



SAFETY ACTION PLAN

May 2026



A MESSAGE FROM MAYOR GABRIEL REYES

The streets in Adelanto are more than places to travel. They connect families to schools, workers to jobs, neighbors to one another, and residents to the opportunities that make Adelanto home. Because of this, everyone who lives, works, visits, and travels through Adelanto deserves to feel safe getting where they need to go, whether they walk, bike, drive, roll, or ride transit.

This Safe Streets and Roads for All (SS4A) Safety Action Plan reflects Adelanto's commitment to a future where serious crashes are not accepted as inevitable. It builds on the work already underway, recognizes the unique needs of our community, and embraces the Safe System Approach to help us design streets that protect people, even when mistakes happen. With support from the federal SS4A program, the City has identified where the highest risks exist, prioritized strategies and projects that can make the greatest impact, and developed a roadmap to guide safety investments that will save lives.

Improving roadway safety is not just a transportation goal, it is also a community goal. Safer streets mean safer routes to school for our children, safer travel for working families, and safer neighborhoods for everyone. This plan helps us focus our efforts, strengthen partnerships, and invest wisely in projects that advance equity, mobility, and quality of life.

I am grateful to the residents, community partners, City staff, regional agencies, and transportation safety professionals who contributed their time, experience, and insight to this effort. Together, we are taking meaningful steps toward a safer Adelanto.

Gabriel Reyes



**Mayor,
City of Adelanto**



OUR COMMITMENT

We pledge to incorporate the Vision Zero resolution and this Safe Streets and Roads for All Safety (SS4A) Action Plan guiding principles, strategies, and priorities into everything our departments do in order to reduce traffic deaths and serious injuries **on City-managed roadways** by **50% by 2035**, with an eventual goal of zero.*

City of Adelanto City Manager

City of Adelanto Engineering Department

City of Adelanto Planning Division

* Vision Zero Resolution adopted by City Council on May 13, 2026 (Resolution No. 26-09).



ONE TRAFFIC DEATH IS TOO MANY

Every traffic-related death or life-changing injury is one too many. These incidents are more than numbers; the unimaginable losses to loved ones and leave lasting impacts on our community.

This Safety Action Plan is dedicated to the families, friends, and neighbors in Adelanto who have been affected by traffic fatalities or serious injuries. It reflects our shared commitment to preventing these tragedies and ensuring that every trip on our streets begins and ends safely.



THANK YOU!

We would like to thank the community members who participated in events, completed surveys, and shared their vision for safer streets in Adelanto. Your input directly shaped the recommendations in this plan.

We also extend our appreciation to the City of Adelanto's leadership, staff, and partners for their guidance and support throughout this effort.

Adelanto Elementary School District
Adelanto High School
California State Assembly (39th District)—Assemblymember Juan Carrillo

CITY OF ADELANTO

El Sol
Greater High Desert Chamber of Commerce
High Desert Hispanic Chamber of Commerce
San Bernardino County Department of Public Health
San Bernardino County Fire Protection District
San Bernardino County Sheriff's Department

San Bernardino County Transportation Authority (SBCTA)
California State Senate (23rd District)—Senator Suzette Martinez

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Chapter 1

WHY A SAFETY ACTION PLAN?



WHAT IS A SAFETY ACTION PLAN?

Every person in Adelanto deserves to travel safely, whether walking, biking, taking transit, using a wheelchair, or driving. Yet too many lives are lost or forever changed on our streets each year due to preventable traffic collisions.

Safe Streets and Roads for All (SS4A) is a federal grant program that supports communities in developing comprehensive and data-driven strategies to prevent roadway fatalities and serious injuries. Adelanto's SS4A-funded Safety Action Plan serves as the City's roadmap for achieving this goal. This plan identifies where crashes are occurring, who is most affected, and which strategies and investments can have the greatest impact on saving lives. This plan reflects Adelanto's commitment to building a transportation system that prevents tragedies before they occur.

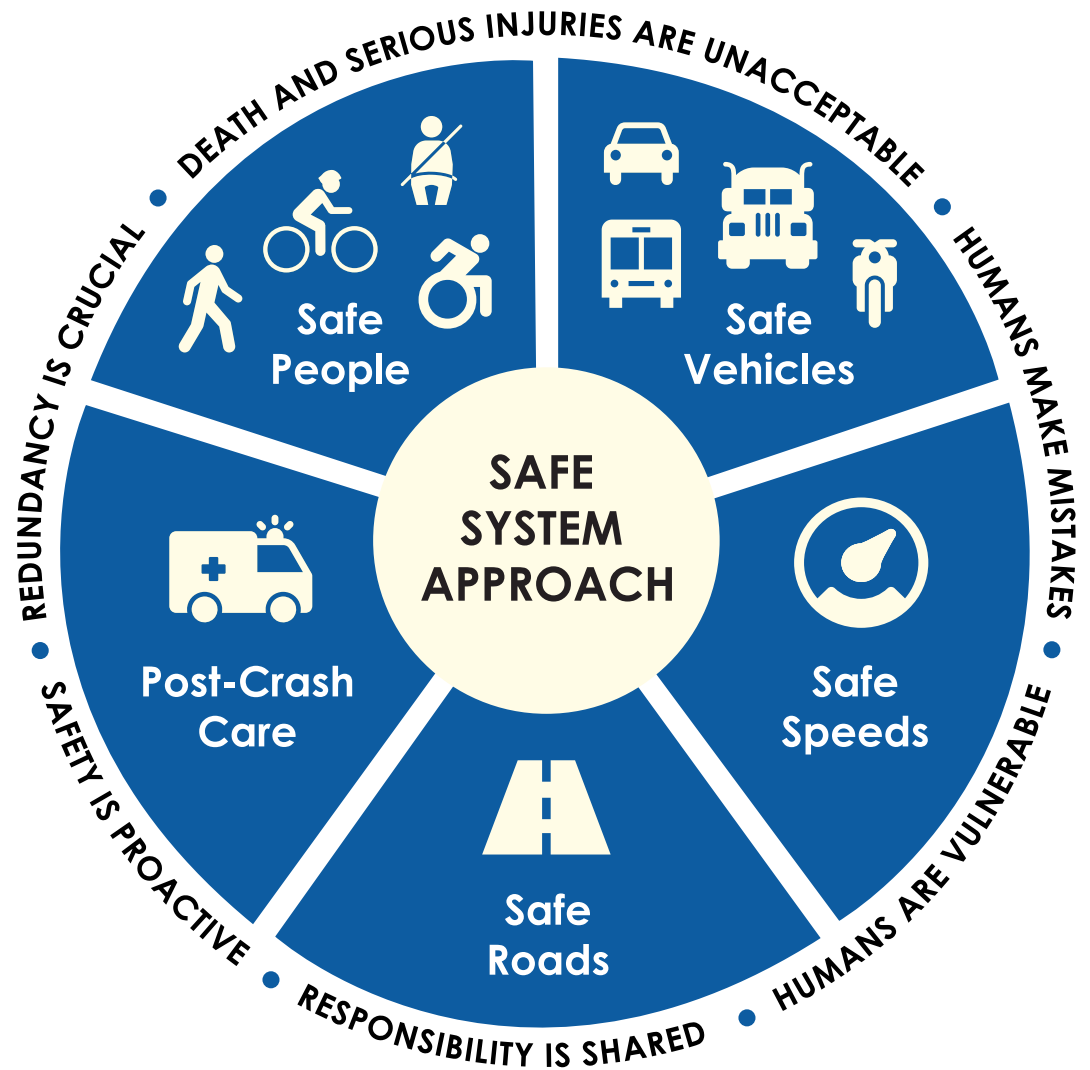
At the core of this Safety Action Plan is Vision Zero, an overarching goal to reduce traffic deaths and serious injuries **on City-managed roadways** by **50% by 2035**, with an eventual goal of zero, while increasing safe, healthy, and equitable mobility for all. This plan recognizes that traffic crashes are preventable and that no loss of life on the transportation system is acceptable.

Just as cities across California and the nation have embraced roadway safety, Adelanto is joining a growing movement that treats safety as a shared responsibility and a moral imperative.



WHY THIS SAFETY ACTION PLAN IS DIFFERENT

This Safety Action Plan is guided by the **Safe System Approach**, a roadway safety strategy that differs from traditional planning and design by focusing on both human mistakes and human vulnerability. Rather than relying solely on individual behavior, the Safe System Approach designs a transportation network with multiple layers of protection to reduce risk and protect all users. Developed by the Federal Highway Administration (FHWA), this framework focuses both on preventing crashes from occurring and on reducing the severity of harm when crashes do happen. It is grounded in the belief that traffic fatalities and serious injuries are not inevitable, but preventable. The Safe System Approach acknowledges that the choices we make about how we plan our community, design our streets, and travel through Adelanto have a direct impact on creating a safer transportation network for everyone.



Source: [FHWA Highway Safety Programs](#)

THE SAFE SYSTEM APPROACH

The Safe System Approach is based on one overarching objective and five key elements:



Safe Planning and Culture

The overarching objective Safe Planning and Culture serves as the foundation for all safety elements. It reflects a shared commitment among public agencies, partners, and the community to prioritize roadway safety. Safe Planning and Culture shapes policies, funding decisions, community engagement, and interagency coordination, ensuring that the five key elements are implemented consistently and equitably across Adelanto.



Safe Road Users

People living, working, or traveling in Adelanto should be safe getting around regardless of whether they are walking, rolling, biking, taking transit, or driving.



Safe Roads

Human error is inevitable. Roads should be designed so that human error or other circumstances leading to collisions do not result in death or severe injury.



Safe Vehicles

Promote vehicle designs and regulation that minimize collisions, reduce severity, and incorporate safety measures using the latest technology and incorporating cutting edge research findings.



Safe Speeds

Slower travel speeds lower the force of impact in a crash, especially for people walking or biking, which helps prevent serious injuries and saves lives.



Post-Crash Care

When crashes happen, quick emergency response and using data to make systemwide improvements can help save lives.

WHY ADELANTO NEEDS A SAFETY ACTION PLAN

Vision Zero is a bold goal for Adelanto, and this plan is in many ways the formation of an organized, methodical, and collective call to action. The statistics around crashes in Adelanto highlight the importance of this work and the need for a paradigm shift in Adelanto and the High Desert region.

Between January 2017 and June 2024, **23 people were killed** on Adelanto's roadways, and **599 people were injured**.¹

- Approximately **18%** of all injury collisions in Adelanto result in a fatality or serious injury (KSI crashes).
- Of all KSI crashes, **29% result in fatality, and 71% result in serious injury.**
- **19%** of all KSI crashes involve people **walking**.
- **3%** of all KSI crashes involve people **biking**.
- **11%** of all KSI crashes involve **motorcycles**.
- **46%** of all crashes occur in **limited lighting conditions**.



Top Safety Issues According to Adelanto Residents:

- Poorly Maintained Roads
- Poorly Maintained or Lack of Sidewalks
- Poorly Maintained or Lack of Dedicated Bike Facilities
- High Vehicle Speeds
- Drivers Not Following Traffic Laws

¹ Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley, 2026, <https://tims.berkeley.edu/about.php#credits>.

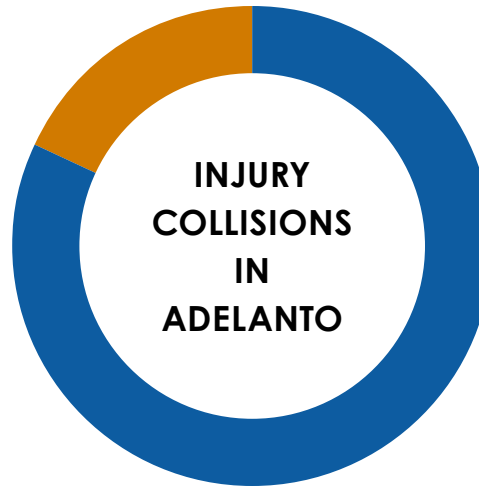
Adelanto Crash Summary (2017-2024)

TERMINOLOGY

KSI: Crashes resulting in people
Killed or Seriously Injured

82%

Non-severe
injury crashes

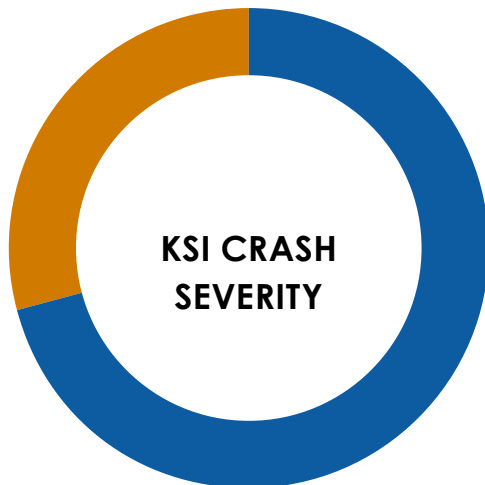


18%

Killed or serious injury
(KSI) crashes

29%

fatality



71%

serious injury

KSI CRASHES INVOLVING



46%

limited lighting
conditions



19%

walking



11%

motorcycles

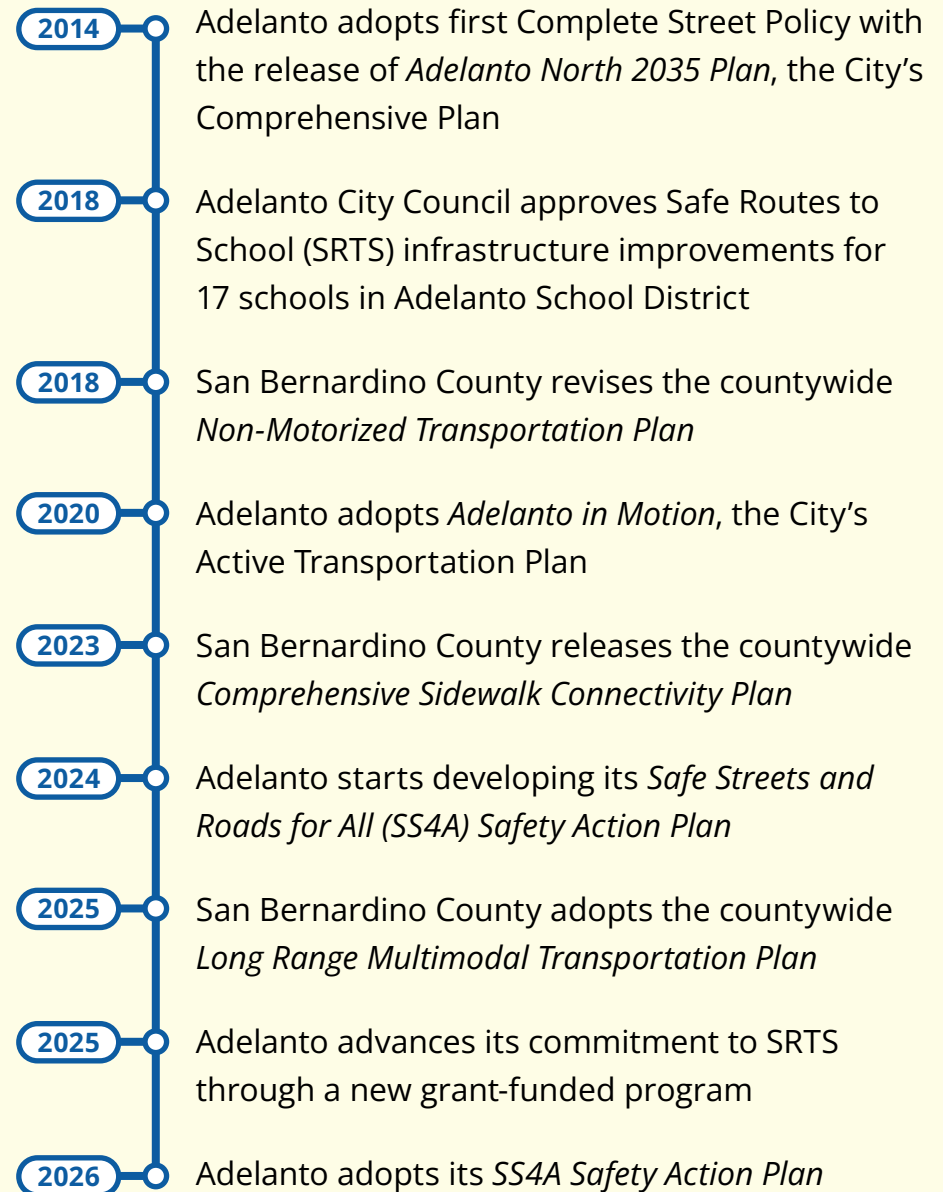


3%

biking

HOW WE BUILD MOMENTUM

Making progress on road safety requires a culture of safety among people living, working, and traveling in Adelanto. The Safety Action Plan builds on the City's previous initiatives, as well as regional efforts, that have already begun moving Adelanto toward a safer transportation system. These earlier actions, highlighted in the timeline graphic to the right, have helped establish the foundation for road safety in Adelanto.



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Chapter 2

SAFETY IN ADELANTO TODAY



WHAT THE COLLISION DATA TELLS US

This Safety Action Plan is informed by a data-driven process. To support the recommendations in this plan, we analyzed seven and half years of the most recently available collision data for Adelanto (January 2017–June 2024) to identify patterns in collision severity, types of collisions, and where they occur across the city.²

How We Evaluated the Data

What does the data tell us overall, such as the total number of people killed or seriously injured. What are the collision trends year-over-year?

Who are represented in the collision data? Do trends vary by mode or based on demographics?

How are collisions occurring? Do we know which factors are contributing to collisions, such as drivers traveling at unsafe speed or failing to observe traffic lights?

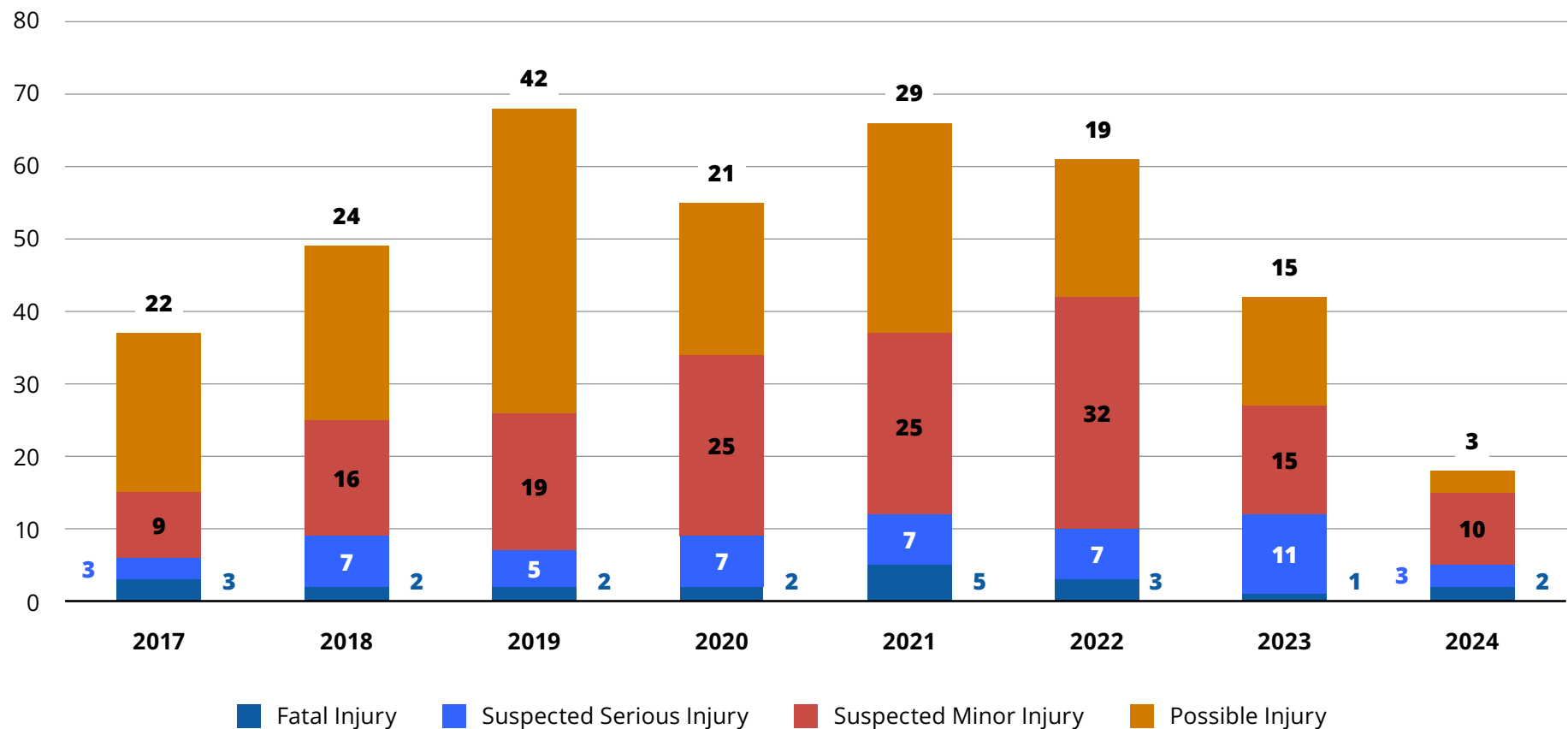
Where are collisions occurring? Which locations in the city experience the greatest number of severe collisions?

² Collision data were collected from the Transportation Injury Mapping System (TIMS) – a statewide database of traffic records. In March 2025, when the TIMS dataset was assessed, the 2023 and 2024 dataset was identified as provisional, meaning some collisions may not yet have been reported. Although the data are not final, this dataset was included in this analysis to reflect the most recent collision trends in Adelanto.

ADELANTO COLLISION TRENDS AND FACTORS

Between January 2017 and June 2024, 396 collisions were reported, averaging 53 per year ([Figure 1](#)). Approximately 18% of collisions resulted in death or serious injury.

Figure 1. Collision Severity by Year (2024 includes only the first half of the year)

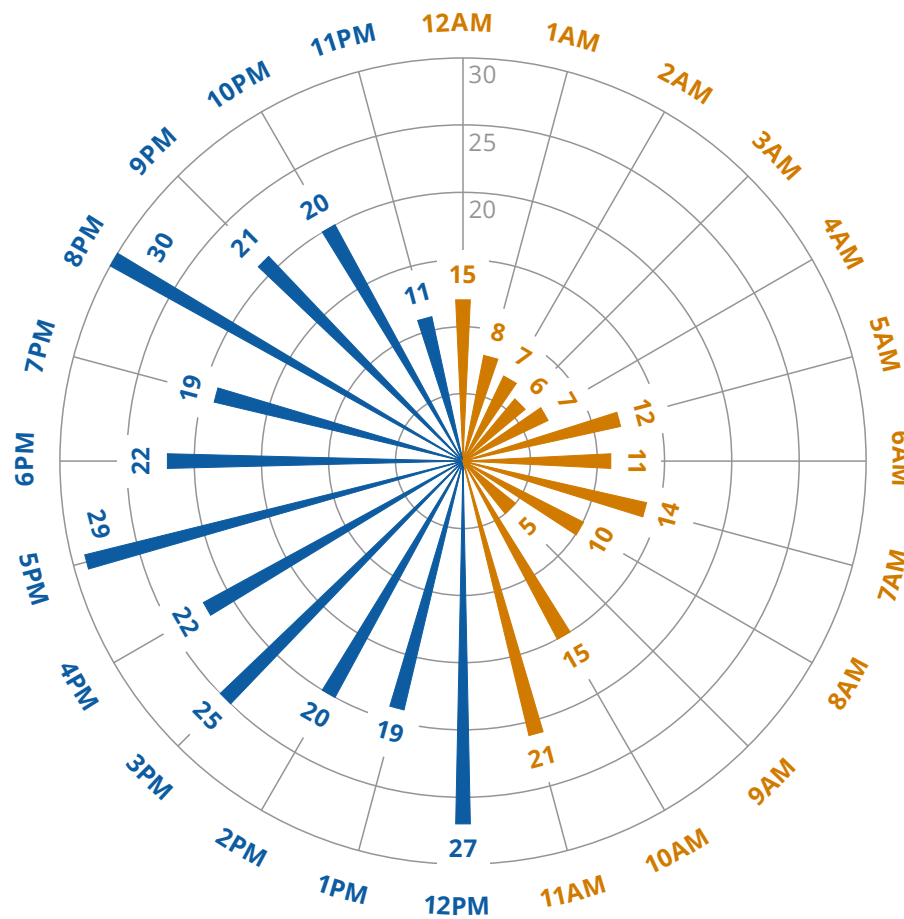


Top Collision Trends

Of all collisions, **about 53% occurred at intersections**. Out of intersection collisions, **43% occurred at intersections that included a highway or arterial roadway, and 32% occurred at an intersection along Highway 395**, the main roadway transversing the city.

Collisions occurred most frequently during the afternoon and evening hours. A disproportionately high share of collisions also occurred during overnight periods, when traffic volumes are relatively low, which may be associated with factors such as poor lighting conditions, driver distraction, or other contributing causes.

Figure 2. Collisions by Time of Day



Among collisions with a documented primary cause, the top four contributing factors account for more than two-thirds of all collisions. These include:



Unsafe Speed

Collisions occurred due to drivers traveling too fast for roadway conditions.



Automobile Right-of-Way

Collisions occurred due to drivers failing to yield to other vehicles, bikes, or pedestrians when they had the right-of-way.



Traffic Signals and Signs

Collisions occurred due to drivers disregarding signals and signs.³



Improper Turning

Collisions occurred due to drivers making unsafe turning movements.

³ The traffic signals and signs” category commonly refers to drivers disregarding signals or signs. While the Appendix D of the 2022 *San Bernardino County Local Roadway Safety Plan* interpreted this category as signals or signs that were inadequate or malfunctioning, a separate attribute in TIMS data says that most of these crashes occurred where signals were functioning.

Where is the Risk?

In addition to understanding overall collision trends, it is important to identify where the most severe collisions are occurring in Adelanto to target locations where safety improvements are most needed. This plan applies multiple complementary analyses to support that effort, including two risk analyses and development of a High Injury Network (HIN). Specifically, the two risk analyses were conducted to identify collision hot spots associated with limited lighting conditions and unsafe speeds, respectively. The results of these analyses informed proposed lighting improvements and speed calming strategies at those hot spot locations. The HIN was developed to highlight the share of streets where most fatal and severe injury collisions occur, helping prioritize locations for safety investments.

A summary of these analyses can be found on the following pages and additional details on these analyses are provided in [Appendix A: Safety Memorandum](#).

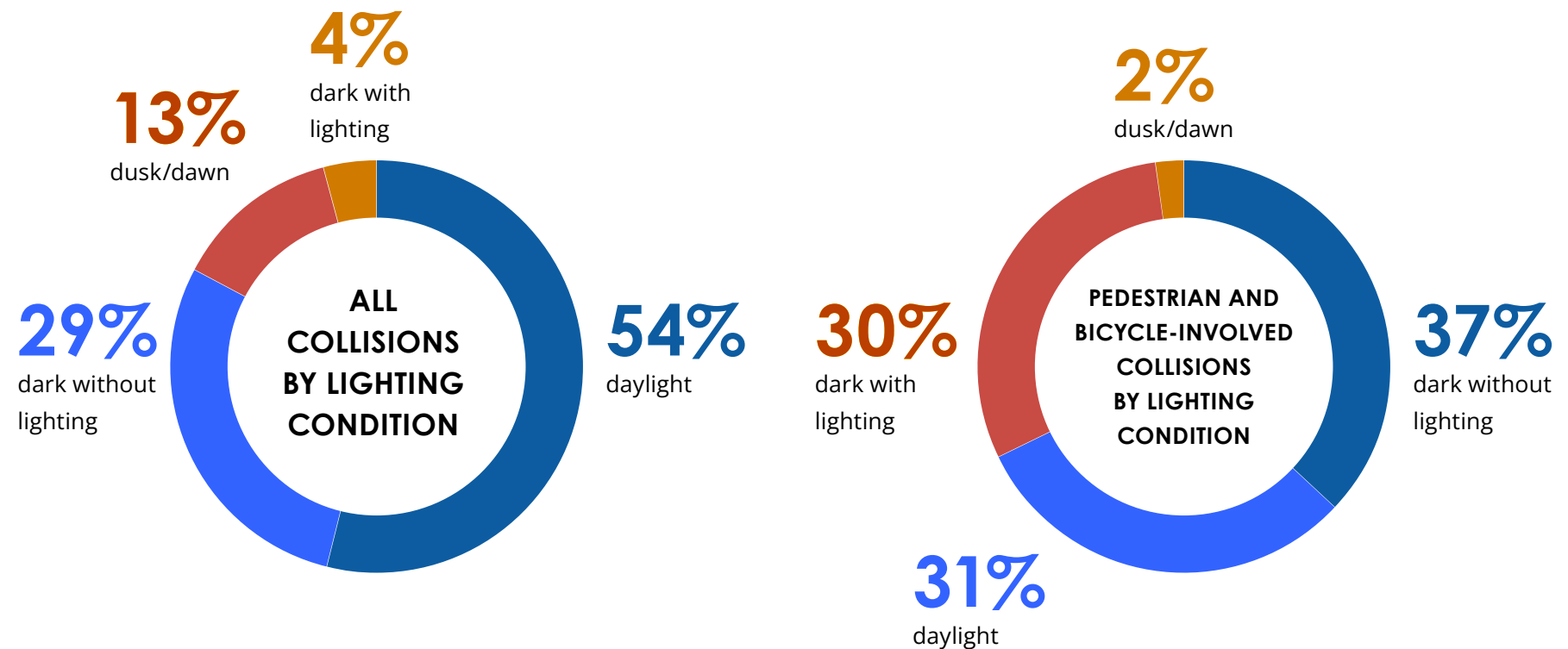
PRIMARY RISK FACTORS IN ADELANTO

- **Speeding** (~25% of crashes)
- **High-speed arterial design** (US 395, major corridors)
- **Limited pedestrian infrastructure** (sidewalk gaps, crossings)
- **Poor lighting** (high share of nighttime crashes)
- **Wide roadway geometry encouraging speed**

Lighting Analysis

In Adelanto, **approximately 46% of all collisions and 69% of pedestrian and bicycle collisions occur at night**, indicating lighting conditions are a significant factor in collisions, especially for vulnerable road users.

Figure 3. Collisions by Lighting Conditions⁴



⁴ The "Dark - without Lighting" category includes locations where no street lights were present or where street lights were present but not functioning.

Of all nighttime pedestrian and bicycle collisions, 28% resulted in fatal injuries and 20% resulted in severe injuries. Of these nighttime pedestrian and bicycle incidents, 56% occurred along roadways with incomplete pedestrian infrastructure, such as missing sidewalks, crosswalks, or sidewalk gaps ([Map 1](#)).

The most significant hot spots of after-dark pedestrian collisions were located **along Air Expressway near Pearmain Street and within residential neighborhoods in southern Adelanto.**



Map 1. Lighting Analysis of After-Dark Collisions



ADELANTO LIGHTING ANALYSIS

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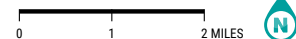
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CRASHES: PEDESTRIAN, AFTER DARK

- Fatal Injury (7 out of 25)
- Crash with Pedestrian Facility Present – Sidewalk or crosswalk available
- Crash with Sidewalk Gap – Sidewalk on one side or with gaps
- Crash with No Pedestrian Facility – No sidewalk or crosswalk present
- Few Crashes After Dark
- Many Crashes After Dark

DESTINATIONS + BOUNDARIES

- Public Schools
- City of Adelanto
- Open Space



Speed Analysis

Between January 2017 and June 2024, **approximately 25% of all collision reports in Adelanto listed speeding as the primary crash factor, including five collisions resulting in fatalities and nine resulting in severe injuries.**

Speed-related collision hot spots are concentrated along US 395, particularly near Air Expressway, Chamberlaine Way, Holly Road, and Palmdale Road (CA-18), as well as in the area surrounding Desert Trails Preparatory Academy.

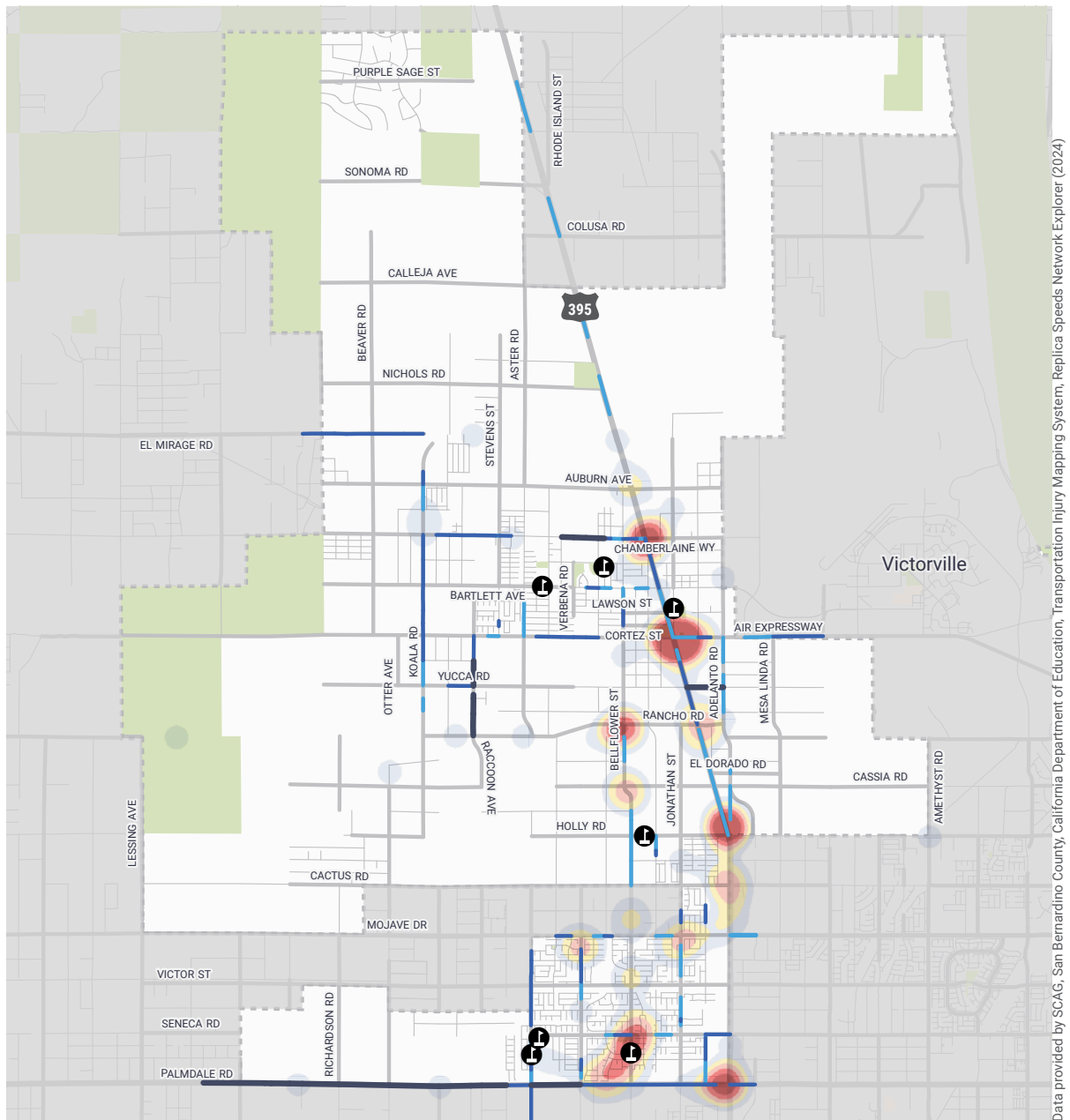
The speed analysis also compared free-flow speeds⁵ on major roads with posted speed limits⁶ on the same roads ([Map 2](#)). The result suggested that **speed-related collisions are more likely to be caused by individuals driving faster than surrounding traffic** rather than by consistently high-speed traffic flows.

5 Free-flow speed data were obtained from Replica Places (2024). Replica defines free-flow speeds as the 66th percentile vehicle speeds between midnight and 6 a.m., a period when traffic congestion is typically lightest.

6 Posted speed limit data were provided by the City of Adelanto and San Bernardino County.



Map 2. Speed Analysis



Data provided by SCAG, San Bernardino County, California Department of Education, Transportation Injury Mapping System, Replica Speeds Network Explorer (2024)

ADELANTO SPEED ANALYSIS

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CITY OF ADELANTO, CA

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SPEED COMPARISON

The Free-Flow Speed Compared to the Posted Speed Limit

- 16 - 31 mph over speed limit
- 6 - 15 mph over speed limit
- 1 - 5 mph over speed limit

CRASHES: UNSAFE SPEED VIOLATION

- Few Crashes Due to Unsafe Speed
- Many Crashes Due to Unsafe Speed

DESTINATIONS + BOUNDARIES

- 🏫 Public Schools
- City of Adelanto
- 🌿 Open Space



High Injury Networks (HIN)

High Injury Networks (HINs) identify the small share of streets where the most severe and fatal collisions occur. By focusing on these high-risk corridors, the City can target safety improvements at locations with the greatest potential to reduce life-altering collisions.

In Adelanto, the HIN comprises only 5% of the road network yet accounts for 95% of all KSI collisions (**Map 3**). The top 16 HIN corridors, including 10 segments owned by the City of Adelanto and 6 owned by the California Department of Transportation (Caltrans), were identified for further analysis and prioritized for safety improvements (**Table 1**).

Locally, the Air Expressway segment has generated the greatest concern, particularly near Pearmain Street. Several other local corridors within the top 16 HIN list directly serve vulnerable road users, including Jonathan Street, which provides access to three schools. In addition, several HIN corridors are in residential areas in south Adelanto, such as Star Street and Seneca Road.

US 395 and Palmdale Road (CA-18), although owned and maintained by Caltrans, are key corridors for safety in Adelanto, and many residents, workers, and visitors heavily rely on them for their daily travel. These routes carry higher traffic volumes and speeds and account for a disproportionate share of severe collisions. Continued coordination and collaboration with Caltrans and regional partners will be necessary to advance the City's roadway safety commitment. Coordination will focus on joint safety audits, corridor redesigns, and funding strategies for shared priority projects.

Additional details on the HIN analysis are provided in [Appendix A: Safety Memorandum](#).

Additionally, safety profiles detailing key crash facts and proposed recommended safety improvements for each of the top 16 HIN corridors can be viewed in [Appendix F: Collision Profiles and Recommended Safety Improvements](#).



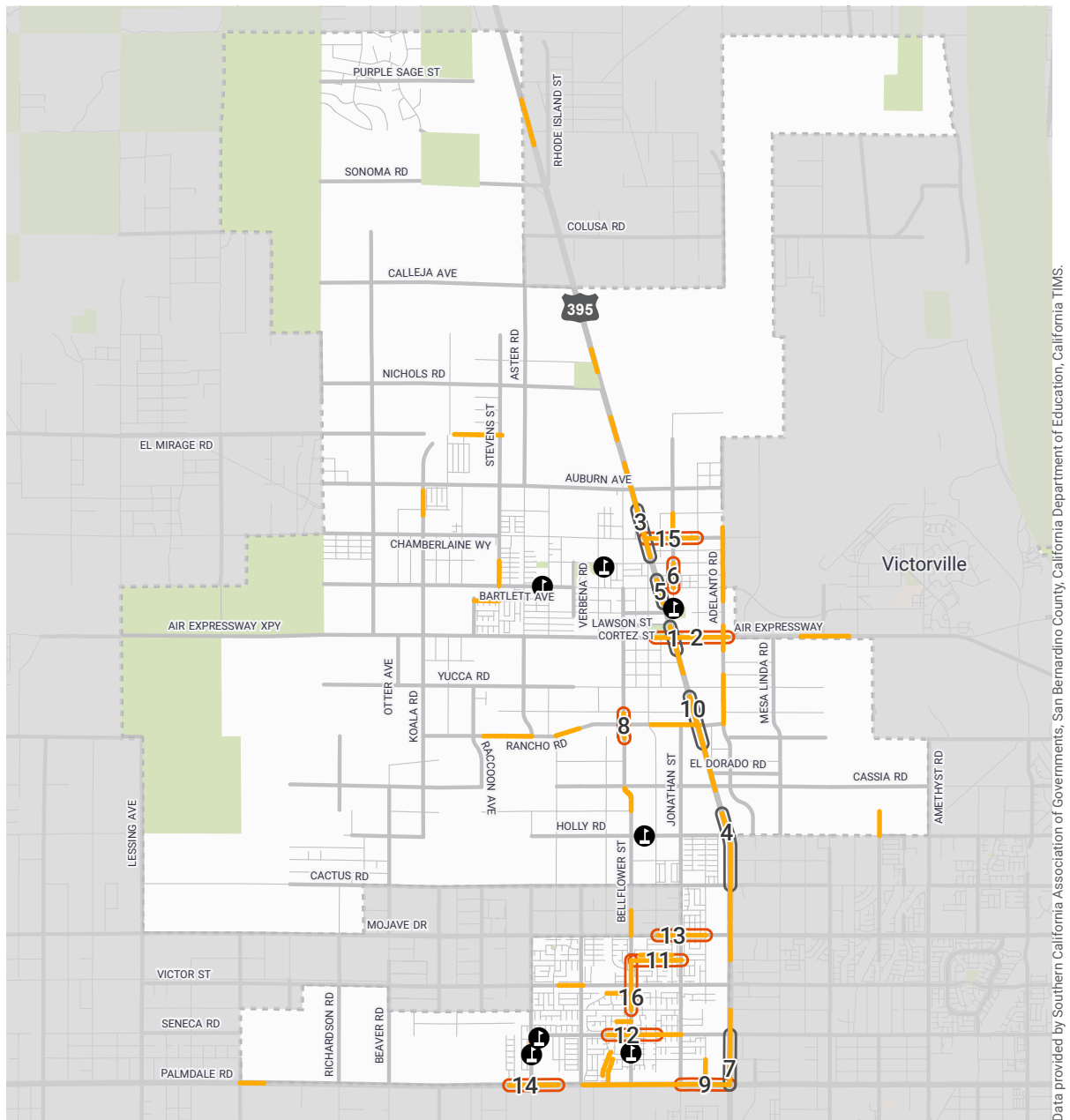
The intersection of US 395 and Crossroads Way is included in one of the identified top corridors on the HIN.

The list is organized by scoring each road segment based on how many serious crashes it has per mile (giving more weight to worse crashes), and then ranking the road segments from highest to lowest score.

Table 1. *Top Adelanto High Injury Network (HIN) Segments*

Corridor Ranking	Segment Name	Right-of-Way Ownership	Number of Total Collisions on Corridor	Number of KSI Collisions on Corridor
1	US 395 near AIR EXPRESSWAY	Caltrans	19	5
2	Air Expressway near US 395	City	21	6
3	US 395 near Chamberlaine Way	Caltrans	14	4
4	US 395 near Holly Road	Caltrans	23	5
5	US 395 near Bartlett Avenue	Caltrans	8	1
6	Jonathan Street near Brockman Avenue	City	5	2
7	US 395 near Palmdale Road	Caltrans	13	3
8	Bellflower Street near Rancho Road	City	7	1
9	Palmdale Road (CA-18) near US 395	Caltrans	11	1
10	US 395 near Rancho Road	Caltrans	13	0
11	Star Street near Jonathan Street	City	5	2
12	Seneca Road near Palm Street	City	11	0
13	Mojave Drive near Mesquite Avenue	City	9	0
14	Palmdale Road (CA-18) at Aster Road	Caltrans	5	1
15	Chamberlaine Way near US 395	City	5	1
16	Bellflower Street near Victor Street	City	5	1

Map 3. Adelanto High Injury Network



Data provided by Southern California Association of Governments, San Bernardino County, California Department of Education, California TIMS.

ADELANTO HIGH INJURY NETWORK

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CITY OF ADELANTO, CA



ANALYSIS LAYER

- High Injury Network (HIN)
- ▭ Top Corridors on HIN (not on US 395)
- ▭ Top Corridors on HIN (on US 395)

MORE THAN 95% OF ALL KSI CRASHES
OCCUR ON 5% OF THE ROAD NETWORK.

DESTINATIONS + BOUNDARIES

- Public Schools
- ▭ City of Adelanto
- ▭ Open Space

0 1 2 MILES



Everyone Deserves to Be Safe

The burden of traffic collisions is not shared equally across Adelanto. To better understand how traffic safety impacts are distributed across the community, a locally tailored equity score was developed reflecting Adelanto's unique social, economic, health, and travel characteristics.

The equity analysis found that the areas of Adelanto with the highest levels of social vulnerability are primarily concentrated along US 395 and near its intersections with Air Expressway and Palmdale Road (CA-18). These locations experience high traffic volumes and contain several top HIN segments. Altogether, 9 of the top 16 HIN corridors fall within the areas identified as having the greatest need based on the equity analysis.

In addition to the local equity analysis, the entire City of Adelanto falls within a U.S. Department of Transportation-designated Area of Persistent Poverty.⁷ This binary designation reflects long-standing economic challenges in the City and underscores the City's need for federal and other external funding support to advance traffic safety improvements.

Additional details and results on the equity analysis are provided in [Appendix B: Equity Considerations Memorandum](#).

⁷ The Areas of Persistent Poverty dataset identifies U.S. Census tracts with a poverty rate of 20% or higher, as measured by the 2014-2018 5-year data series available from the American Community Survey of the Bureau of the Census.



Chapter 3

ENGAGEMENT



The Adelanto Safety Action Plan was shaped by community voices. Between summer 2025 and winter 2026, the City engaged residents, students and caregivers, community organizations, and regional partners to understand safety concerns and identify solutions.

Through a combination of in-person and hybrid workshops, online tools, and coordinated outreach, the City created multiple ways for residents to share their concerns and feedback. These efforts were designed to reach people of different ages, language backgrounds, and levels of internet access, reflecting Adelanto's diverse community.

Additional details about public engagement are provided in [Appendix C: Public Engagement Details](#).

Safety Task Force

The City formed a Safety Task Force to guide the development of this plan and integrate local priorities and experiences into the plan. The Safety Task Force represents a strategic selection of voices in Adelanto who share the goal of creating safer streets for everyone.

This Safety Action Plan would not have been possible without the input and dedication from Safety Task Force members, including representatives from the following organizations:

- Adelanto Elementary School District
- Adelanto High School
- California State Assembly (39th District)—Assemblymember Juan Carrillo
- City of Adelanto
- U.S. House of Representatives (CA-23)—Congressmember Jay Obernolte
- San Bernardino County (1st District)—Col. Paul Cook (Ret.)
- El Sol
- Greater High Desert Chamber of Commerce
- High Desert Hispanic Chamber of Commerce
- San Bernardino County Department of Public Health
- San Bernardino County Fire Protection District
- San Bernardino County Sheriff's Department
- San Bernardino County Transportation Authority (SBCTA)
- California State Senate (23rd District)—Senator Suzette Martinez Valladares
- Victor Valley Transit Authority

Over three meetings held between summer 2025 and winter 2026, members:

- Helped shape roadway safety goals
- Reviewed crash analysis findings
- Provided input on the draft Safety Countermeasure Toolbox
- Reviewed proposed strategies and corridor-level recommendations
- Supported community outreach efforts

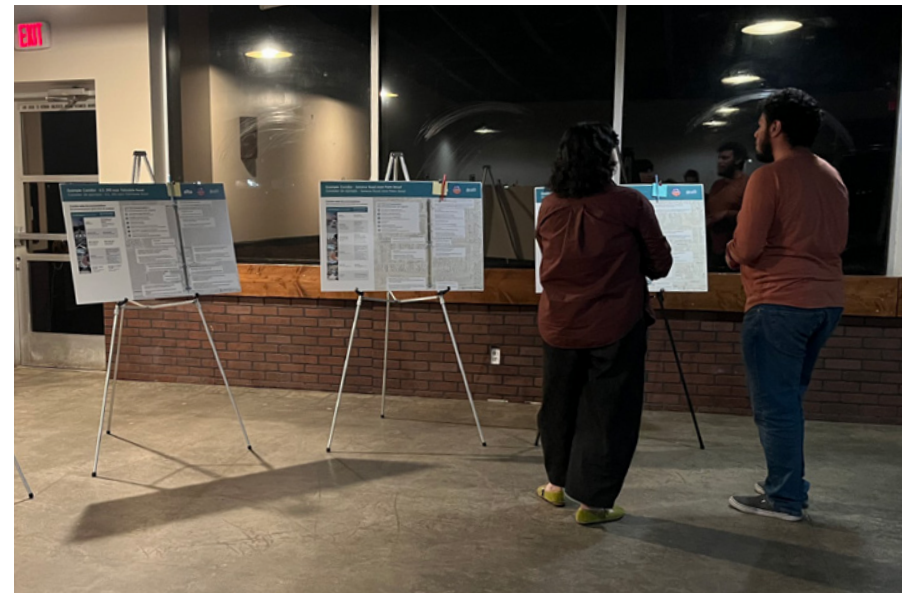
This collaboration strengthened coordination across agencies and grounded the plan in local priorities and lived experience.

Engagement by the Numbers

- 1 pop-up event
- 2 community workshops
- 13 online survey responses
- 100+ total interactions across all platforms
- 1,000+ views of workshop recordings
- 10,000+ social media and website interactions



Sidewalk gaps along Air Expressway Boulevard were a common theme raised by community members during a pop-up event at Adelanto City Hall.



A member of the project team discusses draft recommendations with a member of the public during the second community workshop.

PHASES OF ENGAGEMENT

Engagement occurred in two primary phases.

PHASE 1 – LISTENING AND LEARNING

Residents were invited to share safety concerns, barriers, and important destinations. Feedback was collected through the pop-up event, first workshop, survey, and online map. This input helped identify priority corridors, common crash concerns, and community-identified safety challenges.

PHASE 2 – SHARING AND REFINING

Draft recommendations were presented during the second workshop and through online platforms. Community members and City Council representatives provided feedback on proposed strategies and priority improvements, which informed refinement of the plan's recommendations (Chapters 4 and 5).



WHAT WE HEARD

Consistently, Adelanto residents want safer ways to travel around their community. All across the city, we heard similar concerns and challenges.

PEOPLE DO NOT FEEL SAFE WHILE TRAVELING IN ADELANTO.

Driver behavior, such as speeding and aggressive driving, and roadway conditions, like limited lighting and distressed pavement, impact the safety and comfort of travel in the city.

MISSING AND DISCONNECTED INFRASTRUCTURE CHANGES HOW PEOPLE GET AROUND.

Limited sidewalks and safe crossing opportunities discourage walking, while inadequate roadway maintenance and faded striping make bicycling and driving more difficult.

TRANSPORTATION SAFETY CHALLENGES DISPROPORTIONATELY AFFECT VULNERABLE ROAD USERS.

Safety for students traveling to and from school was frequently identified as a significant concern.

RESIDENTS EXPRESSED SUPPORT FOR THE FOLLOWING ACTIONS TO IMPROVE THE TRANSPORTATION SYSTEM:

- Reconfigure roadways to reduce vehicle speeds, especially near intersections.
- Expand the walking and bicycling network to improve travel options.
- Add Complete Streets elements, such as lighting, street trees, sidewalks, and bikeways, to make walking and bicycling safer and more comfortable.

HOW COMMUNITY INPUT INFORMED PROJECT SELECTION

Input gathered through community engagement (see [Appendix C, Table 1](#)) directly informed the identification of priority corridors and the selection of countermeasures. Common themes were systematically translated into targeted improvements using the High Injury Network and countermeasure screening methodology.

Voices from the Community

"Crossings are too far apart. People need more direct and convenient places to cross."

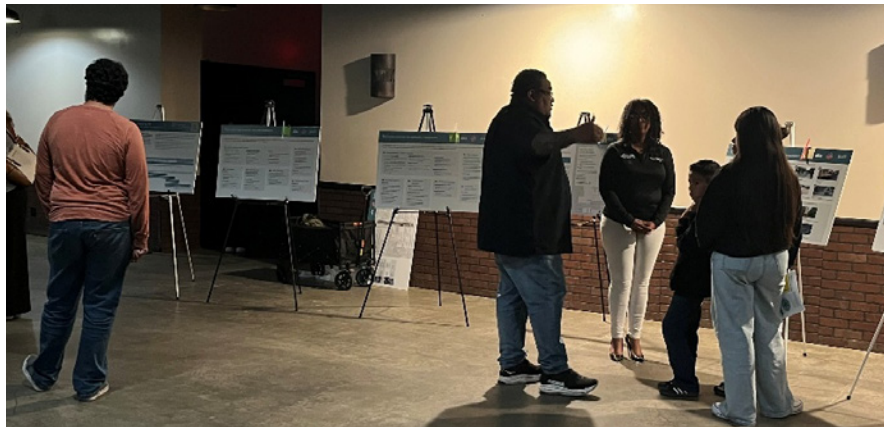
"There aren't enough sidewalks, and in some places you have to walk in the street."

"We need a well-lit path along Highway 395 to better connect the north and south sides of town."

"Drivers go too fast and don't always follow traffic laws."

"Transit stops don't always feel safe or comfortable."

"Roads and sidewalks are not well maintained. Cracks and missing sections make it hard for people to walk safely."



Informational boards helped guide attendees through the draft recommendations at the second community workshop.



Project team members answered questions and gathered community input during a pop-up event outside Adelanto City Hall.



A digital billboard along US 395 helped raise awareness about the Safety Action Plan and encouraged residents to attend the second community workshop.

What is Adelanto Safe Streets For All Action Plan?

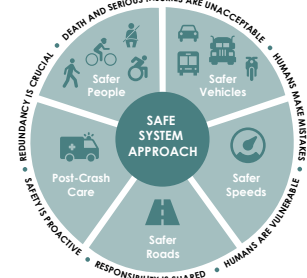
The City of Adelanto's Safe Streets for All Action Plan (Adelanto SS4A) is developing a holistic, well-defined strategy to mitigate roadway fatalities and serious injuries in partnership with the community and stakeholder groups.

Ultimately, the Adelanto SS4A Action Plan will enable transformative change by providing a roadmap to implement recommended safety improvements, while promoting public awareness and qualifying the City to pursue millions in dedicated federal grant funding.

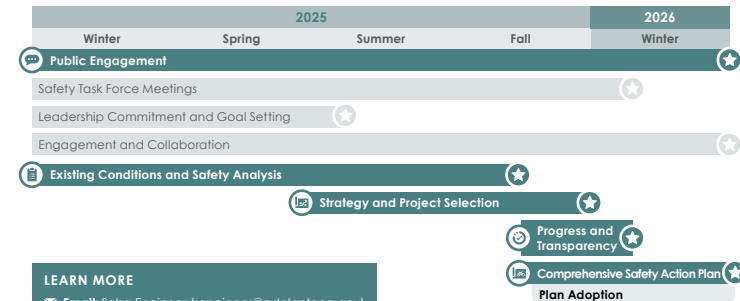
Safe System Approach



The **Safe System Approach** works by building and reinforcing multiple layers of protection to both prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur.



Project Timeline



LEARN MORE

Email: Saba.Engineer@adelantoca.gov
Project Webpage: bit.ly/46ZWLJ



A project fact sheet was available in both English and Spanish. It was distributed at all in-person outreach events and posted on the project website to provide an overview of the project and direct community members to additional information.

Project Website



The project website remained active throughout the planning process and functioned as the primary source for project information and updates. It included an overview of the Safety Action Plan, major milestones, and notices about upcoming engagement opportunities. The site featured the interactive input map and online survey, giving community members the ability to provide feedback at their convenience. Workshop materials, presentation boards, recordings, and the project fact sheet were also posted online. By centralizing these resources, the website allowed residents to follow the project and contribute input even if they were unable to attend events in person.

LOOKING AHEAD

Community engagement will remain central to the implementation of Adelanto's Safety Action Plan. The partnerships formed through this process among City departments, schools, regional agencies, community organizations, and residents will continue as Adelanto moves from planning to action.

Regular updates, public events, and collaboration with local partners will help advance a shared vision for safer streets that reflects the experiences and needs of the people who use them every day.



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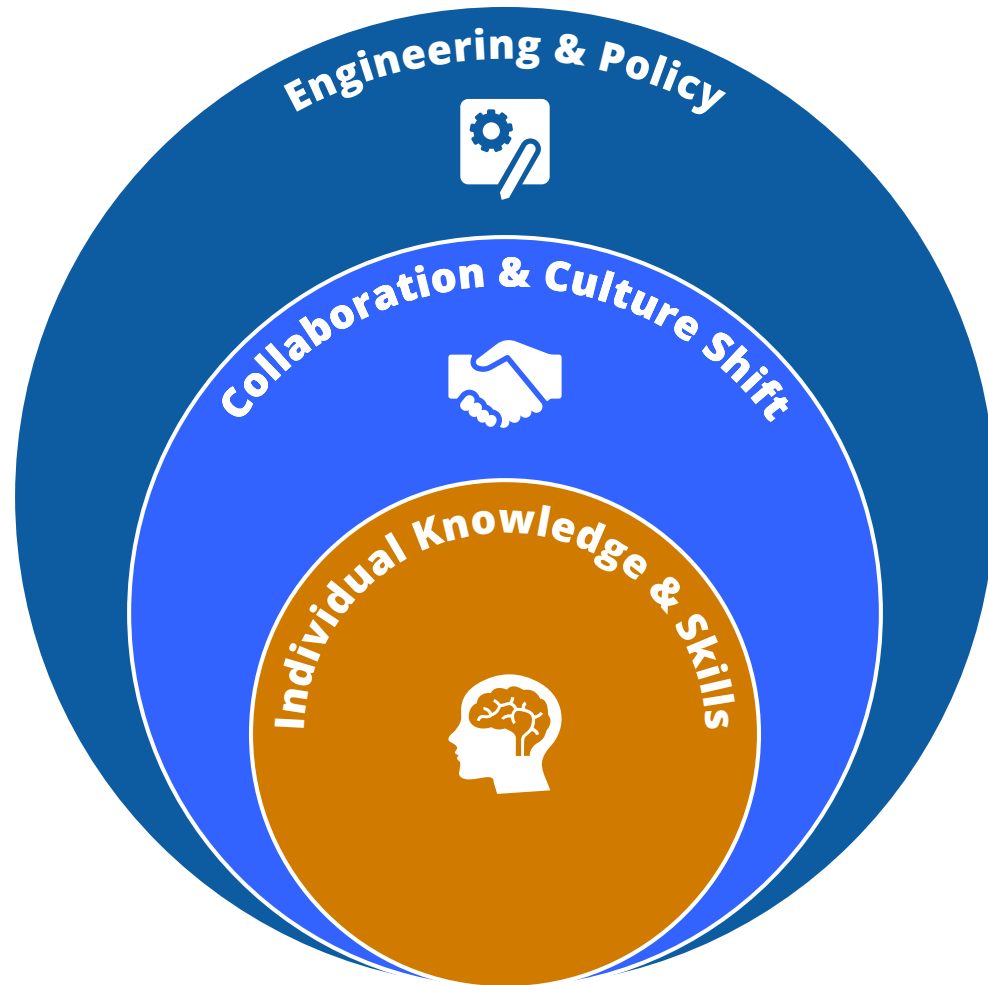
Chapter 4

SAFE STREET STRATEGIES



A SYSTEMS APPROACH TO SAFETY

A systems approach recognizes that serious crashes are influenced by many layers of the transportation environment. By looking beyond individual collisions and examining the broader context, we can understand how other factors contribute to risk. These insights—whether applicable to individual knowledge, culture, or physical changes and policy—help identify changes that have the greatest potential to prevent future harm.



OUR GUIDING PRINCIPLES

As described on page 3, the guiding principles in this plan were adapted using Federal Highway Administration (FHWA) Safety System Approach language. These guiding principles introduce a paradigm shift in how we think about safety on Adelanto's streets.



DEATH AND SEVERE INJURIES ARE UNACCEPTABLE.

Every life lost on Adelanto's streets is one too many. The City will prioritize actions that can eliminate crashes that result in a severe injury or death.



EVERYONE DESERVES TO BE SAFE.

Actions and strategies must focus on disadvantaged areas and areas near schools where risk and need are greatest.



HUMANS MAKE MISTAKES.

We know humans make mistakes, but one mistake should not end a life. Streets should be designed to forgive human error through lower speeds, better visibility, and safer infrastructure.



HUMANS ARE VULNERABLE.

Our bodies cannot withstand the force of fast-moving vehicles. Adelanto's streets should prioritize human life and community health.



RESPONSIBILITY IS SHARED.

Everyone who lives in, works in, and visits Adelanto plays a role in safety. The City, its partners, and the public must work together to create lasting change.



SAFETY IS PROACTIVE.

Creating safe streets requires that we identify and mitigate risks proactively. Using data to identify dangerous conditions, we can create safer streets before a collision occurs.



REDUNDANCY IS CRUCIAL.

Much like how humans make mistakes, it is inevitable that parts of the system will fail. Under the Safe System Approach, when one part fails, the other parts must still protect people.

POLICY AND PROGRAMMATIC RECOMMENDATIONS

Insights from safety analyses, community input, a policy benchmarking assessment, and guidance from the City of Adelanto and the Safety Task Force informed the development of this plan's policy and programmatic recommendations.⁸

To promote holistic solutions for transportation safety challenges, these recommendations are organized under one overarching objective and the five Safe System Approach categories.

Safe Planning and Culture

.....

Safe Road Users

Safe Roads

Safe Vehicles

Safe Speeds

Post-Crash Care

Specifically, the overarching objective, Safe Planning and Culture, serves as the foundation for all safety efforts in Adelanto and guides how the City sets policies, aligns processes, evaluates outcomes, and collaborates with community partners.

Recommendations are not exclusive to one category; however, each topic contributes to the overall goal of reducing deaths and serious injuries across Adelanto's transportation system.

⁸ Details on current policy and programmatic practices in Adelanto are available in [Appendix D: Policy Benchmarking Assessment Memorandum](#).

HOW TO READ THE RECOMMENDATIONS

The following sections present the recommendations organized by the six Safe System Approach elements. The recommendations are organized within tables that include the following details:

OBJECTIVE

Safe Planning and Culture, Safe Road Users, Safe Roads, Safe Vehicles, Safe Speeds, and Post-Crash Care.

RECOMMENDATION

Detailed guidance on the key actions needed to implement the strategy, including specific action items and performance targets.

STRATEGY

Recommended strategy directly related to safety analysis, crash profiles, community input, or policy/program gap assessment.

CATEGORY

Broad classification for the recommended strategies.

FOUNDATIONAL STRATEGY

A core strategy that needs to be prioritized for implementation in the short-term.

ROLE AND RESPONSIBILITY

The agencies or partners responsible for leading implementation and supporting delivery.



Safe Planning and Culture:
An effective planning process and a strong culture of safety should guide all transportation decisions in Adelanto.

A culture of safety is a self-reinforcing mechanism that enables system safety change. By strengthening planning and leadership practices, collecting and using safety data to guide targeted improvements, and establishing a clear commitment from City leadership to reduce deaths and serious injuries, Adelanto can build the momentum needed to create safer streets for everyone.

Table 2. Safe Planning and Culture Recommendations

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
Leadership and Commitment			
SP&C-1 Caltrans Coordination for US 395 Safety*	Building on the progress from the Safety Action Plan, ensure ongoing, proactive coordination with Caltrans to advance safety improvements along the US 395 corridor. This should include establishing a regular internal process for identifying and preparing priority projects for grant and other funding opportunities, coordinating support letters, and aligning applications with both Caltrans' Vision Zero resolution and Adelanto's local leadership commitments to roadway safety.	City of Adelanto Engineering & Public Services	Caltrans SBCTA
SP&C-2 Designate Safety Performance Lead and Reporting*	Designate a lead safety champion to implement the performance monitoring framework. Track key indicators such as fatal and serious injury crashes, crashes involving vulnerable road users, and progress on HIN projects; publish a short, visually accessible safety progress update at least every three years and present it to Council and the community.	City of Adelanto Engineering & Public Services	San Bernardino County Sheriff's Department SBCTA



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Strategy	Recommendation	Lead Agency	Supporting Partner(s)
SP&C-3 Establish a Standing Safety Task Force*	Form and maintain a standing multi-agency Safety Task Force that meets at least twice per year to guide Safety Action Plan implementation, review updated crash trends, coordinate funding opportunities, and monitor progress across all Safe System elements.	City of Adelanto Engineering & Public Services	Existing members of the Safety Task Force
SP&C-4 Implement Safe System and Vision Zero Training	Develop a recurring Safe System and Vision Zero training series for City staff, elected officials, and community leaders, using FHWA and State training resources where possible, and require new staff in transportation, planning, and public safety roles to complete an introductory training module.	City of Adelanto Engineering & Public Services; Community Safety	San Bernardino County Sheriff's Department
 SP&C-5 Coordinate Safe Routes to School Efforts	Identify a lead department or partner agency to coordinate SRTS efforts with the recommendations in the SAP, prioritize a small number of high-need schools for near-term projects, and coordinate grant funding to support periodic walk audits, education, and low-cost safety improvements even if a full-time program is not feasible.	City of Adelanto City Clerk; Community Safety	Adelanto Elementary School District Victor Valley Union High School District San Bernardino County SRTS Program
Meaningful Engagement			
SP&C-6 Develop Multilingual Safety Outreach Materials	Develop multilingual (English and Spanish at minimum) safety outreach materials and templates that can be used across safety campaigns, ensuring key safety messages and project updates are accessible to residents whose primary language is not English.	City of Adelanto City Clerk and Information Technology; Community Safety	San Bernardino County Public Health
Data and Analysis			
SP&C-7 Enhance MyAdelanto Traffic Safety Reporting	Enhance the existing MyAdelanto reporting system by adding a “traffic safety concern” category, linking submissions to GIS, and creating a transparent triage process to track, evaluate, and respond to safety requests.	City of Adelanto Information Technology; Community Safety	SBCTA San Bernardino County Sheriff's Department

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
SP&C-8 Create a Centralized Safety GIS Data Hub	Develop a centralized GIS safety data hub that consolidates crash data, HIN, sidewalks, bikeways, crossings, and school zones, and establish a simple process for updating these layers at least annually as new projects are delivered.	City of Adelanto Engineering & Public Services	SBCTA Southern California Association of Governments (SCAG)
Funding			
 SP&C-9 Maintain a Rolling Safety Project Readiness List	Including the top three priority project locations from the SAP, maintain a rolling list of safety-priority corridors and projects, with planning-level cost estimates and readiness status, so Adelanto can quickly pursue future SS4A, Active Transportation Program (ATP), and related funding opportunities.	City of Adelanto Engineering & Public Services; City Manager	Internal
 SP&C-10 Integrate Safety into CIP and Maintenance Programs	Work with Public Works and Finance to embed safety considerations into Capital Improvement Plan (CIP) and routine maintenance programming. For example, by requiring a safety review of resurfacing lists and setting aside a small percentage of operations and maintenance funding for quick build safety treatments.	City of Adelanto Engineering & Public Services; Finance	Internal
Development Review			
SP&C-11 Align Development Review with Safety Action Plan	Update development review guidelines to reference the Safety Action Plan and Active Transportation Plan, ensuring site circulation, access points, and any transportation demand management measures support safe walking, biking, and transit to, from, and within new developments, especially near schools and on HIN corridors.	City of Adelanto Engineering & Public Services; Planning	Internal

** Recommendations marked with an asterisk are intended to build on the efforts and momentum established through the Safety Action Plan.*



Safe Road Users:

Address the safety of all road users, including those who walk, bike, roll, take transit, or drive.

People living, working, or traveling in Adelanto should be safe walking, biking, rolling, taking transit, or driving. The Safe System Approach is focused on the safety of all road users. This is an important component of many strategies listed in this plan, even those outside the Road Users category. Recommendations for safe users include continuing public education campaigns around traffic safety, using demonstration projects to raise awareness of new designs, and developing enforcement and education pilots.

Table 3. *Safe Road Users Recommendations*

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
Education			
SU-1 Implement Targeted Traffic Safety Education Campaigns	Develop a focused traffic safety education plan that identifies priority behaviors (speeding, impaired driving, failure to yield, distraction) and target audiences, and leverages partnerships with schools, community-based organizations, and local media to deliver culturally responsive campaigns.	City of Adelanto City Clerk; Community Safety	San Bernardino County Department of Public Health
SU-2 Use Demonstration Projects to Advance Safety Designs	Incorporate low-cost demonstration projects informed by the SAP's near-term infrastructure recommendations such as temporary curb extensions, crosswalks, or protected bike lanes into future planning and design efforts. Use these projects as opportunities for public education, data collection, and building support for permanent improvements.	City of Adelanto Engineering & Public Services	SBCTA Caltrans

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
Enforcement			
SU-3 Assess Equity Impacts of Traffic Enforcement	Collaborate with law enforcement, public health, and community partners to review traffic enforcement data by location and demographic characteristics, identify any disproportionate impacts on disadvantaged communities, and develop strategies, such as adjusting enforcement focus or expanding non-punitive approaches, to address inequities.	City of Adelanto Community Safety	San Bernardino County Sheriff's Department
SU-4 Align Enforcement with the High Injury Network*	Align traffic enforcement deployment with the HIN and top crash types, prioritizing high-risk behaviors and locations while coordinating with engineering and education efforts to reduce reliance on traditional enforcement over time.	City of Adelanto Community Safety; Engineering & Public Services	San Bernardino County Sheriff's Department

* *Adelanto Safety Action Plan planning process continuation*



Safe Roads: Humans are not perfect, and roadways should be designed with that in mind.

Designing and retrofitting roadways to account for human error can reduce the risk of severe injuries when crashes occur. This includes closing gaps in the transportation network, creating seamless connections between different travel modes, and using roadway design and technology to alert users to potential hazards.

Table 4. *Safe Roads Recommendations*

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
Network Completion			
SR-1 Advance Sidewalk and Bikeway Gap Closure Program*	Leverage the Active Transportation Plan and Safety Action Plan to develop a phased sidewalk and bikeway gap closure program that focuses first on connections to schools, transit, and services in high-risk and equity-priority areas, and bundles these improvements into competitive grant applications.	City of Adelanto Engineering & Public Services	SBCTA
Policies and Tradeoffs			
SR-2 Develop Curbside and Micromobility Management Guidelines	Develop curbside and micromobility management guidelines that clarify where loading, parking, and shared devices are allowed, and prioritize clear, unobstructed space for people walking, using mobility devices, and biking, particularly on or near the HIN.	City of Adelanto Engineering & Public Services	Victor Valley Transit Authority SBCTA SCAG
SR-3 Ensure Safe Access During Construction and Maintenance	Update standard construction traffic control and detour requirements to maintain safe, accessible routes for pedestrians, bicyclists, and people using mobility devices, especially near schools, transit stops, and along HIN segments.	City of Adelanto Engineering & Public Services	Internal

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
Innovation			
SR-4 Pilot Intelligent Transportation Systems for Safety	Identify one or two City-managed priority corridors as testbeds for intelligent transportation systems that support safety goals such as smarter signals, speed feedback, or automated traffic data, and seek partnerships and grants to pilot these technologies where they can most benefit people walking and biking.	City of Adelanto Engineering & Public Services	Caltrans

** Adelanto Safety Action Plan planning process continuation*



Safe Vehicles: Adelanto can improve safety by encouraging safer vehicles on its streets.

Promoting vehicles that are designed and regulated to minimize the occurrence and severity of crashes using safety measures that incorporate the latest technology helps improve redundancy and minimize human error. This includes participating in connected vehicle programs, making safety a priority in municipal fleet purchases, and supporting commercial and freight safety through appropriate truck routes.

Table 5. *Safe Vehicles Recommendations*

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
Supportive Infrastructure			
SV-1 Monitor and Participate in Connected Vehicle Pilots	Monitor regional and state initiatives related to connected vehicle infrastructure and identify opportunities for Adelanto to participate in pilots or low-cost deployments that directly support speed management and conflict reduction on key corridors.	City of Adelanto Engineering & Public Services	Caltrans
SV-2 Reduce Heavy Truck Traffic on High-Injury Streets	Evaluate the existing Circulation Diagram and designated truck routes, and cross-reference them with high-injury streets to identify opportunities to consolidate and reduce truck traffic in areas with elevated crash rates.	City of Adelanto Engineering & Public Services	Caltrans SBCTA
Fleet Management			
SV-3 Implement a Municipal Fleet Safety Strategy	Develop a phased municipal fleet safety strategy that prioritizes lower-mass, safety-featured vehicles for city operations where feasible; designates truck routes that avoid sensitive locations; and coordinates with private fleet operators on safe loading and routing practices.	City of Adelanto Engineering & Public Services	SBCAT California Air Resources Board



Safe Speeds: High-speed crashes are devastating for everyone involved.

Reducing travel speeds can help to save lives by reducing impact forces, providing additional time for drivers to react, and improving visibility for all road users. Appropriate speed limits, enforcement, and policies that reduce speeding are essential steps to saving lives and reducing the likelihood of life-altering injuries, especially for vulnerable road users.

Table 6. *Safe Speeds Recommendations*

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
Design and Operations			
 SS-1 Adopt Context-Sensitive Speed Management Design	Develop context-sensitive speed management design guidance that are aligned with FHWA and State best practices. Commit to using target speeds, rather than existing operating speeds, to guide corridor and intersection design decisions.	City of Adelanto Engineering & Public Services	Caltrans
Enforcement			
SS-2 Explore Automated Speed Safety Cameras (AB 645)	Explore opportunities to participate in or align with California's automated speed safety system pilot program (authorized under AB 645) and assess the legal feasibility of implementing automated speed enforcement in Adelanto. If state law and local policy allow, prioritize camera deployments on HIN corridors with documented speeding issues and pair any enforcement with transparent public communication and equitable fine structures.	City of Adelanto Engineering & Public Services	Caltrans

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
Policy and Training			
SS-3 Modernize Speed Limit Setting and Training	Adopt a speed limit setting policy that emphasizes roadway context, land use, and vulnerable road users over the 85th percentile rule, and provide recurring training to engineering, planning, and enforcement staff on modern speed management practices.	City of Adelanto Engineering & Public Services	Internal



Post-Crash Care:

When crashes do occur, first responders need quick access to the scene.

After a crash, Adelanto and its partners can analyze data from the incident to better understand safety challenges and support system improvements. Recommendations to improve post-crash care can focus on data reporting and documentation and provide extra support to families affected by crashes.

Table 7. *Post-Crash Care Recommendations*

Strategy	Recommendation	Lead Agency	Supporting Partner(s)
Partnerships			
PCC-1 Strengthen Post-Crash Data-Sharing Partnerships	Convene partners such as law enforcement, fire/emergency medical services (EMS), hospitals, and public health to explore data-sharing agreements that improve the accuracy and timeliness of injury and crash data available for safety analysis and project development.	City of Adelanto Engineering & Public Services	San Bernardino County Sheriff's Department; Department of Public Health; Inland Counties Emergency Medical Agency
PCC-2 Support Families Affected by Traffic Crashes	Collaborate with advocacy groups and community organizations to develop a protocol for offering information, grief support resources, and engagement opportunities to families affected by traffic fatalities and serious injuries, while maintaining privacy and sensitivity.	City of Adelanto Engineering & Public Services	San Bernardino County Sheriff's Department; Department of Public Health; Inland Counties Emergency Medical Agency

Chapter 5

IMPROVING ADELANTO STREETS



INTRODUCTION

Improving Adelanto's streets through physical changes and improved design standards is a vital piece of reducing traffic deaths and serious injuries.

Crash data help identify trends and priority locations and indicate which types of improvements are likely to have the greatest impact on transportation safety. By examining the broader context of each crash on the top 16 HIN corridors, the City can better understand roadway conditions, potential contributing behaviors, and other factors such as land use or lighting that may have played a role. This information then informs the selection of safety countermeasures that are proven to address these conditions and reduce crash risk.



VISION ZERO SUCCESS STORIES

This Safety Action Plan is an important first step for Adelanto in advancing its roadway safety goals. Reducing traffic deaths and serious injuries on City-managed roadways by 50% by 2035, with a long-term goal of zero, is achievable, but it requires collaboration and commitment from everyone in the Adelanto community. The following success stories show what is possible and can inspire and guide Adelanto's roadway safety journey.

Phoenix, Arizona⁹

Phoenix is a large desert city that has faced significant roadway safety challenges related to wide arterials, high travel speeds, and a high number of nighttime pedestrian crashes. In response, the City launched its Vision Zero Road Safety Action Plan in 2022 and adopted a Safe System Approach centered on data-driven decision-making and High Injury Network prioritization. Phoenix has implemented a range of strategies to reduce speeds and crash severity, including signal modernization, enhanced pedestrian crossings, improved lighting, speed limit reduction campaign, and targeted enforcement on high-risk streets. The City has also institutionalized safety by integrating Vision Zero principles into capital planning and maintenance programs. Over the past three years, Phoenix has tracked its Vision Zero progress annually. The City's 2024 annual report shows a 13% decrease in fatal and serious injury crashes compared with the plan's baseline five-year annual average, a 5% decrease in pedestrian fatal crashes, and a 25% decrease in crashes at signalized intersections.

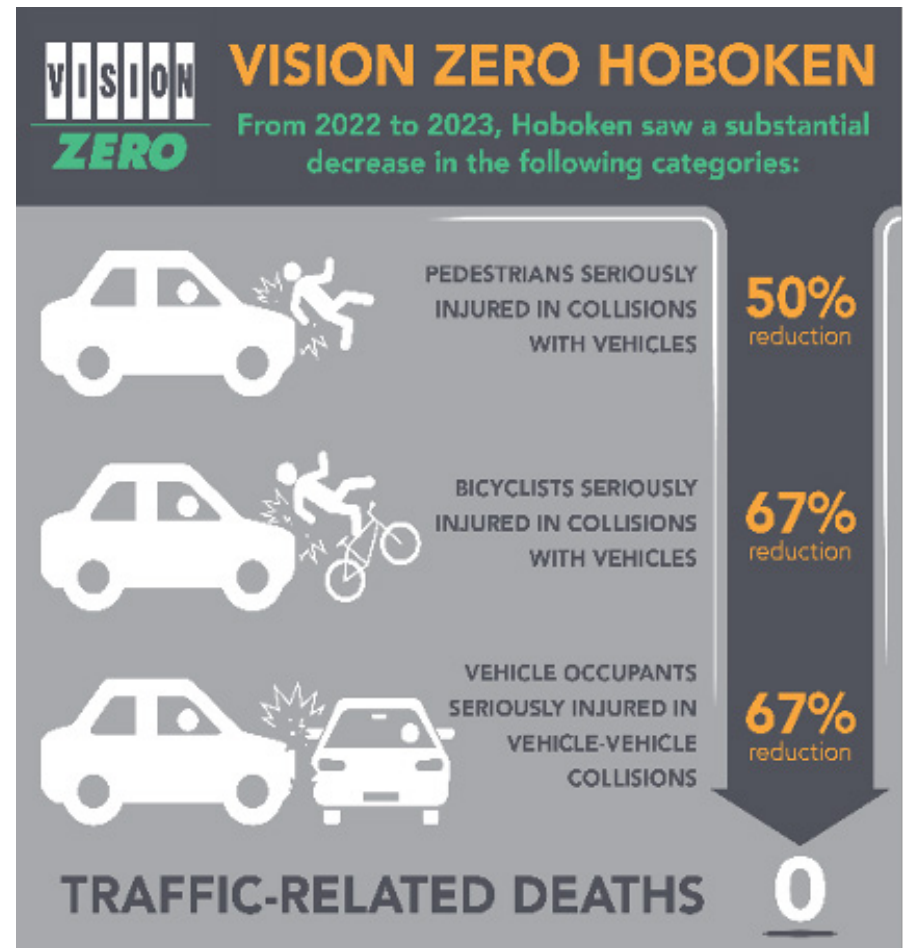


Source: City of Phoenix

⁹ City of Phoenix (October 2025). *City of Phoenix 2024 Road Safety Action Plan Annual Report*. [https://www.phoenix.gov/content/dam/phoenix/streetssite/documents/safety-resources/PHXRSAP_2024AnnualReport_Final_reduced%20\(2\).pdf](https://www.phoenix.gov/content/dam/phoenix/streetssite/documents/safety-resources/PHXRSAP_2024AnnualReport_Final_reduced%20(2).pdf).

Hoboken, New Jersey¹⁰

Hoboken is one of the few cities in the nation to achieve zero traffic deaths. After the City launched its Vision Zero initiative in 2019, it convened a task force and created a data-driven action plan that focused on safe roads, safe speeds, safe users, and safe vehicles. Hoboken then implemented a host of engineering interventions, including high-visibility and raised crosswalks, curb extensions, daylighted intersections, and other traffic calming measures. The City also lowered speed limits to 20 miles per hour (mph) citywide and to 15 mph in school zones. These engineering and policy actions, combined with strong enforcement measures and other steps aimed at institutionalizing safety, have allowed Hoboken to achieve seven consecutive years without a traffic fatality, making it a national model for Vision Zero programs.



Source: City of Hoboken

¹⁰ City of Hoboken. (January 31, 2024). "City of Hoboken reaches new Vision Zero milestone: Seven consecutive years without a traffic death." <https://www.hobokennj.gov/news/city-of-hoboken-reaches-new-vision-zero-milestone-seven-consecutive-years-without-a-traffic-death>.

Madison, Wisconsin¹¹

Madison has made significant progress with its Vision Zero program since adopting the policy in 2020. Since then, the City has worked to reduce speeds through initiatives like “20 is Plenty,” redesigned high-risk intersections, and prioritized improvements on its High Injury Network, including protected bike lanes, safer pedestrian crossings, and traffic calming measures. These engineering changes have been combined with enforcement and public education efforts as part of a Safe System Approach, which recognizes that crashes will happen but designs streets to minimize the risk of death or serious injury. This comprehensive strategy has helped Madison achieve a 29% drop in its killed or seriously injured (KSI) crash rate from 2020 to 2023 and a 58% reduction in traffic fatalities by 2024 compared to 2020. Citywide speed limit reductions along with systemic infrastructure improvements are seen as key elements of Madison’s success.



Source: City of Madison

¹¹ Smith, T. (August 5, 2025). “Celebrating Vision Zero successes: Small wins, big impact.” Vision Zero Network. <https://visionzeronetwork.org/small-wins-big-impact/>.

ADELANTO'S SAFETY COUNTERMEASURE TOOLBOX

The Safety Countermeasure Toolbox is a practical guide for applying a set of evidence-based engineering strategies aligned with the Safe System Approach to address identified concerns. Safety countermeasures are key tools for achieving near-term progress toward Adelanto's roadway safety goals. Many can be implemented quickly using pilot or "quick build" materials, while others can be integrated into long-term capital projects to deliver lasting benefits.

The toolbox was developed using the Safe System Approach, incorporating elements of the Safe System Pyramid¹² and the FHWA Safe System Roadway Design Hierarchy.¹³ It also reflects the principles of contextual design outlined by Caltrans in *Design Information Bulletin 94, Contextual Design Guidance*.¹⁴ In addition, the project team reviewed case studies from rural and suburban communities with similar conditions and included countermeasures that address collision patterns comparable to those observed in Adelanto.

While project-specific effectiveness calculations are not included at this stage, detailed crash reduction factors (CRFs/CMFs) for these treatments are available through resources such as the FHWA CMF Clearinghouse and Caltrans Local Road Safety Manual, and can be applied in future phases to support cost-benefit analysis and grant applications.

12 Ederer, D.J., Panik, R.T., Botchwey, N., Watkins, K. 2023. "The Safe Systems Pyramid: A new framework for traffic safety." *Transportation Research Interdisciplinary Perspectives*, Volume 21, 2023. <https://doi.org/10.1016/j.trip.2023.100905>.

13 Hopwood, C., Little, K., Gaines, D. 2024. *Safe Systems Roadway Design Hierarchy*. FHWA, report FHWA-SA-22-069, https://highways.dot.gov/sites/fhwa.dot.gov/files/2024-01/Safe_System_Roadway_Design_Hierarchy.pdf.

14 Caltrans. 2024. Design Information Bulletin-94: Contextual Design Guidance. <https://dot.ca.gov/-/media/dot-media/programs/design/documents/dib-94-010224-a11y.pdf>.

A total of **69 countermeasures** were identified for Adelanto. A complete list and description of all countermeasures can be found in [Appendix E: Safety Countermeasure Toolbox](#). These countermeasures are organized into four categories based on the adapted Safe System Roadway Design Hierarchy, providing a balanced framework that prioritizes conflict reduction, effective speed management, and a more predictable environment for all roadway users. The hierarchy is organized into a ranked list:



DEMAND MANAGEMENT

Countermeasures under this category aim to reduce crash severities through land use, access management, and mode shift strategies.



SPEED MANAGEMENT

To reduce speeds, these countermeasures support the design and operation of streets that encourage safe and context-appropriate vehicle speeds.



CONFLICT MANAGEMENT

These countermeasures use design and operational measures to separate vulnerable road users and vehicles in time and space to help avoid severe conflicts.



IMPROVE REDUNDANCY

These countermeasures give road users the information and options they need to make safer choices. They may include improved signage, wayfinding, or route design that offers safe alternatives and reduces exposure to potential crash risk.

COLLISION PROFILES AND RECOMMENDED SAFETY IMPROVEMENTS

Following the development of the HIN in Chapter 2, a detailed analysis of crash characteristics was conducted for the top 16 HIN corridors. This analysis examined contributing circumstances, crash types, roadway geometry, speed limits, number of lanes, intersection control, lighting conditions, and surrounding land use. These corridor-level collision profiles identify the roadway conditions and behavioral patterns associated with a large share of fatal and serious injury crashes in Adelanto. In addition to evaluating each corridor as a whole, specific intersections and roadway segments were reviewed to capture localized design features that may contribute to crash risk.

This systemic understanding of where and how crashes occur along the HIN corridors informs the selection of safety improvements from the Safety Countermeasure Toolbox. Recommended countermeasures are tailored to address documented crash types and risk factors while aligning with the Safe System Approach.

In addition to addressing crash patterns from the past seven years, this plan takes a proactive approach by recommending safety treatments that reflect anticipated growth and changing travel patterns based on zoning and development trends in Adelanto. As safety conditions improve, walking and bicycling activity is expected to increase. Providing connected and protected pedestrian and bicycle facilities along high-risk corridors reduces exposure to severe crashes and supports long-term safety outcomes.

Recommended countermeasures are focused on addressing identified risk factors, including speed, visibility, and pedestrian exposure.

Table 8 presents 10 of the most common and broadly applicable countermeasures for the top 16 HIN corridors, organized into the four categories of the adapted Safe System Roadway Design Hierarchy.

Table 8. High Profile Countermeasures for the Top 16 HIN Corridors

Hierarchy	Countermeasure	Description	Visual Example
 Demand Management	Bus Shelter with Seating	Enhances comfort, visibility, and accessibility at bus stops to reduce barriers to transit use.	
	Roundabout or Traffic Circle	A circle intersection design reduces vehicle speeds and conflict points at intersections while improving traffic flow and safety for all road users.	
 Speed Management	Curb Extension or Truck Apron	Extensions of the sidewalk past the existing curb to shorten crossing distances and make people outside of cars more visible to drivers.	
	Road Diet	Reconfigures travel lanes to calm traffic, improve safety, and create space for multimodal improvements or medians.	

Hierarchy	Countermeasure	Description	Visual Example
 Separate in Space and Time	Sidewalk or Shared-Use Path	Creates a dedicated, accessible space for people walking and biking, separated from vehicle traffic to improve safety and comfort.	
	High-Visibility Crosswalk	Enhances pedestrian visibility at crossings through bold pavement markings, improving driver awareness and yielding behavior.	
	Leading Pedestrian or Bike Interval (LPI/LBI)	Gives people walking or biking a head start at signalized intersections, increasing visibility and reducing conflicts with turning vehicles.	
 Improve Redundancy	Wider Edge Lines	Visually narrows the travel way to encourage lower vehicle speeds and creates a buffer between vehicles and roadside users.	
	Lighting	Improves nighttime visibility for all road users, particularly people walking and biking, reducing the risk of severe crashes after dark.	
	Speed Feedback Signs	Displays a driver's current speed to raise awareness and encourage speed reduction.	

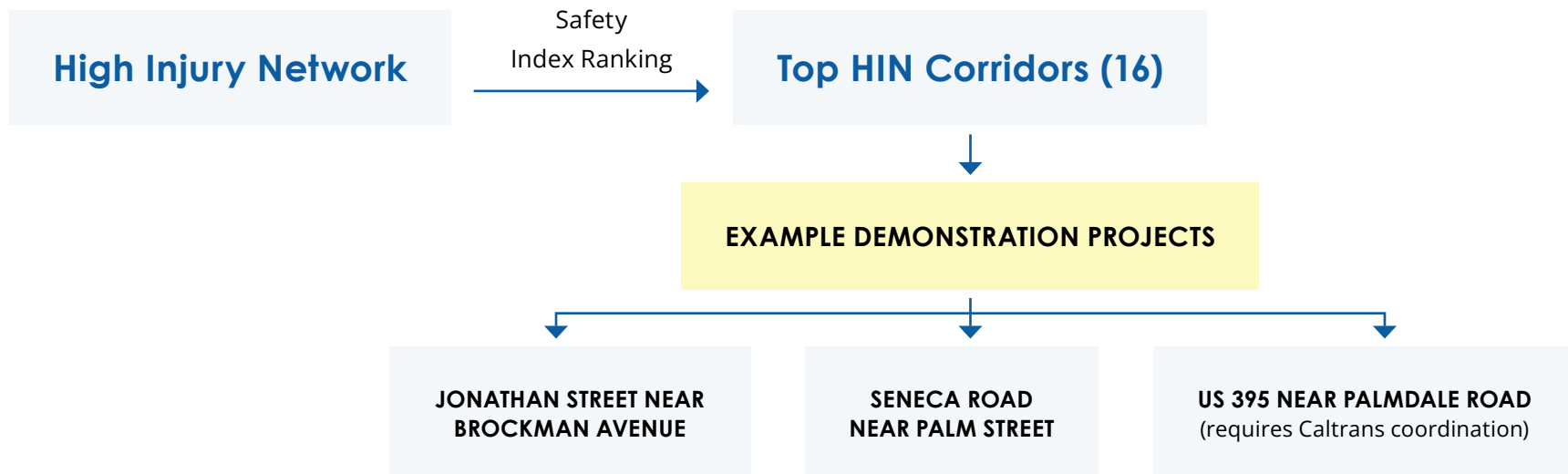
EXAMPLE PROJECT LOCATIONS

To initiate implementation of this Safety Action Plan, the City identified three example project locations from the top 16 HIN corridors:

- Jonathan Street near Brockman Avenue
- Seneca Road near Palm Street
- US 395 near Palmdale Road (requires Caltrans coordination)

These locations were selected as examples based on crash patterns, their role within the HIN, and their importance to the surrounding community. Each example location reflects conditions where focused safety investments can meaningfully reduce risk for people walking, biking, driving, and using transit:

- Jonathan Street near Brockman Avenue serves nearby neighborhoods and schools, making it an important area for improvements that support student and pedestrian safety.
- Seneca Road near Palm Street represents a residential corridor where targeted traffic calming and pedestrian safety enhancements can improve neighborhood travel conditions.
- US 395 near Palmdale Road is a major regional corridor with a history of severe crashes and will require coordination with regional partners to advance safety improvements.



These three locations serve as example locations drawn from within the top 16 identified corridors. While they illustrate potential near-term project opportunities, improvements across other HIN corridors may also move forward as opportunities arise.

It is important to note that the implementation timeline does not necessarily apply uniformly to all recommended safety improvement projects. For example, lower-cost and quicker-to-implement treatments such as high-visibility crosswalk striping may be advanced on other HIN corridors earlier than more complex improvements, such as roundabouts, at the Example Project Locations. This flexible approach allows the City to deliver near-term safety benefits while planning for longer-term capital investments.

This plan uses these example project locations to demonstrate how safety improvement projects are applied to the HIN using the Safety Countermeasure Toolbox.



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EXAMPLE PROJECT LOCATION RECOMMENDATIONS

Jonathan Street Near Brockman Avenue

EXISTING CONDITIONS AND OPPORTUNITIES

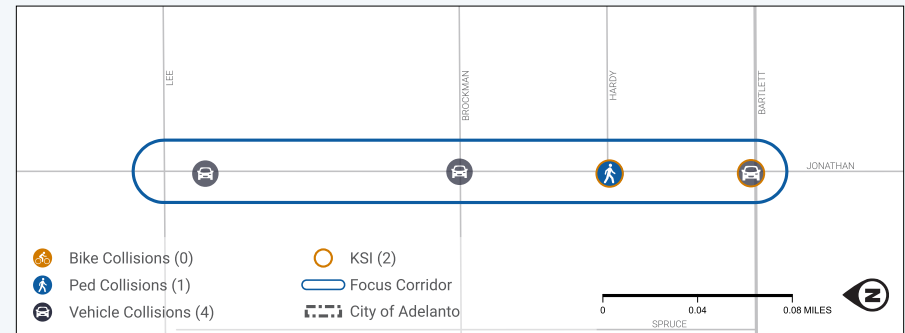
Jonathan Street near Brockman Avenue is a two-lane local street with a posted speed limit of 25 mph. Crash data show several serious crashes, including one involving a person walking. Most crashes occurred at or near intersections. The most common crash types are sideswipe and head-on crashes. Reports also show issues such as drivers traveling on the wrong side of the road or failing to yield the right-of-way. Because this corridor is close to schools and neighborhoods, people walking and biking are present, which increases the need for safer street design.

The recommended improvements are designed to respond to these conditions. High-visibility crosswalks, Americans with Disabilities Act (ADA) curb ramps, and raised or mini roundabouts can help slow vehicles and make crossings easier to see. Speed feedback signs and better stop sign visibility can remind drivers to slow down and pay attention. Curb extensions and intersection upgrades can shorten crossing distances and better define where vehicles should travel. Together, these improvements help address the types of crashes that have occurred and create safer conditions for students, residents, and everyone who uses the corridor.

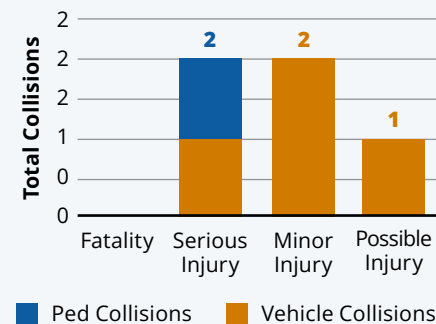
Corridor Profile

JONATHAN STREET NEAR BROCKMAN AVENUE

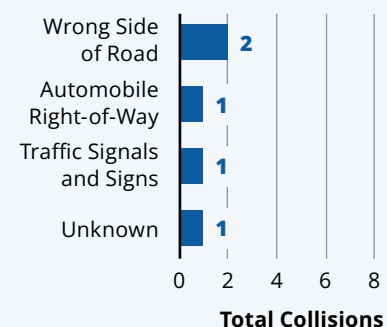
Collisions on Corridor



Number of Collisions by Severity



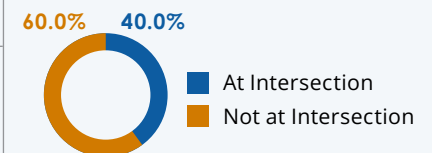
Contributing Circumstances



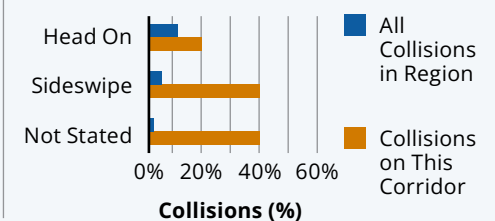
Corridor Context

Functional Class	Highway
Zoning Class	Commercial
Number of Lanes	6
Speed Limit	65
Severity Index	43

Collisions at Intersections



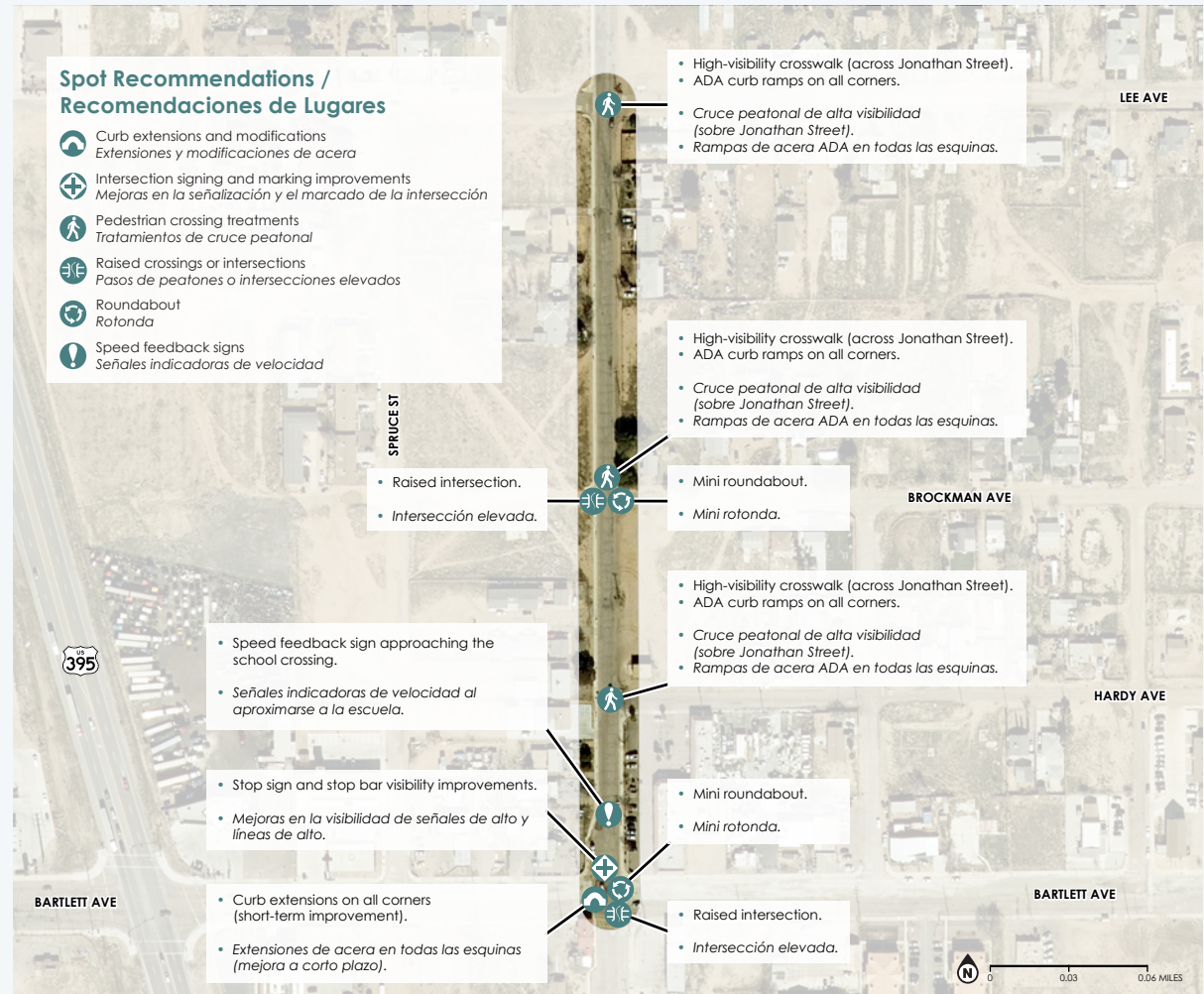
Crash Types (Top 5 most common)



Data notes: Collisions from the TIMS database, snapped to nearest corridor (2019-2023). Weighted index is the sum of weighted collisions divided by the corridor length in miles.

Corridor and Location-Specific Recommendations

Countermeasure	Recommendation
	Lighting Pedestrian-scale lighting
	Sidewalk / Shared-use Path Sidewalk on east side of street; shared-use path as a long-term option
	Speed humps Speedhumps; centerline markings removal
	Lateral shift or chicane Chicanes



Seneca Road Near Palm Street

EXISTING CONDITIONS AND OPPORTUNITIES

Seneca Road near Palm Street is a five-lane minor arterial in a single family residential area with a posted speed limit of 35 mph. Crash data show nine vehicle collisions and two bicycle collisions along this segment, with no fatal or serious injury crashes recorded. Most crashes resulted in possible or minor injuries. Most crashes occurred at intersections. The most common contributing factors include traffic signal and sign violations, unsafe speed, and right-of-way violations. The most common crash type shown is broadside collisions.

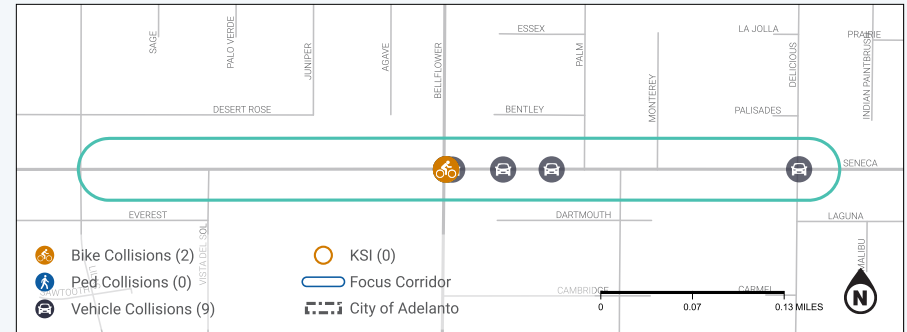
The recommended improvements respond to these conditions. Raised crosswalks, high-visibility crosswalk markings, advance yield markings, and pedestrian flashing beacons are proposed to improve visibility and reduce conflicts at crossings. A single-lane roundabout and raised intersection treatments are intended to slow vehicles and reduce the likelihood of angle crashes. Curb extensions on all corners shorten crossing distances and improve sight lines. Speed feedback signs support speed awareness along the corridor. Transit-related improvements, including bus shelters and bus bulbs within existing parking lanes, help organize stopping activity and reduce unexpected vehicle movements. Together, these improvements focus on intersection safety, speed management, and clearer right-of-way expectations.

Data notes: Collisions from the TIMS database, snapped to nearest corridor (2019-2023). Weighted index is the sum of weighted collisions divided by the corridor length in miles.

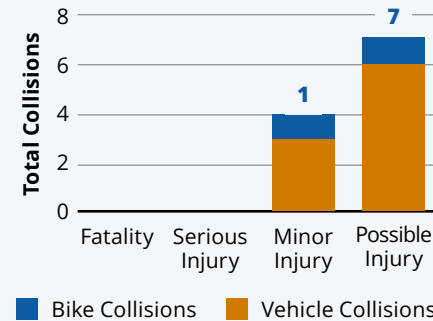
Corridor Profile

SENECA ROAD NEAR PALM STREET

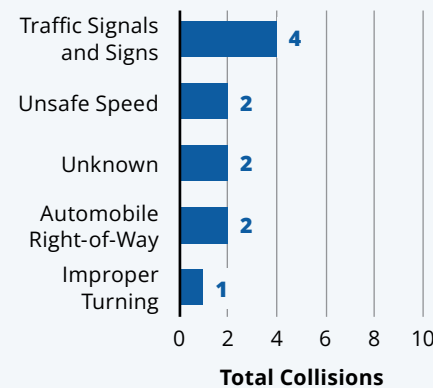
Collisions on Corridor



Number of Collisions by Severity



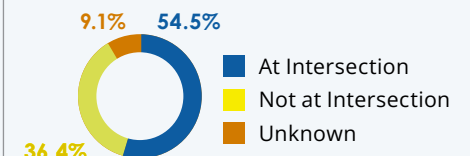
Contributing Circumstances



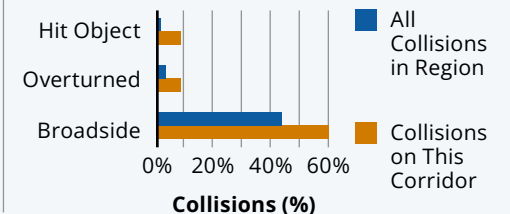
Corridor Context

Functional Class	Minor Arterial
Zoning Class	Single Family Residential
Number of Lanes	5
Speed Limit	35
Severity Index	22

Collisions at Intersections

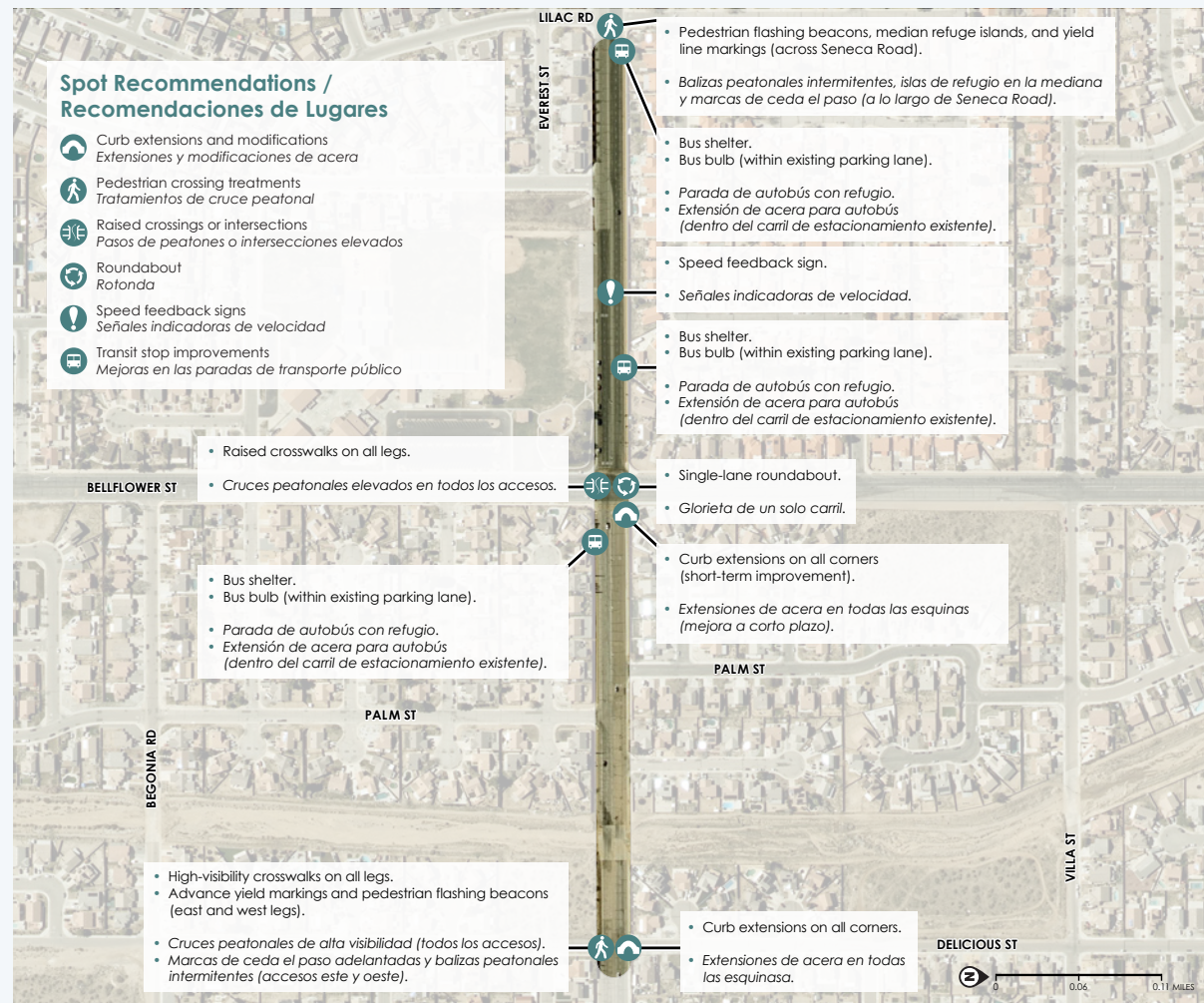


Crash Types



Corridor and Location-Specific Recommendations

Countermeasure	Recommendation
	Lighting Street lighting
	Pinch points and chokers Pinch points or chokers in the parking lane
	Lane narrowing Travel lane narrowing to 11 feet and parking removal
	Bike lane Separated or buffered bike lanes; shared-use path as a long-term option
	Road diet Road diet
	Sidewalk Sidewalk gap closure



Detailed collision profiles for all 16 corridors, and the corresponding recommended safety improvements, are provided in [Appendix F: Collision Profiles and Recommended Safety Improvements](#).

US 395 near Palmdale Road (CA-18)

EXISTING CONDITIONS AND OPPORTUNITIES

US 395 near Palmdale Road is a six-lane roadway in a commercial area with a posted speed limit of 65 mph. Crash data show 12 vehicle collisions and one pedestrian collision along this segment, including three crashes that resulted in fatal or serious injury. Most crashes occurred away from intersections, though a substantial share also occurred at intersections. The most common contributing factors include traffic signal violations, unsafe speed, and improper turning. The most common crash types include broadside and rear-end collisions.

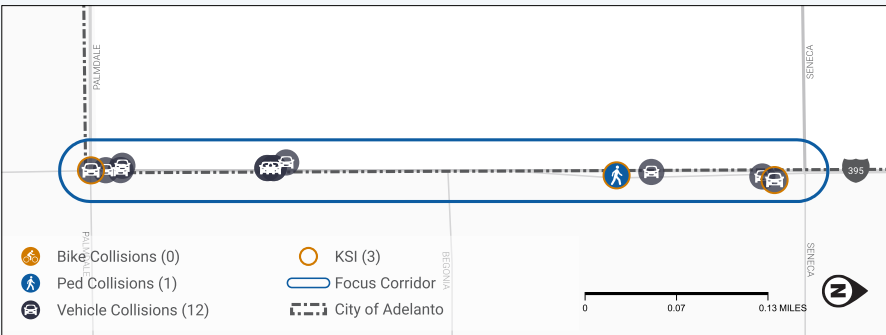
The recommended improvements respond directly to these conditions. Proposed signal timing adjustments, including changes to yellow and all-red clearance intervals and pedestrian head start phases, are intended to address signal-related and turning crashes. High-visibility crosswalks on multiple legs and pedestrian refuge islands aim to improve crossing visibility and reduce exposure distance for people walking. Restrictions such as no right turn on red at key locations respond to documented signal and turning conflicts. Additional measures, including reflective backplates, added signal heads, lighting improvements, wider edge lines, raised medians, and protected intersection elements, are designed to improve driver awareness, manage speeds, and reduce conflict points. Together, these improvements focus on addressing the crash patterns identified in the data while supporting safer travel along this high-speed corridor.

Data notes: Collisions from the TIMS database, snapped to nearest corridor (2019-2023). Weighted index is the sum of weighted collisions divided by the corridor length in miles.

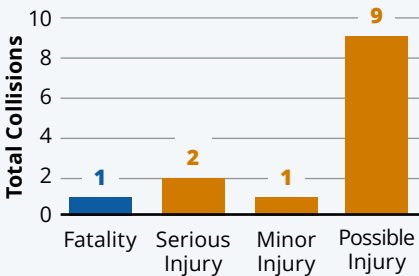
Corridor Profile

US 395 NEAR PALMDALE ROAD

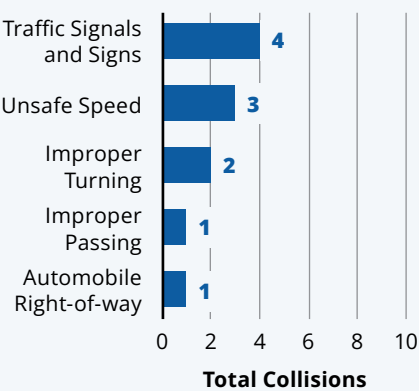
Collisions on Corridor



Number of Collisions by Severity



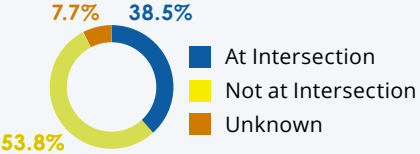
Contributing Circumstances



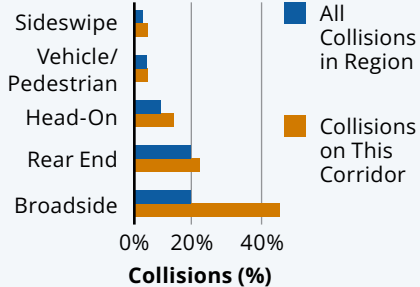
Corridor Context

Functional Class	Highway
Zoning Class	Commercial
Number of Lanes	6
Speed Limit	65
Severity Index	43

Collisions at Intersections

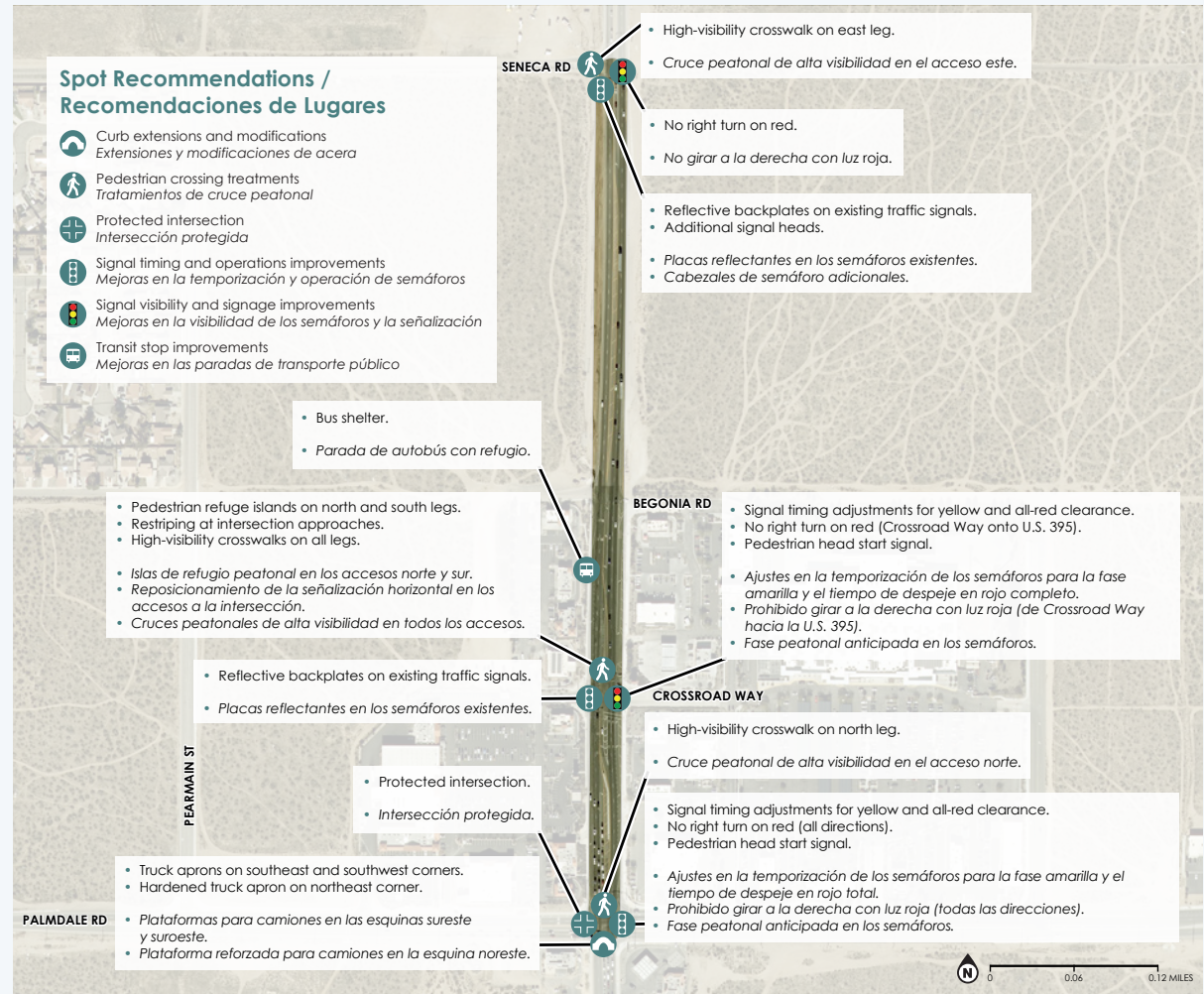


Crash Types



Corridor and Location-Specific Recommendations

Countermeasure	Recommendation
	Lighting
	Raised median
	Wider edge lines
	Bike lane
	Sidewalk / Shared-use Path



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Chapter 6

TRANSPARENT IMPLEMENTATION



ACHIEVING VISION ZERO

This Safety Action Plan is Adelanto's commitment to policy and cultural change that will reduce traffic deaths and serious injuries on City-managed roadways by 50% by 2035, with a long-term goal of zero. Achieving this goal will require a concerted effort by everyone in the Adelanto community.

A cornerstone of implementing this action plan is transparency, and that begins with a clear understanding of our top priorities and projects. This part of the plan provides an overview of This part of the plan provides an overview of Adelanto's foundational policy and programmatic recommendations along with approaches for advancing safety on Adelanto's most dangerous roadways. It also outlines funding opportunities and the City's commitment to transparency and accountability throughout the implementation process.

Additional details on Adelanto's immediate actions and priority projects, along with transparent performance measures and reporting frameworks, are provided in [Appendix G: Transparency and Implementation Memorandum](#).



FOUNDATIONAL POLICY AND PROGRAMMATIC RECOMMENDATIONS

Achieving roadway safety goals on Adelanto's roadways requires dedication and commitment from City departments, outside partners, and people who live, work, visit, and travel in Adelanto. Chapter 4 outlined policy and programmatic recommendations that will incrementally guide a cultural shift toward safer roads. However, every journey begins with a few critical first steps. These six foundational policy and programmatic recommendations have been identified to outline the immediate steps Adelanto can take to begin its roadway safety journey:



SP&C-1 Caltrans Coordination for US 395 Safety



SP&C-2 Designate Safety Performance Lead and Reporting



SP&C-5 Coordinate Safe Routes to School Efforts



SP&C-9 Maintain a Rolling Safety Project Readiness List



SP&C-10 Integrate Safety into CIP and Maintenance Programs



SS-1 Adopt Context-Sensitive Speed Management Design



PROJECT IMPLEMENTATION STRATEGIES

Implementing safety improvement projects is a core component of Adelanto's roadway safety effort. The following project implementation strategies form the foundation for advancing priority actions and projects on Adelanto's roadways. These strategies are not sequential and are intended to be used in combination, allowing multiple safety initiatives to move forward at the same time based on opportunity, readiness, funding availability, and community needs.

The following three project implementation strategies reflect the range of project scales, costs, and delivery timelines anticipated under this Safety Action Plan. While the example project locations identified in the previous chapter illustrate how projects may be implemented, these project implementation strategies provide additional general guidance for advancing safety improvements on other HIN corridors and on additional roadways throughout the city.

Quick Build Projects

Quick build projects can be implemented more rapidly and at a lower cost than other projects. They typically include operational improvements such as leading pedestrian intervals and adjustments to yellow change or all-red clearance intervals, as well as signage and striping enhancements like high-visibility crosswalks and lane narrowing through striping. Other capital improvement countermeasures that typically require more time and funding can also be delivered through quick build approaches, such as curb extensions, temporary sidewalks, and medians. These projects not only provide interim safer infrastructure in the near term but also serve as proof of concept to support future funding applications for permanent installations. Quick build projects may occur on any part of Adelanto's roadway network, particularly in locations where they can meaningfully improve safety based on their associated crash modification factors.

Capital Projects

Capital projects are typically larger-scale improvements that require advanced design, community engagement, coordination, and permitting. These projects take longer to deliver than quick build projects and require greater financial and staff resources. Capital projects may include intersection improvements, advanced pedestrian traffic control, lighting improvements, traffic calming measures, and transit access enhancements.

Transformative Projects

Transformative projects are comprehensive, long-term investments that fundamentally reshape corridors or networks to achieve substantial and lasting safety outcomes. Due to the significant impact and cost, these projects will require increased agency coordination, time for design, public engagement, permitting, right-of-way acquisitions, and construction.

Transformative projects may include early implementation of quick build or capital elements to address urgent safety concerns while long-term design and funding are pursued. These projects are the best opportunity to leverage federal funding, which will require an early effort on the design, permitting, and acquisition activities that will make a large grant application more competitive.

FUNDING OPPORTUNITIES

Federal and State Funding Sources

ACTIVE TRANSPORTATION PROGRAM (ATP)

California's ATP consolidates several federal and state funding sources into a single program that supports walking, biking, and SRTS projects. Eligible projects include sidewalks, bikeways, crossings, traffic calming near schools, and non-infrastructure programs such as safety education and encouragement activities. Funds are awarded through statewide and regional competitive cycles and are administered by the California Transportation Commission with support from Caltrans.

CALIFORNIA OFFICE OF TRAFFIC SAFETY (OTS)

OTS funds non-infrastructure transportation safety programs that target behavioral risk factors such as speeding, impaired driving, distracted driving, school-zone safety, and pedestrian and bicyclist awareness. These grants can support campaigns targeted enforcement operations, driver education, community outreach, and cross-agency data collection efforts.

CALTRANS SUSTAINABLE TRANSPORTATION PLANNING GRANTS

These grants fund planning efforts that advance safe, multimodal transportation networks. They can be used for corridor design studies, conceptual alternatives analysis, Complete Streets plans, multimodal network studies, and climate-focused mobility planning. For Adelanto, these grants may be particularly well suited for developing state-owned corridors where partnership with Caltrans will be required.

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ)

CMAQ funds transportation projects that reduce vehicle emissions in areas that do not meet federal air quality standards. California implementing statutes authorize San Bernardino County Transportation Authority (SBCTA) to select and program CMAQ projects with input from SCAG, Caltrans, and air quality districts. Funds are distributed based upon a formula that considers population by county and the severity of its ozone and carbon monoxide air quality problems within the non-attainment or maintenance area. CMAQ eligibility is conditional upon analyses showing that the project will reduce emissions of criteria pollutants. Activities typically eligible for CMAQ funding include transit improvements, travel demand management strategies, traffic flow improvements such as signal synchronization, and public fleet conversions to cleaner fuels.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

HSIP is a federal safety program managed in California by Caltrans. It funds projects that reduce fatalities and serious injuries on public roadways. Eligible projects include intersection safety improvements, speed management measures, lighting, and SRTS treatments where crash history or systemic risk can be measured and documented.

SAFE STREETS AND ROADS FOR ALL (SS4A)

The federal SS4A program, created under the Infrastructure Investment and Jobs Act, provides grants to help local agencies develop and implement Safety Action Plans that reduce roadway deaths and serious injuries. Adelanto is already using SS4A funding to develop this Safety Action Plan and can pursue future SS4A implementation grants to build high-priority safety projects identified in the plan.

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM (STBG)

STBG provides flexible federal funding for a wide range of transportation projects, including road rehabilitation, safety improvements, transit, and bicycle and pedestrian facilities. In San Bernardino County, these funds (sometimes referred to as Surface Transportation Program or STP funds) are programmed by the SBCTA and can be used to deliver multimodal safety projects on Adelanto's local streets.

TRANSPORTATION DEVELOPMENT ACT (TDA)

California's TDA provides State Transit Assistance and Local Transportation Fund revenues that can be used for transit operations, paratransit, and in some cases pedestrian and bicycle projects that provide access to transit. These funds are administered regionally and can support Safe Routes to Transit and complementary SRTS improvements.

Regional and Local Funding Sources

CITY OF ADELANTO FUNDS AND PARTNERSHIPS

Local sources such as the City's capital improvement budget, development impact fees, and partnerships with school districts and community organizations can also help implement SS4A projects.

ADELANTO MEASURE R

Adelanto Measure R is a local business license tax that provides funding for public services, including transportation-related needs. For safety implementation, Measure R can support upkeep such as asphalt repair that improves crosswalk visibility, sidewalk repair in areas with surface deterioration, and enhanced traffic enforcement.

SAN BERNARDINO COUNTY MEASURE I

Measure I is San Bernardino County's half-cent sales tax dedicated to transportation improvements. Revenues are administered by SBCTA and returned to cities and the County for local streets and roads, traffic safety, public transit, and pedestrian and bicycle projects. The City of Adelanto already uses Measure I funds to improve critical street, road and transit projects (Measure I projects in Adelanto).

TRANSPARENCY AND MEASURING SUCCESS

Maintaining transparency is a core element of implementing this Safety Action Plan. Years of worsening crash rates have eroded the public's trust in the systems and agencies that plan and implement transportation infrastructure. It is clear that Adelanto community members want to see change. To build trust, it is critical to match the recommendations presented in this action plan with swift action to implement safety projects.

OUR COMMITMENT TO TRANSPARENCY

- Communicate specific agencies involved in roadway safety efforts and their roles and responsibilities
- Show how and where SS4A funding is being allocated
- Provide timely updates to the public on progress toward roadway safety goals and strategies
- Maintain publicly available and accessible crash data
- Document and demonstrate the role of public input in safety planning and programming
- Institutionalize an oversight committee, such as through a permanent Safety Task Force

Additional progress report measures can be found in [Appendix G: Transparency and Implementation Memorandum](#).

Appendix





From: Alta Planning + Design
To: City of Adelanto
Date: January 7, 2026
Re: Appendix A: Safety Analysis Memorandum

Crash Analysis

Purpose

As part of the Safety Analysis, Alta prepared this crash analysis summary to understand crash trends in Adelanto. A thorough consideration of crash trends can highlight types of crashes and conditions that are particularly problematic, with the aim of eliminating all traffic injuries in the future. Alta downloaded crash data from the Transportation Injury Mapping System (TIMS), a database maintained by the Safe Transportation Research & Education Center (SafeTREC) at the University of California Berkeley mapping injury-causing crashes only. Crash data was collected for all crashes of any mode reported within Adelanto city limits between 2017 and June 2024, providing seven and a half years of complete data. Alta performed crash tabulations on the data provided in TIMS, which included variables such as the time, day, lighting conditions, primary cause of crashes and other information reported at the crash site. These findings inform the Risk Factor Analysis.

Crash Data Summary

Between 2017 and 2024, 396 injury-causing crashes were reported, 70 of which involved a fatality or serious injury. In total, 23 people were killed and 599 people were injured.

From this data, the project team arrived at the following findings:

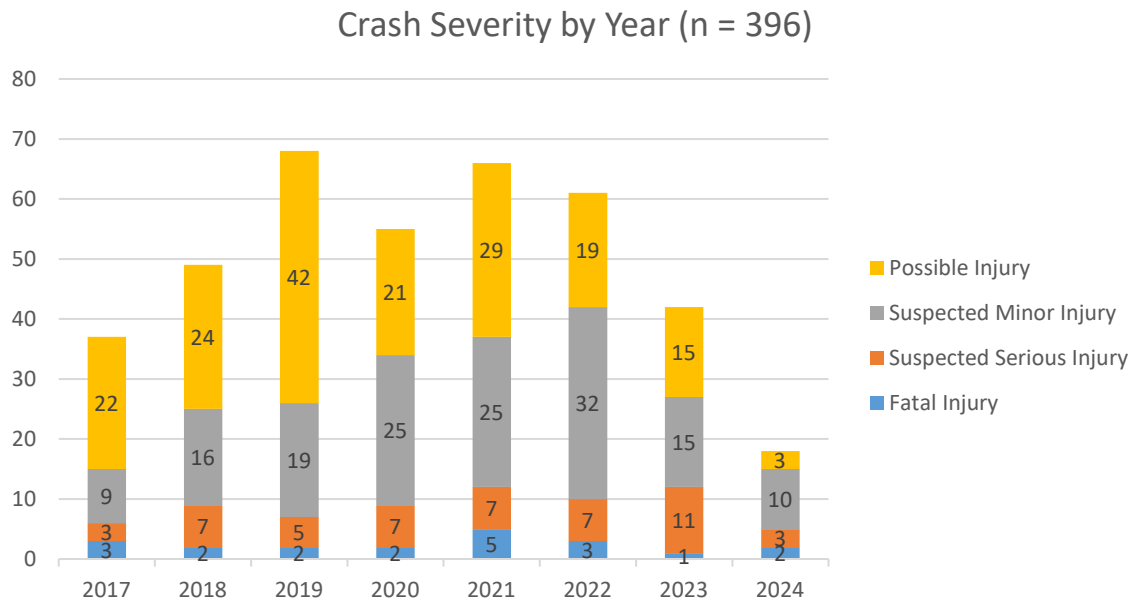
- Over half of crashes (53%) occurred at intersections and about a third of those occurred at an intersection along US 395.
- Half of all injury crashes occurred in daylight conditions and one out of eight crashes occurred in dark conditions without streetlights.
- When only looking at crashes involving bicyclists and pedestrians, nearly 70% of crashes occurred during twilight or in dark conditions.
- Crashes occurred more often in the afternoon and evening with the most occurring during the 5-6 pm (7%) and 8-9 pm (8%) hours.
- The most common primary causes of crashes were unsafe speeds (25%). The second most common was “traffic signals and signs” (16%), which we take to refer to drivers disregarding signals or signs. While one

source interpreted this category as signals or signs that were inadequate or malfunctioning, a separate attribute in TIMS data says that most of these crashes occurred where signals were functioning.¹

Severity by Year

Figure 1 shows the number and severity of crashes by year.

Figure 1 Crash Severity by Year. 2024 includes only the first half of the year.



Looking at year over year trends, there has been downward trend in crashes since 2021, with a significant drop in 2023.² Fatal crashes peaked in 2021 but have since decreased while the number of suspected serious injuries, which can have life-altering impacts, increased in 2024 but was trending lower in 2024. Crashes involving suspected minor injuries or possible injuries have fluctuated the most and account for most crashes each year.

Pedestrians were involved in 30 crashes and bicyclists were involved in 16 crashes during the study period. **Figure 2** and **Figure 3** show the severity of crashes for pedestrian-involved and bicyclist-involved crashes, respectively. Pedestrian-involved crashes tended to be more severe with two out of five resulting in a fatality or serious injury. There were no fatalities in bicyclist-involved crashes and only 13% of crashes resulted in a serious injury.

¹ San Bernardino County, *San Bernardino County Local Roadway Safety Plan*, <https://www.sbpl.org/DocumentCenter/View/3134/San-Bernardino-LRSP---Appendix-D---PCF-Glossary-PDF?bidId=> (accessed Feb. 28, 2025).

² TIMS data for 2023 is still considered provisional, so some crashes may not have been yet reported.

Figure 2. Severity of Pedestrian-Involved Crashes

Severity of Pedestrian-Involved Crashes (n=30)

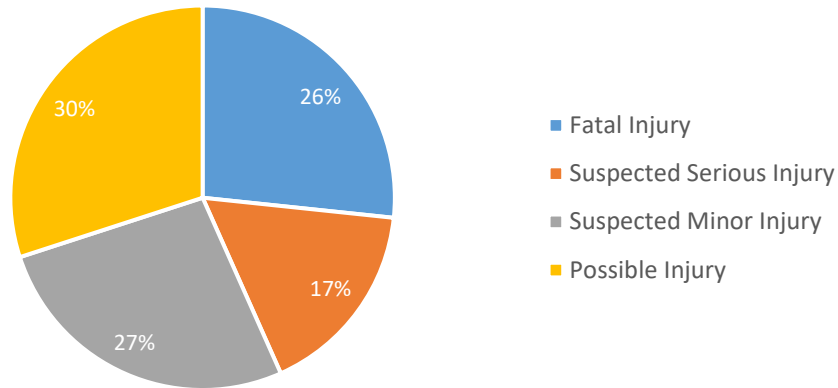
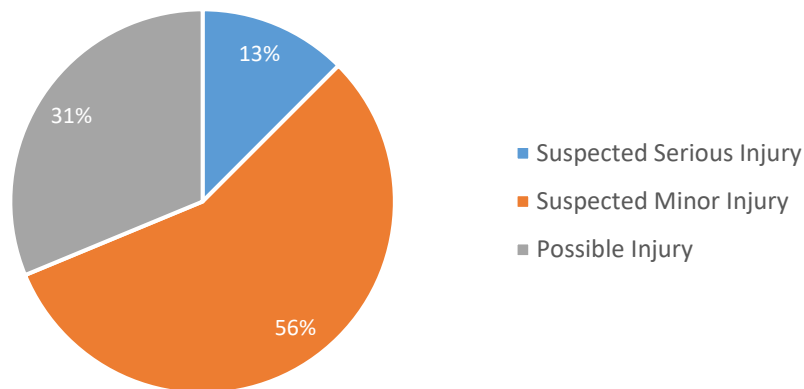


Figure 3. Severity of Bicyclist-Involved Crashes

Severity of Bicyclist-Involved Crashes (n=16)

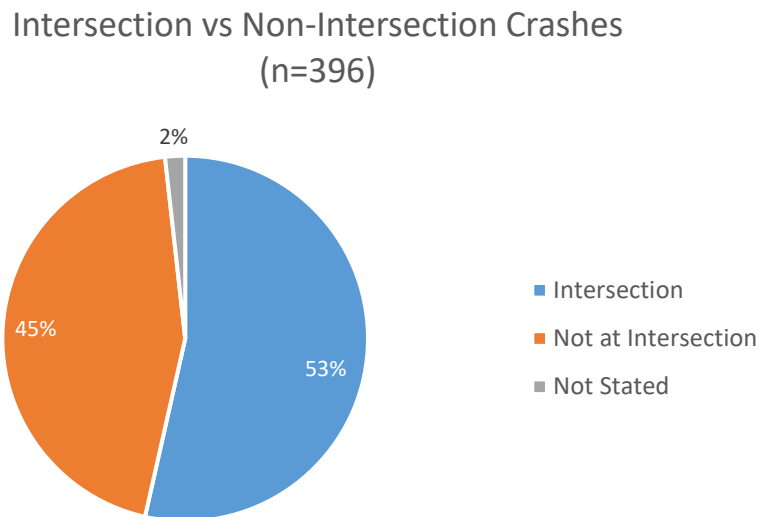


Key Trends

The project team analyzed crash data to identify key trends based on the attributes available. These included whether the crash occurred at an intersection, the lighting conditions, the time of day, and the primary cause of the crash.

Intersections

Of all crashes, about 53% occurred within an intersection, as shown in **Figure 4**. Out of intersection crashes, about 43% occurred at intersections with at least one state highway and roughly 32% occurred at an intersection along US 395, the main roadway transversing the city.

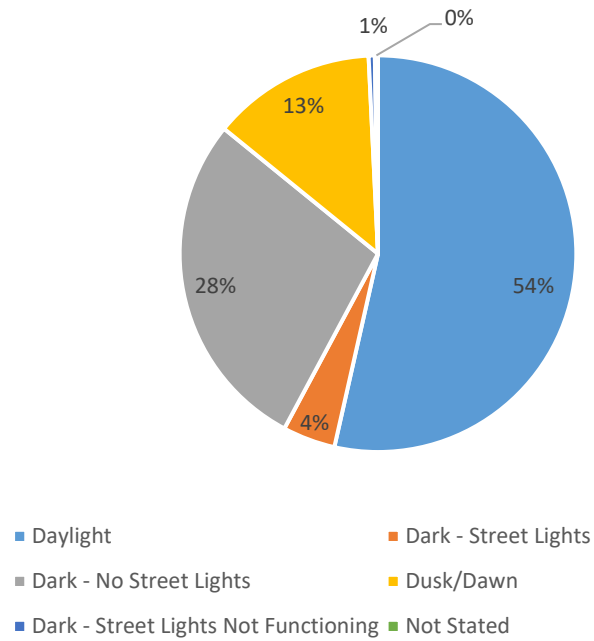
Figure 4. Intersection vs Non-Intersection Crashes

Lighting Conditions

As shown in **Figure 5**, slightly over half of all crashes occurred in daylight conditions and about 13% of crashes occurred during twilight hours (dusk or dawn). About 32% of crashes occurred in dark conditions with most of them (28% of all crashes) occurring in an area without streetlights. Crashes in dark conditions without street lights were slightly concentrated on rural segments of US 395 and Palmdale Road. There was also a significant cluster of these crashes on Air Expressway between US 395 and Adelanto Road. In two nighttime crashes, there was a non-functional streetlight.

Figure 5. Crashes by Lighting Conditions

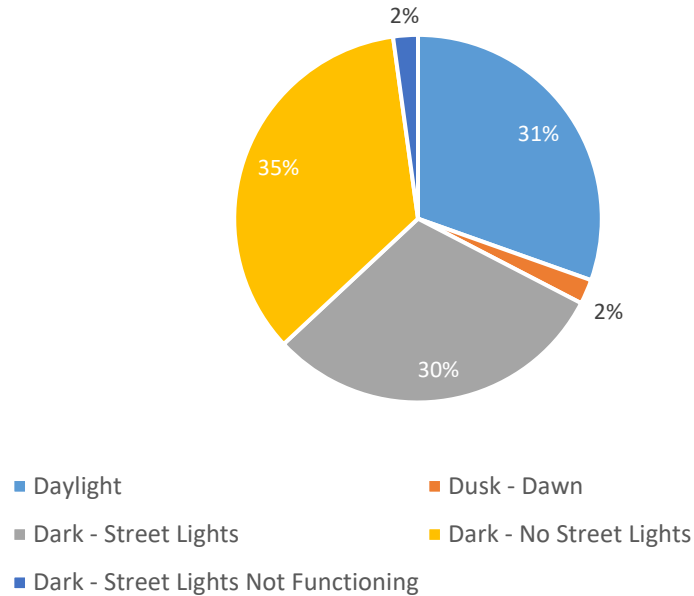
Crashes by Lighting Condition (n=396)



When only looking at crashes involving bicyclists and pedestrians, 69% of crashes occurred during twilight or in dark conditions as shown in **Figure 6**.

Figure 6. Lighting Conditions of Pedestrian and Bicyclist-Involved Crashes

Lighting Conditions of Pedestrian and Bicyclist-Involved Crashes (n=30)



Time of Day

Crashes occurred more often in the afternoon and evening hours, but there are three noticeable peaks throughout the day. **Figure 7** shows the distribution of crashes over the course of the day. The highest peak is during the 8pm hour, followed closely by the 5pm hour, corresponding to the traditional evening rush hour. The third highest peak is during the lunch hour at 12pm. Crash data was then compared to trip start times from Replica Places, shown in **Figure 8**. Unlike the crash data, trip volumes have just two peaks throughout the day, at 7 am and 3pm, decreasing steadily after that. A high proportion of crashes are happening in the overnight hours where trip volumes are very low, which may be related to poor lighting conditions, distractions, or other causes. It is also interesting that crashes increase in the 12pm and 8pm hours, when trip volumes dip. This comparison shows that hourly variations in crashes are not merely due to higher volumes of cars on the road; there are other factors causing crashes to spike at certain hours.

Figure 8. Crashes by Time of Day

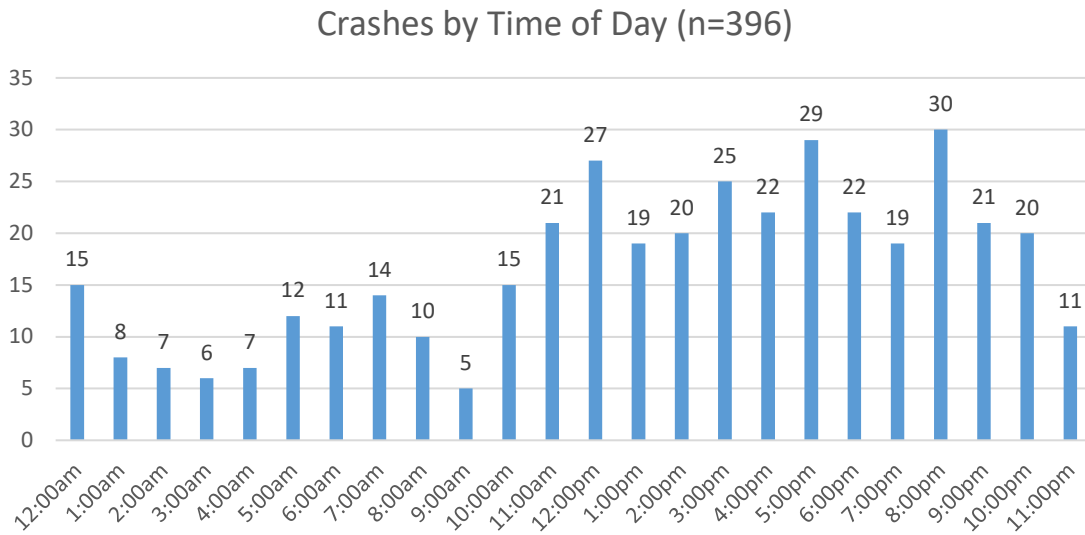
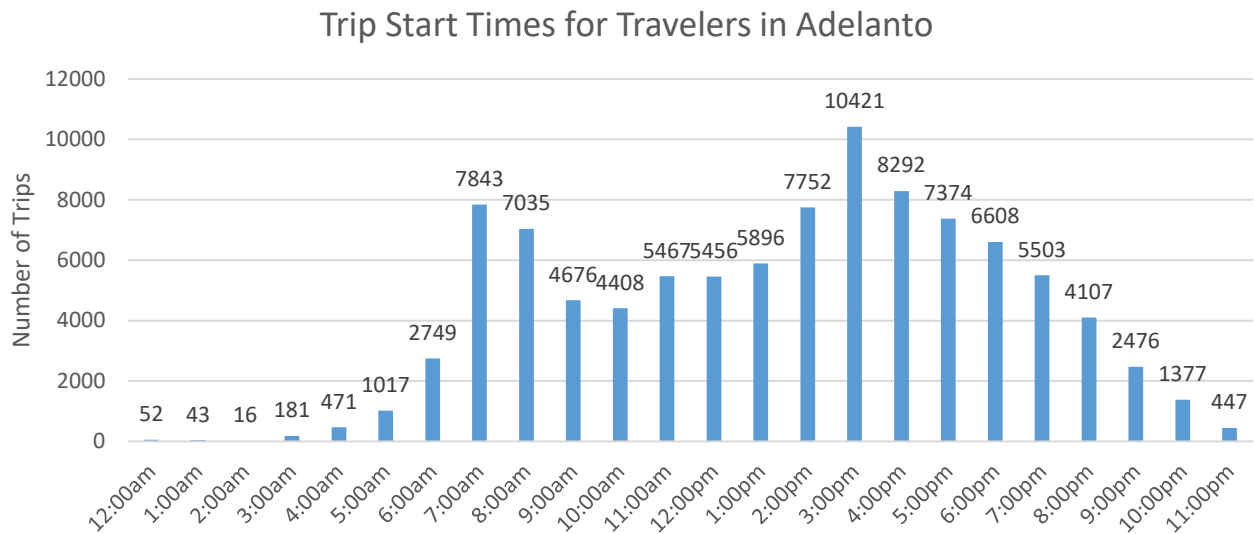


Figure 7: Starting hour of typical weekday trips under 10 miles intersecting with Adelanto (Replica Places, 2024)

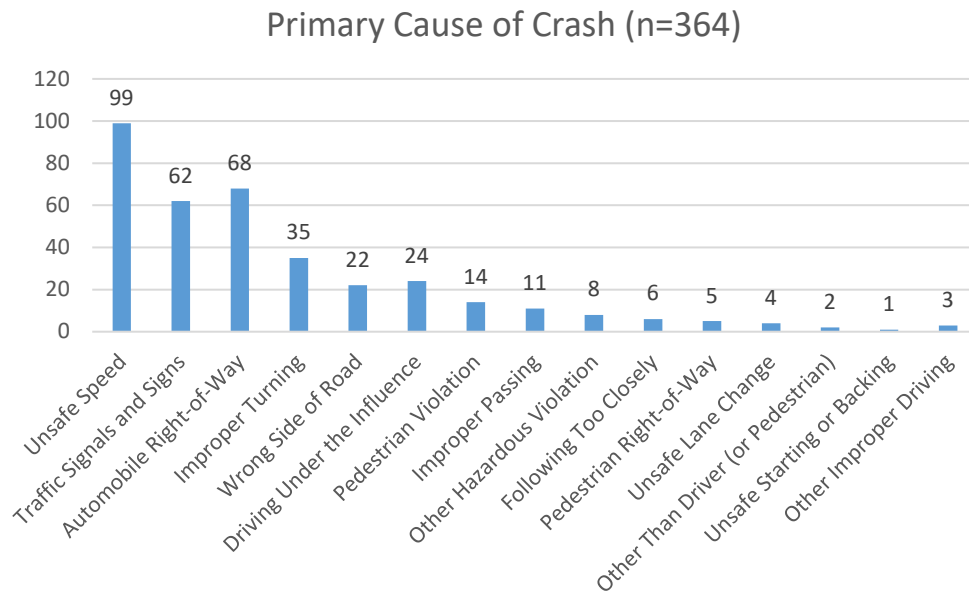


Primary Cause of Crash

The primary cause of the crash was reported for 364 out of 396 crashes (92%) and the remaining 32 crashes were either not stated or marked “Unknown”. “Unsafe speed” was cited as the primary cause for the plurality of injury crashes (25%). The second most common primary cause was “Automobile Right-of-Way”, meaning the driver

completed a maneuver without respecting the right-of-way of another driver.³ The third most reported primary cause was “Traffic Signals and Signs”. **Figure 9** shows the distribution of crash causes.

Figure 9. Primary Cause of Crash



Lighting and Speed Analysis

Due to insufficient data, such as traffic signals, the number of bike facilities, and streetlights, Alta could not perform a typical detailed risk factor analysis as originally scoped. As an alternative, Alta conducted a lighting analysis and speed data analysis, which can help us predict where risk is greatest and safety improvements are needed. These analyses will guide the selection of countermeasures and integrate seamlessly into project prioritization.

Methodology

1. The **lighting analysis** examines pedestrian injury crashes after dark, with and without streetlights, to understand where lighting conditions are poor at the pedestrian scale. Alta developed a heat map using this crash data to show where pedestrian-scale lighting improvements are needed and compared this data to sidewalk availability.
2. The **speed analysis** identifies areas where uninhibited traffic flows exceed the speed limit, which may highlight corridors where the design speed does not match the speed limit or where increased traffic enforcement is needed. This analysis compared free-flow speeds on major roads from Replica Places (2024) with posted speed limits on the same roads, as provided by the City of Adelanto and San Bernardino County. Alta then calculated speed differentials for each road.⁴

³ San Bernardino County, *San Bernardino County Local Roadway Safety Plan*, <https://www.sbpl.org/DocumentCenter/View/3134/San-Bernardino-LRSP---Appendix-D---PCF-Glossary-PDF?bidId=> (accessed Feb. 28, 2025).

⁴ Replica defines free-flow speeds as 66th percentile vehicle speeds between the hours of midnight and 6 am. This represents the time when congestion is typically lightest.

Results

Lighting Analysis

The results of the lighting analysis are shown in Figure 10. **Between January 2017 and June 2024, 25 out of 30 pedestrian crashes occurred with limited lighting conditions, including dusk, dawn, or darkness with or without functioning streetlights. Of these 25 collisions, seven resulted in fatal injuries and 5 in severe injuries.** Excluding one crash with an unknown location, 56% of these incidents occurred along roadways with incomplete pedestrian infrastructure, such as missing sidewalks, crosswalks, or sidewalk gaps.

Speed Analysis

Figure 11 highlights roads where free-flow speeds exceed posted limits. **Significant speeding activity has been observed along Palmdale Road, Aster Road, Koala Road, Air Expressway, and Chamberlaine Way.** Roads shown in gray either have free-flow speeds that are approximately at or below the speed limit or lack sufficient data. However, this does not mean that speeding by individual drivers is not occurring, as community members have consistently raised speeding as a major concern.

Discussion

Lighting Analysis

After-Dark Crash Hot Spot: Air Expressway & Pearmain Street

Notably, the largest after-dark pedestrian collision hot spot was identified along Air Expressway at and just east of Pearmain Street, where six crashes occurred after dark, three of which resulted in fatalities. Three of the crashes occurred midblock between Pearmain Street and Adelanto Road, and most occurred between 10pm and 2am. In all but one case, the pedestrian was noted as being traveling in the road or on the road shoulder; in the remaining crash, the pedestrian was attempting to cross the street. This part of Air Expressway has no dedicated existing pedestrian facilities or streetlights, so people walk in the road shoulder. In five of the crashes, a pedestrian violation was deemed the primary cause of the crash, though it is unclear what the violation was or if being on the shoulder (despite the lack of sidewalk) is itself considered a violation.

It is unclear where the victims' intended destinations were. This area has few residents and just a handful of businesses, none of which are open past 9pm, but employees may work late. Around the corner on US 395, there is a 24-hour travel center and the High Desert Outreach Center, a social services organization, which may generate pedestrian activity after dark. This area has little transit service, so people without vehicles may have few options but to walk along dark road shoulders at night. Sidewalks and lighting here would provide a safer experience for those looking to make east-west connections.

Other After-Dark Crash Trends

Aside from the above hotspot, most other pedestrian crashes that occurred after dark were in scattered across the city. Seven crashes, including one fatality, and four felony hit-and-runs, occurred throughout the residential neighborhoods of south Adelanto. In all but two of these crashes, pedestrian facilities were present. In most cases, the cause was determined to be related to the driver's behavior, including unsafe speeds or improper maneuvers. Strategies that deter hit-and-runs and slow speeds in neighborhoods may help improve safety at these locations.



Data provided by Southern California Association of Governments, San Bernardino County, California Department of Education, Transportation Injury Mapping System

ADELANTO LIGHTING ANALYSIS

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CRASHES: PEDESTRIAN, AFTER DARK

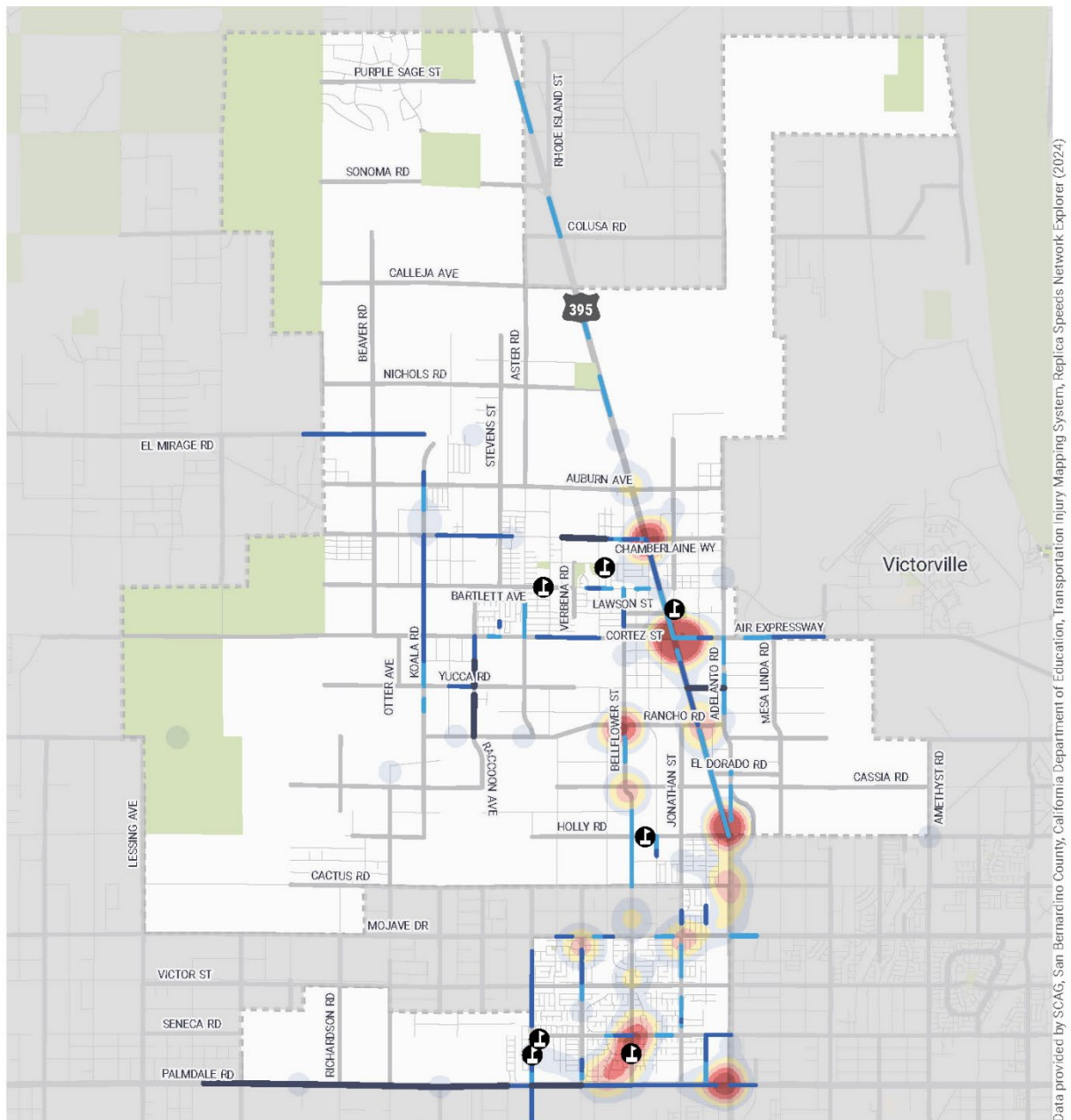
- Fatal Injury (7 out of 25)
- Crash with Pedestrian Facility Present – Sidewalk or crosswalk available
- Crash with Sidewalk Gap – Sidewalk on one side or with gaps
- Crash with No Pedestrian Facility – No sidewalk or crosswalk present
- Few Crashes After Dark
- Many Crashes After Dark

DESTINATIONS + BOUNDARIES

- Public Schools
- City of Adelanto
- Open Space



Figure 10: Lighting analysis of after-dark crashes



Data provided by SCAG, San Bernardino County, California Department of Education, Transportation Injury Mapping System, Replica Speeds Network Explorer (2024)

ADELANTO SPEED ANALYSIS

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CITY OF ADELANTO, CA

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SPEED COMPARISON

The Free Flow Speed Compared to the Posted Speed Limit

- 16 - 31 mph over speed limit
- 6 - 15 mph over speed limit
- 1 - 5 mph over speed limit

CRASHES: UNSAFE SPEED VIOLATION

- Few Crashes Due to Unsafe Speed
- Many Crashes Due to Unsafe Speed

DESTINATIONS + BOUNDARIES

- Public Schools
- City of Adelanto
- Open Space



Figure 11: Speed analysis

Speed Analysis

Figure 11 shows hot spots for speed-related crashes. Between January 2017 and June 2024, approximately 25% of all crash reports in Adelanto listed speeding as the primary crash factor, including five crashes resulting in fatalities and nine resulting in severe injuries.

Hot Spots

One speeding hotspot is along US 395 near the intersection of Air Expressway. Unsafe speeds here caused five collisions, two of which were head-on, and one of which caused a serious injury. This location has a busy intersection and a very straight road, which may facilitate high speeds.

Another hotspot is further north on US 395 at the intersection with Chamberlaine Way, where speed caused five collisions, four of which were rear-end crashes and one of which resulted in a severe injury. Countermeasures here that slow speeding may help to prevent these types of crashes in the future.

Relation to High-Speed Corridors

These speeding-related crash hot spots align with corridors where free-flow speeds exceed posted limits moderately, but they are typically not on the corridors with the highest rates of excessive speed. This could indicate that speed-related crashes are more likely to be caused by individuals exceeding the speed of traffic rather than by generally high-speed traffic flows. It is also important to note that this analysis uses posted speeds provided by the City of Adelanto. If those posted speeds are not current, then the results of this analysis would be inaccurate, and the results could be misleading.

High Injury Network

Purpose

High Injury Networks (HINs) illustrate that a small number of improvements to roadways often can address the most life-altering crashes. This approach moves beyond typical crash history and allows for a better understanding of the types of roadways in Adelanto where users are most at risk. Crashes involving a fatality or severe injury are commonly referred to as Killed or Serious Injury (KSI) crashes. The purpose of this HIN analysis is to identify the high-risk areas of the transportation system and the key crash trends in Adelanto.

Methodology

This section outlines the data inputs, processing, and HIN creation steps taken to develop a HIN for Adelanto, CA.

Data Inputs

Alta produced the HIN using ArcGIS Pro. The HIN required two datasets:

- Seven-year crash data (2017 – mid-2024) of all crashes listed within the City of Adelanto, provided by the California Transportation Injury Mapping System (TIMS). This data includes motor-vehicle, bicyclist, pedestrian and motorcycle crashes within the city limits.
- The street centerline network called “Circulation” is provided by the City of Adelanto.

Street Centerline Processing

The Adelanto Circulation shapefile was used for the HIN analysis. All types included in this file were used, even though some are gravel or dirt type roads. The roads were segmented by planarizing all existing segments that were larger than one-quarter mile in length.

Crash Data Processing

The crash data was given weights based on the most serious injury sustained by any individual involved in the crash. This prioritizes areas where more vulnerable road user crashes, or serious motor vehicle crashes, are occurring to identify areas where the most serious injuries can be reduced. These proportions are based on the ratio of the average cost to society from fatal and serious crashes compared to minor injury crashes. Using this ratio avoids overweighting fatal crashes that occur as isolated events so that the HIN can represent roadways with patterns of severe crashes.⁵ The weights given to the crashes by severity are the following:

- Fatal injury or serious injury: 4
- Minor or Possible injury: 1
- Property damage only: 0.5

HIN Creation

The HIN approach used a rolling window analysis, overlapping the street network by extending the lines over each roadway segment by 25%. This process allowed rolling window statistics to be calculated on each road segment. The benefits of rolling window analysis are that it reduces the impact that dead-end streets, arbitrary segmentation, or anomalous crashes have on the final HIN. Fundamentally, it better captures the linear corridor crash patterns where they exist (Fitzpatrick, 2018).⁶ This process is illustrated in Figure 12. Alta created and used a custom splitting tool that has an overlap percentage (Wasserman, 2023).

The HIN was developed using the rolling window approach, following these steps:

1. Spatially joined the crash layer to the rolling window road network.
2. Calculated the summed crash weight for each rolling window road segment. This sums the weight of crashes on each rolling window segment to reflect total crash severity on each segment.
3. Joined the rolling crash weight from the rolling window feature class back to the original, unrolled centerline network to show rolling crash weight per segment. Divided the rolling crash weight by the length of the unrolled segment (generally ¼ mile) to normalize the crash statistics for the road length and calculate a crash weight rate per road mile. However, for the purpose of calculating crash weight per road mile, Alta counted any rolled segments of less than 1/10 miles as 1/10 of a mile, to avoid overrepresenting crashes on small road segments, as dividing by very small numbers yields very large numbers. The crash weight per mile is referred to here as the **crash index**. This analysis purposely does not normalize for volumes to focus efforts on where improvements can reduce the most serious injuries.
4. Beginning with segments with the highest crash index, Alta's custom-build HIN Generation tool was used to progressively add segments to the HIN. This tool calculated the length in miles for each segment as it is added

⁵ There are many calculations of average cost of severe and fatal crashes. The ratio shown here is based on the FHWA's *Crash Costs for Safety Analysis* (Harmon et al, 2018), table 17. The weights shown here are proportional to the average of the square root of costs to society of serious crashes (fatal and serious injury) compared to the baseline of minor-injury crashes. Source: <https://safety.fhwa.dot.gov/hsip/docs/fhwasa17071.pdf>.

⁶ These patterns would take into account crashes sometimes not directly on a particular segment in order to smooth out analysis results. Examples of this type of analysis are provided by FHWA in their [Guide Book on High Pedestrian Crash Locations](#).

and keeps track of the cumulative miles in the HIN and the number of crashes occurring on those segments. It stops when the designated threshold of KSI crashes have been accumulated. The tool also generates a table that shows the number of crashes, and the number of roadway miles accounted for with each HIN segment.

5. Alta decided the threshold for the percentage of crashes included in the HIN by examining a graph of accumulated crashes and centerline miles and identifying the natural inflection point in the data. This represents the point at which adding more roadways to the HIN has diminishing returns in terms of identifying more crashes. For Adelanto, the threshold chosen was 95% of the KSI crashes.
6. Examined the map of qualifying HIN segments and perform manual cleaning output from the tool. This step fills small gaps in otherwise contiguous networks on major roadways.
7. Calculated the percentage of roadway miles and the percentage of KSI crashes accounted for in the final HIN.
8. Identified the corridors with the highest crash index and reported as key areas to consider for projects.

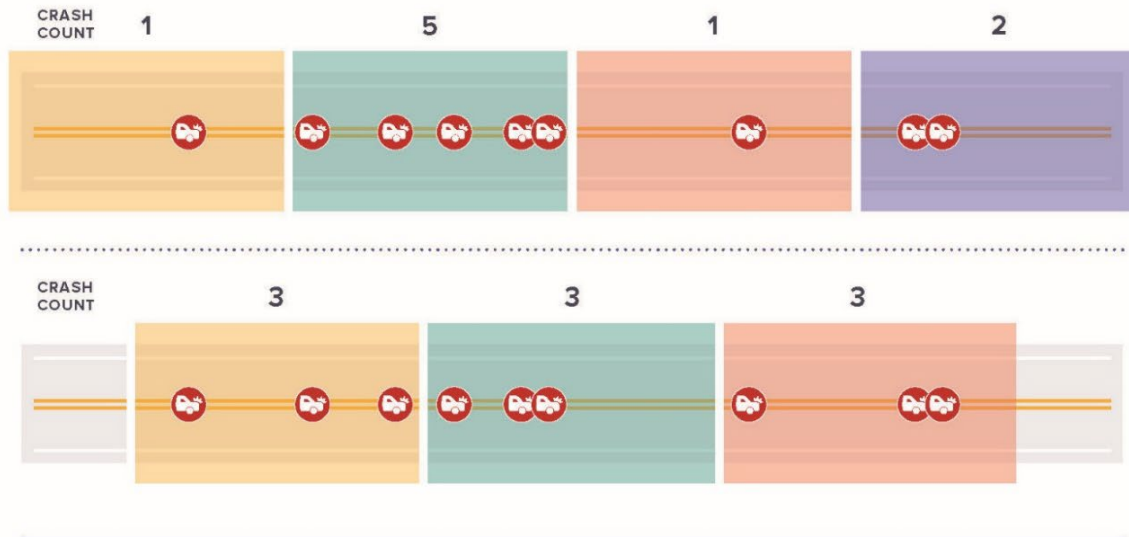
Rolling Window Approach



Segmented roadways can be misleading.

The same roadway, segmented in two different ways, paints a different picture of where crashes are happening.

Where segments get divided is somewhat arbitrary.



The rolling window approach more accurately represents crash count figures.

The rolling window approach helps mitigate bias caused by arbitrary segmentation.

Rolled crash counts are shown here for simplicity. In the analysis, a sum of crash weights is used, and then divided by the segment length to show the weighted crash rate per mile.

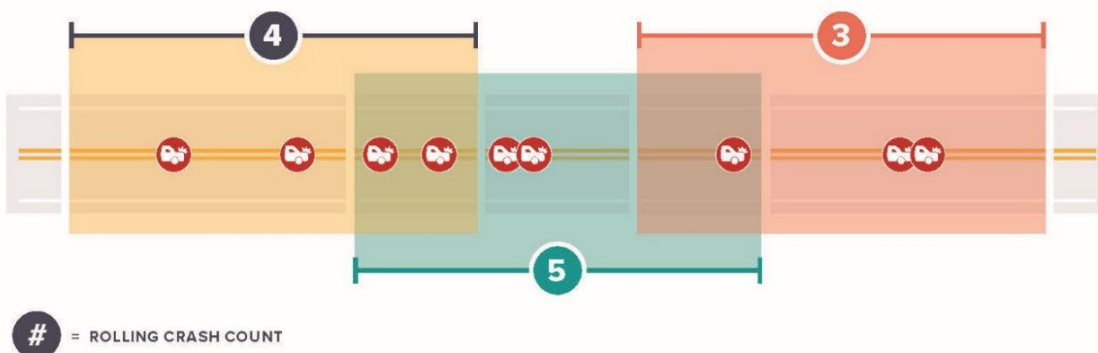


Figure 12: Rolling Window Approach

Results

Citywide Analysis

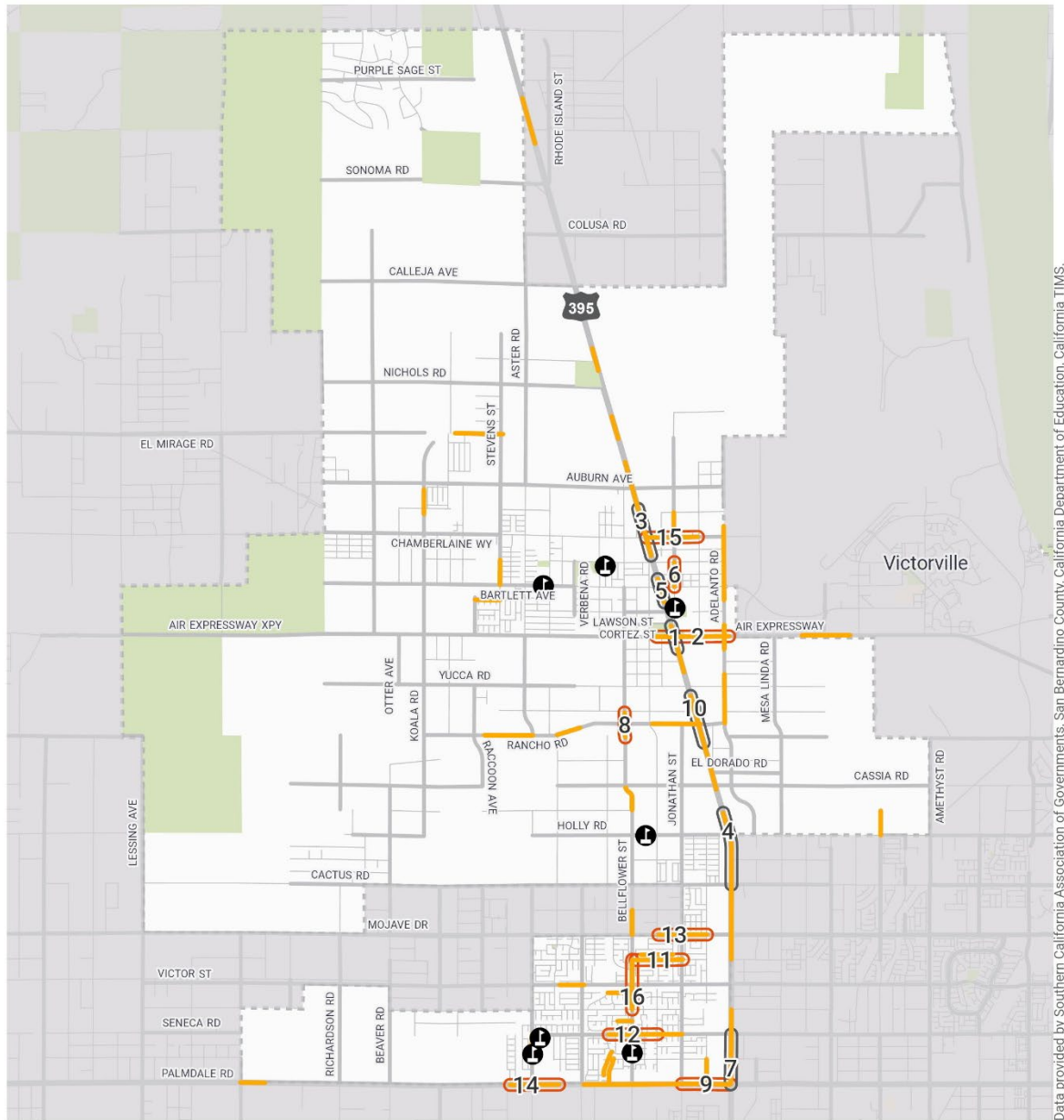
The Adelanto HIN is highly concentrated on key portions of the overall road network. In Adelanto, 95% of all KSI crashes are located on only 5% of the road network. Alta initially computed the top 10 segments on the HIN by crash index. Because six of these corridors fell on US 395, which is Caltrans right-of-way, we then added the next six local, City-owned segments to the list for a total of 16 HIN segments. These top 16 corridors on the HIN by crash index are listed in Table 1 and are shown in **Figure 13**. The six segments on US 395 are shown in gray in the table and on the map, while the **ten segments on local streets are shown in red**.

Table 1. Top Adelanto High Injury Network (HIN) Segments

Corridor Ranking	Segment Name	Number of Total Crashes on Corridor	Number of KSI Crashes on Corridor
1	US 395 near AIR EXPRESSWAY	19	5
2	Air Expressway near US 395	21	6
3	US 395 near Chamberlaine Way	14	4
4	US 395 near Holly Road	23	5
5	US 395 near Bartlett Ave	8	1
6	Jonathan Street near Brockman Ave	5	2
7	US 395 near Palmdale Road	13	3
8	Bellflower Street near Rancho Road	7	1
9	Palmdale Road near US 395	11	1
10	US 395 near Rancho Road	13	0
11	Star Street near Jonathan Street	5	2
12	Seneca Road near Palm Street	11	0
13	Mojave Drive near Mesquite Avenue	9	0
14	Palmdale Road at Aster Road	5	1

Corridor Ranking	Segment Name	Number of Total Crashes on Corridor	Number of KSI Crashes on Corridor
15	Chamberlaine Way near US 395	5	1
16	Bellflower Street near Victor Street	5	1

Finally, Alta mapped the crash index for each segment in Adelanto in **Figure 14**, which represents the sum of crash weights per mile. This metric was the key input to the HIN, and the highest-scoring segments were those selected for the HIN. The lower-scoring segments highlight areas that were not selected for the HIN but nonetheless experienced some moderate injury or property damage-only crashes.



Data provided by Southern California Association of Governments, San Bernardino County, California Department of Education, California TIMS.

ADELANTO HIGH INJURY NETWORK

SS4A SAFETY ACTION PLAN
CITY OF ADELANTO, CA

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ANALYSIS LAYER

- High Injury Network (HIN)
- Top Corridors on HIN (not on US 395)
- ▭ Top Corridors on HIN (on US 395)

MORE THAN 95% OF ALL KSI CRASHES
OCCUR ON 5% OF THE ROAD NETWORK.

DESTINATIONS + BOUNDARIES

- Public Schools
- ▭ City of Adelanto
- ▭ Open Space

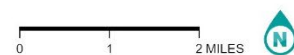
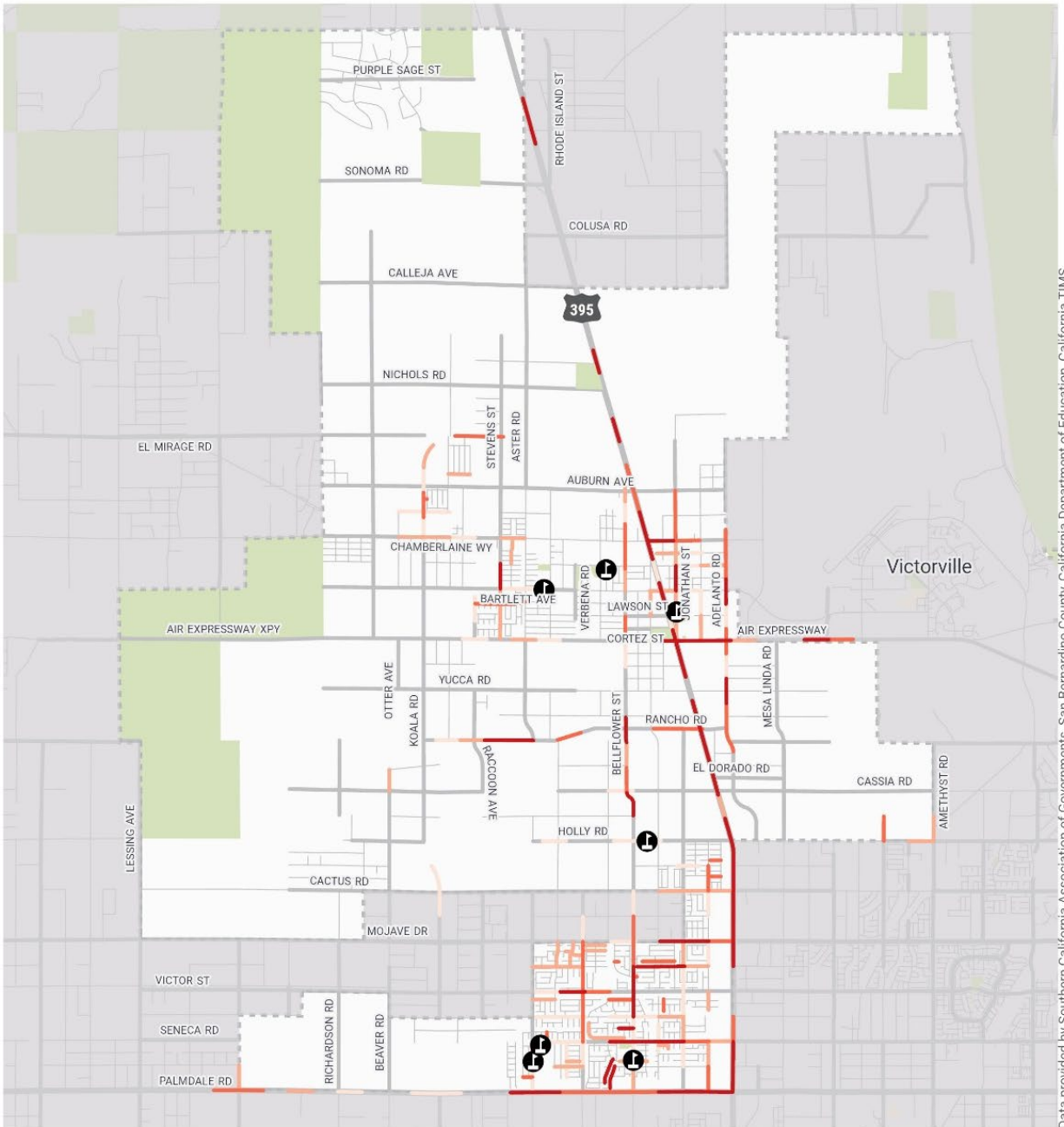


Figure 13: Adelanto High Injury Network



Data provided by Southern California Association of Governments, San Bernardino County, California Department of Education, California TIMS.

ADELANTO HIGH INJURY NETWORK

SS4A SAFETY ACTION PLAN
CITY OF ADELANTO, CA

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CRASH INDEX

- 13.5 - 95.6
- 7.9 - 13.4
- 3.2 - 7.8
- 2.4 - 3.1

DESTINATIONS + BOUNDARIES

- Public Schools
- City of Adelanto
- Open Space

Crashes are weighted by severity: fatal or serious injury is 4 points, minor or possible injury is 1 point, and property damage only is 0.5 points.

Rolling window analysis allows for the crash weights along a segments to be summed, then divided by length, to create a normalized crash index.

0 1 2 MILES



Figure 14: High Injury Network by crash index

Discussion

Overall, US 395, especially near the central part of the city, is a key corridor for safety in Adelanto. Several contiguous sections of the road are among the top five corridors on the HIN. This indicates that a greater number of serious injuries are occurring on these segments of US 395, even when accounting for road length. These crashes may be a function largely of higher volumes on US 395 compared with the rest of the city but still US 395 deserve attention as the corridor where most people are being injured. However, this corridor is Caltrans right-of-way, so it is not the primary focus of this analysis.

Air Expressway is also a concern with several segments among the top corridors on the HIN. The segment near Pearmain Road is especially problematic for pedestrians, with five crashes, including three fatalities. Three pedestrian crashes on this segment occurred between the High Season cannabis store and the Express Bakery, which is about 500 feet from the nearest crosswalk. Given the overlapping customer base of these two land uses, we would expect more pedestrians to attempt this crossing in the future, and a mid-block crossing may be considered during countermeasure selection.

Other east-west roads with several segments on the HIN include Rancho Road, Mojave Drive, and CA-18 / Palmdale Road. Also notable from the list of top corridors are Jonathan Street, near Adelanto Elementary, and Seneca Road, which provides access to Theodore Vick Elementary School, Columbia Middle School, and Desert Trails Preparatory Academy. These are important sections to consider for safety improvements focused on vulnerable users and are noteworthy because they are primarily in or nearby residential areas where crashes are often less frequent. In addition, there are several sections of Bellflower Street on the HIN, including one on the top 16 list, which have experienced several injury crashes.

Throughout Adelanto, there are a handful of other segments on the HIN in residential areas, where crashes and conditions could be reviewed for future safety improvements. For example, segments of El Mirage Road near Raccoon Avenue are on the HIN. While some HIN segments have only one severe crash, these are still important areas to consider for preventing traffic injuries and deaths in the future.

References

- Fitzpatrick, K. A. (2018). *Guidebook on Identification of High Pedestrian Crash Locations. FHWA-HRT-17-106. Supplemental Material*. McLean, VA: Federal Highway Administration Office of Safety Research and Development.
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From: Alta Planning + Design
To: City of Adelanto
Date: October 16, 2025
Re: Appendix B: Equity Considerations Memorandum

Introduction

The purpose of this memorandum is to identify concentrations of underserved or vulnerable populations. The results of this analysis, which show the overlap between areas of inequity and HIN segments, will be incorporated into the countermeasure selection process and assist in prioritizing investments to improve safety and mobility for areas experiencing disproportionate transportation challenges.

Methodology

Alta consulted the U.S. Department of Transportation's Areas of Persistent Poverty (APP) data to identify disadvantaged communities within the City of Adelanto and found that the entire city falls within designated APP areas. To provide a more detailed context specific to the project area, the project team developed an equity index comprised of additional demographic attributes and mapped them by block group, calculated the individual data points' percentile ranks relative to the Adelanto dataset, then created a final score for each block group, which ranked the block group relative only to block groups in Adelanto. These demographic attributes and weights are listed in **Table 1**.

Attributes include those that can affect transportation access directly, such as low income households, households with no vehicle access, and households burdened by housing costs.¹ Other contributing attributes include the percentage of the population of color, senior population, youth population, population without high school diplomas, and the origin-trip density for households below the median income. These attributes reflect association with a relative lack of access to transportation, increased susceptibility to crashes, and a higher likelihood of disinvestment in neighborhoods that are predominantly non-white.

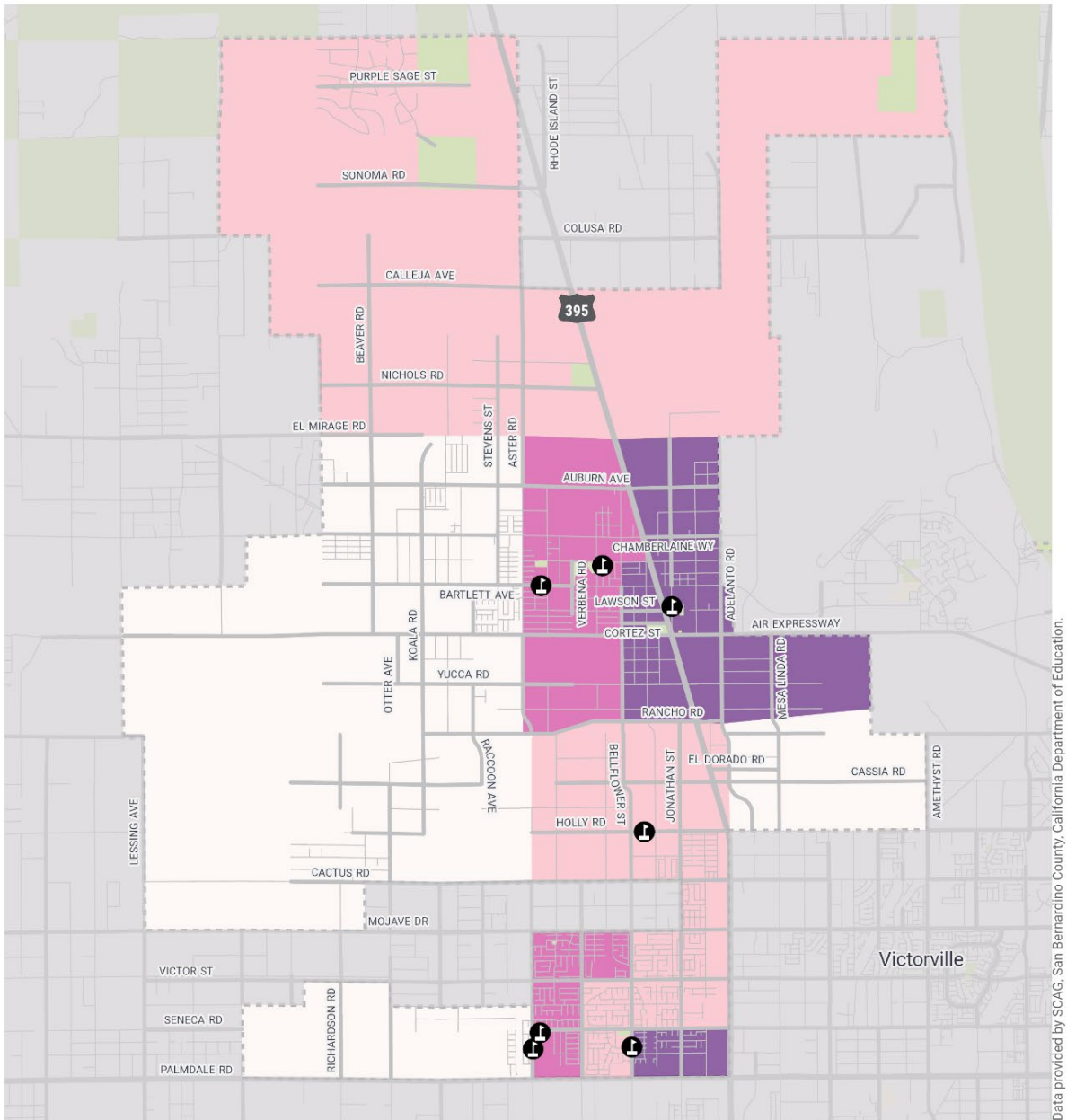
Table 1. Equity Index Variables

Field	Data Source	Weight
Low Income	EJ Screen 2.3 (based on ACS 2018-2022 5 Year Estimates)	0.091

¹ The percent of a block group's population in households where the household income is less than or equal to twice the federal "poverty level."

Percentage Population of Color	EJ Screen 2.3 (based on ACS 2018-2022 5 Year Estimates)	0.091
Percentage of Population Under 18 and Over 64 Years of Age	EJ Screen 2.3 (based on ACS 2018-2022 5 Year Estimates)	0.091
Percentage of Households with No Vehicle	American Community Survey 2019-2023 5 Year Estimates	0.091
Percentage of Households earning below median income Burdened by Housing Cost	United States Department of Housing and Urban Development	0.091
Percentage of Population who did not complete High School	EJ Screen 2.3 (based on ACS 2018-2022 5 Year Estimates)	0.091
Particulate Matter 2.5	EJ Screen 2.3 (based on ACS 2018-2022 5 Year Estimates)	0.091
Economic Opportunity	Opportunity Atlas U.S. Tract 2010-2020 Crosswalk	0.091
Rate of Coronary Heart Disease	CDC Places data set (2024)	0.091
Origin-Trip Density for School-Related Trips	Replica	0.091
Origin-Trip Density for Households Below Median Income	Replica	0.091
Weight Total		1

All demographic attributes are mapped by block group into four categories (**Figure 1**). The block groups in the highest quartile include those with GeoIDs: 060710091311, 060710091312, 060710091322, and 060710091241.



Data provided by SCAG, San Bernardino County, California Department of Education.

ADELANTO EQUITY ANALYSIS

SS4A SAFETY ACTION PLAN
CITY OF ADELANTO, CA

EQUITY SCORES BY BLOCK GROUP

- 0.66 - 0.78
- 0.53 - 0.65
- 0.39 - 0.52
- 0.25 - 0.38

DESTINATIONS + BOUNDARIES

- Public Schools
- City of Adelanto
- Open Space

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Figure 1: Equity Scores by Block Group

Results

The equity analysis revealed the areas in Adelanto that have the highest levels of social vulnerability. These areas are primarily clustered along US 395 and near its intersection with Air Expressway. Not only do these locations experience high traffic volumes, they also contain several High Injury Network (HIN) segments. In addition, the dark-purple block group to the southeast part of the city is bordered by three HIN segments. Altogether, 9 of the top 16 HIN segments fall within the highest quantile of the equity index.



From: Alta Planning + Design
To: City of Adelanto
Date: February 1, 2026
Re: Appendix C: Public Engagement Details

Introduction

This memorandum documents the public engagement process conducted to inform the City of Adelanto's Safe Streets and Roads for All (SS4A) Safety Action Plan. Engagement activities were designed to elevate community voices, identify safety priorities, and help ensure that the plan reflects the lived experiences of people who walk, bike, drive, ride transit, and roll throughout Adelanto.

Engagement occurred between summer 2025 and winter 2026 and included in-person and virtual opportunities to participate.

Engagement Overview

The City implemented a multi-platform engagement strategy to reach a broad cross-section of the community, including residents of varying ages, individuals with limited English proficiency, and those without consistent internet access.

Engagement Activities

- In-Person and Virtual Events
- One pop-up event at Adelanto City Hall (in-person and virtual)
- Two community workshops (hybrid format)
- Online Engagement
- Online survey
- Interactive online input map
- Project website with workshop materials and recordings
- Project Promotion
- Social media posts
- Digital billboard along U.S. 395
- Email distribution lists
- Outreach through partner organizations

Information was shared through partner organizations and City communication channels, reaching more than 10,000 individuals.

Outreach Partners

- San Bernardino County Department of Public Health
- San Bernardino County Transportation Authority
- City of Adelanto
- Greater High Desert Chamber of Commerce
- El Sol Neighborhood Educational Center
- Adelanto High School

Engagement by the Numbers

- 1 pop-up event
- 2 community workshops
- 13 online survey responses
- 100+ total interactions across all platforms
- 1,000+ views of workshop recordings
- 10,000+ social media and website interactions

Safety Task Force

To guide the Safety Action Plan process, the City convened a Safety Task Force composed of representatives from local schools, elected offices, regional agencies, public safety departments, community organizations, and business groups.

Participating Organizations

- Adelanto Elementary School District
- Adelanto High School
- California State Assembly (39th District)—Assemblymember Juan Carrillo
- City of Adelanto
- U.S. House of Representatives (CA-23)—Congressmember Jay Obernolte
- San Bernardino County (1st District)—Col. Paul Cook (Ret.)
- El Sol
- Greater High Desert Chamber of Commerce
- High Desert Hispanic Chamber of Commerce
- San Bernardino County Department of Public Health
- San Bernardino County Fire Protection District
- San Bernardino County Sheriff's Department
- San Bernardino County Transportation Authority (SBCTA)
- California State Senate (23rd District)—Senator Suzette Martinez Valladares
- Victor Valley Transit Authority

The Safety Task Force met three times between summer 2025 and winter 2026. Members:

- Helped shape roadway safety goals

- Reviewed strategies and safety improvement recommendations
- Provided input on the draft Safety Countermeasure Toolbox
- Reviewed safety analysis findings
- Supported community outreach efforts

The Task Force helped ensure that technical analysis was grounded in local knowledge and aligned with community priorities.

Phases of Engagement

Phase 1: Listening and Learning

Phase 1 focused on introducing the project and gathering input on existing safety concerns and barriers.

Activities included:

- Social media promotion
- Pop-up event at City Hall
- First community workshop
- Online survey
- Interactive online map

Residents identified unsafe locations, described barriers to safe travel, and shared concerns about roadway conditions, lighting, speeding, and access to schools and destinations.

What We Heard

Across engagement platforms, residents consistently expressed the need for safer travel options. Key themes included:

- People do not feel safe traveling in Adelanto
- Speeding and aggressive driving are major concerns
- Limited lighting contributes to nighttime safety issues
- Missing or disconnected sidewalks and crosswalks discourage walking
- Roadway and sidewalk maintenance issues impact safety
- Students traveling to and from school face safety risks
- Transit stops lack comfort and visibility in some areas

Commonly supported improvements included:

- Reconfigure roadways to reduce speeds, especially near intersections
- Expand and connect the walking and bicycling network
- Improve lighting and visibility
- Add Complete Streets elements such as sidewalks, bikeways, and street trees
- Repair distressed pavement and faded striping

Quotes received from community members included:

- “Crossings are too far apart. People need more direct and convenient places to cross.”
- “There aren’t enough sidewalks, and in some places you have to walk in the street.”
- “Drivers go too fast and don’t always follow traffic laws.”
- “We need a well-lit path along Highway 395 to better connect the north and south sides of town.”

Phase 2: Sharing and Refining

Phase 2 focused on presenting draft recommendations and gathering feedback. Activities included:

- Social media promotion
- Second community workshop (hybrid)
- Online survey

During the second workshop, the project team presented draft strategies and corridor-level concepts. Informational boards were used to guide discussion. City Council members attended and community members provided feedback on priorities and feasibility.

Project Website

The project website served as a central hub throughout the planning process. It included:

- Project overview and milestones
- Workshop materials and presentation boards
- Workshop recordings
- Interactive input map
- Online survey
- Project fact sheet (English and Spanish)

The website ensured ongoing access to information and participation opportunities for those unable to attend in person.

Looking Ahead

Community engagement will continue during implementation of the Safety Action Plan. Partnerships formed during this process will support:

- Regular progress updates
- Continued collaboration with schools and regional agencies
- Public workshops and community events
- Ongoing opportunities for feedback

The City remains committed to ensuring that implementation reflects community priorities and advances a shared vision for safer streets in Adelanto.

Table 1: Community Feedback Applied

Input gathered through community engagement directly informed the identification of priority corridors and the selection of countermeasures. Common themes were systematically translated into targeted improvements using the High Injury Network and countermeasure screening methodology. The table below summarizes how key themes identified through engagement were translated into specific strategies and project recommendations.

Community-Identified Concern	Community Theme/Comment	How It Informed the SAP
Speeding and aggressive driving	"Drivers go too fast..."; top concern across outreach	Prioritized High Injury Network corridors with speed-related crashes; informed use of traffic calming, road diets, speed feedback signs, and roundabouts (Appendix F)
Poor lighting / nighttime safety	"We need a well-lit path..."; high share of nighttime crashes	Informed lighting analysis (Chapter 2 / Appendix A) and inclusion of corridor lighting improvements across HIN corridors
Missing or disconnected sidewalks	"There aren't enough sidewalks..."	Informed sidewalk gap closures and shared-use path recommendations along priority corridors (Appendix F)
Unsafe crossing conditions	"Crossings are too far apart..."	Informed high-visibility crosswalks, refuge islands, LPIs, and protected crossings at key intersections
Safety near schools	Concerns about students traveling to/from school	Prioritized corridors like Jonathan Street; informed Safe Routes to School-focused improvements and traffic calming
Poor roadway conditions (striping, pavement)	"Roads and sidewalks are not well maintained..."	Informed striping upgrades, resurfacing, and visibility improvements (Appendix F)
Limited safe travel options (walking/biking)	Desire for safer walking/biking	Informed Complete Streets approach, including bike lanes, shared-use paths, and multimodal improvements



From: Alta Planning + Design
To: City of Adelanto
Date: November 14, 2025
Re: Appendix D: Policy Benchmarking Assessment Memorandum

Introduction

This memorandum summarizes the benchmarking assessment prepared for the City of Adelanto Safe Streets and Roads for All (SS4A) Safety Action Plan. Alta reviewed recent and ongoing plans, programs, and studies completed by the City and regional partners to benchmark current practices against Safe System best practices.

The purpose of this task is to identify where Adelanto already aligns with the Safe System Approach and where opportunities exist to institutionalize safety practices across City departments and partners. This benchmarking also serves as a recommendation framework to inform implementation priorities and program development in the Safety Action Plan. This benchmarking task will feed directly into the recommendations framework.

Documents Reviewed

1. 2013 Housing Element
2. 2014 Adelanto North 2035 Sustainable Plan
3. 2016 SRTS Victoria Magathan Elementary Plan
4. 2019 Crossing Guard Matrix
5. 2020 Final Adelanto Active Transportation Plan
6. 2020 High Priority Streets Feedback Summary
7. 2022 Proposed Mobility Plan
8. 2023 Circulation Map
9. 2025 Municipal Code
10. Adelanto Circulator Fixed Route 33
11. Victorville North Adelanto Fixed Route 32
12. Victorville South Adelanto Fixed Route 31
13. 2025 LRMTTP – Victor Valley Subarea Plan
14. 2008 SANBAG Victor Valley Transportation Study
15. 2018 SBCTA Non-Motorized Transportation Plan
16. 2023 SBCTA Sidewalks Inventory
17. 2025 LRMTTP (citywide version)

Safe System Approach

The U.S. Department of Transportation adopted the Safe System Approach as the national framework for roadway safety. It recognizes that human mistakes are inevitable and that roadway systems must be designed to prevent those mistakes from leading to fatal or serious injuries. The approach emphasizes shared responsibility, system redundancy, and proactive risk management through five interrelated elements: Safe Road Users, Safe Vehicles, Safe Speeds, Safe Roads, and Post-Crash Care. Following this approach represents a paradigm shift in Adelanto's transportation decision-making. It integrates safety considerations into every stage of planning, design, construction, operations, and maintenance—anticipating human error and emphasizing systemwide protection for all road users.

Source: FHWA Safe System Approach (Alta Planning + Design adaptation)

Adelanto Context

Adelanto currently does not have a High-Injury Network (HIN) or equivalent safety prioritization framework; this will be developed as part of the SS4A Safety Action Plan. Crash data is available through SWITRS, but no GIS-based safety database or performance dashboard currently exists. No active enforcement or demonstration project programs are known currently; these items are flagged as opportunities for staff input and coordination with San Bernardino County Sheriff's Department and Public Works.

Benchmarking Framework

The benchmarking analysis identifies how Adelanto's current policies, plans, and programs compare with Safe System best practices. Each item is categorized under one of four implementation paths:

1. No Action Needed – Program or policy already consistent with best practice.
18. Accomplish with Safety Action Plan – SS4A development and deliverables will achieve this alignment.
19. Implement Following Safety Action Plan Adoption – Recommended for follow-up after plan completion.
2. No Action Planned for Now – Not currently prioritized by the City.

Summary

Benchmarking provides Adelanto with a foundation to institutionalize Safe System practices and integrate safety into every aspect of city operations. The findings (**Table 1: Benchmarking Assessment**) guided the development of a High-Injury Network, priority corridors, and implementation strategies under this SS4A initiative. Adelanto's commitment to embedding safety into policy, design, and enforcement will help create a safer, more connected community for all road users.

Table 1: Benchmarking Assessment

Core Element	Category	Benchmark	State of Current Practice in Adelanto	Links/ Source	Existing level of Commitment or Implementation	Path to Institutionalization	Additional Details
Safety Planning & Culture	Leadership and Commitment	Leaders publicly commit to a "Zero" goal for traffic fatalities and serious injuries within a specific timeframe, and exhibit buy-in for the Safe System approach through media, public events, and support for related policies and programs. [SS4A Self-Cert Q1]	"Reduce the number of severe and fatal collisions to zero by 2040". Unclear to what extent this goal was institutionalized.	ATP Page 35	Occasional Practice	Accomplish with the SAP	Resolution draft is within Alta's scope of work. Draft resolution will be submitted to the City by 11/21/25. Ideally, would be adopted prior to adoption of the SAP so that it can inform the goals of the SAP but not required.
		Develop a safety plan aligned with the Safe System Approach that identifies concrete actions to help Adelanto achieve zero including designation of lead agency, timeline, and funding. Safety plan should include an assessment of the local challenges that have hindered safety interventions in the past and create a roadmap for addressing them.			Not a Current Practice	Accomplish with the SAP	
		Establish key safety performance indicators and implement a monitoring process to evaluate progress and intervene if Adelanto is not on track. [Self-Cert Q8 pt 1]	ATP includes "Publish a triennial report on [...] implementing the Plan", which includes safety goals. No such report in 2023 could be found in the City Council minutes.	ATP page 45	Occasional Practice	Accomplish with the SAP	Scope of work: "develop a memo that outlines various ways to measure progress toward improved safety in Adelanto."
		Convene and/or participate in an inter-agency committee, task force, implementation group, or working group that is charged with a Safety Action Plan's development, implementation, and monitoring [SS4A Self-Cert Q2]. The group should include a representative from every agency or department that plays a critical role in advancing each Safe System element.	The City convened a Community Advisory Committee for the ATP.	ATP page 96	Not a Current Practice	Accomplish with the SAP	
		Provide training to Adelanto staff, directors, elected officials, and community stakeholders on the Safe System approach.			Not a Current Practice	Accomplish with the SAP	
		Establish an ongoing Safe Routes to Schools program and funding mechanism.	"We will continue to support and grow our SRTS Program..." Unclear to what extent this goal was institutionalized.	ATP page 144	Occasional Practice	Possible SAP recommendation	Not within Alta's Scope? City too small for continuous program?
	Meaningful Engagement	Engage with the public and relevant stakeholders, including the private sector and community groups. Incorporate information received from the engagement and collaboration into the safety plan [SS4A Self-Cert Q4]			Occasional Practice	Accomplish with the SAP	
		Establish a website to inform the public about Adelanto's safety program goals and progress and the effectiveness of implemented safety projects. [SS4A Self-Cert Q8]			Not a Current Practice	Accomplish with the SAP	
		Provide public safety materials in common languages spoken by Adelanto residents whose first language is not English.	No educational campaigns found.		Not a Current Practice	Accomplish with the SAP	
	Data and analysis	Apply a proactive and transparent approach to data-driven safety analysis, including the use of systemic profiles, roadway and roadside condition, and modal specific condition assessments (e.g., bicycle network stress or distance between marked crossings). [SS4A Self-Cert Q3]	LTS and crash data in ATP	ATP	Occasional Practice	Accomplish with the SAP	

Core Element	Category	Benchmark	State of Current Practice in Adelanto	Links/ Source	Existing level of Commitment or Implementation	Path to Institutionalization	Additional Details
		Establish a process for residents to report safety hazards or request safety interventions and a data-driven approach for evaluating the reports/requests.	MyAdelanto App	City of Adelanto: Instagram, Facebook, Linktree	Institutionalized Practice	Possible SAP recommendation	
		Focus network screening and benefit/cost calculations on fatal and serious injuries, instead of all collisions, to identify the core safety issues for human vulnerability.	HIN created in the ATP	ATP	Institutionalized Practice	Accomplish with the SAP	
		Collect pedestrian and bicyclist volumes routinely with intersection counts and has a GIS database of counts.	Annual count recommended in ATP. Unclear if recommendation followed.	ATP	Not a Current Practice	Possible SAP recommendation	May not be feasible.
		Maintain a GIS inventory and actively work to improve accuracy of crash data and roadway data such as missing sidewalks, bikeways, intersection controls, etc.	Not centralized. Crash data available on SWITRS, missing sidewalks and other network data from SBCTA.		Not a Current Practice	Possible SAP recommendation	
		Proactively and holistically evaluates risk factors and prioritizes locations with high potential for exposure. Analysis considers the 'Ws' of safety (who, what, when, where, why, which)			Not a Current Practice	Accomplish with the SAP	
		Use innovative data collection and analysis approaches, such as crowdsourcing or video detection data, to identify emphasis areas related to near misses or crashes previously unreported by vulnerable communities.			Not a Current Practice	Accomplish with the SAP	
	Funding	Develop a project evaluation framework that prioritizes funding based on fatal and serious injury crash reduction opportunities, especially for equity populations [Self-Cert Q5].	Part of the prioritization framework in the ATP.	ATP page 155	Occasional Practice	Accomplish with the SAP	
		Apply for grant programs to fund safety projects.	Applied for SS4A		Occasional Practice	No Action Needed	Another SS4A grant cycle is expected in 2026, as well as ATP Cycle 8.
		Institutionalize safety considerations in all project types to systematically fund projects through operations and maintenance efforts (such as repaving projects through the CIP).	[need access to the CIP]				
	Development review	Conduct kinetic energy safety impact assessments of new developments to identify mitigation and cost sharing opportunities.			Not a Current Practice	Accomplish with the SAP	
		During the development review process ensure circulation to, from, and within the development along with recommended TDM measures align with safety best practices and encourage active transportation modes.	TDM ordinance applies only to the City's Employees. GP Goal M-4 supports TDM.	"Municipal Code Section 10.36.030. GP Goal M-4 via ATP"	Not a Current Practice	Possible SAP recommendation	
	Equity first	Identify underserved communities through data. This should include data that identifies underserved communities and/or reflects the impact of crashes on underserved communities, prioritization criteria that consider equity, or a description of meaningful engagement and collaboration with appropriate stakeholders [Self-Cert Q5 pt 2].	Equity analysis in ATP.	ATP	Occasional Practice	Accomplish with the SAP	
		Meaningfully engage populations that are traditionally underserved in shared decision-making for safety efforts [Self-Cert Q5 pt 1].				Accomplish with the SAP	
		Incorporate equity considerations in implementation and assessment plans, such as goals related to safety				Accomplish with the SAP	

Core Element	Category	Benchmark	State of Current Practice in Adelanto	Links/Source	Existing level of Commitment or Implementation	Path to Institutionalization	Additional Details
		improvements for populations that are traditionally underserved.					
Safe Users	Education	Perform outreach through educational programs, with a focus on the behaviors and target audiences most linked to death and serious injuries. Utilize partnerships with community-based organizations and advocacy groups.	Assumption based on research		Occasional Practice	Possible SAP recommendation	
Safe Users Safe Roadways	Education Enforcement	Use demonstration projects to raise awareness of new designs, encourage support among stakeholders for safety projects requiring capacity trade-offs, and solicit feedback from the public. Demonstration projects also provide the opportunity to measure safety effects and encourage innovation and design flexibility.	Assumption based on research		Not a Current Practice	Possible SAP recommendation	
		Investigate and document the impacts of traffic safety enforcement and traffic safety surveillance on minority communities. Take steps to mitigate disproportionate impact of enforcement on disadvantaged populations.	Assumption based on research		Not a Current Practice	Possible SAP recommendation	
	Enforcement Research	Reallocate enforcement activities to target those behaviors and locations most linked to death and serious injury.	Assumption based on research		Not a Current Practice	Possible SAP recommendation	
		Develop and implement strategies for robust demographic data collection in crash reporting including partnering with organizations such as the County Health Services Agency and local hospitals.	Assumption based on research		Not a Current Practice	Possible SAP recommendation	
	Collision avoidance	Systemically install proven countermeasures to separate users in space, separate users in time, and increase attentiveness and awareness, such as: protected signal phases, clear zones, and vertical and horizontal separation for pedestrians and bicyclists.			Not a Current Practice	Accomplish with the SAP	
Safe Roadways Safe Vehicles	Collision avoidance Kinetic energy reduction	Complete infrastructure connectivity for pedestrians and bicyclists and make progress toward providing separation where needed based on crash exposure, crash history, and characteristics of the roadway and adjacent land use associated with higher levels of use.	ATP	ATP	Occasional Practice	Accomplish with the SAP	
		Systemically install proven countermeasures to manage motor vehicle speed and collision angles, such as roadside appurtenances, roundabouts, refuge islands, hardened center lines, and road diets.			Not a Current Practice	Accomplish with the SAP	
	Kinetic energy reduction Policies and tradeoffs	Evaluate intersection design and control decisions in the planning or scoping stage for opportunities to better prioritize reducing kinetic energy transfer, following new FHWA guidance.			Not a Current Practice	Accomplish with the SAP	
		Designate functional class and modal priority for roadways to pinpoint the most effective safety countermeasures and streamline tradeoff decisions.	Functional class in General Plan circulation map	General Plan	Not a Current Practice	Accomplish with the SAP	
	Policies and tradeoffs Innovation	Has curbside management, shared mobility, or micromobility policies (e.g., permitting, enforcement) in places that prioritize pedestrian and bicyclist safety.	Bicycles require a license, registration, and fee payment.		Not a Current Practice	Possible SAP recommendation	
		Ensure safety for all users is prioritized, and accessibility maintained, during construction and road maintenance projects.	Assumption based on research		Occasional Practice	Possible SAP recommendation	
		Provide infrastructure for smarter roadways and intelligent transportation systems (ITS) in support of data collection and analysis, as well as proactive system management. Consider long-term network priorities For ITS	Assumption based on research		Not a Current Practice	Possible SAP recommendation	

Core Element	Category	Benchmark	State of Current Practice in Adelanto	Links/Source	Existing level of Commitment or Implementation	Path to Institutionalization	Additional Details
		implementation, including immediate pedestrian and bicyclist safety and mobility needs in high-use locations.					
	Supportive Infrastructure	Enable infrastructure-to-vehicle communication to provide warnings to drivers that support safer driving behavior.			Not a Current Practice	No Action Planned	
Safe Vehicles Safe Speeds	Supportive Infrastructure Fleet Management	Provide supportive infrastructure for dynamic curbside management and autonomous vehicles to enable active safety technology.			Not a Current Practice	No Action Planned	
		Support safer operations of City and commercial vehicles through a transition plan of City's vehicle fleet to lower-mass and safety feature enhanced vehicles; heavy vehicle route restrictions to avoid high-pedestrian areas; and curbside management programs to limit user conflicts around stopped or loading vehicles.			Not a Current Practice	Possible SAP recommendation	
	Autonomous vehicles	Provide supportive infrastructure for autonomous vehicles to enable active safety technology.			Not a Current Practice	No Action Planned	
	Design and operations	Adopt roadway design standards that are focused on speed management, such as target speed-based design. Adjust roadway geometries for context-appropriate speeds.			Not a Current Practice	Accomplish with the SAP	
Safe Speeds Post Crash Care	Enforcement	Deploy automated speed enforcement, with a focus on equitable fee structures.			Not a Current Practice	Possible SAP recommendation	
	Policy and training	Follow speed limit setting methodologies that determine appropriate speeds based on roadway context and modal priority, rather than the historic behavior of road users. Provide speed management training to staff focused on fatality and serious injury minimization.			Not a Current Practice	Accomplish with the SAP	
	Crash investigation	Create a feedback loop such that key insights from crash investigations are shared with roadway designers.			Not a Current Practice	Possible SAP recommendation	
Post Crash Care	Partnerships	Share data across agencies and organizations, including first responders and hospitals, to develop a holistic understanding of the safety landscape and improve accuracy.			Not a Current Practice	Possible SAP recommendation	
		Connect with victims' families and the advocacy community to offer support and resources and encourage partnerships with outreach and education.			Not a Current Practice	Possible SAP recommendation	

From: Alta Planning + Design

To: City of Adelanto

Date: October 1, 2025

Re: Appendix E: Safety Countermeasure Toolbox and Draft Recommendations Memorandum

Introduction

This memorandum documents the methodology and outcomes of a screening process used to develop safety countermeasure recommendations along the set of city-owned top corridors on High Injury Network (HIN) in Adelanto. The process was guided by the Safe System Approach and contextual design principles, aiming to identify improvements that address key roadway safety needs.

The memo begins with a methodology section, which outlines the development of the countermeasure toolbox, the structure and function of the screening tool, and how it was applied with corridor and intersection attributes to generate draft recommendations. This is followed by a summary of the Countermeasure Toolbox, including a table of all countermeasures that were included in the screening process. To see how these recommendations were applied to all 16 of the HIN corridors, see Appendix F Collision Profiles and Recommended Safety Improvements.

Methodology

Development of Countermeasure Toolbox

The first step of the methodology was to develop the countermeasure toolbox. The toolbox was developed using the Safe System Approach, incorporating elements of the Safe Systems Pyramid¹ and the FHWA Safe Systems Roadway Design Hierarchy.² Higher tiers of countermeasures apply to greater populations with less individual effort, and lower tiers apply to smaller populations requiring greater individual effort. In addition to the Safe Systems principles, the toolbox was developed based upon the principles of contextual design which are outlined at the state level by Caltrans in *Design Information Bulletin-94: Contextual Design Guidance* (DIB 94).³ The project team also reviewed case studies from rural areas with similar contexts and incorporated countermeasures that address comparable collision patterns observed in Adelanto. The final toolbox consisted of 69 countermeasures sorted into four tiers based upon the Safe Systems principles:

¹ Ederer, D.J., Panik, R.T., Botchwey, N., Watkins, K. 2023. *The Safe Systems Pyramid: A new framework for traffic safety*. Transportation Research Interdisciplinary Perspectives, Volume 21, 2023. <https://doi.org/10.1016/j.trip.2023.100905>.

² Hopwood, C., Little, K., Gaines, D. 2024. *Safe Systems Roadway Design Hierarchy*. FHWA, report FHWA-SA-22-069, https://highways.dot.gov/sites/fhwa.dot.gov/files/2024-01/Safe_System_Roadway_Design_Hierarchy.pdf

³ Caltrans. 2024. *Design Information Bulletin-94: Contextual Design Guidance*. <https://dot.ca.gov/-/media/dot-media/programs/design/documents/dib-94-010224-a11y.pdf>

- **Tier 1, Demand management.** These consist of countermeasures which improve access to transit, improve transit facilities, or promote land use which reduces short car trips. Examples include improving transit stops by adding shelters, adding a last-mile connection to nearby sidewalks or bikeways, or changes to land use near transit stops to encourage ridership.
- **Tier 2, Speed management.** These consist of roadway design features which lower vehicle speeds and thereby reduce the severity and frequency of crashes. Examples include roundabouts and raised crosswalks.
- **Tier 3, Separate in space and time.** These consist of roadway design or operational features which separate users *in space*, including by adding separated facilities for non-vehicular modes, medians, or upgrading intersections to innovative intersection designs. Users can also be separated *in time* using signal timing or other features, including protected-only left turns or leading pedestrian interval.
- **Tier 4, Improve redundancy.** These consist of signing, marking, or other visibility improvements to increase awareness and attentiveness of potential hazards, or to reduce the impact of crash or roadway departure were it to occur. Examples include upgraded curve signing, flashing yellow arrow signals, or guardrail.

Countermeasure Screening Tool

Screening Process

For each countermeasure, internal screening thresholds were developed based on state and federal guidelines and best practices. Additional resources, such as NCHRP reports, case studies or existing examples of implementation, were used where agency guidance was unavailable. More emphasis was given to California-specific guidance such as Caltrans' DIB 94, Pedestrian Safety Countermeasures Toolbox, Traffic Calming Guide, or examples of implementation within California. Guidance, best practices, and examples outside of California were used where appropriate.

Screening factors include context area, number of lanes, annual average daily traffic volumes (AADT), target speed, truck route, transit route, lane width, presence or absence of curb, shoulder, median, bike lane, sidewalk, and whether existing facility widths or level or protection were in accordance with DIB 94 guidance.⁴ In accordance with the purpose of this as a screening tool, thresholds were increased above typical guidance in some cases to account for site conditions, allow for variation in some input parameters (such as traffic volumes), and allow for engineering judgment.

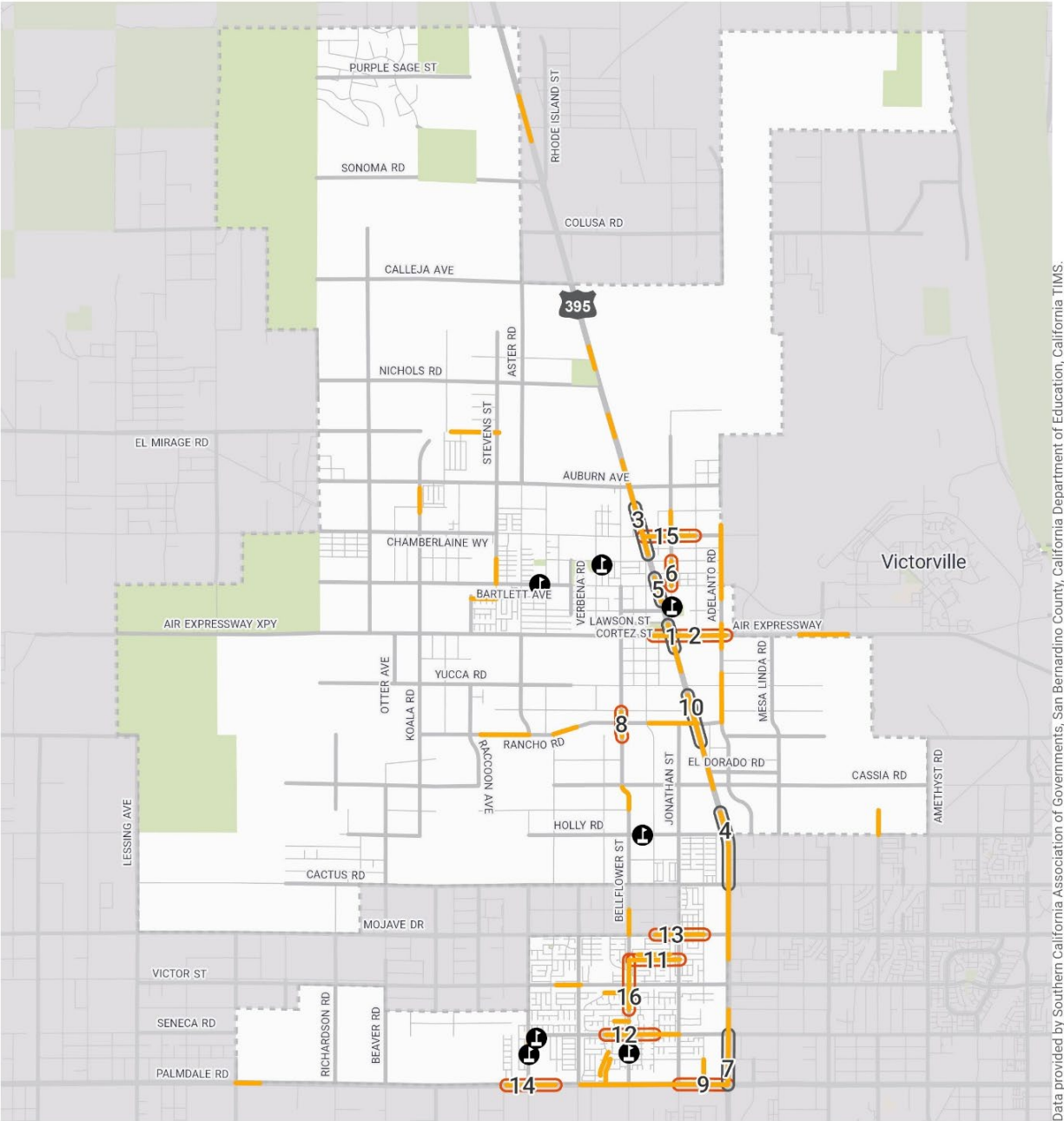
The countermeasure toolbox and the screening factors were incorporated into an Excel-based tool to provide a consistent and streamlined method for countermeasure application based upon the Safe Systems principles. The screening tool produces a list of potentially suitable countermeasures that can then be applied along a corridor or segment of roadway based on professional judgment and knowledge of site-specific context data.

Adelanto Roadways

This project reviewed the top 16 HIN corridors (Figure 1), including the top 10 not located along US 395, and developed recommendations. It also summarizes the segment characteristics and intersection typologies for these corridors. The advantage of this approach is that it provides a list of suitable countermeasures for roadways with

⁴ Replica AADT Explorer was used to estimate traffic volumes.

similar characteristics that can be applied systemically across the entire City existing and future roadway network. This enables reviewers to understand how the countermeasures might be meaningfully different due to site context including different cross-sectional elements, context areas, or land uses.



Data provided by Southern California Association of Governments, San Bernardino County, California Department of Education, California TMS.

ADELANTO HIGH INJURY NETWORK
SS4A SAFETY ACTION PLAN
CITY OF ADELANTO, CA



- ANALYSIS LAYER
- High Injury Network (HIN)
 - Top Corridors on HIN (not on US 395)
 - Top Corridors on HIN (on US 395)

- DESTINATIONS + BOUNDARIES
- Public Schools
 - City of Adelanto
 - Open Space

MORE THAN 95% OF ALL KSI CRASHES OCCUR ON 5% OF THE ROAD NETWORK.

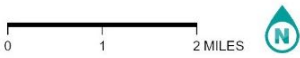


Figure 1: Adelanto High-Injury Network

Recommendations Along Corridors

The recommendation process began with a comprehensive review of the entire corridor. Key factors such as AADT, speed limit, and road width, were entered into the Countermeasure Screening Tool, which generated a list of applicable countermeasures for each typology. This approach allowed reviewers to focus on segments or intersections where physical, operational, or right-of-way characteristics differed from one or more adjacent areas and required a separate set of recommendations.

Next, a further assessment of each location was conducted, including reviewing common crash types and contributing factors and previously proposed recommendations. Using the guidance from the screening tool and this additional contextual analysis, tailored recommendations were developed and mapped for each representative location.

To assist reviewers with mapping the countermeasures recommended in the Screening Tool, a GIS database was developed. Using the GIS tool, the reviewers used detailed screening tool outputs, site context, and professional judgment to assign countermeasures to corridors or intersections. Through this process, a total of 109 linear recommendations and 130 point recommendations were proposed.

To illustrate how the screening process and toolbox is applied in practice, the following sections show how local context, roadway characteristics, and crash patterns informed the selection of tailored countermeasures, as well as recommendations proposed on each HIN corridor.


Table 1: Countermeasure Toolbox

Type	Category	Countermeasure	FHWA Proven (PSC)	Caltrans Local Road Safety
Demand Management	Transit Corridor improvements	First- and Last-Mile Connectivity: Improve Transit Stop Amenities and Access		
Demand Management	Transit Corridor improvements	Transit Operations: Expand Walking, Biking, and Transit Access Through Corridor Improvements to Improve Transit Operations		
Speed Management	Curb Extensions and Modifications	Curb extension		
Speed Management	Curb Extensions and Modifications	Truck apron		
Speed Management	Curb Extensions and Modifications	Square up channelized turn lanes and reduce crossing distances		
Speed Management	Curb Extensions and Modifications	Reduce curb radius		
Speed Management	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		
Speed Management	Protected intersection	Protected intersection		
Speed Management	Raised crosswalk	Raised crosswalk		x
Speed Management	Raised intersection	Raised intersection		
Speed Management	Road diet	Road diet	x	
Speed Management	Roundabout	Mini roundabout		x
Speed Management	Roundabout	Roundabout	x	x
Speed Management	Traffic Calming	Speed humps, cushions, or tables		
Speed Management	Traffic Calming	Lateral shift or chicane		
Speed Management	Turn calming	Centerline hardening		
Speed Management	Turn calming	Left turn wedge		
Conflict Management	Access management or driveway consolidation	Access management or driveway consolidation	x	

Type	Category	Countermeasure	FHWA Proven (PSC)	Caltrans Local Road Safety
Conflict Management	Add or upgrade protection level of bike lane	Upgrade existing Class II or III bikeway to higher level of protection (Class IV, Class I, or buffered Class II)	X	X
Conflict Management	Add or upgrade protection level of bike lane	Bike Lane (Class II or Class IV)	X	X
Conflict Management	All way stop control	Convert from two-way stop (or yield) to all-way stop control	X	X
Conflict Management	Dedicated left turn or right turn lanes	Dedicated left turn or right turn lanes	X	X
Conflict Management	Install traffic signal	Install traffic signal		
Conflict Management	Median	Convert intersection to right-in, right out or add directional median		X
Conflict Management	Pedestrian crossing enhancements	Refuge islands	X	X
Conflict Management	Pedestrian crossing enhancements	Pedestrian Hybrid Beacon	X	
Conflict Management	Prohibit right turn on red	Prohibit right turn on red		
Conflict Management	Protected-only turns	Protected-only turns		X
Conflict Management	Raised median	Raised median		X
Conflict Management	Reduced conflict left-turn intersections	Restricted Crossing U-Turn (RCUT)	X	X
Conflict Management	Reduced conflict left-turn intersections	Median U Turn (MUT)	X	X
Conflict Management	Sidewalk or Shared Use Path	Sidewalk	X	X
Conflict Management	Sidewalk or Shared Use Path	Shared Use Path (Class I bikeway)	X	X
Conflict Management	Sight Distance	Positive offset left turn lanes		
Conflict Management	Signal improvements	Adjust yellow change or all-red clearance interval	X	X
Conflict Management	Signal improvements	Dynamic All-red Extension		
Conflict Management	Signal improvements	Leading pedestrian or bike interval (LPI/LBI)	X	X
Conflict Management	Signal improvements	Exclusive pedestrian phase (aka pedestrian scramble)		X
Conflict Management	Signal improvements	Bicycle signals		

Type	Category	Countermeasure	FHWA Proven (PSC)	Caltrans Local Road Safety
Conflict Management	Signal improvements	Countdown timers (pedestrian signals)		X
Conflict Management	Signal improvements	Shorter cycle lengths to reduce pedestrian/bike delay		
Improve Redundancy	Bikeway intersection improvements	Bike lane intersection marking improvements, including bicycle mixing zone, bicycle conflict markings, bike box		X
Improve Redundancy	Flashing yellow arrow signals	Flashing yellow arrow signals		
Improve Redundancy	Improve pavement friction	Improve pavement friction	X	X
Improve Redundancy	Improve pavement friction	High friction surface treatment	X	X
Improve Redundancy	Lighting	Lighting	X	X
Improve Redundancy	Pavement marking improvements	Wet-reflective pavement markings		X
Improve Redundancy	Pavement marking improvements	Wider edge lines	X	
Improve Redundancy	Pedestrian crossing enhancements	RRFB	X	X
Improve Redundancy	Pedestrian crossing enhancements	High visibility crosswalk	X	X
Improve Redundancy	Pedestrian crossing enhancements	Advance yield markings and signage	X	X
Improve Redundancy	Realign intersection	Realign intersection to reduce skew (angle of intersection closer to 90 degrees)		
Improve Redundancy	Red light cameras	Red light cameras		
Improve Redundancy	Resurface roadway	Resurface roadway		
Improve Redundancy	Roadside	Guardrail or crash cushions		X
Improve Redundancy	Roadside	Relocate or remove fixed objects from clear zone	X	X
Improve Redundancy	Rumble strips	Centerline Rumble strips	X	
Improve Redundancy	Rumble strips	Shoulder or edge line Rumble Strips	X	
Improve Redundancy	Shoulder	Safety edge	X	
Improve Redundancy	Shoulder	Widen or install paved shoulder	X	X

Type	Category	Countermeasure	FHWA Proven (PSC)	Caltrans Local Road Safety
Improve Redundancy	Sight Distance	Remove or relocate fixed objects to improve sight distance		
Improve Redundancy	Signal improvements	Signal visibility enhancements, including signal backplates, additional signal heads	x	x
Improve Redundancy	Signal improvements	Blank out signs for right turns on red and wrong way		
Improve Redundancy	Signing, marking, and object delineation improvements	Enhanced curve signage and delineation	x	x
Improve Redundancy	Signing, marking, and object delineation improvements	Sequential Dynamic Curve Warning		
Improve Redundancy	Signing, marking, and object delineation improvements	Systemic signage and marking improvements at intersections	x	x
Improve Redundancy	Signing, marking, and object delineation improvements	Advance actuated signal warning flashers		x
Improve Redundancy	Signing, marking, and object delineation improvements	Speed reduction bars		
Improve Redundancy	Speed feedback signs	Speed feedback signs		x

Appendix F: Collision Profiles and Recommended Safety Improvements

Introduction

This memo documents the collision profiles identified along Adelanto's High Injury Network (HIN), along with the recommendations applicable to each profile. Linear countermeasure recommendations are specific to each profile and do not include measures from intersecting profiles. In contrast, spot (point) recommendations include intersection-related measures that may apply to multiple profiles.

The profiles are presented in order of their priority corridor ranking based on crash severity along the HIN. For additional details on countermeasures, including application guidance, refer to **Appendix E: Countermeasure Toolbox**.

Collision Profiles and Recommended Safety Improvements

Priority Corridor 1: US 395 Near Air Expressway

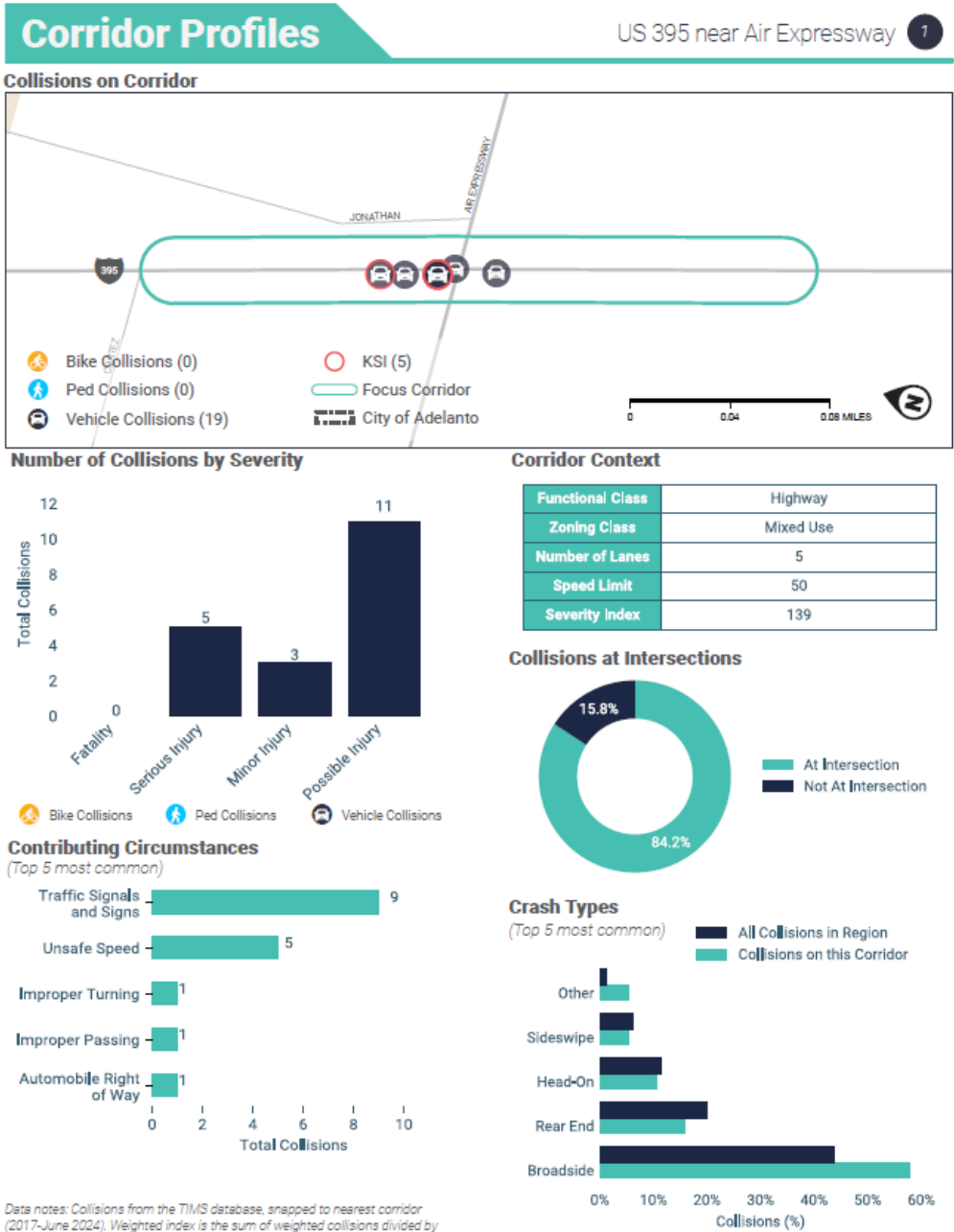


Table 1: US 395 Near Air Expressway Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2001	Air Expressway	US 395	East of Adelanto Rd	Roadway reconfiguration	Road diet	Bidirectional	S	
2003	Air Expressway	West Of Montezuma St/City Hall	East of Adelanto Rd	Lighting	Lighting	Bidirectional	L	
2090	Air Expressway	West Of Montezuma St/City Hall	US 395	Traffic calming	Pinch points, chokers, and gateways	Bidirectional (east-west)	S	
2091	Air Expressway	West Of Montezuma St/City Hall	US 395	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes	Bidirectional (East-West)	S	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1003	No	Air Expressway	Turn calming	Centerline hardening		All	4	S
1004	No	Air Expressway	Signal visibility and signage improvements	Signal backplates	Supplemental signal heads or lens	All	4	S
1029	No	Air Expressway	Roundabout			All legs	1	L
1030	No	Air Expressway	Raised crossings or intersections			All	4	L
1033	No	Air Expressway	Pedestrian crossing treatments	Refuge islands	High visibility crosswalk	All	4	S
1034	No	Air Expressway	Signal timing and operations improvements	Prohibit right turn on red	Adjust yellow change or all-red clearance interval	All legs		S
1067	Yes	Air Expressway	Signal visibility and signage improvements	Advance actuated signal warning flashers		East side of street	1	L
1068	Yes	Air Expressway	Signal visibility and signage improvements	Advance actuated signal warning flashers		West side of street	1	L

Priority Corridor 2: Air Expressway Near US 395 Near

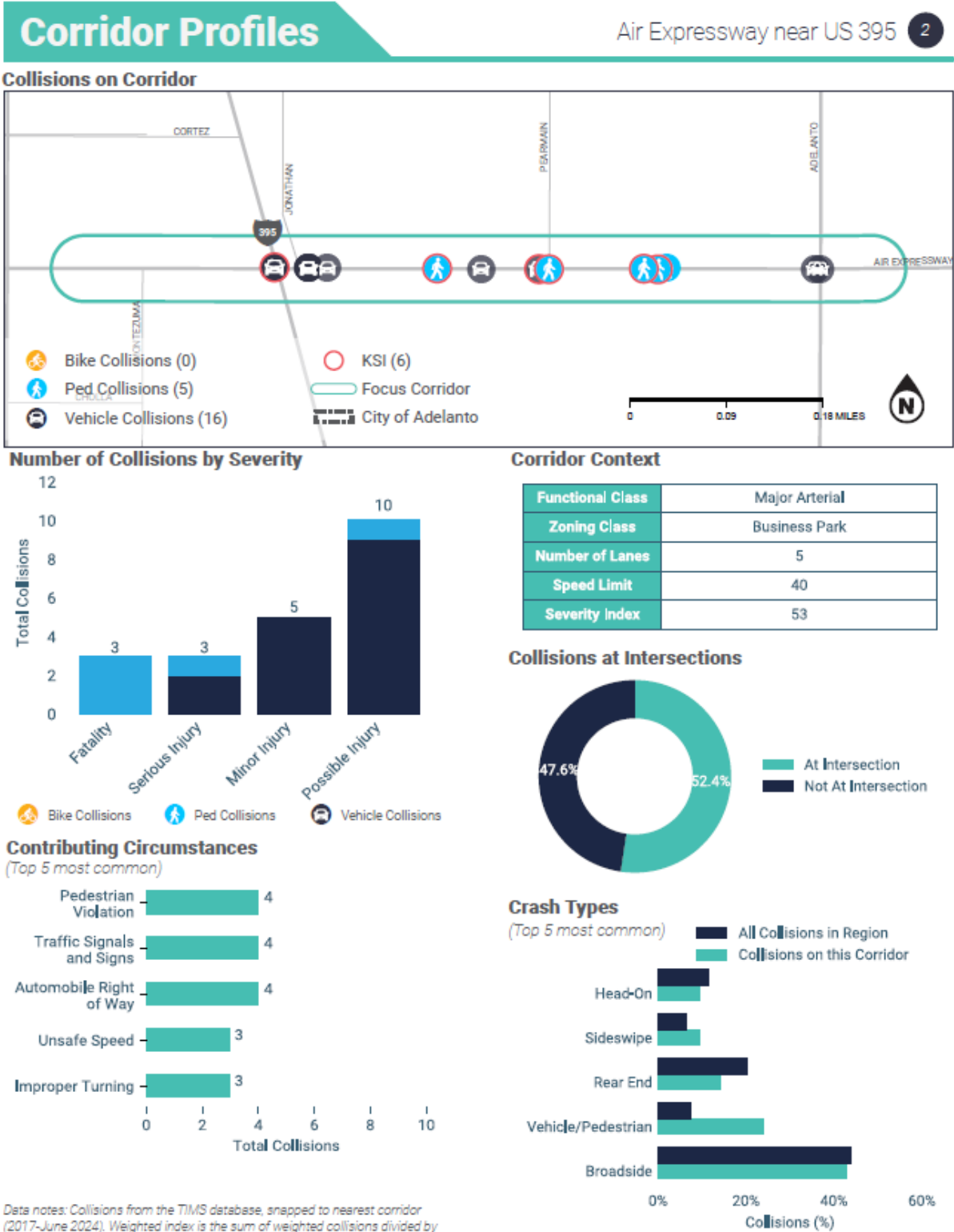


Table 2: Air Expressway Near US 395 Safety Improvements

Linear Recommendations							
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline
2001	US 395	East of Adelanto Rd	Roadway reconfiguration	Road diet		Bidirectional	S
2003	West of Montezuma St/City Hall	East of Adelanto Rd	Lighting	Lighting		Bidirectional	L
2090	West of Montezuma St/City Hall	US 395	Traffic Calming	Pinch points, chokers, and gateways		Bidirectional (East-West)	S
2091	West of Montezuma St/City Hall	US 395	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional (East-West)	S
2093	West of Montezuma St/City Hall	US 395	Sidewalk or shared use path	Sidewalk	Shared Use Path (SUP)	Bidirectional (East-West)	L
2095	West of Montezuma St/City Hall	US 395	Corridor Access Management	Raised median		Bidirectional (East-West)	L
2096	West of Montezuma St/City Hall	US 395	Road surface and shoulder improvements	Resurface roadway		Bidirectional (East-West)	S
2097	West of Montezuma St/City Hall	US 395	Pavement marking improvements	Wet-reflective pavement markings	Wider edge lines	Bidirectional (East-West)	S
2098	US 395	East of Adelanto Rd	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional (East-West)	L
2100	US 395	Adelanto Elementary School District Office	Install or improve bike lane	Install Bike Lane (standard, buffered, or separated)		Bidirectional (East-West)	S
2101	US 395	Adelanto Elementary School District Office	Sidewalk or shared use path	Sidewalk		Bidirectional (East-West)	L
2102	US 395	Adelanto Elementary School District Office	Road surface and shoulder improvements	Centerline Rumble strips		Bidirectional (East-West)	S
2103	US 395	East of Adelanto Rd	Pavement marking improvements	Wet-reflective pavement markings		Bidirectional (East-West)	S
2105	Adelanto Elementary School District Office	East of Adelanto Rd	Sidewalk or shared use path	Sidewalk		Bidirectional (East-West)	L
2106	Adelanto Elementary School District Office	East of Adelanto Rd	Corridor Access Management	Raised median		Bidirectional (East-West)	L
2107	Adelanto Elementary School District Office	East of Adelanto Rd	Road surface and shoulder improvements	Centerline Rumble strips		Bidirectional (East-West)	S

Linear Recommendations

2108	Adelanto Elementary School District Office	East of Adelanto Rd	Pavement marking improvements	Wider edge lines	Bidirectional (East-West)	S
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Spot (Point) Recommendations

ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1001	No	Jonathan St	Intersection signing and marking improvements	Systemic signage and marking improvements at intersections			1	S
1003	No	Air Expressway	Turn calming	Centerline hardening		All	4	S
1004	No	Air Expressway	Signal visibility and signage improvements	Signal backplates	Supplemental signal heads or lens	All	4	S
1029	No	Air Expressway	Roundabout			All legs	1	L
1030	No	Air Expressway	Raised crossings or intersections			All	4	L
1033	No	Air Expressway	Pedestrian crossing treatments	Refuge islands	High visibility crosswalk	All	4	S
1034	No	Air Expressway	Signal timing and operations improvements	Prohibit right turn on red	Adjust yellow change or all-red clearance interval	All legs		S
1036	Yes	US 395	Curb Extensions and Modifications	Curb extension		North side of street	1	S
1037	Yes	Jonathan St	Transit stop or intersection improvements	Bus shelter with seating	Bus bulb or bay	North side of street	1	L
1038	No	Jonathan St	Pedestrian crossing treatments	High visibility crosswalk		North leg	1	S
1039	No	Adelanto Rd	Roundabout	Roundabout		All legs	1	L
1040	No	Adelanto Rd	Raised crossings or intersections	Raised crosswalk		All	4	L
1041	No	Adelanto Rd	Curb Extensions and Modifications	Curb extension	Truck apron	All corners	4	S
1042	No	Pearmain St	Pedestrian crossing treatments	High visibility crosswalk		North leg	1	S
1043	No	Adelanto Rd	Signal visibility and signage improvements	Signal backplates		East leg	1	S

Priority Corridor 3: US 395 Near Chamberlaine Way

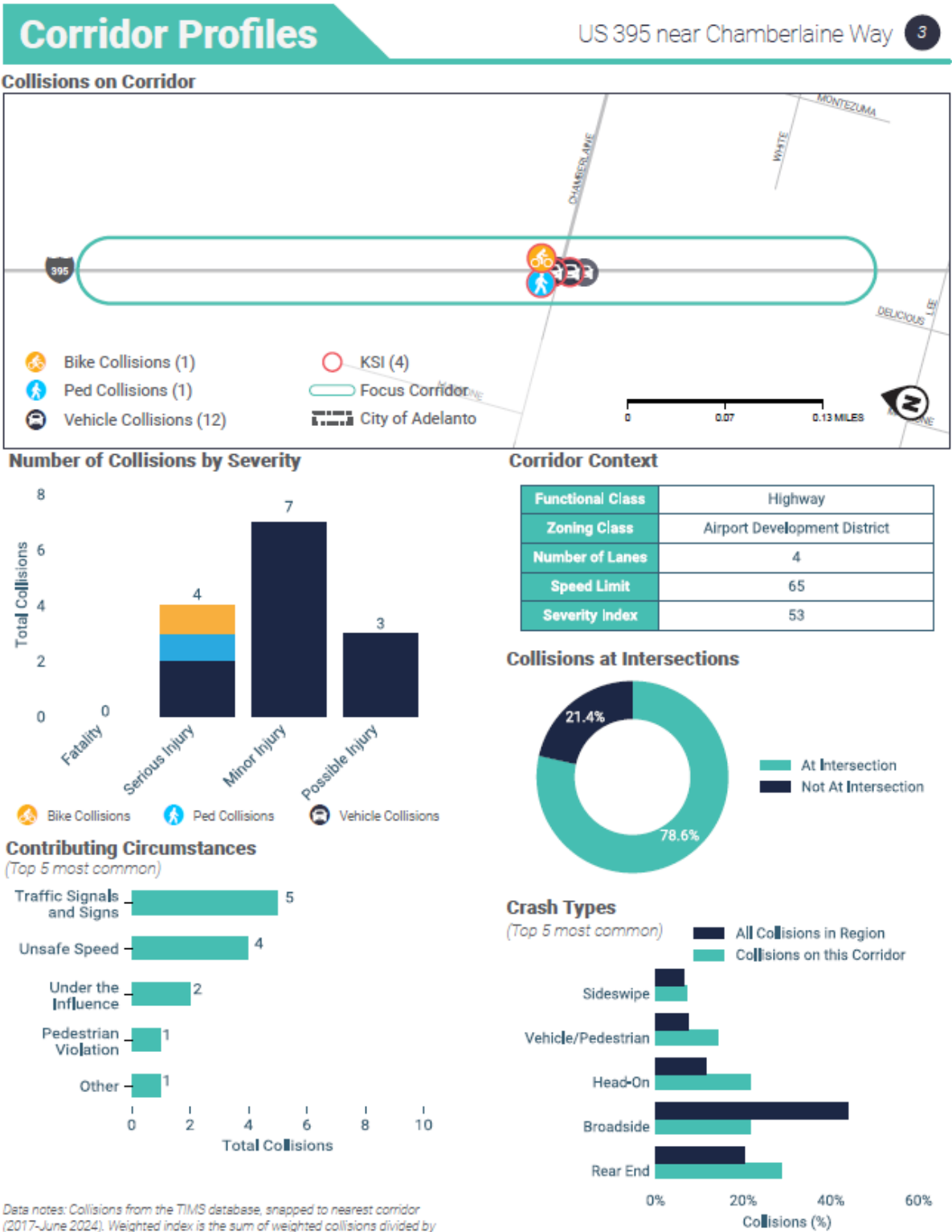


Table 3: US 395 Near Chamberlaine Way Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2111	North end of Corridor 3	South end of Corridor 3	Sidewalk or shared use path	Sidewalk	Shared Use Path (SUP)	Bidirectional (North-South)	L	
2113	North end of Corridor 3	South end of Corridor 3	Pavement marking improvements	Wider edge lines		Bidirectional (North-South)	S	
2114	North end of Corridor 3	South end of Corridor 3	Lighting	Lighting		Bidirectional (North-South)	L	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1045	No	Chamberlaine Way	Roundabout	Roundabout		All legs	1	L
1046	No	Chamberlaine Way	Raised crossings or intersections			East and west legs	2	L
1047	No	Chamberlaine Way	Curb Extensions and Modifications	Curb extension	Truck apron	All corners	4	S
1049	No	Chamberlaine Way	Signal timing and operations improvements	Prohibit right turn on red	Adjust yellow change or all-red clearance interval			S
1050	No	Chamberlaine Way	Signal visibility and signage improvements	Signal backplates		All legs	16	S

Priority Corridor 4: US 395 Near Holly Road

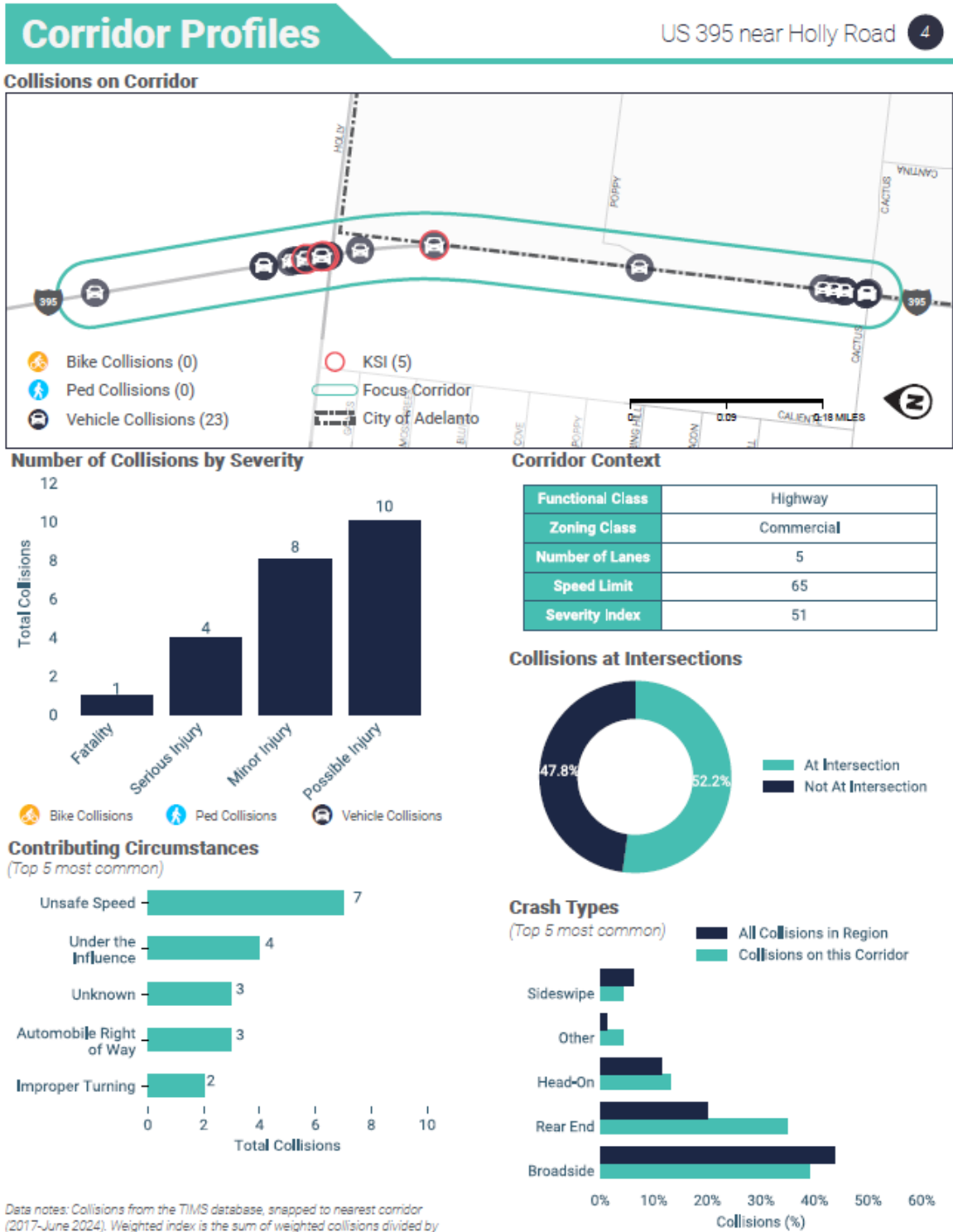


Table 4: US 395 Near Holly Road Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2117	North end of Corridor 4	Cactus Rd	Sidewalk or shared use path	Shared Use Path (SUP)		Bidirectional (North-South)	L	
2118	North end of Corridor 4	Cactus Rd	Corridor Access Management	Raised median		Bidirectional (North-South)	L	
2120	North end of Corridor 4	Cactus Rd	Pavement marking improvements	Wider edge lines		Bidirectional (North-South)	L	
2121	North end of Corridor 4	Cactus Rd	Lighting	Lighting		Bidirectional (North-South)	L	
2228	HOLLY RD (north)	Holly Rd (South)	Road surface and shoulder improvements			Bidirectional (East-West)	S	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1051	Yes	Holly Rd	Speed feedback signs	Speed feedback signs		East side of street	1	S
1052	Yes	Holly Rd	Speed feedback signs	Speed feedback signs		West side of street	1	S
1053	No	Cactus Rd	Roundabout	Roundabout		All legs	1	L
1054	No	Cactus Rd	Raised crossings or intersections			East and west legs	2	L
1055	No	Cactus Rd	Curb Extensions and Modifications	Truck apron		Southeast corner	1	S
1056	No	Cactus Rd	Pedestrian crossing treatments	High visibility crosswalk		All	4	S
1057	No	Cactus Rd	Signal timing and operations improvements	Prohibit right turn on red	Leading pedestrian or bike interval (LPI/LBI)			S

Priority Corridor 5: US 395 Near Bartlett Ave

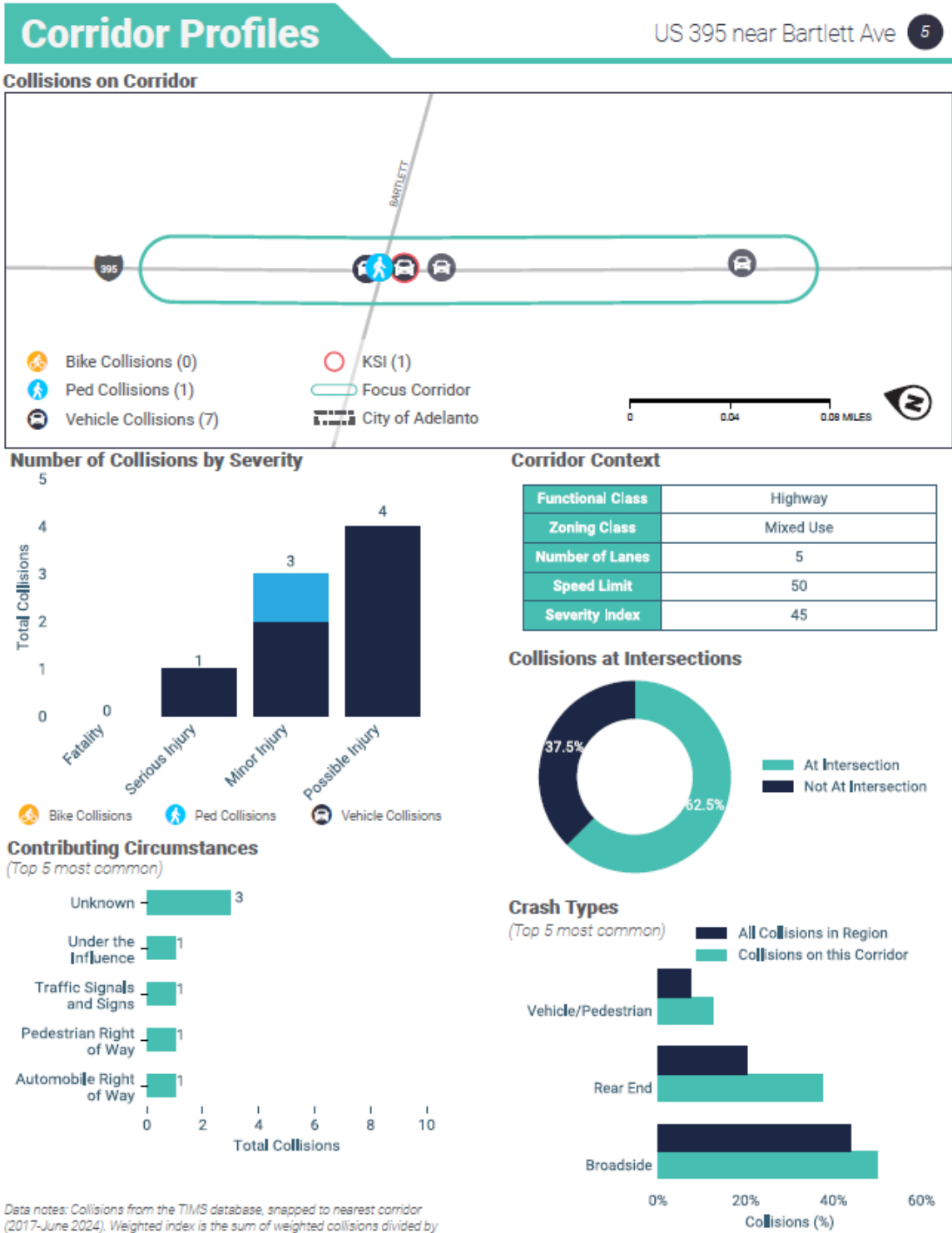


Table 5: US 395 Near Bartlett Ave Safety Improvements

Linear Recommendations							
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline
2123	North end of Corridor 5	South end of Corridor 5	Sidewalk or shared use path	Sidewalk	Shared Use Path (SUP)	Bidirectional (North-South)	L
2124	North end of Corridor 5	South end of Corridor 5	Corridor Access Management	Raised median		Bidirectional (North-South)	L
2125	North end of Corridor 5	South end of Corridor 5	Road surface and shoulder improvements	Resurface roadway		Bidirectional (North-South)	S
2126	North end of Corridor 5	BARTLETT AVE	Road surface and shoulder improvements	Centerline Rumble strips	Shoulder or edge line Rumble Strips	Bidirectional (North-South)	S
2127	North end of Corridor 5	South end of Corridor 5	Pavement marking improvements	Wider edge lines		Bidirectional (North-South)	S
2128	North end of Corridor 5	South end of Corridor 5	Lighting	Lighting		Bidirectional (North-South)	L
Spot (Point) Recommendations - None							

Priority Corridor 6: Jonathan Street Near Brockman Ave

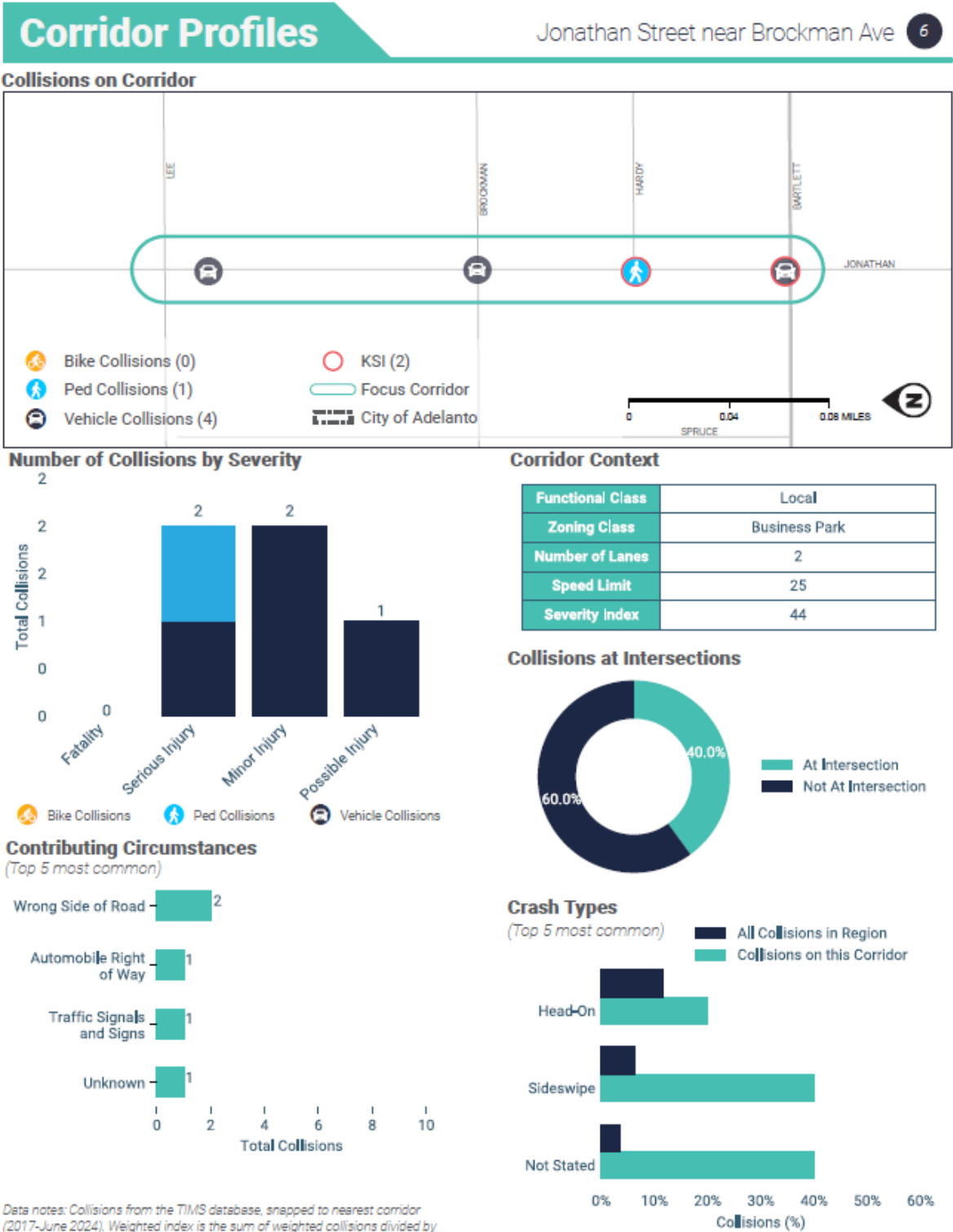


Table 6: Jonathan Street Near Brockman Ave Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2210	LEE ST	Bartlett Ave	Traffic Calming	Speed humps, cushions, or tables	Lateral shift or chicane	Bidirectional	S	
2214	LEE ST	Hardy Ave	Sidewalk or shared use path	Sidewalk	Shared Use Path (SUP)	Eastside	L	
2215	LEE ST	Bartlett Ave	Lighting	Lighting		Bidirectional	L	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1167	No	Brockman Ave	Roundabout	Mini roundabout			1	L
1168	No	Bartlett Ave	Roundabout	Roundabout			1	S
1169	No	Brockman Ave	Raised crossings or intersections	Raised intersection			1	L
1170	No	Bartlett Ave	Raised crossings or intersections	Raised intersection			4	L
1173	Yes	Hardy Ave	Pedestrian crossing treatments	High visibility crosswalk		south approach	1	S
1174	No	Lee Ave	Pedestrian crossing treatments	High visibility crosswalk			1	L
1175	No	Brockman Ave	Curb Extensions and Modifications	Curb extension			4	S
1176	No	Brockman Ave	Pedestrian crossing treatments	High visibility crosswalk			1	L
1177	Yes		Speed feedback signs	Speed feedback signs			1	S
1181	No	Bartlett Ave	Intersection signing and marking improvements	Systemic signage and marking improvements at intersections			4	S

Priority Corridor 7: US 395 Near Palmdale Road

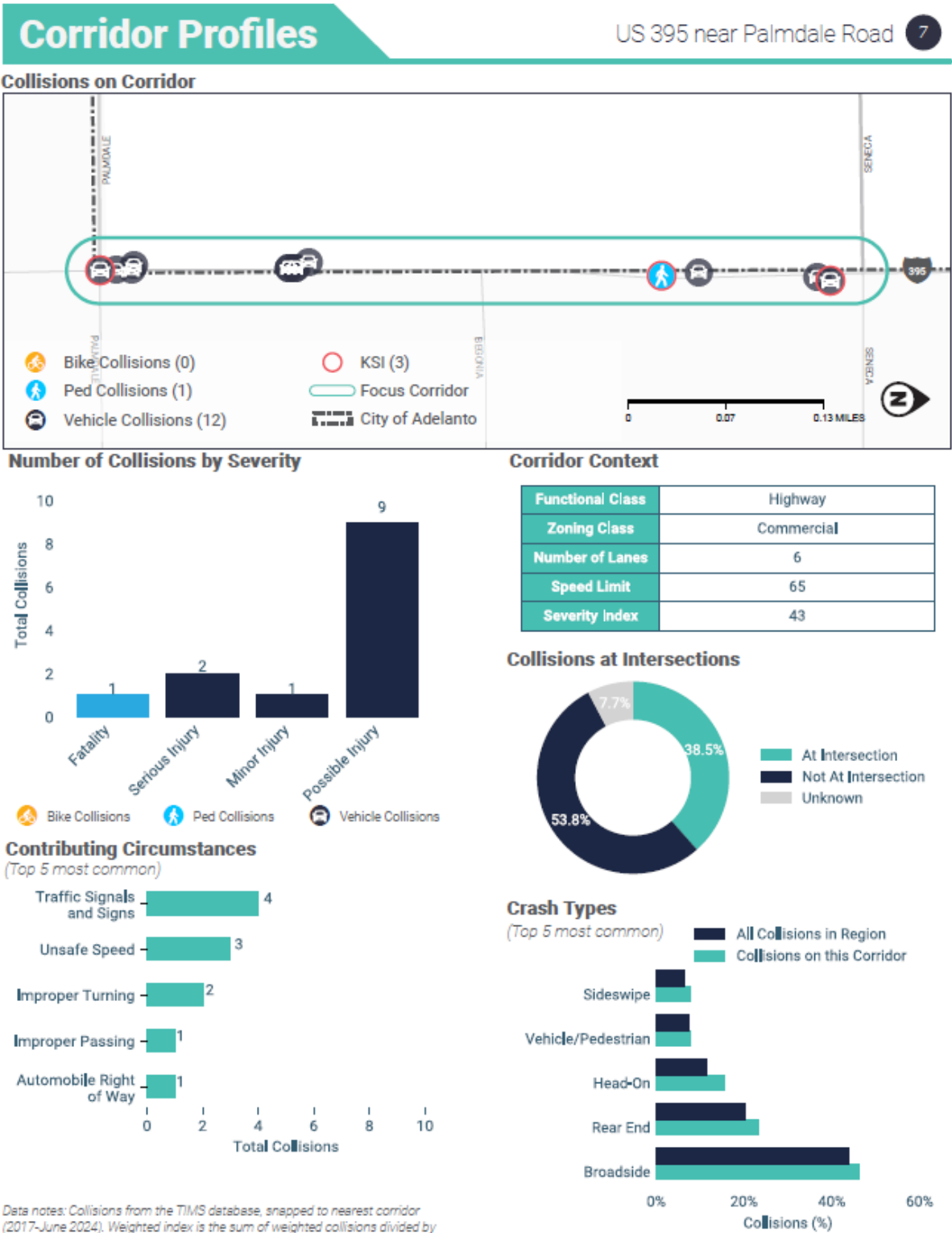


Table 7: US 395 Near Palmdale Road Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2130	Seneca Rd	Begonia Rd	Sidewalk or shared use path	Sidewalk	Shared Use Path (SUP)	Bidirectional (North-South)	L	
2132	Seneca Rd	Begonia Rd	Corridor Access Management	Raised median		Bidirectional (North-South)	L	
2134	Seneca Rd	Begonia Rd	Pavement marking improvements	Wider edge lines		Bidirectional (North-South)	S	
2135	Seneca Rd	Begonia Rd	Lighting	Lighting		Bidirectional (North-South)	L	
2136	Begonia Rd	Palmdale Rd	Install or improve bike lane	Install Bike Lane (standard, buffered, or separated)		Bidirectional (North-South)	L	
2137	Begonia Rd	Palmdale Rd	Corridor Access Management	Raised median		Bidirectional (North-South)	L	
2138	Begonia Rd	Palmdale Rd	Lighting	Lighting		Bidirectional (North-South)	L	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1064	No	Seneca Rd	Pedestrian crossing treatments	High visibility crosswalk		East leg	1	S
1065	No	Seneca Rd	Signal timing and operations improvements	Prohibit right turn on red				S
1066	No	Seneca Rd	Signal visibility and signage improvements	Signal backplates	Supplemental signal heads or lens	All legs		S
1069	Yes	Palmdale Rd	Transit stop or intersection improvements	Bus shelter with seating		East side of street	1	L
1071	No	Palmdale Rd	Protected intersection	Protected intersection		All legs	1	L
1072	No	Palmdale Rd	Curb Extensions and Modifications	Truck apron		Southeast corner	1	S
1073	No	Palmdale Rd	Pedestrian crossing treatments	High visibility crosswalk				S
1074	No	Crossroads Way	Pedestrian crossing treatments	Refuge islands	High visibility crosswalk			L
1075	No	Palmdale Rd	Signal timing and operations improvements	Prohibit right turn on red	Adjust yellow change or all-red clearance interval	All legs		S

Linear Recommendations							
1076	No	Crossroads Way	Signal timing and operations improvements	Prohibit right turn on red	Adjust yellow change or all-red clearance interval		S
1077	No	Crossroads Way	Signal visibility and signage improvements	Signal backplates	All legs	21	S

Priority Corridor 8: Bellflower Street Near Ranch Road

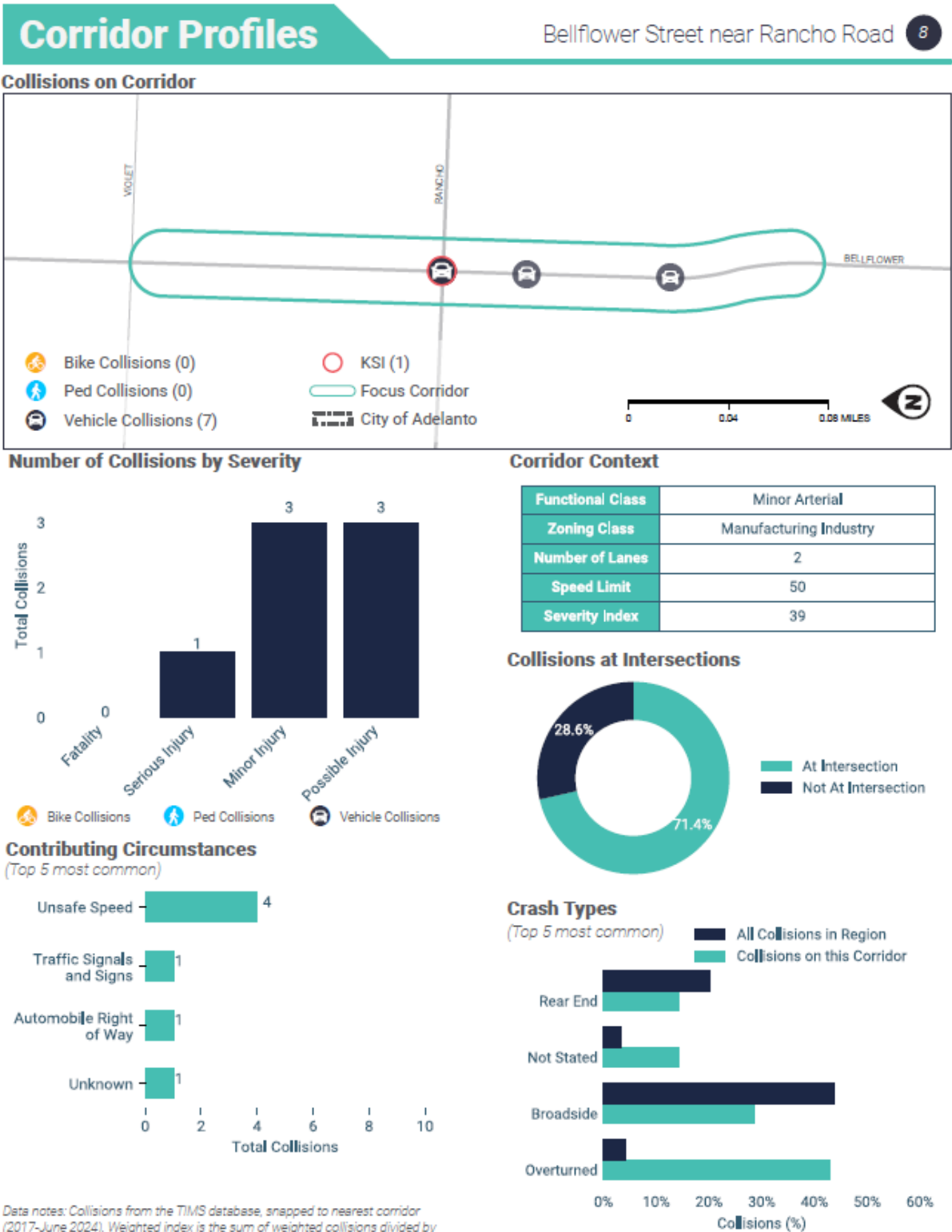


Table 8: Bellflower Street Near Ranch Road Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2225	North end of Corridor 8	Powerline Rd	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional	S	
2226	North end of Corridor 8	Powerline Rd	Road surface and shoulder improvements	Safety edge	Centerline Rumble strips	Bidirectional	S	
2227	North end of Corridor 8	Powerline Rd	Lighting	Lighting		Bidirectional	L	
2226	North end of Corridor 8	Powerline Rd	Pavement marking improvements	Wet-reflective pavement markings	Wider edge lines	Bidirectional	S	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1192	No	Rancho Rd	Transit stop or intersection improvements	Bus shelter with seating		W	1	L
1193	No	Rancho Rd	Pedestrian crossing treatments	High visibility crosswalk		All legs	4	S
1194	No	Rancho Rd	Roundabout	Roundabout			1	S
1195	No	Rancho Rd	Curb Extensions and Modifications	Truck apron			1	L
1197	No	Powerline Rd	Curve signing, marking, and object delineation improvements	Enhanced curve signage and delineation			1	S
1198	No	Rancho Rd	Pedestrian crossing treatments	High visibility crosswalk		All legs	4	S
1201	Yes		Intersection signing and marking improvements	Systemic signage and marking improvements at intersections		All legs	1	S

Priority Corridor 9: Palmdale Road Near US 395

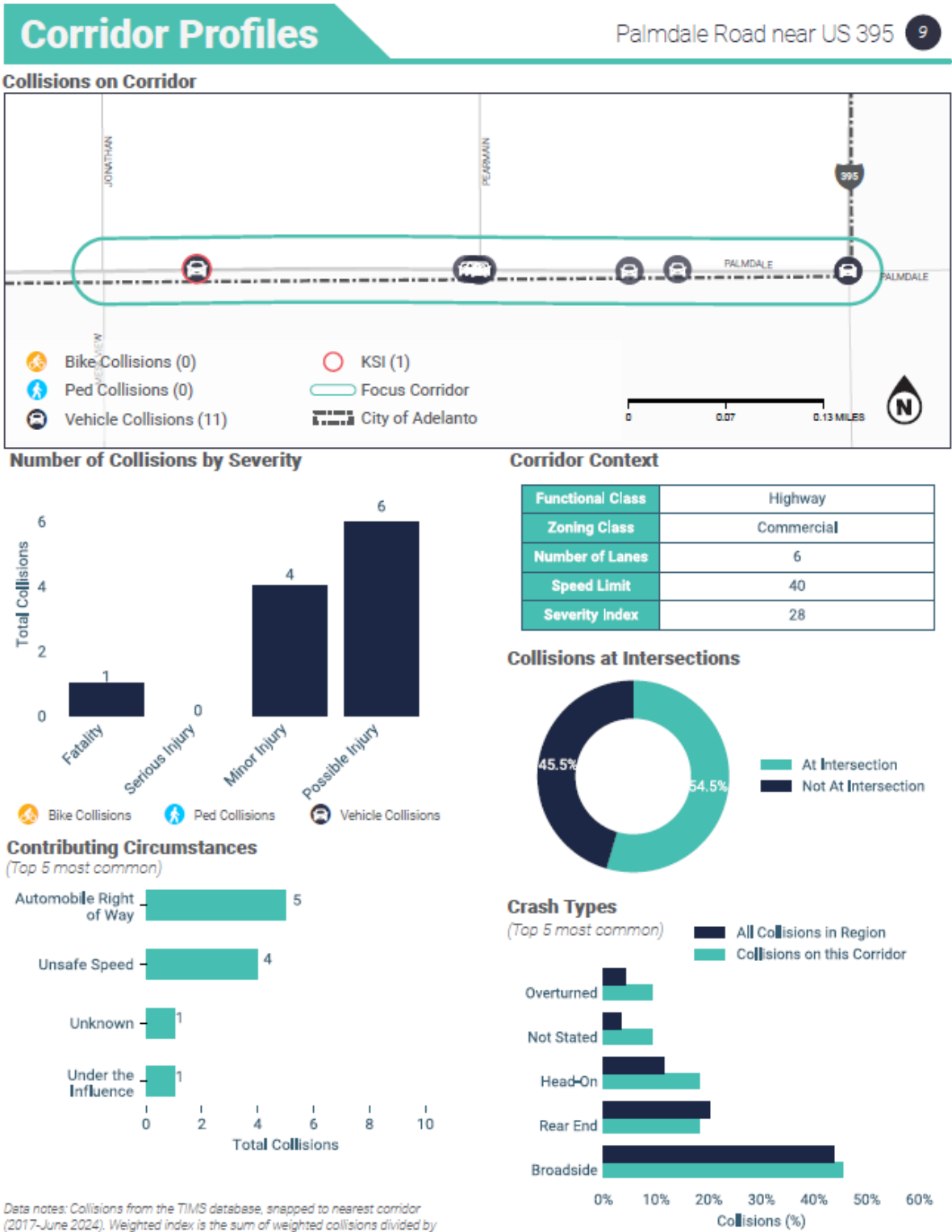


Table 9: Palmdale Road Near US 395 Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2139	West end of Corridor 9	Pearmain St	Sidewalk or shared use path	Sidewalk	Shared Use Path (SUP)	Bidirectional (East-West)	L	
2141	West end of Corridor 9	Pearmain St	Pavement marking improvements	Wider edge lines		Bidirectional (East-West)	S	
2142	West end of Corridor 9	Pearmain St	Lighting	Lighting		Bidirectional (East-West)	L	
2144	PEARMAIN ST	US 395	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional (East-West)	L	
2149	PEARMAIN ST	US 395	Install or improve bike lane	Install Bike Lane (standard, buffered, or separated)		Bidirectional (East-West)	L	
2150	PEARMAIN ST	US 395	Sidewalk or shared use path	Sidewalk		Bidirectional (East-West)	L	
2151	PEARMAIN ST	US 395	Corridor Access Management	Raised median		Bidirectional (East-West)	L	
2152	PEARMAIN ST	US 395	Road surface and shoulder improvements	Centerline Rumble strips	Shoulder or edge line Rumble Strips	Bidirectional (East-West)	S	
2153	PEARMAIN ST	US 395	Pavement marking improvements	Wider edge lines		Bidirectional (East-West)	S	
2154	PEARMAIN ST	US 395	Lighting	Lighting		Bidirectional (East-West)	L	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1071	No	Palmdale Rd	Protected intersection	Protected intersection		All legs	1	L
1072	No	Palmdale Rd	Curb Extensions and Modifications	Truck apron		Southeast corner	1	S
1073	No	Palmdale Rd	Pedestrian crossing treatments	High visibility crosswalk				S
1075	No	Palmdale Rd	Signal timing and operations improvements	Prohibit right turn on red	Adjust yellow change or all-red clearance interval	All legs		S
1078	No	Jonathan St	Roundabout	Roundabout		All legs	1	L
1079	No	Pearmain St	Roundabout	Roundabout		All legs	1	L
1083	No	Adelanto Marketplace driveway	Pedestrian crossing treatments	Refuge islands	High visibility crosswalk			S

Linear Recommendations								
1084	No	Pearmain St	Pedestrian crossing treatments	High visibility crosswalk		North leg	1	S
1085	No	Jonathan St	Pedestrian crossing treatments	High visibility crosswalk		All legs	4	L
1087	No	Adelanto Marketplace driveway	Signal timing and operations improvements	Adjust yellow change or all-red clearance interval	Leading pedestrian or bike interval (LPI/LBI)			S

Priority Corridor 10: US 395 Near Rancho Road

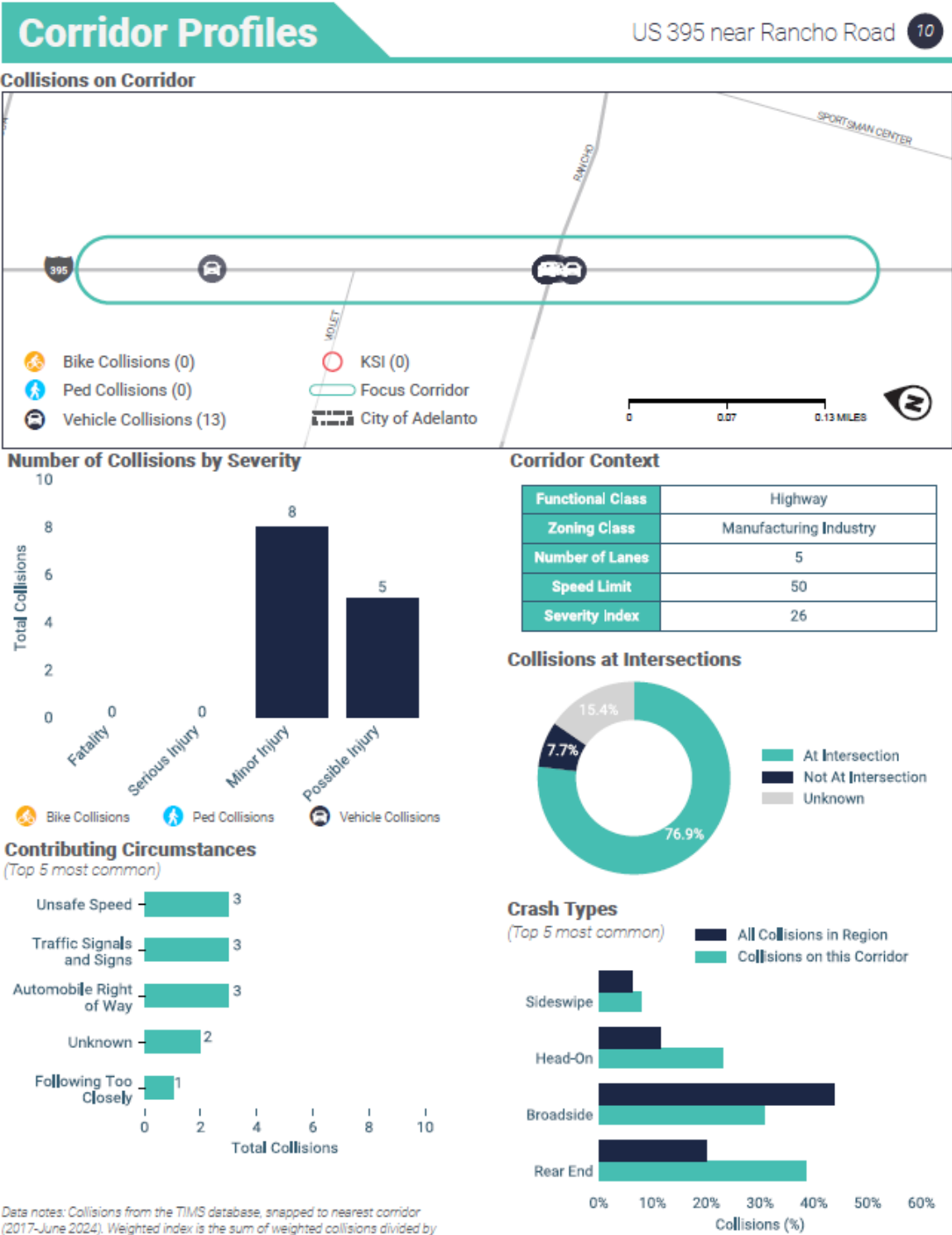


Table 10: US 395 Near Rancho Road Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2203	North end of corridor 10	South end of corridor 10	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional	L	
2205	North end of corridor 10	South end of corridor 10	Road surface and shoulder improvements	Widen or install paved shoulder	Safety edge	Bidirectional	L	
2206	North end of corridor 10	South end of corridor 10	Pavement marking improvements	Wider edge lines		Bidirectional	S	
2233	North end of corridor 10	South end of corridor 10	Sidewalk or shared use path	Shared Use Path (SUP)		Bidirectional	L	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1155	No	Rancho Rd	Roundabout	Roundabout			1	L
1156	No	Rancho Rd	Raised crossings or intersections	Raised crosswalk			4	L
1157	No	Rancho Rd	Curb Extensions and Modifications	Tighten curb radius	Truck apron		4	S
1211	No	Rancho Rd	Pedestrian crossing treatments	High visibility crosswalk			4	S
1212	No	Rancho Rd	Signal timing and operations improvements	Leading pedestrian or bike interval (LPI/LBI)			4	S
1213	Yes	Violet Rd	Speed feedback signs	Speed feedback signs		Southbound	1	S
1214	Yes	Powerline Rd	Speed feedback signs	Speed feedback signs		Northbound	1	S

Priority Corridor 11: Star Street near Jonathan Street

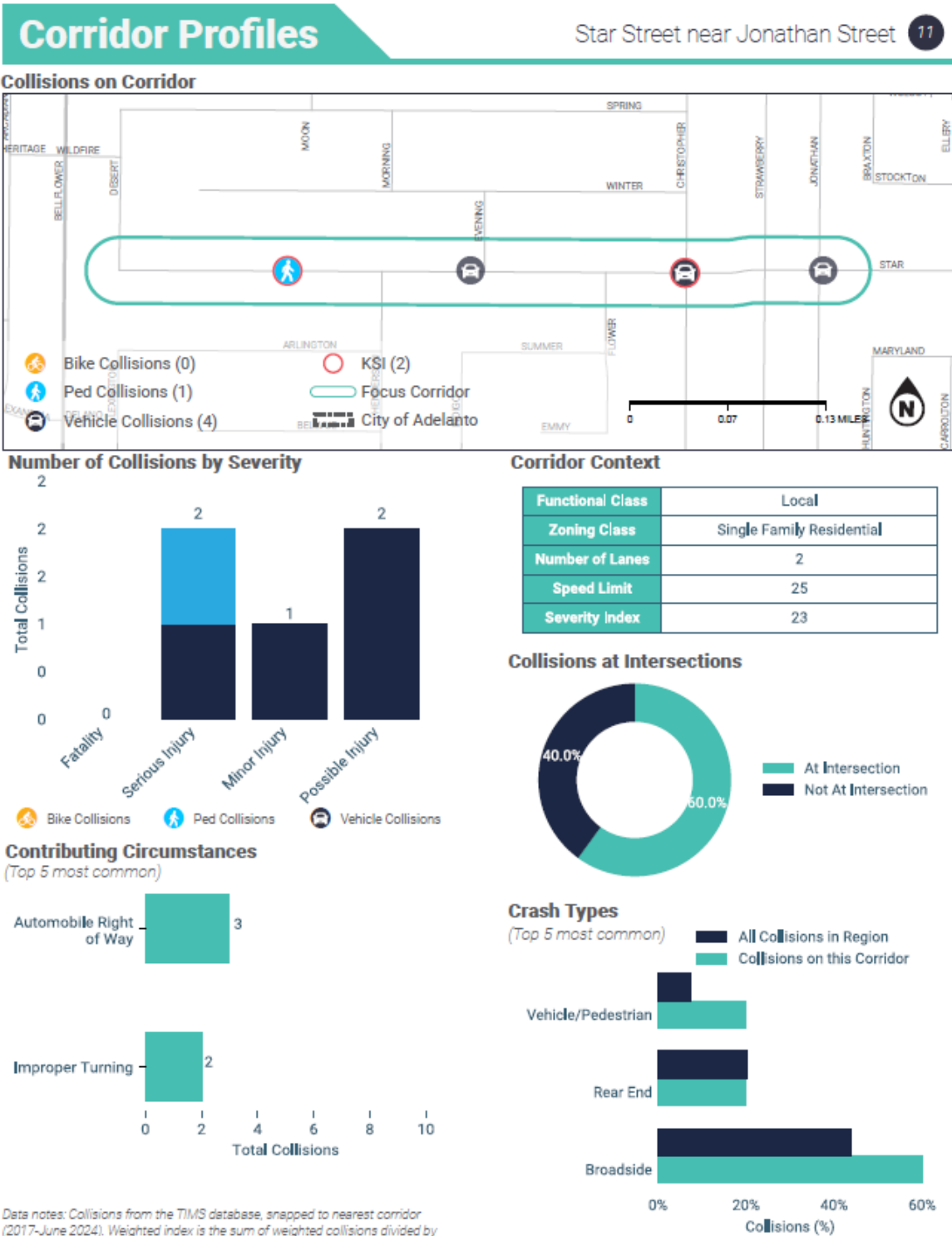


Table 11: Star Street near Jonathan Street Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2207	DESERT ST	Jonathan St	Traffic Calming	Speed humps, cushions, or tables	Pinch points, chokers, and gateways			S
2209	DESERT ST	Jonathan St	Lighting	Lighting		Bidirectional		L
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1160	No	Jonathan St	Roundabout	Mini roundabout			1	S
1161	No	Strawberry Ln	Curb Extensions and Modifications	Curb extension			4	S
1162	No	Jonathan St	Curb Extensions and Modifications	Curb extension			4	S
1163	No	Christopher St	Curb Extensions and Modifications	Curb extension			4	S
1164	Yes	Flower St	Curb Extensions and Modifications	Curb extension			2	S
1166	No	Jonathan St	Raised crossings or intersections	Raised crosswalk			1	S
1209	No	Christopher St	Turn calming				1	L
1210	Yes		Speed feedback signs	Speed feedback signs		East	1	S

Priority Corridor 12: Seneca Road Near Palm Street

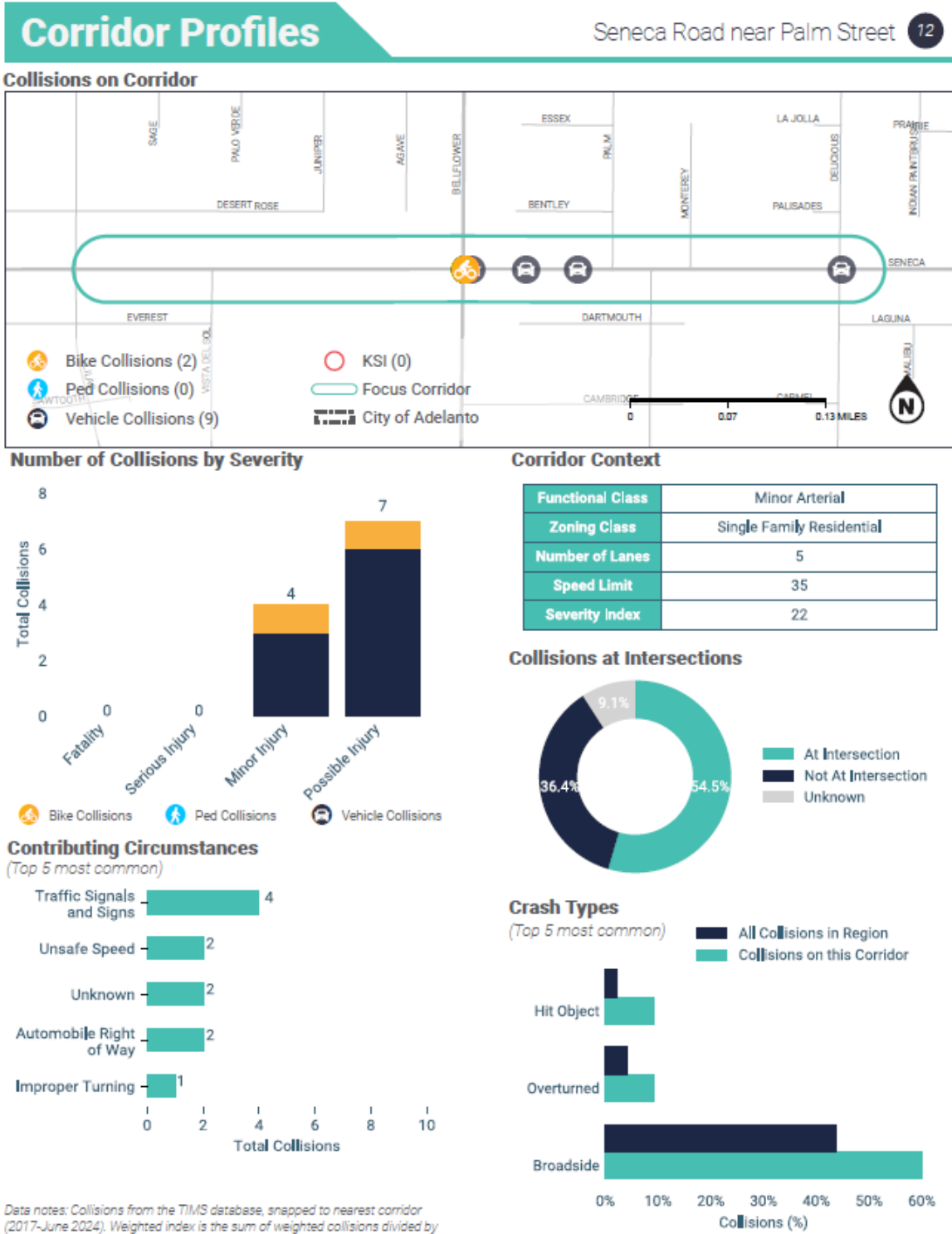


Table 12: Seneca Road Near Palm Street Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2193	Lilac Rd	Delicious St	Roadway reconfiguration	Road diet		Bidirectional	S	
2194	Lilac Rd	Delicious St	Traffic Calming	Pinch points, chokers, and gateways		Bidirectional	L	
2195	Lilac Rd	Delicious St	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional	S	
2196	Lilac Rd	Delicious St	Install or improve bike lane	Upgrade existing bike lane or shared lane to buffered or separated bike lane		Bidirectional	S	
2197	Lilac Rd	Bellflower St	Sidewalk or shared use path	Sidewalk			L	
2198	Bellflower St	Delicious St	Sidewalk or shared use path	Sidewalk			L	
2201	Lilac Rd	Delicious St	Lighting	Lighting		Bidirectional	L	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1143	No	Lilac Rd	Transit stop or intersection improvements	Bus shelter with seating	Bus bulb or bay		1	L
1144	No	Bellflower St	Transit stop or intersection improvements	Bus shelter with seating	Bus bulb or bay		1	L
1145	No	Bellflower St	Transit stop or intersection improvements	Bus shelter with seating	Bus bulb or bay		1	L
1146	No	Bellflower St	Roundabout	Roundabout			1	S
1147	No	Bellflower St	Raised crossings or intersections	Raised crosswalk		All legs	4	L
1148	No	Bellflower St	Curb Extensions and Modifications	Curb extension	Tighten curb radius	All corners	4	S
1149	No	Delicious St	Curb Extensions and Modifications	Curb extension		All corners	4	S
1152	No	Delicious St	Pedestrian crossing treatments	High visibility crosswalk	Advance yield markings and signage	E/W	2	S
1153	Yes		Speed feedback signs	Speed feedback signs		East	1	S
1205	No	Lilac Rd	Pedestrian crossing treatments	RRFB	Refuge islands	N/S legs	2	S

Priority Corridor 13: Mojave Drive Near Mesquite Avenue

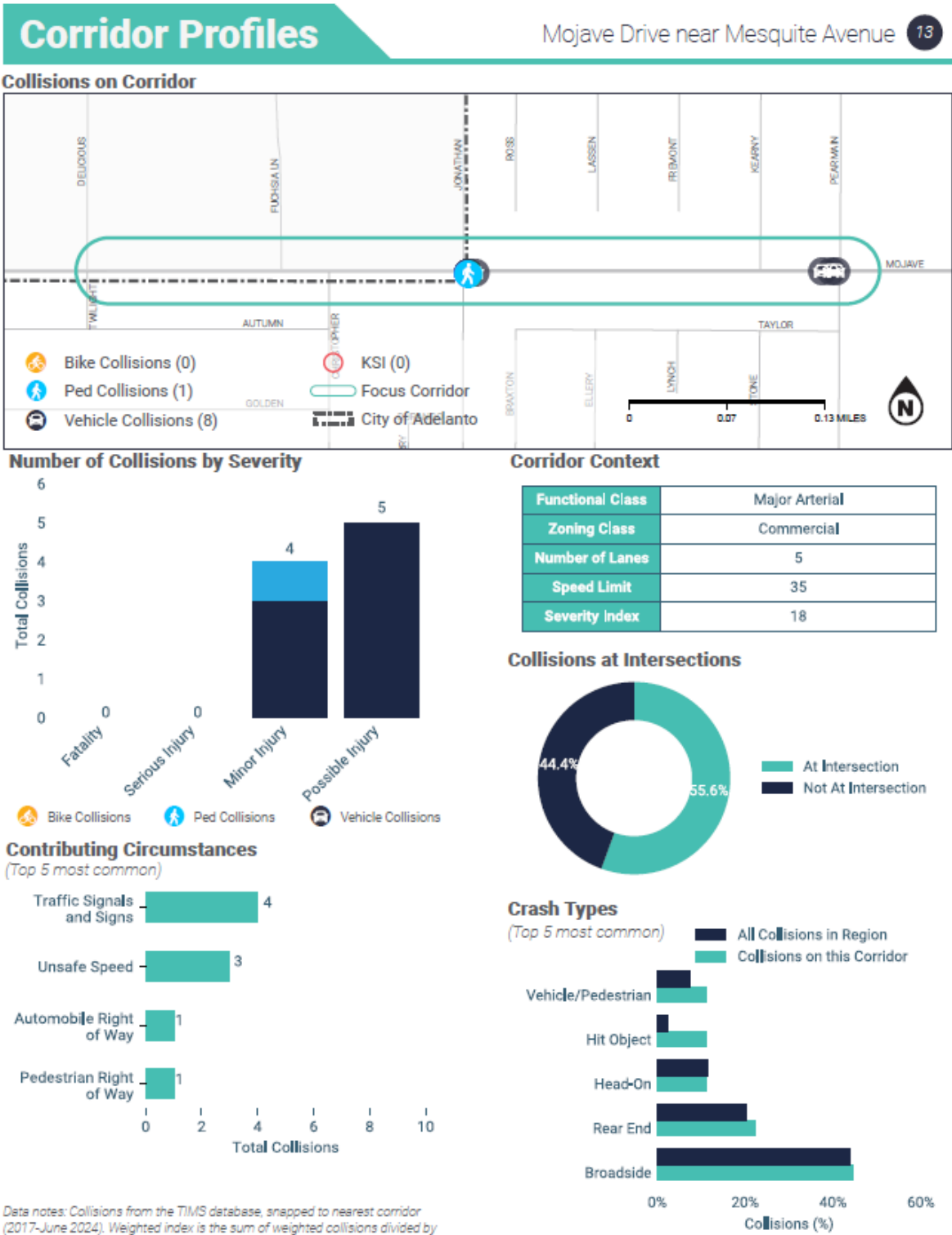


Table 13: Mojave Drive Near Mesquite Avenue Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2179	Twilight Way	Mesquite Ave	Sidewalk or shared use path	Sidewalk		Southside	L	
2181	Twilight Way	Mesquite Ave	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional	S	
2182	Twilight Way	Mesquite Ave	Corridor Access Management	Raised median			L	
2184	Twilight Way	Mesquite Ave	Lighting	Lighting		Southside	L	
2186	Mesquite Ave	Pearmain St	Traffic Calming	Pinch points, chokers, and gateways			S	
2187	Mesquite Ave	Pearmain St	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional	S	
2188	Mesquite Ave	Pearmain St	Install or improve bike lane	Install Bike Lane (standard, buffered, or separated)		Bidirectional	S	
2189	Twilight Way	Mesquite Ave	Install or improve bike lane	Install Bike Lane (standard, buffered, or separated)		Bidirectional	S	
2190	Mesquite Ave	Pearmain St	Corridor Access Management	Raised median			L	
2192	Mesquite Ave	Pearmain St	Lighting	Lighting			L	
2234	Mesquite Ave	Pearmain St	Roadway reconfiguration	Road diet		Bidirectional	S	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1129	No	Mesquite Ave	Roundabout	Roundabout			1	L
1132	No	Mesquite Ave	Curb Extensions and Modifications	Curb extension	Tighten curb radius		4	S
1133	No	Mesquite Ave	Pedestrian crossing treatments	High visibility crosswalk			4	S
1135	Yes		Speed feedback signs	Speed feedback signs			1	S
1136	No	Pearmain St	Roundabout	Roundabout			1	L
1137	No	Pearmain St	Raised crossings or intersections	Raised crosswalk			4	L
1139	No	Pearmain St	Curb Extensions and Modifications	Curb extension	Tighten curb radius		4	S

Linear Recommendations						
1140	No	Pearmain St	Pedestrian crossing treatments	High visibility crosswalk	Refuge islands	S

Priority Corridor 14: Palmdale Road at Aster Road

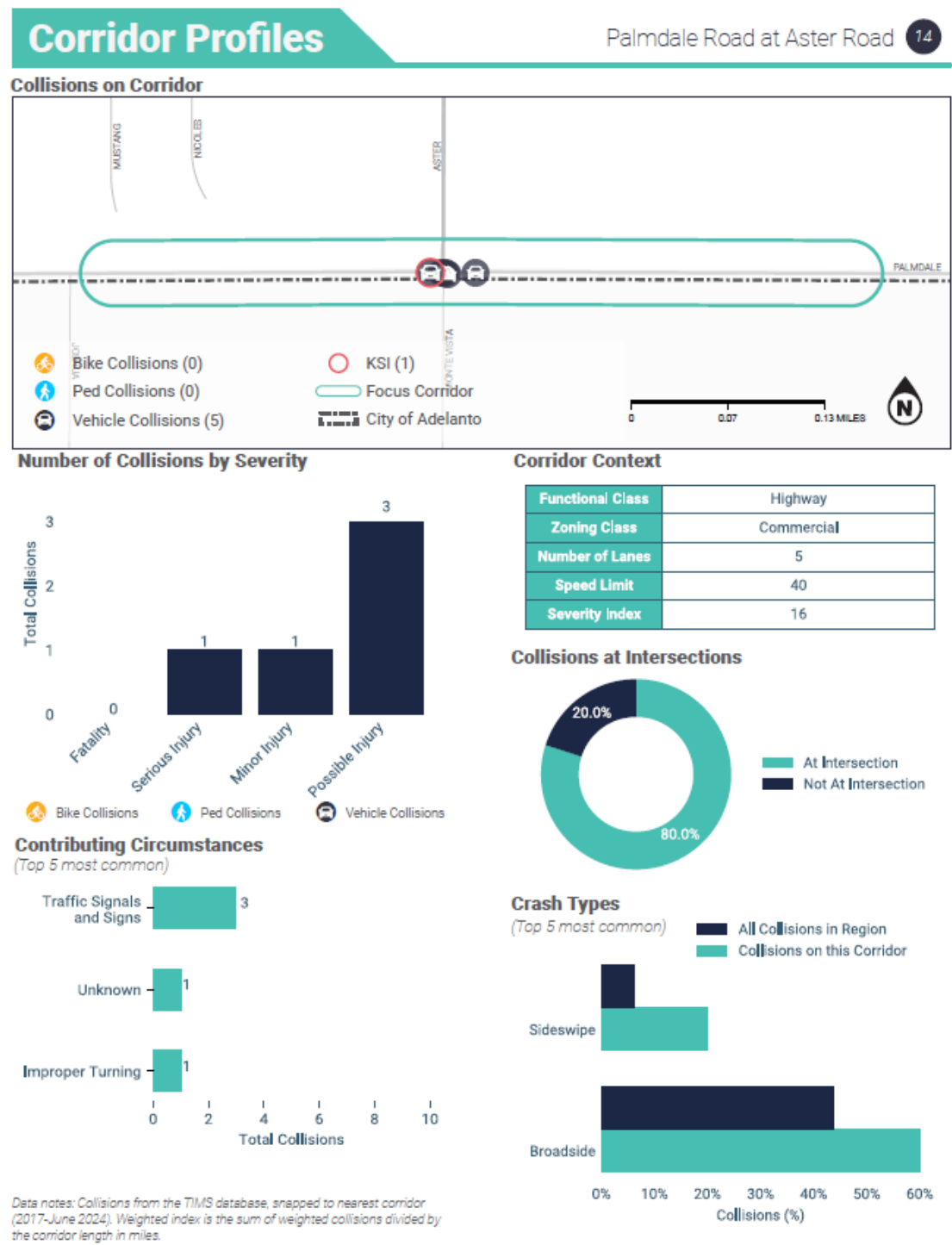


Table 14: Palmdale Road at Aster Road Safety Improvements

Linear Recommendations							
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline

Linear Recommendations

2219	Aster Rd	East end of Corridor 14	Corridor Access Management	Raised median		Bidirectional	L
2221	West end of Corridor 14	East end of Corridor 14	Lighting	Lighting		Bidirectional	L
2232	Aster Rd	East end of Corridor 14	Sidewalk or shared use path	Shared Use Path (SUP)		Bidirectional	L

Spot (Point) Recommendations

ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1183	No	Aster Rd	Roundabout	Roundabout			1	L
1184	No	Aster Rd	Turn calming	Centerline hardening			4	S
1185	No	Aster Rd	Raised crossings or intersections	Raised crosswalk			3	L
1186	No	Aster Rd	Curb Extensions and Modifications	Curb extension	Truck apron		4	S
1187	No	Aster Rd	Pedestrian crossing treatments	High visibility crosswalk			4	S
1188	No	Aster Rd	Signal timing and operations improvements	Protected-only turns	Adjust yellow change or all-red clearance interval	E/W	2	S

Priority Corridor 15: Chamberlaine Way Near US 395

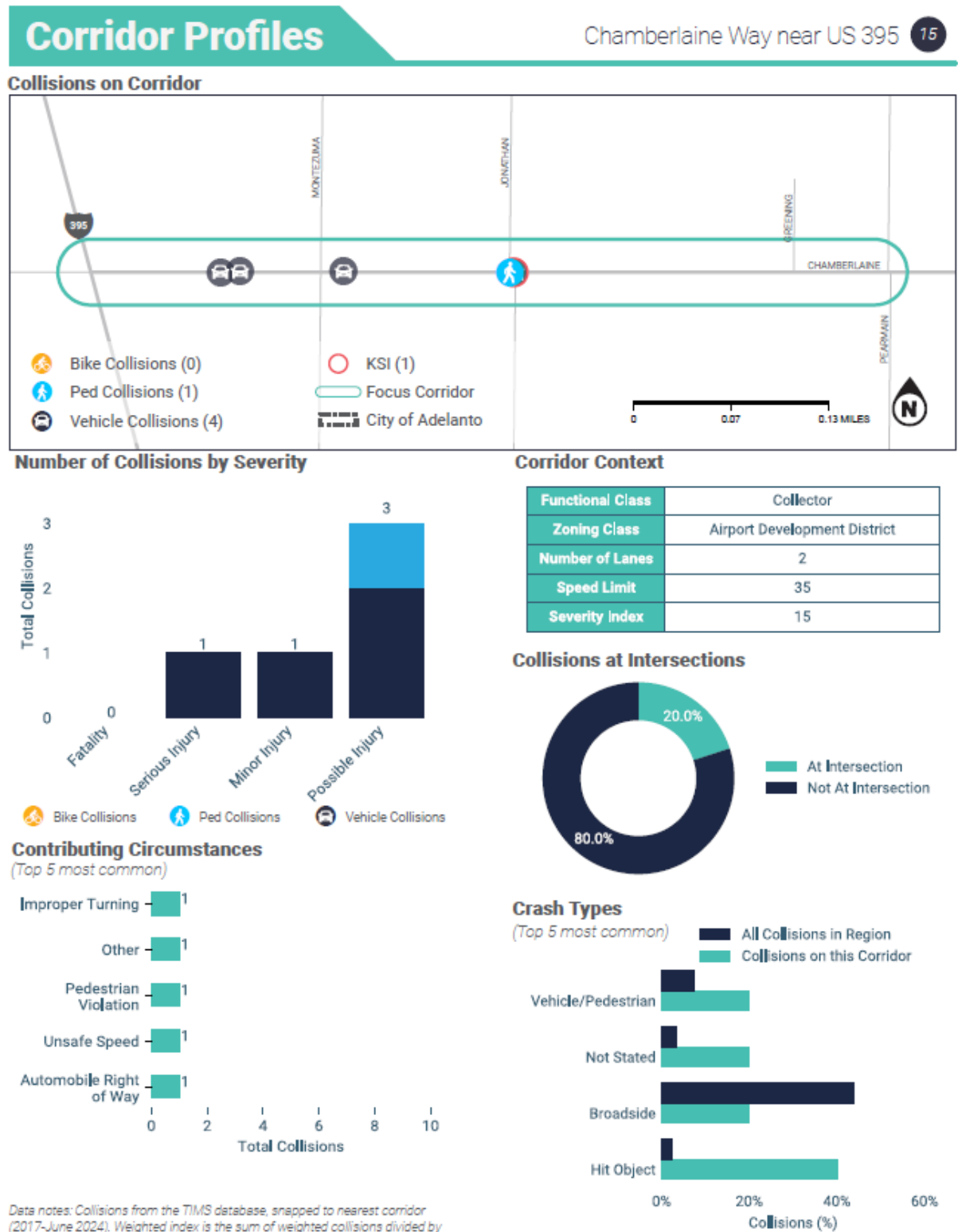


Table 15: Chamberlaine Way Near US 395 Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2156	US 395	Adelanto Park Entrance	Traffic Calming	Speed humps, cushions, or tables	Pinch points, chokers, and gateways	Bidirectional (East-West)	S	
2157	Jonathan St	Pearmain St	Traffic Calming	Speed humps, cushions, or tables	Pinch points, chokers, and gateways	Bidirectional (East-West)	S	
2158	Adelanto Park Entrance	Jonathan St	Traffic Calming	Speed humps, cushions, or tables	Pinch points, chokers, and gateways	Bidirectional (East-West)	S	
2159	Adelanto Park Entrance	Jonathan St	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional (East-West)	S	
2160	Desert Star Apartments Driveway	Jonathan St	Narrow the width of vehicle lanes	Narrow the width of vehicle lanes		Bidirectional (East-West)	S	
2161	US 395	Pearmain St	Install or improve bike lane	Install Bike Lane (standard, buffered, or separated)		Bidirectional (East-West)	L	
2162	US 395	Adelanto Park Entrance	Sidewalk or shared use path	Sidewalk		Bidirectional (East-West)	L	
2163	Adelanto Park Entrance	Jonathan St	Sidewalk or shared use path	Sidewalk		Bidirectional (East-West)	L	
2164	Jonathan St	Pearmain St	Sidewalk or shared use path	Sidewalk		Bidirectional (East-West)	L	
2165	US 395	Montezume St	Road surface and shoulder improvements	Resurface roadway		Bidirectional (East-West)	L	
2166	Jonathan St	Pearmain St	Road surface and shoulder improvements	Resurface roadway		Bidirectional (East-West)	L	
2167	US 395	Pearmain St	Pavement marking improvements	Wet-reflective pavement markings		Bidirectional (East-West)	S	
2168	US 395	Pearmain St	Lighting	Lighting		Bidirectional (East-West)	L	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1045	No	Chamberlaine Way	Roundabout	Roundabout		All legs	1	L
1046	No	Chamberlaine Way	Raised crossings or intersections			East and west legs	2	L
1047	No	Chamberlaine Way	Curb Extensions and Modifications	Curb extension	Truck apron	All corners	4	S

Linear Recommendations

1049	No	Chamberlaine Way	Signal timing and operations improvements	Prohibit right turn on red	Adjust yellow change or all-red clearance interval			S
1050	No	Chamberlaine Way	Signal visibility and signage improvements	Signal backplates		All legs	16	S
1088	No	Montezuma St	Roundabout	Mini roundabout		All legs	1	L
1089	No	Jonathan St	Roundabout	Roundabout		All legs	1	L
1090	No	Pearmain St	Roundabout	Mini roundabout		All legs	1	L
1094	No	Jonathan St	Turn calming	Centerline hardening		East leg	1	S
1095	No	Montezuma St	Turn calming	Centerline hardening		East and west legs	2	S
1096	No	Jonathan St	Curb Extensions and Modifications	Curb extension		Southwest corner	1	S
1097	No	Montezuma St	Curb Extensions and Modifications	Curb extension		Southwest corner	1	S
1098	No	Montezuma St	Pedestrian crossing treatments	High visibility crosswalk		All legs	4	S
1099	No	Jonathan St	Pedestrian crossing treatments	High visibility crosswalk		All legs	4	S
1100	No	Pearmain St	Pedestrian crossing treatments	High visibility crosswalk		All legs	4	S
1101	Yes	Pearmain St	Speed feedback signs	Speed feedback signs		North and south sides of street	2	S

Priority Corridor 16: Bellflower Street Near Victor Street

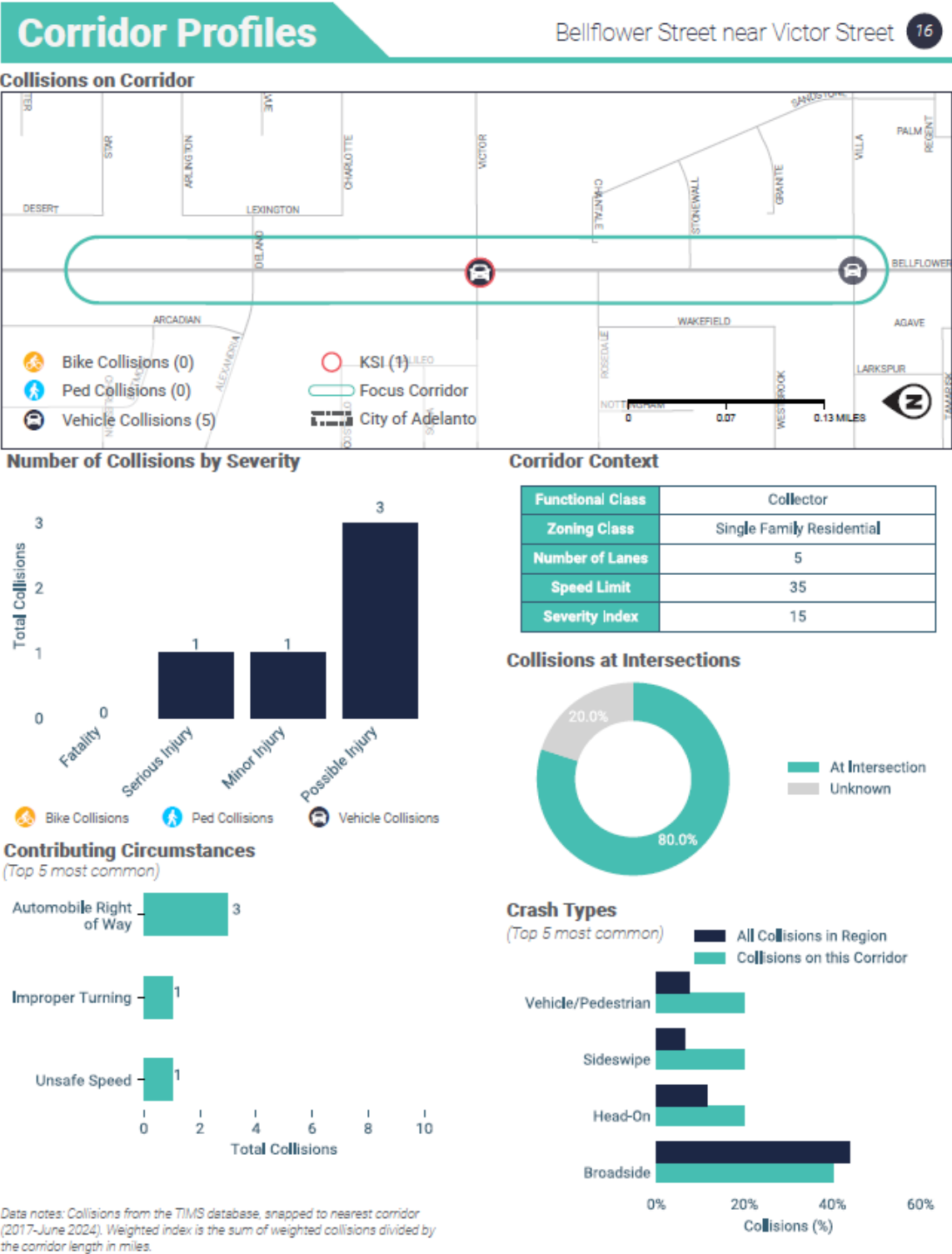


Table 16: Bellflower Street Near Victor Street Safety Improvements

Linear Recommendations								
ID	From Street	To Street	Category (line)	Countermeasure 1	Countermeasure 2	Direction	Implementation Timeline	
2169	Victor St	Villa St	Transit Corridor improvements	First-Last Mile/Transit Access Improvements		Bidirectional	S	
2170	Wildfire Way	Villa St	Roadway reconfiguration	Road diet		Bidirectional	S	
2171	Wildfire Way	Villa St	Traffic Calming	Pinch points, chokers, and gateways	Lateral shift or chicane	Bidirectional	S	
2172	Victor St	Villa St	Install or improve bike lane	Install Bike Lane (standard, buffered, or separated)		Bidirectional	S	
2173	North Of Rosedale Dr	VILLA ST	Sidewalk or shared use path	Sidewalk		West side of street	L	
2174	North of Victor St Intersection	South of Victor St Intersection	Sidewalk or shared use path	Sidewalk		Bidirectional	S	
2175	Wildfire Way	Alexandria St	Sidewalk or shared use path	Sidewalk		East side of street	S	
2176	Wildfire Way	Villa St	Corridor Access Management	Raised median		Bidirectional	L	
2177	Wildfire Way	Villa St	Pavement marking improvements	Wet-reflective pavement markings		Bidirectional	S	
2178	Wildfire Way	Villa St	Lighting	Lighting		Bidirectional	L	
Spot (Point) Recommendations								
ID	Midblock?	Cross Street	Category (point)	Countermeasure 1	Countermeasure 2	Direction	Quantity	Implementation Timeline
1102	No	Villa St	Transit stop or intersection improvements	Bus shelter with seating	Bus bulb or bay	Bidirectional	2	L
1104	No	Victor St	Roundabout	Roundabout			1	S
1105	No	Victor St	Raised crossings or intersections	Raised crosswalk			4	L
1111	No	Villa St	Raised crossings or intersections	Raised crosswalk			4	S
1112	No	Alexandria St	Turn calming	Centerline hardening			1	S
1113	No	Victor St	Curb Extensions and Modifications	Curb extension			2	S
1114	No	Victor St	Change intersection control type	Convert from two-way stop (or yield) to all-way stop control			2	S

Linear Recommendations

1115	Yes	Stonewall Cir	Curb Extensions and Modifications	Curb extension		2	S
1116	Yes	Rosedale Dr	Curb Extensions and Modifications	Curb extension	Tighten curb radius	2	S
1117	No	Villa St	Change intersection control type	Convert from two-way stop (or yield) to all-way stop control		1	S
1118	No	Alexandria St	Change intersection control type	Convert from two-way stop (or yield) to all-way stop control		1	S
1119	No	Alexandria St	Pedestrian crossing treatments	High visibility crosswalk	Advance yield markings and signage		S
1120	No	Victor St	Pedestrian crossing treatments	High visibility crosswalk	Refuge islands	4	S
1121	Yes	Rosedale Dr	Pedestrian crossing treatments	High visibility crosswalk		1	S
1122	Yes	Stonewall Cir	Pedestrian crossing treatments	High visibility crosswalk		1	S
1123	No	Villa St	Pedestrian crossing treatments	High visibility crosswalk	Advance yield markings and signage		S
1124	Yes		Speed feedback signs	Speed feedback signs			S



From: Alta Planning + Design
To: City of Adelanto
Date: January 5, 2026
Re: Appendix G: Transparency and Implementation Memorandum.

Introduction

This progress and transparency memo consists of two parts: (1) a **Proposed Performance Measures and Reporting Framework** for measuring progress in implementing the Adelanto Safe Streets and Roads for All (SS4A) Safety Action Plan (SAP) and reporting roadway safety performance, and (2) a **One-Year Implementation Plan** that identifies immediate, near-term actions for implementation.

The Proposed Performance Measures and Reporting Framework outlines the necessary metrics and potential performance measures that should be included in the public-facing reporting, with a focus on tracking progress toward reducing roadway fatalities and serious injuries in accordance with the SS4A SAP. This framework is supported by national best practices and peer city examples. An evaluation of available data will be conducted to note the metrics that can be tracked immediately and those that may require additional data collection and procession. Based on the recommended metrics and case study findings, this section proposes an annual public report card framework organized into three topics: safety action plan strategies, annual crash reduction progress, and before/after project implementation. Additionally, an appendix is included to provide examples of how peer agencies report progress on their safety action plans.

The One-Year Implementation Plan presents a transparent and fiscally constrained roadmap for the City of Adelanto's first year of SS4A implementation. This section identifies immediate actions the City can take, including necessary policy actions such as modifications to City standards, guidelines, and ordinances, as well as new recommendations. It also provides high-level estimates of budgeting needs related to implementation, staff training, and expanding staff capacity.

Together, the Program Evaluation Framework and the One-Year Implementation Plan support the City's ability to meet SS4A Implementation Grant program requirements while ensuring that progress is communicated in a clear and transparent manner to residents and other relevant stakeholders.

Proposed Performance Measures and Reporting Framework

Alta proposes three major topics to be included in the reporting framework, which may be updated and published annually as one document on Adelanto's website. Alta recommends the following performance measures for their simplicity and ease, their relevance to Adelanto's size and values, and their consistency with the Safe System Approach.

Additional reporting considerations, such as supplementary performance measures, alternative data points, and reporting formats, may also be considered in future annual program reports, depending on data availability and the City's capacity. These considerations are discussed and compared at length in this section.

In preparation for this memorandum, dozens of safety reports were reviewed. To help the City better understand potential formats for the progress report, please refer to the appendix for examples of how peer agencies report progress on their safety action plans.

Topic 1: Crashes

Crash performance measure	Effort	Source	Why include?
Fatalities: Count and percent change since last report	  	SWITRS/Police	Safe System approach: emphasis on fatalities and serious injuries.
Serious injuries: Count and percent change since last report	  	SWITRS/Police	
Pedestrian and bicycle-involved crashes	  	SWITRS/Police	Safe System approach: emphasis on vulnerable road users.
Truck crashes	  	SWITRS/Police	Safe System approach: emphasis on all road users; reflects Adelanto's higher portion of freight and truck traffic and industrial land uses.
Speeding-related crashes	  	SWITRS/Police	Safe System approach: emphasis on speed.
Crashes compared to peer cities	  	SWITRS/Police	Recommend comparing crashes and KSI crashes to peer cities. Match by region, population, and VMT; normalize by population and VMT.
	  	OTS Crash Rankings	Recommend comparing City's traffic safety statistics to those of other cities with similar-sized populations. OTS Crash Rankings are publicly recognized but released on a delayed schedule, making them most suitable as a periodic benchmarking reference.

Topic 2: Progress

Progress on Safety Action Plan performance measure	Effort	Output format	Why include?
Projects completed	● ● ○	Count, list, % of plan, % of projects in disadvantaged areas	Straightforward progress report. Focus of this section.
Miles of new network improvements (sidewalks, bikeways, and trails)	● ● ○	Count, list, miles, % of plan	The Action Plan and other documents may suggest significant network investment.
Education and encouragement program reach	● ● ○	Persons reached (in person), impressions/views (online), materials distributed	If education and encouragement programs are included in the Action Plan, tracking reach provides a measurable indicator of program delivery, community engagement, and implementation progress.
Policy and legislation adoption	● ● ○	List of adopted policies, resolutions, ordinances, or standards, including their adoption date, governing body, and the associated Action Plan program and policy recommendation addressed.	Demonstrates institutional commitment and progress toward implementing Action Plan strategies through enforceable policy changes.
Planned projects for next [x] years	● ● ○	List of the projects prioritized for the following year/s	Sense of momentum.
Grant applications submitted and awarded	● ● ○	List of grant applications submitted, funding amount requested and awarded, project type and status	Demonstrates implementation momentum, funding readiness, and the City's commitment to advancing Action Plan progress.
Projects on-time	● ● ○	% on-time	Sense of responsibility, accountability, and transparency.
Projects on-budget	● ● ○	% on-budget, amount over/under budget	
Events sponsored	● ○ ○	Description of each event, photos	Sense of community.

Topic 3: Before & After

Focusing on one or multiple highlighted projects completed from Topic 2, this topic will show the impacts of implemented projects. It will also double as a project summary sheet for stakeholder and public review, or for sponsorship and funding applications.

Section	Components	Why include?
Project details	• Project name. • Location. • In disadvantaged area? • Along High Injury Network? • Overview: 2-3 sentence summary of what was installed or changed and why.	Establishes context for the project and ties it to city priorities.
Community feedback	• Resident quotes of support. • Survey statistic (e.g., percentage support for installation).	Demonstrates public sentiment and support.
Observed behavioral changes, if applicable	• Intersections: driver yielding rate at crosswalks, average pedestrian delay, vehicle turning behavior (e.g., close calls, illegal turns), driver compliance with signals/signage, vehicle turning speed, etc. • Segments: reduced speeds, higher biking and walking volumes, sidewalk/wrong-way biking rate, illegal parking rate, jaywalking rate, etc. • These behavioral changes could be carefully measured or merely carefully observed. Be clear which method is used.	Shows early effects on behavior, even before crash data is available.
Before-and-after photos		Provides compelling visual evidence of the change and helps convey the project's impact.
Crash rates	• Preliminary before-and-after crash rates near the project (if available). • If data is limited, consider highlighting data from similar past projects, anticipated crash reductions based on statistical techniques such as Safety Performance Functions, or empirically derived data such as Crash Modification Factors.	Tracks safety outcomes.

Additional Reporting Considerations

1. Crash Performance Measures

Crash data is one of the most readily available and actionable types of safety information and can help convey how crash severity and frequency change over time relative to historic trends. However, agencies should provide appropriate caveats when reporting crash trends, given the influence of external factors and random variance that can skew perceptions of program effectiveness. For instance, while vehicle miles traveled declined nationally during the COVID-19 pandemic, the total number of KSI crashes increased. Agencies can control for some of the trends by limiting KSI crash trend reporting to areas where improvements have been implemented. Additional considerations for crash performance measures are listed below and in.

- **Disaggregation:** Each crash-related measure below may be disaggregated by severity: fatalities, serious injuries, and other crashes. The Safe System Approach focuses on fatalities and serious injuries. However, including “other crashes,” such as those involving lesser injuries or property damage only, may paint a more comprehensive picture of crash activity and may potentially inform proactive safety analysis.
- **Trends:** Where feasible, performance measures should be compared to previous years, including pre-project years. Implementation of relevant projects (and other factors such as COVID) should be noted on the time axis.
- **Output formats:** Many visual formats are possible depending on the performance measures and disaggregation tactic. These include bar charts, stacked graphs, line graphs, maps, and tables. It is important to consider the clarity of the output format to the layperson. These reports are often read by community members, elected officials, and other partners who may not have technical backgrounds.
- **Methodology:** Most of the measures in this section can be derived from the Statewide Integrated Traffic Records System (SWITRS), combined with other City GIS maps. A GIS-capable staff member can extract, map, and summarize this data relatively quickly. GIS outputs can be exported to Excel, Illustrator, or elsewhere for data visualization and report creation using the performance evaluation templates.

Table 1. Crash-related performance measures.

Performance measure	Effort	Source	Output format	Comment
KSI Outcomes and Rates				
Fatalities	● ○ ○	SWITRS/Police	Bar chart or table	
Fatality rate (per VMT or road network mileage)	● ○ ○	SWITRS/Police	Bar chart or table	
Serious injuries	● ○ ○	SWITRS/Police	Bar chart or table	
Serious injury rate (per VMT or road network mileage)	● ○ ○	SWITRS/Police	Bar chart or table	
Crashes compared to state, peer cities, or the nation	● ● ○	SWITRS/Police	Table, bar chart	Using K/SI/Other total or disaggregate by any of the performance measures above.
	● ○ ○	OTS Crash Rankings	Table, bar chart	Recommend comparing City's traffic safety statistics to those of other cities with similar-sized populations. OTS Crash Rankings are publicly recognized but released on a delayed schedule, making them most suitable as a periodic benchmarking reference.
Context for Crash Types				
Pedestrian and bicycle-involved crashes	● ○ ○	SWITRS/Police	Stacked bar chart	For example, in a stacked bar chart, the x-axis is the year, and the y-axis bars have sections for killed, significantly injured, and other crashes.
Truck crashes	● ○ ○	SWITRS/Police	Stacked bar chart	
Intersection crashes	● ○ ○	SWITRS/Police	Stacked bar chart	
Alcohol- or drug-involved crashes	● ○ ○	SWITRS/Police	Stacked bar chart	
Speeding-related crashes	● ○ ○	SWITRS/Police	Map, chart, table	Reflects speed-reduction efforts.
Traffic signal- and sign-related crashes	● ○ ○	SWITRS/Police	Map, chart, table	Reflects signal and operational improvements efforts.
Who, What, and Where?				
Crashes by age group	● ○ ○	SWITRS/Police	Table, bar chart	
Crashes by type	● ○ ○	SWITRS/Police	Table, bar chart	
Crashes by time of day	● ● ○	SWITRS/Police	Histogram, map series	Shows lighting or nightlife trends.
Crashes by location	● ● ○	SWITRS/Police	Map	

Performance measure	Effort	Source	Output format	Comment
Crashes by council district	● ● ○	SWITRS/Police + District map	Table, map	May help to communicate with City Council.
Crashes by street owner (city vs. state)	● ● ○	SWITRS/Police + Street ownership	Table, map	
Crashes in Areas of Persistent Poverty	● ● ○	SWITRS/Police + USDOT Tool	Table, map	Equity impact.
Crashes on high-injury network	● ● ○	SWITRS/Police + HIN Map	Map	Requires a consistent HIN.
Crashes near implemented projects	● ● ○	SWITRS/Police + Project map	Table, map	
Crashes near schools	● ● ○	SWITRS/Police + School map	Table, map	
Crash response time	● ● ○	EMS/Police	Table, map	

2. Plan Progress Performance Measures

This section tracks the implementation of the City's SAP commitments. It highlights the quantity, scope, equity impact, and delivery performance of road safety interventions. Considerations that apply to SAP performance reporting are listed below and in Table 2.

- **Requirements:** SS4A and the State Highway Safety Improvement Program (HSIP) do not establish specific requirements for reporting or performance measures. While HSIP recipients may be asked to collect and submit data demonstrating positive safety benefits to Caltrans, no further guidance is provided.¹
- **Output formats:** The appropriate format depends on the measure. Options include percent completion, bars or progress charts, geographic distribution, lists of projects completed, and equity implications. Where possible, include visual documentation such as photos.
- **Methodology:** Performance data should come from internal tracking tools, including Capital Improvement Plan spreadsheets, asset inventories, staff reports, etc. A staff member with knowledge of these tools and spreadsheets could generate a report if the tools and spreadsheets are regularly updated and shared.

¹ California Department of Transportation. (2021, September). *Local Assistance Programs Guidelines Chapter 9: Local Highway Safety Improvement Program (HSIP)*. <https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/lapg/g09.pdf>

Table 2. Safety Action Plan performance measures.

Performance measure/component	Effort	Possible output format	Comment
Overall projects completed	● ● ○	Count, list, % of plan	
Overall projects completed in disadvantaged communities	● ● ○	Count, list, % of plan	Equity impact. If no locally-defined equity focus areas, use SB535 methodology (CalEnviroScreen) or federally-defined Areas of Persistent Poverty.
Overall projects completed on safety priority corridors	● ● ○	Count, list, % of plan	Can be segmented by City and state-owned roads.
Miles of new bikeways	● ● ○	Count, list, miles, % of plan	
Traffic-calming installations	● ● ○	Count, list, % of plan	
Safe Routes to Schools projects	● ● ○	Count, list, detail, % of plan	
Sidewalk gaps closed	● ● ○	Count, list, miles, % of plan	
Curb ramps and accessibility features added	● ● ○	Count, list, % of plan	
Traffic signals upgraded	● ● ○	Count, list, % of plan	
Other countermeasures from the Safety Action Plan		Count, list, miles, % of plan	
Education program reach	● ● ○	Persons reached (in person), impressions/views (online)	
Next steps	● ● ○	List of the projects prioritized for the following year	Review the progress and the existing action plan. Determine priorities for the coming year.
Projects on-time	● ● ●	% on-time	
Projects on-budget	● ● ○	% on-budget, amount over/under budget	
Events sponsored	● ○ ○	Description of each event, photos	
Sections of report focused on individual safety priority corridors	● ● ○	Location of crashes and projects along each corridor	Individual pages or areas of the report focusing on one priority corridor, highlighting specific issues for that street.
City funding committed	● ● ○	Dollar amount	May be difficult to separate road safety money from other programs.
Grant funding leveraged	● ● ○	Dollar amount, description of grants	Shows external support/return on local investment.

3. Other Evaluation Strategies

Standard crash and project data provide a foundation for understanding safety outcomes. However, other evaluation strategies may offer a broader context.

These strategies may be within or outside of the scope of the regular report. Many require additional expertise, long-term partnerships, or ongoing budgets. If integrated, the findings and results from these efforts can be incorporated into regular safety reporting. Table 3 provides an assessment of performance measures for these other evaluation strategies.

Table 3. Other evaluation metrics.

Performance measure/component	Effort	Source	Comment
Safe streets committee	● ● ●		A regularly meeting committee made up of program partners and elected officials. Receives testimony and project updates from police and public works, and hears feedback from citizens. May write a brief annual report.
Feedback on safety projects, public safety awareness	● ● ●	User survey	Partner with citywide events on a survey.
Bicycle & Pedestrian Counts	● ● ●	Counting system	This could help determine the crash rate. Currently, the number of crashes per pedestrian/bicyclist is impossible to calculate.
Transit use	● ● ○	Transit agency	If transit use is part of the Action Plan.
Mode share	● ● ●	Vehicle count, Transit agency, MPO, etc.	Consider localizing a mode-share traffic count to certain focus corridors or project locations.
Land use (i.e., Promotion of Transit-Oriented, Pedestrian-Friendly Development)	● ● ●	City council	Determine legislative progress towards TDM by land use change. This may be hard to measure.
Benefit-cost analysis	● ● ●	SWITRS, budget, FHWA BCA guidance, experts	Evaluate per project.
Traffic enforcement impacts on minority communities	● ● ●		See: non-infrastructure recommendation SU-3. This may be hard to measure.
Speed reduction near traffic calming projects	● ● ●	Speed study	Could be automated or spot studies.
Health impact analysis	● ● ●	Public health department	

4. Report Formatting Options

The visual presentation of the data is important for its impact and accessibility, but every format has trade-offs in terms of accessibility, shareability, effort, and technical requirements. Some agencies combine formats to better meet messaging and evaluation goals. Considerations include:

- **Framing:** A narrative, framing, or theme, such as “Safe Streets Report Card” can help simplify and make the content more accessible.
- **Frequency:** Frequency of publication depends on staff capacity, data availability, and demand from partners. Annual publication is by far the most common and balances resource needs with transparency. However, a few jurisdictions publish on different schedules. For example, Montgomery County, MD publishes quarterly and Hawthorne, CA publishes every 2 years. The most frequent reporting period possible is quarterly because it aligns with the publishing schedule for SWITRS crash data. Some jurisdictions (e.g., Sacramento) decouple the sections of the report, publishing crash data in a continuously updated online dashboard and project progress in an annual PDF report.

Table 4 presents a variety of safety performance reports options, including their associated level of effort, strengths, and weaknesses.

Table 4. Safety performance report formats.

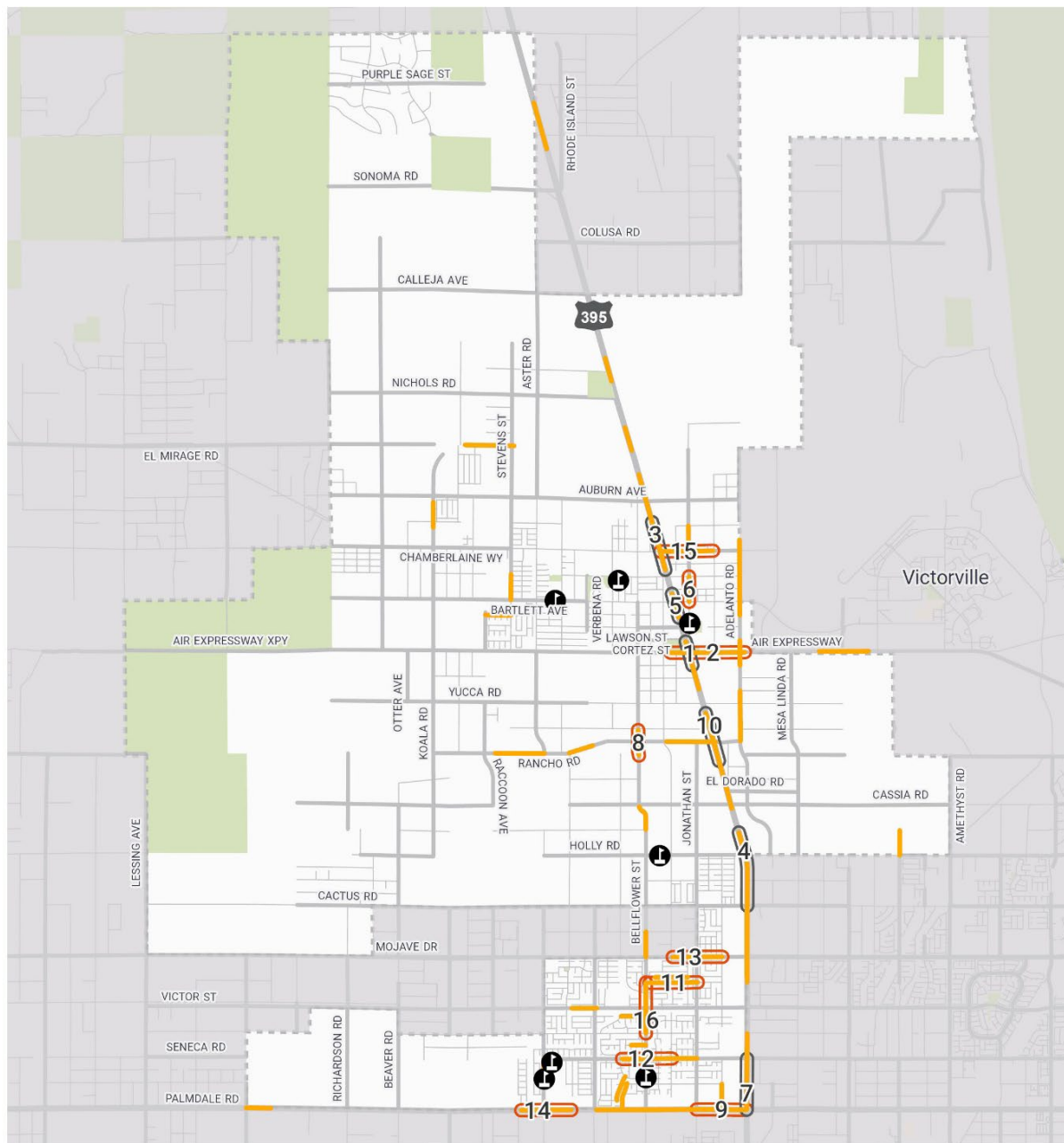
Format	Description	Effort	Strengths	Weaknesses
Basic PDF report	Simple but complete document with tables and a brief commentary.	  	• Easily shareable, archivable, and printable • Export from Word or Excel • No graphic design requirements	• May not engage a general audience; perceived as dry or dull
Highly polished PDF report	Professionally designed, branded documents with infographics, narratives, and photos	  	• More effective for the audience, higher engagement. • Builds City's brand	• Requires more design time/expertise
Spreadsheet	Simple method of displaying projects and their progress	  	• Easy to make for project progress • No graphic design requirements	• Hard to communicate crash data • May appear too technical • May not engage a general audience; perceived as dry or dull
Public webpage	Dedicated webpage with scrollable sections and embedded visuals.	  	• Improves online searchability • Potential for increased engagement	• Requires ongoing maintenance and updates by staff
Interactive Dashboard	Live charts, filters, and maps (e.g. ArcGIS Online)	  	• Engaging, interactive format • Encourages independent review	• Gives the expectation of updated information • Requires more labor/expertise to maintain and update • May incur software license fees
Slide deck	A concise version for presentations to Council or community meetings	  	• Offers concise summary of key points in a narrative structure • Easy to create and update from template	• Limited detail • Limited shareability • Not interactive

One-Year Implementation Plan

The actions outlined in this implementation plan represent a schedule of activities that Adelanto will prioritize during the year following adoption of the SS4A Action Plan. The City should review and update this document as frequently as possible to respond to emerging safety challenges and new opportunities. After the first year, it is recommended that the City continue using this document as a template to develop implementation plans for subsequent years, adjusting timelines as needed. To set the framework for the implementation, the following assumptions were made:

- **Staffing:** The Engineering Department of the City of Adelanto will be responsible for tracking implementation of Adelanto SS4A Action Plan.
- **Focus Areas:** The High-Injury Network (HIN) in **Figure 1** identifies the most dangerous roads to guide Adelanto's investments in infrastructure and programs and ensures that resources support those most in need. Among those, the top 16 HIN corridors received infrastructure improvement recommendations. The recommendations on City-owned corridors will be the first focus for implementation and evaluation, with potential for longer-term coordination with Caltrans on US 395 segments. As opportunities arise, safety improvements will also advance on roadway segments outside the HIN as part of Adelanto's commitment to integrating safety into all transportation projects, with the goal of improving streets before crashes occur.
- **Coordination with Caltrans:** Since Caltrans owns 40% of the top HIN corridors, some actions will focus solely on City's roadways while others will include all roads in the top HIN corridors. In general, Caltrans roadways will follow a different implementation track to allow for appropriate coordination with Caltrans.

This implementation is organized by engineering actions, policy and programmatic actions, as well as funding opportunities.



ADELANTO HIGH INJURY NETWORK

SS4A SAFETY ACTION PLAN
CITY OF ADELANTO, CA



ANALYSIS LAYER

- High Injury Network (HIN)
- Top Corridors on HIN (not on US 395)
- Top Corridors on HIN (on US 395)

MORE THAN 95% OF ALL KSI CRASHES
OCCUR ON 5% OF THE ROAD NETWORK.

DESTINATIONS + BOUNDARIES

- Public Schools
- City of Adelanto
- Open Space

0 1 2 MILES



Figure 1. Adelanto High Injury Network

Engineering Actions

Improving infrastructure along the HIN is a core component of Adelanto's SS4A effort, as roadway engineering and design strongly influence traffic behavior and safety outcomes. However, it is also the most labor-intensive and costly element, requiring significant financial and staff resources. The timeline and level of effort needed for engineering projects can vary widely, from quick build projects that can be implemented relatively quickly and inexpensively, to large capital and transformative projects that require multiple phases of planning, design, coordination, and funding.

Engineering Project	Quick Build Projects	Capital Projects	Transformative Projects
Implementation Timeframe	6-18 months	18+ months	2+ years
Year 1 Project List	- Operational safety improvements on entire top HIN corridors - Signage and striping improvements on entire top HIN corridors Quick build capital improvement projects at three priority project locations	Three priority project locations Rank the remaining top HIN corridors using their severity index and sort between Adelanto and Caltrans ownership	Focus on three priority project locations, major arterials and US 395 Rank corridors using their severity index and sort between Adelanto and Caltrans ownership
Year 1 Performance Measure	- Operational, signage, and striping improvements implemented along entire top HIN corridors - Low-cost, quick build capital improvements implemented at three priority project locations	- Three priority project locations improved - Remaining top HIN corridors evaluated	1 transformative project completed through 100% Design 3 transformative projects scoped and conceptually designed
	•	•	•

Quick Build Projects

Quick build projects can be implemented more rapidly and at a lower cost. They typically include operational improvements such as leading pedestrian intervals and adjustments to yellow change or all-red clearance intervals, as well as signage and striping enhancements like high-visibility crosswalks and lane narrowing through striping. Other capital improvement countermeasures that typically require more time and funding can also be delivered through quick build approaches, such as curb extensions, temporary sidewalks, and medians. These projects not only provide interim safer infrastructure in the near term but also serve as proof of concept to support future funding applications for permanent installations. Quick build projects may occur on any part of Adelanto's roadway network, particularly in locations where they can meaningfully improve safety based on their associated crash modification factors.

Adelanto will use the top 16 HIN corridors as the base project list to determine specific locations and appropriate treatments for quick build projects. In Year 1, it is recommended that the City prioritize operational, signage, and striping improvements along these corridors. If resources allow, the City may also implement quick build capital improvements beginning with the three priority project locations.

However, quick build projects can be especially successful when paired with complementary efforts, such as repaving. Additionally, some corridors are more suitable for quick build treatments than others. The City should evaluate the following feasibility and opportunistic factors when scoping and preparing concept design recommendations for Year 1 quick build projects.

Feasibility considerations:

- Roadway has sufficient right-of-way (ROW)
- Project maintains existing traffic capacity
- Project maintains existing drainage
- Project maintains existing signal infrastructure

Opportunistic considerations:

- Adelanto road rehabilitation project
- Public request
- Regional (e.g., San Bernardino County, Southern California Association of Governments) project and resources

Capital Projects

Capital projects are typically larger-scale improvements that require advanced design, community engagement, coordination, and permitting. These projects take longer to deliver than quick build efforts and require greater financial and staff resources. Capital projects may include intersection improvements, advanced pedestrian traffic control, lighting improvements, traffic calming measures, and transit access enhancements. Capital project can occur on any portion of Adelanto's roadways.

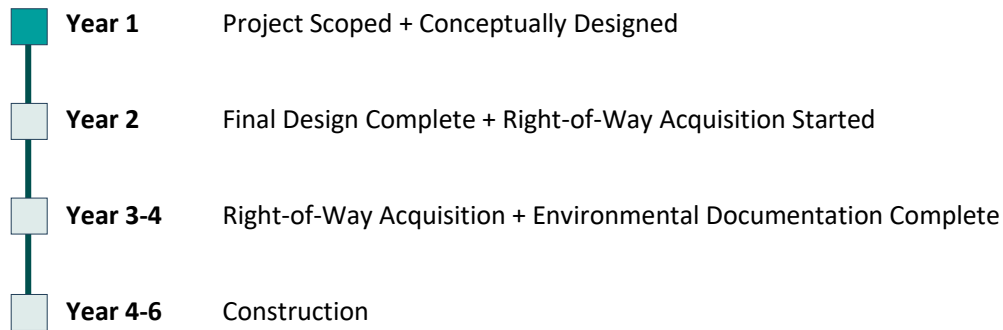
In Year 1, the City can begin implementing capital projects at the three priority project locations, while also initiating the scoping and planning process for future capital projects along the remaining top HIN corridors in subsequent years. Since some capital projects may be more suitable for quick build implementation, the City should evaluate which improvements can be delivered as quick-build treatments and which should be installed as permanent infrastructure to optimize implementation and resource efficiency.

Transformative Project

Transformative projects will occur at the three priority project locations, on major arterials and US 395. These projects will address significant corridor transformations or reconstructions targeting the most unsafe roadways in Adelanto. Due to the significant impact and cost, these projects will require increased agency coordination, time for design, public engagement, permitting, ROW, and construction. These projects may provide the best opportunity to leverage federal funding, which will require an early effort on the design, permitting, and acquisition activities that

will make a large grant application more competitive. In addition, to continue advancing SS4A effort, an increase in funding is recommended so that the engineering portion of the annual SS4A budget grows by at least 3% each year.

A typical timeline for a major transformative project is illustrated in the flow chart below. In Year 1, it is recommended that the City begin scoping and developing conceptual designs for three transformative projects, with a focus on advancing one project to 100 percent design completion.



Policy and Programmatic Actions

While engineering efforts often have the greatest impact on roadway safety, policy and programmatic actions also play an important role in a comprehensive systems approach to safety because they address behavior change on the roadway. As part of the Adelanto SS4A effort, a list of non-infrastructure recommendations was developed. From this list, six foundational strategies were identified as high priorities due to staff capacity constraints. This section highlights these foundational strategies and establishes Year 1 performance measures, as they are essential to supporting positive behavior change and reducing serious injuries and fatalities. For the full list of non-infrastructure recommendations, refer to Chapter 3 of the Adelanto SS4A Action Plan.

SP&C-1 Caltrans Coordination for US-395 Safety

Action Plan Recommendation	Building on the progress from the SAP, ensure ongoing, proactive coordination with Caltrans to advance safety improvements along the US-395 corridor. This should include establishing a regular internal process for identifying and preparing priority projects for grant and other funding opportunities, coordinating support letters, and aligning applications with both Caltrans' Vision Zero resolution and Adelanto's local leadership commitments to roadway safety.
Lead Agency	City of Adelanto Engineering & Public Services
Staff Capacity	Dedicate an engineering/planning staff to corridor coordination (0.25 FTE)
Year 1 Performance Measure	Establish formal coordination process with Caltrans, including roles, contacts, and meeting frequency.

SP&C-2 Designate Safety Performance Lead and Reporting

Action Plan Recommendation	Designate a lead safety champion to implement the performance monitoring framework. Track key indicators such as fatal and serious injury crashes, crashes involving vulnerable road users, and progress on HIN projects; publish a short, visually-accessible safety progress update at least every three years and present it to Council and the community.
Lead Agency	City of Adelanto Engineering & Public Services
Staff Capacity	Assign one formal safety champion role (0.25 FTE)
Year 1 Performance Measure	- Designate and formally adopt a lead safety champion role. - Develop an Adelanto SS4A reporting template guided by the Performance Measures and Reporting Framework.

SP&C-5 Coordinate Safe Routes to School Efforts

Action Plan Recommendation	Identify a lead department or partner agency to coordinate Safe Routes to School efforts with the recommendations in the SAP, prioritize a small number of high-need schools for near-term projects, and coordinate grant funding to support periodic walk audits, education, and low-cost safety improvements even if a full-time program is not feasible.
Lead Agency	City of Adelanto City Clerk; Community Safety

Staff Capacity	Identify a primary City SRTS coordinator (0.5 FTE)
Year 1 Performance Measure	- Identify and designate a lead department or partner agency - Develop a long-term strategy for a Safe Routes to School program and prepare a scope of work for a future Request for Proposals.

SP&C-9 Maintain a Rolling Safety Project Readiness List

Action Plan Recommendation	Including the top three priority project locations from the SAP, maintain a rolling list of safety-priority corridors and projects, with planning-level cost estimates and readiness status, so Adelanto can quickly pursue future SS4A, ATP, and related funding opportunities.
Lead Agency	City of Adelanto Engineering & Public Services; City Manager
Staff Capacity	Dedicate an engineering/planning staff to review and update the safety-priority project list (0.25 FTE)
Year 1 Performance Measure	- Review and update the initial rolling priority project list developed in the SAP semi-annually to ensure it reflects the priorities, project readiness, and funding opportunities. - Identify grant opportunities aligned to listed projects.

SP&C-10 Integrate Safety into CIP and Maintenance Programs

Action Plan Recommendation	Work with Public Works and Finance to embed safety considerations into CIP and routine maintenance programming. For example, by requiring a safety review of resurfacing lists and setting aside a small percentage of O&M funding for quick-build safety treatments.
Lead Agency	City of Adelanto Engineering & Public Services; Finance
Staff Capacity	Coordination between Engineering & Public Services and Finance (0.25 FTE combined staff time)
Year 1 Performance Measure	- Establish a formal review step requiring safety review in CIP and routine maintenance programming. - Dedicate a defined percentage or amount of maintenance funding for safety improvements.

SS-1 Adopt Context-Sensitive Speed Management Design

Action Plan Recommendation	Develop context-sensitive speed management design guidance that are aligned with State and FHWA best practices. Commit to using target speeds, rather than existing operating speeds, to guide corridor and intersection design decisions.
Lead Agency	City of Adelanto Engineering & Public Services
Staff Capacity	Assign a technical project manager (0.5 FTE)
Year 1 Performance Measure	- Develop a City speed management design guidance aligned with State and FHWA best practices. - Identify 2-3 top HIN corridors to pilot target-speed-based design concept. - Provide at least one training session for City staff and leadership on applying target-speed-based design concept.

Funding Opportunities

Funding for the recommendations in the SAP may come from a mix of federal, state, regional, and local sources, including competitive grants, sales tax revenues, formula allocations, and public–private partnerships. This list is not exhaustive, and program details such as eligibility, funding cycles, and available amounts will change over time. As new opportunities emerge, the City should use this plan to prioritize projects and position Adelanto to compete for funding to advance safety projects along Top HIN corridors roadways.

As funding programs and criteria evolve, this section should serve as a guide to help Adelanto align grant applications with community priorities, focus investments on the Top HIN corridors, and support the long-term implementation of recommendations as appropriate.

Federal and State Funding Sources

Active Transportation Program (ATP)

California’s Active Transportation Program consolidates several federal and state funding sources into a single program that supports walking, biking, and Safe Routes to School projects. Eligible projects include sidewalks, bikeways, crossings, traffic calming near schools, and non-infrastructure programs such as safety education and encouragement activities. Funds are awarded through statewide and regional competitive cycles and are administered by the California Transportation Commission with support from Caltrans.

California Office of Traffic Safety (OTS)

OTS funds non-infrastructure transportation safety programs that target behavioral risk factors such as speeding, impaired driving, distracted driving, school-zone safety, and pedestrian and bicyclist awareness. These grants can support campaigns targeted enforcement operations, driver education, community outreach, and cross-agency data collection efforts.

Caltrans Sustainable Transportation Planning Grants

These grants fund planning efforts that advance safe, multimodal transportation networks. They can be used for corridor design studies, conceptual alternatives analysis, Complete Streets plans, multimodal network studies, and climate-focused mobility planning. For Adelanto, these grants may be particularly well suited for developing state-owned corridors where partnership with Caltrans will be required.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

CMAQ funds transportation projects that reduce vehicle emissions in areas that do not meet federal air quality standards. California implementing statutes authorize San Bernardino County Transportation Authority (SBCTA) to select and program CMAQ projects with input from SCAG, Caltrans, and air quality districts. Funds are distributed based upon a formula that considers population by county and the severity of its ozone and carbon monoxide air quality problems within the non-attainment or maintenance area. CMAQ eligibility is conditional upon analyses showing that the project will reduce emissions of criteria pollutants. Activities typically eligible for CMAQ funding

include transit improvements, travel demand management strategies, traffic flow improvements such as signal synchronization, and public fleet conversions to cleaner fuels.

Highway Safety Improvement Program (HSIP)

HSIP is a federal safety program managed in California by Caltrans. It funds projects that reduce fatalities and serious injuries on public roadways. Eligible projects include intersection safety improvements, speed management measures, lighting, and Safe Routes to School treatments where crash history or systemic risk can be measured and documented.

Safe Streets and Roads for All (SS4A)

The federal SS4A program, created under the Infrastructure Investment and Jobs Act, provides grants to help local agencies develop and implement Safety Action Plans that reduce roadway deaths and serious injuries. Adelanto is already using SS4A funding to develop this Safety Action Plan and can pursue future SS4A implementation grants to build high-priority safety projects identified in the plan.

Surface Transportation Block Grant Program (STBG)

STBG provides flexible federal funding for a wide range of transportation projects, including road rehabilitation, safety improvements, transit, and bicycle and pedestrian facilities. In San Bernardino County, these funds (sometimes referred to as Surface Transportation Program or STP funds) are programmed by the SBCTA and can be used to deliver multimodal safety projects on Adelanto's local streets.

Transportation Development Act (TDA)

California's Transportation Development Act provides State Transit Assistance and Local Transportation Fund revenues that can be used for transit operations, paratransit, and in some cases pedestrian and bicycle projects that provide access to transit. These funds are administered regionally and can support Safe Routes to Transit and complementary SRTS improvements.

Regional and Local Funding Sources

City of Adelanto Funds and Partnerships

Local sources such as the City's capital improvement budget, development impact fees, and partnerships with school districts and community organizations can also help implement SS4A projects.

Adelanto Measure R

Adelanto Measure R is a local business license tax that provides funding for general public services, including transportation-related needs. For safety implementation, Measure R can support upkeep such as asphalt repair that improves crosswalk visibility, sidewalk repair in areas with surface deterioration, and enhanced traffic enforcement.

San Bernardino County Measure I

Measure I is San Bernardino County's half-cent sales tax dedicated to transportation improvements. Revenues are administered by SBCTA and returned to cities and the County for local streets and roads, traffic safety, public transit, and pedestrian and bicycle projects. The City of Adelanto already uses Measure I funds to improve critical street, road and transit projects ([Measure I projects in Adelanto](#)).

Next Steps

This memorandum sets the foundation for an important ongoing conversation about roadway safety performance reporting in Adelanto, as well as the immediate next steps in Year 1 following adoption of the SAP. Moving forward, Alta staff will work with City staff to identify which performance measures will be tracked, determine the preferred reporting format, establish the frequency of report publication, and define a combination of metrics and evaluation methods that can be realistically sustained by Adelanto staff in the future.

In addition, this memorandum will help guide the development of both infrastructure projects and non-infrastructure strategies in the near term. The City can also use the structure of this memo as a template and update the content in future years as implementation progresses.

By framing these next steps as a collaborative and iterative effort, this memorandum is intended to help ensure that Adelanto's roadway safety performance reporting and implementation efforts remain practical, sustainable, and meaningful in advancing safer streets.

Peer Agency Safety Performance Reporting Examples and Literature Review

In preparation for this memorandum, dozens of examples of safety reports were reviewed. Reports varied widely in their reporting methods, level of detail, balance between sections, and frequency of updates. Some focused on simple, polished visuals, while others listed all projects in a big spreadsheet. Many mixed the methodologies and performance measures listed above, although most used the Vision Zero framing, focusing on roadway deaths and serious injuries.

Table 5 summarizes key takeaways from this review of peer agency documents, including length, update frequency, presentation format, and other notable findings. Figures 1 through 10 illustrate examples of data visualizations, report formats, and interactive websites and data dashboards to share safety progress.

Table 5. Peer agency safety performance report examples.

Report	Length	Frequency	Format	Pages per section	Notes
El Paso Vision Zero Annual Report	9 pages 1400 words	Annual	Highly polished PDF report	Crash statistics: 1 Project progress: 5	- Very simple, easy to read and understand at a glance. - Focuses on a few key projects but does not show all of the details.
Austin, TX Vision Zero Report Card	4 pages 500 words	Annual	Highly polished PDF report	Crash statistics: 2 Project progress: 2	- Simple “report card” framing. - Projects are not listed. Instead, they are just enumerated by category (education, engineering, enforcement, policy, and evaluation) and status (initiated, ongoing, completed, and future) in a simple matrix.
Montgomery County, MD Vision Zero Progress Report	32 pages 8300 words	Quarterly	Basic PDF report + Interactive Dashboard	Crash statistics: 1 Project progress: 31	- Lists 45 actions in a table, and an updated, detailed status next to each action. - Actions are updated as they progress (i.e., the entire report is not rewritten every quarter). - ArcGIS dashboard maps all projects, their category, and status.
Phoenix, AZ Road Safety Action Plan Annual Report	45 pages 8500 words	Annual	Highly polished PDF report	Background: 9 Crash statistics: 9 Project progress: 16 Next steps: 10	
Des Moines, IA Vision Zero Transportation Safety Action Plan Annual Report	5 pages 4200 words	Annual	Spreadsheet	Project progress: 5	Very simple project-tracking spreadsheet.
Sacramento, CA Vision Zero Update and Vision Zero Crash Dashboard	9 pages 1400 words	Annual (Report), Continuous (Map)	Basic PDF report + Interactive Dashboard	Background: 1 Crash statistics: Dashboard only Project progress: 5	- Sacramento took a unique approach by separating crash data into the online dashboard and project progress into the report. - The report lists all infrastructure and non-infrastructure projects, including grant applications.

Examples of Crash Performance Measures

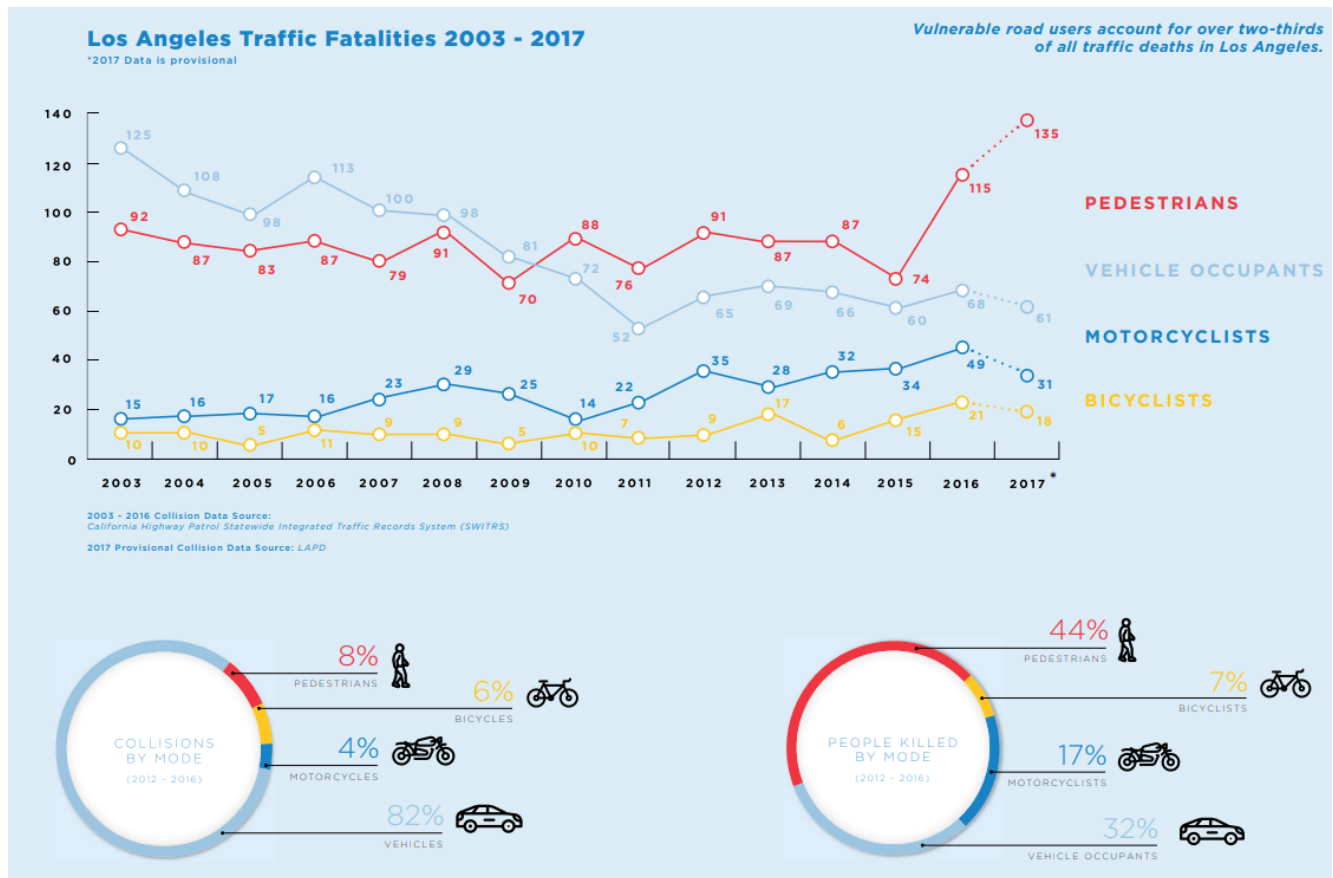


Figure 1: Fatalities, year-by-year, by mode. Note how many disaggregation strategies are communicated in one simple graphic.²

² City of Los Angeles. (2018). *Vision Zero Action Plan Progress Report*

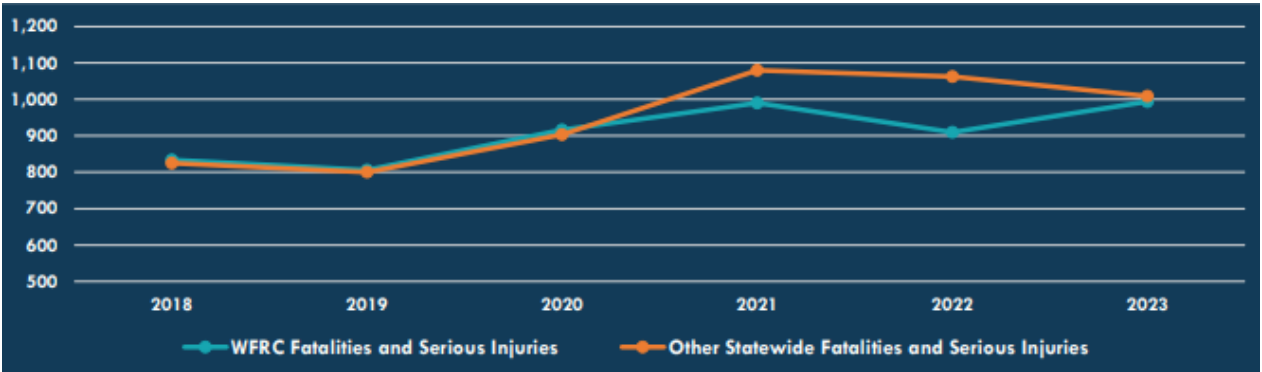
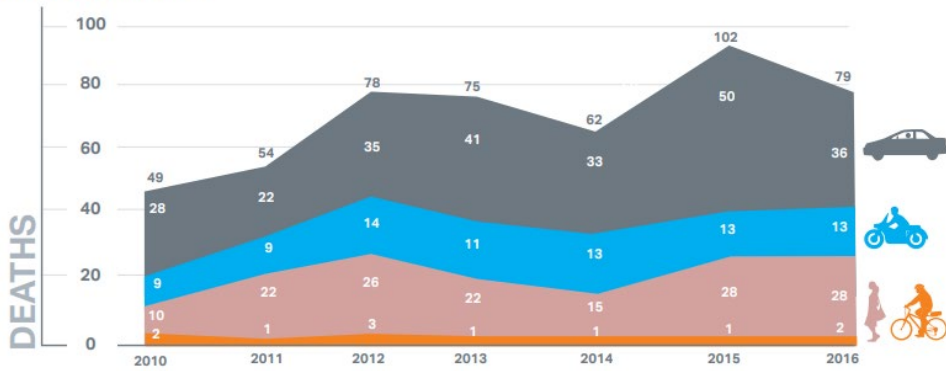


Figure 2: Comparison of study area and statewide trends ³

CRASHES BY TRANSPORTATION MODE

PEOPLE KILLED



PEOPLE SERIOUSLY INJURED

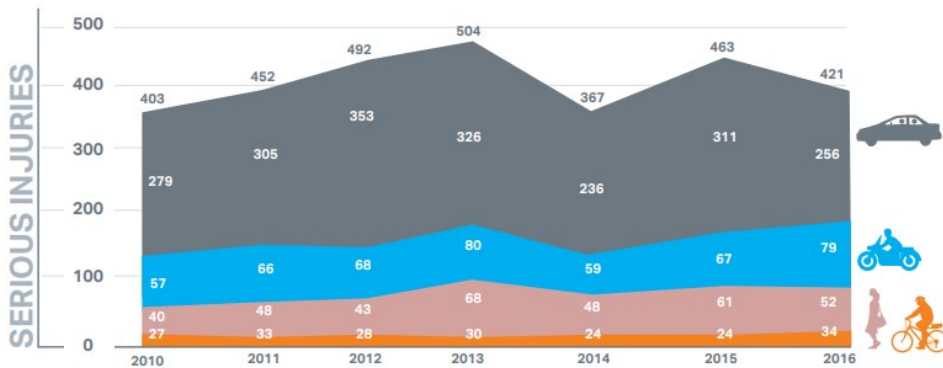


Figure 3: An example of a stacked line chart, disaggregated by year, mode, and injury severity. ⁴

³ Wasatch Front Regional Council. (2024, June 27). *Comprehensive Safety Action Plan: 2023 annual report*. https://www.cgg.wa.gov.au/Profiles/cgg/Assets/ClientData/Example_Safety_Action_Plan.pdf

⁴ City of Austin. (2017, May). *Vision Zero Report Card*.

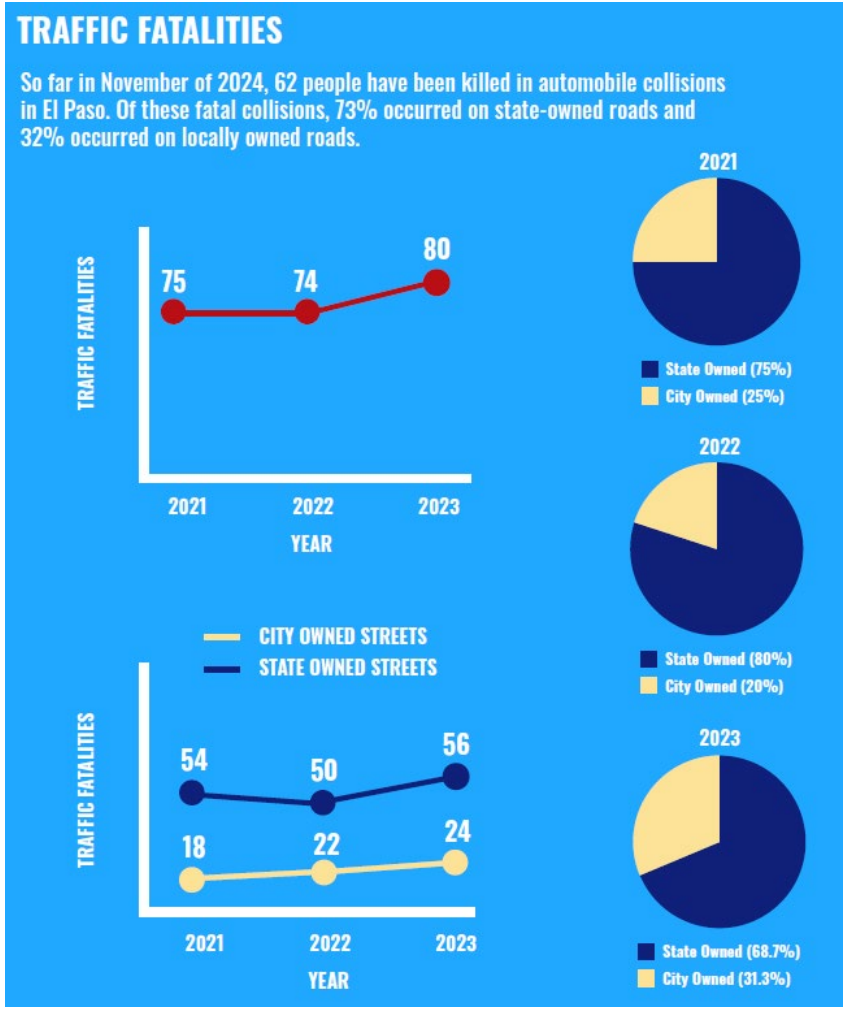


Figure 4: Disaggregation by street ownership ⁵

⁵ City of El Paso. (2025). *Vision Zero 2024 Annual Report, Capital Improvement, Mobility Planning Division*. <https://www.elpasotexas.gov/assets/Documents/CoEP/Vision-Zero/Documents/Reports/Vision-Zero-Report-Final-compressed.pdf>

Examples of Progress on Action Plan Projects

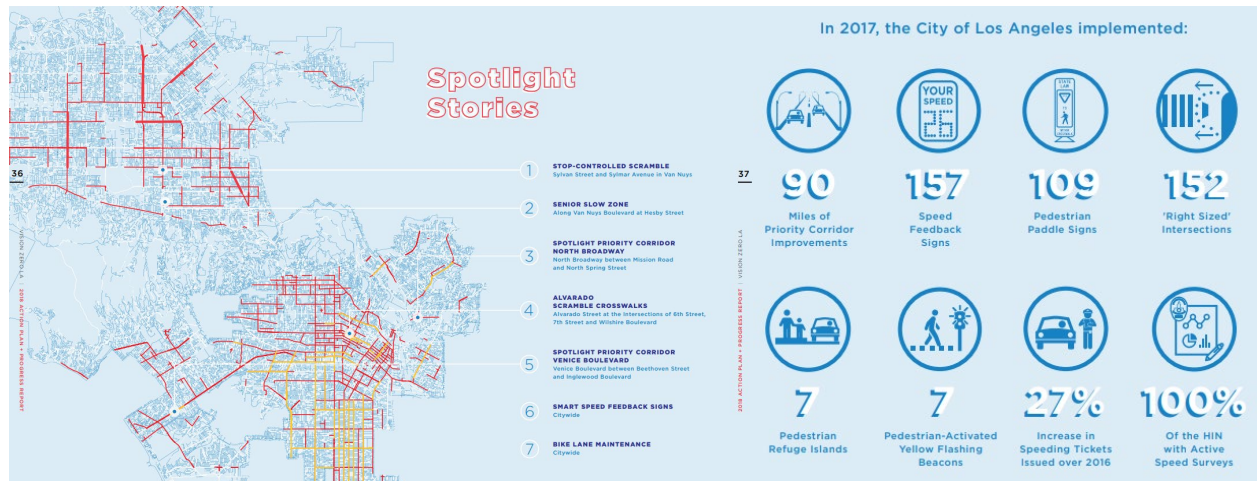


Figure 5: Large cities cannot show all projects, so they provide an overview and a few selected examples.⁶

Status	Focus Areas / Actions / Implementation Steps	Implementation Timeline						Lead Entity	Partners	Measurement	Cost	Notes
		FY 2023	FY 2024 (23)	FY 2025	FY 2026	FY 2027	FY 2028					
FOCUS AREA 1: City Policies, Programs, Processes, and Partnerships												
ACTION 1.1 Establish a Vision Zero program within the City of Des Moines												
✓	1 Adopt a Vision Zero Resolution and Action Plan	Completed 6/26/2023						T&T	CMO, ENG, TSC, VZAG	Plan adopted	\$	
✓	2 Create a press release announcing the Vision Zero Resolution and Action Plan upon adoption	Completed 6/26/2023						T&T	COM	Press release issued	\$	
✗	3 Establish a permanent, dedicated funding source for Vision Zero implementation and coordination		Prepare BRC request					ENG	CMO, FIN, T&T	Funding established at needed levels	\$\$\$	Funding requested for FY2024 but was not approved. Funding will be requested again in next Capital Improvement Program (CIP).
	4 Continue to create a Vision Zero program with dedicated staff			Initiate action to add 1 FTE position	On-going action	On-going action	On-going action			Funding and staffing at needed levels to reach Vision Zero. 1 full time staff dedicated to Vision Zero by FY2025	\$\$\$	
✓	5 Create identifiable branding for Vision Zero in Des Moines	Completed 7/11/2023						T&T	COM	Branding finalized	\$	
✓	6 Establish a Vision Zero technical advisory group (VZAG) to create an interdisciplinary Vision Zero program and administrative framework that guides all street safety decision and includes staff from multiple departments, including engineering, transportation, planning, police, fire, communications, public works and legal	Completed		On-going action	On-going action	On-going action	On-going action	T&T	CMO, COM, DEV, NBS, DMPS, DMPO, Polk Health, AARP, IowaDOT, DART, DMPS, MPD, LEGAL, PW, EQUITY, PAR, other groups	Group established, at least 2 meetings annually	\$	Transportation Safety Committee (TSC) membership was expanded to include 2 additional members representing the Polk County Health Department and Iowa Department of Transportation. This committee will act as an advisory group moving forward.
✓	7 Conduct a joint meeting of the TSC and VZAG at least once a year to collaborate on the overall Vision Zero program	Completed 10/9/2024		On-going action	On-going action	On-going action	On-going action	T&T	TSC, VZAG	Annual meeting convened	\$	Meeting to review annual report was convened on 10/8/2024
✓	8 Conduct annual review of Vision Zero successes and challenges to include in the Vision Zero annual report	Completed 10/8/2024		On-going action	On-going action	On-going action	On-going action	T&T	CMO, VZAG	Review conducted annually	\$	2023 Annual Report Public in March 2025
ACTION 1.2 Institutionalize the Safe System Approach and a goal of Vision Zero on all street-related decision in Des Moines												
➡	1 Incorporate the Action Plan by reference as an element in the City's PlanDSM and MoveDSM		Move to Future	Complete action				T&T	DEV, CMO	Plan adopted into PlanDSM and MoveDSM	\$	This action step will be moved to a future year. This action step will be completed in conjunction with a future update of MoveDSM
	2 Update the purchasing standards to size City-owned vehicles to safe system street designs and require latest driver assistance safety features			Initiate action	Complete action			FIN - FLEET	T&T	Purchasing standards updated	\$\$\$	
	3 Integrate Complete Streets Policy and Traffic Calming Program into the Vision Zero program			Initiate action	Complete action			ENG		Integration established and being considered	\$	
	Integrate Vision Zero into the BRC and CIP project approval process											

Figure 6: Des Moines publishes a spreadsheet showing the status of each action item.⁷ Presumably because this format is the easiest to update, Montgomery County, MD is able to publish quarterly.⁸

⁶ City of Austin. (2017, May). *Vision Zero Report Card*.
⁷ City of Des Moines. (2023). *Vision Zero Transportation Safety Action Plan: 2023 Annual Report*.
https://cms2.revize.com/revize/desmoines/document_center/Engineering/Vision%20Zero/Focuses,%20Actions,%20and%20Steps_2023%20Annual%20Report.pdf
⁸ County of Montgomery. (2025). *Vision Zero Progress Report*.

PROGRESS ON INDIVIDUAL ACTIONS

These ratings reflect efforts from June 2016 to March 2017 on the Actions listed in the Plan.

VISION ZERO FOCUS AREA	Total Actions	Initiated	Ongoing	Completed	Future
EDUCATION	16	11	0	1	4
ENGINEERING	30	13	14	1	1
ENFORCEMENT	8	3	4	0	1
POLICY	18	6	7	0	5
EVALUATION	12	4	4	4	0

Figure 7: Even though this summary shows much less detail, it is easier for a layperson to understand progress. Contrast with Figure 6.⁹

Examples of Design & Report Formatting

Denver did slightly better in 2019 compared to 2018 at meeting their goals for street safety improvements as outlined in the [Vision Zero Action Plan](#). Notably, the City made significant progress on two types of improvements: corridor-level traffic calming on 15th St, 17th St, 32nd Ave, and Park Ave; and street lighting enhancements throughout Denver. However, the City continued to fall well short of their goal to build 14 miles of new sidewalks, and also fell behind on their goal to build 20 miles of new bike lanes, after meeting this goal in 2018. The City also missed critical opportunities to make pedestrian crossing and intersection improvements along the High Injury Network.

CITY GOALS	ACTIONS	LOCATION*	QUALITY**	COMPLETE	SCORE
BUILD 20 MILES OF BIKE LANES	12.5 MILES OF BIKE LANES BUILT	A	A	D	C
BUILD 14 MILES OF SIDEWALKS	4.35 MILES OF SIDEWALKS BUILT	F	C	F	F
IMPLEMENT TRAFFIC CALMING ON 1 CORRIDOR	IMPLEMENTED TRAFFIC CALMING ON 4 CORRIDORS	B+	A	A+	A
REDESIGN 2 INTERSECTIONS TO INCREASE SAFETY	ADDED BULB OUTS OR BIKE CORRAIS TO 8 INTERSECTIONS	D	A	A+	B-
INSTALL OR UPGRADE 3 PED CROSSINGS	INSTALLED PEDESTRIAN ACTIVATED SIGNALS AT 11 CROSSINGS	D+	A	A+	B
IMPROVE OPERATIONS AT 10 INTERSECTIONS	IMPROVED SIGNALS AT 62 INTERSECTIONS	A	A	A+	A
ENHANCE STREET LIGHTING ON 2 CORRIDORS	CONVERTED 30,500 LIGHTS TO LED ON NUMEROUS CORRIDORS	A	A	A+	A
"SMART CITY" TECHNOLOGIES AT 10 INTERSECTIONS	INSTALLED DATA COLLECTION DEVICES AT 12 INTERSECTIONS (NO OPERATIONAL IMPROVEMENTS)	A	F	F	D

* Located on the High Injury Network and/or in a Community of Concern?

** Did the action improve safety for all users?

FINAL GRADE: **C+**

Figure 8: Denver, CO committed to a “report card” theming, which gives a framing of transparency and accountability. Interestingly, it incorporates two measures of equity (location equity and mode equity) in addition to completeness.¹⁰

⁹ City of El Paso. (2025). *Vision Zero 2024 Annual Report*, Capital Improvement, Mobility Planning Division. <https://www.elpasotexas.gov/assets/Documents/CoEP/Vision-Zero/Documents/Reports/Vision-Zero-Report-Final-compressed.pdf>

¹⁰ Denver Streets Partnership. (2019). *2019 Vision Zero Action Plan Progress Report Card*.

Examples of Websites and Interactive Dashboards

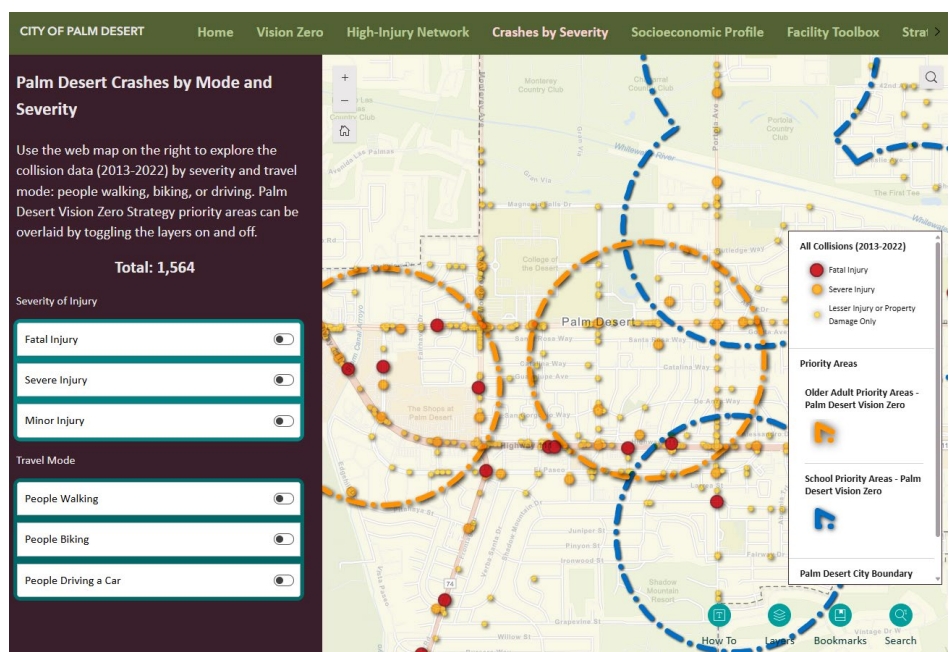


Figure 9: Example of an online dashboard with crashes, priority zones, and various filters. ¹¹

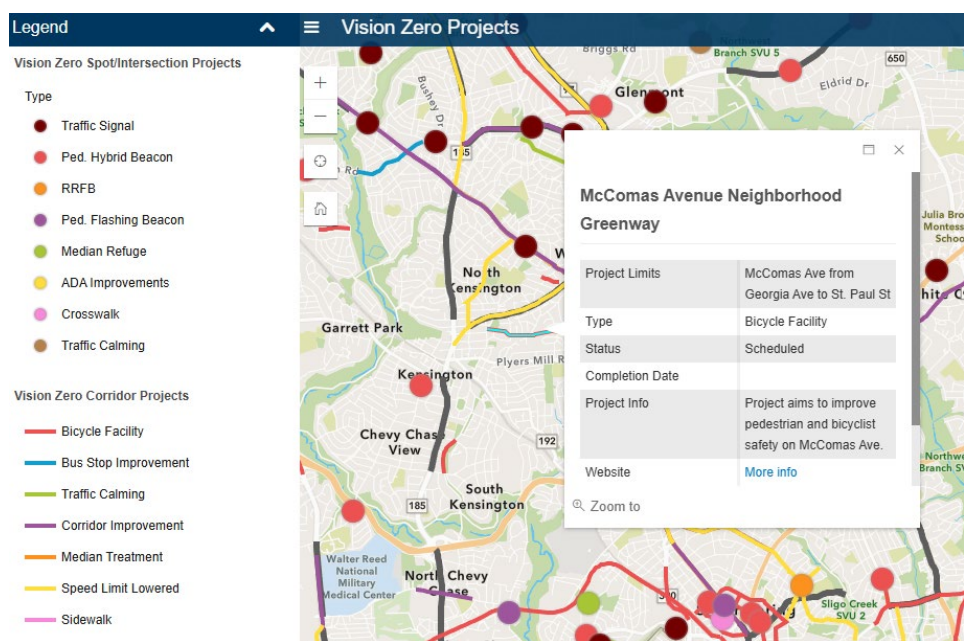


Figure 10: Montgomery County Vision Zero project tracker, which complements the annual report. ¹²

¹¹ [Crashes by Severity | Vision Zero Dashboard](#)

¹² <https://mctgov-gis.maps.arcgis.com/apps/SimpleViewer/index.html?appid=33cbbf17bbba4ab8b0ee63ac01c90fcd>

