#### **I OVERVIEW**

The City of Salinas recently adopted two planning documents related to Safety near Williams Road, the Alisal Vibrancy Plan and the Vision Zero Action Plan. Both plans were developed through an extensive community engagement process. While no physical improvements have been made on Williams Road, the City has taken steps to listen to the community. Both approved plans document clear support from the communities to improve traffic safety, reduce vehicle speeds, and to improve bicycle and pedestrian safety.

The City of Salinas adopted a Vision Zero Policy on February 11, 2020, and shortly after developed a Vision Zero Action Plan approved by Council Resolution on September 14, 2021. The Vision Zero Action Plan is rooted in the understanding that traffic deaths are preventable. The Vision Zero Action Plan used a systems-based approach and the application data to identify emphasis areas, priorities, and actionable strategies with the goal of eliminating severe injury and fatal crashes.

The Williams Road corridor was found to be on the City's High Injury Network, in fact the Williams Road corridor was identified as the number two highest KSI collision corridor throughout the City in the Vision Zero Plan. The identification of the High Injury Network as part of a Vision Zero Action Plan was a critical first step because it identifies roadway segments where high frequencies of fatal or severe injury collisions occur that the City can focus on. GIS technology was used to identify the Salinas High Injury Network, corridors with the highest concentration of fatal and severe injury collisions, also known as killed or severely injured collisions (KSI). Traffic data for the HIN was collected from the Transportation Injury Mapping System (TIMS), Statewide Integrated Traffic Records System (SWITRS) and local police records. between the years 2009-2018. The HIN focuses on corridors where the highest number of traffic fatalities and severe injuries occurred. The Action Plan shows that the Salinas HIN consists of only 12% of the city's roadway streets network.

Countermeasures were identified within the Action Plan for the Williams Road Corridor. No new countermeasures have been installed since the Plans adoption within the last 5 years Williams Road. Within the past 5 years, the City has only performed maintenance work at these locations to replace damaged or old infrastructure.

Collisions along the Williams Road are spatially distributed throughout the corridor and typically located near an intersection or driveway. Notable collision types include broadside, and head-on collisions. The most frequent primary collision factors include auto right-of-way violations, unsafe speeds, and improper turning. The corridor is currently five lanes wide with two lanes in each direction and a two way left turn lane at the center. The corridor has on street parking, a high driveway density, and no bike facilities. The countermeasures that were developed during the community driven Vision Zero Action Plan were tailored to specifically address the notable collision types and primary collision factors, see **Attachment 1**. The City evaluated different conceptual options to meet the needs of the community. Trade-offs between parking, safe bicycle facilities and traffic operations were considered throughout the process. Ultimately access management strategies were identified to help mitigate the collision trends. The project proposes

a median with three roundabouts to provide the ability to U-turn where left turn access is lost and a new signal, for detailed depiction of the implementation of the Vision Zero Action Plan, see the corridor maps along with the graphics depicting all proposed improvements along with crash supporting information as **Attachment 2**. On-street parking was a priority for the community and is proposed to remain, and a road diet with a median was instead considered to create safe space for bicyclist. Increased lighting was identified as a goal to reduce nighttime collisions. The proposed Williams Road Safe Street Corridor Project represents safety improvements tailored specifically to collision trends and reduce fatal and sever injury collisions on Williams Road.

The high frequencies of collision that can lead to fatalities or life altering injuries are an indication that safety improvements on Williams Road would have a substantial benefit. The 10 years of collision data from the City's Vision Zero Action Plan have identified the Williams Road corridor as the corridor with the second highest number of fatal and severe injury collisions in the City. This data driven process indicates that any investments in traffic safety on Williams Road would have a great impact to lower collision rates and help achieve the City's Vision Zero goal.

The Williams Road Safe Street Corridor Project strongly follows the countermeasures identified within the Vision Zero Action Plan as shown in Attachment 2. With multimodal improvements along Williams Road in the City of Salinas between East Alisal Road and Freedom Parkway. The City of Salinas (City) has designed the following safety modifications to the roadway and upgrades of the pedestrian, bicycle, and transit facilities with the primary focus of improving safety along the corridor for all roadway users the top focus. The City performed an Intersection Control Evaluation (ICE) for the Corridor to ensure the project fit well within the grants goals and also to ensure the proper safety and cost effective strategies were utilized accurately, see **Attachment 3**:

All improvements will be installed in public right-of-way (ROW), therefore, there is no need for any new ROW acquisition.

#### **II LOCATION**

Williams Road is located in the City of Salinas, which is the largest city in the Monterey Bay Region and home to approximately 163,397 residents (US Census Data, 2020 ACS). Williams Road is an easterly corridor that is adjacent to disadvantaged communities within the City.

The safety of pedestrians and bicyclists is extremely important for this corridor considering there are two schools which front the roadway, a library, a shopping center, a fire station, businesses, and residential units and buildings.

Pedestrian and Bicyclists

The City's civil and traffic engineering consultants' review of research concluded that roundabouts provide safer crossing conditions for pedestrians and bicyclists when compared to signalized intersections and that roundabouts have been implemented successfully near schools,

providing shorter crossing distances since the splitter island on each approach provides a refuge for pedestrians and providing bicyclists the flexibility to navigate the roundabout as a pedestrian, giving them the same benefits.

The existing configurations include barriers to safe pedestrian and bicycle access, including high speed or high-volume vehicular traffic, multiple lanes of traffic and a lack of separation from moving vehicles, often making people fee unsafe or unconfinable so they will choose to not ride a bike across or along this roadway. The proposed project would add a raised cycle track along the corridor which currently has no bicycle facilities and add striped buffers along the corridor, construct raised medians along the corridor, and promote traffic calming at intersections with roundabouts, a road diet, and pedestrian enhancements.

Sidewalks form the backbone of the pedestrian transportation network in Salinas, and there are several paths and trails that connect neighborhoods with each other and with community destinations such as schools, retail uses and other services. There are existing sidewalks along Williams Road on both sides; however the proposed improvements will provide safe crossings and slower motorist speeds to lower the severity of collisions or decline

The project has an immediate need to address safety concerns and provide non-vehicle options which is especially important for adjacent residents in areas of persistent poverty. See Williams Road cross-sections as part of **Attachment 4**.

#### **III SELECTION CRITERIA**

The data suggests a trend of unsafe speed for drivers, non-compliance with signals and signs, and a lack of adequate facilities for pedestrians and bicyclists along the corridor. It is also worth including that Salinas has a lot of crashes that go unreported due to a self- reporting requirement for non-serious crashes that was in place as the police department continues to be short staffed.

In the 2018 California Office of Traffic Safety crash rankings report, Salinas ranked among the top ten for pedestrian collisions and 3<sup>rd</sup> worst for pedestrian collisions involving youth under 15 when compared to cities of a similar size. Salinas also ranked among the top ten for bicycle collisions involving youth under 15 and was one of the top five cities for alcohol-related collisions, again when competed against cities of a similar size. Between 2009 and 2018, Salinas reported 601 pedestrian collisions and 432 bicyclist collisions.

The proposed raised cycle track and buffered bike lanes would provide adequate and consistent bicycle infrastructure throughout the corridor which would in turn promote predictable and compliant behavior for people biking. The additional offset between the vehicular lane and bike lane would provide more right of way for bicyclists. At the roundabout intersections, bicyclists can either take the bike ramp to the cycle track and navigate the intersection as a pedestrian or they can take the lane and ride with traffic in a slower speed environment through the intersection. Both options remove the cyclist from the shoulder of the roadway and increase visibility between drivers and cyclists.

With the roundabouts and enhanced pedestrian crossings at all three roundabout intersections and raised median along the corridor, pedestrians would have a more compelling reason to cross at the intersection since the improvements will provide shorter crossing distances, and the splitter islands on each approach provide refuges for pedestrians.

#### **IV EQUITY AND ENGAGEMENT**

Grant funding agencies, including the U.S. DOT at the federal level and Caltrans and other statewide grantors in California, prioritize funding projects in disadvantaged communities. Grant programs use various definitions of disadvantaged communities, and this section describes how several of those metrics apply to Salinas and specifically the project area.

See **Attachment 5** for the maps demonstrating the proximity and information regarding the disadvantaged community components. The entire project corridor is within the areas of persistent poverty with 83% of the residents within the Census Tracts be disadvantaged.

Households living below the poverty line are less likely to own cars and are more likely to walk, bike, or take public transit to travel. The Williams Road Safe Street Corridor Project will provide safe walking and biking facilities for residents of these areas to travel on.

Providing additional transportation options can help improve people's health, changing vehicle trips to active, non-vehicle trips to support an active lifestyle.

#### V STAKEHOLDER AND PUBLIC ENGAGEMENT

Meaningful engagement with the public and involvement of relevant stakeholders through plan development and implementation has been a priority in the City of Salinas.

The City is in the process of working with PG&E for an undergrounding project or Rule 20A Program and the project has been prioritized for PG&E due to its location within a disadvantaged community. PG&E is currently working with the City on the corridor's final configuration to ensure their project is properly located. Funding for the Williams Road Safe Street Corridor Project will determine the next steps with the Rule 20A layout information the City provides to PG&E.

To address safety related concerns expressed by school districts in the City of Salinas, various studies were conducted to evaluate pedestrian and bicyclist safety at multi-lane roundabouts adjacent to schools. It was found that a design that incorporates less travel lanes and roundabout control at intersections has many advantages including but not limited to fewer traffic fatalities; fewer injury crashes; lower severity of collisions; a smaller number of person-hours delayed in traffic; fewer traffic-related pollutants; and lower operation and maintenance costs.

Effective Practices and Strategies

#### Create a Safer Community

The segment and full corridor improvements would support U.S. DOT's goal for Safety and to

"make our transportation system safer for all people" since they will:

- Increase accessibility and safety between key origins and destinations in the region
- Improve travel time for all modes of transportation including pedestrians, bicyclists, transit, car/vanpool, and freight
- Reduce gaps in the region's active transportation infrastructure
- Reduce traffic congestion by increasing access to alternatives to using a personal vehicle

for regional and commuter travel

The improvements would also support U.S. DOT's goal for Economic Strength and Global Competitiveness since they will:

- Invest in transportation solutions that provide reliable and efficient access to resources, markets and jobs
- Invest in transportation solutions that provide regional accessibility for freight and reduce

truck hours of delay

The improvements would also align with U.S. DOT's effort to achieve Complete Streets that are designed and operated to enable safe use and support mobility for all users:

- Increase active transportation mode share for travel to work and school
- Reduce quantities of harmful air pollutants created by transportation

Safety benefits of the planned improvements on the 1.6-mile corridor of Williams Road include reductions in crash frequency and risk using several of FHWA's Proven Safety Countermeasures:

- <u>Roundabouts.</u> National research has shown roundabouts are a viable roadway safety countermeasure for:
  - o Reducing the overall frequency of crashes, including specific types of crashes such as those involving bicyclists and pedestrians
  - o Eliminating certain types of crashes, such as broadside and head-on crashes
  - o Reducing the severity of other types of crashes, such as rear end crashes, through managing and reducing speeds along a corridor and at intersections.
- *Crosswalk Visibility Enhancements*: The FHWA's Proven Safety Countermeasures identifies three main crosswalk visibility enhancements to help make crosswalks and the pedestrians, bicyclists, wheelchair and other mobility device users, and transit users using them more visible to drivers. These include:
  - o High-visibility crosswalks, which can reduce pedestrian injury crashes up to 40%.
  - o Intersection lighting, which can help reduce pedestrian crashes up to 42%.
  - o Advance yield or stop markings and signs, which can reduce pedestrian crashes up to 25%.
- (Buffered) Bicycle Lanes: The Caltrans Local Roadway Safety Manual states separated bikeways are most appropriate on streets with high volumes of bike traffic and/or high bike-vehicle collisions, presumably in an urban or suburban area. By separating bicyclists from motor traffic, "protected" or physically separated bike lanes can offer a higher level of comfort and are attractive to a wider spectrum of the public.

- *Walkways:* The FHWA's Proven Safety Countermeasures states that sidewalks can lead to 65-89% reduction in crashes involving pedestrians walking along the roadways. Walkways improve mobility for pedestrians and provide access for all types of pedestrian travel: to and from home, work, parks, schools, shopping areas, and transit stops.
- Medians and Pedestrian Refuge Islands: The FHWA's Proven Safety Countermeasures states that medians with pedestrian refuge islands can help improve safety of pedestrians and lead to about a 56% decrease in pedestrian collisions. Some locations where these improvements are most applicable include mid-block crossings, approaches to multi-lane intersections and areas near transit stops or other pedestrian focused sites.
- Lighting: The FHWA's Proven Safety Countermeasures states that adequate lighting at night-time or in low-lighting conditions can help enhance safety for pedestrians, wheelchair and other mobility device users, bicyclists, and transit users as they travel along and across roadways. It can reduce crashes up to 42% for nighttime injury pedestrian crashes at intersections.

Implementation of these evidence-based roadway safety countermeasures along Williams Road will provide a safer community for residents.

#### Safe System Approach

The vision and the approach of the City's Vision Zero Action Plan entails features aligned to the National Roadway Safety Strategy which adopts the Safe System Approach. The City has integrated the Safe Systems Approach into the development of its Vision Zero Action Plan, and into all of its on-going strategic planning documents such as the Salinas Safe Routes to School Plan, and Vision Salinas General Plan Update. Each plan lead through a community driven process uses the available data to design projects to prevent death and serious injuries, by prioritizing vulnerable road users' safety, and designing for safe speeds. These plans rely on existing collision data to inform the process but are also proactive and identify risks in the City's transportation network where safety improvements would provide a substantial benefit. In addition, the City's Vision Zero Action Plan involves a committed Vision Zero Task Force, with identified implementable actions and strategies organized into four areas:

- Vision Zero Program: Focuses on educational strategies to bring Vision Zero to the table
- Street Design and Operation: Focuses on designing and implementing based on Vision Zero Analyses and Findings
- Behavioral Change: Focuses on Targeting and educating public on street changes
- Vulnerable Road Users: Focuses on designing and implementing for bicycle and pedestrian

The identified improvements and strategies for Williams Road Safe Street Corridor Project heavily incorporates three of the Safe System Approach elements described below:

• Safer People: The improvements have been identified to enhance safety not just for

automobile drivers but also for those who walk, bike, ride transit, and travel by other modes. Educational strategies that increase awareness of driver behavior and commitment to zero fatalities and serious injuries on the roadways will support features of the project such as roundabouts, buffered bike lanes and enhancing amenities at the transit stops on the segment.

- Safer Speeds: As per the collision history in the City of Salinas, one of the major primary collision factors identified is the observed behavior of unsafe speeding. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility. The project's identified engineering improvements as well as educational strategies aim to deliver just this.
- Safer Roads: Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes. The identified improvements aim at incorporating design elements that offer layers of protection to prevent crashes from occurring and mitigate harm when they do occur. These context sensitive improvements when implemented significantly enhance roadway safety by advancing infrastructure design.

https://safety.fhwa.dot.gov/provencountermeasures/walkways.cfm

http://www.pedbikesafe.org/PEDSAFE/countermeasures\_detail.cfm?CM\_NUM=1

https://safety.fhwa.dot.gov/provencountermeasures/ped\_medians.cfm

https://safety.fhwa.dot.gov/provencountermeasures/lighting.cfm





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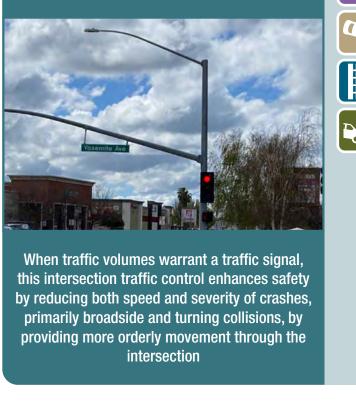


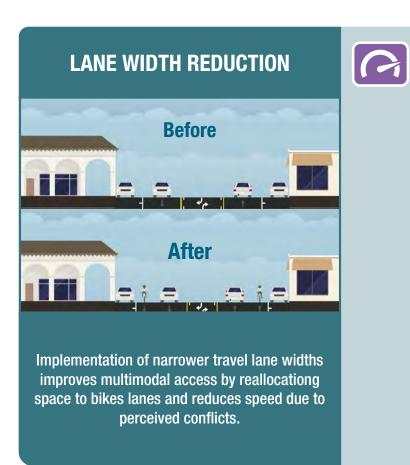


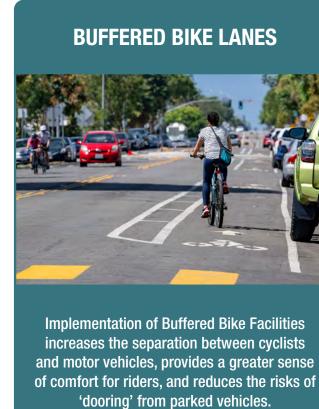
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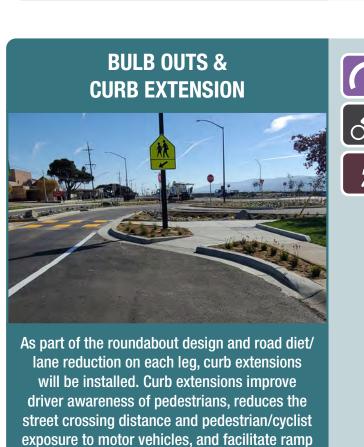




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**Head-Ons** 

accessibility improvements.



Day C

(4)

**B** 



Installing a roundabout will reduce vehicle speed, avert collisions due to single-directional travel, reduce the amount of conflict points between different movements, reduce GHG emissions, and reduce congestion on approaching roads which allows for road diets and lane reductions.

# BULB OUTS & CURB EXTENSION



As part of the roundabout design and road diet/ lane reduction on each leg, curb extensions will be installed. Curb extensions improve driver awareness of pedestrians, reduces the street crossing distance and pedestrian/cyclist exposure to motor vehicles, and facilitate ramp accessibility improvements.

#### **Crash Categories**



**Broadside** 



Rear End



Head-Ons



**Pedestrian Violation** 



Auto R/W Violation



Unsafe Speed



Improper Turning

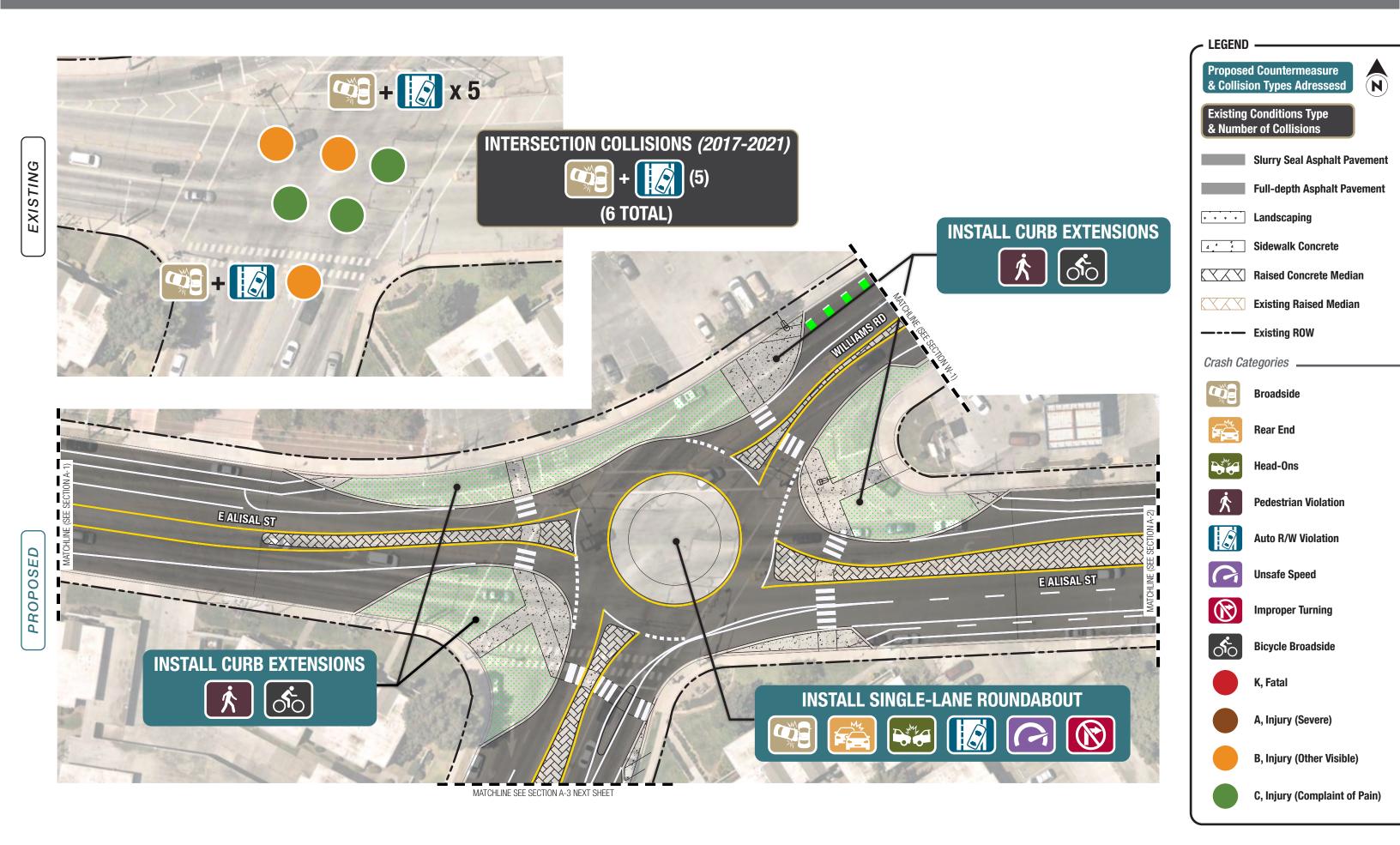


Bicycle Broadside

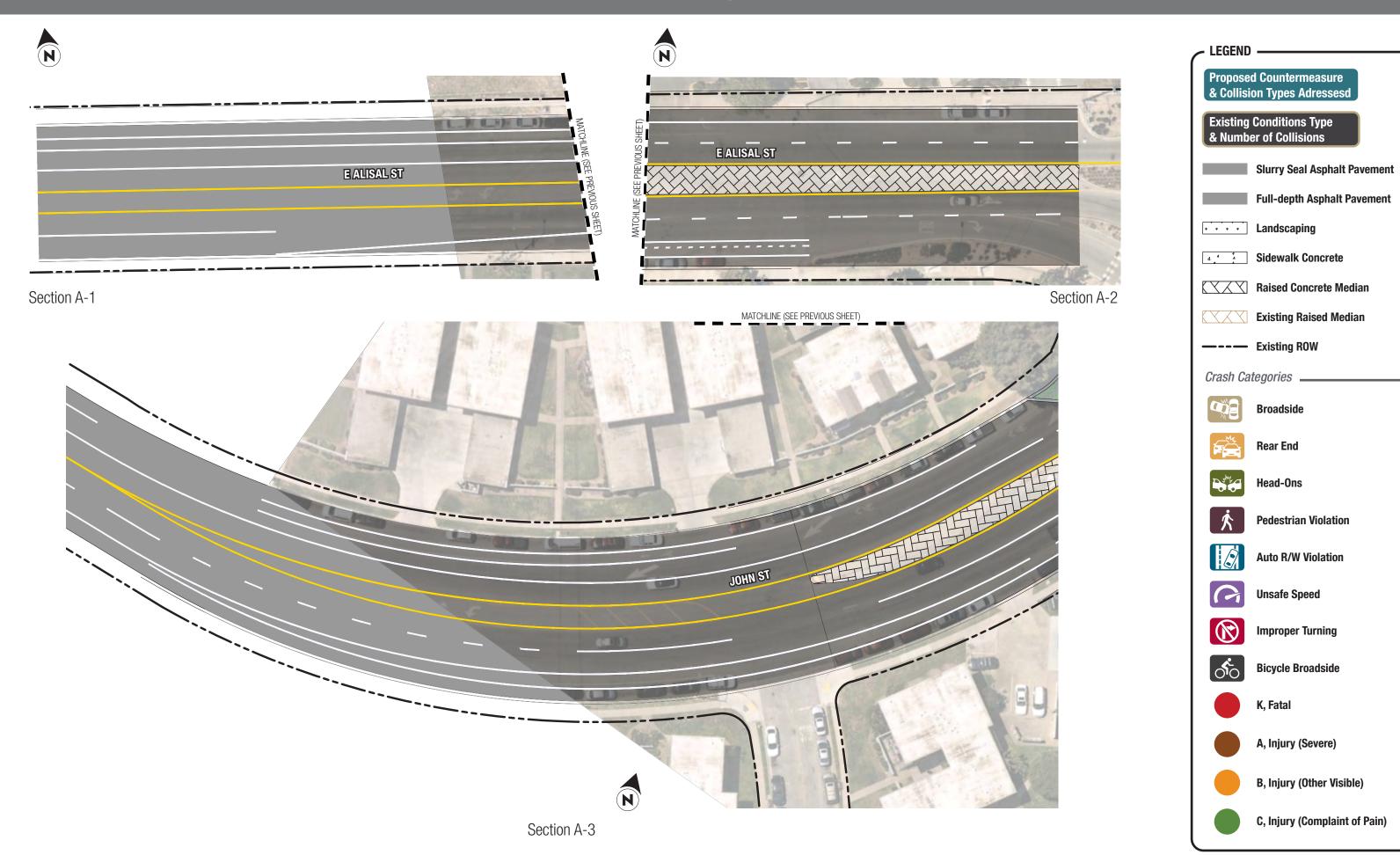
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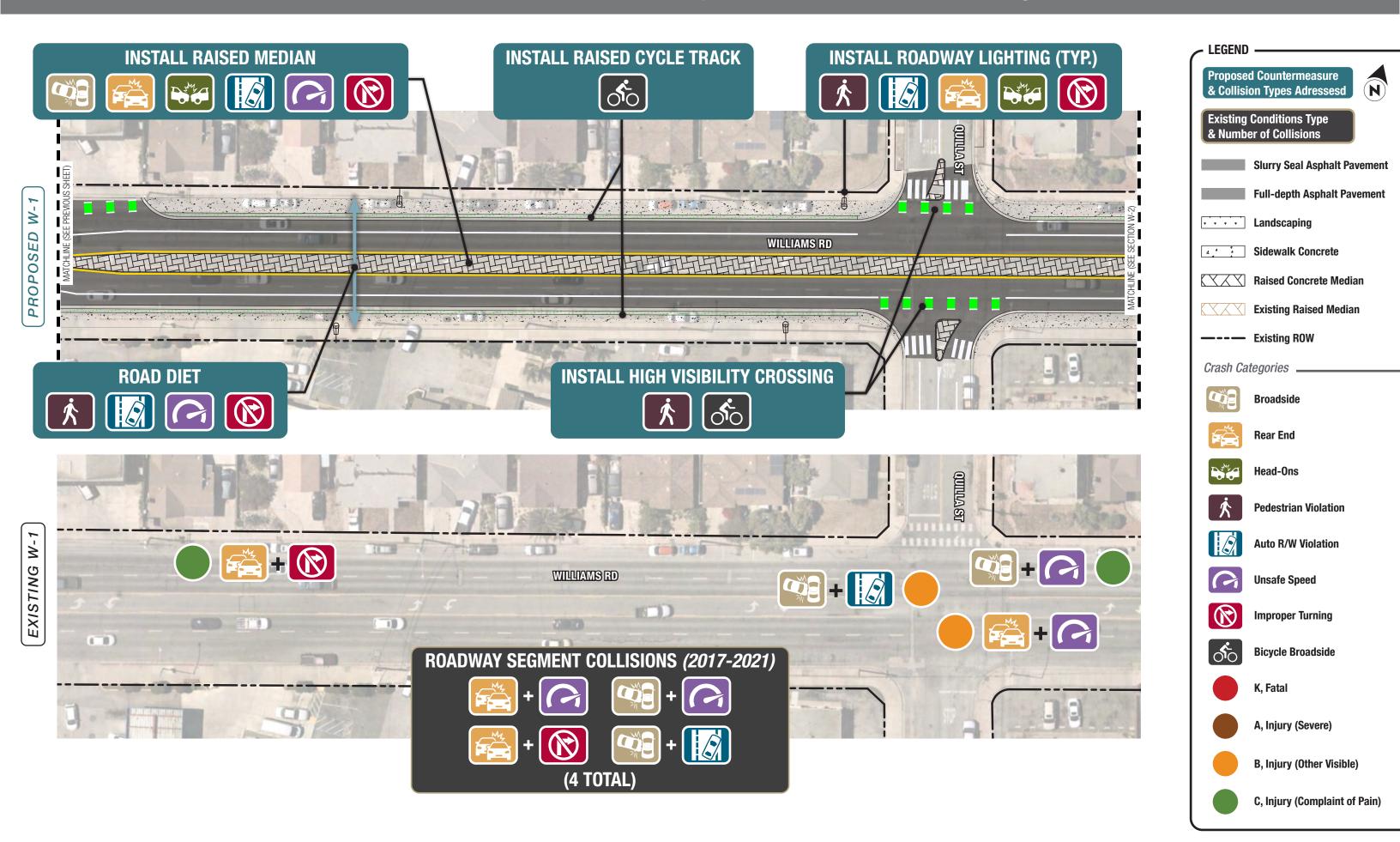
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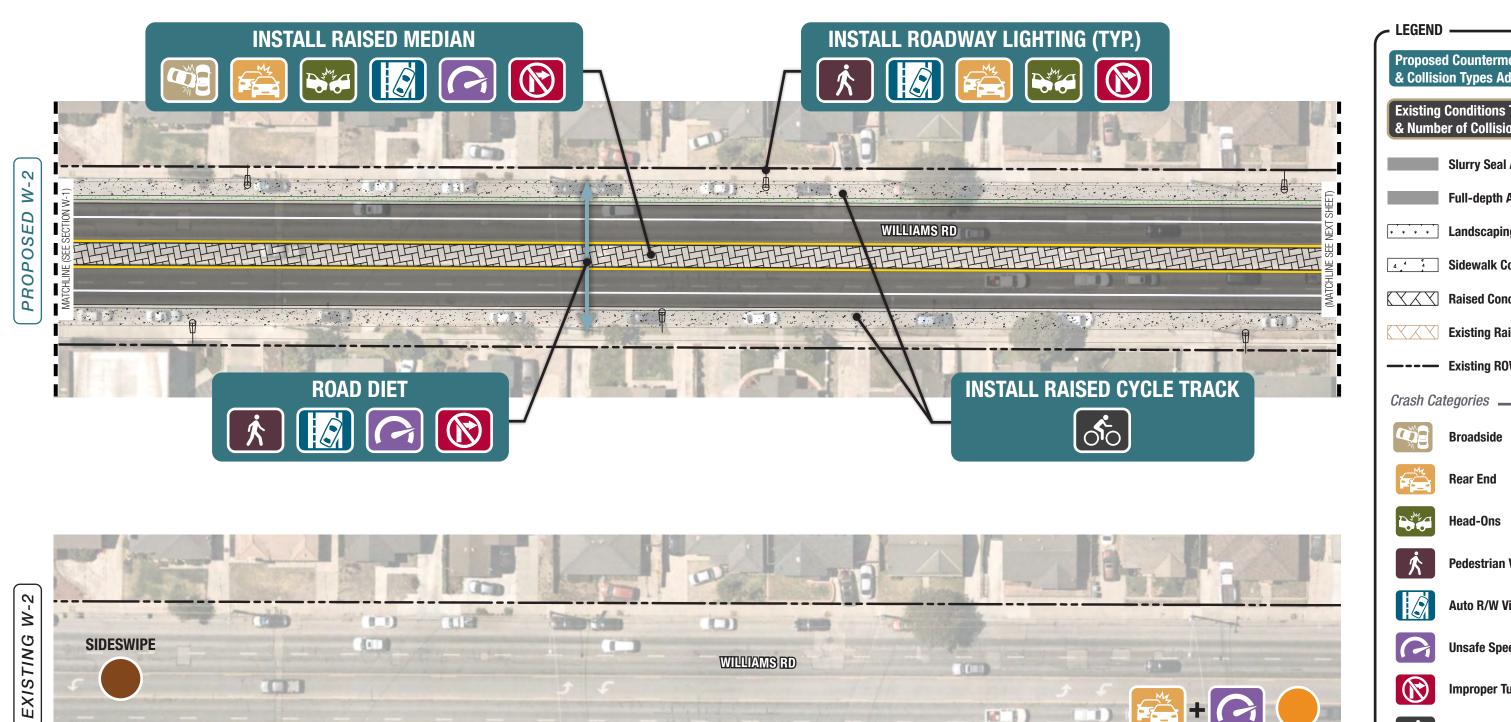
## **Williams Road Safe Street Corridor Project - Alisal Street Roundabout**



## **Williams Road Safe Street Corridor Project - Alisal Street Roundabout**





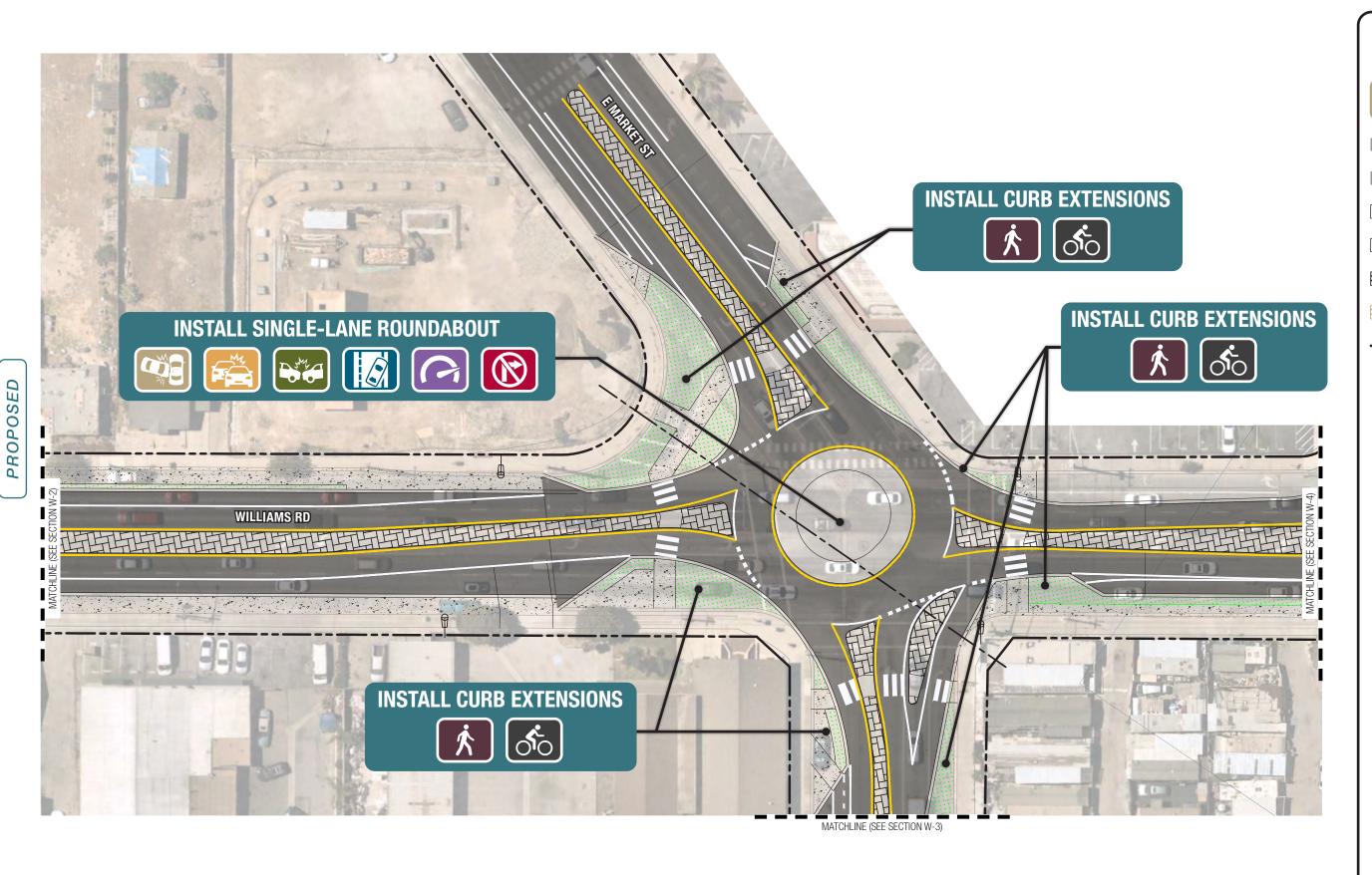


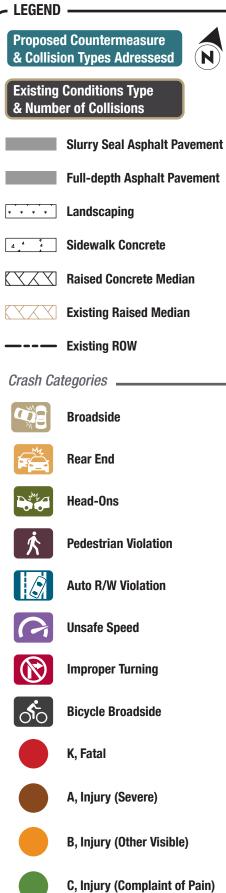
**ROADWAY SEGMENT COLLISIONS (2017-2021)** 

**(2 TOTAL)** 

**Proposed Countermeasure** & Collision Types Adressesd **Existing Conditions Type** & Number of Collisions **Slurry Seal Asphalt Pavement Full-depth Asphalt Pavement** Landscaping **Sidewalk Concrete** Raised Concrete Median **Existing Raised Median** ——— Existing ROW **Pedestrian Violation Auto R/W Violation Unsafe Speed Improper Turning Bicycle Broadside** K, Fatal A, Injury (Severe) B, Injury (Other Visible) C, Injury (Complaint of Pain)

### Williams Road Safe Street Corridor Project - Market Street Roundabout (Proposed)





## Williams Road Safe Street Corridor Project - Market Street Roundabout (Existing)



**LEGEND** 

**Proposed Countermeasure** & Collision Types Adressesd



**Slurry Seal Asphalt Pavement** 

**Full-depth Asphalt Pavement** 

Landscaping

**Sidewalk Concrete** 

Raised Concrete Median

**Existing Raised Median** 

——— Existing ROW

Crash Categories

**Broadside** 

**Rear End** 

Head-Ons

**Pedestrian Violation** 

Auto R/W Violation

**Unsafe Speed** 

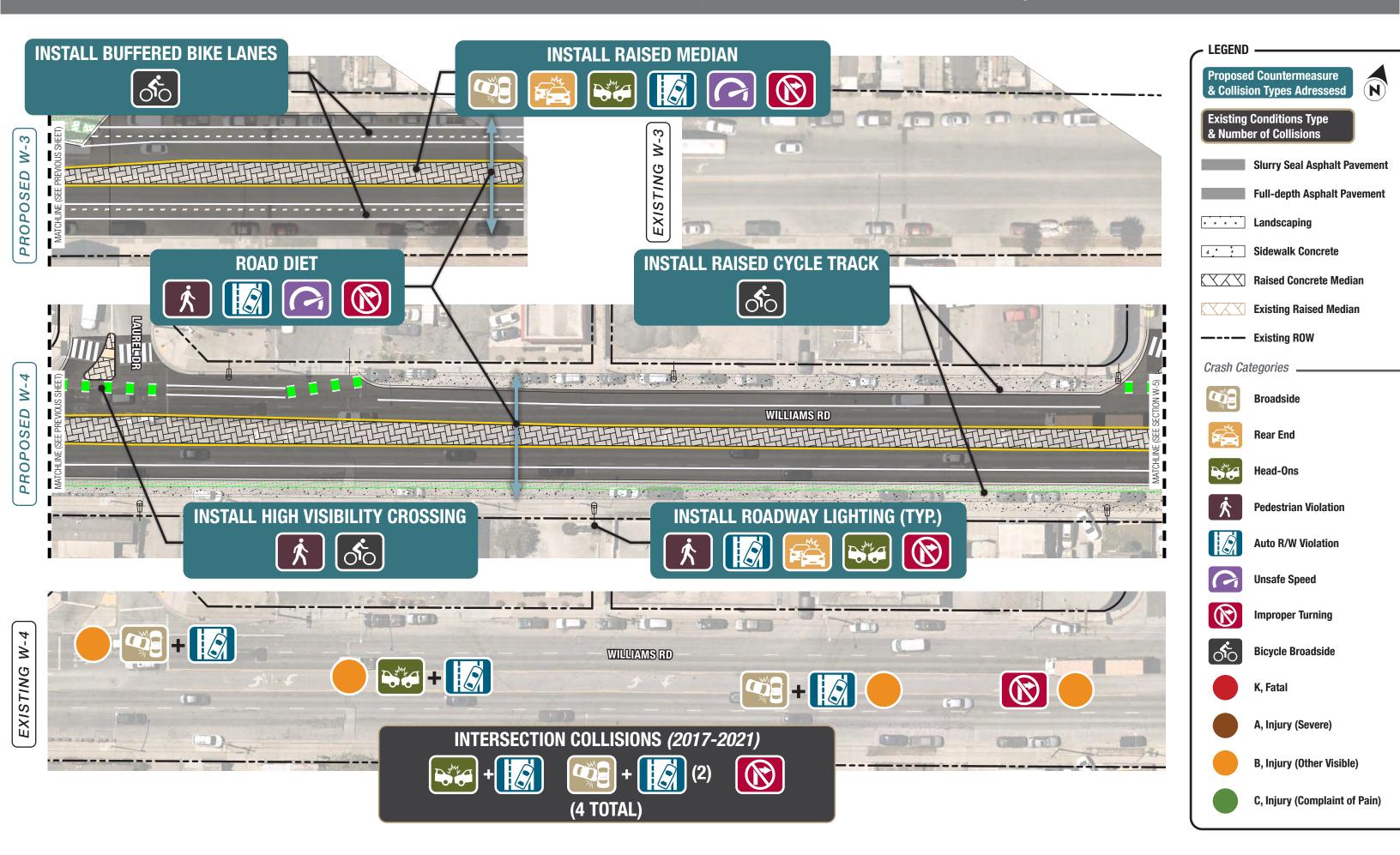
**Improper Turning** 

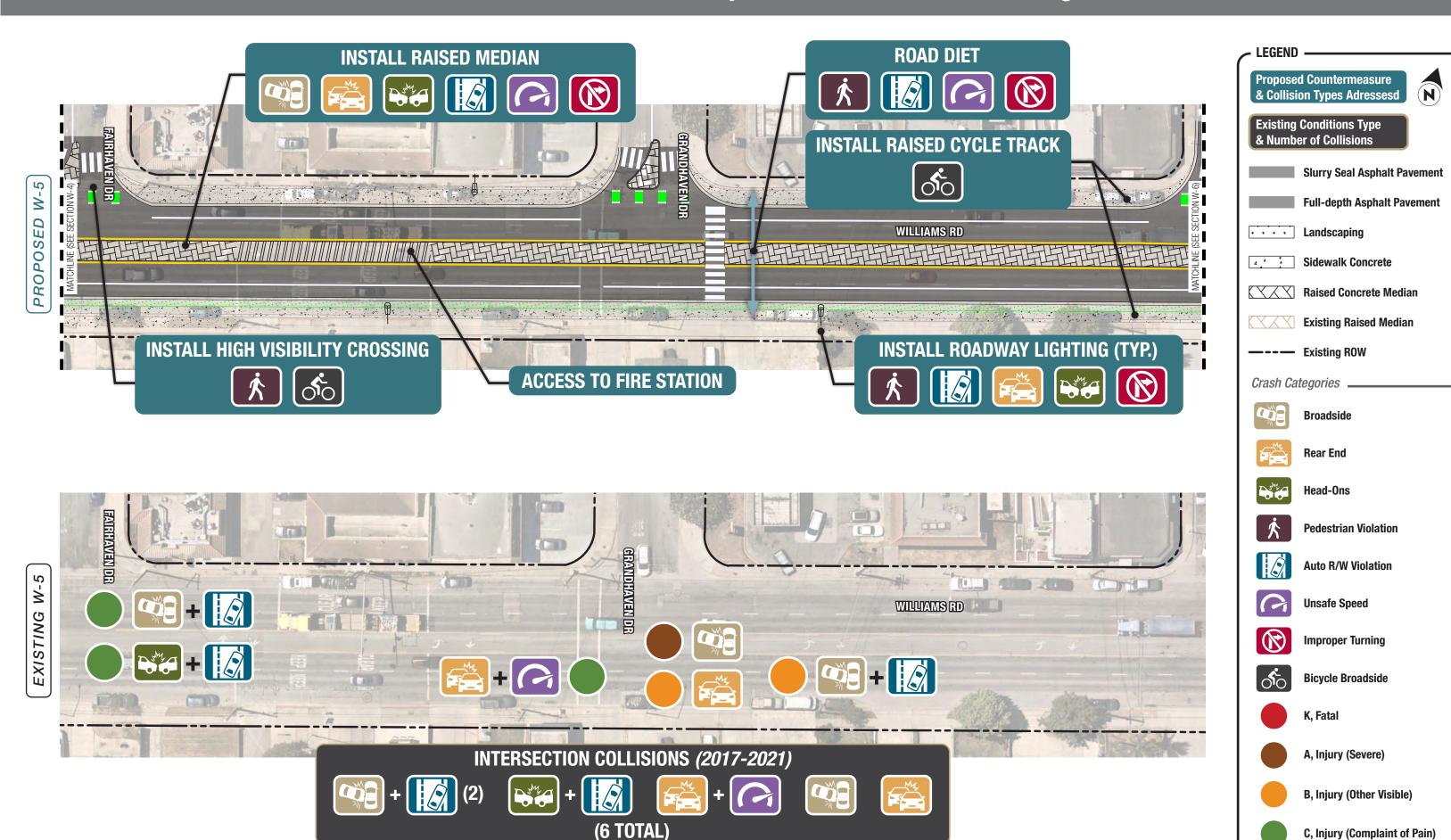
**Bicycle Broadside** 

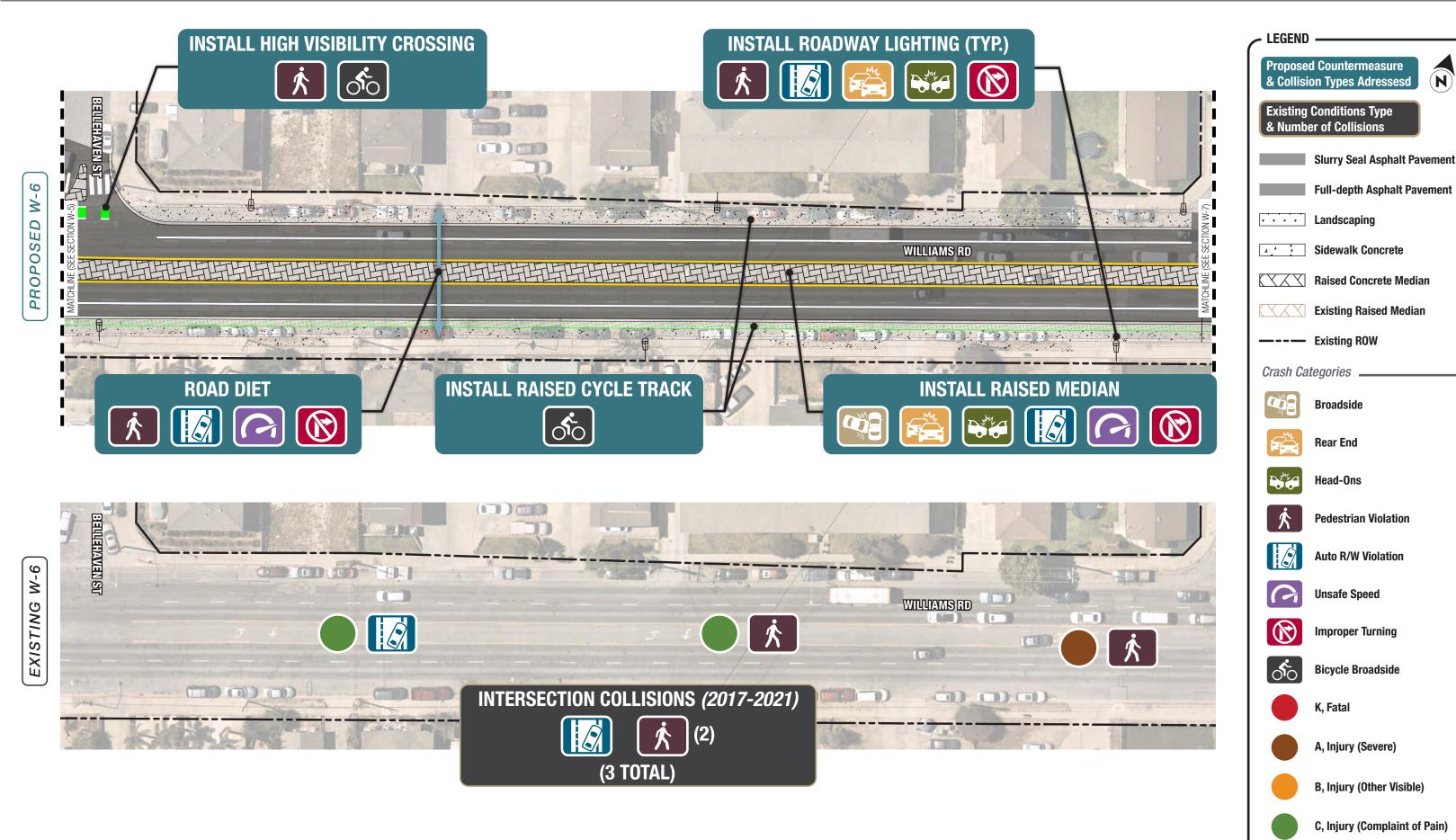
K, Fatal

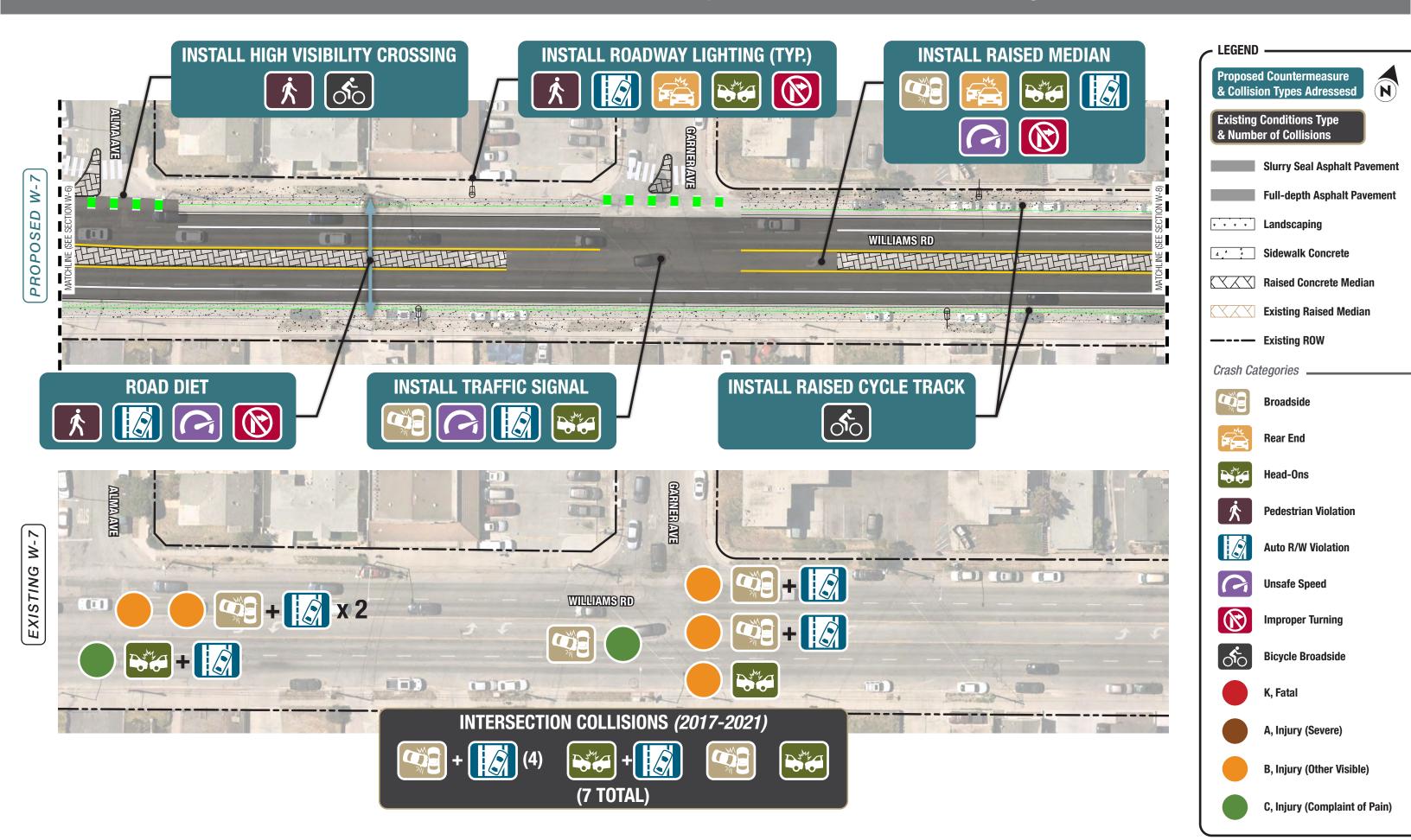
A, Injury (Severe)

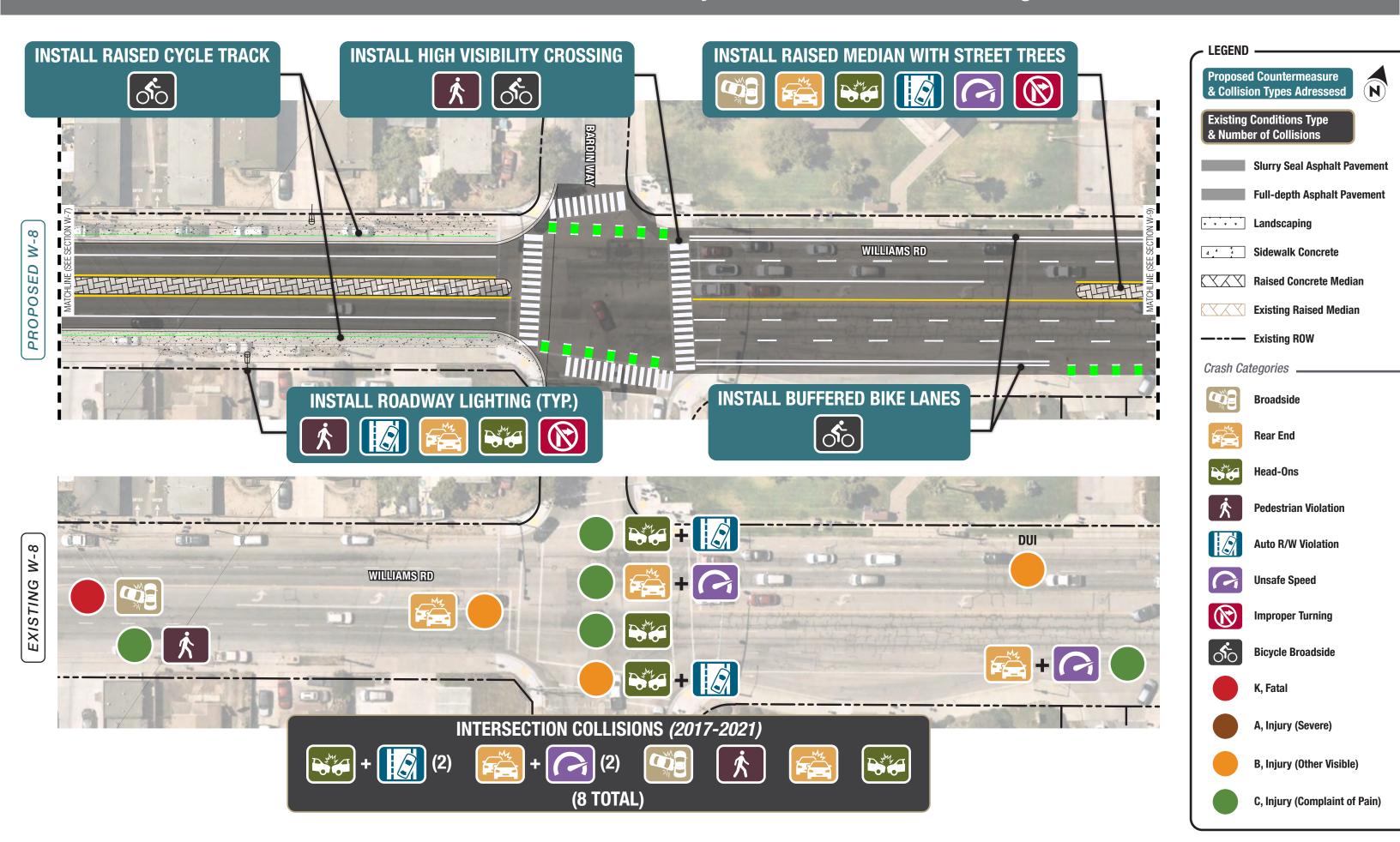
B, Injury (Other Visible)

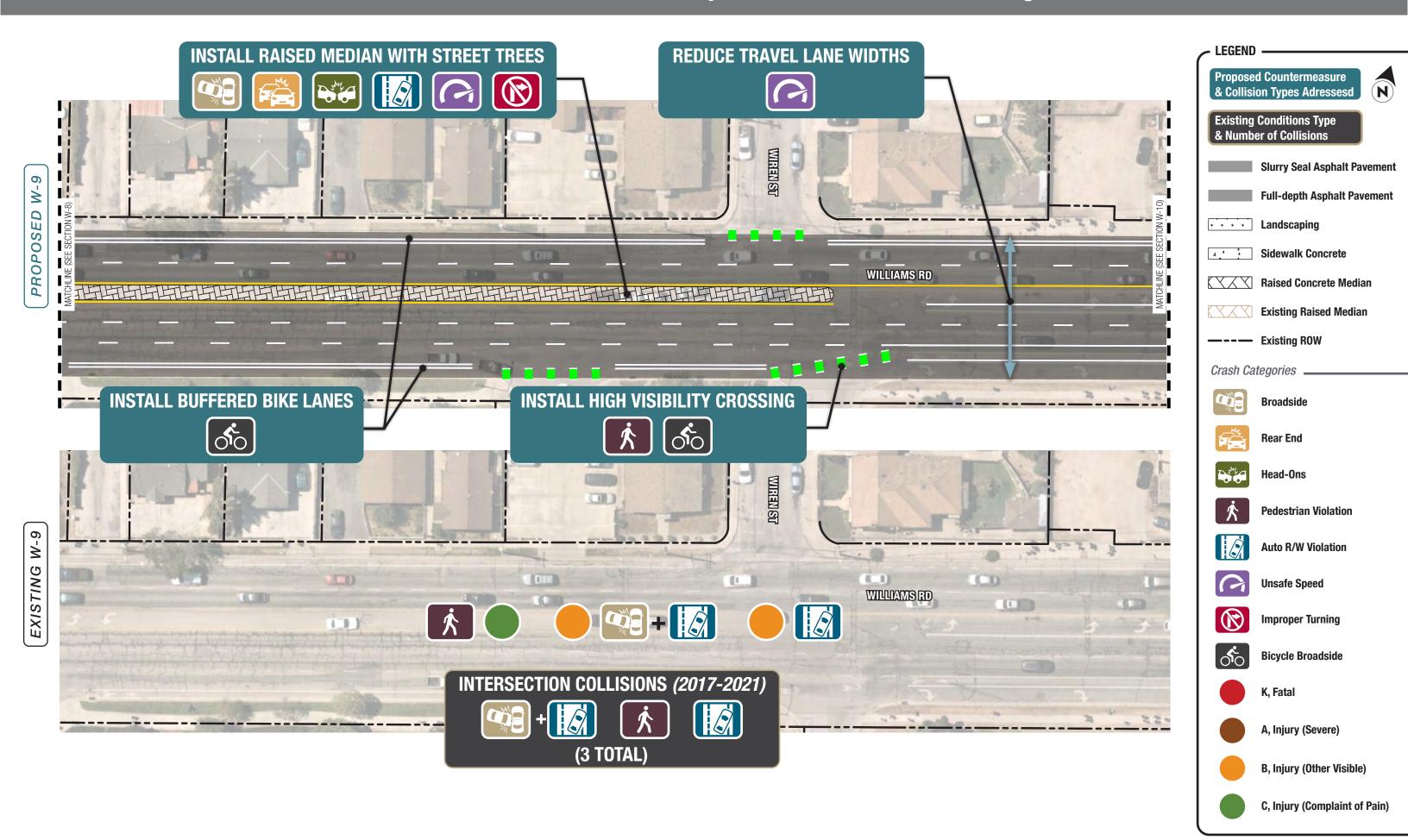


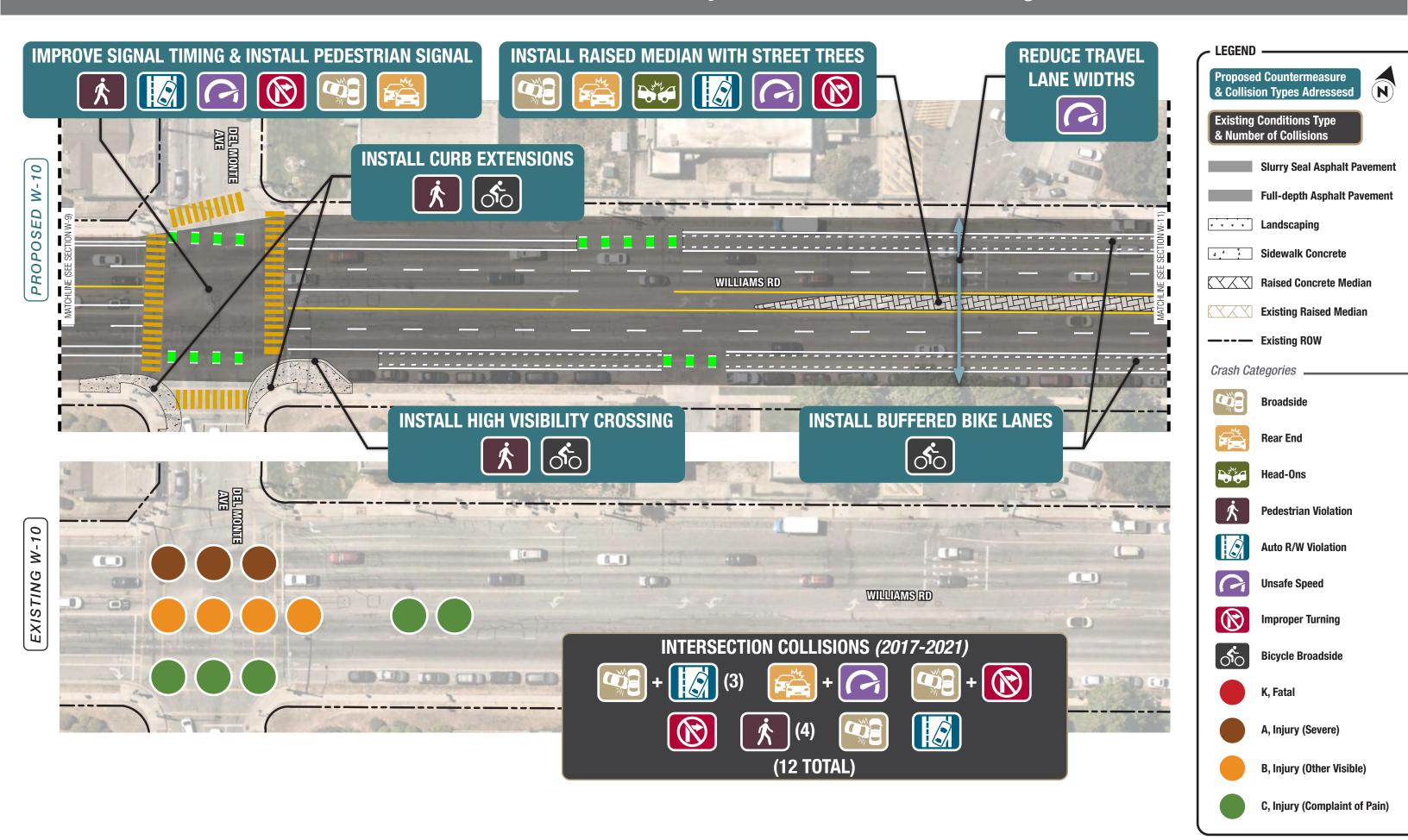


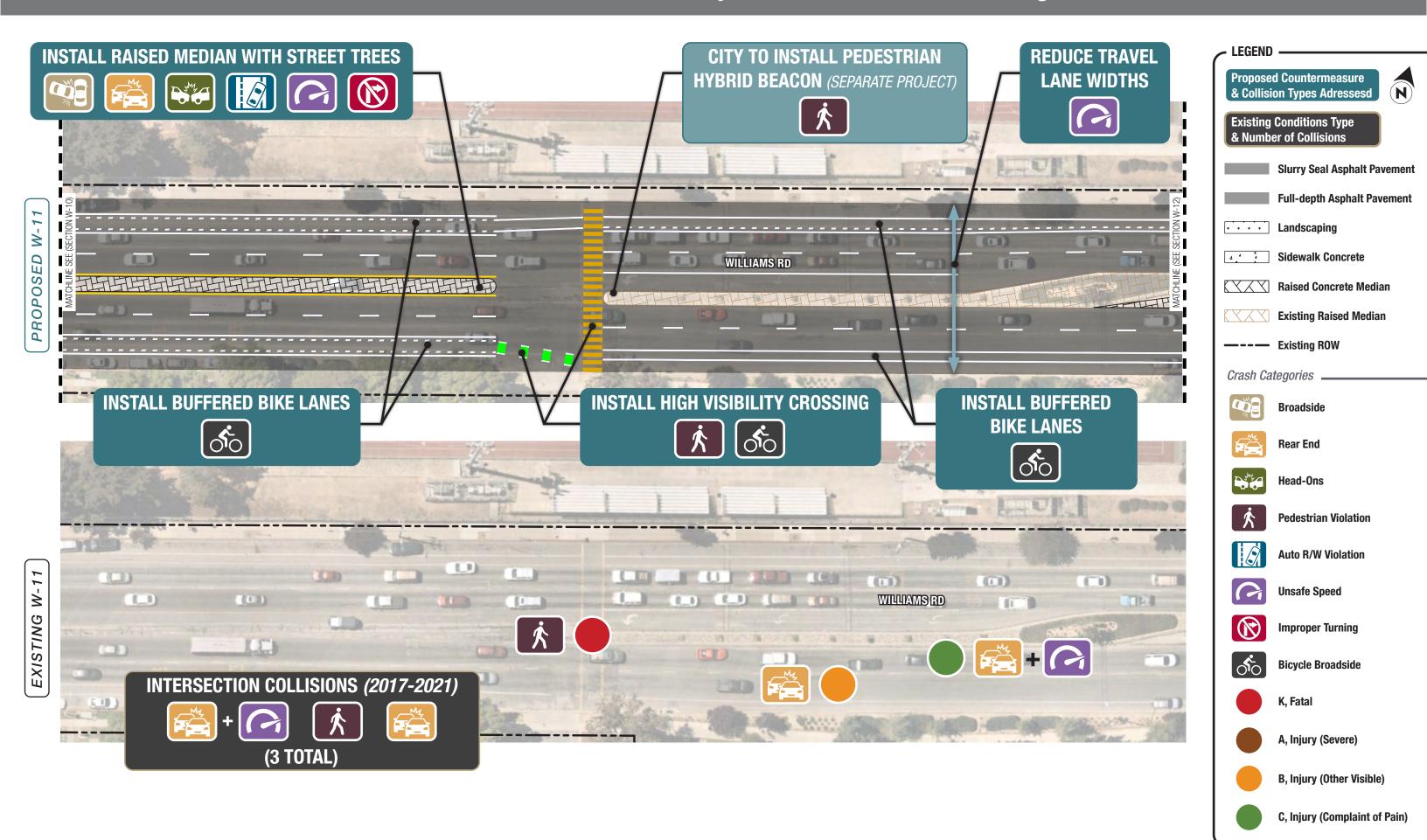


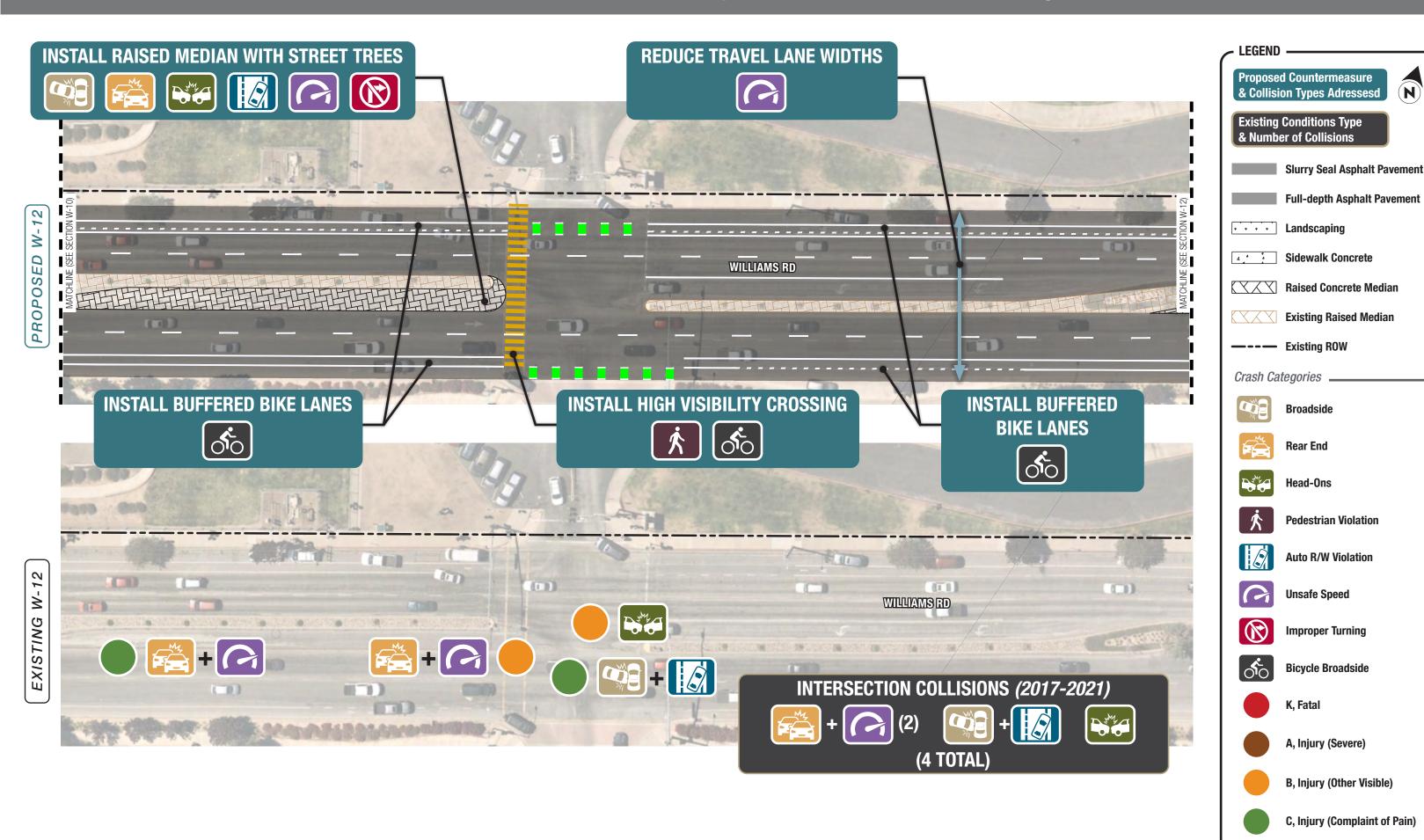


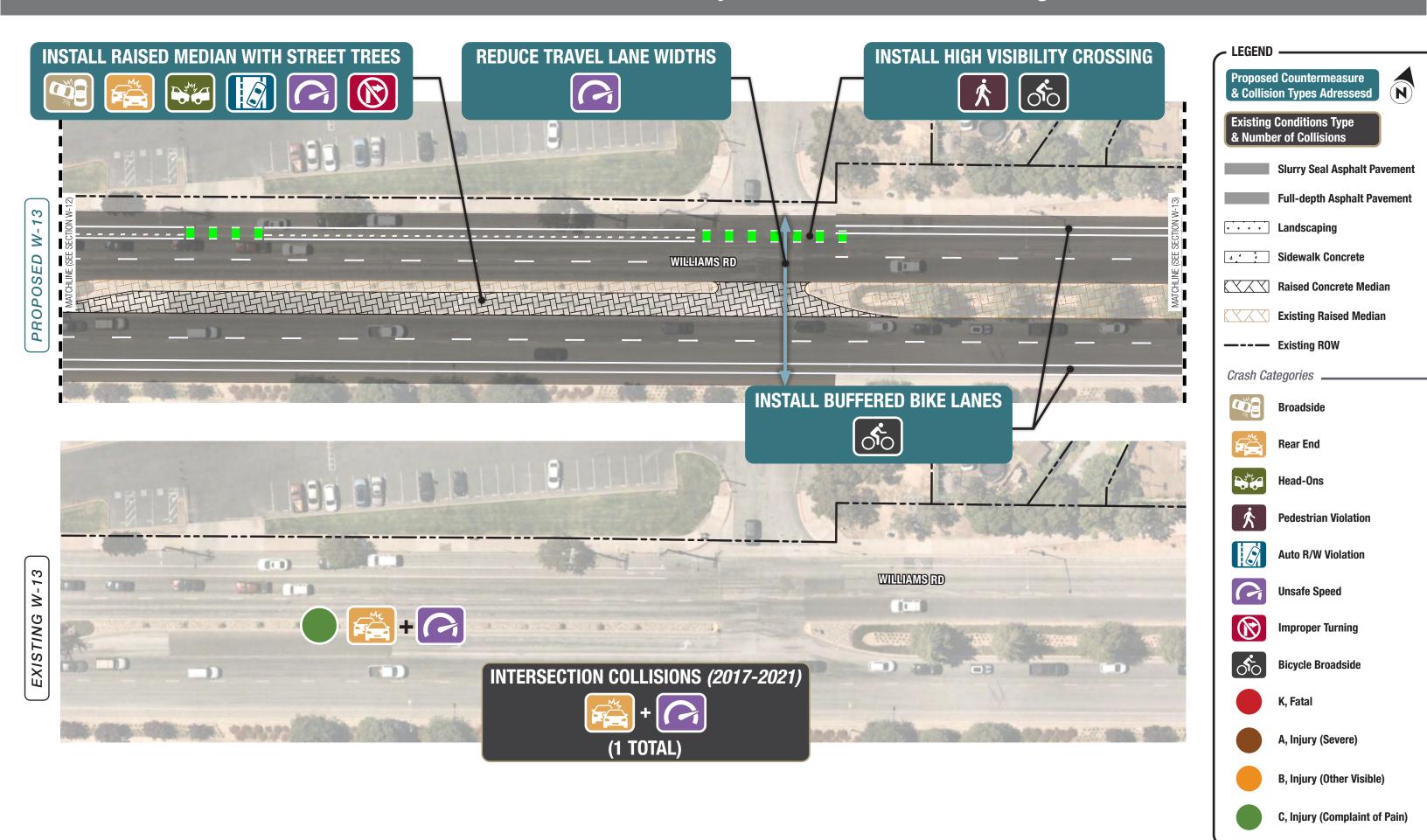


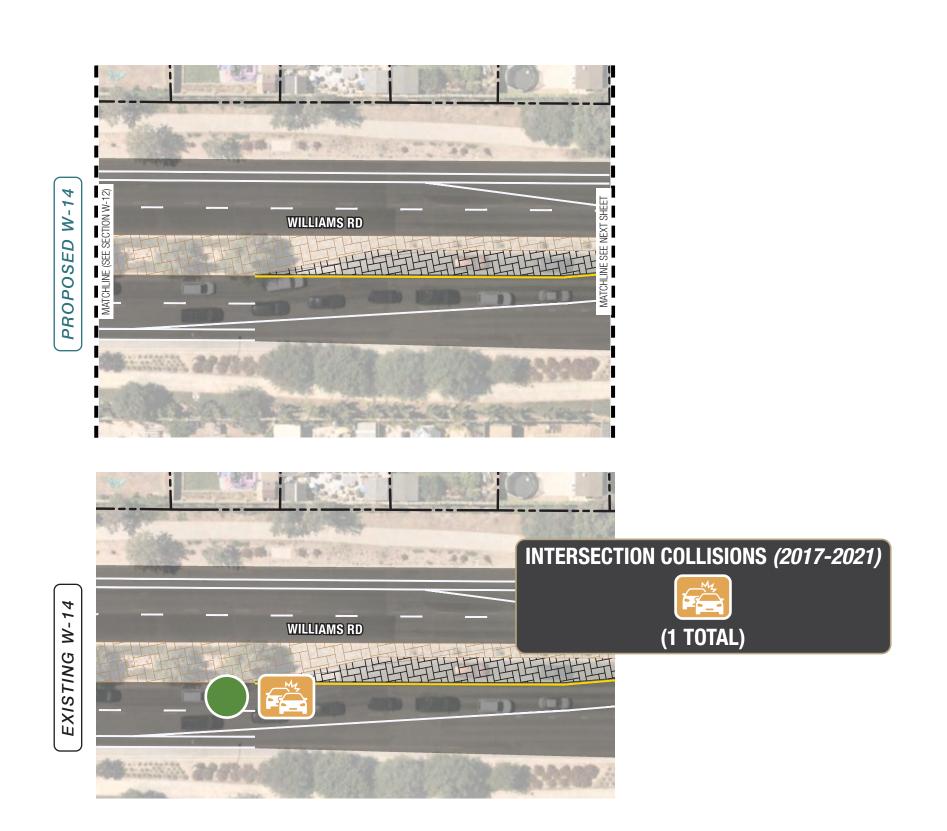












**LEGEND Proposed Countermeasure** & Collision Types Adressesd

N

**Existing Conditions Type** & Number of Collisions

**Slurry Seal Asphalt Pavement** 

**Full-depth Asphalt Pavement** 

Landscaping

**Sidewalk Concrete** 

Raised Concrete Median

**Existing Raised Median** 

——— Existing ROW

Crash Categories

**Broadside** 





Head-Ons



**Pedestrian Violation** 



**Auto R/W Violation** 



**Unsafe Speed** 



**Improper Turning** 



**Bicycle Broadside** 



K, Fatal



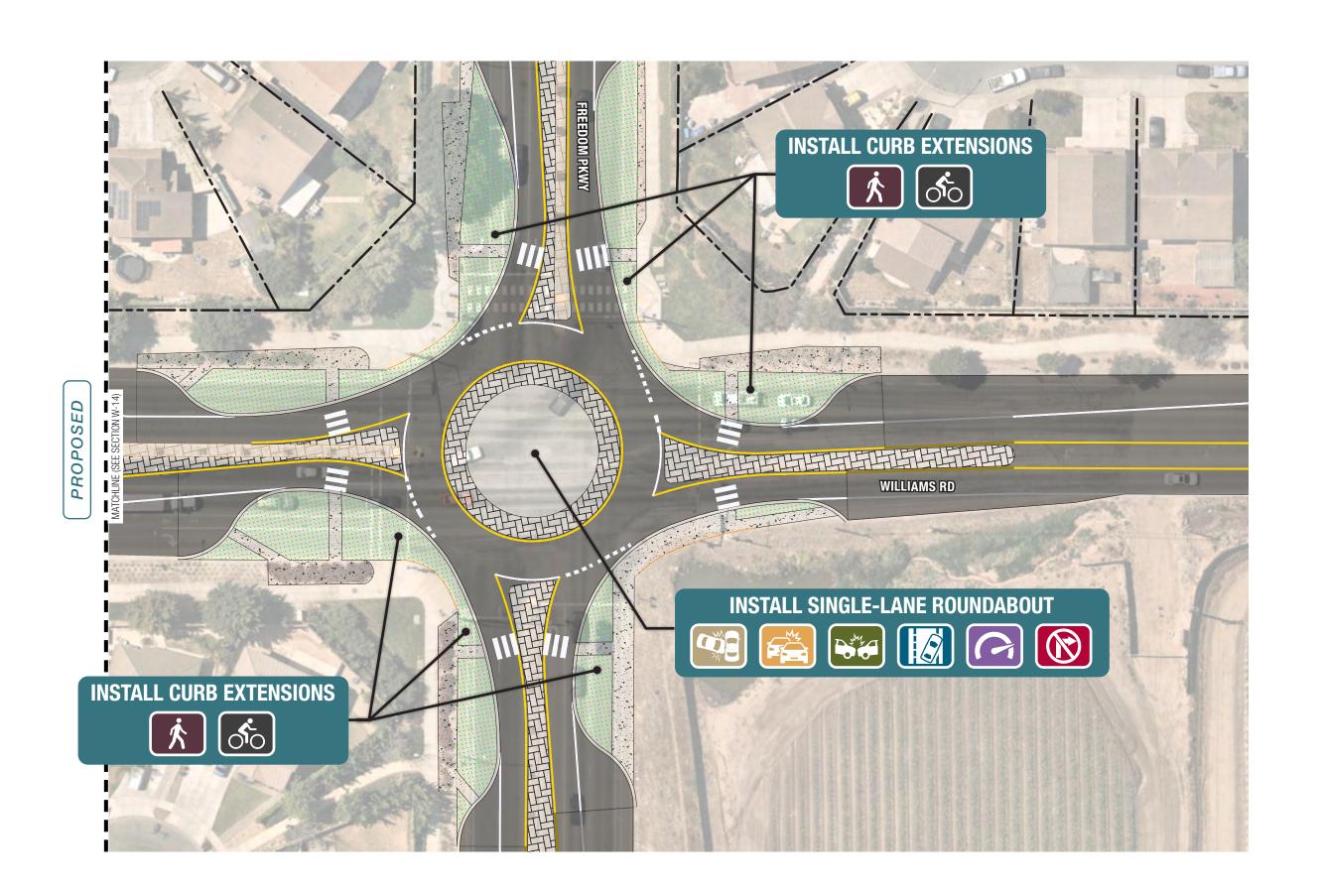
A, Injury (Severe)



B, Injury (Other Visible)

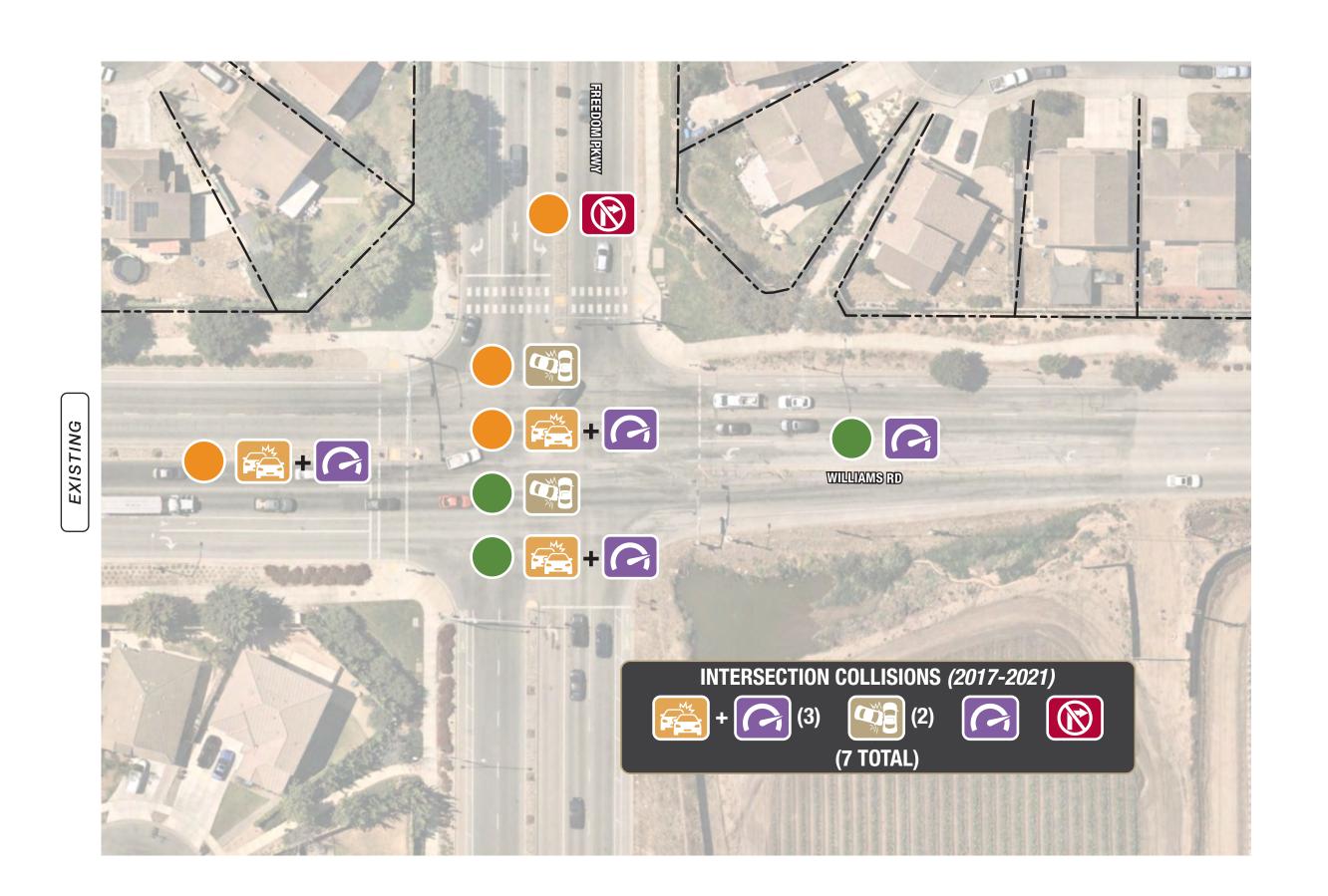


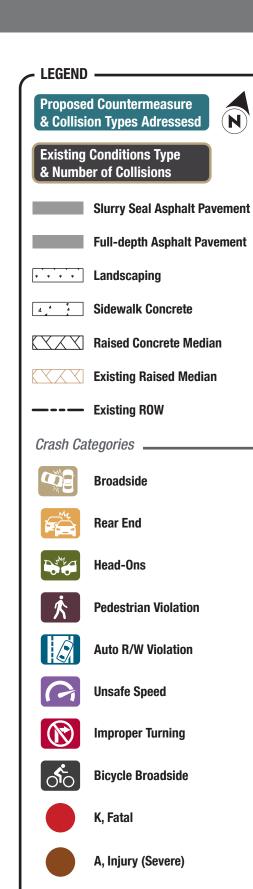
### Williams Road Safe Street Corridor Project - Freedom Parkway Roundabout (Proposed)



# LEGEND **Proposed Countermeasure** & Collision Types Adressesd **Existing Conditions Type** & Number of Collisions **Slurry Seal Asphalt Pavement Full-depth Asphalt Pavement** Landscaping **Sidewalk Concrete** Raised Concrete Median **Existing Raised Median** ——— Existing ROW Crash Categories **Broadside Rear End** Head-Ons **Pedestrian Violation Auto R/W Violation Unsafe Speed Improper Turning Bicycle Broadside** K, Fatal A, Injury (Severe) B, Injury (Other Visible)

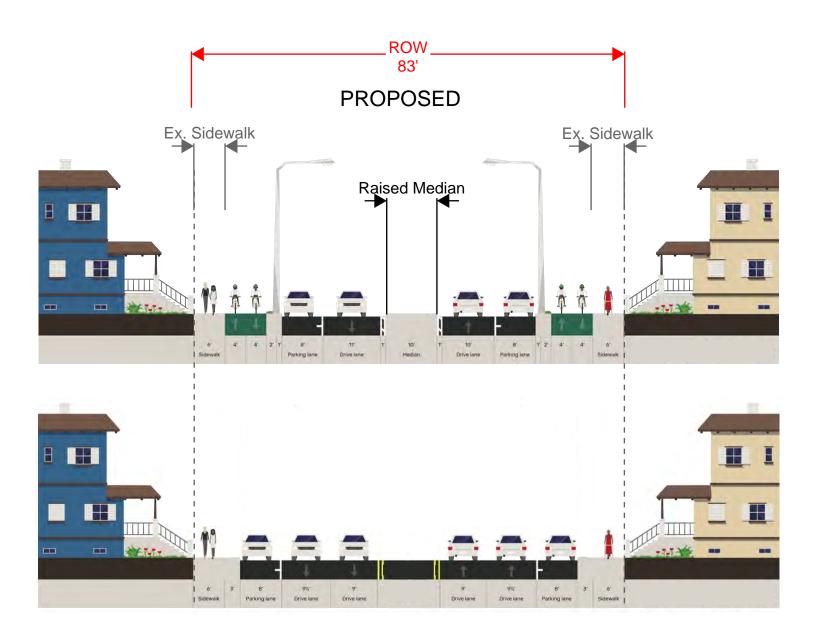
### Williams Road Safe Street Corridor Project - Freedom Parkway Roundabout (Existing)



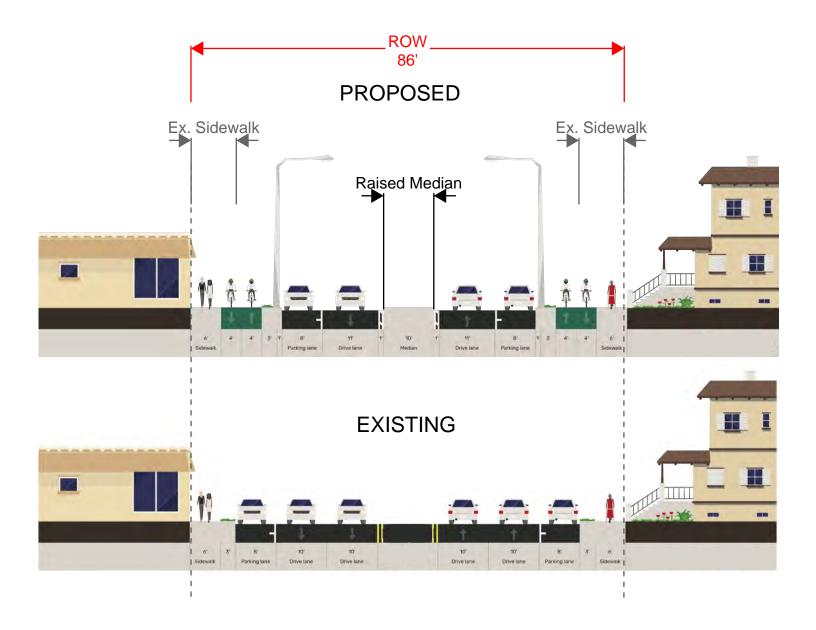


B, Injury (Other Visible)

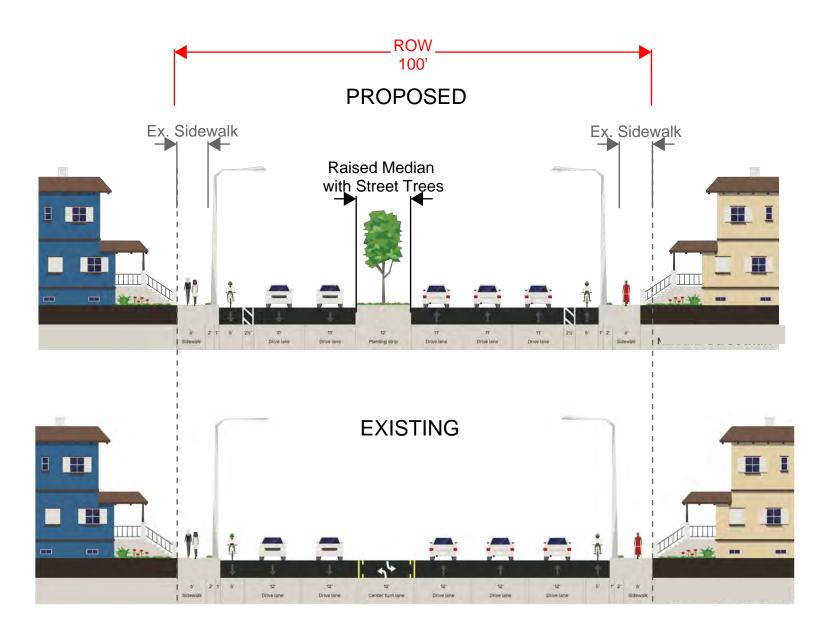
# WILLIAMS ROAD (ALISAL TO FAIRHAVEN) ROAD DIET TYPICAL SECTION



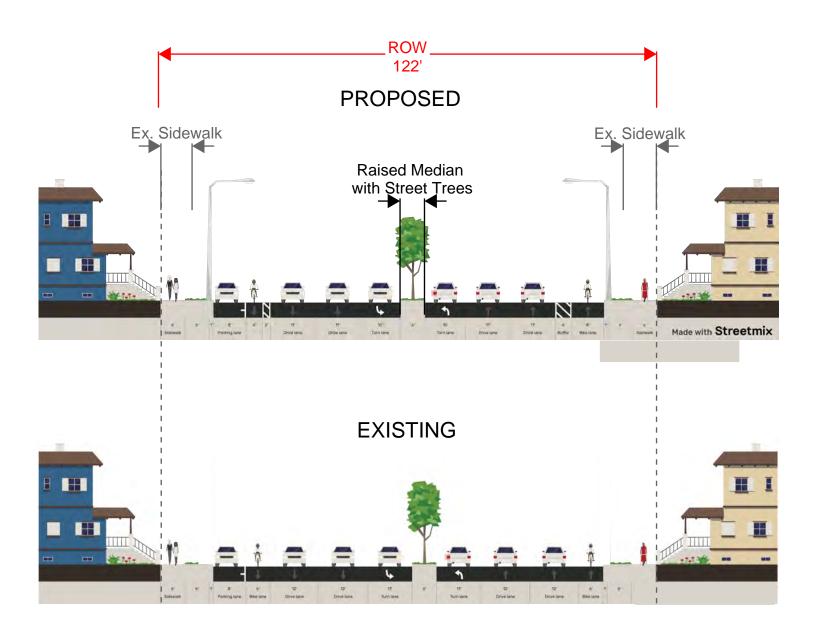
#### WILLIAMS ROAD (FAIRHAVEN TO BARDIN) ROAD DIET TYPICAL SECTION

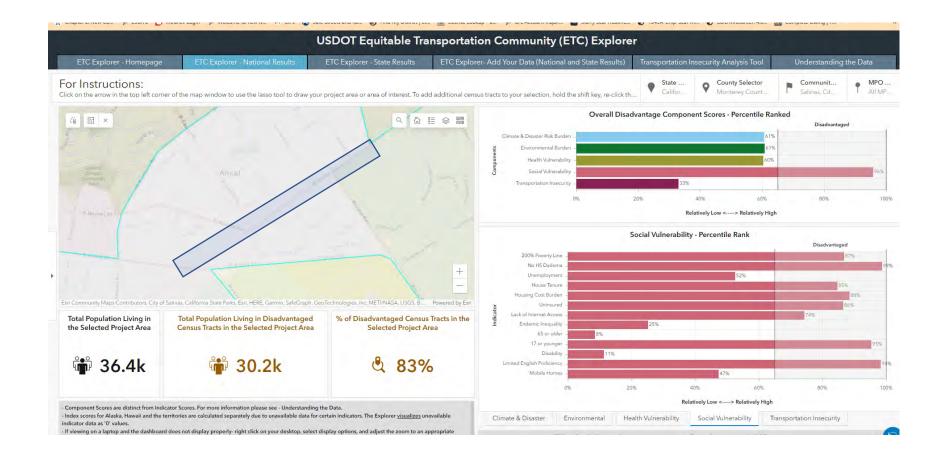


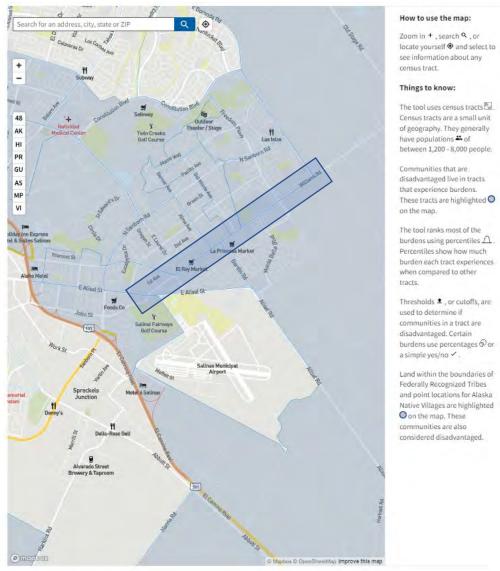
# WILLIAMS ROAD (BARDIN TO DEL MONTE) SAFETY IMPROVEMENTS TYPICAL SECTION

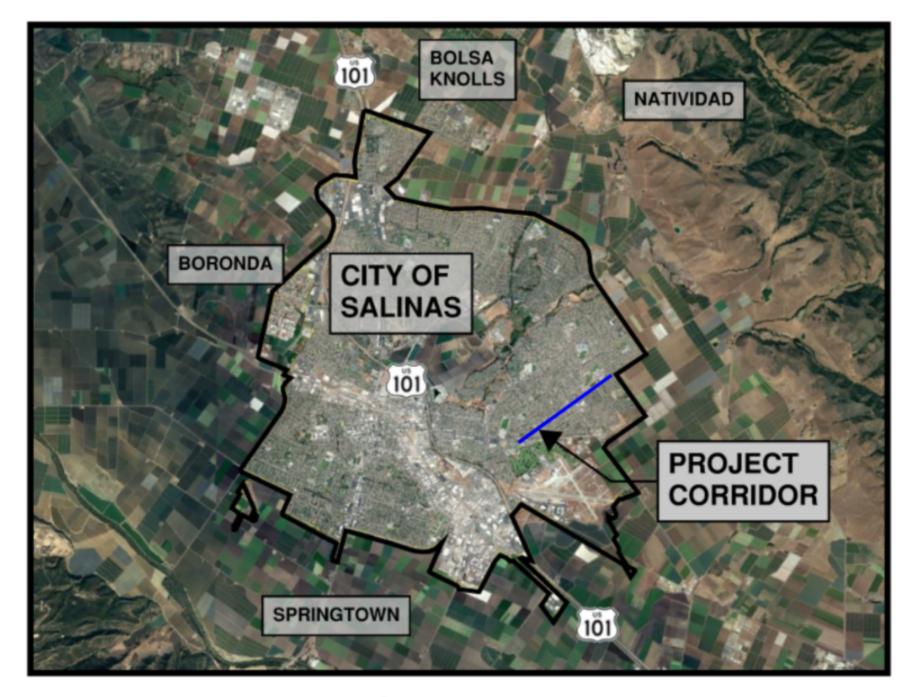


# WILLIAMS ROAD (DEL MONTE TO FREEDOM) SAFETY IMPROVEMENTS TYPICAL SECTION

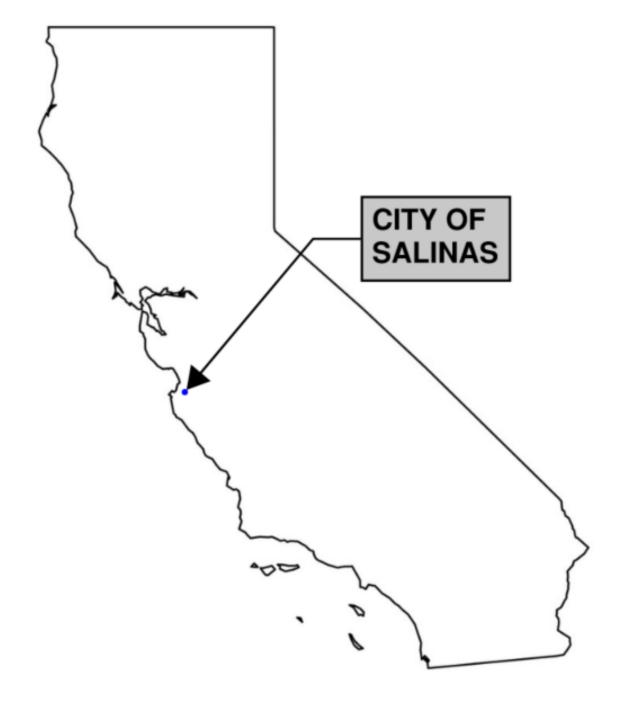








VICINITY MAP



STATE MAP