to work in this neighborhood than in the city as a whole.

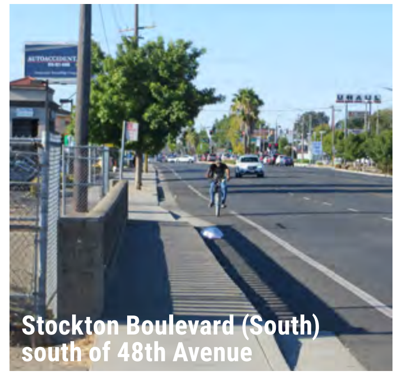



This neighborhood has a larger share of residents age 19 or younger, when compared with the rest of the city.




32% of residents in this neighborhood identify as Asian, Native Hawaiian, or Pacific Islander, compared with 19% of residents citywide.


Stockton Boulevard (South) at Riza Avenue



Stockton Boulevard (South) south of 48th Avenue

Stockton Boulevard (South) north of Lemon Hill Avenue

## Key Destinations Along the Corridor

### Schools

**4**

### Food Markets

**5**

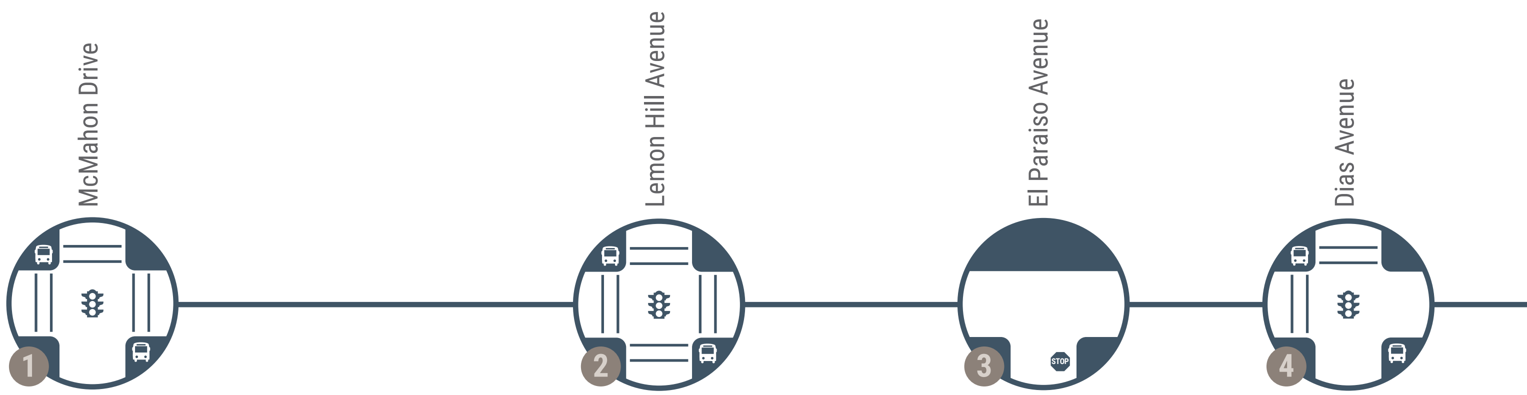
### Houses of Worship

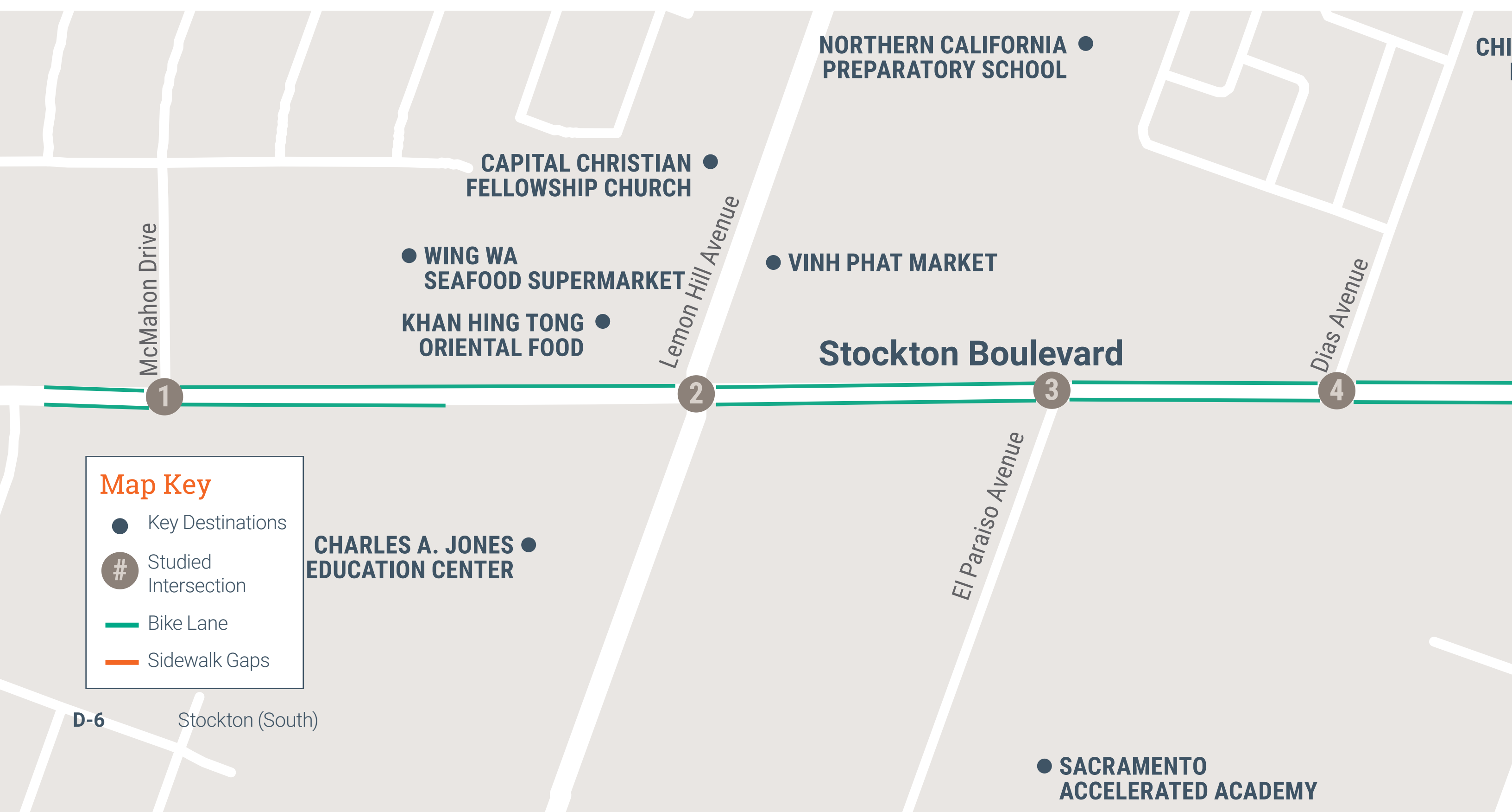
**2**

# Travel on Stockton (South)

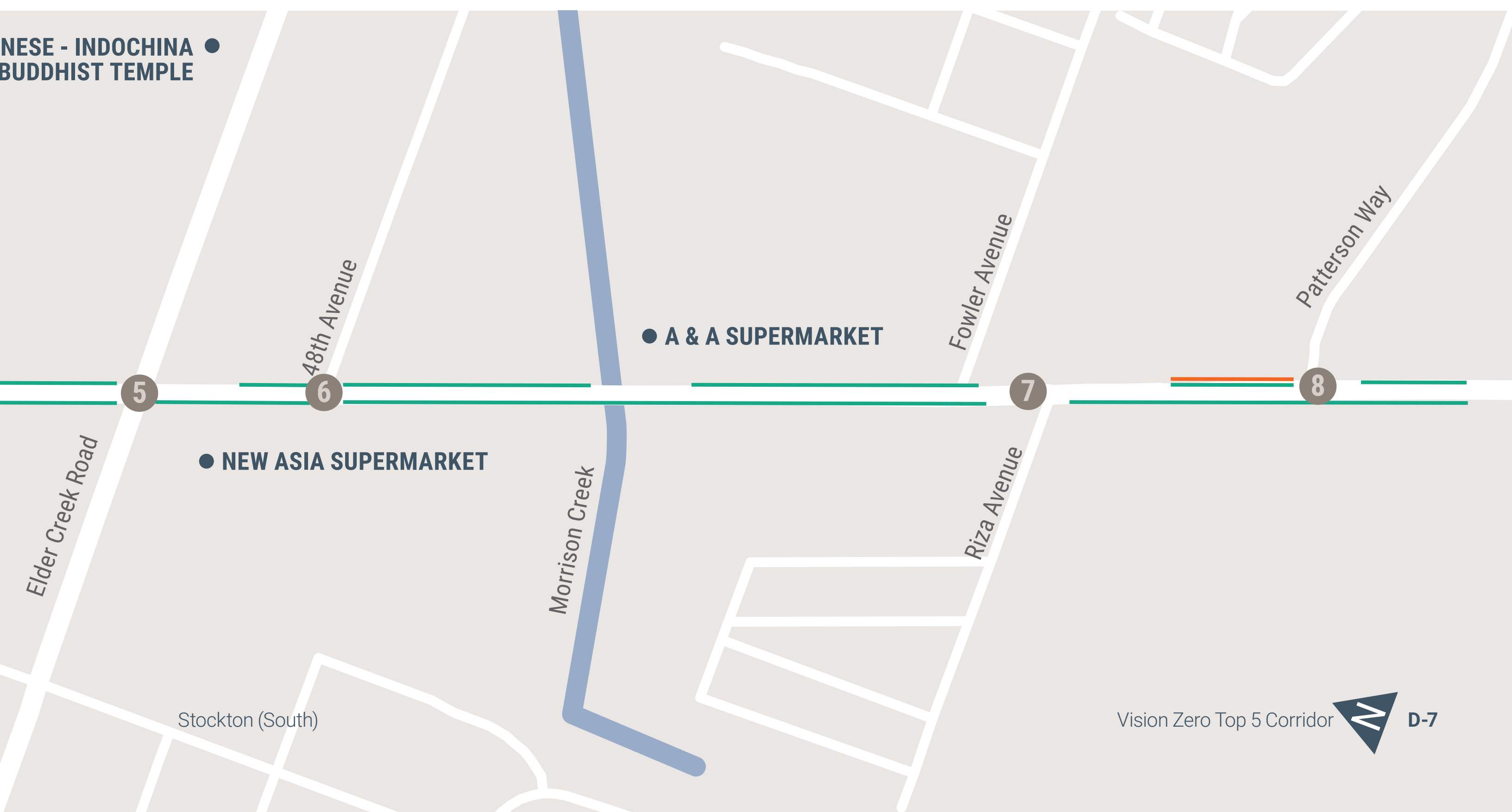
## Key Statistics

| Posted Speed Limit | Daily Vehicles | Maximum PM Intersection Vehicle Volume | PM Rush Hour People Walking | PM Rush Hour People Biking |
|---|---|---|---|---|
| 40 MPH | 29,700 | 2,116 | 121 | 96 |



| Number of Transit Routes | Bikeway Type | Longest Distance Between Marked Crosswalks | Sidewalk Coverage |
|---|---|---|---|
| **1** *#51* | ***On-Street Bike Lanes, with gaps*** | ***1,780 Ft*** | ***97%*** |

# Crashes on Stockton (South)

## Vehicle Crash Types

### Unsafe Speed

“Unsafe Speed” was the most common violation, cited in 35% of all crashes.

1 2 3 4 5 6 7 8

### Proceeding Straight

Nearly 3/4 of drivers were proceeding straight or stopped at the time of the crash.

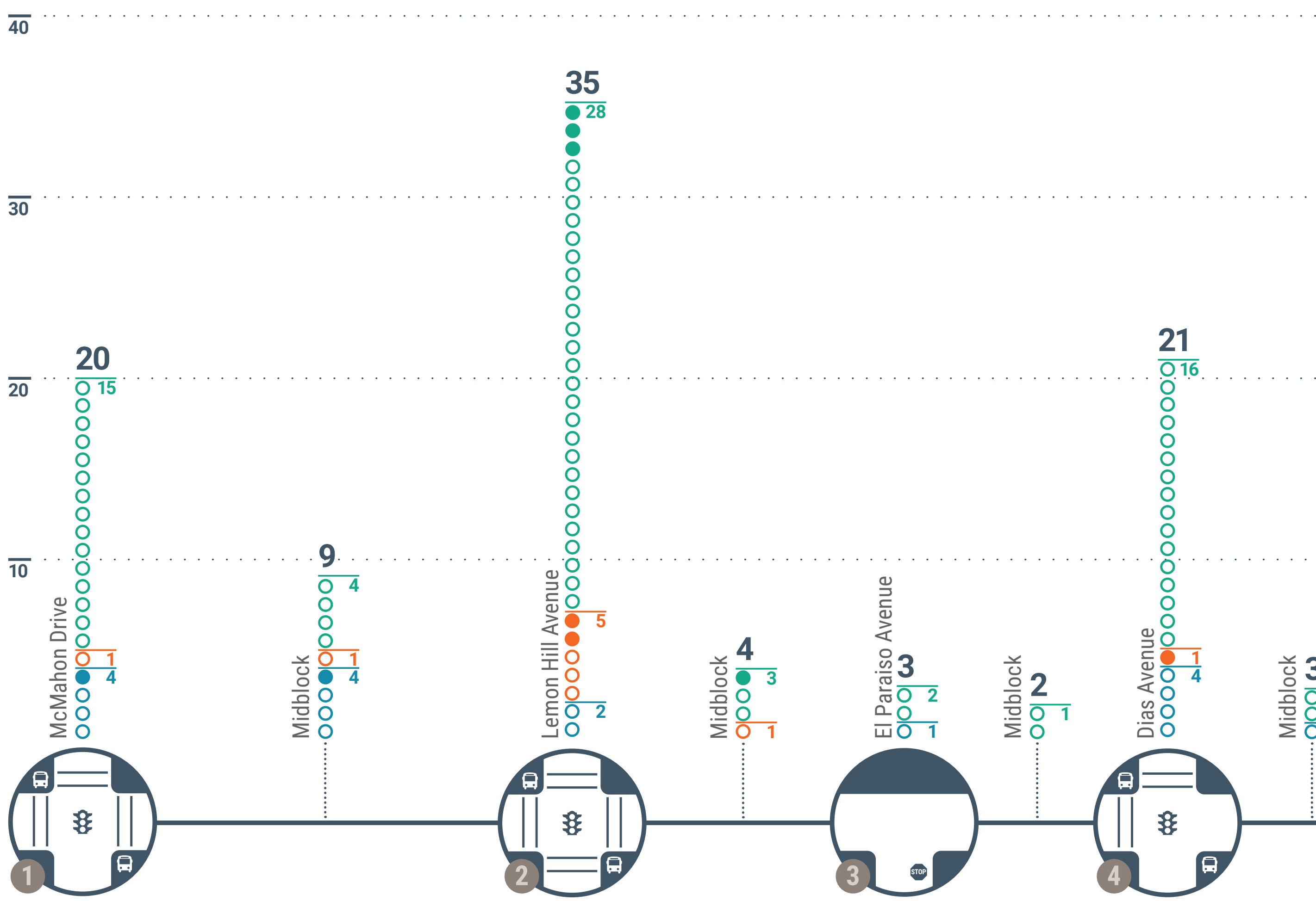
1 2 3 4 5 6 7 8

### Rear End

Over 35% of all crashes were rear end.

1 2 3 4 5 6 7 8

## Crash Locations



## Ped Crash Types

### Nighttime

40% of all crashes occurred during nighttime or dark conditions.

1 2 3 4 5 6 7 8

### Crossing in Crosswalk

Nearly half of all pedestrians hit by a driver were in a crosswalk at the time of the crash.

1 2 3 4 5 6 7 8

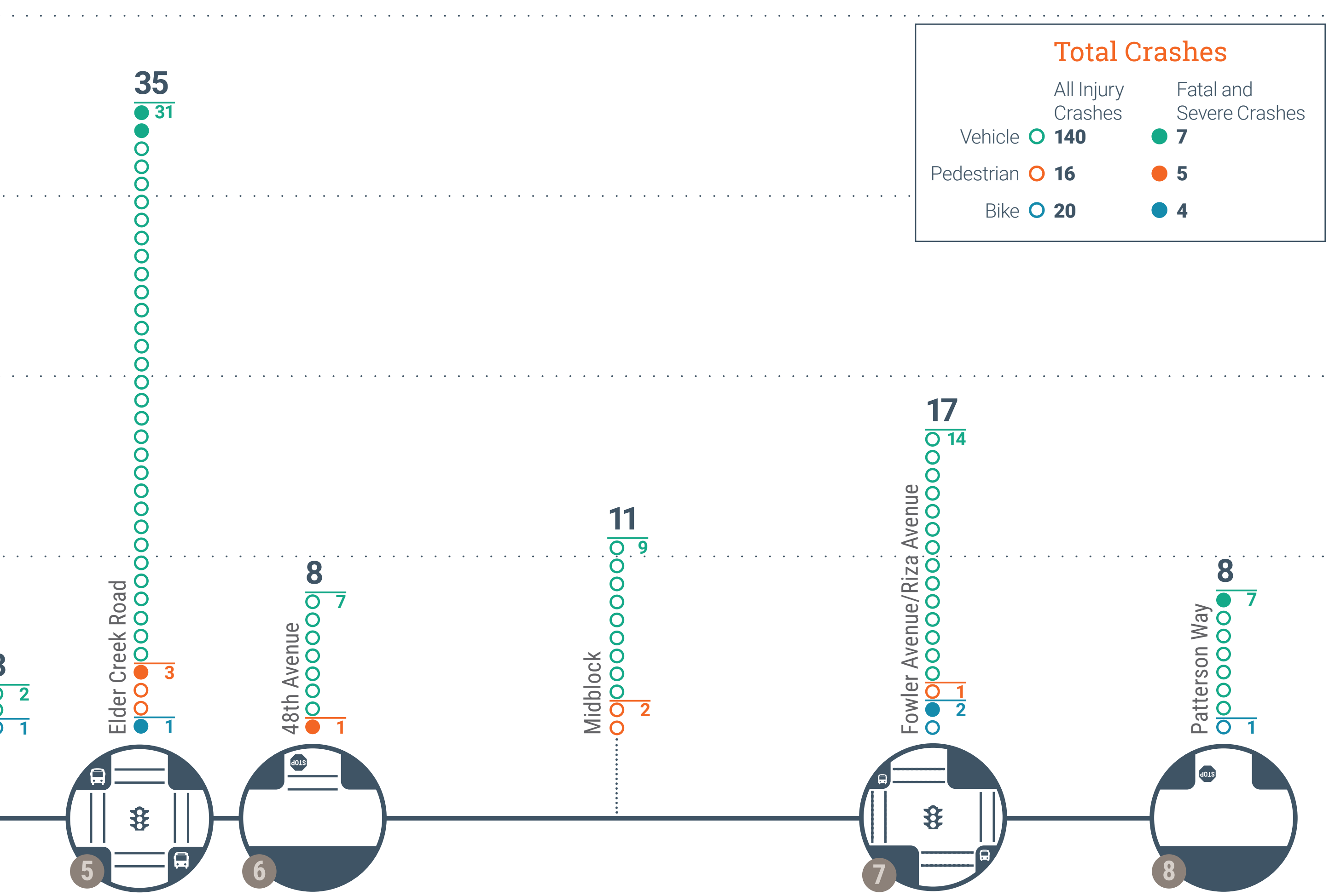
## Bike Crash Types

### Right Turns

1/3 of drivers who hit a bicyclist were making a right turn at the time of the crash

1 2 3 4 5 6 7 8

1 Numbers that are turned on represent a location where crash type has occurred at least three times.




**Total Crashes**

| | All Injury Crashes | Fatal and Severe Crashes |
|---|---|---|
| Vehicle | 140 | 7 |
| Pedestrian | 16 | 5 |
| Bike | 20 | 4 |

# Feedback from the Community

> "I won't ride my bike along this corridor because it feels unsafe."

> "My grandma picks me up from school and there are a lot of fast cars."

Peter Burnett Elementary Schoool Community Workshop

## Key Themes

### Bike/Pedestrian Safety

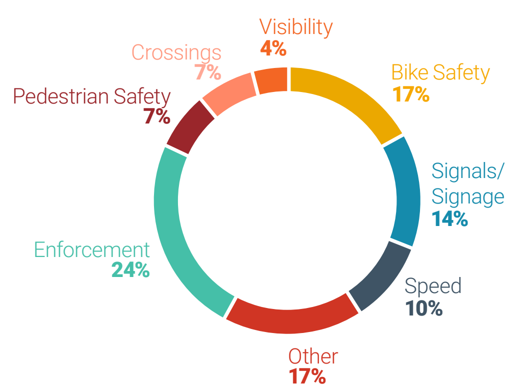
Residents described avoiding biking on Stockton Boulevard because it feels unsafe and there is a lack of connectivity to other bike facilities.

### Speed

Residents described traffic speeding along the corridor.

### Signals/Signage

Residents described red light running, particularly at the Stockton Boulevard/McMahon Drive intersection.




## Engagement Events

November 5, 2018
Peter Burnett Elementary School Community Workshop

June 5, 2019
Luther Burbank High School Community Open House

# Investments to Enhance Safety

## Key Crash Countermeasures

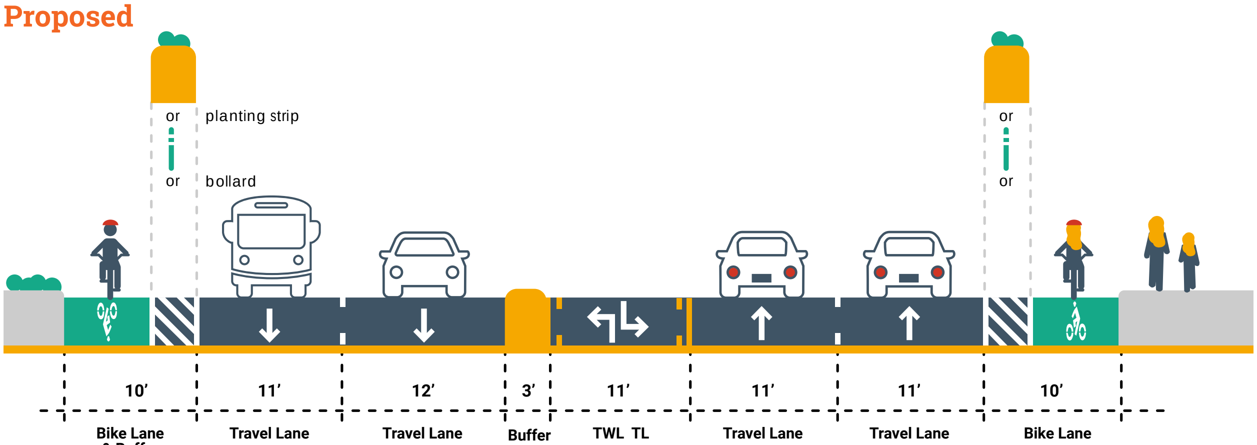
| Countermeasure | | Crash Type | Feedback Key Theme |
|---|---|---|---|
| Slow Green Wave | TO ADDRESS | Unsafe Speed | Speed |
| Prohibit Turns During Pedestrian Phase | TO ADDRESS | Crossing in Crosswalk | Bike/Pedestrian Safety |
| Extend Signal Clearance Time | TO ADDRESS | Rear End | Signals/Signage |

### How Will The Roadway Space Be Used?

Section D
**Existing**

SEE PAGE D-17

Section D
**Proposed**



# Conceptual Design for Stockton (South)

Pedestrian Scale Lighting

Advanced Dilemma-Zone Detection

Slow Green Wave

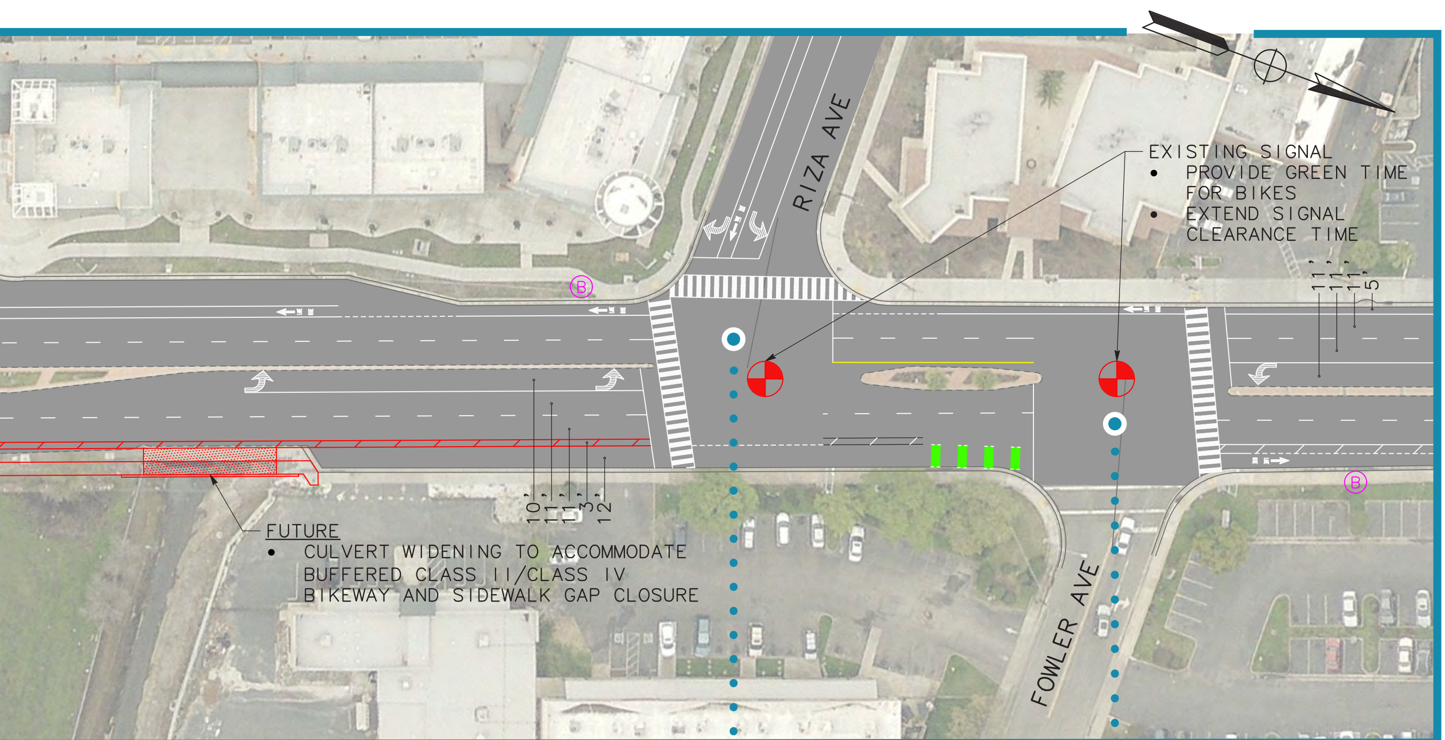
Shorten Cycle Length

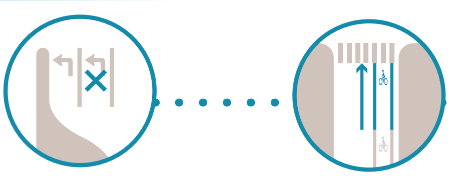
Extend Signal Clearance Time

High Visibility Crosswalk

## Corridor-Wide Recommendations

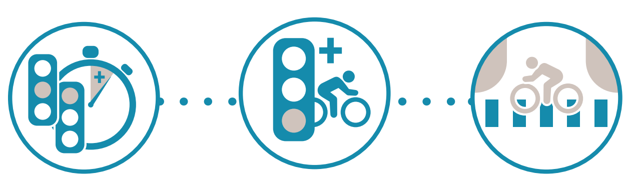
## Location-Specific Recommendations



Remove Dual Left Turn Lanes

Extend Bike Lane to Intersection

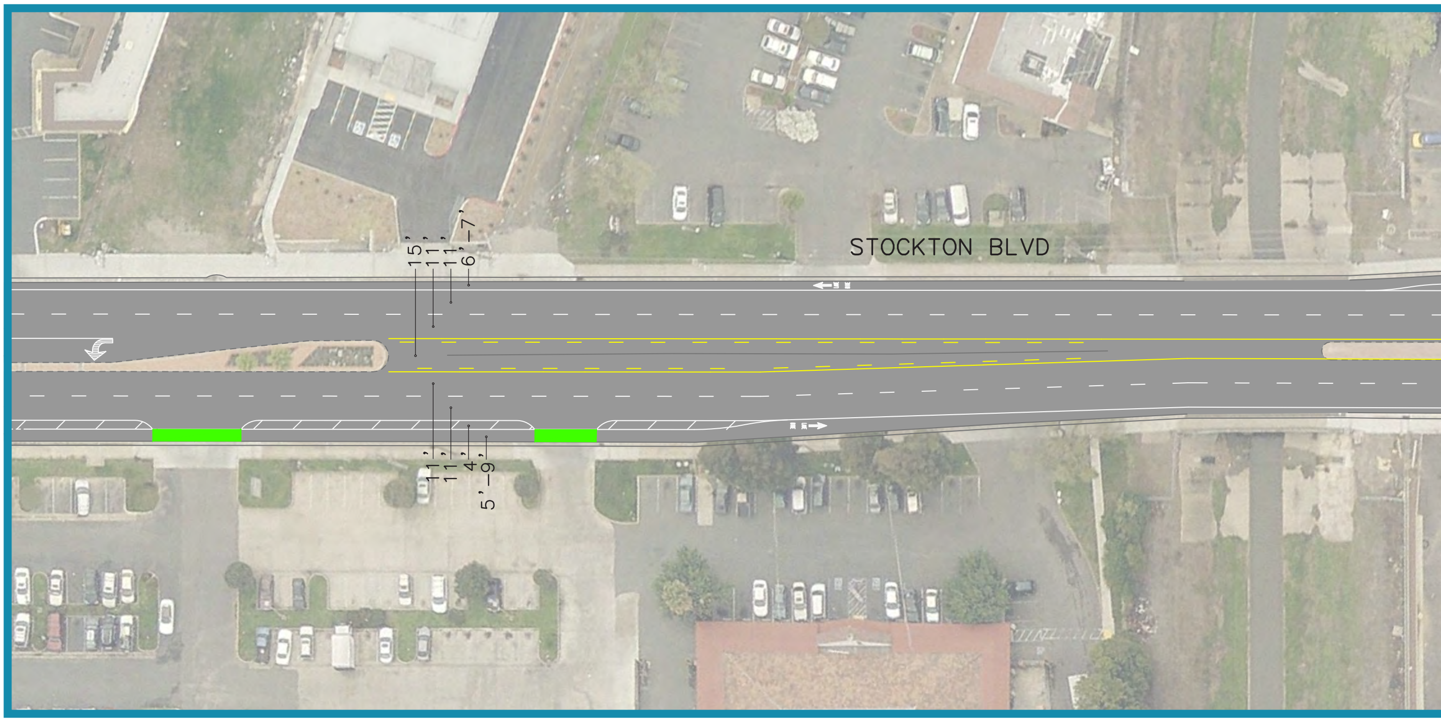


Extend Signal Clearance Time

Provide Green Time For Bikes

Bike Conflict Zone Markings

# Conceptual Design for Stockton (South)



Pedestrian Scale Lighting

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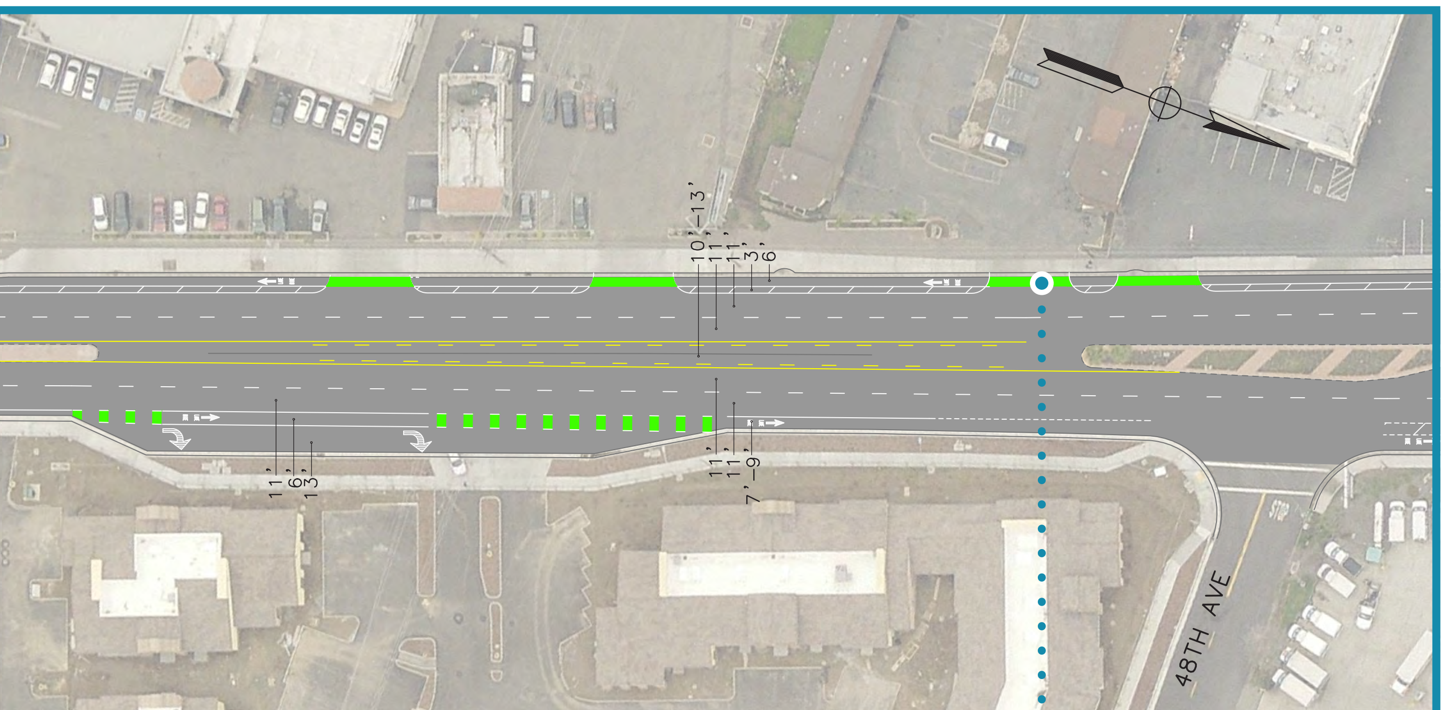
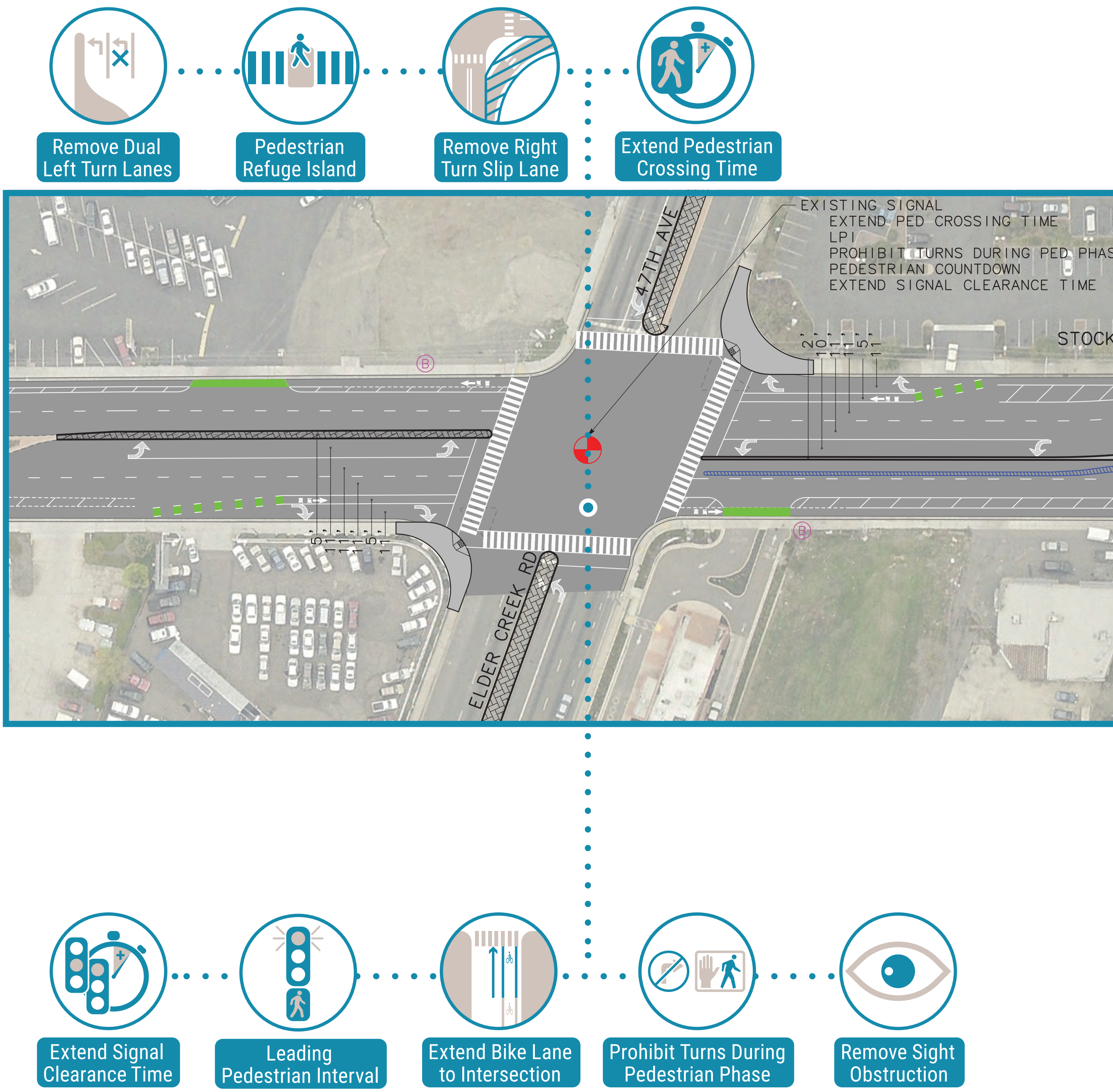
## Corridor-Wide Recommendations

## Location-Specific Recommendations




Bike Conflict Zone Markings

# Conceptual Design for Stockton (South)



Pedestrian Scale Lighting

Advanced Dilemma-Zone Detection

Slow Green Wave

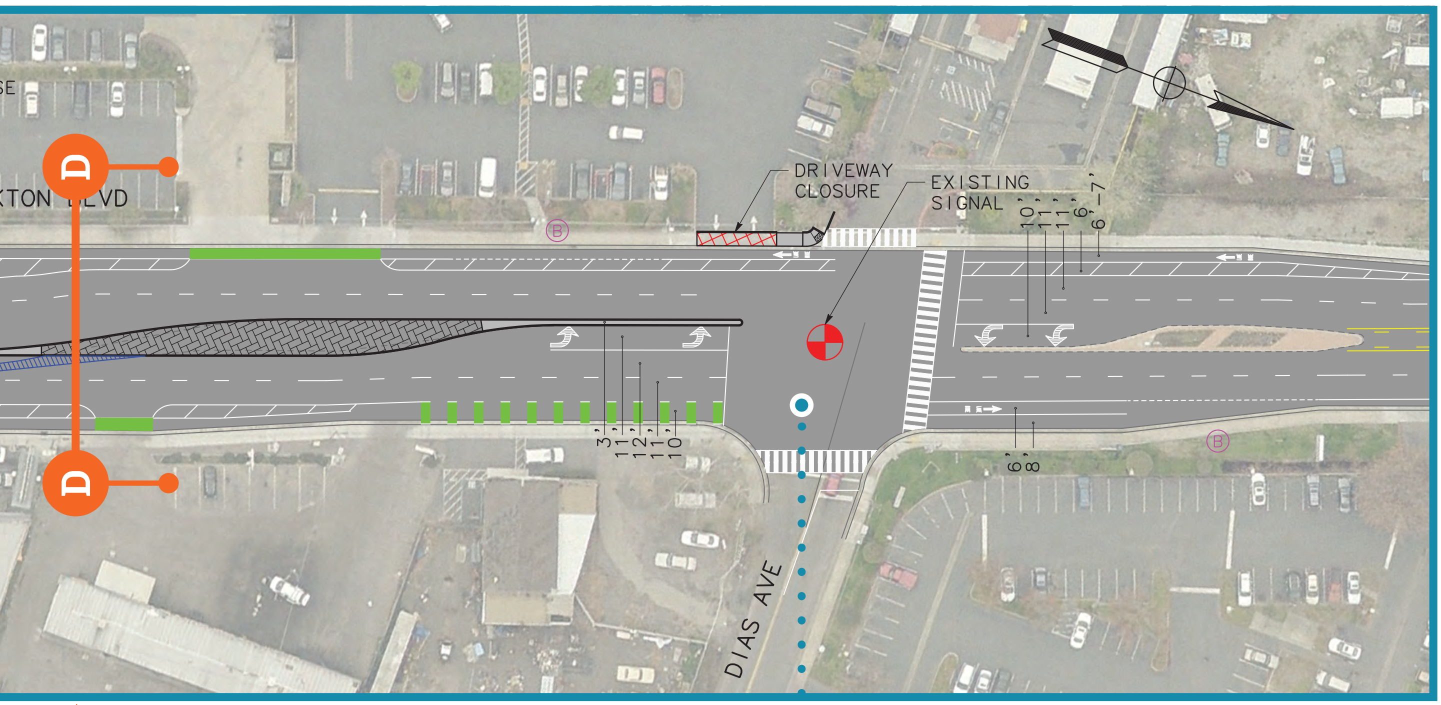
Shorten Cycle Length

Extend Signal Clearance Time

High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations




SEE PAGE D-11

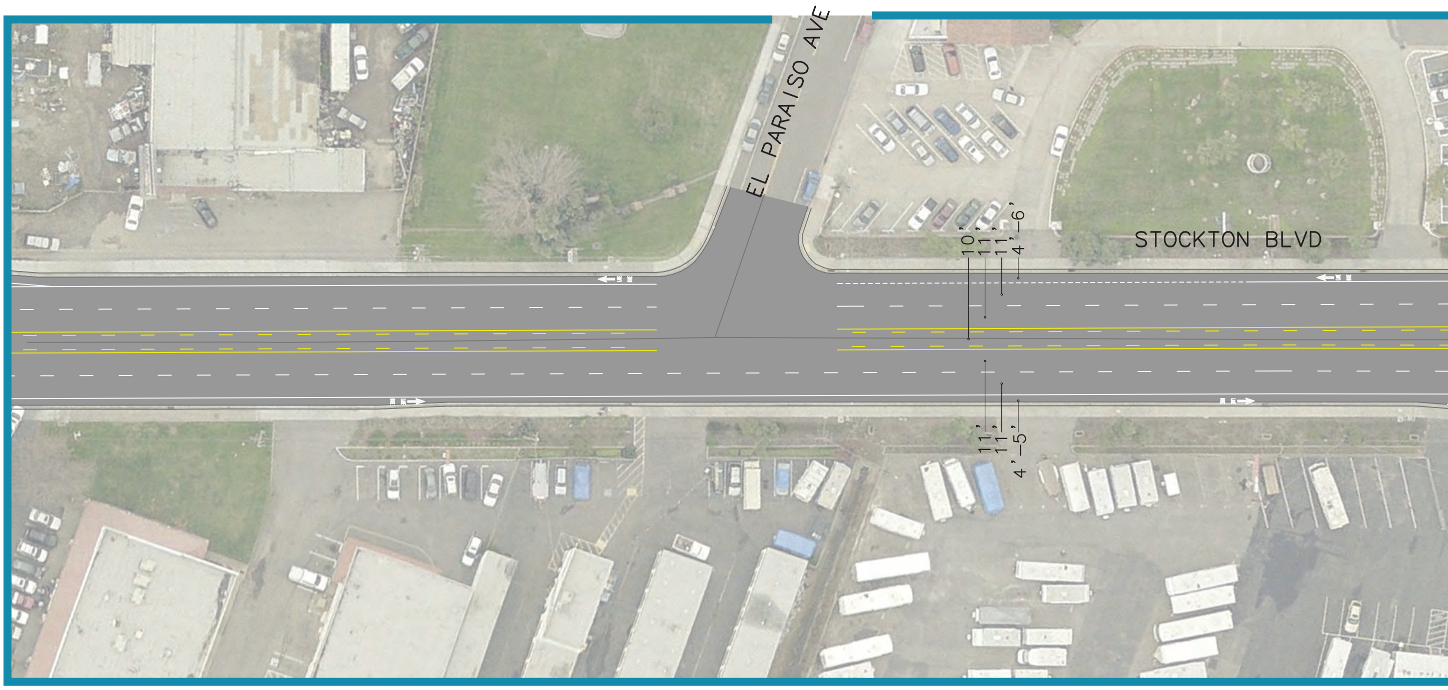
Consolidate Driveways

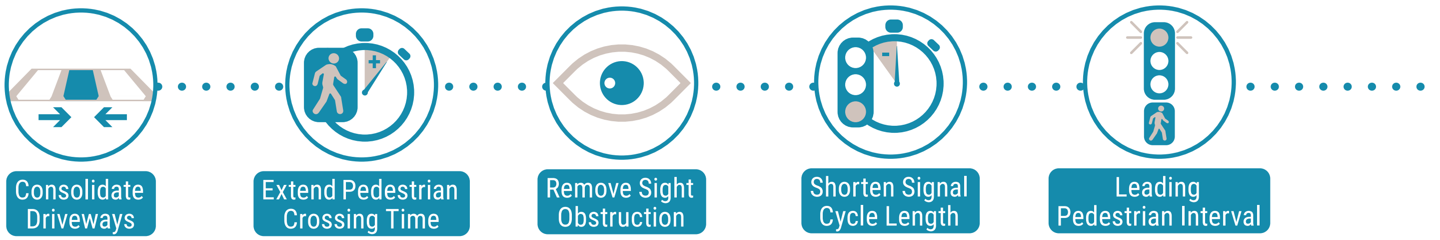
Bike Conflict Zone Markings

Advance Stop Bar

Stop Sign

# Conceptual Design for Stockton (South)



Pedestrian Scale Lighting

Advanced Dilemma-Zone Detection

Slow Green Wave

Shorten Cycle Length

Extend Signal Clearance Time

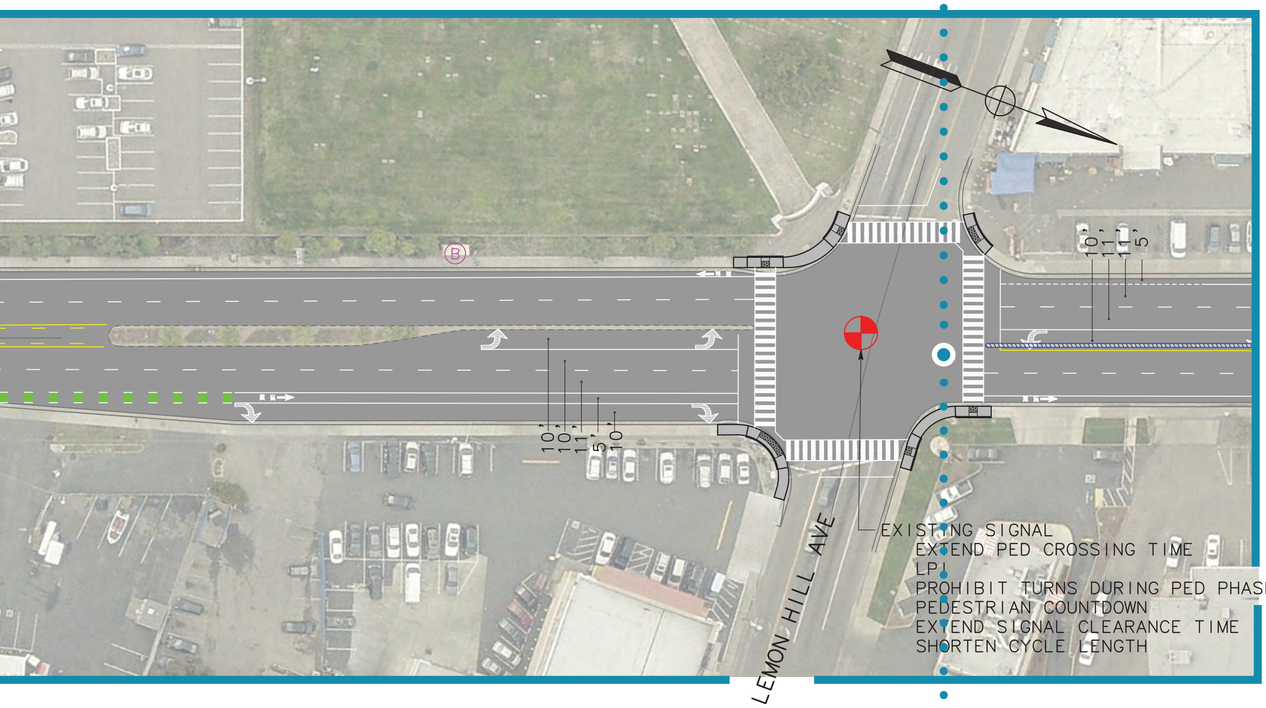
High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations

Extend Signal Clearance Time

Protected Left Turns




Extend Bike Lane to Intersection

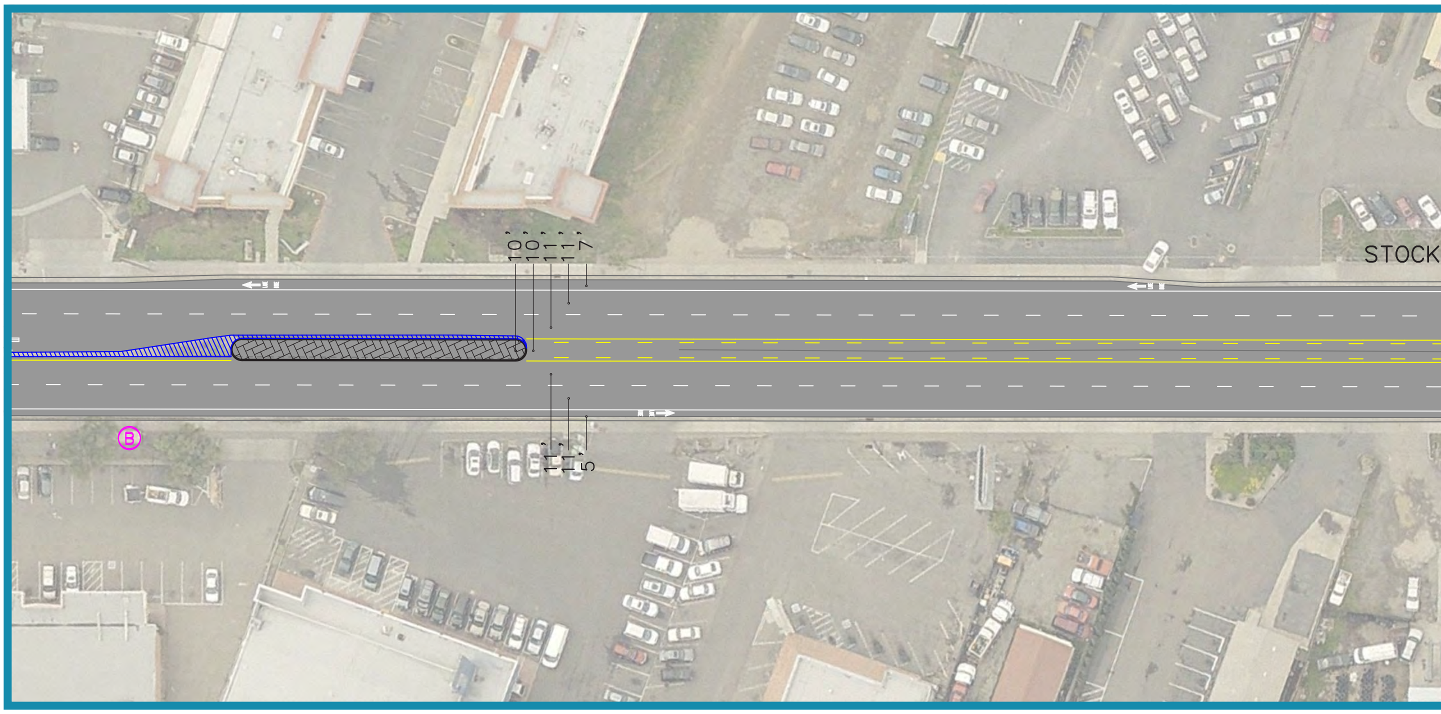
Bike Conflict Zone Markings

Countdown Pedestrian Signal Heads

Intersection Tightening

Prohibit Turns During Pedestrian Phase

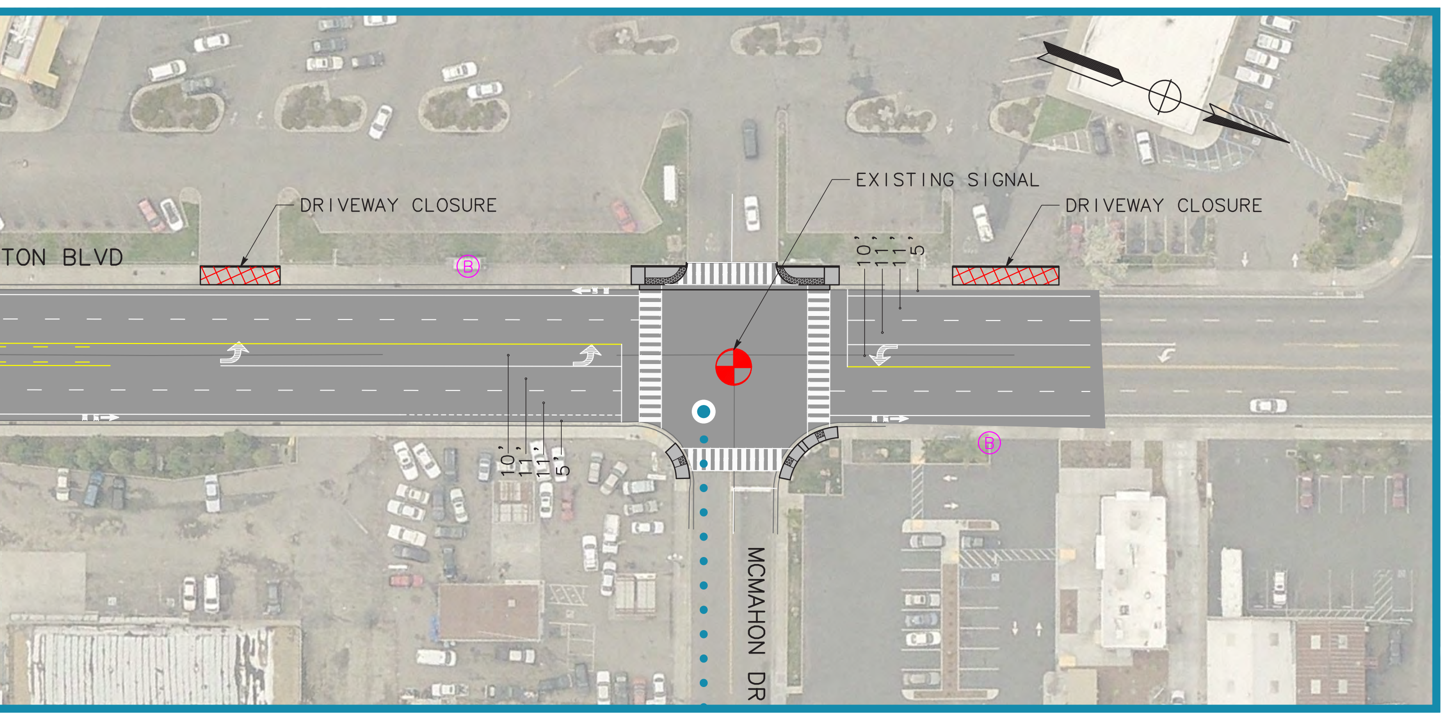
# Conceptual Design for Stockton (South)

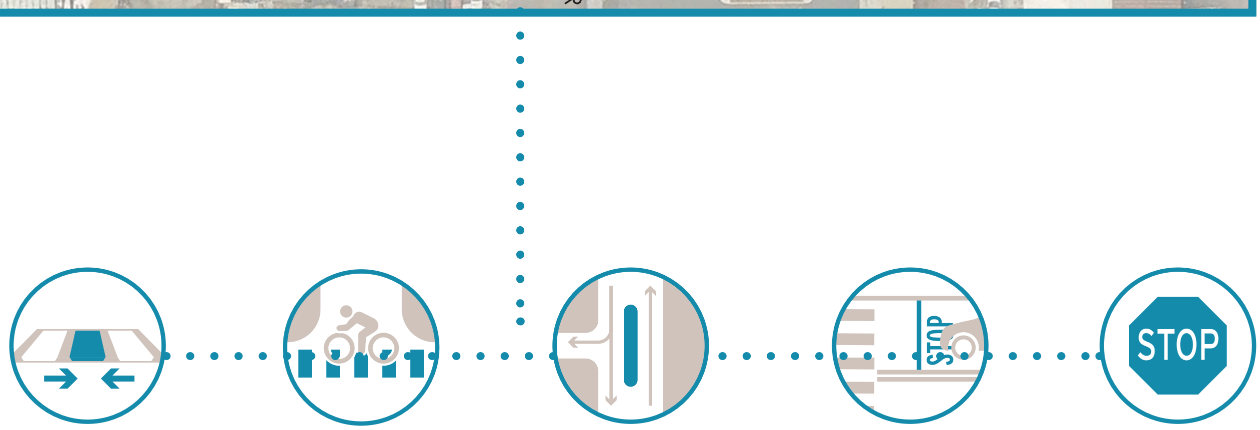


Pedestrian Scale Lighting | Advanced Dilemma-Zone Detection | Slow Green Wave | Shorten Cycle Length | Extend Signal Clearance Time | High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations



Consolidate Driveways | Bike Conflict Zone Markings | Raised Median | Advance Stop Bar | Stop Sign

# How Will Travel Change?

## Estimated Changes with Project

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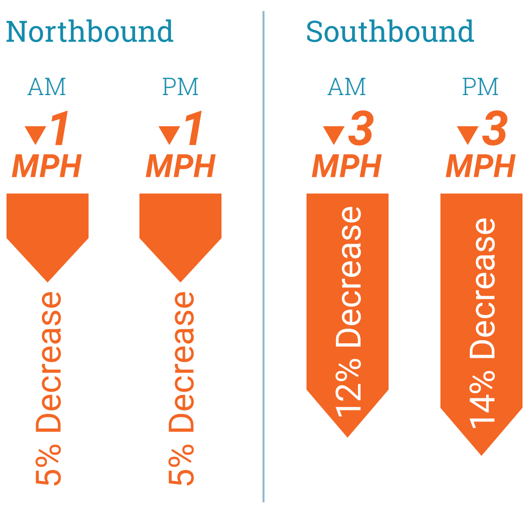
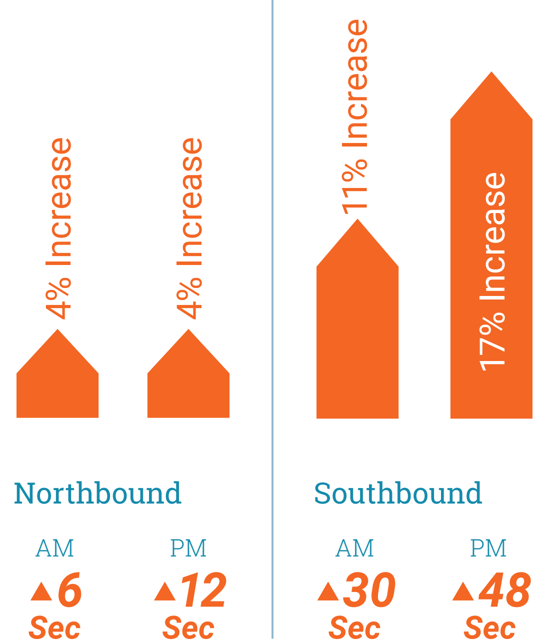


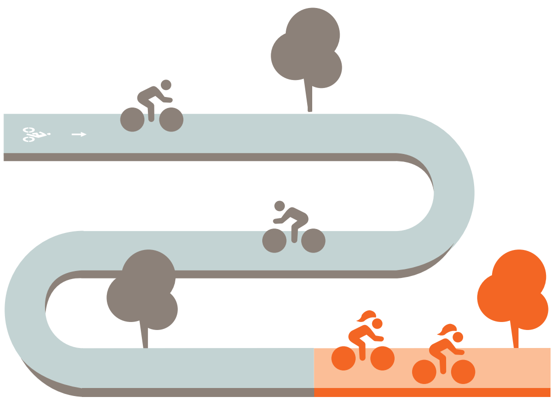




### Vehicle Travel Time

Average vehicle travel time along the one-mile corridor during peak periods is expected to increase between 6 and 48 seconds as a result of the proposed project.

# Estimated Changes with Project

## Bike Lane Coverage



Without project

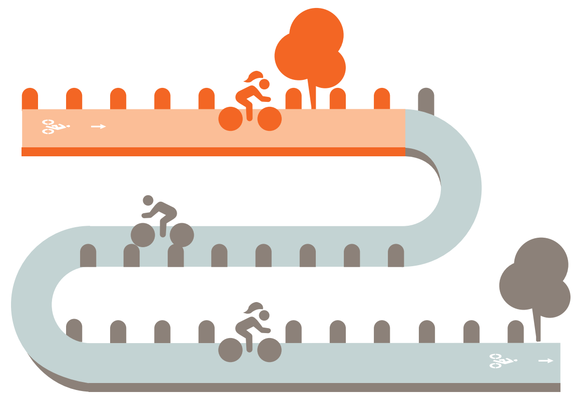
**83%**
**(10,120 ft)**

▶

With project

**100%**
**(12,250 ft)**

## Share of Bike Lanes with Vertical Separation



Without project

**0%**
**(0 ft)**

▶

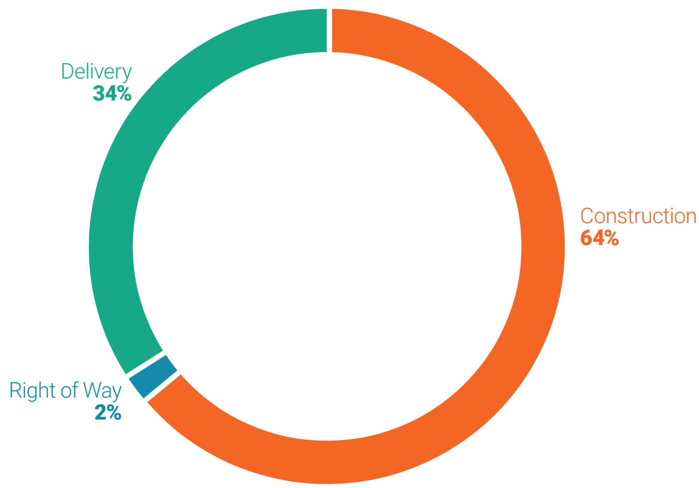
With project

**30%**
**(3,670 ft)**

# How Much Will the Project Cost?

## Stockton Boulevard (South) Cost Summary

**$9,500,000**

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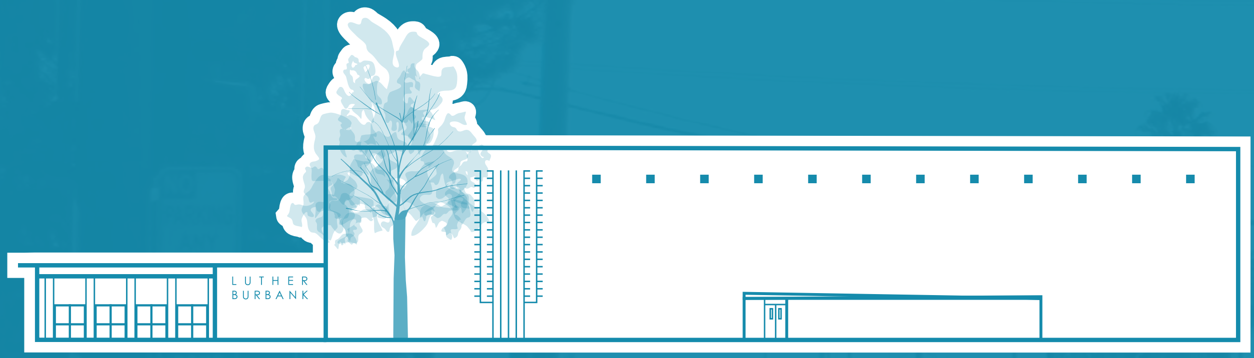
Florin Road at Luther Drive

# Florin

Vision Zero
Top 5 Corridor

# Florin Road

## Vision Zero Top 5 Corridor




Florin Road - Luther Burbank High School

### What is going on?

Between 2009 and 2017, 16 crashes that resulted in a fatality or severe injury (KSI) occurred on Florin Road between 24th Street and Munson Way. Eight of these crashes involved a person walking or biking.

### What are the key issues?

Three-fourths of drivers who crashed were proceeding straight or stopped at the time of the crash, and nearly half of all crashes cited unsafe speed as the primary violation. Of the pedestrians who were hit, half were crossing the street in a marked crosswalk at the time. Nearly 40 percent of bike crashes involved a driver making a right-turn.

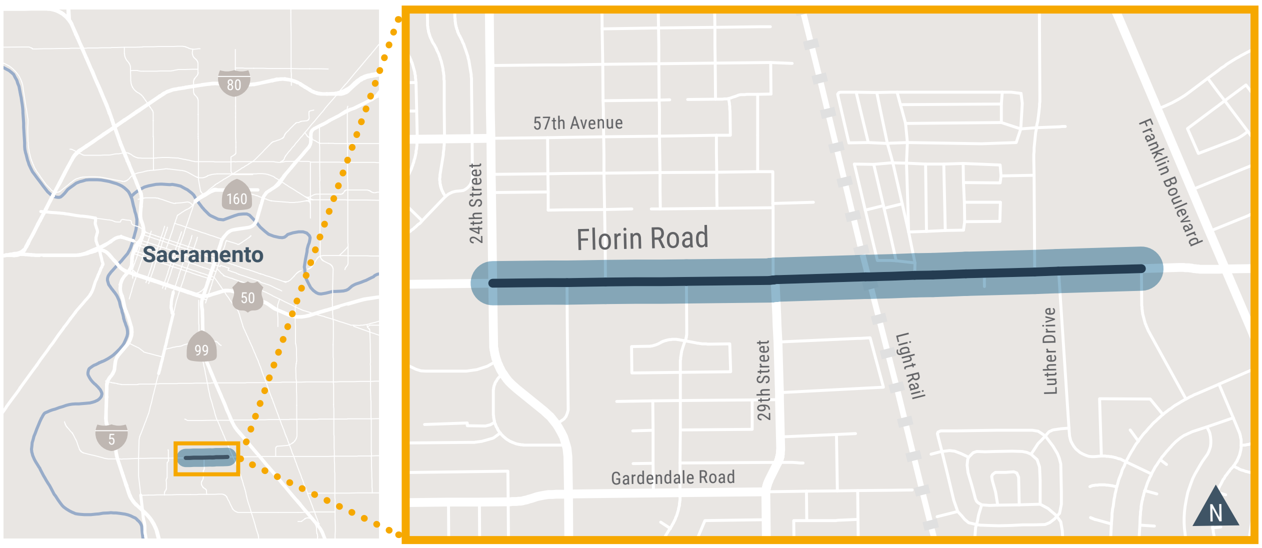
### What is the community concerned about?

At outreach events, residents described difficulty crossing the street, particularly near the Florin Light Rail Station and Luther Burbank high school.
The following pages lay out the existing conditions along the corridor, feedback heard from residents at outreach events, and a set of roadway safety recommendations focused on slowing down drivers, increasing compliance with signals and signs, and improving safety for people walking and biking

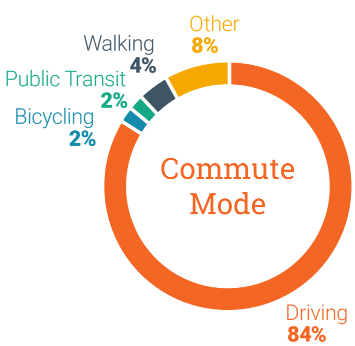
# Table of Contents

# In the Neighborhood

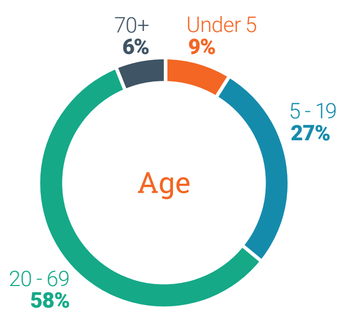
## Corridor



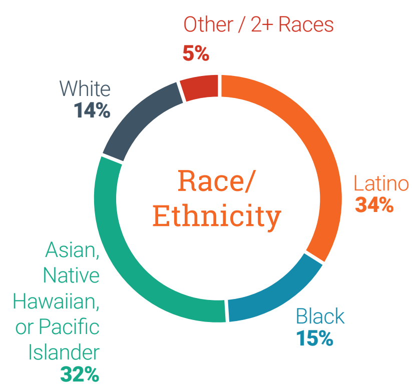

## About the Neighborhood




A larger share of residents in this neighborhood walk to work, when compared to the city as a whole.



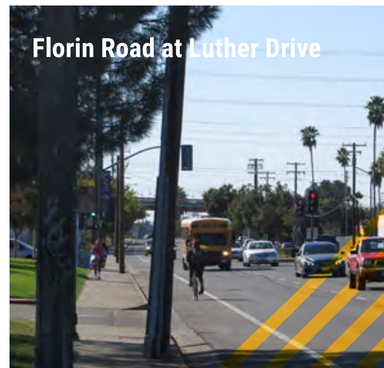

36% of residents in this neighborhood are age 19 or younger, compared with 26% of residents citywide.




81% of residents in this neighborhood identify as Latino, Black or Asian, compared with 61% of residents citywide.

Florin Road east of Luther Drive

Florin Road at light rail crossing



Florin Road at Luther Drive

## Key Destinations Along the Corridor

### Parks

1

### Schools & Libraries

2

### Food Markets

1

### Houses of Worship

3

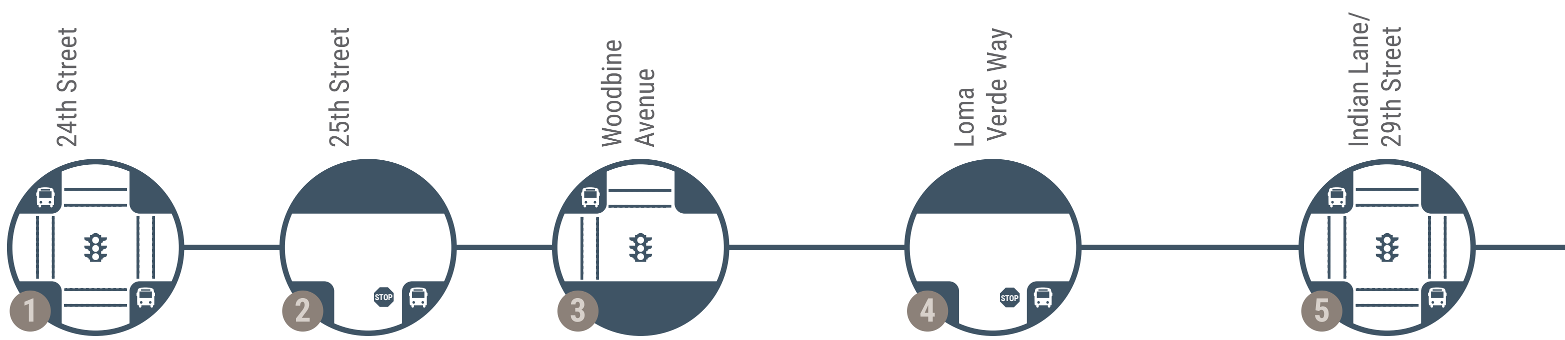
### Light Rail Stations

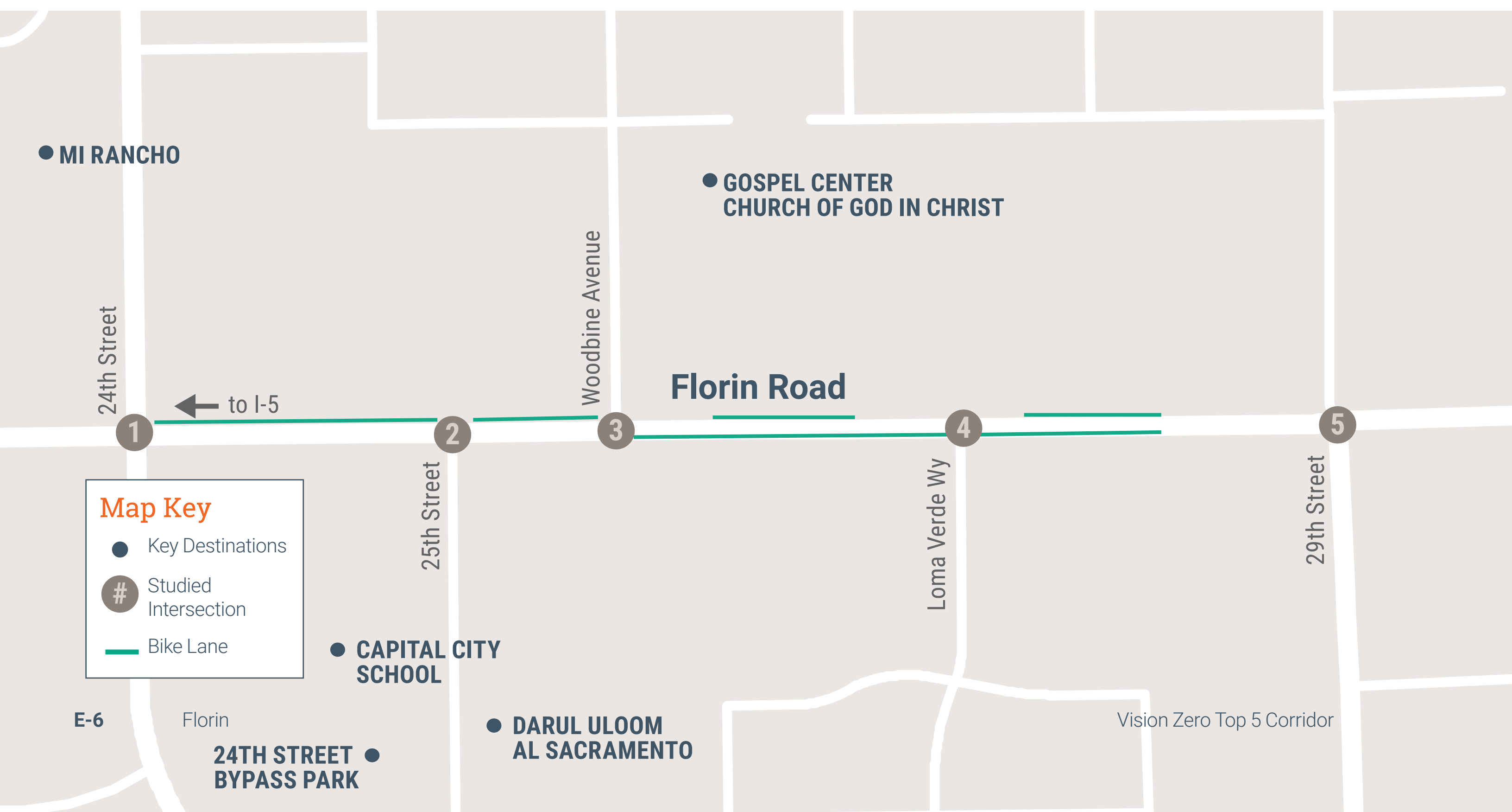
1

# Travel on Florin

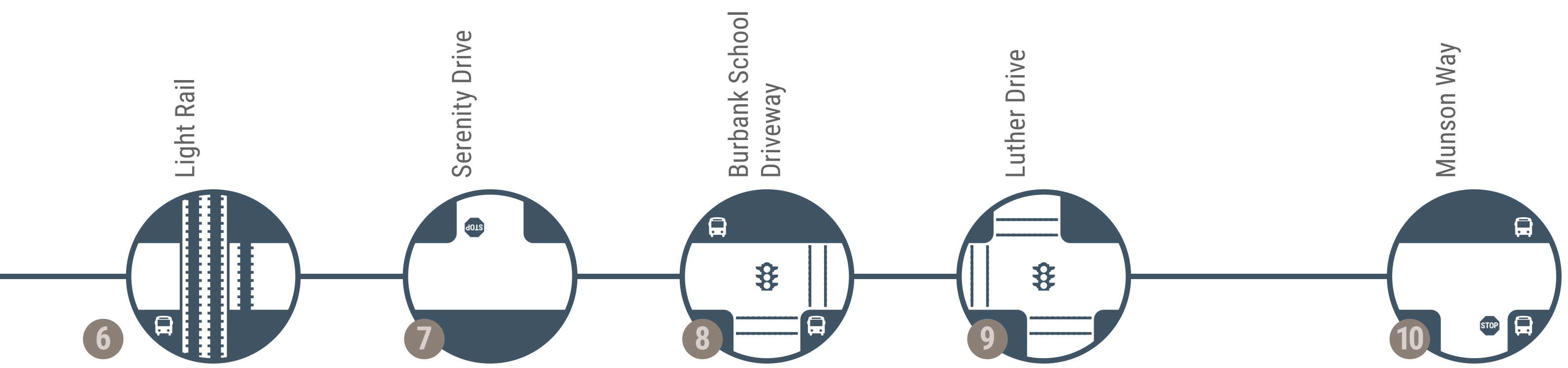
## Key Statistics

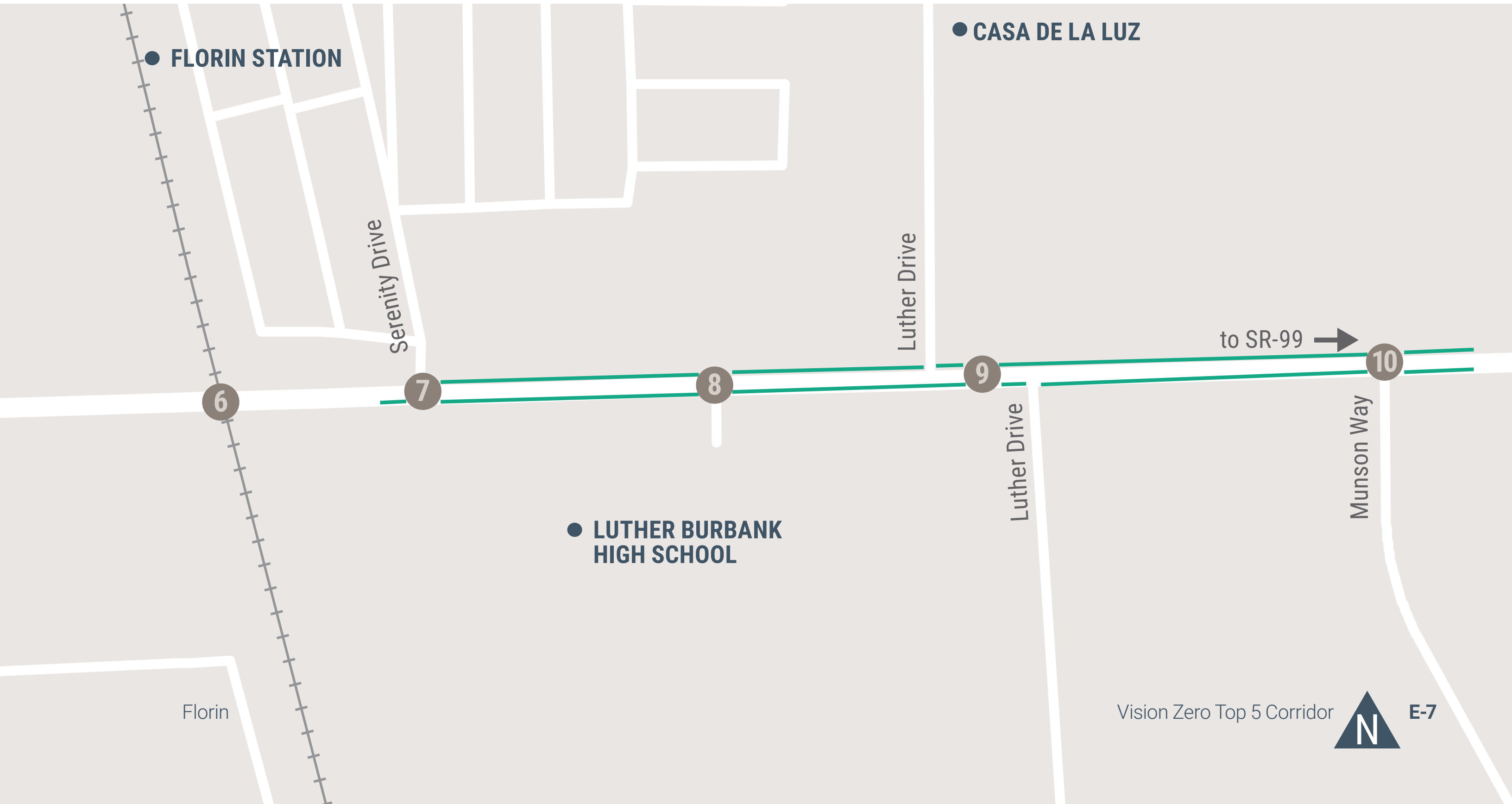
| Posted Speed Limit | Daily Vehicles | Maximum PM Intersection Vehicle Volume | PM Rush Hour People Walking | PM Rush Hour People Biking |
|---|---|---|---|---|
| ***40* *MPH*** | ***36,000*** | ***2,540*** | ***163*** | ***119*** |



| Number of Transit Routes | Bikeway Type | Longest Distance Between Marked Crosswalks | Sidewalk Coverage |
|---|---|---|---|
| **3** | ***On-Street Bike Lanes, with long gaps*** | ***1,740 Ft*** | ***100%*** |
| ***#54, #81, Blue Line*** | | | |



# Crashes on Florin

## Vehicle Crash Types

### Unsafe Speed

"Unsafe Speed" was cited as the primary violation in nearly half of all crashes.

1 2 3 4 5 6 7 8 9 10

### Proceeding Straight

75% of drivers were proceeding straight or stopped at the time of the crash.

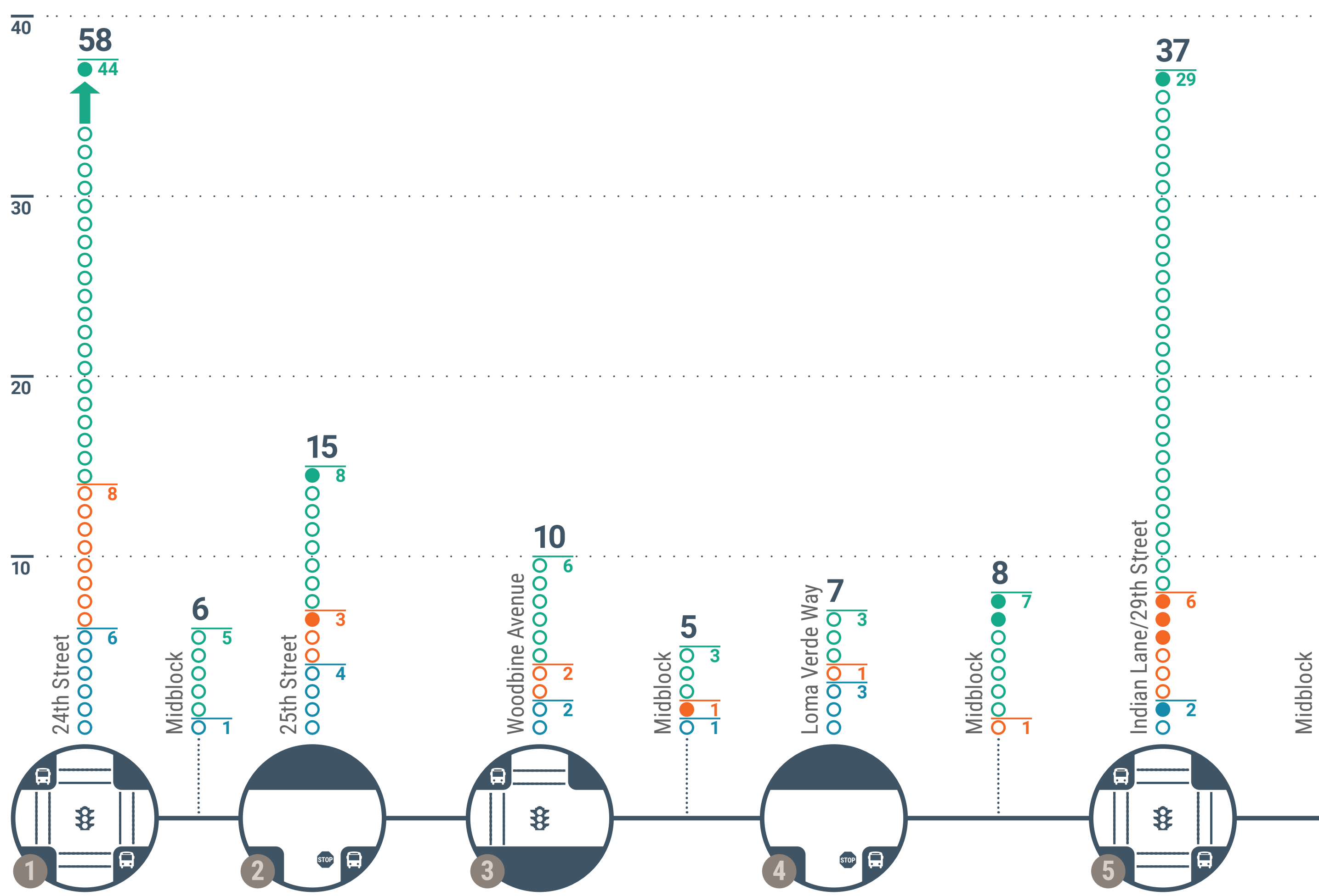
1 2 3 4 5 6 7 8 9 10

### Rear End

Nearly half of all crashes were rear end.

1 2 3 4 5 6 7 8 9 10

## Crash Locations



## Ped Crash Types

### Pedestrian Crossing

The majority of people hit while walking were crossing. Half of people were in the crosswalk.

1 2 3 4 5 6
7 8 9 10

## Bike Crash Types

### Right Turns

In nearly 40% of bike crashes, the driver was making a right turn.

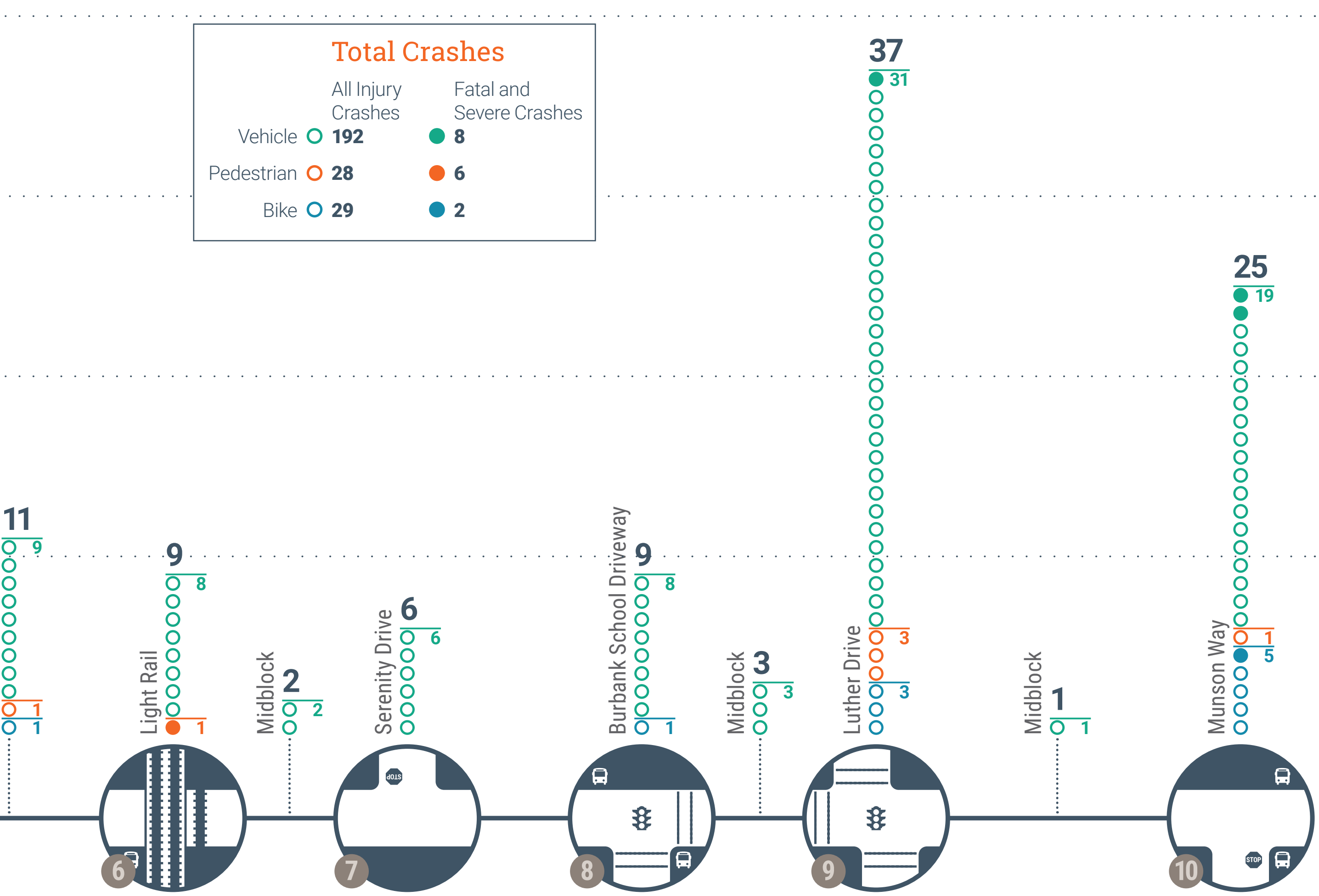
1 2 3 4 5 6
7 8 9 10

### Broadside

More than half of bike crashes were broadside, also called T-Bone.

1 2 3 4 5 6
7 8 9 10

1 Numbers that are turned on represent a location where crash type has occurred at least three times.



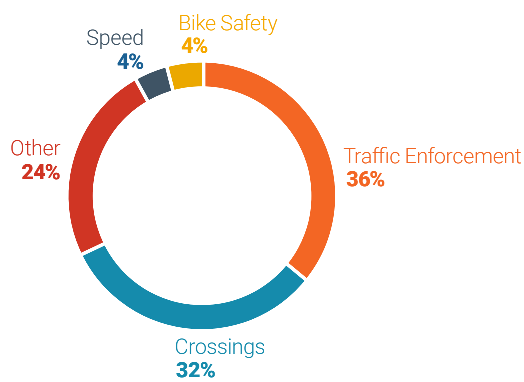
# Feedback from the Community

"We need to slow drivers down."

"The signals need more time for crossing (when seniors cross it is too short)."


Luther Burbank High School
Community Workshop

## Key Themes




### Traffic Enforcement

Residents described speeding, and red light and stop sign running across the corridor and suggested increased speed enforcement could deter this behavior.

### Crossings

Residents described difficulty crossing the street, particularly by the Florin light rail station and Luther Burbank High School, due to large spacing between marked crosswalks.

## Engagement Events

November 15, 2018
Luther Burbank High School
Community Workshop

May 5, 2019
Luther Burbank High School
Community Open House

# Investments to Enhance Safety

## Key Crash Countermeasures

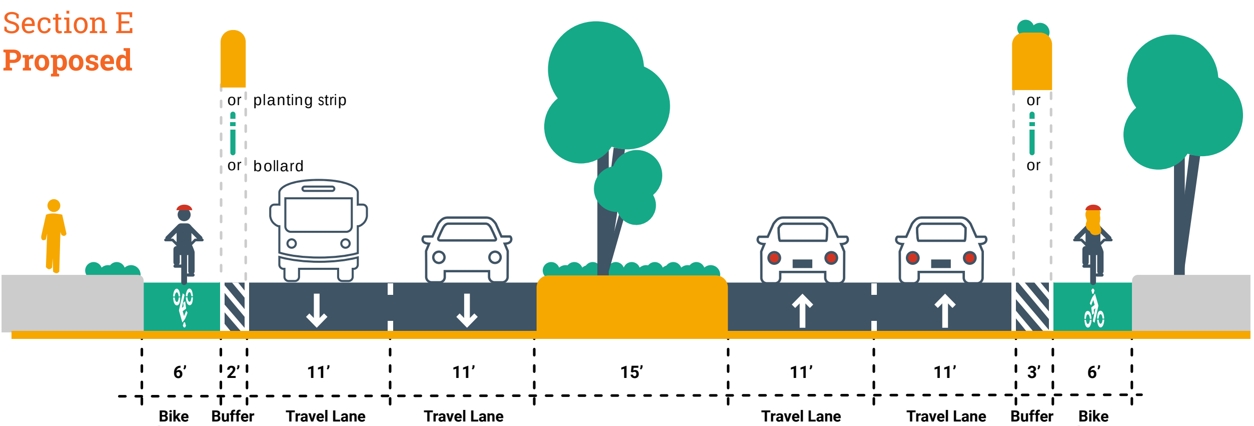
| Countermeasure | | Crash Type | Feedback Key Theme |
| --- | --- | --- | --- |
| Slow Green Wave | TO ADDRESS | Unsafe Speed | Enforcement & Compliance |
| Add New Signal | TO ADDRESS | Pedestrian Crossing | Crossings |
| Advanced Dilemma-Zone Detection | TO ADDRESS | Rear End | Enforcement & Compliance |

### How Will The Roadway Space Be Used?

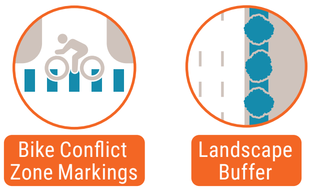
Section E
**Existing**

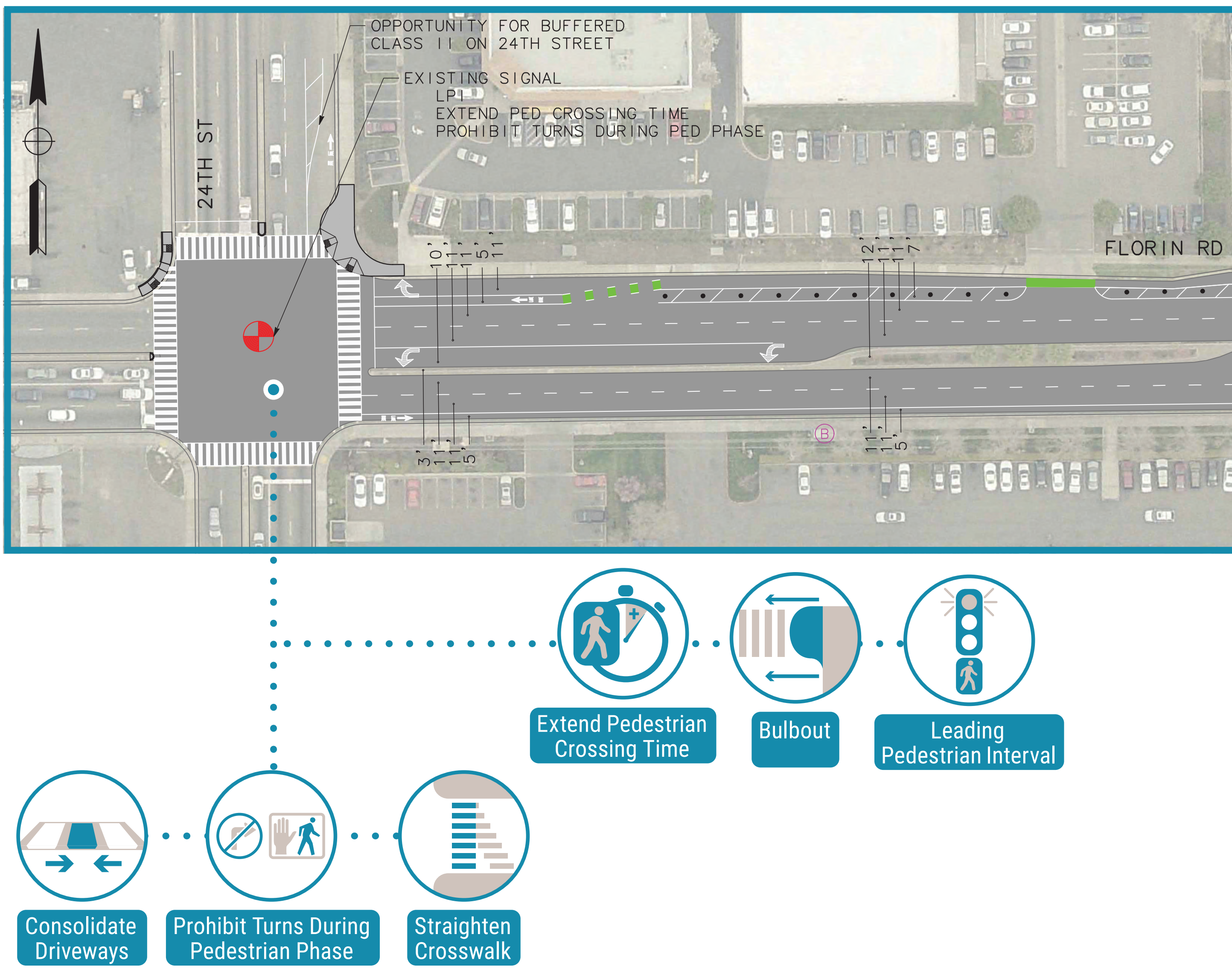
SEE PAGE E-163

Section E
**Proposed**



# Conceptual Design for Florin



Protected Left Turns

Separated Bikeway

Narrow Lanes

Consolidate Driveways

Slow Green Wave

Pedestrian Scale Lighting

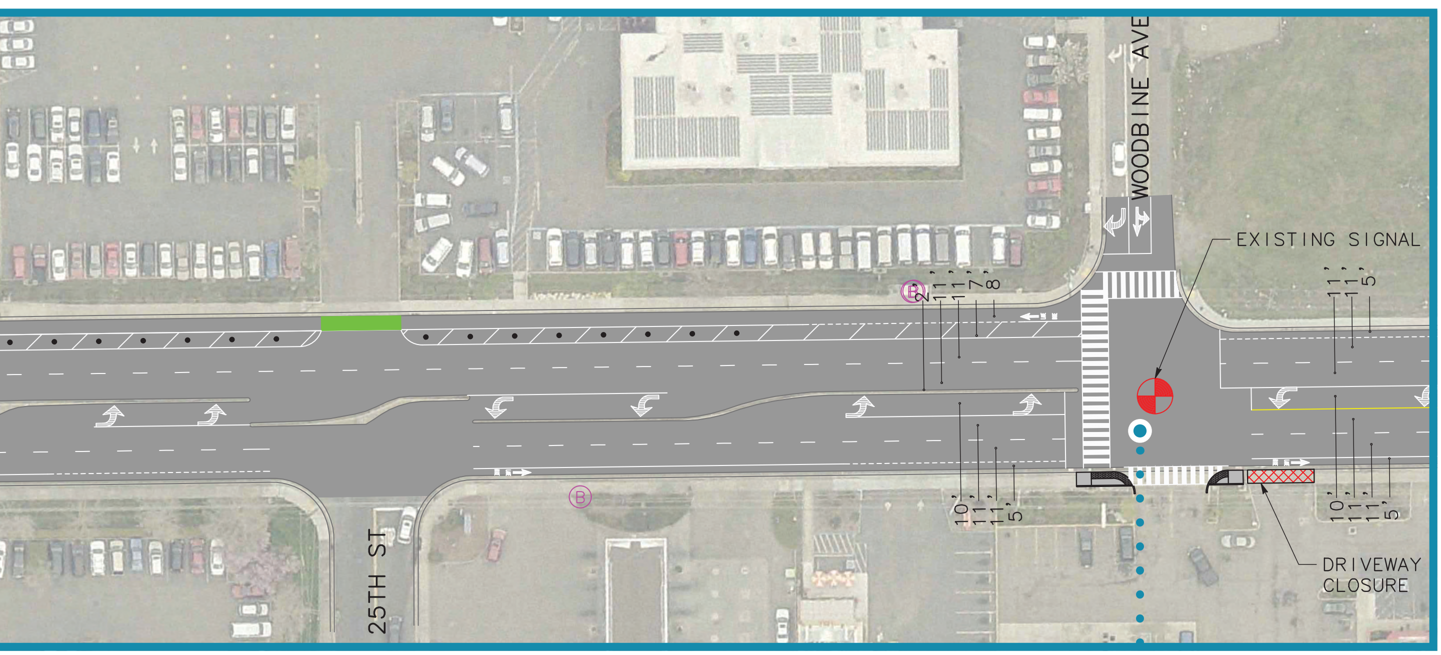
Advanced Dilemma-Zone Detection

Widen Sidewalk

High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations

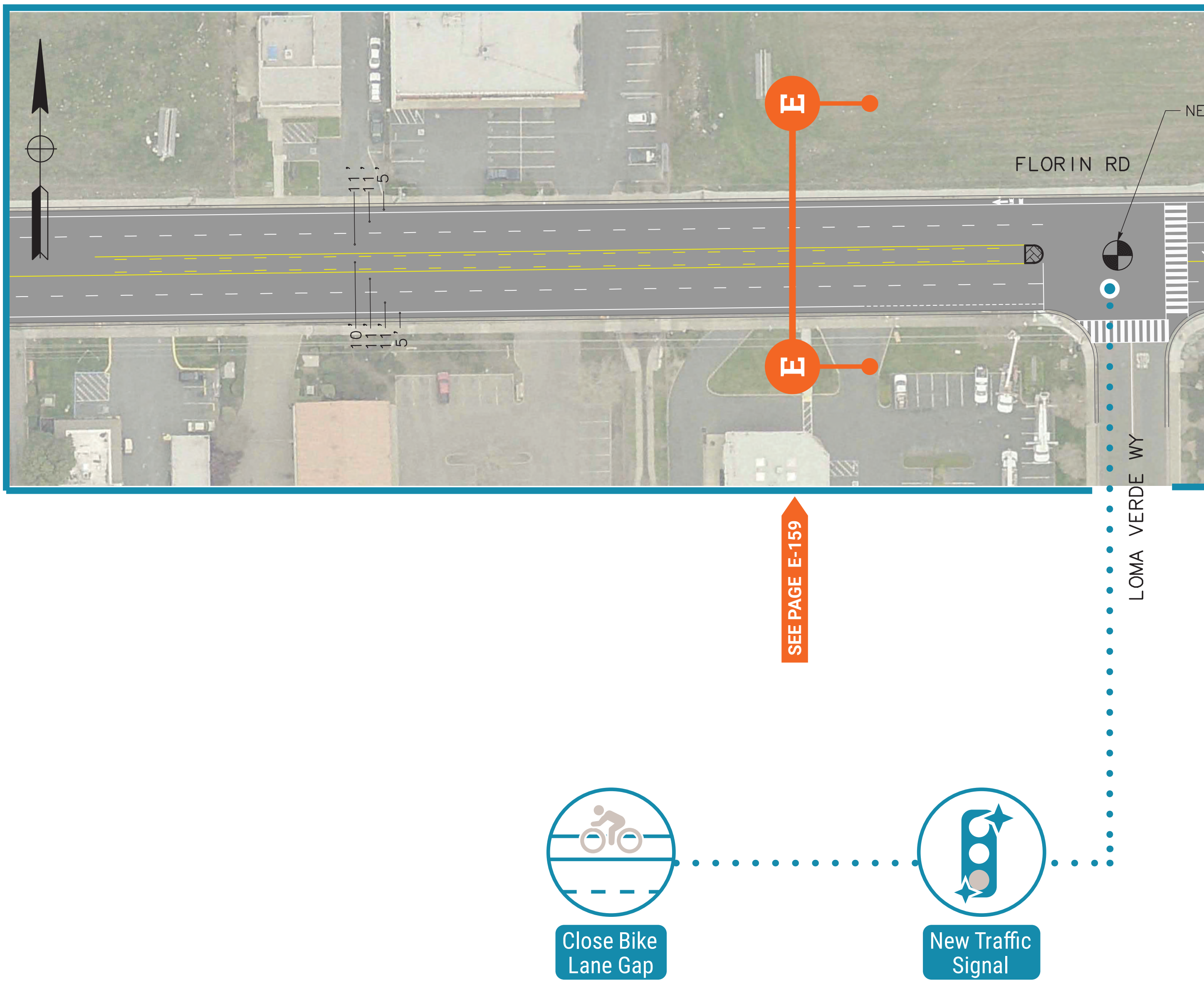


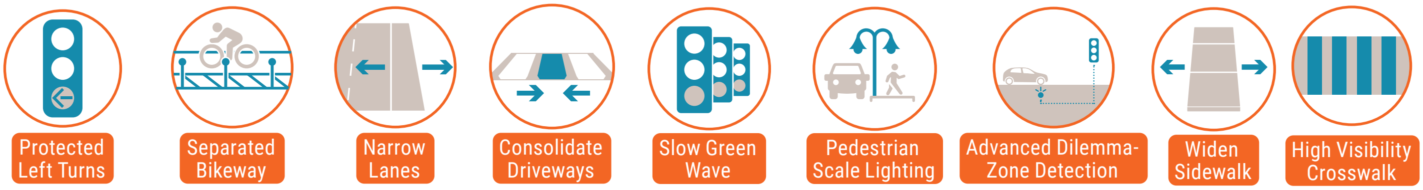

Consolidate Driveways

Raised Median

# Conceptual Design for Florin

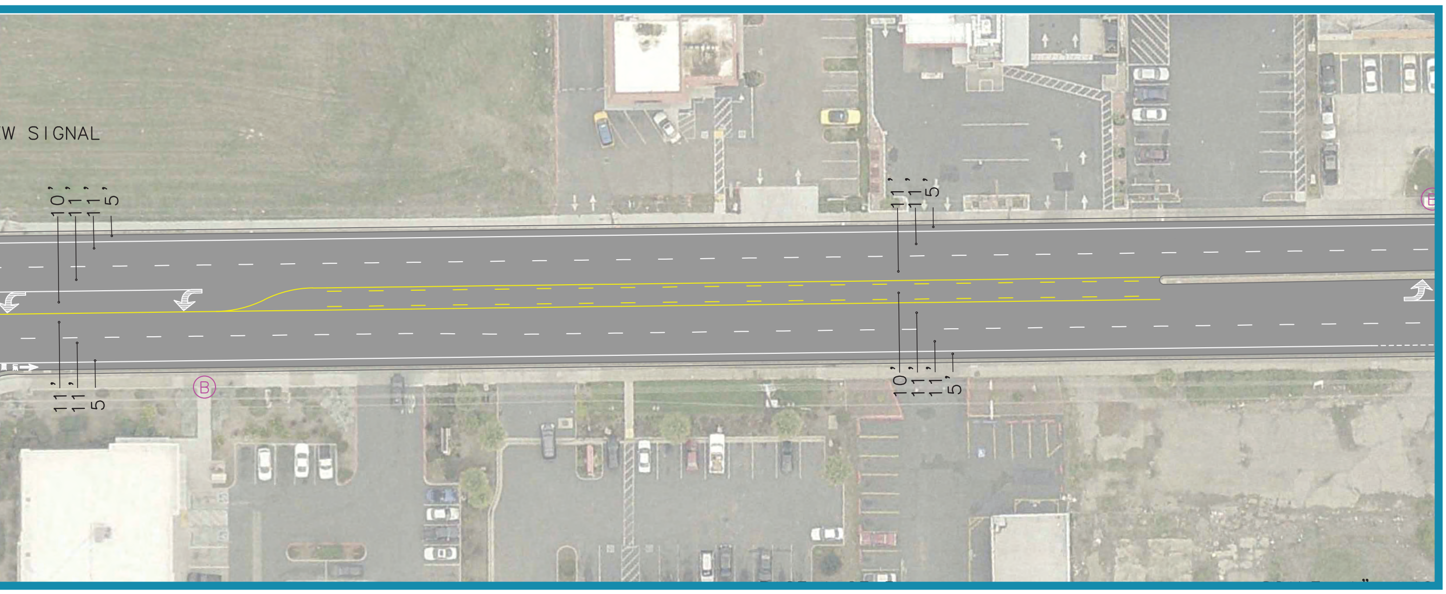






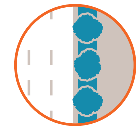

## Corridor-Wide Recommendations

## Location-Specific Recommendations

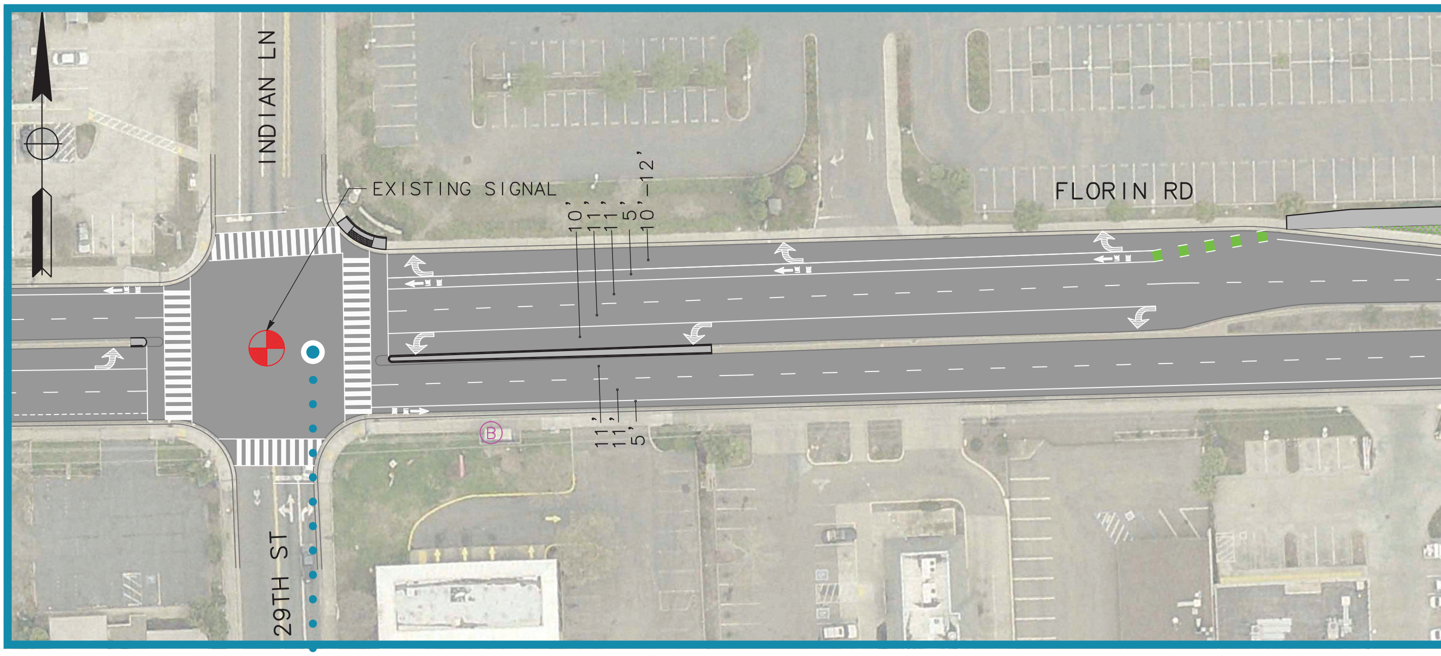


# Conceptual Design for Florin

Bike Conflict Zone Markings



Landscape Buffer




Dual Curb Ramps

Protected Left Turns

Separated Bikeway

Narrow Lanes

Consolidate Driveways

Slow Green Wave

Pedestrian Scale Lighting

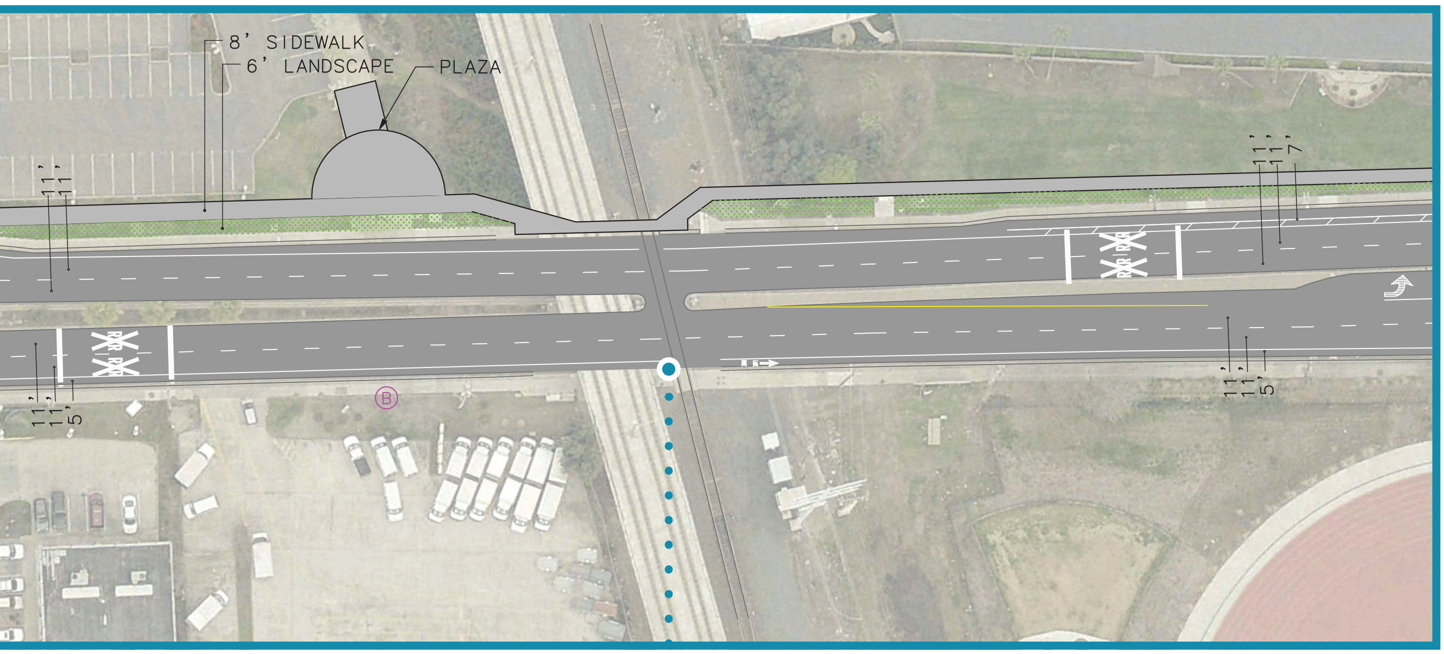
Advanced Dilemma-Zone Detection

Widen Sidewalk

High Visibility Crosswalk

## Corridor-Wide Recommendations

## Location-Specific Recommendations

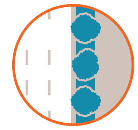



Co-locate Bus Stop

Landscape Buffer

# Conceptual Design for Florin

Bike Conflict Zone Markings



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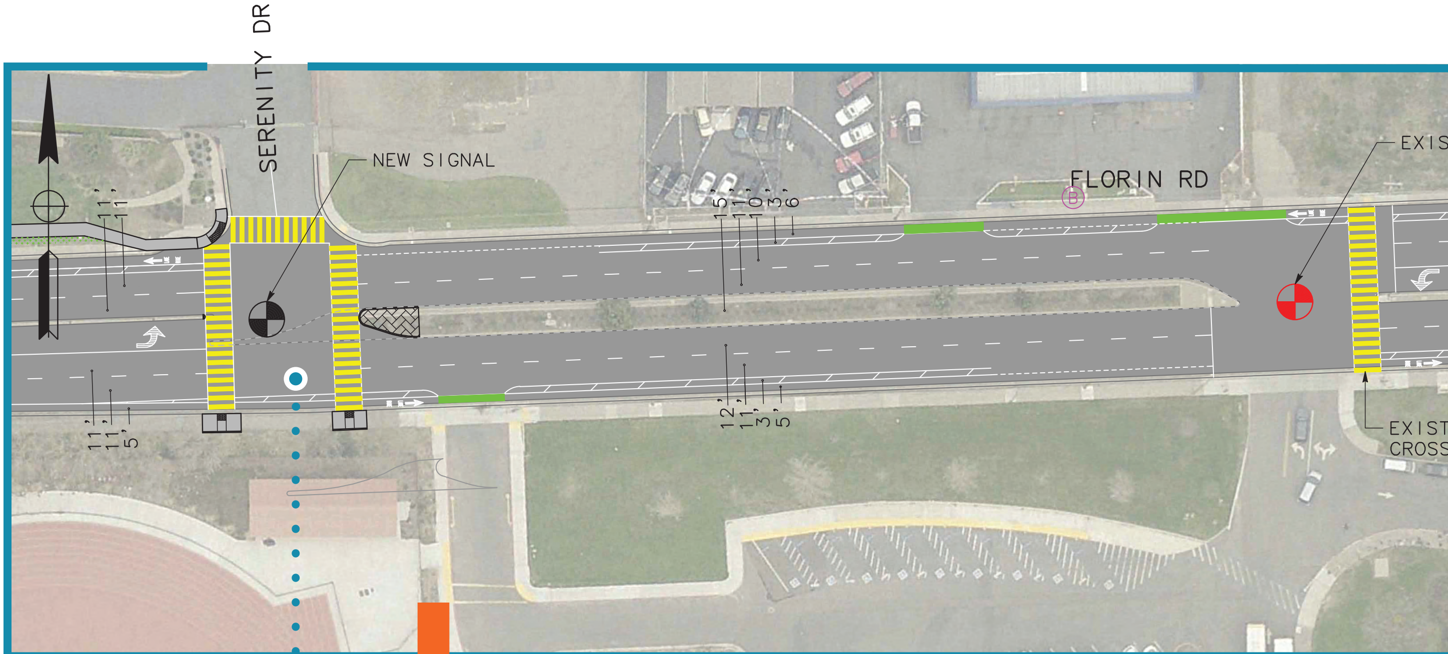
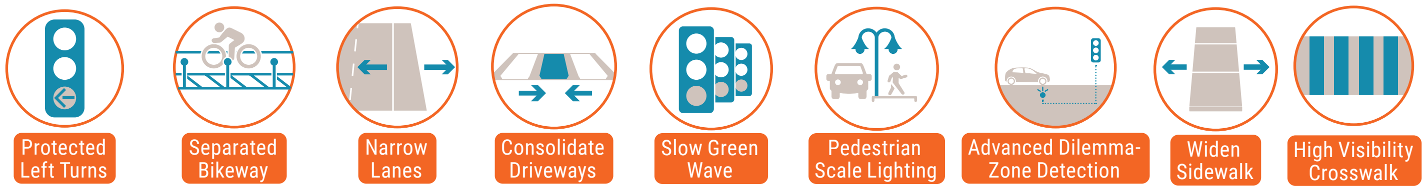



New Traffic Signal

### Florin Road/Serenity Drive Queues

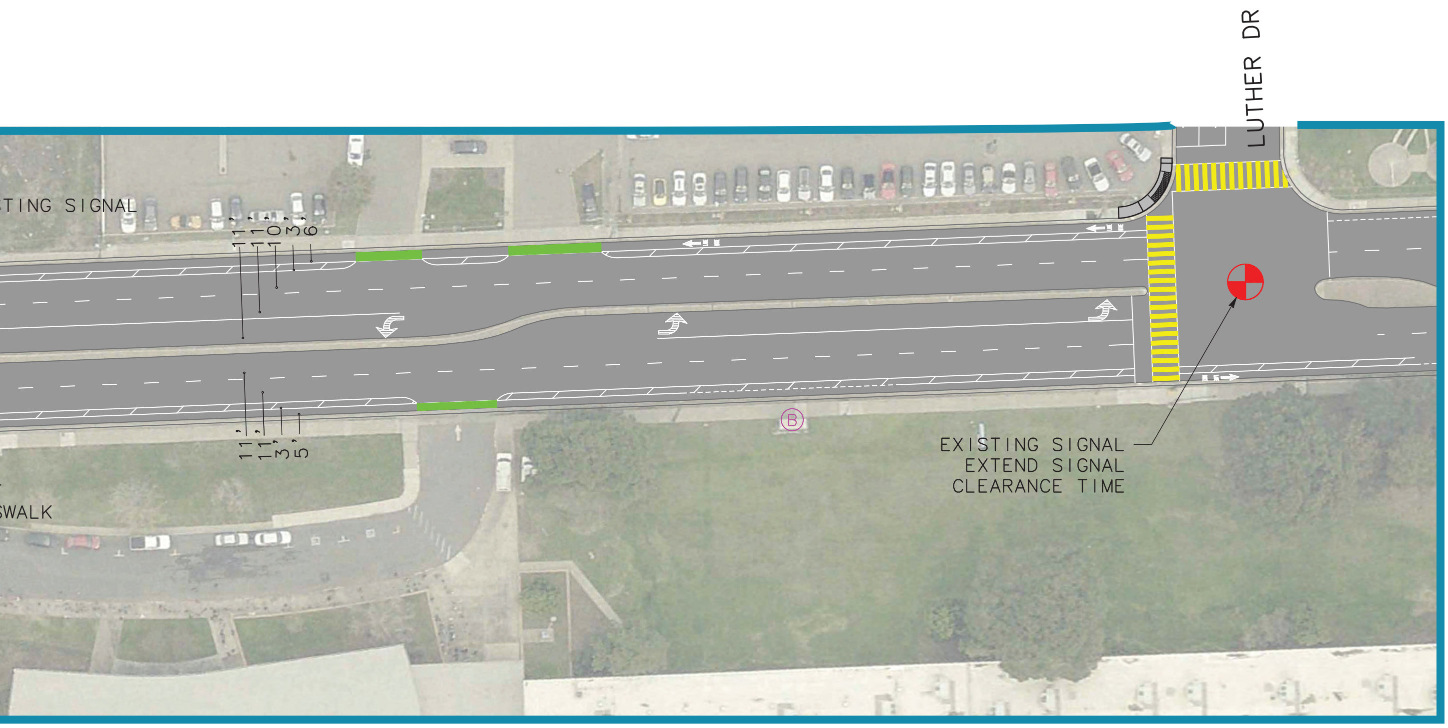
The Florin Road/Serenity Drive intersection is approximately 450-feet east of railroad tracks operated by Union Pacific Railroad. If a signal is installed at Florin Road/Serenity Drive, measures should be taken to ensure the eastbound queue does not spill back onto the railroad.

Queues were calculated from SimTraffic models representing existing conditions with the Vision Zero recommendations implemented. The peak hour maximum queues of this new signal are shown in Appendix B.



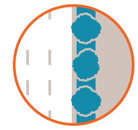

## Corridor-Wide Recommendations

## Location-Specific Recommendations



# Conceptual Design for Florin


Bike Conflict Zone Markings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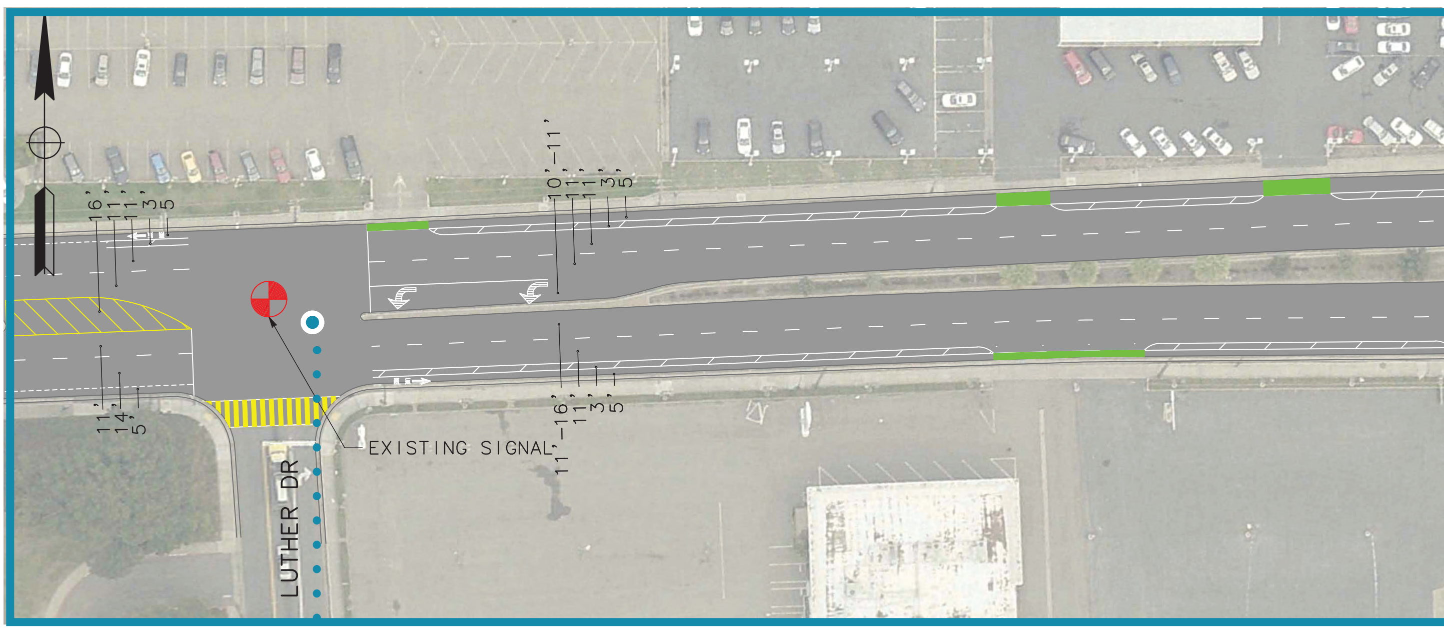
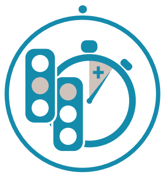
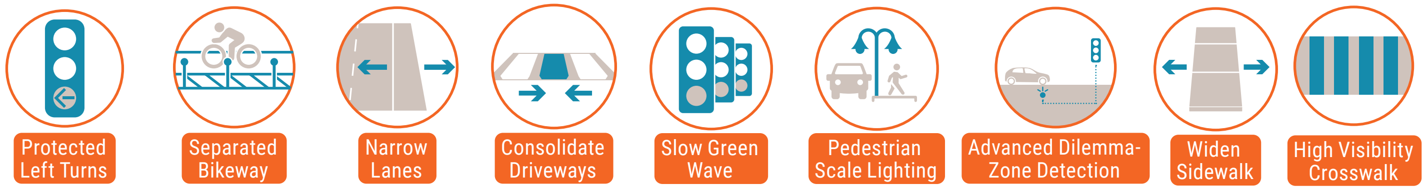
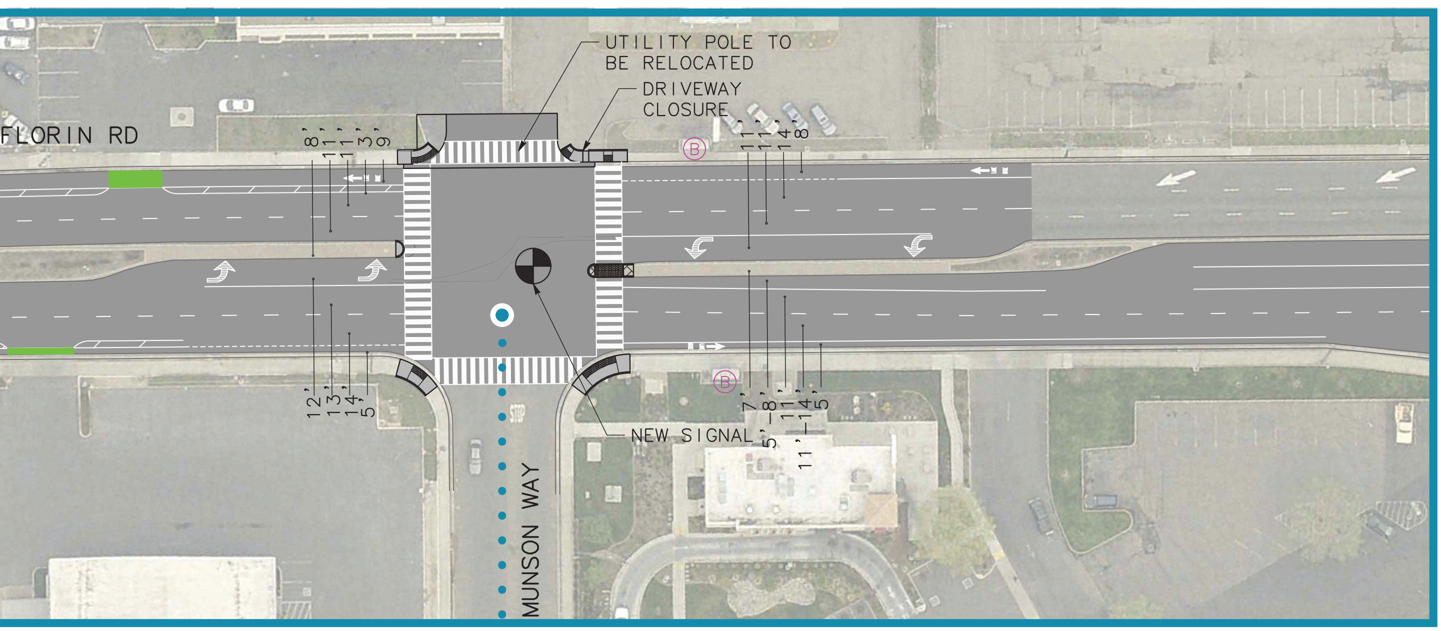


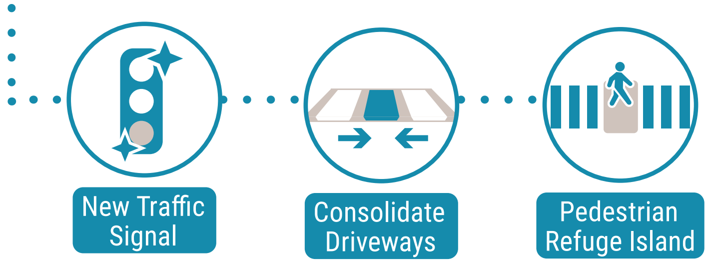


Extend Signal Clearance Time




## Corridor-Wide Recommendations

## Location-Specific Recommendations



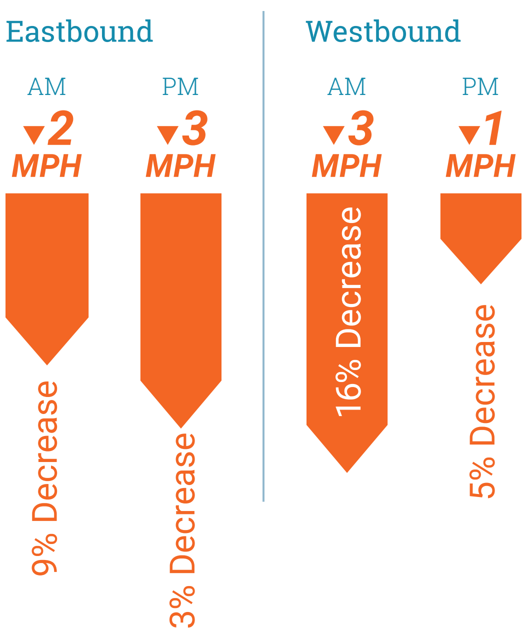



# How Will Travel Change?

## Estimated Changes with Project

### Average Vehicle Speed

Average vehicle speed along the corridor during peak periods is expected to decrease between 1 and 3 mph as a result of the proposed project. While slower travel speeds result in longer travel times, they reduce traffic fatalities and severe injuries that result from crashes.



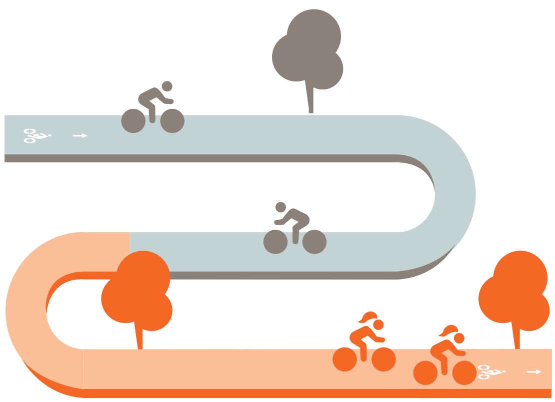


### Vehicle Travel Time

Average vehicle travel time along the one-mile corridor during peak periods is expected to increase between 13 and 36 seconds as a result of the proposed project.

# Estimated Changes with Project

## Bike Lane Coverage



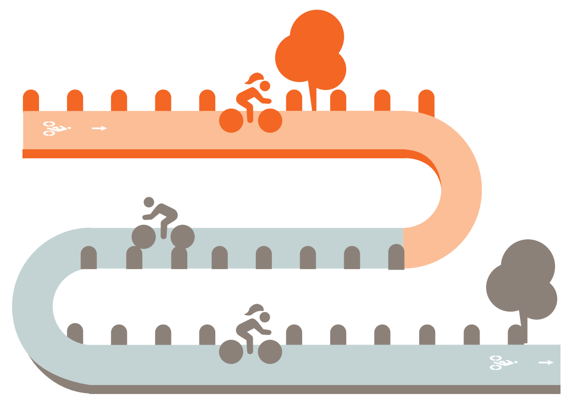
Without project

**56%**
**(7,190 ft)**

With project

**100%**
**(12,780 ft)**

## Share of Bike Lanes with Vertical Separation



Without project

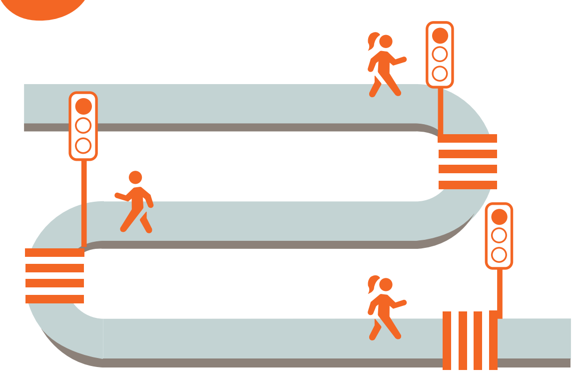
**0%**
**(0 ft)**

With project

**38%**
**(4,900 ft)**

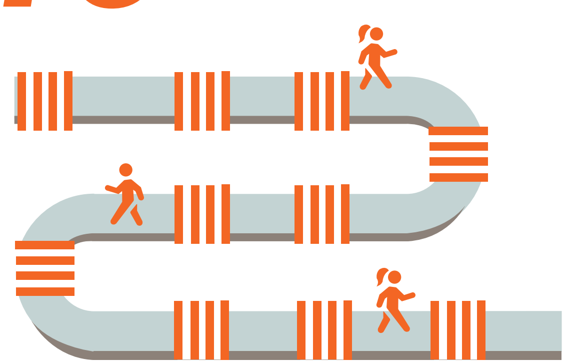
## Number of Locations Upgraded to Controlled Crossings

**3**



## Number of Marked Crosswalks

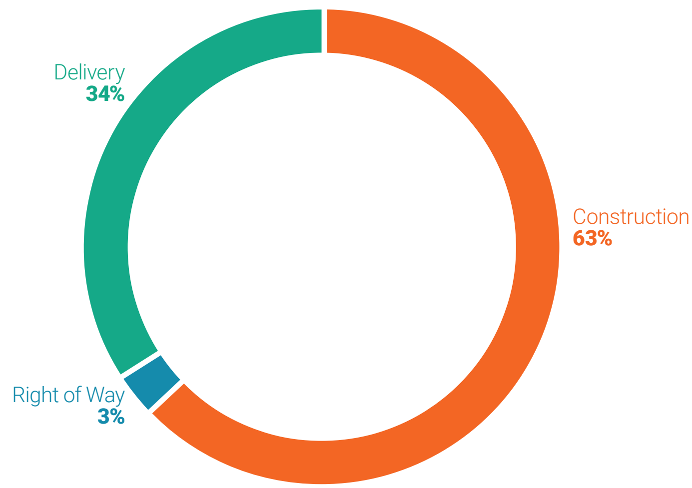
**10** ***new crossings***



# How Much Will the Project Cost?

## Florin Road Cost Summary

**$11,900,000**




The total project costs shown in the summary chart have been escalated at an assumed 3% per year escalation factor to 2025, the anticipated year of construction.

### Construction

Construction costs include the cost to build the primary items associated with the safety countermeasures for the corridor. The items were estimated based on the preliminary design concepts and recent construction bid unit costs with an escalation factor to account for future construction. The costs were broken down into two categories that consisted of major roadway items and electrical items such as traffic signals and lighting. A contingency factor was included to account for refinement of project design, changes in project details, or unforeseen changes in construction costs.

Actual project costs will be determined by surveyed base mapping, geotechnical reports, concept refinement, environmental reviews, right of way availability, project phasing, and bid conditions at the time of advertisement. Project costs should be reviewed prior to any grant application or initiation of a Capital Improvement Project to revalidate and update the assumptions in this study as necessary.
.

### Right of Way

In addition to construction costs, right of way costs were assumed that include temporary construction easements for items such driveway modifications, curb ramps reconstruction, signal equipment poles and cabinets. It was assumed that each project could be constructed almost exclusively within the roadway prism and right of way acquisition would not be needed along the entire project frontage. Further refinement of the base mapping in subsequent phases of design will more accurately identify specific right of way needs.

### Delivery

Project delivery costs are included in the estimates provided in this study. These costs encompass all of the work to complete subsequent phases including preliminary engineering, environmental documentation, final design, right of way engineering, and construction oversight. A breakdown of these costs is provided in Appendix C.

TOP 5 CORRIDORS
Vision
ZERØ

# Appendix A
## Related Documents

# Appendix B

## Technical Calculations

# Appendix C

## Concept Plans & Cost Estimates

Vision Zero Top 5 Corridors

# FAQs

**The Vision Zero Top 5 Corridors study represents a next step of the Sacramento Vision Zero Action Plan, focusing efforts on implementing near-term roadway improvements on the five corridors in the city that have the highest rate of crashes that result in fatalities and severe injuries. During public outreach and public comment of this study, a few common questions were posed that were not covered in the Vision Zero Top 5 Corridors report. Responses to those questions are provided below.**

## 1. Why aren't new trees and landscaping included in the Plan?

The recommendations in the Vision Zero Top 5 Corridors Plan are focused on roadway design features that will improve safety based on the collision data that was analyzed. The project team did not identify locations in which a landscape buffer addressed collisions and was a feasible option. There are some recommendations that will require changes to the existing landscaping, such as the modified sidewalk on Florin Rd. and the realignment of the intersection of El Camino Rd. and the Sacramento Northern Bike Trail. This plan does not preclude new trees, landscaping, and other placemaking elements from being considered in the future where there is available space and financial resources to maintain.

## 2. Why does the plan propose so many new traffic signals?

New traffic signals organize interactions between vehicles, pedestrians, and bicyclists with conflicting movements, and provide an improved crossing for pedestrians. New traffic signals can also slow traffic on long, high-speed straightaways when timed properly. Consistently spaced traffic signals facilitate the "slow green wave" in which signals are coordinated for slower travel speeds.

## 3. Can you set lower speed limits to reduce speed?

Cities in the State of California must adhere to the California Vehicle Code for setting speed limits. The process for setting speed limits on non-residential streets includes conducting a specific speed survey to determine the, "prevailing speed." The prevailing speed is the speed which 85 percent of the motorists are traveling at or below. The speed limit is set using the prevailing speed, with considerations for other factors such as the type of adjacent development, bicycle and pedestrian activity, and reported collision history. This process prohibits cities from arbitrarily setting speed limits. Roadway design can help to influence prevailing speeds, meaning that in the future a lower speed limit may be warranted along corridors where roadway safety improvements have been made.

## 4. Will my street be considered for safety improvements?

Per the City of Sacramento's Vision Zero Action Plan, safety improvements are prioritized where historic collision data points to the most need. These locations together are called the High Injury Network. The City's transportation funding priorities include an emphasis on funding future safety projects on the High Injury Network.

# Appendix A
## Related Documents

# Vision Zero Top 5 Corridors

# Existing Conditions Report

**Prepared for:**
**City of Sacramento**

March 2019

RS18-3649

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## Appendices

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# Introduction

This report documents existing transportation conditions for the Vision Zero "Top Five" corridors in Sacramento, California. The Top Five corridors represent approximately one-mile segments with the highest number of fatal and serious crashes involving pedestrians, bicyclists, and motorists. The existing conditions analysis profiles each corridor in terms of the experience each person has driving, riding a bicycle, or walking on the corridor and collision history.

# Relationship to Vision Zero Action Plan

To help reach its goal of eliminating traffic fatalities and serious injuries by 2027, the City of Sacramento developed a Vision Zero Action Plan, which was adopted by the City Council in August 2018. The Plan used historic crash data to pinpoint the factors contributing to traffic deaths and serious injuries, and it identified proven safety countermeasures to address those factors through education, engineering, enforcement, and evaluation. This Top Five Corridor Study represents a critical next step in the implementation of City of Sacramento's Vision Zero Program, focusing efforts on implementing near-term improvements on the five corridors within the City that have the highest rates of collisions that result in fatalities and severe injuries.

# Identification of Segments

A High Injury Network (HIN) was developed in July 2017 for the City of Sacramento as part of the Vision Zero Action Plan. The HIN identifies corridors with the highest levels of fatal and severe collisions for all travel modes (i.e., vehicle, bicycle, and pedestrian) to better understand existing transportation safety challenges in the City. Seven years of collision data, from 2009 through 2015, was analyzed from the statewide Transportation Injury Mapping Systems (TIMS). TIMS data includes only those collisions that resulted in an injury, ranging from "complaint of pain" to "fatal." Collisions resulting in only property damage, either to a vehicle or other property, are not included in the TIMS data set and were not analyzed as part of the Vision Zero Action Plan and HIN development.

A weighted collision score was created for each roadway segment; collisions involving a fatality or severe injury were given a score of 3, and all other injury collisions were given a score of 1. Weighted collision scores were then analyzed as a rate based on segment length. Segments with a weighted collision score greater than 1 per 300 ft of roadway were included on the HIN.

Once the HIN was developed, the network was divided into corridors approximately one mile in length, to allow for direct comparison and selection of the highest priority corridors. Fehr & Peers identified the ten corridors on the HIN with the highest number of fatal and severe injury collisions per mile. The five highest ranking corridors were selected for this initial study and are shown in

Figure **1**. Each of these corridors have between 10.4 and 7.1 fatal or severe injury collisions per mile. The next five ranked corridors (#6-10) have fatal and severe injury collision rates between 6.2 and 2.1.

The top five priority corridors are listed below:

- Broadway: Martin Luther King Jr. Boulevard to Stockton Boulevard; Stockton Boulevard: Broadway to 13th Avenue
- El Camino Avenue: Del Paso Boulevard to Steelhead Creek trail crossing
- Florin Road: 24th Street to Munson Way
- Marysville Boulevard: North Avenue to Arcade Boulevard
- Stockton Boulevard (South): McMahon Drive to Patterson Way

FIGURE 1

## MAP OF TOP 5 CORRIDORS WITHIN CITY OF SACRAMENTO

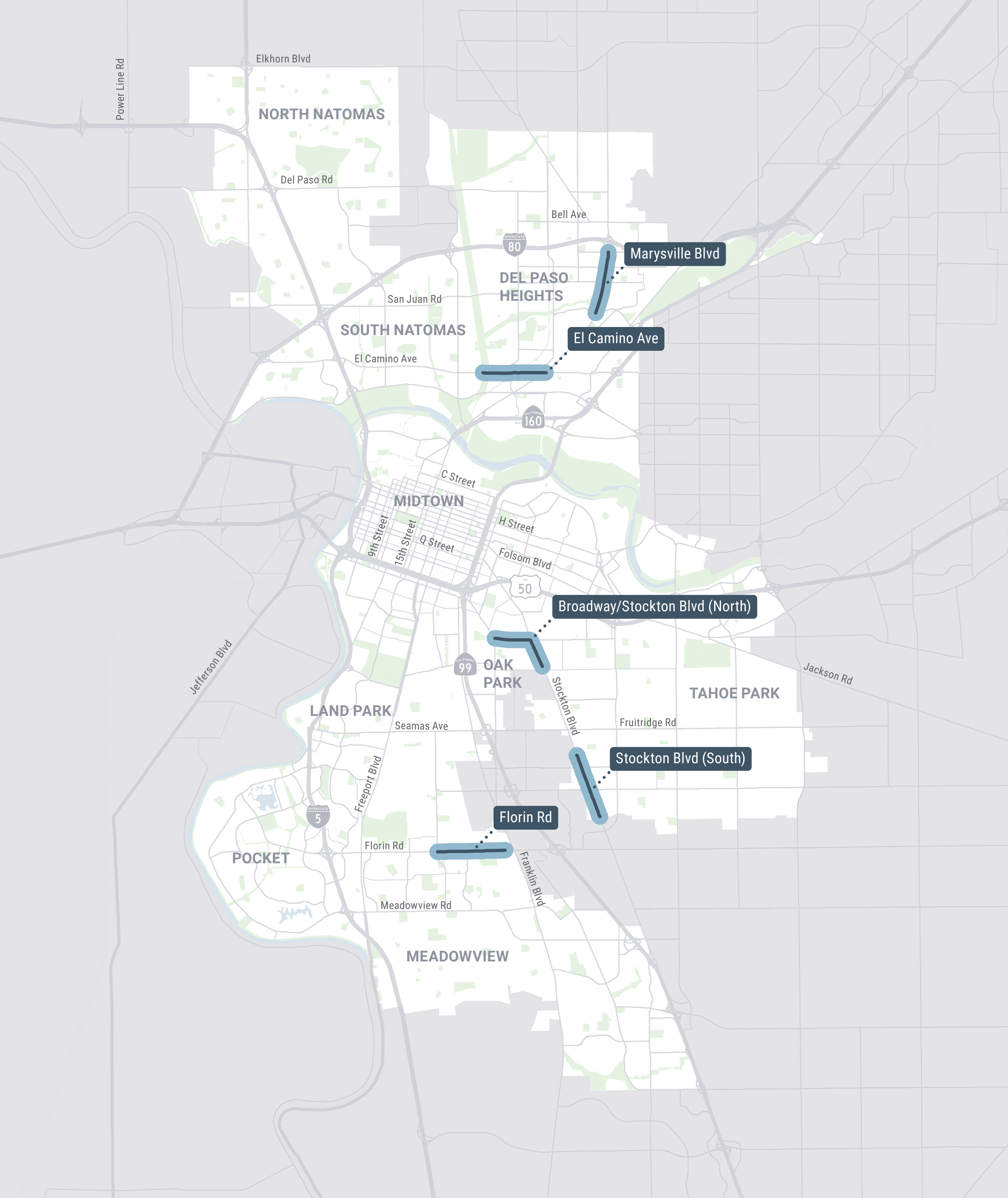
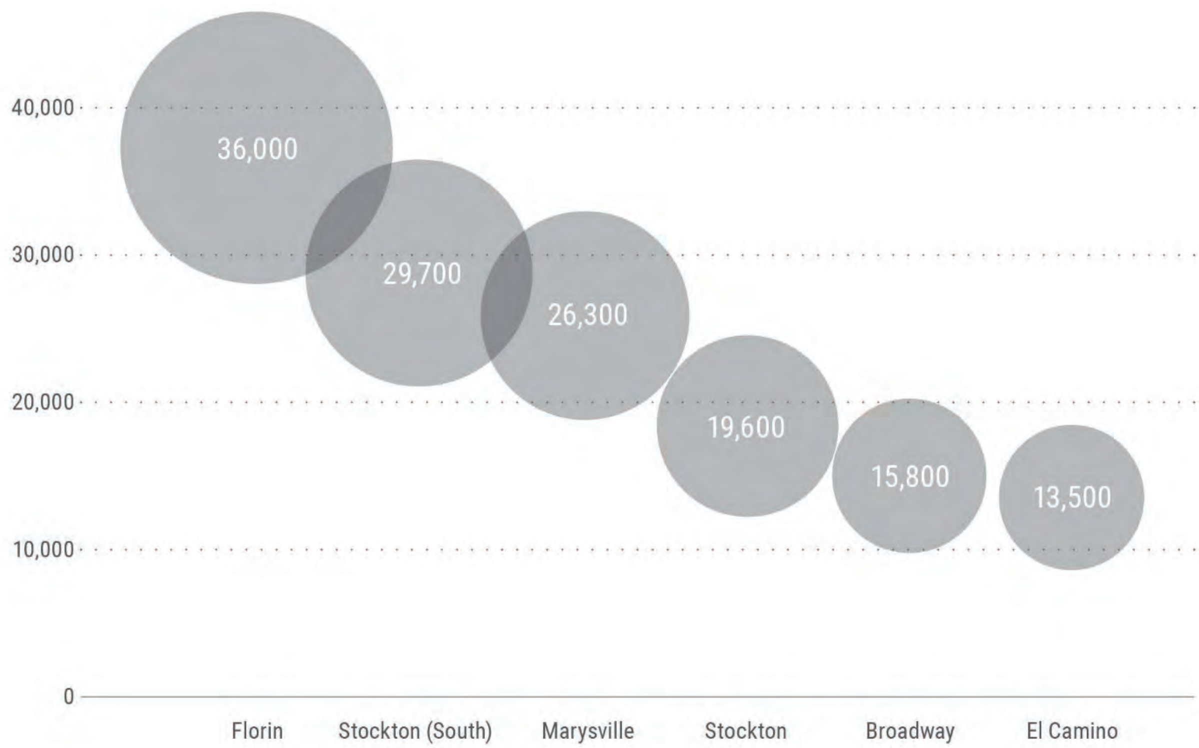


Figure 2: Average Daily Traffic of Top 5 Corridors




Though all these segments are classified as arterials in the *Sacramento General Plan 2035*, they have varying key characteristics, including a range of widths (i.e. travel lanes and right-of-way), speed limits, land use patterns, and traffic volumes.

Figure 2 displays the Average Daily Traffic (ADT) of the Top Five corridors. These values were measured in the early summer of 2018, when schools were in session and the weather was fair. Florin Road carries the most traffic (36,000 vehicles per day) of the Top Five corridors, while El Camino Avenue carries the least traffic (13,500 vehicles per day).

**Figure 3: Total Crashes by Year**

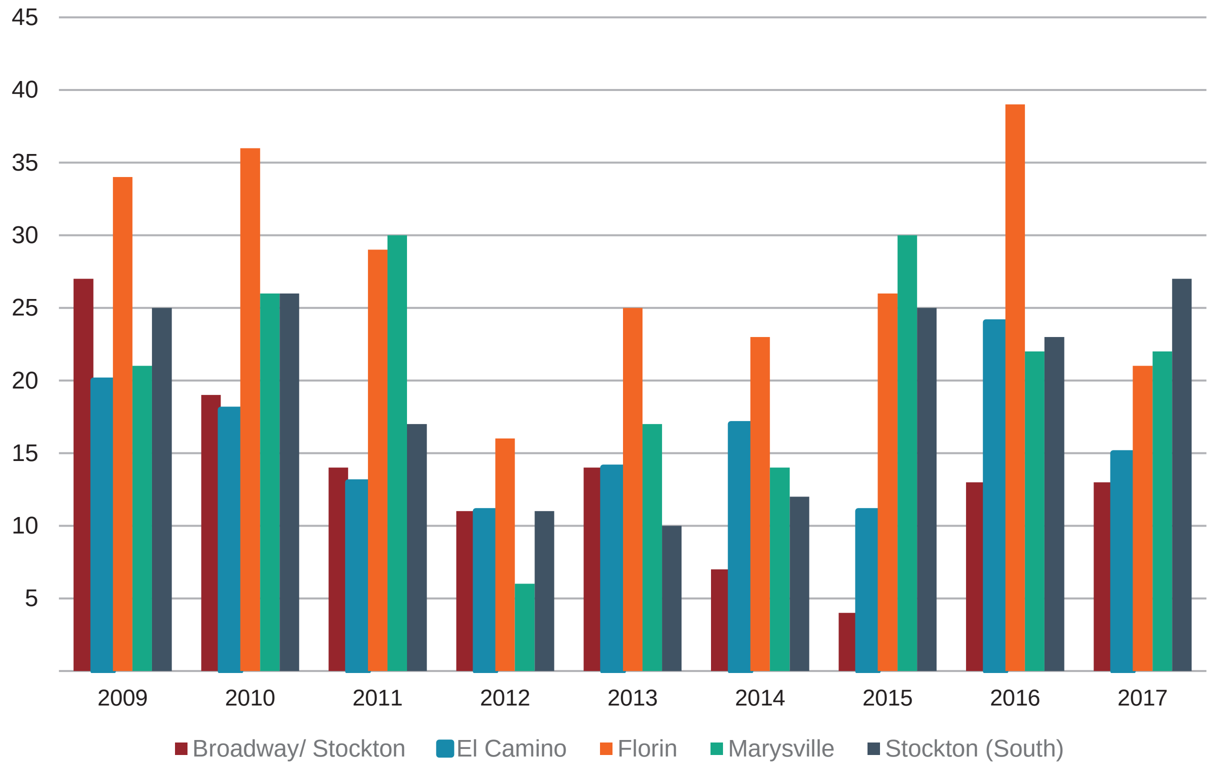
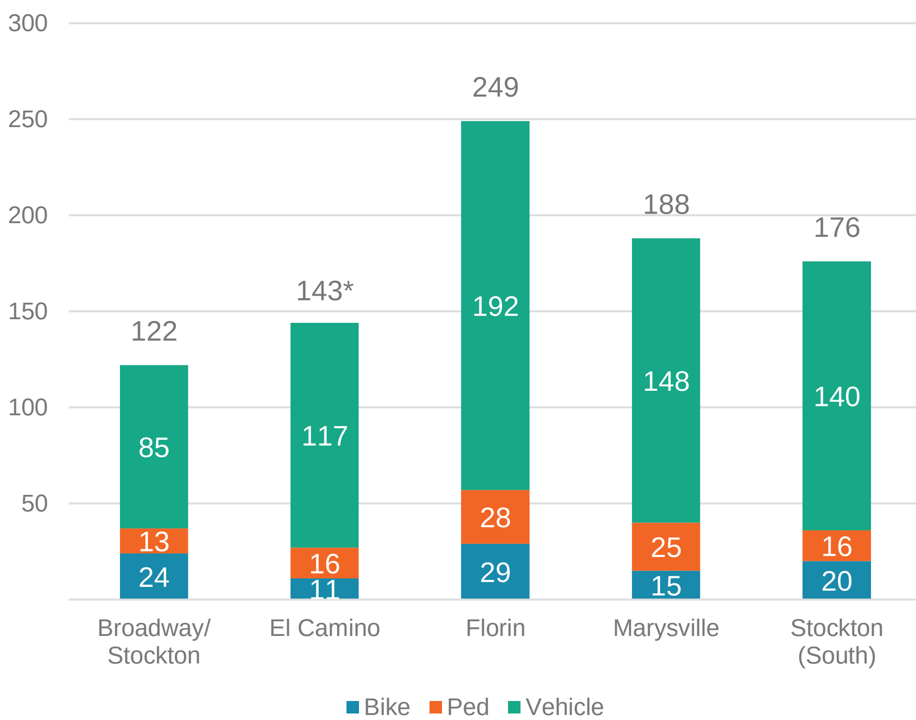



Figure 3 displays the number of annual injury crashes along each corridor between 2009 and 2017. The fewest crashes in a year occurred on the Broadway/Stockton Boulevard (North) corridor in 2015 (four crashes) and the highest number of crashes in a year occurred on Florin Road in 2016 (39 crashes). Broadway/Stockton Boulevard (North) is the corridor with the lowest number of total crashes (122) and Florin Road is the corridor with the highest number of total crashes (249).

Figure 4 displays the number of injury crashes by mode along each corridor as totals and percentages. Despite having the lowest number of crashes overall, the Broadway/Stockton Boulevard (North) corridor has the largest share of crashes involving a bicyclist (24 crashes, or 20 percent). The Marysville Boulevard corridor has the largest share of crashes involving a pedestrian (25 crashes, or 13 percent). However, in absolute numbers, the Florin Road corridor accounts for the highest numbers of crashes involving pedestrians (28 crashes), bicyclists (29 crashes), and vehicle-vehicle crashes (192 crashes).

## Figure 4: Total Crashes by Mode




*One collision on El Camino involved both a pedestrian and a bicyclist.

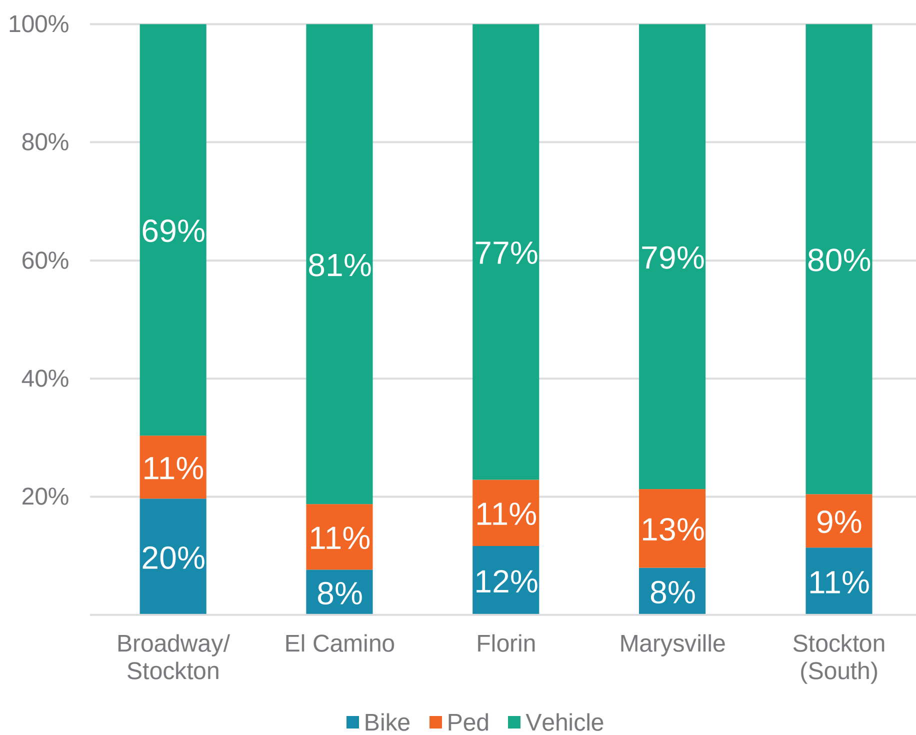


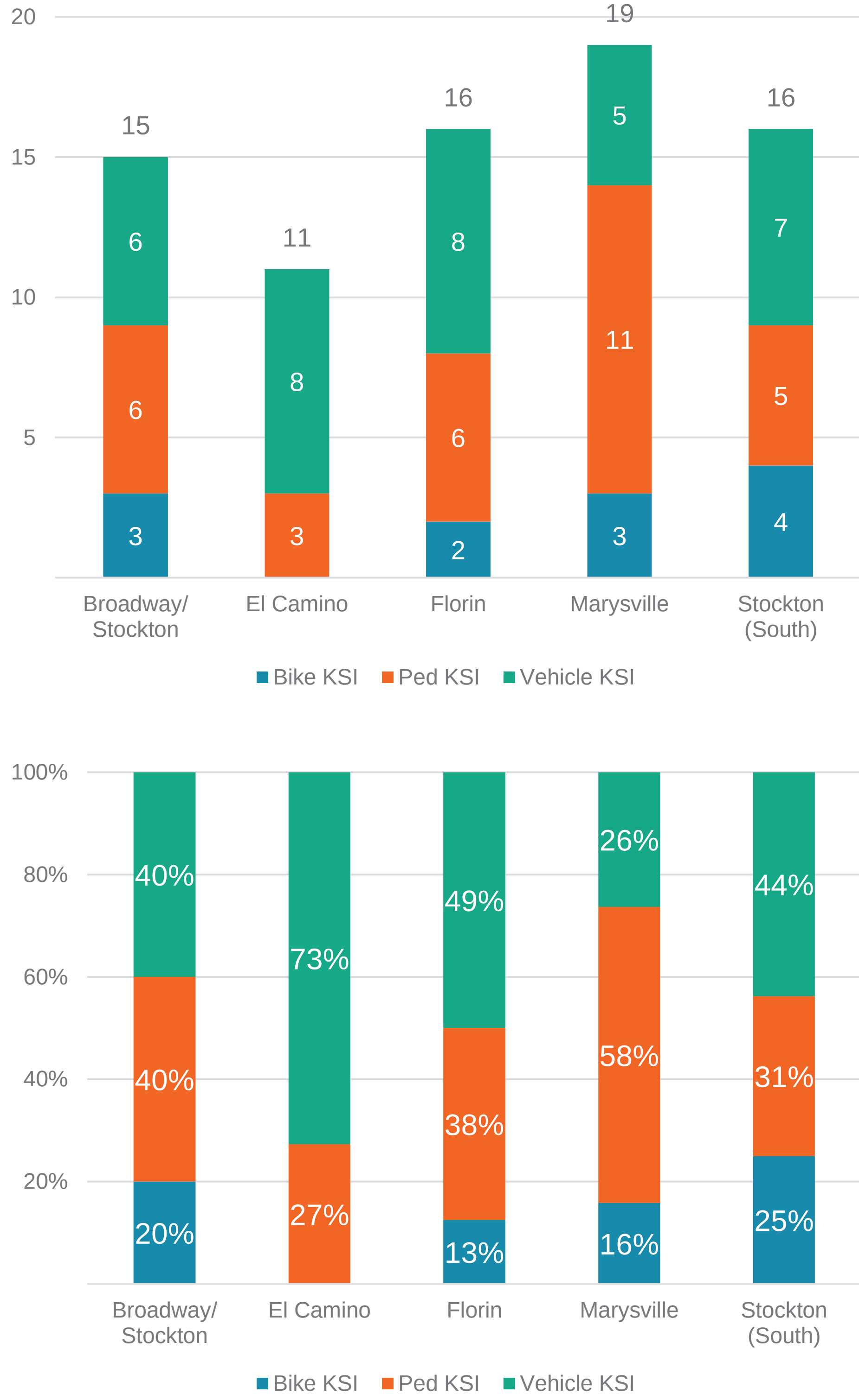
Figure 5 displays the number of crashes that resulted in a fatality or serious injury (also called KSI) along each corridor. Despite having the lowest number of total crashes overall, the Broadway/Stockton Boulevard (North) corridor has the largest share of crashes that result in a fatality or serious injury (15 crashes, or 12 percent of all injury crashes). The Marysville Boulevard corridor has the highest absolute number of crashes resulting in a fatality or serious injury (19 crashes).

Figure 6 displays the number of crashes by mode that resulted in a fatality or serious injury. The Marysville Boulevard corridor has the highest number and largest share of KSI crashes that involved a pedestrian (11 crashes, or 58 percent of KSI crashes). The Stockton Boulevard (South) corridor has the highest number and largest share of KSI crashes that involved a bicyclist (four crashes, or 25 percent of KSI crashes). The El Camino Avenue corridor does not have any bicycle crashes that resulted in a fatality or serious injury.

Throughout this report, the acronym KSI is used to denote crashes where someone was killed or seriously injured.

**Figure 5: Total Crashes by Severity**

**Figure 6: KSI Crashes by Mode**



# Methodology

This section outlines the methodology developed to quantify the existing conditions of each corridor.

# Traffic Operations Analysis

Peak hour vehicular traffic conditions were modeled in SimTraffic 10, micro-simulation software that provides outputs consistent with the *Highway Capacity Manual* by replicating queues and delays at intersections while accounting for signal coordination, queue spillback, and pedestrian crossings, among other factors. Intersection turning movement counts were collected along the Top Five corridors during midweek peak periods when schools were in session and the weather was fair. The counts included vehicular turning movements, heavy vehicles, cyclists, and pedestrian crossings. The results reported for the SimTraffic analysis represent averages of ten runs with outliers omitted, per standard practice. To accurately model the queues along each corridor, the peak hour factor (PHF) was measured and applied to the analysis. The PHF is a measure of intensity of the peak 15 minutes in the peak hour; it is the peak hour volume divided by the peak 15-minute flow rate. Traffic operating conditions are presented as delay and level of service (LOS) at study intersections. Descriptions of level of service are shown in the table below.

**Table 1: Intersection Level of Service (LOS) Criteria**

| Level of Service | Description | Signalized Intersection Delay (s) | Unsignalized Intersection Delay (s) |
|---|---|---|---|
| A | Progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay. | < 10.0 | < 10.0 |
| B | Progression is good, cycle lengths are short, or both. More vehicles stop than with LOS A, causing higher levels of average delay. | > 10.0 to 20.0 | > 10.0 to 15.0 |
| C | Higher congestion may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, though many still pass through the intersection without stopping. | > 20.0 to 35.0 | > 15.0 to 25 |
| D | The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable. | > 35.0 to 55.0 | > 25.0 to 35.0 |
| E | This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. | > 55.0 to 80.0 | > 35.0 to 50.0 |

**Table 1: Intersection Level of Service (LOS) Criteria**

| Level of Service | Description | Signalized Intersection Delay (s) | Unsignalized Intersection Delay (s) |
|---|---|---|---|
| F | This level is considered unacceptable with oversaturation, which is when arrival flow rates exceed the capacity of the intersection. This level may also occur at high V/C ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to such delay levels. | > 80.0 | > 50.0 |

Source: *Highway Capacity Manual, 6th Edition*. Transportation Research Board, 2016.

# StreetScore+ Analysis

The pedestrian and cyclist experiences were quantified using StreetScore+, a tool developed by Fehr & Peers that reports a comfort index for biking and walking. StreetScore+ accounts for existing or proposed bicycle and pedestrian facilities of roadway segments. For cycling, StreetScore+ builds off the “Level of Traffic Stress” (LTS) methodology that describes the user tolerance along a given bikeway and includes the National Association of City Transportation Officials’ (NACTO) *Urban Bikeway Guide, 2nd Edition* methodology to document the comfort of separated bikeways. This approach is also applied for pedestrian StreetScore+ analyses, which is based on the NACTO *Urban Streets Design Guide*. The LTS methodology provides a “weakest link” approach to bicycle and pedestrian planning. A description of each StreetScore+ rating is shown in Table 2.

**Table 2: StreetScore+ Criteria**

| StreetScore+ | Description |
|---|---|
| 1 | Most children can tolerate StreetScore+ 1 and feel safe while bicycling. For pedestrians, Streetscore+ 1 indicates a highly pedestrian-friendly and easily navigable environment for people of all ages and abilities. |
| 2 | This is the highest level of stress that the adult bicyclists will tolerate while still feeling safe. For pedestrians, walking is generally comfortable, but parents may not feel comfortable letting their children walk alone. |
| 3 | Bicyclists who are considered “enthused and confident” but still prefer having their own dedicated space for riding will tolerate this level of stress and feel safe while cycling. For pedestrians, walking is uncomfortable but possible, with some barriers that make walking uninviting or uncomfortable. |
| 4 | For bicyclists, this is tolerated only by those characterized as “strong and fearless,” which comprises a small percentage of the population. These roadways have high speed limits, multiple travel lanes, limited or non-existent bike lanes and signage, and large distances to cross at intersections. For pedestrians, walking is very uncomfortable or even impossible. Streets have limited or no accommodation and may be unsafe for people walking. |

Source: *StreetScore+: Comfort and Level of Traffic Stress Scoring Methodology for Bicyclist and Pedestrians.* Fehr & Peers, 2016.

Factors influencing StreetScore+ results include:

- Number of travel lanes
- Speed of traffic
- Number of vehicles
- Presence, width, and separation of bike lanes
- Presence, width, and separation of sidewalks

# Collision Analysis

## Crash Database

In the summer of 2018, Fehr & Peers built a database for each of the five corridors using geocoded crash data for the years 2009 through 2017 from the Transportation Injury Mapping System (TIMS), managed by the Safe Transportation Research and Education Center (SafeTREC) at the University of California, Berkeley. Crash data include only those crashes that resulted in an injury and do not include crashes that resulted in property damage only. The crash data was retrieved from the TIMS system in June of 2018. At the time of retrieval, crash data for the years 2015, 2016 and 2017 were provisionally available and had not yet been finalized by SafeTREC.

Crashes were identified for each corridor if the TIMS geocoded location fell within 250 feet of the corridor centerline and if the study corridor was reported as either the primary street or cross street within the crash record. For each corridor, the number of crashes by mode (pedestrian, bicyclist, or vehicle-vehicle) is reported along with whether crashes resulted in a fatality or serious injury. This data is also reported for each intersection and midblock location. For each intersection location, a collision analysis sphere of influence was determined based on the size of the intersection and the length of turn lanes associated with the intersection. This identification process was performed for each intersection. The spheres of influence range from 150 feet to 250 feet on each approach. Collisions falling within the sphere of influence of two intersections were assigned based on the reported streets in the crash record. Any collisions located beyond the sphere of influence were either associated with the adjacent intersection or determined to be a midblock collision. A maximum of 250 feet was used for this project to limit the collision dataset for each location to that which would be acceptable under an HSIP funding application. These spheres of influence may be different than those ordinally used for analysis in some locations.

## Serious Injury Crashes

Serious injuries (also called severe injuries by the California Highway Patrol) obtained in a traffic crash can result in a number of catastrophic impacts to those involved, including permanent disability, lost productivity and wages, and ongoing healthcare costs. Serious injuries include:

- Broken or fractured bones
- Dislocated or distorted limbs
- Severe lacerations
- Severe burns

- Skull, spinal, chest or abdominal injuries
- Unconsciousness at or when taken from the collision scene

# Roadway and Contextual Data

Fehr & Peers collected additional data related to roadway and other contextual characteristics along each corridor. In most cases, original GIS data was provided by the City as part of the Vision Zero Action Plan analysis. In some cases, new data was collected through a survey of third-party maps. This data was then verified through field visits as part of the traffic operations analysis process. The roadway and contextual data displayed as part of the crash analysis includes:

- Number of lanes
- Posted speed
- Presence and type of bicycle facilities
- Presence and type of marked crosswalks
- Intersection configuration
- Intersection control type (including Pedestrian Hybrid Beacons)
- Bus stops
- Rail crossings
- Key institutional locations

# Crash Types

As part of the crash analysis along each corridor, Fehr & Peers identified key crash types. Crash types were determined based on data within the crash records themselves, and include the following categories:

- Primary violation category (e.g. unsafe speed, improper turning, wrong side of road, under the influence, signal or sign violation)
- Vehicle movement preceding collision (e.g. proceeding straight, left turns, right turns)
- Crash category (e.g. broadside, side swipe, rear end, head on)
- Day of week (e.g. weekend, weekday)
- Time of day (e.g. morning, daytime, nighttime)
- Time of year (e.g. winter)
- Location of pedestrian at time of collision (e.g. crossing in crosswalk, crossing not in crosswalk, in road)
- Age of victim (e.g. senior victims)
- Whether alcohol was involved

The reported crash types represent a sample of trends for each corridor, with each crash type occurring at least three times on the corridor but usually occurring much more often. These crash types represent only a sample and do not encompass all crash types occurring along a given corridor. If a crash type is unique to a corridor (i.e. the trend was not prevalent along the other corridors), it is included in corridor crash types list. Vehicle crash types highlight trends among all crashes along that corridor (predominantly vehicle-vehicle crashes, with no pedestrians or bicycles involved). Pedestrian crash types highlight trends among the crashes involving pedestrians. Bicycle crash types highlight trends among the crashes involving bicyclists. Crash types represent trends within the full set of crashes for each corridor but are also displayed for the intersections where a crash type occurs at least three times. Across all corridors, there is a predominant trend of crash types involving vehicles that are proceeding straight or stopped, unsafe speed violations, and rear end crashes.

# Public Outreach

In late 2018, community outreach events were held for each corridor to build community awareness about the Vision Zero Top Five Corridors study, present an overview of existing conditions and crash analytics along each corridor, and obtain input on people's experiences traveling along each corridor. These events comprised Phase 1 of the outreach program for this project.

Six pop-up events and two community workshops were held at locations near each corridor to engage community members who regularly travel along the corridor. Each event included display boards with technical information about the relevant corridor, which included key characteristics (e.g. roadway cross-sections, distance between crosswalks, etc.), crash analytics between 2009 and 2017, and corridor-wide crash types for each mode of transportation. During each outreach event, attendees were asked to review the project boards and share their experiences traveling along the corridor. A detailed summary of the Phase 1 outreach efforts is provided in Appendix A (*Community Outreach Summary Report – Phase 1*).

Table 3 lists each of the Phase 1 outreach events.

**Table 3: Phase 1 Outreach Events**

| Corridor | Event | Location | Date |
|---|---|---|---|
| Broadway/Stockton Boulevard (North) | Pop-up event at Fall Family Festival | Oak Park Community Center | October 25, 2018 |
| | Pop-up event | Broadway/Stockton Boulevard WB transit stop | November 7, 2018 |
| El Camino Avenue | Old North Sacramento/Dixieanne Community Association Meeting | 701 Dixieanne Avenue | November 10, 2018 |
| | Pop-up event | Grocery Outlet | December 4, 2018 |
| Florin Road | Community Workshop | Luther Burbank High School | November 15, 2018 |
| Marysville Boulevard | Mutual Assistance Harvest Festival | Robertson Community Center | October 27, 2018 |
| | Hagginwood Community Association Meeting | William J. Kinney Police Facility | December 4, 2018 |
| Stockton Boulevard (South) | Community Workshop | Peter Burnett Elementary School | November 5, 2018 |

Source: *Community Outreach Summary Report – Phase 1*. City of Sacramento, 2018.

# Broadway/Stockton Boulevard (North)

This segment is comprised of two roadways: Broadway between Martin Luther King Jr. Boulevard and Stockton Boulevard; and Stockton Boulevard between Broadway and 14th Avenue.

## Existing Conditions

Traffic counts were collected on this corridor on May 31, 2018. The observed AM peak hour occurred between 7:15 and 8:15 AM with a PHF of 0.87 and two percent heavy vehicle count. The observed PM peak hour occurred between 4:30 and 5:30 PM, with a 0.94 PHF and one percent heavy vehicle count. During both peak hours, at least five bicyclists traveled through and at least 16 pedestrians crossed at each study intersection on Broadway, and on Stockton Boulevard, at least 15 bicyclists traveled through and at least ten pedestrians crossed at each study intersection. The measured ADT of Broadway was 15,800 vehicles, and the measured ADT of Stockton Boulevard was 19,600.

Figure 7 and Figure 8 show the travel patterns on Broadway and Stockton Boulevard. Figure 9 and Figure 10 summarize existing travel characteristics for these corridors.

FIGURE 7

# BROADWAY TRAVEL PATTERNS

Thursday, May 31st, 2018. 7:15–8:15 AM & 4:30–5:30 PM

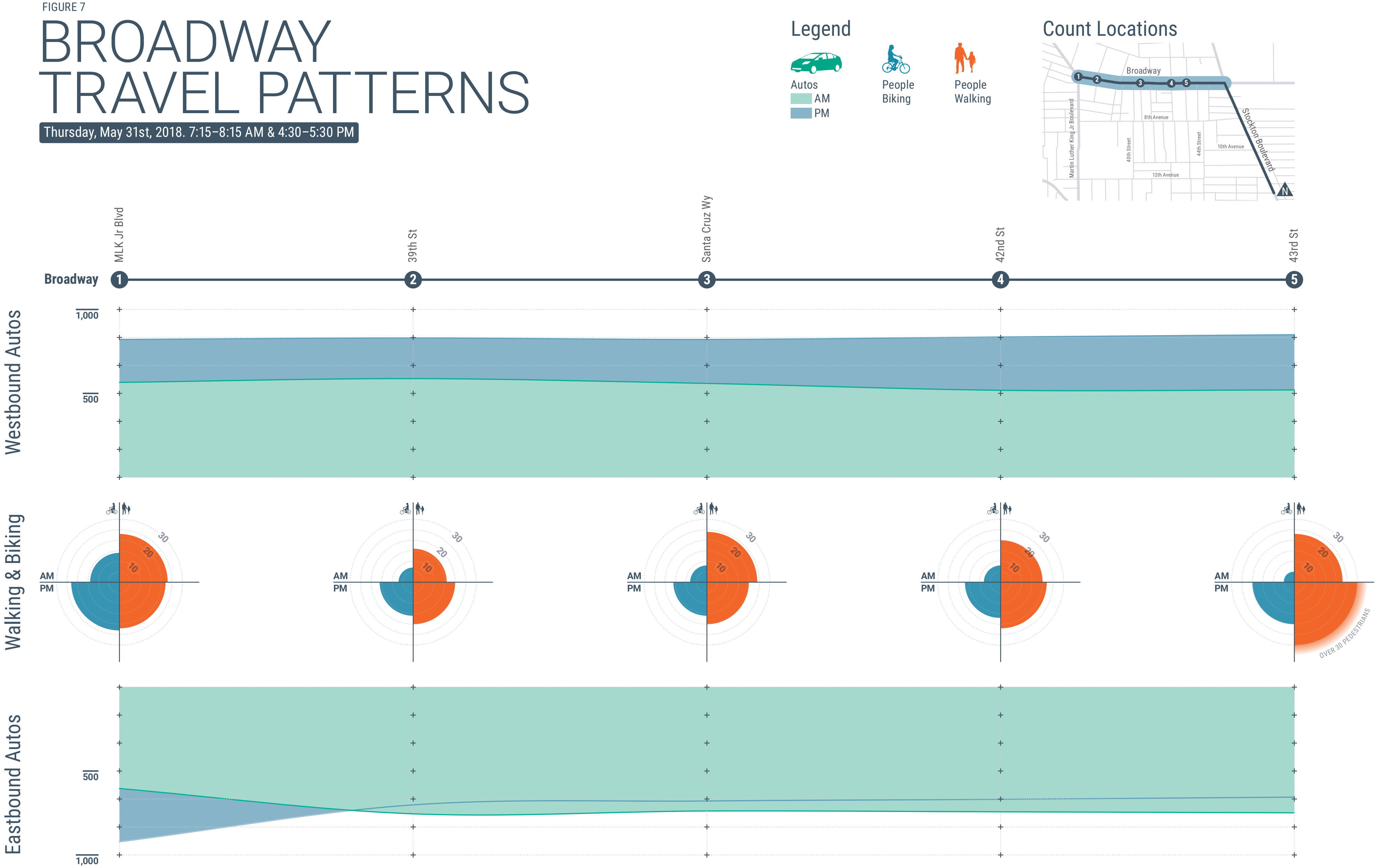


FIGURE 8

# STOCKTON BOULEVARD TRAVEL PATTERNS

Thursday, May 31st, 2018. 7:15–8:15 AM & 4:30–5:30 PM

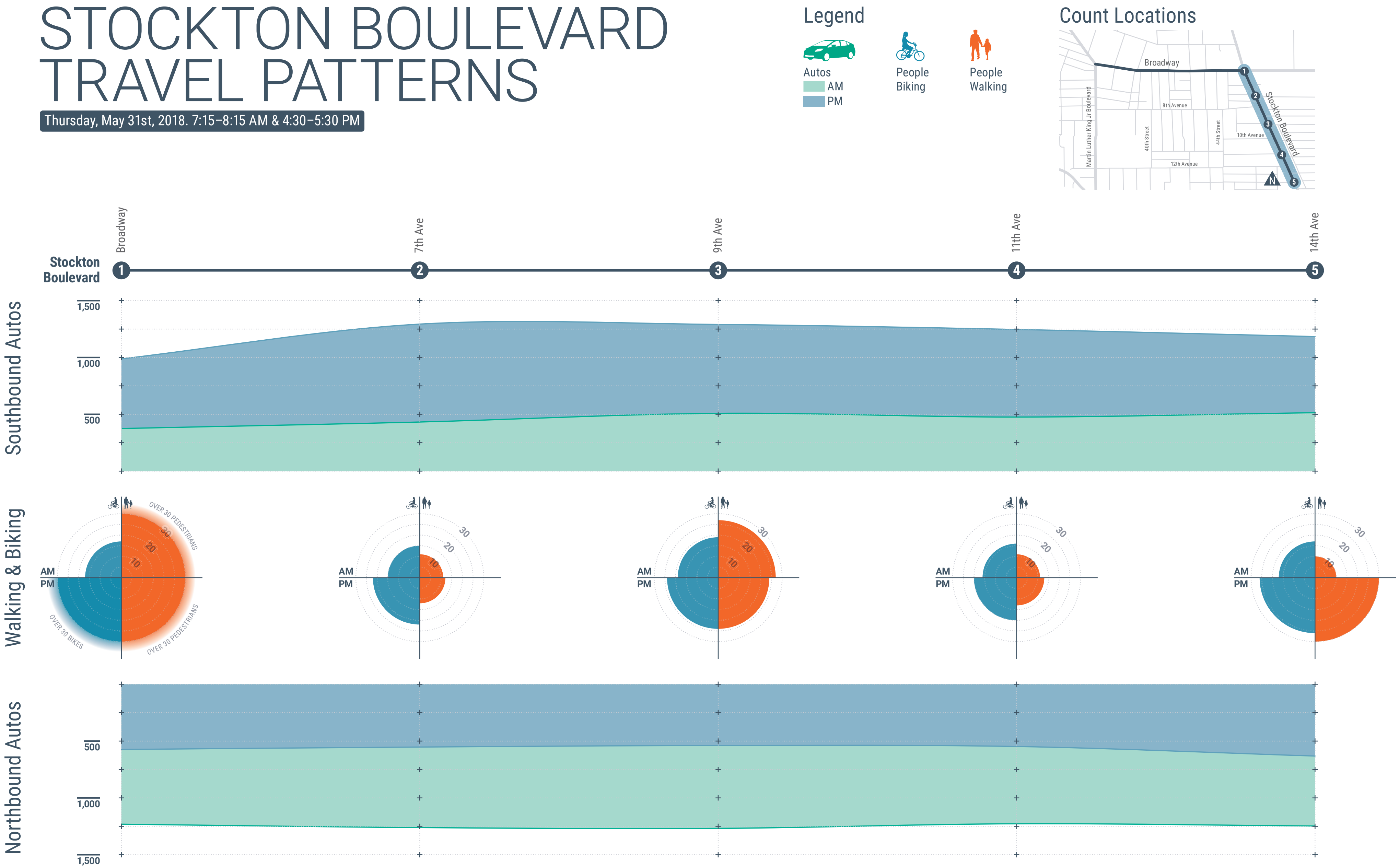


FIGURE 9

# BROADWAY - EXISTING CONDITIONS

## IN THE MAP

- On-Street Bicycle Lane
- xxx′ Distance Between Crosswalks

## KEY CHARACTERISTICS

SPEED LIMIT 30

- Average Daily Traffic Volume: 15,800
- Class II bicycle lanes on some of corridor
- Maximum distance between crosswalks: 930 ft between 39th Street & Santa Cruz Way
- 100% sidewalk coverage

## BROADWAY SAMPLE CROSS-SECTION

Four travel lanes with some left turn pockets.

Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

SACRT ROUTES COVERED:
**51, 206, 214**

*Daily ridership is the sum of weekday boardings and alightings.

FIGURE 10

# STOCKTON BOULEVARD - EXISTING CONDITIONS

## IN THE MAP

On-Street Bicycle Lane

xxx′ Distance Between Crosswalks

## KEY CHARACTERISTICS

SPEED LIMIT 35

- Average Daily Traffic Volume: 19,600
- Class II bicycle lanes along the entire corridor
- Maximum distance between crosswalks: 1,560 feet between Broadway and 2nd Avenue
- 100% sidewalk coverage

## STOCKTON BOULEVARD SAMPLE CROSS-SECTION

Four travel lanes plus raised median/center turn lane.

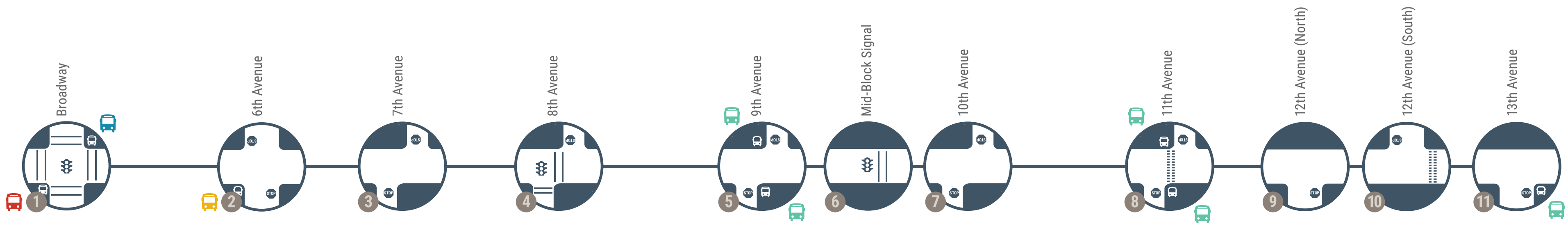
Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

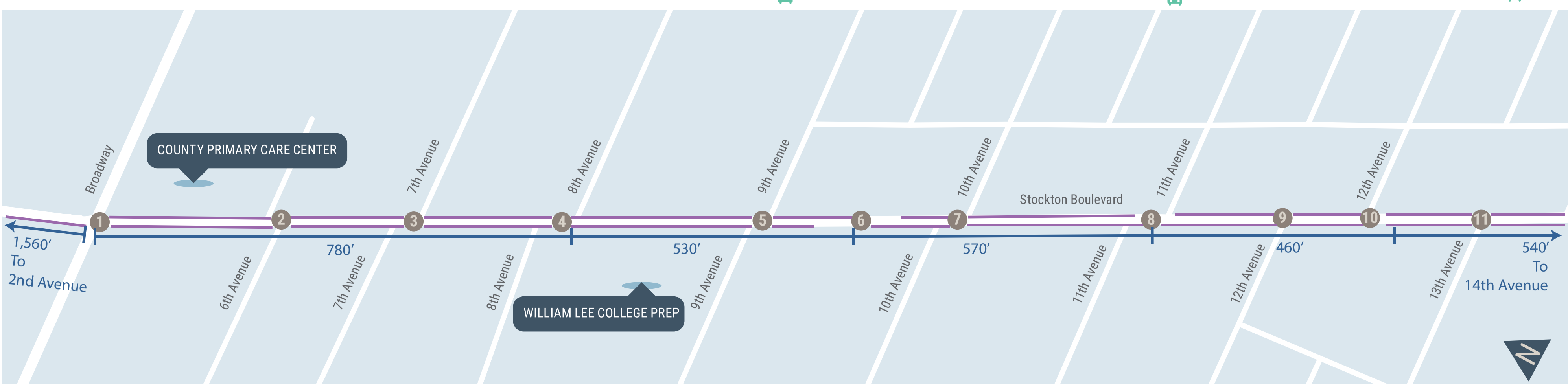
## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

SACRT ROUTES COVERED:
**51, 213**

*Daily ridership is the sum of weekday boardings and alightings.



# Vehicular Facilities

## Broadway

The segment of Broadway is comprised of four travel lanes with some left-turn pockets at key intersections. The posted speed limit is 30 miles per hour. For this segment of Broadway, the intersections are closely-spaced, and the legs of the Martin Luther King Jr. Boulevard/Broadway intersection are skewed (i.e., not at a right angle, 90 degrees). On-street parking is prohibited along the corridor, except for a loading zone by the Arbors apartments.

The *Sacramento General Plan 2035* classifies Broadway as an arterial. Policy M.1.2.2 dictates that the City will strive to operate this segment at LOS D or better for vehicles during typical weekday conditions, including the AM and PM peak hour.

Table 4 shows the intersection operations along Broadway during peak hours. All intersections operate acceptably according to Policy M.1.2.2 of the *Sacramento General Plan 2035*. The highest delays to vehicles along this segment occur during the AM peak hour at the Stockton Boulevard/Broadway intersection. Appendix B includes detailed calculations of these results.

**Table 4: Peak Hour Intersection Operations – Broadway**

| Intersection | Traffic Control[1] | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay[2] (s) | LOS[3] | Delay[2] (s) | LOS[3] |
| Martin Luther King Jr. Boulevard/Broadway | Signal | 13.7 | B | 14.5 | B |
| 39th Street/Broadway | SSSC | 2.1 (20.2) (NB TH) | A (C) | 2.8 (6.1) (EB LT) | A (A) |
| Santa Cruz Way/Broadway | SSSC | 2.5 (18.1) (SB LT) | A (C) | 0.8 (7.1) (EB LT) | A (A) |
| 42nd Street/Broadway | Signal | 5.2 | A | 4.3 | A |
| 43rd Street/Broadway | SSSC | 1.4 (14.8) (SB TH) | A (B) | 1.7 (9.1) (EB LT) | A (A) |
| Stockton Boulevard/Broadway | Signal | 41.1 | D | 33.6 | C |

Notes:
1. Signal = traffic signal-controlled intersection; SSSC = side-street stop-controlled intersection
2. Average control delay for signalized intersections is the weighted average for all movements. For SSSC intersections, the delay and LOS for the highest delay movement is shown in parentheses.
3. LOS = level of service; calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).

Source: Fehr & Peers, 2018.

## Stockton Boulevard

The segment of Stockton Boulevard is comprised of four travel lanes plus a median/center left-turn lane. The posted speed limit is 35 miles per hour. Many intersections are offset (i.e. the east and west legs are not aligned) and many intersections operate as side-street stop-controlled, except for the segment's terminal intersections at the Broadway/14th Avenue and the Stockton Boulevard/8th Avenue (East) intersections, which are signalized. On-street parallel parking is prohibited along this segment.

This segment is characterized as an arterial by the *Sacramento General Plan 2035*. The LOS D standard of Policy M.1.2.2 applies to this segment. Table 5 shows that all intersections on this segment operate acceptably during both the AM and PM peak hours except for Stockton Boulevard/14th Avenue which operates at LOS E during both peak hours. Appendix B includes detailed calculations of these results.

**Table 5: Peak Hour Intersection Operations – Stockton Boulevard (North)**

| Intersection | Traffic Control[1] | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay[2] (s) | LOS[3] | Delay[2] (s) | LOS[3] |
| Stockton Boulevard/Broadway | Signal | 41.1 | D | 33.6 | C |
| Stockton Boulevard/7th Avenue | SSSC | 6.7 (39.5) (WB RT) | A (E) | 0.8 (13.6) (EB LT) | A (B) |
| Stockton Boulevard/9th Avenue | SSSC | 2.3 (26.4) (WB TH) | A (C) | 1.1 (21.9) (EB LT) | A (C) |
| Stockton Boulevard/11th Avenue (West) | SSSC | 1.1 (22.8) (WB LT) | A (C) | 1.7 (25.4) (EB LT) | A (D) |
| Stockton Boulevard/14th Avenue | Signal | **62.3** | **E** | **60.1** | **E** |

Notes:
1. Signal = traffic signal-controlled intersection; SSSC = side-street stop-controlled intersection
2. Average control delay for signalized intersections is the weighted average for all movements. For SSSC intersections, the delay and LOS for the highest delay movement is shown in parentheses.
3. LOS = level of service; calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).

**Bold** text indicates unacceptable operations.
Source: Fehr & Peers, 2018.

# Transit Facilities

Line 51 of Sacramento Regional Transit (RT) operates on Broadway and Stockton Boulevard with 15-minute headways for its weekday operations. This line connects Florin Towne Centre with the Sacramento Valley Station. On weekdays, it operates between 5:30 AM to 10:30 PM. On weekends and holidays, the line operates with 30-minute headways between 6:00 AM and 11:00 PM on Saturdays and between 6:00 AM and 9:30 PM on Sundays and holidays. Line 51 has the highest ridership of any bus route in the RT system.

Sacramento Regional Transit also operates two school bus lines on Broadway and one school bus line on Stockton Boulevard, each of which make one trip to school in the morning and one trip from school in the afternoon. Line 206 provides service from the Stockton Boulevard/Broadway intersection to California Middle School, and Line 214 provides service from the T Street/34th Street intersection to Kit Carson Middle School. Both routes serve stops on Broadway. Line 213 serves stops on Stockton Boulevard between West Campus High School and Kit Carson Middle School. The school bus lines do not provide weekend or holiday service.

Most bus stops along Broadway lack passenger amenities and are marked by signage only. There is a bench for the eastbound stop at the Broadway/44th Street intersection, and a transit shelter for the westbound stop at Stockton Boulevard/Broadway.

Many bus stops on this segment of Stockton Boulevard have transit shelters including the southbound stop at Stockton Boulevard/6th Avenue, the southbound stop at Stockton Boulevard/9th Avenue, the southbound stop at Stockton Boulevard/11th Avenue, the southbound stop at Stockton Boulevard/14th Avenue, and the northbound stop at Stockton Boulevard/14th Avenue.

# Pedestrian Facilities

## Broadway

The Broadway segment of this corridor has sidewalks that are approximately 6.5 feet wide on both sides of the street. The sidewalk is mostly adjacent to the road, except for a landscape buffer on the south side between Martin Luther King Jr. Boulevard and east of 39th Street. Lighting is provided by roadway overhead light poles.

There are marked crosswalks across Broadway at all signalized intersections along this segment. The northwest leg of Martin Luther King Jr. Boulevard/Broadway intersection does not have a striped crosswalk or pedestrian phase. Additionally, there are crosswalks on the west leg of the 39th Street/Broadway intersection, on the west leg of the Santa Cruz Way/Broadway intersection, and on the east leg of the 44th Street/Broadway intersection, all of which operate with side-street stop control. There are also pedestrian-hybrid beacons at these crosswalks, which stop vehicular traffic when activated by a pedestrian push-button. All crosswalks on this section of the corridor have basic markings striped with solid lines. The maximum distance between crosswalks is 930 feet between 39th Street and Santa Cruz Way. During field observations, it was noted that frequent jaywalking occurs on Broadway, particularly mid-block between San Diego Way and Stockton Boulevard.

## Stockton Boulevard

There are sidewalks on both sides of the street of this segment that are typically 5 feet in width. Some segments have landscaped buffers, while in others the sidewalk is adjacent to the roadway. Lighting is provided by overhead traffic lighting.

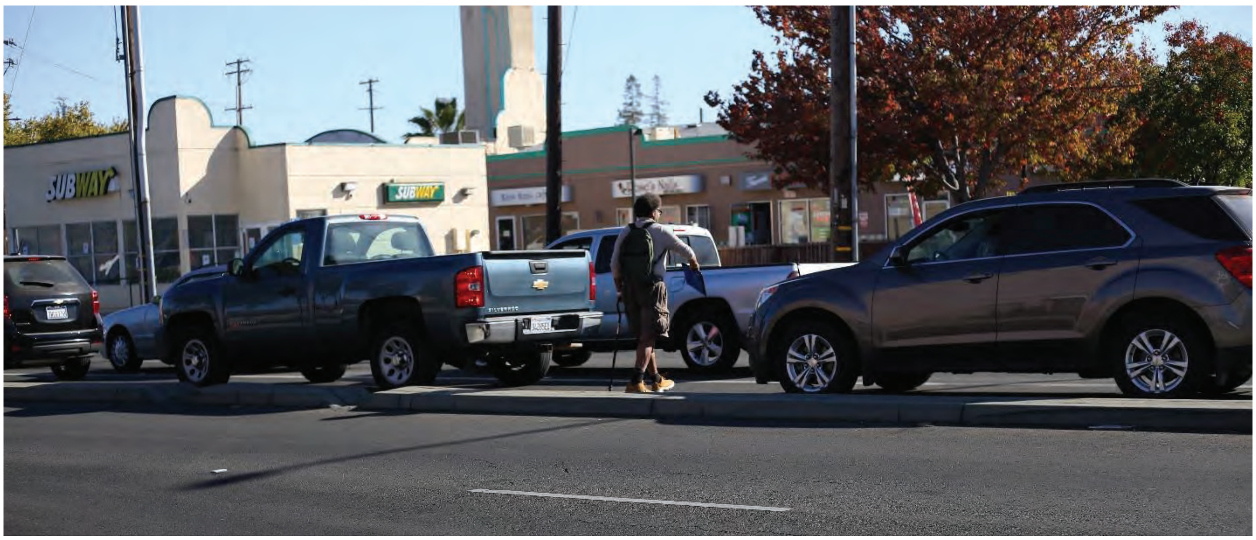
There are marked crosswalks across Stockton Boulevard at the signalized intersections of this segment. The north legs of the Stockton Boulevard/8th Avenue (East) and Stockton Boulevard/14th Avenue intersections do not have crosswalks or pedestrian phases. Additionally, there is a marked crosswalk at the Stockton Boulevard/11th Avenue intersection, which is an offset (i.e. east and west legs are not aligned) side-street stop-controlled intersection. The crosswalk is on Stockton Boulevard between the east and west legs of 11th Avenue.

The maximum distance between marked crosswalks along the segment is 780 feet between the south leg of Broadway and 8th Avenue. Though outside the limits of the study corridor, the distance between the north leg of the Stockton Boulevard/Broadway intersection (the northern terminus of this corridor) and the nearest crosswalk to the north at 2nd Avenue is 1,260 feet.

A marked mid-block pedestrian crossing is located between 9th Avenue and 10th Avenue, where a full signal controls northbound and southbound traffic when the pedestrian button is pushed to activate a pedestrian crossing phase.

All crosswalks along this section of the corridor feature basic striping treatments with solid lines, except for the crosswalk at Stockton Boulevard/11th Avenue, which has a “triple-four” configuration.

### Figure 11: Stockton Boulevard



# Bicycle Facilities

**Figure 12: Stockton Boulevard/Broadway Intersection**


## Broadway

Class II bike lanes, 5 feet wide, are located along portions of the Broadway corridor, with gaps on the north side between west of La Solidad Way and 43rd Street and on the south side between La Solidad Way and 44th Street. Based on field observations, the bike lanes are typically not blocked by obstructions such as parked vehicles, trash cans, leaf piles, etc.

## Stockton Boulevard

There are Class II bike lanes on this segment of Stockton Boulevard, typically between 5 and 6 feet in width, along most of the corridor which experience minimal blockage. There are gaps in the bike lanes on the east side of Stockton Boulevard north of Broadway, and on both sides of Stockton Boulevard around the midblock signal between 9th Avenue and 10th Avenue.

# StreetScore+

## Broadway

The StreetScore+ results for the Broadway segment are shown in Table 6. Appendix B of this report includes detailed calculations of these results. Many segments with Class II bike lanes have a bicycle score of 3 because there are five travel lanes, meaning that “enthused and confident” bicyclist will tolerate the level of stress of this segment. Segments without the Class II bike lanes typically have a rating of 4 because of high speeds, meaning that only “strong and fearless” cyclists will tolerate traveling on the segment.

Frequent driveway curb cuts and no landscaping buffer results in score of 3 for pedestrians, which means that walking is uncomfortable but possible.

**Table 6: StreetScore+ Results – Broadway**

| Segment | Direction | Bicycle StreetScore+ | Pedestrian StreetScore+ |
|---|---|---|---|
| Broadway between 38th Street and Martin Luther King Jr. Boulevard | EB | 2 | 3 |
| | WB | 2 | 3 |
| Broadway between Martin Luther King Jr. Boulevard and 39th Street | EB | 3 | 2 |
| | WB | 3 | 3 |
| Broadway between 39th Street and Santa Cruz Way | EB | 4 | 3 |
| | WB | 4 | 3 |
| Broadway between Santa Cruz Way and 42nd Street | EB | 4 | 3 |
| | WB | 4 | 3 |
| Broadway between 42nd Street and 43rd Street | EB | 4 | 3 |
| | WB | 4 | 3 |
| Broadway between 43rd Street and Stockton Boulevard | EB | 4 | 3 |
| | WB | 3 | 3 |
| Broadway between Stockton Boulevard and 49th Street | EB | 4 | 3 |
| | WB | 3 | 3 |

StreetScore+ ratings range from 1 through 4 with 1 representing low stress bicycle and pedestrian travel conditions and 4 representing high stress bicycle and pedestrian travel conditions.
Source: Fehr & Peers, 2018.

## Stockton Boulevard

Table 9 shows the StreetScore+ results for this segment of Stockton Boulevard. Appendix B of this report includes detailed calculations of these results.

Because of the 40-mile-per-hour posted speed limit, most segments of this corridor have a bicycle score of 3, meaning enthusiastic cyclists will tolerate this level of stress. For the segments of Stockton Boulevard adjacent to Broadway, there is either no bike lane or a five-foot bike lane, resulting in a rating of 4, which indicates that likely only “strong and fearless” bicyclists will feel comfortable traveling on the segment.

The segments also have a pedestrian score of 3 because the sidewalk is less than six feet wide and crosswalk spacing (greater than 400 feet). Additionally, many segments also do not have a landscape buffer and driveway curb cuts in the sidewalk. A rating of 3 indicates that walking is uncomfortable but possible.

**Table 7: StreetScore+ Results – Stockton Boulevard (North)**

| Segment | Direction | Bicycle StreetScore+ | Pedestrian StreetScore+ |
|---|---|---|---|
| Stockton Boulevard between 4th Avenue and Broadway | NB | 4 | 3 |
| | SB | 4 | 3 |
| Stockton Boulevard between Broadway and 7th Avenue | NB | 4 | 3 |
| | SB | 4 | 3 |
| Stockton Boulevard between 7th Avenue and 9th Avenue | NB | 3 | 3 |
| | SB | 3 | 3 |
| Stockton Boulevard between 9th Avenue and 11th Avenue | NB | 3 | 3 |
| | SB | 3 | 3 |
| Stockton Boulevard between 11th Avenue and 14th Avenue | NB | 3 | 3 |
| | SB | 3 | 3 |
| Stockton Boulevard between 14th Avenue and 15th Avenue | NB | 3 | 3 |
| | SB | 3 | 3 |

StreetScore+ ratings range from 1 through 4 with 1 representing low stress bicycle and pedestrian travel conditions and 4 representing high stress bicycle and pedestrian travel conditions.
Source: Fehr & Peers, 2018.

# Collision Analysis

Figure 14 and Figure 15 show the crashes on Broadway and summarize the crash types. Figure 16 and Figure 17 show the crashes on Stockton Boulevard and summarize the crash types. These figures also served as display boards at the outreach meetings for this corridor.

## Broadway

Along the Broadway section, the most crashes occurred at the Martin Luther King Jr. Boulevard and San Jose Way/San Rafael Court intersections (ten crashes at each location). The most KSI crashes occurred at the 39th Street intersection (two vehicle and one pedestrian). Pedestrian KSI crashes also occurred at 40th Street and Santa Cruz Way. One bicycle KSI crash occurred at San Diego Way.

Crashes involving a vehicle proceeding straight or stopped, unsafe speed violations, and rear end crashes were common along all five corridors, and Broadway is no exception. Other common crash types include:

- Vehicle left-turns (Martin Luther King Jr. Boulevard, San Jose Way/San Rafael Court, and 42nd Street)
- Sideswipe crashes, including those involving a bicyclist (42nd Street)
- Broadside crashes (San Jose Way/San Rafael Court)

# Stockton Boulevard

Along the Stockton section, the most crashes occurred at the Stockton Boulevard/Broadway intersection (34 crashes). There were four KSI crashes at this location, including two pedestrian and one bicyclist crash. Another pedestrian KSI crash occurred at 6th Avenue and a second bicycle KSI crash occurred at 11th Avenue.

Crashes involving a vehicle proceeding straight or stopped, unsafe speed violations, and rear end crashes were again common along this segment of Stockton Boulevard. Because most crashes along this corridor occur at the Broadway intersection, that location largely determines the other common crash types, including:

- Vehicle left turns
- Broadside crashes, including those involving bicyclists
- Pedestrian hit while crossing in a crosswalk
- Bicycle crashes involving right-turning vehicles
- Bicycle crashes occurring before noon

**Figure 13: Stockton Boulevard**

# Feedback

Many of the comments received at outreach meetings for the Broadway/Stockton Boulevard corridor mentioned speeding, pedestrian crossings, enforcement, and bicycle safety. These comments are detailed in the *Community Outreach Report – Phase 1*, which is included in Appendix A.

FIGURE 14

# BROADWAY CRASHES

## CORRIDOR CRASH SUMMARY (2009-2017)

| | Vehicle | Pedestrian | Bicycle |
|---|---|---|---|
| ALL INJURY CRASHES | 38 | 8 | 11 |
| FATAL AND SEVERE CRASHES | 4 | 3 | 1 |

## KEY CHARACTERISTICS

SPEED LIMIT 30

Four travel lanes with some left turn pockets.

Class II bicycle lanes along short portions of the corridor.

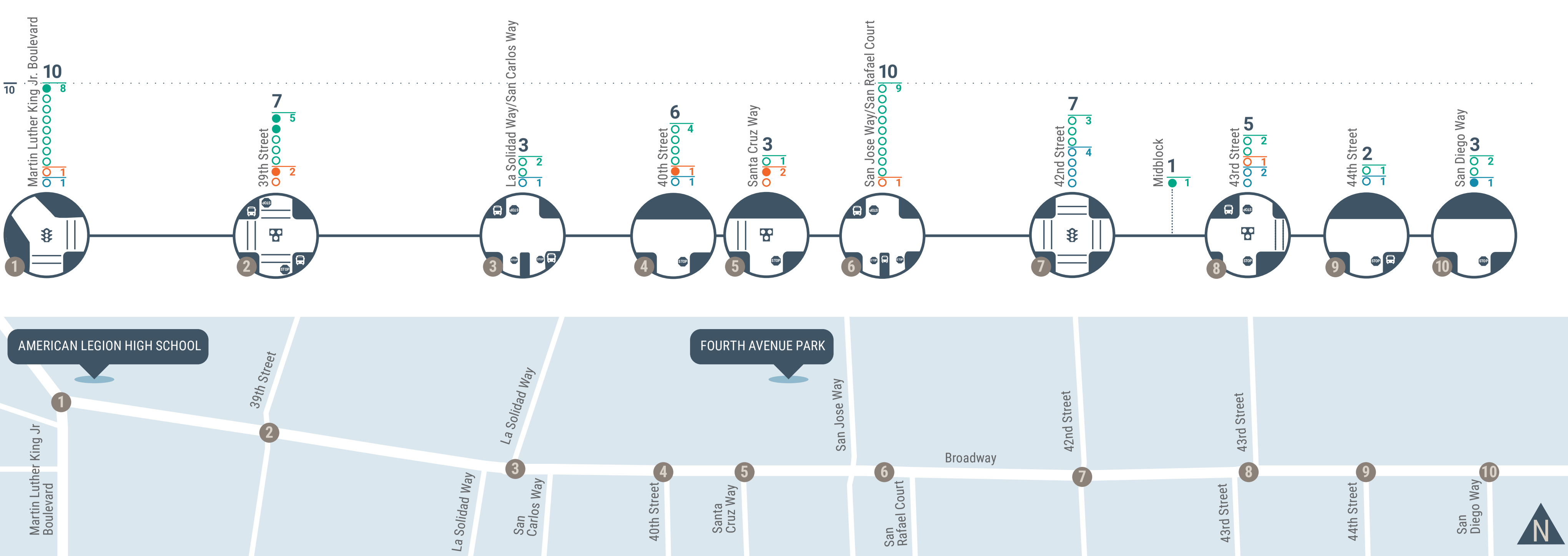


FIGURE 15

# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed

"Unsafe Speed" was the most common violation, cited in 28% of all crashes.

### Proceeding Straight

More than 2/3 of drivers were proceeding straight or stopped at the time of the crash.

### Sideswipe

Sideswipe was the second most common crash type - 23% of all crashes.

### Rear End

Rear End was the most common crash type - 25% of all crashes.

### Left Turns

Nearly 2/3 of drivers who were turning at the time of the crash were making a left turn.

### Broadside

Nearly 20% of all crashes were broadside, also called T-Bone.

## PEDESTRIAN

### Not in Crosswalk

Half of pedestrians hit were crossing outside of a crosswalk at the time of the crash.

### Weekend

Nearly 2/3 of pedestrian crashes occurred on Friday or Saturday.

### Daytime

Nearly 2/3 of pedestrian crashes occurred between 6 AM and 6 PM.

## BICYCLE

### Sideswipe

45% of bicycle crashes were sideswipe.

### Improper Turning

"Improper Turning" was cited as the primary violation in nearly half of bike crashes.

1 Numbers that are turned on represent a location where crash type has occurred at least three times.

FIGURE 16

# STOCKTON BOULEVARD CRASHES


## CORRIDOR CRASH SUMMARY (2009-2017)

| | Vehicle | Pedestrian | Bicycle |
|---|---|---|---|
| ALL INJURY CRASHES | 47 | 5 | 13 |
| FATAL AND SEVERE CRASHES | 2 | 3 | 2 |

## KEY CHARACTERISTICS

SPEED LIMIT 35

Four travel lanes plus raised median/center turn lane.

Class II bicycle lanes along entire corridor.

FIGURE 17

# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed

"Unsafe Speed" was the primary violation cited in 23% of all crashes.

### Proceeding Straight

More than 60% of drivers were proceeding straight or stopped at the time of the crash.

### Broadside

40% of all crashes were broadside, also called T-Bone.

### Rear End

Rear End was the second most common crash type - 20% of all crashes.

### Left Turns

More than 70% of drivers who were turning at the time of the crash were making a left turn.

## PEDESTRIAN

### Crossing in Crosswalk

60% of pedestrians hit by drivers were crossing in a crosswalk at the time of the crash.

### Senior Victims

60% of pedestrian victims were age 60 or older.

## BICYCLE

### Broadside

More than 60% of bicycle crashes were broadside, also called T-Bone.

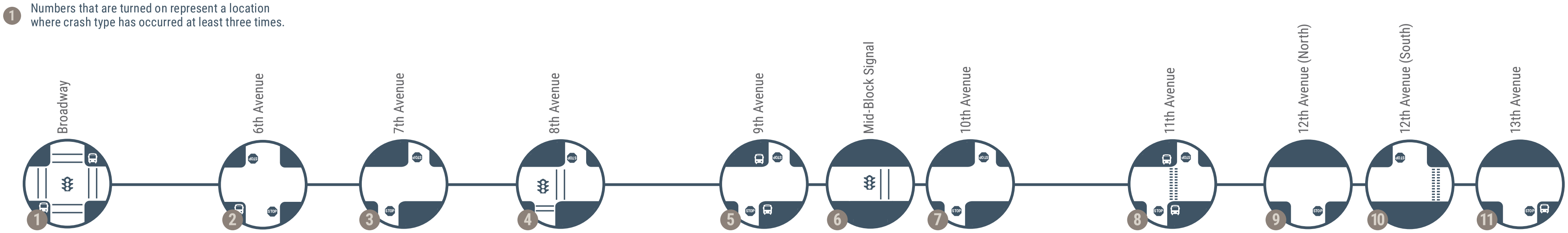
### Morning

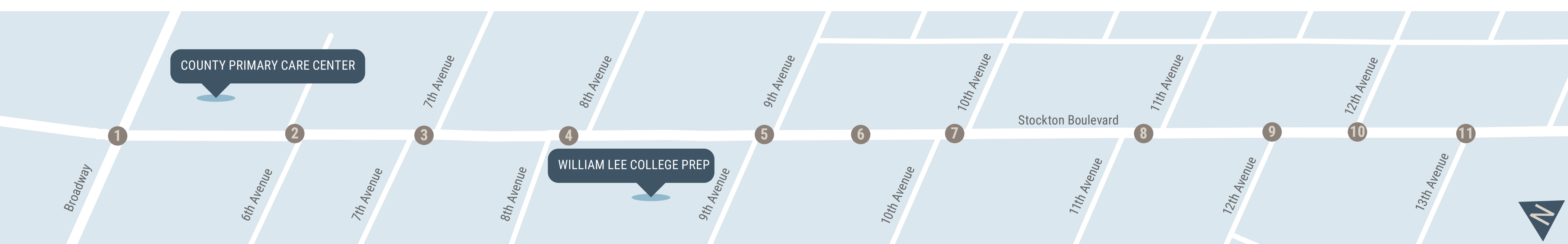
More than 60% of bicycle crashes occurred before noon.

### Right Turns

In nearly half of bike crashes, the driver was making a right turn.

1 Numbers that are turned on represent a location where crash type has occurred at least three times.



# El Camino Avenue

## Existing Conditions

The Top Five segment of El Camino Avenue is located between the paved crossing for Steelhead Creek trail and Del Paso Boulevard. The intersection and roadway counts for this segment were collected May 24, 2018. The observed AM peak hour occurred between 7:30 and 8:30 am with PHF of 0.91 and heavy vehicle percentage of two. The PM peak hour occurred from 5:00 to 6:00 PM with a PHF of 0.97 and heavy vehicle percentage of one. During the peak hours, there was a minimum of two bicyclists traveling through each study intersection and three pedestrians crossing at each study intersection on the corridor. The observed ADT on El Camino Avenue is 13,500 vehicles.

The travel patterns are shown in Figure 18. Figure 19 summarizes the existing conditions for this corridor.

### Vehicular Facilities

This segment has two travel lanes with a posted speed limit of 30 miles per hour. The City of Sacramento's General Plan 2035 classifies this segment as an arterial, and Policy M1.2.2 exempts this road from the LOS D standard that is applied to most roadways in the City. Instead, LOS E is allowed because expansion of the roadway would cause undesirable impacts or conflict with other community values.

There are two five-legged intersections on this segment, an unsignalized side-street stop-controlled intersection at El Camino Avenue/Altos Avenue/Hawthorne Avenue, and a signalized intersection at El Camino Avenue/Del Paso Boulevard/Beaumont Street. The south leg of the El Camino Avenue/Altos Avenue/Hawthorne Avenue is not paved and carries minimal volume. Beaumont Street provides one-way travel in the southbound direction from El Camino Avenue/Del Paso Boulevard, and therefore is an approach with receiving lanes only.

Parking is prohibited for the entire segment of El Camino Avenue. The land use on this street is primarily residential (single-family dwelling units), and vehicles must park in garages or on driveways.

FIGURE 18

# EL CAMINO AVENUE TRAVEL PATTERNS

Thursday, May 24th, 2018. 7:30–8:30 AM & 5:00–6:00 PM

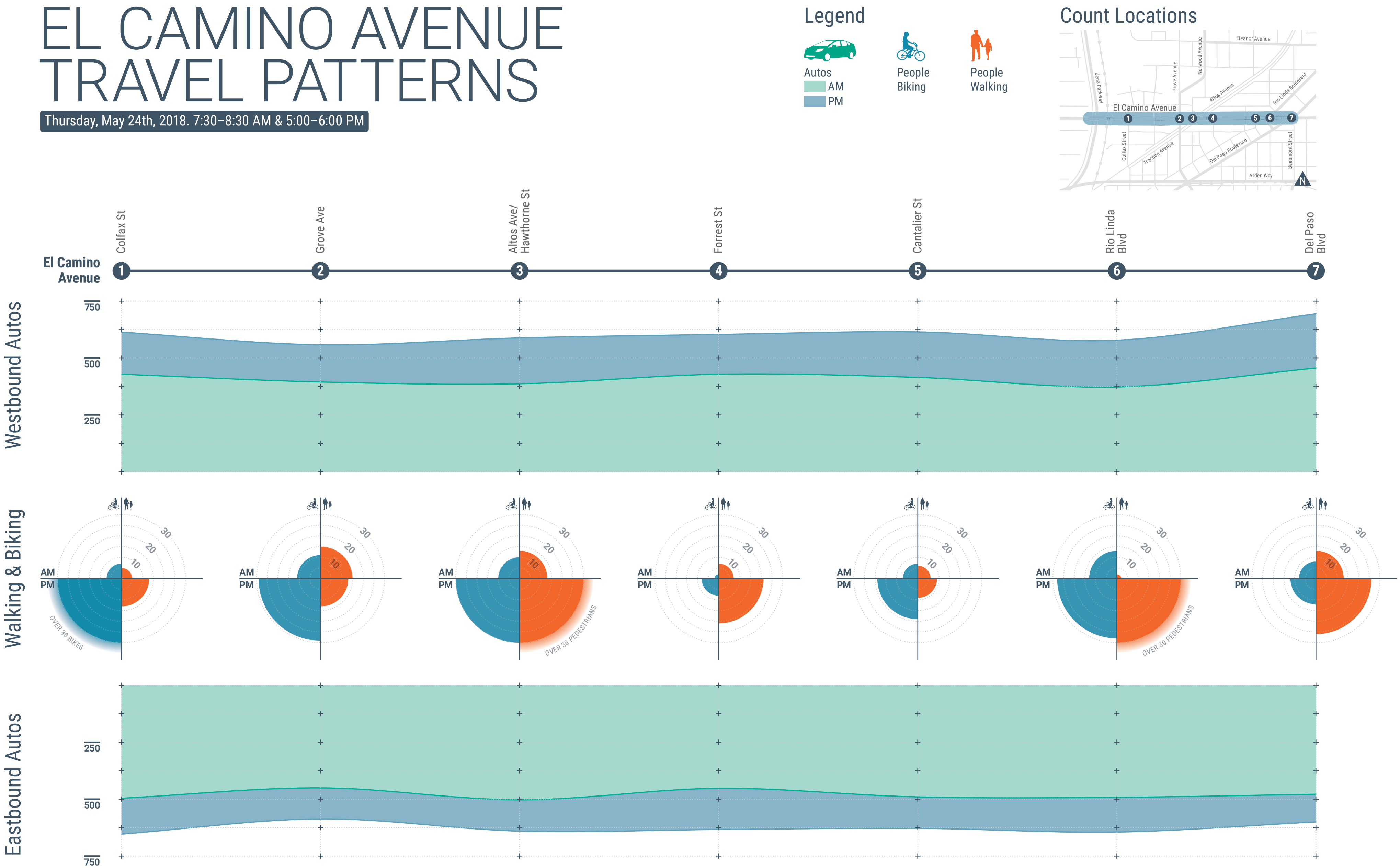


FIGURE 19

# EL CAMINO AVENUE - EXISTING CONDITIONS

### IN THE MAP

- On-Street Bicycle Lane
- Multi-Use Path
- xxx′ Distance Between Crosswalks
- Sidewalk Gap

### KEY CHARACTERISTICS

SPEED LIMIT 30

- Average Daily Traffic Volume: 13,500
- Class II bicycle lanes along most of the corridor.
- Maximum distance between crosswalks: 2,100 ft between American Ave & Colfax Ave
- 97% sidewalk coverage.

### EL CAMINO AVENUE SAMPLE CROSS-SECTION

One travel lane in each direction.

Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

### DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

SACRT ROUTES COVERED:
**15, 88**

*Daily ridership is the sum of weekday boardings and alightings.

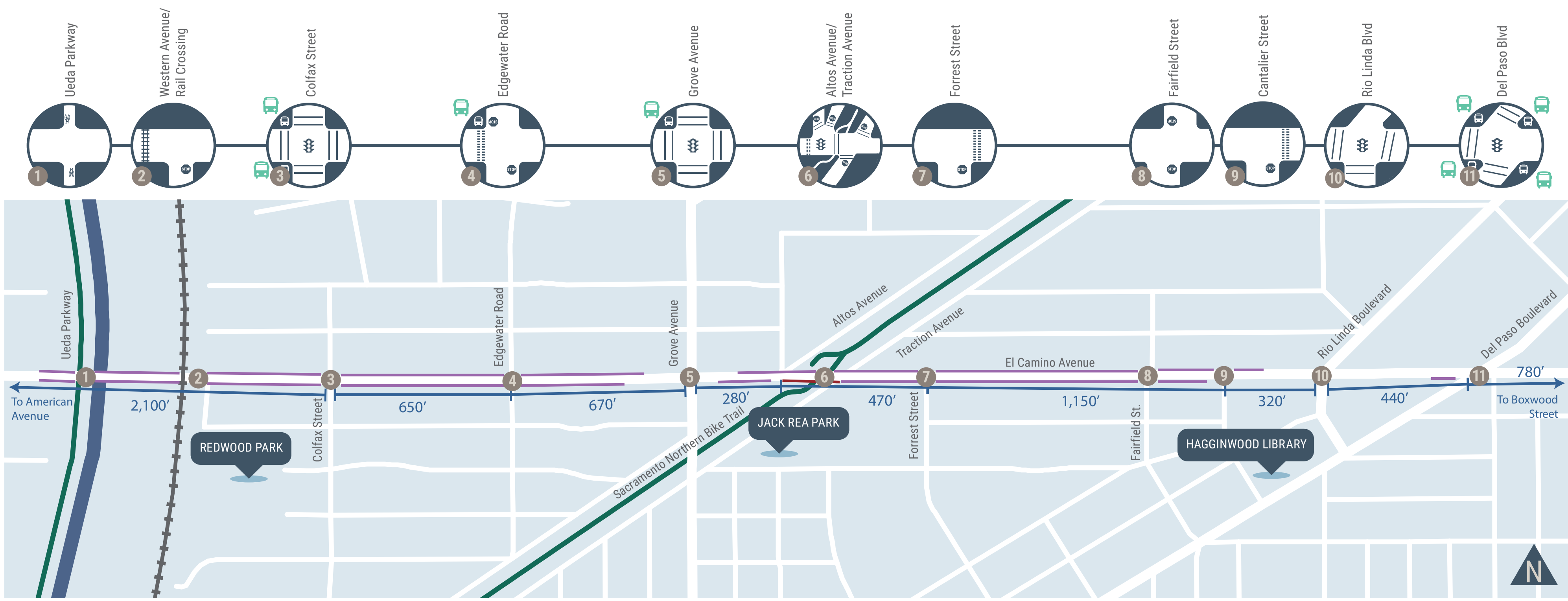


Table 8 summarizes the SimTraffic operations analysis results. Appendix B contains detailed calculations of these results.

### Table 8: Peak Hour Intersection Operations – El Camino Avenue

| Intersection | Traffic Control[1] | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay[2] (s) | LOS[3] | Delay[2] (s) | LOS[3] |
| Colfax Street/El Camino Avenue | Signal | 3.7 | A | 6.7 | A |
| Grove Avenue/El Camino Avenue | Signal | 24.2 | C | 56.5 | E |
| Altos Avenue/El Camino Avenue/Hawthorne Avenue | SSSC | 6.8 (39.9) (SW LT) | A (E) | 28.2 (**77.1**) (SW RT) | D (**F**) |
| Forrest Street/El Camino Avenue | SSSC | 1.4 (4.9) (WB LT) | A (A) | 6.3 (45.7) (NB LT) | A (E) |
| Cantalier Street/El Camino Avenue | SSSC | 1.0 (4.1) (NB RT) | A (A) | 1.8 (9.5) (NB LT) | A (A) |
| Rio Linda Boulevard/El Camino Avenue | Signal | 6.8 | A | 10.8 | B |
| Del Paso Boulevard/Beaumont Street/El Camino Avenue | Signal | 25.5 | C | 36.7 | D |

Notes:

1. Signal = traffic signal-controlled intersection; SSSC = side-street stop-controlled intersection
2. Average control delay for signalized intersections is the weighted average for all movements. For SSSC intersections, the delay and LOS for the highest delay movement is shown in parentheses.
3. LOS = level of service; calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).

**Bold** text indicates unacceptable operations.
Source: Fehr & Peers, 2018.

As shown in Table 8, the overall delays and LOS for all intersections are acceptable during peak hour conditions. However, the El Camino Avenue/Grove Avenue intersection operations have substantial queue spillback in both the eastbound and westbound direction during the peak hour. The westbound queue extends to between Forrest Street and Cantalier Street and results in long delays at the side street movements of Altos Avenue/Hawthorne Avenue and Forrest Street.

**Figure 20: Del Paso Boulevard/Beaumont Street/El Camino Avenue Intersection**

# Transit Facilities

Sacramento Regional Transit's Line 88 operates on the west side of this segment of El Camino Avenue between the Steelhead Creek trail crossing and Grove Avenue. This line serves the Arden/Del Paso area and downtown Sacramento and operates from 5:30 AM to 9:00 PM on weekdays with hour-long headways. On Saturdays, the line operates from 6:00 AM to 9:30 PM and on Sundays and holidays it operates from 8:00 AM to 9:00 PM. The stops for this line on this segment are marked with signage only and do not have transit shelters.

Additionally, Line 15 operates on Del Paso Boulevard with stops at the Del Paso Boulevard/El Camino Avenue intersection in both directions.

# Pedestrian Facilities

For most of the segment, there are five-foot sidewalks on both sides of the street with a landscape buffer. There is a gap in the sidewalk on the south side of the road between Altos Avenue and Traction Avenue, and there is no landscape buffer between Rio Linda Boulevard and Del Paso Boulevard. Lighting is provided by overhead roadway lighting for the entire segment and pedestrian-scale lighting exists on portions of the segment.

Crosswalks across El Camino Avenue are striped at all signalized intersections along the corridor. There is no crosswalk on the east leg of the El Camino Avenue/Del Paso Boulevard/Beaumont Street intersection. It should be noted that frequent jaywalking occurred at this location during field observations. Striped crosswalks also exist at a few side-street stop-controlled intersections: Edgewater Road, Altos Avenue/Hawthorne Avenue, Forrest Street, and Cantalier Street. The maximum crossing distance within the segment is 1,150 feet between Forrest Street and Cantalier Street. Beyond the extents of this segment, the distance west of Colfax Street (the westernmost marked crosswalk on the study corridor) to the next nearest crossing is 2,100 feet at American Avenue.

El Camino Avenue intersects with two separated, multi-use paths. The westernmost intersection of the segment is the El Camino Avenue/Steelhead Creek trail intersection. Additionally, El Camino Avenue intersects with the Sacramento Northern Bike Trail between the intersections at Altos Avenue/Hawthorne Avenue and Traction Avenue. This intersection has a paved crossing with a traffic signal that stops eastbound and westbound traffic when a cyclist or pedestrian activates the crossing phase.

Most crosswalks on this corridor feature basic markings with solid lines. The crosswalks at the Sacramento Northern Bike Trail crossing and on the east leg of the Cantalier Street intersection feature a triple-four configuration.

# Bicycle Facilities

There are Class II bike lanes on the majority of the segment, with gaps near Grove Avenue and between Cantalier Street and Del Paso Boulevard. The marked bike lanes are in an oversized gutter pan of the road, directly adjacent to the rolled curb, and are often blocked by trash cans, leaf piles, etc. Additionally, the bike lanes are around four feet in width, and the concrete quality is poor. The flow line of the gutter pan is around one foot from the edge of the curb. During field observations, many cyclists traveled on the sidewalk instead of using the bike lanes. Figure 21 shows the bike lanes on El Camino Avenue.

**Figure 21: Bike Lanes on El Camino Avenue**

**Figure 22: El Camino Avenue/Altos Avenue Intersection**

# StreetScore+

Because there is no raised median on El Camino Avenue, the majority of segments have a rating of 3 for their bicycle facilities. This means that bicyclists considered “enthused and confident” will tolerate the stress of the segment. Additionally, the sidewalk width is less than six feet, and the distance between crosswalks is greater than 400 feet, so many segments have a pedestrian score of 3 and 4, which indicates that either walking is uninviting and uncomfortable or walking is very uncomfortable and even impossible. Table 9 shows the StreetScore+ of El Camino Avenue segments. Appendix B of this report includes detailed calculations of these results.

**Table 9: StreetScore+ Results – El Camino Avenue**

| Segment | Direction | Bicycle StreetScore+ | Pedestrian StreetScore+ |
|---|---|---|---|
| El Camino Avenue between Rail Crossing and Western Avenue | EB | 3 | 4 |
| | WB | 3 | 3 |
| El Camino Avenue between Western Avenue and Colfax Street | EB | 3 | 3 |
| | WB | 3 | 3 |
| El Camino Avenue between Colfax Street and Edgewater Road | EB | 3 | 3 |
| | WB | 3 | 3 |
| El Camino Avenue between Edgewater Road to Grove Avenue | EB | 3 | 3 |
| | WB | 3 | 3 |
| El Camino Avenue between Grove Avenue and Altos Avenue/Hawthorne Street | EB | 3 | 3 |
| | WB | 3 | 3 |
| | EB | 3 | 3 |

**Table 9: StreetScore+ Results – El Camino Avenue**

| Segment | Direction | Bicycle StreetScore+ | Pedestrian StreetScore+ |
|---|---|---|---|
| El Camino Avenue between Altos Avenue/Hawthorne Street and Forrest Street | WB | 3 | 4 |
| El Camino Avenue between Forrest Street and Fairfield Street | EB | 3 | 3 |
| | WB | 3 | 3 |
| El Camino Avenue between Fairfield Street and Cantalier Street | EB | 3 | 3 |
| | WB | 3 | 3 |
| El Camino Avenue between Cantalier Street and Rio Linda Boulevard | EB | 2 | 4 |
| | WB | 3 | 3 |
| El Camino Avenue between Rio Linda Boulevard and Del Paso Boulevard | EB | 2 | 3 |
| | WB | 4 | 3 |
| El Camino Avenue between Del Paso Boulevard and Empress Street | EB | 4 | 3 |
| | WB | 3 | 3 |

StreetScore+ ratings range from 1 through 4 with 1 representing low stress bicycle and pedestrian travel conditions and 4 representing high stress bicycle and pedestrian travel conditions.
Source: Fehr & Peers, 2018.

# Collision Analysis

The crash locations along El Camino Avenue are shown in Figure 23. Figure 24 summarizes the crash types along the corridor. These figures also served as display boards at outreach events.

Along the El Camino Avenue corridor, the most crashes occurred at the Del Paso Boulevard (20 crashes), and Altos Avenue/Traction Avenue (19 crashes) intersections. There was one KSI crash at each location, including a pedestrian KSI crash at Altos Avenue/Traction Avenue. Other pedestrian KSI crashes occurred at the Fairfield Street intersection, and at the midblock location between Western Avenue and Colfax Street.

FIGURE 23

# EL CAMINO AVENUE CRASHES


## CORRIDOR CRASH SUMMARY (2009-2017)

| | Vehicle | Pedestrian | Bicyclist |
|---|---|---|---|
| ALL INJURY CRASHES | 117 | 16 | 11 |
| FATAL AND SEVERE CRASHES | 8 | 3 | 0 |

*One crash involved both a pedestrian and bicyclist, and is identified under both mode categories.

## KEY CHARACTERISTICS

SPEED LIMIT 30

One travel lane in each direction.

Class II bicycle lanes along most of the corridor.

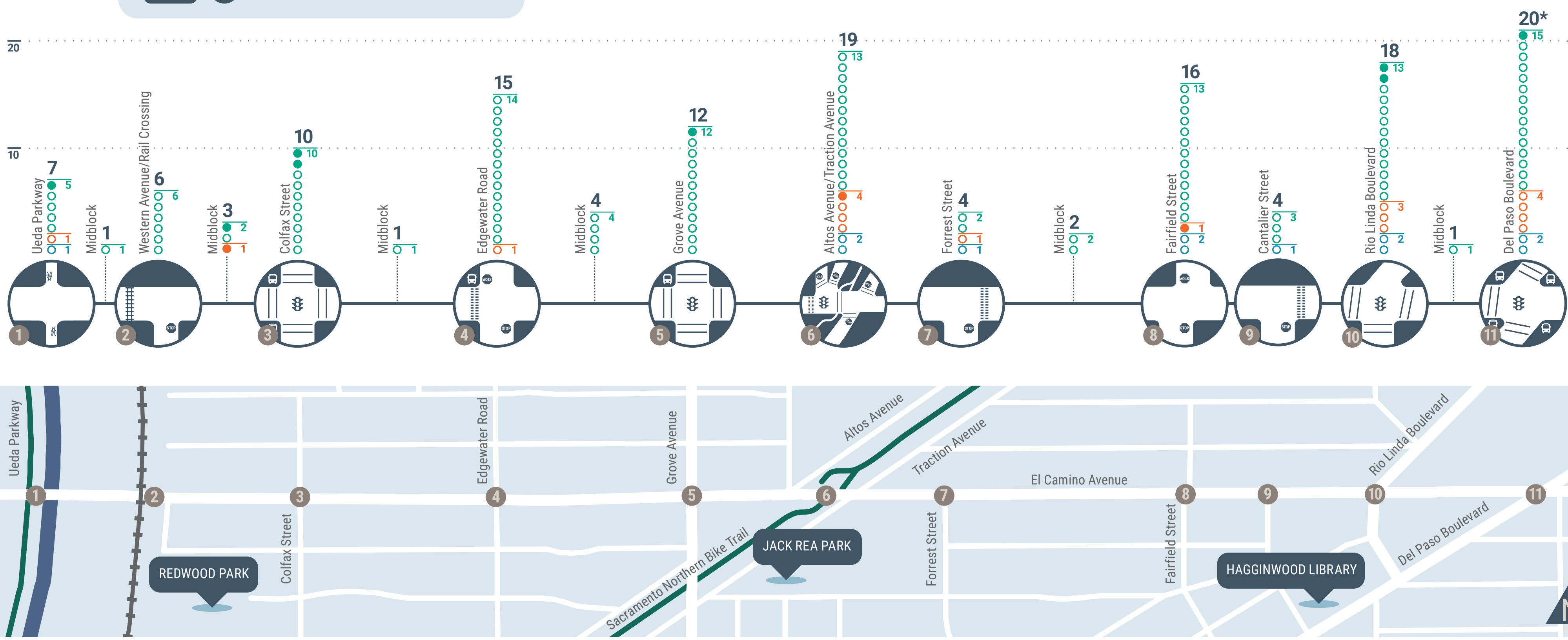


FIGURE 24

# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed
"Unsafe Speed" was the most common violation, cited in 40% of all crashes.

1 **2** **3** **4** **5** **6**
7 8 **9** **10** **11**

### Proceeding Straight
80% of drivers were proceeding straight or stopped at the time of the crash.

**1** **2** **3** **4** **5** **6**
**7** **8** **9** **10** **11**

### Signal or Sign Violation
"Traffic Signals and Signs" was the second most common violation category.

1 2 3 4 **5** 6
7 **8** 9 **10** **11**

### Rear End
Over 40% of all crashes were rear end.

**1** **2** **3** **4** **5** **6**
7 **8** **9** **10** **11**

### Left Turns
70% of drivers who were turning at the time of the crash were making a left turn.

1 2 **3** 4 5 **6**
7 **8** 9 10 **11**

### Broadside
30% of all crashes were broadside, also called T-Bone.

1 2 **3** **4** **5** **6**
7 **8** 9 **10** **11**

## PEDESTRIAN

### Pedestrian Crossing
The majority of people hit while walking were crossing. 2/3 of people were in the crosswalk.

1 2 3 4 5 **6**
7 8 9 **10** **11**

### Weekend
Nearly 2/3 of pedestrian crashes occurred on Friday, Saturday or Sunday.

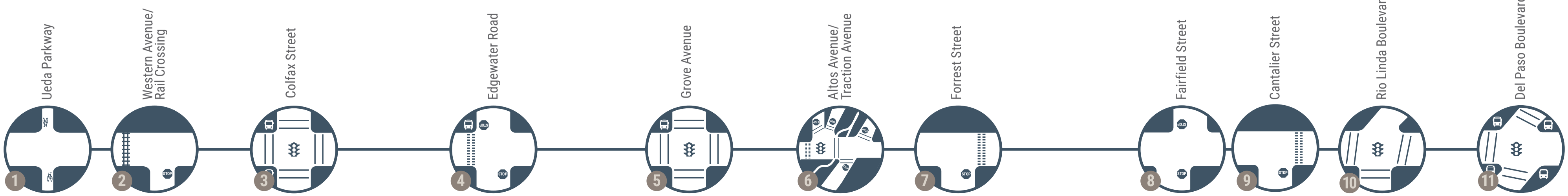
1 2 3 4 5 **6**
7 8 9 10 **11**

## BICYCLE

### Daytime
10 of 11 total bicycle crashes occured between 9 AM and 6 PM.

1 2 3 4 5 6
7 8 9 10 11

1 Numbers that are turned on represent a location where crash type has occurred at least three times.




Crashes involving a vehicle proceeding straight or stopped, unsafe speed violations, and rear end crashes were common along El Camino, with at least three crashes of each crash type occurring at almost all intersections. Other common crash types along the corridor include:

- Vehicle left-turns (Colfax Street, Altos Avenue/Traction Avenue, Fairfield Street, Del Paso Boulevard)
- Broadside crashes (Colfax Street, Edgewater Road, Grove Avenue, Altos Avenue/Traction Avenue, Fairfield Street, Rio Linda Boulevard, Del Paso Boulevard)
- Signal or sign violations (Grove Avenue, Fairfield Street, Rio Linda Boulevard, Del Paso Boulevard)
- Pedestrian hit while crossing the street, with most people crossing in a crosswalk (Altos Avenue/Traction Avenue, Rio Linda Boulevard, Del Paso Boulevard)
- Pedestrian crashes on the weekend (Altos Avenue/Traction Avenue, Del Paso Boulevard)

# Feedback

Many of the comments received during El Camino Avenue outreach events were regarding visibility and signals/signage. These comments are detailed in the *Community Outreach Report – Phase 1*, which is included in Appendix A.

# Florin Road

## Existing Conditions

The study segment of Florin Road is between 24th Street and Munson Way. Traffic counts were conducted on May 31, 2018. The observed AM peak hour occurred between 7:30 and 8:30 am with a 0.91-PHF and three percent heavy vehicle count. The observed PM peak hour occurred between 4:30 and 5:30 PM with a 0.95-PHF and two percent heavy vehicle count. During the peak hours, at least four bicyclists traveled through each study intersection and at least six pedestrians crossed the street at each study intersection along the corridor. The ADT observed on Florin Road is 36,000 vehicles.

Figure 25 shows the travel patterns along Florin Road. Figure 26 summarizes existing conditions for this corridor.

## Vehicular Facilities

This segment is comprised of four travel lanes plus a raised median and center turn-lane. The Florin Road/Luther Drive intersection is offset, (i.e. the north and south legs are not aligned). The posted speed limit is 40-miles per hour.

The *Sacramento General Plan 2035* designates this segment as an arterial. Policy M.1.2.2 indicates that the City shall strive for LOS D operations on this corridor during typical weekdays including peak hours. Table 10 shows the peak hour intersection delay and level of service. All intersections operate acceptably at LOS D or better. Appendix B includes detailed calculations of these results.

**Table 10: Peak Hour Intersection Operations – Florin Road**

| Intersection | Traffic Control[1] | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay[2] (s) | LOS[3] | Delay[2] (s) | LOS[3] |
| 24th Street/Florin Road | Signal | 9.7 | A | 11.0 | B |
| Woodbine Avenue/Florin Road | Signal | 22.6 | C | 20.2 | C |
| 29th Street/Indian Lane/Florin Road | Signal | 13.2 | B | 4.0 | A |
| Luther Burbank HS/Florin Road | Signal | 48.8 | D | 42.9 | D |
| Luther Drive/Florin Road | Signal | 9.7 | A | 11.0 | B |
| Munson Way/Florin Road | SSSC | 2.6 (13.5) (WB LT) | A (B) | 2.8 (13.9) (WB LT) | A (B) |

Notes:

1. Signal = traffic signal-controlled intersection; SSSC = side-street stop-controlled intersection
2. Average control delay for signalized intersections is the weighted average for all movements. For SSSC intersections, the delay and LOS for the highest delay movement is shown in parentheses.
3. LOS = level of service; calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).

Source: Fehr & Peers, 2018.

FIGURE 25

# FLORIN ROAD TRAVEL PATTERNS

Thursday, May 31st, 2018. 7:30–8:30 AM & 4:30–5:30 PM

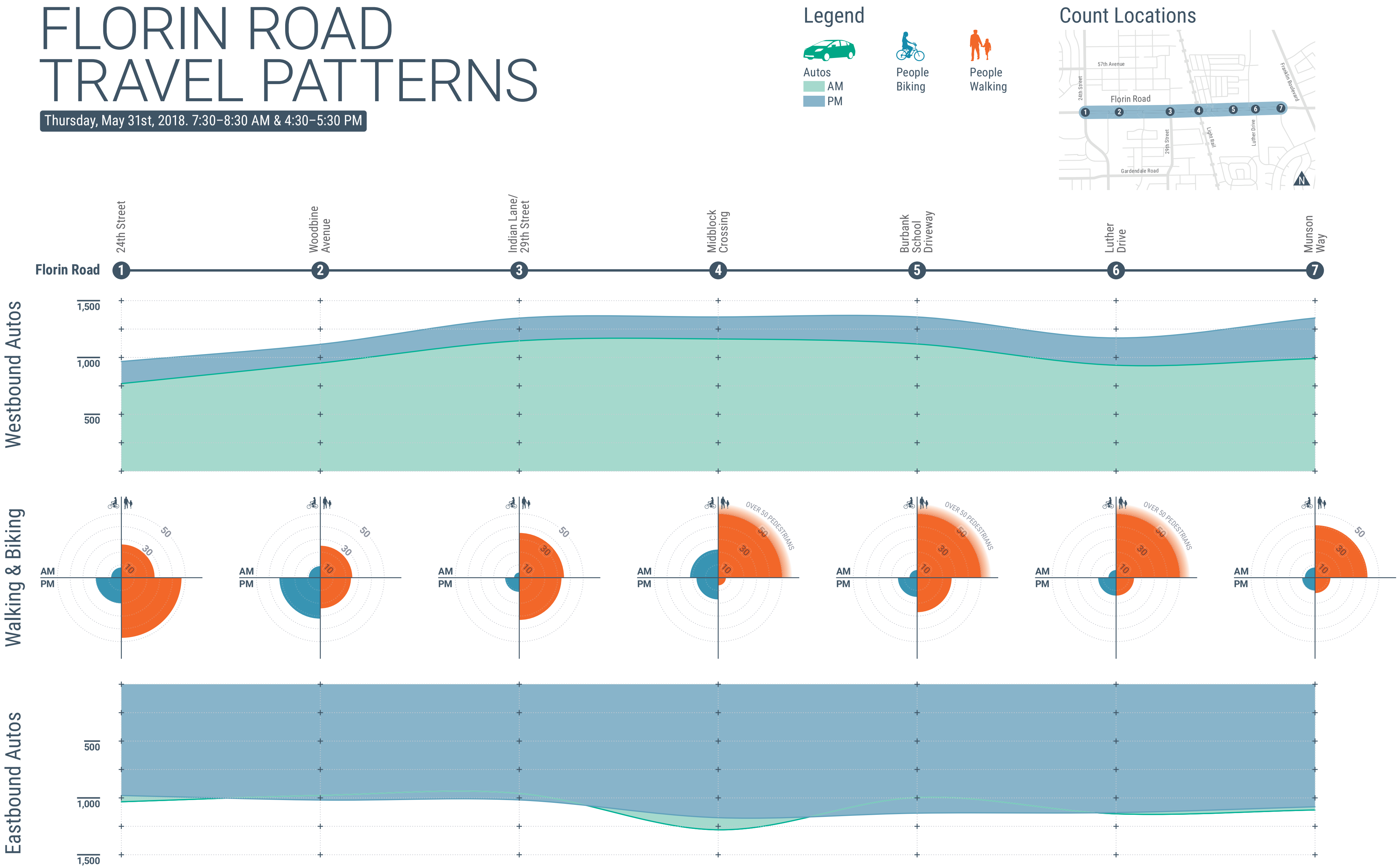


FIGURE 26

# FLORIN ROAD - EXISTING CONDITIONS

## IN THE MAP

- On-Street Bicycle Lane
- XXX′ Distance Between Crosswalks

## KEY CHARACTERISTICS

SPEED LIMIT 40

- Average Daily Traffic Volume: 36,000
- Class II bicycle lanes present in some locations.
- Maximum distance between crosswalks: 1,740 ft.
- 100% sidewalk coverage.

## FLORIN ROAD SAMPLE CROSS-SECTION

Four travel lanes plus raised median/center turn lane.

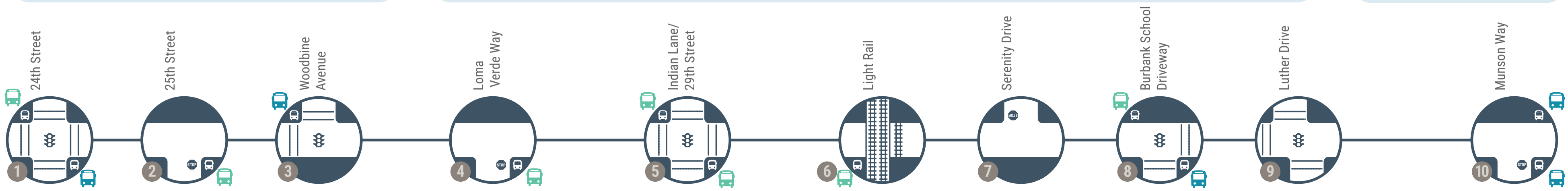
Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

SACRT ROUTES COVERED:
**54, 81**

*Daily ridership is the sum of weekday boardings and alightings.




# Transit Facilities

Sacramento Regional Transit operates two bus lines on Florin Road. Line 54 provides service between Gerber Road/Power Inn Road and the Florin Light Rail station. It has hour-long headways and operates between 5:30 AM and 8:00 PM on weekdays. On Saturdays, the line only operates between Cosumnes River College and Florin Light Rail Station between 8:30 AM and 8:00 PM. There is no service on Sundays and holidays.

Line 81 also operates on Florin Road with 15-minute headways between Florin Road/Riverside Boulevard and University Avenue/65th Street Light Rail Station. Weekday service starts at 5:00 AM and ends at 10:30 PM, Saturday service starts at 6:00 AM and ends at 10:30 PM, and Sunday/holiday service starts at 6:00 AM and ends at 9:00 PM.

There are transit shelters for the eastbound stop Luther Drive/Florin Road (in front of Luther Burbank High School), the westbound stop at 29th Street/Indian Lane/Florin Road, the westbound stop at Florin Road/Woodbine Avenue, and the westbound stop at Florin Road/24th Street. Additionally, there are benches for the westbound bus stop at Serenity Drive/Florin Road and the eastbound stop at 25th Street/Florin Road.

The Florin Road Light Rail Station is located between the 29th Street/Indian Lane/Florin Road and Serenity Drive/Florin Road intersections and is part of the Blue Line of Sacramento Regional Transit's light rail network. This line has 15-minute headways during peak periods and 30-minute headways during non-peak periods. The Blue Line connects Cosumnes River College to the Watt Avenue/I-80 transit station. On weekdays it operates from 4:00 AM to midnight, on Saturdays it operates from 4:30 AM to midnight, and on Sundays and holidays it operates from 5:00 AM to 10:00 PM.

**Figure 27: Florin Road and Light Rail Overcrossing**

## Pedestrian Facilities

There are sidewalks on both sides of the street with widths varying between five and six feet. The sidewalk is adjacent to the bike lane or road shoulder. Lighting is provided by overhead roadway lighting.

There are marked crosswalks across Florin Road at every signalized intersection, though the east leg of the Woodbine Avenue intersection, west leg of Luther Burbank High School Driveway intersection, and east leg of the Luther Drive intersection do not have striped crosswalks and associated pedestrian phases. None of the side-street stop-controlled intersections on this corridor have striped crosswalks. All crosswalks on this corridor are striped with the basic treatment of solid lines.

Field observations, community feedback and measured data indicate substantial numbers of pedestrians jaywalking midblock under the light rail overpass. Most crossings occur between 7:30 and 8:15 AM, coinciding with the start of classes at Luther Burbank High School at 8:10 AM. It should be noted that measured pedestrian activity at this location drops off sharply during the PM peak hour since the end of the school day occurs prior to the evening commute.

**Figure 28: Florin Road**


## Bicycle Facilities

There are Class II bike lanes present on the north side of Florin Road between 24th Street and Woodbine Avenue, on both sides of the street between Woodbine Avenue and east of Loma Verde Way (though the north side has gaps), and on the both sides of the street on Serenity Drive to east of Munson Way. The bike lane widths vary between 4.5 and six feet.

Some intersections have right-turn lanes, which can present conflicts between right-turning vehicles and cyclists using the bike lanes. However, bike lanes typically remain unblocked by parked vehicles, trash cans, leaf piles, etc.

## StreetScore+

The bicycle and pedestrian StreetScore+ of the Florin Road segments are shown in Table 11. Because of the relatively high posted speed, the segments all have a bicycle and pedestrian score 4, meaning that only "strong and fearless" bicyclist will tolerate the stress on the segment and walking is very uncomfortable or even impossible.

**Table 11: StreetScore+ Results – Florin Road**

| Segment | Direction | Bicycle StreetScore+ | Pedestrian StreetScore+ |
|---|---|---|---|
| Florin Road between Tamoshanter Way and 24th Street | EB | 4 | 4 |
| | WB | 4 | 4 |
| Florin Road between 24th Street and 25th Street | EB | 4 | 4 |
| | WB | 4 | 4 |
| Florin Road between 25th Street and Woodbine Avenue | EB | 4 | 4 |
| | WB | 4 | 4 |
| Florin Road between Woodbine Avenue and Loma Verde Way | EB | 4 | 4 |
| | WB | 4 | 4 |
| Florin Road between Loma Verde Way and Indian Lane/29th Street | EB | 4 | 4 |
| | WB | 4 | 4 |
| Florin Road between Indian Lane/29th Street and LRT | EB | 4 | 4 |
| | WB | 4 | 4 |
| Florin Road between LRT and Serenity Drive | EB | 4 | 4 |
| | WB | 4 | 4 |
| Florin Road between Serenity Drive and Luther Burbank High School Driveway | EB | 4 | 4 |
| | WB | 4 | 4 |
| Florin Road between Luther Burbank High School and Luther Drive | EB | 4 | 4 |
| | WB | 4 | 4 |
| Florin Road between Luther Drive and Munson Way | EB | 4 | 4 |
| | WB | 4 | 4 |

StreetScore+ ratings range from 1 through 4 with 1 representing low stress bicycle and pedestrian travel conditions and 4 representing high stress bicycle and pedestrian travel conditions.
Source: Fehr & Peers, 2018.

# Collision Analysis

Florin Road crashes are shown in Figure 29. Figure 30 summarizes the different crash types along the corridor. These figures also served as display boards at the Florin Road community workshop.

Along the Florin corridor, the most crashes occurred at the 24th Street (58 crashes), Indian Lane/29th Street (37 crashes), Luther Drive (37 crashes), and Munson Way (25 crashes) intersections. One vehicle KSI crash occurred at both the 24th Street and Luther Drive intersections. Three KSI crashes occurred at Munson Way, including one bicycle KSI crash. At Indian Lane/29th Street, there were five KSI crashes, including three pedestrian KSI crashes (accounting for half of the pedestrian KSI crashes along the whole corridor), and one bicycle KSI crash. One pedestrian KSI crash occurred at 25th Street, the light rail crossing, and at the midblock location between Woodbine Avenue and Loma Verde Way.

Crashes involving a vehicle proceeding straight or stopped, unsafe speed violations, and rear end crashes were very common along Florin Road, with at least three crashes of each crash type occurring at almost all intersections. Other common crash types along the corridor include:

- Pedestrians crossing the street (24th Street, 25th Street, 29th Street, Luther Drive)
- Pedestrian victims age 60 or older (24th Street)
- Pedestrian crashes during the winter months (25th Street)
- Bicycle crashes involving a “Wrong Side of the Road” violation (25th Street)
- Broadside bicycle crashes (25th Street, Munson Way)
- Bicycle crashes involving a right-turning vehicle (25th Street, Loma Verde Way)

# Feedback

Most of the comments received during outreach for this corridor mentioned enforcement and crossings. These comments are detailed in the *Community Outreach Report – Phase 1*, which is included in Appendix A.

FIGURE 29

# FLORIN ROAD CRASHES

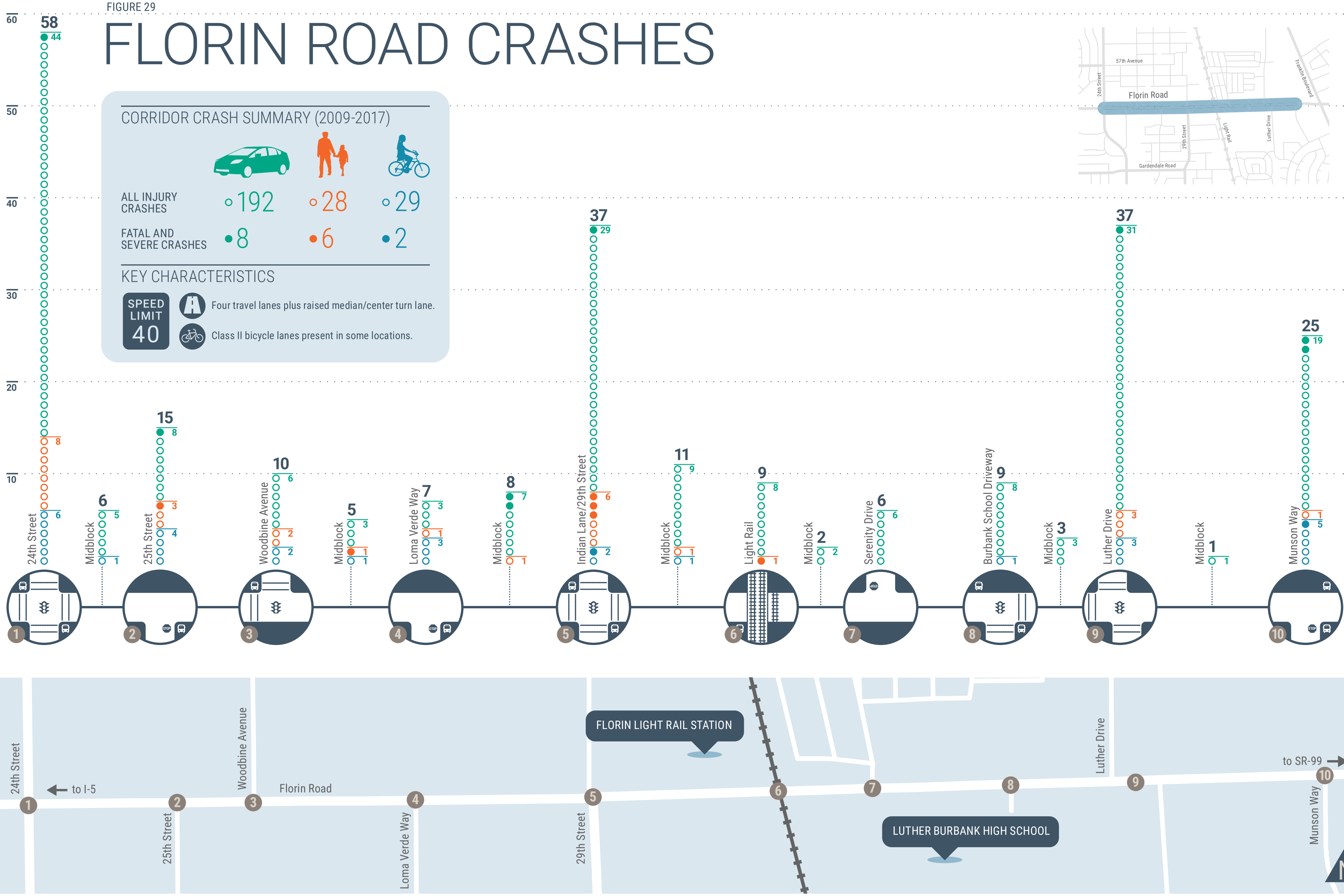


FIGURE 30

# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed

"Unsafe Speed" was cited as the primary violation in nearly half of all crashes.

1 2 3 4 5 6
7 8 9 10

### Proceeding Straight

75% of drivers were proceeding straight or stopped at the time of the crash.

1 2 3 4 5 6
7 8 9 10

### Rear End

Nearly half of all crashes were rear end.

1 2 3 4 5 6
7 8 9 10

## PEDESTRIAN

### Pedestrian Crossing

The majority of people hit while walking were crossing. Half of people were in the crosswalk.

1 2 3 4 5 6
7 8 9 10

### Winter Crashes

Over 40% of pedestrian crashes occurred in November, December or January.

1 2 3 4 5 6
7 8 9 10

### Senior Victims

10 of the 28 people hit while walking were age 60 or older.

1 2 3 4 5 6
7 8 9 10

## BICYCLE

### Wrong Way Riding

The primary violation cited in over 40% of bicycle crashes was "Wrong Side of Road."

1 2 3 4 5 6
7 8 9 10

### Broadside

More than half of bicycle crashes were broadside, also called T-Bone.

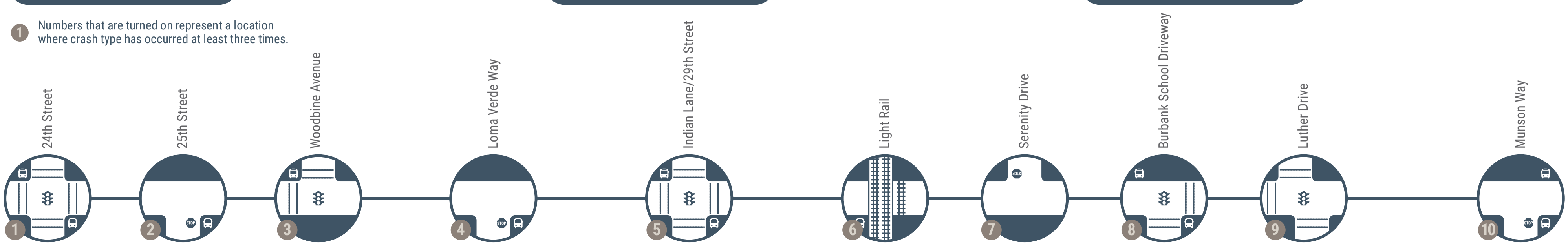
1 2 3 4 5 6
7 8 9 10

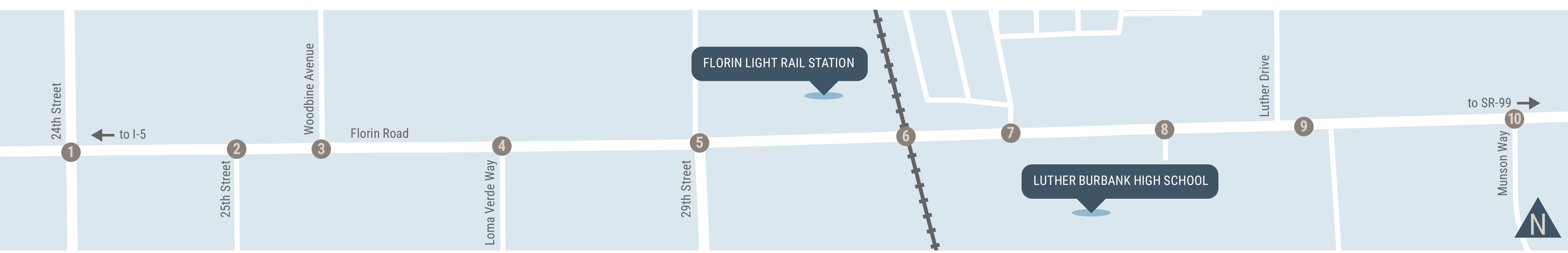
### Right Turns

In nearly 40% of bike crashes, the driver was making a right turn.

1 2 3 4 5 6
7 8 9 10

1 Numbers that are turned on represent a location where crash type has occurred at least three times.



# Marysville Boulevard

## Existing Conditions

The Top Five segment on Marysville Boulevard is located between North Avenue and Arcade Boulevard. Counts for this segment were collected May 30, 2018. The peak hours of travel along this corridor are 7:15 to 8:15 AM and 5:00 to 6:00 PM. The percentage of heavy vehicles is 4 percent and 2 percent for the AM and PM peak hours, respectively. The measured PHF is 0.93 for the AM peak hour and 0.96 for the PM peak hour. During the peak hours, at least two bicycles traveled through each study intersection, and at least six pedestrians crossed the street at each study intersection. Marysville Boulevard has a daily traffic volume of 26,300 vehicles.

Figure 31 shows the travel patterns of this corridor during peak hours. Figure 32 summarizes the existing conditions of this corridor.

### Vehicular Facilities

The Marysville Boulevard segment is four travel lanes. The City of Sacramento's *General Plan 2035* classifies this segment as an arterial. Policy M1.2.1 indicates that the City should strive to operate this road at LOS D or better during typical weekday conditions, including the AM and PM peak hours.

This segment has a raised median/center turn lane and a speed limit of 35 miles per hour. There are sidewalks on both sides of the road for the entire segment, and there are Class II bike lanes on both sides of the road for most of the segment, from I-80 to just north of Ermina Drive. On-street parking is prohibited.

FIGURE 31

# MARYSVILLE BOULEVARD TRAVEL PATTERNS

Wednesday, May 30th, 2018. 7:15–8:15 AM & 5:00–6:00 PM

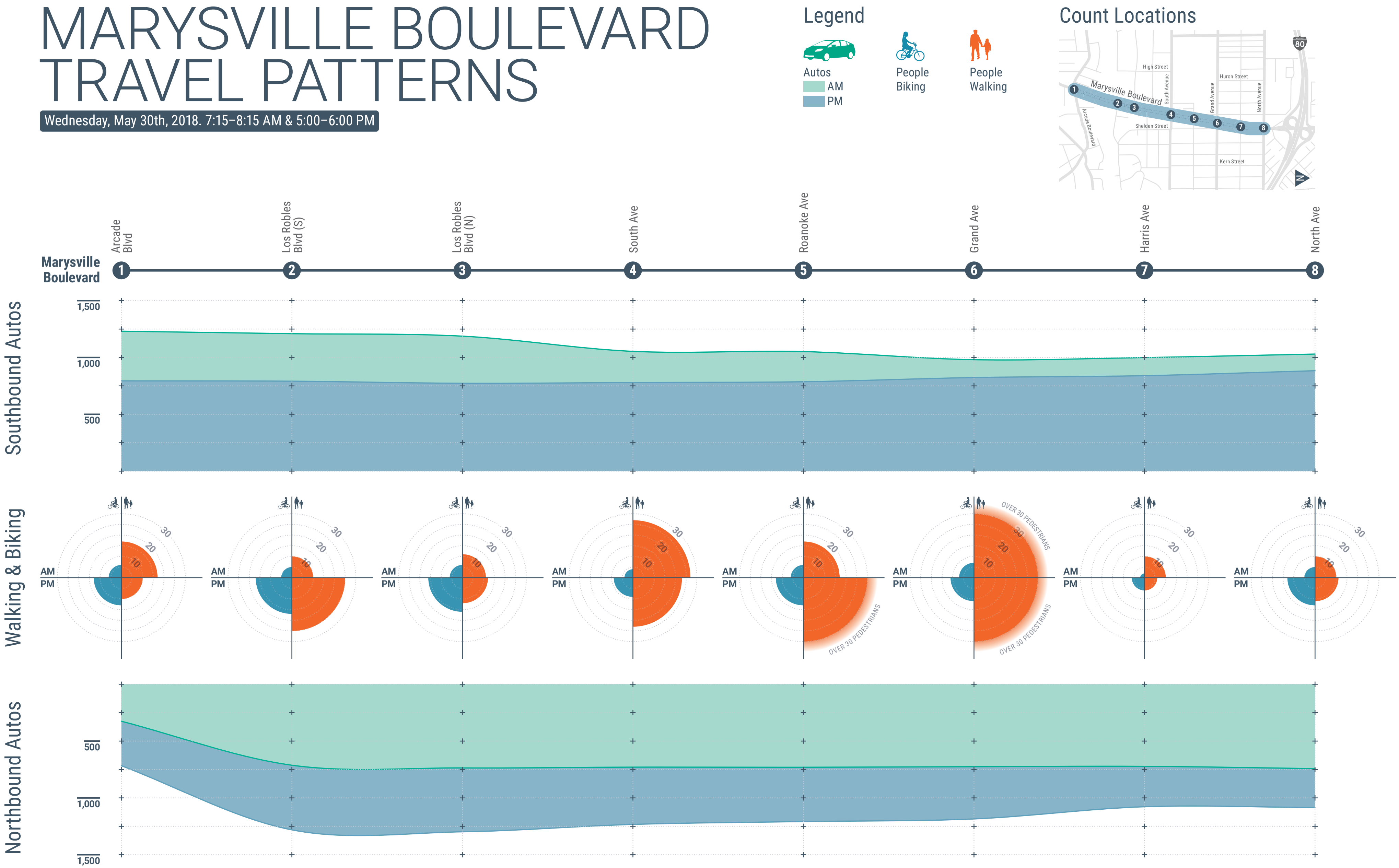


FIGURE 32

# MARYSVILLE BOULEVARD EXISTING CONDITIONS

## IN THE MAP

- On-Street Bicycle Lane
- xxx′ Distance Between Crosswalks

## KEY CHARACTERISTICS

SPEED LIMIT 35

- Average Daily Traffic Volume: 26,300
- Class II bicycle lanes along most of the corridor
- Maximum distance between crosswalks: 2,550 ft between North Avenue and Bell Avenue
- 100% sidewalk coverage.

## MARYSVILLE BOULEVARD SAMPLE CROSS-SECTION

Four travel lanes plus raised median/center turn lane.

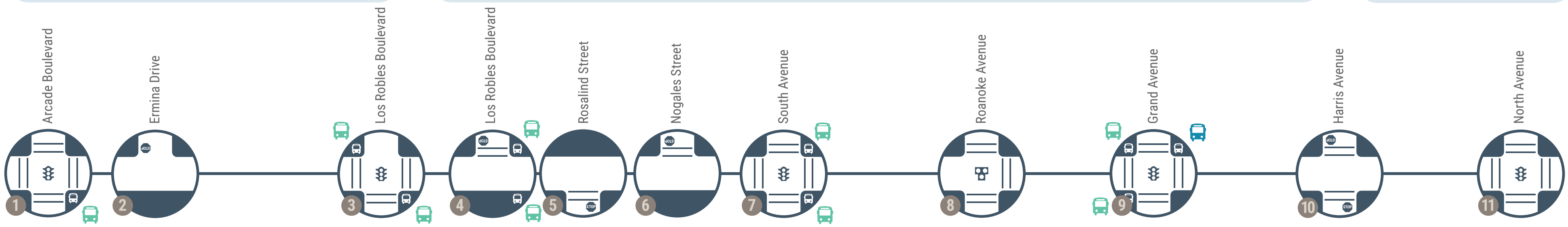
Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

SACRT ROUTES COVERED:
**15, 86**

*Daily ridership is the sum of weekday boardings and alightings.



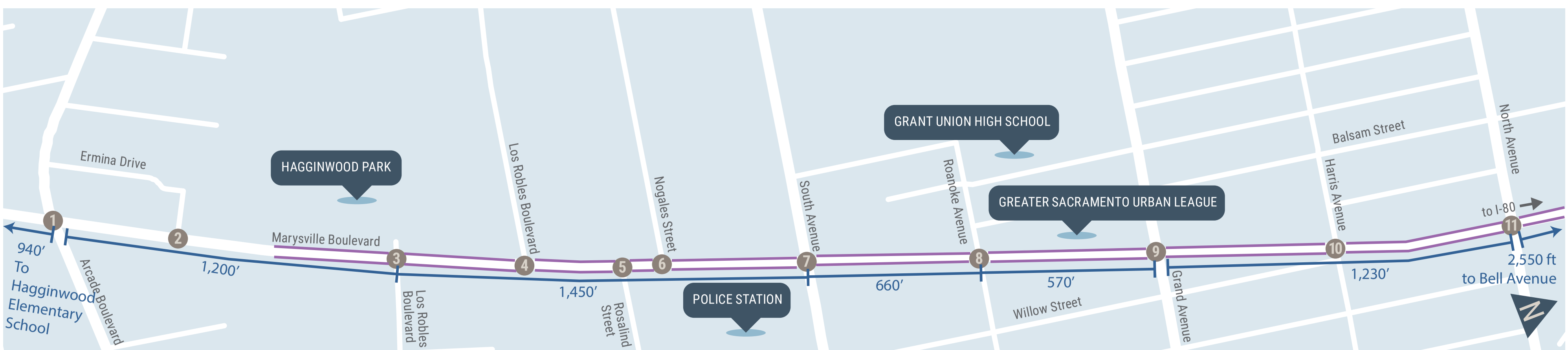



**Figure 33: Marysville Boulevard**

The results of the SimTraffic analysis are shown in Table 12. All intersections operate acceptably and have an overall LOS of D or better during the AM and PM peak hours. The side-street movements of Marysville Boulevard/Roanoke Avenue (a side-street stop-controlled intersection) experience high delay during the PM peak hour.

**Table 12: Peak Hour Intersection Operations – Marysville Boulevard**

| Intersection | Traffic Control[1] | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay[2] (s) | LOS[3] | Delay[2] (s) | LOS[3] |
| Marysville Boulevard/North Avenue | Signal | 9.7 | A | 10.6 | B |
| Marysville Boulevard/Harris Avenue | SSSC | 3.4 (23.4) (EB TH) | A (C) | 3.9 (25.3) (EB LT) | A (D) |
| Marysville Boulevard/Grand Avenue | Signal | 20.5 | C | 19.6 | B |
| Marysville Boulevard/Roanoke Avenue | SSSC | 6.1 (15.8) (WB LT) | A (C) | 22.3 (**68.9**) (**WB LT**) | C (**F**) |
| Marysville Boulevard/South Avenue | Signal | 14.4 | B | 10.3 | B |
| Marysville Boulevard/Los Robles Boulevard (North) | SSSC | 1.7 (21.6) (EB LT) | A (C) | 1.8 (13.0) (EB LT) | A (B) |
| Marysville Boulevard/Los Robles Boulevard (South) | Signal | 4.8 | A | 6.0 | A |
| Marysville Boulevard/Arcade Boulevard | Signal | 30.9 | C | 42.4 | D |

Notes:

1. Signal = traffic signal-controlled intersection; SSSC = side-street stop-controlled intersection
2. Average control delay for signalized intersections is the weighted average for all movements. For SSSC intersections, the delay and LOS for the highest delay movement is shown in parentheses.
3. LOS = level of service; calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).

**Bold** text indicates unacceptable operations.
Source: Fehr & Peers, 2018.

# Transit Facilities

There is one transit line operating on Marysville Boulevard, Line 86 operated by Sacramento Regional Transit. This line serves stops between Marconi Arcade Light Rail station and downtown Sacramento. On weekdays, it has half hour headways between 5:30 AM and 9:15 PM. On Saturdays, the line has hour-long headways between 6:30 AM and 9:00 PM. On Sundays and holidays, Line 86 operates with hour-long headways between 8:00 AM and 6:30 PM.

Line 15 operates on Grand Avenue and has a stop at the Marysville Boulevard/Grand Avenue intersection.

There is a transit shelter at the southbound bus stop at Marysville Boulevard/Los Robles Boulevard (by Hagginwood Park) and a bench for the southbound bus stop at Marysville Boulevard/Los Robles Boulevard (across from Sunshine Academy).

# Pedestrian Facilities

Sidewalks line both sides of Marysville Boulevard for the entirety of the segment. The sidewalk widths vary between five and six feet. The sidewalk is in good repair, except for the westside sidewalk north of North Avenue. Lighting is provided by overhead roadway lights. Typically, the sidewalk is adjacent to the bike lane, except for the east side of the road adjacent to the Dollar General store where there is a landscape buffer.

The signalized intersections along the corridor have crosswalks on the north and south legs. The only unsignalized intersection that has a crosswalk across Marysville Boulevard is the Roanoke Avenue intersection. This intersection is side-street stop-controlled and includes a pedestrian hybrid beacon that stops traffic when activated.

**Figure 34: Marysville Boulevard/Roanoke Avenue HAWK**


The maximum distance between crosswalks on the segment is 1,230 feet between the north leg of Grand Avenue and the south leg of North Avenue. The crosswalk on the north leg of North Avenue (the northern terminus of the study corridor) is 2,550 feet south of the crosswalk at Bell Avenue, which is outside the segment, north of I-80. All crosswalks on this corridor feature basic markings with solid lines.

# Bicycle Facilities

There are Class II bike lanes on both sides of this segment. The width of these bike lanes varies from 3.5 to seven feet. The bike lanes on this segment are between I-80 and the Arcade Creek crossing; there are no bike lanes south of Los Robles Boulevard (South). Bike lanes are typically not blocked by obstructions.

# StreetScore+

The StreetScore+ results for study segments along Marysville Boulevard are shown in Table 13. Because Marysville Boulevard has a 35 mile-per-hour posted speed limit and a centerline, many bicycle scores for these roadway segments are 3 and 4, meaning that only “enthused and confident” and “strong and fearless” cyclists will tolerate the stress, respectively. Furthermore, many crosswalks that cross Marysville Boulevard, and the driveways along the roadway have curb cuts, so pedestrian StreetScore+’s are also 3 and 4, which indicates that walking is either uncomfortable or very uncomfortable.

**Table 13: StreetScore+ Results – Marysville Boulevard**

| Segment | Direction | Bicycle StreetScore+ | Pedestrian StreetScore+ |
|---|---|---|---|
| Marysville Boulevard between Doolittle Street and North Avenue | NB | 4 | 4 |
| | SB | 4 | 4 |
| Marysville Boulevard between North Avenue and Harris Avenue | NB | 3 | 3 |
| | SB | 3 | 3 |
| Marysville Boulevard between Harris Avenue and Grand Avenue | NB | 3 | 3 |
| | SB | 3 | 3 |
| Marysville Boulevard between Grand Avenue and Roanoke Avenue | NB | 3 | 3 |
| | SB | 3 | 3 |
| Marysville Boulevard between Roanoke Avenue and South Avenue | NB | 3 | 3 |
| | SB | 3 | 3 |
| Marysville Boulevard between South Avenue and Nogales Street | NB | 3 | 3 |
| | SB | 3 | 3 |
| Marysville Boulevard between Nogales Street and Rosalind Street | NB | 3 | 4 |
| | SB | 3 | 4 |
| Marysville Boulevard between Rosalind Street and Los Robles Boulevard (N) | NB | 3 | 4 |
| | SB | 3 | 3 |
| Marysville Boulevard between Los Robles Boulevard (N) and Los Robles Boulevard (S) | NB | 3 | 3 |
| | SB | 3 | 3 |
| Marysville Boulevard between Los Robles Boulevard (S) and Ermina Drive | NB | 4 | 3 |
| | SB | 4 | 3 |
| Marysville Boulevard between Ermina Drive and Arcade Boulevard | NB | 4 | 4 |
| | SB | 4 | 3 |
| Marysville Boulevard between Arcade Boulevard and Sonoma Avenue | NB | 4 | 3 |
| | SB | 4 | 4 |

StreetScore+ ratings range from 1 through 4 with 1 representing low stress bicycle and pedestrian travel conditions and 4 representing high stress bicycle and pedestrian travel conditions.
Source: Fehr & Peers, 2018.

# Collision Analysis

Figure 35 shows the crash locations on Marysville Boulevard, and Figure 36 summarizes the crash types. These figures were used as display boards for the Marysville Boulevard outreach events.

Along Marysville Boulevard, the most crashes occurred at the intersections of Los Robles Boulevard (42 crashes), Grand Avenue (37 crashes), Arcade Boulevard (25 crashes), and Roanoke Avenue (23 crashes). Five KSI crashes occurred at Los Robles Boulevard, including four pedestrian KSI crashes. Three pedestrian KSI crashes occurred at Grand Avenue, and two occurred at Roanoke Avenue. An additional pedestrian KSI crash occurred at both Harris Avenue and the midblock location between Grand Avenue and Harris Avenue. Two bicycle KSI crashes occurred at Arcade Boulevard. An additional bicycle KSI crash occurred at the midblock location between Ermina Drive and Los Robles Boulevard.

Crashes involving a vehicle proceeding straight or stopped, unsafe speed violations, and rear end crashes were again common along Marysville Boulevard. Other common crash types along the corridor include:

- Vehicle left turns (Arcade Boulevard, Los Robles Boulevard, South Avenue, Roanoke Avenue, Grand Avenue, Harris Avenue, North Avenue)
- Head on crashes (Arcade Boulevard, Los Robles Boulevard, Grand Avenue, North Avenue)
- Broadside crashes (Arcade Boulevard, Los Robles Boulevard, South Avenue, Roanoke Avenue, Grand Avenue, Harris Avenue, North Avenue)
- Severe or fatal crashes with alcohol involved (Los Robles Boulevard)
- Pedestrian crossing the street, with majority of people in a crosswalk (Los Robles Boulevard, Roanoke Avenue, Grand Avenue)
- Pedestrian crashes at night (Los Robles Boulevard, Roanoke Avenue, Grand Avenue)
- Bicycle broadside crashes (Grand Avenue)

FIGURE 35

# MARYSVILLE BOULEVARD CRASHES

## CORRIDOR CRASH SUMMARY (2009-2017)

| | Vehicle | Pedestrian | Bicycle |
|---|---|---|---|
| ALL INJURY CRASHES | 148 | 25 | 15 |
| FATAL AND SEVERE CRASHES | 5 | 11 | 3 |

## KEY CHARACTERISTICS

SPEED LIMIT 35

Four travel lanes plus raised median/center turn lane.

Class II bicycle lanes along most of the corridor.

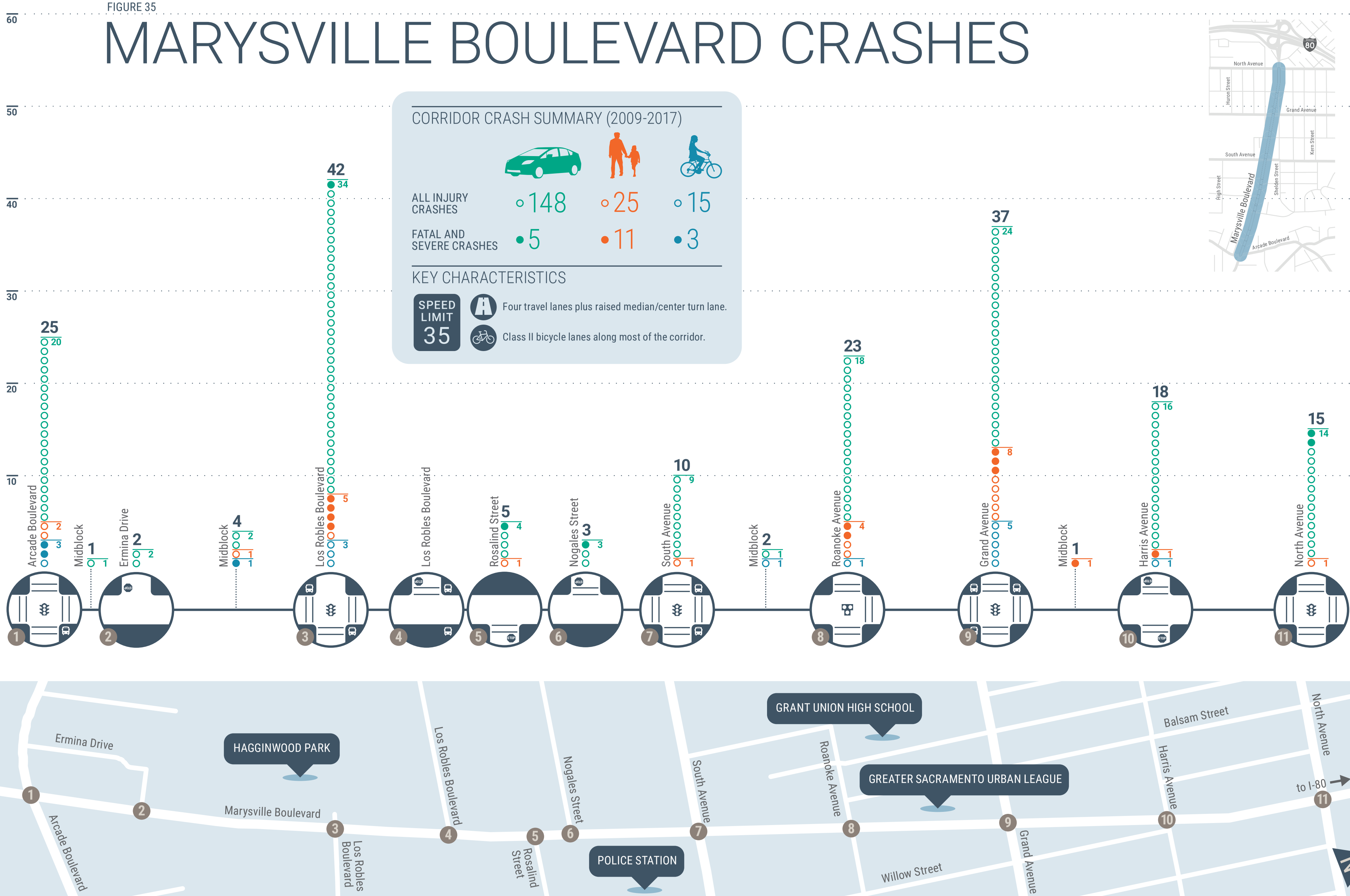


FIGURE 36

# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed
"Unsafe Speed" was cited as the primary violation in 20% of crashes.

### Proceeding Straight
2/3 of drivers were proceeding straight or stopped at the time of the crash.

### Head On
Nearly 20% of all crashes were head on.

### KSI & Alcohol Involved
Alcohol was involved in over half of crashes resulting in a fatality or severe injury.

### Rear End
Nearly 20% of all crashes were rear end.

### Left Turns
More than 20% of drivers were making a left turn at the time of the crash.

### Broadside
40% of all crashes were broadside, also called T-Bone.

## PEDESTRIAN

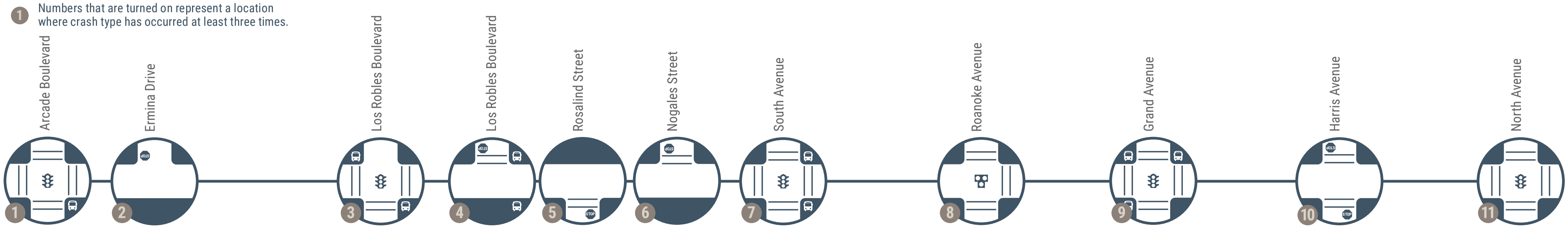
### Pedestrian Crossing
Almost all people hit while walking were crossing. 2/3 of people were in the crosswalk.

### Nighttime
Half of pedestrian crashes occurred during nighttime or dark conditions.

## BICYCLE

### Broadside
3/4 of bicycle crashes were broadside, also called T-Bone.

1 Numbers that are turned on represent a location where crash type has occurred at least three times.



# Feedback

Most of the comments received during outreach for Marysville Boulevard mentioned signals/signage and speeding. These comments are detailed in the *Community Outreach Report – Phase 1*, which is included in Appendix A.

# Stockton Boulevard (South)

## Existing Conditions

Stockton Boulevard between McMahon Drive and Patterson Way is a Top Five segment. This segment has a speed limit of 40 miles per hour, and an ADT of 29,700. Traffic counts were collected on May 31, 2018. The observed AM peak hour occurred between 7:15 and 8:15 AM with a PHF of 0.89 and two percent heavy vehicle count. During the peak hours, there were at least six bicyclists traveling through each study intersection and at least three pedestrians crossing at each study intersection along the corridor. The PM peak hour occurred between 4:15 and 5:15 PM with a PHF of 0.95 and one percent heavy vehicle count.

Figure 38 shows the travel patterns of this segment, and Figure 39 displays its existing conditions.

### Vehicular Facilities

**Figure 37: Stockton Boulevard (South)**


On-street parallel parking is prohibited.

The *Sacramento General Plan 2035* characterizes this segment as an arterial where the LOS D standard of Policy M.1.2.2 applies. Table 14 shows the peak hour intersection operations of the Stockton Boulevard segment. All intersections operate acceptably during peak hours, except for the 37th Avenue approach of the Stockton Boulevard/37th Avenue intersection during the PM peak hour.

### Table 14: Peak Hour Intersection Operations – Stockton Boulevard (South)

| Intersection | Traffic Control[1] | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay[2] (s) | LOS[3] | Delay[2] (s) | LOS[3] |
| Stockton Boulevard/37th Avenue | SSSC | 2.4 (19.5) (EB LT) | A (C) | 4.2 (**36.8**) (EB LT) | A (**E**) |
| Stockton Boulevard/McMahon Drive | Signal | 7.0 | A | 9.1 | A |
| Stockton Boulevard/Lemon Hills Avenue | Signal | 27.7 | C | 22.0 | C |
| Stockton Boulevard/Dias Avenue | Signal | 8.5 | A | 8.6 | A |
| Stockton Boulevard/47th Avenue/Elder Creek Road | Signal | 38.5 | D | 45.8 | D |
| Stockton Boulevard/Fowler Avenue/Riza Avenue | Signal | 12.7 | B | 16.6 | B |

Notes:

1. Signal = traffic signal-controlled intersection; SSSC = side-street stop-controlled intersection
2. Average control delay for signalized intersections is the weighted average for all movements. For SSSC intersections, the delay and LOS for the highest delay movement is shown in parentheses.
3. LOS = level of service; calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).

**Bold** text indicates unacceptable operations.
Source: Fehr & Peers, 2018.

FIGURE 38

# STOCKTON BOULEVARD TRAVEL PATTERNS

Thursday, May 31st, 2018. 7:15–8:15 AM & 4:15–5:15 PM


## Count Locations

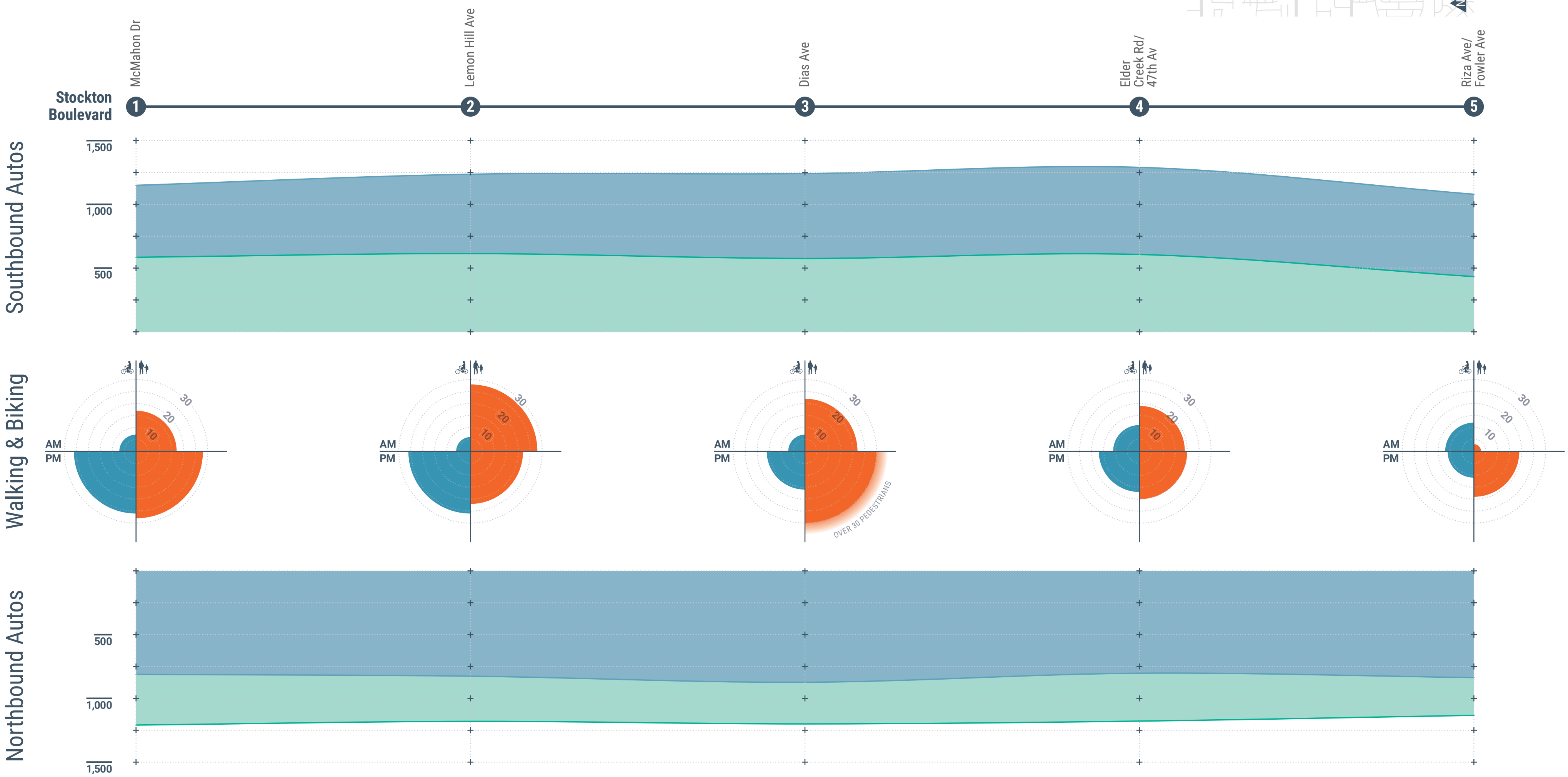



FIGURE 39

# STOCKTON BOULEVARD - EXISTING CONDITIONS

## IN THE MAP

- On-Street Bicycle Lane
- Sidewalk Gap
- xxx′ Distance Between Crosswalks

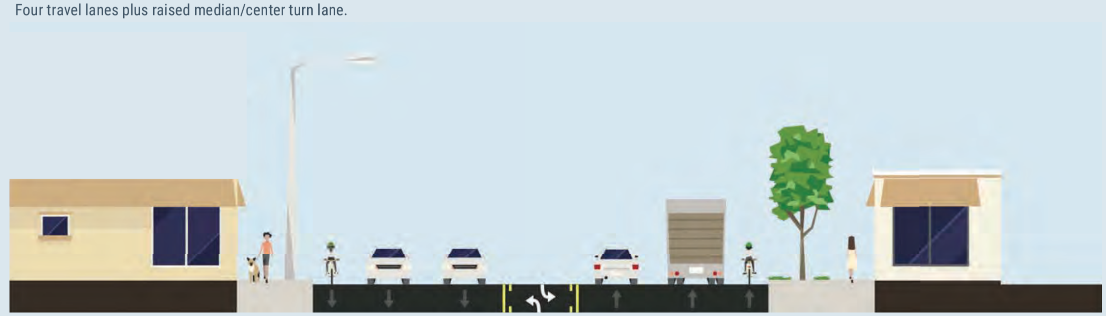
## KEY CHARACTERISTICS

SPEED LIMIT 40

- Average Daily Traffic Volume: 29,700
- Class II bicycle lanes along the entire corridor.
- Maximum distance between crosswalks: 1,780 ft between Riza Avenue and 65th Street
- 97% sidewalk coverage.

## STOCKTON BOULEVARD SAMPLE CROSS-SECTION

Four travel lanes plus raised median/center turn lane.



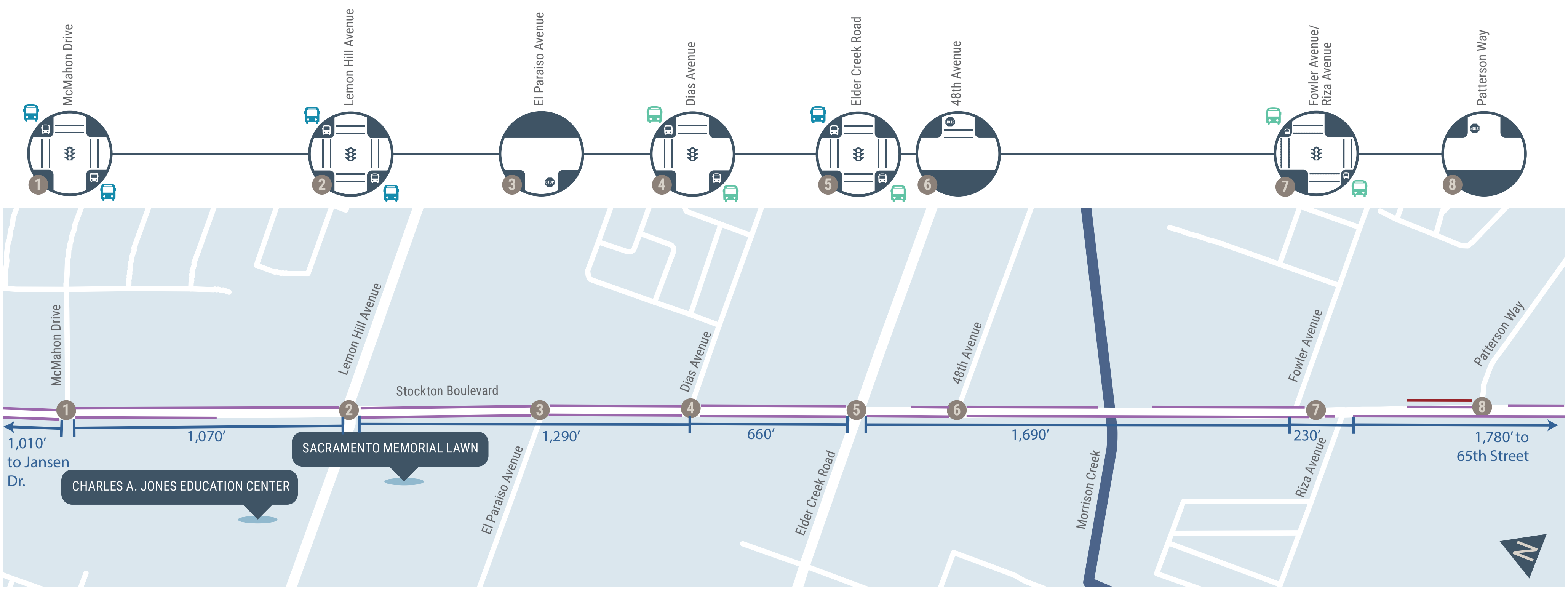
Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

SACRT ROUTES COVERED:
**51**

*Daily ridership is the sum of weekday boardings and alightings.



# Transit Facilities

Line 51 of Sacramento Regional Transit operates on Stockton Boulevard with 15-minute headways for its weekday operations. This line connects Florin Towne Centre to the Sacramento Valley train station and has the highest ridership of all bus routes in the RT system. On weekdays, it operates between 5:30 AM to 10:30 PM. On weekends and holidays, the line operates with half hour headways between 6:00 AM and 11:00 PM on Saturdays and between 6:00 AM and 9:30 PM on Sundays and holidays.

Most transit stops on this corridor are indicated by a Sacramento Regional Transit sign. There is a bench at the northbound stops at Stockton Boulevard/McMahon Drive and Stockton Boulevard/Dias Avenue. There is also a transit shelter at the northbound stop at Stockton Boulevard/Lemon Hill Avenue.

# Pedestrian Facilities

There are sidewalks on both sides of the street that are typically 5.5 feet wide. A gap exists north of Patterson Way on the east side of the roadway.

There are crosswalks on all approaches of all signalized intersections on this segment, except for the south leg of Stockton Boulevard/Dias Avenue. None of the side-street stop-controlled intersections have marked crosswalks. The maximum distance between crosswalks within the segment extents are between south leg of Lemon Hill Avenue intersection and the north leg of the Dias Avenue intersection (1,290 feet). Just outside the segment, the crosswalk on the south leg of the Fowler Avenue/Riza Avenue intersection to 65$^{th}$ Street has a distance of 1,780 feet between crosswalks. All crosswalks on this corridor feature basic makings with solid lines.

Lighting is provided by overhead roadway light poles.

# Bicycle Facilities

The segment has Class II bike lanes along the entire corridor, except for gaps going over Morrison Creek and by the Stockton Boulevard/Fowler Avenue/Riza Avenue intersection. There is also a gap on the west side of the road north of Lemon Hill Avenue intersection. The bike lanes are five-feet in width and are typically not blocked by obstructions.

# StreetScore+

The StreetScore+ results for the bicycle and pedestrian facilities of Stockton Boulevard between 37$^{th}$ Avenue and Patterson Way are shown in Table 15. Because of the high posted speed limit, the bicycle and pedestrian scores are 4 for all segments. This indicates that only “strong and fearless” cyclist will tolerate the level of stress of the segment, and walking is very uncomfortable or impossible.

**Table 15: StreetScore+ Results – Stockton Boulevard (South)**

| Segment | Direction | Bicycle StreetScore+ | Pedestrian StreetScore+ |
|---|---|---|---|
| Stockton Boulevard between Gordon Drive and 37th Avenue | NB | 4 | 4 |
| | SB | 4 | 4 |
| Stockton Boulevard between 37th Avenue and McMahon Drive | NB | 4 | 4 |
| | SB | 4 | 4 |
| Stockton Boulevard between McMahon Drive and Lemon Hill Avenue | NB | 4 | 4 |
| | SB | 4 | 4 |
| Stockton Boulevard between El Paraiso Avenue and Dias Avenue | NB | 4 | 4 |
| | SB | 4 | 4 |
| Stockton Boulevard between Dias Avenue and 47th Avenue/Elder Creek Road | NB | 4 | 4 |
| | SB | 4 | 4 |
| Stockton Boulevard between 47th Avenue/Elder Creek Road and 48th Avenue | NB | 4 | 4 |
| | SB | 4 | 4 |
| Stockton Boulevard between 48th Avenue and Fowler Avenue/Riza Avenue | NB | 4 | 4 |
| | SB | 4 | 4 |
| Stockton Boulevard between Fowler Avenue/Riza Avenue and Patterson Way | NB | 4 | 4 |
| | SB | 4 | 4 |
| Stockton Boulevard between Patterson Way and 65th Street | NB | 4 | 4 |
| | SB | 4 | 4 |

StreetScore+ ratings range from 1 through 4 with 1 representing low stress bicycle and pedestrian travel conditions and 4 representing high stress bicycle and pedestrian travel conditions.
Source: Fehr & Peers, 2018.

# Collision Analysis

Figure 40 shows the locations of crashes on Stockton Boulevard. Figure 41 summarizes the crash types along the corridor. These figures were used as display boards during the Stockton Boulevard community workshop.

Along the Stockton Boulevard corridor, the most crashes occurred at the intersections of Lemon Hill Avenue and Elder Creek Road (35 crashes each). There were five KSI crashes at Lemon Hill Avenue, including two pedestrian KSI crashes. There were four KSI crashes at Elder Creek Road, including one pedestrian KSI crash and one bicycle KSI crash. One pedestrian KSI crash occurred at both Dias Avenue and 48th Avenue. One bicycle KSI crash occurred at each of the following locations: McMahon Drive, Fowler Avenue/Riza Avenue, and the midblock location between McMahon Drive and Lemon Hill Avenue.

FIGURE 40

# STOCKTON BOULEVARD CRASHES

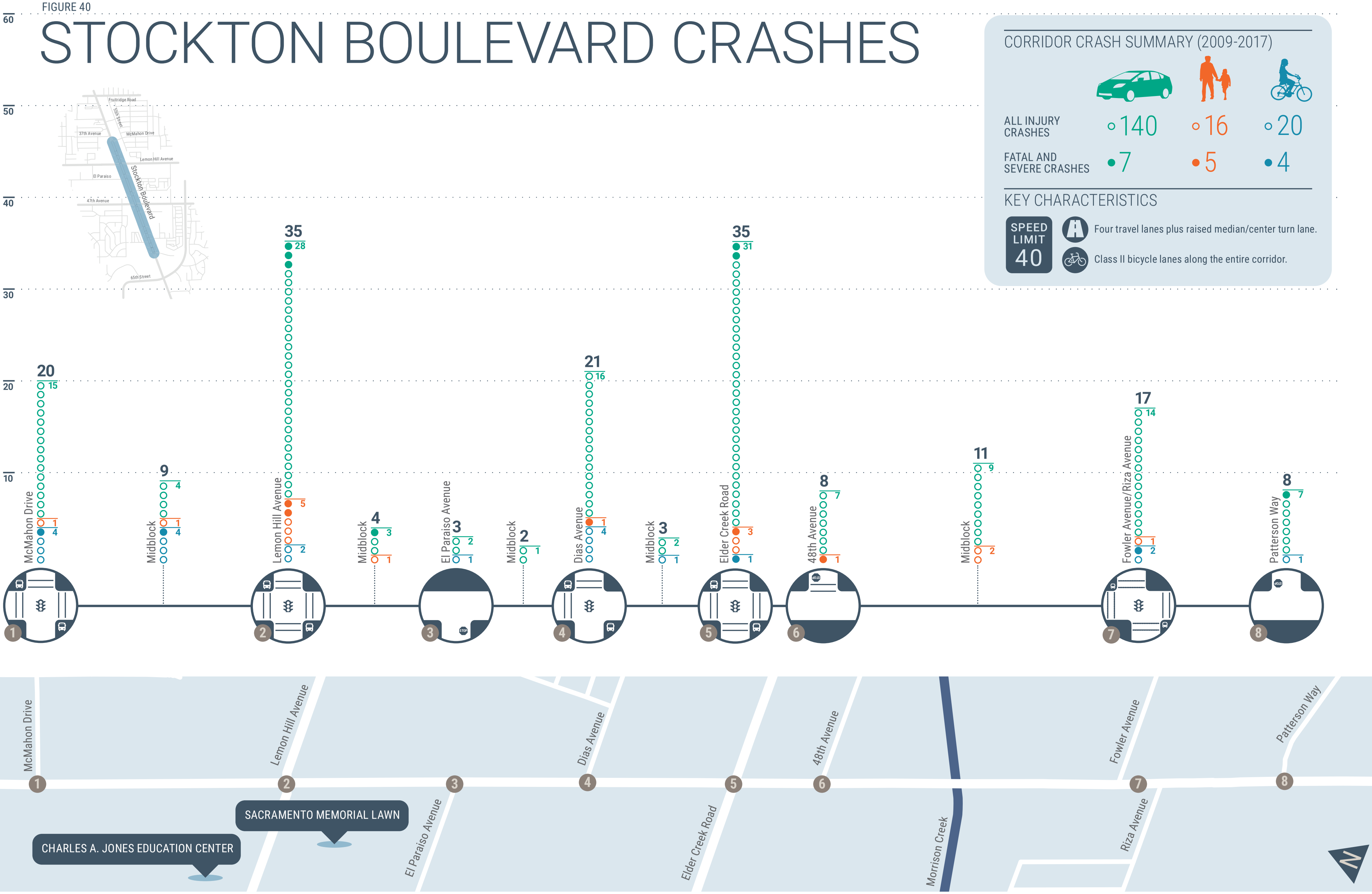


FIGURE 41

# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed
"Unsafe Speed" was the most common violation, cited in 35% of all crashes.

**1** **2** 3 **4** **5** **6** **7** **8**

### Proceeding Straight
Nearly 3/4 of drivers were proceeding straight or stopped at the time of the crash.

**1** **2** **3** **4** **5** **6** **7** **8**

### Signal or Sign Violation
"Traffic Signals and Signs" was tied for second most common violation category.

**1** **2** 3 **4** **5** 6 7 8

### Under the Influence
"Under the Influence" was tied for second most common violation category.

1 **2** 3 4 **5** 6 7 8

### Rear End
Over 35% of all crashes were rear end.

**1** **2** 3 **4** **5** **6** **7** 8

### Left Turns
65% of drivers who were turning at the time of the crash were making a left turn.

**1** **2** 3 **4** **5** 6 7 8

### Broadside
30% of all crashes were broadside, also called T-Bone.

**1** **2** 3 **4** **5** 6 **7** 8

### Nighttime
40% of all crashes occurred during nighttime or dark conditions.

**1** **2** 3 **4** **5** 6 **7** **8**

## PEDESTRIAN

### Crossing in Crosswalk
Nearly half of all pedestrians hit by a driver were in a crosswalk at the time of the crash.

1 **2** 3 4 5 6 7 8

### Pedestrian in Road
25% of pedestrians hit by a driver were walking along the road or shoulder.

1 2 3 4 5 6 7 8

## BICYCLE

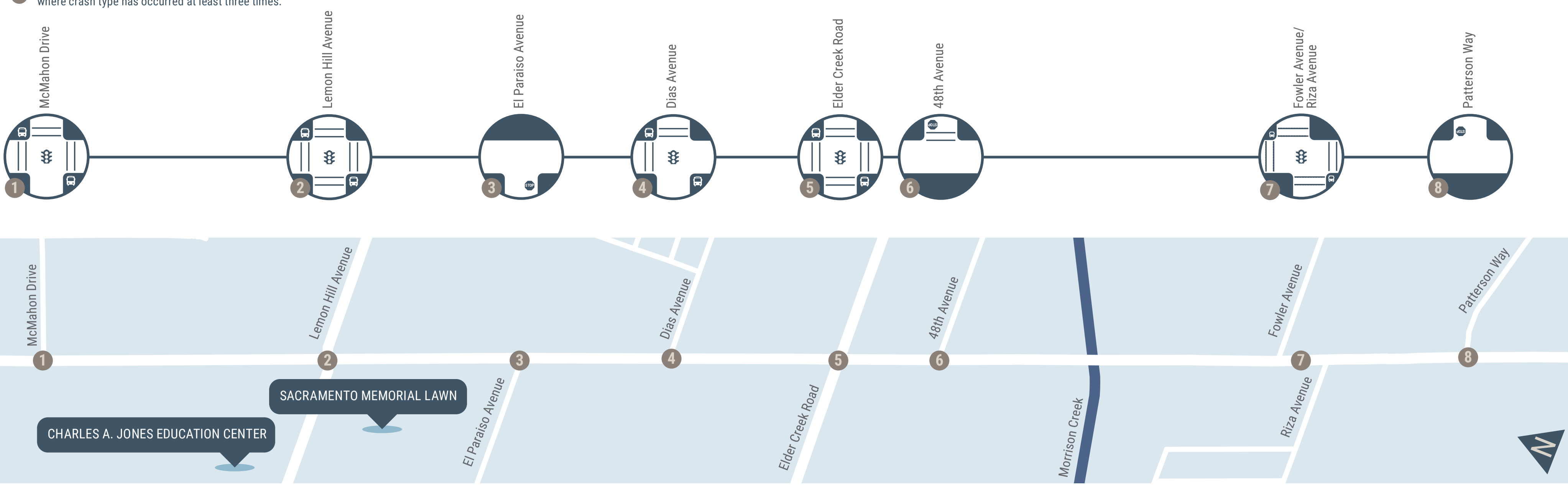
### Broadside
65% of bicycle crashes were broadside, also called T-Bone.

1 2 3 4 5 6 7 8

### Right Turns
1/3 of drivers who hit a bicyclist were making a right turn at the time of the crash

1 2 3 **4** 5 6 7 8

1 Numbers that are turned on represent a location where crash type has occurred at least three times.



Crashes involving a vehicle proceeding straight or stopped, unsafe speed violations, and rear end crashes were very common along South Stockton, with at least three crashes of each crash type occurring at almost all intersections. Other common crash types along the corridor include:

- Vehicle left turns (McMahon Drive, Lemon Hill Avenue, Dias Avenue, Elder Creek Road)
- Broadside crashes (McMahon Drive, Lemon Hill Avenue, Dias Avenue, Elder Creek Road, Fowler Avenue/Riza Avenue)
- Signal or sign violations (McMahon Drive, Lemon Hill Avenue, Dias Avenue, Elder Creek Road)
- Under the influence violations (Lemon Hill Avenue, Elder Creek Road)
- Nighttime crashes (McMahon Drive, Lemon Hill Avenue, Dias Avenue, Elder Creek Road, Fowler Avenue/Riza Avenue, Patterson Way)
- Pedestrian hit while crossing in crosswalk (Lemon Hill Avenue)
- Bicycle crashes involving right-turning vehicles (Dias Avenue)

# Feedback

Most of the comments received during outreach for Marysville Boulevard mentioned enforcement and bike safety. These comments are detailed in the *Community Outreach Report – Phase 1*, which is included in Appendix A.

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# Appendix A – Phase 1 Outreach Summary

# Vision Zero Top 5 Corridors Study

Community Outreach Summary Report | **Phase I**

**FALL 2018**

# Table of Contents



David Carter, Fehr & Peers, discusses the **Broadway / Stockton** Corridor with Councilmember Eric Guerra and a community member.

Jennifer Donlon Wyant, City of Sacramento, discusses the **Broadway / Stockton** Corridor with a community member.

Leslie Mancebo, City of Sacramento, discusses the **El Camino** Corridor with a community member.

Jennifer Donlon Wyant, City of Sacramento, discusses the **Marysville** Corridor with families at the Mutual Assistance Harvest Festival

# About the Vision Zero Top Five Corridors

In 2017, the City of Sacramento identified five corridors in Sacramento with the highest numbers of fatal and serious crashes involving pedestrians, bicyclists, and motorists.

The purpose of the Vision Zero Top Five Corridor Study is to analyze the factors that contribute to these corridors' high crash rates and propose improvements for each corridor that can be implemented near-term. Improvements are based on technical analysis, community input, and best practices in roadway safety and design.

Each of the five corridors span about one mile and are shown on the map to the right and listed below:

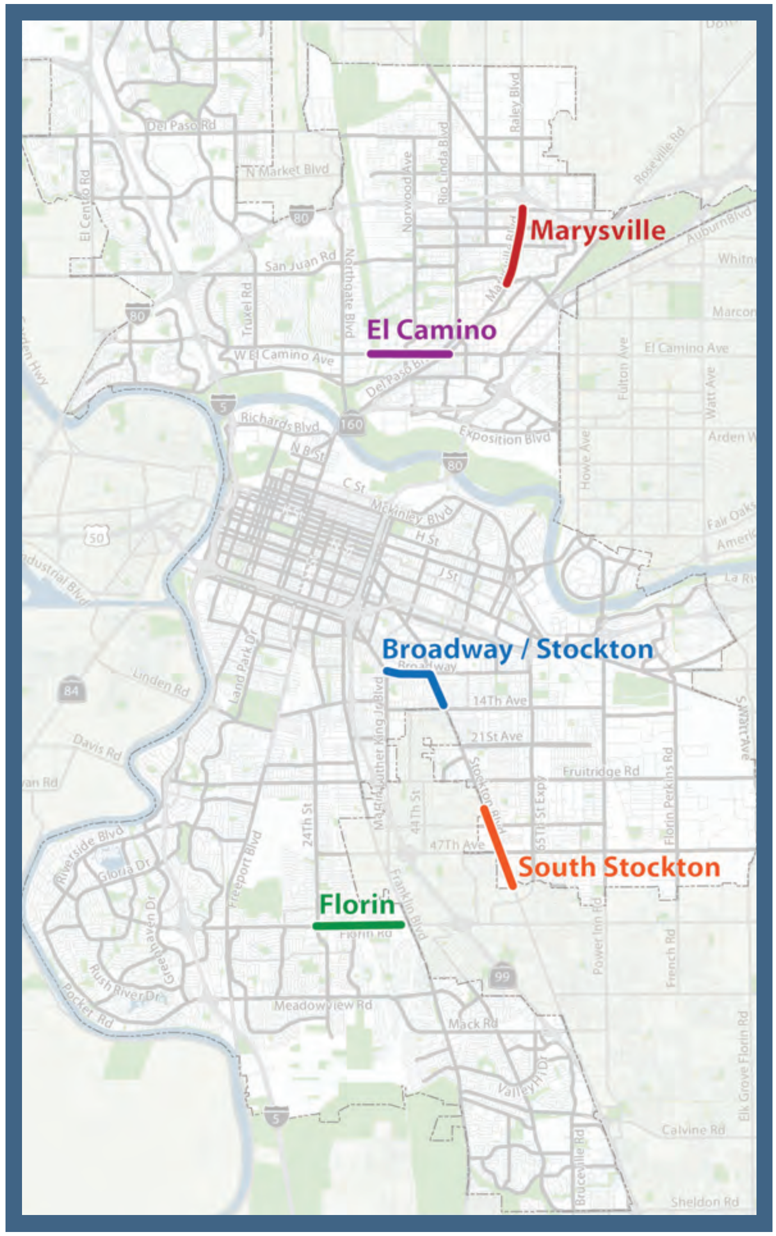
**Marysville Boulevard**
North Avenue to Arcade Boulevard

**El Camino Avenue**
Del Paso Boulevard to the paved levee trail adjacent to Steelhead Creek

**Broadway / Stockton Boulevard**
Martin Luther King Jr. Boulevard to 13th Avenue

**South Stockton Boulevard**
McMahon Drive to Patterson Way

**Florin Road**
24th Street to Munson Way



# Community Outreach Program

Community outreach is an important component of the Vision Zero Top Five Corridor Study. Technical data and analysis can identify where crashes take place along a corridor, how often they take place, and the types of crashes. However, community input is needed to help tell the whole story – including the experiences of those who travel along the corridors, their observations of how others are traveling within the corridor and what and where they see the challenges. Feedback from the community about these topics can better inform the study's countermeasures, which will address specific traffic and safety challenges along each of the top five corridors.

Leslie Mancebo, City of Sacramento, discusses the **Broadway / Stockton** Corridor with a community member at the SacRT transit stop by Food Source.

The community outreach program includes two phases:

**Phase 1 (October – December 2018)**

*Objectives*

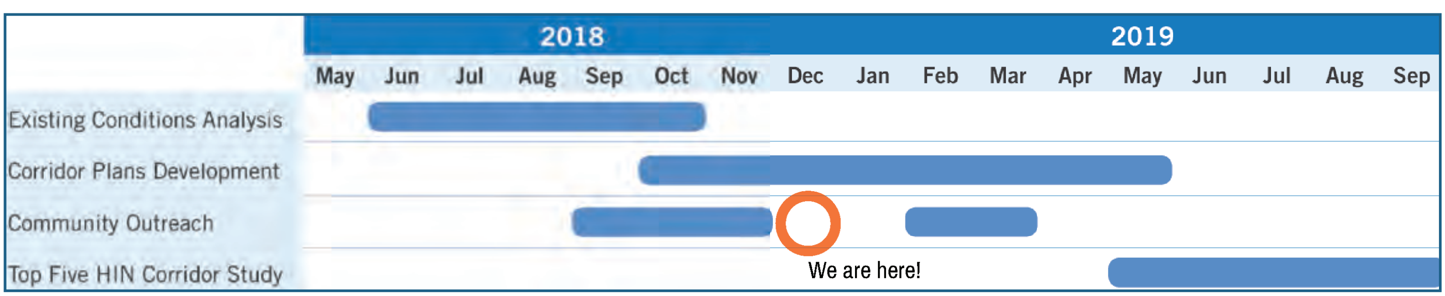
- Build community awareness about the Vision Zero Top Five Corridors Study
- Present an overview of existing conditions along the top five corridors
- Obtain community input on the community's experiences traveling along the top five corridors
- Educate the community on the importance of traffic safety

**Phase 2 (Spring – Summer 2019)**

*Objectives*

- Present draft countermeasures developed based upon technical analysis, best practices in traffic engineering, and community input.
- Obtain community input on the draft countermeasures.
- Educate the community on the importance of traffic safety

PROJECT SCHEDULE



The City of Sacramento Vision Zero team held a total of six pop-up events and two community workshops throughout the top five corridors.

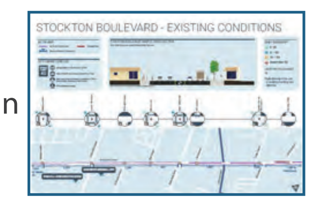
David Carter, Fehr & Peers, and Nicole Porter, AIM Consulting, pose with batman at the **Broadway / Stockton** pop-up event at the Oak Park Community Center Harvest Festival.

The purpose of the pop-up event series and community open houses were to engage community members who regularly travel along the corridors and find out their experiences walking, biking, and driving along the corridor. The project team held the pop-up events at community hubs and community events near each corridor. Community workshops were held at local schools near each of the corridors. The project team engaged more than 100 community members throughout the Phase 1 of public outreach.

At each of the outreach events community members were provided technical information represented graphically on a series of display boards relevant to one of the top five corridors, depending on the location of the event, as well as an overview of the project background. The boards included the following information:

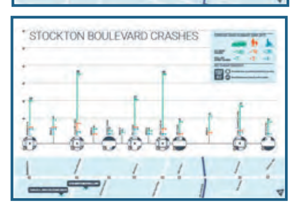
**Project Overview and Background**

o These displays provided an overview about the Vision Zero Top Five Corridors Study and a project schedule along with a map of all corridors within the City.



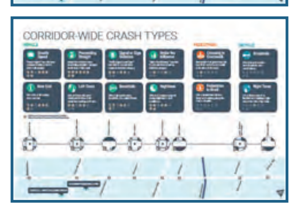

**Existing Conditions of the Corridor**

o This display included key characteristics of the corridor, such as the average daily traffic volume, length of bike lanes, distance in-between crosswalks, and the percentage of sidewalk coverage along the corridor. It also displayed an illustrative drawing of a sample cross-section of the existing conditions, daily transit ridership numbers, and transit stop locations.




**Corridor Crash Analytics**

o This display presented a summary of all crashes involving vehicles, pedestrians, and bicyclists along the specific corridor from 2009 to 2017. It showed where these crashes have taken place and specified if the crash resulted in an injury or fatality.




**Corridor-Wide Crash Types**

o This display presented the different types of crashes that had taken place along the specific corridor from 2009 to 2017, for each mode of transportation that was involved in a crash.


**Community Input Board**

o This board asked community members to respond to the prompt, "Tell us about your experience traveling long [specific corridor]." The intent was to understand the community members experience traveling within the corridor, their observations, concerns and ideas for improvement.

*The boards listed above can be found in the appendix of this document.*

During each outreach event, community members were asked to review the project boards and share their experiences traveling within the corridor. Participants wrote their comments on post-it notes and placed their comments on board exhibits.  Project team members at the pop-up events wrote down additional comments from one-on-one discussions with participants, which included ideas and suggestions for needed improvements along the corridor to enhance safety.

Jennifer Donlon Wyant, City of Sacramento, and David Carter, Fehr & Peers, discuss the **Florin** Corridor with a community member at the Community Workshop at Luther Burbank High.

Gladys Cornell, AIM Consulting discusses the **South Stockton** Corridor with a community member at the Community Workshop at Peter Burnett Elementary.

**The outreach events were held from October through early December of 2018 and are listed by date and corridor below.**

## PHASE 1 OUTREACH EVENTS

| | |
|---|---|
| October 25 | **Fall Family Festival**<br>Broadway / Stockton Corridor<br>*Oak Park Community Center* |
| October 27 | **Mutual Assistance Harvest Festival**<br>Marysville Corridor<br>*Robertson Community Center* |
| November 5 | **Community Workshop**<br>South Stockton Corridor<br>*Peter Burnett Elementary School* |
| November 7 | **Transit stop at Broadway / Stockton**<br>Broadway / Stockton Corridor<br>*WB Transit Stop by Food Source* |
| November 10 | **Old North Sacramento / Dixieanne Community Association Meeting**<br>El Camino Corridor<br>*701 Dixieanne Avenue* |
| November 15 | **Comunity Workshop**<br>Florin Road Corridor<br>*Luther Burbank High School* |
| December 4 | **Grocery Outlet**<br>El Camino Corridor<br>*Grocery Outlet on Del Paso Boulevard* |
| December 5 | **Hagginwood Community Association Meeting**<br>Marysville Corridor<br>*William J. Kinney Police Facility* |

# Compilation of Input by Corridor

The following pages reflect the input recieved at each pop-up event and community workshop facilitated by the project team.


# Marysville

*North Avenue to Arcade Boulevard*

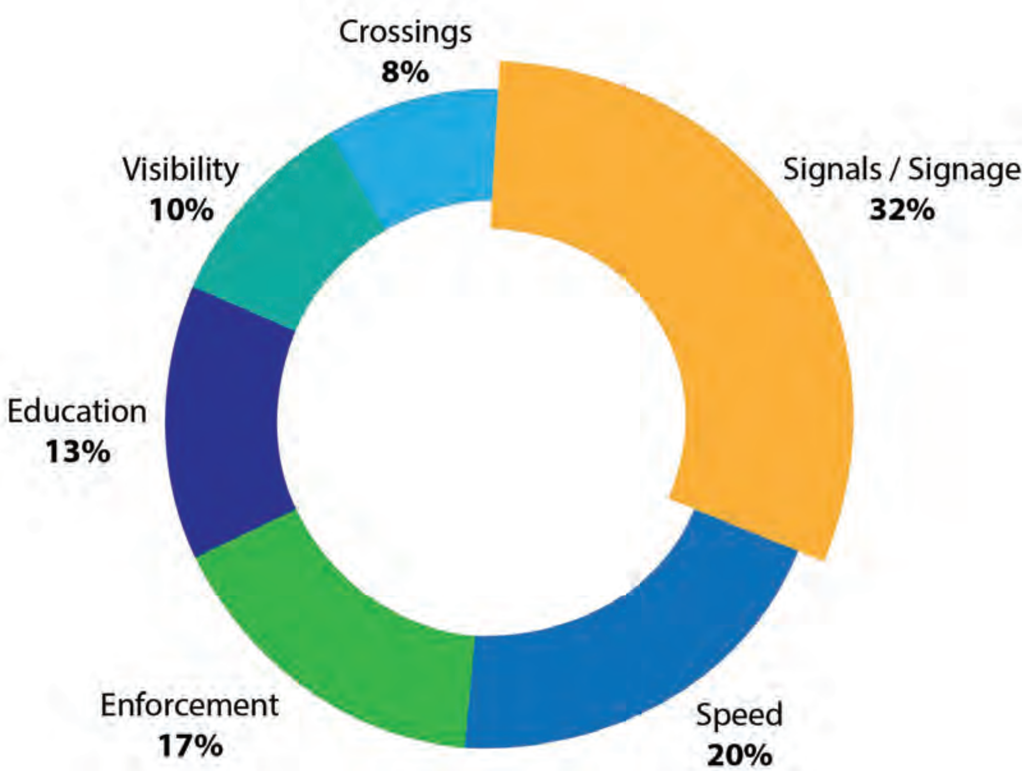


Existing intersection on Marysville Boulevard.

The project team held two pop-up events to obtain community input on the Marysville Corridor:

- Mutual Assistance Network Harvest Festival on Saturday, October 27, at the Robertson Community Center
- Hagginwood Community Association Meeting on Wednesday, December 5th, at the William J. Kinney Police Facility

Below is the feedback received from each event distributed into relevant categories. The graph below depicts the amount of input received in each category.



**Comments received from post-it notes on project boards:**

## Crossings

- Very difficult to cross the street as a pedestrian. Flashing beacons or lights flashing on the street would make it safer.
- There are too many kids and people jay-walking across the street. The crosswalks are too far apart so people don't use them.
- Pedestrians don't pay attention when crossing the street - we need more cross walks.
- Crosswalks need flashing beacons - people are unaware they are there without them.
- We need bump outs for pedestrians to better alert drivers, so they can visually see where they would be.

Community members creating reflective stickers at the Harvest Festival.

## Enforcement

- Marysville needs law presence for more phone enforcement and reckless driving enforcement.
- More enforcement needed at signals.
- Drivers don't pay attention, they are on their cell phones, and don't seem to care about pedestrians.
- We need more police enforcement, particularly for speeding.
- Drivers don't pay attention to pedestrians.
- Enforce traffic violations.
- More enforcement to keep drivers off of their cell phones.
- I see a lot of jay-walking, especially near liquor stores and the park.
- There are too many jay-walkers and red light-runners
- Viva Supermarket, Rainbow Market, 3621 Mini mart, Quick Stop, and Arcade Market all have vagrants that loiter and constantly jay-walk back and forth across Marysville Boulevard.

## Education

- PHB: Education needed for drivers and pedestrians.
- Educate people on what the signals mean.
- Education about signals and road laws in the area is needed.
- Education on the new traffic beacons is needed, then add more of them.
- this area could use traffic safety / signal classes (for free!)
- Education needed about PHB.
- People drive too fast, drivers don't know what to do at PHB. We need more cross walks, better pavement and more lighting for overall visibility.
- A video series for cyclists to learn the rules of the road is needed.

Rebecca Shafer helping community members make reflective stickers at the Harvest Festival.

## Speed

- Cars drive too fast.
- People drive too fast.
- Speeding is an issue.
- Speeding is an issue, and sidewalks disappear.
- Speeding is an issue, drivers don't follow the law and drive aggressively.
- Slow down traffic, drivers go over 35 MPH.
- Speeding is a problem!
- People speed too often.
- I take the side streets to avoid Marysville Boulevard because people drive way too fast.
- Speeding is an issue.
- Paint the speed limit on the street.
- Marysville Boulevard is becoming a shortcut to downtown.


Jennifer Donlon Wyant, City of Sacramento, discussing the Marysville corridor with families at the Harvest Festival.

## Signals / Signage

- We need more signal lighting.
- The signals are slow, so people run them.
- More cross walks, more PHB / HAWLK signals. But educate people on them.
- Make cars aware of crosswalks, more lighting to see pedestrians at night would also help. Pedestrian flashing beacons are safe and keep the flow of traffic.
- The Los Robles signal is confusing and needs a left turn signal.
- More signals and more cross walks would make Marysville Safer.
- More signals needed for pedestrians to cross.
- People don't yield where they are supposed to.
- Roanoke pedestrian hybrid beacon.
- Audible pedestrians' heads - do they show better crossing compliance?
- Los Robles at Quick Stop, pedestrian button stolen?
- Westbound Arcade Boulevard to north bound Maysville needs a green arrow for making a turn onto northbound Marysville.
- Arcade and Marysville - no ped heads?
- Vehicle turn lanes help on two-way turn lanes.
- Arcade to Marysville needs turn signal heads.
- Marysville and North Avenue: Cars pull out into traffic for right turn when there is inadequate clearance to do so which causes traffic to slow.
- Left hand turns at Arcade feel like I'm taking my life into my hands every time I turn left. Bicyclists and walkers crossing or walking in streets against red lights.
- Lane striping needs refreshing.
- Need better street signs, I can't see them.

## Visibility

- More street lights and cross walks needed.
- Bushes on the dividers make it hard to see oncoming traffic, and hard to make left turns.
- Center medians are not reflective and hard to see at night and the markings are hard to see.
- It's hard to see pedestrians southbound on Marysville, onto Rosalind Street.
- Marysville and Los Robles: View of north bound traffic is obstructed by cars at the gas pumps at the market.
- Corridor is too dark.
- I live by Del Paso and Marysville Boulevard, that neighborhood needs lighting.

# El Camino

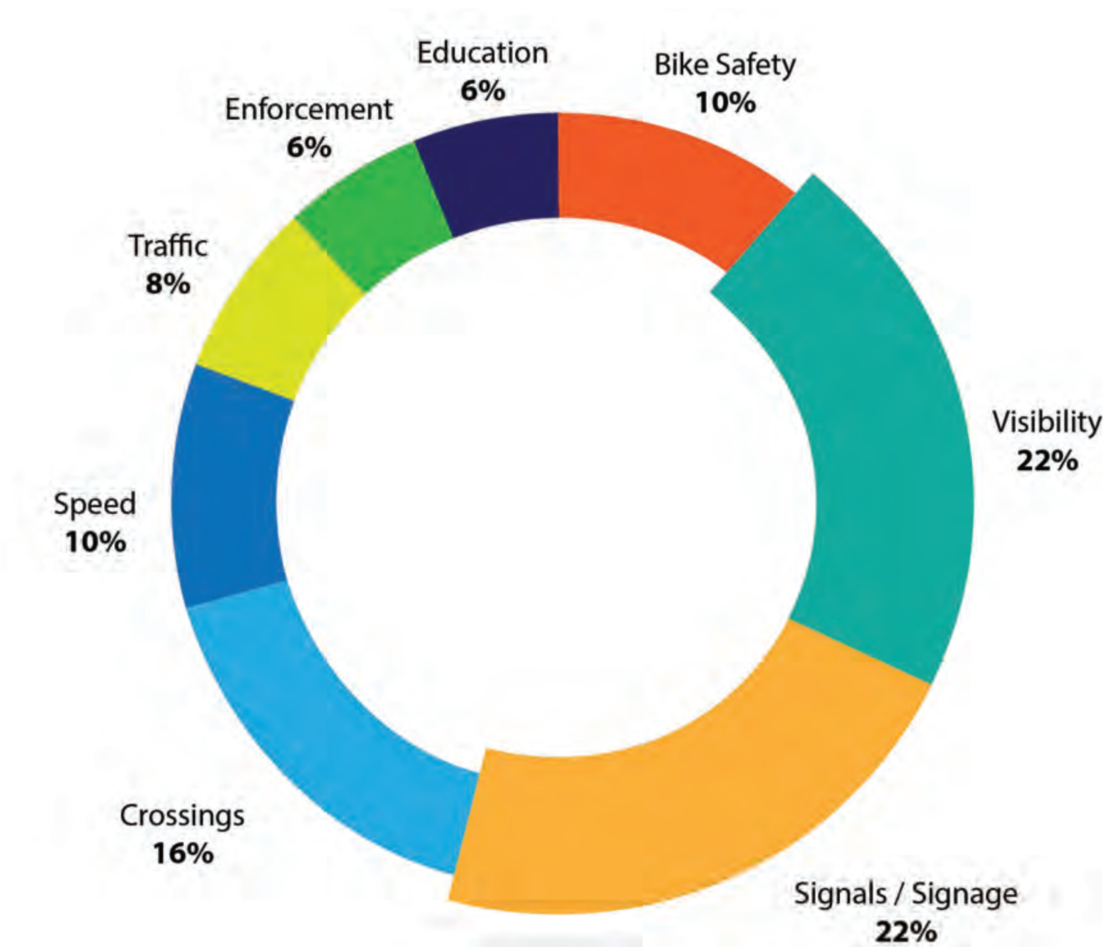
*Paved levee trail adjacent to Steelhead Creek to Del Paso Boulevard*


Existing intersection in the El Camino Corridor.

The project team held two pop-up events to obtain community input on the El Camino Corridor:

- Old North Sacramento / Dixieanne Community Association Meeting, Saturday, November 10, at Grace City, located at 701 Dixieanne Avenue
- Grocery Outlet Store, Tuesday December 4, located at the Grocery Outlet along the corridor

Below is the feedback received from each event distributed into relevant categories. The graph below depicts the amount of input received in each category.



**Comments received from post-it notes on project boards:**

### Bike Safety

- Altos / Traction meets the bikes path, there is a lot of bike activity there and no bike lanes / bike safety.
- Bike lanes along this corridor have obstructions or are non-existent.
- Bike lanes are too skinny.
- “Fake” bike lanes, we need better lighting to see people, and a barricade to separate cars.
- West El Camino towards Northgate: not a lot of room for cyclists.
- It can be frightening to bike on El Camino.
- Bicyclists have to take a lot of precautions because of fast traffic.

### Visibility

- Difficult to pull out of my driveway on El Camino, need slower speeds there and better visibility.
- It’s hard to pull out to El Camino from side streets because its hard to see.
- Need better lighting at night.
- Mid-block crashes: a lot of homes have their driveways backing into El Camino - there is unsafe backing out due to high speeds and visibility issues.
- The City needs to trim their trees for visibility, particularly in front of stop signs.
- You cannot see getting onto El Camino from the side streets.
- El Camino needs more lighting in general - more street lights improve visibility
- Hard to turn off of El Camino onto other streets
- Visibility for cyclists is bad on El Camino, especially when it gets dark since the lighting is bad. I have to ride in the gutters and sometimes there is debris.
- Del Paso Boulevard and Rio Linda: People cannot see the stop sign and there is about one accident per month. El Camino is not wide enough.
- On El Camino Avenue, everything is too close together, it’s constricting and hard to see at night.
- At night people walk directly in front of cars.
- Need more lighting.


Rebecca Shafer, Fehr & Peers, discussing the El Camino corridor with individuals at the Community Association Meeting.

### Speed

- The speed on El Camino is too high.
- El Camino and Grove Avenue needs to be widened and slower traffic speeds to make it safer.
- I try to avoid El Camino because there are random pedestrians and people drive too fast.
- Aggressive driving and road rage on El Camino.
- The street is too narrow, and traffic moves too fast.
- There is one light port in my neighborhood and speed bumps that were installed at Del Paso and Arden Arcade.
- Traffic needs to slow down, especially by crosswalks.

Project team members discussing the corridor crash types at Grocery Outlet.

### Crossings

- There is systematic Jay-walking on El Camino.
- Fairfield and El Camino: There is no cross walk, all intersections should have cross walks with crossing lights.
- Crossings along here are not pedestrian-priority, people jay-walk because of it.
- Jay-walking becomes a culture because of the long waits - it's a systematic issue.
- Weird striping for the West Bound approach at Grove.
- It's a nightmare to walk on a 3-way split at Del Paso, Arden, and El Camino.
- Homeless people walk across the street and hang out in the medians sometimes by the overpass.
- They added a new light for the crosswalk, but no one uses it.
- Sometimes it's difficult to walk on El Camino because cars travel too fast.
- At the intersection of Del Paso and El Camino, it is hard to cross the street. There aren't crosswalks for every street, but people won't wait forever for the light, so they walk where there is no crosswalk anyway.
- Look into mid-block victims in this study.

### Signals / Signage

- People Jay-walk because the Del Paso and El Camino is too long of a wait.
- Too many traffic signals on El Camino create the problem.
- More Vision Zero signs on El Camino are needed.
- With too many signals, people stop using them.
- Stop signs with red flashing lights around it draws more attention.
- Speed sign feedback: drivers don't wait for pedestrians to get to the sidewalk, flashing lights will call attention to stop signs, as will trimming trees so they are easier to see.
- Colfax and El Camino: Signal timing: too many cars end up waiting for the long signal, then people run red lights
- Signalized cross walks needed.
- "Slow Down" banners would be helpful.
- The Speed feedback sign has been helpful in slowing speeds on Del Paso.
- Signage reminding people to slow down and that they are driving in a residential area.
- El Camino needs stop signs and speed bumps.
- Light at the El Camino corner is highly dangerous. The lanes are also small.
- It's hard to cross at Rio Linda.
- People jay-walk when the lights don't turn for a long time. But some people don't want to stop traffic with the cross walk.
- There are no stop signs on El Camino, which is unsafe as a pedestrian. A friend was hit by a car at 5:00 a.m. and the specific travel times are too fast. Everyone talks about the speed issue, there needs to be more signs and speed bumps to slow cars down. Travel time needs to be better [rush hour].

### Enforcement

- There is too much neglectful driving, we need more enforcement, and the Police drive too fast to see.
- More traffic enforcement needed.
- I walk across where Wienerschnitzel is, and some driver ran the red light. If I didn't dive out of the way, I would've been hit.
- Distracted driving with cell phones and jay-walking is a problem on El Camino.

### Traffic

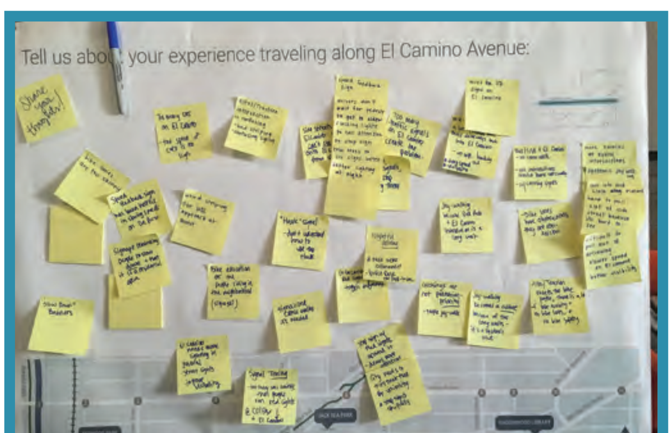
- I take Del Paso or Garden Highway instead of El Camino to avoid traffic problems.
- Del Paso and El Camino are always congested, and people are always rushing through.
- Edgewater Road goes from four to two lanes: widen the road way, it's hard to see the way the streets are lined up.
- Traffic gets backed up on El Camino, so I take residential streets.
- El Camino goes from four lanes to two lanes so there's a bottleneck.

### Education

- People do not know how to use the "Hawk Signal"
- We need bike education for cyclists in the neighborhood, maybe signage around the area?
- The Altos / Traction intersection is confusing: bad striping, confusing lighting.
- El Camino Avenue / Del Pas Boulevard is confusing.

Project team members discussing existing conditions at Grocery Outlet.


Leslie Mancebo, City of Sacramento, presenting to the Old North Sacramento / Dixieanne Community Association.




Input received from the Old North Sacramento and Dixieanne Community Association.

# Broadway / Stockton

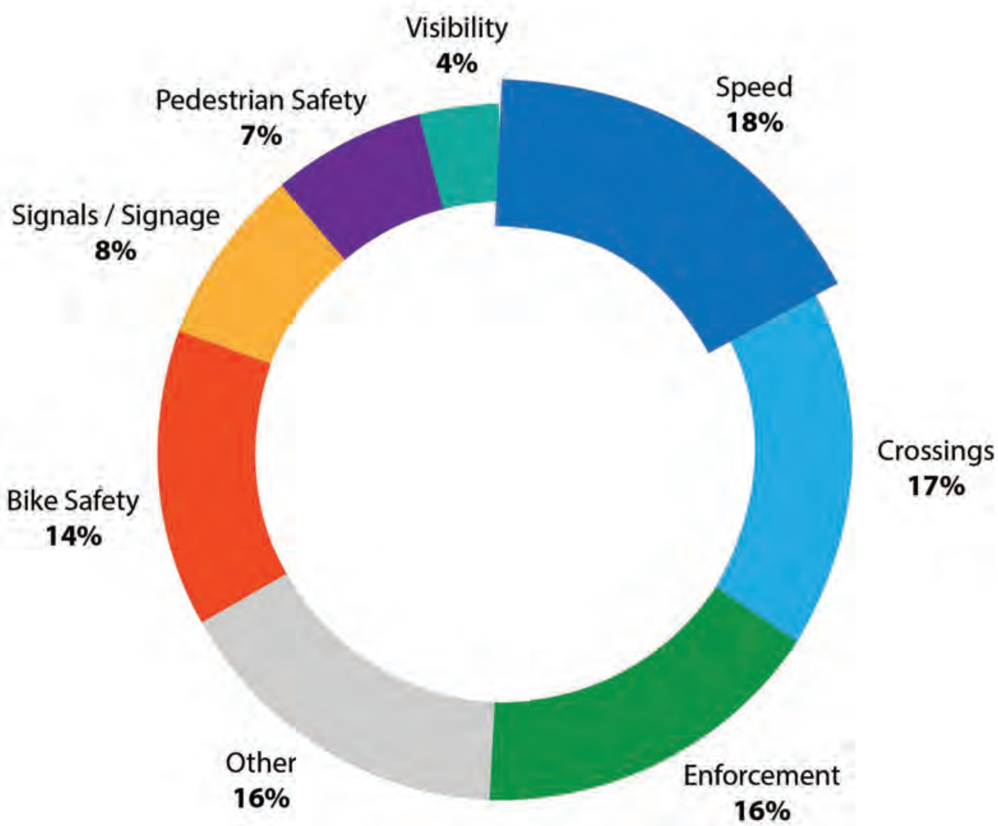
*Martin Luther King Jr. Boulevard to 13th Avenue*


Existing intersection on the Broadway / Stockton corridor.

The project team held two pop-up events to obtain community input on the Broadway / Stockton Corridor:

- The Fall Family Festival on Thursday, October 25, at the Oak Park Community Center
- Transit stop at Broad/way Stockton on Wednesday, November 7, in front of the Food Source

Below is the feedback received from each event distributed into relevant categories. The graph below depicts the amount of input received in each category.



**Comments received from post-it notes on project boards:**

## Signals / Signage

- Cars make left turn from MLK onto Broadway and don't stop or look for people walking.
- Drivers are distracted, and there's a lot of activity happening, especially at the intersection.
- Even when light says you can walk, I stop to make sure they aren't running the red light.
- Need more lights - it isn't convenient for drivers, but it will slow them down and make the area safer.
- Need a double turn lane on Broadway Stockton.
- We need more traffic signals.
- Traffic light timing is a problem, and we need wider lanes on Broadway.

Nicole Porter, AIM Consulting, discussing the crash data along the Broadway / Stockton Corridor.

## Pedestrian Safety

- Pedestrians usually follow the rules of the road.
- This is a more populated low-income area, so there are more people walking.
- Stockton and 14th - South bound right turn don't look for pedestrians, nor do they stop for pedestrians.
- I drive slower here because I've almost hit other people.
- More people walk around this area than in other places.
- Just saw a family get hit by Mack/Valley Hi, the car drove away.

## Speed

- Speeding - drivers drive too fast and need to slow down.
- My transit stop is at 38th and MLK. My whole family walks from 18th Street and cars drive way too fast.
- Cars speeding! It feels dangerous to bike even in the bike lanes. Cars don't yield to pedestrians. It's difficult as a cyclist to make turns. Work crews always put signs in their bike lanes, and the bike lanes often have a lot of debris/leaves in them which makes it difficult to share the lane.
- On MLK cars drive way too fast and drive too close to the sidewalk.
- Enforce a speed limit and have flashing stop signs.
- I walk to the 51-bus route, usually around Mack and Valley Hi. Cars are going too fast - watch yourself.
- You see a lot of other drivers going fast or angrily.
- Buses speed on Broadway and there is already too much traffic on Broadway. We need more crosswalks.
- Slow the streetcars and create traffic calming mechanisms.
- People drive too fast and run the right turn red lights at the Broadway / Stockton intersection.
- More narrow lanes to slow traffic and make us safer.
- A 2-lane bridge to drive over, like freeways have, so we can keep the freeway speed off this corridor.
- Broadway segment is too many lanes for residential nature - the speed is too high.
- Shrink the lane sizes.
- Better speed enforcement and complete bike lanes.

## Bike Safety

- Nurses ride bikes up Stockton early in the morning, on the way to the UCD Med center - from Tahoe park onto Stockton.
- It's difficult to commute to midtown from Stockton Boulevard because all bike lanes end at Broadway / Stockton. It's an uncomfortable corridor to bike on.
- I don't ride my bike on Broadway because it is too fast - we need slower traffic from Central Oak Pak to the UC Davis Medical Center.
- "Disappearing bike lanes" - we need continuing bike lanes.
- No more disappearing bike lanes please.
- Disappearing, reappearing, disappearing bike lanes. Park / bike lanes look similar and usually have cars parked in it. Bike lanes are always the minimum width and the car lanes are huge.
- Direct bike traffic onto 8th Avenue or 1st or 2nd Avenue, they have slower traffic.
- Make bike lanes continuous!
- People always drive in the bike lanes.
- The bike lanes aren't ever cleaned.
- Reflective gear for cyclists is so important.
- Try temporary fixes to make bike lanes continuous and safe.


Councilmember Eric Guerra, District 6, and Leslie Mancebo, City of Sacramento, live streaming the transit stop pop-up event.

## Crossings

- I take light rail by AutoZone and walk down MLK - we need a crossing between the firehouse and Happy Takeout - a lot of people, students included, jay-walk.
- On the Stanford Market intersection, cars pass through the bike area.
- Crossing guards are needed by the schools.
- Marked crosswalk at 7th was removed, but people still use, and since it's no longer marked, drivers are more aggressive.
- Pedestrian lights, flashing cross walks
- Even when pedestrian crossing lights are on, people are cautious to cross - cars too.
- Enforce pedestrian crossing at crosswalks.
- Lots of jay-walking along here.
- Zebra crossing at Broadway / Stockton (See UC Davis Med Center).
- South Stockton - pedestrian overpass needed to prevent jay-walking.
- Right turn on red and not enough crossings.
- More crosswalks! Cars do not stop, and there are bus stops not too far from crosswalks.
- Pedestrians don't pay attention and people don't use cross walks because they are too far away.


David Carter, Fehr & Peers, recording input from a community member at the transit stop pop-up event.

## Enforcement

- People cut me off while driving, drive too fast, texting while driving
- Distracted driving is an issue.
- More enforcement needed - police need to do their jobs and write tickets.
- Drunk driving is a big problem here.
- Tent pop-ups along Broadway are distracting.
- People don't stop at red lights on a right turn on Broadway / Stockton.
- Red light running is a problem at the Broadway / Stockton Intersection.
- Distracted driving, specifically cell phones, is a huge problem.
- More cops need to be around to enforce the rules of the road: people always speed and jay-walk.
- Cameras to monitor traffic speeds might help with speeding and light running.
- Greater / enhanced traffic enforcement through SacPD and UC Davis.
- Since this area is higher crime, there should be more traffic enforcement officers.
- Red light enforcement cameras or the police.
- Police officers from UC Davis and SacPD need to enforce traffic laws.

## Visibility

- Better street lighting is needed on Stockton.
- Light up the intersection so drivers can see pedestrians.
- I walk in the street because the sidewalks are so dark - we need better lighting.
- Blind corner at Martin Luther King Jr. Boulevard / Broadway.

## Other

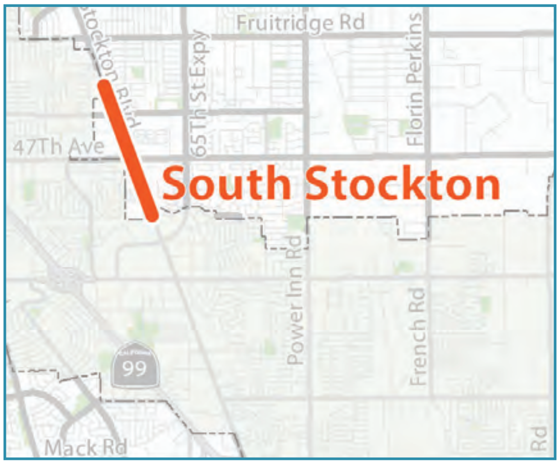
- I usually drive or take SacRT to Cosumnes River College - the bus doesn't stop if homeless people are around, and sometimes when it's busy or late, I must walk to the bus and it's difficult.
- I normally drive around those streets early, at 6:00 a.m., up Stockton to Alhambra.
- Driving on Broadway - the road maintenance is bad and there are too many lanes.
- Stockton to Martin Luther King Jr. Boulevard has cracked pavement that ruins cars.
- Drunk driving along this corridor is an issue.
- Oakridge school parents drive here.
- I go to PS7, no one walks off campus.
- I work at the community center and prefer to go down 8th and Broadway than go on Broadway / Stockton.
- DMV tests - people that drive here don't know how to handle a car and there is too much distracted driving.
- The community should help clean up the street, more receptacles would help.
- Paint green specifically around the corners / problem areas of this corridor.
- The pavement quality is bad and distracting at 39th and Broadway.
- Broadway is too narrow and windy.
- Widen Broadway, two lanes are not large enough.

Nicole Porter, AIM Consulting, discussing biking on the Broadway / Stockton Corridor with a student.

Community member providing input on the Broadway / Stockton Corridor at the transit stop pop-up event.

# South Stockton

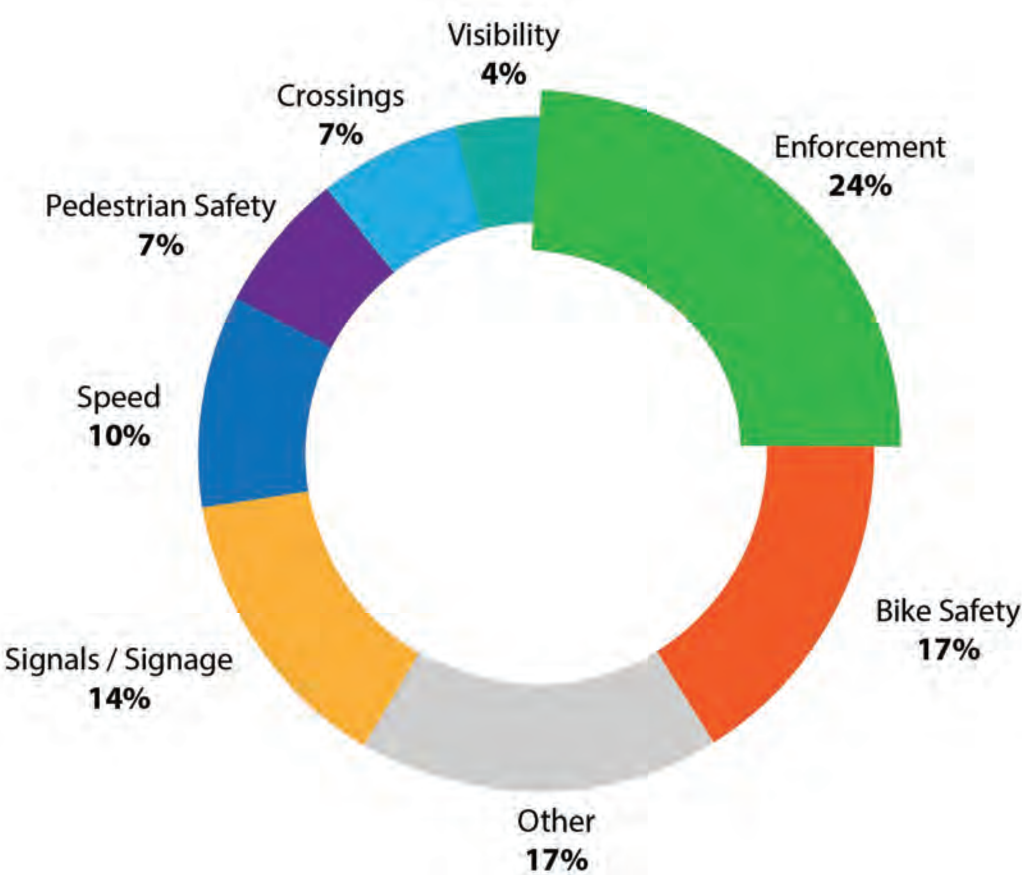
*McMahon Drive to Patterson Way*




Existing intersection on the South Stockton corridor.

The project team held one community workshop to obtain community input on the South Stockton Corridor at Peter Burnett Elementary School, on Monday, November 5.

Below is the feedback received from the workshop distributed into relevant categories. The graph below depicts the amount of input received in each category.



**Comments received from post-it notes on project boards:**

Project team members discuss community experiences along the South Stockton corridor.

## Signals / Signage

- I drive and walk. We need people to be more careful. They also need more lights along this corridor. South Stockton is very travelled because of all the schools along it.
- Fruitridge and 58th: One year ago, I got hit walking in the crosswalk on my light. Three-way stops and yields are unsafe because cars don't stop. We need more/longer crosswalk lights.
- People run red lights at McMahon.
- All red signal phase for pedestrians to cross.

## Speed

- My grandma picks me up from school and there are a lot of fast cars.
- A road diet would help decrease car speeds.
- Drivers' speeds are too high.

## Bike / Pedestrian Safety

- I just saw a car accident between a car and a bicycle - it happens all the time.
- I ride my bike all the time but won't shop on Stockton because it's unsafe.
- I won't ride my bike along this corridor because it feels unsafe.
- Connectivity of adjacent roads would make it easier to bike around.
- If there is enough room to put protected bike lanes in, that would be good.
- Pedestrian Safety
- I walk to school.
- My grandpa walks me to school sometimes and it doesn't feel safe, especially when there are a lot of people walking around.


Nicole Porter, AIM Consulting, helping students make reflective stickers for their bike helmets.

### Enforcement

- People don't respect the laws, especially drivers.
- There is a lot of red light running on Stockton / McMahon Drive - we need cameras!
- Many people don't see walkers.
- I was in an accident on South Stockton recently - I was stuck in traffic and someone merged into my lane without looking.
- Distracted driving from cell phones is an issue.
- Drivers don't pay attention. They are too concerned with going to their destination and not getting stuck in traffic.
- Drivers don't notice pedestrians, they turn without waiting.

### Visibility

- Lemon Hill: lights are dim, and the sunset causes issues with visibility.

### Crossings

- We need more crosswalks and stop lights on Stockton - I hear about too many crashes on the news.
- People cross in the middle of the street unexpectedly, especially at night.
- Other
- Lord have mercy! I avoid travelling on South Stockton at all costs.
- A lot of people get off the bus stop on McMahon, they walk onto South Stockton and could get hit.
- It's hard to exit stores on the South-west corner of Stockton / 47th. There is a popular food truck there.

### Other

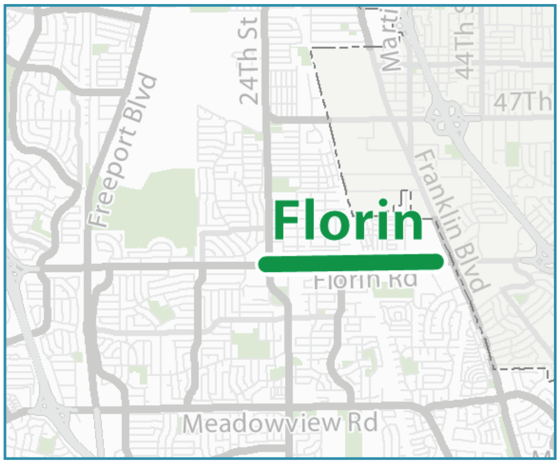
- I've never had trouble driving on South Stockton.
- Homeless on south Stockton – please get rid of them, they leave trash in my alley.

Community members signing up for project updates about the South Stockton Corridor.

Leslie Mancebo, City of Sacramento, and Adrian Engel, Fehr & Peers, discuss with a community member the existing conditions of the South Stockton corridor.

# Florin

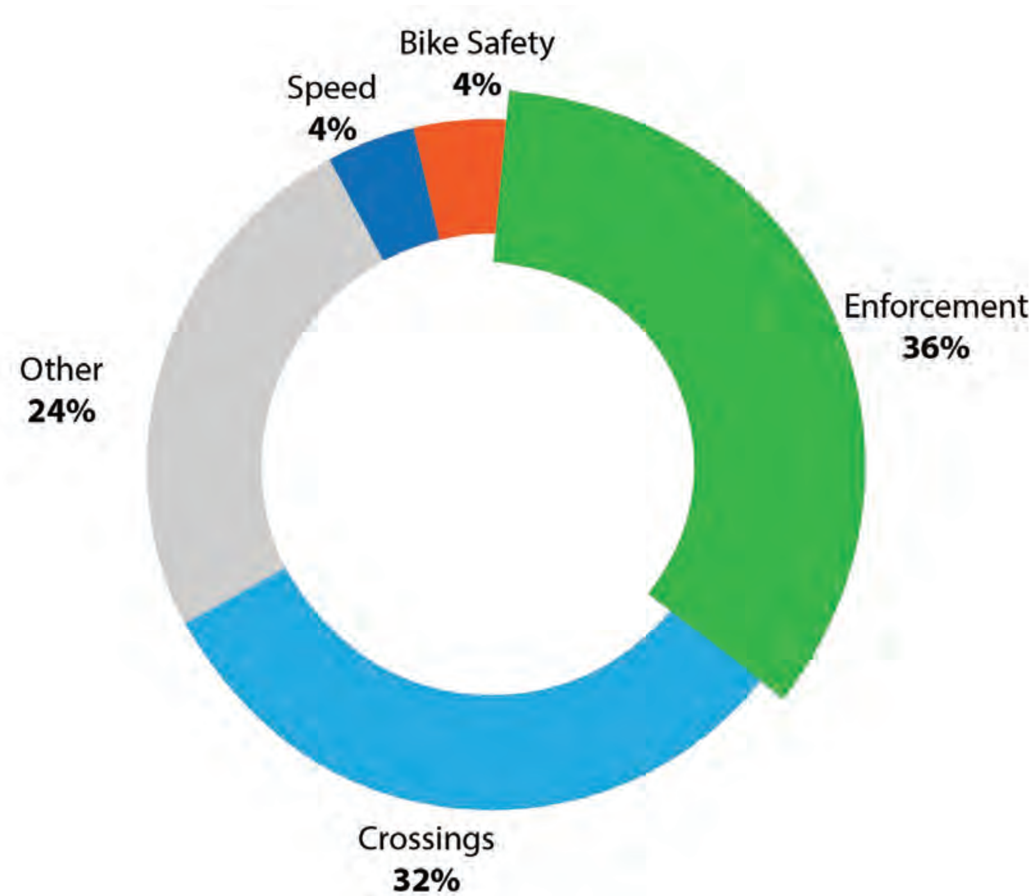
*24th Street to Munson Way*




Existing intersection on the Florin corridor.

The project team held one community workshop to obtain community input on the Florin Corridor at Luther Burbank High School, on Thursday, November 15.

Below is the feedback received from the workshop distributed into relevant categories. The graph below depicts the amount of input received in each category.



**Comments received from post-it notes on project boards:**

## Speed

- Gates slow people down.

## Crossings

- More crosswalks needed at light rail, with audible chirpers.
- Kids always cross mid-block at light rail, it needs a crossing.
- Pedestrian activated crosswalks needed.
- Loma Verde needs a cross walk and traffic signal.
- Students cross without a cross walk directly across from Luther Burbank entrance.
- The signals need more time for crossing (when seniors cross it is too short.)
- Luther Drive needs signals for walking across.
- It is difficult to walk by McDonald's on Florin Road. On Franklin and Florin, cars don't stop - we need more traffic control. Thick traffic gates on the road and reflective clothing would help.
- Morrison creek at Florin - the bus stops are in the traffic lanes and drivers are not thinking about pedestrians.

Project team members discuss with students their experiences walking and biking along Florin.

## Enforcement

- We need to slow drivers down.
- Increase police enforcement of speeding and jay-walking.
- Florin has too much traffic and the speeds are too high.
- Stop signs: people don't actually stop, they only yield to stop signs.
- Police who see traffic violations are not addressing the violations.
- Drivers drive too fast.
- Red light running - needs more enforcement.
- Need more speed enforcement and better speed limit signs.

## Bike Safety

- Need wider bike lanes.

## Other

- I would rather take Uber than walk to school (Luther Burbank)
- Flooding at intersections, need DI improvements.
- More trees needed on Florin.
- Heard on NextDoor about the meeting.
- Make sure there are curb ramps for wheel chair users.
- Florin Road: I was contracted to tear up the median strip, assumed it was dirt under the asphalt. Found asphalt under the median strip, two lanes were in a ditch, and I was paid to destroy that.

Gladys Cornell, AIM Consulting, discusses saety along the Florin corridor with Luther Burbank High school students.

# Public Notification

The project team completed an extensive notification process for each pop-up event and community workshop. The purpose of creating and completing such an extensive notification plan was to inform the public about the project, it's goals, and ask community members who were notified to share the project and event information with their fellow communities.

For each event, a list of businesses, community associations, and individuals were notified by phone and email to share the event information with their organization along the adjacent corridor. A general email was also sent to all individuals who signed up throughout the City of Sacramento's email database for their specific corridor.

Below is a list of organizations and groups who helped share information about the project and events through email, social media, or printed flyer:

- Councilmember Allen Warren
- Councilmember Jay Schenirer
- Councilmember Larry Carr
- Councilmember Eric Guerra
- Florin Road Partnership
- Stockton Boulevard Partnership
- Sacramento City Blog
- Sacramento Are Bicycle Advocates (SABA)
- Southeast Village Neighborhood Association (SEVNA)
- Hagginwood Community Association
- North Sacramento United Methodist
- Smythe Academy for Arts and Sciences
- Harmon Elementary School
- Mutual Housing at River Garden
- Stanford Settlement
- Saint James Holy Baptist Church
- Friends of West Tahoe Park
- Elmhurst Neighborhood Association
- Colonial Heights Neighborhood Association
- William Lee College Prep
- Broadway DMV
- Parkwest Lotus Casino
- Sommerset Place Apartments
- Southeast Village Neighborhood Association
- Nicholas Elementary School
- Peter Burnett Elementary School
- SF Supermarket
- Rodeway Inn
- A&A Supermarket
- Smart & Final
- Southgate Plaza
- North Franklin District Business Association
- Florin Meadowview Apartments
- Southwind Mobile Estates
- Parkview Apartments
- Meadowview Neighborhood Association
- Luther Burbank High School
- Fern Bacon Middle School
- Bowling Green Elementary School
- Florin Square Shopping Center

# Appendix

- Pop-up Boards
  - Project Overview Boards
  - Marysville
  - El Camino
  - Broadway / Stockton
  - South Stockton
  - Florin
- Comment Card
- Public Notification Flyers

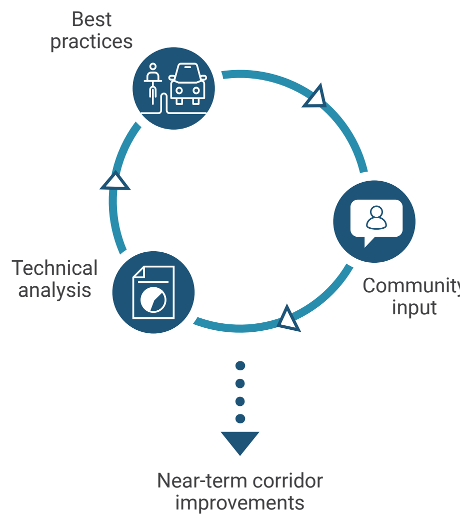
# Project Overview Boards

## About the Study

In 2017, the City of Sacramento identified the five corridors in Sacramento with the highest numbers of fatal and serious crashes involving pedestrians, bicyclists, and motorists.

The Vision Zero Top Five Corridor Study will analyze the factors that contribute to these corridors' high crash rates.

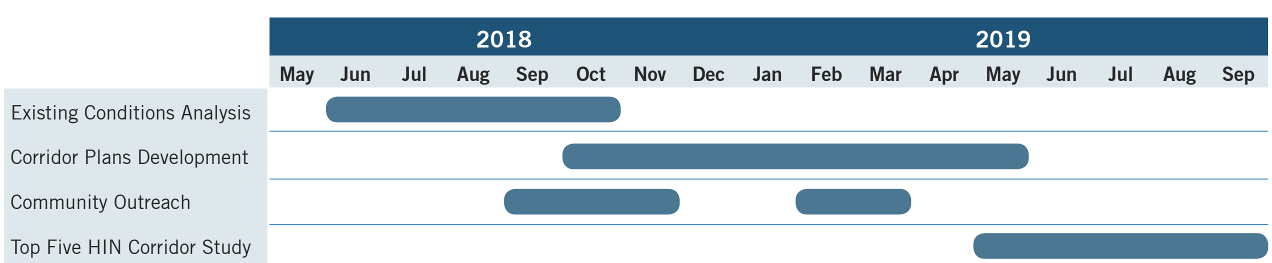
Based on technical analysis, community input, and best practices in roadway safety and design, the study will identify improvements for each of these corridors that can be implemented in the near-term.



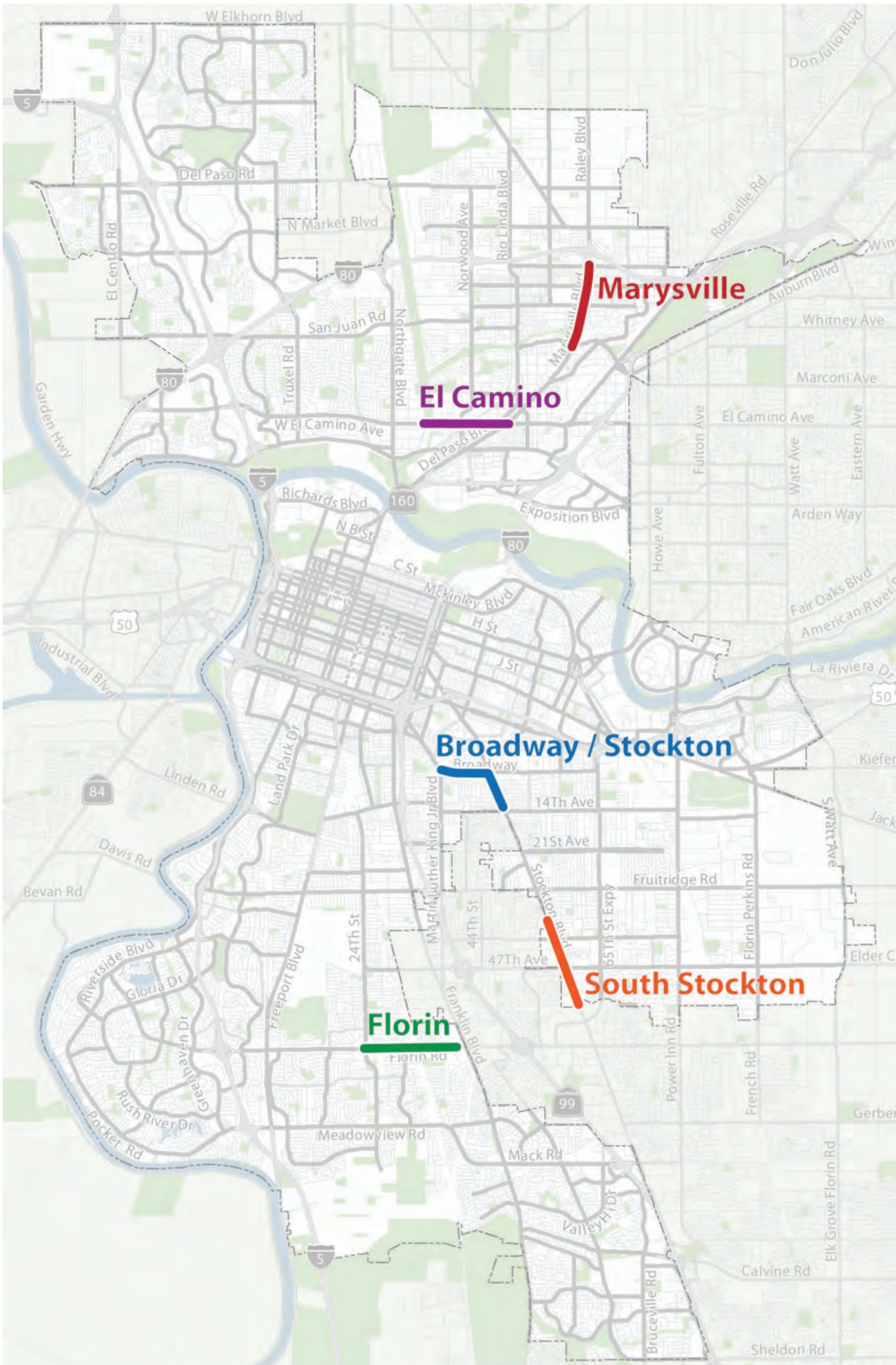

## About Vision Zero

Vision Zero is a traffic safety philosophy that rejects the notion that traffic crashes are simply "accidents," but instead are preventable incidents that can and must be systematically addressed.

## Project Schedule



### Where are the top five corridors?



# Marysville

# MARYSVILLE BOULEVARD EXISTING CONDITIONS

## IN THE MAP

On-Street Bicycle Lane

xxx′ Distance Between Crosswalks

## KEY CHARACTERISTICS

SPEED LIMIT 35

- Average Daily Traffic Volume: 26,300
- Class II bicycle lanes along most of the corridor
- Maximum distance between crosswalks: 2,550 ft between North Avenue and Bell Avenue
- 100% sidewalk coverage.

## MARYSVILLE BOULEVARD SAMPLE CROSS-SECTION

Four travel lanes plus raised median/center turn lane.

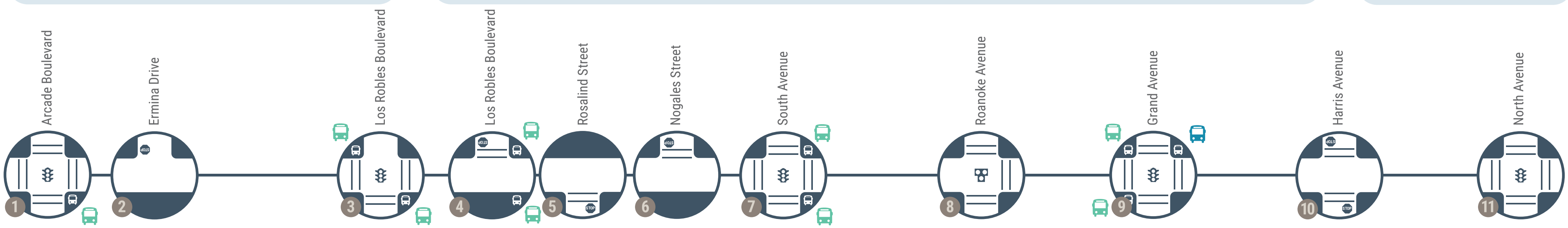
Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

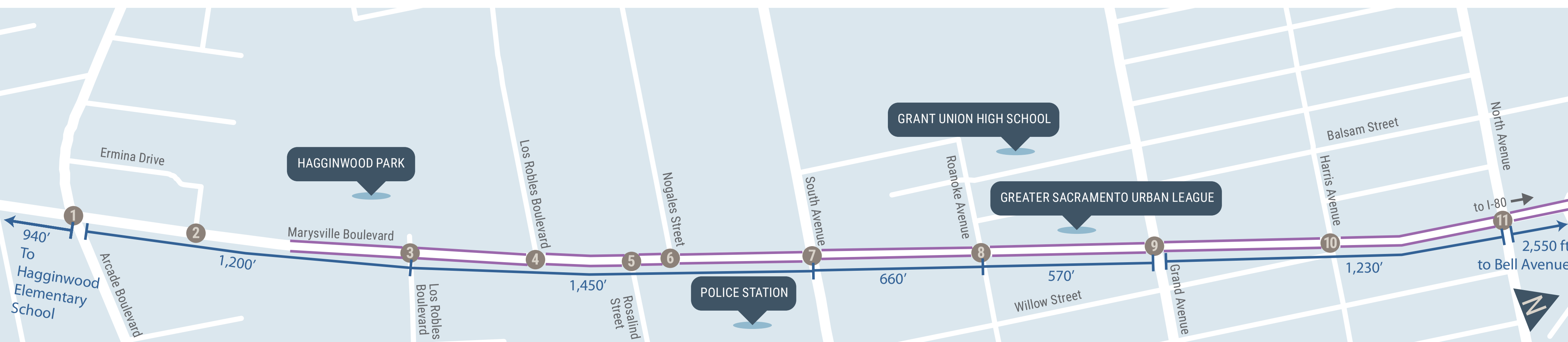
## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

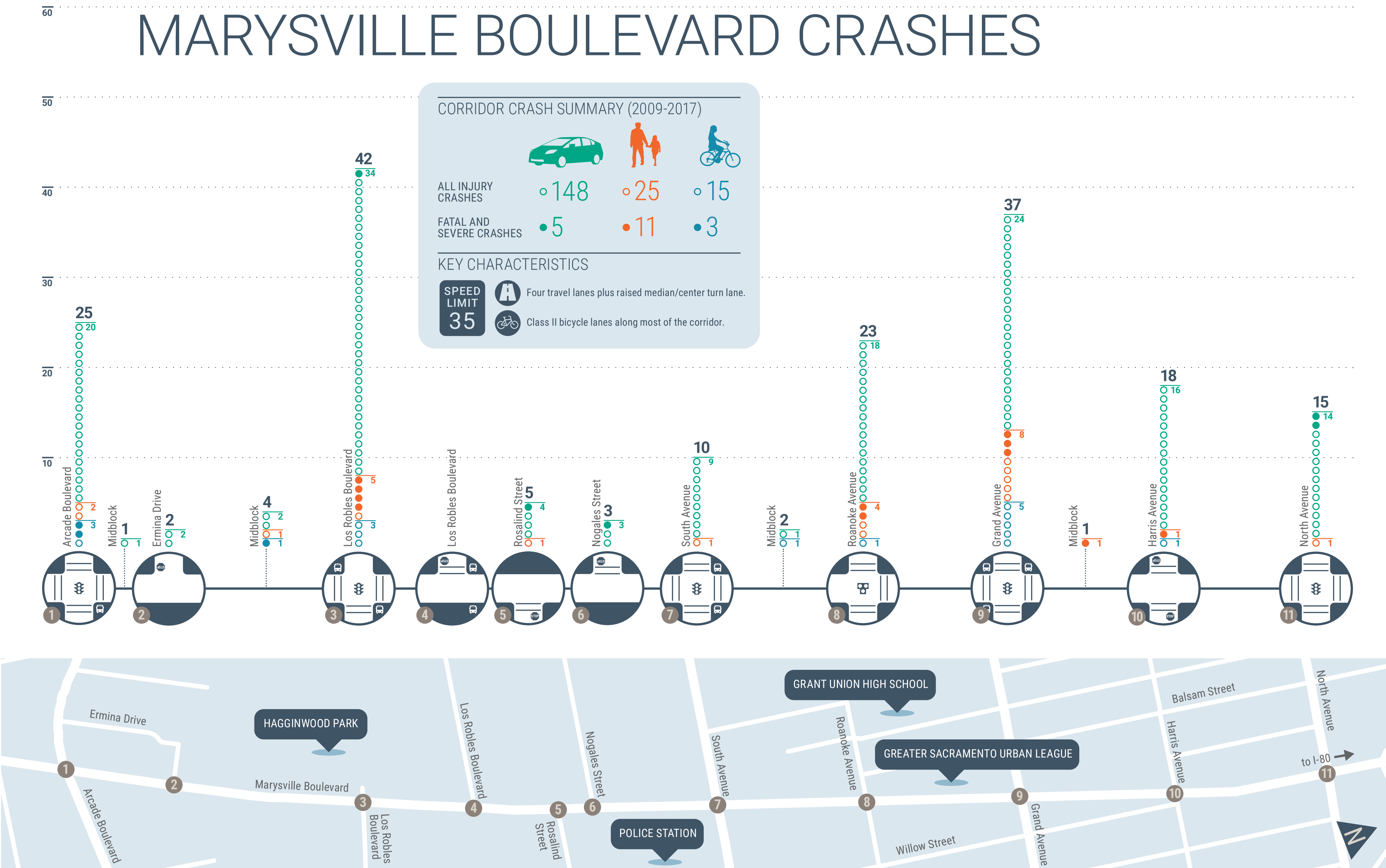
SACRT ROUTES COVERED:
**15, 86**

*Daily ridership is the sum of weekday boardings and alightings.



# MARYSVILLE BOULEVARD CRASHES



# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed

"Unsafe Speed" was cited as the primary violation in 20% of crashes.

### Proceeding Straight

2/3 of drivers were proceeding straight or stopped at the time of the crash.

### Head On

Nearly 20% of all crashes were head on.

### KSI & Alcohol Involved

Alcohol was involved in over half of crashes resulting in a fatality or severe injury.

### Rear End

Nearly 20% of all crashes were rear end.

### Left Turns

More than 20% of drivers were making a left turn at the time of the crash.

### Broadside

40% of all crashes were broadside, also called T-Bone.

## PEDESTRIAN

### Pedestrian Crossing

Almost all people hit while walking were crossing. 2/3 of people were in the crosswalk.

### Nighttime

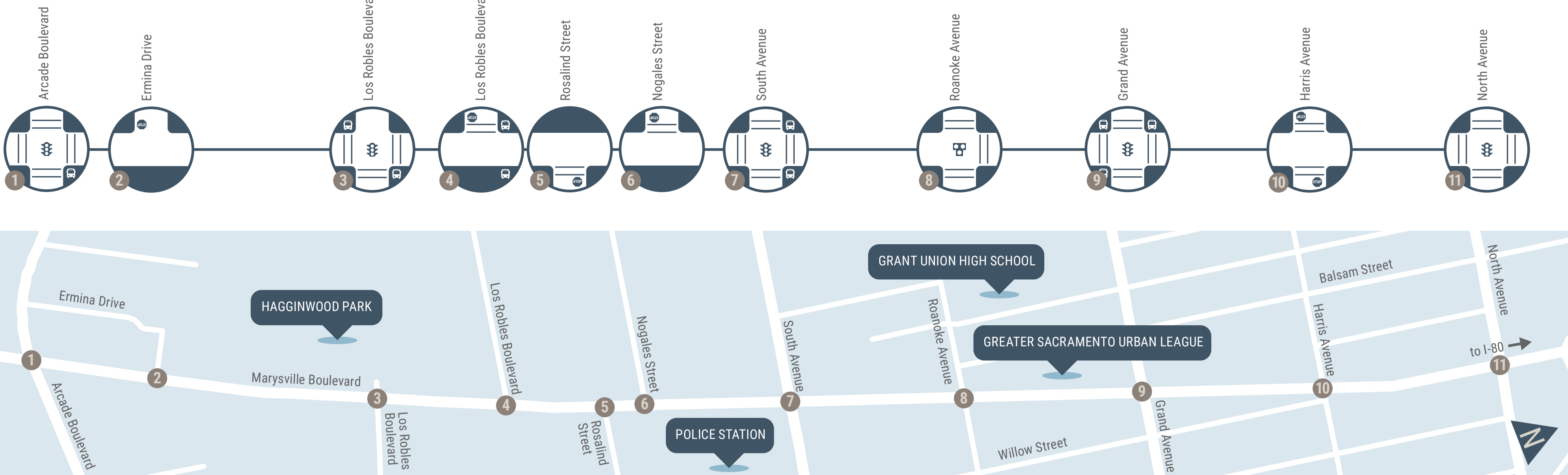
Half of pedestrian crashes occurred during nighttime or dark conditions.

## BICYCLE

### Broadside

3/4 of bicycle crashes were broadside, also called T-Bone.

Numbers that are turned on represent a location where crash type has occurred at least three times.



## Tell us about your experience traveling along Marysville Boulevard:

# El Camino

# EL CAMINO AVENUE - EXISTING CONDITIONS

## IN THE MAP

- On-Street Bicycle Lane
- xxx′ Distance Between Crosswalks
- Multi-Use Path
- Sidewalk Gap

## KEY CHARACTERISTICS

SPEED LIMIT 30

- Average Daily Traffic Volume: 13,500
- Class II bicycle lanes along most of the corridor.
- Maximum distance between crosswalks: 2,100 ft between American Ave & Colfax Ave
- 97% sidewalk coverage.

## EL CAMINO AVENUE SAMPLE CROSS-SECTION

One travel lane in each direction.

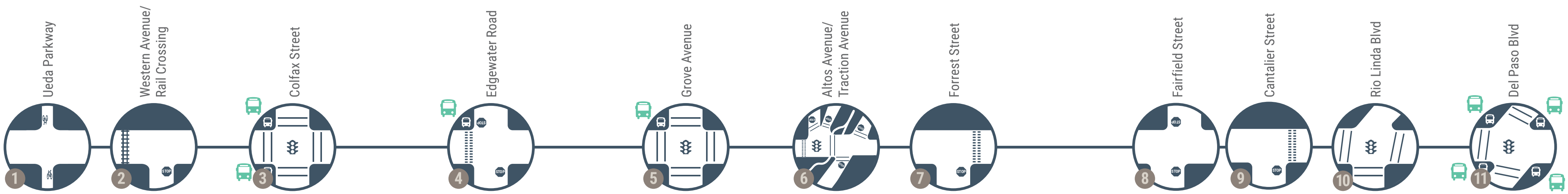
Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

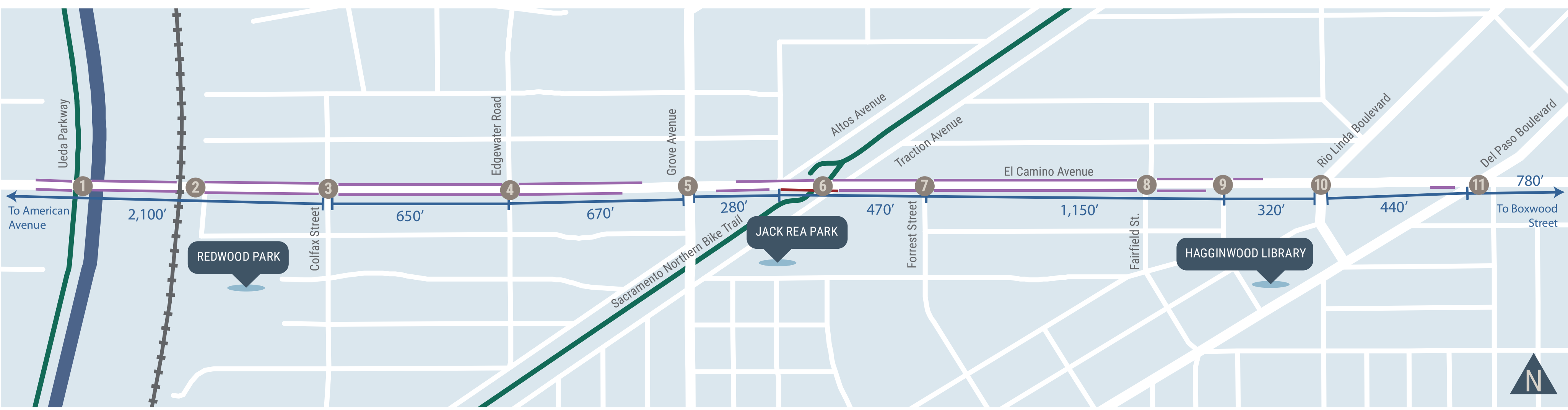
## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

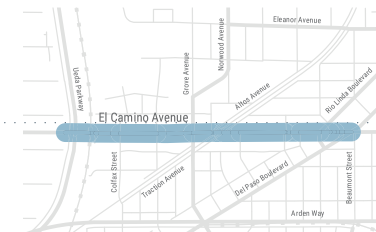
SACRT ROUTES COVERED:
**15, 88**

*Daily ridership is the sum of weekday boardings and alightings.



# EL CAMINO AVENUE CRASHES




## CORRIDOR CRASH SUMMARY (2009-2017)

| | Vehicle | Pedestrian | Bicycle |
|---|---|---|---|
| ALL INJURY CRASHES | 117 | 16 | 11 |
| FATAL AND SEVERE CRASHES | 8 | 3 | 0 |

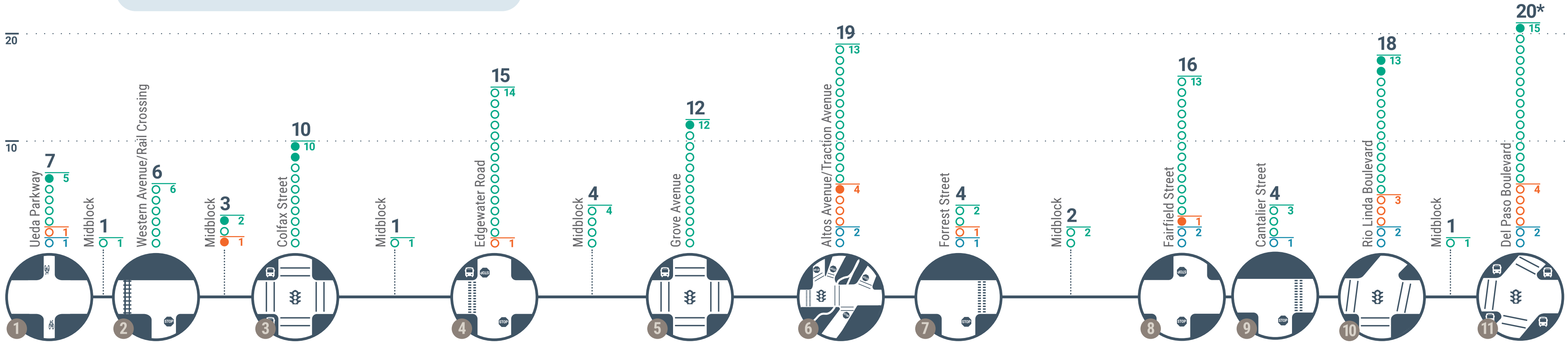
*One crash involved both a pedestrian and bicyclist, and is identified under both mode categories.

## KEY CHARACTERISTICS

SPEED LIMIT 30

One travel lane in each direction.

Class II bicycle lanes along most of the corridor.




# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed
"Unsafe Speed" was the most common violation, cited in 40% of all crashes.

1 2 3 4 5 6
7 8 9 10 11

### Proceeding Straight
80% of drivers were proceeding straight or stopped at the time of the crash.

1 2 3 4 5 6
7 8 9 10 11

### Signal or Sign Violation
"Traffic Signals and Signs" was the second most common violation category.

1 2 3 4 5 6
7 8 9 10 11

### Rear End
Over 40% of all crashes were rear end.

1 2 3 4 5 6
7 8 9 10 11

### Left Turns
70% of drivers who were turning at the time of the crash were making a left turn.

1 2 3 4 5 6
7 8 9 10 11

### Broadside
30% of all crashes were broadside, also called T-Bone.

1 2 3 4 5 6
7 8 9 10 11

## PEDESTRIAN

### Pedestrian Crossing
The majority of people hit while walking were crossing. 2/3 of people were in the crosswalk.

1 2 3 4 5 6
7 8 9 10 11

### Weekend
Nearly 2/3 of pedestrian crashes occurred on Friday, Saturday or Sunday.

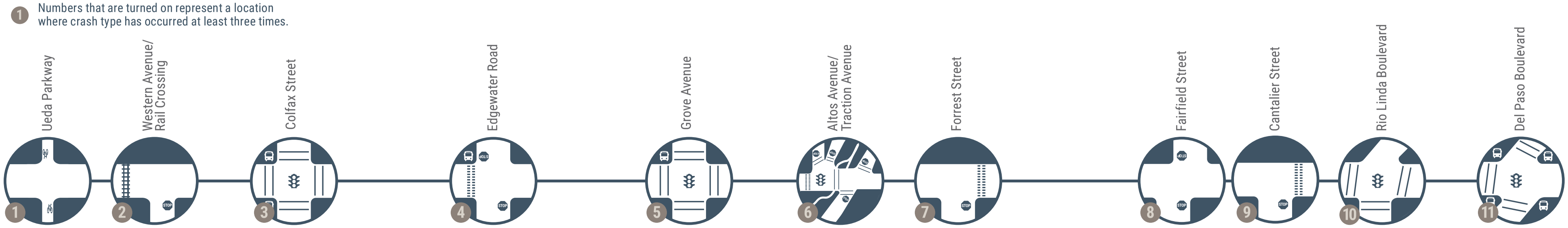
1 2 3 4 5 6
7 8 9 10 11

## BICYCLE

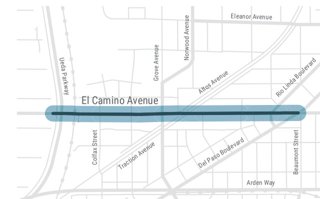
### Daytime
10 of 11 total bicycle crashes occured between 9 AM and 6 PM.

1 2 3 4 5 6
7 8 9 10 11

1 Numbers that are turned on represent a location where crash type has occurred at least three times.




# Tell us about your experience traveling along El Camino Avenue:




# Broadway / Stockton

# BROADWAY - EXISTING CONDITIONS

## IN THE MAP

- On-Street Bicycle Lane
- XXX′ Distance Between Crosswalks

## KEY CHARACTERISTICS

SPEED LIMIT 30

- Average Daily Traffic Volume: 15,800
- Class II bicycle lanes on some of corridor
- Maximum distance between crosswalks: 930 ft between 39th Street & Santa Cruz Way
- 100% sidewalk coverage

## BROADWAY SAMPLE CROSS-SECTION

Four travel lanes with some left turn pockets.

Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

SACRT ROUTES COVERED:
**51, 206, 214**

*Daily ridership is the sum of weekday boardings and alightings.

# BROADWAY CRASHES

## CORRIDOR CRASH SUMMARY (2009-2017)

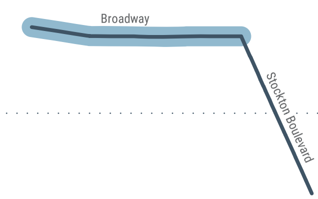
| | Vehicle | Pedestrian | Bicycle |
|---|---|---|---|
| ALL INJURY CRASHES | 38 | 8 | 11 |
| FATAL AND SEVERE CRASHES | 4 | 3 | 1 |

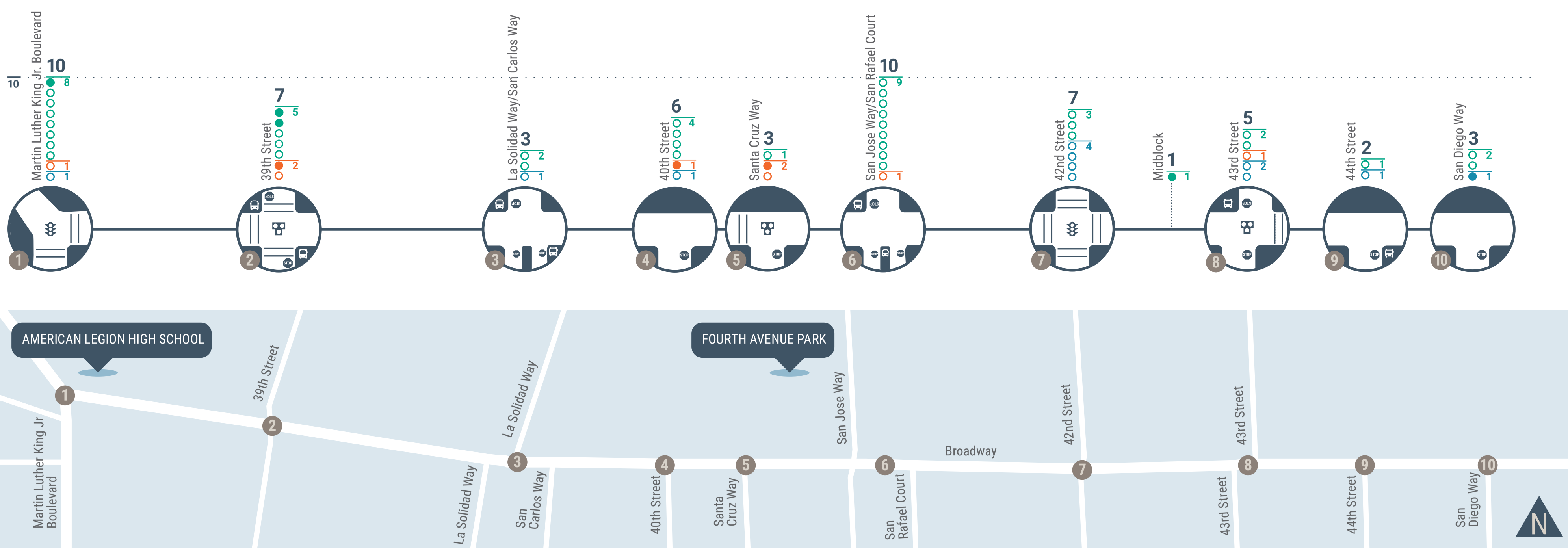
## KEY CHARACTERISTICS

SPEED LIMIT 30

Four travel lanes with some left turn pockets.

Class II bicycle lanes along short portions of the corridor.



# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed

"Unsafe Speed" was the most common violation, cited in 28% of all crashes.

**1** 2 3 **4** 5 **6** 7 8 9 10

### Proceeding Straight

More than 2/3 of drivers were proceeding straight or stopped at the time of the crash.

**1** **2** 3 **4** **5** **6** **7** **8** 9 **10**

### Sideswipe

Sideswipe was the second most common crash type - 23% of all crashes.

1 2 3 4 5 6 **7** 8 9 10

### Rear End

Rear End was the most common crash type - 25% of all crashes.

1 2 3 **4** 5 **6** 7 8 9 10

### Left Turns

Nearly 2/3 of drivers who were turning at the time of the crash were making a left turn.

**1** 2 3 4 5 **6** **7** 8 9 10

### Broadside

Nearly 20% of all crashes were broadside, also called T-Bone.

1 2 3 4 5 **6** 7 8 9 10

## PEDESTRIAN

### Not in Crosswalk

Half of pedestrians hit were crossing outside of a crosswalk at the time of the crash.

1 2 3 4 5 6 7 8 9 10

### Weekend

Nearly 2/3 of pedestrian crashes occurred on Friday or Saturday.

1 2 3 4 5 6 7 8 9 10

### Daytime

Nearly 2/3 of pedestrian crashes occurred between 6 AM and 6 PM.

1 2 3 4 5 6 7 8 9 10

## BICYCLE

### Sideswipe

45% of bicycle crashes were sideswipe.

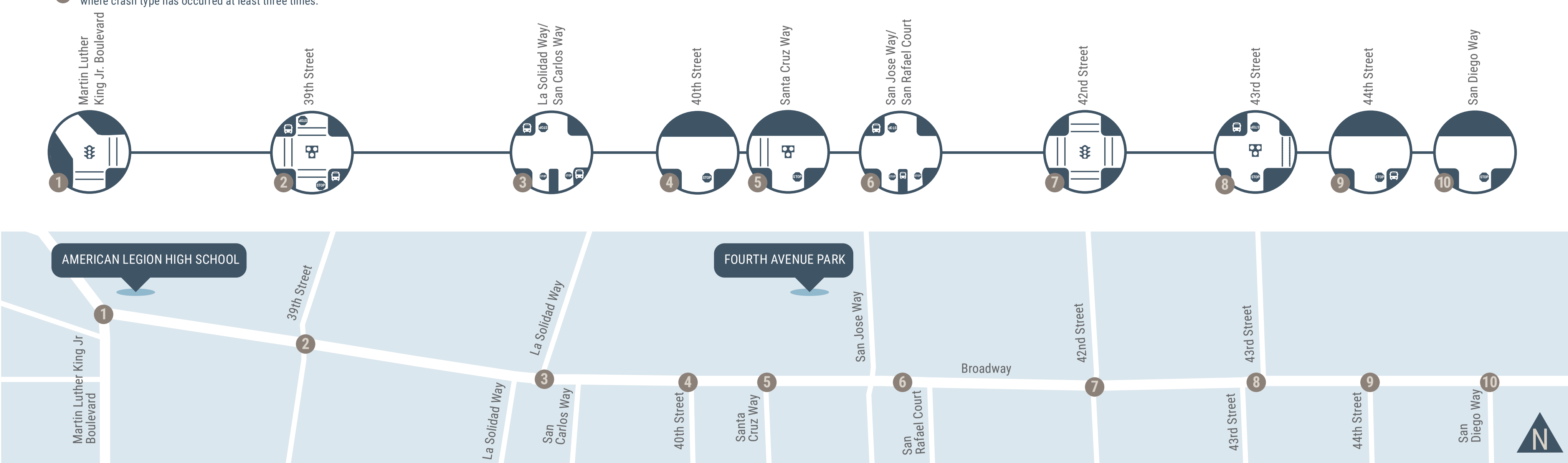
1 2 3 4 5 6 **7** 8 9 10

### Improper Turning

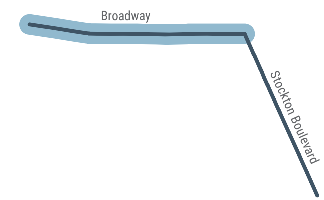
"Improper Turning" was cited as the primary violation in nearly half of bike crashes.

1 2 3 4 5 6 7 8 9 10

1 Numbers that are turned on represent a location where crash type has occurred at least three times.



# Tell us about your experience traveling along Broadway:




# STOCKTON BOULEVARD - EXISTING CONDITIONS

## IN THE MAP

- On-Street Bicycle Lane
- xxx′ Distance Between Crosswalks

## KEY CHARACTERISTICS

SPEED LIMIT 35

- Average Daily Traffic Volume: 19,600
- Class II bicycle lanes along the entire corridor
- Maximum distance between crosswalks: 1,560 feet between Broadway and 2nd Avenue
- 100% sidewalk coverage

## STOCKTON BOULEVARD SAMPLE CROSS-SECTION

Four travel lanes plus raised median/center turn lane.

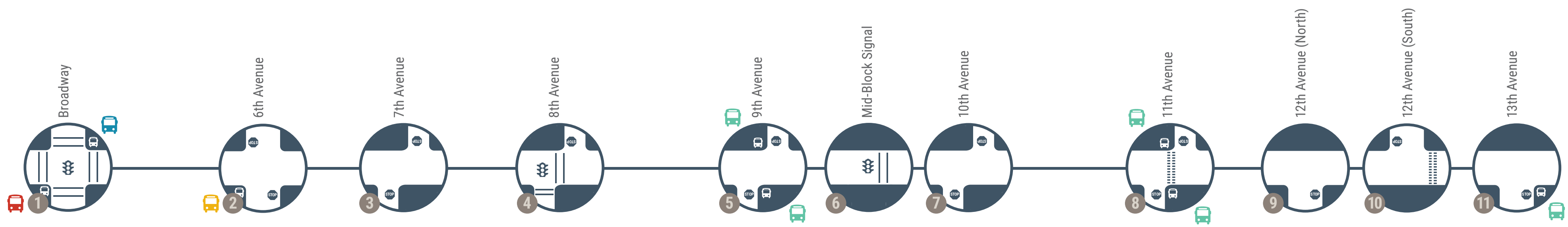
Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

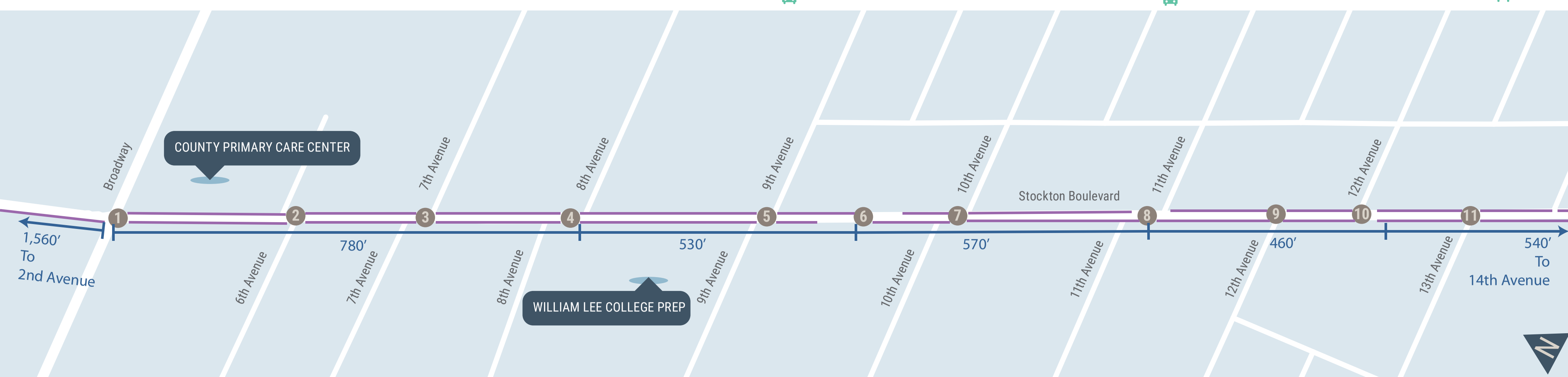
## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

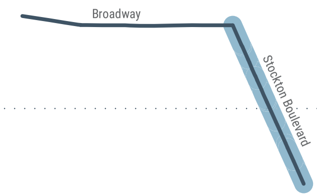
SACRT ROUTES COVERED:
**51, 213**

*Daily ridership is the sum of weekday boardings and alightings.



# STOCKTON BOULEVARD CRASHES




## CORRIDOR CRASH SUMMARY (2009-2017)

| | Vehicle | Pedestrian | Bicycle |
|---|---|---|---|
| ALL INJURY CRASHES | 47 | 5 | 13 |
| FATAL AND SEVERE CRASHES | 2 | 3 | 2 |

## KEY CHARACTERISTICS

SPEED LIMIT 35

Four travel lanes plus raised median/center turn lane.

Class II bicycle lanes along entire corridor.

# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed

"Unsafe Speed" was the primary violation cited in 23% of all crashes.

1 2 3 4 5 6 7 8 9 10 11

### Proceeding Straight

More than 60% of drivers were proceeding straight or stopped at the time of the crash.

1 2 3 4 5 6 7 8 9 10 11

### Broadside

40% of all crashes were broadside, also called T-Bone.

1 2 3 4 5 6 7 8 9 10 11

### Rear End

Rear End was the second most common crash type - 20% of all crashes.

1 2 3 4 5 6 7 8 9 10 11

### Left Turns

More than 70% of drivers who were turning at the time of the crash were making a left turn.

1 2 3 4 5 6 7 8 9 10 11

## PEDESTRIAN

### Crossing in Crosswalk

60% of pedestrians hit by drivers were crossing in a crosswalk at the time of the crash.

1 2 3 4 5 6 7 8 9 10 11

### Senior Victims

60% of pedestrian victims were age 60 or older.

1 2 3 4 5 6 7 8 9 10 11

## BICYCLE

### Broadside

More than 60% of bicycle crashes were broadside, also called T-Bone.

1 2 3 4 5 6 7 8 9 10 11

### Morning

More than 60% of bicycle crashes occurred before noon.

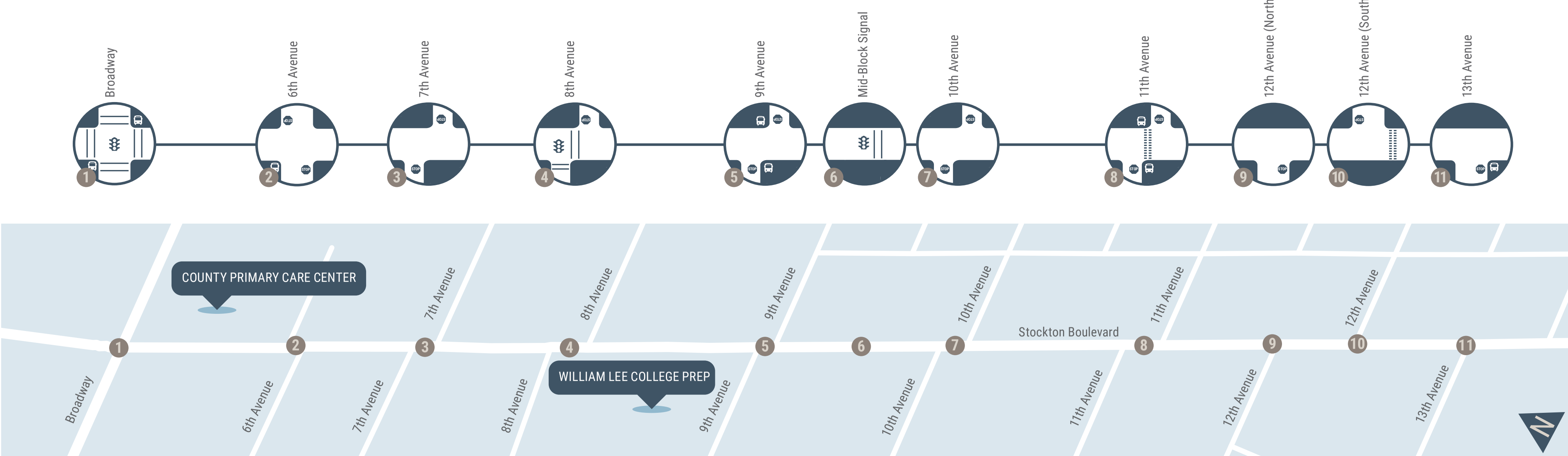
1 2 3 4 5 6 7 8 9 10 11

### Right Turns

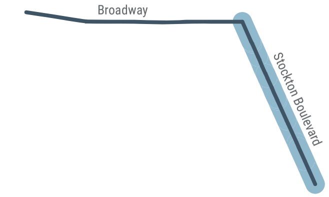
In nearly half of bike crashes, the driver was making a right turn.

1 2 3 4 5 6 7 8 9 10 11

1 Numbers that are turned on represent a location where crash type has occurred at least three times.



# Tell us about your experience traveling along Stockton Boulevard:




# South Stockton

# STOCKTON BOULEVARD - EXISTING CONDITIONS

## IN THE MAP

- On-Street Bicycle Lane
- Sidewalk Gap
- xxx′ Distance Between Crosswalks

## KEY CHARACTERISTICS

SPEED LIMIT 40

- Average Daily Traffic Volume: 29,700
- Class II bicycle lanes along the entire corridor.
- Maximum distance between crosswalks: 1,780 ft between Riza Avenue and 65th Street
- 97% sidewalk coverage.

## STOCKTON BOULEVARD SAMPLE CROSS-SECTION

Four travel lanes plus raised median/center turn lane.

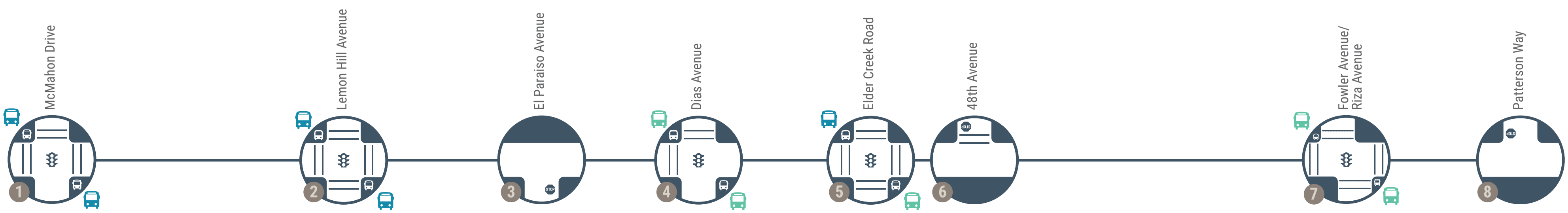
Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

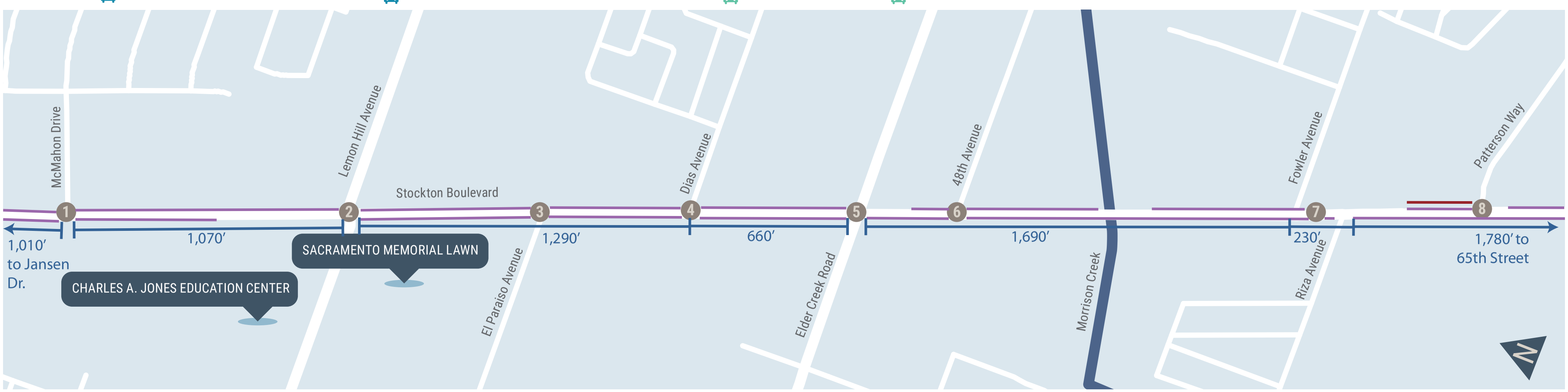
## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

SACRT ROUTES COVERED:
**51**

*Daily ridership is the sum of weekday boardings and alightings.



# STOCKTON BOULEVARD CRASHES

CORRIDOR CRASH SUMMARY (2009-2017)

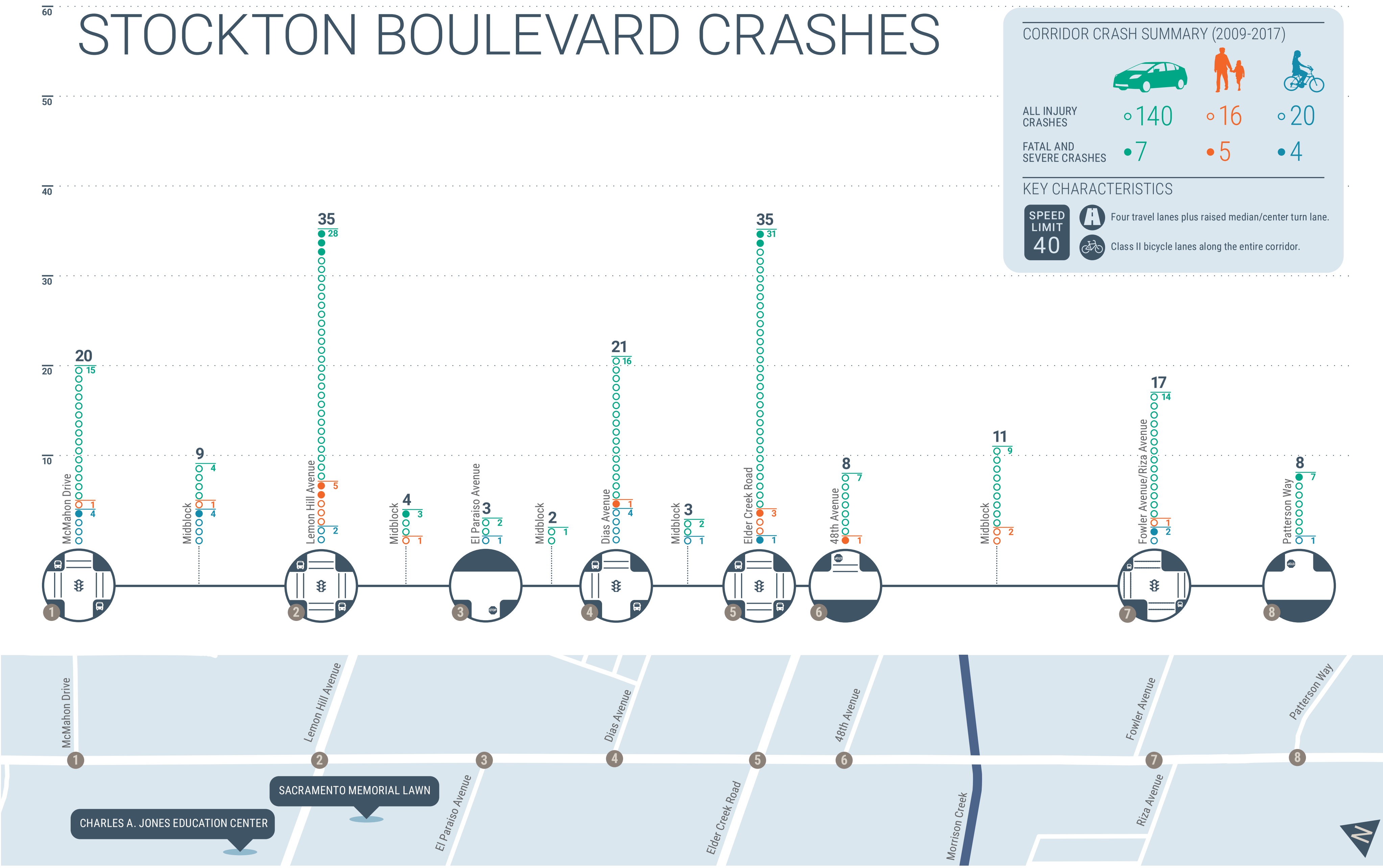
| | Vehicle | Pedestrian | Bicycle |
|---|---|---|---|
| ALL INJURY CRASHES | 140 | 16 | 20 |
| FATAL AND SEVERE CRASHES | 7 | 5 | 4 |

KEY CHARACTERISTICS

SPEED LIMIT 40

Four travel lanes plus raised median/center turn lane.

Class II bicycle lanes along the entire corridor.



# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed
"Unsafe Speed" was the most common violation, cited in 35% of all crashes.

**1** **2** 3 **4** **5** **6** **7** **8**

### Proceeding Straight
Nearly 3/4 of drivers were proceeding straight or stopped at the time of the crash.

**1** **2** **3** **4** **5** **6** **7** **8**

### Signal or Sign Violation
"Traffic Signals and Signs" was tied for second most common violation category.

**1** **2** 3 **4** **5** 6 7 8

### Under the Influence
"Under the Influence" was tied for second most common violation category.

1 **2** 3 4 **5** 6 7 8

### Rear End
Over 35% of all crashes were rear end.

**1** **2** 3 **4** **5** **6** **7** 8

### Left Turns
65% of drivers who were turning at the time of the crash were making a left turn.

**1** **2** 3 **4** **5** 6 7 8

### Broadside
30% of all crashes were broadside, also called T-Bone.

**1** **2** 3 **4** **5** 6 **7** 8

### Nighttime
40% of all crashes occurred during nighttime or dark conditions.

**1** **2** 3 **4** **5** 6 **7** **8**

## PEDESTRIAN

### Crossing in Crosswalk
Nearly half of all pedestrians hit by a driver were in a crosswalk at the time of the crash.

1 **2** 3 4 5 6 7 8

### Pedestrian in Road
25% of pedestrians hit by a driver were walking along the road or shoulder.

1 2 3 4 5 6 7 8

## BICYCLE

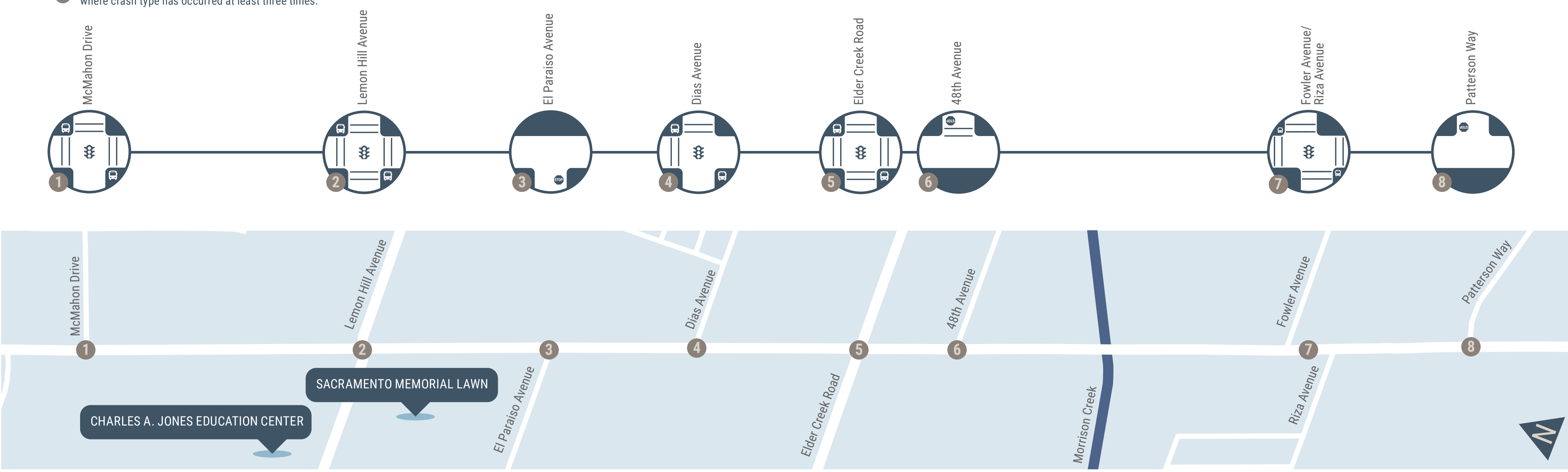
### Broadside
65% of bicycle crashes were broadside, also called T-Bone.

1 2 3 4 5 6 7 8

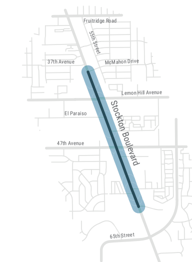
### Right Turns
1/3 of drivers who hit a bicyclist were making a right turn at the time of the crash

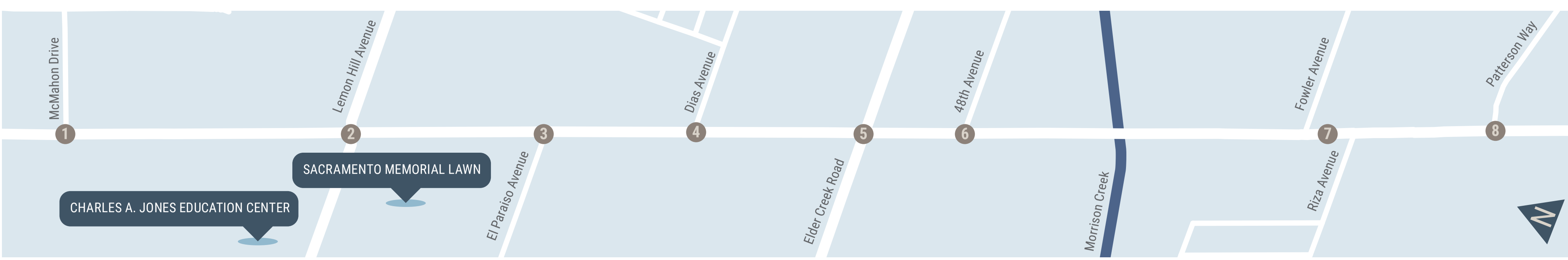
1 2 3 **4** 5 6 7 8

**1** Numbers that are turned on represent a location where crash type has occurred at least three times.



# Tell us about your experience traveling along Stockton Boulevard:



# Florin

# FLORIN ROAD - EXISTING CONDITIONS

## IN THE MAP

- On-Street Bicycle Lane
- XXX′ Distance Between Crosswalks

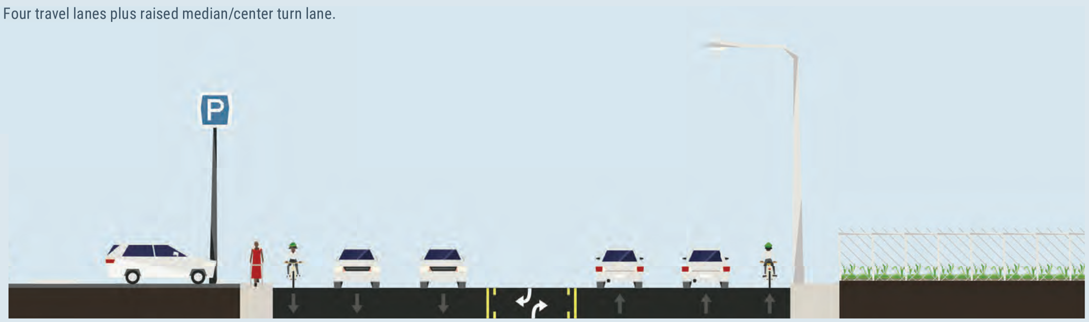
## KEY CHARACTERISTICS

SPEED LIMIT 40

- Average Daily Traffic Volume: 36,000
- Class II bicycle lanes present in some locations.
- Maximum distance between crosswalks: 1,740 ft.
- 100% sidewalk coverage.

## FLORIN ROAD SAMPLE CROSS-SECTION

Four travel lanes plus raised median/center turn lane.



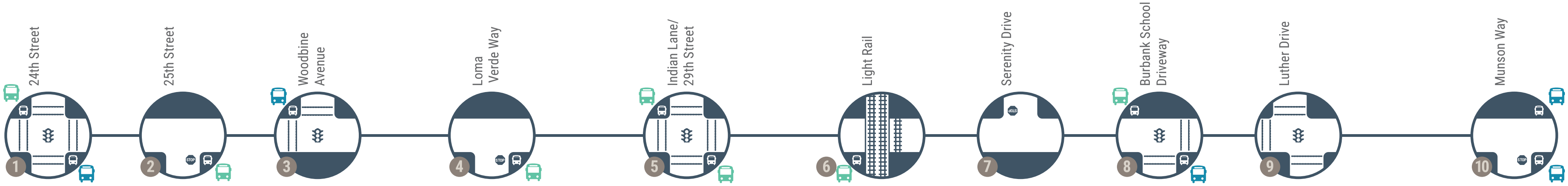

Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

## DAILY RIDERSHIP*

- 0 - 50
- 51 - 100
- 101 - 150
- Greater than 150

SACRT ROUTES COVERED:
**54, 81**

*Daily ridership is the sum of weekday boardings and alightings.




# FLORIN ROAD CRASHES

CORRIDOR CRASH SUMMARY (2009-2017)

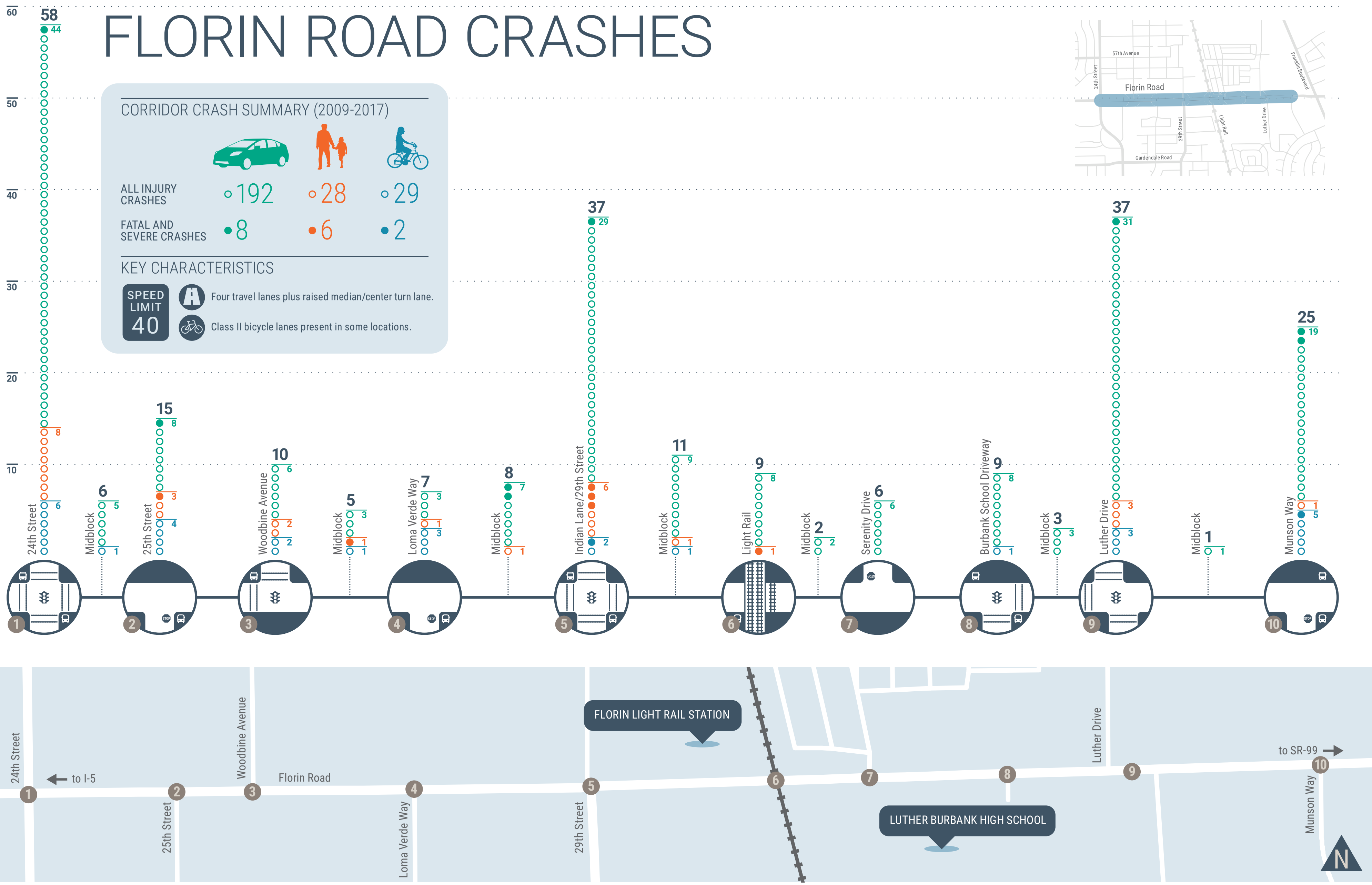
| | Vehicle | Pedestrian | Bicycle |
|---|---|---|---|
| ALL INJURY CRASHES | 192 | 28 | 29 |
| FATAL AND SEVERE CRASHES | 8 | 6 | 2 |

KEY CHARACTERISTICS

SPEED LIMIT 40

Four travel lanes plus raised median/center turn lane.

Class II bicycle lanes present in some locations.



# CORRIDOR-WIDE CRASH TYPES

## VEHICLE

### Unsafe Speed

"Unsafe Speed" was cited as the primary violation in nearly half of all crashes.

### Proceeding Straight

75% of drivers were proceeding straight or stopped at the time of the crash.

### Rear End

Nearly half of all crashes were rear end.

## PEDESTRIAN

### Pedestrian Crossing

The majority of people hit while walking were crossing. Half of people were in the crosswalk.

### Winter Crashes

Over 40% of pedestrian crashes occurred in November, December or January.

### Senior Victims

10 of the 28 people hit while walking were age 60 or older.

## BICYCLE

### Wrong Way Riding

The primary violation cited in over 40% of bicycle crashes was "Wrong Side of Road."

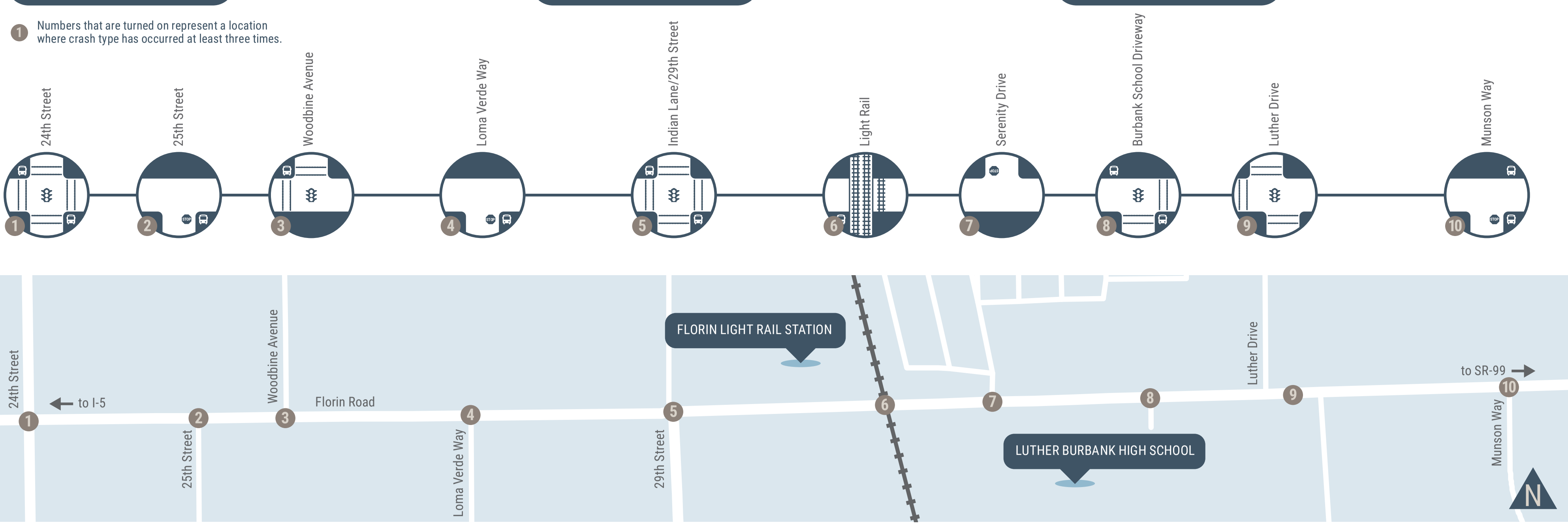
### Broadside

More than half of bicycle crashes were broadside, also called T-Bone.

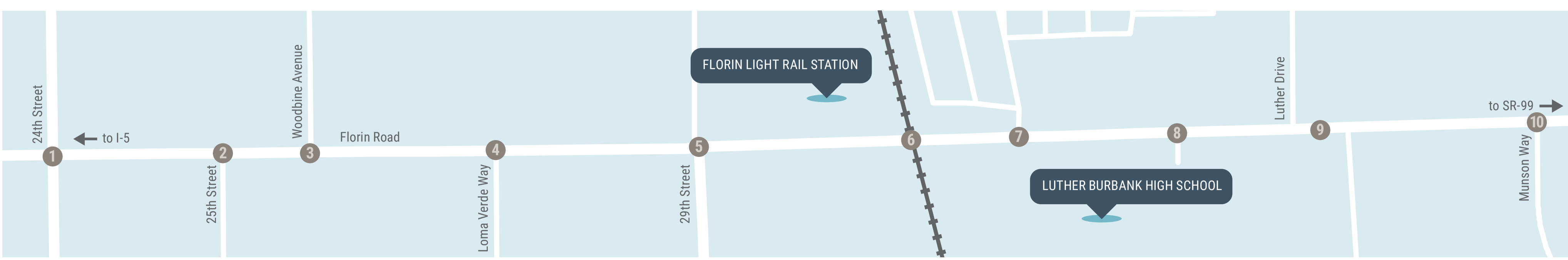
### Right Turns

In nearly 40% of bike crashes, the driver was making a right turn.

1 Numbers that are turned on represent a location where crash type has occurred at least three times.



# Tell us about your experience traveling along Florin Road:

TOP 5 CORRIDORS
Vision ZERO

# Comment Card

Please share your thoughts, comments, or questions:

Name ______________________ Phone ______________

Email ______________________________________________

How did you hear about this event? __________________________

You can submit your comments to staff today, by mail, by fax (916) 442-1186, or email them directly to Katie Durham at kdurham@aimconsultingco.com

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postage
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AIM Consulting, Inc.
2523 J Street, Suite 202
Sacramento, CA 95816

Visit www.visionzerosac.org for more information

# Public Notification Flyers

TOP 5 CORRIDORS

Vision ZERØ

# The Road Belongs to All of Us

## HELP CREATE A SAFER MARYSVILLE!

*Join us at the at the Mutual Assistance Network Harvest Festival*

**Saturday, Oct. 27**

**11:00 am–2:00 pm**

**Robertson Community Center**

*3525 Norwood Avenue*

Stop by to tell us about your experience walking and biking on **Marysville Boulevard**, and learn about the City of Sacramento's Top Five Corridors Study.

### *About the Top Five Corridors Study*

In 2017, the City of Sacramento identified the five corridors in Sacramento with the highest numbers of fatal and serious crashes involving pedestrians, bicyclists, and motorists.

Your input will help the City analyze the factors that contribute to these corridors' high crash rates, and identify improvements for each of the corridors.

**visionzerosac.org**

TOP 5 CORRIDORS

Vision ZERØ

# The Road Belongs to All of Us

## HELP CREATE A SAFER MARYSVILLE

*Join us at the at the Hagginwood Community Association Meeting*

# Wednesday, Dec. 5

## 6:00 pm–8:00 pm

**Hagginwood Community Association Meeting**

*William J. Kinney Police Facility*

*3550 Marysville Boulevard*

Stop by to tell us about your experience walking and biking on **Marysville**, and learn about the City of Sacramento's Top Five Corridors Study.

### *About the Top Five Corridors Study*

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**visionzerosac.org**

TOP 5 CORRIDORS

Vision ZERØ

# The Road Belongs to All of Us

## HELP CREATE A SAFER EL CAMINO!

*Join us at the at the Old North Sacramento/Dixieanne Community Association Meeting*

# Saturday, Nov. 10

## 9:30 am–10:15 am

*701 Dixieanne Avenue, Sacramento*

Stop by to tell us about your experience walking and biking on **El Camino**, and learn about the City of Sacramento's Top Five Corridors Study.

### *About the Top Five Corridors Study*

In 2017, the City of Sacramento identified the five corridors in Sacramento with the highest numbers of fatal and serious crashes involving pedestrians, bicyclists, and motorists.

Your input will help the City analyze the factors that contribute to these corridors' high crash rates, and identify improvements for each of the corridors.

**visionzerosac.org**

# The Road Belongs to All of Us

## HELP CREATE A SAFER EL CAMINO!

*Join us at the at Grocery Outlet*

# Tuesday, Dec. 4

## 4:00 pm–6:00 pm

**Grocery Outlet**

*2308 Del Paso Boulevard*

Stop by to tell us about your experience walking and biking on **El Camino**, and learn about the City of Sacramento's Top Five Corridors Study.

### *About the Top Five Corridors Study*

In 2017, the City of Sacramento identified the five corridors in Sacramento with the highest numbers of fatal and serious crashes involving pedestrians, bicyclists, and motorists.

Your input will help the City analyze the factors that contribute to these corridors' high crash rates, and identify improvements for each of the corridors.

**visionzerosac.org**

# The Road Belongs to All of Us

## HELP CREATE A SAFER BROADWAY/STOCKTON

*Join us at the at the Oak Park Community Center Family Fall Festival*

TOP 5 CORRIDORS

Vision ZERØ

# Thursday, Oct. 25

## 5:00 pm–7:00 pm

**Oak Park Community Center**

*3425 Martin Luther King Jr. Boulevard*

Stop by to tell us about your experience walking and biking on **Broadway/Stockton**, and learn about the City of Sacramento's Top Five Corridors Study.

### *About the Top Five Corridors Study*

In 2017, the City of Sacramento identified the five corridors in Sacramento with the highest numbers of fatal and serious crashes involving pedestrians, bicyclists, and motorists.

Your input will help the City analyze the factors that contribute to these corridors' high crash rates, and identify improvements for each of the corridors.

**visionzerosac.org**

# The Road Belongs to All of Us

## HELP CREATE A SAFER BROADWAY/STOCKTON

*Join us at the at the Transit Stop at Broadway/Stockton*

TOP 5 CORRIDORS

Vision ZERØ

# Wednesday, Nov. 7

## 12:00 pm–2:00 pm

**Transit Stop at Broadway/Stockton**

*Broadway/Stockton WB, outside Food Source*

Stop by to tell us about your experience walking and biking on **Broadway/Stockton**, and learn about the City of Sacramento's Top Five Corridors Study.

### *About the Top Five Corridors Study*

In 2017, the City of Sacramento identified the five corridors in Sacramento with the highest numbers of fatal and serious crashes involving pedestrians, bicyclists, and motorists.

Your input will help the City analyze the factors that contribute to these corridors' high crash rates, and identify improvements for each of the corridors.

**visionzerosac.org**

# Help create a safer South Stockton Boulevard!

*Join us at a*

# Community Open House

## Monday, November 5

## 5:00 – 7:00 p.m.

### Peter Burnett Elementary School

*6032 36th Avenue, Sacramento, CA*

*RSVP* : **visionzerotop5southstockton.eventbrite.com**

Stop by anytime between 5:00 and 7:00 p.m. to tell us your experience walking and biking on **South Stockton Boulevard** and learn about the City of Sacramento's Vision Zero Top Five Corridors Study.


### About the Study

In 2017, the City of Sacramento identified five corridors in the City of Sacramento with the highest numbers of fatal and serious crashes involving pedestrians, bicyclists, and motorists.

Your input will help the City analyze the factors that contribute to these high crash rates and identify improvements for each of the corridors.

More information about the project is available at **www.VisionZeroSac.org**

City of SACRAMENTO

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# Help create a safer Florin Road

*Join us at a*

# Community Open House

## Thursday, November 15

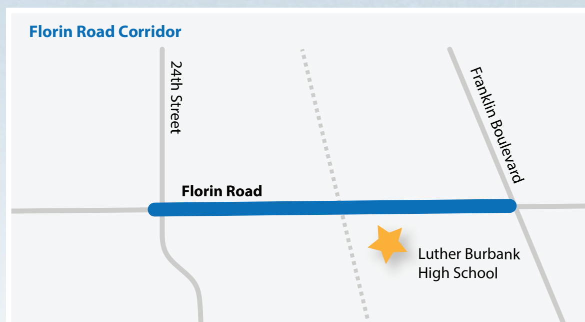
## 5:00–7:00 p.m.

### Luther Burbank High School

*3500 Florin Road, Sacramento, CA*

*RSVP* : **visionzerotop5florin.eventbrite.com**

Stop by anytime between 5:00 and 7:00 p.m. to tell us your experience walking and biking on **Florin Road** and learn about the City of Sacramento's Vision Zero Top Five Corridors Study.




### About the Study

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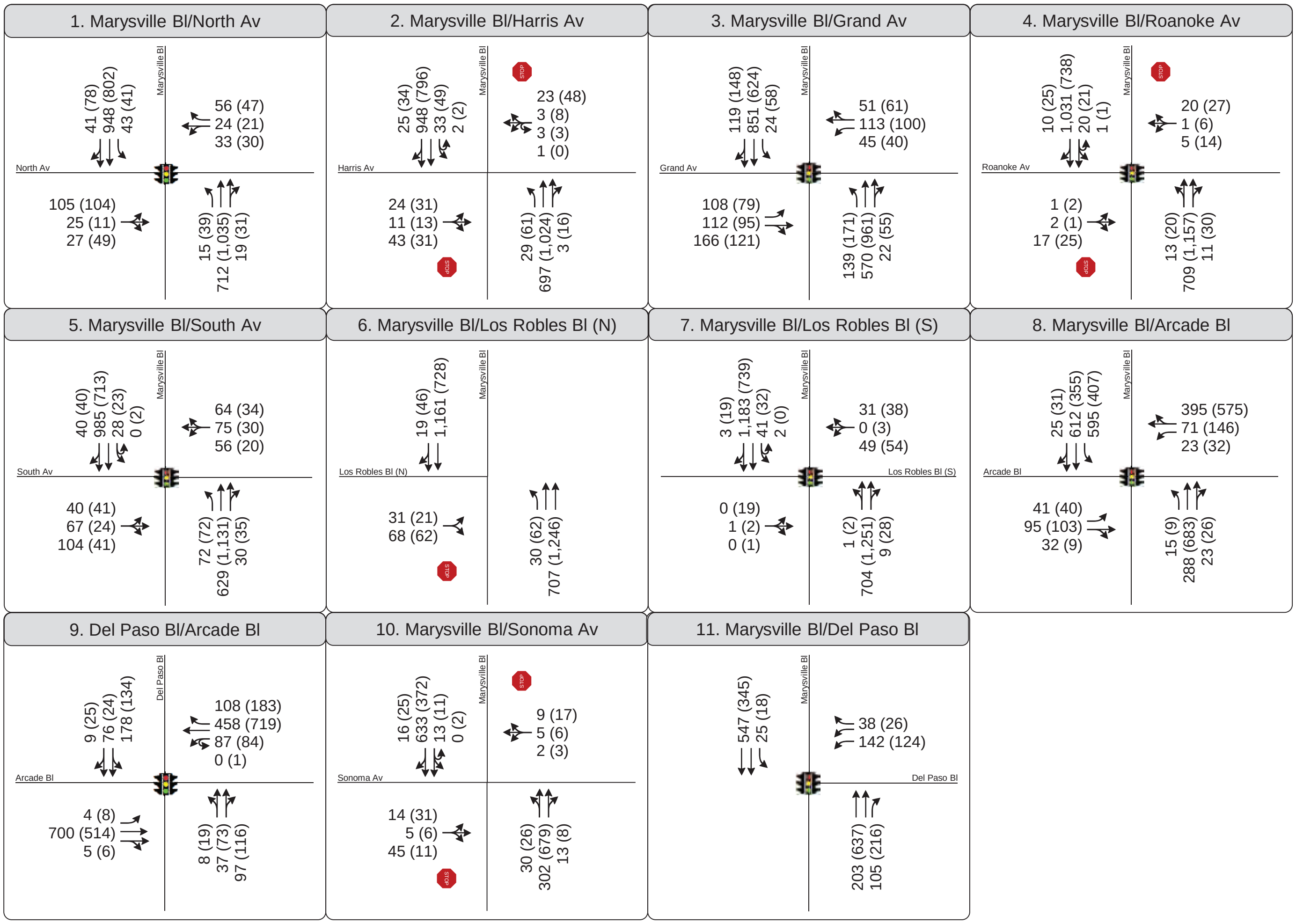
# Appendix B – Data and Technical Calculations

# Peak Hour Traffic Volumes and Lane Configurations

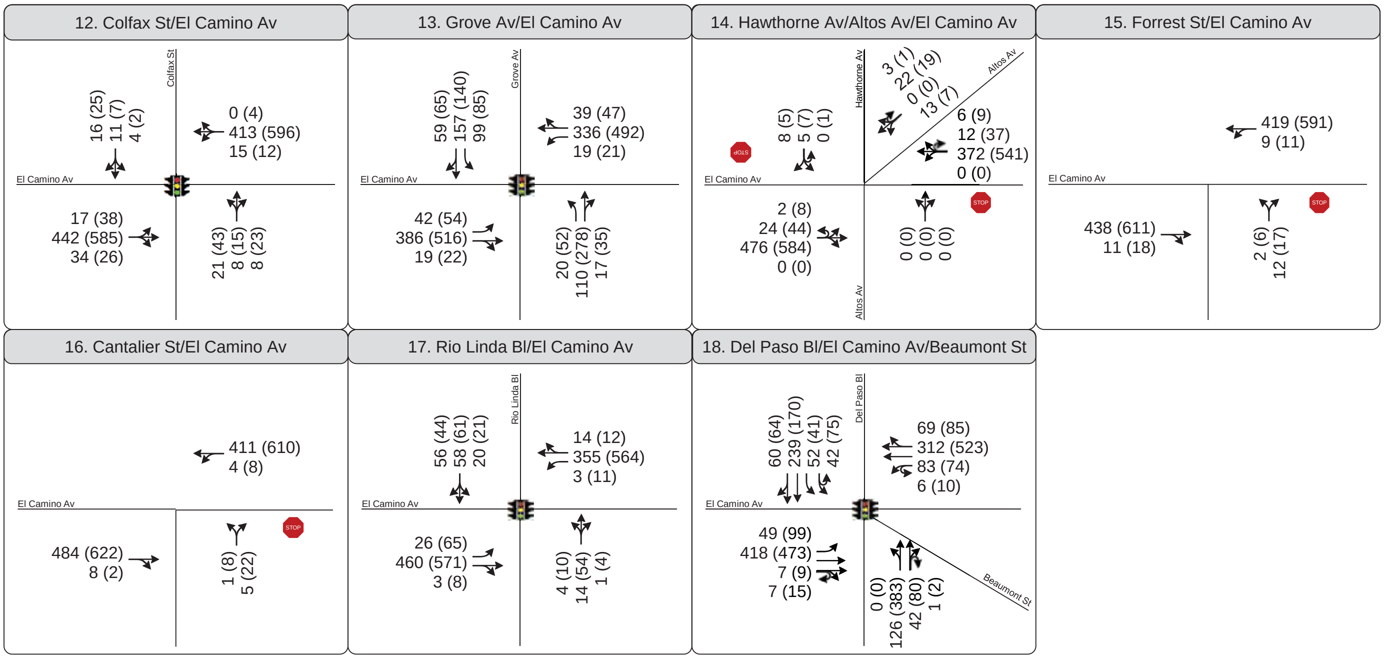
## Existing Conditions




Counts taken May 30, 2018
AM Peak Hour: 7:15-8:15 AM; 0.93 PHF; 4% HV
PM Peak Hour: 5:00-6:00 PM; 0.96 PHF; 2% HV

Figure

Marysville Boulevard
Peak Hour Traffic Volumes and Lane Configurations
Existing Conditions



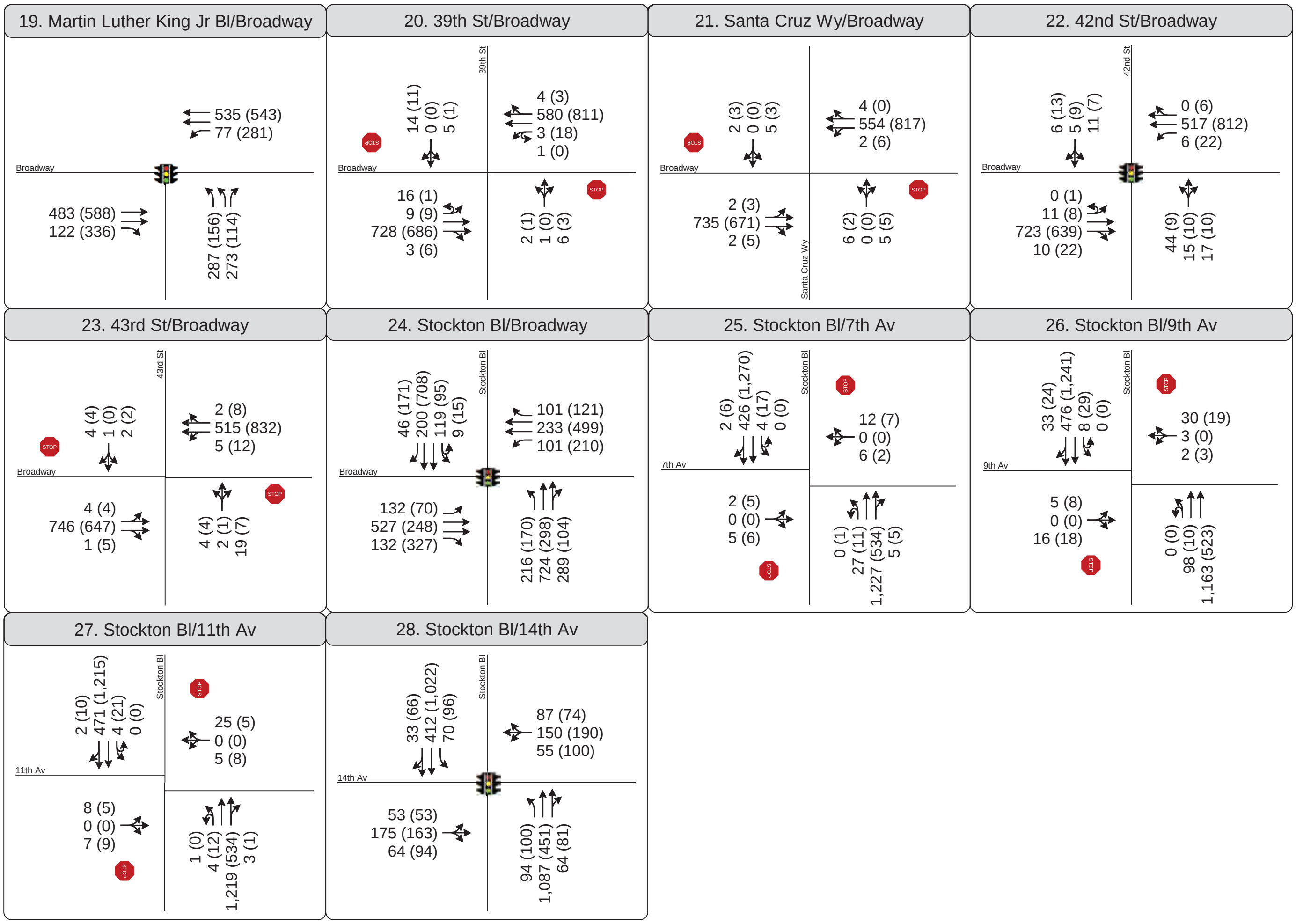

Counts taken May 24, 2018
AM Peak Hour: 7:30-8:30 AM; 0.91 PHF; 2% HV
PM Peak Hour: 5:00-6:00 PM; 0.97 PHF; 1% HV

Figure

El Camino Avenue

Peak Hour Traffic Volumes and Lane Configurations

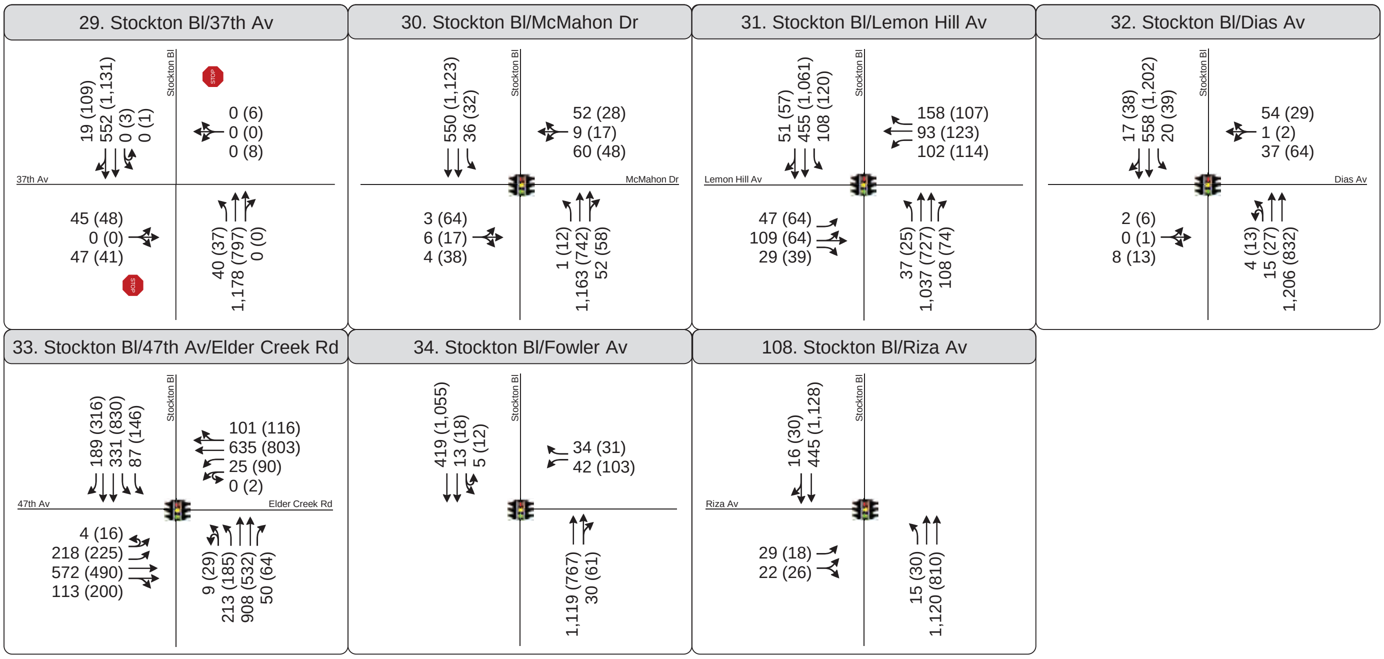
Existing Conditions




Counts taken May 31, 2018
AM Peak Hour: 7:15-8:15 AM; 0.87 PHF; 2% HV
PM Peak Hour: 4:30-5:30 PM; 0.94 PHF; 1% HV

Figure

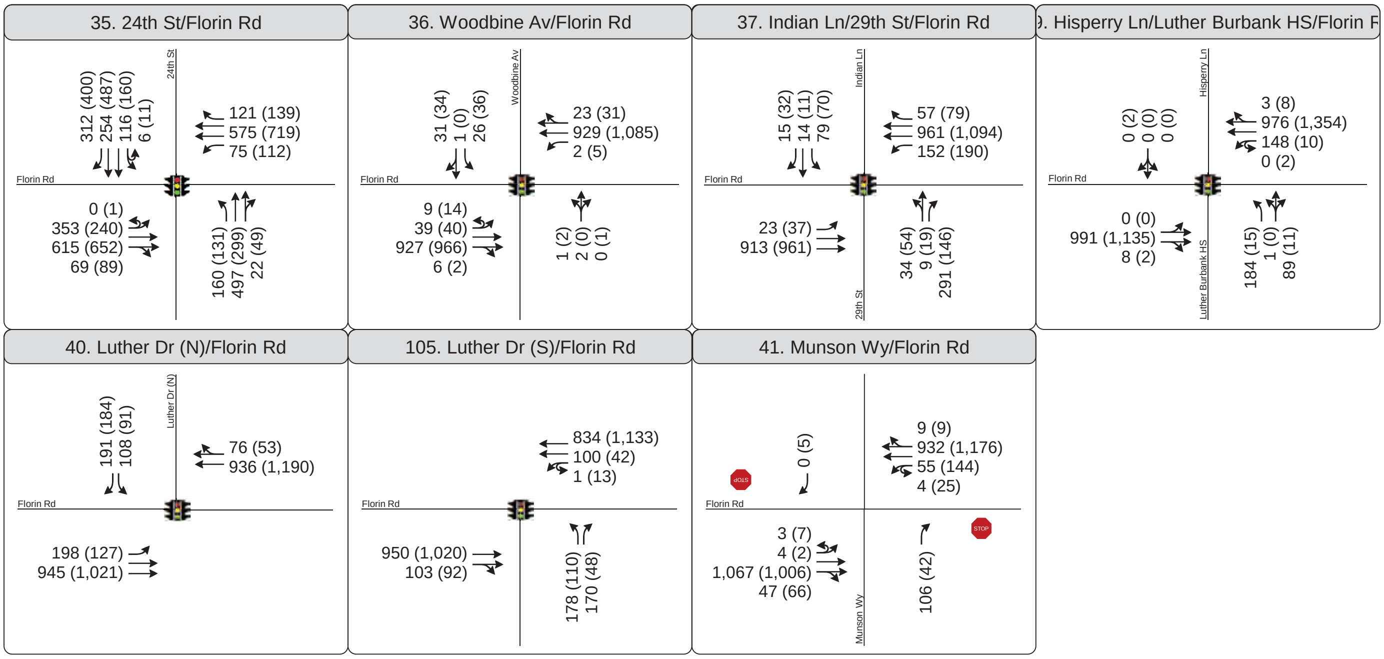
Broadway/Stockton Boulevard (North)
Peak Hour Traffic Volumes and Lane Configurations
Existing Conditions




Counts taken May 31, 2018
AM Peak Hour: 7:15-8:15 AM; 0.89 PHF; 2% HV
PM Peak Hour: 4:15-5:15 PM; 0.95 PHF; 1% HV

Figure

Stockton Boulevard (South)
Peak Hour Traffic Volumes and Lane Configurations
Existing Conditions




Counts taken May 31, 2018

AM Peak Hour: 7:30-8:30 AM; 0.91 PHF; 3% HV

PM Peak Hour: 4:30-5:30 PM; 0.95 PHF; 2% HV

Figure

Florin Road

Peak Hour Traffic Volumes and Lane Configurations

Existing Conditions

# Level of Service Results

## Existing Conditions

**Intersection 1** **Marysville Bl/North Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 15 | 14 | 94.2% | 27.3 | 8.1 | C |
| | Through | 712 | 676 | 94.9% | 8.8 | 2.0 | A |
| | Right Turn | 19 | 17 | 92.0% | 5.7 | 4.3 | A |
| | Subtotal | 746 | 708 | 94.8% | 9.1 | 2.0 | A |
| SB | Left Turn | 43 | 52 | 120.3% | 27.1 | 8.4 | C |
| | Through | 948 | 943 | 99.5% | 8.3 | 1.6 | A |
| | Right Turn | 41 | 43 | 104.3% | 5.1 | 2.7 | A |
| | Subtotal | 1,032 | 1,038 | 100.6% | 9.1 | 1.9 | A |
| EB | Left Turn | 105 | 108 | 102.7% | 16.5 | 2.6 | B |
| | Through | 25 | 21 | 83.3% | 17.2 | 6.6 | B |
| | Right Turn | 27 | 29 | 107.5% | 10.2 | 3.5 | B |
| | Subtotal | 157 | 158 | 100.5% | 15.5 | 2.6 | B |
| WB | Left Turn | 33 | 36 | 110.5% | 17.4 | 4.6 | B |
| | Through | 24 | 28 | 116.3% | 18.7 | 5.6 | B |
| | Right Turn | 56 | 56 | 100.3% | 5.9 | 1.6 | A |
| | Subtotal | 113 | 121 | 106.7% | 12.2 | 2.3 | B |
| Total | | 2,048 | 2,024 | 98.8% | 9.7 | 1.4 | A |

**Intersection 2** **Marysville Bl/Harris Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 29 | 28 | 97.5% | 9.4 | 2.8 | A |
| | Through | 697 | 663 | 95.1% | 1.9 | 0.3 | A |
| | Right Turn | 3 | 4 | 124.0% | 1.1 | 1.3 | A |
| | Subtotal | 729 | 695 | 95.3% | 2.2 | 0.3 | A |
| SB | Left Turn | 35 | 35 | 99.9% | 7.4 | 3.5 | A |
| | Through | 948 | 947 | 99.9% | 2.8 | 0.3 | A |
| | Right Turn | 25 | 29 | 114.6% | 2.0 | 0.7 | A |
| | Subtotal | 1,008 | 1,011 | 100.3% | 2.9 | 0.4 | A |
| EB | Left Turn | 24 | 24 | 99.2% | 19.6 | 8.6 | C |
| | Through | 11 | 12 | 104.8% | 23.4 | 14.7 | C |
| | Right Turn | 43 | 49 | 113.3% | 13.1 | 4.5 | B |
| | Subtotal | 78 | 84 | 107.8% | 16.5 | 5.6 | C |
| WB | Left Turn | 4 | 3 | 83.7% | 12.0 | 14.9 | B |
| | Through | 3 | 5 | 161.2% | 11.3 | 12.3 | B |
| | Right Turn | 23 | 21 | 90.6% | 6.7 | 2.0 | A |
| | Subtotal | 30 | 29 | 96.7% | 10.0 | 4.0 | B |
| Total | | 1,845 | 1,819 | 98.6% | 3.4 | 0.5 | A |

**Intersection 3** **Marysville Bl/Grand Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 139 | 142 | 102.5% | 37.3 | 6.2 | D |
| | Through | 570 | 552 | 96.9% | 11.3 | 2.9 | B |
| | Right Turn | 22 | 16 | 74.4% | 9.5 | 7.3 | A |
| | Subtotal | 731 | 711 | 97.2% | 16.5 | 2.5 | B |
| SB | Left Turn | 24 | 21 | 86.8% | 54.9 | 15.3 | D |
| | Through | 851 | 872 | 102.4% | 22.3 | 2.2 | C |
| | Right Turn | 119 | 108 | 91.0% | 18.6 | 5.5 | B |
| | Subtotal | 994 | 1,001 | 100.7% | 22.5 | 2.1 | C |
| EB | Left Turn | 108 | 103 | 95.8% | 29.8 | 5.8 | C |
| | Through | 112 | 108 | 96.7% | 25.1 | 4.4 | C |
| | Right Turn | 166 | 167 | 100.6% | 16.0 | 3.2 | B |
| | Subtotal | 386 | 379 | 98.1% | 22.5 | 3.2 | C |
| WB | Left Turn | 45 | 47 | 104.2% | 26.4 | 8.0 | C |
| | Through | 113 | 104 | 91.8% | 22.8 | 4.5 | C |
| | Right Turn | 51 | 47 | 91.9% | 13.5 | 4.9 | B |
| | Subtotal | 209 | 198 | 94.5% | 21.6 | 2.5 | C |
| Total | | 2,320 | 2,288 | 98.6% | 20.5 | 1.8 | C |

**Intersection 4** **Marysville Bl/Roanoke Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 13 | 12 | 91.6% | 12.8 | 9.2 | B |
| | Through | 709 | 679 | 95.8% | 4.5 | 2.7 | A |
| | Right Turn | 11 | 13 | 115.0% | 5.2 | 3.7 | A |
| | Subtotal | 733 | 704 | 96.0% | 4.7 | 2.8 | A |
| SB | Left Turn | 21 | 23 | 108.1% | 10.4 | 3.7 | B |
| | Through | 1,031 | 1,042 | 101.1% | 6.6 | 2.4 | A |
| | Right Turn | 10 | 13 | 126.5% | 6.2 | 2.4 | A |
| | Subtotal | 1,062 | 1,078 | 101.5% | 6.7 | 2.4 | A |
| EB | Left Turn | 1 | 1 | 111.6% | 14.4 | 40.5 | B |
| | Through | 2 | 1 | 55.8% | 4.2 | 9.4 | A |
| | Right Turn | 17 | 17 | 100.7% | 9.1 | 4.8 | A |
| | Subtotal | 20 | 19 | 96.7% | 12.2 | 10.3 | B |
| WB | Left Turn | 5 | 5 | 96.7% | 15.8 | 13.5 | C |
| | Through | 1 | 1 | 74.4% | 4.4 | 11.6 | A |
| | Right Turn | 20 | 22 | 111.6% | 7.7 | 3.6 | A |
| | Subtotal | 26 | 28 | 107.3% | 9.7 | 3.4 | A |
| Total | | 1,841 | 1,829 | 99.3% | 6.0 | 2.4 | A |

**Intersection 5** **Marysville Bl/South Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 72 | 64 | 88.9% | 32.1 | 4.7 | C |
| | Through | 629 | 595 | 94.6% | 8.6 | 1.6 | A |
| | Right Turn | 30 | 33 | 110.4% | 6.8 | 1.7 | A |
| | Subtotal | 731 | 692 | 94.7% | 10.7 | 1.6 | B |
| SB | Left Turn | 28 | 23 | 81.0% | 40.7 | 9.3 | D |
| | Through | 985 | 985 | 100.0% | 14.0 | 2.7 | B |
| | Right Turn | 40 | 44 | 110.7% | 11.4 | 3.1 | B |
| | Subtotal | 1,053 | 1,052 | 99.9% | 14.5 | 2.7 | B |
| EB | Left Turn | 40 | 39 | 97.7% | 24.5 | 8.5 | C |
| | Through | 67 | 60 | 88.8% | 27.8 | 3.6 | C |
| | Right Turn | 104 | 99 | 95.5% | 15.9 | 3.8 | B |
| | Subtotal | 211 | 198 | 93.8% | 21.6 | 3.9 | C |
| WB | Left Turn | 56 | 47 | 84.4% | 20.2 | 6.8 | C |
| | Through | 75 | 79 | 105.6% | 24.4 | 6.4 | C |
| | Right Turn | 64 | 67 | 105.2% | 14.4 | 4.0 | B |
| | Subtotal | 195 | 194 | 99.4% | 20.0 | 4.6 | B |
| Total | | 2,190 | 2,136 | 97.5% | 14.4 | 1.6 | B |

**Intersection 6** **Marysville Bl/Los Robles Bl (N)** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 30 | 28 | 91.8% | 10.8 | 4.0 | B |
| | Through | 707 | 678 | 95.9% | 1.2 | 0.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 737 | 705 | 95.7% | 1.6 | 0.4 | A |
| SB | Left Turn | | | | | | |
| | Through | 1,161 | 1,141 | 98.2% | 0.4 | 0.1 | A |
| | Right Turn | 19 | 21 | 109.6% | 0.1 | 0.1 | A |
| | Subtotal | 1,180 | 1,161 | 98.4% | 0.4 | 0.1 | A |
| EB | Left Turn | 31 | 32 | 104.4% | 21.6 | 6.3 | C |
| | Through | | | | | | |
| | Right Turn | 68 | 80 | 117.6% | 12.9 | 3.7 | B |
| | Subtotal | 99 | 112 | 113.5% | 15.6 | 3.1 | C |
| WB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| Total | | 2,016 | 1,979 | 98.2% | 1.7 | 0.3 | A |

**Intersection 7** **Marysville Bl/Los Robles Bl (S)** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 0 | 37.2% | 4.5 | 14.2 | A |
| | Through | 704 | 677 | 96.2% | 3.6 | 0.8 | A |
| | Right Turn | 9 | 10 | 111.6% | 1.7 | 1.5 | A |
| | Subtotal | 714 | 687 | 96.3% | 3.6 | 0.8 | A |
| SB | Left Turn | 43 | 38 | 89.1% | 11.9 | 3.9 | B |
| | Through | 1,183 | 1,175 | 99.3% | 4.9 | 1.0 | A |
| | Right Turn | 3 | 4 | 124.0% | 0.7 | 1.2 | A |
| | Subtotal | 1,229 | 1,217 | 99.0% | 5.1 | 1.1 | A |
| EB | Left Turn | | | | | | |
| | Through | 1 | 1 | 148.8% | 4.0 | 8.1 | A |
| | Right Turn | | | | | | |
| | Subtotal | 1 | 1 | 148.8% | 4.0 | 8.1 | A |
| WB | Left Turn | 49 | 54 | 109.3% | 13.7 | 3.7 | B |
| | Through | | | | | | |
| | Right Turn | 31 | 32 | 104.4% | 6.8 | 3.5 | A |
| | Subtotal | 80 | 86 | 107.4% | 11.4 | 3.3 | B |
| Total | | 2,024 | 1,992 | 98.4% | 4.8 | 0.8 | A |

**Intersection 8** **Marysville Bl/Arcade Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 15 | 11 | 71.9% | 39.3 | 22.4 | D |
| | Through | 288 | 273 | 94.8% | 37.0 | 3.8 | D |
| | Right Turn | 23 | 21 | 92.2% | 21.4 | 5.5 | C |
| | Subtotal | 326 | 305 | 93.6% | 36.4 | 3.7 | D |
| SB | Left Turn | 595 | 563 | 94.6% | 43.4 | 10.6 | D |
| | Through | 612 | 610 | 99.7% | 18.2 | 4.3 | B |
| | Right Turn | 25 | 27 | 108.6% | 14.8 | 4.4 | B |
| | Subtotal | 1,232 | 1,200 | 97.4% | 30.0 | 7.1 | C |
| EB | Left Turn | 41 | 38 | 93.5% | 27.8 | 6.3 | C |
| | Through | 95 | 93 | 97.5% | 22.1 | 7.1 | C |
| | Right Turn | 32 | 29 | 89.5% | 12.5 | 8.5 | B |
| | Subtotal | 168 | 160 | 95.0% | 21.8 | 5.7 | C |
| WB | Left Turn | 23 | 24 | 103.5% | 40.7 | 10.8 | D |
| | Through | 71 | 72 | 101.6% | 43.3 | 16.8 | D |
| | Right Turn | 395 | 385 | 97.5% | 30.0 | 14.7 | C |
| | Subtotal | 489 | 481 | 98.4% | 32.6 | 14.5 | C |
| Total | | 2,215 | 2,146 | 96.9% | 30.9 | 5.5 | C |

**Intersection 9** **Del Paso Bl/Arcade Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 8 | 7 | 93.0% | 24.3 | 17.4 | C |
| | Through | 37 | 38 | 103.6% | 27.7 | 5.2 | C |
| | Right Turn | 97 | 92 | 94.3% | 7.0 | 2.4 | A |
| | Subtotal | 142 | 137 | 96.7% | 14.2 | 3.2 | B |
| SB | Left Turn | 178 | 156 | 87.6% | 29.3 | 3.8 | C |
| | Through | 76 | 78 | 102.3% | 27.7 | 5.5 | C |
| | Right Turn | 9 | 12 | 128.1% | 8.1 | 7.1 | A |
| | Subtotal | 263 | 245 | 93.2% | 27.8 | 2.9 | C |
| EB | Left Turn | 4 | 2 | 55.8% | 24.4 | 28.7 | C |
| | Through | 700 | 665 | 95.0% | 16.8 | 2.3 | B |
| | Right Turn | 5 | 3 | 67.0% | 10.5 | 13.4 | B |
| | Subtotal | 709 | 670 | 94.5% | 16.9 | 2.2 | B |
| WB | Left Turn | 87 | 83 | 95.8% | 29.9 | 4.4 | C |
| | Through | 458 | 457 | 99.8% | 12.1 | 2.2 | B |
| | Right Turn | 108 | 94 | 86.8% | 3.1 | 0.3 | A |
| | Subtotal | 653 | 634 | 97.1% | 13.2 | 1.7 | B |
| Total | | 1,767 | 1,687 | 95.5% | 16.8 | 1.2 | B |

**Intersection 10** **Marysville Bl/Sonoma Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 30 | 32 | 106.6% | 6.2 | 2.4 | A |
| | Through | 302 | 286 | 94.6% | 1.1 | 0.3 | A |
| | Right Turn | 13 | 13 | 100.2% | 0.6 | 0.6 | A |
| | Subtotal | 345 | 331 | 95.9% | 1.6 | 0.4 | A |
| SB | Left Turn | 13 | 12 | 94.4% | 2.9 | 1.8 | A |
| | Through | 633 | 631 | 99.6% | 0.9 | 0.1 | A |
| | Right Turn | 16 | 12 | 72.1% | 0.6 | 0.9 | A |
| | Subtotal | 662 | 654 | 98.8% | 1.0 | 0.2 | A |
| EB | Left Turn | 14 | 13 | 90.3% | 15.1 | 6.4 | C |
| | Through | 5 | 3 | 59.5% | 9.4 | 14.7 | A |
| | Right Turn | 45 | 48 | 106.6% | 8.9 | 2.5 | A |
| | Subtotal | 64 | 64 | 99.4% | 10.8 | 3.3 | B |
| WB | Left Turn | 2 | 2 | 93.0% | 5.4 | 11.0 | A |
| | Through | 5 | 4 | 81.8% | 9.5 | 10.7 | A |
| | Right Turn | 9 | 8 | 90.9% | 4.8 | 2.8 | A |
| | Subtotal | 16 | 14 | 88.4% | 9.5 | 4.3 | A |
| Total | | 1,087 | 1,063 | 97.8% | 1.9 | 0.3 | A |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - Marysville Bl**
**Average Results from 10 Runs** | **Existing Conditions**
**Volume and Delay by Movement** | **AM Peak Hour**

**Intersection 11** **Marysville Bl/Del Paso Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | 203 | 196 | 96.6% | 4.9 | 1.0 | A |
| | Right Turn | 105 | 94 | 89.6% | 1.5 | 0.2 | A |
| | Subtotal | 308 | 290 | 94.2% | 3.8 | 0.8 | A |
| SB | Left Turn | 25 | 24 | 96.7% | 16.9 | 5.6 | B |
| | Through | 547 | 525 | 95.9% | 5.4 | 1.1 | A |
| | Right Turn | | | | | | |
| | Subtotal | 572 | 549 | 95.9% | 5.9 | 1.1 | A |
| EB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| WB | Left Turn | 142 | 144 | 101.1% | 9.7 | 1.6 | A |
| | Through | | | | | | |
| | Right Turn | 38 | 38 | 98.9% | 3.8 | 0.3 | A |
| | Subtotal | 180 | 181 | 100.6% | 8.5 | 1.3 | A |
| Total | | 1,060 | 1,020 | 96.2% | 5.8 | 0.7 | A |

**Intersection 12** **Colfax St/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 21 | 23 | 109.2% | 7.0 | 3.7 | A |
| | Through | 8 | 9 | 118.3% | 3.8 | 2.9 | A |
| | Right Turn | 8 | 8 | 95.6% | 3.1 | 2.8 | A |
| | Subtotal | 37 | 40 | 108.2% | 5.8 | 2.5 | A |
| SB | Left Turn | 4 | 3 | 63.7% | 7.6 | 16.9 | A |
| | Through | 11 | 12 | 105.9% | 8.6 | 7.1 | A |
| | Right Turn | 16 | 15 | 93.3% | 4.6 | 3.7 | A |
| | Subtotal | 31 | 29 | 93.9% | 6.3 | 4.6 | A |
| EB | Left Turn | 17 | 17 | 100.6% | 5.3 | 3.3 | A |
| | Through | 442 | 450 | 101.7% | 3.5 | 0.7 | A |
| | Right Turn | 34 | 25 | 74.9% | 2.2 | 0.8 | A |
| | Subtotal | 493 | 492 | 99.8% | 3.5 | 0.7 | A |
| WB | Left Turn | 15 | 10 | 65.5% | 6.5 | 3.4 | A |
| | Through | 413 | 383 | 92.7% | 3.5 | 0.7 | A |
| | Right Turn | | | | | | |
| | Subtotal | 428 | 393 | 91.8% | 3.5 | 0.8 | A |
| Total | | 989 | 954 | 96.5% | 3.7 | 0.5 | A |

**Intersection 13** **Grove Av/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 20 | 21 | 107.4% | 27.6 | 6.4 | C |
| | Through | 110 | 108 | 98.3% | 27.5 | 6.0 | C |
| | Right Turn | 17 | 16 | 94.2% | 17.9 | 10.6 | B |
| | Subtotal | 147 | 146 | 99.0% | 26.5 | 5.8 | C |
| SB | Left Turn | 99 | 99 | 100.4% | 24.5 | 6.3 | C |
| | Through | 157 | 157 | 99.7% | 25.1 | 5.9 | C |
| | Right Turn | 59 | 50 | 83.9% | 17.2 | 4.7 | B |
| | Subtotal | 315 | 305 | 97.0% | 23.6 | 4.5 | C |
| EB | Left Turn | 42 | 45 | 107.5% | 44.1 | 16.8 | D |
| | Through | 386 | 388 | 100.6% | 19.3 | 5.5 | B |
| | Right Turn | 19 | 20 | 107.3% | 22.9 | 22.7 | C |
| | Subtotal | 447 | 454 | 101.5% | 21.8 | 7.1 | C |
| WB | Left Turn | 19 | 17 | 92.0% | 53.0 | 14.9 | D |
| | Through | 344 | 329 | 95.7% | 25.8 | 6.3 | C |
| | Right Turn | 39 | 40 | 101.7% | 21.2 | 7.3 | C |
| | Subtotal | 402 | 386 | 96.1% | 26.5 | 6.4 | C |
| Total | | 1,311 | 1,291 | 98.5% | 24.2 | 5.2 | C |

**Intersection 14** **Hawthorne Av-Altos Av/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| EB | Left Turn | 26 | 28 | 106.4% | 16.7 | 6.0 | C |
| | Through | 476 | 471 | 99.0% | 6.1 | 1.5 | A |
| | Right Turn | | | | | | |
| | Subtotal | 502 | 499 | 99.4% | 6.6 | 1.8 | A |
| SB | Left Turn | 13 | 13 | 100.8% | 39.9 | 28.6 | E |
| | Through | 22 | 19 | 84.4% | 13.9 | 11.2 | B |
| | Right Turn | 3 | 2 | 72.8% | 15.0 | 10.9 | B |
| | Subtotal | 38 | 34 | 89.1% | 22.0 | 10.2 | C |
| SE | Left Turn | 5 | 4 | 80.1% | 20.0 | 21.8 | C |
| | Through | | | | | | |
| | Right Turn | 8 | 6 | 72.8% | 10.1 | 8.3 | B |
| | Subtotal | 13 | 10 | 75.6% | 15.9 | 11.6 | C |
| WB | Left Turn | | | | | | |
| | Through | 372 | 362 | 97.3% | 5.3 | 2.8 | A |
| | Right Turn | 18 | 16 | 89.0% | 4.6 | 2.4 | A |
| | Subtotal | 390 | 378 | 96.9% | 5.3 | 2.8 | A |
| Total | | 943 | 921 | 97.6% | 6.8 | 1.8 | A |

**Intersection 15** **Forrest St/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 1 | 54.6% | 3.6 | 7.1 | A |
| | Through | | | | | | |
| | Right Turn | 12 | 13 | 109.2% | 4.1 | 2.0 | A |
| | Subtotal | 14 | 14 | 101.4% | 4.5 | 2.3 | A |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 438 | 429 | 98.0% | 0.9 | 0.2 | A |
| | Right Turn | 11 | 11 | 102.6% | 0.6 | 0.5 | A |
| | Subtotal | 449 | 440 | 98.1% | 0.9 | 0.2 | A |
| WB | Left Turn | 9 | 7 | 80.9% | 4.9 | 3.9 | A |
| | Through | 419 | 409 | 97.6% | 1.7 | 0.4 | A |
| | Right Turn | | | | | | |
| | Subtotal | 428 | 416 | 97.2% | 1.8 | 0.4 | A |
| Total | | 891 | 871 | 97.7% | 1.4 | 0.3 | A |

**Intersection 16** **Cantalier St/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 0 | 36.4% | 0.4 | 1.1 | A |
| | Through | | | | | | |
| | Right Turn | 5 | 7 | 145.6% | 4.1 | 3.2 | A |
| | Subtotal | 6 | 8 | 127.4% | 4.1 | 3.2 | A |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 484 | 471 | 97.4% | 0.7 | 0.3 | A |
| | Right Turn | 8 | 8 | 100.1% | 0.2 | 0.3 | A |
| | Subtotal | 492 | 479 | 97.4% | 0.7 | 0.2 | A |
| WB | Left Turn | 4 | 5 | 136.5% | 3.2 | 3.6 | A |
| | Through | 411 | 405 | 98.7% | 1.4 | 0.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 415 | 411 | 99.0% | 1.4 | 0.3 | A |
| Total | | 913 | 898 | 98.4% | 1.0 | 0.2 | A |

**Intersection 17** **Rio Linda Bl/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 4 | 3 | 63.7% | 10.0 | 15.3 | A |
| | Through | 14 | 15 | 104.0% | 25.0 | 10.9 | C |
| | Right Turn | 1 | 0 | 36.4% | 2.8 | 8.9 | A |
| | Subtotal | 19 | 17 | 92.0% | 25.0 | 10.8 | C |
| SB | Left Turn | 20 | 23 | 116.5% | 20.6 | 8.4 | C |
| | Through | 58 | 54 | 93.5% | 24.2 | 5.1 | C |
| | Right Turn | 56 | 55 | 98.8% | 12.1 | 3.2 | B |
| | Subtotal | 134 | 133 | 99.1% | 18.3 | 3.1 | B |
| EB | Left Turn | 26 | 25 | 96.6% | 9.0 | 4.2 | A |
| | Through | 460 | 451 | 98.0% | 3.6 | 0.7 | A |
| | Right Turn | 3 | 2 | 60.7% | 0.8 | 1.7 | A |
| | Subtotal | 489 | 478 | 97.7% | 3.9 | 0.7 | A |
| WB | Left Turn | 3 | 1 | 48.5% | 4.4 | 5.5 | A |
| | Through | 355 | 354 | 99.7% | 5.5 | 1.1 | A |
| | Right Turn | 14 | 13 | 96.2% | 5.5 | 4.2 | A |
| | Subtotal | 372 | 369 | 99.1% | 5.6 | 1.1 | A |
| Total | | 1,014 | 997 | 98.3% | 6.8 | 0.8 | A |

**Intersection 18** **Del Paso Bl-Beaumont St/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | Total Delay (sec/veh) LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| NB | Through | 126 | 123 | 97.6% | 30.7 | 4.6 | C |
| NB | Right Turn | 43 | 51 | 117.7% | 30.3 | 5.8 | C |
| NB | Subtotal | 169 | 174 | 102.7% | 30.5 | 3.8 | C |
| SB | Left Turn | 94 | 94 | 100.3% | 39.0 | 6.0 | D |
| SB | Through | 239 | 227 | 95.0% | 27.1 | 3.7 | C |
| SB | Right Turn | 60 | 61 | 101.9% | 6.3 | 2.6 | A |
| SB | Subtotal | 393 | 383 | 97.3% | 26.7 | 3.8 | C |
| EB | Left Turn | 49 | 47 | 96.6% | 36.0 | 8.4 | D |
| EB | Through | 425 | 415 | 97.6% | 24.7 | 4.7 | C |
| EB | Right Turn | 7 | 9 | 124.8% | 11.1 | 9.1 | B |
| EB | Subtotal | 481 | 471 | 97.8% | 25.5 | 3.8 | C |
| WB | Left Turn | 89 | 77 | 86.3% | 38.9 | 9.4 | D |
| WB | Through | 312 | 310 | 99.4% | 23.8 | 3.8 | C |
| WB | Right Turn | 69 | 77 | 111.3% | 2.8 | 0.4 | A |
| WB | Subtotal | 470 | 464 | 98.7% | 22.9 | 4.0 | C |
| Total | | 1,513 | 1,491 | 98.5% | 25.5 | 2.4 | C |

**Intersection 19** **Martin Luther King Jr Bl/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 287 | 286 | 99.7% | 62.2 | 143.7 | E |
| | Through | | | | | | |
| | Right Turn | 273 | 268 | 98.1% | 42.0 | 109.9 | D |
| | Subtotal | 560 | 554 | 98.9% | 52.3 | 126.7 | D |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 483 | 486 | 100.6% | 9.2 | 3.3 | A |
| | Right Turn | 122 | 118 | 97.1% | 5.0 | 1.5 | A |
| | Subtotal | 605 | 604 | 99.9% | 8.4 | 2.8 | A |
| WB | Left Turn | 77 | 58 | 75.2% | 74.0 | 145.6 | E |
| | Through | 535 | 531 | 99.2% | 10.2 | 5.3 | B |
| | Right Turn | | | | | | |
| | Subtotal | 612 | 588 | 96.2% | 12.7 | 6.6 | B |
| Total | | 1,777 | 1,747 | 98.3% | 13.7 | 9.5 | B |

**Intersection 20** **39th St/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 1 | 56.4% | 1.2 | 2.0 | A |
| | Through | 1 | 1 | 112.8% | 20.2 | 54.1 | C |
| | Right Turn | 6 | 6 | 106.5% | 5.2 | 3.4 | A |
| | Subtotal | 9 | 9 | 96.1% | 14.4 | 27.2 | B |
| SB | Left Turn | 5 | 5 | 97.8% | 13.9 | 19.6 | B |
| | Through | | | | | | |
| | Right Turn | 14 | 12 | 85.9% | 10.5 | 19.7 | B |
| | Subtotal | 19 | 17 | 89.1% | 7.7 | 5.5 | A |
| EB | Left Turn | 25 | 24 | 94.8% | 7.3 | 12.7 | A |
| | Through | 728 | 725 | 99.6% | 1.2 | 0.1 | A |
| | Right Turn | 3 | 1 | 37.6% | 1.2 | 0.1 | A |
| | Subtotal | 756 | 750 | 99.2% | 1.4 | 0.4 | A |
| WB | Left Turn | 4 | 2 | 56.4% | 6.2 | 13.2 | A |
| | Through | 580 | 566 | 97.5% | 2.6 | 5.8 | A |
| | Right Turn | 4 | 4 | 94.0% | 0.6 | 0.9 | A |
| | Subtotal | 588 | 572 | 97.2% | 2.6 | 5.8 | A |
| Total | | 1,372 | 1,347 | 98.2% | 2.1 | 2.8 | A |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - Broadway & Stockton Bl**
**Average Results from 10 Runs** | **Existing Conditions**
**Volume and Delay by Movement** | **AM Peak Hour**

**Intersection 21** | **Santa Cruz Wy-Altos Av/Broadway** | **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 6 | 9 | 150.4% | 10.9 | 10.4 | B |
| | Through | | | | | | |
| | Right Turn | 5 | 5 | 105.3% | 3.5 | 3.0 | A |
| | Subtotal | 11 | 14 | 129.9% | 9.7 | 7.5 | A |
| SB | Left Turn | 5 | 4 | 82.7% | 18.1 | 24.5 | C |
| | Through | | | | | | |
| | Right Turn | 2 | 2 | 112.8% | 2.6 | 4.6 | A |
| | Subtotal | 7 | 6 | 91.3% | 17.1 | 24.3 | C |
| EB | Left Turn | 2 | 2 | 94.0% | 3.1 | 3.2 | A |
| | Through | 735 | 722 | 98.2% | 2.0 | 1.5 | A |
| | Right Turn | 2 | 3 | 169.2% | 1.9 | 1.5 | A |
| | Subtotal | 739 | 727 | 98.4% | 2.0 | 1.6 | A |
| WB | Left Turn | 2 | 1 | 37.6% | 2.1 | 3.6 | A |
| | Through | 554 | 540 | 97.5% | 2.8 | 1.2 | A |
| | Right Turn | 4 | 3 | 75.2% | 3.0 | 5.1 | A |
| | Subtotal | 560 | 544 | 97.1% | 2.8 | 1.2 | A |
| Total | | 1,317 | 1,292 | 98.1% | 2.5 | 1.3 | A |

**Intersection 22** | **42nd St/Broadway** | **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 44 | 49 | 111.1% | 10.4 | 3.9 | B |
| | Through | 15 | 14 | 90.2% | 9.3 | 3.1 | A |
| | Right Turn | 17 | 20 | 117.2% | 7.0 | 3.1 | A |
| | Subtotal | 76 | 82 | 108.3% | 9.5 | 2.7 | A |
| SB | Left Turn | 11 | 11 | 95.7% | 9.8 | 7.1 | A |
| | Through | 5 | 6 | 112.8% | 8.4 | 10.4 | A |
| | Right Turn | 6 | 6 | 94.0% | 5.1 | 8.6 | A |
| | Subtotal | 22 | 22 | 99.1% | 8.8 | 7.2 | A |
| EB | Left Turn | 11 | 10 | 88.9% | 7.3 | 6.8 | A |
| | Through | 723 | 705 | 97.5% | 5.2 | 1.0 | A |
| | Right Turn | 10 | 12 | 120.3% | 4.5 | 4.2 | A |
| | Subtotal | 744 | 727 | 97.7% | 5.3 | 1.0 | A |
| WB | Left Turn | 6 | 4 | 68.9% | 7.2 | 7.5 | A |
| | Through | 517 | 508 | 98.2% | 4.2 | 1.1 | A |
| | Right Turn | | | | | | |
| | Subtotal | 523 | 512 | 97.8% | 4.3 | 1.1 | A |
| Total | | 1,365 | 1,343 | 98.4% | 5.2 | 0.9 | A |

**Intersection 23** **43rd St/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 4 | 6 | 150.4% | 9.6 | 9.6 | A |
| | Through | 2 | 2 | 112.8% | 6.0 | 7.9 | A |
| | Right Turn | 19 | 20 | 102.9% | 5.7 | 2.6 | A |
| | Subtotal | 25 | 28 | 111.3% | 8.2 | 3.1 | A |
| SB | Left Turn | 2 | 2 | 94.0% | 3.3 | 7.0 | A |
| | Through | 1 | 2 | 150.4% | 14.8 | 24.5 | B |
| | Right Turn | 4 | 4 | 94.0% | 3.9 | 6.8 | A |
| | Subtotal | 7 | 7 | 102.1% | 10.0 | 10.6 | B |
| EB | Left Turn | 4 | 3 | 75.2% | 2.0 | 2.1 | A |
| | Through | 746 | 732 | 98.1% | 1.3 | 0.1 | A |
| | Right Turn | 1 | 1 | 112.8% | 0.2 | 0.2 | A |
| | Subtotal | 751 | 736 | 98.0% | 1.3 | 0.1 | A |
| WB | Left Turn | 5 | 6 | 120.3% | 4.9 | 4.8 | A |
| | Through | 515 | 504 | 97.8% | 0.9 | 0.5 | A |
| | Right Turn | 2 | 3 | 131.6% | 0.8 | 0.4 | A |
| | Subtotal | 522 | 512 | 98.2% | 1.0 | 0.6 | A |
| Total | | 1,305 | 1,284 | 98.4% | 1.4 | 0.3 | A |

**Intersection 24** **Stockton Bl/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 216 | 193 | 89.3% | 72.2 | 4.8 | E |
| | Through | 724 | 699 | 96.5% | 44.6 | 5.5 | D |
| | Right Turn | 289 | 262 | 90.8% | 42.5 | 8.2 | D |
| | Subtotal | 1,229 | 1,154 | 93.9% | 48.7 | 4.9 | D |
| SB | Left Turn | 128 | 130 | 101.9% | 52.7 | 7.4 | D |
| | Through | 200 | 204 | 101.9% | 27.2 | 3.5 | C |
| | Right Turn | 46 | 52 | 113.6% | 4.5 | 1.9 | A |
| | Subtotal | 374 | 387 | 103.3% | 32.6 | 4.0 | C |
| EB | Left Turn | 132 | 136 | 103.1% | 60.6 | 7.7 | E |
| | Through | 527 | 516 | 98.0% | 39.4 | 5.1 | D |
| | Right Turn | 132 | 133 | 101.1% | 6.8 | 1.8 | A |
| | Subtotal | 791 | 786 | 99.3% | 37.5 | 4.2 | D |
| WB | Left Turn | 101 | 107 | 106.1% | 57.9 | 5.6 | E |
| | Through | 233 | 235 | 100.7% | 36.2 | 4.9 | D |
| | Right Turn | 101 | 112 | 110.6% | 8.4 | 1.6 | A |
| | Subtotal | 435 | 453 | 104.2% | 34.6 | 2.8 | C |
| Total | | 2,829 | 2,780 | 98.3% | 41.1 | 2.3 | D |

**Intersection 25** **Stockton Bl/7th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 27 | 27 | 100.3% | 9.2 | 3.6 | A |
| | Through | 1,227 | 1,205 | 98.2% | 8.5 | 3.1 | A |
| | Right Turn | 5 | 4 | 75.2% | 2.1 | 1.1 | A |
| | Subtotal | 1,259 | 1,236 | 98.2% | 8.5 | 3.1 | A |
| SB | Left Turn | 4 | 4 | 94.0% | 16.4 | 16.9 | C |
| | Through | 426 | 440 | 103.2% | 0.2 | 0.0 | A |
| | Right Turn | 2 | 1 | 56.4% | 0.0 | 0.1 | A |
| | Subtotal | 432 | 444 | 102.9% | 0.4 | 0.2 | A |
| EB | Left Turn | 2 | 0 | 18.8% | 0.7 | 2.1 | A |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 5 | 8 | 157.9% | 2.8 | 1.5 | A |
| | Subtotal | 7 | 8 | 118.2% | 2.9 | 1.6 | A |
| WB | Left Turn | 6 | 6 | 94.0% | 37.0 | 30.7 | E |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 12 | 13 | 106.5% | 39.5 | 22.6 | E |
| | Subtotal | 18 | 18 | 102.4% | 39.1 | 15.2 | E |
| Total | | 1,716 | 1,707 | 99.5% | 6.7 | 2.3 | A |

**Intersection 26** **Stockton Bl/9th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 98 | 96 | 97.7% | 6.2 | 1.4 | A |
| | Through | 1,163 | 1,135 | 97.6% | 1.8 | 0.2 | A |
| | Right Turn | 2 | 3 | 131.6% | 0.0 | 0.1 | A |
| | Subtotal | 1,263 | 1,234 | 97.7% | 2.1 | 0.2 | A |
| SB | Left Turn | 8 | 10 | 130.4% | 15.6 | 15.6 | C |
| | Through | 469 | 480 | 102.3% | 0.5 | 0.1 | A |
| | Right Turn | 33 | 40 | 121.9% | 0.1 | 0.2 | A |
| | Subtotal | 510 | 530 | 104.0% | 0.9 | 0.5 | A |
| EB | Left Turn | 5 | 3 | 67.7% | 5.6 | 7.8 | A |
| | Through | 0 | 0 | 0.0% | 1.7 | 5.2 | A |
| | Right Turn | 16 | 19 | 116.9% | 4.2 | 1.5 | A |
| | Subtotal | 21 | 22 | 105.6% | 5.3 | 1.3 | A |
| WB | Left Turn | 2 | 1 | 56.4% | 5.5 | 15.0 | A |
| | Through | 3 | 2 | 78.3% | 26.4 | 7.8 | D |
| | Right Turn | 30 | 43 | 142.6% | 22.0 | 7.5 | C |
| | Subtotal | 35 | 46 | 132.1% | 22.0 | 7.4 | C |
| Total | | 1,829 | 1,832 | 100.2% | 2.3 | 0.3 | A |

**Intersection 27** **Stoctkon Bl/11th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 5 | 6 | 120.3% | 2.5 | 1.2 | A |
| | Through | 1,219 | 1,177 | 96.6% | 1.0 | 0.2 | A |
| | Right Turn | 2 | 2 | 75.2% | 0.0 | 0.0 | A |
| | Subtotal | 1,226 | 1,185 | 96.6% | 1.0 | 0.2 | A |
| SB | Left Turn | 4 | 3 | 65.8% | 6.6 | 13.3 | A |
| | Through | 471 | 484 | 102.8% | 0.2 | 0.0 | A |
| | Right Turn | 2 | 1 | 56.4% | 0.0 | 0.0 | A |
| | Subtotal | 477 | 488 | 102.3% | 0.2 | 0.1 | A |
| EB | Left Turn | 8 | 7 | 89.3% | 5.7 | 3.4 | A |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 7 | 5 | 64.5% | 2.9 | 1.5 | A |
| | Subtotal | 15 | 12 | 77.7% | 4.8 | 2.7 | A |
| WB | Left Turn | 5 | 5 | 90.2% | 22.8 | 25.8 | C |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 25 | 29 | 115.8% | 18.5 | 7.1 | C |
| | Subtotal | 30 | 33 | 111.5% | 20.6 | 6.2 | C |
| Total | | 1,748 | 1,718 | 98.3% | 1.1 | 0.1 | A |

**Intersection 28** **Stockton Bl/14th Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 94 | 89 | 94.8% | 121.9 | 15.8 | F |
| | Through | 1,087 | 1,039 | 95.6% | 71.6 | 16.8 | E |
| | Right Turn | 64 | 55 | 85.8% | 60.9 | 18.5 | E |
| | Subtotal | 1,245 | 1,183 | 95.0% | 74.7 | 16.3 | E |
| SB | Left Turn | 70 | 75 | 107.4% | 78.7 | 9.6 | E |
| | Through | 412 | 411 | 99.8% | 32.6 | 5.1 | C |
| | Right Turn | 33 | 27 | 80.9% | 29.4 | 9.9 | C |
| | Subtotal | 515 | 513 | 99.7% | 39.3 | 4.5 | D |
| EB | Left Turn | 53 | 51 | 95.8% | 55.6 | 11.8 | E |
| | Through | 175 | 185 | 105.9% | 58.8 | 12.2 | E |
| | Right Turn | 64 | 69 | 108.1% | 40.7 | 10.6 | D |
| | Subtotal | 292 | 305 | 104.6% | 54.4 | 10.9 | D |
| WB | Left Turn | 55 | 59 | 106.6% | 59.0 | 8.1 | E |
| | Through | 150 | 148 | 98.5% | 65.6 | 12.6 | E |
| | Right Turn | 87 | 95 | 108.9% | 55.7 | 17.5 | E |
| | Subtotal | 292 | 301 | 103.1% | 61.3 | 11.8 | E |
| Total | | 1,748 | 1,828 | 104.6% | 62.3 | 10.1 | E |

**Intersection 29** **Stockton Bl/37th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 40 | 36 | 89.9% | 5.2 | 1.3 | A |
| | Through | 1,178 | 1,115 | 94.7% | 2.0 | 0.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 1,218 | 1,151 | 94.5% | 2.1 | 0.4 | A |
| SB | Left Turn | | | | | | |
| | Through | 552 | 542 | 98.2% | 1.4 | 0.2 | A |
| | Right Turn | 19 | 21 | 110.5% | 1.4 | 0.7 | A |
| | Subtotal | 571 | 563 | 98.6% | 1.4 | 0.2 | A |
| EB | Left Turn | 45 | 39 | 86.2% | 19.5 | 6.3 | C |
| | Through | | | | | | |
| | Right Turn | 47 | 44 | 93.2% | 7.6 | 1.9 | A |
| | Subtotal | 92 | 83 | 89.8% | 13.3 | 4.3 | B |
| WB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| Total | | 1,881 | 1,797 | 95.5% | 2.4 | 0.4 | A |

**Intersection 30** **Stockton Bl/McMahon Dr** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 1 | 106.8% | 6.2 | 14.2 | A |
| | Through | 1,163 | 1,106 | 95.1% | 7.3 | 1.9 | A |
| | Right Turn | 52 | 51 | 97.2% | 6.3 | 2.3 | A |
| | Subtotal | 1,216 | 1,158 | 95.2% | 7.2 | 1.9 | A |
| SB | Left Turn | 36 | 29 | 81.1% | 22.9 | 8.1 | C |
| | Through | 550 | 541 | 98.4% | 4.2 | 1.0 | A |
| | Right Turn | 13 | 16 | 126.0% | 1.5 | 1.0 | A |
| | Subtotal | 599 | 587 | 97.9% | 5.1 | 1.2 | A |
| EB | Left Turn | 3 | 2 | 59.3% | 3.3 | 7.6 | A |
| | Through | 6 | 8 | 136.5% | 17.4 | 15.1 | B |
| | Right Turn | 4 | 6 | 160.2% | 6.0 | 9.5 | A |
| | Subtotal | 13 | 16 | 126.0% | 11.1 | 7.1 | B |
| WB | Left Turn | 60 | 57 | 95.5% | 16.2 | 4.4 | B |
| | Through | 9 | 7 | 79.1% | 16.0 | 13.9 | B |
| | Right Turn | 52 | 46 | 89.0% | 12.1 | 3.2 | B |
| | Subtotal | 121 | 111 | 91.5% | 14.7 | 3.4 | B |
| Total | | 1,949 | 1,871 | 96.0% | 7.0 | 1.5 | A |

**Intersection 31** **Stockton Bl/Lemon Hill Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 37 | 34 | 91.4% | 68.8 | 18.2 | E |
| | Through | 1,037 | 990 | 95.5% | 30.6 | 11.3 | C |
| | Right Turn | 108 | 104 | 96.3% | 13.2 | 5.0 | B |
| | Subtotal | 1,182 | 1,128 | 95.4% | 30.2 | 10.9 | C |
| SB | Left Turn | 108 | 92 | 85.4% | 40.7 | 6.4 | D |
| | Through | 455 | 464 | 102.0% | 18.0 | 2.6 | B |
| | Right Turn | 51 | 47 | 92.1% | 15.0 | 5.2 | B |
| | Subtotal | 614 | 603 | 98.3% | 21.2 | 2.5 | C |
| EB | Left Turn | 47 | 46 | 97.0% | 39.2 | 9.0 | D |
| | Through | 109 | 110 | 100.9% | 40.5 | 7.0 | D |
| | Right Turn | 29 | 35 | 119.1% | 6.7 | 2.1 | A |
| | Subtotal | 185 | 190 | 102.8% | 34.1 | 5.9 | C |
| WB | Left Turn | 102 | 97 | 94.9% | 34.3 | 6.8 | C |
| | Through | 93 | 88 | 94.2% | 35.8 | 7.1 | D |
| | Right Turn | 158 | 165 | 104.5% | 18.7 | 3.0 | B |
| | Subtotal | 353 | 350 | 99.0% | 27.4 | 2.6 | C |
| Total | | 2,334 | 2,271 | 97.3% | 27.7 | 5.9 | C |

**Intersection 32** **Stockton Bl/Dias Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 19 | 17 | 89.9% | 14.2 | 7.2 | B |
| | Through | 1,206 | 1,177 | 97.6% | 9.6 | 1.5 | A |
| | Right Turn | 2 | 1 | 71.2% | 3.0 | 6.2 | A |
| | Subtotal | 1,227 | 1,195 | 97.4% | 9.6 | 1.5 | A |
| SB | Left Turn | 20 | 18 | 90.8% | 18.0 | 6.0 | B |
| | Through | 558 | 559 | 100.2% | 5.1 | 1.5 | A |
| | Right Turn | 17 | 16 | 96.3% | 3.1 | 1.8 | A |
| | Subtotal | 595 | 593 | 99.7% | 5.5 | 1.3 | A |
| EB | Left Turn | 2 | 2 | 106.8% | 1.9 | 3.9 | A |
| | Through | | | | | | |
| | Right Turn | 8 | 6 | 75.7% | 4.9 | 5.4 | A |
| | Subtotal | 10 | 8 | 81.9% | 5.3 | 5.3 | A |
| WB | Left Turn | 37 | 40 | 108.7% | 17.3 | 2.8 | B |
| | Through | 1 | 0 | 35.6% | 0.5 | 1.5 | A |
| | Right Turn | 54 | 56 | 104.2% | 10.4 | 4.5 | B |
| | Subtotal | 92 | 97 | 105.3% | 13.1 | 3.4 | B |
| Total | | 1,924 | 1,894 | 98.4% | 8.5 | 1.3 | A |

**Intersection 33** **Stockton Bl/47th Av-Elder Creek Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 222 | 237 | 106.6% | 43.1 | 4.9 | D |
| | Through | 908 | 898 | 98.9% | 36.4 | 7.6 | D |
| | Right Turn | 50 | 51 | 101.1% | 15.4 | 6.3 | B |
| | Subtotal | 1,180 | 1,185 | 100.4% | 36.9 | 6.6 | D |
| SB | Left Turn | 87 | 84 | 96.6% | 47.3 | 8.2 | D |
| | Through | 331 | 336 | 101.4% | 29.5 | 4.1 | C |
| | Right Turn | 189 | 184 | 97.6% | 8.3 | 2.4 | A |
| | Subtotal | 607 | 604 | 99.5% | 25.6 | 4.1 | C |
| EB | Left Turn | 222 | 223 | 100.5% | 42.8 | 3.8 | D |
| | Through | 572 | 563 | 98.4% | 31.6 | 3.4 | C |
| | Right Turn | 113 | 128 | 113.1% | 24.7 | 5.6 | C |
| | Subtotal | 907 | 914 | 100.8% | 33.4 | 2.4 | C |
| WB | Left Turn | 25 | 24 | 95.4% | 60.5 | 10.0 | E |
| | Through | 635 | 596 | 93.8% | 58.7 | 12.8 | E |
| | Right Turn | 101 | 89 | 88.5% | 52.6 | 17.5 | D |
| | Subtotal | 761 | 709 | 93.1% | 57.9 | 13.0 | E |
| Total | | 3,455 | 3,412 | 98.8% | 38.5 | 2.2 | D |

**Intersection 34** **Stockton Bl/Riza Av-Fowler Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 15 | 14 | 90.2% | 33.3 | 9.4 | C |
| | Through | 1,090 | 1,077 | 98.8% | 12.6 | 2.1 | B |
| | Right Turn | 29 | 30 | 104.3% | 11.2 | 2.0 | B |
| | Subtotal | 1,134 | 1,121 | 98.9% | 12.8 | 2.1 | B |
| SB | Left Turn | 18 | 13 | 73.2% | 35.9 | 11.5 | D |
| | Through | 403 | 438 | 108.6% | 10.1 | 2.7 | B |
| | Right Turn | 15 | 16 | 104.4% | 8.9 | 2.2 | A |
| | Subtotal | 436 | 466 | 107.0% | 10.9 | 2.9 | B |
| EB | Left Turn | 28 | 25 | 90.3% | 30.9 | 10.4 | C |
| | Through | 1 | 1 | 71.2% | 29.5 | 10.4 | C |
| | Right Turn | 22 | 27 | 124.6% | 5.7 | 3.0 | A |
| | Subtotal | 51 | 53 | 104.7% | 17.6 | 5.8 | B |
| WB | Left Turn | 41 | 40 | 96.4% | 26.9 | 6.3 | C |
| | Through | 1 | 1 | 142.4% | 25.7 | 6.6 | C |
| | Right Turn | 34 | 37 | 109.9% | 10.2 | 4.2 | B |
| | Subtotal | 76 | 78 | 103.1% | 18.8 | 3.8 | B |
| Total | | 1,697 | 1,719 | 101.3% | 12.7 | 2.0 | B |

**Intersection 35** **24th St/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 160 | 150 | 94.0% | 61.1 | 12.1 | E |
| | Through | 497 | 493 | 99.2% | 33.5 | 2.3 | C |
| | Right Turn | 22 | 21 | 96.0% | 25.4 | 7.5 | C |
| | Subtotal | 679 | 664 | 97.8% | 39.6 | 4.0 | D |
| SB | Left Turn | 122 | 118 | 97.0% | 49.1 | 8.9 | D |
| | Through | 254 | 269 | 105.9% | 29.2 | 2.8 | C |
| | Right Turn | 312 | 312 | 99.9% | 12.5 | 2.8 | B |
| | Subtotal | 688 | 699 | 101.6% | 25.3 | 2.2 | C |
| EB | Left Turn | 353 | 302 | 85.6% | 97.3 | 28.5 | F |
| | Through | 615 | 616 | 100.2% | 25.7 | 3.6 | C |
| | Right Turn | 69 | 72 | 103.9% | 19.7 | 4.7 | B |
| | Subtotal | 1,037 | 990 | 95.5% | 47.2 | 11.1 | D |
| WB | Left Turn | 75 | 71 | 95.1% | 44.9 | 5.9 | D |
| | Through | 575 | 541 | 94.1% | 33.0 | 4.3 | C |
| | Right Turn | 121 | 115 | 95.1% | 15.2 | 2.4 | B |
| | Subtotal | 771 | 728 | 94.4% | 31.4 | 3.8 | C |
| Total | | 3,175 | 3,081 | 97.0% | 36.9 | 3.4 | D |

**Intersection 36** **Woodbine Av/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Through | 2 | 1 | 36.4% | 7.7 | 22.7 | A |
| | Right Turn | | | | | | |
| | Subtotal | 3 | 1 | 24.3% | 7.6 | 22.8 | A |
| SB | Left Turn | 26 | 23 | 89.6% | 38.8 | 15.8 | D |
| | Through | 1 | 0 | 0.0% | 3.3 | 10.4 | A |
| | Right Turn | 31 | 32 | 104.5% | 7.5 | 2.3 | A |
| | Subtotal | 58 | 56 | 96.0% | 21.8 | 8.9 | C |
| EB | Left Turn | 48 | 43 | 90.2% | 51.4 | 11.0 | D |
| | Through | 927 | 920 | 99.3% | 5.9 | 0.7 | A |
| | Right Turn | 6 | 6 | 103.1% | 5.1 | 4.0 | A |
| | Subtotal | 981 | 970 | 98.8% | 7.9 | 1.5 | A |
| WB | Left Turn | 2 | 1 | 72.8% | 20.2 | 32.0 | C |
| | Through | 929 | 889 | 95.7% | 10.8 | 2.5 | B |
| | Right Turn | 23 | 23 | 98.1% | 11.3 | 4.8 | B |
| | Subtotal | 954 | 913 | 95.7% | 10.9 | 2.5 | B |
| Total | | 1,996 | 1,939 | 97.1% | 9.7 | 1.4 | A |

**Intersection 37** **Indian Ln-29th St/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 34 | 36 | 107.1% | 35.9 | 8.0 | D |
| | Through | 9 | 10 | 109.2% | 33.6 | 17.5 | C |
| | Right Turn | 291 | 296 | 101.8% | 17.0 | 2.4 | B |
| | Subtotal | 334 | 343 | 102.6% | 19.5 | 2.2 | B |
| SB | Left Turn | 79 | 78 | 98.1% | 43.2 | 8.7 | D |
| | Through | 14 | 14 | 101.4% | 43.6 | 23.7 | D |
| | Right Turn | 15 | 14 | 92.2% | 7.4 | 4.0 | A |
| | Subtotal | 108 | 106 | 97.7% | 38.9 | 7.5 | D |
| EB | Left Turn | 23 | 24 | 102.9% | 44.4 | 10.9 | D |
| | Through | 913 | 885 | 97.0% | 26.7 | 6.1 | C |
| | Right Turn | 33 | 31 | 93.8% | 22.8 | 10.4 | C |
| | Subtotal | 969 | 940 | 97.0% | 27.0 | 6.2 | C |
| WB | Left Turn | 152 | 151 | 99.4% | 47.4 | 5.7 | D |
| | Through | 961 | 929 | 96.7% | 14.4 | 4.3 | B |
| | Right Turn | 57 | 56 | 98.3% | 4.3 | 0.9 | A |
| | Subtotal | 1,170 | 1,136 | 97.1% | 18.2 | 4.0 | B |
| Total | | 2,581 | 2,524 | 97.8% | 22.6 | 4.1 | C |

**Intersection 39** **Hisperry Ln-Luther Burbank HS/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 184 | 182 | 98.7% | 39.0 | 3.7 | D |
| | Through | 1 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 89 | 87 | 97.7% | 17.3 | 4.5 | B |
| | Subtotal | 274 | 269 | 98.0% | 32.1 | 2.6 | C |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 991 | 971 | 98.0% | 8.3 | 1.7 | A |
| | Right Turn | 8 | 10 | 127.4% | 8.6 | 7.6 | A |
| | Subtotal | 999 | 981 | 98.2% | 8.3 | 1.7 | A |
| WB | Left Turn | 148 | 146 | 98.6% | 33.0 | 6.0 | C |
| | Through | 976 | 955 | 97.8% | 10.1 | 1.8 | B |
| | Right Turn | 3 | 3 | 109.2% | 4.7 | 2.8 | A |
| | Subtotal | 1,127 | 1,104 | 98.0% | 13.1 | 2.3 | B |
| Total | | 2,400 | 2,354 | 98.1% | 13.2 | 1.4 | B |

**Intersection 40** **Luther Dr/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 130 | 131 | 100.5% | 37.9 | 2.8 | D |
| | Through | 48 | 48 | 100.3% | 37.9 | 3.0 | D |
| | Right Turn | 170 | 171 | 100.8% | 15.9 | 3.0 | B |
| | Subtotal | 348 | 350 | 100.6% | 27.2 | 2.9 | C |
| SB | Left Turn | 64 | 64 | 99.7% | 36.8 | 5.3 | D |
| | Through | 44 | 44 | 99.9% | 37.1 | 5.1 | D |
| | Right Turn | 191 | 192 | 100.4% | 13.0 | 2.3 | B |
| | Subtotal | 299 | 300 | 100.2% | 21.6 | 1.7 | C |
| EB | Left Turn | 198 | 185 | 93.2% | 61.9 | 6.1 | E |
| | Through | 842 | 833 | 99.0% | 67.6 | 6.4 | E |
| | Right Turn | 59 | 52 | 88.4% | 67.9 | 6.8 | E |
| | Subtotal | 1,099 | 1,070 | 97.4% | 66.6 | 6.3 | E |
| WB | Left Turn | 101 | 99 | 98.4% | 68.5 | 12.4 | E |
| | Through | 758 | 748 | 98.7% | 42.0 | 11.7 | D |
| | Right Turn | 28 | 30 | 107.6% | 42.1 | 11.1 | D |
| | Subtotal | 887 | 878 | 99.0% | 45.1 | 11.2 | D |
| Total | | 2,633 | 2,598 | 98.7% | 48.8 | 4.9 | D |

**Intersection 41** **Munson Wy/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 106 | 102 | 95.8% | 10.4 | 2.3 | B |
| | Subtotal | 106 | 102 | 95.8% | 10.4 | 2.3 | B |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | 7 | 7 | 93.6% | 9.8 | 8.0 | A |
| | Through | 1,067 | 1,044 | 97.8% | 2.9 | 0.5 | A |
| | Right Turn | 47 | 48 | 103.0% | 3.0 | 0.7 | A |
| | Subtotal | 1,121 | 1,099 | 98.0% | 3.0 | 0.5 | A |
| WB | Left Turn | 59 | 53 | 89.5% | 13.5 | 6.0 | B |
| | Through | 932 | 937 | 100.5% | 0.6 | 0.2 | A |
| | Right Turn | 9 | 12 | 129.4% | 0.0 | 0.1 | A |
| | Subtotal | 1,000 | 1,001 | 100.1% | 1.3 | 0.4 | A |
| Total | | 2,227 | 2,201 | 98.8% | 2.6 | 0.4 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Marysville Bl**
**Existing Conditions**
**PM Peak Hour**

**Intersection 1** **Marysville Bl/North Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 39 | 33 | 84.7% | 35.1 | 6.8 | D |
| | Through | 1,035 | 962 | 93.0% | 9.7 | 2.5 | A |
| | Right Turn | 31 | 25 | 79.3% | 6.8 | 2.2 | A |
| | Subtotal | 1,105 | 1,020 | 92.3% | 10.4 | 2.4 | B |
| SB | Left Turn | 41 | 38 | 93.7% | 27.9 | 4.6 | C |
| | Through | 802 | 799 | 99.6% | 9.0 | 1.5 | A |
| | Right Turn | 78 | 84 | 107.8% | 5.6 | 2.3 | A |
| | Subtotal | 921 | 922 | 100.1% | 9.5 | 1.5 | A |
| EB | Left Turn | 104 | 110 | 105.6% | 17.4 | 2.8 | B |
| | Through | 11 | 7 | 66.3% | 14.8 | 9.6 | B |
| | Right Turn | 49 | 45 | 92.5% | 11.2 | 5.3 | B |
| | Subtotal | 164 | 162 | 99.0% | 15.7 | 2.7 | B |
| WB | Left Turn | 30 | 29 | 96.0% | 19.7 | 8.1 | B |
| | Through | 21 | 21 | 98.7% | 20.3 | 6.3 | C |
| | Right Turn | 47 | 52 | 110.3% | 9.0 | 3.0 | A |
| | Subtotal | 98 | 101 | 103.4% | 14.1 | 2.6 | B |
| Total | | 2,288 | 2,205 | 96.4% | 10.6 | 1.6 | B |

**Intersection 2** **Marysville Bl/Harris Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 61 | 49 | 80.6% | 8.9 | 3.8 | A |
| | Through | 1,024 | 960 | 93.8% | 3.0 | 0.5 | A |
| | Right Turn | 16 | 13 | 79.2% | 2.6 | 1.5 | A |
| | Subtotal | 1,101 | 1,022 | 92.8% | 3.3 | 0.7 | A |
| SB | Left Turn | 51 | 52 | 101.6% | 7.9 | 2.7 | A |
| | Through | 796 | 793 | 99.6% | 2.5 | 0.3 | A |
| | Right Turn | 34 | 31 | 90.4% | 2.0 | 0.7 | A |
| | Subtotal | 881 | 875 | 99.3% | 2.8 | 0.2 | A |
| EB | Left Turn | 31 | 23 | 75.6% | 25.3 | 8.8 | D |
| | Through | 13 | 13 | 97.5% | 24.5 | 8.6 | C |
| | Right Turn | 31 | 31 | 100.3% | 15.3 | 10.0 | C |
| | Subtotal | 75 | 67 | 89.6% | 20.3 | 7.4 | C |
| WB | Left Turn | 3 | 2 | 76.8% | 16.4 | 23.4 | C |
| | Through | 8 | 5 | 67.2% | 15.3 | 11.3 | C |
| | Right Turn | 48 | 46 | 95.2% | 9.6 | 3.3 | A |
| | Subtotal | 59 | 53 | 90.5% | 11.0 | 4.3 | B |
| Total | | 2,116 | 2,018 | 95.4% | 3.9 | 0.4 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Marysville Bl**
**Existing Conditions**
**PM Peak Hour**

**Intersection 3** **Marysville Bl/Grand Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 171 | 154 | 90.3% | 41.0 | 8.1 | D |
| | Through | 961 | 901 | 93.8% | 18.6 | 4.8 | B |
| | Right Turn | 55 | 46 | 84.5% | 15.6 | 5.2 | B |
| | Subtotal | 1,187 | 1,102 | 92.8% | 21.6 | 4.8 | C |
| SB | Left Turn | 58 | 60 | 103.9% | 31.1 | 4.9 | C |
| | Through | 624 | 610 | 97.7% | 16.9 | 3.3 | B |
| | Right Turn | 148 | 147 | 99.6% | 13.4 | 5.0 | B |
| | Subtotal | 830 | 818 | 98.5% | 17.4 | 3.2 | B |
| EB | Left Turn | 80 | 74 | 92.2% | 29.0 | 6.4 | C |
| | Through | 95 | 97 | 102.3% | 22.0 | 3.2 | C |
| | Right Turn | 121 | 122 | 100.9% | 12.3 | 4.0 | B |
| | Subtotal | 296 | 293 | 99.0% | 19.5 | 3.3 | B |
| WB | Left Turn | 40 | 41 | 102.7% | 23.0 | 4.4 | C |
| | Through | 100 | 105 | 104.8% | 19.0 | 4.1 | B |
| | Right Turn | 61 | 58 | 94.4% | 11.7 | 3.5 | B |
| | Subtotal | 201 | 204 | 101.3% | 18.1 | 1.8 | B |
| Total | | 2,514 | 2,416 | 96.1% | 19.6 | 3.2 | B |

**Intersection 4** **Marysville Bl/Roanoke Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 21 | 20 | 95.1% | 24.7 | 16.0 | C |
| | Through | 1,157 | 1,077 | 93.1% | 22.6 | 14.8 | C |
| | Right Turn | 30 | 28 | 93.4% | 18.9 | 16.9 | C |
| | Subtotal | 1,208 | 1,125 | 93.1% | 22.6 | 14.8 | C |
| SB | Left Turn | 22 | 18 | 83.8% | 37.8 | 22.8 | E |
| | Through | 738 | 719 | 97.5% | 19.1 | 10.7 | C |
| | Right Turn | 25 | 21 | 84.5% | 17.6 | 10.1 | C |
| | Subtotal | 785 | 759 | 96.7% | 19.5 | 10.8 | C |
| EB | Left Turn | 2 | 0 | 19.2% | 42.8 | 80.4 | E |
| | Through | 1 | 1 | 76.8% | 2.8 | 6.2 | A |
| | Right Turn | 25 | 22 | 86.0% | 6.7 | 2.4 | A |
| | Subtotal | 28 | 23 | 80.9% | 8.6 | 5.2 | A |
| WB | Left Turn | 14 | 11 | 79.5% | 68.9 | 68.3 | F |
| | Through | 6 | 6 | 96.0% | 25.7 | 26.5 | D |
| | Right Turn | 27 | 25 | 92.4% | 68.2 | 76.9 | F |
| | Subtotal | 47 | 42 | 89.1% | 67.6 | 66.8 | F |
| Total | | 2,068 | 1,948 | 94.2% | 22.3 | 13.2 | C |

**Intersection 5** **Marysville Bl/South Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 72 | 60 | 82.7% | 29.6 | 4.6 | C |
| | Through | 1,131 | 1,055 | 93.3% | 8.5 | 1.2 | A |
| | Right Turn | 35 | 33 | 93.3% | 7.8 | 2.7 | A |
| | Subtotal | 1,238 | 1,147 | 92.7% | 9.6 | 1.2 | A |
| SB | Left Turn | 25 | 31 | 122.9% | 32.1 | 10.6 | C |
| | Through | 713 | 697 | 97.7% | 8.8 | 1.6 | A |
| | Right Turn | 40 | 37 | 92.2% | 6.7 | 3.2 | A |
| | Subtotal | 778 | 764 | 98.2% | 9.6 | 1.6 | A |
| EB | Left Turn | 41 | 40 | 97.4% | 23.0 | 6.1 | C |
| | Through | 24 | 26 | 108.8% | 22.5 | 6.0 | C |
| | Right Turn | 41 | 37 | 90.8% | 11.5 | 3.1 | B |
| | Subtotal | 106 | 103 | 97.4% | 18.5 | 3.4 | B |
| WB | Left Turn | 20 | 18 | 88.3% | 25.6 | 6.0 | C |
| | Through | 30 | 28 | 92.2% | 22.3 | 5.3 | C |
| | Right Turn | 34 | 39 | 115.2% | 10.9 | 3.5 | B |
| | Subtotal | 84 | 84 | 100.6% | 17.7 | 3.4 | B |
| Total | | 2,206 | 2,099 | 95.1% | 10.3 | 1.1 | B |

**Intersection 6** **Marysville Bl/Los Robles Bl (N)** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 62 | 59 | 94.8% | 6.8 | 0.9 | A |
| | Through | 1,246 | 1,163 | 93.3% | 2.0 | 0.4 | A |
| | Right Turn | | | | | | |
| | Subtotal | 1,308 | 1,222 | 93.4% | 2.3 | 0.4 | A |
| SB | Left Turn | | | | | | |
| | Through | 728 | 699 | 96.0% | 0.4 | 0.1 | A |
| | Right Turn | 46 | 46 | 101.0% | 0.1 | 0.1 | A |
| | Subtotal | 774 | 745 | 96.3% | 0.4 | 0.1 | A |
| EB | Left Turn | 21 | 19 | 89.6% | 13.0 | 8.4 | B |
| | Through | | | | | | |
| | Right Turn | 62 | 69 | 111.5% | 6.4 | 1.9 | A |
| | Subtotal | 83 | 88 | 105.9% | 7.8 | 2.5 | A |
| WB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| Total | | 2,165 | 2,055 | 94.9% | 1.8 | 0.3 | A |

**Intersection 7** **Marysville Bl/Los Robles Bl (S)** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 1 | 57.6% | 5.3 | 8.7 | A |
| | Through | 1,251 | 1,156 | 92.4% | 6.3 | 1.0 | A |
| | Right Turn | 28 | 26 | 91.9% | 5.1 | 1.9 | A |
| | Subtotal | 1,281 | 1,183 | 92.4% | 6.2 | 1.0 | A |
| SB | Left Turn | 32 | 32 | 100.8% | 18.1 | 4.6 | B |
| | Through | 739 | 713 | 96.5% | 4.5 | 0.4 | A |
| | Right Turn | 19 | 19 | 99.0% | 2.6 | 1.9 | A |
| | Subtotal | 790 | 764 | 96.7% | 5.0 | 0.4 | A |
| EB | Left Turn | 19 | 18 | 95.0% | 10.7 | 7.1 | B |
| | Through | 2 | 0 | 19.2% | 0.2 | 0.5 | A |
| | Right Turn | 1 | 2 | 192.0% | 1.8 | 3.1 | A |
| | Subtotal | 22 | 20 | 92.5% | 10.0 | 6.5 | B |
| WB | Left Turn | 54 | 59 | 109.5% | 12.7 | 2.3 | B |
| | Through | 3 | 3 | 89.6% | 7.3 | 9.3 | A |
| | Right Turn | 38 | 41 | 107.1% | 6.6 | 3.0 | A |
| | Subtotal | 95 | 103 | 107.9% | 10.3 | 2.2 | B |
| Total | | 2,188 | 2,070 | 94.6% | 6.0 | 0.8 | A |

**Intersection 8** **Marysville Bl/Arcade Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 9 | 6 | 64.0% | 47.6 | 29.4 | D |
| | Through | 683 | 681 | 99.7% | 37.3 | 4.7 | D |
| | Right Turn | 26 | 26 | 99.0% | 29.6 | 6.9 | C |
| | Subtotal | 718 | 712 | 99.2% | 37.1 | 4.4 | D |
| SB | Left Turn | 407 | 397 | 97.6% | 41.2 | 5.7 | D |
| | Through | 355 | 338 | 95.3% | 14.8 | 2.2 | B |
| | Right Turn | 31 | 33 | 106.5% | 8.1 | 5.2 | A |
| | Subtotal | 793 | 768 | 96.9% | 28.1 | 3.3 | C |
| EB | Left Turn | 40 | 35 | 88.3% | 37.3 | 14.8 | D |
| | Through | 103 | 111 | 108.1% | 27.9 | 4.8 | C |
| | Right Turn | 9 | 8 | 89.6% | 4.7 | 5.3 | A |
| | Subtotal | 152 | 155 | 101.8% | 29.4 | 5.0 | C |
| WB | Left Turn | 32 | 28 | 86.4% | 81.6 | 27.0 | F |
| | Through | 146 | 114 | 78.1% | 77.9 | 28.5 | E |
| | Right Turn | 575 | 507 | 88.2% | 66.5 | 27.7 | E |
| | Subtotal | 753 | 649 | 86.2% | 69.0 | 27.6 | E |
| Total | | 2,416 | 2,284 | 94.6% | 42.4 | 8.8 | D |

**Intersection 9** **Del Paso Bl/Arcade Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 19 | 22 | 115.2% | 36.8 | 14.8 | D |
| | Through | 73 | 74 | 101.0% | 33.1 | 5.6 | C |
| | Right Turn | 116 | 116 | 100.0% | 8.4 | 2.0 | A |
| | Subtotal | 208 | 212 | 101.7% | 19.8 | 2.8 | B |
| SB | Left Turn | 134 | 145 | 108.0% | 32.0 | 6.2 | C |
| | Through | 24 | 23 | 96.0% | 27.2 | 7.6 | C |
| | Right Turn | 25 | 22 | 89.1% | 16.0 | 8.8 | B |
| | Subtotal | 183 | 190 | 103.9% | 29.5 | 6.1 | C |
| EB | Left Turn | 8 | 7 | 86.4% | 55.2 | 26.3 | E |
| | Through | 514 | 499 | 97.0% | 23.2 | 6.1 | C |
| | Right Turn | 6 | 3 | 57.6% | 10.2 | 13.8 | B |
| | Subtotal | 528 | 509 | 96.4% | 23.7 | 5.9 | C |
| WB | Left Turn | 85 | 90 | 105.7% | 31.2 | 6.5 | C |
| | Through | 719 | 704 | 97.9% | 16.8 | 2.7 | B |
| | Right Turn | 183 | 188 | 102.8% | 3.6 | 0.2 | A |
| | Subtotal | 987 | 982 | 99.5% | 15.6 | 2.2 | B |
| Total | | 1,906 | 1,893 | 99.3% | 19.6 | 3.0 | B |

**Intersection 10** **Marysville Bl/Sonoma Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 26 | 31 | 121.1% | 3.5 | 1.7 | A |
| | Through | 679 | 652 | 96.0% | 1.2 | 0.4 | A |
| | Right Turn | 8 | 9 | 115.2% | 0.4 | 0.5 | A |
| | Subtotal | 713 | 693 | 97.2% | 1.3 | 0.5 | A |
| SB | Left Turn | 13 | 15 | 115.2% | 4.9 | 2.4 | A |
| | Through | 372 | 350 | 94.1% | 0.7 | 0.1 | A |
| | Right Turn | 25 | 18 | 73.7% | 0.2 | 0.2 | A |
| | Subtotal | 410 | 384 | 93.6% | 0.8 | 0.2 | A |
| EB | Left Turn | 31 | 33 | 106.5% | 14.8 | 3.6 | B |
| | Through | 6 | 5 | 76.8% | 13.3 | 17.2 | B |
| | Right Turn | 11 | 9 | 83.8% | 5.1 | 4.4 | A |
| | Subtotal | 48 | 47 | 97.6% | 13.8 | 3.3 | B |
| WB | Left Turn | 3 | 4 | 128.0% | 9.5 | 11.6 | A |
| | Through | 6 | 7 | 121.6% | 7.8 | 7.3 | A |
| | Right Turn | 17 | 23 | 133.3% | 5.5 | 1.7 | A |
| | Subtotal | 26 | 34 | 130.0% | 7.8 | 2.7 | A |
| Total | | 1,197 | 1,157 | 96.7% | 1.8 | 0.4 | A |

**Intersection 11** **Marysville Bl/Del Paso Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | 637 | 617 | 96.9% | 5.8 | 0.8 | A |
| | Right Turn | 216 | 207 | 95.8% | 2.3 | 0.3 | A |
| | Subtotal | 853 | 824 | 96.6% | 4.9 | 0.6 | A |
| SB | Left Turn | 18 | 17 | 93.9% | 14.8 | 5.2 | B |
| | Through | 345 | 319 | 92.6% | 4.4 | 1.5 | A |
| | Right Turn | | | | | | |
| | Subtotal | 363 | 336 | 92.7% | 4.9 | 1.5 | A |
| EB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| WB | Left Turn | 124 | 118 | 94.8% | 9.3 | 1.3 | A |
| | Through | | | | | | |
| | Right Turn | 26 | 37 | 141.8% | 3.6 | 0.5 | A |
| | Subtotal | 150 | 154 | 102.9% | 7.9 | 0.8 | A |
| Total | | 1,366 | 1,315 | 96.3% | 5.3 | 0.6 | A |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - El Camino Av**
**Average Results from 10 Runs** | **Existing Conditions**
**Volume and Delay by Movement** | **PM Peak Hour**

**Intersection 12** **Colfax St/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 43 | 35 | 82.1% | 14.7 | 5.8 | B |
| | Through | 15 | 12 | 80.2% | 15.6 | 8.5 | B |
| | Right Turn | 23 | 22 | 94.5% | 6.4 | 4.8 | A |
| | Subtotal | 81 | 69 | 85.3% | 12.3 | 4.0 | B |
| SB | Left Turn | 2 | 2 | 97.0% | 4.5 | 10.5 | A |
| | Through | 7 | 6 | 88.7% | 9.7 | 9.2 | A |
| | Right Turn | 25 | 31 | 122.6% | 7.1 | 3.4 | A |
| | Subtotal | 34 | 39 | 114.1% | 8.0 | 4.2 | A |
| EB | Left Turn | 38 | 36 | 93.9% | 11.7 | 2.8 | B |
| | Through | 585 | 591 | 101.1% | 6.6 | 1.8 | A |
| | Right Turn | 26 | 26 | 98.5% | 5.0 | 3.8 | A |
| | Subtotal | 649 | 653 | 100.6% | 6.8 | 1.9 | A |
| WB | Left Turn | 12 | 13 | 106.7% | 9.4 | 4.6 | A |
| | Through | 596 | 571 | 95.8% | 5.7 | 1.4 | A |
| | Right Turn | 4 | 3 | 87.3% | 2.5 | 3.2 | A |
| | Subtotal | 612 | 587 | 95.9% | 5.8 | 1.4 | A |
| Total | | 1,376 | 1,348 | 97.9% | 6.7 | 1.1 | A |

**Intersection 13** **Grove Av/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 52 | 51 | 98.5% | 41.0 | 7.2 | D |
| | Through | 278 | 283 | 101.9% | 41.0 | 5.8 | D |
| | Right Turn | 35 | 44 | 125.3% | 32.4 | 11.3 | C |
| | Subtotal | 365 | 378 | 103.6% | 40.0 | 5.2 | D |
| SB | Left Turn | 85 | 74 | 87.6% | 41.9 | 5.4 | D |
| | Through | 140 | 139 | 98.9% | 43.5 | 3.2 | D |
| | Right Turn | 65 | 73 | 112.8% | 31.1 | 5.4 | C |
| | Subtotal | 290 | 286 | 98.7% | 40.0 | 2.4 | D |
| EB | Left Turn | 54 | 60 | 110.7% | 101.0 | 20.3 | F |
| | Through | 516 | 516 | 100.1% | 45.2 | 17.5 | D |
| | Right Turn | 22 | 20 | 91.7% | 38.0 | 24.5 | D |
| | Subtotal | 592 | 596 | 100.7% | 50.6 | 17.4 | D |
| WB | Left Turn | 21 | 24 | 112.7% | 114.3 | 42.8 | F |
| | Through | 497 | 470 | 94.5% | 83.0 | 18.7 | F |
| | Right Turn | 47 | 44 | 94.1% | 78.3 | 23.3 | E |
| | Subtotal | 565 | 538 | 95.2% | 83.7 | 19.0 | F |
| Total | | 1,812 | 1,799 | 99.3% | 56.5 | 8.8 | E |

**Intersection 14** **Hawthorne Av-Altos Av/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| EB | Left Turn | 52 | 47 | 89.5% | 26.0 | 8.1 | D |
| | Through | 584 | 589 | 100.8% | 8.5 | 1.5 | A |
| | Right Turn | | | | | | |
| | Subtotal | 636 | 635 | 99.9% | 9.8 | 1.5 | A |
| SB | Left Turn | 7 | 5 | 66.5% | 53.9 | 52.4 | F |
| | Through | 19 | 19 | 100.1% | 77.1 | 36.5 | F |
| | Right Turn | 1 | 1 | 77.6% | 69.2 | 43.3 | F |
| | Subtotal | 27 | 24 | 90.5% | 72.9 | 35.3 | F |
| SE | Left Turn | 8 | 5 | 63.1% | 28.6 | 26.6 | D |
| | Through | | | | | | |
| | Right Turn | 5 | 5 | 93.1% | 48.3 | 39.8 | E |
| | Subtotal | 13 | 10 | 74.6% | 47.7 | 35.3 | E |
| WB | Left Turn | | | | | | |
| | Through | 541 | 519 | 96.0% | 47.4 | 16.7 | E |
| | Right Turn | 46 | 46 | 100.4% | 44.2 | 16.3 | E |
| | Subtotal | 587 | 565 | 96.3% | 47.1 | 16.7 | E |
| Total | | 1,263 | 1,235 | 97.8% | 28.2 | 7.4 | D |

**Intersection 15** **Forrest St/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 6 | 5 | 84.1% | 45.7 | 61.0 | E |
| | Through | | | | | | |
| | Right Turn | 17 | 15 | 89.0% | 12.2 | 12.2 | B |
| | Subtotal | 23 | 20 | 87.7% | 18.3 | 16.6 | C |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 611 | 609 | 99.7% | 1.1 | 0.4 | A |
| | Right Turn | 18 | 20 | 112.1% | 0.7 | 0.7 | A |
| | Subtotal | 629 | 629 | 100.1% | 1.0 | 0.4 | A |
| WB | Left Turn | 11 | 10 | 91.7% | 14.8 | 11.0 | B |
| | Through | 591 | 584 | 98.9% | 11.5 | 8.3 | B |
| | Right Turn | | | | | | |
| | Subtotal | 602 | 594 | 98.7% | 11.6 | 8.2 | B |
| Total | | 1,254 | 1,244 | 99.2% | 6.3 | 3.7 | A |

**Intersection 16** **Cantalier St/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 9 | 7 | 81.9% | 9.5 | 9.2 | A |
| | Through | | | | | | |
| | Right Turn | 22 | 20 | 89.9% | 8.5 | 5.9 | A |
| | Subtotal | 31 | 27 | 87.6% | 9.9 | 6.0 | A |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 622 | 614 | 98.7% | 1.0 | 0.3 | A |
| | Right Turn | 2 | 3 | 135.8% | 0.3 | 0.4 | A |
| | Subtotal | 624 | 617 | 98.9% | 1.0 | 0.3 | A |
| WB | Left Turn | 8 | 5 | 67.9% | 6.1 | 4.6 | A |
| | Through | 610 | 630 | 103.2% | 2.2 | 0.8 | A |
| | Right Turn | | | | | | |
| | Subtotal | 618 | 635 | 102.8% | 2.3 | 0.9 | A |
| Total | | 1,273 | 1,279 | 100.5% | 1.8 | 0.4 | A |

**Intersection 17** **Rio Linda Bl/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 10 | 13 | 128.0% | 31.1 | 7.2 | C |
| | Through | 54 | 51 | 94.8% | 25.0 | 4.4 | C |
| | Right Turn | 4 | 4 | 106.7% | 10.1 | 14.8 | B |
| | Subtotal | 68 | 68 | 100.4% | 25.6 | 4.0 | C |
| SB | Left Turn | 21 | 15 | 70.2% | 17.2 | 11.1 | B |
| | Through | 61 | 60 | 98.6% | 25.3 | 4.3 | C |
| | Right Turn | 44 | 52 | 117.3% | 13.1 | 3.8 | B |
| | Subtotal | 126 | 126 | 100.4% | 19.6 | 2.9 | B |
| EB | Left Turn | 65 | 65 | 100.3% | 19.7 | 3.0 | B |
| | Through | 571 | 556 | 97.4% | 6.8 | 2.1 | A |
| | Right Turn | 8 | 8 | 97.0% | 6.6 | 6.5 | A |
| | Subtotal | 644 | 629 | 97.7% | 8.1 | 1.8 | A |
| WB | Left Turn | 11 | 8 | 74.1% | 13.7 | 8.8 | B |
| | Through | 564 | 568 | 100.8% | 10.0 | 2.3 | B |
| | Right Turn | 12 | 11 | 93.8% | 8.7 | 5.8 | A |
| | Subtotal | 587 | 588 | 100.1% | 10.1 | 2.3 | B |
| Total | | 1,425 | 1,412 | 99.1% | 10.8 | 1.0 | B |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - El Camino Av**
**Existing Conditions**
**PM Peak Hour**

**Intersection 18** **Del Paso Bl-Beaumont St/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | 383 | 388 | 101.4% | 45.5 | 4.2 | D |
| | Right Turn | 82 | 84 | 102.2% | 43.0 | 6.9 | D |
| | Subtotal | 465 | 472 | 101.5% | 45.1 | 4.2 | D |
| SB | Left Turn | 116 | 128 | 110.4% | 50.1 | 7.4 | D |
| | Through | 170 | 148 | 87.0% | 26.0 | 3.3 | C |
| | Right Turn | 64 | 61 | 95.8% | 12.8 | 4.1 | B |
| | Subtotal | 350 | 337 | 96.3% | 32.8 | 3.0 | C |
| EB | Left Turn | 99 | 85 | 85.4% | 61.9 | 14.1 | E |
| | Through | 482 | 454 | 94.2% | 29.4 | 8.3 | C |
| | Right Turn | 15 | 15 | 98.3% | 13.8 | 11.8 | B |
| | Subtotal | 596 | 553 | 92.8% | 33.8 | 8.2 | C |
| WB | Left Turn | 84 | 69 | 82.2% | 55.0 | 9.3 | D |
| | Through | 523 | 518 | 99.0% | 37.3 | 5.9 | D |
| | Right Turn | 85 | 81 | 95.9% | 3.3 | 0.6 | A |
| | Subtotal | 692 | 668 | 96.6% | 34.9 | 4.7 | C |
| Total | | 2,103 | 2,031 | 96.6% | 36.7 | 3.1 | D |

**Intersection 19** **Martin Luther King Jr Bl/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 156 | 149 | 95.7% | 27.2 | 2.6 | C |
| | Through | | | | | | |
| | Right Turn | 114 | 105 | 92.4% | 5.9 | 1.0 | A |
| | Subtotal | 270 | 255 | 94.3% | 18.3 | 1.7 | B |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 588 | 591 | 100.6% | 12.4 | 1.7 | B |
| | Right Turn | 336 | 319 | 95.0% | 11.7 | 1.8 | B |
| | Subtotal | 924 | 911 | 98.6% | 12.2 | 1.5 | B |
| WB | Left Turn | 281 | 259 | 92.2% | 29.0 | 7.8 | C |
| | Through | 543 | 546 | 100.5% | 9.9 | 3.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 824 | 805 | 97.7% | 15.9 | 3.8 | B |
| Total | | 2,018 | 1,970 | 97.6% | 14.5 | 1.7 | B |

**Intersection 20** **39th St/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Through | | | | | | |
| | Right Turn | 3 | 3 | 112.8% | 3.4 | 4.6 | A |
| | Subtotal | 4 | 3 | 84.6% | 3.4 | 4.6 | A |
| SB | Left Turn | 1 | 0 | 0.0% | 1.3 | 4.0 | A |
| | Through | | | | | | |
| | Right Turn | 11 | 11 | 102.5% | 8.0 | 8.3 | A |
| | Subtotal | 12 | 11 | 94.0% | 8.0 | 8.3 | A |
| EB | Left Turn | 10 | 10 | 101.5% | 6.1 | 2.5 | A |
| | Through | 686 | 676 | 98.6% | 3.3 | 1.8 | A |
| | Right Turn | 6 | 8 | 125.3% | 3.1 | 1.7 | A |
| | Subtotal | 702 | 694 | 98.9% | 3.3 | 1.7 | A |
| WB | Left Turn | 18 | 17 | 94.0% | 5.5 | 2.8 | A |
| | Through | 811 | 808 | 99.6% | 2.3 | 1.8 | A |
| | Right Turn | 3 | 2 | 62.7% | 0.8 | 0.8 | A |
| | Subtotal | 832 | 827 | 99.4% | 2.4 | 1.8 | A |
| Total | | 1,550 | 1,536 | 99.1% | 2.8 | 1.8 | A |

**Intersection 21** | **Santa Cruz Wy-Altos Av/Broadway** | **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 2 | 1 | 56.4% | 4.6 | 8.1 | A |
| | Through | | | | | | |
| | Right Turn | 5 | 3 | 67.7% | 4.9 | 7.0 | A |
| | Subtotal | 7 | 5 | 64.5% | 5.7 | 7.4 | A |
| SB | Left Turn | 3 | 2 | 75.2% | 7.1 | 10.0 | A |
| | Through | | | | | | |
| | Right Turn | 3 | 4 | 125.3% | 1.6 | 2.0 | A |
| | Subtotal | 6 | 6 | 100.3% | 6.1 | 5.4 | A |
| EB | Left Turn | 3 | 4 | 125.3% | 3.9 | 3.5 | A |
| | Through | 671 | 653 | 97.3% | 0.8 | 0.1 | A |
| | Right Turn | 5 | 6 | 112.8% | 0.7 | 0.1 | A |
| | Subtotal | 679 | 663 | 97.6% | 0.9 | 0.2 | A |
| WB | Left Turn | 6 | 6 | 94.0% | 4.0 | 5.0 | A |
| | Through | 817 | 828 | 101.3% | 0.6 | 0.2 | A |
| | Right Turn | | | | | | |
| | Subtotal | 823 | 834 | 101.3% | 0.6 | 0.3 | A |
| Total | | 1,515 | 1,507 | 99.4% | 0.8 | 0.2 | A |

**Intersection 22** | **42nd St/Broadway** | **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 9 | 10 | 108.6% | 6.0 | 4.4 | A |
| | Through | 10 | 10 | 101.5% | 10.6 | 7.8 | B |
| | Right Turn | 10 | 8 | 82.7% | 2.0 | 1.4 | A |
| | Subtotal | 29 | 28 | 97.2% | 7.7 | 2.8 | A |
| SB | Left Turn | 7 | 6 | 91.3% | 4.6 | 4.7 | A |
| | Through | 9 | 9 | 104.4% | 9.2 | 7.8 | A |
| | Right Turn | 13 | 12 | 89.7% | 2.7 | 1.7 | A |
| | Subtotal | 29 | 27 | 94.6% | 6.3 | 3.9 | A |
| EB | Left Turn | 9 | 8 | 83.6% | 11.2 | 16.2 | B |
| | Through | 639 | 616 | 96.4% | 4.0 | 1.3 | A |
| | Right Turn | 22 | 22 | 100.8% | 4.0 | 4.3 | A |
| | Subtotal | 670 | 646 | 96.4% | 4.1 | 1.4 | A |
| WB | Left Turn | 22 | 22 | 99.1% | 11.5 | 5.9 | B |
| | Through | 812 | 822 | 101.3% | 4.1 | 0.7 | A |
| | Right Turn | 6 | 6 | 100.3% | 3.1 | 4.8 | A |
| | Subtotal | 840 | 850 | 101.2% | 4.3 | 0.7 | A |
| Total | | 1,568 | 1,551 | 98.9% | 4.3 | 0.8 | A |

**Intersection 23** **43rd St/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 4 | 3 | 84.6% | 9.0 | 11.2 | A |
| | Through | 1 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 7 | 6 | 80.6% | 7.4 | 7.4 | A |
| | Subtotal | 12 | 9 | 75.2% | 9.3 | 8.0 | A |
| SB | Left Turn | 2 | 0 | 18.8% | 4.0 | 12.6 | A |
| | Through | | | | | | |
| | Right Turn | 4 | 2 | 56.4% | 2.7 | 4.3 | A |
| | Subtotal | 6 | 3 | 43.9% | 6.7 | 12.4 | A |
| EB | Left Turn | 4 | 4 | 94.0% | 9.1 | 10.2 | A |
| | Through | 647 | 626 | 96.7% | 1.2 | 0.4 | A |
| | Right Turn | 5 | 5 | 105.3% | 0.7 | 0.8 | A |
| | Subtotal | 656 | 635 | 96.8% | 1.3 | 0.4 | A |
| WB | Left Turn | 12 | 15 | 125.3% | 6.1 | 3.3 | A |
| | Through | 832 | 847 | 101.8% | 1.8 | 0.5 | A |
| | Right Turn | 8 | 9 | 108.1% | 1.6 | 0.4 | A |
| | Subtotal | 852 | 870 | 102.2% | 1.9 | 0.6 | A |
| Total | | 1,526 | 1,517 | 99.4% | 1.7 | 0.5 | A |

**Intersection 24** **Stockton Bl/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 170 | 173 | 101.7% | 47.8 | 8.8 | D |
| | Through | 298 | 288 | 96.6% | 30.2 | 5.3 | C |
| | Right Turn | 104 | 105 | 100.5% | 24.9 | 6.5 | C |
| | Subtotal | 572 | 566 | 98.9% | 34.6 | 5.1 | C |
| SB | Left Turn | 110 | 108 | 97.8% | 57.5 | 9.2 | E |
| | Through | 708 | 688 | 97.1% | 35.2 | 4.0 | D |
| | Right Turn | 171 | 170 | 99.6% | 11.6 | 2.7 | B |
| | Subtotal | 989 | 966 | 97.6% | 33.7 | 4.0 | C |
| EB | Left Turn | 70 | 68 | 97.8% | 54.0 | 7.0 | D |
| | Through | 248 | 238 | 96.1% | 36.1 | 6.8 | D |
| | Right Turn | 327 | 309 | 94.6% | 19.8 | 4.7 | B |
| | Subtotal | 645 | 616 | 95.5% | 30.0 | 4.3 | C |
| WB | Left Turn | 210 | 218 | 103.7% | 53.4 | 9.3 | D |
| | Through | 499 | 506 | 101.3% | 34.7 | 3.1 | C |
| | Right Turn | 121 | 127 | 105.3% | 8.8 | 1.8 | A |
| | Subtotal | 830 | 851 | 102.5% | 35.7 | 4.3 | D |
| Total | | 3,036 | 2,998 | 98.8% | 33.6 | 3.3 | C |

**Intersection 25** **Stockton Bl/7th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 12 | 11 | 94.0% | 10.8 | 7.2 | B |
| | Through | 534 | 534 | 100.1% | 0.8 | 0.2 | A |
| | Right Turn | 5 | 5 | 97.8% | 0.3 | 0.1 | A |
| | Subtotal | 551 | 550 | 99.9% | 1.0 | 0.4 | A |
| SB | Left Turn | 17 | 14 | 81.8% | 5.1 | 3.8 | A |
| | Through | 1,270 | 1,239 | 97.6% | 0.6 | 0.1 | A |
| | Right Turn | 6 | 3 | 50.1% | 0.0 | 0.1 | A |
| | Subtotal | 1,293 | 1,256 | 97.2% | 0.6 | 0.1 | A |
| EB | Left Turn | 5 | 4 | 75.2% | 13.6 | 12.5 | B |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 6 | 6 | 94.0% | 6.0 | 6.6 | A |
| | Subtotal | 11 | 9 | 85.5% | 12.3 | 8.2 | B |
| WB | Left Turn | 2 | 1 | 37.6% | 0.6 | 1.9 | A |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 7 | 8 | 112.8% | 3.9 | 2.4 | A |
| | Subtotal | 9 | 9 | 96.1% | 4.0 | 2.4 | A |
| Total | | 1,864 | 1,825 | 97.9% | 0.8 | 0.2 | A |

**Intersection 26** **Stockton Bl/9th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 10 | 10 | 104.3% | 17.0 | 13.3 | C |
| | Through | 523 | 527 | 100.8% | 0.6 | 0.1 | A |
| | Right Turn | 4 | 5 | 122.2% | 0.1 | 0.2 | A |
| | Subtotal | 537 | 542 | 101.0% | 0.9 | 0.3 | A |
| SB | Left Turn | 29 | 30 | 103.4% | 4.7 | 1.8 | A |
| | Through | 1,241 | 1,206 | 97.2% | 0.8 | 0.2 | A |
| | Right Turn | 24 | 20 | 83.0% | 0.0 | 0.0 | A |
| | Subtotal | 1,294 | 1,256 | 97.1% | 0.9 | 0.2 | A |
| EB | Left Turn | 8 | 6 | 75.2% | 21.9 | 22.1 | C |
| | Through | 0 | 0 | 0.0% | 1.4 | 4.4 | A |
| | Right Turn | 18 | 16 | 91.4% | 12.2 | 6.9 | B |
| | Subtotal | 26 | 23 | 86.8% | 14.9 | 7.8 | B |
| WB | Left Turn | 3 | 3 | 112.8% | 3.3 | 3.3 | A |
| | Through | 0 | 0 | 0.0% | 0.9 | 2.7 | A |
| | Right Turn | 19 | 17 | 88.6% | 5.6 | 3.7 | A |
| | Subtotal | 22 | 20 | 92.3% | 5.5 | 3.0 | A |
| Total | | 1,879 | 1,841 | 98.0% | 1.1 | 0.2 | A |

**Intersection 27** **Stoctkon Bl/11th Av** **Side-street Stop**

| | | Demand | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| Direction | Movement | Volume (vph) | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 12 | 14 | 112.8% | 16.9 | 11.0 | C |
| | Through | 534 | 537 | 100.6% | 0.4 | 0.1 | A |
| | Right Turn | 1 | 2 | 150.4% | 0.0 | 0.0 | A |
| | Subtotal | 547 | 552 | 101.0% | 0.8 | 0.4 | A |
| SB | Left Turn | 21 | 17 | 82.4% | 5.9 | 4.6 | A |
| | Through | 1,215 | 1,176 | 96.8% | 1.7 | 1.5 | A |
| | Right Turn | 10 | 11 | 105.3% | 0.5 | 1.5 | A |
| | Subtotal | 1,246 | 1,204 | 96.6% | 1.8 | 1.4 | A |
| EB | Left Turn | 5 | 6 | 112.8% | 25.4 | 22.2 | D |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 9 | 6 | 66.8% | 11.1 | 12.5 | B |
| | Subtotal | 14 | 12 | 83.3% | 22.4 | 12.7 | C |
| WB | Left Turn | 8 | 7 | 84.6% | 8.0 | 10.9 | A |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 5 | 7 | 135.4% | 4.5 | 4.6 | A |
| | Subtotal | 13 | 14 | 104.1% | 7.5 | 7.1 | A |
| Total | | 1,820 | 1,781 | 97.9% | 1.7 | 0.9 | A |

**Intersection 28** **Stockton Bl/14th Av** **Signal**

| | | Demand | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| Direction | Movement | Volume (vph) | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 100 | 98 | 98.1% | 63.8 | 9.2 | E |
| | Through | 451 | 466 | 103.4% | 34.7 | 4.0 | C |
| | Right Turn | 81 | 82 | 100.7% | 27.7 | 6.8 | C |
| | Subtotal | 632 | 646 | 102.2% | 38.2 | 3.5 | D |
| SB | Left Turn | 96 | 89 | 92.4% | 136.8 | 18.0 | F |
| | Through | 1,022 | 915 | 89.5% | 66.5 | 15.8 | E |
| | Right Turn | 66 | 55 | 83.7% | 64.7 | 13.7 | E |
| | Subtotal | 1,184 | 1,059 | 89.4% | 72.2 | 16.3 | E |
| EB | Left Turn | 53 | 47 | 88.0% | 49.8 | 9.1 | D |
| | Through | 163 | 159 | 97.8% | 58.7 | 9.2 | E |
| | Right Turn | 94 | 85 | 90.8% | 48.7 | 14.0 | D |
| | Subtotal | 310 | 291 | 94.0% | 54.2 | 8.3 | D |
| WB | Left Turn | 100 | 96 | 95.5% | 68.7 | 14.2 | E |
| | Through | 190 | 176 | 92.8% | 72.5 | 18.4 | E |
| | Right Turn | 74 | 74 | 100.1% | 60.1 | 18.1 | E |
| | Subtotal | 364 | 346 | 95.0% | 69.0 | 16.3 | E |
| Total | | 1,820 | 1,895 | 104.1% | 60.1 | 10.1 | E |

**Intersection 29** **Stockton Bl/37th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 37 | 31 | 84.2% | 13.9 | 4.4 | B |
| | Through | 797 | 733 | 92.0% | 1.7 | 0.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 834 | 765 | 91.7% | 2.2 | 0.5 | A |
| SB | Left Turn | 4 | 3 | 76.0% | 3.3 | 3.5 | A |
| | Through | 1,131 | 1,119 | 98.9% | 3.4 | 0.4 | A |
| | Right Turn | 109 | 115 | 105.3% | 3.2 | 0.8 | A |
| | Subtotal | 1,244 | 1,237 | 99.4% | 3.4 | 0.4 | A |
| EB | Left Turn | 48 | 48 | 99.0% | 36.8 | 8.4 | E |
| | Through | | | | | | |
| | Right Turn | 41 | 41 | 99.2% | 22.2 | 12.9 | C |
| | Subtotal | 89 | 88 | 99.1% | 29.3 | 10.1 | D |
| WB | Left Turn | 8 | 4 | 52.3% | 20.2 | 19.4 | C |
| | Through | | | | | | |
| | Right Turn | 6 | 5 | 82.3% | 7.9 | 6.7 | A |
| | Subtotal | 14 | 9 | 65.1% | 14.9 | 12.1 | B |
| Total | | 2,181 | 2,098 | 96.2% | 4.2 | 0.7 | A |

**Intersection 30** **Stockton Bl/McMahon Dr** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 12 | 11 | 91.8% | 26.5 | 9.0 | C |
| | Through | 742 | 674 | 90.9% | 10.1 | 4.0 | B |
| | Right Turn | 58 | 61 | 105.5% | 7.9 | 2.8 | A |
| | Subtotal | 812 | 746 | 91.9% | 10.1 | 3.8 | B |
| SB | Left Turn | 32 | 26 | 80.8% | 24.6 | 7.3 | C |
| | Through | 1,123 | 1,112 | 99.0% | 7.0 | 1.0 | A |
| | Right Turn | 25 | 23 | 91.2% | 5.9 | 2.3 | A |
| | Subtotal | 1,180 | 1,160 | 98.3% | 7.3 | 1.1 | A |
| EB | Left Turn | 64 | 67 | 105.1% | 16.4 | 3.0 | B |
| | Through | 17 | 16 | 93.9% | 19.4 | 10.6 | B |
| | Right Turn | 38 | 38 | 101.0% | 12.2 | 5.1 | B |
| | Subtotal | 119 | 122 | 102.2% | 15.5 | 2.6 | B |
| WB | Left Turn | 48 | 40 | 83.1% | 16.0 | 6.4 | B |
| | Through | 17 | 14 | 82.7% | 20.4 | 14.1 | C |
| | Right Turn | 28 | 25 | 89.6% | 10.0 | 4.9 | B |
| | Subtotal | 93 | 79 | 85.0% | 14.4 | 4.6 | B |
| Total | | 2,204 | 2,107 | 95.6% | 9.1 | 1.4 | A |

SimTraffic Post-Processor | Vision Zero Top 5 Corridors - Stockton Bl
Average Results from 10 Runs | Existing Conditions
Volume and Delay by Movement | PM Peak Hour

**Intersection 31** | **Stockton Bl/Lemon Hill Av** | **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 25 | 22 | 89.7% | 41.9 | 6.8 | D |
| | Through | 727 | 703 | 96.7% | 20.1 | 3.2 | C |
| | Right Turn | 74 | 76 | 102.2% | 5.9 | 1.4 | A |
| | Subtotal | 826 | 801 | 97.0% | 19.3 | 3.0 | B |
| SB | Left Turn | 120 | 130 | 108.0% | 38.6 | 6.2 | D |
| | Through | 1,061 | 1,063 | 100.2% | 20.2 | 3.7 | C |
| | Right Turn | 57 | 47 | 82.0% | 20.5 | 5.8 | C |
| | Subtotal | 1,238 | 1,239 | 100.1% | 22.1 | 3.4 | C |
| EB | Left Turn | 64 | 56 | 87.9% | 34.8 | 7.0 | C |
| | Through | 64 | 67 | 105.1% | 32.0 | 9.6 | C |
| | Right Turn | 39 | 37 | 95.5% | 11.7 | 5.1 | B |
| | Subtotal | 167 | 161 | 96.3% | 29.1 | 3.7 | C |
| WB | Left Turn | 114 | 108 | 94.3% | 32.6 | 7.8 | C |
| | Through | 123 | 119 | 96.4% | 32.0 | 5.4 | C |
| | Right Turn | 107 | 106 | 99.4% | 9.3 | 1.5 | A |
| | Subtotal | 344 | 333 | 96.7% | 24.8 | 3.4 | C |
| Total | | 2,575 | 2,533 | 98.4% | 22.0 | 2.4 | C |

**Intersection 32** | **Stockton Bl/Dias Av** | **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 40 | 39 | 96.9% | 27.8 | 6.0 | C |
| | Through | 832 | 768 | 92.3% | 7.2 | 1.4 | A |
| | Right Turn | 1 | 2 | 228.0% | 1.6 | 2.3 | A |
| | Subtotal | 873 | 809 | 92.7% | 8.2 | 1.6 | A |
| SB | Left Turn | 39 | 34 | 86.7% | 16.0 | 5.7 | B |
| | Through | 1,202 | 1,172 | 97.5% | 8.3 | 1.7 | A |
| | Right Turn | 38 | 38 | 100.0% | 6.1 | 1.6 | A |
| | Subtotal | 1,279 | 1,244 | 97.3% | 8.4 | 1.7 | A |
| EB | Left Turn | 6 | 5 | 76.0% | 15.7 | 12.2 | B |
| | Through | 1 | 2 | 152.0% | 10.3 | 17.2 | B |
| | Right Turn | 13 | 14 | 111.1% | 11.8 | 7.0 | B |
| | Subtotal | 20 | 21 | 102.6% | 15.0 | 7.4 | B |
| WB | Left Turn | 64 | 62 | 97.4% | 14.7 | 4.9 | B |
| | Through | 2 | 2 | 76.0% | 5.7 | 17.2 | A |
| | Right Turn | 29 | 33 | 112.7% | 8.8 | 3.9 | A |
| | Subtotal | 95 | 97 | 101.6% | 12.6 | 3.7 | B |
| Total | | 2,267 | 2,170 | 95.7% | 8.6 | 1.6 | A |

**Intersection 33** **Stockton Bl/47th Av-Elder Creek Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 214 | 203 | 94.6% | 48.1 | 6.8 | D |
| | Through | 532 | 475 | 89.3% | 34.6 | 3.1 | C |
| | Right Turn | 64 | 61 | 95.6% | 6.7 | 1.2 | A |
| | Subtotal | 810 | 739 | 91.2% | 36.0 | 1.5 | D |
| SB | Left Turn | 146 | 128 | 88.0% | 54.2 | 6.5 | D |
| | Through | 830 | 765 | 92.1% | 37.5 | 4.2 | D |
| | Right Turn | 316 | 309 | 97.6% | 21.4 | 4.6 | C |
| | Subtotal | 1,292 | 1,202 | 93.0% | 35.2 | 3.6 | D |
| EB | Left Turn | 241 | 261 | 108.2% | 45.6 | 2.8 | D |
| | Through | 490 | 516 | 105.2% | 31.9 | 2.9 | C |
| | Right Turn | 200 | 213 | 106.4% | 26.3 | 4.1 | C |
| | Subtotal | 931 | 989 | 106.2% | 34.3 | 2.1 | C |
| WB | Left Turn | 92 | 81 | 88.4% | 97.1 | 23.9 | F |
| | Through | 803 | 778 | 96.9% | 79.1 | 20.2 | E |
| | Right Turn | 116 | 98 | 84.8% | 56.5 | 20.8 | E |
| | Subtotal | 1,011 | 958 | 94.8% | 78.3 | 20.0 | E |
| Total | | 4,044 | 3,887 | 96.1% | 45.8 | 5.3 | D |

**Intersection 34** **Stockton Bl/Riza Av-Fowler Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 30 | 33 | 108.9% | 36.6 | 8.9 | D |
| | Through | 749 | 724 | 96.6% | 12.8 | 2.7 | B |
| | Right Turn | 60 | 61 | 101.3% | 11.2 | 2.5 | B |
| | Subtotal | 839 | 817 | 97.4% | 13.6 | 2.9 | B |
| SB | Left Turn | 30 | 30 | 98.8% | 46.0 | 10.6 | D |
| | Through | 1,025 | 994 | 97.0% | 17.0 | 3.5 | B |
| | Right Turn | 27 | 25 | 91.8% | 15.4 | 4.0 | B |
| | Subtotal | 1,082 | 1,049 | 96.9% | 17.7 | 3.4 | B |
| EB | Left Turn | 17 | 14 | 80.5% | 29.3 | 15.8 | C |
| | Through | 1 | 1 | 114.0% | 27.8 | 15.7 | C |
| | Right Turn | 26 | 20 | 76.0% | 10.9 | 7.1 | B |
| | Subtotal | 44 | 35 | 78.6% | 17.2 | 5.8 | B |
| WB | Left Turn | 100 | 109 | 109.2% | 30.9 | 5.0 | C |
| | Through | 3 | 3 | 85.5% | 29.2 | 5.1 | C |
| | Right Turn | 31 | 34 | 109.1% | 6.1 | 2.5 | A |
| | Subtotal | 134 | 146 | 108.6% | 24.8 | 3.2 | C |
| Total | | 2,099 | 2,046 | 97.5% | 16.6 | 2.6 | B |

**Intersection 35** **24th St/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 131 | 120 | 92.0% | 49.0 | 16.7 | D |
| | Through | 299 | 268 | 89.5% | 27.5 | 3.1 | C |
| | Right Turn | 49 | 44 | 90.0% | 20.4 | 4.9 | C |
| | Subtotal | 479 | 432 | 90.2% | 33.0 | 4.9 | C |
| SB | Left Turn | 171 | 162 | 94.4% | 49.9 | 5.9 | D |
| | Through | 487 | 506 | 103.9% | 28.4 | 2.1 | C |
| | Right Turn | 400 | 399 | 99.8% | 18.3 | 3.6 | B |
| | Subtotal | 1,058 | 1,067 | 100.9% | 27.9 | 1.7 | C |
| EB | Left Turn | 241 | 242 | 100.3% | 55.0 | 9.8 | E |
| | Through | 652 | 654 | 100.4% | 28.6 | 2.5 | C |
| | Right Turn | 89 | 84 | 94.8% | 23.6 | 3.6 | C |
| | Subtotal | 982 | 980 | 99.8% | 34.8 | 2.5 | C |
| WB | Left Turn | 112 | 106 | 95.0% | 61.0 | 5.6 | E |
| | Through | 719 | 681 | 94.7% | 26.8 | 2.4 | C |
| | Right Turn | 139 | 138 | 99.2% | 13.2 | 1.6 | B |
| | Subtotal | 970 | 925 | 95.4% | 28.7 | 2.4 | C |
| Total | | 3,489 | 3,404 | 97.6% | 30.8 | 1.1 | C |

**Intersection 36** **Woodbine Av/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 0 | 19.0% | 7.6 | 24.0 | A |
| | Through | | | | | | |
| | Right Turn | 1 | 1 | 76.0% | 1.2 | 2.7 | A |
| | Subtotal | 3 | 1 | 38.0% | 8.8 | 23.8 | A |
| SB | Left Turn | 36 | 32 | 89.7% | 41.5 | 7.5 | D |
| | Through | | | | | | |
| | Right Turn | 34 | 33 | 96.1% | 11.4 | 4.5 | B |
| | Subtotal | 70 | 65 | 92.8% | 26.6 | 4.5 | C |
| EB | Left Turn | 54 | 51 | 94.3% | 49.3 | 10.6 | D |
| | Through | 966 | 948 | 98.2% | 12.4 | 2.0 | B |
| | Right Turn | 2 | 2 | 95.0% | 4.9 | 2.3 | A |
| | Subtotal | 1,022 | 1,001 | 98.0% | 14.2 | 1.9 | B |
| WB | Left Turn | 5 | 5 | 106.4% | 55.5 | 22.0 | E |
| | Through | 1,085 | 1,041 | 96.0% | 7.0 | 1.3 | A |
| | Right Turn | 31 | 30 | 96.8% | 6.0 | 2.4 | A |
| | Subtotal | 1,121 | 1,077 | 96.0% | 7.2 | 1.2 | A |
| Total | | 2,216 | 2,144 | 96.7% | 11.0 | 1.2 | B |

**SimTraffic Post-Processor** **Vision Zero Top 5 Corridors - Florin Rd**
**Average Results from 10 Runs** **Existing Conditions**
**Volume and Delay by Movement** **PM Peak Hour**

**Intersection 37** **Indian Ln-29th St/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 54 | 54 | 99.2% | 39.3 | 5.5 | D |
| | Through | 19 | 17 | 88.0% | 36.8 | 11.2 | D |
| | Right Turn | 146 | 141 | 96.6% | 11.2 | 1.5 | B |
| | Subtotal | 219 | 211 | 96.5% | 20.4 | 3.0 | C |
| SB | Left Turn | 70 | 67 | 95.0% | 40.2 | 6.4 | D |
| | Through | 11 | 9 | 82.9% | 38.2 | 20.1 | D |
| | Right Turn | 32 | 41 | 129.4% | 9.2 | 5.0 | A |
| | Subtotal | 113 | 117 | 103.6% | 29.6 | 5.0 | C |
| EB | Left Turn | 37 | 38 | 101.7% | 49.5 | 7.2 | D |
| | Through | 961 | 950 | 98.9% | 21.7 | 3.3 | C |
| | Right Turn | 33 | 32 | 95.6% | 18.9 | 5.6 | B |
| | Subtotal | 1,031 | 1,019 | 98.9% | 22.6 | 3.3 | C |
| WB | Left Turn | 190 | 171 | 90.2% | 53.3 | 9.0 | D |
| | Through | 1,094 | 1,053 | 96.2% | 12.5 | 3.2 | B |
| | Right Turn | 79 | 82 | 103.9% | 4.5 | 0.9 | A |
| | Subtotal | 1,363 | 1,306 | 95.8% | 17.5 | 2.6 | B |
| Total | | 2,726 | 2,654 | 97.3% | 20.2 | 1.7 | C |

**Intersection 39** **Hisperry Ln-Luther Burbank HS/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 15 | 16 | 103.9% | 59.6 | 11.7 | E |
| | Through | | | | | | |
| | Right Turn | 11 | 11 | 100.2% | 13.0 | 7.7 | B |
| | Subtotal | 26 | 27 | 102.3% | 39.1 | 9.2 | D |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 2 | 2 | 76.0% | 2.9 | 6.3 | A |
| | Subtotal | 2 | 2 | 76.0% | 2.9 | 6.3 | A |
| EB | Left Turn | | | | | | |
| | Through | 1,135 | 1,097 | 96.6% | 1.8 | 0.3 | A |
| | Right Turn | 2 | 2 | 114.0% | 0.6 | 1.2 | A |
| | Subtotal | 1,137 | 1,099 | 96.7% | 1.8 | 0.3 | A |
| WB | Left Turn | 12 | 9 | 76.0% | 51.6 | 32.1 | D |
| | Through | 1,354 | 1,306 | 96.5% | 4.8 | 0.9 | A |
| | Right Turn | 8 | 7 | 90.3% | 3.4 | 3.5 | A |
| | Subtotal | 1,374 | 1,323 | 96.3% | 5.1 | 0.8 | A |
| Total | | 2,539 | 2,450 | 96.5% | 4.0 | 0.5 | A |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - Florin Rd**
**Average Results from 10 Runs** | **Existing Conditions**
**Volume and Delay by Movement** | **PM Peak Hour**

**Intersection 40** | **Luther Dr/Florin Rd** | **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 105 | 98 | 93.2% | 39.8 | 4.7 | D |
| | Through | 5 | 4 | 87.4% | 37.6 | 4.5 | D |
| | Right Turn | 48 | 51 | 105.3% | 13.4 | 4.8 | B |
| | Subtotal | 158 | 153 | 96.7% | 31.0 | 4.2 | C |
| SB | Left Turn | 83 | 83 | 99.6% | 37.9 | 5.4 | D |
| | Through | 8 | 7 | 92.6% | 37.8 | 5.5 | D |
| | Right Turn | 184 | 185 | 100.4% | 15.2 | 3.7 | B |
| | Subtotal | 275 | 275 | 99.9% | 22.7 | 3.7 | C |
| EB | Left Turn | 127 | 117 | 91.9% | 55.3 | 8.2 | E |
| | Through | 929 | 885 | 95.3% | 58.1 | 8.6 | E |
| | Right Turn | 84 | 84 | 100.2% | 58.0 | 9.0 | E |
| | Subtotal | 1,140 | 1,086 | 95.3% | 57.8 | 8.6 | E |
| WB | Left Turn | 57 | 55 | 99.5% | 63.2 | 11.3 | E |
| | Through | 1,080 | 1,050 | 97.2% | 34.0 | 3.8 | C |
| | Right Turn | 48 | 47 | 97.0% | 31.8 | 3.8 | C |
| | Subtotal | 1,185 | 1,151 | 97.1% | 35.3 | 4.0 | D |
| Total | | 2,758 | 2,665 | 96.6% | 42.9 | 3.5 | D |

**Intersection 41** | **Munson Wy/Florin Rd** | **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 42 | 38 | 91.4% | 6.9 | 2.7 | A |
| | Subtotal | 42 | 38 | 91.4% | 6.9 | 2.7 | A |
| SB | Left Turn | 1 | 1 | 114.0% | 20.7 | 15.8 | C |
| | Through | | | | | | |
| | Right Turn | 5 | 4 | 76.0% | 7.7 | 8.4 | A |
| | Subtotal | 6 | 5 | 82.3% | 8.6 | 9.6 | A |
| EB | Left Turn | 9 | 9 | 97.1% | 13.6 | 11.2 | B |
| | Through | 1,006 | 968 | 96.2% | 2.6 | 0.6 | A |
| | Right Turn | 66 | 51 | 77.7% | 2.3 | 0.6 | A |
| | Subtotal | 1,081 | 1,028 | 95.1% | 2.7 | 0.6 | A |
| WB | Left Turn | 169 | 157 | 92.9% | 13.9 | 2.7 | B |
| | Through | 1,176 | 1,167 | 99.2% | 1.2 | 0.3 | A |
| | Right Turn | 9 | 8 | 84.4% | 0.1 | 0.2 | A |
| | Subtotal | 1,354 | 1,332 | 98.3% | 2.7 | 0.7 | A |
| Total | | 2,483 | 2,403 | 96.8% | 2.8 | 0.6 | A |

# StreetScore+ Results

## Existing Conditions

StreetScore+ Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Doolittle St and North Av** | **Doolittle St and North Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **45** | **45** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 45 | 45 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5.5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 45 | 45 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **North Av and Harris Av** | **North Av and Harris Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | 5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Harris Av to Grand Av** | **Harris Av to Grand Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5.5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Grand Av to Roanoke Av** | **Grand Av to Roanoke Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | Yes | Yes |
| What is the combined bicycle lane and parking lane width? | <13' | <13' |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Roanoke Av to South Av** | **Roanoke Av to South Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 6' | <5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **South Av to Nogales St** | **South Av to Nogales St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | <5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| **Pedestrian Streetscore by Link** | **Dir1 - SB Input** | **Dir2 - NB Input** |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Nogales St to Rosalind St** | **Nogales St to Rosalind St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5.5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Rosalind St to Los Robles Bl N** | **Rosalind St to Los Robles Bl N** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | No Lighting |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Los Robles Bl N to Los Robles Bl S** | **Los Robles Bl N to Los Robles Bl S** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5.5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Los Robles Bl S to Ermina Dr** | **Los Robles Bl S to Ermina Dr** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Los Robles Bl S to Arcade Bl** | **Los Robles Bl S to Arcade Bl** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | No Lighting |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Marysville Bl** | **Marysville Bl** |
| Roadway Extents | **Arcade Bl to Sonoma Av** | **Arcade Bl to Sonoma Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 35 | 35 |
| # of Travel Lanes | 4 | 4 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | No Lighting | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Rail Crossing to Western Av** | **Rail Crossing to Western Av** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **2** | **2** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | >=7' | 6' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 2 | 2 |
| Is lighting present? | Pedestrian-Scale | No Lighting |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **4** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Western Av to Colfax St** | **Western Av to Colfax St** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **2** | **2** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Continuous | Yes, Continuous |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 2 | 2 |
| Is lighting present? | Pedestrian-Scale | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Colfax St to Edgewater Rd** | **Colfax St to Edgewater Rd** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **2** | **2** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

## Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Continuous | Yes, Continuous |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 2 | 2 |
| Is lighting present? | Pedestrian-Scale | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Edgewater Rd to Grove Av** | **Edgewater Rd to Grove Av** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **2** | **2** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Continuous | Yes, Continuous |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 2 | 2 |
| Is lighting present? | Pedestrian-Scale | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Grove Av to Altos Av / Hawthorne St** | **Grove Av to Altos Av / Hawthorne St** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **2** | **2** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | >=7' | 5.5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Discontinuous | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 2 | 2 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced Every 400' or Less | Crosswalks Spaced Every 400' or Less |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Altos Av / Hawthorne St to Forrest St** | **Altos Av / Hawthorne St toForrest St** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **2** | **2** |

StreetScore+

Bike Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| **Bike StreetScore by Link** | **Dir1 - WB Input** | **Dir 2 - EB Input** |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | 5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Cracks, Failing Pavement | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Continuous | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 2 | 2 |
| Is lighting present? | Pedestrian-Scale | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced Every 400' or Less | Crosswalks Spaced Every 400' or Less |
| **Street Score+ LTS Score** | **4** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Forrest St to Fairfield St** | **Forrest St to Fairfield St** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **2** | **2** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| **Bike StreetScore by Link** | **Dir1 - WB Input** | **Dir 2 - EB Input** |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Continuous | Yes, Continuous |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 2 | 2 |
| Is lighting present? | Pedestrian-Scale | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Fairfield St to Cantalier St** | **Fairfield St to Cantalier St** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **2** | **2** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Continuous | Yes, Continuous |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 2 | 2 |
| Is lighting present? | Pedestrian-Scale | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Cantalier St to Rio Linda Bl** | **Cantalier St to Rio Linda Bl** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **2** | **2** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Route Or No Designated Bikeway |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Is the bikeway frequently blocked? | No | |
| Is there on-street parking? | No | |
| What is the bicycle lane width? | <5' | |
| Is there a raised median present? | No | No |
| Speed | 30 | 30 |
| # of Travel Lanes | 2 | 2 |
| Does the street have a centerline? | | Yes |
| Is the street classified as residential? | | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **2** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 2 | 2 |
| Is lighting present? | Pedestrian-Scale | No Lighting |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **4** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Cantalier St to Rio Linda Bl** | **Cantalier St to Rio Linda Bl** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **3** | **3** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 30 | 30 |
| # of Travel Lanes | 3 | 3 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **2** | **2** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| **Pedestrian Streetscore by Link** | **Dir1 - WB Input** | **Dir2 - EB Input** |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 3 | 3 |
| Is lighting present? | No Lighting | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **El Camino Av** | **El Camino Av** |
| Roadway Extents | **Rio Linda Bl to Empress St** | **Rio Linda Bl to Empress St** |
| ADT (average daily traffic) | **12001-15000** | **12001-15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Route Or No Designated Bikeway |
| Speed | 30 | 30 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | |
| Is there on-street parking? | No | |
| What is the bicycle lane width? | 6' | |
| Is there a raised median present? | No | No |
| Speed | 30 | 30 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | | Yes |
| Is the street classified as residential? | | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **4** |
| **Street Score+ LTS Score** | **3** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **Broadway** | **Broadway** |
| Roadway Extents | **38th St to Martin Luther King Jr. Bl** | **38th St to Martin Luther King Jr. Bl** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **25** | **25** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 25 | 25 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5.5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **2** | **2** |
| **Street Score+ LTS Score** | **2** | **2** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 25 | 25 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Pedestrian-Scale | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+ Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **Broadway** | **Broadway** |
| Roadway Extents | **Martin Luther King Jr. Bl to 39th St** | **Martin Luther King Jr. Bl to 39th St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 30 | 30 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | Yes |
| What is the combined bicycle lane and parking lane width? | | 13.5' |
| What is the bicycle lane width? | 5.5' | |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | Yes, Continuous |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced Every 400' or Less | Crosswalks Spaced Every 400' or Less |
| **Street Score+ LTS Score** | **3** | **2** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **Broadway** | **Broadway** |
| Roadway Extents | **39th St to Santa Cruz Wy** | **39th St to Santa Cruz Wy** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 30 | 30 |
| # of Travel Lanes | 4 | 4 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **Broadway** | **Broadway** |
| Roadway Extents | **Santa Cruz Wy to 42nd St** | **Santa Cruz Wy to 42nd St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 30 | 30 |
| # of Travel Lanes | 4 | 4 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Pedestrian-Scale | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **Broadway** | **Broadway** |
| Roadway Extents | **42nd St to 43rd St** | **42nd St to 43rd St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 30 | 30 |
| # of Travel Lanes | 4 | 4 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced Every 400' or Less | Crosswalks Spaced Every 400' or Less |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **Broadway** | **Broadway** |
| Roadway Extents | **43rd St to Stockton Bl** | **43rd St to Stockton Bl** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Route Or No Designated Bikeway |
| Speed | 30 | 30 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | |
| Is there on-street parking? | No | |
| What is the bicycle lane width? | 5' | |
| Is there a raised median present? | No | No |
| Speed | 30 | 30 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | | Yes |
| Is the street classified as residential? | | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **4** |
| **Street Score+ LTS Score** | **3** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Discontinuous | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **Broadway** | **Broadway** |
| Roadway Extents | **Stockton Bl to 49th St** | **Stockton Bl to 49th St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **30** | **30** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir 2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Route Or No Designated Bikeway |
| Speed | 30 | 30 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | |
| Is there on-street parking? | No | |
| What is the bicycle lane width? | 6.5' | |
| Is there a raised median present? | No | No |
| Speed | 30 | 30 |
| # of Travel Lanes | 4 | 4 |
| Does the street have a centerline? | | Yes |
| Is the street classified as residential? | | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **4** |
| **Street Score+ LTS Score** | **3** | **4** |

**StreetScore+**

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 30 | 30 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **4th Av to Broadway** | **4th Av to Broadway** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 35 | 35 |
| # of Travel Lanes | 4 | 4 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Continuous | Yes, Discontinuous |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **Broadway to 7th Av** | **Broadway to 7th Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | Yes, Continuous |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Pedestrian-Scale |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **7th Av to 9th Av** | **7th Av to 9th Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Discontinuous | Yes, Continuous |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **9th Av to 11th Av** | **9th Av to 11th Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5.5' | 5.5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | Yes, Continuous |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **11th Av to 14th Av** | **11th Av to 14th Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5.5' | 5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | Yes, Continuous |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **14th Av to 15th Av** | **14th Av to 15th Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **35** | **35** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 35 | 35 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | >=7' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **3** | **3** |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | Yes, Continuous | Yes, Discontinuous |
| What is the prevailing speed? | 35 | 35 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **3** | **3** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **Jansen Dr to 37th Av** | **Jansen Dr to 37th Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5.5' | 5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **37th Av to McMahon Dr** | **37th Av to McMahon Dr** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| **Bike StreetScore by Link** | **Dir1 - SB Input** | **Dir 2 - NB Input** |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **McMahon Dr to Lemon Hill Av** | **McMahon Dr to Lemon Hill Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | | No |
| Is there on-street parking? | | No |
| What is the bicycle lane width? | | 5' |
| Is there a raised median present? | No | No |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | Yes | |
| Is the street classified as residential? | No | |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **Lemon Hill Av to El Paraiso Av** | **Lemon Hill Av to El Paraiso Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

## Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **Lemon Hill Av to Dias Av** | **Lemon Hill Av to Dias Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | <5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+ Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **Dias Av to 47th Av / Elder Creek Rd** | **Dias Av to 47th Av / Elder Creek Rd** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | <5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **47th Av / Elder Creek Rd to 48th Av** | **47th Av / Elder Creek Rd to 48th Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5.5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - SB | Dir2 - NB |
|---|---|---|
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **48th Av to Fowler Rd / Riza Av** | **48th Av to Fowler Rd / Riza Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Route Or No Designated Bikeway |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | |
| Is there on-street parking? | No | |
| What is the bicycle lane width? | 5' | |
| Is there a raised median present? | No | No |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | | Yes |
| Is the street classified as residential? | | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **Fowler Rd / Riza Av to Patterson Wy** | **Fowler Rd / Riza Av to Patterson Wy** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Route Or No Designated Bikeway |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | |
| Is there on-street parking? | Yes | |
| What is the combined bicycle lane and parking lane width? | <13' | |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | | Yes |
| Is the street classified as residential? | | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

## Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Cracks, Failing Pavement |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - SB** | **Dir2 - NB** |
| Roadway Name | **Stockton Bl** | **Stockton Bl** |
| Roadway Extents | **Patterson Wy to 65th St** | **Patterson Wy to 65th St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - SB Input | Dir 2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5.5' | 5.5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - SB Input | Dir2 - NB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **Tamoshanter Wy to 24th St** | **Tamoshanter Wy to 24th St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **No** | **No** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| **Bike StreetScore by Link** | **Dir1 - WB Input** | **Dir 2 - EB Input** |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+ Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **24th St to 25th St** | **24th St to 25th St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Route Or No Designated Bikeway |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | |
| Is there on-street parking? | No | |
| What is the bicycle lane width? | 5' | |
| Is there a raised median present? | Yes | Yes |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | | Yes |
| Is the street classified as residential? | | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **25th St to Woodbine Av** | **25th St to Woodbine Av** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Route Or No Designated Bikeway |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | |
| Is there on-street parking? | No | |
| What is the bicycle lane width? | 5' | |
| Is there a raised median present? | Yes | Yes |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Does the street have a centerline? | | Yes |
| Is the street classified as residential? | | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | No Lighting |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **Woodbine Av to Loma Verde Wy** | **Woodbine Av to Loma Verde Wy** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **No** | **No** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5' |
| Is there a raised median present? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **Loma Verde Wy to Indian Ln / 29th St** | **Loma Verde Wy to Indian Ln / 29th St** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **6** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 6 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 6 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
| --- | --- | --- |
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **Indian Ln / 29th St to LRT** | **Indian Ln / 29th St to LRT** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 40 | 40 |
| # of Travel Lanes | 4 | 4 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | 7-6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **LRT to Serenity Dr** | **LRT to Serenity Dr** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Route Or No Designated Bikeway | Bicycle Route Or No Designated Bikeway |
| Speed | 40 | 40 |
| # of Travel Lanes | 4 | 4 |
| Does the street have a centerline? | Yes | Yes |
| Is the street classified as residential? | No | No |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Driveway Curb Cuts Out of the Sidewalk Zone | Driveway Curb Cuts Out of the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **Indian Ln / 29th St to Luther Burbank HS** | **Indian Ln / 29th St to Luther Burbank HS** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 6.5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **Luther Burbank HS to Luther Dr** | **Luther Burbank HS to Luther Dr** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400' | Crosswalks Spaced > 400' |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

## Input For General Roadway Characteristics

| Roadway Variables | Dir1 - WB | Dir2 - EB |
|---|---|---|
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **Luther Dr to Munson Wy** | **Luther Dr to Munson Wy** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **4** | **4** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Bike StreetScore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 4 | 4 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | 5' | 5' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

## Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | <6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 4 | 4 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400’ | Crosswalks Spaced > 400’ |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

# Intro Card

| Input For General Roadway Characteristics | | |
|---|---|---|
| **Roadway Variables** | **Dir1 - WB** | **Dir2 - EB** |
| Roadway Name | **Florin Rd** | **Florin Rd** |
| Roadway Extents | **Munson Wy to Franklin Bl** | **Munson Wy to Franklin Bl** |
| ADT (average daily traffic) | **>15000** | **>15000** |
| Prevailing Speed in MPH (use posted speed limit if speed data is not available) | **40** | **40** |
| Are the bicycle conditions the same in both directions? (e.g. bicycle facilities are the same in both directions, number of lanes are the same in both directions) | **No** | **No** |
| Are the pedestrian conditions the same in both directions? (e.g. sidewalk of similar width present on both sides of the street, number of lanes are the same in both directions) | **Yes** | **Yes** |
| Is there a raised median? | **Yes** | **Yes** |
| Number of Total Travel Lanes | **5** | **5** |

StreetScore+

Bike Score
by Link

*Refer to StreetScore+ white paper for criteria definitions.*

| **Bike StreetScore by Link** | **Dir1 - WB Input** | **Dir2 - EB Input** |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the bicycle facility type? | Bicycle Lane | Bicycle Lane |
| Speed | 40 | 40 |
| # of Travel Lanes | 5 | 5 |
| Is the bikeway frequently blocked? | No | No |
| Is there on-street parking? | No | No |
| What is the bicycle lane width? | <5' | 6' |
| Is there a raised median present? | Yes | Yes |
| **Segment LTS Score Per Mineta Methodology** | **4** | **4** |
| **Street Score+ LTS Score** | **4** | **4** |

StreetScore+

Pedestrian Score by Link

*Refer to StreetScore+ white paper for criteria definitions.*

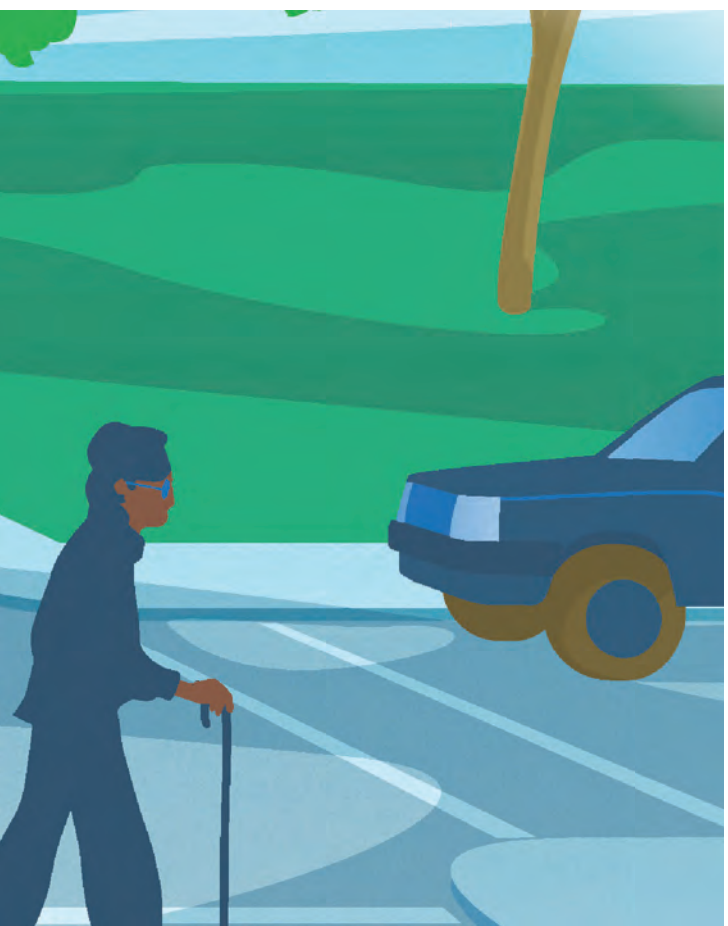
| Pedestrian Streetscore by Link | Dir1 - WB Input | Dir2 - EB Input |
|---|---|---|
| View Basic Roadway Characteristics? | - | |
| What is the width of the sidewalk? | 7-6' | <6' |
| Is the sidewalk in good repair? | Even, Smooth Surface | Even, Smooth Surface |
| Does the sidewalk provide a continuous pedestrian environment? | Frequent Driveway Curb Cuts into the Sidewalk Zone | Frequent Driveway Curb Cuts into the Sidewalk Zone |
| Is there a landscape buffer and street trees? | No Landscaping | No Landscaping |
| What is the prevailing speed? | 40 | 40 |
| Number of Travel Lanes? | 5 | 5 |
| Is lighting present? | Roadway Lighting Only | Roadway Lighting Only |
| What is the percent of heavy vehicles in curbside travel lane? (Use total percentage if by-lane data is not available. Percentage should not include transit vehicles.) | <=5% | <=5% |
| (Optional) What is the crosswalk frequency? | Crosswalks Spaced > 400′ | Crosswalks Spaced > 400′ |
| **Street Score+ LTS Score** | **4** | **4** |

TOP 5 CORRIDORS
Vision ZERO

# Vision Zero Top 5 Corridors Study

Community Outreach Summary Report | **Phase II**

**SPRING 2019**



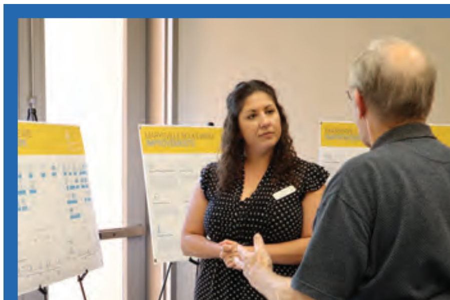
City of SACRAMENTO   FEHR & PEERS   aim consulting

# Table of Contents



David Carter, Fehr & Peers, discusses the **Broadway / Stockton** corridors with a community member at the Let's Move! event.

Jennifer Donlon Wyant, City of Sacramento, discusses the **Florin / South Stockton** Corridors with a community member.



Leslie Mancebo, City of Sacramento, discusses the **Marysville / El Camino** corridors with a community member.

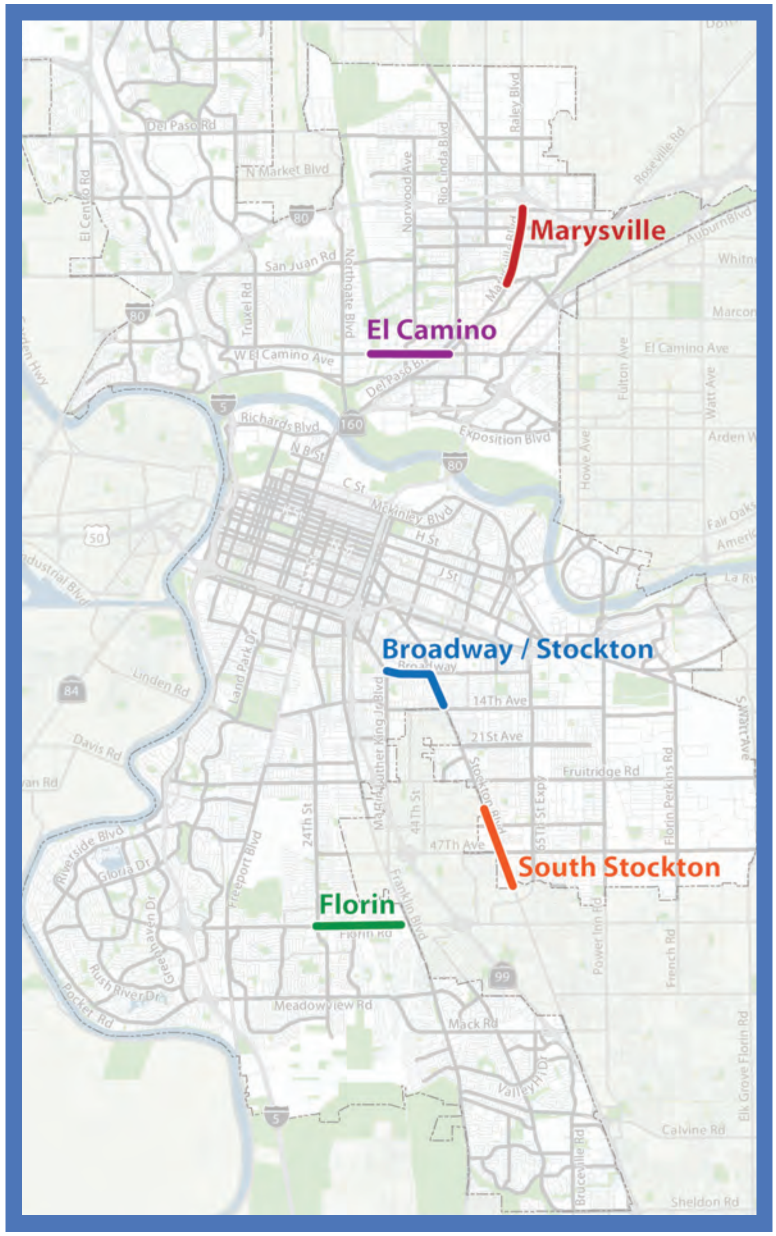
Gladys Cornell, AIM Consulting, discusses the **Broadway / Stockton** corridors with a community member at Let's Move!

# About the Vision Zero Top Five Corridors

In 2017, the City of Sacramento identified five corridors in Sacramento with the highest number of fatal and serious crashes involving pedestrians, bicyclists, and motorists.

The purpose of the Vision Zero Top Five Corridor Study is to analyze the factors that contribute to these corridors' high crash rates and propose counter measures for each corridor that can be implemented near-term. Improvements are based on technical analysis, community input, and best practices in roadway safety and design.

Each of the five corridors span about one mile and are shown on the map to the right and listed below:




**Marysville Boulevard**
North Avenue to Arcade Boulevard

**El Camino Avenue**
Del Paso Boulevard to the paved levee trail adjacent to Steelhead Creek

**Broadway / Stockton Boulevard**
Martin Luther King Jr. Boulevard to 13th Avenue

**South Stockton Boulevard**
McMahon Drive to Patterson Way

**Florin Road**
24th Street to Munson Way

# Community Outreach Program

Engaging community members allows the project team to vet their understanding of the existing conditions, explore potential best use practices to improve mobility challenges and to identify ways to assure the improvements will work for the community members.

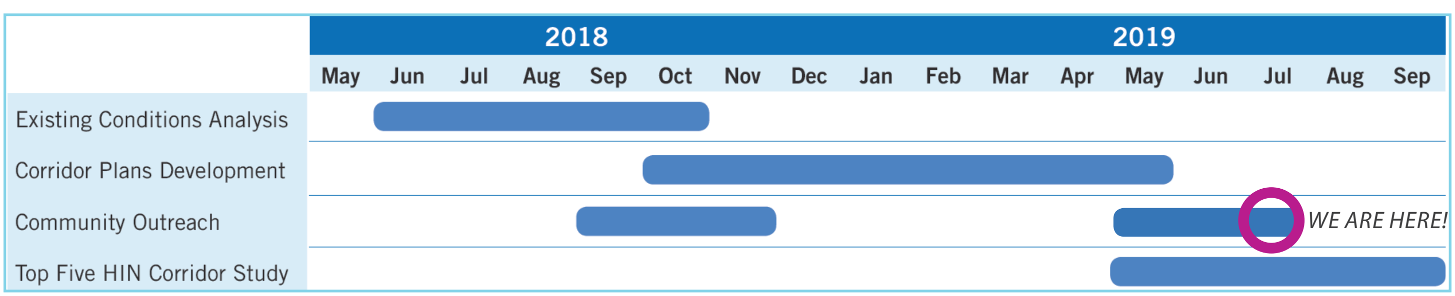
Technical data and analysis can identify where crashes take place along a corridor, how often they take place, and the types of crashes. However, community input is needed to assure improvements fit within the context of the community. The community outreach program includes two phases:


Community member provides input on the **Broadway / Stockton** corridor improvements at the Let's Move! event.

**Phase 1 (October – December 2018)**
*Objectives*
• Build community awareness about the Vision Zero Top Five Corridors Study.
• Present an overview of existing conditions along the top five corridors and potential best practices.
• Obtain community input on the community's experiences traveling along the top five corridors.

**Phase 2 (Spring – Summer 2019)**
*Objectives*
• Present draft countermeasures developed based upon technical analysis, best practices in addressing transportation challenges, and community input.
• Obtain community input on the draft countermeasures at the proposed locations along the corridor.

PROJECT SCHEDULE




During this second phase of outreach, the City of Sacramento Vision Zero team held two community open houses and one community event, each within one of two adjacent corridors per meeting.

**May 30** *Community Event, "Let's Move!" for the Broadway-North Stockton corridor*
**June 5** *Community Open House for the South Stockton and Florin corridors*
**June 6** *Community Open House for the El Camino and Marysville corridors*

The purpose of the community open houses and events were to engage stakeholders, community members, motorists, pedestrians, bicyclists, and transit riders who travel on and live nearby one of the top five corridors in Sacramento. These open houses and events were a key opportunity to build awareness and inform the community about the potential transportation improvements coming to their neighborhood and get their input.

These corridors are located in underrepresented communities within the City. Using traditional community engagement methods can be problematic for these hard-to-reach communities. To address this issue the project team decided to host a community family-friendly celebration at one of the neighborhood parks along the corridor. In conjunction with other City mobility initiatives, the Vision Zero project team developed and implemented "Let's Move" which featured fun activites around personal movement for adults and children. The project team also collaborated with some of the local businesses along the corridor to participate in the Let's Move event.

The project team engaged more than 100 community members throughout Phase II of public outreach.

At each of the outreach events, community members were provided informational boards that displayed information relevant to two of the top five corridors depending on the location of each event. The information on the boards included an overview of the project background, crash analytics of each corridor, and a toolkit of proposed corridor-wide and location specific improvements. The new Phase II boards are described below:

### WHAT WE HEARD

These boards displayed an overview of the community feedback comments received from Phase I Outreach.

### CORRIDOR-WIDE RECOMMENDATIONS

This board displayed a side-by-side comparison of the corridor as it is today, and the recommendations proposed to-scale and their locations along the corridor.

*Samples*





### LOCATION-SPECIFIC RECOMMENDATIONS

This board displayed a map of each corridor, highlighting where each of the proposed improvements would be implemented. The purpose of this station was to confirm the project team's understanding of the community feedback and how the feedback was incorporated into the proposed improvements for each corridor.

### IMPROVEMENTS

This board displayed all recommended improvements for each corridor and their descriptions.

*The boards listed above can be found in the appendix of this document.*

Guided Tai Chi with local kids at the Let's Move Event.

# Compilation of Input by Corridor

The following pages reflect the input received at each community event facilitated by the project team.

Guided yoga with Classy Hippie Tea Co. at the Let's Move! event.


Community members learning about other City transportation initiatives at the Let's Move! event.


Community members finger painting at the Let's Move! event.

AIM Consulting team and local kids playing games at the Let's Move! event.

# Let's Move Event | **Broadway / North Stockton Corridor**

## LET'S MOVE!

On May 31, 2019, the Vision Zero project team collaborated with multiple City-wide transportation projects and hosted the Let's Move Event at McClatchy Park, adjacent to the Broadway / North Stockton top five corridor. The "Let's Move!" event engaged stakeholders, community members, motorists, pedestrians, bicyclists, and transit riders who travel on and live nearby the Broadway / North Stockton corridor in Sacramento. This event was a key opportunity to build awareness and inform the community about ongoing transportation projects and programs, as well as potential transportation improvements coming to their neighborhood.

Participants were given opportunities to contribute their ideas, input, and questions for the Envision Broadway in Oak Park project, the Electric Vehicle Blueprint project, and the City of Sacramento General Plan in addition to the Vision Zero Top Five study.

The event was structured in an open house / festival format and organized around a series of three information stations where attendees were able to review materials, ask questions of staff, and provide their input. The Vision Zero information stations focused on proposed countermeasures for the Broadway / North Stockton corridor. Community members were encouraged to provide their input directly onto the display boards at each information station.

Family-friendly, movement-based activities and games were set-up between each information station. Streamed music played in the background as participants engaged in guided tai chi, flow movement, prompted group painting, a kid's obstacle course, and partner / group games such as twister and connect-four.

Below is the feedback received from each information station pertaining to the Vision Zero Top 5 study .

*The full-size board displays from each station can be found in the appendix.*

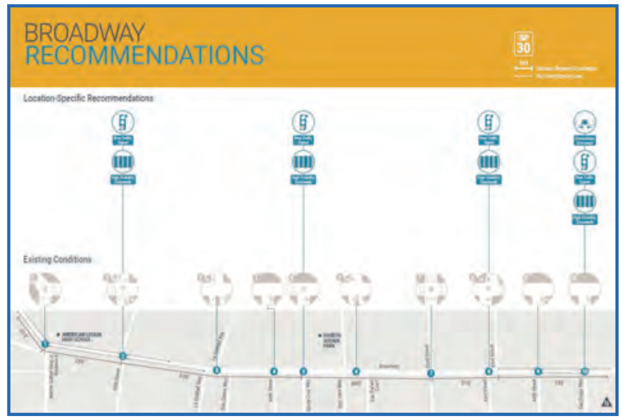
Adrian Engel, Fehr and Peers, discusses the **Envision Broadway Project** with a community member at Let's Move!

Leslie Mancebo, City of Sacramento, discusses the **Vision Zero Top Five Study** with a community member at Let's Move!

Local kids play with bubbles at Let's Move!

Community members at Let's Move!

# Broadway Corridor Feedback




### Broadway Recommendations

- Intersection 1: Continue to study 4th Avenue & 21st Street
- Intersection 1: Can we fix the approach geometry at Martin Luther King Jr. Boulevard, awkward and jagged movements – it's scary as a bicyclist with the EBR through Pocket onto Martin Luther King Jr. Boulevard.
- Intersection 1: Need to make the area under Highway 99 between Franklin Bouelvard and Alhambra more inviting (cleaner and safer)
- Intersection 1: If traffic is diverted to X Street there should be a left turn lane to go from X onto Alhambra.
- Intersection 3: Add an enhanced crossing at a La Solidad with the road diet.
- Intersection 7: Can we fix the uneven pavement at the light's intersection, traveling west? I must move closer to the inner lane to avoid tire / alignment damage on my car. This pavement is on the outer lane (right side).
- Intersection 10: Consolidate driveways please.
- Overall Parking: Residential parking on Broadway is an issue. Cars stick out in the street.
- Overall Parking: I'm a resident at 5th and T Streets, now retired. I'm taxed with loads of parking meters and have a residence sticker. Any remedy for us retirees on filtered incomes having to pay meters often!


### Broadway Location-Specific Recommendations

- Bus lanes or pull-outs for them are needed.
- Keep the bus stops on Broadway.
- I love the separated bike lanes!
- I support these improvements.
- Separation of the bus stop lane (since there are only two lanes going either way.)


### Broadway Improvements

- Advanced Dilemma Zone Detection: I like this idea rather than a radar.
- Advanced Dilemma Zone Detection: Radar speed boxes take a photo of the license plate if a car is speeding.
- Advanced Dilemma Zone Detection: Seriously look at attempting to prevent "Yellow Runners."

# North Stockton Boulevard Corridor Feedback

### North Stockton Recommendations

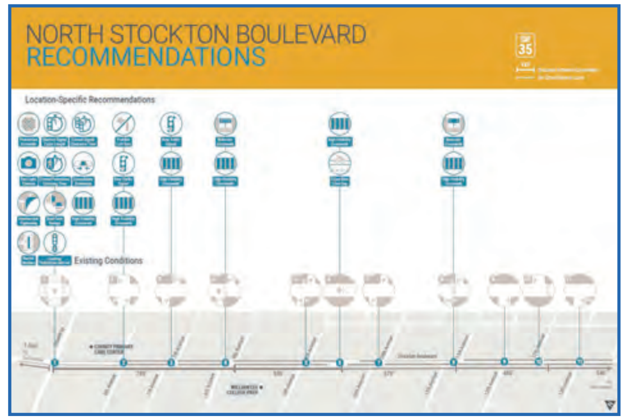
- Intersection 1: I like the pedestrian scramble
- Intersection 1: The meeting access continuing north of Broadway is awkward, can you consolidate and simplify?
- Intersection 6: Yes please!

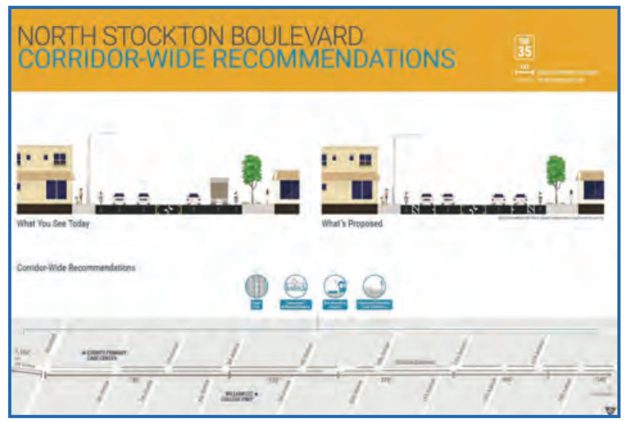
### North Stockton Location-Specific Recommendations

- Broadway and 2nd Avenue: sidewalk infill north of Broadway, formalize and consolidate access.
- Bus Boarding Islands: More transit shelters and benches with warmth (solar heating).
- Bus Boarding Islands: Aren't buses 0 clearance? Is this needed?
- Bus Boarding Islands: Bus only / HOV lanes. SacRT express and light rail needed.
- Road Diet: A road diet and separated bike lanes all the way to midtown!
- 11th and Stockton: Sidewalks are narrow, and I have ADA concerns through the commercial areas.
- Overall: Consolidate driveways and entry points.
- Overall: More trees and landscaping.
- Overall: Consolidate driveways and add a center median with trees.

### North Stockton Improvements

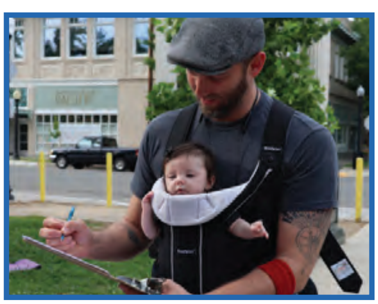
- Consolidate Driveways: Great idea!
- Intersection Tightening: Bad for trucks.
- Red Light Camera: No thanks.
- Separated / Buffered Bikeway: Yes please!
- Separated / Buffered Bikeway: Buffered bikeway please.

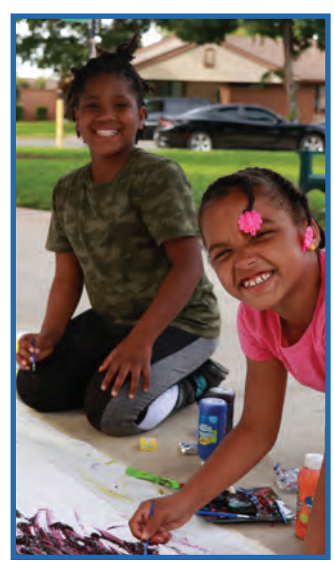



# Broadway / North Stockton Corridor | *Online Feedback*

- Please add parking and above all make it safe for cyclists on Stockton Boulevard by adding in the safe cycling lane.
    - ◊ Implement all the changes in the current plan (e.g., two lane traffic reduction with parking and widen the bike lane)
    - ◊ Please extend the cycling lane from 14th Street to San Francisco Boulevard or the Colonial Library. Many of us in the Colonial Heights neighborhood commute to work downtown by bicycle daily.
    - ◊ I anticipate that this change will make Stockton Boulevard a safer road to cycle on, reduce the reckless and currently consistent speeding on Stockton Boulevard, and add to city revenue by helping Stockton businesses get up running again. I fully support these changes.
    - ◊ It is reasonably foreseeable that a extending these changes down Stockton Boulevard to the Colonial Library will reduce blight, boost home prices in the Colonial Heights, and increase city revenue. It may also be a minimal increase to cost that will pay off big for Sacramento!
- Please slow traffic and make this a safe place to walk, ride bikes and use futuristic mobility options like scooters. We want trees for shade. We want to be able to walk our dog safely and without fear of being killed by a motorist. Protected bike lanes are important. Sidewalks that slow traffic and protect us from cars are important.
- Thank you for completing this study! The Broadway / North Stockton corridor feels unsafe. Cars drive very fast and recklessly. To feel safe, cyclists take to the sidewalk or travel against traffic which impacts pedestrians. I'd love to see improvements for all modes of transit that allow all community members safe access to amenities (light rail, etc.) along Broadway and Stockton Boulevard.
- Stockton Boulevard at T Street is a corridor that is only going to get worse with time where a new, huge housing development is going in. Ingress and egress at this building is going to cause an already busy/dangerous intersection (without dedicated left turn signals except southbound Stockton at T Street) to get even worse.
- Both of these corridors are important and need improvement. I would like to add that our entire city needs improvement and to make bicycle/pedestrian safety a top concern during the planning phase of every roadway. For our city to grow it must take alternate forms of transportation more seriously starting with enforcement on the constant use of bike lanes as loading zones. It does the city no good to spend money on painting bike lanes green when the city could care less about rows and rows of cars parked on them.





# Community Open House | **South Stockton / Florin Corridors**

Rebecca Shafer, Fehr and Peers, discusses the Florin Corridor with a community member.

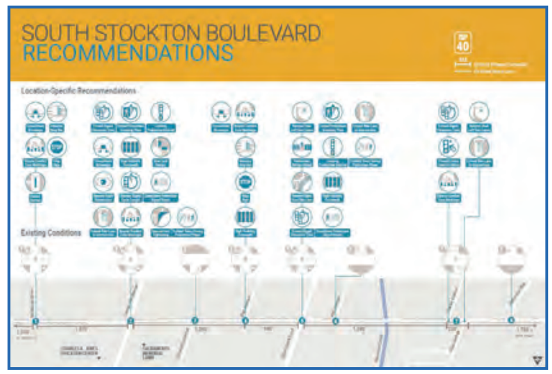
On June 5th, the Vision Zero project team held a community open house at Luther Burbank High School, located directly on the Florin Road corridor.

Participants were given opportunities to contribute their ideas, input, and questions for the Vision Zero Top Five Study through interactive board displays.

The meeting was structured in an open house format and organized by corridor and organized into two information stations. The information stations focused on proposed countermeasures for the Florin Road and South Stockton corridors as part of the Vision Zero Top Five Study. Community members were encouraged to provide their input directly onto the display boards at each information station.

Below is the feedback received from each information station.
*The full-size board displays from each station can be found in the appendix.*

## South Stockton Boulevard Corridor Feedback




### South Stockton Recommendations

- Raised Medians: Some people stand on raised medians when they are too low.  Consider higher curbs.
- High visibility crosswalks: Need more of these.
- Pedestrian Crossing time: Extend pedestrian crossing time at Fruitridge Road and Stockton Boulevard.
- Extend Pedestrian Crossing time: This will be useful since many people run red lights.

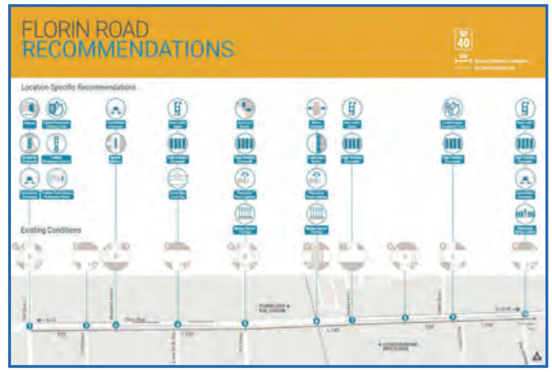
## South Stockton Boulevard | *Online Feedback*

- As a citizen of Sacramento, I am horrified that the five most dangerous corridors in this City are in areas historically under served by city government. This is a clear case of economic injustice. The City should redirect the millions of dollars earmarked for projects in areas over-supplied with bicycle facilities to these far more important projects. In particular, the Two Rivers Trail is not necessary -- there is a parallel trail right across the American River, and the area it serves has a multitude of bicycle facilities. This is a stark case where the City is not walking its talk of commitment to justice for underserved neighborhoods.
- Try to find a parallel route on quieter streets. There is a lot of traffic from delivery trucks to older/more polluting cars in this area. The result is a lot of opportunities for conflict and very poor air quality. It is also not shaded, its bumpy (poor road or manholes in bike lane), and there is a lot of broken glass/debris. These things make it generally unpleasant to ride on Stockton and only the most intense cyclists will use it. I'd love to see it improved, but I think the best way may be to truly focus on a parallel street where there are fewer cars and conflict opportunities. I bike 8 miles from East Sacramento to South Sacramento and I'll only be passed by 10 cars in the neighborhoods. On Stockton, it could be as many as hundreds.

# Florin Corridor Feedback

## Florin Recommendations

- Intersection 1: Chirping for entire crossing time; more crossing time.
- Intersection 4: Traffic signal needed at Loma Verde.
- Intersection 6: Fix for those with handicaps – right now they must go almost in the street to get around the crossing gate (on both sides).
- Intersection 9: Better visibility and better maintenance needed.
- Intersection 10: Another crosswalk between Franklin Boulevard and Luther Burbank High School is needed.
- Overall: Before repaving, make sure the utilities are working.

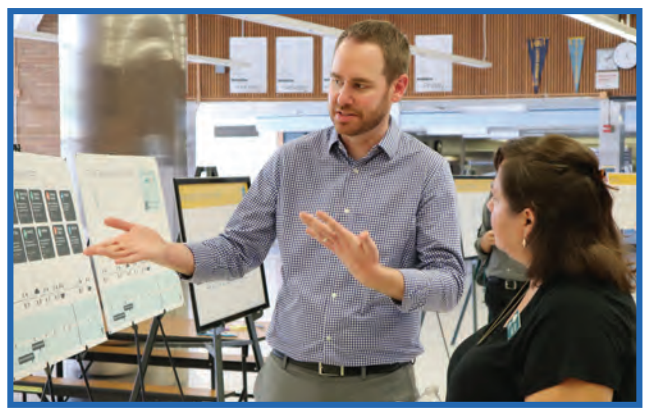



## Florin Improvements

- Overall: Crosswalks under the light rail tracks needed.
- Overall: More enforcement needed for wrong-way cycling.
- Overall: How are these improvements helping with the heat island effect?
- Advanced Dilemma-Zone Detection: More stop signs to slow down drivers.
- New traffic signal: more traffic lights needed.
- High visibility crosswalks: More crosswalks.
- Pedestrian Refuge Island: Add more trees; they provide shade and are better for the environment.
- Landscaping: Trees need to be at the forefront of this discussion - they filter particulate matter out of the air, reduce the urban heat island effect (shading asphalt, concrete, and building surfaces that absorb heat while also cooling the air and reducing energy / AC usage), and encourage the use of alternative transportation like walking, cycling, or public transit. Especially in underserved neighborhoods, every street, parking lot, bike path, park, and school should be well shaded.
- Landscape buffer: We like this.


# Florin Road | *Online Feedback*

- My comment is about the reduced speeds in all school areas. Currently, the school signage in my area simply says "25 MPH when children are present". I am hoping that the new rules and signage are more specific, which is why I believe drivers ignore the current speed limit. I understand it's difficult to pinpoint specific days/times considering all school activities. Electronic reduced speed signs operate even when the school is closed, so drivers ignore it. How can speed limits be enforced when the sign reading "when children are present" is so vague? Specifying class times and school activites wouldn't include all afterschool activities, but it would be better.

# Community Open House | **Marysville / El Camino Corridors**

On June 6th, the Vision Zero project team held a community open house at the Greater Sacramento Urban League, located on the Marysville Boulevard corridor.

David Carter, Fehr and Peers, discusses the Marysville Corridor with a community member.

Participants were given opportunities to contribute their ideas, input, and questions for the Vision Zero Top Five Study through interactive board displays.

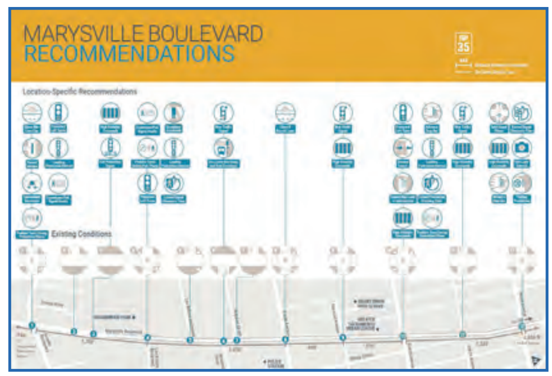
The meeting was structured in an open house format and organized by corridor and organized into two information stations. The information stations focused on proposed countermeasures for the Marysville Boulevard and El Camino Avenue corridors as part of the Vision Zero Top Five Study. Community members were encouraged to provide their input directly onto the display boards at each information station.

Below is the feedback received from each information station.
*The full-size board displays from each station can be found in the appendix.*

## Marysville Boulevard Corridor Feedback

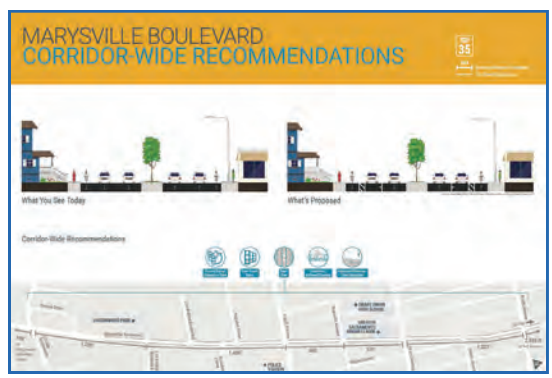
### Marysville Recommendations

- Intersection 8: Class II Bike Lane: Need education for any new features or improvements.
- Intersection 9: Square up intersections and add curb extensions by the park and Grant Union High School.
- Intersection 9: Consider pedestrian scramble where there are a lot of pedestrians, like by Grant Union High School.




### Marysville Location-Specific Recommendations

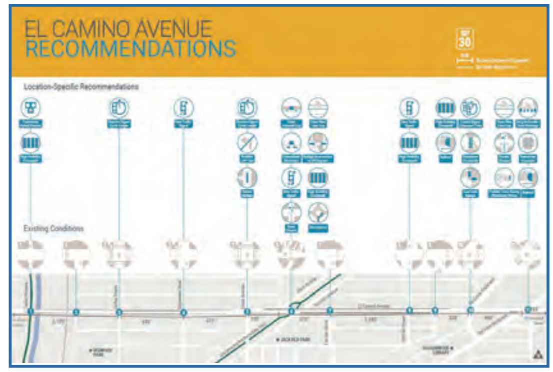
- Overall: widen sidewalks with extra space.
- Overall" Watch for blind spots with parking and separated bike lanes.
- Streetlights: Better lighting (brighter bulbs)
- Parking: Approve on-street parking.



# El Camino Avenue Corridor Feedback

### El Camino Recommendations

- Overall: Replace and widen bike lanes on El Camino Avenue.
- Overall: The sidewalk gap closure is good.
- Intersection 5: Traction Avenue, west of Jack Park is not needed. Eliminate it!
- Intersection 8: Anything to help with visibility is good at the Rio Linda crossing.
- Intersection 11: Pedestrian Scramble: I like the pedestrian scramble at this intersection. This way pedestrians can move in all directions, and I don't think it would affect traffic too much.
- Intersection 11: Citations are what get peoples' attention when speeding or running lights.




# El Camino Avenue | *Online Feedback*

- Need to change El Camino Avenue to possibly four lanes, two each way. Maybe put in some roundabouts. There also needs to be one or two more pedestrian crossing lights and better bike lanes.
- I live on El Camino Avenue, across from Cantalier Street and have noticed many senior neighbors trying to cross at the cross walk in front of my house at the Cantalier intersection. With the recent purchase of the church across the street there is much more foot traffic at this intersection (which is nice!) but please post better speed signage and paint or make the cross walk more visible as I have had to stop traffic for seniors more than once at this intersection/crossing. A speed bump here may be useful. I support bike lanes on El Camino Avenue and hope additional bike racks are added to the highly walkable area along with bike rentals. Please consider adding public water fountains near bike racks or bike friendly areas along this route as well. It's hot and cyclists or pedestrians could use water fountain breaks.

# Public Notification

The project team completed an extensive notification process for the Let's Move community event and each community open house. The purpose of creating and completing such an extensive notification plan was to inform the public about the project, it's goals, and ask community members who were notified to share the project and event information with their fellow communities.

For each event, a list of businesses, community associations, and individuals were notified by phone and email to share the event information with their organization along the adjacent corridor. A general email was also sent to all individuals who signed up throughout the City of Sacramento's email database for their specific corridor.

Below is a list of organizations and groups who helped share information about the project and events through email, social media, or printed flyer:

- AARP
- A World of Tomorrow
- Broadway Coffee
- City of Sacramento
- Classy Hippie Tea Company
- Councilmember Larry Carr, Dsitrict 8
- Councilmember Jay Schenrier, District 5
- Councilmember Allen Warren, District 2
- Inn off Capitol Park
- Oak Park Art Garden
- Old Soul Broadway
- Next Door
- North Sacramento Beat
- North Sacramento Chamber of Commerce
- Sac365
- Sacramento Area Bicycle Advocates (SABA)
- Sacramento Building Healthy Communities (SacBHC)
- Sacramento Regional Baptist Church
- Sacramento State
- SacTRU
- Sierra 2 Center
- Stockton Boulevard Partnership
- Strapping Store
- Vibe Health Bar
- WALK Sacramento


# Appendix

- Project Boards
  - What We Heard
  - Broadway
  - North Stockton
  - South Stockton
  - Florin
  - Marysville
  - El Camino
- Public Notification Flyers

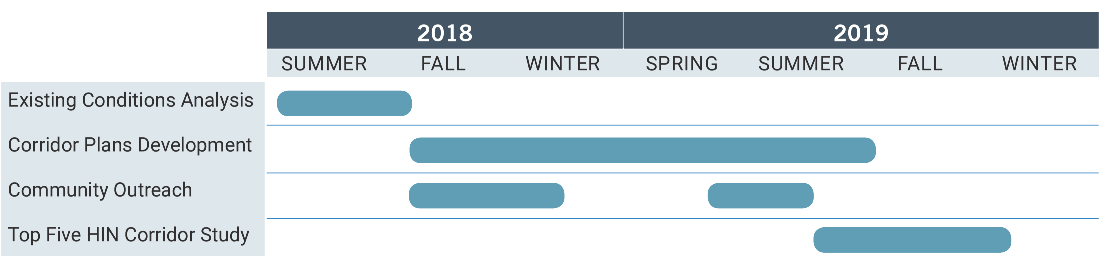
# ABOUT THE
# VISION ZERO TOP FIVE STUDY

In 2017, the City of Sacramento identified the five corridors in Sacramento with the **highest numbers of fatal and serious crashes** involving pedestrians, bicyclists, and motorists.

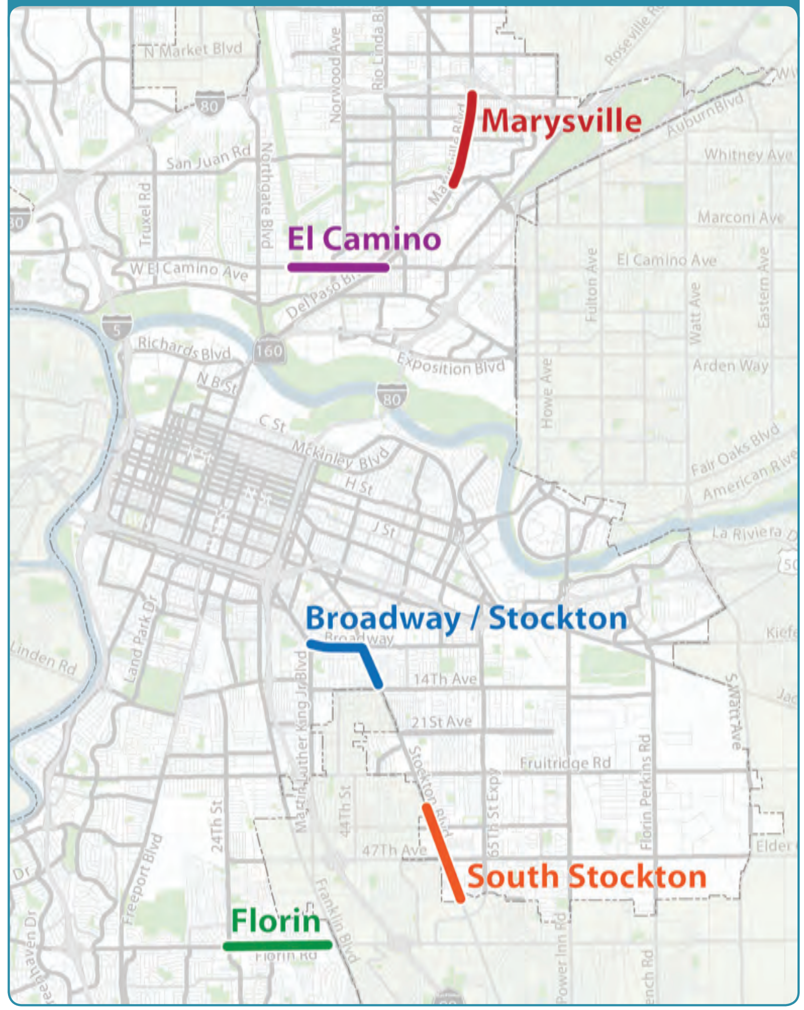
The Vision Zero Top Five Corridor Study is analyzing the factors that contribute to these corridors' high crash rates.

Based on **technical analysis, community input, and best practices in roadway safety and design,** the study will identify improvements for each of these corridors that can be implemented in the near-term.

## Project Schedule



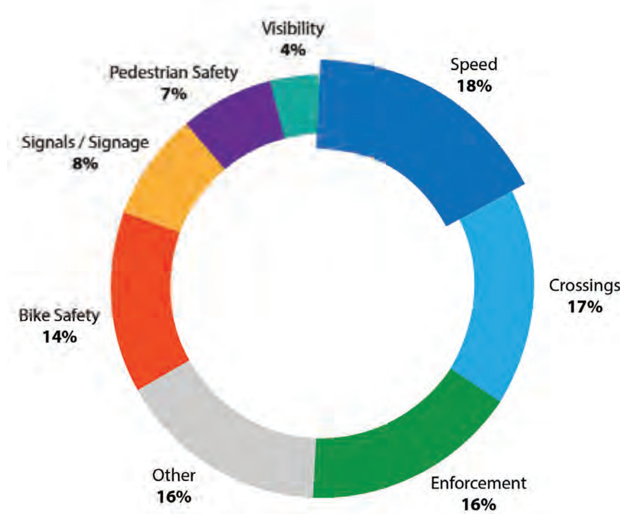

**TOP FIVE CORRIDORS**



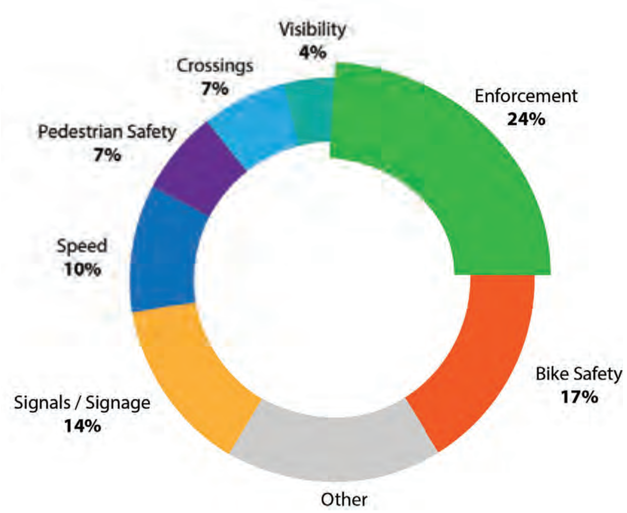
# WHAT WE HEARD
# VISION ZERO TOP FIVE STUDY

The Vision Zero team held a six pop-up events and two community workshops from October through December 2018, to engage community members who regularly travel along the five corridors and discuss their experiences walking, biking, and driving along the corridor. Below is an overview of the community feedback comments received from events at each corridor, distributed into relevant categories.

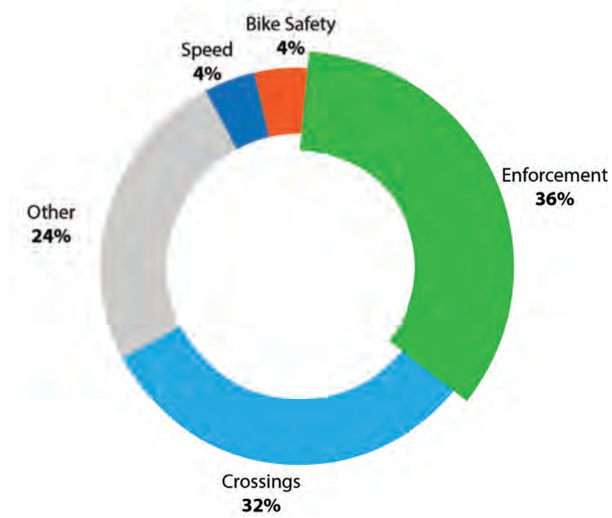
**Broadway / Stockton Corridor**




**South Stockton**



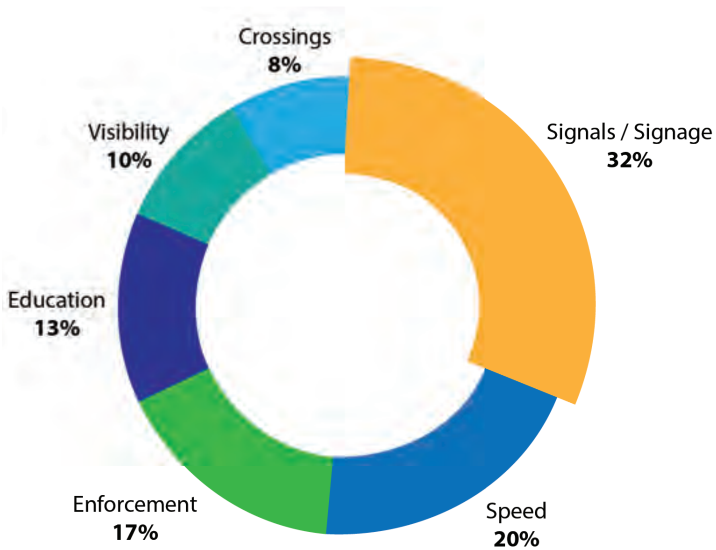

**Florin**



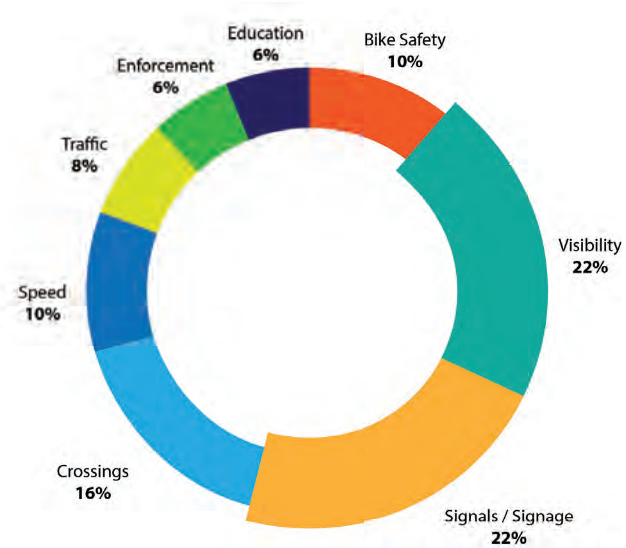
# WHAT WE HEARD
# VISION ZERO TOP FIVE STUDY

Below is an overview of the community feedback comments received from events at each corridor, distributed into relevant categories.

**Marysville**




**El Camino**



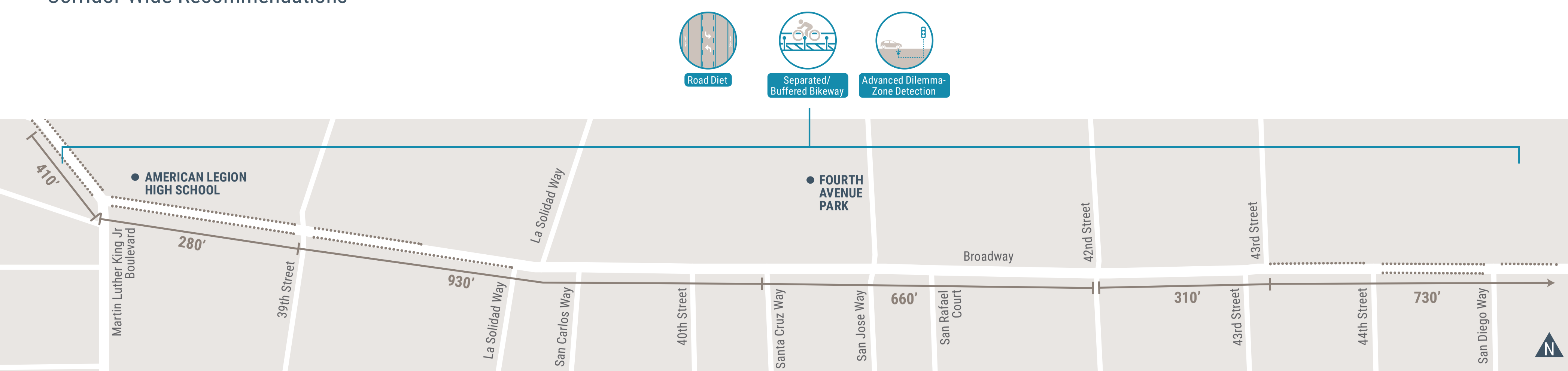
# BROADWAY
# CORRIDOR-WIDE RECOMMENDATIONS


What You See Today



What's Proposed

## Corridor-Wide Recommendations



# BROADWAY IMPROVEMENTS

S4 40%

## Advanced Dilemma-Zone Detection

Signals/Signage

Advanced dilemma-zone detection enhances safety at signalized intersections by modifying traffic control signal timing on the fly to reduce the number of drivers that may have difficulty deciding whether to stop or proceed during a yellow phase. This may reduce rear-end crashes associated with unsafe stopping and angle crashes due to red light running.

## Consolidate Driveways

Bike Safety, Pedestrian Safety, Visibility

Reducing the number of driveway entrances/exits through consolidation limits the exposure of bicyclists, pedestrians, and drivers to vehicles entering or exiting driveways, reducing conflicts.

NS6/NS17/NS18 25-35%

## High Visibility Crosswalk

Crossings, Pedestrian Safety, Visibility

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.

NS3 25%

## New Traffic Signal

Signals/Signage

New traffic signals help organize travel of all modes at an intersection, limiting interactions between vehicles, pedestrians, and bicyclists with conflicting movements. New signals can have a traffic calming effect on long, high-speed straightaways.

R15 30%

## Road Diet

Speed, Pedestrian Safety, Bike Safety, Crossings

Road diets generally reassign space in the roadway from vehicle travel lanes to create room for bicycle 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 collisions.

R36 35%

## Separated/Buffered Bikeway

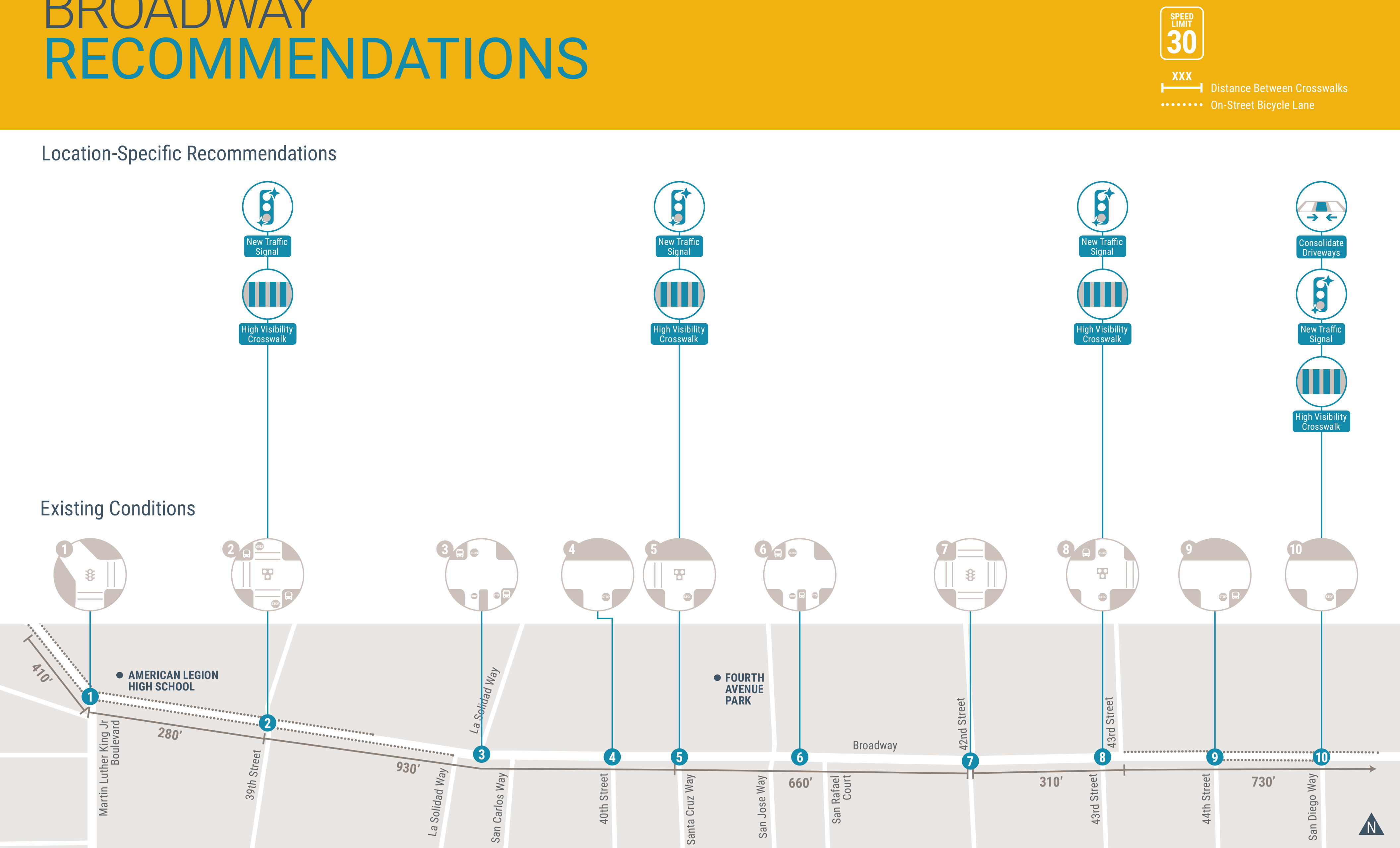
Bike Safety

Designated bicycle lanes, separated from vehicle traffic by a physical barrier, usually bollards, landscaping, or parked cars. These facilities can increase safety by decreasing opportunities for collisions with over-taking vehicles, and reducing the risk of dooring.

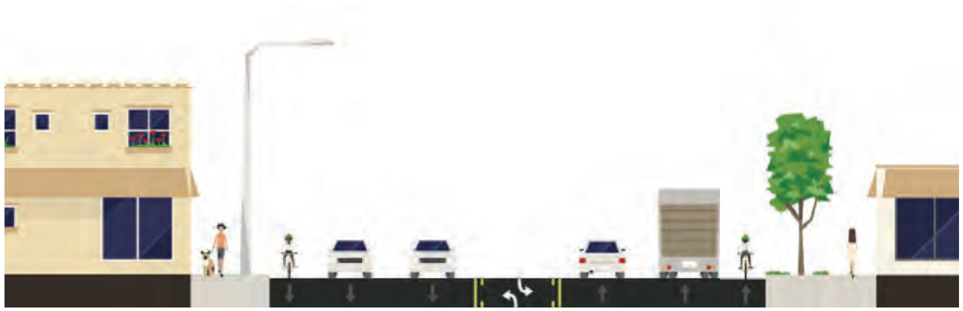
R36 35% — Caltrans Local Road Safety Manual ID; Crash Reduction Factor

Safety Issue Categories

# BROADWAY RECOMMENDATIONS



# NORTH STOCKTON BOULEVARD
# CORRIDOR-WIDE RECOMMENDATIONS

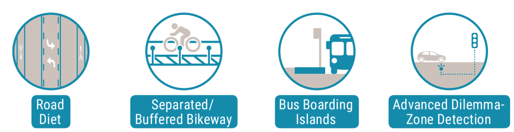



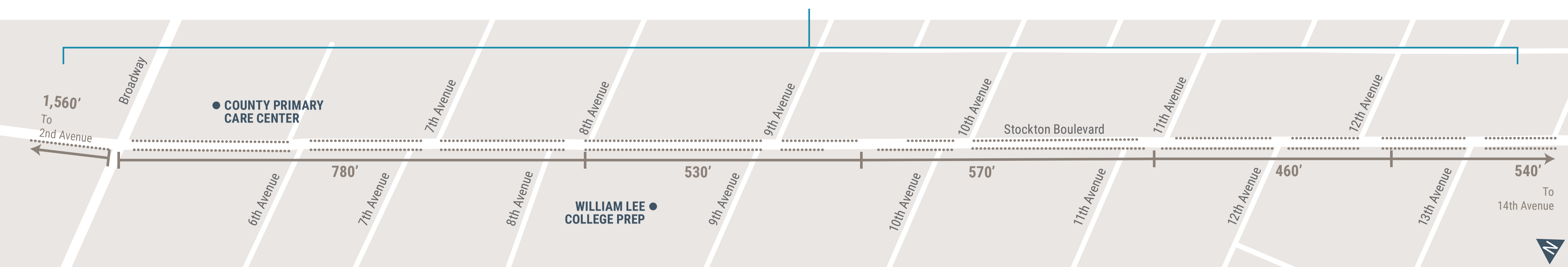
What You See Today

What's Proposed



## Corridor-Wide Recommendations



# NORTH STOCKTON BOULEVARD IMPROVEMENTS

### Advanced Dilemma-Zone Detection

S4 | 40%

Signals/Signage

Advanced dilemma-zone detection enhances safety at signalized intersections by modifying traffic control signal timing on the fly to reduce the number of drivers that may have difficulty deciding whether to stop or proceed during a yellow phase. This may reduce rear-end crashes associated with unsafe stopping and angle crashes due to red light running.

### Bus Boarding Islands

Bike Safety

Dedicated waiting and boarding areas for passengers that are separated from the sidewalk by a bike channel, eliminating conflicts between transit vehicles and bikes at stops.

### Close Bike Lane Gap

R36 | 35%

Bike Safety

Closing gaps between bicycle lanes increases the amount of dedicated facilities bicyclists can use, reducing mixing of bicyclists and drivers and increasing network connectivity and visibility of bicyclists in the roadway.

### Consolidate Driveways

Bike Safety, Pedestrian

Reducing the number of driveway entrances/exits through consolidation limits the exposure of bicyclists, pedestrians, and drivers to vehicles entering or exiting driveways, reducing conflicts.

### Dual Curb Ramps

Pedestrian Safety

Dual curb ramps improve ADA accessibility at all intersection approaches so that pedestrians with mobility challenges, or those pushing carts or strollers, can safely enter and exit all crosswalks.

### Extend Pedestrian Crossing Time

S3 | 15%

Crossings, Pedestrian Safety

Increases time for pedestrian walk phases, and can better accommodate vulnerable populations such as children and the elderly.

### Extend Signal Clearance Time

S3 | 15%

Signals/Signage

Extending yellow and all red time allows drivers and bicyclists to safely cross through a signalized intersection before conflicting traffic movements are permitted to enter the intersection.

### High Visibility Crosswalk

NS6/NS17/NS18 | 25-35%

Crossings, Pedestrian Safety, Visibility

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.

### Intersection Tightening

Crossings, Pedestrian Safety, Speed, Visibility

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.

### Leading Pedestrian Interval

59%

Crossings, Pedestrian Safety, Visibility

Traffic signals timed to allow pedestrians a short head start in crossing an intersection to minimize conflicts with turning vehicles and improve pedestrian visibility.

### New Traffic Signal

NS3 | 25%

Signals/Signage

New traffic signals help organize travel of all modes at an intersection, limiting interactions between vehicles, pedestrians, and bicyclists with conflicting movements. New signals can have a traffic calming effect on long, high-speed straightaways.

### Pedestrian Scramble

35%

Crossings, Pedestrian Safety, Signals/Signage

Restricts vehicular movements to provide an exclusive signal phase allowing pedestrians to cross in all directions, including diagonally.

### Prohibit Left Turn

10%

Bike Safety, Crossings, Pedestrian Safety, Signals/Signage

Bans left turns at locations where a turning vehicle may conflict with pedestrians in the crosswalk or where opposing traffic volume is high. Reduces pedestrian interaction with vehicles when crossing.

### Raised Median

S13/NS12/R9 | 25% - 45%

Crossings, Pedestrian Safety, Speed

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.

### Red Light Camera

Signals/Signage

Red light cameras can be used for automated enforcement to issue citations to drivers running red lights at signalized intersections, and may discourage this behavior.

R36 — Caltrans Local Road Safety Manual ID
35% — Crash Reduction Factor
Safety Issue Categories

# NORTH STOCKTON BOULEVARD IMPROVEMENTS

### Relocate Crosswalk

Crossings, Pedestrian Safety, Visibility

Relocating existing crosswalks can help improve pedestrian visibility, shorten crossing distances, and minimize conflicts with vehicles. In some cases, crosswalks currently located between two legs of an offset intersection may be moved to the far side of the intersection to minimize the number of conflicting vehicle turning movements.

### Road Diet

R15 | 30%

Speed, Pedestrian Safety, Bike Safety, Crossings

Road diets generally reassign space in the roadway from vehicle travel lanes to create room for bicycle 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 collisions.

### Separated/Buffered Bikeway

R36 | 35%

Bike Safety

Designated bicycle lanes, separated from vehicle traffic by a physical barrier, usually bollards, landscaping, or parked cars. These facilities can increase safety by decreasing opportunities for collisions with over-taking vehicles, and reducing the risk of dooring.

### Shorten Signal Cycle Length

S3 | 15%

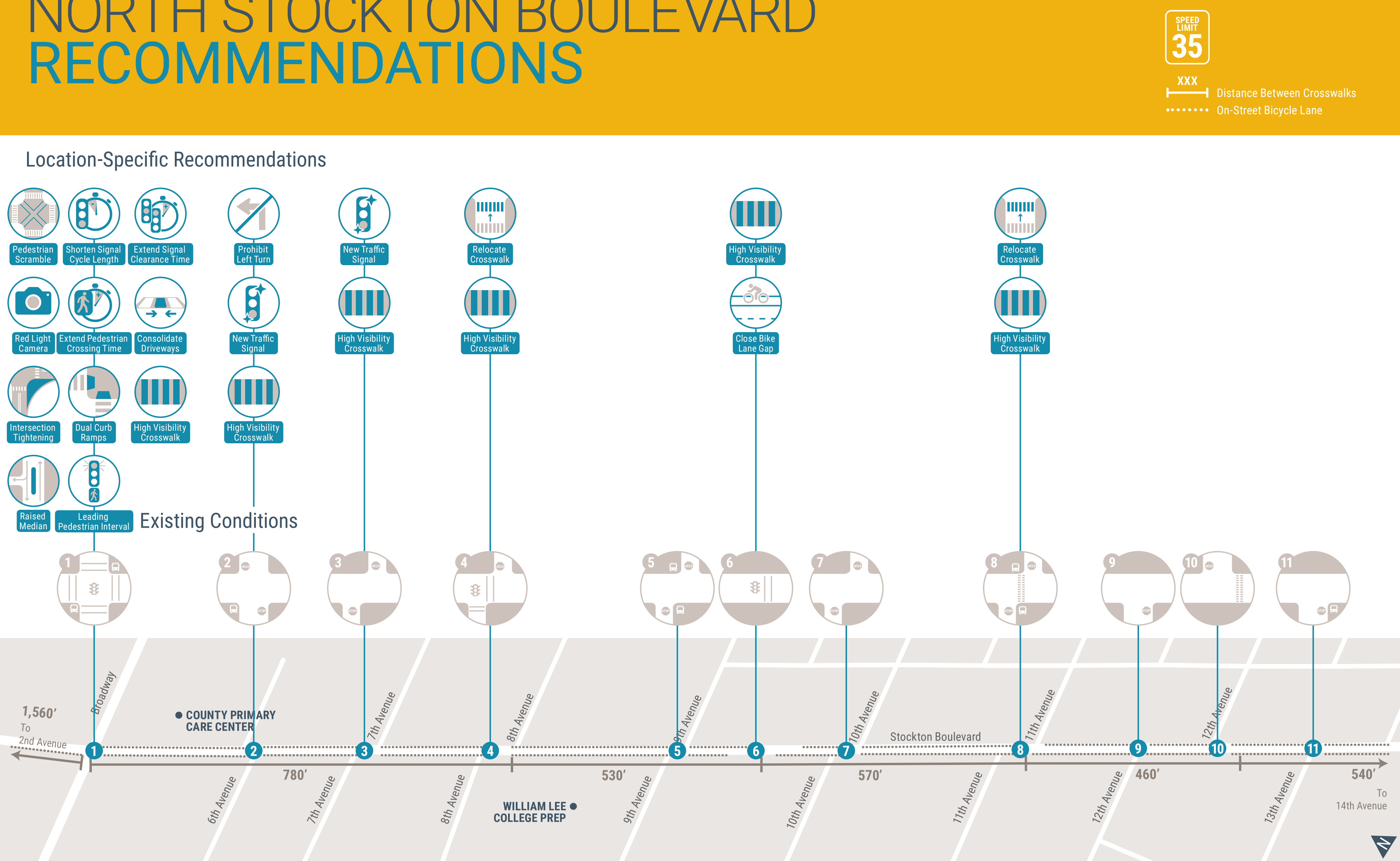
Signals/Signage

Reducing the cycle length at intersections may reduce the delay experienced by vehicles, bicyclists, and pedestrians. When delay is significant, road users are more inclined to ignore signal indications.

R36 — Caltrans Local Road Safety Manual ID
35% — Crash Reduction Factor

Safety Issue Categories

# NORTH STOCKTON BOULEVARD RECOMMENDATIONS



# SOUTH STOCKTON BOULEVARD
# CORRIDOR-WIDE RECOMMENDATIONS

SPEED LIMIT 40

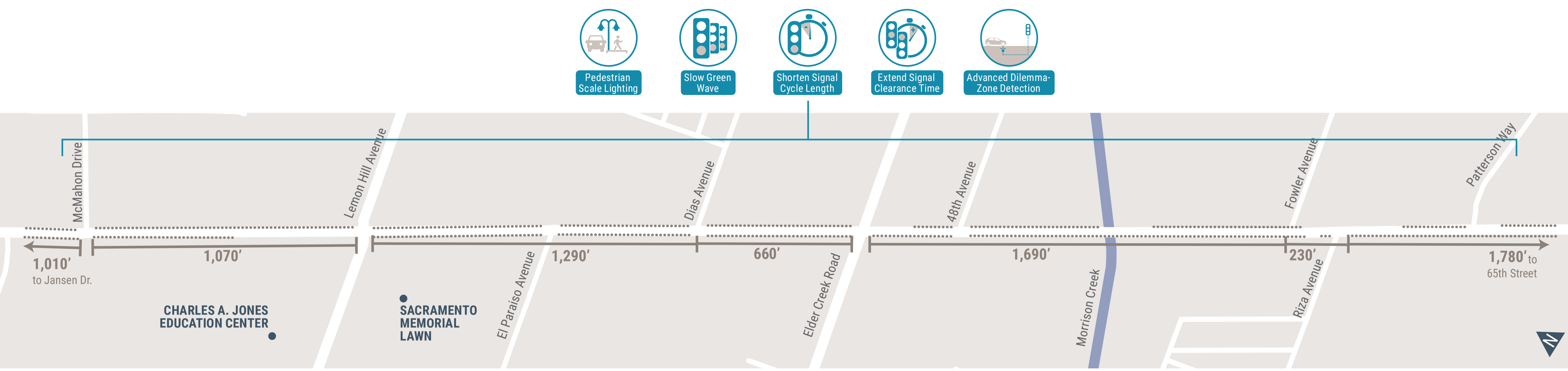
XXX Distance Between Crosswalks
On-Street Bicycle Lane

What You See Today

What's Proposed



## Corridor-Wide Recommendations



# SOUTH STOCKTON BOULEVARD IMPROVEMENTS

### Advanced Dilemma-Zone Detection

S4 | 40%

Signals/Signage

Advanced dilemma-zone detection enhances safety at signalized intersections by modifying traffic control signal timing on the fly to reduce the number of drivers that may have difficulty deciding whether to stop or proceed during a yellow phase. This may reduce rear-end crashes associated with unsafe stopping and angle crashes due to red light running.

### Advance Stop Bar

S21 | 15%

Crossings, Pedestrian Safety

A stop bar placed ahead of the crosswalk at stop signs and signals reduces instances of vehicles encroaching on the crosswalk.

### Bicycle Conflict Zone Markings

Bike Safety

Green pavement within a bicycle lane to increase visibility of bicyclists and to reinforce bicycle priority. The green pavement is used as a spot treatment in conflict areas such as driveways.

### Consolidate Driveways

Bike Safety, Pedestrian Safety, Visibility

Reducing the number of driveway entrances/exits through consolidation limits the exposure of bicyclists, pedestrians, and drivers to vehicles entering or exiting driveways, reducing conflicts.

### Countdown Pedestrian Signal Heads

S19 | 25%

Crossings, Pedestrian Safety, Signals/Signage

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.

### Dual Curb Ramps

Pedestrian Safety

Dual curb ramps improve ADA accessibility at all intersection approaches so that pedestrians with mobility challenges, or those pushing carts or strollers, can safely enter and exit all crosswalks.

### Extend Bike Lane to Intersection

Bike Safety

In locations where a bike lane is dropped due to the addition of a right turn pocket, the intersection approach may be restriped to allow for bicyclists to move to the left side of right-turning vehicles ahead of reaching the intersection.

### Extend Pedestrian Crossing Time

S3 | 15%

Crossings, Pedestrian Safety

Increases time for pedestrian walk phases, and can better accommodate vulnerable populations such as children and the elderly.

### Extend Signal Clearance Time

S3 | 15%

Signals/Signage

Extending yellow and all red time allows drivers and bicyclists to safely cross through a signalized intersection before conflicting traffic movements are permitted to enter the intersection.

### High Visibility Crosswalk

NS6/NS17/NS18 | 25-35%

Crossings, Pedestrian Safety, Visibility

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.

### Intersection Tightening

Crossings, Pedesrian Safety, Speed, Visibility

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.

### Leading Pedestrian Interval

59%

Crossings, Pedestrian Safety, Visibility

Traffic signals timed to allow pedestrians a short head start in crossing an intersection to minimize conflicts with turning vehicles and improve pedestrian visibility.

### Pedestrian Refuge Island

S12/NS16 | 25-45%

Crossings, Pedestrian Safety, Speed, Visibility

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.

### Pedestrian Scale Lighting

S1/NS1/R1 | 35-40%

Crossings, Pedestrian Safety, Visibility

Appropriate quality and placement of lighting can enhance an environment as well as increase comfort and safety. Pedestrian-scale lighting is lower in height than standard streetlighting and is spaced closer together.

### Prohibit Turn During Pedestrian Phase

Bike Safety, Crossings, Pedestrian Safety, Signals/Signage

Restricts left or right turns during the pedestrian crossing phase at locations where a turning vehicle may conflict with pedestrians in the crosswalk. This restriction may be displayed with a blank-out sign.

R36 | 35%

Caltrans Local Road Safety Manual ID

Crash Reduction Factor

Safety Issue Categories

# SOUTH STOCKTON BOULEVARD IMPROVEMENTS

## Provide Green Time For Bikes

S3 | 15%

Bike Safety, Signals/Signage

Provide or prolong the green phase when bicyclists are present to provide additional time for bicyclist to clear the intersection. Can occur automatically in the signal phasing or when prompted with bicycle detection. Topography should be considered in clearance time.

## Raised Median

S13/NS12/R9 | 25% - 45%

Crossings, Pedestrian Safety, Speed

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.

## Remove Dual Left Turn Lanes

Signals/Signage

Restriping an approach so there is a single left-turn lane instead of dual lefts can help simplify an intersection and create room for a road diet or other geometric improvements.

## Remove Right Turn Slip Lane

Bike Safety, Pedestrian Safety, Speed

Closing a free-flow right-turn slip lane can help slow right turning drivers, eliminates an uncontrolled crossing for pedestrians, and shortens pedestrian crossing distances. The space reclaimed in closing the slip lane can be reused as pedestrian space to widen sidewalks, enhance curb ramps, or provide more space for street furniture.

## Remove Sight Obstruction

NS10 | 20%

Visibility

Remove objects that may prevent drivers and pedestrians from having a clear sightline. May include trimming or removing landscaping, or removing or relocating large signs.

## Shorten Signal Cycle Length

S3 | 15%

Signals/Signage

Reducing the cycle length at intersections may reduce the delay experienced by vehicles, bicyclists, and pedestrians. When delay is significant, road users are more inclined to ignore signal indications.

## Slow Green Wave

Signals/Signage, Speed

A series of traffic signals coordinated to allow for uninterrupted bicycle traffic flow or slower vehicle travel speeds through several intersections along a corridor. Coordinating signals for a slower travel speed gives bicyclists more time to cross safely and encourages drivers to travel at slower speeds.

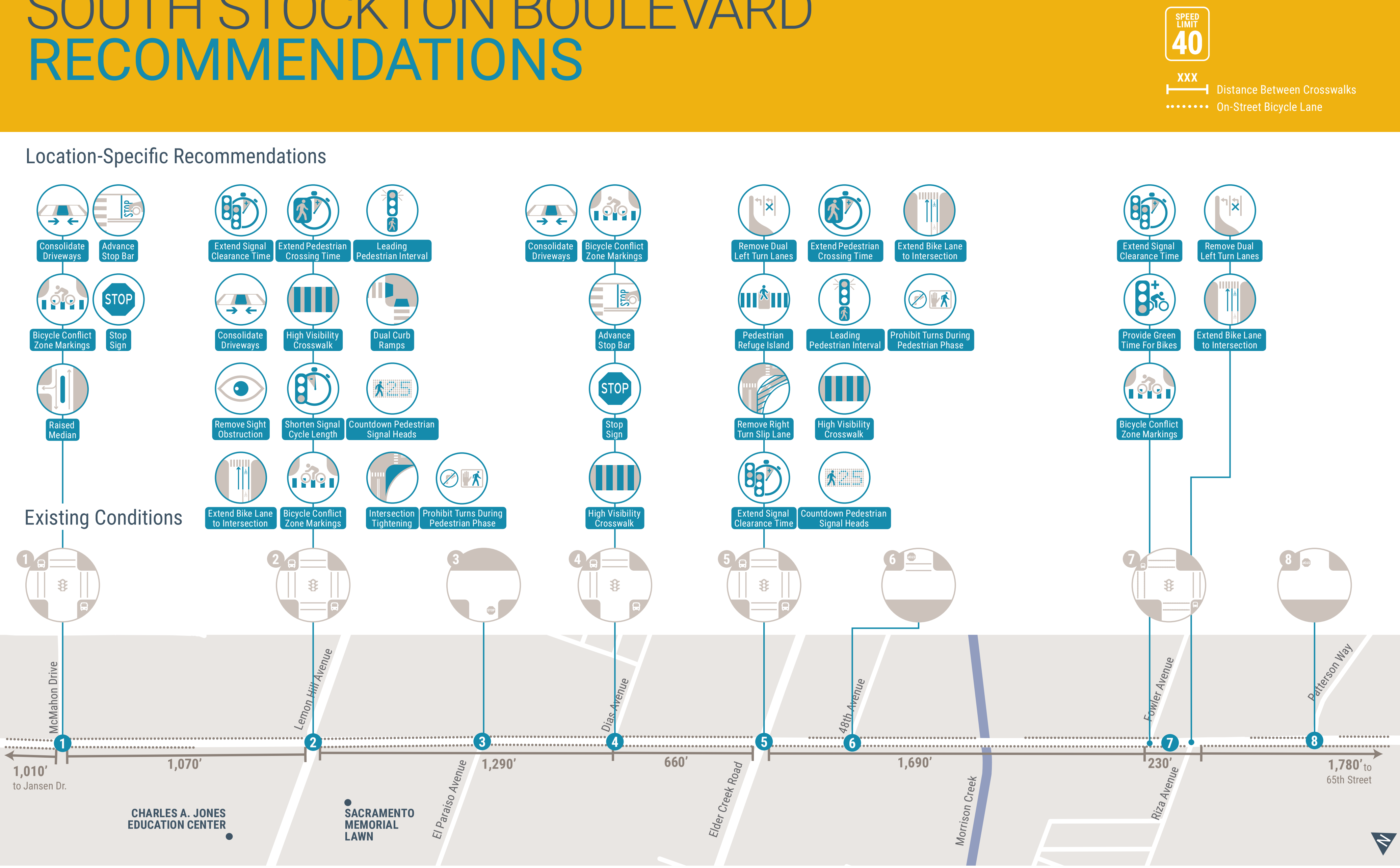
## Stop Sign

Signals/Signage

When warranted, stop signs provide a cue to drivers to stop and wait for vehicles, bicyclists, and pedestrians to cross before proceeding.

R36 — Caltrans Local Road Safety Manual ID
35% — Crash Reduction Factor
Safety Issue Categories

# SOUTH STOCKTON BOULEVARD RECOMMENDATIONS

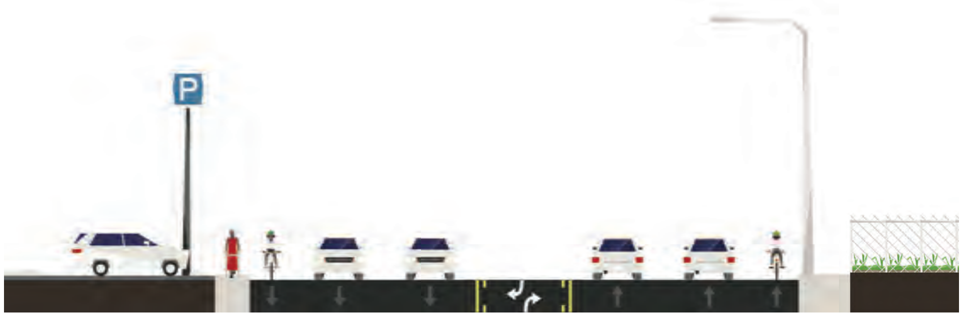


# FLORIN ROAD
# CORRIDOR-WIDE RECOMMENDATIONS

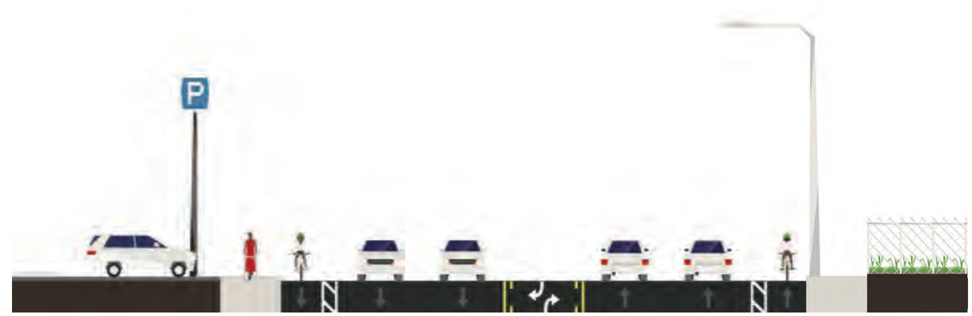
SPEED LIMIT 40

XXX Distance Between Crosswalks

On-Street Bicycle Lane



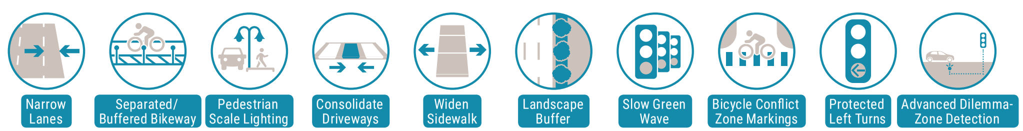

What You See Today

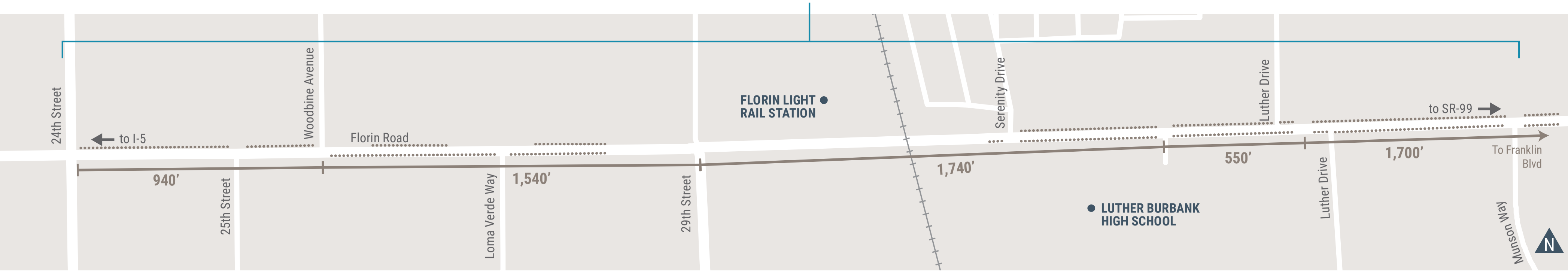



What's Proposed



## Corridor-Wide Recommendations



# FLORIN ROAD IMPROVEMENTS

### Advanced Dilemma-Zone Detection

S4 | 40%

Signals/Signage

Advanced dilemma-zone detection enhances safety at signalized intersections by modifying traffic control signal timing on the fly to reduce the number of drivers that may have difficulty deciding whether to stop or proceed during a yellow phase. This may reduce rear-end crashes associated with unsafe stopping and angle crashes due to red light running.

### Bicycle Conflict Zone Markings

Bike Safety

Green pavement within a bicycle lane to increase visibility of bicyclists and to reinforce bicycle priority. The green pavement is used as a spot treatment in conflict areas such as driveways.

### Bulbout

Crossings, Pedestrian Safety, Speed, Visibility

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.

### Close Bike Lane Gap

R36 | 35%

Bike Safety

Closing gaps between bicycle lanes increases the amount of dedicated facilities bicyclists can use, reducing mixing of bicyclists and drivers and increasing network connectivity and visibility of bicyclists in the roadway.

### Consolidate Driveways

Bike Safety, Pedestrian Safety, Visibility

Reducing the number of driveway entrances/exits through consolidation limits the exposure of bicyclists, pedestrians, and drivers to vehicles entering or exiting driveways, reducing conflicts.

### Dual Curb Ramps

Pedestrian Safety

Dual curb ramps improve ADA accessibility at all intersection approaches so that pedestrians with mobility challenges, or those pushing carts or strollers, can safely enter and exit all crosswalks.

### Extend Pedestrian Crossing Time

S3 | 15%

Crossings, Pedestrian Safety

Increases time for pedestrian walk phases, and can better accommodate vulnerable populations such as children and the elderly.

### Extend Signal Clearance Time

S3 | 15%

Signals/Signage

Extending yellow and all red time allows drivers and bicyclists to safely cross through a signalized intersection before conflicting traffic movements are permitted to enter the intersection.

### High Visibility Crosswalk

NS6/NS17/NS18 | 25-35%

Crossings, Pedestrian Safety, Visibility

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.

### Landscape Buffer

Pedestrian Safety

Separating drivers from bicyclists and pedestrians using landscaping provides more space between the modes and can produce a traffic calming effect by encouraging drivers to drive at slower speeds, lowering the risk of collision.

### Leading Pedestrian Interval

59%

Crossings, Pedestrian Safety, Visibility

Traffic signals timed to allow pedestrians a short head start in crossing an intersection to minimize conflicts with turning vehicles and improve pedestrian visibility.

### Median Barrier Fencing

R3 | 25%

Crossings, Pedestrian Safety

Pedestrian median barriers restrict pedestrians from crossing the median at locations where nearby crossings are available and midblock crossings may have poor sight lines or insufficient safety enhancements for the conditions.

### Narrow Lanes

Speed

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 collision with bicyclists, pedestrians, and other drivers.

### New Traffic Signal

NS3 | 25%

Signals/Signage

New traffic signals help organize travel of all modes at an intersection, limiting interactions between vehicles, pedestrians, and bicyclists with conflicting movements. New signals can have a traffic calming effect on long, high-speed straightaways.

### Pedestrian Refuge Island

S12/NS16 | 25-45%

Crossings, Pedestrian Safety, Speed, Visibility

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.

R36 | 35%

Caltrans Local Road Safety Manual ID

Crash Reduction Factor

Safety Issue Categories

# FLORIN ROAD IMPROVEMENTS

## Pedestrian Scale Lighting

S1/NS1/R1 | 35-40%

Crossings, Pedestrian Safety, Visibility

Appropriate quality and placement of lighting can enhance an environment as well as increase comfort and safety. Pedestrian-scale lighting is lower in height than standard streetlighting and is spaced closer together.

## Prohibit Turn During Pedestrian Phase

Bike Safety, Crossings, Pedestrian Safety, Signals/Signage

Restricts left or right turns during the pedestrian crossing phase at locations where a turning vehicle may conflict with pedestrians in the crosswalk. This restriction may be displayed with a blank-out sign.

## Protected Left Turns

S6/S17 | 30-55%

Signals/Signage

Protected left turns provide an exclusive phase for left-turning vehicles to enter an intersection separate from conflicting vehicle or pedestrian movements.

## Raised Median

S13/NS12/R9 | 25-45%

Crossings, Pedestrian Safety, Speed

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.

## Separated/Buffered Bikeway

R36 | 35%

Bike Safety

Wide sidewalks can provide a more comfortable space for pedestrians. They are particularly helpful at important for locations with high volumes of pedestrians, and for providing space to accommodate people in wheelchairs.

## Slow Green Wave

Signals/Signage, Speed

A series of traffic signals coordinated to allow for uninterrupted bicycle traffic flow or slower vehicle travel speeds through several intersections along a corridor. Coordinating signals for a slower travel speed gives bicyclists more time to cross safely and encourages drivers to travel at slower speeds.

## Straighten Crosswalk

Crossings, Pedestrian Safety, Visibility

Straightening crosswalks improves sight lines, making pedestrians more visible to oncoming drivers, and may shorten the crossing distance, reducing the length of time required for pedestrians to cross an intersection.

## Widen Sidewalk

Pedestrian Safety

Wide sidewalks can provide a more comfortable space for pedestrians. They are particularly helpful at important for locations with high volumes of pedestrians, and for providing space to accommodate people in wheelchairs.

R36 — Caltrans Local Road Safety Manual ID
35% — Crash Reduction Factor
Safety Issue Categories

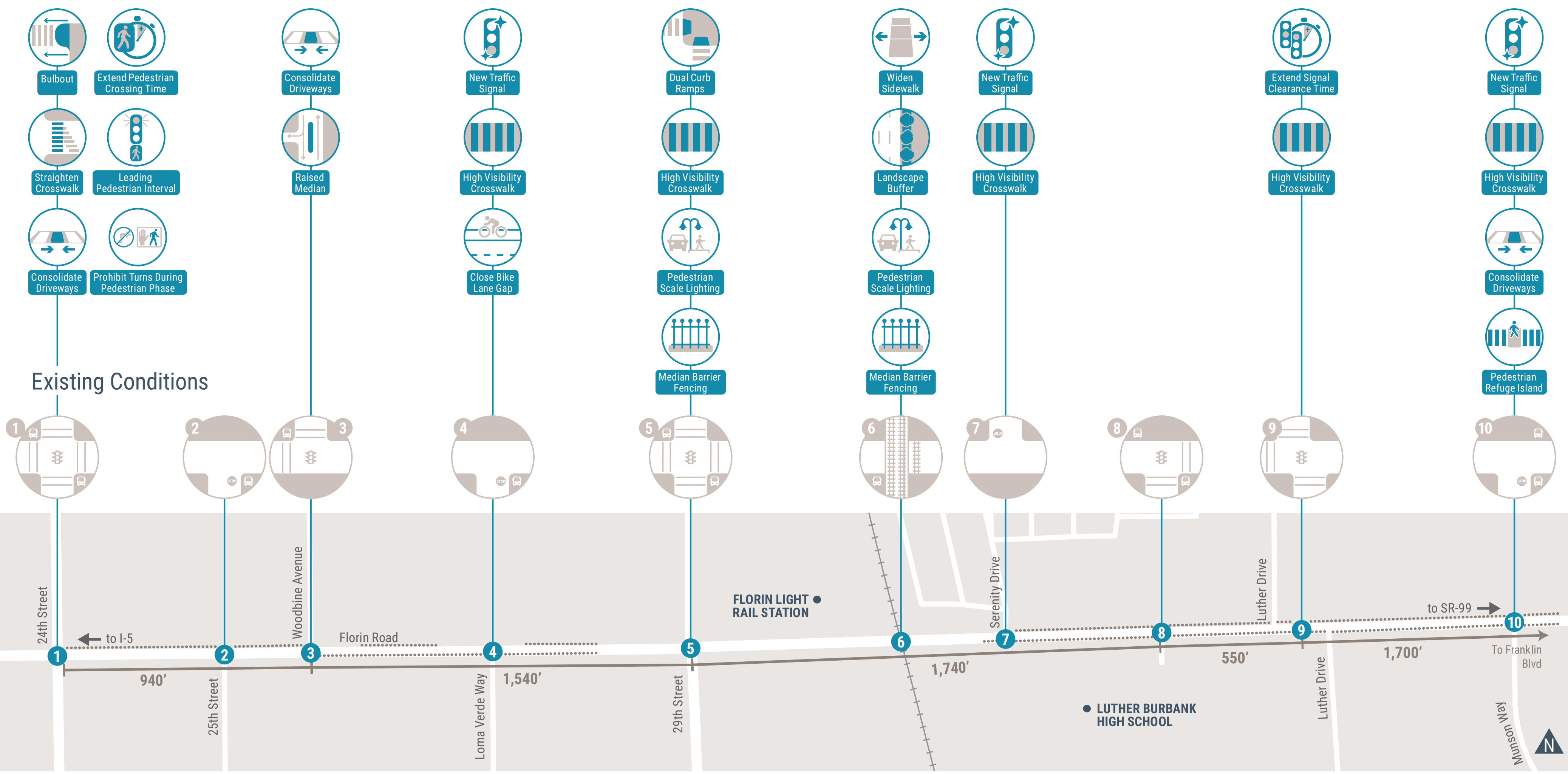
# FLORIN ROAD RECOMMENDATIONS

SPEED LIMIT 40

XXX Distance Between Crosswalks

On-Street Bicycle Lane

## Location-Specific Recommendations



# MARYSVILLE BOULEVARD CORRIDOR-WIDE RECOMMENDATIONS

SPEED LIMIT 35

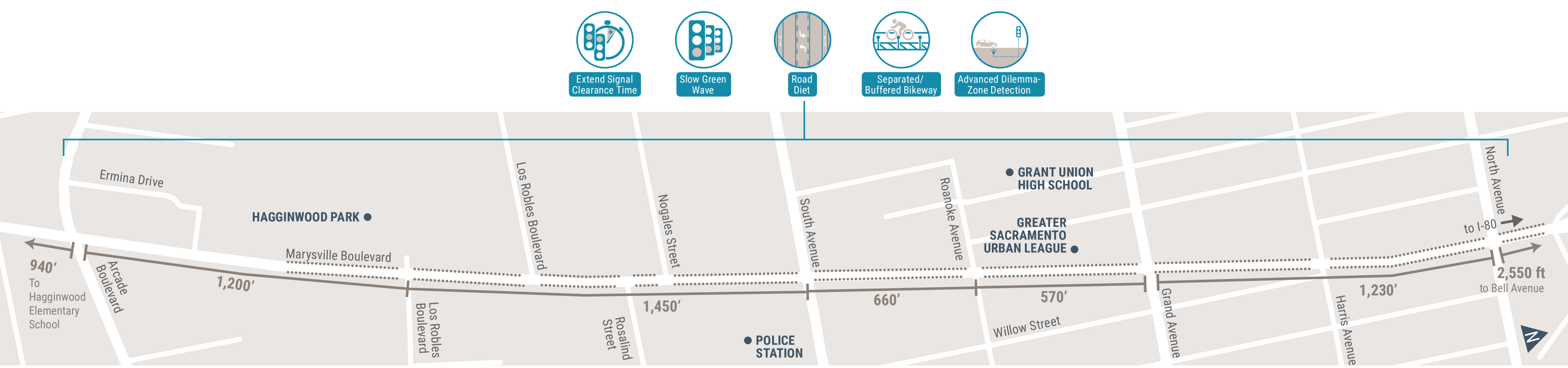
XXX Distance Between Crosswalks
On-Street Bicycle Lane

What You See Today

What's Proposed



## Corridor-Wide Recommendations



# MARYSVILLE BOULEVARD IMPROVEMENTS

### Advanced Dilemma-Zone Detection

S4 | 40%

Signals/Signage

Advanced dilemma-zone detection enhances safety at signalized intersections by modifying traffic control signal timing on the fly to reduce the number of drivers that may have difficulty deciding whether to stop or proceed during a yellow phase. This may reduce rear-end crashes associated with unsafe stopping and angle crashes due to red light running.

### Advance Stop Bar

S21 | 15%

Crossing, Pedestrian Safety

A stop bar placed ahead of the crosswalk at stop signs and signals reduces instances of vehicles encroaching on the crosswalk.

### Class II Bicycle Lane

R36 | 35%

Bike Safety

Five to seven foot wide designated lanes for bicyclist adjacent to vehicle travel lanes, delineated with pavement markings.

### Close Bike Lane Gap

R36 | 35%

Bike Safety

Closing gaps between bicycle lanes increases the amount of dedicated facilities bicyclists can use, reducing mixing of bicyclists and drivers and increasing network connectivity and visibility of bicyclists in the roadway.

### Co-Locate Bus Stops and Pedestrian Crossings

Crossing, Pedestrian Safety

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

### Consolidate Driveways

Bike Safety, Pedestrian Safety, Visibility

Reducing the number of driveway entrances/exits through consolidation limits the exposure of bicyclists, pedestrians, and drivers to vehicles entering or exiting driveways, reducing conflicts.

### Countdown Pedestrian Signal Heads

S19 | 25%

Crossings, Pedestrian Safety, Signals/Signage

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 Bike Lane to Intersection

Bike Safety

In locations where a bike lane is dropped due to the addition of a right turn pocket, the intersection approach may be restriped to allow for bicyclists to move to the left side of right-turning vehicles ahead of reaching the intersection.

### Extend Pedestrian Crossing Time

S3 | 15%

Crossings, Pedestrian Safety

Increases time for pedestrian walk phases, and can better accommodate vulnerable populations such as children and the elderly.

### Extend Signal Clearance Time

S3 | 15%

Signals/Signage

Extending yellow and all red time allows drivers and bicyclists to safely cross through a signalized intersection before conflicting traffic movements are permitted to enter the intersection.

### Full Pedestrian Signal

PED XING

Crossings, Pedestrian Safety, Signals/Signage

Full pedestrian signals are full traffic signals, with red, amber and green indicators, that may be installed at mid-block locations. These signals provide a protected pedestrian crossing phase when the pedestrian phase is called, but otherwise rest in green for oncoming vehicles.

### High Visibility Crosswalk

NS6/NS17/NS18 | 25-35%

Crossings, Pedestrian Safety, Visibility

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.

### Leading Pedestrian Interval

59%

Crossings, Pedestrian Safety, Visibility

Traffic signals timed to allow pedestrians a short head start in crossing an intersection to minimize conflicts with turning vehicles and improve pedestrian visibility.

### Narrow Lanes

Speed

A reduction in lane width, in 11 feet, produces a traffic calming effect by encouraging drivers to travel at slower speeds, lowering the risk of collision with bicyclists, pedestrians, and other drivers.

### New Traffic Signal

NS3 | 25%

Signals/Signage

New traffic signals help organize travel of all modes at an intersection, limiting interactions between vehicles, pedestrians, and bicyclists with conflicting movements. New signals can have a traffic calming effect on long, high-speed straightaways.

R36 — Caltrans Local Road Safety Manual ID

35% — Crash Reduction Factor

Safety Issue Categories

# MARYSVILLE BOULEVARD IMPROVEMENTS

R36 | 35%

### Parking Prohibition

30%

Bike Safety, Crossings, Pedestrian Safety, Signals/Signage

By restricting parking at curbs in front of intersection crosswalks, sight lines are cleared between pedestrian crossings and oncoming drivers, reducing the risk of collision (also called "daylighting). Parking can also be restricted in locations with on-street bicycle facilities to minimize dooring collisions.

### Prohibit Turns During Pedestrian Phase

Bike Safety, Crossings, Pedestrian Safety, Signals/Signage

Restricts left or right turns during the pedestrian crossing phase at locations where a turning vehicle may conflict with pedestrians in the crosswalk. This restriction may be displayed with a blank-out sign.

### Protected Left Turns

S6/S17 | 30-55%

Signals/Signage

Protected left turns provide an exclusive phase for left-turning vehicles to enter an intersection separate from conflicting vehicle or pedestrian movements.

### Raised Median

S13/NS12/R9 | 25-45%

Crossings, Pedestrian Safety, Speed

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.

### Red Light Camera

Signals/Signage

Red light cameras can be used for automated enforcement to issue citations to drivers running red lights at signalized intersections, and may discourage this behavior.

### Road Diet

R15 | 30%

Speed, Pedestrian Safety, Bike Safety, Crossings

Road diets generally reassign space in the roadway from vehicle travel lanes to create room for bicycle 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 collisions.

### Separated/Buffered Bikeway

R36 | 35%

Bike Safety

Designated bicycle lanes, separated from vehicle traffic by a physical barrier, usually bollards, landscaping, or parked cars. These facilities can increase safety by decreasing opportunities for collisions with over-taking vehicles, and reducing the risk of dooring.

### Slow Green Wave

Signals/Signage, Speed

A series of traffic signals coordinated to allow for uninterrupted bicycle traffic flow or slower vehicle travel speeds through several intersections along a corridor. Coordinating signals for a slower travel speed gives bicyclists more time to cross safely and encourages drivers to travel at slower speeds.

### Split Signal Phase

Signals/Signage

Opposing legs of an intersection each receive their own phase

### Straighten Crosswalk

Crossings, Pedestrian Safety, Visibility

Straightening crosswalks improves sight lines, making pedestrians more visible to oncoming drivers, and may shorten the crossing distance, reducing the length of time required for pedestrians to cross an intersection.

R36 — Caltrans Local Road Safety Manual ID
35% — Crash Reduction Factor
Safety Issue Categories

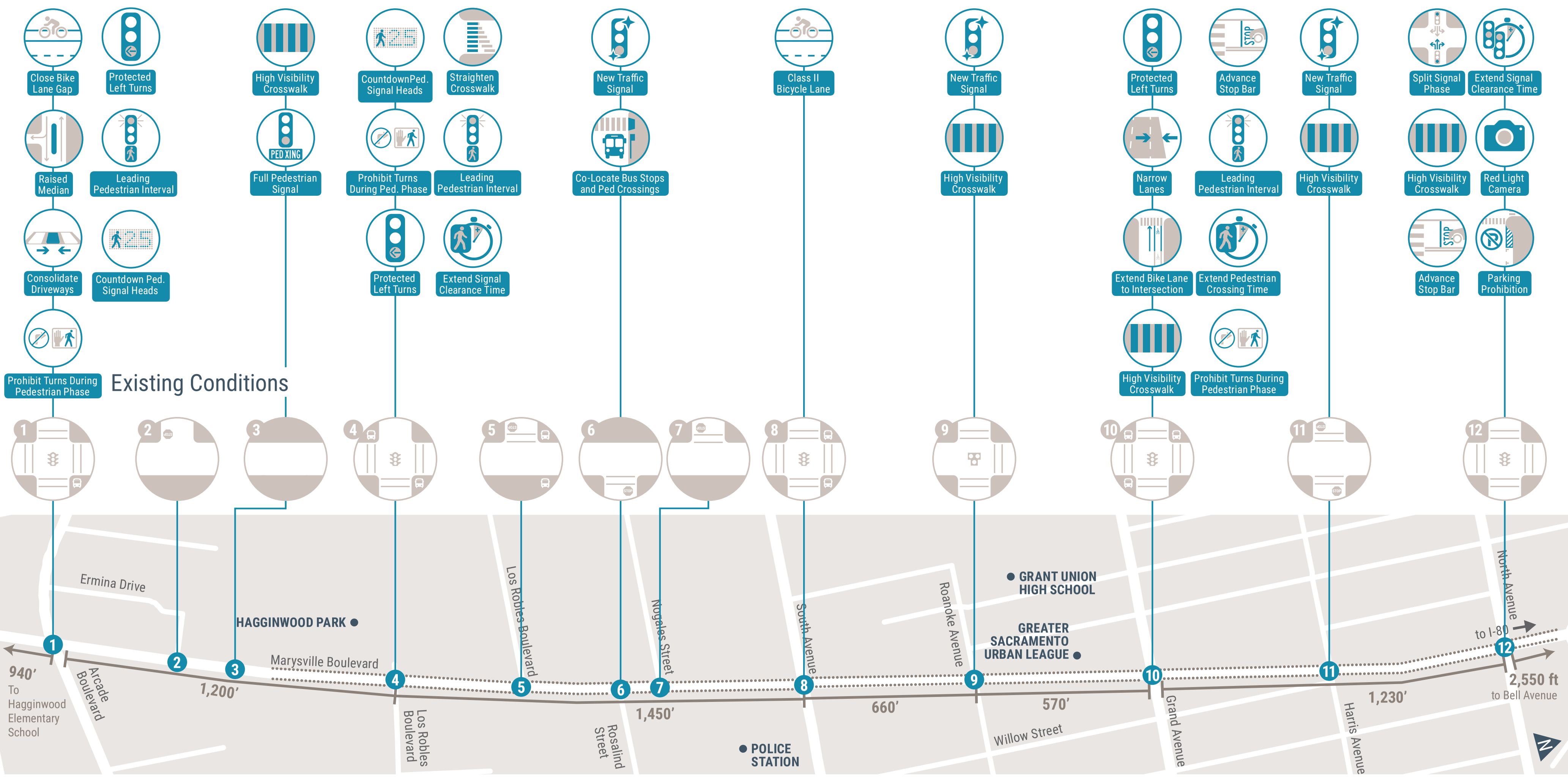
# MARYSVILLE BOULEVARD RECOMMENDATIONS

SPEED LIMIT 35

XXX Distance Between Crosswalks

On-Street Bicycle Lane

## Location-Specific Recommendations



# EL CAMINO AVENUE
# CORRIDOR-WIDE RECOMMENDATIONS


What You See Today

Source: StreetMix (CC BY-SA 4.0, https://creativecommons.org/licenses/by-sa/4.0/)

What's Proposed

## Corridor-Wide Recommendations

# EL CAMINO AVENUE IMPROVEMENTS

S4 | 40%

### Advanced Dilemma-Zone Detection

Signals/Signage

Advanced dilemma-zone detection enhances safety at signalized intersections by modifying traffic control signal timing on the fly to reduce the number of drivers that may have difficulty deciding whether to stop or proceed during a yellow phase. This may reduce rear-end crashes associated with unsafe stopping and angle crashes due to red light running.

### Bicycle Conflict Zone Markings

Bike Safety

Green pavement within a bicycle lane to increase visibility of bicyclists and to reinforce bicycle priority. The green pavement is used as a spot treatment in conflict areas such as driveways.

### Bulbout

Crossings, Pedestrian Safety, Speed, Visibility

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.

R36 | 35%

### Close Bike Lane Gap

Bike Safety

Closing gaps between bicycle lanes increases the amount of dedicated facilities bicyclists can use, reducing mixing of bicyclists and drivers and increasing network connectivity and visibility of bicyclists in the roadway.

R37 | 80%

### Close Sidewalk Gap

Pedestrian Safety

Providing continuous sidewalks for pedestrians provides a separated facility for people to walk along the roadway, and can help minimize collisions with pedestrians walking in the road.

### Consolidate Driveways

Bike Safety, Pedestrian Safety, Visibility

Reducing the number of driveway entrances/exits through consolidation limits the exposure of bicyclists, pedestrians, and drivers to vehicles entering or exiting driveways, reducing conflicts.

### Dual Curb Ramps

Pedestrian Safety

Dual curb ramps improve ADA accessibility at all intersection approaches so that pedestrians with mobility challenges, or those pushing carts or strollers, can safely enter and exit all crosswalks.

S3 | 15%

### Extend Signal Clearance Time

Signals/Signage

Extending yellow and all red time allows drivers and bicyclists to safely cross through a signalized intersection before conflicting traffic movements are permitted to enter the intersection.

NS6/NS17/NS18 | 25-35%

### High Visibility Crosswalk

Crossings, Pedestrian Safety, Visibility

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.

NS3 | 25%

### New Traffic Signal

Signals/Signage

New traffic signals help organize travel of all modes at an intersection, limiting interactions between vehicles, pedestrians, and bicyclists with conflicting movements. New signals can have a traffic calming effect on long, high-speed straightaways.

### Partial Closure

Bike Safety, Crossings, Pedestrian Safety

Partial closures, using a physical barrier across one direction of traffic at an intersection allow full bicycle and pedestrian passage while restricting vehicle access in one direction. This strategy can be used to minimize conflict points at complicated intersections.

NS19 | 55%

### Pedestrian Hybrid Beacon

Crossings, Pedestrian Safety, Signals/Signage, Speed, Visibility

Pedestrian-activated beacon used at mid-block crosswalks to notify oncoming motorists to stop with a series of red and yellow lights.

### Pedestrian Recall Signal Timing

Pedestrian Safety, Signals/Signage

Signals can be put in "recall" for key time periods of the day such as peak business hours or school drop-off/pick-up times. The "WALK" signal would be displayed every signal cycle without prompting by a pedestrian push button.

S1/NS1/R1 | 35-40%

### Pedestrian Scale Lighting

Crossings, Pedestrian Safety, Visibility

Appropriate quality and placement of lighting can enhance an environment as well as increase comfort and safety. Pedestrian-scale lighting is lower in height than standard streetlighting and is spaced closer together.

35%

### Pedestrian Scramble

Crossings, Pedestrian Safety, Signals/Signage

Restricts vehicular movements to provide an exclusive signal phase allowing pedestrians to cross in all directions, including diagonally.

R36 | 35% — Caltrans Local Road Safety Manual ID; Crash Reduction Factor

Safety Issue Categories

# EL CAMINO AVENUE IMPROVEMENTS

## Prohibit Left Turn

10%

Bike Safety, Crossings, Pedstrian Safety, Signals/Signage

Bans left turns at locations where a turning vehicle may conflict with pedestrians in the crosswalk or where opposing traffic volume is high. Reduces pedestrian interaction with vehicles when crossing.

## Prohibit Turns During Pedestrian Phase

Crossings, Pedestrian Safety, Signals/Signage

Restricts left or right turns during the pedestrian crossing phase at locations where a turning vehicle may conflict with pedestrians in the crosswalk. This restriction may be displayed with a blank-out sign.

## Raised Median

S13/NS12/R9 | 25% - 45%

Crossings, Pedestrian Safety, Speed

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.

## Realign Intersection to 90 Degrees

Crossings, Pedestrian Safety, Speed, Visibility

By eliminating acute or obtuse angles between intersection roadways, intersection sight distance may be improved, allowing drivers to see pedestrians more easily. Right-angle intersections can also help to slow down turning vehicles.

## Road Closure

Bike Safety, Crossings, Pedestrian Safety

Road closures, using a physical barrier, allow full bicycle and pedestrian passage while restricting vehicle access. This strategy can be used to minimize conflict points at complicated intersections or to minimize conflicting movements due to turning vehicles.

## Roundabout

S18 | 35-67%

Bike Safety, Pedestrian Safety, Signals/Signage

Roundabouts are large circular islands, placed in the middle of an intersection, which direct flow in a continuous circular direction around the intersection. Roundabouts can reduce the number of conflict points, compared to an uncontrolled intersection, and decrease vehicle speeds due to intersection geometry. Converting signalized intersections to roundabouts can be especially effective at complex intersections or intersections with high left-turn volumes.

## Shorten Signal Cycle Length

S3 | 15%

Signals/Signage

Reducing the cycle length at intersections may reduce the delay experienced by vehicles, bicyclists, and pedestrians. When delay is significant, road users are more inclined to ignore signal indications.

## Slow Green Wave

Signals/Signage, Speed

A series of traffic signals coordinated to allow for uninterrupted bicycle traffic flow or slower vehicle travel speeds through several intersections along a corridor. Coordinating signals for a slower travel speed gives bicyclists more time to cross safely and encourages drivers to travel at slower speeds.

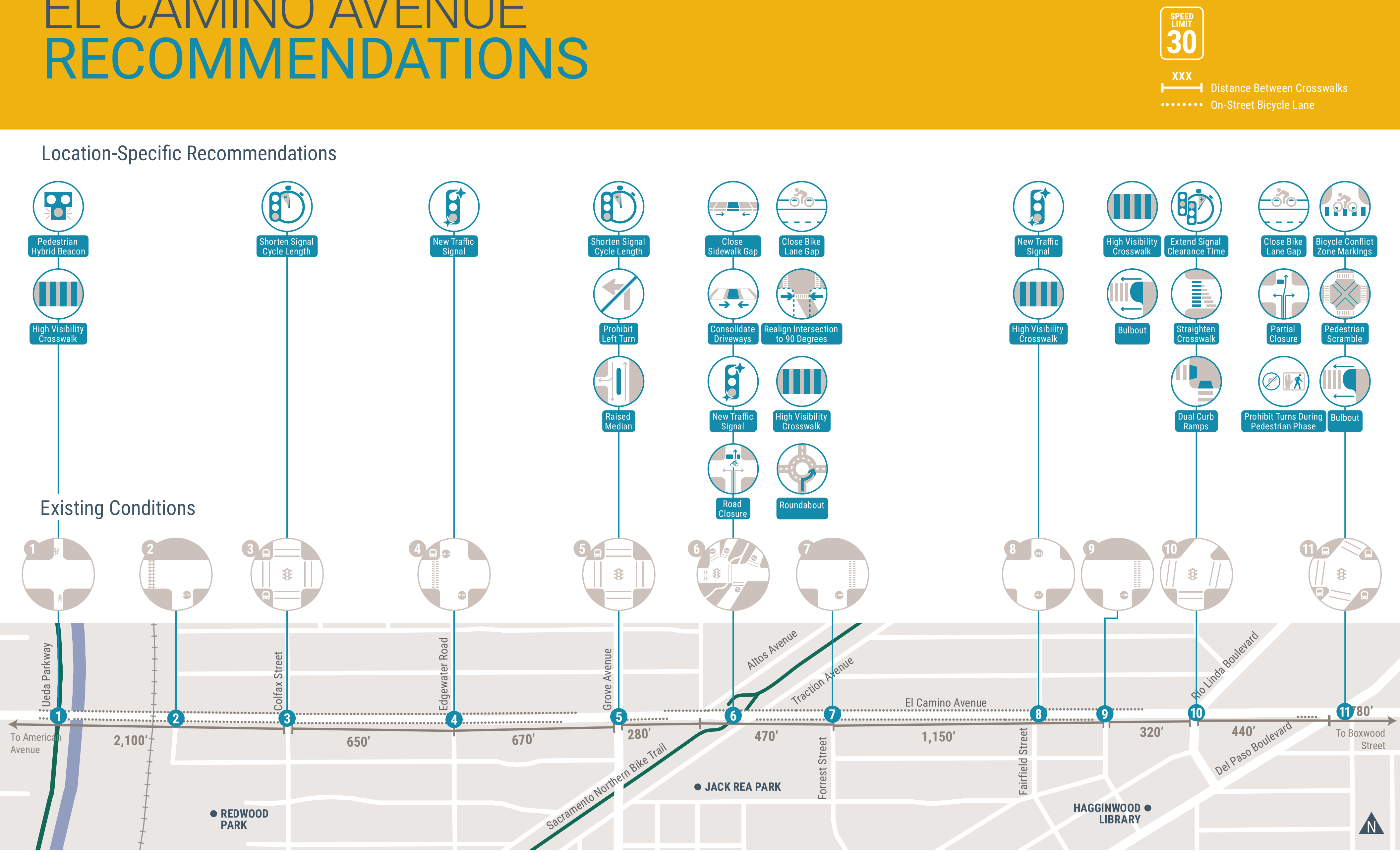
## Straighten Crosswalk

Crossings, Pedestrian Safety, Visibility

Straightening crosswalks improves sight lines, making pedestrians more visible to oncoming drivers, and may shorten the crossing distance, reducing the length of time required for pedestrians to cross an intersection.

R36 — Caltrans Local Road Safety Manual ID
35% — Crash Reduction Factor
Safety Issue Categories

# EL CAMINO AVENUE RECOMMENDATIONS



# LET'S MOVE!

## BUILDING COMMUNITY THROUGH MOVEMENT

City of SACRAMENTO


MCCLATCHY PARK
3500 5TH AVE

## JOIN US

**LEARN ABOUT TRANSPORTATION PROJECTS IN YOUR NEIGHBORHOOD & CELEBRATE MOVEMENT IN ALL FORMS**

| Thursday | May 30 | 4:30–6:30pm |
|---|---|---|

**ENJOY MUSIC, SNACKS, AND FAMILY-FRIENDLY ACTIVITIES WHILE WE EXPLORE HOW TO IMPROVE OUR STREETS, MINDS, AND BODIES.**

**MOVE! your mind and talk to us about transportation projects happening in your neighborhood:**

- Envision Broadway in Oak Park Complete Streets Plan
- Vision Zero Top Five Study (Broadway / Stockton corridor)
- Electric Vehicle Blueprint Project

&

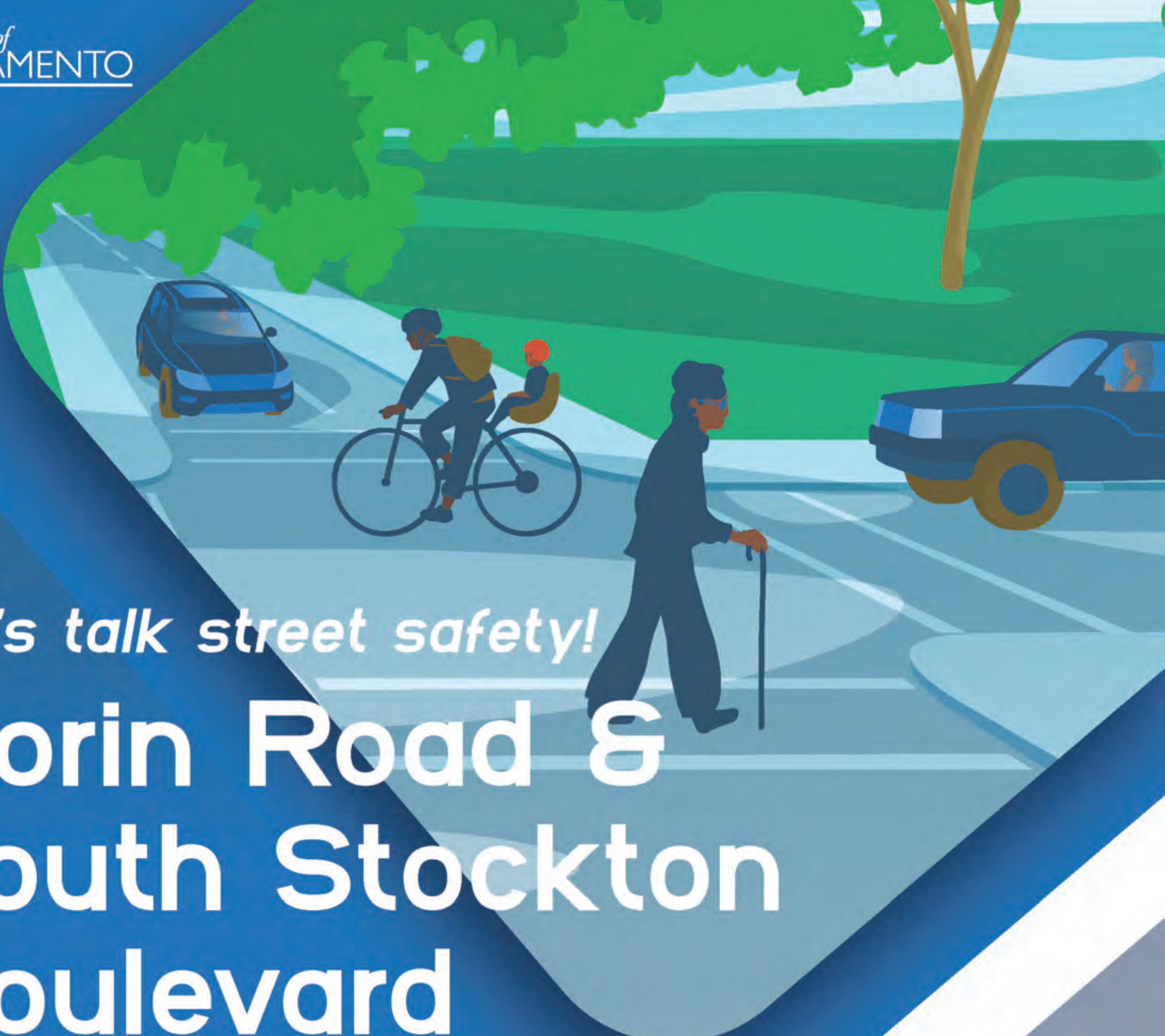
**MOVE! your body by participating in:**

- Kids' obstacle course & games
- Group painting
- Guided tai chi *with Classy Hippie Tea Company*
- Flow movement / yoga *with Classy Hippie Tea Company*

Snacks & light refreshments to be provided by Oak Park Neighborhood Association

RSVP online at **letsmovesac.eventbrite.com** (RSVP's are requested, not required)

City of SACRAMENTO



*Let's talk street safety!*

# Florin Road & South Stockton Boulevard

Help the City identify transportation improvements for your neighborhood.

## WEDS. JUNE 5

### 5:00 - 6:30 PM

**Luther Burbank High School**
**3500 Florin Road**

Join us to learn about and provide your input on proposed improvements to make it safer to walk, bike, and drive on Florin Road and South Stockton Boulevard. The improvements are a part of the City's **Vision Zero Top Five Study**.

311 Español | 中文 | Tagalog | Tiếng Việt | Hmoob | Русский

TOP 5 CORRIDORS
Vision ZERØ
visionzerosac.org

RSVP online at
**visionzerosac1.eventbrite.com**
*RSVPs are requested, but not required*

City of SACRAMENTO

*Let's talk street safety!*

# El Camino Avenue & Marysville Boulevard

Learn about potential street improvements coming to your neighborhood!

## THURS. JUNE 6

## 5:00 - 6:30 PM

**Greater Sacramento Urban League**
**3725 Marysville Boulevard**

Join us to learn about and provide your input on proposed improvements to make it safer to walk, bike, and drive on El Camino Avenue and Marysville Boulevard. The improvements are a part of the City's **Vision Zero Top Five Study**.

311 Español | 中文 | Tagalog | Tiếng Việt | Hmoob | Русский

TOP 5 CORRIDORS
Vision ZERO
visionzerosac.org

RSVP online at
**visionzerosac2.eventbrite.com**
*RSVPs are requested, but not required*

# Appendix B
## Technical Calculations

El Camino Avenue

# Vision Zero Top 5 Corridor Recommendations Results Summary – El Camino Avenue

## Vision Zero Top 5 Corridor Recommendations Implemented

- Signal coordination
- Shortened cycle length at El Camino Avenue/Colfax Street and El Camino Avenue/Grove Avenue
- New traffic signals at El Camino Avenue/Edgewater Road, El Camino Avenue/Altos Avenue/Traction Avenue, and El Camino Avenue/Fairfield Street
- Option 1 project at El Camino Avenue/Altos Avenue/Traction Avenue: close south leg of Traction Avenue, north leg of Traction Avenue, south leg of Altos Avenue, and restrict access to/from Hawthorne Avenue to right-in/right-out. Square-up north leg of Altos Avenue and install traffic signal. (Option 2 results included on next page)
- Extended clearance time at El Camino Avenue/Rio Linda Boulevard
- Pedestrian scramble phase at El Camino Avenue/Del Paso Boulevard
- Road diet on Del Paso Boulevard (extension of Marysville Boulevard road diet)

## Speed & Travel Time Results

| Travel Times (min) | Dir | Existing Conditions | | VZ Recommendations | | % Change | |
|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour |
| El Camino Ave - Colfax St to Del Paso Blvd | EB | 3.0 | 3.5 | 3.8 | 4.1 | 26% | 14% |
| | WB | 3.2 | 4.2 | 4.1 | 4.6 | 27% | 22% |
| **Speed (mph)** | **Dir** | **Existing Conditions** | | **VZ Recommendations** | | **% Change** | |
| | | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** |
| El Camino Ave - Colfax St to Del Paso Blvd | EB | 21 | 18 | 16 | 15 | -27% | -17% |
| | WB | 21 | 16 | 19 | 14 | -10% | -13% |

## Delay & LOS Results

| Intersection | Existing Conditions | | | VZ Recommendations | | |
|---|---|---|---|---|---|---|
| | Control[1] | AM Peak Hour | PM Peak Hour | Control | AM Peak Hour | PM Peak Hour |
| Colfax Street/El Camino Avenue | Signal | A / 4 | A / 7 | Signal | A / 5 | A / 6 |
| Edgewater Road/El Camino Avenue | SSSC | *Not Analyzed* | *Not Analyzed* | Signal | A / 4 | A / 5 |
| Grove Avenue/El Camino Avenue | Signal | C / 24 | E / 57 | Signal | D / 41 | C / 35 |
| Hawthorne Avenue/El Camino Avenue | SSSC | A (E) / 7 (40) | D (F) / 28 (77) | SSSC | A (A) / 3 (6) | A (D) / 6 (31) |
| Altos Avenue/El Camino Avenue | | | | Signal | A / 7 | B / 15 |
| Traction Avenue/El Camino Avenue | SSSC | *Not Analyzed* | *Not Analyzed* | | | |
| Forrest Street/El Camino Avenue | SSSC | A (A) / 1 (5) | A (A) / 2 (10) | SSSC | A (A) / 2 (6) | A (C) / 3 (18) |
| Fairfield Street/El Camino Avenue | SSSC | *Not Analyzed* | *Not Analyzed* | Signal | A / 3 | A / 10 |
| Cantalier Street/El Camino Avenue | SSSC | A (A) / 1 (4) | A (A) / 2 (10) | SSSC | A (A) / 2 (4) | A (C) / 3 (23) |
| Rio Linda Boulevard/El Camino Avenue | Signal | A / 7 | B / 11 | Signal | B / 12 | B / 12 |
| Del Paso Boulevard/Beaumont Street/El Camino Avenue | Signal | C / 26 | D / 37 | Signal | D / 45 | E / 78 |

## Vision Zero Top 5 Corridor Recommendations Results Summary – El Camino Avenue

### Peak Hour Maximum Queue Results – El Camino Avenue/Del Paso Boulevard/Beaumont Street

| Approach | Lane | Storage (ft) | Peak Hour Maximum Queue (ft) | |
|---|---|---|---|---|
| | | | AM Peak Hour | PM Peak Hour |
| NB | Through | 1,350 | 125 | 425 |
| | Through/Right | 1,350 | 125 | 450 |
| SB | Left | 175 | **200** | **200** |
| | Through | 1,275 | 275 | 250 |
| | Right | 200 | 125 | 100 |
| EB | Left | 300 | **325** | 300 |
| | Through | 450 | **500** | **475** |
| | Right | 125 | **175** | 75 |
| WB | Left | 150 | **175** | **325** |
| | Through/Right | 575 | 325 | **950** |

### Option 2 Results – El Camino Avenue/Altos Avenue/Traction Avenue

| Intersection | Existing Conditions | | | VZ Recommendations – Option 2 | | |
|---|---|---|---|---|---|---|
| | Control[1] | AM Peak Hour | PM Peak Hour | Control | AM Peak Hour | PM Peak Hour |
| Hawthorne Avenue/El Camino Avenue | SSSC | A (E) / 7 (40) | D (F) / 28 (77) | SSSC | A (A) / 3 (6) | A / 10 |
| Altos Avenue/El Camino Avenue | | | | Signal | B / 17 | D / 38 |
| Traction Avenue/El Camino Avenue | SSSC | *Not Analyzed* | *Not Analyzed* | | | |

## Arterial Level of Service: EB El Camino Av

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Colfax St | 12 | 3.2 | 26.4 | 0.2 | 27 |
| Edgewater Rd | 119 | 1.3 | 17.0 | 0.1 | 28 |
| Grove Av | 13 | 18.8 | 34.5 | 0.1 | 14 |
| Altos Av | 14 | 4.3 | 10.7 | 0.1 | 22 |
| PED CROSSING | 300 | 1.3 | 5.5 | 0.0 | 13 |
| Traction Av | 120 | 0.6 | 2.6 | 0.0 | 37 |
| Forrest St | 15 | 1.0 | 8.9 | 0.1 | 24 |
| Fairfield St | 121 | 1.3 | 20.1 | 0.2 | 29 |
| Cantalier St | 16 | 0.8 | 7.7 | 0.1 | 28 |
| Rio Linda Bl | 17 | 4.1 | 12.6 | 0.1 | 20 |
| | 117 | 3.8 | 11.8 | 0.1 | 20 |
| Del Paso Bl | 18 | 21.1 | 24.5 | 0.0 | 7 |
| Total | | 61.6 | 182.2 | 1.0 | 21 |

## Arterial Level of Service: WB El Camino Av

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Del Paso Bl | 18 | 22.4 | 51.6 | 0.3 | 22 |
| | 117 | 1.8 | 9.0 | 0.0 | 19 |
| Rio Linda Bl | 17 | 5.2 | 12.3 | 0.1 | 19 |
| Cantalier St | 16 | 1.4 | 10.7 | 0.1 | 24 |
| Fairfield St | 121 | 0.4 | 7.3 | 0.1 | 29 |
| Forrest St | 15 | 1.5 | 20.5 | 0.2 | 28 |
| Traction Av | 120 | 1.9 | 7.9 | 0.1 | 27 |
| PED CROSSING | 300 | 1.7 | 5.7 | 0.0 | 17 |
| Altos Av | 14 | 0.9 | 2.4 | 0.0 | 29 |
| Grove Av | 13 | 20.9 | 29.5 | 0.1 | 8 |
| Edgewater Rd | 119 | 2.2 | 18.4 | 0.1 | 27 |
| Colfax St | 12 | 3.5 | 18.9 | 0.1 | 25 |
| Total | | 63.8 | 194.1 | 1.2 | 21 |

## Arterial Level of Service: EB El Camino Av

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Colfax St | 12 | 6.6 | 29.9 | 0.2 | 24 |
| Edgewater Rd | 119 | 2.1 | 17.6 | 0.1 | 27 |
| Grove Av | 13 | 35.9 | 50.5 | 0.1 | 10 |
| Altos Av | 14 | 6.8 | 13.2 | 0.1 | 18 |
| PED CROSSING | 300 | 2.1 | 6.4 | 0.0 | 11 |
| Traction Av | 120 | 0.3 | 2.0 | 0.0 | 49 |
| Forrest St | 15 | 1.0 | 8.8 | 0.1 | 24 |
| Fairfield St | 121 | 1.6 | 20.8 | 0.2 | 28 |
| Cantalier St | 16 | 0.9 | 7.8 | 0.1 | 27 |
| Rio Linda Blvd | 17 | 6.8 | 15.3 | 0.1 | 16 |
| | 117 | 6.3 | 14.4 | 0.1 | 16 |
| Del Paso Blvd | 18 | 21.9 | 25.3 | 0.0 | 7 |
| Total | | 92.2 | 211.9 | 1.0 | 18 |

## Arterial Level of Service: WB El Camino Av

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Del Paso Blvd | 18 | 44.4 | 73.5 | 0.3 | 16 |
| | 117 | 3.6 | 10.8 | 0.0 | 16 |
| Rio Linda Blvd | 17 | 8.6 | 15.6 | 0.1 | 15 |
| Cantalier St | 16 | 2.2 | 11.4 | 0.1 | 22 |
| Fairfield St | 121 | 0.8 | 7.6 | 0.1 | 28 |
| Forrest St | 15 | 7.0 | 23.3 | 0.2 | 25 |
| Traction Av | 120 | 11.9 | 16.9 | 0.1 | 12 |
| PED CROSSING | 300 | 8.3 | 11.9 | 0.0 | 8 |
| Altos Av | 14 | 2.5 | 3.6 | 0.0 | 20 |
| Grove Av | 13 | 30.6 | 37.8 | 0.1 | 6 |
| Edgewater Rd | 119 | 2.9 | 19.0 | 0.1 | 26 |
| Colfax St | 12 | 6.1 | 21.7 | 0.1 | 22 |
| Total | | 128.9 | 253.3 | 1.2 | 16 |

## Arterial Level of Service: EB El Camino Av

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 154 | 5.0 | 14.6 | 0.1 | 20 |
| Colfax St | 12 | 4.4 | 18.5 | 0.1 | 23 |
| Edgewater Rd | 119 | 3.7 | 19.2 | 0.1 | 25 |
| Grove Av | 13 | 23.8 | 39.7 | 0.1 | 12 |
| Hawthorne Av | 156 | 3.1 | 10.6 | 0.1 | 21 |
| Altos Av | 14 | 2.2 | 5.1 | 0.0 | 17 |
| Forrest St | 15 | 1.3 | 11.2 | 0.1 | 27 |
| Fairfield St | 121 | 6.0 | 25.3 | 0.2 | 23 |
| Cantalier St | 16 | 1.7 | 8.6 | 0.1 | 25 |
| Rio Linda Bl | 17 | 9.3 | 17.7 | 0.1 | 14 |
| Del Paso Bl | 18 | 47.5 | 59.4 | 0.1 | 7 |
| Total | | 108.0 | 229.8 | 1.0 | 16 |

## Arterial Level of Service: WB El Camino Av

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Del Paso Bl | 18 | 28.3 | 58.2 | 0.3 | 20 |
| Rio Linda Bl | 17 | 8.2 | 21.5 | 0.1 | 19 |
| Cantalier St | 16 | 2.1 | 11.2 | 0.1 | 22 |
| Fairfield St | 121 | 4.7 | 11.5 | 0.1 | 18 |
| Forrest St | 15 | 2.4 | 21.2 | 0.2 | 27 |
| Altos Av | 14 | 7.3 | 17.1 | 0.1 | 18 |
| Hawthorne Av | 156 | 3.6 | 6.5 | 0.0 | 13 |
| Grove Av | 13 | 32.8 | 40.0 | 0.1 | 6 |
| Edgewater Rd | 119 | 3.8 | 20.0 | 0.1 | 24 |
| Colfax St | 12 | 4.2 | 19.7 | 0.1 | 24 |
| | 154 | 5.4 | 19.7 | 0.1 | 22 |
| Total | | 102.8 | 246.7 | 1.3 | 19 |

## Arterial Level of Service: EB El Camino Av

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 154 | 3.9 | 13.5 | 0.1 | 22 |
| Colfax St | 12 | 5.3 | 19.3 | 0.1 | 22 |
| Edgewater Rd | 119 | 3.6 | 19.2 | 0.1 | 25 |
| Grove Av | 13 | 22.2 | 37.5 | 0.1 | 13 |
| Hawthorne Av | 156 | 7.0 | 14.5 | 0.1 | 15 |
| Altos Av | 14 | 5.1 | 8.1 | 0.0 | 10 |
| Forrest St | 15 | 1.8 | 11.7 | 0.1 | 26 |
| Fairfield St | 121 | 11.2 | 30.3 | 0.2 | 19 |
| Cantalier St | 16 | 1.7 | 8.5 | 0.1 | 25 |
| Rio Linda Blvd | 17 | 8.8 | 17.3 | 0.1 | 15 |
| Del Paso Blvd | 18 | 50.9 | 62.7 | 0.1 | 7 |
| Total | | 121.6 | 242.6 | 1.0 | 15 |

## Arterial Level of Service: WB El Camino Av

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Del Paso Blvd | 18 | 100.0 | 129.2 | 0.3 | 9 |
| Rio Linda Blvd | 17 | 5.4 | 19.1 | 0.1 | 21 |
| Cantalier St | 16 | 2.8 | 12.0 | 0.1 | 21 |
| Fairfield St | 121 | 5.3 | 11.9 | 0.1 | 18 |
| Forrest St | 15 | 4.3 | 23.7 | 0.2 | 24 |
| Altos Av | 14 | 16.1 | 25.9 | 0.1 | 12 |
| Hawthorne Av | 156 | 7.1 | 10.0 | 0.0 | 8 |
| Grove Av | 13 | 38.6 | 45.7 | 0.1 | 5 |
| Edgewater Rd | 119 | 5.6 | 22.0 | 0.1 | 22 |
| Colfax St | 12 | 3.5 | 19.0 | 0.1 | 25 |
| | 154 | 5.0 | 19.4 | 0.1 | 22 |
| Total | | 193.8 | 338.1 | 1.3 | 14 |

**Intersection 12** **Colfax St/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 21 | 21 | 102.3% | 35.7 | 5.9 | D |
| | Through | 8 | 7 | 81.9% | 30.0 | 22.6 | C |
| | Right Turn | 8 | 8 | 100.1% | 7.1 | 5.9 | A |
| | Subtotal | 37 | 36 | 97.4% | 29.1 | 6.6 | C |
| SB | Left Turn | 4 | 1 | 18.2% | 3.4 | 7.1 | A |
| | Through | 11 | 12 | 112.5% | 22.6 | 14.8 | C |
| | Right Turn | 16 | 17 | 106.9% | 6.8 | 3.4 | A |
| | Subtotal | 31 | 30 | 97.5% | 14.1 | 7.4 | B |
| EB | Left Turn | 17 | 17 | 100.6% | 7.2 | 3.3 | A |
| | Through | 442 | 471 | 106.6% | 4.3 | 1.1 | A |
| | Right Turn | 34 | 34 | 100.6% | 2.1 | 1.1 | A |
| | Subtotal | 493 | 523 | 106.0% | 4.3 | 1.1 | A |
| WB | Left Turn | 15 | 15 | 99.5% | 9.0 | 5.3 | A |
| | Through | 413 | 397 | 96.1% | 3.9 | 1.6 | A |
| | Right Turn | | | | | | |
| | Subtotal | 428 | 412 | 96.2% | 4.1 | 1.6 | A |
| Total | | 989 | 1,001 | 101.2% | 5.4 | 0.9 | A |

**Intersection 13** **Grove Av/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 23 | 24 | 106.0% | 72.9 | 4.8 | E |
| | Through | 110 | 121 | 110.2% | 50.2 | 4.9 | D |
| | Right Turn | 39 | 37 | 96.1% | 39.9 | 10.6 | D |
| | Subtotal | 172 | 183 | 106.4% | 50.9 | 5.0 | D |
| SB | Left Turn | 104 | 112 | 107.8% | 63.9 | 9.8 | E |
| | Through | 157 | 185 | 118.0% | 52.9 | 11.5 | D |
| | Right Turn | 59 | 60 | 102.4% | 38.9 | 15.4 | D |
| | Subtotal | 320 | 358 | 111.8% | 54.1 | 9.8 | D |
| EB | Left Turn | 44 | 43 | 97.6% | 90.2 | 12.1 | F |
| | Through | 375 | 378 | 100.8% | 23.2 | 3.2 | C |
| | Right Turn | 28 | 26 | 92.3% | 19.0 | 7.5 | B |
| | Subtotal | 447 | 447 | 99.9% | 29.3 | 3.4 | C |
| WB | Left Turn | 46 | 52 | 113.2% | 66.3 | 18.2 | E |
| | Through | 341 | 318 | 93.3% | 35.5 | 6.9 | D |
| | Right Turn | 36 | 36 | 100.1% | 32.9 | 7.4 | C |
| | Subtotal | 423 | 406 | 96.0% | 39.1 | 7.4 | D |
| Total | | 1,362 | 1,394 | 102.3% | 41.4 | 4.6 | D |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - El Camino Av**
**Vision Zero Top 5 Recommendations**
**AM Peak Hour**

**Intersection 14** **Altos Av-Traction Av/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| SB | Left Turn | 13 | 8 | 61.6% | 27.0 | 20.1 | C |
| | Through | | | | | | |
| | Right Turn | 22 | 28 | 127.4% | 12.3 | 7.8 | B |
| | Subtotal | 35 | 36 | 103.0% | 15.0 | 6.8 | B |
| EB | Left Turn | 24 | 20 | 84.9% | 8.2 | 5.9 | A |
| | Through | 494 | 497 | 100.6% | 4.8 | 2.7 | A |
| | Right Turn | | | | | | |
| | Subtotal | 518 | 517 | 99.9% | 5.0 | 2.9 | A |
| WB | Left Turn | | | | | | |
| | Through | 408 | 388 | 95.2% | 9.5 | 5.8 | A |
| | Right Turn | 12 | 12 | 97.1% | 7.7 | 12.7 | A |
| | Subtotal | 420 | 400 | 95.2% | 9.5 | 6.1 | A |
| Total | | 973 | 953 | 98.0% | 7.3 | 3.5 | A |

**Intersection 15** **Forrest St/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 0 | 18.2% | 1.2 | 3.8 | A |
| | Through | | | | | | |
| | Right Turn | 12 | 9 | 78.9% | 4.3 | 2.2 | A |
| | Subtotal | 14 | 10 | 70.2% | 4.5 | 2.2 | A |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 496 | 499 | 100.5% | 1.3 | 0.2 | A |
| | Right Turn | 11 | 9 | 86.0% | 0.7 | 0.6 | A |
| | Subtotal | 507 | 508 | 100.2% | 1.3 | 0.2 | A |
| WB | Left Turn | 9 | 7 | 76.8% | 5.5 | 3.5 | A |
| | Through | 418 | 406 | 97.2% | 2.2 | 0.9 | A |
| | Right Turn | | | | | | |
| | Subtotal | 427 | 413 | 96.8% | 2.3 | 0.9 | A |
| Total | | 948 | 931 | 98.2% | 1.8 | 0.5 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - El Camino Av**
**Vision Zero Top 5 Recommendations**
**AM Peak Hour**

**Intersection 16** **Cantalier St/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 1 | 109.2% | 3.9 | 7.6 | A |
| | Through | | | | | | |
| | Right Turn | 5 | 4 | 80.1% | 4.6 | 5.8 | A |
| | Subtotal | 6 | 5 | 84.9% | 6.6 | 5.8 | A |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 484 | 488 | 100.8% | 1.6 | 0.4 | A |
| | Right Turn | 8 | 10 | 122.9% | 1.5 | 1.4 | A |
| | Subtotal | 492 | 498 | 101.1% | 1.6 | 0.5 | A |
| WB | Left Turn | 4 | 1 | 36.4% | 4.0 | 6.4 | A |
| | Through | 409 | 399 | 97.5% | 1.9 | 0.5 | A |
| | Right Turn | | | | | | |
| | Subtotal | 413 | 400 | 96.9% | 2.0 | 0.5 | A |
| Total | | 911 | 903 | 99.1% | 1.8 | 0.4 | A |

**Intersection 17** **Rio Linda Bl/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 4 | 1 | 36.4% | 12.2 | 20.1 | B |
| | Through | 14 | 15 | 106.6% | 22.3 | 6.0 | C |
| | Right Turn | 1 | 1 | 109.2% | 3.4 | 7.0 | A |
| | Subtotal | 19 | 17 | 92.0% | 22.3 | 4.7 | C |
| SB | Left Turn | 36 | 36 | 100.1% | 27.1 | 6.9 | C |
| | Through | 58 | 56 | 97.3% | 29.7 | 4.5 | C |
| | Right Turn | 56 | 49 | 87.1% | 16.7 | 4.2 | B |
| | Subtotal | 150 | 141 | 94.2% | 24.8 | 4.9 | C |
| EB | Left Turn | 26 | 29 | 113.4% | 15.7 | 7.1 | B |
| | Through | 460 | 471 | 102.5% | 10.3 | 6.0 | B |
| | Right Turn | 3 | 4 | 121.3% | 3.5 | 2.8 | A |
| | Subtotal | 489 | 505 | 103.2% | 10.5 | 5.8 | B |
| WB | Left Turn | 3 | 3 | 84.9% | 4.3 | 6.8 | A |
| | Through | 353 | 349 | 98.8% | 7.2 | 2.3 | A |
| | Right Turn | 14 | 14 | 98.8% | 3.5 | 1.7 | A |
| | Subtotal | 370 | 365 | 98.7% | 7.0 | 2.3 | A |
| Total | | 1,028 | 1,028 | 100.0% | 11.5 | 3.7 | B |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - El Camino Av**
**Vision Zero Top 5 Recommendations**
**AM Peak Hour**

**Intersection 156** **Hawthorne Av/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 8 | 8 | 100.1% | 5.7 | 6.9 | A |
| | Subtotal | 8 | 8 | 100.1% | 5.7 | 6.9 | A |
| EB | Left Turn | | | | | | |
| | Through | 518 | 519 | 100.2% | 2.6 | 1.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 518 | 519 | 100.2% | 2.6 | 1.3 | A |
| WB | Left Turn | | | | | | |
| | Through | 415 | 401 | 96.6% | 3.5 | 1.5 | A |
| | Right Turn | 15 | 16 | 104.3% | 1.0 | 1.5 | A |
| | Subtotal | 430 | 416 | 96.8% | 3.4 | 1.4 | A |
| Total | | 956 | 943 | 98.7% | 3.0 | 1.1 | A |

**Intersection 16** **Cantalier St/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 1 | 109.2% | 3.9 | 7.6 | A |
| | Through | | | | | | |
| | Right Turn | 5 | 4 | 80.1% | 4.6 | 5.8 | A |
| | Subtotal | 6 | 5 | 84.9% | 6.6 | 5.8 | A |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 484 | 488 | 100.8% | 1.6 | 0.4 | A |
| | Right Turn | 8 | 10 | 122.9% | 1.5 | 1.4 | A |
| | Subtotal | 492 | 498 | 101.1% | 1.6 | 0.5 | A |
| WB | Left Turn | 4 | 1 | 36.4% | 4.0 | 6.4 | A |
| | Through | 409 | 399 | 97.5% | 1.9 | 0.5 | A |
| | Right Turn | | | | | | |
| | Subtotal | 413 | 400 | 96.9% | 2.0 | 0.5 | A |
| Total | | 911 | 903 | 99.1% | 1.8 | 0.4 | A |

**Intersection 17** **Rio Linda Bl/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 4 | 1 | 36.4% | 12.2 | 20.1 | B |
| | Through | 14 | 15 | 106.6% | 22.3 | 6.0 | C |
| | Right Turn | 1 | 1 | 109.2% | 3.4 | 7.0 | A |
| | Subtotal | 19 | 17 | 92.0% | 22.3 | 4.7 | C |
| SB | Left Turn | 36 | 36 | 100.1% | 27.1 | 6.9 | C |
| | Through | 58 | 56 | 97.3% | 29.7 | 4.5 | C |
| | Right Turn | 56 | 49 | 87.1% | 16.7 | 4.2 | B |
| | Subtotal | 150 | 141 | 94.2% | 24.8 | 4.9 | C |
| EB | Left Turn | 26 | 29 | 113.4% | 15.7 | 7.1 | B |
| | Through | 460 | 471 | 102.5% | 10.3 | 6.0 | B |
| | Right Turn | 3 | 4 | 121.3% | 3.5 | 2.8 | A |
| | Subtotal | 489 | 505 | 103.2% | 10.5 | 5.8 | B |
| WB | Left Turn | 3 | 3 | 84.9% | 4.3 | 6.8 | A |
| | Through | 353 | 349 | 98.8% | 7.2 | 2.3 | A |
| | Right Turn | 14 | 14 | 98.8% | 3.5 | 1.7 | A |
| | Subtotal | 370 | 365 | 98.7% | 7.0 | 2.3 | A |
| Total | | 1,028 | 1,028 | 100.0% | 11.5 | 3.7 | B |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - El Camino Av**
**Average Results from 10 Runs** | **Vision Zero Top 5 Recommendations**
**Volume and Delay by Movement** | **AM Peak Hour**

**Intersection 156** | **Hawthorne Av/El Camino Av** | **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 8 | 8 | 100.1% | 5.7 | 6.9 | A |
| | Subtotal | 8 | 8 | 100.1% | 5.7 | 6.9 | A |
| EB | Left Turn | | | | | | |
| | Through | 518 | 519 | 100.2% | 2.6 | 1.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 518 | 519 | 100.2% | 2.6 | 1.3 | A |
| WB | Left Turn | | | | | | |
| | Through | 415 | 401 | 96.6% | 3.5 | 1.5 | A |
| | Right Turn | 15 | 16 | 104.3% | 1.0 | 1.5 | A |
| | Subtotal | 430 | 416 | 96.8% | 3.4 | 1.4 | A |
| Total | | 956 | 943 | 98.7% | 3.0 | 1.1 | A |

**Intersection 12** **Colfax St/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | Total Delay (sec/veh) LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 43 | 44 | 102.0% | 34.8 | 9.0 | C |
| | Through | 15 | 12 | 77.6% | 23.1 | 15.3 | C |
| | Right Turn | 23 | 22 | 96.2% | 13.1 | 7.5 | B |
| | Subtotal | 81 | 78 | 95.8% | 27.7 | 5.6 | C |
| SB | Left Turn | 2 | 2 | 97.0% | 13.0 | 23.3 | B |
| | Through | 7 | 7 | 94.2% | 38.0 | 20.5 | D |
| | Right Turn | 25 | 29 | 116.4% | 7.0 | 2.1 | A |
| | Subtotal | 34 | 38 | 110.7% | 13.6 | 4.6 | B |
| EB | Left Turn | 38 | 38 | 101.1% | 8.4 | 4.7 | A |
| | Through | 585 | 577 | 98.6% | 5.1 | 2.1 | A |
| | Right Turn | 26 | 28 | 107.4% | 3.2 | 2.4 | A |
| | Subtotal | 649 | 643 | 99.1% | 5.2 | 2.2 | A |
| WB | Left Turn | 12 | 10 | 80.8% | 13.3 | 11.3 | B |
| | Through | 596 | 492 | 82.6% | 3.5 | 0.8 | A |
| | Right Turn | 4 | 3 | 77.6% | 2.1 | 3.8 | A |
| | Subtotal | 612 | 505 | 82.5% | 3.6 | 0.7 | A |
| Total | | 1,376 | 1,264 | 91.8% | 6.2 | 1.2 | A |

**Intersection 13** **Grove Av/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | Total Delay (sec/veh) LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 54 | 57 | 105.6% | 47.7 | 15.8 | D |
| | Through | 278 | 284 | 102.3% | 39.2 | 12.7 | D |
| | Right Turn | 67 | 61 | 90.3% | 31.9 | 12.5 | C |
| | Subtotal | 399 | 402 | 100.7% | 39.4 | 12.7 | D |
| SB | Left Turn | 93 | 94 | 100.5% | 43.7 | 12.1 | D |
| | Through | 140 | 139 | 99.5% | 28.7 | 4.7 | C |
| | Right Turn | 65 | 63 | 97.3% | 19.4 | 6.0 | B |
| | Subtotal | 298 | 296 | 99.3% | 31.6 | 4.1 | C |
| EB | Left Turn | 62 | 56 | 90.7% | 56.4 | 7.1 | E |
| | Through | 500 | 491 | 98.2% | 20.9 | 6.1 | C |
| | Right Turn | 30 | 31 | 102.2% | 18.7 | 10.0 | B |
| | Subtotal | 592 | 578 | 97.7% | 24.2 | 5.6 | C |
| WB | Left Turn | 47 | 41 | 86.7% | 66.0 | 14.0 | E |
| | Through | 495 | 409 | 82.6% | 43.7 | 9.6 | D |
| | Right Turn | 47 | 45 | 96.6% | 39.3 | 12.1 | D |
| | Subtotal | 589 | 495 | 84.1% | 45.0 | 10.0 | D |
| Total | | 1,878 | 1,771 | 94.3% | 35.0 | 5.0 | C |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - El Camino Av**
**Vision Zero Top 5 Recommendations**
**PM Peak Hour**

**Intersection 14** **Altos Av-Traction Av/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| SB | Left Turn | 7 | 7 | 94.2% | 33.2 | 28.4 | C |
| | Through | | | | | | |
| | Right Turn | 17 | 15 | 86.7% | 17.7 | 20.9 | B |
| | Subtotal | 24 | 21 | 88.9% | 27.9 | 22.1 | C |
| EB | Left Turn | 45 | 44 | 98.3% | 17.3 | 5.7 | B |
| | Through | 615 | 603 | 98.0% | 10.6 | 3.6 | B |
| | Right Turn | | | | | | |
| | Subtotal | 660 | 647 | 98.0% | 11.1 | 3.6 | B |
| WB | Left Turn | | | | | | |
| | Through | 602 | 552 | 91.7% | 18.9 | 18.1 | B |
| | Right Turn | 9 | 10 | 112.1% | 16.4 | 15.5 | B |
| | Subtotal | 611 | 562 | 92.0% | 18.8 | 18.1 | B |
| Total | | 1,295 | 1,230 | 95.0% | 15.2 | 9.4 | B |

**Intersection 15** **Forrest St/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 6 | 4 | 64.7% | 18.2 | 24.6 | C |
| | Through | | | | | | |
| | Right Turn | 17 | 20 | 116.4% | 5.9 | 3.0 | A |
| | Subtotal | 23 | 24 | 102.9% | 8.6 | 7.2 | A |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 604 | 593 | 98.2% | 1.7 | 0.4 | A |
| | Right Turn | 18 | 16 | 88.4% | 1.4 | 0.9 | A |
| | Subtotal | 622 | 609 | 97.9% | 1.7 | 0.4 | A |
| WB | Left Turn | 11 | 10 | 88.2% | 8.8 | 9.5 | A |
| | Through | 605 | 581 | 96.0% | 4.0 | 4.0 | A |
| | Right Turn | | | | | | |
| | Subtotal | 616 | 591 | 95.9% | 4.1 | 4.1 | A |
| Total | | 1,261 | 1,223 | 97.0% | 3.1 | 2.2 | A |

**Intersection 16** | **Cantalier St/El Camino Av** | **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 9 | 10 | 112.1% | 22.5 | 18.4 | C |
| | Through | | | | | | |
| | Right Turn | 22 | 26 | 118.2% | 7.4 | 2.8 | A |
| | Subtotal | 31 | 36 | 116.4% | 12.4 | 5.3 | B |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 622 | 596 | 95.8% | 1.7 | 0.5 | A |
| | Right Turn | 2 | 2 | 116.4% | 0.6 | 0.8 | A |
| | Subtotal | 624 | 598 | 95.9% | 1.6 | 0.5 | A |
| WB | Left Turn | 8 | 6 | 77.6% | 4.6 | 4.8 | A |
| | Through | 610 | 566 | 92.8% | 2.9 | 0.8 | A |
| | Right Turn | | | | | | |
| | Subtotal | 618 | 572 | 92.6% | 2.9 | 0.8 | A |
| Total | | 1,273 | 1,207 | 94.8% | 2.6 | 0.5 | A |

**Intersection 17** | **Rio Linda Bl/El Camino Av** | **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 10 | 9 | 89.2% | 31.8 | 20.6 | C |
| | Through | 54 | 53 | 98.4% | 29.7 | 6.8 | C |
| | Right Turn | 4 | 5 | 135.8% | 9.0 | 10.9 | A |
| | Subtotal | 68 | 68 | 99.3% | 28.7 | 7.3 | C |
| SB | Left Turn | 21 | 21 | 97.9% | 36.2 | 13.9 | D |
| | Through | 61 | 62 | 101.8% | 33.9 | 6.5 | C |
| | Right Turn | 44 | 43 | 97.0% | 22.0 | 6.5 | C |
| | Subtotal | 126 | 125 | 99.5% | 29.7 | 4.8 | C |
| EB | Left Turn | 65 | 62 | 94.9% | 21.5 | 6.7 | C |
| | Through | 571 | 544 | 95.3% | 10.6 | 2.3 | B |
| | Right Turn | 8 | 7 | 82.5% | 7.6 | 8.5 | A |
| | Subtotal | 644 | 613 | 95.1% | 11.8 | 2.3 | B |
| WB | Left Turn | 11 | 9 | 84.7% | 16.6 | 8.7 | B |
| | Through | 564 | 503 | 89.2% | 6.9 | 1.7 | A |
| | Right Turn | 12 | 10 | 84.1% | 4.6 | 4.1 | A |
| | Subtotal | 587 | 523 | 89.0% | 7.1 | 1.7 | A |
| Total | | 1,425 | 1,328 | 93.2% | 12.4 | 0.8 | B |

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Vision Zero Top 5 Corridors - El Camino Av
Vision Zero Top 5 Recommendations
PM Peak Hour

**Intersection 18** **Del Paso Bl/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | 383 | 350 | 91.4% | 121.5 | 31.5 | F |
| | Right Turn | 82 | 78 | 95.1% | 120.7 | 33.4 | F |
| | Subtotal | 465 | 428 | 92.0% | 121.5 | 31.4 | F |
| SB | Left Turn | 116 | 112 | 96.7% | 82.7 | 26.5 | F |
| | Through | 170 | 176 | 103.6% | 47.2 | 4.8 | D |
| | Right Turn | 64 | 76 | 118.8% | 43.0 | 6.5 | D |
| | Subtotal | 350 | 364 | 104.1% | 57.3 | 8.4 | E |
| EB | Left Turn | 99 | 112 | 113.3% | 72.5 | 10.3 | E |
| | Through | 473 | 378 | 79.9% | 50.8 | 8.4 | D |
| | Right Turn | 24 | 21 | 85.7% | 27.6 | 11.8 | C |
| | Subtotal | 596 | 511 | 85.7% | 54.7 | 7.9 | D |
| WB | Left Turn | 84 | 73 | 86.4% | 103.7 | 36.5 | F |
| | Through | 523 | 424 | 81.2% | 91.7 | 29.8 | F |
| | Right Turn | 85 | 89 | 104.5% | 3.0 | 0.4 | A |
| | Subtotal | 692 | 586 | 84.7% | 79.8 | 26.0 | E |
| Total | | 2,103 | 1,889 | 89.8% | 78.1 | 6.0 | E |

**Intersection 119** **Edgewater Rd/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 3 | 0 | 12.9% | 0.3 | 0.9 | A |
| | Through | 1 | 1 | 77.6% | 8.5 | 18.1 | A |
| | Right Turn | 7 | 6 | 88.7% | 6.2 | 5.3 | A |
| | Subtotal | 11 | 7 | 67.0% | 9.2 | 9.2 | A |
| SB | Left Turn | 5 | 5 | 93.1% | 32.7 | 21.9 | C |
| | Through | 1 | 0 | 38.8% | 5.0 | 15.9 | A |
| | Right Turn | 11 | 13 | 119.9% | 8.8 | 6.4 | A |
| | Subtotal | 17 | 18 | 107.3% | 15.6 | 10.8 | B |
| EB | Left Turn | 24 | 29 | 121.3% | 8.0 | 2.9 | A |
| | Through | 580 | 572 | 98.7% | 3.7 | 1.8 | A |
| | Right Turn | 6 | 5 | 77.6% | 0.6 | 0.9 | A |
| | Subtotal | 610 | 606 | 99.4% | 3.8 | 1.8 | A |
| WB | Left Turn | 2 | 1 | 58.2% | 2.8 | 5.8 | A |
| | Through | 598 | 512 | 85.6% | 4.9 | 1.4 | A |
| | Right Turn | 14 | 16 | 113.6% | 4.0 | 2.8 | A |
| | Subtotal | 614 | 529 | 86.2% | 4.9 | 1.3 | A |
| Total | | 1,252 | 1,161 | 92.7% | 4.6 | 1.5 | A |

**Intersection 121** **Fairfield St/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 15 | 12 | 82.8% | 42.6 | 9.9 | D |
| | Through | 9 | 8 | 90.5% | 41.6 | 19.3 | D |
| | Right Turn | 62 | 59 | 95.1% | 10.7 | 3.7 | B |
| | Subtotal | 86 | 80 | 92.5% | 17.7 | 3.9 | B |
| SB | Left Turn | 4 | 3 | 77.6% | 19.2 | 26.8 | B |
| | Through | 3 | 3 | 116.4% | 15.0 | 19.9 | B |
| | Right Turn | 35 | 30 | 85.4% | 8.6 | 2.4 | A |
| | Subtotal | 42 | 36 | 86.8% | 11.2 | 5.2 | B |
| EB | Left Turn | 43 | 48 | 111.0% | 18.5 | 9.5 | B |
| | Through | 558 | 543 | 97.3% | 12.4 | 5.5 | B |
| | Right Turn | 20 | 23 | 114.5% | 8.3 | 7.7 | A |
| | Subtotal | 621 | 614 | 98.8% | 12.8 | 5.8 | B |
| WB | Left Turn | 7 | 6 | 83.1% | 8.0 | 12.2 | A |
| | Through | 566 | 537 | 94.9% | 5.5 | 1.0 | A |
| | Right Turn | 45 | 50 | 111.2% | 4.4 | 2.3 | A |
| | Subtotal | 618 | 593 | 95.9% | 5.4 | 1.1 | A |
| Total | | 1,367 | 1,323 | 96.8% | 9.7 | 2.9 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - El Camino Av**
**Vision Zero Top 5 Recommendations**
**PM Peak Hour**

**Intersection 156** **Hawthorne Av/El Camino Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 5 | 4 | 85.4% | 31.2 | 43.2 | D |
| | Subtotal | 5 | 4 | 85.4% | 31.2 | 43.2 | D |
| EB | Left Turn | | | | | | |
| | Through | 660 | 647 | 98.0% | 5.7 | 2.4 | A |
| | Right Turn | | | | | | |
| | Subtotal | 660 | 647 | 98.0% | 5.7 | 2.4 | A |
| WB | Left Turn | | | | | | |
| | Through | 584 | 525 | 90.0% | 6.5 | 3.3 | A |
| | Right Turn | 35 | 32 | 90.9% | 3.7 | 2.7 | A |
| | Subtotal | 619 | 557 | 90.0% | 6.3 | 3.1 | A |
| Total | | 1,284 | 1,208 | 94.1% | 6.2 | 2.1 | A |

## Intersection: 18: Del Paso Bl & Beaumont St & El Camino Av

| Movement | EB | EB | EB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | TR | > | <L | T | T | TR> | <L | T | R |
| Maximum Queue (ft) | 302 | 480 | 14 | 158 | 310 | 119 | 125 | 190 | 272 | 120 |
| Average Queue (ft) | 77 | 346 | 2 | 87 | 191 | 61 | 61 | 93 | 157 | 29 |
| 95th Queue (ft) | 258 | 530 | 30 | 170 | 347 | 113 | 128 | 192 | 278 | 110 |
| Link Distance (ft) | | 444 | | | 1582 | 1234 | 1234 | | 325 | |
| Upstream Blk Time (%) | | 9 | | | | | | | 0 | |
| Queuing Penalty (veh) | | 47 | | | | | | | 2 | |
| Storage Bay Dist (ft) | 300 | | 120 | 130 | | | | 170 | | 200 |
| Storage Blk Time (%) | | 43 | | 3 | 19 | | | 2 | 9 | |
| Queuing Penalty (veh) | | 27 | | 10 | 18 | | | 5 | 16 | |

## Intersection: 18: Del Paso Blvd & Beaumont St & El Camino Av

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | TR | > | <L | T | R | T | TR> | <L | T | R |
| Maximum Queue (ft) | 293 | 461 | 66 | 311 | 931 | 103 | 409 | 439 | 192 | 242 | 92 |
| Average Queue (ft) | 138 | 334 | 13 | 132 | 653 | 39 | 303 | 314 | 127 | 126 | 35 |
| 95th Queue (ft) | 309 | 501 | 82 | 342 | 1112 | 364 | 472 | 500 | 245 | 247 | 107 |
| Link Distance (ft) | | 444 | | | 1581 | 1581 | 1234 | 1234 | | 325 | |
| Upstream Blk Time (%) | | 6 | | | | | | | | 1 | |
| Queuing Penalty (veh) | | 36 | | | | | | | | 2 | |
| Storage Bay Dist (ft) | 300 | | 120 | 300 | | | | | 250 | | 200 |
| Storage Blk Time (%) | | 47 | | | 51 | | | | 2 | 2 | 0 |
| Queuing Penalty (veh) | | 55 | | | 44 | | | | 6 | 4 | 0 |

**Intersection 14** **Altos Av-Traction Av/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | Total Delay (sec/veh) LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 3 | 3 | 97.1% | 42.8 | 44.7 | D |
| | Through | | | | | | |
| | Right Turn | 22 | 17 | 77.8% | 8.8 | 3.7 | A |
| | Subtotal | 25 | 20 | 80.1% | 20.6 | 19.3 | C |
| SB | Left Turn | 13 | 9 | 72.8% | 54.7 | 29.6 | D |
| | Through | | | | | | |
| | Right Turn | 22 | 25 | 115.8% | 12.2 | 7.2 | B |
| | Subtotal | 35 | 35 | 99.8% | 25.8 | 14.5 | C |
| EB | Left Turn | 24 | 23 | 94.0% | 23.1 | 12.2 | C |
| | Through | 472 | 457 | 96.9% | 13.8 | 4.8 | B |
| | Right Turn | 9 | 8 | 89.0% | 9.5 | 7.1 | A |
| | Subtotal | 505 | 488 | 96.6% | 14.2 | 5.1 | B |
| WB | Left Turn | 27 | 23 | 83.6% | 25.5 | 11.9 | C |
| | Through | 381 | 383 | 100.6% | 19.9 | 8.8 | B |
| | Right Turn | 12 | 12 | 103.1% | 10.8 | 12.5 | B |
| | Subtotal | 420 | 418 | 99.6% | 20.0 | 8.9 | B |
| Total | | 985 | 961 | 97.6% | 17.3 | 6.1 | B |

**Intersection 14** **Altos Av-Traction Av/El Camino Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 2 | 116.4% | 59.1 | 70.4 | E |
| | Through | | | | | | |
| | Right Turn | 32 | 37 | 115.2% | 10.0 | 3.4 | A |
| | Subtotal | 34 | 39 | 115.3% | 18.0 | 11.9 | B |
| SB | Left Turn | 7 | 5 | 72.1% | 52.1 | 54.1 | D |
| | Through | | | | | | |
| | Right Turn | 17 | 17 | 100.4% | 16.4 | 15.6 | B |
| | Subtotal | 24 | 22 | 92.2% | 29.8 | 26.2 | C |
| EB | Left Turn | 45 | 43 | 96.6% | 37.7 | 14.7 | D |
| | Through | 583 | 560 | 96.0% | 29.4 | 5.7 | C |
| | Right Turn | 8 | 10 | 131.0% | 25.8 | 5.9 | C |
| | Subtotal | 636 | 614 | 96.5% | 30.1 | 6.0 | C |
| WB | Left Turn | 26 | 22 | 83.6% | 51.3 | 26.4 | D |
| | Through | 576 | 513 | 89.1% | 48.3 | 21.8 | D |
| | Right Turn | 9 | 11 | 125.0% | 39.8 | 30.9 | D |
| | Subtotal | 611 | 546 | 89.3% | 48.5 | 21.9 | D |
| Total | | 1,305 | 1,221 | 93.6% | 38.0 | 10.7 | D |

FEHR PEERS

| | | | | |
|---|---|---|---|---|
| Major Street | El Camino Av | | Project | Vision Zero Top 5 Corridors |
| Minor Street | Altos Av/Hawthorne Rd | | Scenario | El Camino Av - VZ Recommendation |
| | | | Peak Hour | AM |

Turn Movement Volumes

| | SE | SB | EB | WB |
|---|---|---|---|---|
| Left | 5 | 13 | 26 | 0 |
| Through | 0 | 22 | 476 | 372 |
| Right | 8 | 3 | 0 | 18 |
| Total | 13 | 38 | 502 | 390 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 22 |
| Approach with Worst Case Delay | SB |
| Total Vehicles on Approach | 38 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Camino Av - VZ Recommendation** | **0.2** | **38** | **943** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

FEHR PEERS

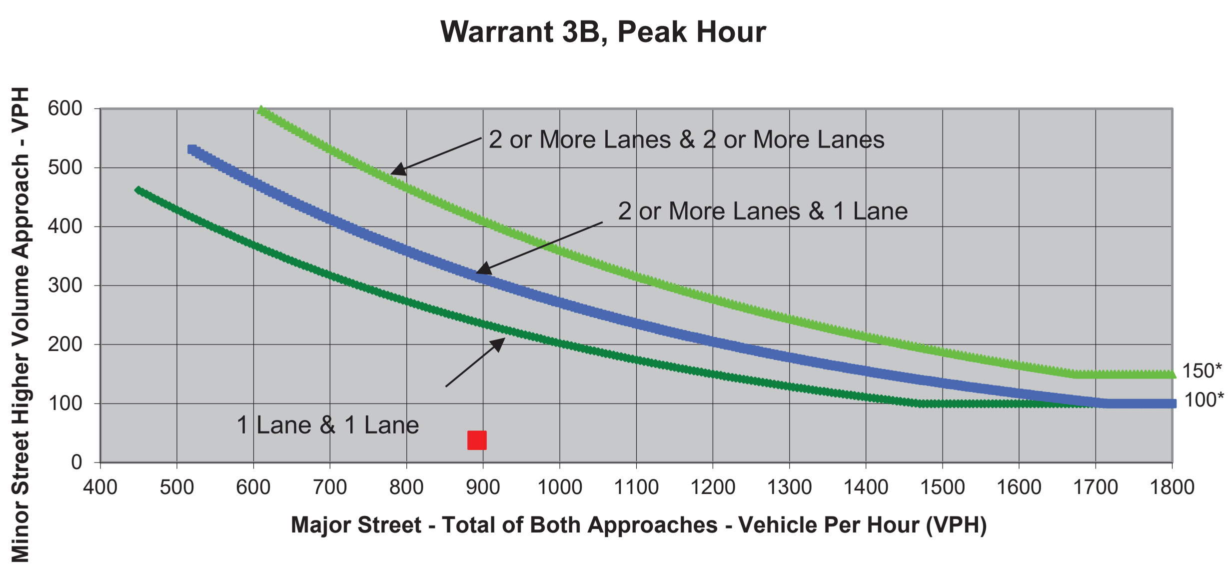
| | | | | |
|---|---|---|---|---|
| | | | Project | Vision Zero Top 5 Corridors |
| Major Street | El Camino Av | | Scenario | El Camino Av - VZ Recommendation |
| Minor Street | Altos Av/Hawthorne Rd | | Peak Hour | AM |

Turn Movement Volumes

| | SE | SB | EB | WB |
|---|---|---|---|---|
| Left | 5 | 13 | 26 | 0 |
| Through | 0 | 22 | 476 | 372 |
| Right | 8 | 3 | 0 | 18 |
| Total | 13 | 38 | 502 | 390 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>El Camino Av | Minor Street<br>Altos Av/Hawthorne Rd | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **892** | **38** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

| | | | | |
|---|---|---|---|---|
| Major Street | El Camino Av | | Project | Vision Zero Top 5 Corridors |
| Minor Street | Altos Av/Hawthorne Rd | | Scenario | El Camino Av - VZ Recommendation |
| | | | Peak Hour | PM |

Turn Movement Volumes

| | SE | SB | EB | WB |
|---|---|---|---|---|
| Left | 8 | 7 | 52 | 0 |
| Through | 0 | 19 | 584 | 541 |
| Right | 5 | 1 | 0 | 46 |
| Total | 13 | 27 | 636 | 587 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 77.1 |
| Approach with Worst Case Delay | SB |
| Total Vehicles on Approach | 27 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Camino Av - VZ Recommendation** | **0.6** | **27** | **1,263** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

FEHR & PEERS

| | | | | |
|---|---|---|---|---|
| | | | Project | Vision Zero Top 5 Corridors |
| Major Street | El Camino Av | | Scenario | El Camino Av - VZ Recommendation |
| Minor Street | Altos Av/Hawthorne Rd | | Peak Hour | PM |

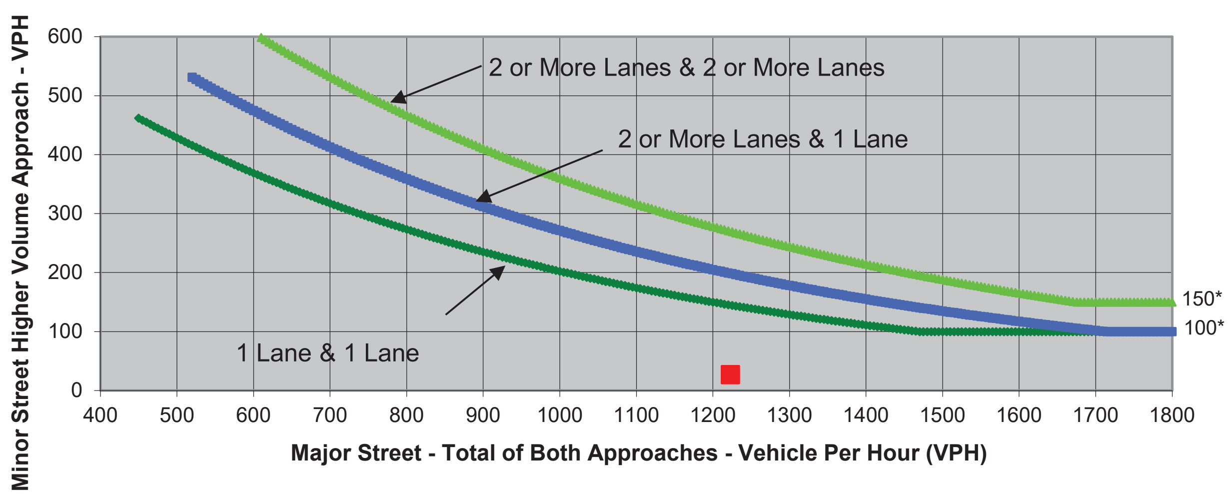
Turn Movement Volumes

| | SE | SB | EB | WB |
|---|---|---|---|---|
| Left | 8 | 7 | 52 | 0 |
| Through | 0 | 19 | 584 | 541 |
| Right | 5 | 1 | 0 | 46 |
| Total | 13 | 27 | 636 | 587 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

**Warrant 3B, Peak Hour**




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | **Major Street**<br>El Camino Av | **Minor Street**<br>Altos Av/Hawthorne Rd | **Warrant Met** |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **1,223** | **27** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

| | | | | |
|---|---|---|---|---|
| Major Street | El Camino Av | | Project | Vision Zero Top 5 Corridors |
| Minor Street | Edgewater Rd | | Scenario | El Camino Av - VZ Recommendation |
| | | | Peak Hour | PM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 3 | 5 | 24 | 2 |
| Through | 1 | 1 | 580 | 598 |
| Right | 7 | 11 | 6 | 14 |
| Total | 11 | 17 | 610 | 614 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 19.9 |
| Approach with Worst Case Delay | SB |
| Total Vehicles on Approach | 17 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Camino Av - VZ Recommendation** | **0.1** | **17** | **1,252** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

FEHR PEERS

| | | | |
|---|---|---|---|
| | | Project | Vision Zero Top 5 Corridors |
| Major Street | El Camino Av | Scenario | El Camino Av - VZ Recommendation |
| Minor Street | Edgewater Rd | Peak Hour | PM |

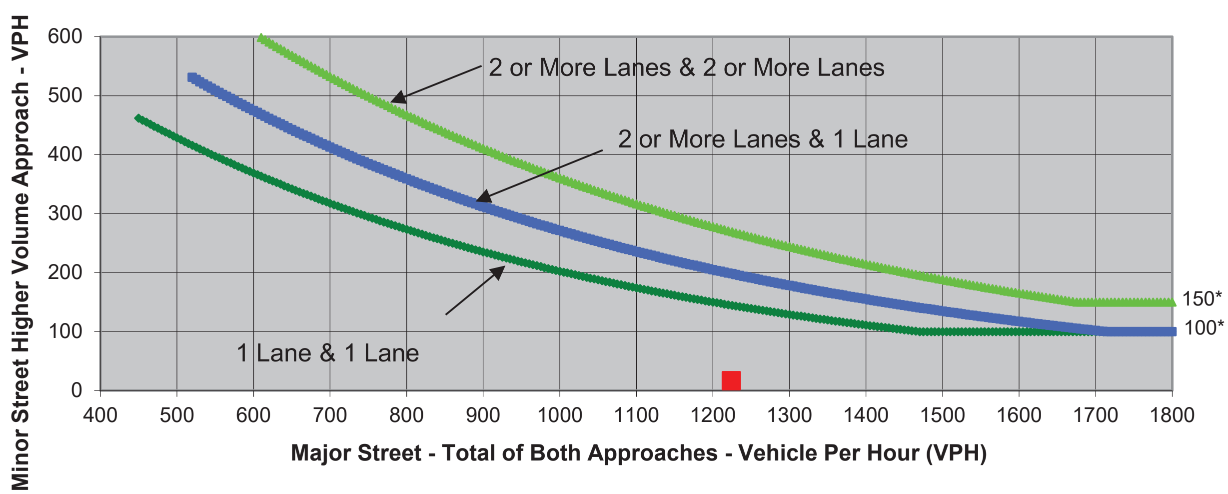
Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 3 | 5 | 24 | 2 |
| Through | 1 | 1 | 580 | 598 |
| Right | 7 | 11 | 6 | 14 |
| Total | 11 | 17 | 610 | 614 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

**Warrant 3B, Peak Hour**




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>El Camino Av | Minor Street<br>Edgewater Rd | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **1,224** | **17** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

| | | | |
|---|---|---|---|
| | | Project | Vision Zero Top 5 Corridors |
| Major Street | El Camino Av | Scenario | El Camino Av - VZ Recommendation |
| Minor Street | Edgewater Rd | Peak Hour | AM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 1 | 3 | 19 | 11 |
| Through | 2 | 1 | 431 | 403 |
| Right | 13 | 24 | 4 | 9 |
| Total | 16 | 28 | 454 | 423 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 13.4 |
| Approach with Worst Case Delay | NB |
| Total Vehicles on Approach | 16 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Camino Av - VZ Recommendation** | **0.1** | **28** | **921** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

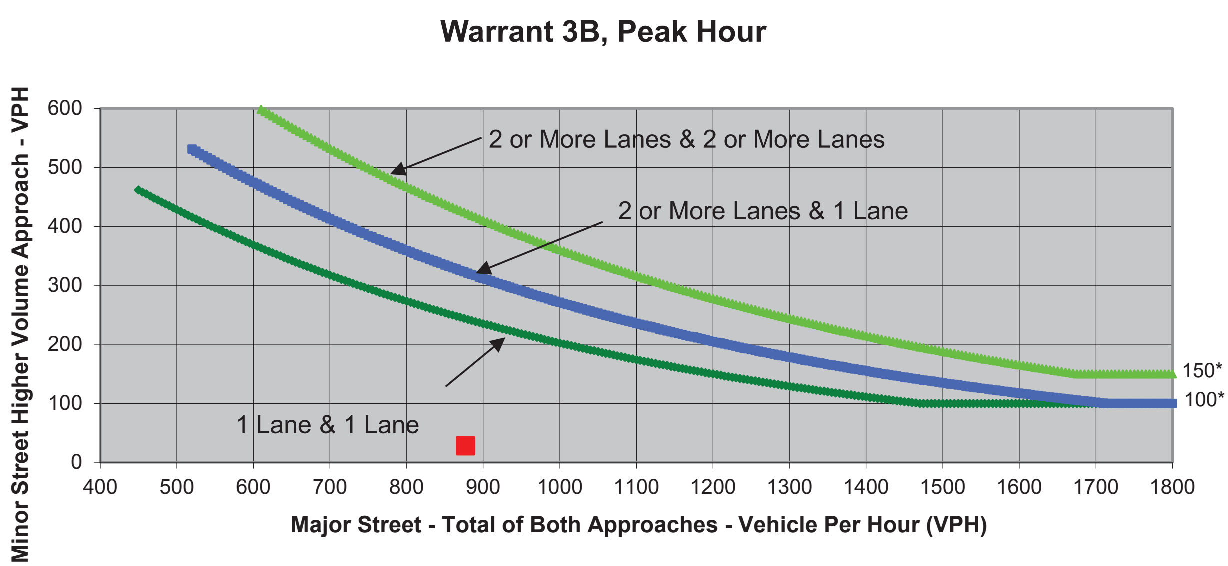
| | | | |
|---|---|---|---|
| Major Street | El Camino Av | Project | Vision Zero Top 5 Corridors |
| Minor Street | Edgewater Rd | Scenario | El Camino Av - VZ Recommendation |
| | | Peak Hour | AM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 1 | 3 | 19 | 11 |
| Through | 2 | 1 | 431 | 403 |
| Right | 13 | 24 | 4 | 9 |
| Total | 16 | 28 | 454 | 423 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>El Camino Av | Minor Street<br>Edgewater Rd | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **877** | **28** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

| | | | | |
|---|---|---|---|---|
| Major Street | El Camino Av | | Project | Vision Zero Top 5 Corridors |
| Minor Street | Fairfield Av | | Scenario | El Camino Av - VZ Recommendation |
| | | | Peak Hour | PM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 2 | 4 | 24 | 20 |
| Through | 10 | 6 | 566 | 567 |
| Right | 22 | 18 | 8 | 7 |
| Total | 34 | 28 | 598 | 594 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 20.5 |
| Approach with Worst Case Delay | SB |
| Total Vehicles on Approach | 28 |

**Warrant 3A, Peak Hour**

| | **Peak Hour Delay on Minor Approach (vehicle-hours)** | **Peak Hour Volume on Minor Approach (vph)** | **Peak Hour Entering Volume Serviced (vph)** |
|---|---|---|---|
| **Camino Av - VZ Recommendation** | **0.2** | **34** | **1,254** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

FEHR & PEERS

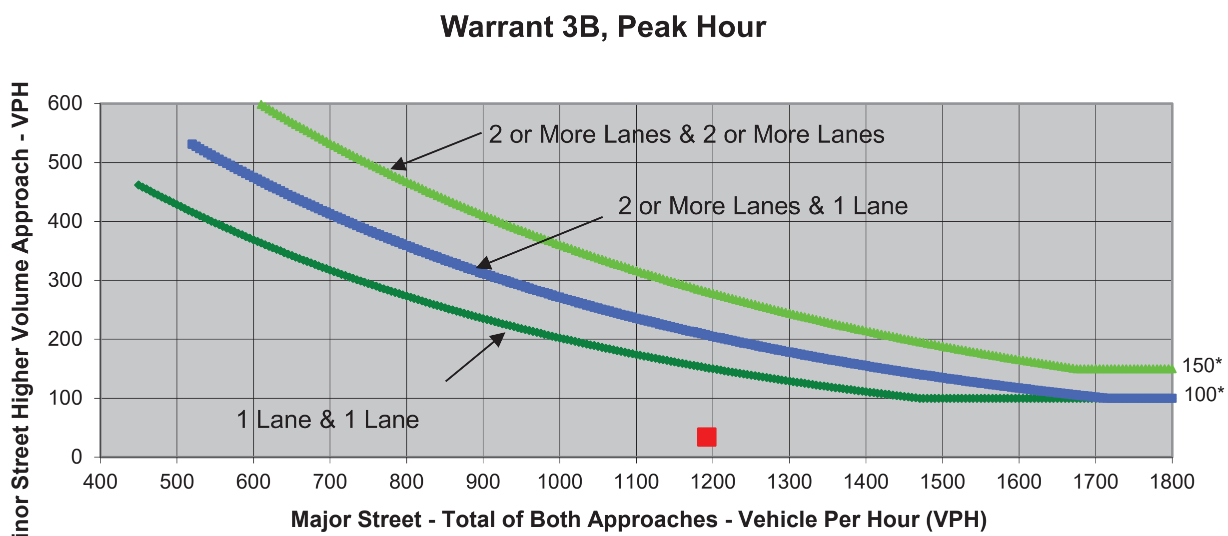
| | | | |
|---|---|---|---|
| | | Project | Vision Zero Top 5 Corridors |
| Major Street | El Camino Av | Scenario | El Camino Av - VZ Recommendation |
| Minor Street | Fairfield Av | Peak Hour | PM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 2 | 4 | 24 | 20 |
| Through | 10 | 6 | 566 | 567 |
| Right | 22 | 18 | 8 | 7 |
| Total | 34 | 28 | 598 | 594 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>El Camino Av | Minor Street<br>Fairfield Av | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **1,192** | **34** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

| | | | | |
|---|---|---|---|---|
| | | | Project | Vision Zero Top 5 Corridors |
| Major Street | El Camino Av | | Scenario | El Camino Av - VZ Recommendation |
| Minor Street | Fairfield Av | | Peak Hour | PM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 3 | 5 | 13 | 21 |
| Through | 5 | 6 | 472 | 365 |
| Right | 17 | 22 | 9 | 6 |
| Total | 25 | 33 | 494 | 392 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 15.9 |
| Approach with Worst Case Delay | NB |
| Total Vehicles on Approach | 25 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Camino Av - VZ Recommendation** | **0.1** | **33** | **944** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

| | |
|---|---|
| Major Street | El Camino Av |
| Minor Street | Fairfield Av |

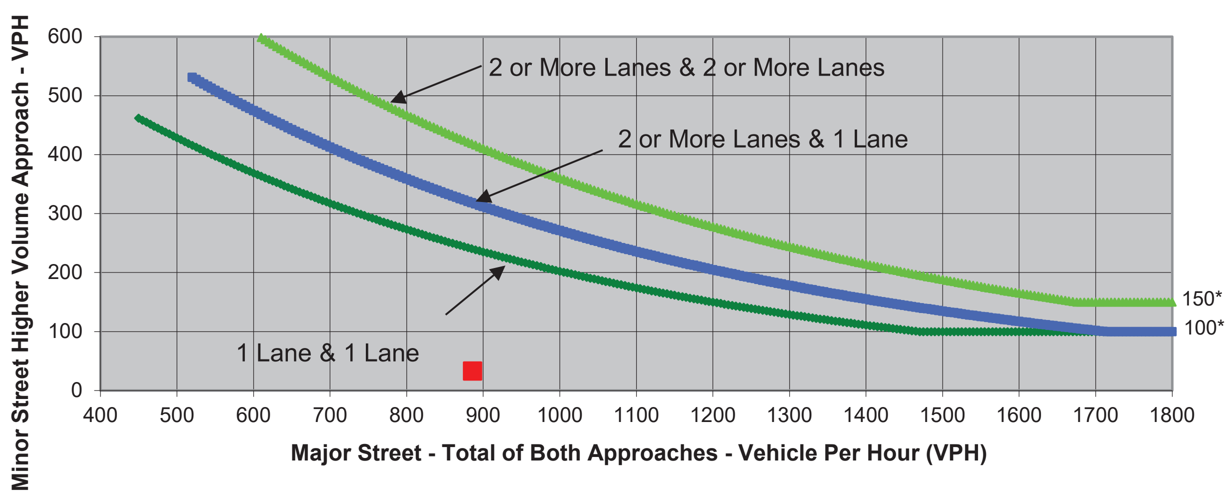
| | |
|---|---|
| Project | Vision Zero Top 5 Corridors |
| Scenario | El Camino Av - VZ Recommendation |
| Peak Hour | PM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 3 | 5 | 13 | 21 |
| Through | 5 | 6 | 472 | 365 |
| Right | 17 | 22 | 9 | 6 |
| Total | 25 | 33 | 494 | 392 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>El Camino Av | Minor Street<br>Fairfield Av | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **886** | **33** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

| | | | |
|---|---|---|---|
| Major Street | El Camino Av | Project | Vision Zero Top 5 Corridors |
| Minor Street | Fairfield Av | Scenario | El Camino Av - VZ Recommendation |
| | | Peak Hour | PM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 15 | 0 | 9 | 7 |
| Through | 9 | 3 | 562 | 566 |
| Right | 62 | 11 | 20 | 38 |
| Total | 86 | 14 | 591 | 611 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 21.6 |
| Approach with Worst Case Delay | NB |
| Total Vehicles on Approach | 86 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Camino Av - VZ Recommendation** | **0.5** | **86** | **1,302** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

FEHR PEERS

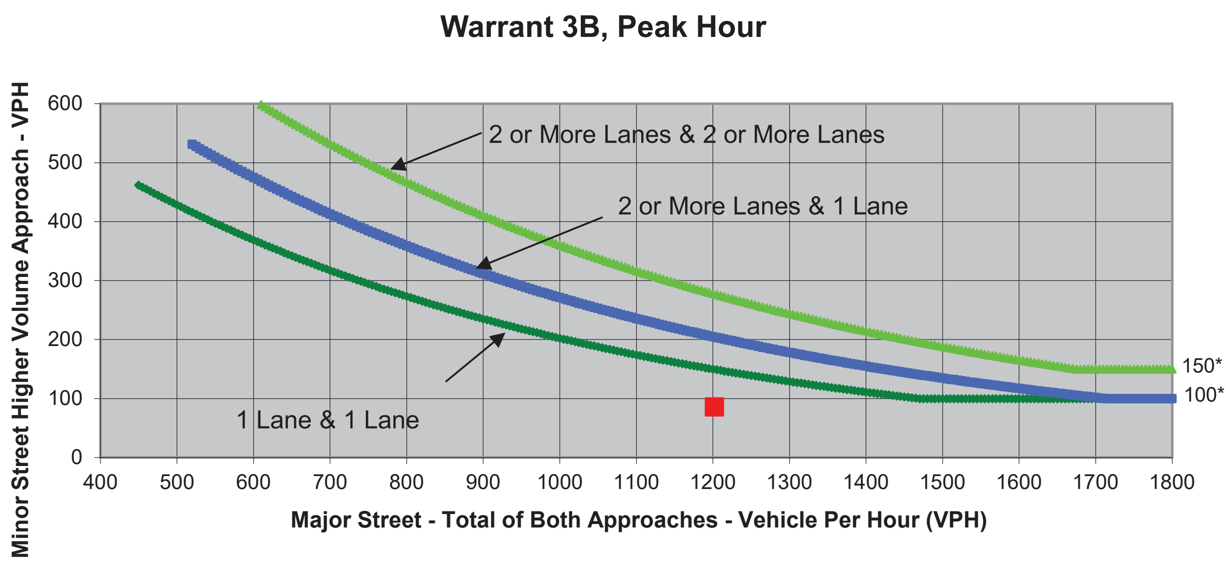
| | | | | |
|---|---|---|---|---|
| | | | Project | Vision Zero Top 5 Corridors |
| Major Street | El Camino Av | | Scenario | El Camino Av - VZ Recommendation |
| Minor Street | Fairfield Av | | Peak Hour | PM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 15 | 0 | 9 | 7 |
| Through | 9 | 3 | 562 | 566 |
| Right | 62 | 11 | 20 | 38 |
| Total | 86 | 14 | 591 | 611 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>El Camino Av | Minor Street<br>Fairfield Av | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **1,202** | **86** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

| | | | | |
|---|---|---|---|---|
| Major Street | El Camino Av | | Project | Vision Zero Top 5 Corridors |
| Minor Street | Fairfield Av | | Scenario | El Camino Av - VZ Recommendation |
| | | | Peak Hour | AM |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 7 | 4 | 5 | 9 |
| Through | 3 | 2 | 473 | 389 |
| Right | 15 | 3 | 17 | 12 |
| Total | 25 | 9 | 495 | 410 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 18.6 |
| Approach with Worst Case Delay | SB |
| Total Vehicles on Approach | 9 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Camino Av - VZ Recommendation** | **0** | **25** | **939** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

| | | | | |
|---|---|---|---|---|
| | | | Project | Vision Zero Top 5 Corridors |
| Major Street | El Camino Av | | Scenario | El Camino Av - VZ Recommendation |
| Minor Street | Fairfield Av | | Peak Hour | AM |

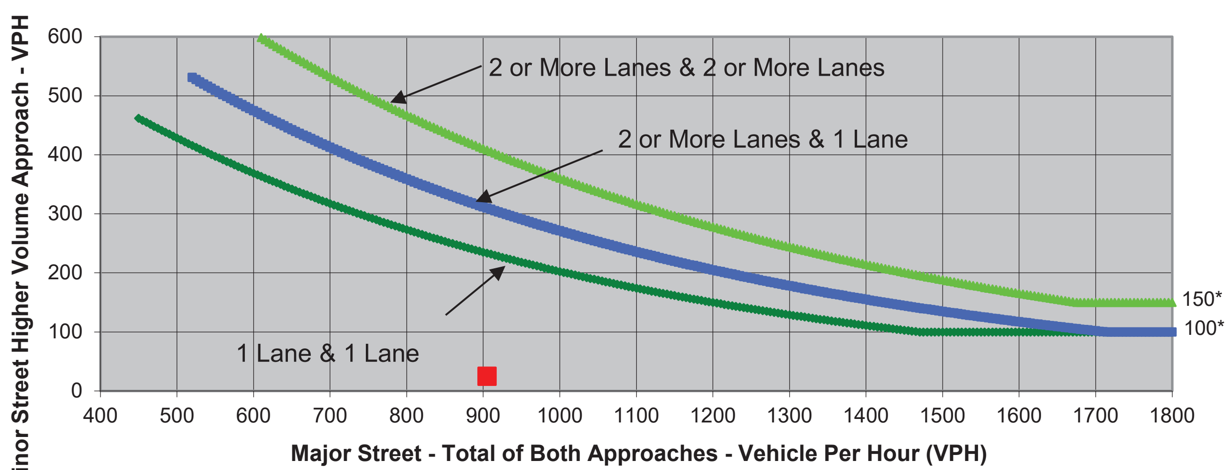
Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 7 | 4 | 5 | 9 |
| Through | 3 | 2 | 473 | 389 |
| Right | 15 | 3 | 17 | 12 |
| Total | 25 | 9 | 495 | 410 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

## Warrant 3B, Peak Hour

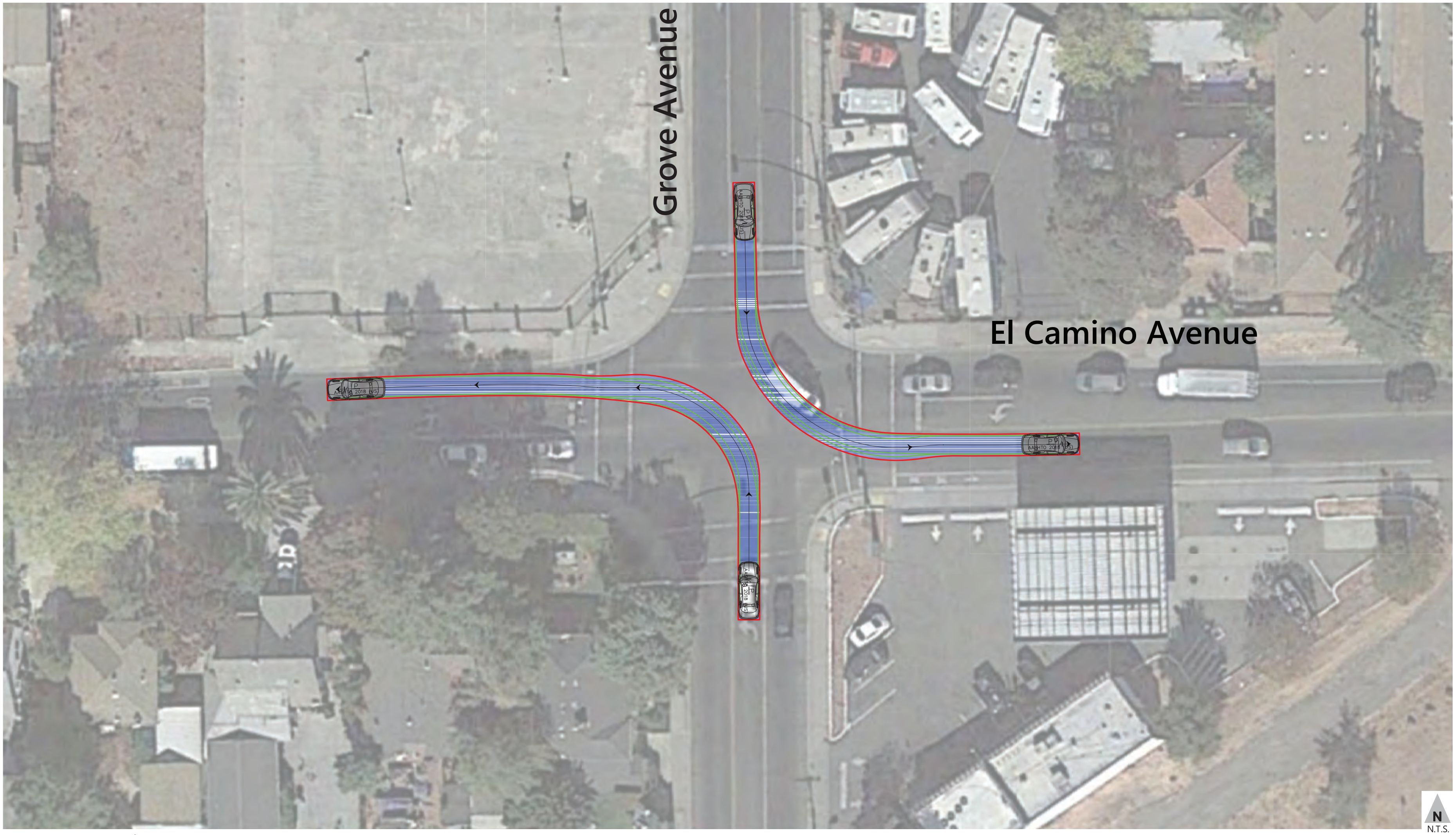



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>El Camino Av | Minor Street<br>Fairfield Av | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **905** | **25** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

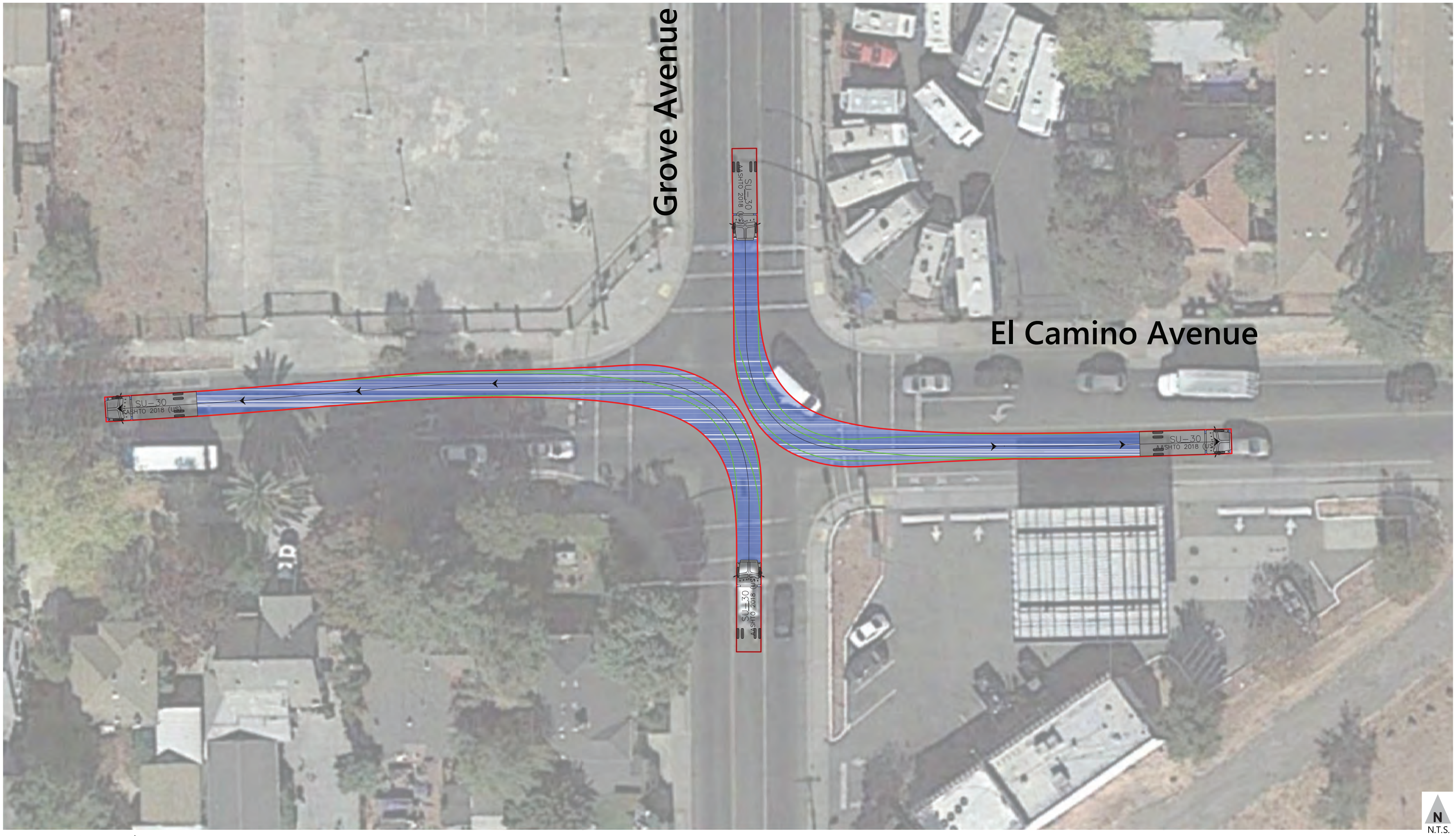



Legend:

- Vehicle Wheel
- Vehicle Body
- Vehicle Center
- Vehicle Swept Path

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Turning Template
Passenger Car
El Camino Ave / Grove Ave - Northbound / Southbound Left Turns

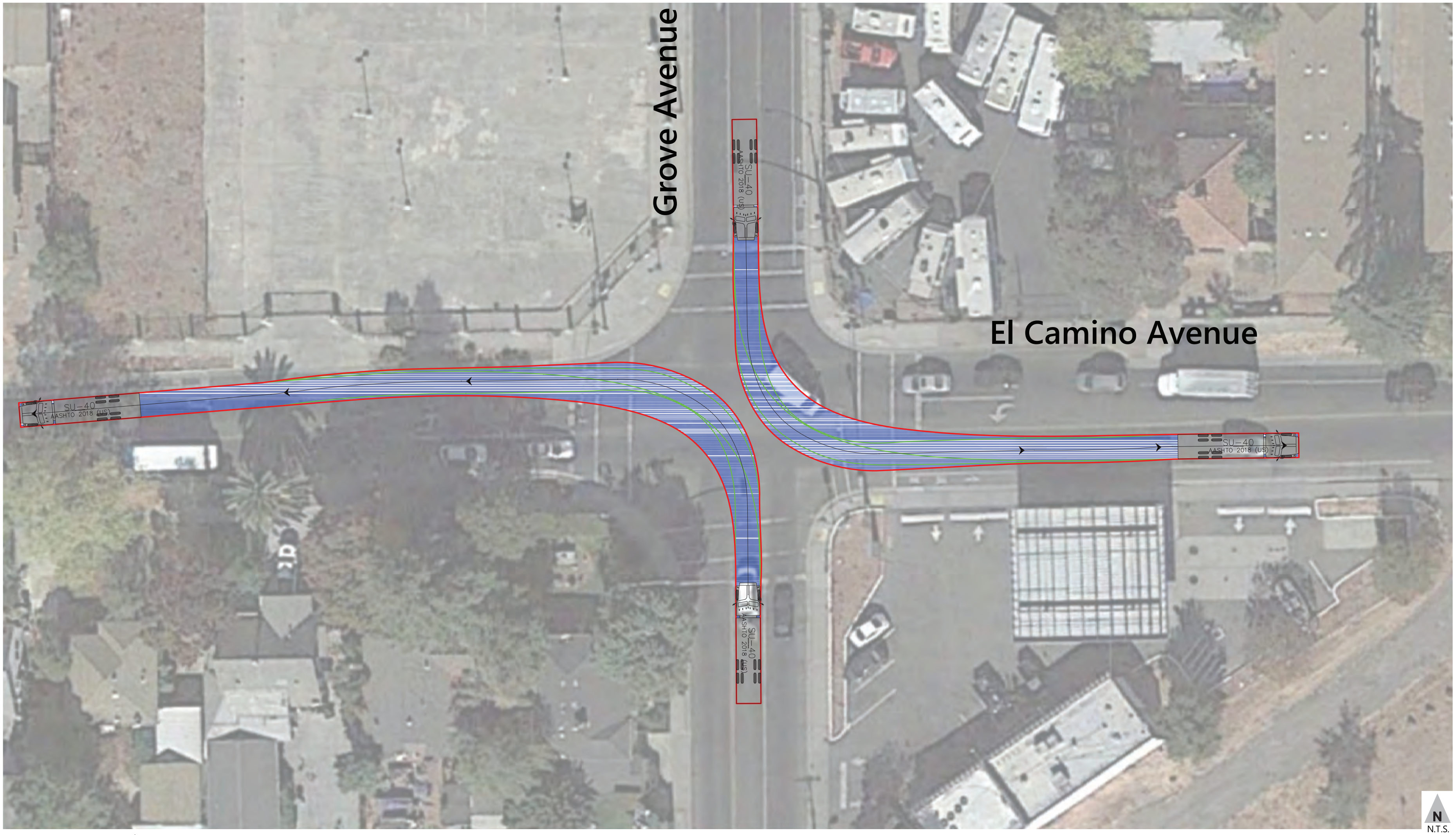



Legend:

- Vehicle Wheel
- Vehicle Body
- Vehicle Center
- Vehicle Swept Path

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL
DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Turning Template
30' Single Unit Truck
El Camino Ave / Grove Ave - Northbound / Southbound Left Turns

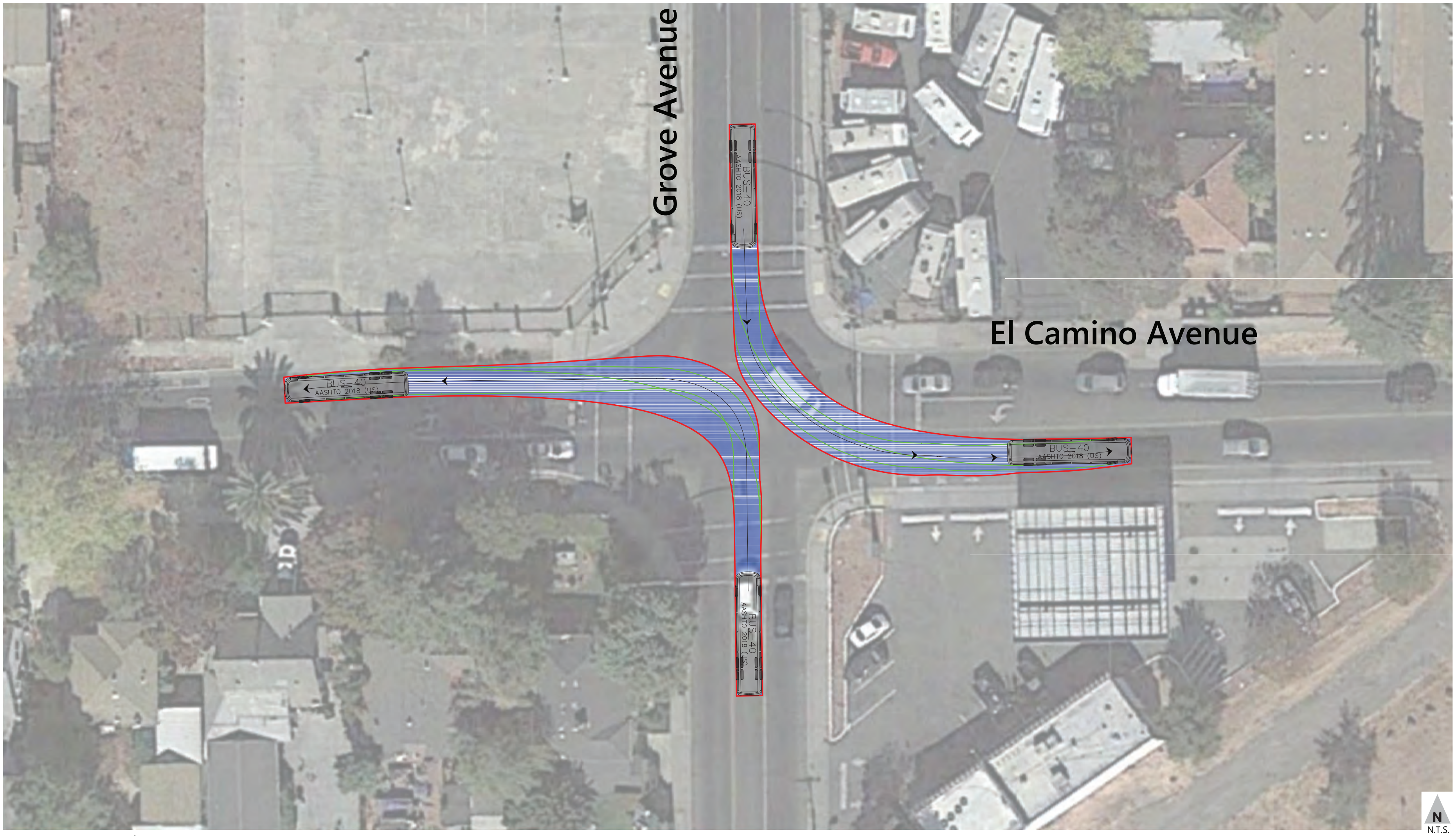



Legend:

- Vehicle Wheel
- Vehicle Body
- Vehicle Center
- Vehicle Swept Path

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Turning Template
40' Single Unit Truck
El Camino Ave / Grove Ave - Northbound / Southbound Left Turns

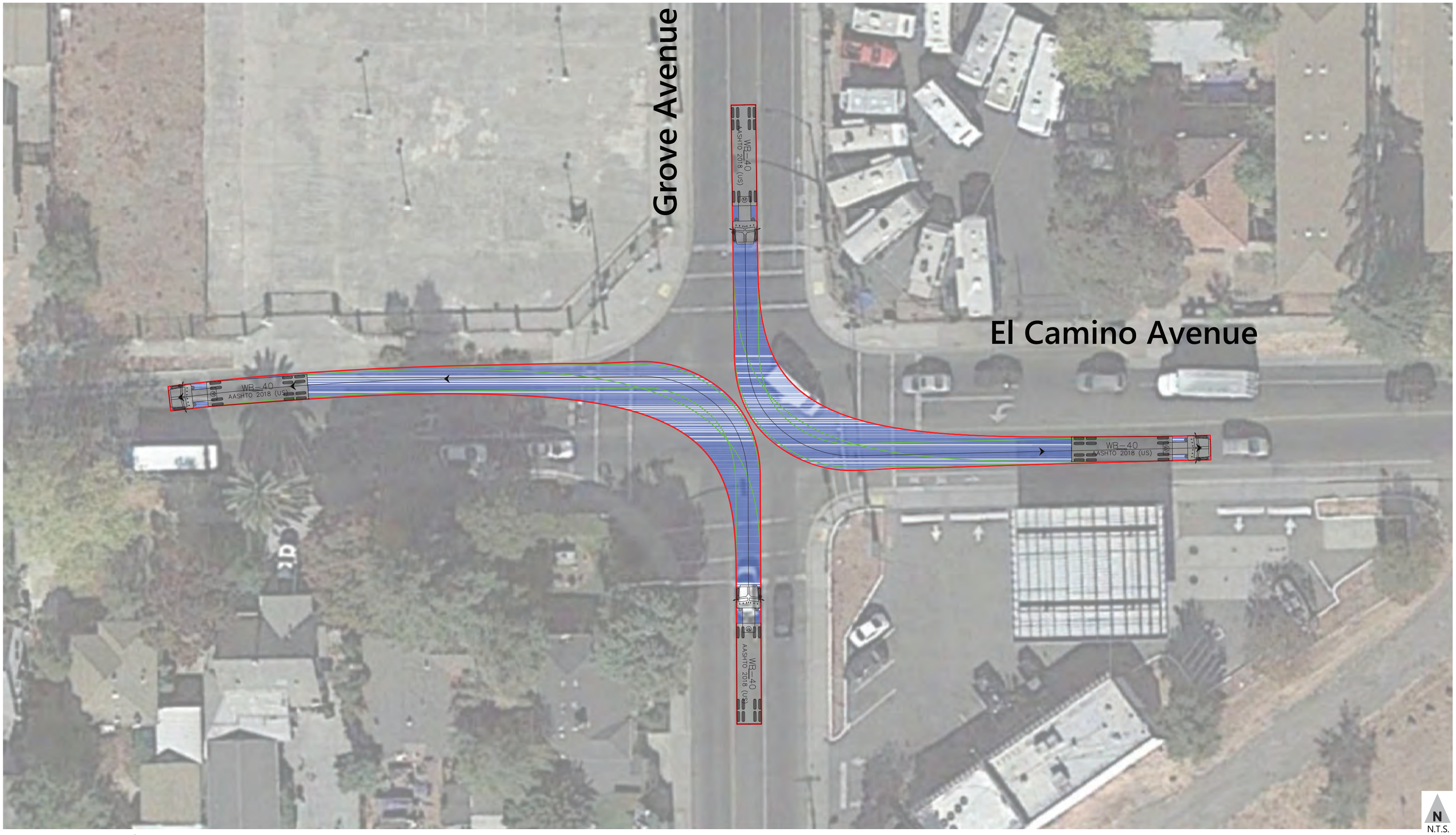



Legend:

- Vehicle Wheel
- Vehicle Body
- Vehicle Center
- Vehicle Swept Path

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Turning Template
40' Bus
El Camino Ave / Grove Ave - Northbound / Southbound Left Turns




Legend:

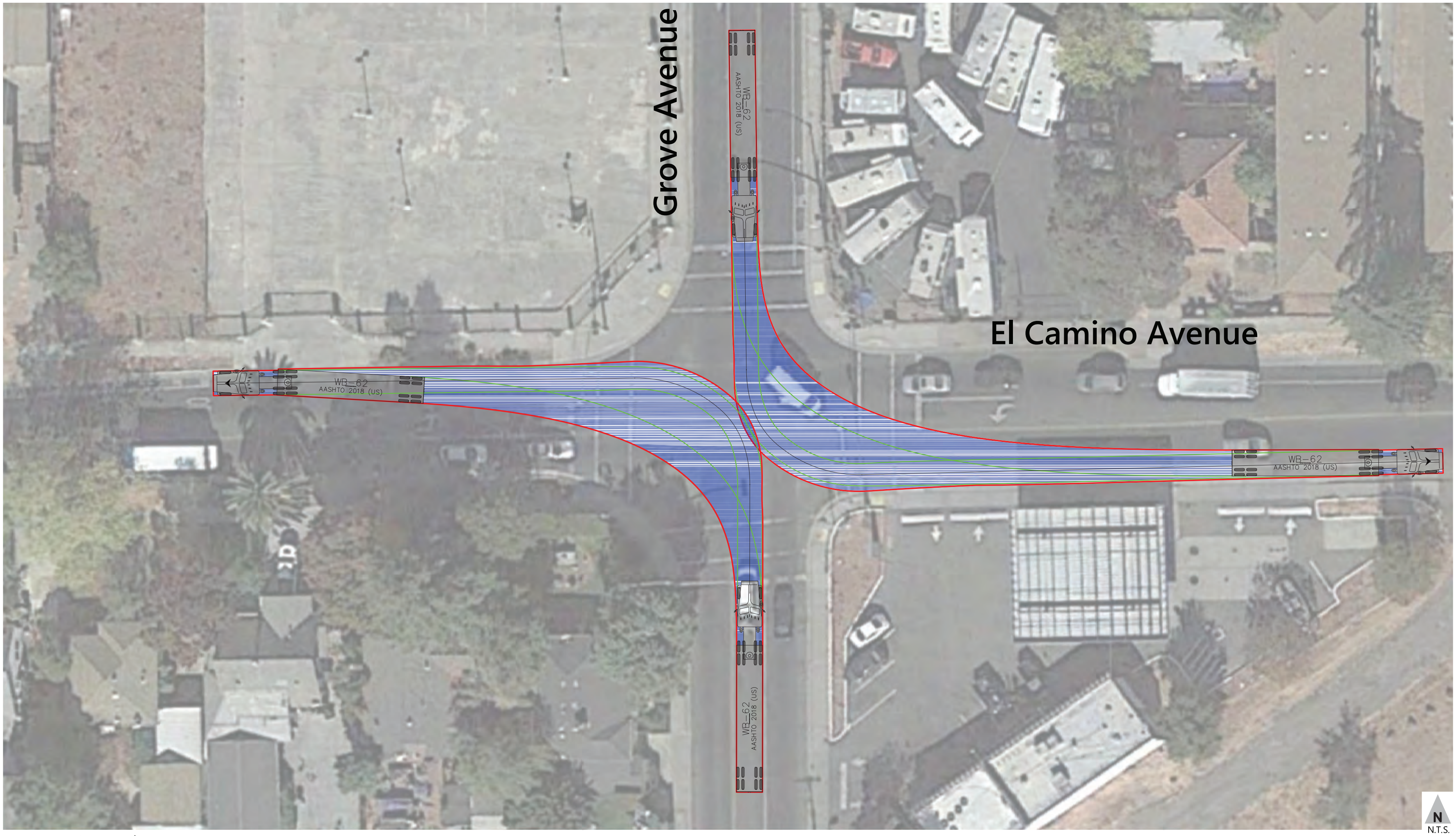
- Vehicle Wheel
- Vehicle Body
- Vehicle Center
- Vehicle Swept Path

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Turning Template

Intermediate Semi-Trailer WB-40

El Camino Ave / Grove Ave - Northbound / Southbound Left Turns




Legend:

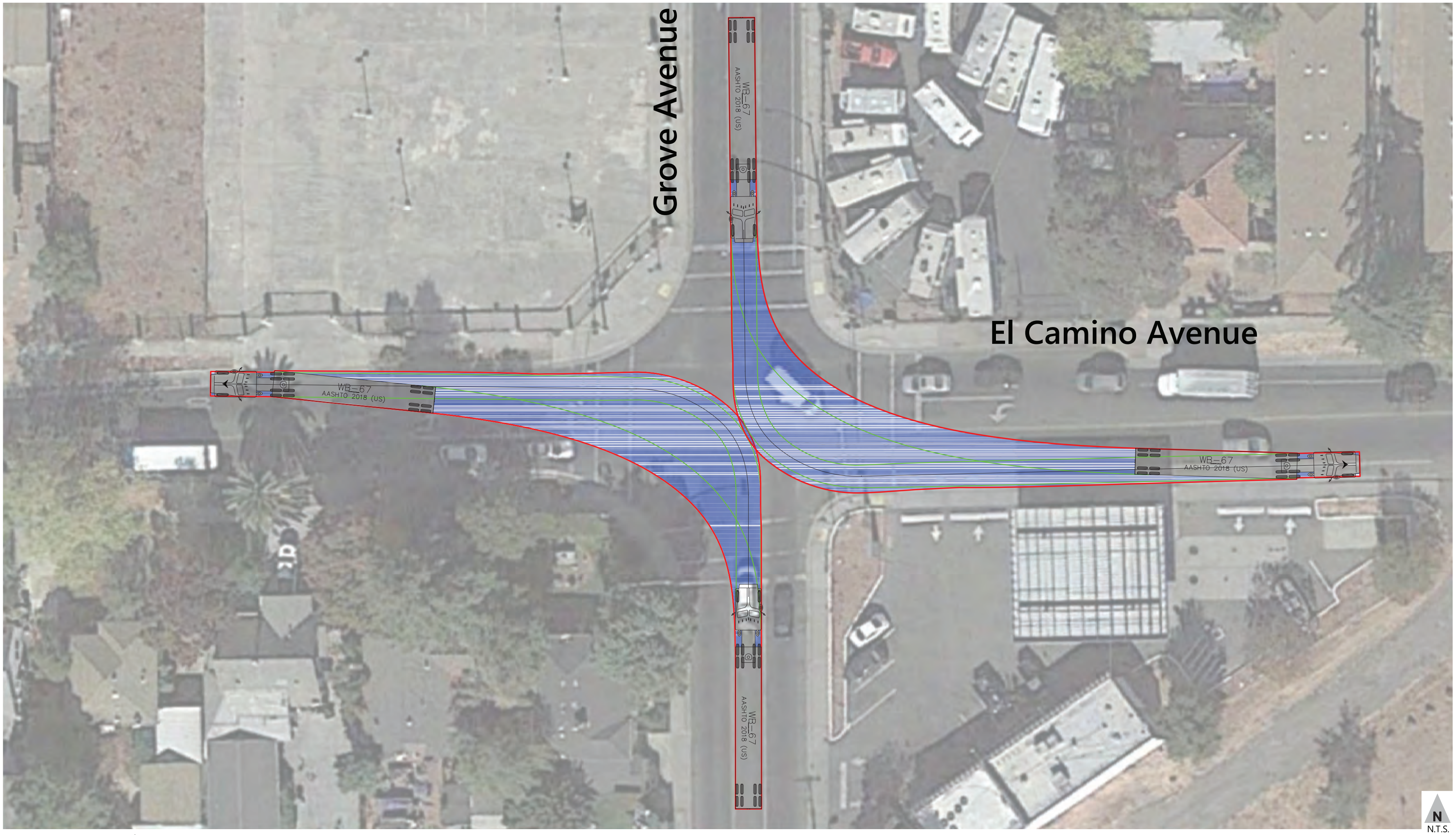
- Vehicle Wheel
- Vehicle Body
- Vehicle Center
- Vehicle Swept Path

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Turning Template

Intermediate Semi-Trailer WB-62

El Camino Ave / Grove Ave - Northbound / Southbound Left Turns




Legend:

- Vehicle Wheel
- Vehicle Body
- Vehicle Center
- Vehicle Swept Path

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Turning Template
Intermediate Semi-Trailer WB-67
El Camino Ave / Grove Ave - Northbound / Southbound Left Turns

Marysville Boulevard

# Vision Zero Top 5 Corridor Recommendations Results Summary – Marysville Boulevard

## Vision Zero Top 5 Corridor Recommendations Implemented

- Signal coordination
- Road diet on Marysville Blvd and Del Paso Boulevard between I-80 and El Camino Avenue
- New traffic signals at Marysville Blvd / Harris Ave and Marysville Blvd / Rosalind St
- Clearance time extended at all signalized intersections
- Protected left-turns at Marysville Blvd / Los Robles Blvd (S) and Marysville Blvd / Arcade Blvd. Split phasing at Marysville Blvd / North Avenue
- Marysville Blvd/Ermina Drive restricted to right-in/right-out access only

## Speed & Travel Time Results

| Travel Times (min) | Dir | Existing Conditions | | VZ Recommendations | | % Change | |
|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour |
| Marysville Blvd – North Ave to Arcade Blvd | NB | 3.2 | 3.7 | 4.1 | 5.5 | 27% | 49% |
| | SB | 3.6 | 3.6 | 5.5 | 4.5 | 51% | 27% |
| **Speed (mph)** | **Dir** | **Existing Conditions** | | **VZ Recommendations** | | **% Change** | |
| | | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** |
| Marysville Blvd – North Ave to Arcade Blvd | NB | 20 | 18 | 16 | 12 | -20% | -33% |
| | SB | 18 | 18 | 12 | 15 | -33% | -17% |

## Delay & LOS Results

| Intersection | Existing Conditions | | | VZ Recommendations | | |
|---|---|---|---|---|---|---|
| | Control[1] | AM Peak Hour | PM Peak Hour | Control | AM Peak Hour | PM Peak Hour |
| Marysville Blvd / North Ave | Signal | A / 10 | B / 11 | Signal | B / 19 | C / 23 |
| Marysville Blvd / Harris Ave | SSSC | A (C) / 3 (23) | A (D) / 4 (25) | Signal | B / 16 | D / 40 |
| Marysville Blvd / Grand Ave | Signal | C / 21 | B / 20 | Signal | D / 51 | E / 66 |
| Marysville Blvd / Roanoke Ave | SSSC | A (C) / 6 (16) | C (F) / 22 (69) | SSSC | A (D) / 9 (32) | D (F) / 33 (204) |
| Marysville Blvd / South Ave | Signal | B / 14 | B / 10 | Signal | D / 42 | C / 26 |
| Marysville Blvd / Rosalind St | SSSC | *Not Analyzed* | | Signal | A / 5 | B / 12 |
| Marysville Blvd / Los Robles Blvd (N) | SSSC | A (C) / 2 (22) | A (B) / 2 (13) | SSSC | A (E) / 5 (44) | A (C) / 5 (19) |
| Marysville Blvd / Los Robles Blvd (S) | Signal | A / 5 | A / 6 | Signal | B / 11 | B / 15 |
| Marysville Blvd / Arcade Blvd | Signal | C / 31 | D / 42 | Signal | C / 34 | D / 46 |

# Vision Zero Top 5 Corridor Recommendations Results Summary – Marysville Boulevard

## Peak Hour Maximum Queue Results

| Intersection | Approach | Lane | Storage (ft) | Peak Hour Maximum Queue (ft) | |
|---|---|---|---|---|---|
| | | | | AM Peak Hour | PM Peak Hour |
| Marysville Boulevard/North Avenue | SB | Left | 125 | 150 | 100 |
| | | Through | 475 | 200 | 225 |
| | | Through/Right | 475 | 225 | 225 |
| Marysville Boulevard/Arcade Boulevard | NB | Left | 125 | 100 | 50 |
| | | Through/Right | 2,800 | 575 | 600 |
| | SB | Left | 750 | 325 | 525 |
| | | Through | 1,200 | 275 | 175 |
| | | Right | 200 | 75 | 175 |
| | EB | Left | 150 | 100 | 100 |
| | | Through/Right | 3,800 | 225 | 200 |
| | WB | Left | 125 | 75 | 150 |
| | | Through | 1,725 | 250 | 600 |
| | | Right | 125 | 175 | 175 |

## Arterial Level of Service: NB Marysville Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Del Paso Blvd | 11 | 5.0 | 25.5 | 0.2 | 29 |
| Acacia Av | 109 | 1.6 | 25.1 | 0.2 | 34 |
| PED CROSSING | 501 | 4.6 | 18.7 | 0.1 | 27 |
| Sonoma Av | 10 | 1.1 | 7.3 | 0.1 | 31 |
| Strader Av | 122 | 0.7 | 7.8 | 0.1 | 31 |
| Arcade Bl | 8 | 37.2 | 42.3 | 0.1 | 4 |
| Ermina Dr | 124 | 3.1 | 12.3 | 0.1 | 27 |
| Los Robles Bl (S) | 7 | 3.6 | 19.8 | 0.2 | 29 |
| Los Robles Bl (N) | 6 | 1.3 | 10.7 | 0.1 | 31 |
| | 142 | 0.2 | 2.7 | 0.0 | 29 |
| Rosalind St | 123 | 0.4 | 5.0 | 0.0 | 34 |
| South Av | 5 | 9.5 | 22.7 | 0.1 | 21 |
| Roanoke Av | 4 | 4.0 | 16.8 | 0.1 | 27 |
| HAWK | 502 | 0.7 | 2.1 | 0.0 | 20 |
| Grand Av | 3 | 11.3 | 22.6 | 0.1 | 18 |
| Harris Av | 2 | 2.2 | 15.1 | 0.1 | 30 |
| North Av | 1 | 9.1 | 21.5 | 0.1 | 21 |
| Total | | 95.7 | 277.8 | 1.8 | 23 |

## Arterial Level of Service: SB Marysville Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| North Av | 1 | 8.4 | 36.6 | 0.3 | 28 |
| Harris Av | 2 | 2.8 | 15.5 | 0.1 | 29 |
| Grand Av | 3 | 22.7 | 35.4 | 0.1 | 13 |
| HAWK | 502 | 7.1 | 18.8 | 0.1 | 22 |
| Roanoke Av | 4 | 0.4 | 1.5 | 0.0 | 28 |
| South Av | 5 | 13.7 | 26.3 | 0.1 | 17 |
| Rosalind St | 123 | 3.3 | 16.3 | 0.1 | 28 |
| | 142 | 0.7 | 5.6 | 0.0 | 30 |
| Los Robles Bl (N) | 6 | 0.4 | 2.6 | 0.0 | 31 |
| | 7 | 4.7 | 14.1 | 0.1 | 24 |
| Ermina Dr | 124 | 5.6 | 21.8 | 0.2 | 26 |
| Arcade Bl | 8 | 13.0 | 22.2 | 0.1 | 15 |
| Strader Av | 122 | 1.7 | 7.0 | 0.1 | 27 |
| Sonoma Av | 10 | 1.0 | 8.0 | 0.1 | 30 |
| PED CROSSING | 501 | 4.9 | 11.6 | 0.1 | 19 |
| Acacia Av | 109 | 2.2 | 15.9 | 0.1 | 32 |
| Del Paso Blvd | 11 | 5.0 | 27.9 | 0.2 | 31 |
| Total | | 97.4 | 287.1 | 1.9 | 24 |

## Arterial Level of Service: NB Marysville Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Del Paso Blvd | 11 | 5.8 | 26.5 | 0.2 | 28 |
| Acacia Av | 109 | 2.1 | 25.7 | 0.2 | 33 |
| PED CROSSING | 501 | 3.2 | 17.6 | 0.1 | 29 |
| Sonoma Av | 10 | 1.2 | 7.4 | 0.1 | 30 |
| Strader Av | 122 | 4.5 | 11.5 | 0.1 | 21 |
| Arcade Bl | 8 | 32.9 | 37.9 | 0.1 | 5 |
| Ermina Dr | 124 | 3.6 | 13.0 | 0.1 | 25 |
| Los Robles Bl (S) | 7 | 6.3 | 22.4 | 0.2 | 26 |
| Los Robles Bl (N) | 6 | 2.1 | 11.5 | 0.1 | 29 |
| | 142 | 0.3 | 2.8 | 0.0 | 28 |
| Rosalind St | 123 | 0.6 | 5.2 | 0.0 | 32 |
| South Av | 5 | 8.6 | 21.7 | 0.1 | 21 |
| Roanoke Av | 4 | 20.1 | 32.8 | 0.1 | 14 |
| HAWK | 502 | 3.0 | 4.4 | 0.0 | 9 |
| Grand Av | 3 | 18.7 | 29.9 | 0.1 | 14 |
| Harris Av | 2 | 3.3 | 16.4 | 0.1 | 28 |
| North Av | 1 | 9.7 | 22.2 | 0.1 | 20 |
| Total | | 125.9 | 308.9 | 1.8 | 21 |

## Arterial Level of Service: SB Marysville Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| North Av | 1 | 9.1 | 37.5 | 0.3 | 28 |
| Harris Av | 2 | 2.7 | 15.4 | 0.1 | 29 |
| Grand Av | 3 | 17.1 | 29.9 | 0.1 | 15 |
| HAWK | 502 | 18.7 | 30.2 | 0.1 | 14 |
| Roanoke Av | 4 | 1.7 | 2.8 | 0.0 | 15 |
| South Av | 5 | 8.9 | 21.8 | 0.1 | 21 |
| Rosalind St | 123 | 2.2 | 15.4 | 0.1 | 30 |
| | 142 | 0.6 | 5.6 | 0.0 | 30 |
| Los Robles Bl (N) | 6 | 0.4 | 2.6 | 0.0 | 31 |
| | 7 | 4.5 | 13.9 | 0.1 | 24 |
| Ermina Dr | 124 | 2.4 | 18.3 | 0.2 | 31 |
| Arcade Bl | 8 | 12.5 | 21.5 | 0.1 | 15 |
| Strader Av | 122 | 1.3 | 6.7 | 0.1 | 28 |
| Sonoma Av | 10 | 0.6 | 7.7 | 0.1 | 31 |
| PED CROSSING | 501 | 2.4 | 9.0 | 0.1 | 25 |
| Acacia Av | 109 | 1.0 | 14.8 | 0.1 | 34 |
| Del Paso Blvd | 11 | 4.5 | 27.5 | 0.2 | 31 |
| Total | | 90.7 | 280.5 | 1.9 | 24 |

## Arterial Level of Service: NB Marysville Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Del Paso Blvd | 11 | 7.6 | 29.6 | 0.2 | 26 |
| Acacia Av | 109 | 1.9 | 25.4 | 0.2 | 34 |
| PED CROSSING | 501 | 4.0 | 18.4 | 0.1 | 27 |
| Sonoma Av | 10 | 1.4 | 7.6 | 0.1 | 29 |
| Strader Av | 122 | 13.6 | 20.6 | 0.1 | 12 |
| Arcade Bl | 8 | 56.0 | 60.9 | 0.1 | 3 |
| | 124 | 3.8 | 13.0 | 0.1 | 25 |
| Los Robles Bl (S) | 7 | 4.2 | 20.4 | 0.2 | 28 |
| Los Robles Bl (N) | 6 | 1.6 | 11.1 | 0.1 | 30 |
| | 142 | 0.5 | 3.0 | 0.0 | 26 |
| Rosalind St | 123 | 1.0 | 5.6 | 0.0 | 30 |
| Nogales St | 152 | 0.9 | 4.3 | 0.0 | 27 |
| South Av | 5 | 17.1 | 27.1 | 0.1 | 13 |
| Roanoke Av | 4 | 4.4 | 17.2 | 0.1 | 26 |
| HAWK | 502 | 0.8 | 2.2 | 0.0 | 19 |
| Grand Av | 3 | 18.1 | 29.1 | 0.1 | 14 |
| Harris Av | 2 | 7.1 | 20.2 | 0.1 | 23 |
| | 158 | 6.3 | 15.2 | 0.1 | 20 |
| North Av | 1 | 11.7 | 15.5 | 0.0 | 9 |
| Total | | 162.0 | 346.5 | 1.8 | 19 |

## Arterial Level of Service: SB Marysville Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| North Av | 1 | 43.0 | 70.9 | 0.3 | 15 |
| | 158 | 14.9 | 18.9 | 0.0 | 7 |
| Harris Av | 2 | 27.7 | 36.2 | 0.1 | 8 |
| Grand Av | 3 | 51.1 | 63.5 | 0.1 | 7 |
| HAWK | 502 | 8.0 | 19.7 | 0.1 | 21 |
| Roanoke Av | 4 | 0.7 | 1.8 | 0.0 | 24 |
| South Av | 5 | 19.5 | 31.6 | 0.1 | 14 |
| Nogales St | 152 | 4.3 | 14.0 | 0.1 | 25 |
| Rosalind St | 123 | 1.2 | 4.3 | 0.0 | 27 |
| | 142 | 2.2 | 7.2 | 0.0 | 23 |
| Los Robles Bl (N) | 6 | 1.3 | 3.5 | 0.0 | 23 |
| | 7 | 10.4 | 19.8 | 0.1 | 17 |
| Ermina Dr | 124 | 3.5 | 19.6 | 0.2 | 29 |
| Arcade Bl | 8 | 7.5 | 16.6 | 0.1 | 20 |
| | 122 | 1.6 | 7.3 | 0.1 | 25 |
| Sonoma Av | 10 | 1.8 | 8.8 | 0.1 | 28 |
| PED CROSSING | 501 | 3.3 | 9.9 | 0.1 | 23 |
| Acacia Av | 109 | 3.6 | 17.4 | 0.1 | 29 |
| Del Paso Blvd | 11 | 9.2 | 32.8 | 0.2 | 26 |
| Total | | 214.8 | 403.7 | 1.9 | 17 |

## Arterial Level of Service: NB Marysville Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Del Paso Blvd | 11 | 8.7 | 30.4 | 0.2 | 26 |
| Acacia Av | 109 | 2.1 | 26.0 | 0.2 | 33 |
| PED CROSSING | 501 | 4.7 | 19.1 | 0.1 | 26 |
| Sonoma Av | 10 | 2.3 | 8.4 | 0.1 | 27 |
| Strader Av | 122 | 8.5 | 15.5 | 0.1 | 16 |
| Arcade Bl | 8 | 20.0 | 25.2 | 0.1 | 7 |
| | 124 | 4.1 | 13.3 | 0.1 | 25 |
| Los Robles Bl (S) | 7 | 15.9 | 32.1 | 0.2 | 18 |
| Los Robles Bl (N) | 6 | 6.5 | 15.8 | 0.1 | 21 |
| | 142 | 2.6 | 5.0 | 0.0 | 16 |
| Rosalind St | 123 | 6.7 | 11.2 | 0.0 | 15 |
| Nogales St | 152 | 3.5 | 6.8 | 0.0 | 17 |
| South Av | 5 | 21.6 | 31.2 | 0.1 | 11 |
| Roanoke Av | 4 | 38.6 | 51.3 | 0.1 | 9 |
| HAWK | 502 | 4.4 | 5.8 | 0.0 | 7 |
| Grand Av | 3 | 40.7 | 51.9 | 0.1 | 8 |
| Harris Av | 2 | 40.2 | 52.5 | 0.1 | 9 |
| | 158 | 5.6 | 14.5 | 0.1 | 21 |
| North Av | 1 | 7.1 | 10.9 | 0.0 | 13 |
| Total | | 243.9 | 426.9 | 1.8 | 15 |

## Arterial Level of Service: SB Marysville Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| North Av | 1 | 18.2 | 46.5 | 0.3 | 22 |
| | 158 | 9.0 | 12.9 | 0.0 | 11 |
| Harris Av | 2 | 25.5 | 34.1 | 0.1 | 9 |
| Grand Av | 3 | 28.9 | 41.5 | 0.1 | 11 |
| HAWK | 502 | 15.5 | 26.9 | 0.1 | 15 |
| Roanoke Av | 4 | 0.9 | 1.9 | 0.0 | 22 |
| South Av | 5 | 13.8 | 26.3 | 0.1 | 17 |
| Nogales St | 152 | 4.3 | 14.1 | 0.1 | 25 |
| Rosalind St | 123 | 1.8 | 5.2 | 0.0 | 22 |
| | 142 | 1.6 | 6.4 | 0.0 | 26 |
| Los Robles Bl (N) | 6 | 1.0 | 3.2 | 0.0 | 25 |
| | 7 | 7.0 | 16.5 | 0.1 | 20 |
| Ermina Dr | 124 | 6.4 | 22.7 | 0.2 | 25 |
| Arcade Bl | 8 | 5.1 | 14.3 | 0.1 | 23 |
| Strader Av | 122 | 1.0 | 6.7 | 0.1 | 28 |
| Sonoma Av | 10 | 0.7 | 7.7 | 0.1 | 32 |
| PED CROSSING | 501 | 2.0 | 8.6 | 0.1 | 26 |
| Acacia Av | 109 | 1.3 | 15.0 | 0.1 | 34 |
| Del Paso Blvd | 11 | 2.8 | 26.3 | 0.2 | 32 |
| Total | | 146.9 | 336.9 | 1.9 | 20 |

**Intersection 1** **Marysville Bl/North Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 15 | 12 | 79.4% | 60.4 | 26.0 | E |
| | Through | 593 | 525 | 88.5% | 11.6 | 2.0 | B |
| | Right Turn | 6 | 6 | 93.0% | 5.1 | 2.2 | A |
| | Subtotal | 614 | 542 | 88.3% | 12.6 | 2.1 | B |
| SB | Left Turn | 47 | 39 | 82.3% | 63.0 | 14.1 | E |
| | Through | 813 | 782 | 96.1% | 12.2 | 5.1 | B |
| | Right Turn | 41 | 39 | 96.2% | 5.5 | 4.6 | A |
| | Subtotal | 901 | 860 | 95.4% | 14.2 | 5.0 | B |
| EB | Left Turn | 105 | 100 | 95.3% | 56.5 | 5.3 | E |
| | Through | 27 | 26 | 97.8% | 57.6 | 17.5 | E |
| | Right Turn | 27 | 26 | 97.8% | 40.7 | 13.8 | D |
| | Subtotal | 159 | 153 | 96.2% | 54.0 | 7.2 | D |
| WB | Left Turn | 18 | 16 | 90.9% | 47.0 | 17.3 | D |
| | Through | 24 | 28 | 116.3% | 57.1 | 18.7 | E |
| | Right Turn | 12 | 11 | 93.0% | 9.5 | 7.3 | A |
| | Subtotal | 54 | 55 | 102.6% | 46.9 | 8.4 | D |
| Total | | 1,728 | 1,610 | 93.2% | 18.6 | 2.9 | B |

**Intersection 2** **Marysville Bl/Harris Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 29 | 24 | 82.1% | 65.7 | 15.6 | E |
| | Through | 565 | 508 | 89.9% | 8.3 | 2.2 | A |
| | Right Turn | 3 | 1 | 49.6% | 0.4 | 0.8 | A |
| | Subtotal | 597 | 533 | 89.4% | 10.9 | 2.9 | B |
| SB | Left Turn | 35 | 39 | 111.6% | 59.6 | 12.1 | E |
| | Through | 798 | 776 | 97.2% | 13.7 | 10.7 | B |
| | Right Turn | 25 | 25 | 98.2% | 13.5 | 13.9 | B |
| | Subtotal | 858 | 839 | 97.8% | 15.6 | 10.3 | B |
| EB | Left Turn | 24 | 26 | 107.0% | 69.0 | 26.6 | E |
| | Through | 11 | 13 | 118.4% | 56.6 | 21.4 | E |
| | Right Turn | 43 | 38 | 87.4% | 43.6 | 21.9 | D |
| | Subtotal | 78 | 76 | 97.8% | 55.5 | 22.3 | E |
| WB | Left Turn | 4 | 4 | 102.3% | 55.4 | 51.6 | E |
| | Through | 3 | 3 | 111.6% | 76.1 | 78.4 | E |
| | Right Turn | 23 | 26 | 114.8% | 18.2 | 23.6 | B |
| | Subtotal | 30 | 34 | 112.8% | 28.8 | 19.0 | C |
| Total | | 1,563 | 1,483 | 94.9% | 16.2 | 6.5 | B |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Marysville Bl**
**Marysville Blvd Road Diet**
**AM Peak Hour**

**Intersection 3** **Marysville Bl/Grand Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 136 | 118 | 86.4% | 81.7 | 14.1 | F |
| | Through | 462 | 437 | 94.7% | 25.0 | 2.7 | C |
| | Right Turn | 23 | 19 | 82.5% | 22.0 | 10.4 | C |
| | Subtotal | 621 | 574 | 92.4% | 36.6 | 3.5 | D |
| SB | Left Turn | 16 | 21 | 130.2% | 75.6 | 16.5 | E |
| | Through | 755 | 719 | 95.2% | 28.9 | 11.3 | C |
| | Right Turn | 73 | 62 | 85.6% | 24.6 | 13.3 | C |
| | Subtotal | 844 | 802 | 95.1% | 29.8 | 11.2 | C |
| EB | Left Turn | 91 | 81 | 89.5% | 148.3 | 42.9 | F |
| | Through | 117 | 104 | 89.0% | 98.9 | 42.9 | F |
| | Right Turn | 161 | 147 | 91.3% | 80.9 | 42.7 | F |
| | Subtotal | 369 | 333 | 90.1% | 103.6 | 44.2 | F |
| WB | Left Turn | 54 | 51 | 94.4% | 101.7 | 32.0 | F |
| | Through | 162 | 155 | 95.8% | 81.1 | 23.8 | F |
| | Right Turn | 44 | 35 | 80.3% | 61.9 | 30.7 | E |
| | Subtotal | 260 | 241 | 92.9% | 82.6 | 24.6 | F |
| Total | | 2,094 | 1,950 | 93.1% | 50.8 | 10.4 | D |

**Intersection 4** **Marysville Bl/Roanoke Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 13 | 10 | 77.3% | 16.6 | 9.2 | C |
| | Through | 599 | 587 | 98.0% | 5.3 | 1.9 | A |
| | Right Turn | 11 | 8 | 74.4% | 3.6 | 1.5 | A |
| | Subtotal | 623 | 605 | 97.1% | 5.5 | 1.9 | A |
| SB | Left Turn | 21 | 22 | 106.3% | 17.2 | 5.8 | C |
| | Through | 939 | 888 | 94.6% | 9.5 | 5.5 | A |
| | Right Turn | 10 | 8 | 81.8% | 8.8 | 5.1 | A |
| | Subtotal | 970 | 918 | 94.7% | 9.7 | 5.4 | A |
| EB | Left Turn | 1 | 0 | 37.2% | 32.4 | 102.6 | D |
| | Through | 2 | 1 | 37.2% | 10.6 | 26.4 | B |
| | Right Turn | 17 | 15 | 85.3% | 28.2 | 26.5 | D |
| | Subtotal | 20 | 16 | 78.1% | 33.5 | 39.2 | D |
| WB | Left Turn | 5 | 4 | 74.4% | 19.4 | 16.8 | C |
| | Through | 1 | 1 | 111.6% | 10.4 | 29.2 | B |
| | Right Turn | 20 | 17 | 85.6% | 17.0 | 13.7 | C |
| | Subtotal | 26 | 22 | 84.4% | 20.1 | 13.1 | C |
| Total | | 1,639 | 1,561 | 95.3% | 8.5 | 4.2 | A |

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Vision Zero Top 5 Corridors - Marysville Bl
Marysville Blvd Road Diet
AM Peak Hour

**Intersection 5** **Marysville Bl/South Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 74 | 68 | 92.5% | 96.0 | 16.8 | F |
| | Through | 529 | 510 | 96.3% | 21.1 | 3.8 | C |
| | Right Turn | 10 | 7 | 74.4% | 10.7 | 11.1 | B |
| | Subtotal | 613 | 586 | 95.5% | 30.0 | 7.3 | C |
| SB | Left Turn | 23 | 17 | 74.4% | 91.3 | 21.4 | F |
| | Through | 905 | 852 | 94.2% | 30.2 | 10.7 | C |
| | Right Turn | 33 | 36 | 108.2% | 26.7 | 10.8 | C |
| | Subtotal | 961 | 905 | 94.2% | 31.3 | 10.8 | C |
| EB | Left Turn | 36 | 31 | 84.7% | 89.2 | 54.0 | F |
| | Through | 77 | 65 | 84.1% | 95.5 | 70.4 | F |
| | Right Turn | 112 | 99 | 88.7% | 84.5 | 58.2 | F |
| | Subtotal | 225 | 195 | 86.5% | 88.6 | 59.8 | F |
| WB | Left Turn | 42 | 31 | 74.4% | 93.4 | 59.8 | F |
| | Through | 88 | 76 | 86.7% | 95.4 | 42.0 | F |
| | Right Turn | 58 | 51 | 88.5% | 81.0 | 41.4 | F |
| | Subtotal | 188 | 159 | 84.5% | 90.9 | 44.4 | F |
| Total | | 1,987 | 1,844 | 92.8% | 41.5 | 9.1 | D |

**Intersection 6** **Marysville Bl/Los Robles Bl (N)** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 30 | 28 | 91.8% | 17.6 | 7.9 | C |
| | Through | 589 | 561 | 95.2% | 1.6 | 0.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 619 | 588 | 95.0% | 2.3 | 0.6 | A |
| SB | Left Turn | | | | | | |
| | Through | 1,075 | 977 | 90.8% | 2.8 | 0.5 | A |
| | Right Turn | 19 | 18 | 95.9% | 1.8 | 0.4 | A |
| | Subtotal | 1,094 | 995 | 90.9% | 2.7 | 0.5 | A |
| EB | Left Turn | 31 | 25 | 81.6% | 43.8 | 25.4 | E |
| | Through | | | | | | |
| | Right Turn | 68 | 61 | 89.2% | 40.3 | 20.1 | E |
| | Subtotal | 99 | 86 | 86.8% | 41.3 | 20.6 | E |
| WB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| Total | | 1,812 | 1,669 | 92.1% | 4.6 | 1.4 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Marysville Bl**
**Marysville Blvd Road Diet**
**AM Peak Hour**

**Intersection 7** **Marysville Bl/Los Robles Bl (S)** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Through | 586 | 562 | 95.9% | 3.7 | 1.1 | A |
| | Right Turn | 9 | 5 | 57.9% | 1.2 | 2.2 | A |
| | Subtotal | 596 | 567 | 95.2% | 3.7 | 1.1 | A |
| SB | Left Turn | 43 | 47 | 109.9% | 80.2 | 11.1 | F |
| | Through | 1,097 | 968 | 88.3% | 9.4 | 1.8 | A |
| | Right Turn | 3 | 2 | 74.4% | 3.8 | 1.8 | A |
| | Subtotal | 1,143 | 1,018 | 89.0% | 12.7 | 2.0 | B |
| EB | Left Turn | | | | | | |
| | Through | 1 | 0 | 37.2% | 9.8 | 30.9 | A |
| | Right Turn | | | | | | |
| | Subtotal | 1 | 0 | 37.2% | 9.8 | 30.9 | A |
| WB | Left Turn | 49 | 50 | 102.5% | 52.6 | 10.3 | D |
| | Through | | | | | | |
| | Right Turn | 31 | 30 | 96.0% | 26.3 | 14.0 | C |
| | Subtotal | 80 | 80 | 100.0% | 42.5 | 9.2 | D |
| Total | | 1,820 | 1,665 | 91.5% | 11.1 | 1.7 | B |

**Intersection 8** **Marysville Bl/Arcade Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 15 | 11 | 74.4% | 91.0 | 57.3 | F |
| | Through | 243 | 244 | 100.6% | 101.4 | 20.3 | F |
| | Right Turn | 32 | 28 | 87.2% | 85.1 | 26.6 | F |
| | Subtotal | 290 | 283 | 97.7% | 99.9 | 20.7 | F |
| SB | Left Turn | 543 | 459 | 84.5% | 18.9 | 3.8 | B |
| | Through | 580 | 503 | 86.7% | 10.5 | 1.5 | B |
| | Right Turn | 23 | 20 | 87.3% | 5.2 | 1.6 | A |
| | Subtotal | 1,146 | 982 | 85.7% | 14.4 | 2.2 | B |
| EB | Left Turn | 39 | 45 | 116.4% | 59.4 | 13.6 | E |
| | Through | 119 | 105 | 87.8% | 56.4 | 11.8 | E |
| | Right Turn | 32 | 35 | 110.4% | 44.6 | 16.2 | D |
| | Subtotal | 190 | 185 | 97.5% | 54.8 | 10.1 | D |
| WB | Left Turn | 28 | 33 | 116.9% | 69.0 | 13.1 | E |
| | Through | 86 | 88 | 102.1% | 55.0 | 8.5 | E |
| | Right Turn | 324 | 324 | 99.9% | 11.8 | 3.2 | B |
| | Subtotal | 438 | 444 | 101.4% | 24.7 | 3.5 | C |
| Total | | 2,064 | 1,895 | 91.8% | 33.5 | 2.7 | C |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Marysville Bl**
**Marysville Blvd Road Diet**
**AM Peak Hour**

**Intersection 123** **Marysville Blvd/Rosalind St** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | 609 | 575 | 94.4% | 3.8 | 1.0 | A |
| | Right Turn | 11 | 13 | 118.4% | 3.2 | 1.4 | A |
| | Subtotal | 620 | 588 | 94.9% | 3.7 | 1.0 | A |
| SB | Left Turn | 12 | 10 | 83.7% | 7.8 | 2.6 | A |
| | Through | 1,087 | 1,004 | 92.3% | 4.7 | 0.9 | A |
| | Right Turn | | | | | | |
| | Subtotal | 1,099 | 1,014 | 92.2% | 4.8 | 0.9 | A |
| EB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| WB | Left Turn | 7 | 4 | 63.8% | 32.0 | 24.2 | C |
| | Through | | | | | | |
| | Right Turn | 11 | 13 | 118.4% | 8.1 | 6.7 | A |
| | Subtotal | 18 | 17 | 97.1% | 16.0 | 10.1 | B |
| Total | | 1,737 | 1,619 | 93.2% | 4.5 | 0.8 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Marysville Bl**
**Marysville Blvd Road Diet**
**PM Peak Hour**

**Intersection 1** **Marysville Bl/North Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 39 | 32 | 81.7% | 48.3 | 7.7 | D |
| | Through | 865 | 661 | 76.4% | 12.7 | 5.3 | B |
| | Right Turn | 10 | 5 | 53.8% | 8.1 | 5.0 | A |
| | Subtotal | 914 | 698 | 76.4% | 14.3 | 5.2 | B |
| SB | Left Turn | 41 | 35 | 84.3% | 64.3 | 8.9 | E |
| | Through | 626 | 631 | 100.8% | 17.7 | 7.8 | B |
| | Right Turn | 78 | 73 | 93.0% | 8.5 | 6.1 | A |
| | Subtotal | 745 | 738 | 99.1% | 19.1 | 7.2 | B |
| EB | Left Turn | 104 | 115 | 110.8% | 61.5 | 24.8 | E |
| | Through | 18 | 22 | 119.5% | 76.0 | 36.7 | E |
| | Right Turn | 49 | 51 | 105.0% | 51.4 | 26.4 | D |
| | Subtotal | 171 | 188 | 110.0% | 60.9 | 23.5 | E |
| WB | Left Turn | 16 | 20 | 122.4% | 54.2 | 10.2 | D |
| | Through | 21 | 24 | 115.2% | 49.8 | 9.7 | D |
| | Right Turn | 3 | 5 | 153.6% | 6.0 | 7.1 | A |
| | Subtotal | 40 | 48 | 121.0% | 46.9 | 5.7 | D |
| Total | | 1,870 | 1,673 | 89.5% | 22.8 | 6.8 | C |

**Intersection 2** **Marysville Bl/Harris Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 61 | 53 | 86.9% | 103.6 | 10.8 | F |
| | Through | 823 | 649 | 78.9% | 41.1 | 8.9 | D |
| | Right Turn | 16 | 15 | 96.0% | 38.4 | 24.0 | D |
| | Subtotal | 900 | 717 | 79.7% | 45.7 | 9.3 | D |
| SB | Left Turn | 51 | 43 | 84.3% | 82.3 | 28.3 | F |
| | Through | 606 | 608 | 100.3% | 33.8 | 6.7 | C |
| | Right Turn | 34 | 38 | 111.8% | 31.7 | 13.7 | C |
| | Subtotal | 691 | 689 | 99.7% | 36.6 | 7.5 | D |
| EB | Left Turn | 31 | 27 | 86.7% | 31.2 | 12.6 | C |
| | Through | 13 | 13 | 100.4% | 17.1 | 16.5 | B |
| | Right Turn | 31 | 33 | 107.8% | 21.3 | 7.9 | C |
| | Subtotal | 75 | 73 | 97.8% | 23.9 | 7.2 | C |
| WB | Left Turn | 3 | 3 | 102.4% | 7.9 | 11.1 | A |
| | Through | 8 | 7 | 86.4% | 12.0 | 17.5 | B |
| | Right Turn | 58 | 41 | 71.5% | 17.2 | 6.4 | B |
| | Subtotal | 69 | 51 | 74.6% | 17.4 | 6.2 | B |
| Total | | 1,735 | 1,531 | 88.2% | 39.5 | 5.5 | D |

**Intersection 3** | **Marysville Bl/Grand Av** | **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 170 | 132 | 77.9% | 131.4 | 12.7 | F |
| | Through | 776 | 599 | 77.2% | 84.1 | 10.0 | F |
| | Right Turn | 57 | 46 | 80.2% | 79.1 | 7.2 | E |
| | Subtotal | 1,003 | 777 | 77.5% | 92.0 | 9.5 | F |
| SB | Left Turn | 47 | 51 | 109.5% | 69.6 | 19.2 | E |
| | Through | 513 | 518 | 101.1% | 29.0 | 6.1 | C |
| | Right Turn | 80 | 76 | 95.5% | 26.2 | 8.6 | C |
| | Subtotal | 640 | 646 | 101.0% | 31.8 | 5.8 | C |
| EB | Left Turn | 61 | 53 | 86.9% | 97.0 | 32.5 | F |
| | Through | 110 | 101 | 91.5% | 56.6 | 25.3 | E |
| | Right Turn | 119 | 105 | 88.1% | 41.4 | 22.5 | D |
| | Subtotal | 290 | 258 | 89.1% | 59.1 | 24.8 | E |
| WB | Left Turn | 54 | 43 | 80.4% | 108.8 | 32.5 | F |
| | Through | 167 | 161 | 96.6% | 71.3 | 25.5 | E |
| | Right Turn | 64 | 61 | 94.8% | 70.5 | 30.1 | E |
| | Subtotal | 285 | 265 | 93.1% | 76.9 | 26.2 | E |
| Total | | 2,218 | 1,947 | 87.8% | 65.7 | 8.4 | E |

**Intersection 4** | **Marysville Bl/Roanoke Av** | **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 21 | 18 | 85.9% | 39.8 | 15.2 | E |
| | Through | 963 | 801 | 83.1% | 43.1 | 7.0 | E |
| | Right Turn | 30 | 20 | 65.3% | 29.8 | 12.5 | D |
| | Subtotal | 1,014 | 838 | 82.7% | 42.8 | 6.9 | E |
| SB | Left Turn | 22 | 19 | 85.5% | 52.7 | 24.4 | F |
| | Through | 639 | 608 | 95.1% | 16.1 | 3.4 | C |
| | Right Turn | 25 | 24 | 96.8% | 15.3 | 3.3 | C |
| | Subtotal | 686 | 651 | 94.9% | 17.1 | 3.7 | C |
| EB | Left Turn | 2 | 0 | 19.2% | 86.4 | 173.0 | F |
| | Through | 1 | 2 | 153.6% | 17.0 | 35.9 | C |
| | Right Turn | 25 | 27 | 107.5% | 31.4 | 38.5 | D |
| | Subtotal | 28 | 29 | 102.9% | 34.3 | 38.2 | D |
| WB | Left Turn | 14 | 5 | 38.4% | 203.8 | 84.9 | F |
| | Through | 6 | 3 | 57.6% | 192.0 | 167.7 | F |
| | Right Turn | 37 | 12 | 32.2% | 194.6 | 53.3 | F |
| | Subtotal | 57 | 21 | 36.4% | 158.0 | 89.8 | F |
| Total | | 1,785 | 1,539 | 86.2% | 33.3 | 4.6 | D |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Marysville Bl**
**Marysville Blvd Road Diet**
**PM Peak Hour**

**Intersection 5** **Marysville Bl/South Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 90 | 81 | 90.0% | 79.3 | 6.8 | E |
| | Through | 944 | 814 | 86.2% | 25.1 | 7.6 | C |
| | Right Turn | 21 | 19 | 91.4% | 15.5 | 8.6 | B |
| | Subtotal | 1,055 | 914 | 86.6% | 29.8 | 7.3 | C |
| SB | Left Turn | 19 | 18 | 97.0% | 68.9 | 14.2 | E |
| | Through | 628 | 580 | 92.4% | 13.7 | 3.8 | B |
| | Right Turn | 32 | 33 | 104.4% | 11.2 | 5.3 | B |
| | Subtotal | 679 | 632 | 93.1% | 15.2 | 4.3 | B |
| EB | Left Turn | 33 | 29 | 88.4% | 51.3 | 13.7 | D |
| | Through | 38 | 36 | 94.0% | 49.0 | 13.2 | D |
| | Right Turn | 47 | 51 | 108.7% | 33.0 | 11.7 | C |
| | Subtotal | 118 | 116 | 98.3% | 42.4 | 12.9 | D |
| WB | Left Turn | 10 | 10 | 99.8% | 52.3 | 34.1 | D |
| | Through | 43 | 40 | 92.0% | 48.7 | 15.5 | D |
| | Right Turn | 35 | 33 | 93.3% | 32.6 | 8.0 | C |
| | Subtotal | 88 | 82 | 93.4% | 43.1 | 8.8 | D |
| Total | | 1,940 | 1,744 | 89.9% | 26.2 | 4.7 | C |

**Intersection 6** **Marysville Bl/Los Robles Bl (N)** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 62 | 60 | 97.2% | 12.4 | 2.9 | B |
| | Through | 1,063 | 993 | 93.4% | 6.3 | 3.0 | A |
| | Right Turn | | | | | | |
| | Subtotal | 1,125 | 1,053 | 93.6% | 6.7 | 2.9 | A |
| SB | Left Turn | | | | | | |
| | Through | 639 | 601 | 94.1% | 1.0 | 0.2 | A |
| | Right Turn | 46 | 51 | 111.0% | 0.1 | 0.1 | A |
| | Subtotal | 685 | 652 | 95.2% | 0.9 | 0.2 | A |
| EB | Left Turn | 21 | 23 | 107.9% | 18.8 | 11.5 | C |
| | Through | | | | | | |
| | Right Turn | 62 | 63 | 102.2% | 14.6 | 5.7 | B |
| | Subtotal | 83 | 86 | 103.6% | 15.3 | 5.8 | C |
| WB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| Total | | 1,893 | 1,791 | 94.6% | 5.0 | 1.7 | A |

**Intersection 7** **Marysville Bl/Los Robles Bl (S)** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 2 | 76.8% | 29.5 | 41.8 | C |
| | Through | 1,068 | 1,012 | 94.8% | 15.8 | 6.8 | B |
| | Right Turn | 28 | 30 | 108.3% | 13.2 | 12.0 | B |
| | Subtotal | 1,098 | 1,044 | 95.1% | 15.8 | 6.9 | B |
| SB | Left Turn | 32 | 27 | 84.0% | 67.8 | 12.3 | E |
| | Through | 650 | 610 | 93.9% | 6.8 | 2.0 | A |
| | Right Turn | 19 | 18 | 97.0% | 3.6 | 1.9 | A |
| | Subtotal | 701 | 655 | 93.5% | 9.2 | 2.0 | A |
| EB | Left Turn | 19 | 18 | 97.0% | 50.3 | 12.8 | D |
| | Through | 2 | 3 | 134.4% | 36.2 | 42.3 | D |
| | Right Turn | 1 | 1 | 76.8% | 0.8 | 2.4 | A |
| | Subtotal | 22 | 22 | 99.5% | 49.8 | 18.0 | D |
| WB | Left Turn | 54 | 58 | 106.7% | 46.7 | 8.9 | D |
| | Through | 3 | 2 | 76.8% | 22.6 | 34.7 | C |
| | Right Turn | 38 | 42 | 110.1% | 34.4 | 10.5 | C |
| | Subtotal | 95 | 102 | 107.1% | 42.5 | 4.2 | D |
| Total | | 1,916 | 1,823 | 95.2% | 15.3 | 4.3 | B |

**Intersection 8** **Marysville Bl/Arcade Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 9 | 8 | 89.6% | 58.8 | 18.8 | E |
| | Through | 604 | 594 | 98.4% | 30.5 | 4.9 | C |
| | Right Turn | 35 | 30 | 84.5% | 27.6 | 7.0 | C |
| | Subtotal | 648 | 632 | 97.5% | 30.6 | 4.7 | C |
| SB | Left Turn | 357 | 313 | 87.6% | 91.4 | 18.2 | F |
| | Through | 317 | 287 | 90.6% | 11.0 | 5.2 | B |
| | Right Turn | 30 | 27 | 89.6% | 8.5 | 4.8 | A |
| | Subtotal | 704 | 627 | 89.0% | 50.9 | 10.6 | D |
| EB | Left Turn | 39 | 33 | 84.7% | 62.2 | 19.0 | E |
| | Through | 124 | 124 | 99.7% | 45.4 | 7.8 | D |
| | Right Turn | 9 | 12 | 136.5% | 42.6 | 26.4 | D |
| | Subtotal | 172 | 169 | 98.2% | 48.6 | 9.1 | D |
| WB | Left Turn | 62 | 52 | 84.2% | 97.8 | 15.4 | F |
| | Through | 183 | 184 | 100.5% | 74.8 | 15.5 | E |
| | Right Turn | 472 | 464 | 98.4% | 41.4 | 10.4 | D |
| | Subtotal | 717 | 700 | 97.7% | 54.5 | 11.2 | D |
| Total | | 2,241 | 2,128 | 94.9% | 46.0 | 6.9 | D |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - Marysville Bl**
**Average Results from 10 Runs** | **Marysville Blvd Road Diet**
**Volume and Delay by Movement** | **PM Peak Hour**

**Intersection 123** **Marysville Blvd/Rosalind St** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | 1,070 | 977 | 91.3% | 15.6 | 6.7 | B |
| | Right Turn | 14 | 13 | 93.3% | 17.5 | 24.0 | B |
| | Subtotal | 1,084 | 990 | 91.4% | 15.6 | 6.7 | B |
| SB | Left Turn | 24 | 22 | 89.6% | 27.4 | 13.2 | C |
| | Through | 673 | 642 | 95.4% | 5.8 | 3.2 | A |
| | Right Turn | | | | | | |
| | Subtotal | 697 | 664 | 95.2% | 6.5 | 3.6 | A |
| EB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| WB | Left Turn | 12 | 12 | 96.0% | 32.8 | 14.2 | C |
| | Through | | | | | | |
| | Right Turn | 14 | 13 | 90.5% | 14.9 | 5.7 | B |
| | Subtotal | 26 | 24 | 93.0% | 23.7 | 8.9 | C |
| Total | | 1,807 | 1,678 | 92.9% | 12.1 | 3.9 | B |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Queue Length**

**Vision Zero Top 5 Corridors - Marysville Bl**
**Marysville Blvd Road Diet**
**AM Peak Hour**

**Intersection 1** **Marysville Bl/North Av** **Signal**

| | | Storage | Average Queue (ft) | | 95th Queue (ft) | | Maximum Queue (ft) | | Block Time | |
|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Lane Group | (ft) | Average | Std. Dev. | Average | Std. Dev. | Average | Std. Dev. | Pocket | Upstream |
| EB | Shared | 1,050 | 150 | 15 | 250 | 32 | 250 | 35 | 0% | 0% |
| NB | Left Turn | 75 | 25 | 10 | 50 | 25 | 75 | 25 | 2% | 0% |
| | Through/Right | 575 | 200 | 32 | 275 | 34 | 300 | 36 | 18% | 0% |
| SB | Left Turn | 1,225 | 75 | 11 | 125 | 42 | 150 | 67 | 0% | 0% |
| | Through | 1,475 | 150 | 25 | 225 | 47 | 225 | 48 | 2% | 0% |
| | Through/Right | 1,475 | 125 | 27 | 225 | 49 | 200 | 46 | 0% | 0% |
| WB | Left/Through | 1,050 | 50 | 11 | 100 | 14 | 100 | 19 | 0% | 0% |
| | Right Turn | 175 | 25 | 6 | 50 | 14 | 50 | 18 | 0% | 0% |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - Marysville Bl**
**Average Results from 10 Runs** | **Marysville Blvd Road Diet**
**Queue Length** | **AM Peak Hour**
**Intersection 8** **Marysville Bl/Arcade Bl** | **Signal**

| Direction | Lane Group | Storage (ft) | Average Queue (ft) | | 95th Queue (ft) | | Maximum Queue (ft) | | Block Time | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Average | Std. Dev. | Average | Std. Dev. | Average | Std. Dev. | Pocket | Upstream |
| EB | Left Turn | 150 | 50 | 17 | 100 | 39 | 100 | 41 | 0% | 0% |
| | Through/Right | 875 | 125 | 31 | 225 | 66 | 225 | 75 | 12% | 0% |
| NB | Left Turn | 125 | 25 | 16 | 75 | 53 | 100 | 65 | 0% | 0% |
| | Through/Right | 825 | 425 | 39 | 600 | 52 | 575 | 42 | 67% | 1% |
| SB | Left Turn | 375 | 200 | 42 | 325 | 57 | 325 | 55 | 0% | 0% |
| | Through | 750 | 150 | 15 | 275 | 33 | 275 | 39 | 1% | 0% |
| | Right Turn | 225 | 25 | 16 | 75 | 79 | 75 | 110 | 0% | 0% |
| WB | Left Turn | 125 | 25 | 15 | 75 | 37 | 75 | 48 | 0% | 0% |
| | Through | 925 | 125 | 43 | 225 | 91 | 250 | 94 | 7% | 0% |
| | Right Turn | 125 | 125 | 27 | 175 | 33 | 175 | 17 | 7% | 0% |

**Intersection 1** **Marysville Bl/North Av** **Signal**

| Direction | Lane Group | Storage (ft) | Average Queue (ft) | | 95th Queue (ft) | | Maximum Queue (ft) | | Block Time | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Average | Std. Dev. | Average | Std. Dev. | Average | Std. Dev. | Pocket | Upstream |
| EB | Shared | 1,050 | 175 | 48 | 300 | 91 | 275 | 92 | 0% | 0% |
| NB | Left Turn | 75 | 50 | 12 | 75 | 20 | 75 | 17 | 7% | 0% |
| | Through/Right | 575 | 175 | 54 | 325 | 86 | 350 | 77 | 15% | 0% |
| SB | Left Turn | 1,125 | 50 | 12 | 100 | 31 | 100 | 35 | 0% | 0% |
| | Through | 1,475 | 150 | 34 | 225 | 60 | 225 | 54 | 20% | 0% |
| | Through/Right | 1,475 | 125 | 41 | 225 | 79 | 225 | 74 | 0% | 0% |
| WB | Left/Through | 1,050 | 50 | 7 | 100 | 11 | 100 | 15 | 0% | 0% |
| | Right Turn | 175 | 25 | 3 | 25 | 14 | 25 | 18 | 0% | 0% |

**Intersection 8** **Marysville Bl/Arcade Bl** **Signal**

| Direction | Lane Group | Storage (ft) | Average Queue (ft) Average | Average Queue (ft) Std. Dev. | 95th Queue (ft) Average | 95th Queue (ft) Std. Dev. | Maximum Queue (ft) Average | Maximum Queue (ft) Std. Dev. | Block Time Pocket | Block Time Upstream |
|---|---|---|---|---|---|---|---|---|---|---|
| EB | Left Turn | 150 | 50 | 17 | 100 | 48 | 100 | 58 | 0% | 0% |
| | Through/Right | 875 | 125 | 19 | 200 | 34 | 200 | 46 | 6% | 0% |
| NB | Left Turn | 125 | 25 | 3 | 50 | 7 | 50 | 37 | 0% | 0% |
| | Through/Right | 825 | 425 | 55 | 575 | 73 | 600 | 73 | 31% | 0% |
| SB | Left Turn | 750 | 400 | 52 | 525 | 72 | 525 | 66 | 0% | 0% |
| | Through/Right | 1,200 | 100 | 19 | 150 | 39 | 175 | 42 | 0% | 0% |
| WB | Left Turn | 125 | 75 | 17 | 125 | 25 | 150 | 24 | 4% | 0% |
| | Through | 925 | 400 | 114 | 600 | 170 | 600 | 153 | 35% | 0% |
| | Right Turn | 125 | 175 | 6 | 175 | 17 | 175 | 0 | 28% | 0% |

| | | | |
|---|---|---|---|
| Major Street | Marysville Blvd | Project | Vision Zero Top 5 Corridors |
| Minor Street | Harris Ave | Scenario | Existing Conditions |
| | | Peak Hour | AM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 29 | 35 | 24 | 4 |
| Through | 697 | 948 | 11 | 3 |
| Right | 3 | 25 | 43 | 23 |
| Total | 729 | 1,008 | 78 | 30 |

Major Street Direction

| | |
|---|---|
| x | North/South |
| | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 16.5 |
| Approach with Worst Case Delay | EB |
| Total Vehicles on Approach | 78 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Existing Conditions** | **0.4** | **78** | **1,845** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | | **NO** | |

FEHR PEERS

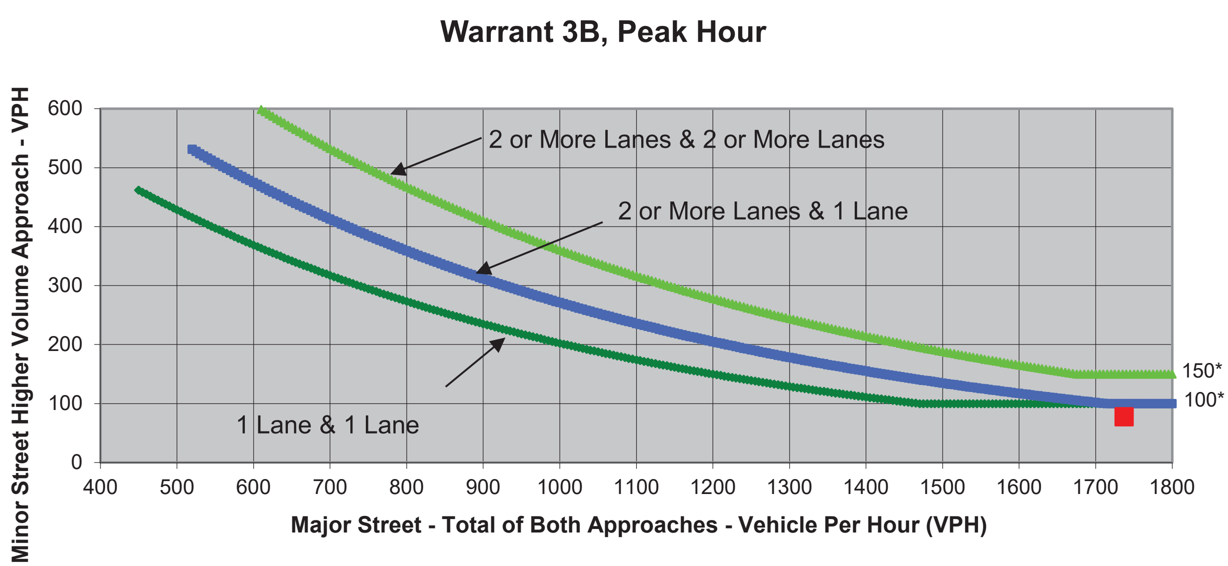
| | | | | |
|---|---|---|---|---|
| | | | Project | Vision Zero Top 5 Corridors |
| Major Street | Marysville Blvd | | Scenario | Existing Conditions |
| Minor Street | Harris Ave | | Peak Hour | AM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 29 | 35 | 24 | 4 |
| Through | 697 | 948 | 11 | 3 |
| Right | 3 | 25 | 43 | 23 |
| Total | 729 | 1,008 | 78 | 30 |

Major Street Direction

| | |
|---|---|
| x | North/South |
| | East/West |




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>Marysville Blvd | Minor Street<br>Harris Ave | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **2** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **1,737** | **78** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

| | | | |
|---|---|---|---|
| Major Street | Marysville Blvd | Project | Vision Zero Top 5 Corridors |
| Minor Street | Harris Ave | Scenario | Existing Conditions |
| | | Peak Hour | PM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 61 | 51 | 31 | 3 |
| Through | 1,024 | 796 | 13 | 8 |
| Right | 16 | 34 | 31 | 48 |
| Total | 1,101 | 881 | 75 | 59 |

Major Street Direction

| | |
|---|---|
| x | North/South |
| | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 20.3 |
| Approach with Worst Case Delay | EB |
| Total Vehicles on Approach | 75 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Existing Conditions** | **0.4** | **75** | **2,116** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

FEHR & PEERS

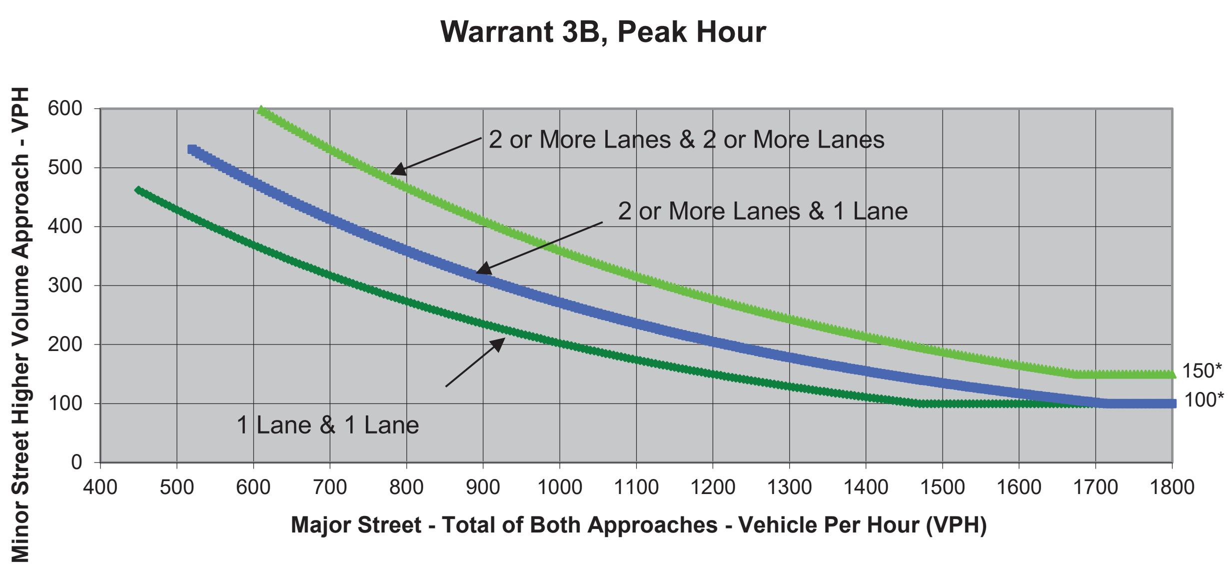
| | | | |
|---|---|---|---|
| Major Street | Marysville Blvd | Project | Vision Zero Top 5 Corridors |
| Minor Street | Harris Ave | Scenario | Existing Conditions |
| | | Peak Hour | PM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 61 | 51 | 31 | 3 |
| Through | 1,024 | 796 | 13 | 8 |
| Right | 16 | 34 | 31 | 48 |
| Total | 1,101 | 881 | 75 | 59 |

Major Street Direction

| | |
|---|---|
| x | North/South |
| | East/West |




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street | Minor Street | Warrant Met |
|---|---|---|---|
| | Marysville Blvd | Harris Ave | |
| **Number of Approach Lanes** | **2** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **1,982** | **75** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

| | | | | |
|---|---|---|---|---|
| | | | Project | Vision Zero Top 5 Corridors |
| Major Street | Marysville Blvd | | Scenario | Existing Conditions |
| Minor Street | Roanoke Ave | | Peak Hour | AM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 13 | 21 | 1 | 5 |
| Through | 709 | 1,031 | 2 | 1 |
| Right | 11 | 10 | 17 | 20 |
| Total | 733 | 1,062 | 20 | 26 |

Major Street Direction

| | |
|---|---|
| x | North/South |
| | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 12.2 |
| Approach with Worst Case Delay | EB |
| Total Vehicles on Approach | 20 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Existing Conditions** | **0.1** | **26** | **1,841** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

FEHR PEERS

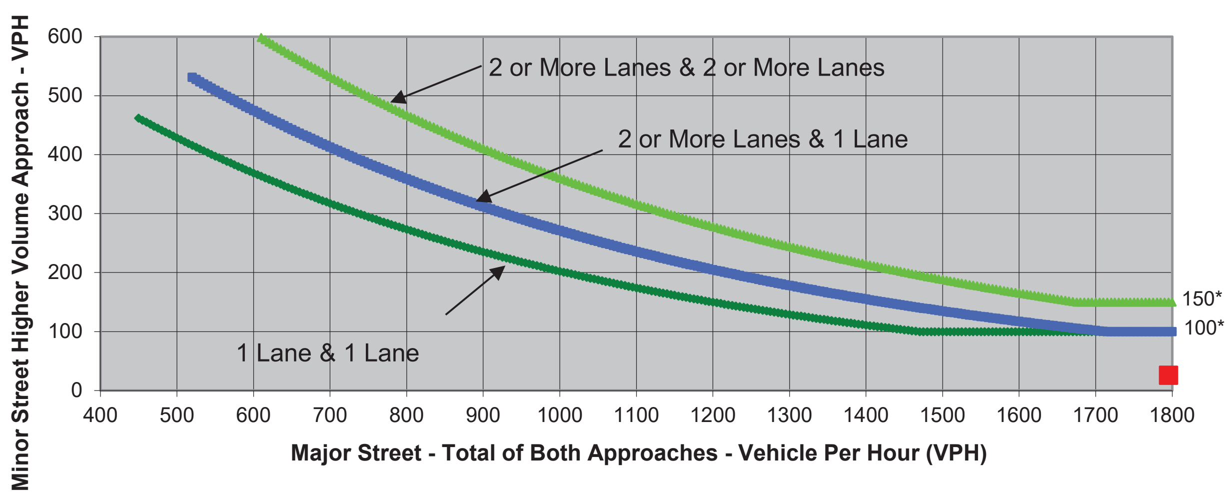
| | | | |
|---|---|---|---|
| | | Project | Vision Zero Top 5 Corridors |
| Major Street | Marysville Blvd | Scenario | Existing Conditions |
| Minor Street | Roanoke Ave | Peak Hour | AM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 13 | 21 | 1 | 5 |
| Through | 709 | 1,031 | 2 | 1 |
| Right | 11 | 10 | 17 | 20 |
| Total | 733 | 1,062 | 20 | 26 |

Major Street Direction

| | |
|---|---|
| x | North/South |
| | East/West |




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>Marysville Blvd | Minor Street<br>Roanoke Ave | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **2** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **1,795** | **26** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

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| | | | | |
|---|---|---|---|---|
| | | | Project | Vision Zero Top 5 Corridors |
| Major Street | Marysville Blvd | | Scenario | Existing Conditions |
| Minor Street | Roanoke Ave | | Peak Hour | PM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 21 | 22 | 2 | 14 |
| Through | 1,157 | 738 | 1 | 6 |
| Right | 30 | 25 | 25 | 27 |
| Total | 1,208 | 785 | 28 | 47 |

Major Street Direction

| | |
|---|---|
| x | North/South |
| | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 67.6 |
| Approach with Worst Case Delay | WB |
| Total Vehicles on Approach | 47 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Existing Conditions** | **0.9** | **47** | **2,068** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

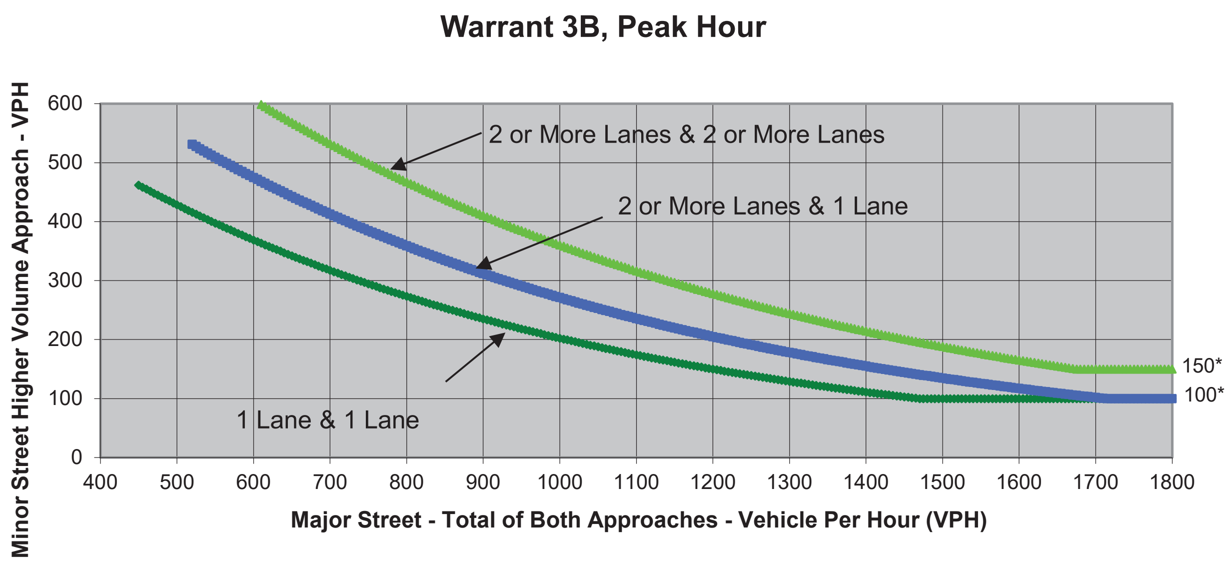
| | | | |
|---|---|---|---|
| Major Street | Marysville Blvd | Project | Vision Zero Top 5 Corridors |
| | | Scenario | Existing Conditions |
| Minor Street | Roanoke Ave | Peak Hour | PM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 21 | 22 | 2 | 14 |
| Through | 1,157 | 738 | 1 | 6 |
| Right | 30 | 25 | 25 | 27 |
| Total | 1,208 | 785 | 28 | 47 |

Major Street Direction

| | |
|---|---|
| x | North/South |
| | East/West |




* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>Marysville Blvd | Minor Street<br>Roanoke Ave | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **2** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **1,993** | **47** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Broadway/Stockton Boulevard

FEHR PEERS

# Vision Zero Top 5 Corridor Recommendations Results Summary – Broadway / Stockton Boulevard

## Vision Zero Top 5 Corridor Recommendations Implemented

- Road diet on Broadway and Stockton Boulevard
- Traffic signals coordinated along Broadway and Stockton Boulevard
- New traffic signals at Broadway/San Diego Way and Stockton Boulevard/6th Avenue
    - Consolidate the Food Source and Walgreens driveways on Broadway to a new driveway aligned with San Diego Way that operates with a signal
- NBR overlap phase at this intersection and shorter cycle length at Broadway/Stockton Boulevard intersection
- Extended clearance time at all intersections

## Additional Changes

- Lower Broadway Project and Envision Broadway assumed to be implemented. Stockton Boulevard Master Plan not implemented

## Speed & Travel Time Results

| Travel Times (min) | Dir | Existing Conditions | | VZ Recommendations | | % Change | |
|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour |
| Broadway - Martin Luther King Jr. Blvd to Stockton Blvd | EB | 4.3 | 3.1 | 4.7 | 3.0 | 8% | -4% |
| | WB | 2.9 | 2.8 | 3.2 | 3.8 | 9% | 34% |
| Stockton Blvd - 14th Ave to Broadway | NB | 4.6 | 2.6 | 5.4 | 2.7 | 19% | 5% |
| | SB | 2.4 | 3.1 | 2.4 | 4.3 | 1% | 36% |
| **Speed (mph)** | **Dir** | **Existing Conditions** | | **VZ Recommendations** | | **% Change** | |
| | | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** |
| Broadway - Martin Luther King Jr. Blvd to Stockton Blvd | EB | 14 | 20 | 12 | 19 | -14% | -5% |
| | WB | 20 | 21 | 20 | 16 | 0% | -24% |
| Stockton Blvd - 14th Ave to Broadway | NB | 11 | 20 | 9 | 18 | -18% | -10% |
| | SB | 19 | 15 | 19 | 11 | 0% | -27% |

## Vision Zero Top 5 Corridor Recommendations Results Summary – Broadway / Stockton Boulevard

### Delay & LOS Results

| Intersection | Existing Conditions | | | VZ Recommendations | | |
|---|---|---|---|---|---|---|
| | Control[1] | AM Peak Hour | PM Peak Hour | Control | AM Peak Hour | PM Peak Hour |
| Martin Luther King Jr. Blvd / Broadway | Signal | B / 14 | B / 15 | Signal | B / 18 | C / 25 |
| 39th St / Broadway | SSSC | A (C) / 2 (20) | A (A) / 3 (8) | SSSC | A (A) / 1 (10) | A / 7 |
| Santa Cruz Wy / Broadway | SSSC | A (C) / 3 (18) | A (A) / 1 (7) | SSSC | A (C) / 4 (16) | A (A) / 1 (8) |
| 42nd St / Broadway | Signal | A / 5 | A / 4 | Signal | C / 20 | A / 5 |
| 43rd St / Broadway | SSSC | A (B) / 1 (15) | A (A) / 2 (9) | SSSC | C (F) / 21 (131) | A (A) / 2 (10) |
| San Diego Wy / Broadway | SSSC | *Not Analyzed* | | Signal | D / 48 | A / 7 |
| Stockton Blvd / Broadway | Signal | D / 41 | C / 34 | Signal | D / 37 | F / 83 |
| Stockton Blvd / 6th Av | SSSC | *Not Analyzed* | | Signal | D / 54 | A / 7 |
| Stockton Blvd / 7th Av | SSSC | A (E) / 7 (40) | A (B) / 1 (14) | SSSC | E (F) / 47 (166) | A (B) / 2 (15) |
| Stockton Blvd / 9th Av | SSSC | A (D) / 2 (26) | A (C) / 1 (22) | SSSC | C (F) / 22 (61) | A (B) / 1 (14) |
| Stockton Blvd / 11th Av | SSSC | A (C) / 1 (23) | A (D) / 2 (25) | SSSC | A (C) / 3 (15) | A (A) / 2 (8) |
| Stockton Blvd / 14th Av | Signal | E / 63 | E / 60 | Signal | E / 72 | E / 59 |

## Arterial Level of Service: EB Broadway

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Martin Luther King J | 19 | 10.8 | 51.4 | 0.4 | 25 |
| HAWK | 504 | 1.6 | 9.5 | 0.1 | 23 |
| 39th St | 20 | 0.1 | 1.0 | 0.0 | 45 |
| La Solidad Wy | 111 | 1.9 | 11.4 | 0.1 | 26 |
| HAWK | 503 | 6.5 | 16.2 | 0.1 | 17 |
| Santa Cruz Wy | 21 | 0.6 | 1.8 | 0.0 | 24 |
| San Jose Wy | 112 | 2.7 | 7.8 | 0.0 | 20 |
| 42nd St | 22 | 11.8 | 21.9 | 0.1 | 14 |
| 43rd St | 23 | 7.4 | 14.1 | 0.1 | 15 |
| HAWK | 505 | 1.0 | 3.2 | 0.0 | 16 |
| San Diego Wy | 113 | 14.6 | 23.4 | 0.1 | 12 |
| Stockton Bl | 24 | 53.0 | 60.1 | 0.1 | 4 |
| | 128 | 29.4 | 39.3 | 0.1 | 7 |
| Total | | 141.3 | 260.9 | 1.0 | 14 |

## Arterial Level of Service: WB Broadway

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 128 | 1.2 | 36.9 | 0.3 | 30 |
| Stockton Bl | 24 | 35.6 | 44.3 | 0.1 | 7 |
| San Diego Wy | 113 | 2.9 | 11.2 | 0.1 | 21 |
| HAWK | 505 | 0.7 | 9.9 | 0.1 | 28 |
| 43rd St | 23 | 0.1 | 1.4 | 0.0 | 38 |
| 42nd St | 22 | 4.9 | 12.2 | 0.1 | 17 |
| San Jose Wy | 112 | 1.3 | 11.5 | 0.1 | 27 |
| | 21 | 2.9 | 8.0 | 0.0 | 19 |
| HAWK | 503 | 1.3 | 3.0 | 0.0 | 14 |
| La Solidad Wy | 111 | 0.6 | 9.4 | 0.1 | 30 |
| 39th St | 20 | 0.6 | 10.7 | 0.1 | 27 |
| HAWK | 504 | 0.1 | 1.7 | 0.0 | 25 |
| Martin Luther King J | 19 | 8.5 | 15.6 | 0.1 | 14 |
| Total | | 60.7 | 175.9 | 1.0 | 20 |

## Arterial Level of Service: NB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| 14th Av | 28 | 84.9 | 110.9 | 0.3 | 9 |
| 13th Av | 116 | 6.4 | 11.4 | 0.0 | 15 |
| | 133 | 10.9 | 20.1 | 0.1 | 16 |
| 11th Av | 110 | 4.4 | 6.8 | 0.0 | 14 |
| 11th Av | 27 | 5.5 | 8.9 | 0.0 | 11 |
| | 134 | 5.2 | 8.0 | 0.0 | 12 |
| 10th Av | 127 | 7.4 | 10.3 | 0.0 | 12 |
| PED CROSSING | 506 | 6.2 | 9.6 | 0.0 | 12 |
| 9th Av | 129 | 1.8 | 3.8 | 0.0 | 21 |
| 9th Av | 26 | 2.1 | 5.2 | 0.0 | 15 |
| | 131 | 2.0 | 4.2 | 0.0 | 18 |
| 8th Av | 126 | 3.4 | 6.4 | 0.0 | 20 |
| | 132 | 3.9 | 6.7 | 0.0 | 14 |
| 7th Av | 130 | 5.0 | 7.1 | 0.0 | 12 |
| 7th Av | 25 | 4.5 | 7.5 | 0.0 | 10 |
| 6th Av | 114 | 6.5 | 9.5 | 0.0 | 13 |
| Broadway | 24 | 31.2 | 36.9 | 0.1 | 6 |
| Total | | 191.4 | 273.1 | 0.8 | 11 |

## Arterial Level of Service: SB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Broadway | 24 | 30.9 | 50.7 | 0.2 | 15 |
| 6th Av | 114 | 2.0 | 8.5 | 0.1 | 26 |
| 7th Av | 25 | 0.1 | 3.5 | 0.0 | 35 |
| 7th Av | 130 | 0.1 | 3.0 | 0.0 | 25 |
| | 132 | 0.1 | 2.0 | 0.0 | 42 |
| 8th Av | 126 | 0.2 | 2.7 | 0.0 | 33 |
| | 131 | 0.4 | 4.1 | 0.0 | 31 |
| 9th Av | 26 | 0.3 | 2.1 | 0.0 | 35 |
| 9th Av | 129 | 0.3 | 3.3 | 0.0 | 24 |
| PED CROSSING | 506 | 0.1 | 2.5 | 0.0 | 33 |
| 10th Av | 127 | 0.1 | 2.9 | 0.0 | 40 |
| | 134 | 0.1 | 3.6 | 0.0 | 33 |
| 11th Av | 27 | 0.1 | 2.6 | 0.0 | 37 |
| 11th Av | 110 | 0.1 | 3.5 | 0.0 | 26 |
| | 133 | 0.1 | 2.8 | 0.0 | 33 |
| 13th Av | 116 | 1.6 | 10.2 | 0.1 | 32 |
| 14th Av | 28 | 29.7 | 34.6 | 0.0 | 5 |
| Total | | 66.5 | 142.8 | 0.8 | 19 |

## Arterial Level of Service: EB Broadway

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Martin Luther King J | 19 | 12.5 | 53.2 | 0.4 | 24 |
| HAWK | 504 | 3.2 | 11.0 | 0.1 | 20 |
| 39th St | 20 | 0.2 | 1.1 | 0.0 | 40 |
| La Solidad Wy | 111 | 1.6 | 11.0 | 0.1 | 27 |
| HAWK | 503 | 0.7 | 10.4 | 0.1 | 27 |
| Santa Cruz Wy | 21 | 0.1 | 1.3 | 0.0 | 32 |
| San Jose Wy | 112 | 0.4 | 5.5 | 0.0 | 28 |
| 42nd St | 22 | 4.0 | 14.1 | 0.1 | 22 |
| 43rd St | 23 | 1.1 | 7.8 | 0.1 | 27 |
| HAWK | 505 | 0.2 | 2.4 | 0.0 | 22 |
| San Diego Wy | 113 | 0.8 | 9.6 | 0.1 | 29 |
| Stockton Bl | 24 | 35.2 | 42.3 | 0.1 | 6 |
| | 128 | 4.6 | 14.8 | 0.1 | 20 |
| Total | | 64.5 | 184.4 | 1.0 | 20 |

## Arterial Level of Service: WB Broadway

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 128 | 2.7 | 38.8 | 0.3 | 29 |
| Stockton Bl | 24 | 32.1 | 40.9 | 0.1 | 7 |
| San Diego Wy | 113 | 2.3 | 10.5 | 0.1 | 22 |
| HAWK | 505 | 1.6 | 11.0 | 0.1 | 25 |
| 43rd St | 23 | 0.2 | 1.5 | 0.0 | 36 |
| 42nd St | 22 | 4.1 | 11.3 | 0.1 | 19 |
| San Jose Wy | 112 | 1.2 | 11.4 | 0.1 | 27 |
| | 21 | 0.5 | 5.6 | 0.0 | 28 |
| HAWK | 503 | 0.1 | 1.8 | 0.0 | 23 |
| La Solidad Wy | 111 | 0.6 | 9.3 | 0.1 | 30 |
| 39th St | 20 | 1.7 | 11.8 | 0.1 | 25 |
| HAWK | 504 | 0.6 | 2.2 | 0.0 | 20 |
| Martin Luther King J | 19 | 7.6 | 14.6 | 0.1 | 15 |
| Total | | 55.2 | 170.7 | 1.0 | 21 |

## Arterial Level of Service: NB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| 14th Av | 28 | 34.7 | 61.7 | 0.3 | 17 |
| 13th Av | 116 | 2.5 | 7.5 | 0.0 | 23 |
| | 133 | 0.6 | 10.1 | 0.1 | 32 |
| 11th Av | 110 | 0.2 | 2.6 | 0.0 | 36 |
| 11th Av | 27 | 0.2 | 3.7 | 0.0 | 26 |
| | 134 | 0.2 | 3.0 | 0.0 | 32 |
| | 127 | 0.2 | 3.1 | 0.0 | 39 |
| PED CROSSING | 506 | 0.5 | 3.9 | 0.0 | 30 |
| 9th Av | 129 | 0.4 | 2.4 | 0.0 | 33 |
| 9th Av | 26 | 0.2 | 3.2 | 0.0 | 24 |
| | 131 | 0.1 | 2.2 | 0.0 | 33 |
| 8th Av | 126 | 0.2 | 3.2 | 0.0 | 39 |
| | 132 | 0.2 | 2.9 | 0.0 | 32 |
| 7th Av | 130 | 0.2 | 2.3 | 0.0 | 37 |
| 7th Av | 25 | 0.3 | 3.3 | 0.0 | 23 |
| 6th Av | 114 | 0.8 | 3.8 | 0.0 | 33 |
| Broadway | 24 | 28.6 | 34.3 | 0.1 | 6 |
| Total | | 70.1 | 153.3 | 0.8 | 20 |

## Arterial Level of Service: SB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Broadway | 24 | 35.3 | 55.3 | 0.2 | 14 |
| 6th Av | 114 | 3.3 | 9.9 | 0.1 | 22 |
| 7th Av | 25 | 0.4 | 3.7 | 0.0 | 33 |
| 7th Av | 130 | 0.2 | 3.2 | 0.0 | 24 |
| | 132 | 0.2 | 2.1 | 0.0 | 41 |
| 8th Av | 126 | 0.3 | 2.8 | 0.0 | 33 |
| | 131 | 0.6 | 4.3 | 0.0 | 30 |
| 9th Av | 26 | 0.4 | 2.2 | 0.0 | 34 |
| 9th Av | 129 | 0.5 | 3.5 | 0.0 | 22 |
| PED CROSSING | 506 | 0.2 | 2.6 | 0.0 | 31 |
| | 127 | 0.3 | 3.1 | 0.0 | 38 |
| | 134 | 0.5 | 4.0 | 0.0 | 30 |
| 11th Av | 27 | 0.5 | 3.0 | 0.0 | 32 |
| 11th Av | 110 | 1.2 | 4.7 | 0.0 | 20 |
| | 133 | 2.4 | 5.1 | 0.0 | 18 |
| 13th Av | 116 | 35.2 | 43.6 | 0.1 | 7 |
| 14th Av | 28 | 31.0 | 35.8 | 0.0 | 5 |
| Total | | 112.5 | 188.9 | 0.8 | 15 |

## Arterial Level of Service: EB Broadway

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 151 | 1.7 | 35.5 | 0.3 | 30 |
| Martin Luther King J | 19 | 13.1 | 20.4 | 0.1 | 11 |
| HAWK | 504 | 1.7 | 9.5 | 0.1 | 23 |
| 39th St | 20 | 0.0 | 0.9 | 0.0 | 47 |
| La Solidad Wy | 111 | 0.5 | 10.1 | 0.1 | 29 |
| HAWK | 503 | 3.2 | 12.8 | 0.1 | 22 |
| Santa Cruz Wy | 21 | 0.9 | 2.1 | 0.0 | 20 |
| San Jose Wy | 112 | 3.5 | 8.6 | 0.0 | 18 |
| 42nd St | 22 | 21.9 | 32.2 | 0.1 | 10 |
| 43rd St | 23 | 17.2 | 24.0 | 0.1 | 9 |
| | 505 | 8.0 | 10.3 | 0.0 | 5 |
| San Diego Wy | 113 | 51.4 | 59.9 | 0.1 | 5 |
| Stockton Bl | 24 | 47.8 | 54.6 | 0.1 | 4 |
| Total | | 170.9 | 281.0 | 0.9 | 12 |

## Arterial Level of Service: WB Broadway

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Stockton Bl | 24 | 38.1 | 80.4 | 0.4 | 18 |
| | 113 | 12.6 | 20.9 | 0.1 | 11 |
| HAWK | 505 | 1.9 | 11.5 | 0.1 | 24 |
| 43rd St | 23 | 0.2 | 1.3 | 0.0 | 39 |
| 42nd St | 22 | 4.7 | 12.0 | 0.1 | 17 |
| San Jose Wy | 112 | 1.8 | 11.9 | 0.1 | 26 |
| | 21 | 1.9 | 6.9 | 0.0 | 22 |
| HAWK | 503 | 0.6 | 2.2 | 0.0 | 19 |
| La Solidad Wy | 111 | 0.7 | 9.6 | 0.1 | 29 |
| 39th St | 20 | 1.0 | 11.0 | 0.1 | 27 |
| HAWK | 504 | 0.3 | 1.9 | 0.0 | 23 |
| Martin Luther King J | 19 | 6.7 | 13.7 | 0.1 | 16 |
| | 151 | 1.2 | 8.8 | 0.1 | 25 |
| Total | | 71.8 | 192.2 | 1.0 | 20 |

## Arterial Level of Service: NB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| 14th Av | 28 | 100.4 | 126.0 | 0.3 | 8 |
| 13th Av | 116 | 15.2 | 20.2 | 0.0 | 9 |
| | 133 | 3.8 | 13.1 | 0.1 | 25 |
| 11th Av | 110 | 1.2 | 3.6 | 0.0 | 26 |
| 11th Av | 27 | 2.0 | 5.3 | 0.0 | 18 |
| | 134 | 2.6 | 5.3 | 0.0 | 18 |
| 10th Av | 127 | 4.1 | 7.0 | 0.0 | 17 |
| PED CROSSING | 506 | 4.5 | 8.0 | 0.0 | 15 |
| 9th Av | 129 | 2.9 | 5.0 | 0.0 | 16 |
| 9th Av | 26 | 5.2 | 8.0 | 0.0 | 10 |
| | 131 | 5.8 | 7.9 | 0.0 | 9 |
| 8th Av | 126 | 12.0 | 15.0 | 0.0 | 8 |
| | 132 | 15.6 | 18.7 | 0.0 | 5 |
| 7th Av | 130 | 10.4 | 12.2 | 0.0 | 7 |
| 7th Av | 25 | 8.8 | 11.7 | 0.0 | 7 |
| 6th Av | 114 | 10.9 | 14.0 | 0.0 | 9 |
| Broadway | 24 | 36.6 | 42.6 | 0.1 | 5 |
| Total | | 242.2 | 323.7 | 0.8 | 9 |

## Arterial Level of Service: SB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Broadway | 24 | 25.6 | 47.3 | 0.2 | 16 |
| 6th Av | 114 | 4.6 | 10.9 | 0.1 | 20 |
| 7th Av | 25 | 1.0 | 4.4 | 0.0 | 28 |
| 7th Av | 130 | 0.3 | 3.1 | 0.0 | 25 |
| | 132 | 0.2 | 2.2 | 0.0 | 39 |
| 8th Av | 126 | 0.3 | 2.9 | 0.0 | 32 |
| | 131 | 0.8 | 4.5 | 0.0 | 28 |
| 9th Av | 26 | 0.7 | 2.5 | 0.0 | 29 |
| 9th Av | 129 | 0.6 | 3.5 | 0.0 | 22 |
| PED CROSSING | 506 | 0.2 | 2.6 | 0.0 | 31 |
| 10th Av | 127 | 0.3 | 3.2 | 0.0 | 37 |
| | 134 | 0.4 | 3.9 | 0.0 | 30 |
| 11th Av | 27 | 0.3 | 2.8 | 0.0 | 34 |
| 11th Av | 110 | 0.3 | 3.6 | 0.0 | 26 |
| | 133 | 0.2 | 2.9 | 0.0 | 32 |
| 13th Av | 116 | 2.1 | 11.0 | 0.1 | 30 |
| 14th Av | 28 | 28.0 | 32.8 | 0.0 | 5 |
| Total | | 65.8 | 144.2 | 0.8 | 19 |

## Arterial Level of Service: EB Broadway

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 151 | 2.1 | 36.0 | 0.3 | 30 |
| Martin Luther King J | 19 | 15.9 | 23.4 | 0.1 | 10 |
| HAWK | 504 | 4.0 | 11.8 | 0.1 | 18 |
| 39th St | 20 | 0.1 | 1.0 | 0.0 | 42 |
| La Solidad Wy | 111 | 0.6 | 10.2 | 0.1 | 29 |
| HAWK | 503 | 0.6 | 10.3 | 0.1 | 27 |
| Santa Cruz Wy | 21 | 0.1 | 1.3 | 0.0 | 32 |
| San Jose Wy | 112 | 0.5 | 5.6 | 0.0 | 27 |
| 42nd St | 22 | 2.8 | 13.1 | 0.1 | 24 |
| 43rd St | 23 | 1.0 | 7.6 | 0.1 | 28 |
| | 505 | 0.2 | 2.5 | 0.0 | 21 |
| San Diego Wy | 113 | 3.8 | 12.8 | 0.1 | 22 |
| Stockton Bl | 24 | 34.5 | 41.8 | 0.1 | 6 |
| Total | | 66.2 | 177.5 | 0.9 | 19 |

## Arterial Level of Service: WB Broadway

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Stockton Bl | 24 | 77.6 | 120.1 | 0.4 | 12 |
| | 113 | 7.2 | 15.4 | 0.1 | 15 |
| HAWK | 505 | 2.2 | 11.6 | 0.1 | 24 |
| 43rd St | 23 | 0.3 | 1.4 | 0.0 | 38 |
| 42nd St | 22 | 4.1 | 11.5 | 0.1 | 18 |
| San Jose Wy | 112 | 1.6 | 11.9 | 0.1 | 26 |
| | 21 | 0.6 | 5.8 | 0.0 | 27 |
| HAWK | 503 | 0.2 | 1.8 | 0.0 | 23 |
| La Solidad Wy | 111 | 1.2 | 10.0 | 0.1 | 28 |
| 39th St | 20 | 6.8 | 16.8 | 0.1 | 18 |
| HAWK | 504 | 1.4 | 3.0 | 0.0 | 14 |
| Martin Luther King J | 19 | 4.8 | 11.7 | 0.1 | 19 |
| | 151 | 0.5 | 8.1 | 0.1 | 28 |
| Total | | 108.4 | 229.0 | 1.0 | 16 |

## Arterial Level of Service: NB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| 14th Av | 28 | 29.6 | 57.9 | 0.3 | 18 |
| 13th Av | 116 | 1.9 | 6.9 | 0.0 | 25 |
| | 133 | 0.4 | 9.7 | 0.1 | 34 |
| 11th Av | 110 | 0.2 | 2.6 | 0.0 | 36 |
| 11th Av | 27 | 0.3 | 3.6 | 0.0 | 26 |
| | 134 | 0.2 | 3.0 | 0.0 | 32 |
| | 127 | 0.3 | 3.2 | 0.0 | 37 |
| PED CROSSING | 506 | 0.4 | 3.9 | 0.0 | 31 |
| 9th Av | 129 | 0.3 | 2.4 | 0.0 | 34 |
| 9th Av | 26 | 0.3 | 3.2 | 0.0 | 24 |
| | 131 | 0.1 | 2.3 | 0.0 | 32 |
| 8th Av | 126 | 0.2 | 3.3 | 0.0 | 38 |
| | 132 | 0.4 | 3.5 | 0.0 | 26 |
| 7th Av | 130 | 0.6 | 2.3 | 0.0 | 37 |
| 7th Av | 25 | 1.5 | 4.3 | 0.0 | 18 |
| 6th Av | 114 | 3.9 | 6.9 | 0.0 | 18 |
| Broadway | 24 | 36.5 | 42.3 | 0.1 | 5 |
| | 246 | 3.5 | 25.2 | 0.2 | 30 |
| Total | | 80.8 | 186.4 | 1.0 | 20 |

## Arterial Level of Service: SB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 246 | 32.4 | 74.1 | 0.4 | 21 |
| Broadway | 24 | 99.0 | 117.2 | 0.2 | 7 |
| 6th Av | 114 | 6.1 | 12.5 | 0.1 | 18 |
| 7th Av | 25 | 1.2 | 4.7 | 0.0 | 27 |
| 7th Av | 130 | 0.5 | 3.3 | 0.0 | 23 |
| | 132 | 0.2 | 2.2 | 0.0 | 38 |
| 8th Av | 126 | 0.3 | 2.8 | 0.0 | 32 |
| | 131 | 0.6 | 4.3 | 0.0 | 29 |
| 9th Av | 26 | 0.4 | 2.2 | 0.0 | 33 |
| 9th Av | 129 | 0.5 | 3.4 | 0.0 | 23 |
| PED CROSSING | 506 | 0.3 | 2.7 | 0.0 | 31 |
| | 127 | 0.4 | 3.2 | 0.0 | 36 |
| | 134 | 0.5 | 4.1 | 0.0 | 29 |
| 11th Av | 27 | 0.6 | 3.2 | 0.0 | 31 |
| 11th Av | 110 | 1.3 | 4.6 | 0.0 | 20 |
| | 133 | 2.1 | 4.8 | 0.0 | 19 |
| 13th Av | 116 | 25.7 | 34.3 | 0.1 | 10 |
| 14th Av | 28 | 41.4 | 46.5 | 0.0 | 4 |
| Total | | 213.6 | 330.1 | 1.2 | 13 |

**Intersection 19** **Martin Luther King Jr Bl/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 283 | 276 | 97.6% | 38.1 | 4.2 | D |
| | Through | | | | | | |
| | Right Turn | 261 | 259 | 99.2% | 15.1 | 3.7 | B |
| | Subtotal | 544 | 535 | 98.4% | 27.0 | 3.5 | C |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 338 | 351 | 103.9% | 14.8 | 1.7 | B |
| | Right Turn | 121 | 118 | 97.2% | 9.5 | 2.6 | A |
| | Subtotal | 459 | 469 | 102.1% | 13.5 | 1.7 | B |
| WB | Left Turn | 86 | 80 | 93.5% | 40.9 | 9.9 | D |
| | Through | 387 | 358 | 92.5% | 6.7 | 0.9 | A |
| | Right Turn | | | | | | |
| | Subtotal | 473 | 438 | 92.7% | 13.0 | 2.3 | B |
| Total | | 1,476 | 1,442 | 97.7% | 18.4 | 1.7 | B |

**Intersection 20** **39th St/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 1 | 34.8% | 9.5 | 20.9 | A |
| | Through | 1 | 0 | 0.0% | 0.0 | 0.1 | A |
| | Right Turn | 6 | 7 | 116.0% | 3.9 | 2.9 | A |
| | Subtotal | 9 | 8 | 85.1% | 10.9 | 17.7 | B |
| SB | Left Turn | 1 | 1 | 69.6% | 3.8 | 8.9 | A |
| | Through | | | | | | |
| | Right Turn | 14 | 15 | 104.4% | 4.3 | 1.8 | A |
| | Subtotal | 15 | 15 | 102.1% | 4.8 | 2.5 | A |
| EB | Left Turn | 25 | 21 | 84.9% | 3.9 | 3.2 | A |
| | Through | 570 | 565 | 99.1% | 1.3 | 0.1 | A |
| | Right Turn | 3 | 1 | 46.4% | 1.3 | 0.1 | A |
| | Subtotal | 598 | 588 | 98.3% | 1.4 | 0.1 | A |
| WB | Left Turn | 4 | 3 | 78.3% | 2.1 | 2.0 | A |
| | Through | 441 | 408 | 92.4% | 1.2 | 0.2 | A |
| | Right Turn | 3 | 1 | 46.4% | 0.4 | 0.3 | A |
| | Subtotal | 448 | 412 | 92.0% | 1.2 | 0.2 | A |
| Total | | 1,070 | 1,023 | 95.6% | 1.4 | 0.1 | A |

**Intersection 21** **Santa Cruz Wy/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 5 | 3 | 62.6% | 9.0 | 10.4 | A |
| | Through | | | | | | |
| | Right Turn | 5 | 8 | 153.1% | 4.1 | 3.8 | A |
| | Subtotal | 10 | 11 | 107.9% | 6.0 | 4.1 | A |
| SB | Left Turn | 5 | 5 | 97.4% | 15.5 | 13.6 | C |
| | Through | | | | | | |
| | Right Turn | 2 | 2 | 104.4% | 1.6 | 1.8 | A |
| | Subtotal | 7 | 7 | 99.4% | 12.6 | 12.9 | B |
| EB | Left Turn | 2 | 2 | 121.8% | 4.5 | 3.0 | A |
| | Through | 568 | 547 | 96.3% | 4.6 | 3.9 | A |
| | Right Turn | 7 | 7 | 104.4% | 3.7 | 3.0 | A |
| | Subtotal | 577 | 556 | 96.4% | 4.5 | 3.9 | A |
| WB | Left Turn | 2 | 1 | 52.2% | 1.0 | 1.0 | A |
| | Through | 408 | 377 | 92.4% | 2.5 | 1.3 | A |
| | Right Turn | 4 | 5 | 113.1% | 2.8 | 5.4 | A |
| | Subtotal | 414 | 382 | 92.4% | 2.5 | 1.2 | A |
| Total | | 1,008 | 957 | 94.9% | 3.9 | 2.6 | A |

**Intersection 22** **42nd St/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 43 | 41 | 94.7% | 19.0 | 4.3 | B |
| | Through | 20 | 21 | 106.1% | 20.5 | 7.3 | C |
| | Right Turn | 37 | 35 | 94.1% | 14.4 | 5.4 | B |
| | Subtotal | 100 | 97 | 96.7% | 17.5 | 4.3 | B |
| SB | Left Turn | 21 | 24 | 116.0% | 21.9 | 8.2 | C |
| | Through | 13 | 12 | 91.0% | 24.2 | 12.7 | C |
| | Right Turn | 6 | 6 | 92.8% | 5.7 | 7.4 | A |
| | Subtotal | 40 | 42 | 104.4% | 20.3 | 6.2 | C |
| EB | Left Turn | 11 | 10 | 91.7% | 25.4 | 29.9 | C |
| | Through | 541 | 493 | 91.2% | 30.7 | 21.1 | C |
| | Right Turn | 18 | 23 | 125.7% | 25.5 | 20.9 | C |
| | Subtotal | 570 | 526 | 92.3% | 30.4 | 21.3 | C |
| WB | Left Turn | 6 | 6 | 98.6% | 7.9 | 9.5 | A |
| | Through | 354 | 323 | 91.3% | 4.6 | 1.6 | A |
| | Right Turn | 5 | 7 | 132.2% | 1.5 | 2.4 | A |
| | Subtotal | 365 | 336 | 92.0% | 4.7 | 1.6 | A |
| Total | | 1,075 | 1,001 | 93.1% | 20.4 | 12.0 | C |

**Intersection 23** **43rd St/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 4 | 2 | 43.5% | 48.9 | 71.9 | E |
| | Through | 42 | 25 | 59.7% | 129.6 | 69.8 | F |
| | Right Turn | 43 | 24 | 56.7% | 131.4 | 72.1 | F |
| | Subtotal | 89 | 51 | 57.5% | 123.6 | 62.1 | F |
| SB | Left Turn | 2 | 1 | 52.2% | 32.0 | 56.9 | D |
| | Through | 1 | 0 | 34.8% | 14.1 | 44.7 | B |
| | Right Turn | 4 | 6 | 156.6% | 10.2 | 8.9 | B |
| | Subtotal | 7 | 8 | 109.4% | 19.4 | 22.9 | C |
| EB | Left Turn | 4 | 6 | 147.9% | 17.9 | 12.7 | C |
| | Through | 594 | 530 | 89.2% | 24.2 | 11.8 | C |
| | Right Turn | 1 | 0 | 34.8% | 7.7 | 3.5 | A |
| | Subtotal | 599 | 536 | 89.5% | 24.2 | 11.7 | C |
| WB | Left Turn | 7 | 5 | 69.6% | 37.6 | 49.7 | E |
| | Through | 357 | 327 | 91.7% | 2.0 | 0.5 | A |
| | Right Turn | 2 | 1 | 52.2% | 1.8 | 0.3 | A |
| | Subtotal | 366 | 333 | 91.1% | 2.8 | 1.6 | A |
| Total | | 1,061 | 928 | 87.5% | 21.0 | 9.3 | C |

**Intersection 24** **Stockton Bl/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 70 | 53 | 76.1% | 51.6 | 7.9 | D |
| | Through | 504 | 374 | 74.3% | 36.4 | 2.5 | D |
| | Right Turn | 262 | 211 | 80.5% | 18.2 | 3.3 | B |
| | Subtotal | 836 | 639 | 76.4% | 31.8 | 2.4 | C |
| SB | Left Turn | 164 | 157 | 95.5% | 53.2 | 10.2 | D |
| | Through | 227 | 226 | 99.3% | 25.6 | 2.3 | C |
| | Right Turn | 27 | 23 | 85.1% | 8.7 | 3.2 | A |
| | Subtotal | 418 | 405 | 96.9% | 35.3 | 4.5 | D |
| EB | Left Turn | 141 | 112 | 79.5% | 56.5 | 5.8 | E |
| | Through | 468 | 367 | 78.5% | 49.3 | 4.9 | D |
| | Right Turn | 54 | 43 | 79.9% | 11.8 | 2.8 | B |
| | Subtotal | 663 | 523 | 78.8% | 47.8 | 3.0 | D |
| WB | Left Turn | 99 | 90 | 91.0% | 43.1 | 5.0 | D |
| | Through | 242 | 231 | 95.6% | 37.8 | 3.0 | D |
| | Right Turn | 190 | 198 | 104.4% | 21.0 | 5.5 | C |
| | Subtotal | 531 | 520 | 97.9% | 32.3 | 2.9 | C |
| Total | | 2,448 | 2,086 | 85.2% | 36.6 | 2.0 | D |

**Intersection 25** **Stockton Bl/7th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 27 | 22 | 82.8% | 71.6 | 24.7 | F |
| | Through | 834 | 635 | 76.2% | 72.3 | 24.5 | F |
| | Right Turn | 5 | 3 | 69.6% | 4.5 | 6.9 | A |
| | Subtotal | 866 | 661 | 76.3% | 71.9 | 24.4 | F |
| SB | Left Turn | 4 | 3 | 69.6% | 9.0 | 11.8 | A |
| | Through | 373 | 351 | 94.1% | 1.3 | 0.3 | A |
| | Right Turn | 2 | 2 | 121.8% | 0.1 | 0.2 | A |
| | Subtotal | 379 | 356 | 94.0% | 1.5 | 0.4 | A |
| EB | Left Turn | 2 | 0 | 17.4% | 85.1 | 217.3 | F |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 5 | 6 | 125.3% | 5.0 | 4.5 | A |
| | Subtotal | 7 | 7 | 94.5% | 17.1 | 36.9 | C |
| WB | Left Turn | 6 | 4 | 69.6% | 104.5 | 146.4 | F |
| | Through | 0 | 0 | 0.0% | 40.7 | 67.2 | E |
| | Right Turn | 12 | 6 | 47.1% | 166.1 | 147.0 | F |
| | Subtotal | 18 | 10 | 56.1% | 131.3 | 150.4 | F |
| Total | | 1,270 | 1,034 | 81.4% | 47.2 | 15.5 | E |

**Intersection 26** **Stockton Bl/9th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 97 | 82 | 84.1% | 35.1 | 17.9 | E |
| | Through | 800 | 636 | 79.6% | 33.7 | 20.0 | D |
| | Right Turn | 2 | 2 | 121.8% | 14.2 | 9.4 | B |
| | Subtotal | 899 | 721 | 80.1% | 33.8 | 19.8 | D |
| SB | Left Turn | 21 | 21 | 99.0% | 22.2 | 10.5 | C |
| | Through | 403 | 374 | 92.9% | 1.2 | 0.3 | A |
| | Right Turn | 33 | 32 | 98.1% | 0.1 | 0.1 | A |
| | Subtotal | 457 | 428 | 93.6% | 2.2 | 0.9 | A |
| EB | Left Turn | 5 | 7 | 146.2% | 15.5 | 14.5 | C |
| | Through | 1 | 1 | 113.1% | 26.8 | 10.5 | D |
| | Right Turn | 28 | 25 | 89.2% | 5.8 | 2.0 | A |
| | Subtotal | 34 | 33 | 98.3% | 8.3 | 3.4 | A |
| WB | Left Turn | 2 | 1 | 34.8% | 9.6 | 23.9 | A |
| | Through | 4 | 3 | 82.7% | 61.4 | 28.1 | F |
| | Right Turn | 29 | 19 | 64.2% | 59.9 | 30.0 | F |
| | Subtotal | 35 | 23 | 64.6% | 57.2 | 21.9 | F |
| Total | | 1,425 | 1,204 | 84.5% | 22.2 | 12.3 | C |

**Intersection 27** **Stoctkon Bl/11th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 16 | 15 | 91.9% | 4.9 | 2.6 | A |
| | Through | 817 | 671 | 82.2% | 3.1 | 3.0 | A |
| | Right Turn | 2 | 0 | 17.4% | 0.0 | 0.0 | A |
| | Subtotal | 835 | 686 | 82.2% | 3.1 | 2.9 | A |
| SB | Left Turn | 5 | 3 | 62.6% | 3.2 | 6.7 | A |
| | Through | 406 | 381 | 93.9% | 0.6 | 0.1 | A |
| | Right Turn | 13 | 15 | 112.4% | 0.1 | 0.2 | A |
| | Subtotal | 424 | 399 | 94.1% | 0.6 | 0.3 | A |
| EB | Left Turn | 9 | 9 | 96.7% | 5.2 | 2.6 | A |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 8 | 7 | 82.7% | 4.8 | 2.3 | A |
| | Subtotal | 17 | 15 | 90.1% | 5.0 | 1.4 | A |
| WB | Left Turn | 2 | 2 | 87.0% | 6.4 | 12.4 | A |
| | Through | 1 | 1 | 60.9% | 0.0 | 0.0 | A |
| | Right Turn | 28 | 28 | 101.0% | 15.2 | 6.2 | C |
| | Subtotal | 31 | 31 | 98.8% | 15.0 | 5.9 | C |
| Total | | 1,307 | 1,131 | 86.6% | 2.6 | 1.8 | A |

**Intersection 28** **Stockton Bl/14th Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 130 | 113 | 87.3% | 86.2 | 16.7 | F |
| | Through | 881 | 739 | 83.9% | 100.6 | 25.7 | F |
| | Right Turn | 60 | 56 | 92.8% | 80.3 | 25.1 | F |
| | Subtotal | 1,071 | 908 | 84.8% | 97.4 | 23.8 | F |
| SB | Left Turn | 61 | 54 | 87.9% | 54.6 | 11.6 | D |
| | Through | 370 | 340 | 91.9% | 30.0 | 4.9 | C |
| | Right Turn | 17 | 15 | 86.0% | 24.4 | 12.8 | C |
| | Subtotal | 448 | 408 | 91.1% | 33.0 | 4.8 | C |
| EB | Left Turn | 30 | 24 | 78.9% | 68.1 | 25.3 | E |
| | Through | 175 | 164 | 93.7% | 68.9 | 29.4 | E |
| | Right Turn | 64 | 64 | 99.5% | 57.7 | 23.0 | E |
| | Subtotal | 269 | 251 | 93.4% | 66.5 | 27.2 | E |
| WB | Left Turn | 55 | 55 | 100.0% | 41.8 | 6.6 | D |
| | Through | 150 | 131 | 87.0% | 50.2 | 18.3 | D |
| | Right Turn | 10 | 10 | 100.9% | 46.9 | 31.7 | D |
| | Subtotal | 215 | 196 | 91.0% | 47.1 | 13.6 | D |
| Total | | 1,307 | 1,301 | 99.5% | 72.0 | 13.0 | E |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - Broadway & Stockton Bl**
**Average Results from 10 Runs** | **Broadway/Stockton Blvd Road Diet**
**Volume and Delay by Movement** | **AM Peak Hour**

**Intersection 113** **San Diego Wy/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 10 | 6 | 62.6% | 22.8 | 11.8 | C |
| | Through | 2 | 2 | 121.8% | 14.9 | 19.0 | B |
| | Right Turn | 10 | 7 | 69.6% | 29.4 | 22.0 | C |
| | Subtotal | 22 | 16 | 71.2% | 29.6 | 10.9 | C |
| SB | Left Turn | 49 | 50 | 101.6% | 33.3 | 4.1 | C |
| | Through | 2 | 2 | 121.8% | 18.3 | 21.3 | B |
| | Right Turn | 37 | 37 | 100.6% | 16.6 | 4.9 | B |
| | Subtotal | 88 | 89 | 101.6% | 26.1 | 3.3 | C |
| EB | Left Turn | 30 | 24 | 78.9% | 73.1 | 32.9 | E |
| | Through | 604 | 476 | 78.8% | 75.6 | 27.1 | E |
| | Right Turn | 5 | 6 | 111.4% | 61.1 | 32.4 | E |
| | Subtotal | 639 | 505 | 79.0% | 75.4 | 27.3 | E |
| WB | Left Turn | 5 | 4 | 76.6% | 15.3 | 20.6 | B |
| | Through | 319 | 291 | 91.3% | 11.4 | 1.2 | B |
| | Right Turn | 15 | 14 | 92.8% | 7.1 | 4.8 | A |
| | Subtotal | 339 | 309 | 91.2% | 11.4 | 1.3 | B |
| Total | | 1,088 | 919 | 84.5% | 48.1 | 15.0 | D |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Broadway & Stockton Bl**
**Broadway/Stockton Blvd Road Diet**
**AM Peak Hour**

**Intersection 114** **6th Av/Stockton Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 5 | 3 | 69.6% | 75.8 | 26.0 | E |
| | Through | 811 | 611 | 75.3% | 83.2 | 26.1 | F |
| | Right Turn | 32 | 22 | 69.6% | 82.8 | 25.7 | F |
| | Subtotal | 848 | 636 | 75.1% | 83.2 | 26.1 | F |
| SB | Left Turn | 15 | 14 | 90.5% | 27.4 | 13.9 | C |
| | Through | 359 | 340 | 94.8% | 5.0 | 1.0 | A |
| | Right Turn | 6 | 4 | 63.8% | 2.0 | 3.3 | A |
| | Subtotal | 380 | 358 | 94.1% | 5.9 | 1.2 | A |
| EB | Left Turn | 5 | 6 | 118.3% | 22.6 | 16.2 | C |
| | Through | 2 | 2 | 87.0% | 10.8 | 16.5 | B |
| | Right Turn | 5 | 4 | 76.6% | 1.8 | 1.9 | A |
| | Subtotal | 12 | 11 | 95.7% | 17.5 | 7.6 | B |
| WB | Left Turn | 15 | 13 | 85.8% | 25.1 | 6.7 | C |
| | Through | 2 | 1 | 34.8% | 1.1 | 2.7 | A |
| | Right Turn | 20 | 23 | 114.8% | 23.0 | 9.4 | C |
| | Subtotal | 37 | 37 | 98.8% | 22.9 | 7.1 | C |
| Total | | 1,277 | 1,042 | 81.6% | 53.5 | 15.6 | D |

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Vision Zero Top 5 Corridors - Broadway & Stockton Bl
Broadway/Stockton Blvd Road Diet
PM Peak Hour

**Intersection 19** **Martin Luther King Jr Bl/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 156 | 165 | 105.6% | 44.2 | 4.5 | D |
| | Through | | | | | | |
| | Right Turn | 114 | 115 | 100.9% | 7.4 | 0.9 | A |
| | Subtotal | 270 | 280 | 103.6% | 29.0 | 4.1 | C |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 274 | 272 | 99.2% | 16.0 | 2.8 | B |
| | Right Turn | 336 | 331 | 98.4% | 11.0 | 1.8 | B |
| | Subtotal | 610 | 602 | 98.7% | 13.2 | 1.9 | B |
| WB | Left Turn | 281 | 276 | 98.2% | 60.1 | 5.6 | E |
| | Through | 366 | 316 | 86.4% | 12.9 | 4.2 | B |
| | Right Turn | | | | | | |
| | Subtotal | 647 | 592 | 91.5% | 34.9 | 4.4 | C |
| Total | | 1,527 | 1,474 | 96.5% | 24.9 | 2.5 | C |

**Intersection 20** **39th St/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 1 | 75.2% | 0.6 | 1.8 | A |
| | Through | | | | | | |
| | Right Turn | 3 | 3 | 100.3% | 2.0 | 1.9 | A |
| | Subtotal | 4 | 4 | 94.0% | 2.2 | 2.1 | A |
| SB | Left Turn | 1 | 1 | 75.2% | 2.5 | 6.5 | A |
| | Through | | | | | | |
| | Right Turn | 11 | 12 | 106.0% | 21.0 | 31.4 | C |
| | Subtotal | 12 | 12 | 103.4% | 19.8 | 26.5 | C |
| EB | Left Turn | 10 | 8 | 75.2% | 12.3 | 10.1 | B |
| | Through | 372 | 367 | 98.8% | 3.7 | 1.8 | A |
| | Right Turn | 6 | 7 | 119.1% | 3.5 | 1.7 | A |
| | Subtotal | 388 | 382 | 98.5% | 3.8 | 1.8 | A |
| WB | Left Turn | 18 | 15 | 83.6% | 8.5 | 7.1 | A |
| | Through | 634 | 569 | 89.8% | 7.9 | 3.3 | A |
| | Right Turn | 3 | 3 | 87.7% | 2.4 | 2.6 | A |
| | Subtotal | 655 | 587 | 89.6% | 7.9 | 3.2 | A |
| Total | | 1,059 | 985 | 93.0% | 6.6 | 2.6 | A |

**Intersection 21** **Santa Cruz Wy/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 2 | 75.2% | 7.8 | 12.9 | A |
| | Through | | | | | | |
| | Right Turn | 5 | 6 | 112.8% | 2.0 | 1.6 | A |
| | Subtotal | 7 | 7 | 102.1% | 6.0 | 6.0 | A |
| SB | Left Turn | 3 | 2 | 62.7% | 5.2 | 9.0 | A |
| | Through | | | | | | |
| | Right Turn | 3 | 4 | 125.3% | 6.1 | 6.7 | A |
| | Subtotal | 6 | 6 | 94.0% | 7.5 | 6.0 | A |
| EB | Left Turn | 3 | 3 | 112.8% | 2.3 | 4.2 | A |
| | Through | 357 | 361 | 101.1% | 0.8 | 0.2 | A |
| | Right Turn | 5 | 6 | 112.8% | 0.6 | 0.1 | A |
| | Subtotal | 365 | 370 | 101.4% | 0.8 | 0.3 | A |
| WB | Left Turn | 6 | 5 | 81.5% | 3.0 | 3.6 | A |
| | Through | 640 | 594 | 92.8% | 0.8 | 0.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 646 | 599 | 92.7% | 0.8 | 0.3 | A |
| Total | | 1,024 | 981 | 95.8% | 0.9 | 0.1 | A |

**Intersection 22** **42nd St/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 9 | 8 | 87.7% | 29.5 | 18.0 | C |
| | Through | 10 | 10 | 97.8% | 23.3 | 18.1 | C |
| | Right Turn | 10 | 8 | 82.7% | 8.9 | 6.6 | A |
| | Subtotal | 29 | 26 | 89.5% | 24.6 | 9.3 | C |
| SB | Left Turn | 7 | 4 | 59.1% | 13.0 | 11.8 | B |
| | Through | 9 | 11 | 117.0% | 29.0 | 19.1 | C |
| | Right Turn | 13 | 11 | 83.9% | 10.6 | 12.0 | B |
| | Subtotal | 29 | 26 | 88.2% | 19.9 | 9.1 | B |
| EB | Left Turn | 9 | 9 | 100.3% | 5.1 | 3.6 | A |
| | Through | 325 | 333 | 102.5% | 3.2 | 1.9 | A |
| | Right Turn | 22 | 23 | 106.0% | 2.9 | 3.2 | A |
| | Subtotal | 356 | 365 | 102.7% | 3.2 | 1.8 | A |
| WB | Left Turn | 22 | 21 | 94.0% | 7.6 | 3.1 | A |
| | Through | 635 | 593 | 93.4% | 4.2 | 1.2 | A |
| | Right Turn | 6 | 5 | 81.5% | 1.5 | 2.5 | A |
| | Subtotal | 663 | 619 | 93.3% | 4.3 | 1.2 | A |
| Total | | 1,077 | 1,036 | 96.2% | 4.9 | 1.3 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Broadway & Stockton Bl**
**Broadway/Stockton Blvd Road Diet**
**PM Peak Hour**

**Intersection 23** **43rd St/Broadway** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 4 | 2 | 47.0% | 3.3 | 4.4 | A |
| | Through | 1 | 0 | 37.6% | 0.5 | 1.5 | A |
| | Right Turn | 7 | 5 | 69.8% | 4.5 | 4.1 | A |
| | Subtotal | 12 | 7 | 59.5% | 4.8 | 3.6 | A |
| SB | Left Turn | 2 | 3 | 150.4% | 10.0 | 10.8 | A |
| | Through | | | | | | |
| | Right Turn | 4 | 5 | 131.6% | 4.4 | 3.9 | A |
| | Subtotal | 6 | 8 | 137.9% | 8.6 | 4.7 | A |
| EB | Left Turn | 4 | 5 | 112.8% | 5.9 | 5.6 | A |
| | Through | 333 | 338 | 101.6% | 1.2 | 0.4 | A |
| | Right Turn | 5 | 4 | 75.2% | 0.6 | 0.7 | A |
| | Subtotal | 342 | 347 | 101.4% | 1.3 | 0.5 | A |
| WB | Left Turn | 12 | 7 | 56.4% | 3.5 | 1.9 | A |
| | Through | 655 | 605 | 92.4% | 2.3 | 0.7 | A |
| | Right Turn | 8 | 9 | 117.5% | 2.0 | 0.6 | A |
| | Subtotal | 675 | 622 | 92.1% | 2.3 | 0.7 | A |
| Total | | 1,035 | 984 | 95.0% | 2.0 | 0.4 | A |

**Intersection 24** **Stockton Bl/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 10 | 11 | 105.3% | 47.5 | 24.9 | D |
| | Through | 220 | 214 | 97.2% | 37.7 | 4.5 | D |
| | Right Turn | 86 | 91 | 105.4% | 10.0 | 4.7 | A |
| | Subtotal | 316 | 315 | 99.7% | 29.8 | 3.4 | C |
| SB | Left Turn | 208 | 182 | 87.3% | 136.4 | 49.3 | F |
| | Through | 581 | 527 | 90.7% | 125.7 | 46.8 | F |
| | Right Turn | 187 | 157 | 83.8% | 112.4 | 46.0 | F |
| | Subtotal | 976 | 865 | 88.6% | 125.7 | 47.3 | F |
| EB | Left Turn | 65 | 70 | 107.0% | 53.9 | 8.2 | D |
| | Through | 216 | 202 | 93.5% | 39.5 | 4.1 | D |
| | Right Turn | 50 | 51 | 101.5% | 19.7 | 4.1 | B |
| | Subtotal | 331 | 322 | 97.4% | 39.4 | 4.1 | D |
| WB | Left Turn | 179 | 158 | 88.2% | 111.4 | 33.3 | F |
| | Through | 466 | 404 | 86.7% | 73.1 | 35.8 | E |
| | Right Turn | 185 | 177 | 95.7% | 56.3 | 39.2 | E |
| | Subtotal | 830 | 739 | 89.1% | 77.1 | 35.7 | E |
| Total | | 2,453 | 2,242 | 91.4% | 83.4 | 20.3 | F |

**Intersection 25** **Stockton Bl/7th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 12 | 13 | 108.9% | 14.5 | 8.1 | B |
| | Through | 277 | 277 | 99.9% | 2.6 | 1.3 | A |
| | Right Turn | 5 | 5 | 97.8% | 0.7 | 0.4 | A |
| | Subtotal | 294 | 295 | 100.2% | 3.0 | 1.5 | A |
| SB | Left Turn | 17 | 14 | 84.0% | 4.5 | 1.8 | A |
| | Through | 835 | 746 | 89.3% | 1.6 | 0.3 | A |
| | Right Turn | 6 | 6 | 94.0% | 0.2 | 0.3 | A |
| | Subtotal | 858 | 766 | 89.2% | 1.7 | 0.3 | A |
| EB | Left Turn | 5 | 3 | 52.6% | 8.2 | 14.9 | A |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 7 | 6 | 85.9% | 5.7 | 4.7 | A |
| | Subtotal | 12 | 9 | 72.1% | 6.9 | 4.7 | A |
| WB | Left Turn | 2 | 2 | 75.2% | 8.2 | 18.4 | A |
| | Through | 0 | 0 | 0.0% | 0.8 | 2.6 | A |
| | Right Turn | 7 | 5 | 68.5% | 3.5 | 2.5 | A |
| | Subtotal | 9 | 6 | 71.0% | 7.4 | 8.6 | A |
| Total | | 1,173 | 1,075 | 91.7% | 2.2 | 0.5 | A |

**Intersection 26** **Stockton Bl/9th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 9 | 11 | 126.4% | 6.3 | 5.7 | A |
| | Through | 267 | 256 | 95.8% | 0.7 | 0.2 | A |
| | Right Turn | 4 | 4 | 94.0% | 0.0 | 0.0 | A |
| | Subtotal | 280 | 271 | 96.7% | 1.0 | 0.6 | A |
| SB | Left Turn | 28 | 23 | 81.6% | 4.7 | 5.1 | A |
| | Through | 806 | 713 | 88.5% | 1.0 | 0.2 | A |
| | Right Turn | 24 | 23 | 95.6% | 0.0 | 0.0 | A |
| | Subtotal | 858 | 759 | 88.5% | 1.1 | 0.2 | A |
| EB | Left Turn | 8 | 9 | 108.1% | 13.9 | 14.3 | B |
| | Through | 1 | 0 | 47.0% | 5.2 | 5.9 | A |
| | Right Turn | 17 | 16 | 94.6% | 9.4 | 3.7 | A |
| | Subtotal | 26 | 25 | 96.9% | 12.0 | 5.2 | B |
| WB | Left Turn | 3 | 2 | 62.7% | 3.8 | 8.3 | A |
| | Through | 1 | 1 | 65.8% | 7.4 | 7.8 | A |
| | Right Turn | 18 | 21 | 117.5% | 4.1 | 1.6 | A |
| | Subtotal | 22 | 24 | 107.7% | 4.5 | 1.9 | A |
| Total | | 1,186 | 1,079 | 91.0% | 1.4 | 0.3 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Broadway & Stockton Bl**
**Broadway/Stockton Blvd Road Diet**
**PM Peak Hour**

**Intersection 27** **Stoctkon Bl/11th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 12 | 11 | 93.2% | 6.1 | 3.8 | A |
| | Through | 278 | 263 | 94.5% | 0.5 | 0.2 | A |
| | Right Turn | 1 | 1 | 75.2% | 0.0 | 0.0 | A |
| | Subtotal | 291 | 275 | 94.4% | 0.8 | 0.3 | A |
| SB | Left Turn | 21 | 17 | 80.6% | 4.5 | 2.9 | A |
| | Through | 780 | 697 | 89.3% | 2.5 | 2.3 | A |
| | Right Turn | 10 | 6 | 60.2% | 0.0 | 0.0 | A |
| | Subtotal | 811 | 720 | 88.7% | 2.5 | 2.3 | A |
| EB | Left Turn | 5 | 5 | 105.3% | 8.3 | 6.7 | A |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 9 | 11 | 117.0% | 9.8 | 5.7 | A |
| | Subtotal | 14 | 16 | 112.8% | 10.1 | 4.2 | B |
| WB | Left Turn | 8 | 6 | 75.2% | 3.2 | 3.8 | A |
| | Through | 0 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Right Turn | 5 | 4 | 88.4% | 2.2 | 1.7 | A |
| | Subtotal | 13 | 11 | 81.0% | 3.8 | 2.5 | A |
| Total | | 1,129 | 1,021 | 90.4% | 2.2 | 1.6 | A |

**Intersection 28** **Stockton Bl/14th Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 170 | 154 | 90.7% | 104.0 | 52.3 | F |
| | Through | 255 | 234 | 91.9% | 29.6 | 10.2 | C |
| | Right Turn | 81 | 77 | 94.7% | 10.8 | 5.3 | B |
| | Subtotal | 506 | 465 | 91.9% | 51.7 | 24.3 | D |
| SB | Left Turn | 30 | 24 | 79.0% | 101.3 | 16.6 | F |
| | Through | 703 | 562 | 79.9% | 72.5 | 13.8 | E |
| | Right Turn | 16 | 10 | 61.1% | 64.1 | 24.2 | E |
| | Subtotal | 749 | 595 | 79.5% | 73.7 | 13.8 | E |
| EB | Left Turn | 23 | 25 | 109.5% | 44.1 | 6.8 | D |
| | Through | 163 | 190 | 116.7% | 50.1 | 8.8 | D |
| | Right Turn | 94 | 97 | 103.2% | 40.7 | 7.5 | D |
| | Subtotal | 280 | 312 | 111.6% | 46.8 | 6.9 | D |
| WB | Left Turn | 100 | 93 | 92.9% | 54.2 | 12.4 | D |
| | Through | 250 | 252 | 100.8% | 59.0 | 13.6 | E |
| | Right Turn | 44 | 47 | 107.7% | 49.5 | 19.4 | D |
| | Subtotal | 394 | 392 | 99.5% | 56.7 | 13.5 | E |
| Total | | 1,129 | 1,086 | 96.2% | 59.4 | 6.5 | E |

**Intersection 113** **San Diego Wy/Broadway** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 5 | 5 | 97.8% | 17.2 | 15.9 | B |
| | Through | 2 | 3 | 169.2% | 17.7 | 19.6 | B |
| | Right Turn | 5 | 4 | 82.7% | 2.5 | 2.5 | A |
| | Subtotal | 12 | 12 | 103.4% | 17.6 | 11.2 | B |
| SB | Left Turn | 24 | 28 | 115.9% | 27.6 | 9.3 | C |
| | Through | 2 | 2 | 112.8% | 19.9 | 24.6 | B |
| | Right Turn | 92 | 92 | 99.7% | 12.4 | 3.8 | B |
| | Subtotal | 118 | 122 | 103.2% | 16.8 | 5.3 | B |
| EB | Left Turn | 40 | 37 | 92.1% | 13.8 | 5.7 | B |
| | Through | 302 | 309 | 102.3% | 3.8 | 1.0 | A |
| | Right Turn | | | | | | |
| | Subtotal | 342 | 346 | 101.1% | 4.9 | 1.3 | A |
| WB | Left Turn | 5 | 3 | 60.2% | 4.3 | 4.9 | A |
| | Through | 578 | 513 | 88.8% | 6.8 | 2.3 | A |
| | Right Turn | 80 | 67 | 83.2% | 4.8 | 1.8 | A |
| | Subtotal | 663 | 583 | 87.9% | 6.6 | 2.2 | A |
| | Total | 1,135 | 1,063 | 93.7% | 7.3 | 1.4 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Broadway & Stockton Bl**
**Broadway/Stockton Blvd Road Diet**
**PM Peak Hour**

**Intersection 114** **6th Av/Stockton Bl** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) | | Total Delay (sec/veh) | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Percent | Average | Std. Dev. | LOS |
| NB | Left Turn | 5 | 3 | 60.2% | 3.8 | 5.5 | A |
| | Through | 274 | 273 | 99.6% | 3.8 | 1.5 | A |
| | Right Turn | 10 | 10 | 101.5% | 2.3 | 2.4 | A |
| | Subtotal | 289 | 286 | 99.0% | 3.7 | 1.4 | A |
| SB | Left Turn | 40 | 34 | 84.6% | 9.0 | 2.8 | A |
| | Through | 765 | 683 | 89.3% | 6.0 | 0.8 | A |
| | Right Turn | 5 | 6 | 127.8% | 2.8 | 1.5 | A |
| | Subtotal | 810 | 723 | 89.3% | 6.2 | 0.6 | A |
| EB | Left Turn | 5 | 5 | 97.8% | 18.1 | 15.4 | B |
| | Through | 2 | 2 | 75.2% | 10.4 | 14.5 | B |
| | Right Turn | 5 | 4 | 75.2% | 8.4 | 8.5 | A |
| | Subtotal | 12 | 10 | 84.6% | 16.4 | 10.8 | B |
| WB | Left Turn | 88 | 88 | 100.4% | 24.0 | 5.1 | C |
| | Through | 2 | 2 | 112.8% | 17.7 | 23.7 | B |
| | Right Turn | 37 | 36 | 97.6% | 12.4 | 5.5 | B |
| | Subtotal | 127 | 127 | 99.8% | 20.8 | 4.4 | C |
| Total | | 1,238 | 1,146 | 92.6% | 7.3 | 0.8 | A |

S Stockton Boulevard

FEHR PEERS

## Vision Zero Top 5 Corridor Recommendations Results Summary – Stockton Boulevard (South)

### Vision Zero Top 5 Corridor Recommendations Implemented

- Signal coordination between McMahon Drive and Riza Avenue/Fowler Avenue; shorter cycle lengths
- Extended clearance time at all traffic signals
- Longer pedestrian crossing time at Stockton Boulevard/47th Avenue/Elder Creek Road
- Extra minimum green time at Stockton Boulevard/Riza Avenue/Fowler Avenue

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### Speed & Travel Time Results

| Travel Times (min) | Dir | Existing Conditions | | VZ Recommendations | | % Change | |
|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour |
| Stockton Boulevard – Riza Avenue to Jansen Drive | NB | 4.1 | 3.8 | 4.2 | 4.0 | 4% | 4% |
| | SB | 3.9 | 4.4 | 4.4 | 5.2 | 11% | 17% |
| **Speed (mph)** | **Dir** | **Existing Conditions** | | **VZ Recommendations** | | **% Change** | |
| | | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** |
| Stockton Boulevard – Riza Avenue to Jansen Drive | NB | 20 | 21 | 19 | 20 | -5% | -5% |
| | SB | 25 | 22 | 22 | 19 | -12% | -14% |

### Delay & LOS Results

| Intersection | Existing Conditions | | | VZ Recommendations | | |
|---|---|---|---|---|---|---|
| | Control[1] | AM Peak Hour | PM Peak Hour | Control | AM Peak Hour | PM Peak Hour |
| Stockton Blvd/37th Ave | SSSC | A (C) / 2 (20) | A (E) / 4 (37) | SSSC | A (C) / 2 (22) | A (E) / 5 (49) |
| Stockton Blvd/McMahon Dr | Signal | A / 7 | A / 9 | Signal | A / 7 | A / 10 |
| Stockton Blvd/Lemon Hill Ave | Signal | C / 28 | C / 22 | Signal | C / 34 | C / 25 |
| Stockton Blvd/Dias Ave | Signal | A / 9 | A / 9 | Signal | A / 8 | B / 19 |
| Stockton Blvd/47th Ave/Elder Creek Rd | Signal | D / 39 | D / 46 | Signal | D / 47 | E / 63 |
| Stockton Blvd/Riza Ave/Fowler Ave | Signal | B / 13 | B / 17 | Signal | C / 21 | B / 19 |

## Vision Zero Top 5 Corridor Recommendations Results Summary – Stockton Boulevard (South)

### Peak Hour Maximum Queue Results – Stockton Boulevard/47th Avenue/Elder Creek Road

| Approach | Lane | Storage (ft) | Peak Hour Maximum Queue (ft) | |
|---|---|---|---|---|
| | | | AM Peak Hour | PM Peak Hour |
| NB | Left | 250 | 250 | **275** |
| | Through | 1,675 | 325 | 350 |
| | Through/Right | 1,675 | 350 | 325 |
| SB | Left | 225 | 175 | **325** |
| | Through | 1,950 | 300 | 600 |
| | Through/Right | 1,950 | 350 | 575 |
| EB | Left | 300 | **350** | **325** |
| | Through | 550 | **575** | 400 |
| | Right | 550 | 500 | 375 |
| WB | Left | 175 | 150 | **200** |
| | Through | 2,275 | 300 | 450 |
| | Through/Right | 2,275 | 325 | 450 |

## Arterial Level of Service: NB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Riza Av | 108 | 10.5 | 25.7 | 0.2 | 24 |
| Fowler Av | 34 | 1.9 | 5.0 | 0.0 | 29 |
| 48th Av | 123 | 6.1 | 29.0 | 0.3 | 32 |
| Elder Creek Rd | 33 | 31.0 | 37.4 | 0.1 | 7 |
| Dias Av | 32 | 11.1 | 22.5 | 0.1 | 20 |
| El Paraiso Av | 107 | 3.0 | 15.8 | 0.1 | 28 |
| Lemon Hill Av | 31 | 28.2 | 41.9 | 0.1 | 12 |
| | 106 | 5.1 | 19.6 | 0.1 | 26 |
| McMahon Dr | 30 | 7.3 | 15.6 | 0.1 | 18 |
| | 29 | 2.1 | 8.7 | 0.1 | 27 |
| Jansen Dr | 136 | 9.8 | 22.7 | 0.1 | 20 |
| Total | | 116.0 | 243.9 | 1.4 | 20 |

## Arterial Level of Service: SB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 136 | 5.4 | 48.1 | 0.4 | 33 |
| 37th Av | 29 | 1.5 | 14.5 | 0.1 | 32 |
| | 30 | 4.2 | 11.0 | 0.1 | 21 |
| | 106 | 1.1 | 8.9 | 0.1 | 32 |
| Lemon Hill Av | 31 | 17.9 | 31.9 | 0.1 | 16 |
| El Paraiso Av | 107 | 2.3 | 16.8 | 0.1 | 30 |
| | 32 | 5.2 | 17.9 | 0.1 | 25 |
| 47th Av | 33 | 29.8 | 40.5 | 0.1 | 11 |
| | 123 | 3.2 | 10.4 | 0.1 | 26 |
| Fowler Av | 34 | 7.9 | 30.9 | 0.3 | 30 |
| Riza Av | 108 | 1.3 | 4.3 | 0.0 | 33 |
| Total | | 79.7 | 235.4 | 1.6 | 25 |

## Arterial Level of Service: NB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Riza Av | 108 | 10.4 | 25.6 | 0.2 | 24 |
| Fowler Av | 34 | 2.1 | 5.1 | 0.0 | 28 |
| 48th Av | 123 | 2.6 | 25.5 | 0.3 | 37 |
| Elder Creek Rd | 33 | 30.6 | 37.0 | 0.1 | 7 |
| Dias Av | 32 | 8.6 | 19.7 | 0.1 | 23 |
| El Paraiso Av | 107 | 1.9 | 14.6 | 0.1 | 30 |
| Lemon Hill Av | 31 | 21.0 | 34.5 | 0.1 | 15 |
| | 106 | 4.3 | 18.8 | 0.1 | 27 |
| McMahon Dr | 30 | 9.3 | 17.7 | 0.1 | 16 |
| | 29 | 1.9 | 8.5 | 0.1 | 27 |
| Jansen Dr | 136 | 9.5 | 22.5 | 0.1 | 21 |
| Total | | 102.1 | 229.6 | 1.4 | 21 |

## Arterial Level of Service: SB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 136 | 8.1 | 50.7 | 0.4 | 31 |
| 37th Av | 29 | 3.6 | 16.5 | 0.1 | 28 |
| | 30 | 7.2 | 14.0 | 0.1 | 17 |
| | 106 | 2.1 | 9.9 | 0.1 | 29 |
| Lemon Hill Av | 31 | 18.7 | 32.6 | 0.1 | 16 |
| El Paraiso Av | 107 | 3.3 | 17.9 | 0.1 | 29 |
| | 32 | 8.3 | 21.1 | 0.1 | 21 |
| 47th Av | 33 | 39.2 | 49.8 | 0.1 | 9 |
| | 123 | 5.0 | 12.2 | 0.1 | 23 |
| Fowler Av | 34 | 13.5 | 36.6 | 0.3 | 26 |
| Riza Av | 108 | 2.5 | 5.5 | 0.0 | 26 |
| Total | | 111.4 | 266.8 | 1.6 | 22 |

## Arterial Level of Service: NB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Riza Av | 108 | 13.6 | 28.8 | 0.2 | 22 |
| Fowler Av | 34 | 2.0 | 5.1 | 0.0 | 28 |
| 48th Av | 123 | 8.9 | 31.9 | 0.3 | 29 |
| Elder Creek Rd | 33 | 30.3 | 36.7 | 0.1 | 8 |
| Dias Av | 32 | 7.4 | 18.9 | 0.1 | 24 |
| El Paraiso Av | 107 | 2.4 | 15.2 | 0.1 | 29 |
| Lemon Hill Av | 31 | 38.7 | 52.2 | 0.1 | 10 |
| | 106 | 4.8 | 19.3 | 0.1 | 26 |
| McMahon Dr | 30 | 5.2 | 13.6 | 0.1 | 21 |
| | 29 | 1.8 | 8.4 | 0.1 | 28 |
| Jansen Dr | 136 | 10.1 | 23.1 | 0.1 | 20 |
| Total | | 125.4 | 253.2 | 1.4 | 19 |

## Arterial Level of Service: SB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 136 | 5.4 | 48.3 | 0.4 | 33 |
| 37th Av | 29 | 1.5 | 14.5 | 0.1 | 32 |
| | 30 | 2.9 | 9.7 | 0.1 | 24 |
| | 106 | 0.8 | 8.6 | 0.1 | 33 |
| Lemon Hill Av | 31 | 21.5 | 35.6 | 0.1 | 14 |
| El Paraiso Av | 107 | 2.5 | 16.9 | 0.1 | 30 |
| | 32 | 4.5 | 17.2 | 0.1 | 26 |
| 47th Av | 33 | 42.6 | 52.8 | 0.1 | 9 |
| | 123 | 3.6 | 10.9 | 0.1 | 25 |
| Fowler Av | 34 | 20.5 | 43.4 | 0.3 | 22 |
| Riza Av | 108 | 2.2 | 5.3 | 0.0 | 27 |
| Total | | 107.9 | 263.0 | 1.6 | 22 |

## Arterial Level of Service: NB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| Riza Av | 108 | 12.5 | 27.8 | 0.2 | 23 |
| Fowler Av | 34 | 2.4 | 5.5 | 0.0 | 26 |
| 48th Av | 123 | 6.6 | 29.5 | 0.3 | 32 |
| Elder Creek Rd | 33 | 33.4 | 39.6 | 0.1 | 7 |
| Dias Av | 32 | 6.5 | 18.4 | 0.1 | 25 |
| El Paraiso Av | 107 | 1.4 | 14.1 | 0.1 | 31 |
| Lemon Hill Av | 31 | 23.6 | 37.3 | 0.1 | 14 |
| | 106 | 4.8 | 19.5 | 0.1 | 26 |
| McMahon Dr | 30 | 7.9 | 16.2 | 0.1 | 18 |
| | 29 | 1.6 | 8.3 | 0.1 | 28 |
| Jansen Dr | 136 | 9.1 | 21.8 | 0.1 | 21 |
| Total | | 109.8 | 237.8 | 1.4 | 20 |

## Arterial Level of Service: SB Stockton Bl

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 136 | 8.5 | 51.1 | 0.4 | 31 |
| 37th Av | 29 | 3.5 | 16.5 | 0.1 | 28 |
| | 30 | 8.2 | 14.9 | 0.1 | 16 |
| | 106 | 2.1 | 10.0 | 0.1 | 29 |
| Lemon Hill Av | 31 | 14.4 | 28.6 | 0.1 | 18 |
| El Paraiso Av | 107 | 5.3 | 19.7 | 0.1 | 26 |
| | 32 | 27.6 | 40.1 | 0.1 | 11 |
| 47th Av | 33 | 72.9 | 82.7 | 0.1 | 5 |
| | 123 | 4.6 | 11.8 | 0.1 | 23 |
| Fowler Av | 34 | 8.6 | 31.4 | 0.3 | 30 |
| Riza Av | 108 | 2.2 | 5.2 | 0.0 | 28 |
| Total | | 157.8 | 311.9 | 1.6 | 19 |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - Stockton Bl**
**Average Results from 10 Runs** | **VZ Recommendations**
**Volume and Delay by Movement** | **AM Peak Hour**

**Intersection 29** **Stockton Bl/37th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 40 | 37 | 91.7% | 4.5 | 1.6 | A |
| | Through | 1,178 | 1,069 | 90.8% | 1.8 | 0.4 | A |
| | Right Turn | | | | | | |
| | Subtotal | 1,218 | 1,106 | 90.8% | 1.8 | 0.4 | A |
| SB | Left Turn | | | | | | |
| | Through | 552 | 559 | 101.3% | 1.5 | 0.3 | A |
| | Right Turn | 19 | 19 | 97.4% | 1.1 | 0.6 | A |
| | Subtotal | 571 | 577 | 101.1% | 1.4 | 0.2 | A |
| EB | Left Turn | 45 | 50 | 110.8% | 18.7 | 3.3 | C |
| | Through | | | | | | |
| | Right Turn | 47 | 47 | 99.2% | 9.7 | 4.7 | A |
| | Subtotal | 92 | 96 | 104.9% | 14.3 | 3.2 | B |
| WB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| Total | | 1,881 | 1,780 | 94.6% | 2.4 | 0.3 | A |

**Intersection 30** **Stockton Bl/McMahon Dr** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 0 | 35.6% | 5.8 | 18.3 | A |
| | Through | 1,163 | 1,040 | 89.4% | 5.2 | 1.0 | A |
| | Right Turn | 52 | 57 | 110.2% | 4.3 | 2.1 | A |
| | Subtotal | 1,216 | 1,097 | 90.2% | 5.2 | 0.9 | A |
| SB | Left Turn | 36 | 35 | 95.9% | 51.2 | 9.9 | D |
| | Through | 550 | 546 | 99.3% | 3.1 | 0.9 | A |
| | Right Turn | 13 | 15 | 117.8% | 2.2 | 2.3 | A |
| | Subtotal | 599 | 596 | 99.5% | 5.8 | 1.3 | A |
| EB | Left Turn | 3 | 2 | 59.3% | 17.8 | 26.8 | B |
| | Through | 6 | 7 | 112.7% | 51.4 | 32.8 | D |
| | Right Turn | 4 | 5 | 133.5% | 10.7 | 12.6 | B |
| | Subtotal | 13 | 14 | 106.8% | 36.3 | 18.1 | D |
| WB | Left Turn | 60 | 63 | 105.0% | 47.2 | 7.2 | D |
| | Through | 9 | 8 | 87.0% | 37.1 | 24.0 | D |
| | Right Turn | 52 | 51 | 97.2% | 28.8 | 7.1 | C |
| | Subtotal | 121 | 121 | 100.3% | 39.0 | 5.1 | D |
| Total | | 1,949 | 1,828 | 93.8% | 7.9 | 0.9 | A |

**Intersection 31** **Stockton Bl/Lemon Hill Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 37 | 42 | 112.6% | 69.0 | 23.9 | E |
| | Through | 1,037 | 917 | 88.4% | 41.1 | 16.2 | D |
| | Right Turn | 108 | 94 | 86.7% | 17.0 | 13.0 | B |
| | Subtotal | 1,182 | 1,052 | 89.0% | 40.0 | 16.0 | D |
| SB | Left Turn | 108 | 109 | 100.5% | 51.7 | 5.7 | D |
| | Through | 455 | 455 | 99.9% | 21.8 | 4.0 | C |
| | Right Turn | 51 | 52 | 101.2% | 19.2 | 4.3 | B |
| | Subtotal | 614 | 615 | 100.1% | 26.9 | 4.4 | C |
| EB | Left Turn | 47 | 41 | 87.9% | 42.4 | 11.4 | D |
| | Through | 109 | 108 | 99.0% | 45.1 | 3.2 | D |
| | Right Turn | 29 | 27 | 94.5% | 7.9 | 2.8 | A |
| | Subtotal | 185 | 177 | 95.4% | 38.6 | 3.9 | D |
| WB | Left Turn | 102 | 112 | 109.6% | 40.0 | 6.2 | D |
| | Through | 93 | 87 | 93.0% | 40.4 | 4.5 | D |
| | Right Turn | 158 | 156 | 98.9% | 16.8 | 3.8 | B |
| | Subtotal | 353 | 355 | 100.4% | 29.9 | 2.1 | C |
| Total | | 2,334 | 2,198 | 94.2% | 34.5 | 8.1 | C |

**Intersection 32** **Stockton Bl/Dias Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 19 | 17 | 88.1% | 10.1 | 5.2 | B |
| | Through | 1,206 | 1,099 | 91.1% | 6.2 | 1.7 | A |
| | Right Turn | 2 | 1 | 35.6% | 0.1 | 0.3 | A |
| | Subtotal | 1,227 | 1,116 | 91.0% | 6.3 | 1.7 | A |
| SB | Left Turn | 20 | 17 | 87.2% | 19.1 | 10.8 | B |
| | Through | 558 | 554 | 99.2% | 4.6 | 2.1 | A |
| | Right Turn | 17 | 19 | 113.1% | 3.5 | 3.4 | A |
| | Subtotal | 595 | 590 | 99.2% | 4.9 | 2.2 | A |
| EB | Left Turn | 2 | 1 | 71.2% | 12.5 | 19.9 | B |
| | Through | | | | | | |
| | Right Turn | 8 | 7 | 84.6% | 3.7 | 3.2 | A |
| | Subtotal | 10 | 8 | 81.9% | 11.9 | 14.5 | B |
| WB | Left Turn | 37 | 34 | 91.4% | 23.6 | 6.8 | C |
| | Through | 1 | 1 | 71.2% | 10.3 | 21.9 | B |
| | Right Turn | 54 | 52 | 96.9% | 12.7 | 3.5 | B |
| | Subtotal | 92 | 87 | 94.4% | 17.5 | 3.8 | B |
| Total | | 1,924 | 1,802 | 93.6% | 6.4 | 1.5 | A |

**Intersection 33** **Stockton Bl/47th Av-Elder Creek Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 222 | 204 | 92.0% | 52.6 | 16.3 | D |
| | Through | 908 | 852 | 93.8% | 38.8 | 15.2 | D |
| | Right Turn | 50 | 46 | 92.6% | 33.3 | 11.8 | C |
| | Subtotal | 1,180 | 1,102 | 93.4% | 41.2 | 15.0 | D |
| SB | Left Turn | 87 | 87 | 100.3% | 43.0 | 6.0 | D |
| | Through | 331 | 352 | 106.4% | 42.4 | 4.0 | D |
| | Right Turn | 189 | 199 | 105.5% | 36.4 | 7.3 | D |
| | Subtotal | 607 | 639 | 105.2% | 40.6 | 3.9 | D |
| EB | Left Turn | 222 | 220 | 98.9% | 129.5 | 43.4 | F |
| | Through | 572 | 518 | 90.6% | 39.3 | 8.4 | D |
| | Right Turn | 113 | 112 | 99.6% | 28.4 | 7.1 | C |
| | Subtotal | 907 | 850 | 93.7% | 61.0 | 16.2 | E |
| WB | Left Turn | 25 | 25 | 101.1% | 50.8 | 16.5 | D |
| | Through | 635 | 572 | 90.1% | 43.0 | 4.7 | D |
| | Right Turn | 101 | 93 | 92.0% | 37.1 | 5.9 | D |
| | Subtotal | 761 | 690 | 90.7% | 42.6 | 4.6 | D |
| Total | | 3,455 | 3,281 | 95.0% | 46.7 | 5.8 | D |

**Intersection 34** **Stockton Bl/Riza Av-Fowler Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 15 | 13 | 87.8% | 61.1 | 29.1 | E |
| | Through | 1,090 | 1,070 | 98.1% | 15.9 | 2.3 | B |
| | Right Turn | 29 | 37 | 127.4% | 14.4 | 2.3 | B |
| | Subtotal | 1,134 | 1,120 | 98.8% | 16.5 | 2.5 | B |
| SB | Left Turn | 18 | 16 | 91.0% | 45.8 | 24.1 | D |
| | Through | 403 | 396 | 98.3% | 24.4 | 5.1 | C |
| | Right Turn | 15 | 15 | 103.2% | 21.6 | 4.5 | C |
| | Subtotal | 436 | 428 | 98.2% | 25.0 | 4.5 | C |
| EB | Left Turn | 28 | 20 | 70.9% | 38.9 | 10.1 | D |
| | Through | 1 | 0 | 44.5% | 37.4 | 10.0 | D |
| | Right Turn | 22 | 22 | 98.7% | 4.0 | 1.6 | A |
| | Subtotal | 51 | 42 | 82.4% | 20.5 | 8.1 | C |
| WB | Left Turn | 41 | 42 | 102.0% | 52.3 | 12.8 | D |
| | Through | 1 | 2 | 160.2% | 49.5 | 13.2 | D |
| | Right Turn | 34 | 40 | 116.2% | 11.2 | 3.6 | B |
| | Subtotal | 76 | 83 | 109.1% | 33.3 | 10.3 | C |
| Total | | 1,697 | 1,673 | 98.6% | 19.6 | 2.5 | B |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - Stockton Bl**
**Average Results from 10 Runs** | **VZ Top 5 Recommendations**
**Volume and Delay by Movement** | **PM Peak Hour**

**Intersection 29** **Stockton Bl/37th Av** **Side-street Stop**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 37 | 35 | 95.5% | 11.3 | 4.2 | B |
| | Through | 797 | 766 | 96.1% | 1.5 | 0.3 | A |
| | Right Turn | | | | | | |
| | Subtotal | 834 | 801 | 96.1% | 1.9 | 0.5 | A |
| SB | Left Turn | 4 | 3 | 76.0% | 2.6 | 3.6 | A |
| | Through | 1,131 | 1,150 | 101.7% | 3.4 | 0.3 | A |
| | Right Turn | 109 | 108 | 99.0% | 2.8 | 0.8 | A |
| | Subtotal | 1,244 | 1,261 | 101.4% | 3.3 | 0.3 | A |
| EB | Left Turn | 48 | 60 | 124.3% | 49.3 | 36.3 | E |
| | Through | | | | | | |
| | Right Turn | 41 | 37 | 89.9% | 30.8 | 20.7 | D |
| | Subtotal | 89 | 97 | 108.4% | 42.4 | 30.4 | E |
| WB | Left Turn | 8 | 8 | 95.0% | 35.6 | 27.2 | E |
| | Through | | | | | | |
| | Right Turn | 6 | 5 | 76.0% | 5.8 | 7.7 | A |
| | Subtotal | 14 | 12 | 86.9% | 28.9 | 20.6 | D |
| Total | | 2,181 | 2,171 | 99.5% | 4.7 | 1.4 | A |

**Intersection 30** **Stockton Bl/McMahon Dr** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 12 | 11 | 95.0% | 34.0 | 13.1 | C |
| | Through | 742 | 695 | 93.7% | 7.8 | 1.9 | A |
| | Right Turn | 58 | 60 | 103.5% | 8.4 | 4.2 | A |
| | Subtotal | 812 | 767 | 94.4% | 8.2 | 1.9 | A |
| SB | Left Turn | 32 | 31 | 97.4% | 33.7 | 7.2 | C |
| | Through | 1,123 | 1,151 | 102.5% | 8.2 | 1.1 | A |
| | Right Turn | 25 | 24 | 94.2% | 5.9 | 4.6 | A |
| | Subtotal | 1,180 | 1,206 | 102.2% | 8.8 | 1.0 | A |
| EB | Left Turn | 64 | 70 | 109.3% | 23.9 | 6.1 | C |
| | Through | 17 | 14 | 84.9% | 18.2 | 10.4 | B |
| | Right Turn | 38 | 36 | 95.0% | 11.4 | 3.8 | B |
| | Subtotal | 119 | 120 | 101.2% | 19.9 | 4.8 | B |
| WB | Left Turn | 48 | 48 | 99.8% | 24.1 | 8.3 | C |
| | Through | 17 | 19 | 111.8% | 25.9 | 11.6 | C |
| | Right Turn | 28 | 30 | 107.2% | 9.9 | 2.9 | A |
| | Subtotal | 93 | 97 | 104.2% | 19.6 | 5.2 | B |
| Total | | 2,204 | 2,190 | 99.4% | 9.7 | 1.0 | A |

**Intersection 31** **Stockton Bl/Lemon Hill Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 25 | 23 | 91.2% | 74.3 | 26.4 | E |
| | Through | 727 | 657 | 90.4% | 23.5 | 3.4 | C |
| | Right Turn | 74 | 65 | 87.8% | 6.2 | 1.7 | A |
| | Subtotal | 826 | 745 | 90.2% | 23.4 | 3.1 | C |
| SB | Left Turn | 120 | 123 | 102.6% | 63.1 | 7.4 | E |
| | Through | 1,061 | 1,041 | 98.1% | 14.6 | 2.2 | B |
| | Right Turn | 57 | 52 | 90.7% | 11.4 | 3.9 | B |
| | Subtotal | 1,238 | 1,216 | 98.2% | 19.3 | 2.4 | B |
| EB | Left Turn | 64 | 74 | 115.8% | 48.6 | 9.7 | D |
| | Through | 64 | 72 | 112.8% | 53.8 | 6.8 | D |
| | Right Turn | 39 | 40 | 103.3% | 12.7 | 4.4 | B |
| | Subtotal | 167 | 187 | 111.7% | 42.7 | 6.0 | D |
| WB | Left Turn | 114 | 116 | 102.0% | 48.9 | 6.4 | D |
| | Through | 123 | 127 | 102.9% | 55.6 | 7.7 | E |
| | Right Turn | 107 | 97 | 90.9% | 15.6 | 2.4 | B |
| | Subtotal | 344 | 340 | 98.9% | 42.0 | 5.4 | D |
| Total | | 2,575 | 2,487 | 96.6% | 25.4 | 1.9 | C |

**Intersection 32** **Stockton Bl/Dias Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 40 | 37 | 93.1% | 31.0 | 15.8 | C |
| | Through | 832 | 826 | 99.2% | 5.4 | 0.8 | A |
| | Right Turn | 1 | 2 | 152.0% | 1.1 | 1.9 | A |
| | Subtotal | 873 | 865 | 99.0% | 6.4 | 0.9 | A |
| SB | Left Turn | 39 | 34 | 87.7% | 30.0 | 20.5 | C |
| | Through | 1,202 | 1,120 | 93.2% | 27.1 | 16.2 | C |
| | Right Turn | 38 | 36 | 94.0% | 29.4 | 23.4 | C |
| | Subtotal | 1,279 | 1,190 | 93.1% | 27.2 | 16.3 | C |
| EB | Left Turn | 6 | 4 | 63.3% | 17.4 | 19.5 | B |
| | Through | 1 | 1 | 76.0% | 9.1 | 19.5 | A |
| | Right Turn | 13 | 13 | 102.3% | 19.8 | 14.6 | B |
| | Subtotal | 20 | 18 | 89.3% | 24.3 | 11.7 | C |
| WB | Left Turn | 64 | 62 | 97.4% | 32.5 | 5.6 | C |
| | Through | 2 | 2 | 114.0% | 11.2 | 19.8 | B |
| | Right Turn | 29 | 31 | 106.1% | 19.3 | 8.3 | B |
| | Subtotal | 95 | 95 | 100.4% | 28.2 | 5.0 | C |
| Total | | 2,267 | 2,168 | 95.6% | 19.0 | 9.4 | B |

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Vision Zero Top 5 Corridors - Stockton Bl
VZ Top 5 Recommendations
PM Peak Hour

**Intersection 33** **Stockton Bl/47th Av-Elder Creek Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 214 | 191 | 89.1% | 114.0 | 30.9 | F |
| | Through | 532 | 570 | 107.1% | 39.8 | 5.8 | D |
| | Right Turn | 64 | 69 | 108.1% | 34.1 | 5.9 | C |
| | Subtotal | 810 | 830 | 102.5% | 56.9 | 10.9 | E |
| SB | Left Turn | 146 | 123 | 84.1% | 86.0 | 15.7 | F |
| | Through | 830 | 779 | 93.9% | 72.9 | 15.0 | E |
| | Right Turn | 316 | 290 | 91.6% | 81.6 | 18.9 | F |
| | Subtotal | 1,292 | 1,191 | 92.2% | 76.4 | 15.4 | E |
| EB | Left Turn | 241 | 193 | 80.1% | 95.0 | 31.8 | F |
| | Through | 490 | 434 | 88.5% | 40.1 | 4.9 | D |
| | Right Turn | 200 | 181 | 90.6% | 30.1 | 5.8 | C |
| | Subtotal | 931 | 808 | 86.8% | 51.4 | 11.3 | D |
| WB | Left Turn | 92 | 90 | 98.3% | 95.7 | 10.8 | F |
| | Through | 803 | 706 | 87.9% | 60.1 | 8.9 | E |
| | Right Turn | 116 | 115 | 98.9% | 53.4 | 9.4 | D |
| | Subtotal | 1,011 | 911 | 90.1% | 63.0 | 8.1 | E |
| Total | | 4,044 | 3,740 | 92.5% | 63.4 | 5.3 | E |

**Intersection 34** **Stockton Bl/Riza Av-Fowler Av** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 30 | 32 | 107.7% | 52.1 | 14.0 | D |
| | Through | 749 | 719 | 95.9% | 15.9 | 1.8 | B |
| | Right Turn | 60 | 65 | 107.5% | 13.9 | 1.6 | B |
| | Subtotal | 839 | 815 | 97.2% | 17.2 | 1.6 | B |
| SB | Left Turn | 30 | 31 | 102.6% | 82.9 | 15.2 | F |
| | Through | 1,025 | 855 | 83.4% | 13.8 | 2.7 | B |
| | Right Turn | 27 | 24 | 90.1% | 12.3 | 3.9 | B |
| | Subtotal | 1,082 | 910 | 84.1% | 16.0 | 2.6 | B |
| EB | Left Turn | 17 | 23 | 135.8% | 50.9 | 17.7 | D |
| | Through | 1 | 2 | 199.5% | 49.0 | 17.5 | D |
| | Right Turn | 26 | 25 | 95.0% | 13.9 | 6.4 | B |
| | Subtotal | 44 | 50 | 113.1% | 32.3 | 7.7 | C |
| WB | Left Turn | 100 | 102 | 102.2% | 49.7 | 11.2 | D |
| | Through | 3 | 3 | 101.3% | 48.2 | 11.4 | D |
| | Right Turn | 31 | 35 | 111.5% | 11.1 | 8.3 | B |
| | Subtotal | 134 | 140 | 104.4% | 40.6 | 12.0 | D |
| Total | | 2,099 | 1,915 | 91.2% | 18.7 | 2.2 | B |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Queue Length**
**Intersection 33** **Stockton Bl/47th Av-Elder Creek Rd**

**Vision Zero Top 5 Corridors - Stockton Bl**
**VZ Recommendations**
**AM Peak Hour**
**Signal**

| | | Storage | Average Queue (ft) | | 95th Queue (ft) | | Maximum Queue (ft) | | Block Time | |
|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Lane Group | (ft) | Average | Std. Dev. | Average | Std. Dev. | Average | Std. Dev. | Pocket | Upstream |
| EB | U/Left Turns | 300 | 300 | 35 | 400 | 40 | 350 | 16 | 41% | 0% |
| | Through | 1,600 | 375 | 183 | 600 | 242 | 575 | 216 | 0% | 0% |
| | Through/Right | 1,600 | 325 | 171 | 525 | 281 | 500 | 239 | 0% | 0% |
| NB | U/Left Turns | 250 | 175 | 32 | 300 | 35 | 250 | 32 | 2% | 0% |
| | Through | 300 | 225 | 38 | 350 | 48 | 325 | 30 | 12% | 7% |
| | Through/Right | 300 | 250 | 34 | 375 | 44 | 350 | 28 | 0% | 9% |
| SB | Left Turn | 225 | 100 | 25 | 150 | 62 | 175 | 81 | 0% | 0% |
| | Through | 575 | 200 | 31 | 275 | 41 | 300 | 48 | 4% | 0% |
| | Through/Right | 575 | 250 | 34 | 350 | 49 | 350 | 55 | 0% | 0% |
| WB | U/Left Turns | 175 | 50 | 17 | 125 | 53 | 150 | 73 | 0% | 0% |
| | Through | 2,800 | 225 | 27 | 325 | 46 | 300 | 51 | 20% | 0% |
| | Through/Right | 2,800 | 250 | 28 | 325 | 45 | 325 | 43 | 0% | 0% |

**SimTraffic Post-Processor** | **Vision Zero Top 5 Corridors - Stockton Bl**
**Average Results from 10 Runs** | **VZ Top 5 Recommendations**
**Queue Length** | **PM Peak Hour**
**Intersection 33** | **Stockton Bl/47th Av-Elder Creek Rd** | **Signal**

| | | Storage | Average Queue (ft) | | 95th Queue (ft) | | Maximum Queue (ft) | | Block Time | |
|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Lane Group | (ft) | Average | Std. Dev. | Average | Std. Dev. | Average | Std. Dev. | Pocket | Upstream |
| EB | U/Left Turns | 300 | 250 | 65 | 325 | 78 | 325 | 61 | 17% | 0% |
| | Through | 1,600 | 250 | 89 | 400 | 187 | 400 | 136 | 0% | 0% |
| | Through/Right | 1,600 | 250 | 76 | 375 | 137 | 375 | 117 | 0% | 0% |
| NB | U/Left Turns | 250 | 250 | 35 | 300 | 22 | 275 | 2 | 30% | 0% |
| | Through | 300 | 275 | 31 | 375 | 42 | 350 | 33 | 7% | 14% |
| | Through/Right | 300 | 250 | 24 | 325 | 31 | 325 | 29 | 0% | 3% |
| SB | Left Turn | 225 | 200 | 48 | 350 | 44 | 325 | 1 | 1% | 0% |
| | Through | 575 | 500 | 69 | 650 | 60 | 600 | 17 | 51% | 16% |
| | Through/Right | 575 | 525 | 62 | 650 | 61 | 575 | 32 | 0% | 19% |
| WB | U/Left Turns | 175 | 150 | 30 | 225 | 32 | 200 | 1 | 5% | 0% |
| | Through | 2,800 | 350 | 41 | 450 | 47 | 450 | 53 | 43% | 0% |
| | Through/Right | 2,800 | 375 | 45 | 450 | 42 | 450 | 36 | 0% | 0% |

Florin Road

# Vision Zero Top 5 Corridor Recommendations Results Summary – Florin Road

## Vision Zero Top 5 Corridor Recommendations Implemented

- Narrowed lanes on Florin Road between 24th Street and Munson Way
- Longer pedestrian crossing time at 24th Street/Florin Road
- New traffic signals at Loma Verde Way/Florin Road, Serenity Drive/ Florin Road, and Munson Way/Florin Road
- Extended signal clearance time at Luther Drive/Florin Road

## Speed & Travel Time Results

| Travel Times (min) | Dir | Existing Conditions | | VZ Recommendations | | % Change | |
|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour |
| Florin Road – 24th Street to Munson Way | EB | 4.2 | 4.0 | 4.6 | 4.6 | 9% | 15% |
| | WB | 3.5 | 3.1 | 4.1 | 3.4 | 17% | 7% |
| **Speed (mph)** | **Dir** | **Existing Conditions** | | **VZ Recommendations** | | **% Change** | |
| | | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** | **AM Peak Hour** | **PM Peak Hour** |
| Florin Road – 24th Street to Munson Way | EB | 23 | 24 | 21 | 21 | -9% | -13% |
| | WB | 19 | 21 | 16 | 20 | -16% | -5% |

## Delay & LOS Results

| Intersection | Existing Conditions | | | VZ Recommendations | | |
|---|---|---|---|---|---|---|
| | Control[1] | AM Peak Hour | PM Peak Hour | Control | AM Peak Hour | PM Peak Hour |
| 24th St/Florin Rd | Signal | D / 37 | C / 31 | Signal | D / 42 | C / 33 |
| Woodbine Av/Florin Rd | Signal | A / 10 | B / 11 | Signal | B / 13 | B / 10 |
| Loma Verde Wy/Florin Rd | SSSC | *Not Analyzed* | | Signal | B / 12 | A / 5 |
| Indian Ln/29th St/Florin Rd | Signal | C / 23 | C / 20 | Signal | C / 29 | C / 21 |
| Serenity Dr/Florin Rd | SSSC | *Not Analyzed* | | Signal | B / 18 | B / 13 |
| Hisperry Ln/Luther Burbank HS Dw/Florin Rd | Signal | B / 13 | A / 4 | Signal | B / 13 | A / 8 |
| Luther Dr/Florin Rd | Signal | D / 49 | D / 43 | Signal | E / 57 | D / 50 |
| Munson Wy/Florin Rd | SSSC | A (B) / 3 (14) | A (C) / 3 (21) | Signal | A / 3 | A / 8 |

## Vision Zero Top 5 Corridor Recommendations Results Summary – Florin Road

### Peak Hour Maximum Queue Results – El Camino Avenue/Del Paso Boulevard/Beaumont Street

| Approach | Lane | Storage (ft) | Peak Hour Maximum Queue (ft) | |
|---|---|---|---|---|
| | | | AM Peak Hour | PM Peak Hour |
| EB | Left | 125 | 100 | 100 |
| | Through | 450 | 250 | 350 |
| | Through/Right | 450 | 275 | 375 |

## Arterial Level of Service: EB Florin Rd

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| 24th St | 35 | 25.9 | 69.9 | 0.5 | 27 |
| 25th St | 101 | 4.0 | 15.5 | 0.1 | 30 |
| | 36 | 2.1 | 8.2 | 0.1 | 30 |
| Loma Verde Wy | 102 | 1.4 | 13.9 | 0.1 | 36 |
| 29th St | 37 | 26.9 | 40.3 | 0.2 | 14 |
| HS Dwy | 103 | 7.5 | 29.3 | 0.2 | 30 |
| Luther Burbank HS | 39 | 8.3 | 15.8 | 0.1 | 19 |
| HS Dwy | 135 | 3.7 | 9.4 | 0.1 | 23 |
| Luther Dr | 40 | 20.8 | 25.9 | 0.1 | 8 |
| Luther Dr | 105 | 3.4 | 7.1 | 0.0 | 21 |
| Munson Wy | 41 | 3.2 | 16.2 | 0.1 | 32 |
| | 140 | 0.7 | 4.4 | 0.0 | 31 |
| Franklin Bl | 137 | 33.2 | 41.2 | 0.1 | 9 |
| | 138 | 2.8 | 7.9 | 0.0 | 22 |
| Total | | 143.8 | 305.1 | 1.8 | 22 |

## Arterial Level of Service: WB Florin Rd

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 138 | 2.6 | 33.3 | 0.4 | 39 |
| Franklin Bl | 137 | 31.9 | 36.3 | 0.0 | 5 |
| | 140 | 4.7 | 14.1 | 0.1 | 26 |
| | 41 | 0.6 | 4.0 | 0.0 | 34 |
| Luther Dr | 105 | 37.1 | 50.0 | 0.1 | 11 |
| Luther Dr | 40 | 3.3 | 7.1 | 0.0 | 21 |
| HS Dwy | 135 | 2.2 | 7.8 | 0.1 | 28 |
| Hisperry Ln | 39 | 6.6 | 11.8 | 0.1 | 18 |
| Serenity Dr | 103 | 2.0 | 9.6 | 0.1 | 32 |
| Indian Ln | 37 | 14.2 | 35.3 | 0.2 | 25 |
| Loma Verde Wy | 102 | 2.9 | 16.8 | 0.2 | 33 |
| Woodbine Av | 36 | 8.0 | 20.4 | 0.1 | 25 |
| | 101 | 2.1 | 8.4 | 0.1 | 29 |
| 24th St | 35 | 29.6 | 40.7 | 0.1 | 11 |
| Total | | 147.6 | 295.6 | 1.7 | 20 |

## Arterial Level of Service: EB Florin Rd

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| 24th St | 35 | 28.7 | 73.3 | 0.5 | 26 |
| 25th St | 101 | 4.5 | 16.2 | 0.1 | 29 |
| | 36 | 9.4 | 15.4 | 0.1 | 16 |
| Loma Verde Wy | 102 | 3.4 | 15.9 | 0.1 | 32 |
| 29th St | 37 | 21.7 | 35.2 | 0.2 | 16 |
| Luther HS Dwy | 103 | 5.2 | 27.1 | 0.2 | 33 |
| Luther Burbank HS | 39 | 1.8 | 9.3 | 0.1 | 32 |
| | 135 | 1.5 | 7.2 | 0.1 | 30 |
| Luther Dr | 40 | 11.9 | 17.1 | 0.1 | 13 |
| Luther Dr | 105 | 2.3 | 6.1 | 0.0 | 25 |
| Munson Wy | 41 | 2.6 | 15.6 | 0.1 | 34 |
| | 140 | 0.7 | 4.4 | 0.0 | 31 |
| Franklin Bl | 137 | 33.6 | 41.6 | 0.1 | 9 |
| | 138 | 2.2 | 7.4 | 0.0 | 24 |
| Total | | 129.5 | 291.7 | 1.8 | 23 |

## Arterial Level of Service: WB Florin Rd

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 138 | 17.1 | 47.6 | 0.4 | 27 |
| Franklin Bl | 137 | 32.5 | 36.9 | 0.0 | 5 |
| | 140 | 6.2 | 15.6 | 0.1 | 23 |
| | 41 | 1.2 | 4.6 | 0.0 | 30 |
| Luther Dr | 105 | 29.6 | 42.5 | 0.1 | 12 |
| Luther Dr | 40 | 3.5 | 7.3 | 0.0 | 21 |
| | 135 | 2.1 | 7.6 | 0.1 | 29 |
| Hisperry Ln | 39 | 3.3 | 8.6 | 0.1 | 25 |
| Serenity Dr | 103 | 1.4 | 9.0 | 0.1 | 34 |
| Indian Ln | 37 | 12.5 | 33.2 | 0.2 | 27 |
| Loma Verde Wy | 102 | 3.3 | 17.4 | 0.2 | 32 |
| Woodbine Av | 36 | 3.9 | 16.4 | 0.1 | 31 |
| | 101 | 1.7 | 8.0 | 0.1 | 31 |
| 24th St | 35 | 22.9 | 34.2 | 0.1 | 13 |
| Total | | 141.2 | 288.9 | 1.7 | 21 |

## Arterial Level of Service: EB Florin Rd

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| 24th St | 35 | 32.2 | 76.2 | 0.5 | 25 |
| 25th St | 101 | 4.1 | 15.9 | 0.1 | 29 |
| | 36 | 1.8 | 7.9 | 0.1 | 31 |
| Loma Verde Wy | 102 | 6.4 | 18.6 | 0.1 | 27 |
| 29th St | 37 | 34.5 | 48.3 | 0.2 | 12 |
| Serenity Dr | 103 | 16.1 | 36.9 | 0.2 | 24 |
| | 155 | 1.7 | 3.3 | 0.0 | 19 |
| Luther Burbank HS | 39 | 5.4 | 11.2 | 0.1 | 21 |
| HS Dwy | 135 | 3.7 | 9.3 | 0.1 | 23 |
| Luther Dr | 40 | 18.9 | 24.1 | 0.1 | 9 |
| Luther Dr | 105 | 3.8 | 7.5 | 0.0 | 20 |
| Munson Wy | 41 | 4.5 | 17.6 | 0.1 | 30 |
| | 140 | 1.1 | 4.8 | 0.0 | 29 |
| Franklin Bl | 137 | 31.3 | 39.1 | 0.1 | 9 |
| | 138 | 2.9 | 8.0 | 0.0 | 22 |
| Total | | 168.5 | 328.6 | 1.8 | 20 |

## Arterial Level of Service: WB Florin Rd

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 138 | 2.7 | 33.4 | 0.4 | 39 |
| Franklin Bl | 137 | 31.0 | 35.3 | 0.0 | 5 |
| | 140 | 6.0 | 15.3 | 0.1 | 24 |
| | 41 | 5.2 | 8.6 | 0.0 | 16 |
| Luther Dr | 105 | 36.0 | 48.6 | 0.1 | 11 |
| Luther Dr | 40 | 3.3 | 7.1 | 0.0 | 21 |
| HS Dwy | 135 | 2.8 | 8.4 | 0.1 | 26 |
| Hisperry Ln | 39 | 6.2 | 11.5 | 0.1 | 19 |
| | 155 | 12.2 | 18.0 | 0.1 | 13 |
| Serenity Dr | 103 | 6.9 | 8.4 | 0.0 | 8 |
| Indian Ln | 37 | 23.5 | 45.2 | 0.2 | 20 |
| Loma Verde Wy | 102 | 11.3 | 25.4 | 0.2 | 22 |
| Woodbine Av | 36 | 5.6 | 17.7 | 0.1 | 28 |
| | 101 | 2.0 | 8.2 | 0.1 | 30 |
| 24th St | 35 | 27.6 | 38.4 | 0.1 | 12 |
| Total | | 182.4 | 329.6 | 1.7 | 18 |

## Arterial Level of Service: EB Florin Rd

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| 24th St | 35 | 27.5 | 71.6 | 0.5 | 26 |
| 25th St | 101 | 4.5 | 15.9 | 0.1 | 29 |
| | 36 | 6.7 | 12.7 | 0.1 | 19 |
| Loma Verde Wy | 102 | 4.4 | 16.9 | 0.1 | 30 |
| 29th St | 37 | 29.3 | 42.9 | 0.2 | 13 |
| Serenity Dr | 103 | 18.0 | 39.2 | 0.2 | 22 |
| HS Dwy | 155 | 1.2 | 2.7 | 0.0 | 23 |
| Luther Burbank HS | 39 | 4.4 | 10.3 | 0.1 | 23 |
| | 135 | 3.9 | 9.5 | 0.1 | 23 |
| Luther Dr | 40 | 22.5 | 27.6 | 0.1 | 8 |
| Luther Dr | 105 | 3.3 | 7.0 | 0.0 | 21 |
| Munson Wy | 41 | 4.3 | 17.3 | 0.1 | 30 |
| | 140 | 0.9 | 4.7 | 0.0 | 29 |
| Franklin Bl | 137 | 31.2 | 39.1 | 0.1 | 9 |
| | 138 | 2.4 | 7.6 | 0.0 | 23 |
| Total | | 164.4 | 325.0 | 1.8 | 20 |

## Arterial Level of Service: WB Florin Rd

| Cross Street | Node | Delay (s/veh) | Travel time (s) | Dist (mi) | Arterial Speed |
|---|---|---|---|---|---|
| | 138 | 14.1 | 44.6 | 0.4 | 29 |
| Franklin Bl | 137 | 34.8 | 39.2 | 0.0 | 5 |
| | 140 | 9.6 | 19.0 | 0.1 | 19 |
| | 41 | 3.8 | 7.2 | 0.0 | 19 |
| Luther Dr | 105 | 32.1 | 44.9 | 0.1 | 12 |
| Luther Dr | 40 | 3.9 | 7.7 | 0.0 | 20 |
| | 135 | 2.4 | 7.9 | 0.1 | 27 |
| Hisperry Ln | 39 | 2.2 | 7.5 | 0.1 | 29 |
| HS Dwy | 155 | 4.1 | 10.1 | 0.1 | 24 |
| Serenity Dr | 103 | 4.6 | 6.1 | 0.0 | 10 |
| Indian Ln | 37 | 8.1 | 29.4 | 0.2 | 30 |
| Loma Verde Wy | 102 | 2.5 | 16.5 | 0.2 | 34 |
| Woodbine Av | 36 | 5.2 | 17.6 | 0.1 | 29 |
| | 101 | 2.0 | 8.3 | 0.1 | 29 |
| 24th St | 35 | 27.6 | 38.7 | 0.1 | 12 |
| Total | | 157.1 | 304.8 | 1.7 | 20 |

**Intersection 35** **24th St/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 160 | 143 | 89.2% | 59.1 | 18.5 | E |
| | Through | 497 | 497 | 100.0% | 31.4 | 2.4 | C |
| | Right Turn | 22 | 23 | 104.2% | 23.6 | 6.7 | C |
| | Subtotal | 679 | 662 | 97.6% | 37.4 | 5.4 | D |
| SB | Left Turn | 122 | 122 | 100.0% | 53.2 | 13.5 | D |
| | Through | 254 | 248 | 97.6% | 26.4 | 1.7 | C |
| | Right Turn | 312 | 314 | 100.6% | 11.7 | 2.2 | B |
| | Subtotal | 688 | 684 | 99.4% | 24.7 | 3.2 | C |
| EB | Left Turn | 353 | 248 | 70.3% | 172.0 | 38.5 | F |
| | Through | 615 | 590 | 96.0% | 30.1 | 5.2 | C |
| | Right Turn | 69 | 70 | 100.8% | 22.0 | 6.7 | C |
| | Subtotal | 1,037 | 908 | 87.6% | 68.5 | 13.5 | E |
| WB | Left Turn | 75 | 68 | 91.2% | 40.2 | 8.4 | D |
| | Through | 575 | 542 | 94.3% | 31.8 | 2.9 | C |
| | Right Turn | 121 | 113 | 93.3% | 16.2 | 2.6 | B |
| | Subtotal | 771 | 723 | 93.8% | 30.2 | 2.3 | C |
| Total | | 3,175 | 2,978 | 93.8% | 42.2 | 3.6 | D |

**Intersection 36** **Woodbine Av/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 1 | 0 | 36.4% | 10.4 | 33.0 | B |
| | Through | 2 | 2 | 109.2% | 42.3 | 40.5 | D |
| | Right Turn | | | | | | |
| | Subtotal | 3 | 3 | 84.9% | 52.8 | 41.8 | D |
| SB | Left Turn | 26 | 21 | 82.6% | 43.5 | 11.8 | D |
| | Through | 1 | 1 | 145.6% | 19.2 | 37.1 | B |
| | Right Turn | 31 | 31 | 101.0% | 8.4 | 3.1 | A |
| | Subtotal | 58 | 54 | 93.5% | 24.7 | 8.7 | C |
| EB | Left Turn | 48 | 52 | 108.4% | 54.0 | 10.2 | D |
| | Through | 927 | 905 | 97.6% | 5.6 | 1.1 | A |
| | Right Turn | 6 | 8 | 139.5% | 4.7 | 2.0 | A |
| | Subtotal | 981 | 965 | 98.4% | 8.3 | 1.5 | A |
| WB | Left Turn | 2 | 3 | 127.4% | 38.2 | 27.0 | D |
| | Through | 929 | 862 | 92.8% | 16.2 | 2.3 | B |
| | Right Turn | 23 | 20 | 87.0% | 14.8 | 2.9 | B |
| | Subtotal | 954 | 885 | 92.8% | 16.3 | 2.3 | B |
| Total | | 1,996 | 1,907 | 95.5% | 12.5 | 1.4 | B |

**Intersection 37** **Indian Ln-29th St/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 34 | 29 | 84.6% | 32.5 | 12.6 | C |
| | Through | 9 | 11 | 117.3% | 30.7 | 15.4 | C |
| | Right Turn | 291 | 281 | 96.7% | 18.5 | 2.4 | B |
| | Subtotal | 334 | 321 | 96.0% | 20.4 | 2.4 | C |
| SB | Left Turn | 79 | 87 | 109.7% | 46.0 | 11.4 | D |
| | Through | 14 | 11 | 80.6% | 39.6 | 19.8 | D |
| | Right Turn | 15 | 16 | 106.8% | 7.9 | 6.6 | A |
| | Subtotal | 108 | 114 | 105.5% | 39.9 | 7.8 | D |
| EB | Left Turn | 23 | 20 | 88.6% | 46.4 | 20.0 | D |
| | Through | 913 | 898 | 98.3% | 34.3 | 4.0 | C |
| | Right Turn | 33 | 29 | 87.1% | 28.1 | 7.3 | C |
| | Subtotal | 969 | 947 | 97.7% | 34.3 | 3.8 | C |
| WB | Left Turn | 152 | 140 | 92.2% | 43.2 | 10.2 | D |
| | Through | 961 | 933 | 97.1% | 24.7 | 2.5 | C |
| | Right Turn | 57 | 50 | 87.5% | 9.2 | 1.2 | A |
| | Subtotal | 1,170 | 1,123 | 96.0% | 26.3 | 1.9 | C |
| Total | | 2,581 | 2,505 | 97.0% | 29.2 | 2.3 | C |

**Intersection 39** **Hisperry Ln-Luther Burbank HS/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 184 | 174 | 94.4% | 35.2 | 4.1 | D |
| | Through | 1 | 1 | 109.2% | 17.8 | 30.2 | B |
| | Right Turn | 89 | 85 | 95.7% | 17.6 | 5.1 | B |
| | Subtotal | 274 | 260 | 94.9% | 29.6 | 4.1 | C |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 991 | 950 | 95.9% | 6.1 | 0.7 | A |
| | Right Turn | 8 | 9 | 118.3% | 4.7 | 4.0 | A |
| | Subtotal | 999 | 960 | 96.1% | 6.0 | 0.7 | A |
| WB | Left Turn | 148 | 146 | 98.4% | 41.9 | 5.2 | D |
| | Through | 976 | 940 | 96.3% | 10.4 | 1.5 | B |
| | Right Turn | 3 | 2 | 72.8% | 6.8 | 4.2 | A |
| | Subtotal | 1,127 | 1,088 | 96.5% | 14.7 | 1.9 | B |
| Total | | 2,400 | 2,308 | 96.2% | 12.8 | 1.4 | B |

**Intersection 40** **Luther Dr/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 130 | 127 | 98.0% | 39.2 | 5.2 | D |
| | Through | 48 | 47 | 97.8% | 40.8 | 5.0 | D |
| | Right Turn | 170 | 174 | 102.6% | 16.4 | 4.3 | B |
| | Subtotal | 348 | 349 | 100.2% | 28.1 | 4.1 | C |
| SB | Left Turn | 64 | 62 | 96.3% | 36.7 | 6.2 | D |
| | Through | 44 | 42 | 96.6% | 36.4 | 6.2 | D |
| | Right Turn | 191 | 204 | 106.7% | 14.0 | 3.1 | B |
| | Subtotal | 299 | 308 | 103.0% | 21.7 | 3.6 | C |
| EB | Left Turn | 198 | 171 | 86.6% | 77.7 | 14.4 | E |
| | Through | 842 | 803 | 95.4% | 83.8 | 14.8 | F |
| | Right Turn | 59 | 51 | 87.1% | 83.5 | 14.7 | F |
| | Subtotal | 1,099 | 1,026 | 93.3% | 82.7 | 14.7 | F |
| WB | Left Turn | 101 | 96 | 94.8% | 78.6 | 16.6 | E |
| | Through | 758 | 718 | 94.7% | 45.6 | 9.2 | D |
| | Right Turn | 28 | 28 | 100.1% | 47.2 | 10.0 | D |
| | Subtotal | 887 | 842 | 94.9% | 49.5 | 10.4 | D |
| Total | | 2,633 | 2,524 | 95.9% | 56.6 | 7.6 | E |

**Intersection 41** **Munson Wy/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 106 | 108 | 102.3% | 13.0 | 3.6 | B |
| | Subtotal | 106 | 108 | 102.3% | 13.0 | 3.6 | B |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 10 | 0 | 0.0% | 0.0 | 0.0 | A |
| | Subtotal | 10 | 0 | 0.0% | 0.0 | 0.0 | A |
| EB | Left Turn | 7 | 6 | 88.4% | 4.7 | 4.1 | A |
| | Through | 1,067 | 1,032 | 96.7% | 2.9 | 0.3 | A |
| | Right Turn | 47 | 40 | 85.2% | 3.3 | 0.9 | A |
| | Subtotal | 1,121 | 1,078 | 96.1% | 2.9 | 0.3 | A |
| WB | Left Turn | 59 | 62 | 104.9% | 11.7 | 3.7 | B |
| | Through | 922 | 928 | 100.7% | 0.7 | 0.2 | A |
| | Right Turn | 19 | 9 | 47.9% | 0.0 | 0.1 | A |
| | Subtotal | 1,000 | 999 | 99.9% | 1.3 | 0.3 | A |
| Total | | 2,237 | 2,185 | 97.7% | 2.7 | 0.4 | A |

**Intersection 102** **Loma Verde Wy/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 40 | 36 | 90.1% | 47.6 | 10.7 | D |
| | Through | | | | | | |
| | Right Turn | 66 | 68 | 102.6% | 21.7 | 6.0 | C |
| | Subtotal | 106 | 104 | 97.9% | 30.6 | 6.2 | C |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 903 | 877 | 97.1% | 6.2 | 1.2 | A |
| | Right Turn | 50 | 53 | 105.6% | 4.4 | 1.0 | A |
| | Subtotal | 953 | 930 | 97.6% | 6.1 | 1.2 | A |
| WB | Left Turn | 96 | 85 | 88.3% | 56.6 | 7.4 | E |
| | Through | 914 | 878 | 96.0% | 11.2 | 1.8 | B |
| | Right Turn | | | | | | |
| | Subtotal | 1,010 | 962 | 95.3% | 15.2 | 2.0 | B |
| Total | | 2,069 | 1,996 | 96.5% | 11.8 | 1.1 | B |

**Intersection 103** **Serenity Dr/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 28 | 32 | 115.7% | 30.6 | 8.1 | C |
| | Subtotal | 28 | 32 | 115.7% | 30.6 | 8.1 | C |
| EB | Left Turn | 18 | 19 | 107.2% | 66.9 | 12.0 | E |
| | Through | 1,265 | 954 | 75.4% | 15.6 | 1.1 | B |
| | Right Turn | | | | | | |
| | Subtotal | 1,283 | 973 | 75.8% | 16.7 | 1.4 | B |
| WB | Left Turn | | | | | | |
| | Through | 1,142 | 1,094 | 95.8% | 18.3 | 1.1 | B |
| | Right Turn | 18 | 17 | 93.0% | 14.4 | 4.1 | B |
| | Subtotal | 1,160 | 1,111 | 95.8% | 18.3 | 1.1 | B |
| Total | | 2,471 | 2,116 | 85.6% | 17.7 | 1.1 | B |

**Intersection 35** **24th St/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 131 | 133 | 101.2% | 42.8 | 7.5 | D |
| | Through | 299 | 304 | 101.8% | 29.2 | 2.4 | C |
| | Right Turn | 49 | 46 | 93.1% | 24.5 | 5.2 | C |
| | Subtotal | 479 | 483 | 100.8% | 32.8 | 2.0 | C |
| SB | Left Turn | 171 | 162 | 94.7% | 47.8 | 4.3 | D |
| | Through | 487 | 490 | 100.7% | 30.3 | 3.3 | C |
| | Right Turn | 400 | 396 | 99.0% | 15.9 | 3.9 | B |
| | Subtotal | 1,058 | 1,048 | 99.1% | 27.6 | 2.2 | C |
| EB | Left Turn | 241 | 229 | 95.1% | 56.7 | 17.1 | E |
| | Through | 652 | 636 | 97.5% | 27.3 | 2.6 | C |
| | Right Turn | 89 | 100 | 112.3% | 22.7 | 3.7 | C |
| | Subtotal | 982 | 965 | 98.3% | 34.1 | 5.9 | C |
| WB | Left Turn | 112 | 108 | 96.4% | 51.1 | 8.1 | D |
| | Through | 719 | 651 | 90.6% | 31.5 | 3.0 | C |
| | Right Turn | 139 | 124 | 89.4% | 16.5 | 1.8 | B |
| | Subtotal | 970 | 884 | 91.1% | 31.8 | 1.9 | C |
| Total | | 3,489 | 3,379 | 96.8% | 31.3 | 2.1 | C |

**Intersection 36** **Woodbine Av/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 2 | 2 | 76.0% | 21.8 | 34.9 | C |
| | Through | | | | | | |
| | Right Turn | 1 | 1 | 114.0% | 3.2 | 6.0 | A |
| | Subtotal | 3 | 3 | 88.7% | 19.7 | 23.1 | B |
| SB | Left Turn | 36 | 29 | 81.3% | 49.2 | 10.2 | D |
| | Through | | | | | | |
| | Right Turn | 34 | 38 | 112.9% | 12.1 | 3.4 | B |
| | Subtotal | 70 | 68 | 96.6% | 28.4 | 6.4 | C |
| EB | Left Turn | 54 | 48 | 88.7% | 57.9 | 14.8 | E |
| | Through | 966 | 930 | 96.3% | 10.0 | 1.7 | B |
| | Right Turn | 2 | 3 | 152.0% | 6.1 | 5.4 | A |
| | Subtotal | 1,022 | 981 | 96.0% | 12.3 | 1.7 | B |
| WB | Left Turn | 5 | 3 | 60.8% | 32.3 | 29.0 | C |
| | Through | 1,085 | 1,032 | 95.2% | 5.1 | 1.9 | A |
| | Right Turn | 31 | 24 | 76.0% | 2.7 | 1.7 | A |
| | Subtotal | 1,121 | 1,059 | 94.5% | 5.2 | 1.8 | A |
| Total | | 2,216 | 2,110 | 95.2% | 9.3 | 1.5 | A |

**Intersection 37** **Indian Ln-29th St/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 54 | 49 | 90.8% | 34.1 | 5.8 | C |
| | Through | 19 | 19 | 100.0% | 42.2 | 11.9 | D |
| | Right Turn | 146 | 147 | 101.0% | 11.8 | 2.3 | B |
| | Subtotal | 219 | 215 | 98.4% | 19.5 | 2.7 | B |
| SB | Left Turn | 70 | 63 | 90.7% | 43.0 | 12.7 | D |
| | Through | 11 | 10 | 86.4% | 36.3 | 21.7 | D |
| | Right Turn | 32 | 32 | 99.8% | 11.1 | 5.8 | B |
| | Subtotal | 113 | 105 | 92.8% | 33.1 | 10.2 | C |
| EB | Left Turn | 37 | 31 | 83.2% | 48.4 | 19.5 | D |
| | Through | 961 | 896 | 93.2% | 29.0 | 3.2 | C |
| | Right Turn | 33 | 29 | 86.4% | 26.4 | 6.9 | C |
| | Subtotal | 1,031 | 955 | 92.6% | 29.5 | 3.0 | C |
| WB | Left Turn | 190 | 183 | 96.4% | 56.4 | 12.7 | E |
| | Through | 1,094 | 1,037 | 94.8% | 8.4 | 2.1 | A |
| | Right Turn | 79 | 76 | 95.7% | 4.6 | 1.7 | A |
| | Subtotal | 1,363 | 1,295 | 95.0% | 15.1 | 2.5 | B |
| Total | | 2,726 | 2,571 | 94.3% | 21.6 | 1.8 | C |

**Intersection 39** **Hisperry Ln-Luther Burbank HS/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 15 | 13 | 83.6% | 46.6 | 16.0 | D |
| | Through | | | | | | |
| | Right Turn | 11 | 9 | 79.5% | 8.4 | 6.4 | A |
| | Subtotal | 26 | 21 | 81.8% | 32.2 | 12.9 | C |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 2 | 0 | 19.0% | 2.7 | 6.0 | A |
| | Subtotal | 2 | 0 | 19.0% | 1.7 | 5.5 | A |
| EB | Left Turn | | | | | | |
| | Through | 1,135 | 1,068 | 94.1% | 4.4 | 1.3 | A |
| | Right Turn | 2 | 2 | 76.0% | 1.6 | 4.7 | A |
| | Subtotal | 1,137 | 1,070 | 94.1% | 4.3 | 1.3 | A |
| WB | Left Turn | 12 | 10 | 85.5% | 62.1 | 24.6 | E |
| | Through | 1,354 | 1,301 | 96.1% | 6.1 | 2.3 | A |
| | Right Turn | 8 | 7 | 85.5% | 4.7 | 2.0 | A |
| | Subtotal | 1,374 | 1,318 | 95.9% | 6.6 | 2.3 | A |
| Total | | 2,539 | 2,410 | 94.9% | 5.8 | 1.8 | A |

**SimTraffic Post-Processor**
**Average Results from 10 Runs**
**Volume and Delay by Movement**

**Vision Zero Top 5 Corridors - Florin Rd**
**VZ Top 5 Recommendations**
**PM Peak Hour**

**Intersection 40** **Luther Dr/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | 105 | 107 | 101.5% | 36.8 | 2.6 | D |
| | Through | 5 | 5 | 95.0% | 34.8 | 3.2 | C |
| | Right Turn | 48 | 46 | 95.8% | 11.5 | 2.4 | B |
| | Subtotal | 158 | 157 | 99.6% | 29.4 | 2.0 | C |
| SB | Left Turn | 83 | 85 | 102.4% | 37.2 | 4.1 | D |
| | Through | 8 | 8 | 96.2% | 37.2 | 4.8 | D |
| | Right Turn | 184 | 184 | 100.2% | 17.0 | 2.6 | B |
| | Subtotal | 275 | 277 | 100.7% | 23.8 | 2.5 | C |
| EB | Left Turn | 127 | 112 | 88.3% | 61.6 | 13.7 | E |
| | Through | 929 | 866 | 93.2% | 67.3 | 13.9 | E |
| | Right Turn | 84 | 71 | 84.9% | 67.3 | 14.4 | E |
| | Subtotal | 1,140 | 1,049 | 92.0% | 66.7 | 13.9 | E |
| WB | Left Turn | 57 | 56 | 101.6% | 69.1 | 15.4 | E |
| | Through | 1,080 | 1,036 | 95.9% | 36.7 | 5.8 | D |
| | Right Turn | 48 | 44 | 90.6% | 34.6 | 5.6 | C |
| | Subtotal | 1,185 | 1,135 | 95.8% | 38.2 | 6.1 | D |
| | Total | 2,758 | 2,619 | 94.9% | 47.8 | 7.1 | D |

**Intersection 41** **Munson Wy/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 42 | 33 | 78.7% | 8.8 | 3.1 | A |
| | Subtotal | 42 | 33 | 78.7% | 8.8 | 3.1 | A |
| SB | Left Turn | 1 | 0 | 0.0% | #DIV/0! | #DIV/0! | #DIV/0! |
| | Through | | | | | | |
| | Right Turn | 5 | 5 | 98.8% | 8.9 | 8.2 | A |
| | Subtotal | 6 | 5 | 82.3% | 8.9 | 8.2 | A |
| EB | Left Turn | 9 | 10 | 109.8% | 30.1 | 17.7 | C |
| | Through | 1,006 | 936 | 93.0% | 4.2 | 1.3 | A |
| | Right Turn | 66 | 67 | 101.9% | 3.9 | 0.9 | A |
| | Subtotal | 1,081 | 1,013 | 93.7% | 4.5 | 1.1 | A |
| WB | Left Turn | 169 | 158 | 93.8% | 58.3 | 21.3 | E |
| | Through | 1,176 | 1,159 | 98.6% | 3.8 | 1.6 | A |
| | Right Turn | 9 | 9 | 97.1% | 2.0 | 4.7 | A |
| | Subtotal | 1,354 | 1,327 | 98.0% | 10.7 | 5.0 | B |
| | Total | 2,483 | 2,378 | 95.8% | 8.0 | 2.7 | A |

**Intersection 102** **Loma Verde Wy/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 28 | 25 | 89.6% | 8.0 | 3.2 | A |
| | Subtotal | 28 | 25 | 89.6% | 8.0 | 3.2 | A |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| EB | Left Turn | | | | | | |
| | Through | 1,003 | 960 | 95.7% | 4.3 | 1.0 | A |
| | Right Turn | | | | | | |
| | Subtotal | 1,003 | 960 | 95.7% | 4.3 | 1.0 | A |
| WB | Left Turn | 59 | 50 | 84.4% | 47.0 | 7.4 | D |
| | Through | 1,121 | 1,058 | 94.4% | 2.4 | 0.4 | A |
| | Right Turn | | | | | | |
| | Subtotal | 1,180 | 1,108 | 93.9% | 4.5 | 0.8 | A |
| Total | | 2,211 | 2,093 | 94.6% | 4.5 | 0.7 | A |

**Intersection 103** **Serenity Dr/Florin Rd** **Signal**

| Direction | Movement | Demand Volume (vph) | Served Volume (vph) Average | Served Volume (vph) Percent | Total Delay (sec/veh) Average | Total Delay (sec/veh) Std. Dev. | LOS |
|---|---|---|---|---|---|---|---|
| NB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | | | | | | |
| | Subtotal | | | | | | |
| SB | Left Turn | | | | | | |
| | Through | | | | | | |
| | Right Turn | 17 | 17 | 98.4% | 32.7 | 18.1 | C |
| | Subtotal | 17 | 17 | 98.4% | 32.7 | 18.1 | C |
| EB | Left Turn | 25 | 28 | 111.0% | 58.7 | 20.2 | E |
| | Through | 1,152 | 1,094 | 95.0% | 16.0 | 3.7 | B |
| | Right Turn | | | | | | |
| | Subtotal | 1,177 | 1,122 | 95.3% | 17.0 | 3.7 | B |
| WB | Left Turn | | | | | | |
| | Through | 1,346 | 1,289 | 95.8% | 8.7 | 3.0 | A |
| | Right Turn | 25 | 26 | 103.4% | 8.8 | 5.4 | A |
| | Subtotal | 1,371 | 1,315 | 95.9% | 8.7 | 3.0 | A |
| Total | | 2,565 | 2,454 | 95.7% | 12.7 | 2.8 | B |

## Intersection: 103: Florin Rd & Serenity Dr

| Movement | EB | EB | EB | WB | WB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | T | TR | R |
| Maximum Queue (ft) | 85 | 236 | 270 | 115 | 116 | 65 |
| Average Queue (ft) | 32 | 118 | 141 | 101 | 98 | 27 |
| 95th Queue (ft) | 93 | 242 | 277 | 148 | 149 | 73 |
| Link Distance (ft) | | 1225 | 1225 | 36 | 36 | 383 |
| Upstream Blk Time (%) | | | | 28 | 27 | |
| Queuing Penalty (veh) | | | | 179 | 172 | |
| Storage Bay Dist (ft) | 130 | | | | | |
| Storage Blk Time (%) | 0 | 4 | | | | |
| Queuing Penalty (veh) | 0 | 1 | | | | |

## Intersection: 103: Florin Rd & Serenity Dr

| Movement | EB | EB | EB | WB | WB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | T | TR | R |
| Maximum Queue (ft) | 76 | 343 | 356 | 110 | 117 | 36 |
| Average Queue (ft) | 29 | 169 | 169 | 78 | 82 | 17 |
| 95th Queue (ft) | 76 | 386 | 382 | 139 | 146 | 47 |
| Link Distance (ft) | | 1225 | 1225 | 36 | 36 | 383 |
| Upstream Blk Time (%) | | | | 21 | 24 | |
| Queuing Penalty (veh) | | | | 153 | 170 | |
| Storage Bay Dist (ft) | 130 | | | | | |
| Storage Blk Time (%) | | 10 | | | | |
| Queuing Penalty (veh) | | 3 | | | | |

FEHR PEERS

| | | | | |
|---|---|---|---|---|
| Major Street | Florin Rd | | Project | Vision Zero Top 5 Corridors |
| Minor Street | Munson Wy | | Scenario | Existing Conditions |
| | | | Peak Hour | AM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 0 | 0 | 7 | 59 |
| Through | 0 | 0 | 1,067 | 932 |
| Right | 106 | 0 | 47 | 9 |
| Total | 106 | 0 | 1,121 | 1,000 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 3 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 10.4 |
| Approach with Worst Case Delay | NB |
| Total Vehicles on Approach | 106 |

| Warrant 3A, Peak Hour | | | |
|---|---|---|---|
| | **Peak Hour Delay on Minor Approach (vehicle-hours)** | **Peak Hour Volume on Minor Approach (vph)** | **Peak Hour Entering Volume Serviced (vph)** |
| **Existing Conditions** | **0.3** | **106** | **2,227** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Met** | **Met** |
| **Warrant Met** | **NO** | | |

| | | | |
|---|---|---|---|
| Major Street | Florin Rd | Project | Vision Zero Top 5 Corridors |
| Minor Street | Munson Wy | Scenario | Existing Conditions |
| | | Peak Hour | AM Peak Hour |

Turn Movement Volumes

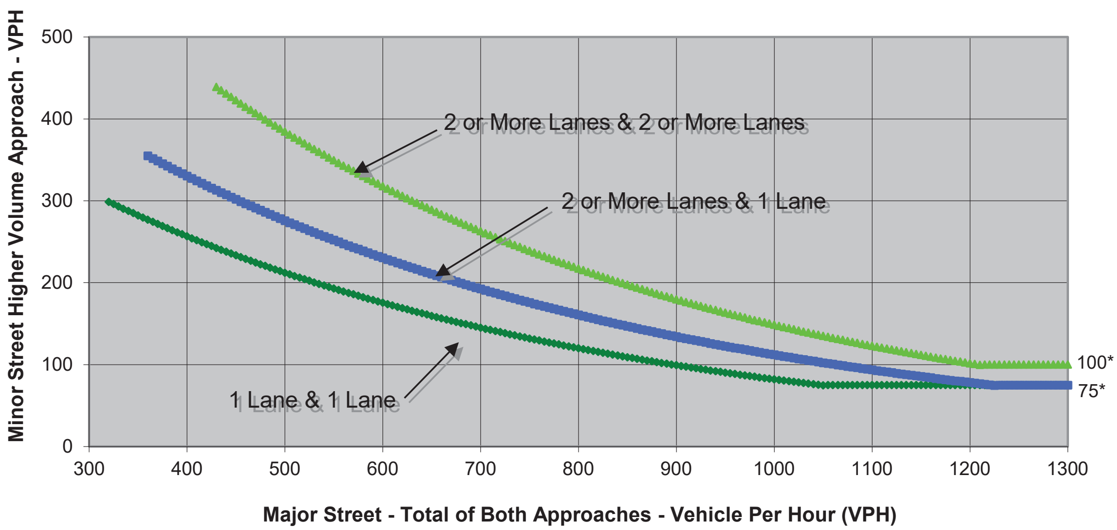
| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 0 | 0 | 7 | 59 |
| Through | 0 | 0 | 1,067 | 932 |
| Right | 106 | 0 | 47 | 9 |
| Total | 106 | 0 | 1,121 | 1,000 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

**Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)**
**(COMMUNITY LESS THAN 10,000 POPULATION OR**

**ABOVE 40 MPH ON MAJOR STREET**




* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>Florin Rd | Minor Street<br>Munson Wy | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **YES** |
| **Traffic Volume (VPH) *** | **2,121** | **106** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

| | | | |
|---|---|---|---|
| Major Street | Florin Rd | Project | Vision Zero Top 5 Corridors |
| Minor Street | Munson Wy | Scenario | Existing Conditions |
| | | Peak Hour | PM Peak Hour |

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 0 | 0 | 9 | 169 |
| Through | 0 | 0 | 1,006 | 1,176 |
| Right | 42 | 6 | 66 | 9 |
| Total | 42 | 6 | 1,081 | 1,354 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |

Intersection Geometry

| | |
|---|---|
| Number of Approach Lanes for Minor Street | 1 |
| Total Approaches | 4 |

Worst Case Delay for Minor Street

| | |
|---|---|
| Stopped Delay (seconds per vehicle) | 7.7 |
| Approach with Worst Case Delay | SB |
| Total Vehicles on Approach | 6 |

**Warrant 3A, Peak Hour**

| | Peak Hour Delay on Minor Approach (vehicle-hours) | Peak Hour Volume on Minor Approach (vph) | Peak Hour Entering Volume Serviced (vph) |
|---|---|---|---|
| **Existing Conditions** | **0** | **42** | **2,483** |
| **Limiting Value** | **4** | **100** | **800** |
| **Condition Satisfied?** | **Not Met** | **Not Met** | **Met** |
| **Warrant Met** | **NO** | | |

Project: Vision Zero Top 5 Corridors
Scenario: Existing Conditions
Peak Hour: PM Peak Hour

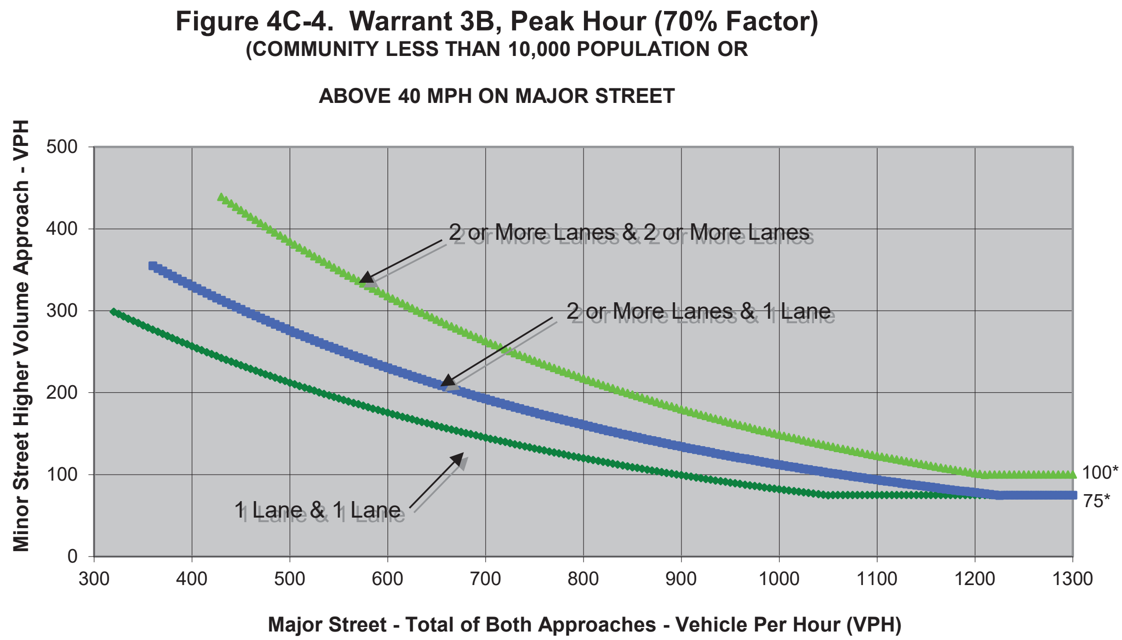
Major Street: Florin Rd
Minor Street: Munson Wy

Turn Movement Volumes

| | NB | SB | EB | WB |
|---|---|---|---|---|
| Left | 0 | 0 | 9 | 169 |
| Through | 0 | 0 | 1,006 | 1,176 |
| Right | 42 | 6 | 66 | 9 |
| Total | 42 | 6 | 1,081 | 1,354 |

Major Street Direction

| | |
|---|---|
| | North/South |
| x | East/West |




* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

| | Major Street<br>Florin Rd | Minor Street<br>Munson Wy | Warrant Met |
|---|---|---|---|
| **Number of Approach Lanes** | **1** | **1** | **NO** |
| **Traffic Volume (VPH) *** | **2,435** | **42** | |

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

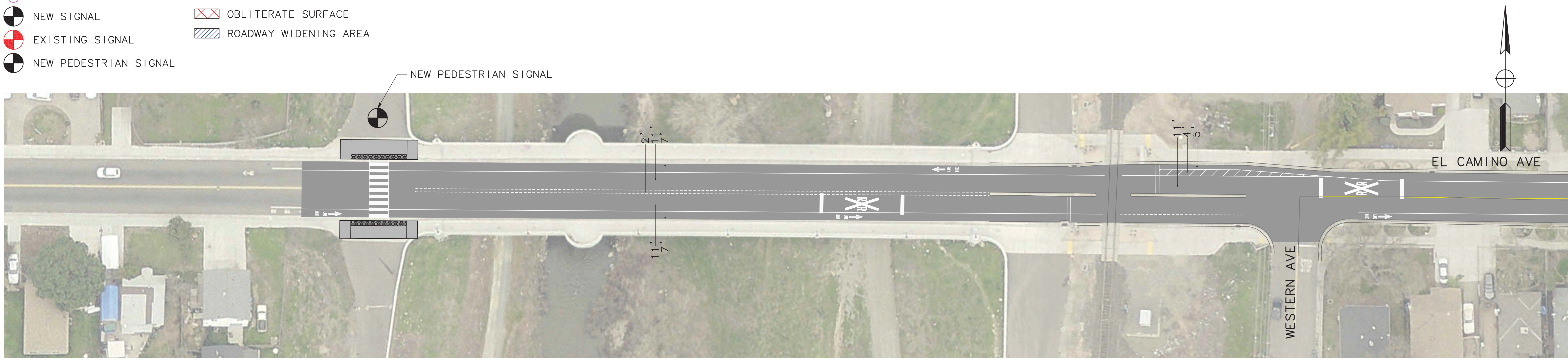
# Appendix C

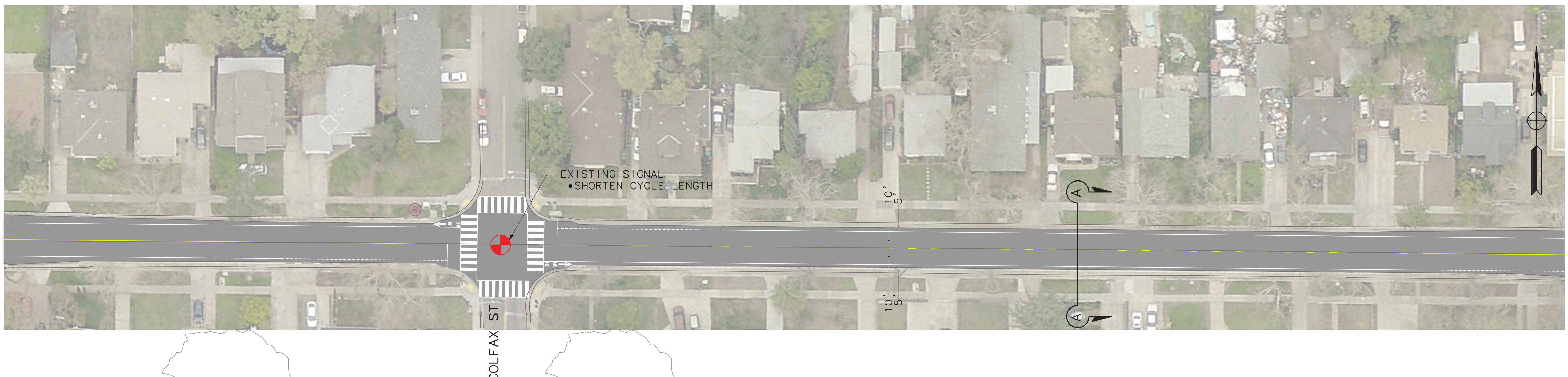
## Concept Plans & Cost Estimates

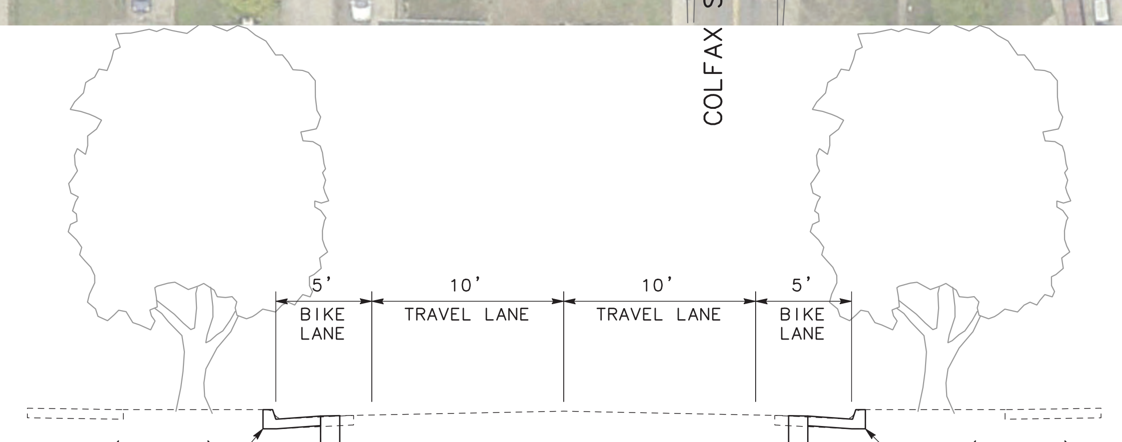
El Camino Avenue

LEGEND:

- BUS STOP LOCATION
- NEW SIGNAL
- EXISTING SIGNAL
- NEW PEDESTRIAN SIGNAL
- LANDSCAPE AREA
- OBLITERATE SURFACE
- ROADWAY WIDENING AREA




**SECTION A-A**



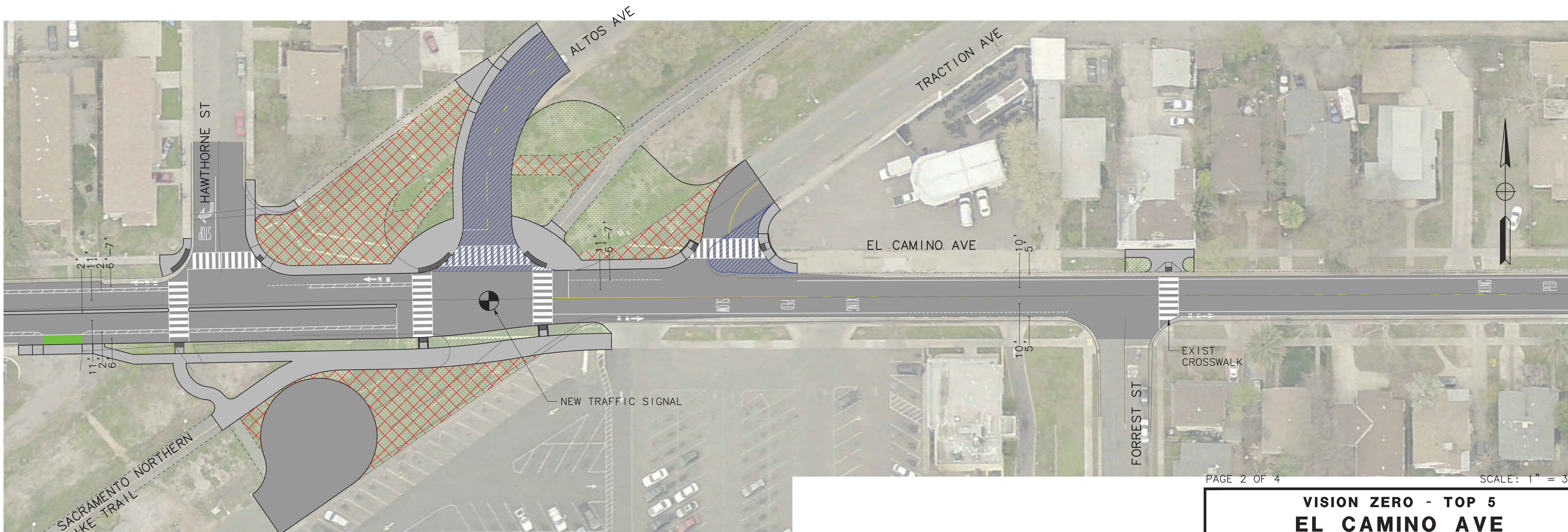
SCALE: 1" = 30'

**VISION ZERO - TOP 5**

# EL CAMINO AVE

**CITY OF SACRAMENTO**

**MARK THOMAS**



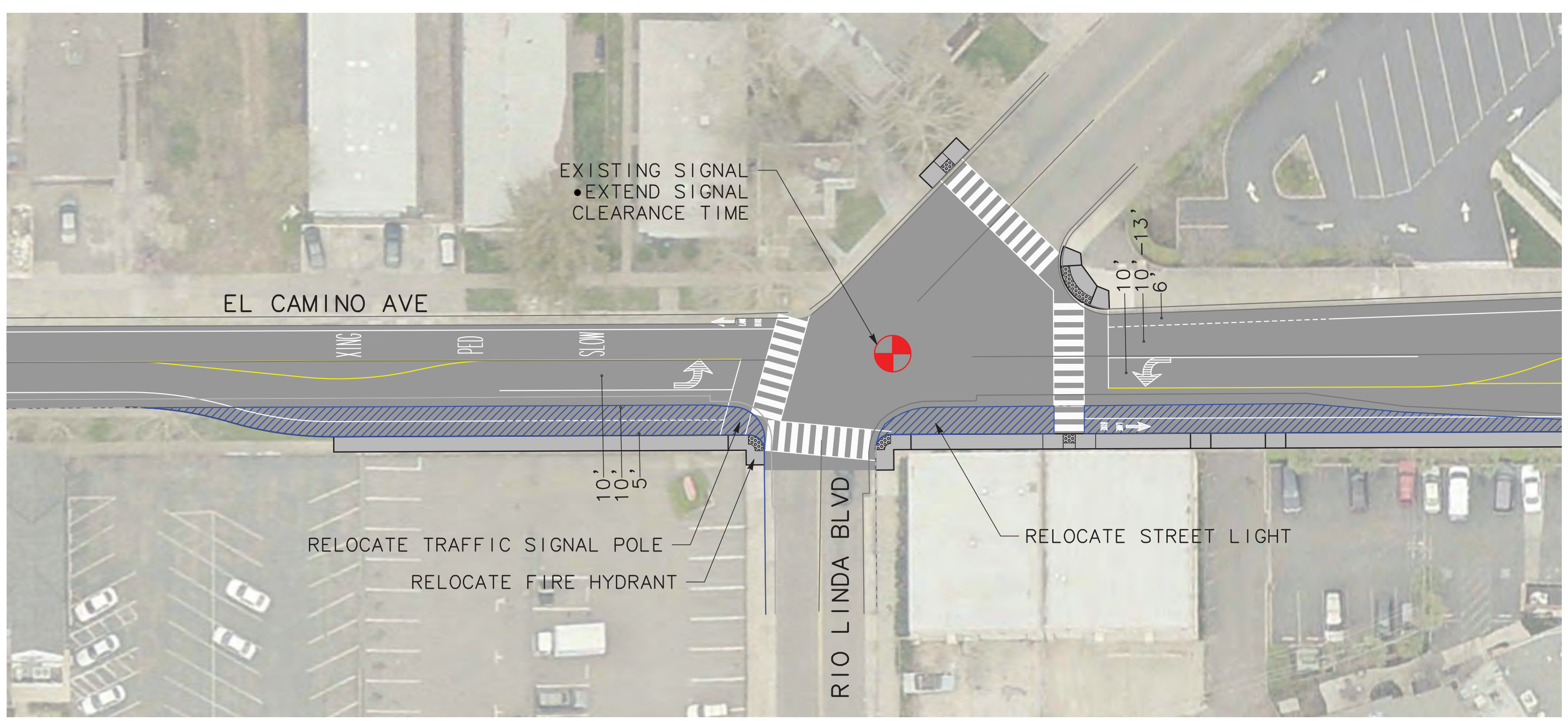

SCALE: 1" = 30'

**VISION ZERO - TOP 5**

# EL CAMINO AVE

CITY OF
SACRAMENTO

MARK
THOMAS



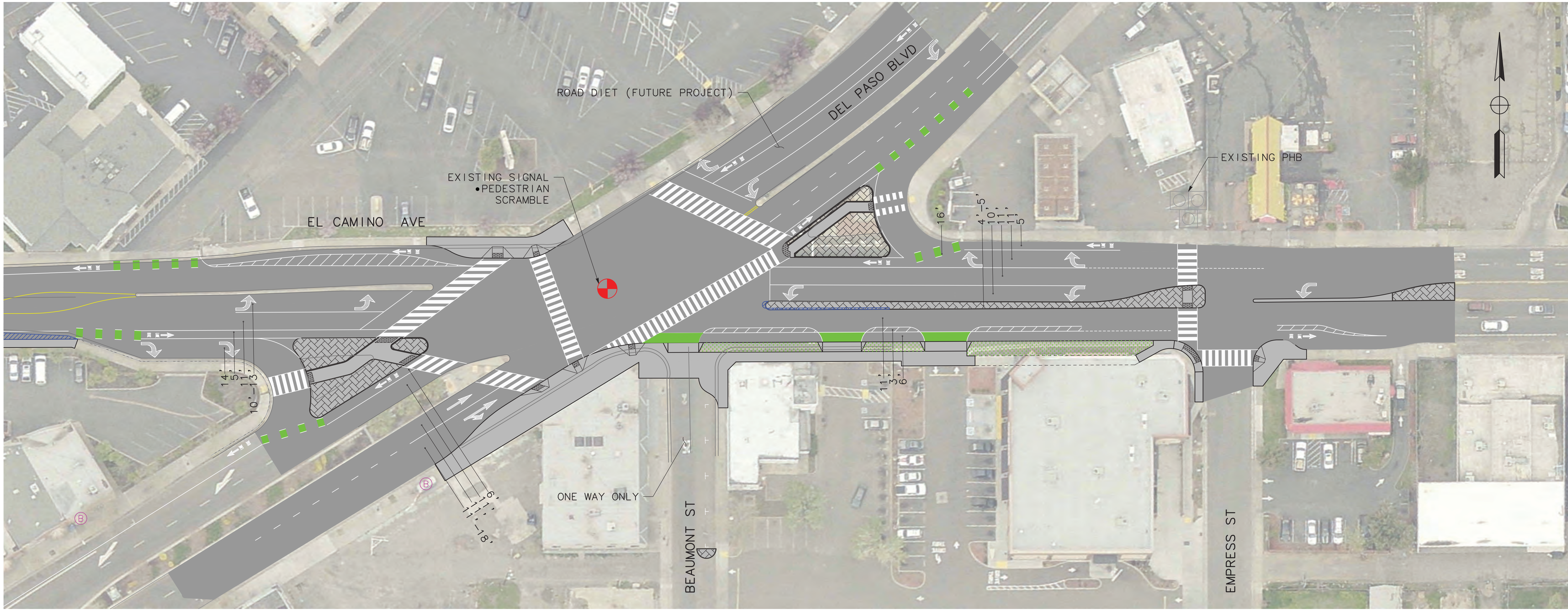

SCALE: 1" = 30'

**VISION ZERO - TOP 5**

# EL CAMINO AVE

CITY OF SACRAMENTO

MARK THOMAS






SCALE: 1" = 30'

**VISION ZERO - TOP 5**

# EL CAMINO AVE

CITY OF SACRAMENTO

MARK THOMAS

# El Camino Avenue

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

## SUMMARY OF PROJECT COST ESTIMATE

| | | Current Year Cost | Escalated Cost (2025)** |
|---|---|---|---|
| | TOTAL CONSTRUCTION COST | $ 8,947,809 | $ 10,372,963 |
| | TOTAL RIGHT OF WAY COST | $ 400,000 | $ 463,710 |
| | **TOTAL CAPITAL OUTLAY COSTS** | **$ 9,348,000** | **$ 10,837,000** |
| DESIGN | PA/ED (12.5%)* | $ 1,170,000 | $ 1,360,000 |
| DESIGN | PS&E (17.5%) | $ 1,640,000 | $ 1,910,000 |
| DESIGN | RIGHT OF WAY (2%) | $ 190,000 | $ 230,000 |
| CM | CONSTRUCTION (19%) | $ 1,780,000 | $ 2,070,000 |
| | **TOTAL DELIVERY COST** | **$ 4,780,000** | **$ 5,570,000** |
| | **TOTAL PROJECT COST** | **$ 14,150,000** | **$ 16,450,000** |

* Support cost percentages reference the Multi-Agency CIP Benchmarking Study (2019) for streets projects
** Assumes escalation of 3% per year. No Adjustments in escalation for time between design and construction were made.

# El Camino Avenue

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

| ITEM No. | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | TOTAL |
|---|---|---|---|---|---|
| **ROADWAY** | | | | | |
| 1 | Install Concrete - Curb Ramp | EA | 36 | $8,000 | $288,000 |
| 2 | Install Concrete - Curb | LF | 2243 | $30 | $67,290 |
| 3 | Install Concrete - Curb & Gutter | LF | 6635 | $50 | $331,750 |
| 4 | Install Concrete - Sidewalk | SF | 27491 | $12 | $329,892 |
| 5 | Install Concrete - Textured Paving | SF | 5099 | $25 | $127,475 |
| 6 | Roadway Excavation | CY | 5311 | $80 | $424,880 |
| 7 | Roadway Widening**** | LS | 1 | $156,861 | $156,861 |
| 8 | Pavement Maintenance (includes overlay cost and base repair) | SY | 28489 | $19 | $541,291 |
| 9 | Obliterate Surface | SY | 1388 | $90 | $124,920 |
| 10 | Signing and Striping | LS | 1 | $31,970 | $31,970 |
| 11 | Green MMA (Methyl Methacrylate) | SF | 1538 | $10 | $15,380 |
| 12 | Landscape | SF | 21563 | $8 | $172,504 |
| 13 | Relocate Street Light | EA | 1 | $25,000 | $25,000 |
| 14 | Relocate Fire Hydrant | EA | 1 | $8,000 | $8,000 |
| **ELECTRICAL** | | | | | |
| 15 | New Traffic Signal (electrical cost only, civil and signal interconnect costs are accounted for seperatly) | EA | 3 | $450,000 | $1,350,000 |
| 16 | New Pedestrian Signal | EA | 1 | $300,000 | $300,000 |
| 17 | Signal Modification | EA | 4 | $250,000 | $1,000,000 |
| 18 | Traffic Signal Interconnect and ITS elements | LF | 4456 | $41 | $182,696 |
| 19 | Pedestrian Scale Lighting | EA | 140 | $1,500 | $210,000 |
| | | | | **SUBTOTAL** | **$5,687,909** |
| 20 | Minor Items (10% of Items 1-18) ** | LS | 1 | $569,000 | $569,000 |
| | | | | **SUBTOTAL** | **$6,256,909** |
| 21 | Mobilization (10% of Items 1-19) | LS | 1 | $626,000 | $626,000 |
| | | | | **SUBTOTAL** | **$6,882,909** |
| | | | | CONTINGENCY (30%) *** | $2,064,900 |
| | | | | CONSTRUCTION SUBTOTAL | $8,947,809 |
| **GRAND TOTAL** | | | | | |
| | | | | **CONSTRUCTION SUBTOTAL=** | **$8,947,809** |
| | | | | **Right of Way/Temporary Construction Easement* =** | **$400,000** |
| | | | | **GRAND TOTAL =** | **$9,347,809** |

* Right of way/TCE's for driveway closures, curb ramps, new signal equipment, conforms, etc. have been estimated at $10K/Location.

** Minor items (for example, fencing, signage, sidewalk repair, utility adjustments, etc.) have been estimated by using a percentage.

*** This feasibility level estimate includes a 30% contingency intended to compensate for the use of limited information.

**** Areas of widening include new pavement structural section (0.50' HMA/1.50' CL2AB)

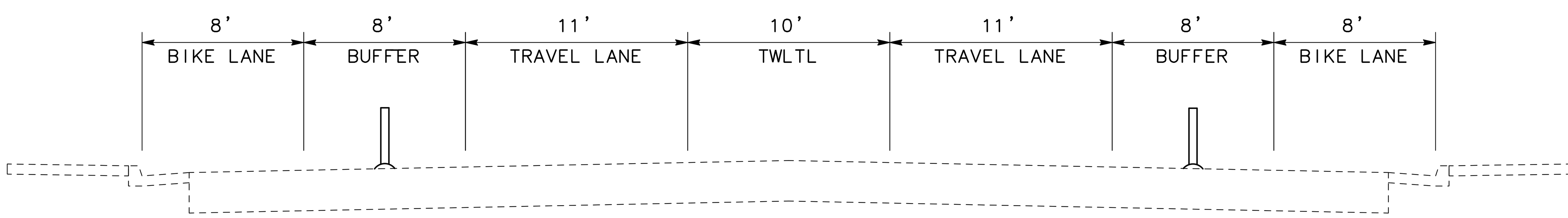
General Note: Where applicable, only minor drainage improvements for transportation projects to address safety are included. Utility improvements such as water, communication, gas, etc. are not included in these estimates.

Marysville Boulevard

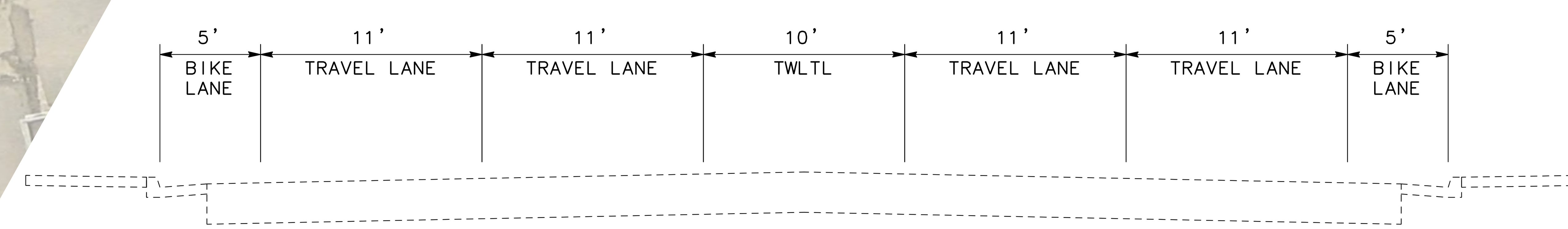
FEHR PEERS

LEGEND:

- (B) BUS STOP LOCATION
- NEW SIGNAL
- EXISTING SIGNAL
- • DELINEATOR (TYPE K-71)
- ROADWAY WIDENING AREA


**SECTION A-A (PROPOSED)**


**SECTION A-A (EXISTING)**

PAGE 1 OF 3

SCALE: 1" = 40'

| | |
|---|---|
| VISION ZERO - TOP 5<br>**MARYSVILLE BLVD** | |
| CITY OF SACRAMENTO | MARK THOMAS |





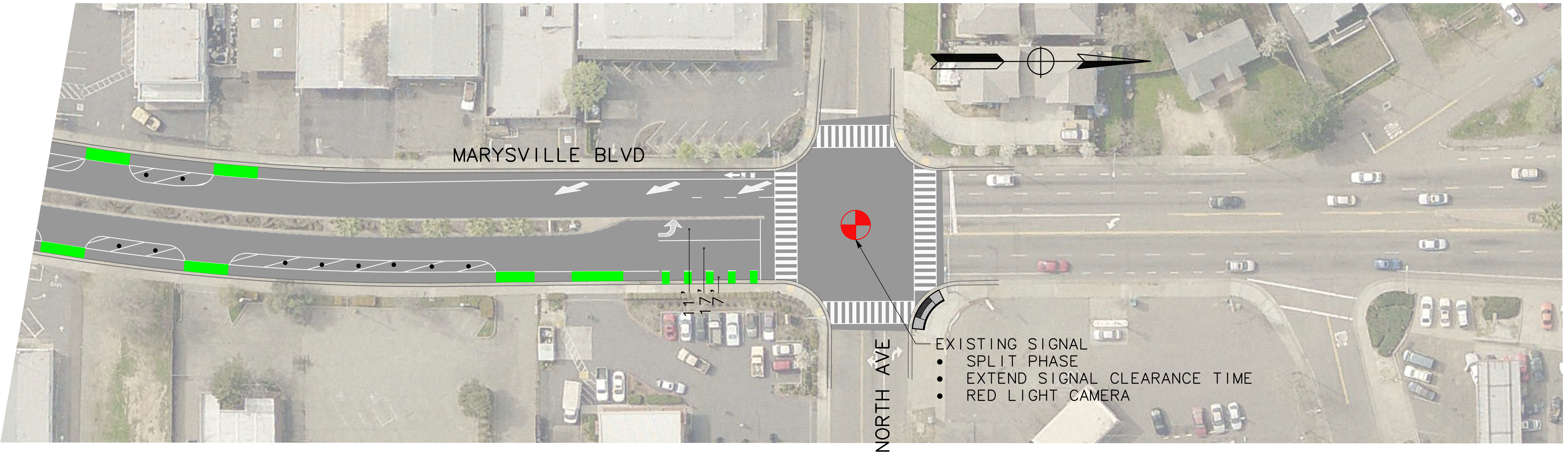
SCALE: 1" = 40'

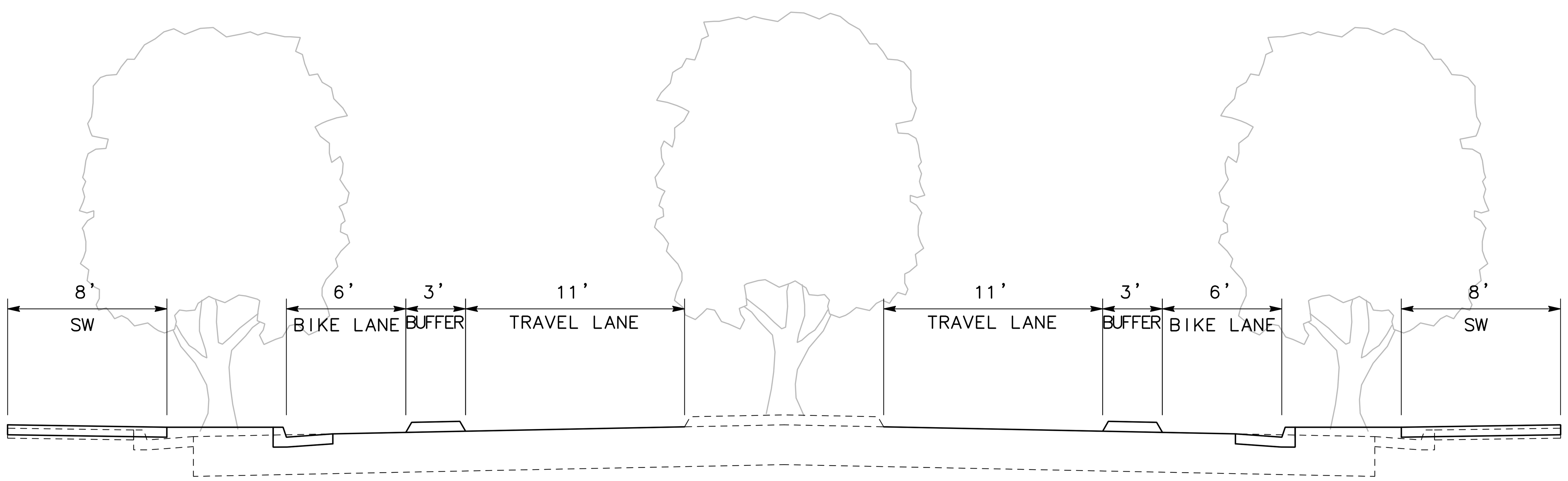
**VISION ZERO - TOP 5**

# MARYSVILLE BLVD

**CITY OF SACRAMENTO**

**MARK THOMAS**




**SECTION A-A**
**(ULTIMATE)**



SCALE: 1" = 40'

**VISION ZERO - TOP 5**

# MARYSVILLE BLVD

**CITY OF SACRAMENTO**

**MARK THOMAS**

# Marysville Boulevard

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

## SUMMARY OF PROJECT COST ESTIMATE

| | | | Current Year Cost | | Escalated Cost (2025)** |
|---|---|---|---|---|---|
| | TOTAL CONSTRUCTION COST | $ | 6,937,574 | $ | 8,042,549 |
| | TOTAL RIGHT OF WAY COST | $ | 370,000 | $ | 428,931 |
| | **TOTAL CAPITAL OUTLAY COSTS** | **$** | **7,308,000** | **$** | **8,472,000** |
| DESIGN | PA/ED (12.5%)* | $ | 920,000 | $ | 1,070,000 |
| DESIGN | PS&E (17.5%) | $ | 1,280,000 | $ | 1,490,000 |
| DESIGN | RIGHT OF WAY (2%) | $ | 150,000 | $ | 180,000 |
| CM | CONSTRUCTION (19%) | $ | 1,390,000 | $ | 1,620,000 |
| | **TOTAL DELIVERY COST** | **$** | **3,740,000** | **$** | **4,360,000** |
| | **TOTAL PROJECT COST** | **$** | **11,050,000** | **$** | **12,850,000** |

* Support cost percentages reference the Multi-Agency CIP Benchmarking Study (2019) for streets projects
** Assumes escalation of 3% per year. No Adjustments in escalation for time between design and construction were made.

# Marysville Boulevard

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

| ITEM No. | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | TOTAL |
|---|---|---|---|---|---|
| **ROADWAY** | | | | | |
| 1 | Install Concrete - Curb Ramp | EA | 37 | $8,000 | $296,000 |
| 2 | Install Concrete - Curb | LF | 1634 | $30 | $49,016 |
| 3 | Install Concrete - Curb & Gutter | LF | 163 | $50 | $8,150 |
| 4 | Install Concrete - Textured Paving | SF | 6740 | $25 | $168,500 |
| 5 | Install Concrete - Sidewalk/Driveway | SF | 1573 | $12 | $18,876 |
| 6 | Roadway Excavation | CY | 3475 | $80 | $278,000 |
| 7 | Roadway Widening**** | LS | 1 | $20,712 | $20,712 |
| 8 | Remove Tree | EA | 6 | $1,000 | $6,000 |
| 9 | Remove Gate | EA | 2 | $5,000 | $10,000 |
| 10 | New Gates | EA | 2 | $15,000 | $30,000 |
| 11 | Pavement Maintenance (includes overlay cost and base repair) | SY | 38580 | $19 | $733,020 |
| 12 | Signing and Striping | LS | 1 | $38,330 | $38,330 |
| 13 | Green MMA (Methyl Methacrylate) | SF | 7634 | $10 | $76,340 |
| 14 | Vertical Delineator (Type K-71) | EA | 179 | $200 | $35,800 |
| **ELECTRICAL** | | | | | |
| 15 | New Traffic Signal (electrical cost only, civil and signal interconnect costs are accounted for seperatly) | EA | 2 | $450,000 | $900,000 |
| 16 | New Pedestrian Signal | EA | 1 | $300,000 | $300,000 |
| 17 | Signal Modification | EA | 4 | $250,000 | $1,000,000 |
| 18 | Traffic Signal Interconnect and ITS elements | LF | 5630 | $41 | $230,830 |
| 19 | Pedestrian Scale Lighting | EA | 140 | $1,500 | $210,000 |
| | | | | **SUBTOTAL** | **$4,409,574** |
| 20 | Minor Items (10% of Items 1-18) ** | LS | 1 | $441,000 | $441,000 |
| | | | | **SUBTOTAL** | **$4,850,574** |
| 21 | Mobilization (10% of Items 1-19) | LS | 1 | $486,000 | $486,000 |
| | | | | **SUBTOTAL** | **$5,336,574** |
| | | | | CONTINGENCY (30%) *** | $1,601,000 |
| | | | | CONSTRUCTION SUBTOTAL | $6,937,574 |
| **GRAND TOTAL** | | | | | |
| | | | | **CONSTRUCTION SUBTOTAL=** | **$6,937,574** |
| | | | | **Right of Way/Temporary Construction Easement* =** | **$370,000** |
| | | | | **GRAND TOTAL =** | **$7,307,574** |

* Right of way/TCE's for driveway closures, curb ramps, new signal equipment, conforms, etc. have been estimated at $10K/Location.

** Minor items (for example, fencing, signage, sidewalk repair, utility adjustments, etc.) have been estimated by using a percentage.

*** This feasibility level estimate includes a 30% contingency intended to compensate for the use of limited information.

**** Areas of widening include new pavement structural section (0.50' HMA/1.50' CL2AB)

General Note: Where applicable, only minor drainage improvements for transportation projects to address safety are included. Utility improvements such as water, communication, gas, etc. are not included in these estimates.

Broadway/Stockton Boulevard

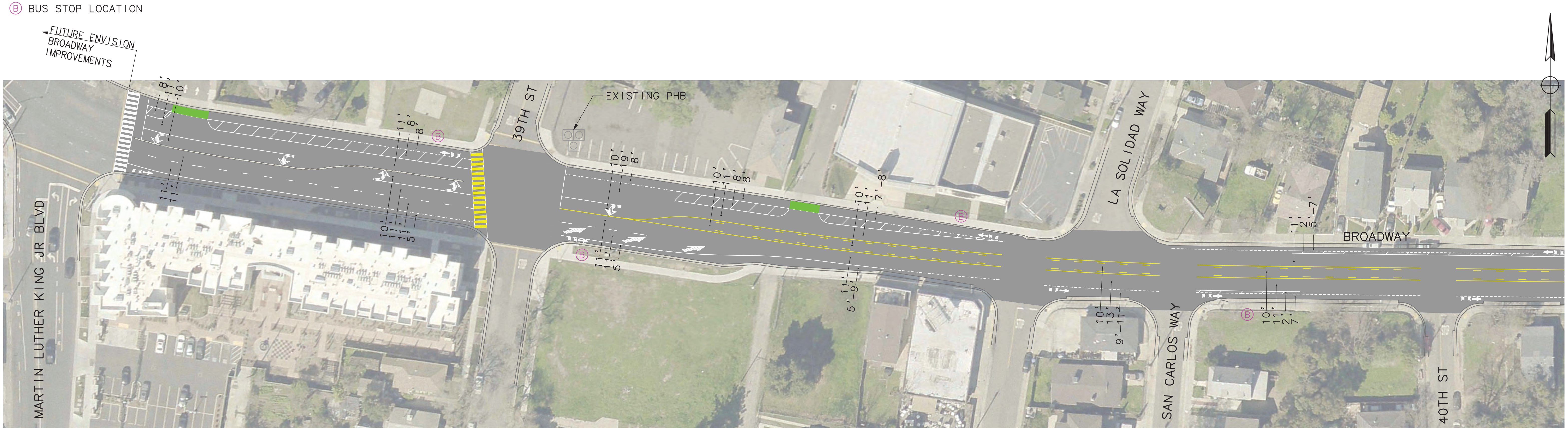
FEHR PEERS

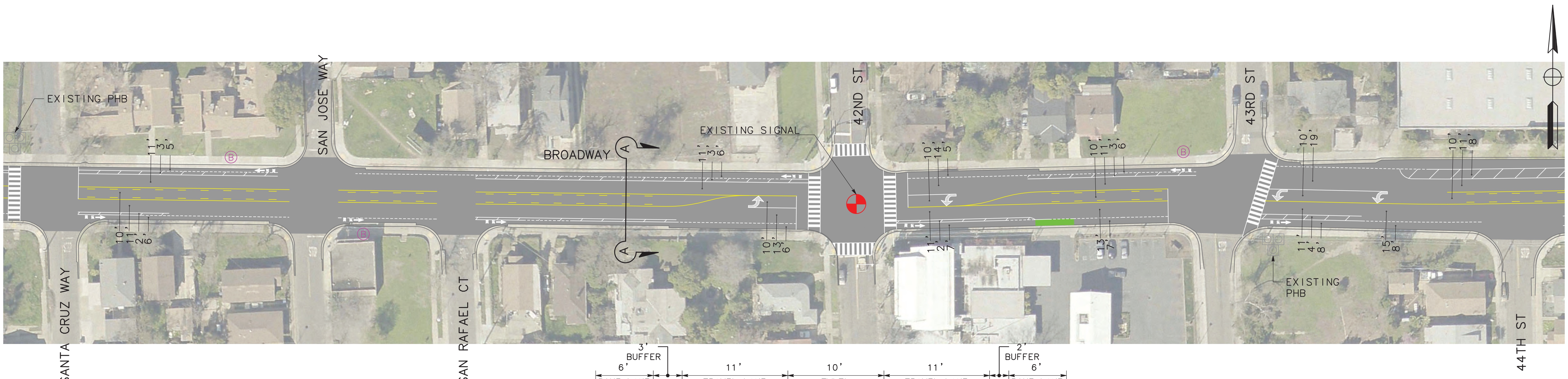
LEGEND:

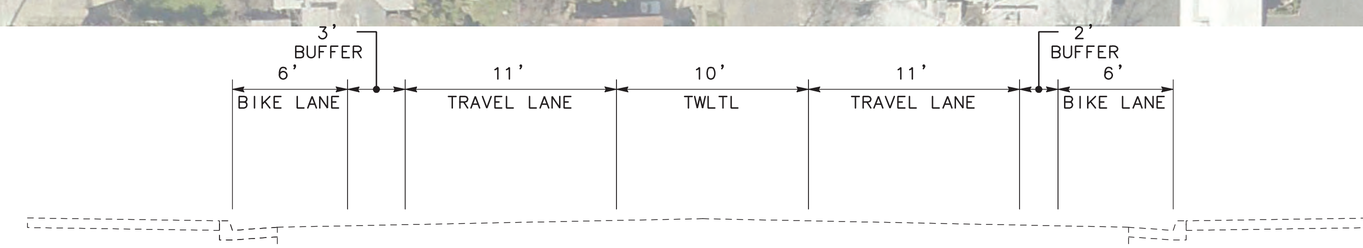
NEW SIGNAL

EXISTING SIGNAL

BUS STOP LOCATION




**SECTION A-A**

PAGE 1 OF 2

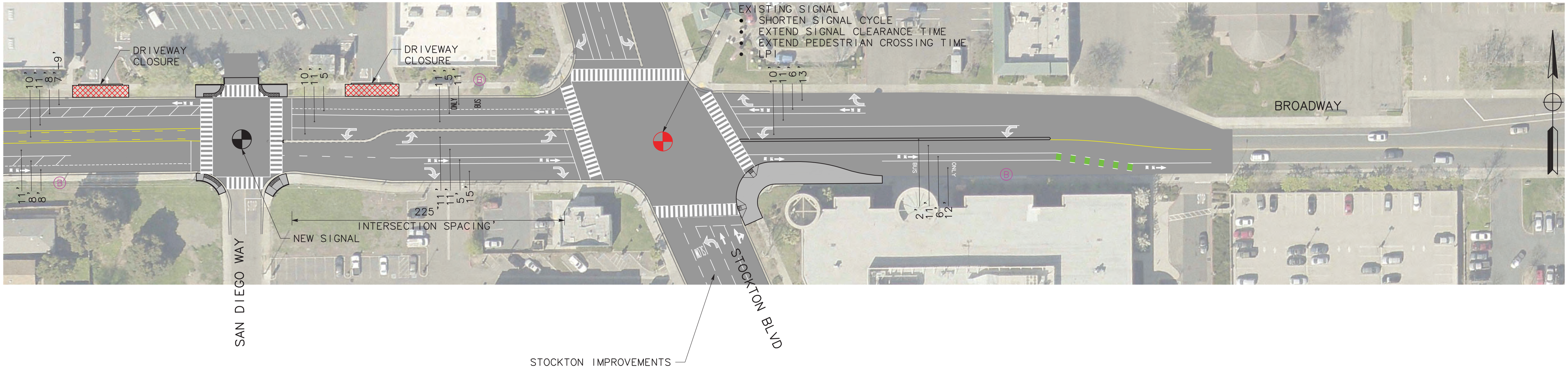
SCALE: 1" = 40'

**VISION ZERO - TOP 5**

# BROADWAY

**CITY OF SACRAMENTO**

**MARK THOMAS**




PAGE 2 OF 2

SCALE: 1" = 40'

VISION ZERO - TOP 5

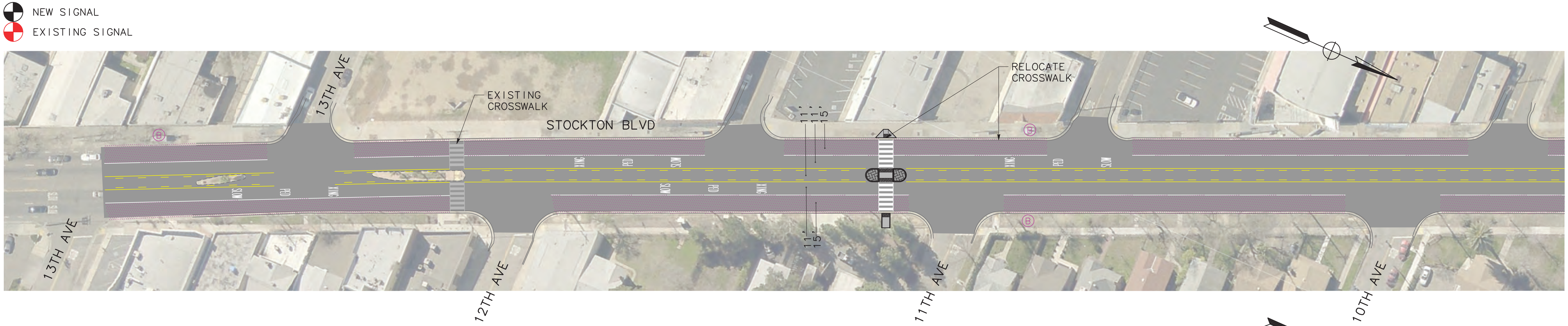
# BROADWAY

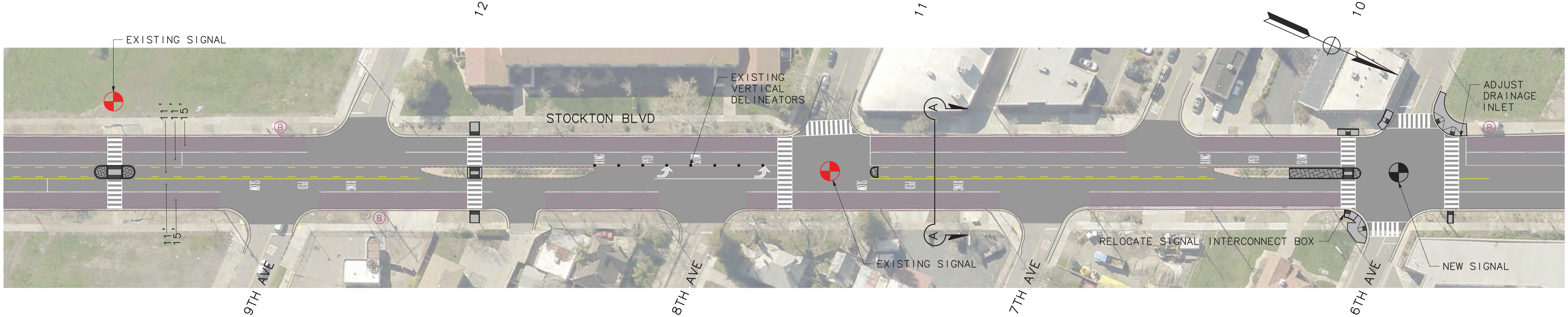
CITY OF SACRAMENTO

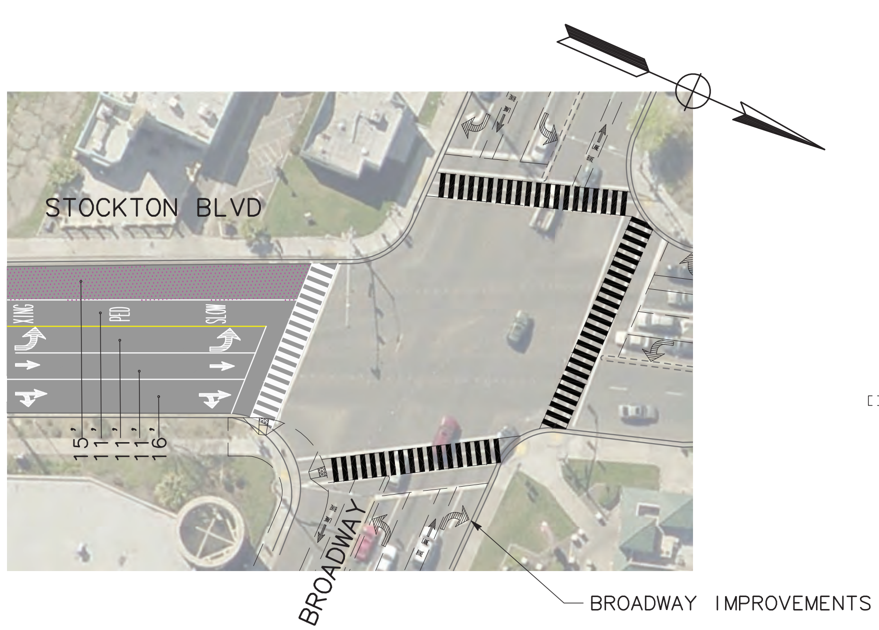
MARK THOMAS

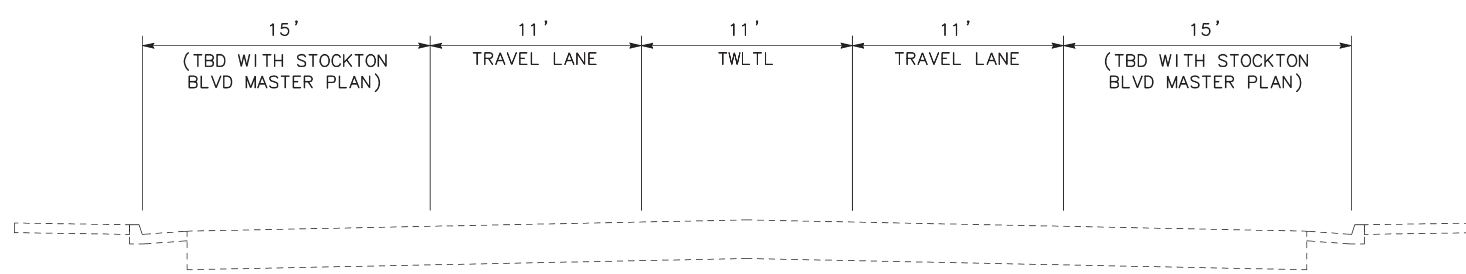
LEGEND:

- TBD WITH STOCKTON BOULEVARD MASTER PLAN
- • DELINEATOR (TYPE K-71)
- (B) EXISTING BUS STOP LOCATION
- NEW SIGNAL
- EXISTING SIGNAL




**SECTION A-A**

SCALE: 1" = 40'

**VISION ZERO - TOP 5**

**NORTH STOCKTON BLVD**

**CITY OF SACRAMENTO**

**MARK THOMAS**

# Broadway

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

## SUMMARY OF PROJECT COST ESTIMATE

| | | Current Year Cost | | Escalated Cost (2025)** |
|---|---|---|---|---|
| | TOTAL CONSTRUCTION COST | $ 2,380,905 | | $ 2,760,121 |
| | TOTAL RIGHT OF WAY COST | $ 110,000 | | $ 127,520 |
| | **TOTAL CAPITAL OUTLAY COSTS** | **$ 2,491,000** | | **$ 2,888,000** |
| DESIGN | PA/ED (12.5%)* | $ 320,000 | | $ 380,000 |
| DESIGN | PS&E (17.5%) | $ 440,000 | | $ 520,000 |
| DESIGN | RIGHT OF WAY (2%) | $ 50,000 | | $ 60,000 |
| CM | CONSTRUCTION (19%) | $ 480,000 | | $ 560,000 |
| | **TOTAL DELIVERY COST** | **$ 1,290,000** | | **$ 1,520,000** |
| | **TOTAL PROJECT COST** | **$ 3,790,000** | | **$ 4,410,000** |

* Support cost percentages reference the Multi-Agency CIP Benchmarking Study (2019) for streets projects

** Assumes escalation of 3% per year. No Adjustments in escalation for time between design and construction were made.

# Broadway

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

| ITEM No. | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | TOTAL |
|---|---|---|---|---|---|
| **ROADWAY** | | | | | |
| 1 | Install Concrete - Curb Ramp | EA | 6 | $8,000 | $48,000 |
| 2 | Install Concrete - Curb | LF | 520 | $30 | $15,600 |
| 3 | Install Concrete - Curb and Gutter | LF | 130 | $50 | $6,500 |
| 4 | Install Concrete - Sidewalk/Driveway | SF | 4070 | $12 | $48,840 |
| 5 | Roadway Excavation | CY | 1752 | $80 | $140,160 |
| 6 | Pavement Maintenance (includes overlay cost and base repair) | SY | 21211 | $19 | $403,009 |
| 7 | Signing and Striping | LS | 1 | $20,716 | $20,716 |
| 8 | Green MMA (Methyl Methacrylate) | SF | 658 | $10 | $6,580 |
| **ELECTRICAL** | | | | | |
| 9 | New Traffic Signal (electrical cost only, civil and signal interconnect costs are accounted for seperatly) | EA | 1 | $450,000 | $450,000 |
| 10 | Signal Modification | EA | 1 | $250,000 | $250,000 |
| 11 | Traffic Signal Interconnect and ITS elements | LF | 3000 | $41 | $123,000 |
| | | | | **SUBTOTAL** | **$1,512,405** |
| 12 | Minor Items (10% of Items 1-11) ** | LS | 1 | $152,000 | $152,000 |
| | | | | **SUBTOTAL** | **$1,664,405** |
| 13 | Mobilization (10% of Items 1-12) | LS | 1 | $167,000 | $167,000 |
| | | | | **SUBTOTAL** | **$1,831,405** |
| | | | | CONTINGENCY (30%) *** | $549,500 |
| | | | | CONSTRUCTION SUBTOTAL | $2,380,905 |
| **GRAND TOTAL** | | | | | |
| | | | | **CONSTRUCTION SUBTOTAL=** | **$2,380,905** |
| | | | | **Right of Way/Temporary Construction Easement*=** | **$110,000** |
| | | | | **GRAND TOTAL=** | **$2,490,905** |

* Right of way/TCE's for driveway closures, curb ramps, new signal equipment, conforms, etc. have been estimated at $10K/Location.

** Minor items (for example, fencing, signage, sidewalk repair, utility adjustments, etc.) have been estimated by using a percentage.

*** This feasibility level estimate includes a 30% contingency intended to compensate for the use of preliminary and limited information.

General Note: Where applicable, only minor drainage improvements for transportation projects to address safety are included. Utility improvements such as water, communication, gas, etc. are not included in these estimates.

# North Stockton Boulevard

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

## SUMMARY OF PROJECT COST ESTIMATE

| | | | Current Year Cost | | Escalated Cost (2025)** |
|---|---|---|---|---|---|
| | TOTAL CONSTRUCTION COST | $ | 2,339,705 | $ | 2,712,359 |
| | TOTAL RIGHT OF WAY COST | $ | 120,000 | $ | 139,113 |
| | **TOTAL CAPITAL OUTLAY COSTS** | **$** | **2,460,000** | **$** | **2,852,000** |
| DESIGN | PA/ED (12.5%)* | $ | 310,000 | $ | 360,000 |
| DESIGN | PS&E (17.5%) | $ | 440,000 | $ | 520,000 |
| DESIGN | RIGHT OF WAY (2%) | $ | 50,000 | $ | 60,000 |
| CM | CONSTRUCTION (19%) | $ | 470,000 | $ | 550,000 |
| | **TOTAL DELIVERY COST** | **$** | **1,270,000** | **$** | **1,490,000** |
| | **TOTAL PROJECT COST** | **$** | **3,730,000** | **$** | **4,350,000** |

* Support cost percentages reference the Multi-Agency CIP Benchmarking Study (2019) for streets projects
** Assumes escalation of 3% per year. No Adjustments in escalation for time between design and construction were made.

# North Stockton Boulevard

**(Feasibility Opinion of Probable Cost)**

**(Estimate does not include improvements from the Stockton Blvd Master Plan)**

MARK THOMAS

| ITEM No. | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | TOTAL |
|---|---|---|---|---|---|
| **ROADWAY** | | | | | |
| 1 | Install Concrete - Curb Ramp | EA | 19 | $8,000 | $152,000 |
| 2 | Install Concrete - Curb | LF | 320 | $30 | $9,600 |
| 3 | Install Concrete - Curb & Gutter | LF | 31 | $50 | $1,550 |
| 4 | Install Concrete - Textured Paving | SF | 764 | $25 | $19,100 |
| 5 | Install Concrete - Sidewalk | SF | 777 | $12 | $9,324 |
| 6 | Roadway Excavation | CY | 1453 | $80 | $116,240 |
| 7 | Pavement Maintenance (includes overlay cost and base repair) | SY | 18167 | $19 | $345,173 |
| 8 | Signing and Striping | LS | 1 | $12,818 | $12,818 |
| 9 | Relocate Drainage Inlet | EA | 1 | $2,000 | $2,000 |
| **ELECTRICAL** | | | | | |
| 10 | New Traffic Signal (electrical cost only, civil and signal interconnect costs are accounted for seperatly) | EA | 1 | $450,000 | $450,000 |
| 11 | Signal Modification | EA | 1 | $250,000 | $250,000 |
| 12 | Traffic Signal Interconnect and ITS elements | LF | 2900 | $41 | $118,900 |
| | | | | **SUBTOTAL** | **$1,486,705** |
| 13 | Minor Items (10% of Items 1-12) ** | LS | 1 | $149,000 | $149,000 |
| | | | | **SUBTOTAL** | **$1,635,705** |
| 14 | Mobilization (10% of Items 1-13) | LS | 1 | $164,000 | $164,000 |
| | | | | **SUBTOTAL** | **$1,799,705** |
| | | | | CONTINGENCY (30%)*** | $540,000 |
| | | | | CONSTRUCTION SUBTOTAL | $2,339,705 |
| **GRAND TOTAL** | | | | | |
| | | | | **CONSTRUCTION SUBTOTAL=** | **$2,339,705** |
| | | | | **Right of Way/Temporary Construction Easement*=** | **$120,000** |
| | | | | **GRAND TOTAL =** | **$2,459,705** |

* Right of way/TCE's for driveway closures, curb ramps, new signal equipment, conforms, etc. have been estimated at $10K/Location.

** Minor items (for example, fencing, signage, sidewalk repair, utility adjustments, etc.) have been estimated by using a percentage.

*** This feasibility level estimate includes a 30% contingency intended to compensate for the use of preliminary and limited information.

General Note: Where applicable, only minor drainage improvements for transportation projects to address safety are included. Utility improvements such as water, communication, gas, etc. are not included in these estimates.

S Stockton Boulevard

FEHR PEERS

LEGEND:

EXISTING SIGNAL  (B) BUS STOP LOCATION  ROADWAY WIDENING AREA





SCALE: 1" = 40'

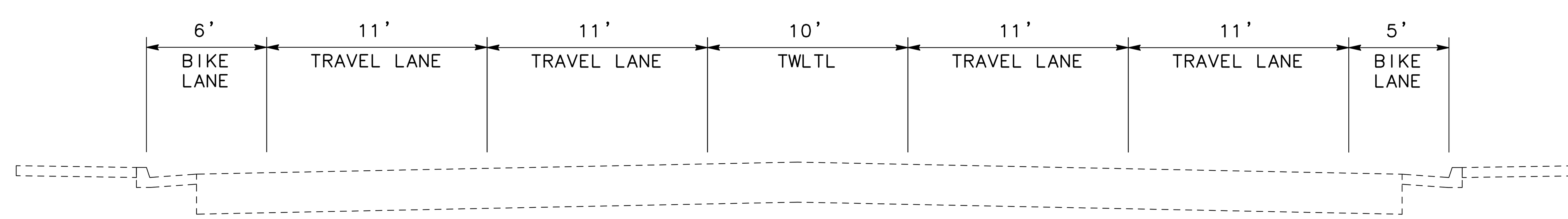
**VISION ZERO - TOP 5**

# SOUTH STOCKTON BLVD

CITY OF SACRAMENTO

MARK THOMAS






**SECTION A-A**



SCALE: 1" = 40'

**VISION ZERO - TOP 5**

**SOUTH STOCKTON BLVD**

**CITY OF SACRAMENTO**

**MARK THOMAS**


PAGE 3 OF 3

SCALE: 1" = 40'

VISION ZERO - TOP 5

**SOUTH STOCKTON BLVD**

CITY OF SACRAMENTO

MARK THOMAS

# South Stockton Boulevard

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

## SUMMARY OF PROJECT COST ESTIMATE

| | | Current Year Cost | | Escalated Cost (2025)** |
|---|---|---|---|---|
| TOTAL CONSTRUCTION COST | $ | 5,254,391 | $ | 6,091,279 |
| TOTAL RIGHT OF WAY COST | $ | 130,000 | $ | 150,706 |
| **TOTAL CAPITAL OUTLAY COSTS** | **$** | **5,385,000** | **$** | **6,242,000** |
| DESIGN: PA/ED (12.5%)* | $ | 680,000 | $ | 790,000 |
| DESIGN: PS&E (17.5%) | $ | 950,000 | $ | 1,110,000 |
| DESIGN: RIGHT OF WAY (2%) | $ | 110,000 | $ | 130,000 |
| CM: CONSTRUCTION (19%) | $ | 1,030,000 | $ | 1,200,000 |
| **TOTAL DELIVERY COST** | **$** | **2,770,000** | **$** | **3,230,000** |
| **TOTAL PROJECT COST** | **$** | **8,200,000** | **$** | **9,500,000** |

* Support cost percentages reference the Multi-Agency CIP Benchmarking Study (2019) for streets projects
** Assumes escalation of 3% per year. No Adjustments in escalation for time between design and construction were made.

# South Stockton Boulevard

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

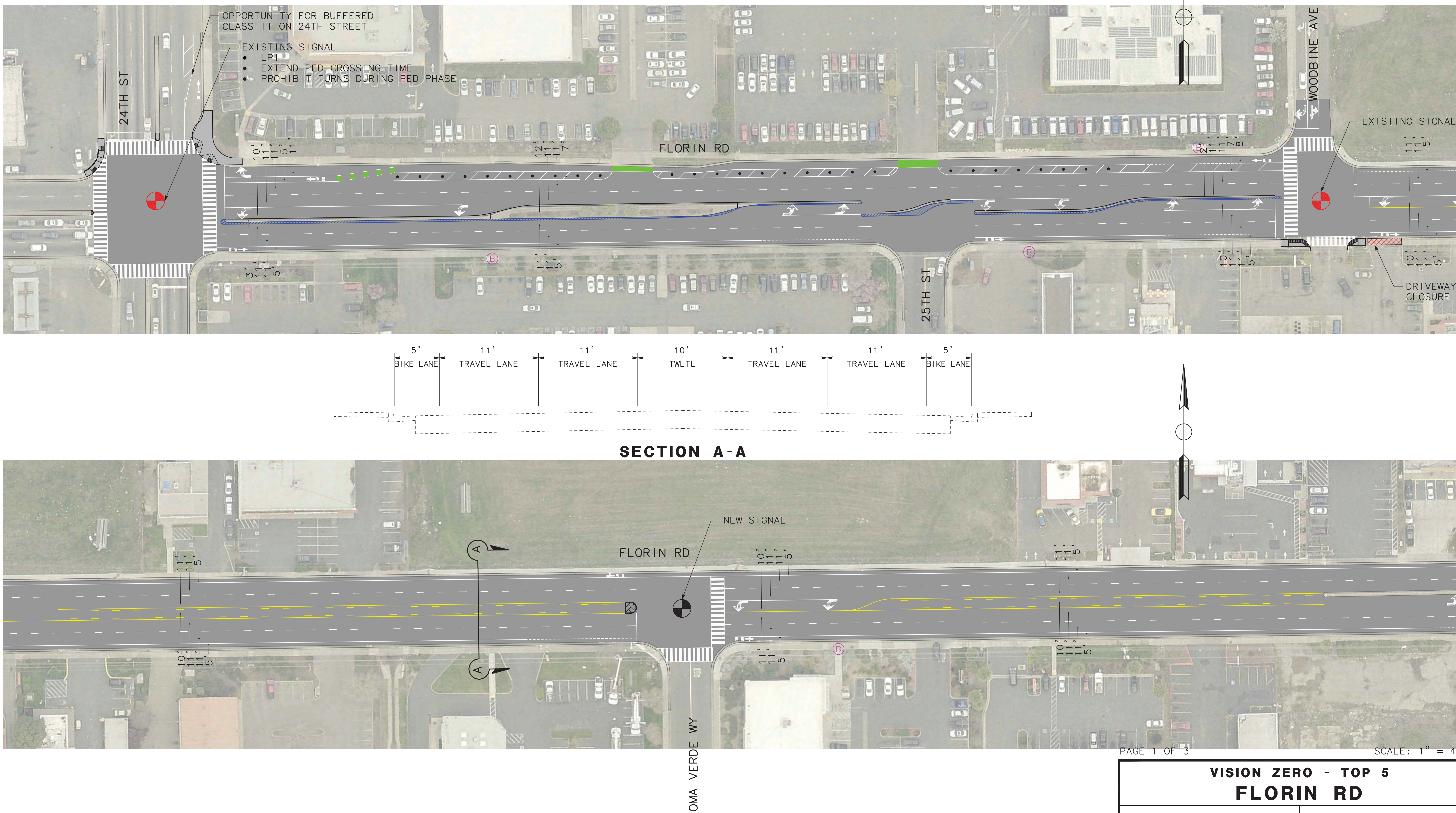
| ITEM No. | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | TOTAL |
|---|---|---|---|---|---|
| **ROADWAY** | | | | | |
| 1 | Install Concrete - Curb Ramp | EA | 14 | $8,000 | $112,000 |
| 2 | Install Concrete - Curb | LF | 3215 | $30 | $96,450 |
| 3 | Install Concrete - Curb & Gutter | LF | 261 | $50 | $13,050 |
| 4 | Install Concrete - Sidewalk/Driveway | LF | 4988 | $12 | $59,856 |
| 5 | Install Concrete - Textured Paving | LF | 9809 | $25 | $245,226 |
| 6 | Roadway Excavation | CY | 4474 | $80 | $357,920 |
| 7 | Roadway Widening**** | LF | 1 | $8,159 | $8,159 |
| 8 | Pavement Maintenance (includes overlay cost and base repair) | SY | 49980 | $19 | $949,620 |
| 9 | Signing and Striping | LS | 1 | $41,984 | $41,984 |
| 10 | Green MMA (Methyl Methacrylate) | SF | 3290 | $10 | $32,900 |
| **ELECTRICAL** | | | | | |
| 11 | Signal Modification | EA | 4 | $250,000 | $1,000,000 |
| 12 | Traffic Signal Interconnect and ITS elements | LF | 5186 | $41 | $212,626 |
| 13 | Pedestrian Scale Lighting | EA | 140 | $1,500 | $210,000 |
| | | | | **SUBTOTAL** | **$3,339,791** |
| 14 | Minor Items (10% of Items 1-12)** | LS | 1 | $334,000 | $334,000 |
| | | | | **SUBTOTAL** | **$3,673,791** |
| 15 | Mobilization (10% of Items 1-13) | LS | 1 | $368,000 | $368,000 |
| | | | | **SUBTOTAL** | **$4,041,791** |
| | | | | CONTINGENCY (30%)*** | $1,212,600 |
| | | | | CONSTRUCTION SUBTOTAL | $5,254,391 |
| **GRAND TOTAL** | | | | | |
| | | | | **CONSTRUCTION SUBTOTAL=** | **$5,254,391** |
| | | | | **Right of Way/Temporary Construction Easement *=** | **$130,000** |
| | | | | **GRAND TOTAL =** | **$5,384,391** |

| | |
|---|---|
| * | Right of way/TCE's for driveway closures, curb ramps, new signal equipment, conforms, etc. have been estimated at $10K/Location. |
| ** | Minor items (for example, fencing, signage, sidewalk repair, utility adjustments, etc.) have been estimated by using a percentage. |
| *** | This feasibility level estimate includes a 30% contingency intended to compensate for the use of preliminary and limited information. |
| **** | Areas of widening include new pavement structural section (0.50' HMA/1.50' CL2AB) |
| General Note | Where applicable, only minor drainage improvements for transportation projects to address safety are included. Utility improvements such as water, communication, gas, etc. are not included in these estimates. |

Florin Road

LEGEND:

- BUS STOP LOCATION
- NEW SIGNAL
- EXISTING SIGNAL
- DELINEATOR (TYPE K-71)
- LANDSCAPE AREA
- ROADWAY WIDENING AREA




PAGE 1 OF 3

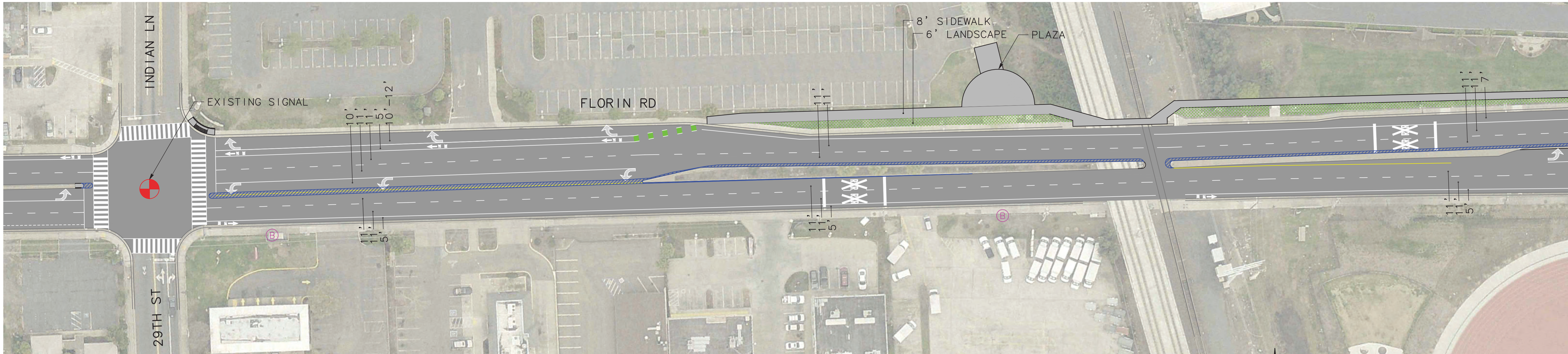
SCALE: 1" = 40'

**VISION ZERO - TOP 5**

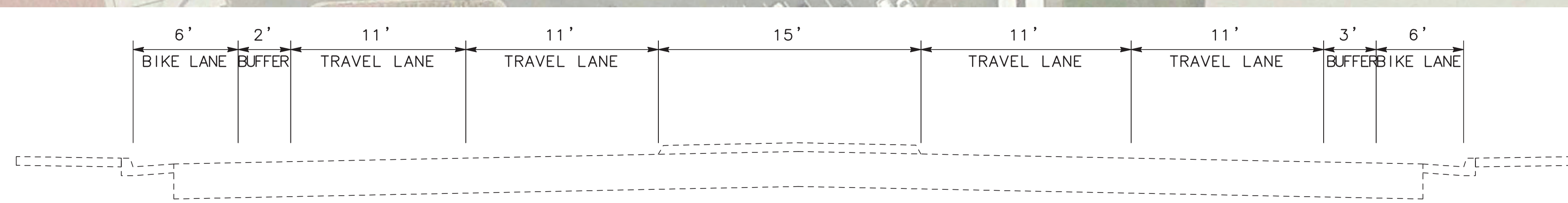
# FLORIN RD

CITY OF SACRAMENTO

MARK THOMAS








**SECTION B-B**



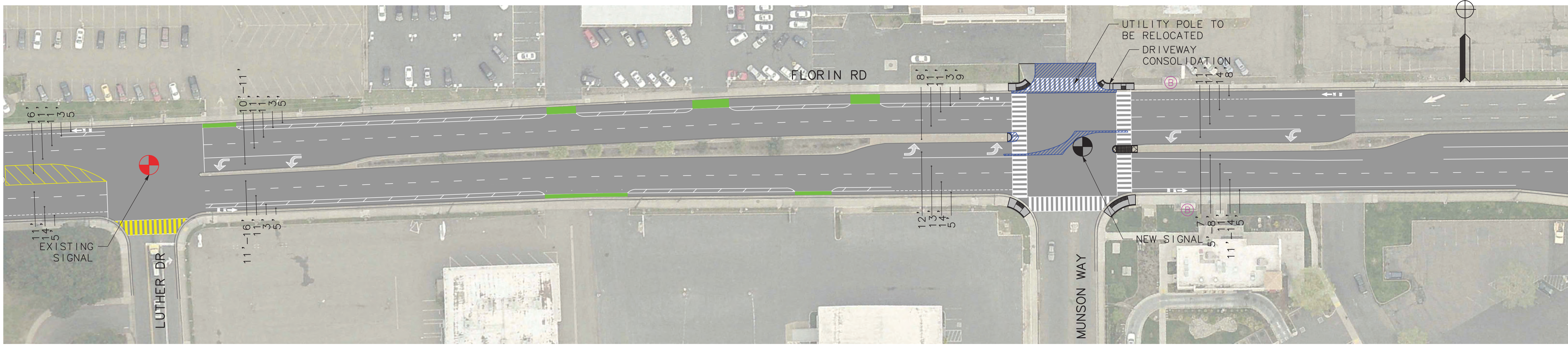
SCALE: 1" = 40'

**VISION ZERO - TOP 5**

**FLORIN RD**

**CITY OF SACRAMENTO**

**MARK THOMAS**






SCALE: 1" = 40'

**VISION ZERO - TOP 5**

# FLORIN RD

**CITY OF SACRAMENTO**

**MARK THOMAS**

# Florin Road

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

## SUMMARY OF PROJECT COST ESTIMATE

| | | Current Year Cost | Escalated Cost (2025)** |
|---|---|---|---|
| | TOTAL CONSTRUCTION COST | $ 6,489,586 | $ 7,523,209 |
| | TOTAL RIGHT OF WAY COST | $ 265,000 | $ 307,208 |
| | **TOTAL CAPITAL OUTLAY COSTS** | **$ 6,755,000** | **$ 7,831,000** |
| DESIGN | PA/ED (12.5%)* | $ 850,000 | $ 990,000 |
| DESIGN | PS&E (17.5%) | $ 1,190,000 | $ 1,380,000 |
| DESIGN | RIGHT OF WAY (2%) | $ 140,000 | $ 170,000 |
| CM | CONSTRUCTION (19%) | $ 1,290,000 | $ 1,500,000 |
| | **TOTAL DELIVERY COST** | **$ 3,470,000** | **$ 4,040,000** |
| | **TOTAL PROJECT COST** | **$ 10,250,000** | **$ 11,900,000** |

* Support cost percentages reference the Multi-Agency CIP Benchmarking Study (2019) for streets projects
** Assumes escalation of 3% per year. No Adjustments in escalation for time between design and construction were made.

# Florin Road

**(Feasibility Opinion of Probable Cost)**

MARK THOMAS

| ITEM No. | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | TOTAL |
|---|---|---|---|---|---|
| **ROADWAY** | | | | | |
| 1 | Install Concrete - Curb Ramp | EA | 17 | $8,000 | $136,000 |
| 2 | Install Concrete - Curb | LF | 3716 | $30 | $111,480 |
| 3 | Install Concrete - Curb & Gutter | LF | 119 | $50 | $5,950 |
| 4 | Install Concrete - Sidewalk/Driveway | SF | 10145 | $12 | $121,740 |
| 5 | Install Concrete - Textured Paving | SF | 431 | $25 | $10,775 |
| 6 | Roadway Excavation | CY | 4375 | $80 | $350,000 |
| 7 | Road Widening**** | LS | 1 | $43,647 | $43,647 |
| 8 | Pavement Maintenance (includes overlay cost and base repair) | SY | 47726 | $19 | $906,794 |
| 9 | Signing and Striping | LS | 1 | $46,471 | $46,471 |
| 10 | Green MMA (Methyl Methacrylate) | SF | 2334 | $10 | $23,340 |
| 11 | Vertical Delineator (Type K-71) | EA | 28 | $200 | $5,600 |
| 12 | Landscape/Irrigation | SF | 3619 | $8 | $28,952 |
| 13 | Relocate Utility Pole | EA | 1 | $30,000 | $30,000 |
| **ELECTRICAL** | | | | | |
| 14 | New Traffic Signal (electrical cost only, civil and signal interconnect costs are accounted for seperatly) | EA | 3 | $450,000 | $1,350,000 |
| 15 | Signal Modification | EA | 2 | $250,000 | $500,000 |
| 16 | Traffic Signal Interconnect and ITS elements | LF | 5957 | $41 | $244,237 |
| 17 | Pedestrian Scale Lighting | EA | 140 | $1,500 | $210,000 |
| | | | | **SUBTOTAL** | **$4,124,986** |
| 17 | Minor Items (10% of Items 1-16) ** | LS | 1 | $413,000 | $413,000 |
| | | | | **SUBTOTAL** | **$4,537,986** |
| 18 | Mobilization (10% of Items 1-17) | LS | 1 | $454,000 | $454,000 |
| | | | | **SUBTOTAL** | **$4,991,986** |
| | | | | CONTINGENCY (30%)*** | $1,497,600 |
| | | | | CONSTRUCTION SUBTOTAL | $6,489,586 |
| **GRAND TOTAL** | | | | | |
| | | | | **CONSTRUCTION SUBTOTAL =** | **$6,489,586** |
| | | | | **Right of Way/Temporary Construction Easement* =** | **$240,000** |
| | | | | **Permanent Right of Way Acquisition =** | **$25,000** |
| | | | | **GRAND TOTAL =** | **$6,754,586** |

* Right of way/TCE's for driveway closures, curb ramps, new signal equipment, conforms, etc. have been estimated at $10K/Location.

** Minor items (for example, fencing, signage, sidewalk repair, utility adjustments, etc.) have been estimated by using a percentage.

*** This feasibility level estimate includes a 30% contingency intended to compensate for the use of preliminary and limited information.

**** Areas of widening include new pavement structural section (0.50' HMA/1.50' CL2AB)

General Note: Where applicable, only minor drainage improvements for transportation projects to address safety are included. Utility improvements such as water, communication, gas, etc. are not included in these estimates.