

JANUARY 2025

CITY OF

DeSoto

COMPREHENSIVE SAFETY ACTION PLAN





Prepared for:



Prepared by:

Kimley»Horn
Expect More. Experience Better.



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GLOSSARY

ADA	– Americans with Disabilities Act
A	– Suspected Serious Injury Crash
B	– Suspected Minor Injury Crash
CMF	– Crash Modification Factor
CSAP	– Comprehensive Safety Action Plan
CSAPPT	– CSAP Planning Team
ETC	– USDOT Equitable Transportation Community Explorer
FHWA	– Federal Highway Administration
HIN	– High-Injury Network
HSIP	– Highway Safety Improvement Program
KABs	– High-Injury Crashes
K	– Fatal Crash
MMA	– Majority Minority Area
MTP	– Master Thoroughfare Plan
PHB	– Pedestrian Hybrid Beacon
RRFB	– Rectangular Rapid Flashing Beacon
SHSP	– Strategic Highway Safety Plan
SS4A	– Safe Streets and Roads for All
STEP	– Selective Traffic Enforcement Program
TA	– Transportation Alternatives
TxDOT	– Texas Department of Transportation
USDOT	– U.S. Department of Transportation
VMT	– Vehicle Miles Traveled
VRUs	– Vulnerable Road Users

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LETTER FROM THE MAYOR

I am proud to announce the completion of the Comprehensive Safety Action Plan for the City of DeSoto. This is a significant milestone in our ongoing commitment to ***making DeSoto a safer, more connected community for everyone.*** This plan represents months of collaboration, analysis, and engagement with stakeholders across our City. Its primary focus is clear: to eliminate crashes resulting in severe injuries and fatalities, making our streets safer for all road users, whether you drive, walk, bike, or use public transportation. Our plan embraces the principles of Vision Zero, a nationwide strategy that prioritizes human lives and equitable mobility above all else, reaffirming our dedication to creating a safer future for every resident and visitor.

The completion of this plan is only the beginning. The DeSoto City Council recently approved a resolution adopting the Vision Zero Policy in support of the Comprehensive Safety Action Plan for the City of DeSoto. As the Mayor of the City of DeSoto, I am deeply committed to implementing its recommendations, which include improving high crash intersections, enhancing pedestrian crossings, expanding bike lanes, and increasing public awareness around traffic safety. I believe we have a shared responsibility to look out for one another, and with your support, we will work to transform DeSoto into a City where safety and accessibility are guaranteed for all. ***Together, let's make our streets places where everyone can travel confidently and securely, knowing that their well-being is our top priority.***



A handwritten signature in black ink, reading "Rachel L. Proctor".

RACHEL L PROCTOR

Mayor of DeSoto





ACKNOWLEDGMENTS

The City of DeSoto, its agencies, organizations, and stakeholders developed the Comprehensive Safety Action Plan. This report documents a comprehensive set of projects and strategies to eliminate roadway fatalities and serious injuries within the City. The information presented herein is at a planning level only and is not meant to represent the support or commitment of any potential partners.

This material was partly funded through grant(s) from the Federal Highway Administration of the U.S. Department of Transportation. The views and opinions of the authors expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation or the Federal Highway Administration.

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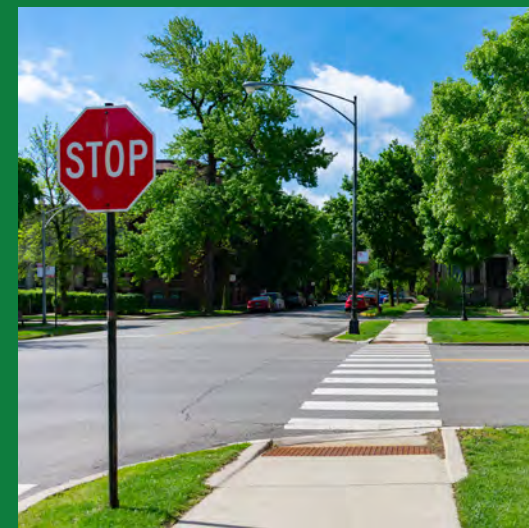
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EXECUTIVE SUMMARY



ES



EXECUTIVE SUMMARY

The City of DeSoto was awarded the Safe Streets and Roads for All (SS4A) grant through the US Department of Transportation to develop a Comprehensive Safety Action Plan (CSAP). The CSAP was created to provide a framework of innovative strategies and implementation actions to reduce transportation-related fatalities and serious injuries. The City desires standards and policies to ensure all roadway users are accommodated safely and equitably. The three-phase project approach kicked off in April 2024 and ran through adoption on January 21, 2025. A timeline that outlines and describes each phase of the project is included in **Chapter 2**.

This Plan is organized into three parts, each containing a purpose statement and a listing of chapters. The parts of the plan correspond to the various phases of the planning process:

- ▶ **Part I: Background and Purpose**
- ▶ **Part II: DeSoto State of Safety**
- ▶ **Part III: Comprehensive Safety Action Plan**



The Safe Streets and Roads for All (SS4A) program is a primary driving force behind the CSAP, characterized and guided by the Federal Highway Administration's (FHWA) Safe System Approach. The guiding principles for this plan are organized by emphasis areas outlined in the Texas Strategic Highway Safety Plan (SHSP). The guiding principles of the Safe System Approach and this document are detailed in **Chapter 1** but can more generally be summarized as follows:



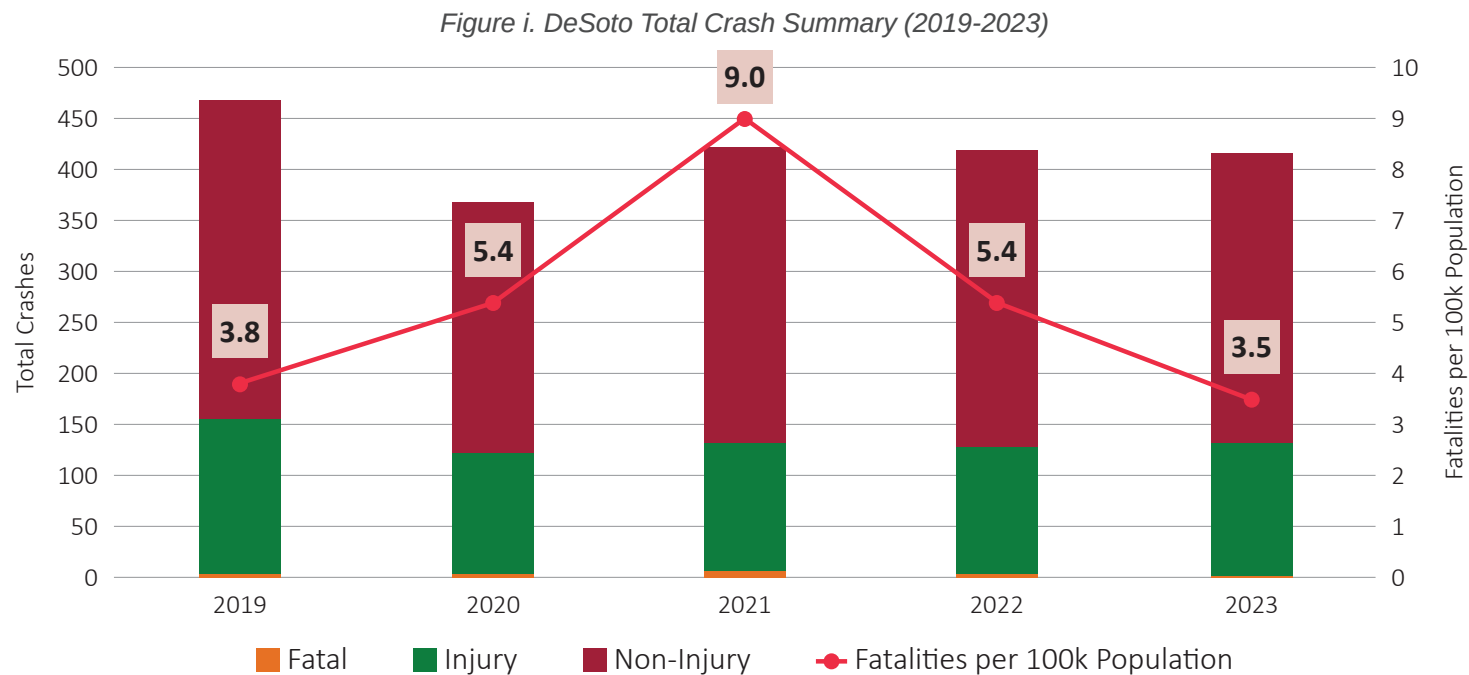
With these safety guiding principles in mind, the CSAP Planning Team (CSAPPT) worked together to establish a mission statement that communicates the reason for being and declares how this Plan aims to serve the community and stakeholders into the future. The mission for the City of DeSoto Comprehensive Safety Action Plan is:

“The City of DeSoto is ***dedicated to improving safety*** by reducing fatalities and injuries on our streets, bikeways, and pedestrian walkways. This commitment is achieved through a ***comprehensive approach*** that includes increased community engagement and education, engineering, policy development, enforcement, and equitable solutions. Our goal is to ***provide complete and safer streets for everyone***, fostering a ***culture of safety*** and ***improving the quality of life*** for all individuals in our community.”

To make this mission a reality, the DeSoto City Council, the CSAP Planning Team, and City staff commit to improving safety in DeSoto by adopting a Vision Zero Resolution on January 21, 2025. The Vision Zero Resolution is provided in **Appendix Item A**.

Part II of the Plan, DeSoto State of Safety, establishes an empirical understanding of existing conditions and critical safety considerations, laying the foundation for **Part III** of the Plan. **Chapter 3** analyzes the City-wide crash history by examining the City's crash trends and characteristics.

City-wide crash trends revealed that the total number of crashes has stagnated over the past five years except for 2019. However, in 2021, it saw the highest fatality rate per 100,000 population within the City over the last five years. The fatality rate has decreased since 2021, and the total number of crashes has remained unchanged (**Figure i**).



A vital part of the crash analysis conducted in DeSoto was the Equity Review, as discussed in **Chapter 4**. Overall disadvantaged, super majority-minority areas, and transportation-disadvantaged census tracts were considered for prioritizing areas within the City that are historically underserved.

A high-injury network (HIN) is a network of roads, intersections, or other transportation infrastructure with a higher-than-average rate of crashes resulting in injuries or fatalities. Identifying and prioritizing facilities within the HIN is crucial in enhancing road safety and reducing fatal and severe crashes. **Chapter 5** details the methodology for calculating the following HIN and the individual segments.



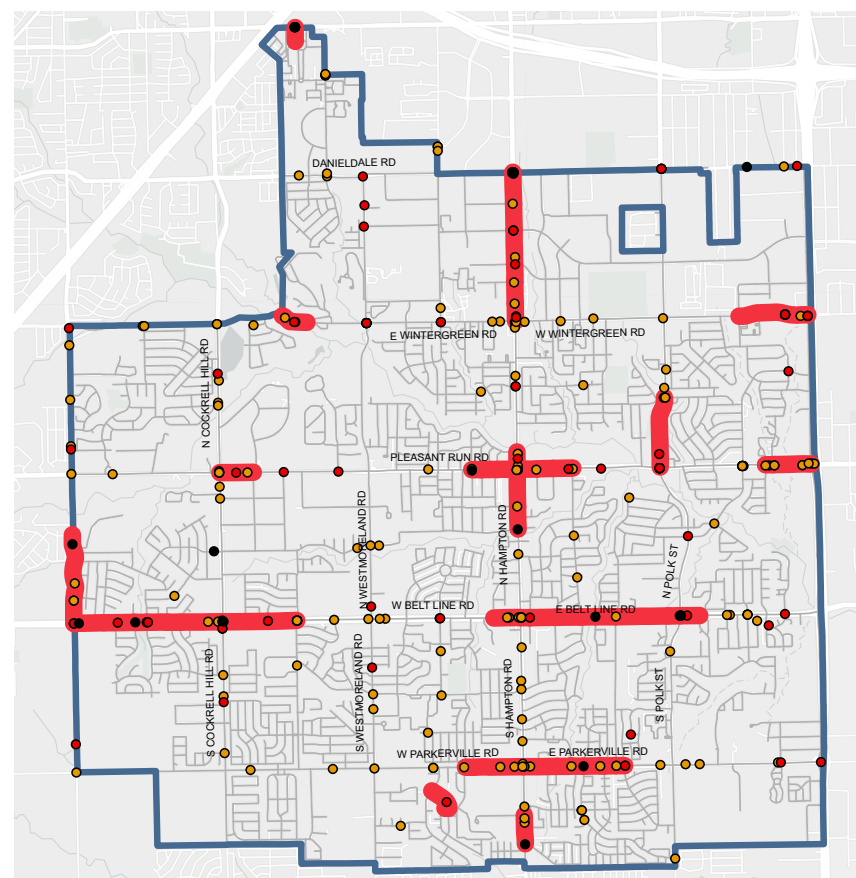
Part III of the plan details corridor-specific countermeasures, recommendations, and systemic improvements that can be applied City-wide. This includes policies, programs, strategies, and actions to support DeSoto's guiding safety principles. **Chapter 5** presents five roadway segments on the High-Injury Network selected as priority locations to make targeted recommendations to improve safety on the City's most unsafe roadway locations (**Table i**). These high-priority study corridors and intersections were selected with input from City staff and scored based on equity, engagement, and feasibility.

Targeted recommendations at study corridors provide detailed and tailored recommendations for specific areas of the City of DeSoto with varying crash history, road geometry, intersection control, and land use context. Additionally, systemic recommendations are organized by safety emphasis area and provide a countermeasure toolbox to make City-wide improvements wherever needed.

Table i. Study Corridors

STUDY CORRIDORS	LIMITS		LENGTH (MILES)	CRASHES				DAILY VOLUME
	FROM	TO		K	A	B	TOTAL	
W Belt Line Rd	Duncanville Rd	Cockrell Hill Rd	1.00	3	4	12	19	16,200
E Belt Line Rd	Hampton Rd	Polk St	1.07	2	3	14	19	17,000
E Pleasant Run Rd	Hampton Rd	Chattey Rd	0.37	0	1	5	6	13,600
N Hampton Rd	Centre Park Blvd	Wintergreen Rd	0.61	0	3	9	12	16,300
Total			3.05	5	11	40	56	—

Exhibit i. High-Injury Network



Systemic countermeasures can be implemented in all City areas to improve safety, including previous recommendations and study corridors. The corresponding toolbox in **Chapter 5** provides a comprehensive collection of strategies and interventions designed to address specific traffic safety issues and challenges. **Table ii** also summarizes these countermeasures.

Table ii. Systemic Countermeasure Toolbox

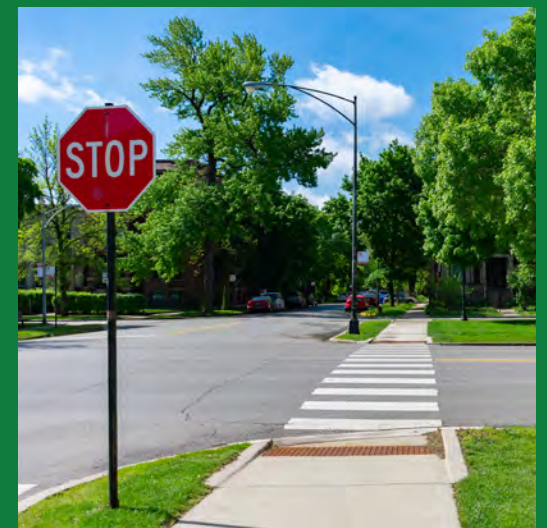
SAFETY EMPHASIS AREAS	RAISED MEDIAN	CORRIDOR ACCESS MANAGEMENT	IMPROVE SIGNING AND VISIBILITY AT SIGNALS	RETROREFLECTIVE BACKPLATES	FLASHING YELLOW ARROW	COORDINATED SIGNAL TIMING	LANE DESIGNATION MARKINGS AND SIGNS	WIDE EDGE LINES	HIGH CONTRAST LANE MARKINGS	IMPLEMENT SYSTEMIC SINGING AND MARKING IMPROVEMENTS	CHANGE RIGHT-TURN LANE GEOMETRY
CMF	0.29	0.93	0.732	0.85	0.975	–	0.75	0.635	0.75	0.734	0.558
Roadway and Lane Departure	•						•	•	•		
Speed-Related	•					•					•
Intersection-Related		•	•	•	•	•	•			•	•
Vulnerable Road Users	•		•			•					•
Distracted Driving			•	•			•	•	•	•	
Impaired Driving	•		•	•			•	•	•		
Unrestrained Persons	•					•					•



Table iii. Action Plan Strategies by Emphasis Area

	CITY-WIDE
	Create a targeted enforcement campaign that focuses on distracted driving, impaired driving, and speeding in the City
	Utilize existing resources from TxDOT and NHTSA to promote traffic safety education in the City
	Conduct engineering studies on the remaining HIN segments
	INTERSECTION-RELATED
	Update the Construction Standards and Specifications to expand on the requirements for pedestrian crossing treatments
	Update Thoroughfare Plan to require dedicated left-turn lanes at signalized or high left-turn volume intersections
	Upgrade all existing signalized intersections to include pedestrian crossing facilities
	IMPAIRED DRIVING
	Conduct a study to understand impaired driving citation patterns throughout the City
	ROADWAY AND LANE DEPARTURES
	Update minimum procurement requirements for purchasing City vehicles with enhanced safety features
	SPEED-RELATED
	Provide access to driver safety courses and resources for City employees using City vehicles
	Create a system to deploy speed feedback signs/trailers along the HIN or other problem locations
	Conduct a study to understand the history of speed enforcement patterns and compare them to the high-injury network (HIN)
	UNRESTRAINED PERSONS
	Continue to partner with entities such as TxDOT and Texas A&M AgriLife to promote safe seatbelt and car seat usage
	VULNERABLE ROAD USERS
	Upgrade lighting along all City roadways to meet current standards with an emphasis on pedestrian crossings
	Prioritize capital projects that overlap with the HIN, ADA Transition Plan, and Active Transportation Framework Plan
	Complete the remaining facilities assessments for the ADA Transition Plan





BACKGROUND AND PURPOSE

PART I: BACKGROUND AND PURPOSE

INTRODUCTION

The City of DeSoto's Comprehensive Safety Action Plan (CSAP) was developed over six months to support DeSoto's goal of eliminating traffic-related fatalities on its roads. The CSAP will guide City Staff, the DeSoto City Council, and other local partners in making informed choices when selecting projects to improve safety for all roadway users in DeSoto. This section (**Part I of III**) includes chapters outlining the plan's purpose and development process.

Chapter 1: Purpose

Guiding Principles of Safety

Chapter 2: Process

Project Timeline

CSAP Planning Team

Public Engagement

Leadership Commitment





Achieving the DeSoto CSAP vision and TxDOT's "Road to Zero" relies on the Safe System Approach, the Six E's of Safety, and the focus areas of the Texas Strategic Highway Safety Plan, each playing a vital role in this effort.

CHAPTER 1. PURPOSE

Chapter 1 outlines the guiding principles of the City of DeSoto's Comprehensive Safety Action Plan (CSAP), highlighting the importance of each principle and explaining how they contribute to safer streets for all users. Achieving the DeSoto CSAP vision and TxDOT's "Road to Zero" relies on the Safe System Approach, the Six E's of Safety, and the focus areas of the Texas Strategic Highway Safety Plan, each playing a vital role in this effort.

GUIDING PRINCIPLES OF SAFETY

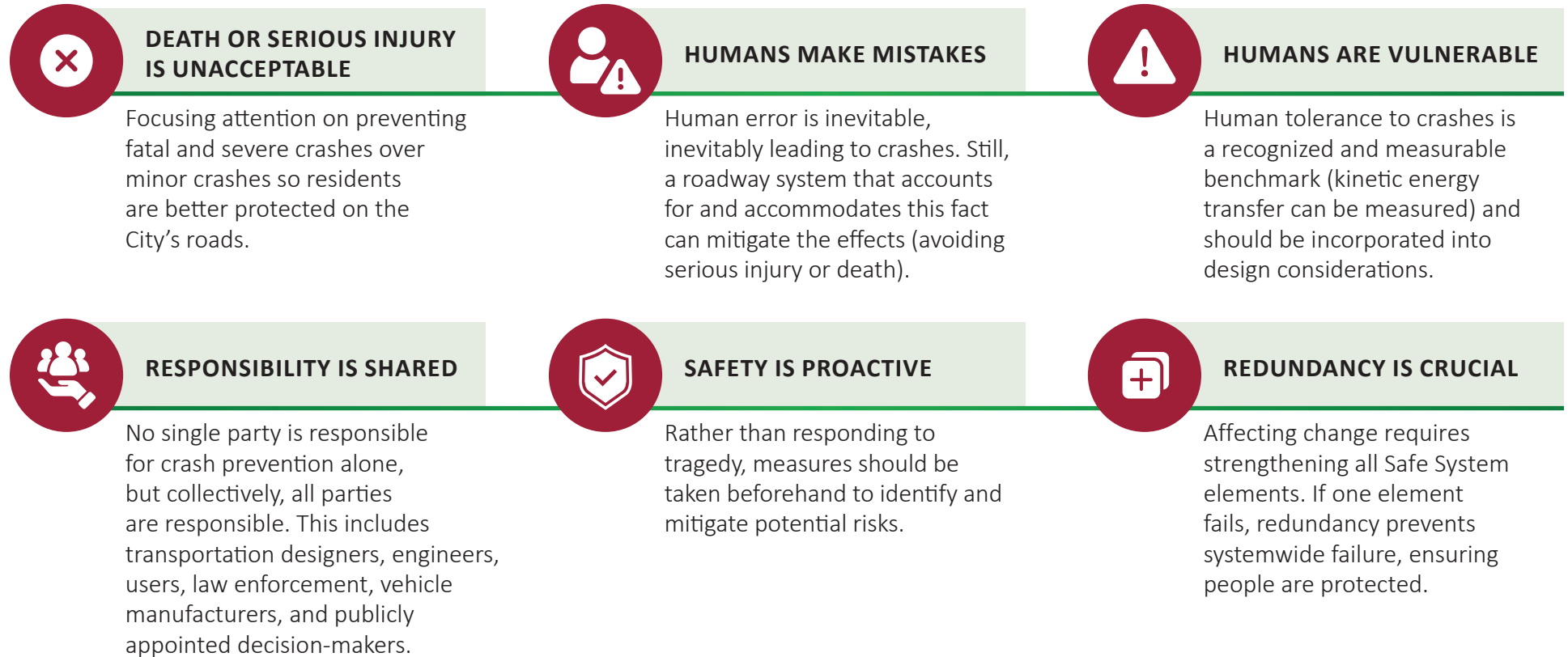
TXDOT'S ROAD TO ZERO TO "PRESERVE ALL LIVES"

TxDOT's Road to Zero is an initiative whose goal is to eliminate fatalities on our roadways by 2050. The last day without a death on Texas roadways was November 7, 2000. Since that day, more than 75,000 people have died in crashes on Texas roadways. From 2019–2023, 37 people lost their lives on DeSoto roadways.

Road to Zero represents a paradigm shift in addressing traffic-related fatalities and injuries. By rejecting the notion that injuries and fatalities are an unavoidable byproduct of modern transportation networks, Road to Zero fosters real change and improvement in traffic safety.

SAFE SYSTEM APPROACH

The Safe System Approach was pioneered in the 1990s by Swedish road safety expert Claes Tingvall. The Safe System Approach is the framework and mechanism by which this Safety Action Plan can be implemented. Six fundamental principles can be utilized to implement the elements of the Safe System Approach, and are as follows:





A principles-based approach intended to eliminate serious and fatal injuries, the Safe System Approach relies on accommodating human mistakes and keeping potential impacts on the human body at tolerable levels. Accommodating human mistakes can be accomplished through roadway design features and vehicle technological advancements (lane departure assist, autonomous emergency braking, etc.). Efforts to mitigate or lessen the physical impacts on the human body include reducing speeds, physically separating automobiles from alternative mode users, and technological advancements in vehicles. There are five complementary objectives outlined by the U.S. Department of Transportation (USDOT) that correspond to and support the implementation of the Safe System Approach as provided in **Figure 1**:

- 1 **Safer people** bear the burden of responsibility for complying with rules and regulations of the roadway.
- 2 **Safer vehicles** are responsible for mitigating or preventing the potential impacts of crashes. Active safety measures can help prevent crashes, while passive measures can lessen the implications of a crash.
- 3 **Safer speeds** are directly correlated with increased survival rates in crashes. Reducing speeds reduces impact, improves visibility, and affords drivers additional braking time.
- 4 **Safer roads** are not defined by their design alone. Instead, the road design, construction, maintenance, operation, and countermeasures work collaboratively to improve safety.
- 5 **Post-crash care** accounts for the actions of those who respond to a crash, whether emergency services, law enforcement, or cleanup.

Figure 1. The Safe System Approach



Source: FHWA

THE SIX “E’S” OF SAFETY

Similar to the Safe System Approach, the Six E’s of safety are components of an integrated and comprehensive framework. While every community’s composition and understanding of safety varies, the Six E’s can be deployed at all levels to enhance the user experience and improve safety. The Safety Action Plan (**Part III**) of this report utilizes each of the Six E’s as an organizing approach to implementation.

ENGINEERING

Engineering projects and interventions in support of Vision Zero may be implemented through the built environment to improve safety. The primary goal is to calm traffic and improve safety for all users. Examples of engineering projects that have been proven include the implementation of safety countermeasures or traffic calming measures that reduce speeding.

EVALUATION

Evaluation can support both proactive and responsive measures. Understanding crashes’ when, where, and why allows us to respond to historical trends and adjust to improve future safety. Similarly, careful evaluation can help avoid potential issues before they reach greater severity.

ENFORCEMENT

Enforcement can ensure system users follow traffic laws and regulations while preventing profiling. Enforcement can also target and prioritize problem behaviors like speeding and other dangerous behaviors over minor infractions.

EDUCATION

Education can improve safety by raising awareness of transportation choices, furthering or establishing the benefits of multimodal transportation, and demonstrating the proper way to utilize the system, thus reducing the margin of error.

EQUITY

Equity efforts must be made to acknowledge and rectify the imbalance and additional burden that disadvantaged populations carry. Vulnerable and disadvantaged populations are historically hard to reach and deserve access to the same information and infrastructure as everyone else.

ENCOURAGEMENT

Encouraging the community to further their knowledge and understanding of safety principles can be fun and interactive. Events and activities can support and promote better behavior.



EMPHASIS AREAS

Texas has developed the Texas Strategic Highway Safety Plan (SHSP). This comprehensive document outlines strategies and initiatives to create a safer transportation network through crash data analysis, identifying high-risk areas, and prioritizing countermeasures. The Texas SHSP highlights eight safety emphasis areas aimed at achieving the goal of zero fatalities. The eight safety emphasis areas are:



DISTRACTED DRIVING

Incidents where driver distraction, inattention, or cell phone/mobile use was a contributing factor.



IMPAIRED DRIVING

Incidents where at least one driver was identified as having consumed alcohol, taken medication, been under the influence of drugs, had a blood alcohol content greater than zero, or tested positive for drugs.



INTERSECTION-RELATED

Crashes that occur within the boundaries of an intersection or where the first harmful event happened on an approach to or exit from an intersection, related to movement through the intersection.



UNRESTRAINED PERSONS

Crashes where vehicle occupants were not using appropriate restraints, such as child restraints or seat belts.



ROADWAY AND LANE DEPARTURES

Incidents involving single vehicles running off the road or head-on collisions.



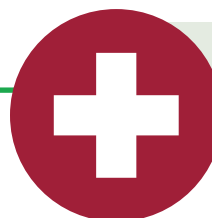
SPEED-RELATED

Crashes where unsafe speed, whether below or above the speed limit, was a contributing factor.



VULNERABLE ROAD USERS

Incidents involving pedestrians and bicyclists, focusing on separating these users in terms of time and/or space.



POST CRASH CARE

Enhancing the survivability of crashes through rapid access to emergency medical care, efficient crash investigation, traffic incident management, and justice.



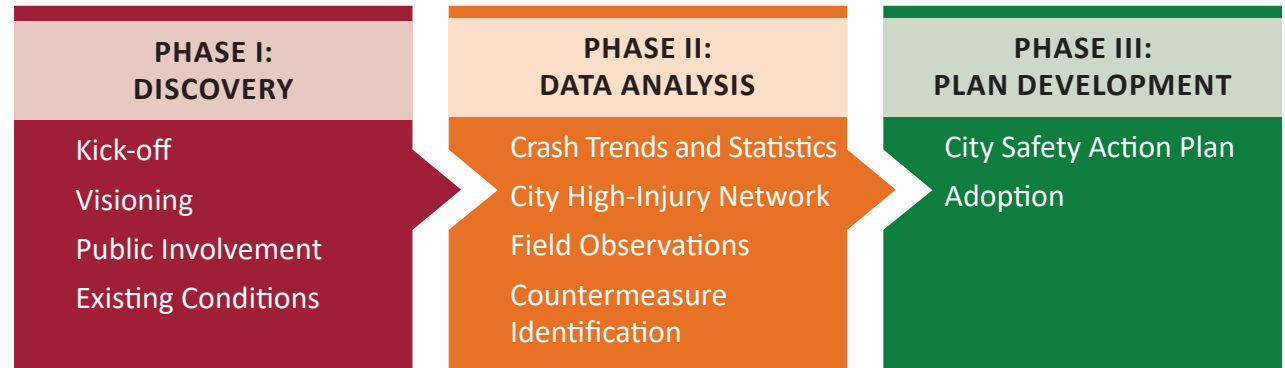
...guidance from the CSAP Planning Team (CSAPPT) and other City leadership was pivotal in creating the City's CSAP.

CHAPTER 2. PROCESS

This chapter details the project timeline and highlights the key takeaways and perspectives gathered from the public engagement efforts throughout the project. Additionally, guidance from the CSAP Planning Team (CSAPPT) and other City leadership was pivotal in creating the City's CSAP.

PROJECT TIMELINE

The DeSoto CSAP's development is divided into three primary phases:



Discovery Phase: This phase involved project initiation and the establishment of a strong foundation for subsequent phases. Before the first CSAPPT meeting, data was collected from all relevant parties to ensure all necessary information was available for the upcoming quantitative analysis. The initial CSAPPT meeting was held on May 23, 2024, to develop a qualitative understanding of the project, define the roles and responsibilities of the committee and project team members, and establish a unified mission statement. During this phase, a project website was launched to provide a centralized platform for soliciting feedback and generating awareness for the project and upcoming public engagement events.



Data Analysis Phase: This project phase involved qualitative and quantitative analyses. The quantitative analysis included various crash analyses and the creation of the High-Injury Network (HIN) model. The qualitative analysis involved field observations, identification of countermeasures, and input from the CSAPPT and the public.

Plan Development: In the final phase, results and key takeaways from the quantitative and qualitative analyses were used to develop an implementation plan aligned with the goals of the SS4A initiative. The CSAPPT and the public reviewed the initial plan and provided input on the direction of the Action Plan throughout this phase. After incorporating public feedback, the draft plan was finalized and formally adopted on January 21, 2025.

The timeline for CSAPPT and Public Meetings for the City's CSAP is shown in the table below:

PHASE/MEETING	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN
PHASE I: DISCOVERY								
<i>Internal Kick-off</i>	•							
CSAPPT Meeting 1: Kick-Off and Goal Setting		•						
PHASE II: DATA ANALYSIS								
CSAPPT Meeting 2: Safety Analysis (High-Injury Network Results)			•					
<i>BSW Hispanic Heritage Festival</i>				•				
CSAPPT Meeting 3: Policy Review and Action Plan				•				
<i>City Council Special Workshop 1</i>					•			
PHASE III: PLAN DEVELOPMENT								
<i>Safety Action Plan Fall Festival</i>					•			
CSAPPT Meeting 4: Draft Plan Review						•		
<i>City Council Special Workshop 2</i>							•	
CSAPPT Meeting 5: Final Plan Review							•	
<i>Adoption</i>								•

• = Meeting

CSAP PLANNING TEAM

The CSAP Planning Team (CSAPPT) was established to help guide the planning process, build consensus and ownership of the plan, and provide critical feedback at significant milestones (**Figure 2**). The CSAPPT is comprised of City staff from varying departments and additional public representatives from local organizations. The CSAPPT Meetings were held on the following days:

- ▶ **Meeting 1:** Kick-Off and Goal-Setting – July 25, 2024
- ▶ **Meeting 2:** Safety Analysis (High-Injury Network Results) – August 22, 2024
- ▶ **Meeting 3:** Policy Review and Action Plan – September 26, 2024
- ▶ **Meeting 4:** Draft Plan Review – November 21, 2024
- ▶ **Meeting 5:** Final Plan Review – December 19, 2024

The CSAPPT served as champions and ambassadors of the plan throughout the process and will continue to raise awareness and educate the public on its implementation. During several work sessions in Phase I with the CSAPPT, a mission statement was developed to articulate the plan's mission and outline its commitment to serving the community and stakeholders in the future.

“The City of DeSoto is ***dedicated to improving safety*** by reducing fatalities and injuries on our streets, bikeways, and pedestrian walkways. This commitment is achieved through a ***comprehensive approach*** that includes increased community engagement and education, engineering, policy development, enforcement, and equitable solutions. Our goal is to ***provide complete and safer streets for everyone***, fostering a ***culture of safety*** and ***improving the quality of life*** for all individuals in our community.”

The CSAPPT participated in various exercises, including a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis, study corridor selection, HIN refinement, action matrix development, and action prioritization. The CSAPPT decided to pursue an annual reduction percentage and complement TxDOT's Road To Zero Initiative goal. This target is reflected in the City's SS4A resolution, stating: “10% annual reduction of fatal and serious injury crashes with a goal of zero fatal crashes by the year 2035.” After the Comprehensive Safety Action Plan is adopted, the CSAPPT will reconvene, celebrate their progress, and prepare to enter the implementation phase of these plans to continue working towards eliminating deaths and severe injuries on DeSoto's roads.



Figure 2. Photos from CSAP Planning Team Meetings



PUBLIC ENGAGEMENT

Public engagement for the DeSoto Comprehensive Safety Action Plan included online opportunities, pop-up events, and the distribution of promotional materials and advertisements. Residents, community leaders, and other key stakeholders were actively involved to ensure the plan addressed the safety concerns of all road users in DeSoto. All online engagement materials were also provided in English and Spanish to ensure an equitable public engagement experience.

Figure 3. Social Media Materials



ONLINE ENGAGEMENT

Social Pinpoint was utilized throughout the plan’s development, serving as a central online hub for information on upcoming events, survey links, and housing the plan itself. Through online surveys, DeSoto residents had two opportunities to share their thoughts on roadway safety within the City. This effort received positive feedback from both residents and stakeholders in DeSoto (**Figure 4**).

Figure 4. Project Website





Survey

The DeSoto CSAP Safety Survey aimed at collecting information on demographics, commute, mode choice, and roadway safety concerns. The survey was comprised of 30 questions, divided into four sections. This survey was available on the project website and at in-person public events. The Roadway Safety Survey received 60 responses, 73% of which indicated that they lived within DeSoto, and 42% worked in DeSoto. As summarized in **Figure 5**, most residents commute less than 10 minutes (18%) or 10 to 20 minutes (20%). Nearly 95% of responses indicated that their primary mode of transportation is a personal vehicle.

Additionally, the top five safety concerns for survey participants were distracted driving (34%), high vehicle speeds (24%), poorly maintained roads (20%), aggressive driving (19%), and people ignoring traffic laws while driving (18%) as shown in **Figure 6**.

Figure 5. Commute Statistics

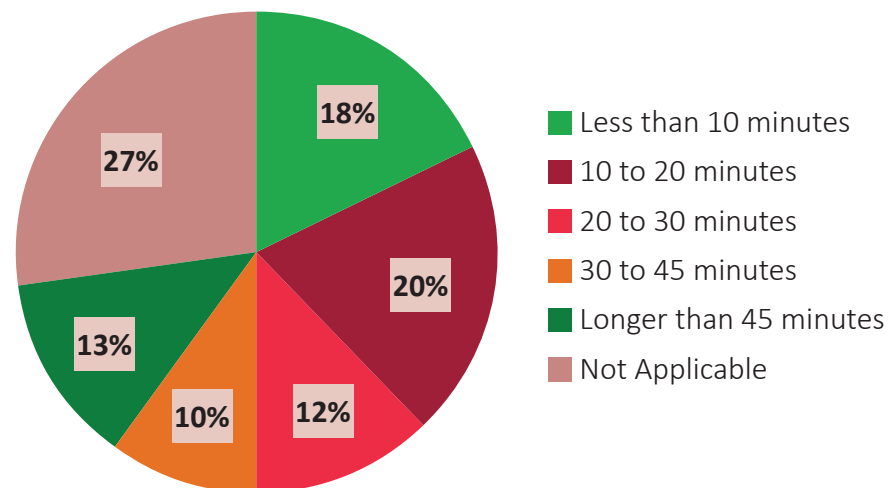
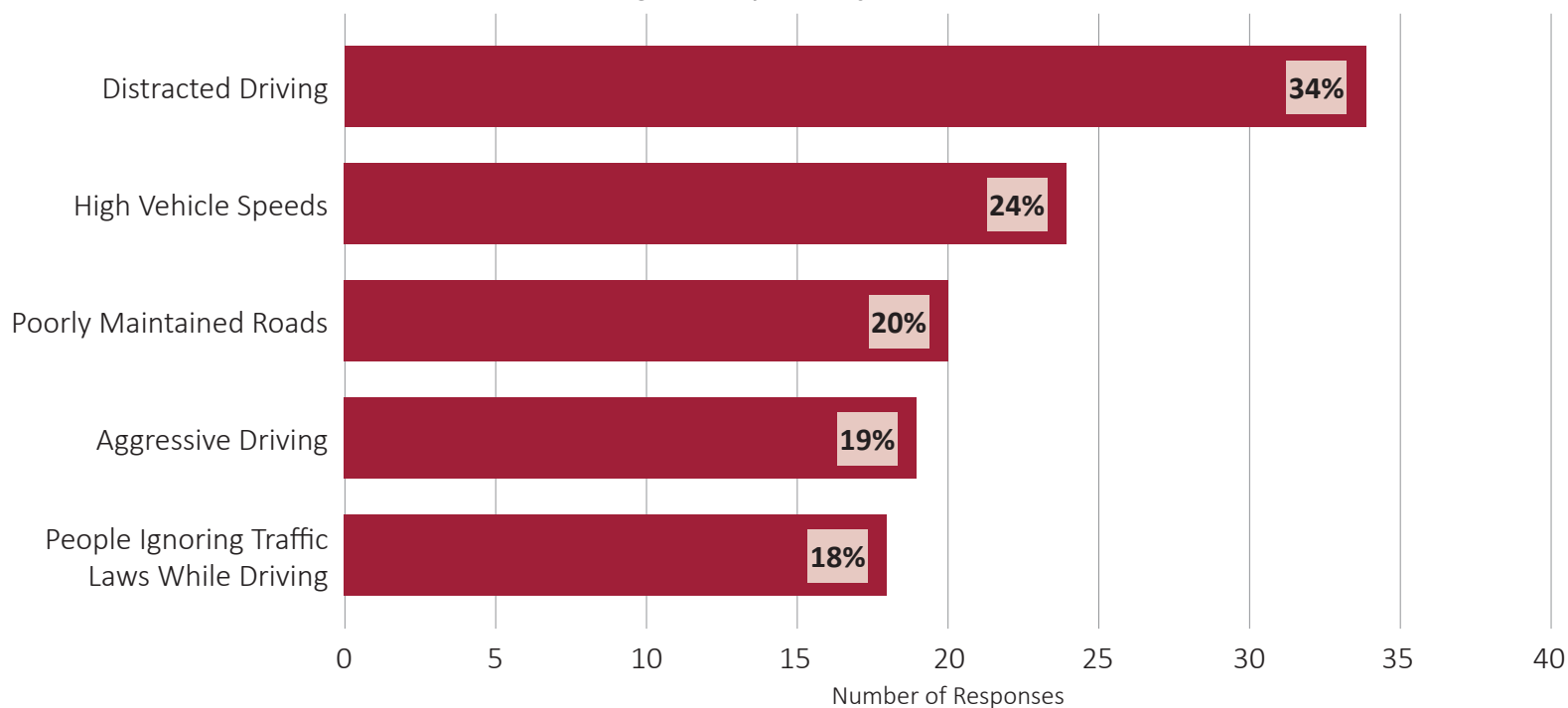


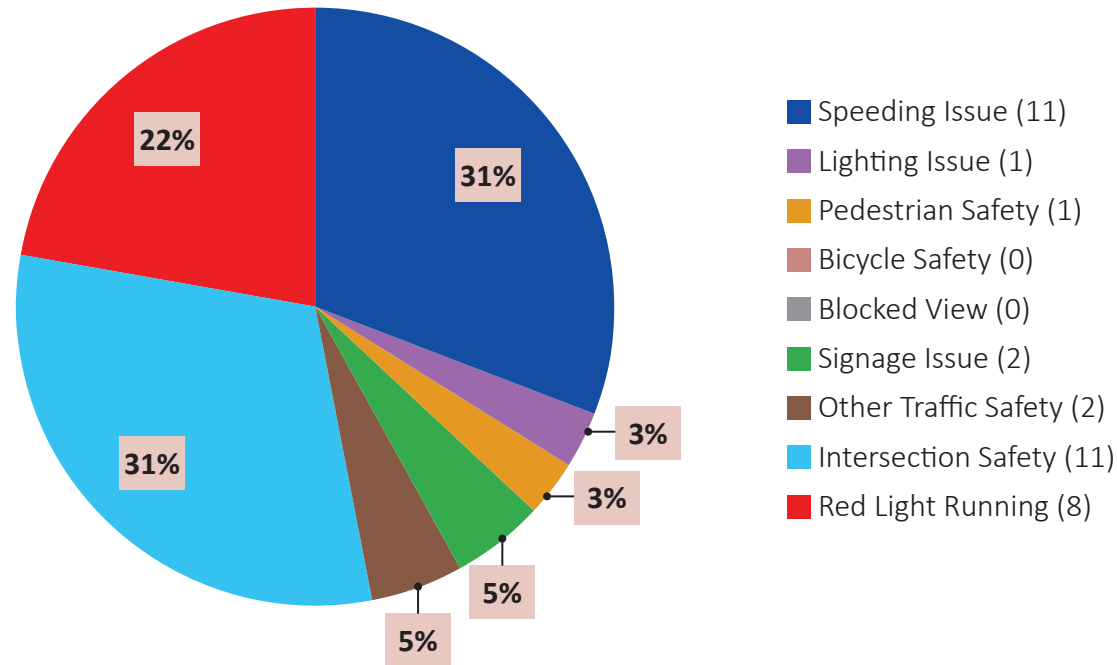
Figure 6. Top 5 Safety Concerns



Interactive Map Survey

Visitors could provide feedback on the safety conditions of existing roadways using an interactive map on the DeSoto CSAP Project website. This engagement tool allowed users to place a point or line on the map and select from various comment types, such as “Speeding Issue” or “Pedestrian Safety Issue.” These comment types helped organize the information provided by users. Additionally, participants could upvote or downvote other ideas to indicate their agreement or disagreement. **Figure 7** and **Exhibit 1** present a visual summary of the 36 comments received from this activity.

Figure 7. Interactive Map Comments



INTERACTIVE MAP COMMENTS

City of DeSoto Safety Action Plan



- Intersection Safety (11)
- Lighting Issue (1)
- Other Traffic Safety (2)
- Pedestrian Safety (1)
- Red Light Running (8)
- Signage Issue (2)
- Speeding Issue (11)

— Roads

Study Area

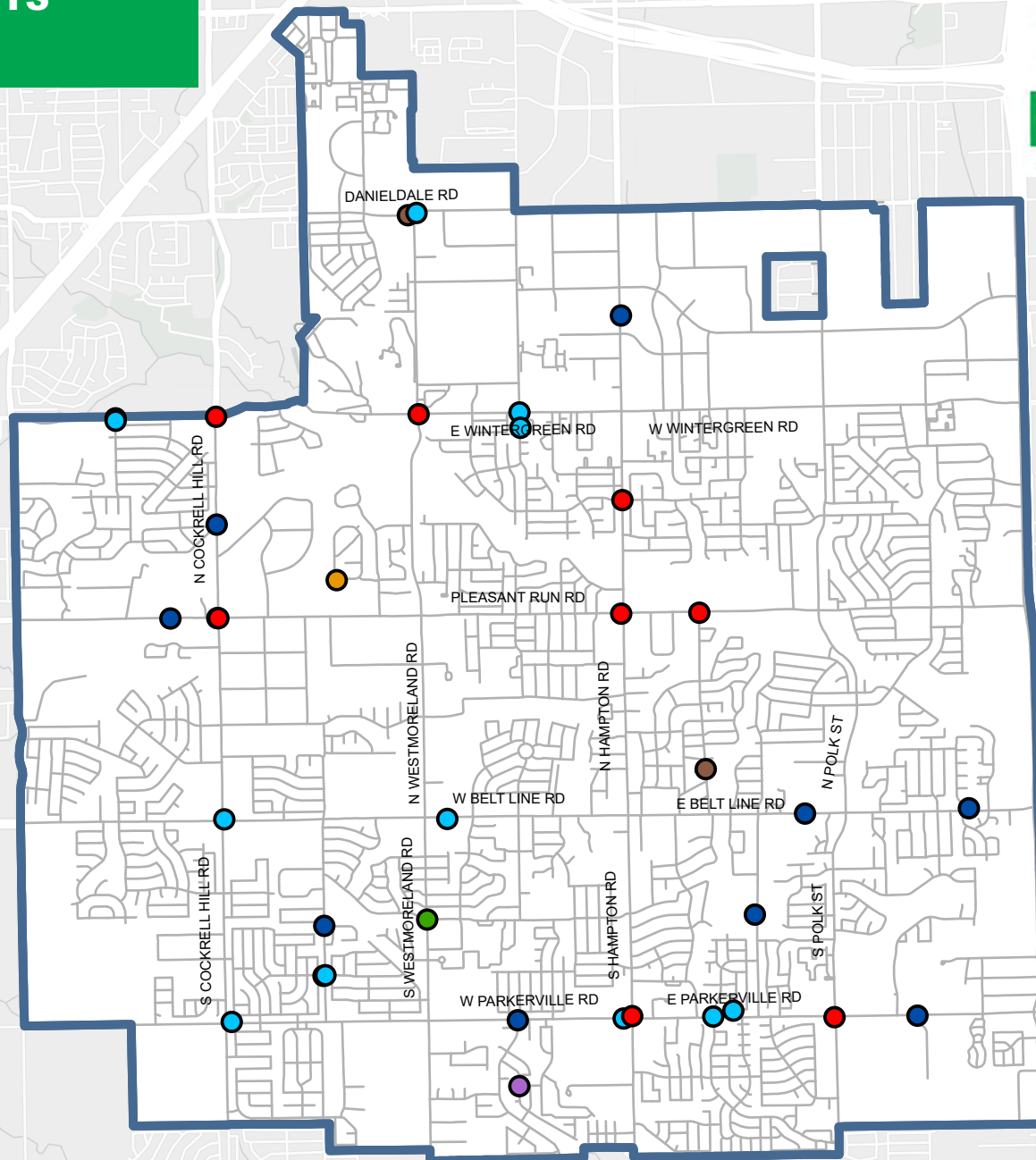


Exhibit 1. Interactive Map Comments

Kimley»Horn 0 1 2 Miles



PUBLIC EVENTS

Engaging the public through in-person pop-up events was also a goal. These events allowed residents to interact with the project team, understand the importance of safety in the City, and learn how they could improve safety locally. The events were held in public settings to generate awareness about the City's Comprehensive Safety Action Plan.

During September 2024, the Best Southwest Hispanic Heritage Festival featured live music, food trucks, vendors, and a kids zone to celebrate Hispanic Heritage Month. Flyers were passed out to many who attended, and they directed people to the project website and the survey. English and Spanish versions were provided to get the maximum engagement from all aspects of the community within DeSoto (**Figure 8**). This provided an opportunity for those present to have casual conversations about safety in the City and promote the need for public input on the plan.

Figure 8. Promotional Flyers





During October 2024, the project team and City staff helped create a Safety Action Plan Fall Festival for the public. This served as a family-friendly and fun Fall-themed opportunity for the public to participate in the online survey and provide feedback on the plan's progress. Mobile devices and printed materials served as a way for the public to provide feedback on what safety concerns are in the City, what improvements they support, and what can be done to fix these issues.

The Fall Festival allowed kids to explore a “Safety Town” with roads, vehicles, and roadway signs. It also had small games and safety-inspired coloring activities. The adults were able to take part in an impaired driving simulation using “drunk” goggles that showed the impact drinking and driving has on safety. Finally, the DeSoto Fire Department provided all attendees with a tour of one of their fire engines and allowed them to see how the City is prepared to improve safety.

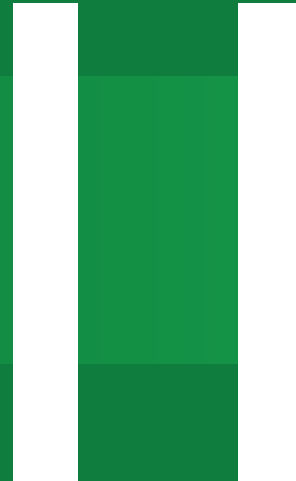
Figure 9. Safety Action Plan Fall Festival



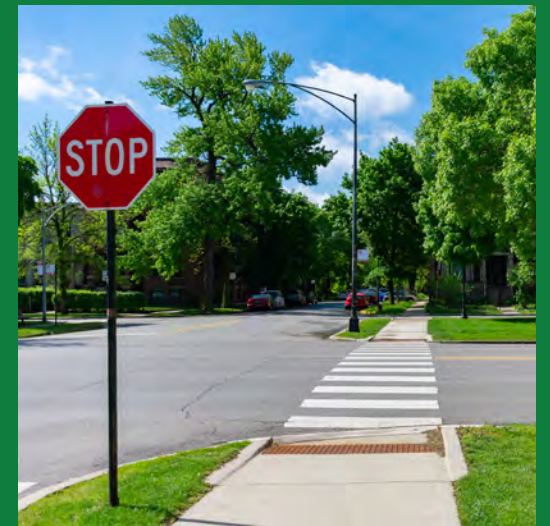
LEADERSHIP COMMITMENT

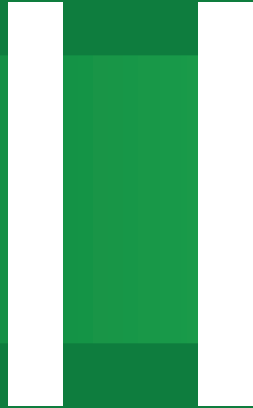
City leadership is essential in establishing “Vision Zero Targets” for the community by spearheading the initiative, setting clear goals, and building public support. They commit to reducing traffic fatalities and serious injuries by allocating resources and adopting policies that emphasize road safety. By working closely with stakeholders, City leaders develop and execute comprehensive strategies—such as infrastructure upgrades, educational campaigns, and enforcement actions—to create safer streets for everyone.





DESOTO STATE OF SAFETY





PART II: DESOTO STATE OF SAFETY

INTRODUCTION

While **Part I** of this report established that improving safety for all mobility modes in DeSoto is a priority for City Staff and Review Committee members, **Part II** elaborates on the State of Safety in DeSoto. An understanding of the City's State of Safety is gathered through a data-driven review of the crash history, equity considerations, and other contributing elements. **Part II** of the report lays the foundation for **Part III**, the Comprehensive Safety Action Plan, by providing insight into the existing conditions, key safety observations, and input from the public, key stakeholders, and the CSAPPT.

Chapter 3: Crash History Analysis

City-Wide Crash Trends

Chapter 4: Equity Review

How Do We Measure Equity?

Chapter 5: High-Injury Network

Critical Crash Rate Method

Critical Crash Rate Calculation

HIN Development and Results



To complete the crash history analysis and creation of the High-Injury Network (HIN), historical crash data for the last five years (2019-2023) from TxDOT's Crash Record Information System (CRIS) database was used.

CHAPTER 3. CRASH HISTORY ANALYSIS

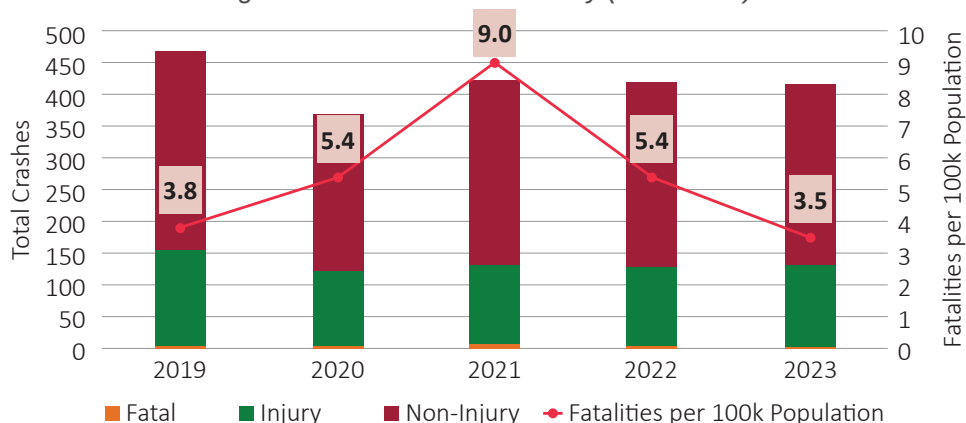
Chapter 3 focuses on the City of DeSoto's crash history, performance within the safety emphasis areas, and the state of safety from an equitable perspective. To complete the crash history analysis and creation of the High-Injury Network (HIN), historical crash data for the last five years (2019-2023) from TxDOT's Crash Record Information System (CRIS) database was used.

Crash data from I-35 mainlanes and frontage roads were excluded from this study and analysis. By focusing on crashes occurring on City thoroughfares, the study can better recommend targeted improvements within areas where the City has greater authority to implement necessary changes.

CITY-WIDE CRASH TRENDS

Crash data from 2019 to 2023 was utilized to identify City-wide crash trends, as summarized in **Figure 10**. Before 2020, the total number of crashes per year in DeSoto was approximately 480. In 2020, there was a significant drop in the number of crashes occurring in the City (396 crashes), attributed to the COVID-19 pandemic. The following year saw an increase in total crashes (468) and consistent crash totals through 2023. The City of DeSoto has seen a dramatic rise in its fatalities per 100,000 population during the COVID-19 pandemic and a decrease in the years following. Until 2022, the fatalities per 100,000 population were increasing, with the highest rate being in 2021, with a rate of 9.0. Since 2021, these rates have been consistently decreasing; fatalities per 100,000 populations were 5.4 in 2022 and 3.5 in 2023. These trends indicate that although the number of crashes occurring in DeSoto has stayed consistent throughout the study period, crash fatalities have increased and decreased between 2019 and 2023.

Figure 10. Total Crash Summary (2019-2023)



The total number of fatal (K) and suspected serious injury (A) crashes have seen increases and decreases, while suspected minor injury (B) crashes have been increasing since 2019 and exceeding previous years' totals, as shown in **Table 1**. Of the 37 fatal crashes, nine occurred in 2020, and 19 occurred in 2021. Minor injury crashes have been steadily increasing and are currently higher than in previous years. While high-severity crashes have steadily increased within the last three years of the study, possible injury and non-injury crashes have increased and decreased in alternating years since 2020.

Table 1. Total Crashes by Severity (2019-2023)

YEAR	K – FATAL INJURY		A – SUSPECTED SERIOUS INJURY		B – SUSPECTED MINOR INJURY		C – POSSIBLE INJURY		N – NOT INJURED		99 – UNKNOWN	
2019	2	0.15%	18	1.38%	94	7.20%	335	25.7%	855	65.47%	2	0.15%
2020	9	0.88%	50	4.90%	102	10.00%	178	17.45%	660	64.71%	21	2.06%
2021	15	1.24%	50	4.12%	138	11.37%	156	12.85%	819	67.46%	36	2.97%
2022	2	0.17%	14	1.20%	177	15.15%	217	18.58%	719	61.56%	39	3.34%
2023	9	0.76%	37	3.12%	178	15.01%	153	12.90%	776	65.43%	33	2.78%

 Indicates the two highest years by percentage



Figure 11 summarizes the top contributing factors for crashes in the City for the past five years. ‘Driver Inattention’ was the most cited contributing factor to crashes in DeSoto. This typically involves distracted driving from cell phone use. This contributing factor was listed in almost 50% more crashes when compared to the second most common contributing factor – failing to yield the right of way on a left turn. These results indicate that the City of DeSoto has a unique issue with driver inattention since it contributes to 20% of crashes.

The top manners of collision and how the crash occurred between vehicles or vulnerable road users for DeSoto are shown in **Figure 12**. In the City, the top manners of a collision were ‘One Motor Vehicle – Going Straight’ (18%), ‘Opposite Direction – One Straight – One Left Turn’ (18%), and ‘Angle-Both Going Straight’ (16%). When the manner of collision is described as ‘Same Direction – One Straight – One Stopped,’ it indicates there was a rear-end crash. ‘One Motor Vehicle – Going Straight’ refers to crashes in which the vehicle ran off the road or failed to maintain the vehicle in a single travel lane. ‘Angle-Both Going Straight’ crashes include sideswipe, T-bone, and other intersection-related crashes.

Figure 11. Top Contributing Factors (2019-2023)

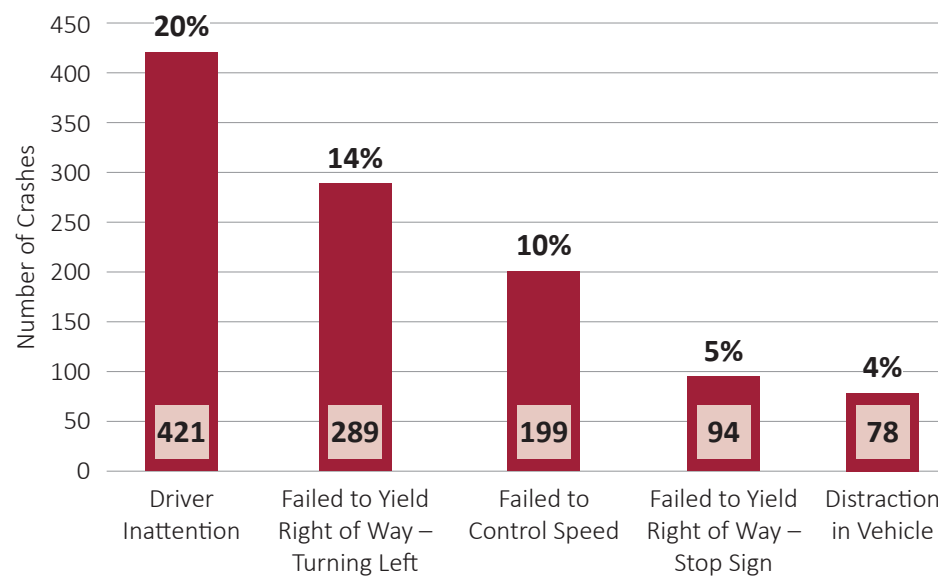
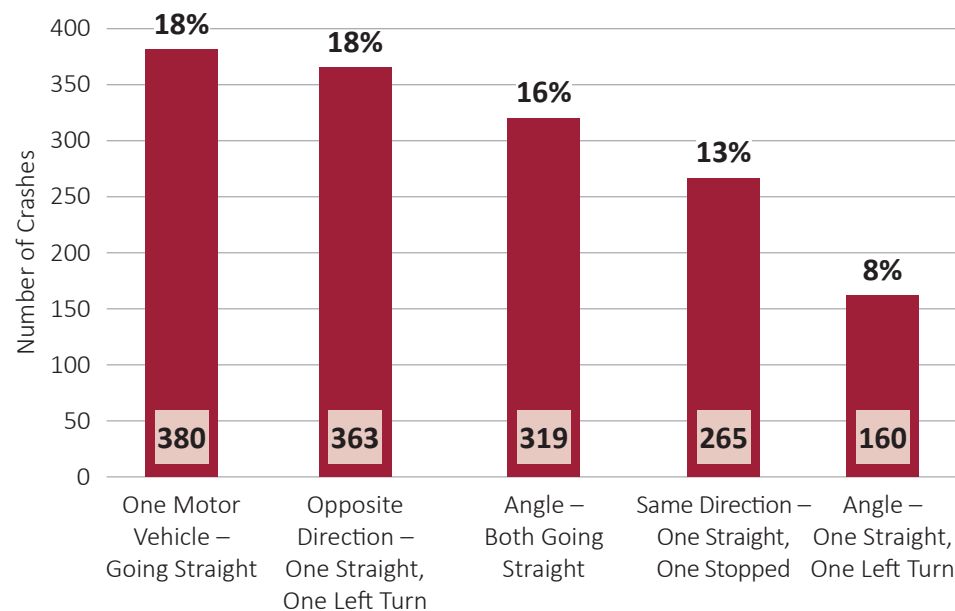


Figure 12. Top Manners of Collision (2019-2023)



CRASH HEAT MAP

A crash heat map was created to highlight the density of crashes within the City of DeSoto from 2019 – 2023, as seen in **Exhibit 2**. This map visually represents the pure density of crash counts at various locations in DeSoto. While the crash heat map does not account for traffic volumes, number of lanes, or speed limits, these factors affect the frequency of crashes.

The highest concentration of crashes occurs along Belt Line Road, Hampton Road, and Pleasant Run Road, with the highest densities at high-volume intersections on Belt Line Road. Two of the largest densities on the crash heat map are near the intersections of W Belt Line Road and Cockrell Hill Road and E Belt Line Road and Hampton Road. This is an expected trend as these are some major thoroughfares within the City that see high traffic volumes throughout the day.

CRASH HEAT MAP
(2019-2023)
City of DeSoto Safety Action Plan



Crash Density

Sparse
Dense

Study Area

Roads

Parks

100-Year Floodplain

Railroads

County Line

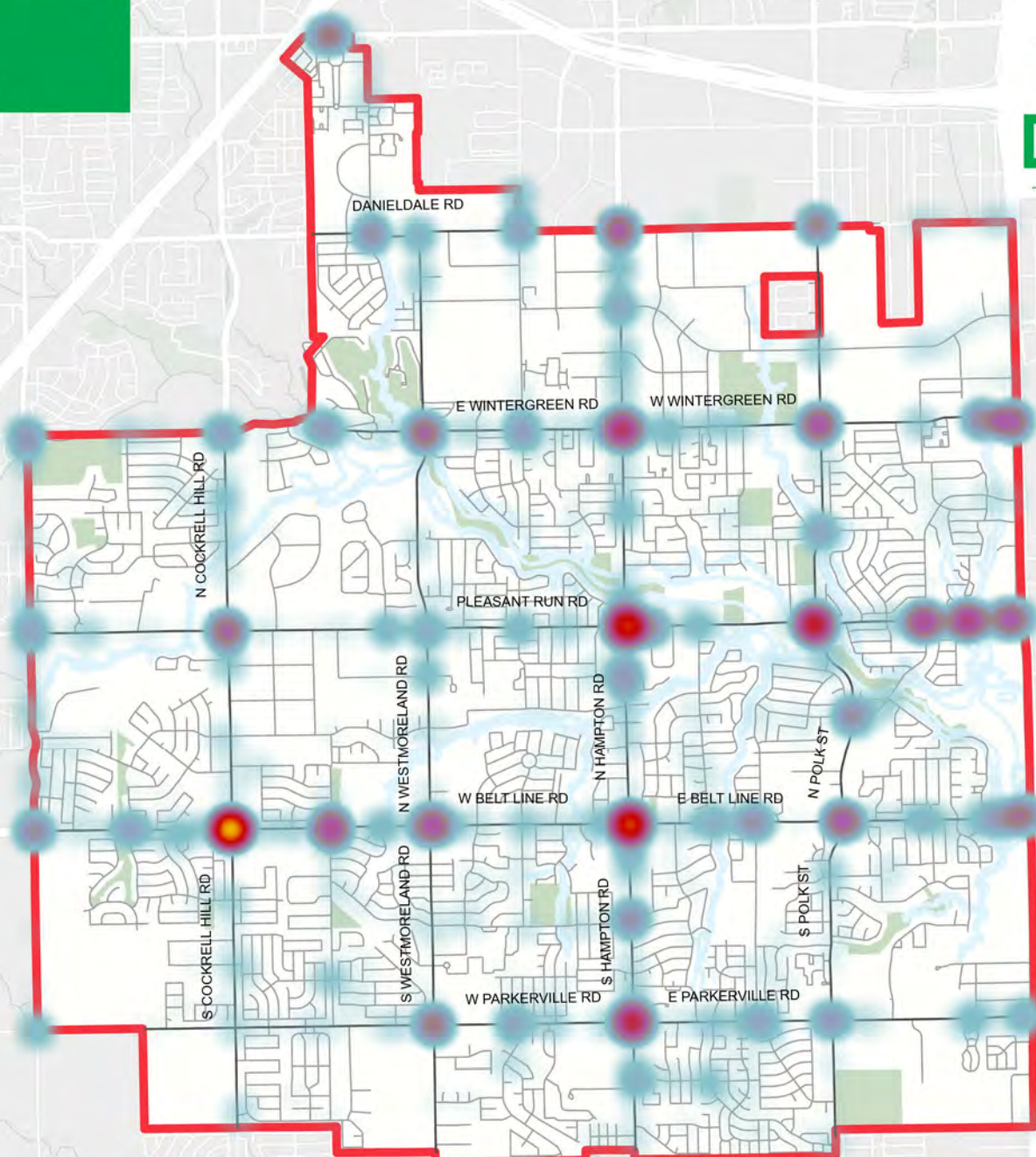


Exhibit 2. Crash Heat Map



High Crash Intersections

Approximately 78% of all the crashes in DeSoto occur at intersections. Intersections can quickly become safety hazards for all roadway users since these are areas where the most conflicts occur for vehicles, pedestrians, and bicyclists. In the City of DeSoto, the intersection of W Belt Line Road and N Cockrell Hill Road had the most crashes over the five-year study period. Both roads comprising this intersection are 4-lane divided roadways. Of the ten intersections listed in **Table 2**, seven of them involved E and W Belt Line Road, N Cockrell Hill Road, or Pleasant Run Road. **Exhibit 3** includes a map showing the locations of the high crash intersections in DeSoto.

Table 2. High Crash Intersections

RANK	INTERSECTION	NUMBER OF CRASHES
1	W Belt Line Rd & N Cockrell Hill Rd	50
2	N Polk St & E Pleasant Run Rd	31
3	E Belt Line Road & S Hampton Rd	25
4	E Pleasant Run Rd & The Meadows Pkwy	25
5	W Wintergreen Rd & N Westmoreland Rd	24
6	W Pleasant Run Rd & N Cockrell Hill Rd	24
7	N Polk St & E Wintergreen Rd	23
8	W Belt Line Road & US 67	22
9	S Westmoreland Rd & W Parkerville Rd	18
10	W Belt Line Road & S Westmoreland Rd	18

HIGH CRASH INTERSECTIONS (2019-2023)

City of Desoto Safety Action Plan



Intersection Type

- Signalized
- Unsignalized
- Roads
- Railroad
- Parks
- Study Area

Priority	Intersection	Crashes
1	W Belt Line Road & N Cockrell Hill Road	50
2	N Polk Street & E Pleasant Run Road	31
3	W Belt Line Road & S Hampton Street	25
4	E Pleasant Run Road & The Meadows Parkway	25
5	W Pleasant Run Road & N Cockrell Hill Road	24
6	W Wintergreen Road & N Westmoreland Road	24
7	N Polk Street & E Wintergreen Road	23
8	W Belt Line Road & US Highway 67	22
9	W Belt Line Road & S Westmoreland Road	18
10	S Westmoreland Road & W Parkerville Road	18

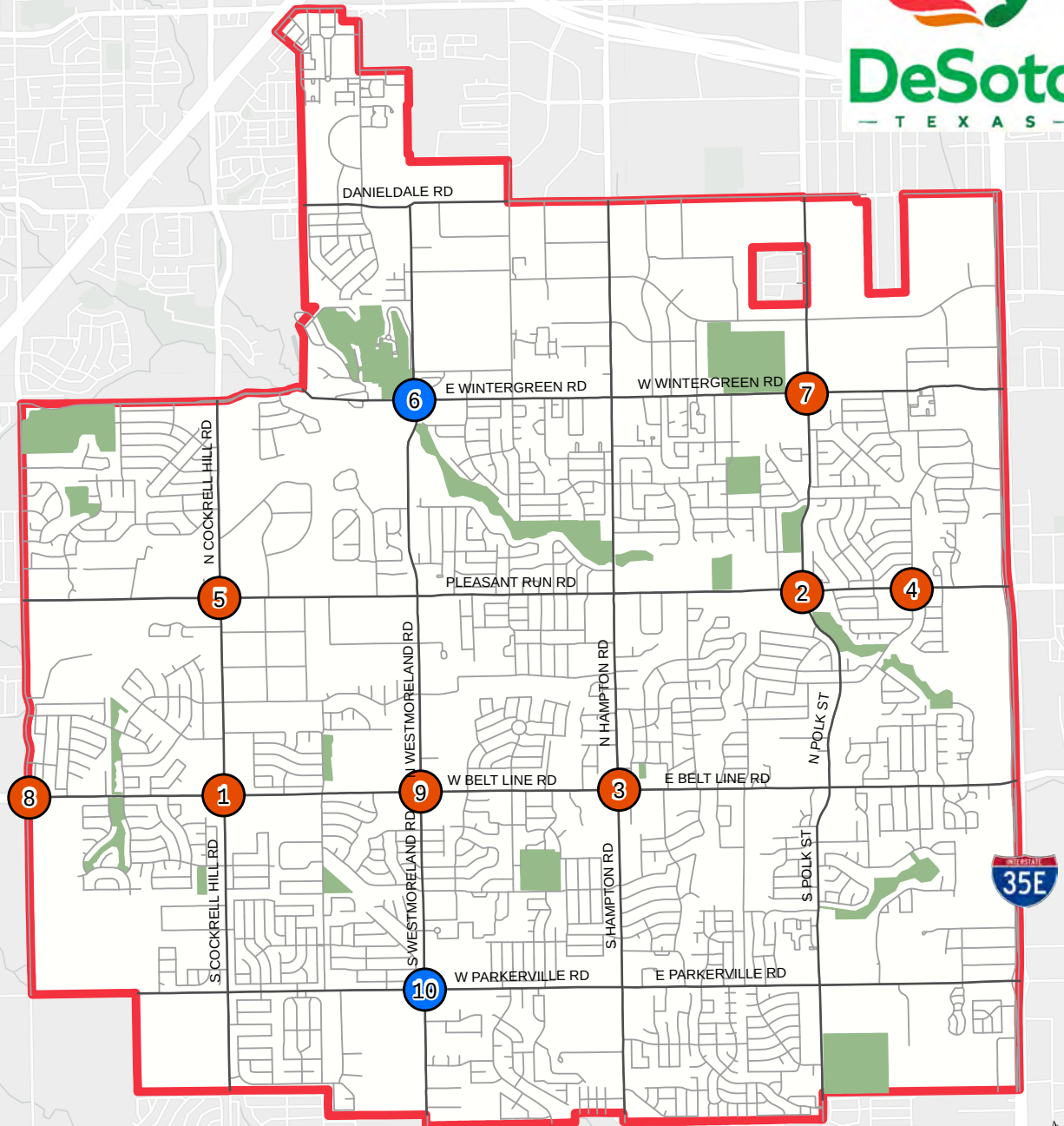


Exhibit 3. High Crash Intersections Map

Kimley»Horn 0 1 2 Miles



Bicycle and Pedestrian Crashes

In the event of a crash involving vulnerable road users, the most vulnerable to fatal or serious injuries are the pedestrians or bicyclists. The crash history in DeSoto further supports this fact. In the past five years, the City has experienced 24 pedestrian crashes and 11 bicyclist crashes, as shown in **Exhibit 4**. Of the 35 crashes involving pedestrians or bicyclists, 16 resulted in a fatality, suspected serious injury, or suspected minor injury.

On average, pedestrian and bicycle crashes are more severe than vehicle-only crashes in the DeSoto. While only 14.7% of vehicle-only crashes result in fatal, suspected serious, or suspected minor injuries, pedestrian and bicyclist crashes resulted in 45.7% of the same severity. A comparison between bicycle/pedestrian and vehicle-only crashes by severity is shown in **Table 3**.

Table 3. Vehicles vs Bicycle and Pedestrian by Crash Severity

CRASH SEVERITY	VEHICLES	BICYCLE/ PEDESTRIAN	DIFFERENCE
K – FATAL INJURY	0.7%	22.9%	22.2%
A – SUSPECTED SERIOUS INJURY	2.4%	11.4%	9.0%
B – SUSPECTED MINOR INJURY	11.6%	11.4%	-0.2%
C – POSSIBLE INJURY	17.5%	51.4%	33.9%
N – NOT INJURED	65.2%	0%	-65.2%
99 – UNKNOWN	1.9%	2.9%	1.0%

 *Vulnerable Road Users disproportionately experience higher-severity crashes*

There is a concentration of pedestrian and bicycle crashes along two corridors in DeSoto. This would suggest that pedestrian facilities should be improved to make walking and biking safer in these areas. Furthermore, there are numerous pedestrian crashes near the intersection of Hampton Road and Wintergreen Road. Aside from these areas with concentrated crashes, the remaining pedestrian and bicyclist crashes occur on other major thoroughfares and principal arterials in the City of DeSoto.

BICYCLE & PEDESTRIAN CRASHES

(2019-2023)

City of DeSoto Safety Action Plan



- Bicycle Crashes (9)
- Pedestrian Crashes (17)
- ▭ Study Area
- Roads
- Parks
- 100-Year Floodplain
- Railroads
- - - County Line

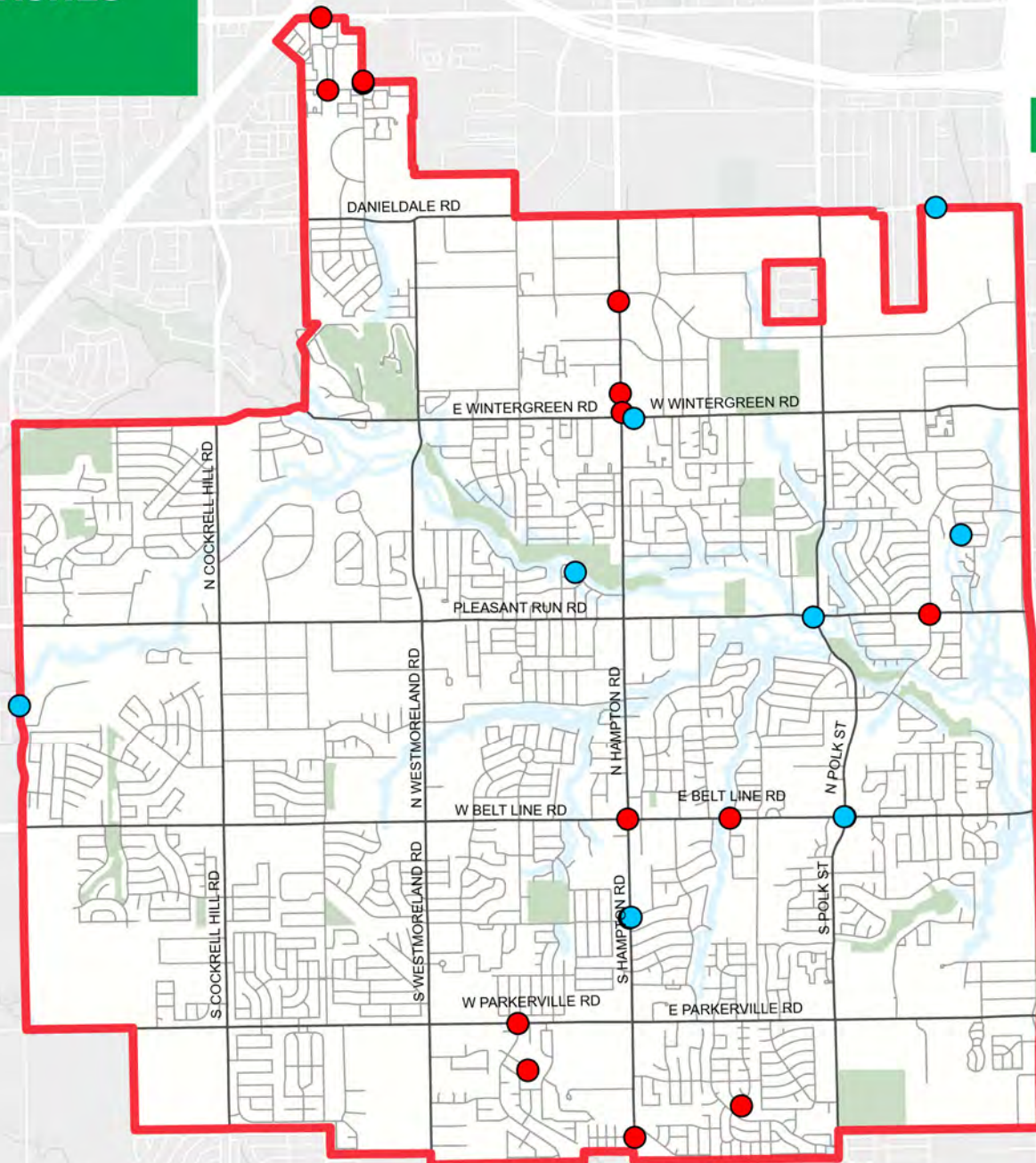


Exhibit 4. Bicycle and Pedestrian Crashes



In the Comprehensive Safety Action Plan, equity means customizing resources and interventions to meet DeSoto's specific needs, ensuring vulnerable communities receive the support necessary to achieve comparable safety outcomes.

CHAPTER 4. EQUITY REVIEW

In the Comprehensive Safety Action Plan, equity means customizing resources and interventions to meet DeSoto's specific needs, ensuring vulnerable communities receive the support necessary to achieve comparable safety outcomes. Unlike equality, which distributes identical resources to everyone regardless of individual circumstances, equity addresses differences in community safety needs. By focusing on equity, the plan acknowledges diverse levels of risk and access to safety measures, resulting in more effective and inclusive safety improvements for all residents.

HOW DO WE MEASURE EQUITY?

The U.S. Department of Transportation (USDOT) identifies disadvantaged census tracts for Safe Streets and Roads for All (SS4A) grants based on factors such as poverty levels, median household income, and transportation access. These areas often have higher poverty and unemployment rates, lower median incomes, and limited public transit options. Additionally, disadvantaged tracts may experience more traffic incidents and lack adequate infrastructure for pedestrian and bicyclist safety. Identifying these tracts is essential for directing SS4A grants to areas most needing safety enhancements and equitable resource allocation.

DISADVANTAGED CENSUS TRACTS

According to the USDOT's metrics discussed previously, a small portion of the northwestern part of DeSoto is considered a disadvantaged census tract. After looking at the multiple factors that qualify census tracts as disadvantaged, it became clear that the transportation security and minority area factors could be used as supplemental indicators for areas lacking equity and needing improvement.

MAJORITY MINORITY AREAS/SUPER MAJORITY MINORITY AREAS

A Majority Minority Area (MMA) is defined as having a population comprising less than 50% non-Hispanic white residents. A Super Majority Minority Area (Super MMA) is defined as having a population comprising less than 25% non-Hispanic white residents. According to the US Census Data, all census tracts in DeSoto are Super MMAs.



TRANSPORTATION INSECURITY

According to the USDOT, transportation insecurity is defined and identified as a percentage by weighing an area's transportation access, transportation cost burden, and transportation safety together to determine a security ranking. Approximately two-fifths of the city of DeSoto was identified as experiencing transportation insecurity. The locations of the transportation-disadvantaged census tracts, according to USDOT's ETC Explorer, are pictured in **Exhibit 5** on page 33.

Throughout the City, 36.2% of all crashes are KABs, whereas in transportation-disadvantaged census tracts, this number is 15.2% (**Table 4**). Although there are much fewer serious injury crashes occurring in transportation-disadvantaged areas of DeSoto, fatal and minor injury crashes are slightly higher in transportation-disadvantaged census tracts.

Table 4. City-Wide vs Transportation Disadvantaged Crash Severity

CRASH SEVERITY	CITY-WIDE	TRANSPORTATION DISADVANTAGED CENSUS TRACTS	DIFFERENCE
K – FATAL INJURY	0.7%	1.5%	0.8%
A – SUSPECTED SERIOUS INJURY	24.3%	2.4%	-21.9%
B – SUSPECTED MINOR INJURY	11.2%	11.3%	0.1%
C – POSSIBLE INJURY	18.3%	18.3%	0%
N – NOT INJURED	65.2%	63.8%	-1.4%
99 – UNKNOWN	2.1%	1.8%	-0.3%

Transportation Disadvantage Census Tracts disproportionately experience higher-severity crashes

TRANSPORTATION DISADVANTAGED AREAS

(2019-2023)

City of DeSoto Safety Action Plan



Crash Severity

- K - FATAL INJURY
- A - SUSPECTED SERIOUS INJURY
- B - SUSPECTED MINOR INJURY

Transportation Insecurity Percentile Rank

- 19.9% - 20%
- 20.1% - 40%
- 40.1% - 60%
- 60.1% - 80%
- 80.1% - 100%

— Texas Railroads

Study Area

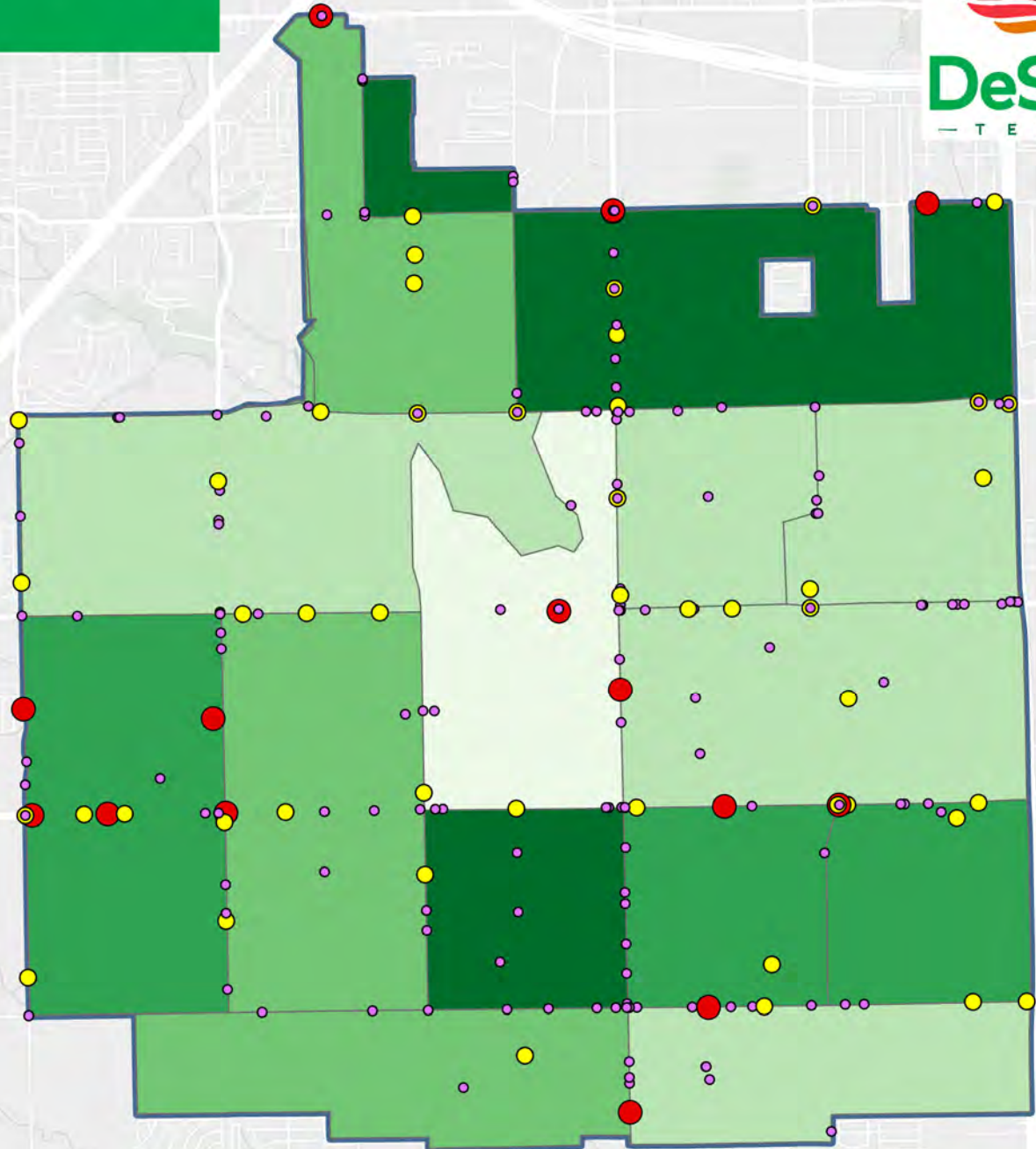


Exhibit 5. Disadvantaged Census Tracts

Kimley»Horn 0 1 2 Miles





Traffic crash data determines the network by considering factors such as crash frequency and severity. The high-injury network aims to help the City prioritize future transportation projects and investments.

CHAPTER 5. HIGH-INJURY NETWORK

A high-injury network (HIN) consists of roads, intersections, or other transportation infrastructure with a higher-than-average rate of crashes resulting in injuries or fatalities. Traffic crash data determines the network by considering factors such as crash frequency and severity. The HIN aims to help the City prioritize future transportation projects and investments.

A crucial step in reducing fatal and severe crashes is identifying and prioritizing facilities within the HIN to improve. Before safety countermeasures for the City can be identified, the HIN must be determined to aid in the decisions regarding roadway safety enhancements.

CRITICAL CRASH RATE METHOD

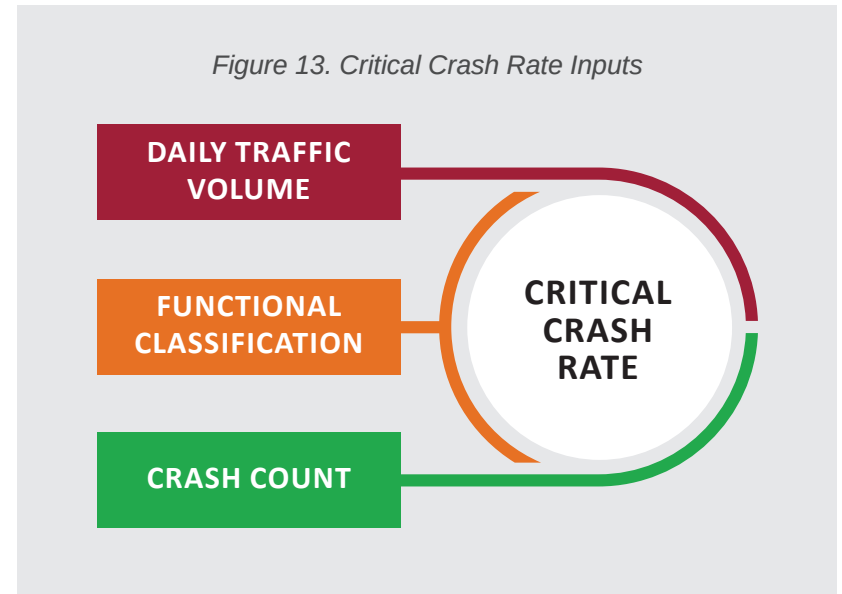
The Federal Highway Administration (FHWA) outlines methods to calculate crash rates to prioritize locations where safety improvements are most needed. Outlined in the Highway Safety Manual, Section 4.4.4.5 on Page 4-41, the critical crash rate method identifies crash hotspots by comparing the observed crash rate at a roadway segment to the expected crash rate based on similar functional classification and traffic volumes. If the observed crash rate exceeds the expected crash rate, the roadway segment is considered to have a critical crash rate and is considered for the HIN.

An ArcGIS Pro model was created to calculate the critical crash rate and provide supporting calculations for each roadway segment in the City. The model assigns crashes to an adjacent segment and performs the calculations in the order outlined by the FHWA. The following section outlines the process used to calculate the critical crash rate using fatal and severe crashes from the previous five years (2019-2023) in DeSoto.

CRITICAL CRASH RATE CALCULATION

The following three steps were followed to calculate the critical crash rate for each road segment in DeSoto:

- 1 Assigning Data to Road Segments:** Calculating the critical crash rate requires three data inputs: roadway functional classification, daily traffic volumes, and crash counts. Since different factors, such as higher traffic volumes, more travel lanes, and higher speed limits, can inflate crash rates, normalizing and comparing these rates is crucial. The critical crash rate compares road segments with similar roadway functional classifications and normalizes daily traffic volumes to calculate crashes more evenly based on their commonalities.
- 2 Calculate Variables of Critical Crash Rate:** The critical crash rates were calculated using the equations outlined in the FHWA's Highway Safety Manual. The observed crash rate represents the KAB crashes on each road segment per 100 million vehicle-miles traveled. The daily volumes for each functional class were normalized for the expected average crash rate per 100 million vehicle-miles traveled calculations. Furthermore, roadways were only compared to similar roads; for example, local roads were only compared to local roads. **Figure 13** outlines the data inputs needed to calculate the critical crash rate.
- 3 Calculate Critical Crash Rate Ratio:** A ratio is used to identify the magnitude of the difference between the observed and expected crash rates. If the ratio is greater than 1.0 or the observed crash rate is higher than the expected crash rate, then that road segment's crash history is greater than the other road segments that share the same functional classification. Any segments with a ratio of 1 or greater were flagged as potential HIN segments. **Exhibit 6** provides a visual summary of all the ratio results.



CRITICAL CRASH RATE RATIO (2019-2023)

City of DeSoto Safety Action Plan



- K - Fatal Injury
- A - Suspected Severe Injury
- B - Suspected Minor Injury

Critical Crash Rate Ratio

- 0.00
- 0.01 - 0.29
- 0.30 - 0.57
- 0.58 - 1.00
- 1.01 - 6.46
- Roads
- Study Area

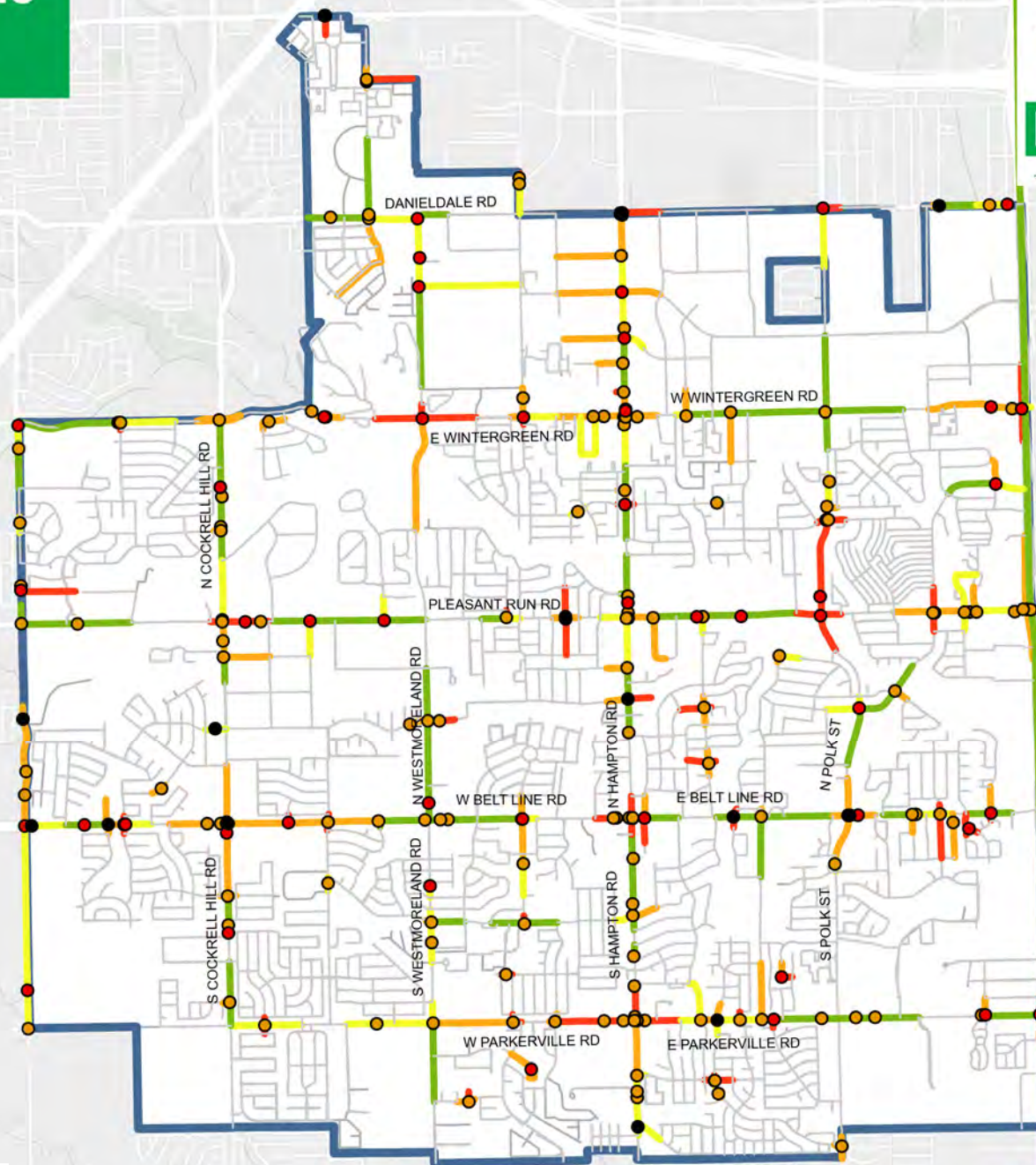


Exhibit 6. Critical Crash Rate Ratio Results

HIN DEVELOPMENT AND RESULTS

The HIN was created by selecting segments based on data-driven criteria and qualitative refinement of the model results. The goal of the HIN is to maximize the total number of vehicle-only KAB crashes and bicycle/pedestrian KAB crashes on the smallest percentage of City roads.

After this initial cleaning, the remaining segments were those with a KAB crash that occurred within the last five years and had a higher-than-expected crash rate. While not all segments experienced a KAB crash, the influence area of the crash typically bleeds over to adjacent segments. The gaps between high crash segments were filled to create a coherent and continuous HIN.

After refining the calculated critical crash rates, the HIN for the City of DeSoto was determined. DeSoto's HIN consists of approximately 9.3 miles of the City's roadways while capturing 55% of vehicle-only KAB crashes, 87% of K crashes, and 83% of bicycle and pedestrian KAB crashes. A summary of all segments included in the HIN is shown in **Table 5**, and a map of the City's High Injury Network is shown in **Exhibit 7**.

Table 5. High-Injury Network Segments

HIN SEGMENT	LIMITS		LENGTH (MILES)	CRASHES				DAILY VOLUME
	FROM	TO		K	A	B	TOTAL	
E Pleasant Run Rd	Abbott Ave	I-35 Frontage Rd	0.31	0	0	8	8	23,700
W Belt Line Rd	N Duncanville Rd	N Elerson Rd	1.76	3	5	20	28	17,400
N Hampton Rd	Woodhaven Dr	Spinner Rd	0.53	1	1	6	8	13,600
W Pleasant Run Rd	Ray Andra Dr	N Chattey Rd	0.69	1	1	6	8	12,100
E Belt Line Rd	Morris St	Wildwood Dr	1.41	2	3	16	21	17,700
N Hampton Rd	W Daniieldale Rd	E Wintergreen Rd	1.02	2	3	17	22	17,500
E Parkerville Rd	DeSoto Dr	Bluebonnet Dr	1.09	1	1	14	16	8,000
W Pleasant Run Rd	N Cockrell Hill Rd	Keysville Avenue	0.23	0	1	6	7	7,400
N Duncanville Rd	Stoney Hills Dr	W Belt Line Rd	0.62	1	1	5	7	3,500
N Polk St	Ray Ave	E Pleasant Run Rd	0.48	0	2	11	13	6,500
E Wintergreen Rd	Wintergreen Ct	I-35 Frontage Rd	0.48	0	2	11	13	6,500
W Wintergreen Rd	Country Ridge Dr	Saint Andrews Pl	0.18	0	1	2	3	4,700
S Hampton Rd	Ace Dr	Goldeneye Dr	0.20	1	0	2	3	7,200
Chestnut Ln	Wentwood Dr	Canterbury Trl	0.20	0	1	0	1	100
Prince George Ave	W Wheatland Rd	Robbie Mince Way	0.09	1	0	4	5	1,900

HIGH INJURY NETWORK (HIN)

(2019-2023)

City of DeSoto Safety Action Plan



- K - FATAL INJURY
- A - SUSPECTED SERIOUS INJURY
- B - SUSPECTED MINOR INJURY

High-Injury Network

Roads

Study Area

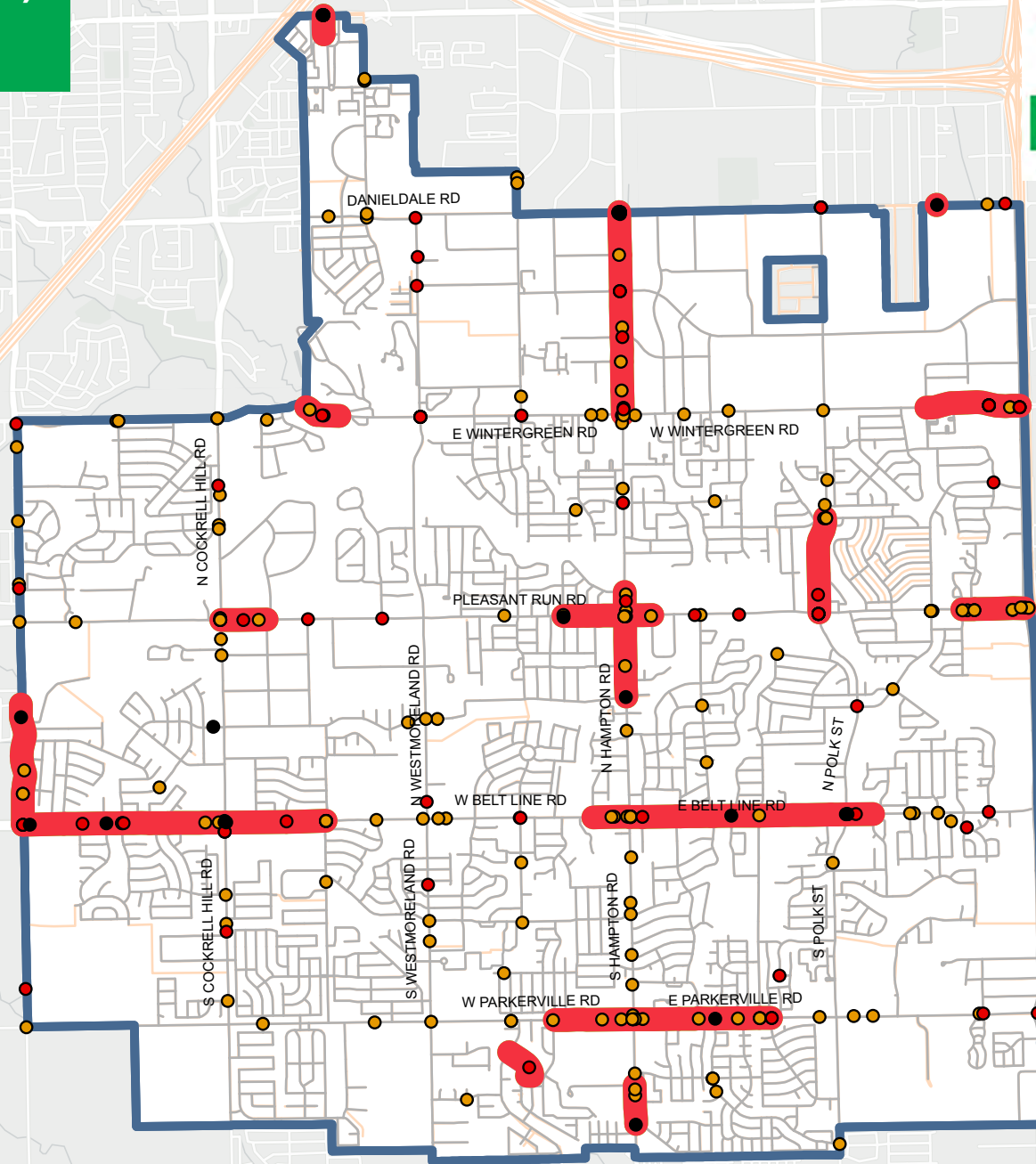
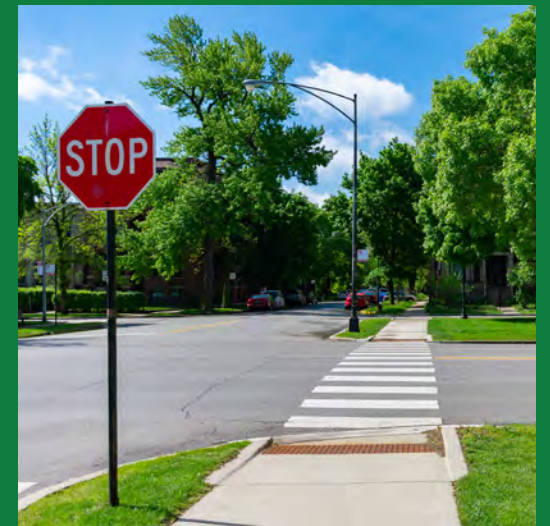


Exhibit 7. High-Injury Network





COMPREHENSIVE SAFETY ACTION PLAN





PART III: COMPREHENSIVE SAFETY ACTION PLAN

INTRODUCTION

Part III details countermeasures and recommendations for study corridors and systemic improvements as part of the Comprehensive Safety Action Plan. This includes policies, programs, and various strategies and actions that improve specific safety emphasis areas in DeSoto.

Chapter 6: Policies and Programs

Targeted Recommendations

Systemic Countermeasure Toolbox

Chapter 7: Implementation Plan

Implementation Program

Action Matrix Elements

City-Wide

Intersection-Related

Impaired Driving

Roadway and Lane Departures

Speed-Related

Unrestrained Persons

Vulnerable Road Users



Targeted recommendations at study corridors and intersections provide detailed and crafted recommendations for specific areas of the City of DeSoto with varying crash histories, road geometry, intersection control, and land use context.

CHAPTER 6. COUNTERMEASURES

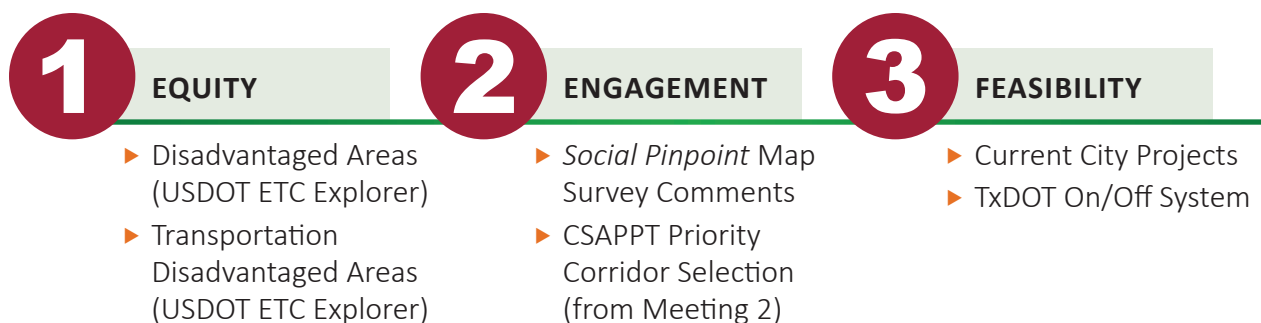
This chapter details the four study corridors by the HIN and CSAPPT, along with their respective targeted recommendations and countermeasures. Targeted recommendations at study corridors and intersections provide detailed and crafted recommendations for specific areas of the City of DeSoto with varying crash histories, road geometry, intersection control, and land use context. Additionally, systemic recommendations are organized according to safety emphasis areas and provide a countermeasure toolbox to make city-wide improvements.

TARGETED RECOMMENDATIONS

In-field observations were made to understand existing conditions and crash locations to select projects and recommendations for improving safety. The following section summarizes the crash history and highlights corridor and intersection-level recommendations for the four selected study corridors.

STUDY CORRIDORS

Four road segments on the High-Injury Network were selected as priority corridors to make targeted recommendations that improve safety on the City's most unsafe corridors today. The highest-priority study corridors were selected with input from City staff and scored based on equity, engagement, and feasibility. The criteria for scoring each road segment were the following:



In coordination with the City of DeSoto Staff and the CSAPPT, the four study corridors selected for targeted recommendations are outlined in **Table 6**. The study corridors add up to approximately 3 miles of roadway (**Exhibit 8**), capturing 56 KAB crashes within their limits. Each is spread between various parts of DeSoto and is located near multiple land use contexts.

Table 6. Study Corridors

STUDY CORRIDORS	LIMITS		LENGTH (MILES)	CRASHES				DAILY VOLUME
	FROM	TO		K	A	B	TOTAL	
W Belt Line Rd	Duncanville Rd	Cockrell Hill Rd	1.00	3	4	12	19	16,200
E Belt Line Rd	Hampton Rd	Polk St	1.07	2	3	14	19	17,000
E Pleasant Run Rd	Hampton Rd	Chattey Rd	0.37	0	1	5	6	13,600
N Hampton Rd	Centre Park Blvd	Wintergreen Rd	0.61	0	3	9	12	16,300
Total			3.05	5	11	40	56	–

STUDY CORRIDORS

City of DeSoto Safety Action Plan



- Roads
- ▮ Study Area
- ▬ Study Corridor

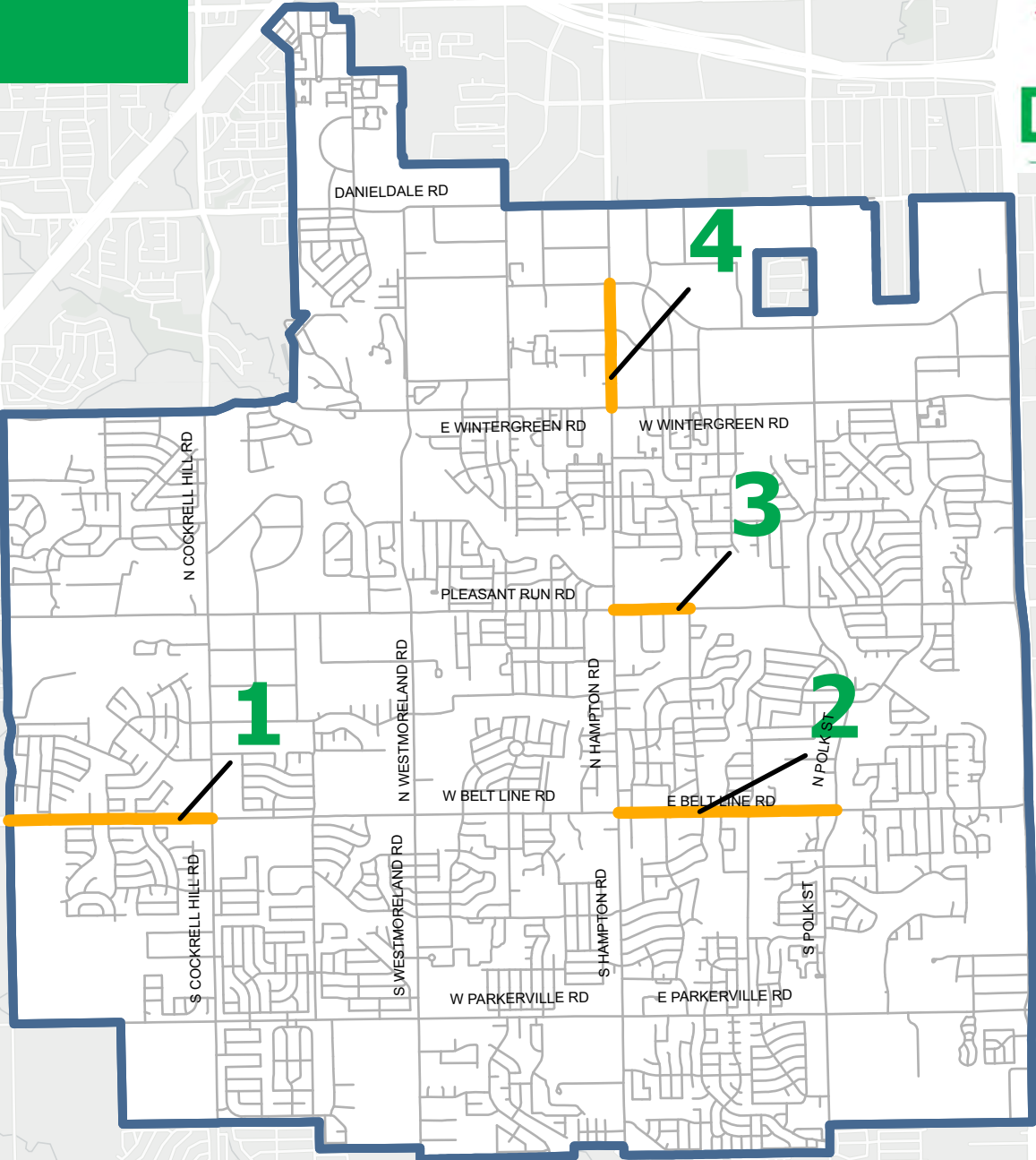


Exhibit 8. Study Corridors



City-Wide Recommendations

The following recommendations detail city-wide improvements at signalized intersections along all four study corridors.

→ Upgrade Traffic Signal Visibility

Traffic signal equipment throughout the City was outdated and missing enhanced visibility components. Retroreflective backplates should be installed at all signal heads to increase drivers' visibility in all weather and lighting conditions. This relatively inexpensive improvement will increase visibility for all drivers and help improve adherence to the traffic signal phases.

→ Increase Lighting at Intersections

Nearly all sections of the study corridors need more lighting along the roadway. Lighting at signalized intersections along the study corridors should be improved, as many intersections only provide lighting on one corner or none at all. It is recommended that lighting at each signalized intersection along the study corridors be improved, and a luminaire should be installed on each corner of the intersection. Increasing lighting at signalized intersections will increase visibility so pedestrians can use crosswalks safely and vehicles can move through the intersection without endangering other vehicles or pedestrians.

→ Enhance Pavement Markings

At each signalized intersection along the study corridors, pavement markings (i.e., stop bars, turn lane arrows, and crosswalks) have deteriorated and become faded. Pavement markings at all signalized intersections should be restriped or refreshed. All brick paver crosswalks should have enhanced longitudinal markings outlining the crosswalk, and all others should be replaced with high-visibility continental (or "ladder-style") markings. These improvements will significantly improve visibility for all vehicles in whatever lighting or weather condition, which will also help provide enhanced walkable spaces for pedestrians at the intersections.

→ Provide ADA Compliant Facilities

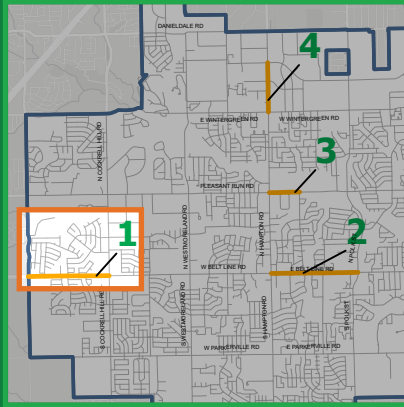
Throughout each corridor, pedestrian facilities at signalized intersections were either missing or had non-ADA-compliant curb ramps, push buttons, or pedestrian signal heads. This poses a barrier for many pedestrians or vulnerable road users who require this equipment to cross intersection crosswalks safely. It is recommended that all curb ramps, push buttons, or pedestrian signal heads be updated to adhere to the latest ADA requirements. This will improve safety for vulnerable road users and provide adequate pedestrian facilities for persons with disabilities.

→ Corridor Signal Timing

Based on field observations, many signalized intersections throughout the City experience moderate congestion during peak periods. Many vehicle platoons arrive at these intersections when the signal is red, which can lead to rear-end collisions. To reduce delays and enhance safety, it is recommended that the City implement coordinated signal timing along key arterial corridors, such as Hampton Road, Pleasant Run Road, and Belt Line Road. Additionally, existing vehicle and pedestrian yellow and all-red clearance intervals should be updated to meet current standards as part of this initiative.



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Corridor 1: W Belt Line Road, From Duncanville Road to Cockrell Hill Road

Context

The W Belt Line Road Corridor (Corridor 1) is a section of W Belt Line Road, also known as FM 1382, from N Duncanville Road to N Cockrell Hill Road that is 1.00 mile in length. Corridor 1 is located on the City's western edge and is surrounded by residential and commercial land uses. This section of W Belt Line Road is a 4-lane divided roadway with a volume of approximately 16,200 vehicles per day. Speed limits on this corridor are 45 miles per hour (MPH). Furthermore, this corridor has three signalized intersections.

Crash History

There were 126 total crashes on this section of W Belt Line Road between 2019-2023. Of these total crashes, 19 were KABs. Key takeaways for crash trends along Corridor 1 were the following:

77%

97 of the 126 total crashes were intersection-related (77%), which included 16 of the 19 KAB crashes (84%)

31%

The top manner of collision was 'Opposite Direction – One Straight – One Left Turn', which contributed to 40 of the 129 total crashes

18%

The top contributing factor of crashes was 'Failed to Yield Right of Way – Turning Left', which contributed to 23 of the 129 total crashes



Corridor Recommendations

W Belt Line Rd was observed to have edge lines denoting the edge of the travel way along the corridor. To enhance the presence of the edge lines and increase lane visibility, a 6-inch-wide edge line should be installed along the northern and southern outside lanes of both directions of the roadway.

It was noted that vehicles often speed through the corridor, especially with long distances between signalized intersections and vertical curve hills. To help drivers manage their speed along the long stretch of W Belt Line Rd, it is recommended to install a speed feedback sign at the following locations:

- ▶ 500 ft west of Sandy Creek Dr in the eastbound direction
- ▶ 1,000 ft west of Cockrell Hill Rd in the westbound direction

Intersection Recommendations

→ S Duncanville Road

It was noted that the pedestrian pushbutton in the southwest corner was not functioning correctly, and the “DON’T WALK” indication was not functioning on the northeast corner of the intersection. Additionally, the pedestrian signal timing clearance intervals should be evaluated to meet traffic engineering standards. It is recommended that the pedestrian signal equipment be repaired and the pedestrian signal timing clearances for each crossing be assessed in more detail.

→ Sandy Creek Drive

The intersection of Sandy Creek Dr is located near the bottom of a hill along E Belt Line Rd, and the sight distance for left-turning vehicles is limited. Implementing a positive offset left-turn for the eastbound and westbound approaches is recommended. Pulling the left-turn into the median further will help improve sight distance and safety for turning vehicles.

→ Laurel Springs Drive

The intersection of Laurel Springs Dr is located at the bottom of a hill along E Belt Line Rd, and the sight distance for left-turning vehicles is limited. Implementing a positive offset left-turn for the eastbound and westbound approaches is recommended. Pulling the left-turn into the median further will help improve sight distance and safety for turning vehicles.

→ N Cockrell Hill Road

Like the other intersections along E Belt Line Rd, implementing positive offset left-turns in the median at the intersection will improve sight distance for all drivers traveling along the study corridor.

Table 7 summarizes the suggested countermeasures and crash modification factors (CMF). **Exhibit 9** summarizes all recommendations and countermeasures along W Belt Line Road.

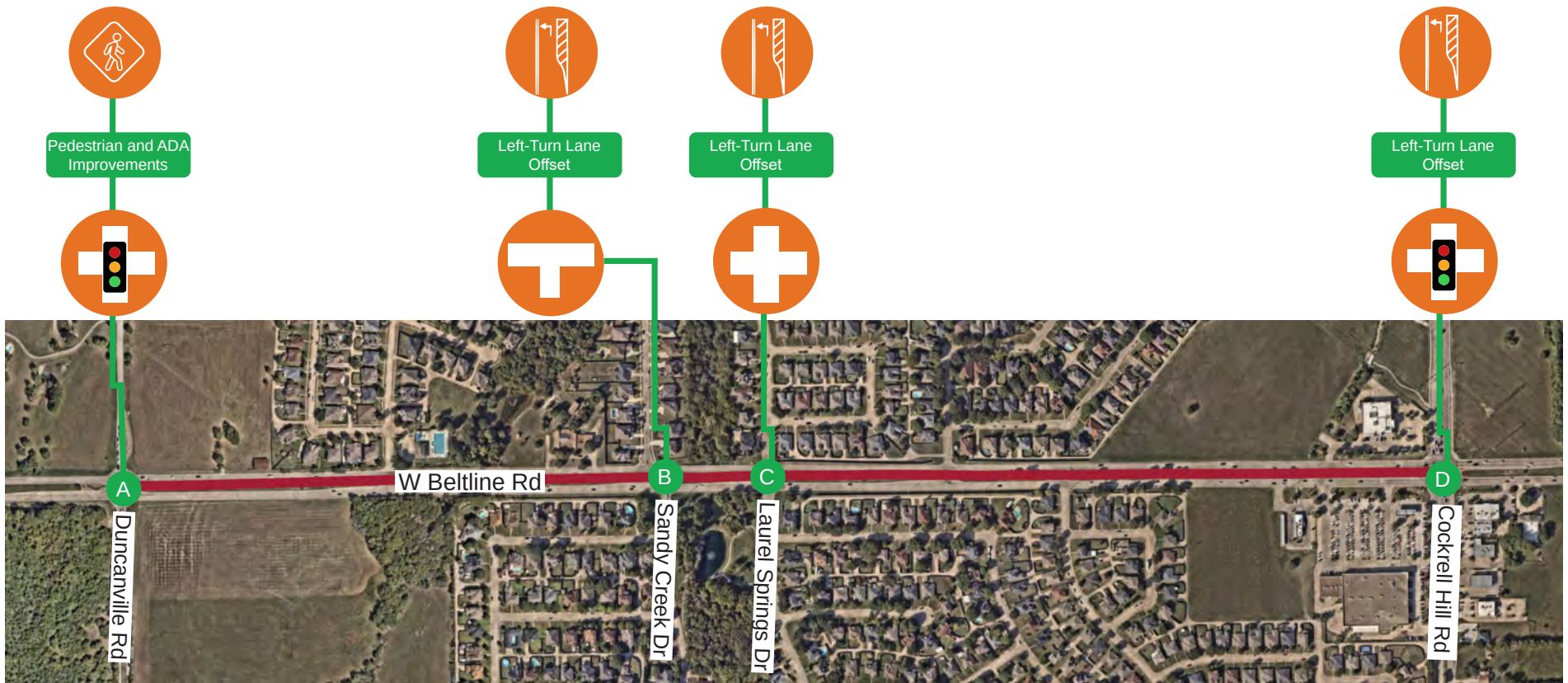
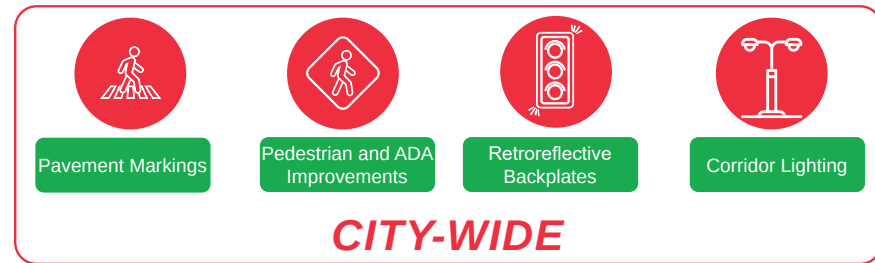
Table 7. Countermeasure Crash Modification Factors for W Belt Line Road

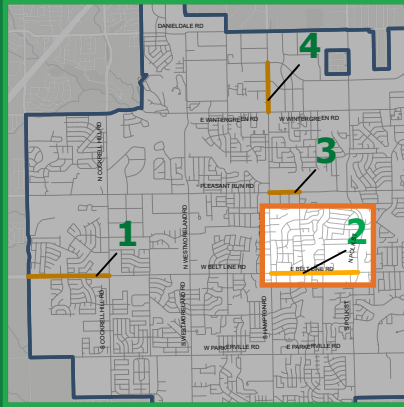
ID	LOCATION	RECOMMENDATION	CMF ID	COUNTERMEASURE	CMF
1.1	Corridor	Install a 6-Inch-Wide Edge Line	4737	Install Wider Edge Lines (4 in to 6 in)	0.635
1.2	Corridor	Install a Speed Feedback Sign	6886	Install dynamic speed feedback sign	0.93
1.A.1	S Duncanville Rd	Install pedestrian crosswalks, signal heads, push buttons, and ADA ramps	8967	Implement systemic signing and visibility improvements at signalized intersections	0.732
1.B.1	Sandy Creek Dr	Improve left-turn lane offset to create positive offset	6095	Improve left-turn lane offset to make the left-turn lanes with positive offset	0.662
1.C.1	Laurel Springs Dr	Improve left-turn lane offset to create positive offset	6095	Improve left-turn lane offset to make the left-turn lanes with positive offset	0.662
1.D.1	N Cockrell Hill Rd	Improve left-turn lane offset to create positive offset	6095	Improve left-turn lane offset to make the left-turn lanes with positive offset	0.662
C.1	City-Wide	Install intersection lighting	10993	Install intersection lighting	0.792
C.2	City-Wide	Install pedestrian crosswalks, signal heads, push buttons, and ADA curb ramps	8967	Implement systemic signing and visibility improvements at signalized intersections	0.732
C.3	City-Wide	Refresh pavement markings at intersections	NS01	Upgrade Intersection Pavement Markings	0.75
C.4	City-Wide	Install retroreflective backplates	1410	Add 3-inch yellow retroreflective sheeting to signal backplates	0.85



CORRIDOR 1: W BELTLINE RD - RECOMMENDATIONS

From Duncanville Rd to Cockrell Hill Rd





Corridor 2: E Belt Line Road, From N Hampton Road to Polk Street

Context

Corridor 2 is the segment of E Belt Line Road from N Hampton Road to Polk Street. The corridor begins as a four-lane undivided roadway and becomes a 4-lane divided roadway with a volume of 17,000 vehicles per day. Corridor 2 is approximately 1.07 miles in the southeastern area of DeSoto. Like Corridor 1, there is a variety of land use surrounding the corridor, most of which is residential and commercial. The speed limit throughout the corridor is 35 MPH, and there is a 20 MPH school zone towards the middle of the corridor.

Crash History

There were 127 total crashes on this section of E Belt Line Road between 2019-2023. Of these total crashes, 19 were KABs. Key takeaways for crash trends exhibited by Corridor 2 were the following:

69%

87 of the 127 total crashes were intersection-related (69%), which included 14 of the 19 KAB crashes (74%)

20%

The top manner of collision was 'Same Direction – One Straight – One Stopped,' which contributed to 26 of the 127 total crashes

12%

The top contributing factor of crashes in DeSoto was 'Failed to Yield Right of Way – Turning Left,' which contributed to 15 of the 127 total crashes



Corridor Recommendations

It was observed that there is currently a two-way left-turn lane running from N Hampton Rd to approximately 750 ft west of Polk St along E Belt Line Rd. E Belt Line Rd west of N Hampton Rd is a six-lane section and has a raised median and east of Polk St it is a four-lane section with a raised median. Installing a raised median from N Hampton Rd to 750 ft west of Polk St is recommended to complete the median along the study corridor. As part of this, it is recommended that median openings be provided at all residential streets to offer controlled access along E Belt Line Rd. The raised median will help reduce turning conflicts and lane departures throughout the corridor, thus reducing the locations of crashes to just controlled median openings.

Access management measures, like driveway consolidations, should be implemented along the corridor based on the frequency and spacing of existing driveways along the E Belt Line Road. It is recommended that driveways be consolidated near signalized intersections, prioritizing closing the driveways closest to intersections where multiple driveways at an approach are present. Consolidating driveways near intersections will help increase access spacing, providing sufficient queueing space for vehicles and safer conditions for vehicles exiting at these driveways.

Intersection Recommendations

→ N Hampton Road

It was observed that there was no median divide between lanes of travel at the intersection on the southbound and westbound approaches. 250-foot-long medians should be installed along these approaches to reduce turn conflicts or lane departures at the intersection.

→ Lyndalyn Avenue

It was observed that the crosswalk at the Lyndalyn Avenue intersection is faded. It used to provide a crossing for students before the school was converted to the DeSoto ISD Language and Conference Center. It spans five lanes of a high-volume roadway and is not utilized frequently, therefore, it is recommended to remove the crosswalk. Pedestrians can safely cross E Belt Line Road at the N Hampton Road intersection, less than 500 feet to the west, where crosswalks are provided.

It should be noted that the proposed median along E Belt Line Rd just east of N Hampton Rd would create the opportunity to provide an eastbound left-turn lane at Lyndalyn Ave; however, the offset northbound approach at Lyndalyn Ave would be limited to right-in/right-out only operations.

→ N Parks Drive

An existing sign in the intersection's southwest corner obstructs drivers' sight distance when looking west along E Belt Line Road. It is recommended that the sign be relocated or removed to increase sight distance and improve safety.

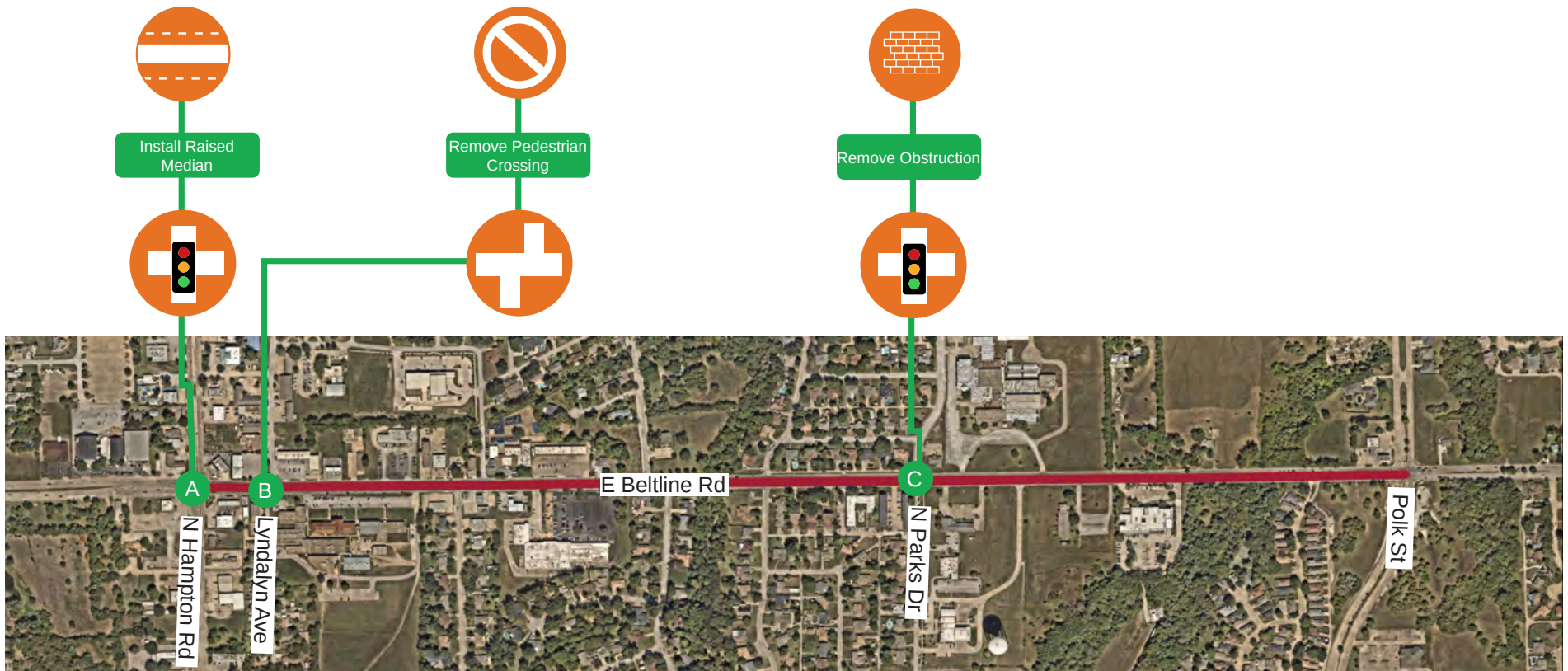
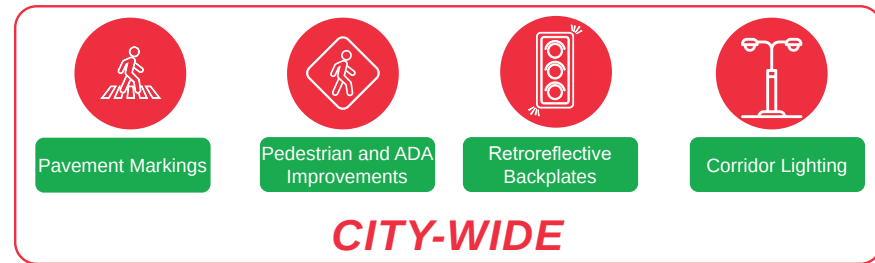
Table 8 identifies the CMFs for all discussed recommendations for E Belt Line Road while **Exhibit 10** summarizes all recommendations and countermeasures along E Belt Line Road.

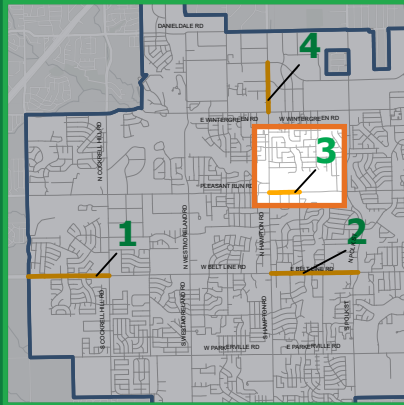
Table 8. Countermeasure Crash Modification Factors for E Belt Line Road

ID	LOCATION	RECOMMENDATION	CMF ID	COUNTERMEASURE	CMF
2.1	Corridor	Improve left-turn lane offset to create positive offset	6095	Improve left-turn lane offset to make the left-turn lanes with positive offset	0.662
2.2	Corridor	Consolidate driveways	442	Closure or complete relocation of all driveways from functional area of intersection	0.93
2.3	Corridor	Install raised median	2219	Install raised median	0.29
2.A.1	N Hampton Rd	Install raised median	2219	Install raised median	0.29
2.C.1	N Parks Dr	Remove obstruction	1024	Remove or Relocate Fixed Objects Outside of Clear Zone	0.62
C.1	City-Wide	Install intersection lighting	10993	Install intersection lighting	0.792
C.2	City-Wide	Install pedestrian crosswalks, signal heads, push buttons, and ADA curb ramps	8967	Implement systemic signing and visibility improvements at signalized intersections	0.732
C.3	City-Wide	Refresh pavement markings at intersections	NS01	Upgrade Intersection Pavement Markings	0.75
C.4	City-Wide	Install retroreflective backplates	1410	Add 3-inch yellow retroreflective sheeting to signal backplates	0.85

CORRIDOR 2: E BELTLINE RD - RECOMMENDATIONS

From Hampton Rd to Polk St





Corridor 3: E Pleasant Run Road, From N Hampton Road to Chattey Road

Context

Corridor 3 is the E Pleasant Run Road segment from N Hampton Road to N Chattey Road. It begins as a four-lane undivided roadway and becomes a four-lane divided roadway with a daily traffic volume of 13,600 vehicles. Corridor 3 is approximately 0.37 miles long and located in central DeSoto. Like Corridor 2, various land uses surround the corridor, most of which are residential and commercial. The speed limit throughout the corridor is 30 MPH.

Crash History

There were 79 crashes on this section of E Pleasant Run Road between 2019-2023. Of these total crashes, 6 were KABs. Key takeaways for crash trends exhibited by Corridor 3 were the following:

63%

50 of the 79 total crashes were intersection-related (63%), which included 4 of the 6 KAB crashes (67%)

24%

The top manner of collision was 'Opposite Direction – One Straight – One Left Turn,' which contributed to 19 of the 79 total crashes

10%

The top contributing factor of crashes in DeSoto was 'Failed to Yield Right of Way – Turning Left,' which contributed to 8 of the 79 total crashes

Corridor Recommendations

Several issues related to sight distance and multiple median openings exist along the corridor, which create numerous conflict points for vehicles at driveways. Full-access median openings are at Tom Thumb, Whataburger, and the Hilltop Circle/DeSoto Town Center driveways. These openings are all within 750 feet of the N Hampton Rd signalized intersection. To improve safety and traffic flow, consolidating the median openings and installing hooded left-turn lanes for the Whataburger and the easternmost Tom Thumb driveway are recommended.



It was observed that the corridor had sidewalk gaps, especially on the south side of E Pleasant Run Rd and parts of the north side near N Hampton Rd. Additionally, worn grass paths show that pedestrians use this area, and a sidewalk would provide safer conditions along the corridor. It is recommended to construct a sidewalk between the following locations:

- ▶ From Fuzzy's driveway to Chattey Rd on the south side
- ▶ From the Whataburger driveway to N Hampton Rd intersection on the north side

Intersection Recommendations

→ N Hampton Road

The existing median noses extend into the crosswalk and impede a clear path for pedestrians to use the crosswalk. To provide ADA-compliant crosswalks, it is recommended that the median nose be pulled back to clear the crosswalk path and restripe it with longitudinal high-visibility pavement markings. The signal is outdated and does not provide flashing yellow arrows, but only "Left Turn Yield on Green." It is recommended that the signal heads and associated signage be upgraded to provide flashing yellow arrows that are much clearer and safer for turning vehicles at the intersection.

→ DeSoto Town Center/Hilltop Circle

It was observed that vehicles traveling northbound and southbound to enter E Pleasant Run Road do not have adequate sight distance. This limited sight distance poses a safety issue for turning vehicles. Along with the corridor recommendation to limit access between N Hampton Road and Hilltop Circle, installing a signal at the intersection is recommended. In addition, the northbound approach should be restriped to provide two lanes with high-visibility crosswalks and stop bars. Also, ADA-compliant curb ramps should be constructed, and pedestrian signal heads and push buttons should be installed, like other signalized intersection improvements.

Trimming the bushes and vegetation on the north side of the road near DeSoto Town Center is recommended to improve sight distance at the intersection. Installing a traffic signal will create a safe crossing point for pedestrians traveling from the DeSoto Town Center to Tom Thumb and other retail areas across E Pleasant Run Road. Additionally, it will improve safe turning movements for vehicles approaching from the north and south.

→ N Chattey Road

There are sidewalks on both the north and south sides of the road, but only east of Chattey Road. However, there is no crosswalk connecting those sidewalks besides at N Hampton Road (about ½ mile west) and Polk Street (about ½ mile east). Chattey Road is the approximate midpoint for providing a pedestrian crossing at a signalized intersection. Therefore, installing a high-visibility north-south crosswalk along the westbound approach is recommended. When installed, the existing traffic signal must be modified to provide accessible pedestrian signals, pushbutton assemblies, and ADA-compliant curb ramps. Additionally, the City should consider implementing a leading pedestrian interval with the new pedestrian clearance timing.

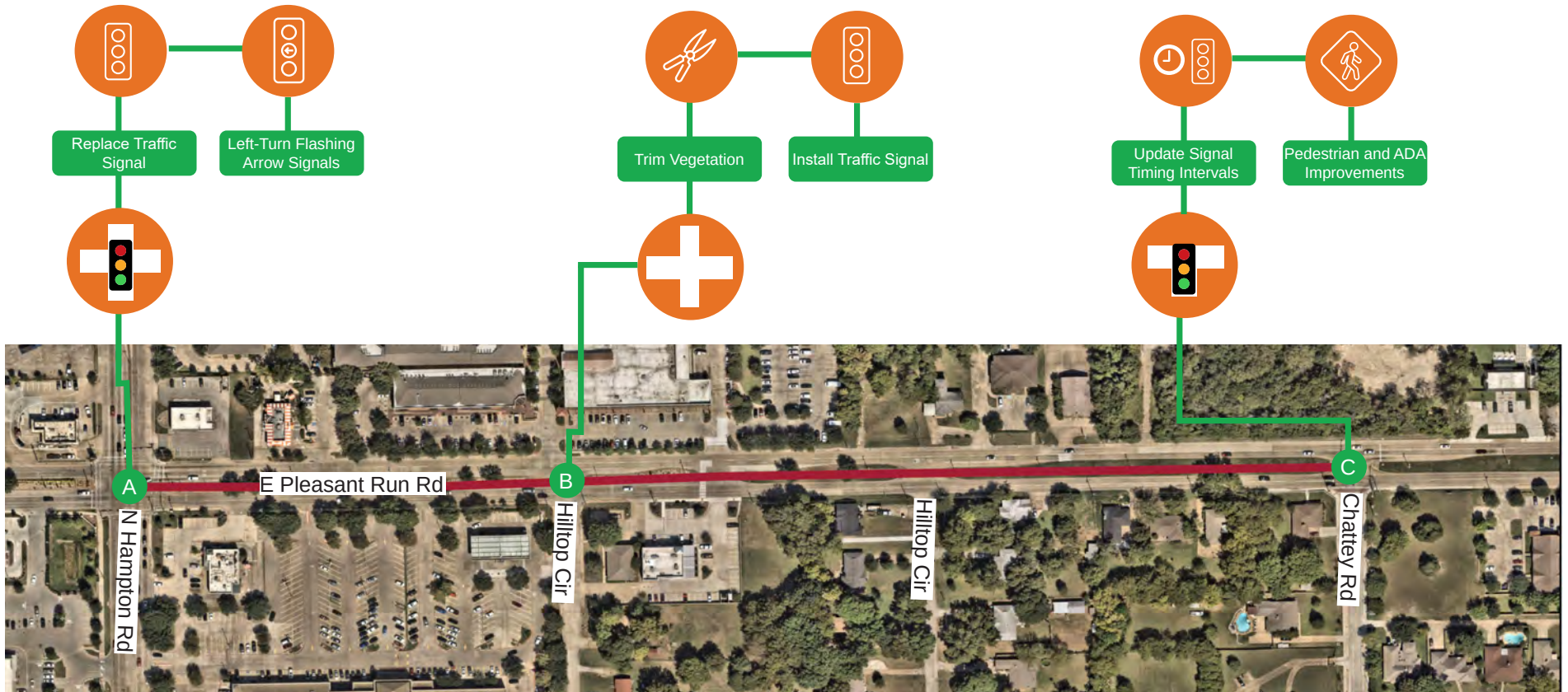
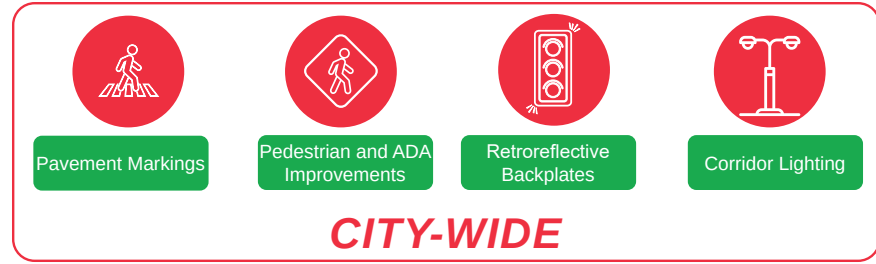
All recommendations are summarized in **Exhibit 11** and their CMFs are listed in **Table 9** for E Pleasant Run Road.

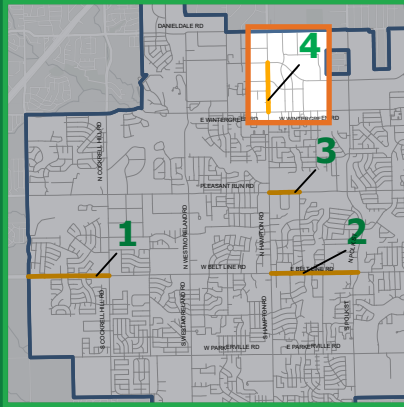
Table 9. Countermeasure Crash Modification Factors for E Pleasant Run Road

ID	LOCATION	RECOMMENDATION	CMF ID	COUNTERMEASURE	CMF
3.1	Corridor	Install offset hooded left-turns	6095	Improve left-turn lane offset to make the left-turn lanes with positive offset	0.662
3.2	Corridor	Install sidewalk and curb ramps	11246	Install sidewalk	0.598
3.A.1	N Hampton Rd	Replace traffic signals	320	Install a traffic signal	0.33
3.A.2	N Hampton Rd	Install left-turn flashing yellow arrow signals and supplemental traffic signs	7730	Install left-turn flashing yellow arrow signals and supplemental traffic signs	0.857
3.B.1	Hilltop Cir	Install a traffic signal with dedicated turn lanes at all approaches	320	Install a traffic signal	0.33
3.B.2	Hilltop Cir	Trim vegetation to improve sight distance	1024	Remove or Relocate Fixed Objects Outside of Clear Zone	0.62
3.C.1	N Chattey Rd	Verify and update yellow and all red clearance intervals	4203	Increase yellow interval and add all red interval	0.99
3.C.2	N Chattey Rd	Install pedestrian crosswalks, signal heads, push buttons, and ADA ramps	8967	Implement systemic signing and visibility improvements at signalized intersections	0.732
C.1	City-Wide	Install intersection lighting	10993	Install intersection lighting	0.792
C.2	City-Wide	Install pedestrian crosswalks, signal heads, push buttons, and ADA curb ramps	8967	Implement systemic signing and visibility improvements at signalized intersections	0.732
C.3	City-Wide	Refresh pavement markings at intersections	NS01	Upgrade Intersection Pavement Markings	0.75
C.4	City-Wide	Install retroreflective backplates	1410	Add 3-inch yellow retroreflective sheeting to signal backplates	0.85

CORRIDOR 3: E PLEASANT RUN RD - RECOMMENDATIONS

From N Hampton Rd to Chattey Rd





Corridor 4: N Hampton Road, From E Centre Park Boulevard to E Wintergreen Road

Context

Corridor 4 is the N Hampton Road segment from E Centre Park Boulevard to E Wintergreen Road. It begins as a six-lane divided roadway with a daily traffic volume of 16,300 vehicles. Corridor 4 is approximately 0.61 miles long and is in north DeSoto. Along the corridor, there is a variety of land uses, primarily commercial. The speed limit throughout the corridor is 40 MPH.

Crash History

There were 56 crashes on this section of E Pleasant Run Road between 2019-2023. Of these total crashes, 12 were KABs. Key takeaways for crash trends exhibited by Corridor 4 were the following:

64%

36 of the 56 total crashes were intersection-related (64%), which included 7 of the 12 KAB crashes (58%)

21%

The top manner of collision was 'Same Direction – One Straight – One Stopped,' which contributed to 12 of the 56 total crashes

13%

The top contributing factor of crashes in DeSoto was 'Driver Inattention,' which contributed to 7 of the 56 total crashes



Corridor Recommendations

Many sections of the sidewalk throughout the corridor were not constructed or are in disrepair—not providing a safe refuge for pedestrians. It is recommended that all missing sections of sidewalk along N Hampton Road be completed and constructed. In addition, curb ramps at driveways and intersections should be provided for ADA accessibility.

Driving over the posted speed limit of 40 mph is common along the corridor. N Hampton Road, being six lanes wide with a median, makes it easy for drivers to exceed the speed limit. To help mitigate this issue, it is recommended to install speed feedback signs at the following locations:

- ▶ 100 feet north of Seahawk Drive in the northbound direction
- ▶ 100 feet south of Executive Way in the southbound direction

Intersection Recommendations

→ E Centre Park Boulevard

It was noted that the median noses on each approach extend into or beyond the existing crosswalks. All medians should be pulled back to prevent obstructions within the pedestrian crosswalk. Additionally, the existing signal equipment needs to be updated, and it is advised that it be updated to include flashing yellow arrows for each left-turn movement. Furthermore, the existing curb ramps should be reconstructed to be ADA-compliant, providing safe passage for vulnerable road users and persons with disabilities.

→ Seahawk Drive

This intersection serves a large portion of the area's development and the school. Due to the crash history and daily volume of this intersection, it is recommended that a traffic signal be installed to mitigate turning conflicts and provide a safe exit onto N Hampton Road.

→ E Wintergreen Road

Many existing driveways are situated too close to the intersection. It is recommended that the driveways near the intersection be consolidated, prioritizing closing those closest to the intersection. This consolidation will help reduce vehicle conflicts and create safer conditions for vehicles entering and exiting N Hampton Road.

All recommendations are summarized in **Exhibit 12** and their CMFs are listed in **Table 10** for N Hampton Road.

Table 10. Countermeasure Crash Modification Factors for N Hampton Road

ID	LOCATION	RECOMMENDATION	CMF ID	COUNTERMEASURE	CMF
4.1	Corridor	Install sidewalk and curb ramps	11246	Install sidewalk	0.598
4.2	Corridor	Install speed feedback signs	6886	Install dynamic speed feedback sign	0.93
4.A.1	E Centre Park Blvd	Install left-turn flashing yellow arrows signals and supplemental traffic signs	7730	Install left-turn flashing yellow arrow signals and supplemental traffic signs	0.857
4.B.1	Seahawk Dr	Install a traffic signal with dedicated turn lanes at all approaches	320	Install a traffic signal	0.33
4.C.1	E Wintergreen Rd	Consolidate driveways	442	Closure or complete relocation of all driveways from functional area of intersection	0.93
C.1	City-Wide	Install intersection lighting	10993	Install intersection lighting	0.792
C.2	City-Wide	Install pedestrian crosswalks, signal heads, push buttons, and ADA curb ramps	8967	Implement systemic signing and visibility improvements at signalized intersections	0.732
C.3	City-Wide	Refresh pavement markings at intersections	NS01	Upgrade Intersection Pavement Markings	0.75
C.4	City-Wide	Install retroreflective backplates	1410	Add 3-inch yellow retroreflective sheeting to signal backplates	0.85

CORRIDOR 4: N HAMPTON RD - RECOMMENDATIONS

From E Centre Park Blvd to E Wintergreen Rd



Dynamic Speed Signs

Install Sidewalks and Curb Ramps

CORRIDOR-WIDE



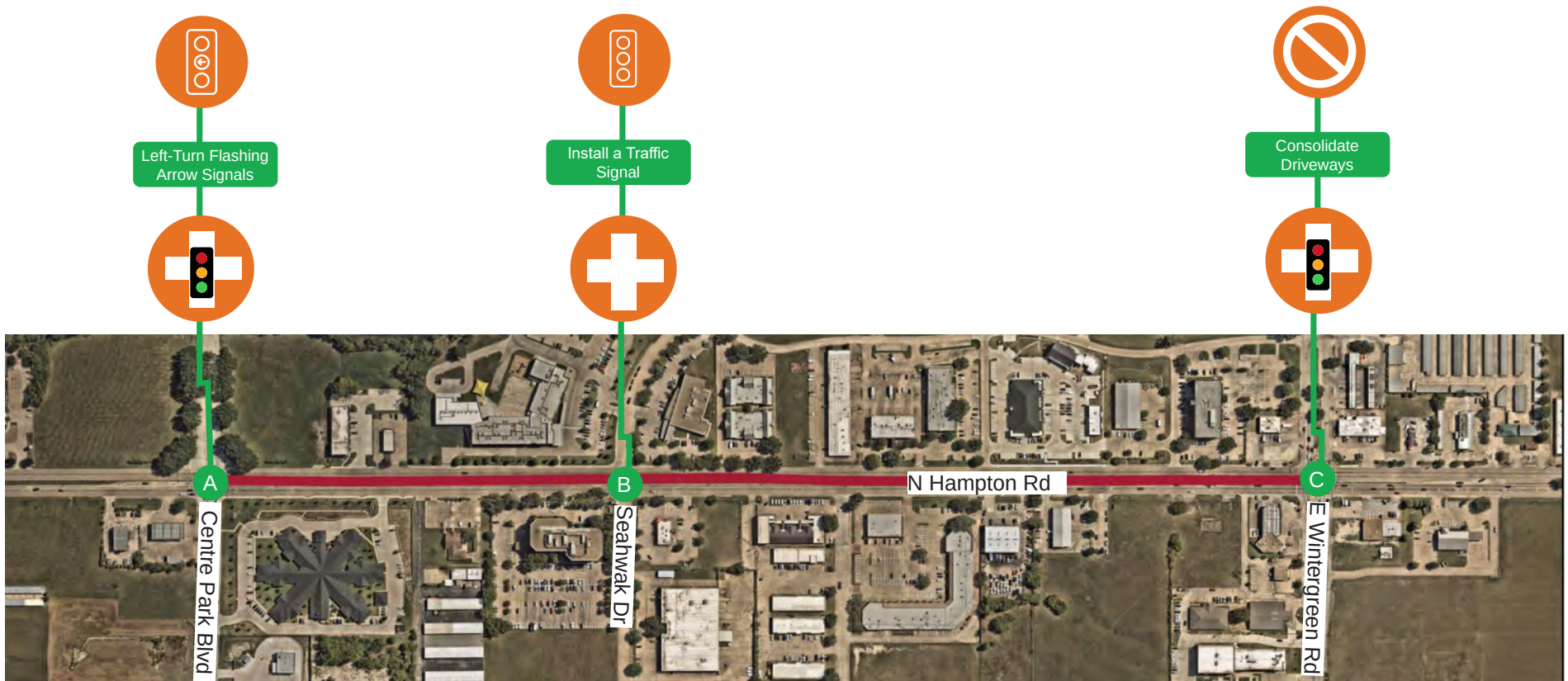
Pavement Markings

Pedestrian and ADA Improvements

Retroreflective Backplates

Corridor Lighting

CITY-WIDE



SYSTEMIC COUNTERMEASURE TOOLBOX

A countermeasure toolbox is a comprehensive collection of strategies and interventions designed to address specific traffic safety issues and challenges. It provides transportation professionals with various options and resources to effectively mitigate risks, improve safety, and enhance the overall performance of roadways and transportation systems.

The following table details systemic countermeasures that can be implemented in all areas of the City to improve safety, not limited to previous recommendations and study corridors. DeSoto’s systemic countermeasure toolbox is provided with each countermeasure and associated crash modification factor categorized by safety emphasis area in **Table 11**. To lessen the severity of crashes, priority should be given to roads along the HIN and in areas with disadvantaged populations.



Table 11. Systemic Countermeasure Toolbox

SAFETY EMPHASIS AREAS	RAISED MEDIAN	CORRIDOR ACCESS MANAGEMENT	IMPROVE SIGNING AND VISIBILITY AT SIGNALS	RETROREFLECTIVE BACKPLATES	FLASHING YELLOW ARROW	COORDINATED SIGNAL TIMING	LANE DESIGNATION MARKINGS AND SIGNS	WIDE EDGE LINES	HIGH CONTRAST LANE MARKINGS	IMPLEMENT SYSTEMIC SIGNALING AND MARKING IMPROVEMENTS	CHANGE RIGHT-TURN LANE GEOMETRY
CMF	0.29	0.93	0.732	0.85	0.975	–	0.75	0.635	0.75	0.734	0.558
Roadway and Lane Departure	•						•	•	•		
Speed-Related	•					•					•
Intersection-Related		•	•	•	•	•	•			•	•
Vulnerable Road Users	•		•			•					•
Distracted Driving			•	•			•	•	•	•	
Impaired Driving	•		•	•			•	•	•		
Unrestrained Persons	•					•					•

ACCESS MANAGEMENT

Every intersection, whether signalized or to an unpaved driveway, has the potential for conflicts between vehicles and vulnerable road users. Therefore, thoughtful access management is crucial for creating a safer transportation network. The following section recommends several countermeasures that aim to provide systemic improvements to address access management concerns in DeSoto.

Raised Median

A raised median is a physical barrier or divider separating opposing traffic lanes on a roadway. It is most used in urban and suburban areas to enhance safety and traffic flow by preventing vehicles from crossing over into opposing lanes or making certain left-turn movements. Installing a raised median has a CMF of 0.29 for all crash types and severities (CMF ID: 2219). **Figure 14** provides an example of a raised median.

Applicable Safety Emphasis Areas:

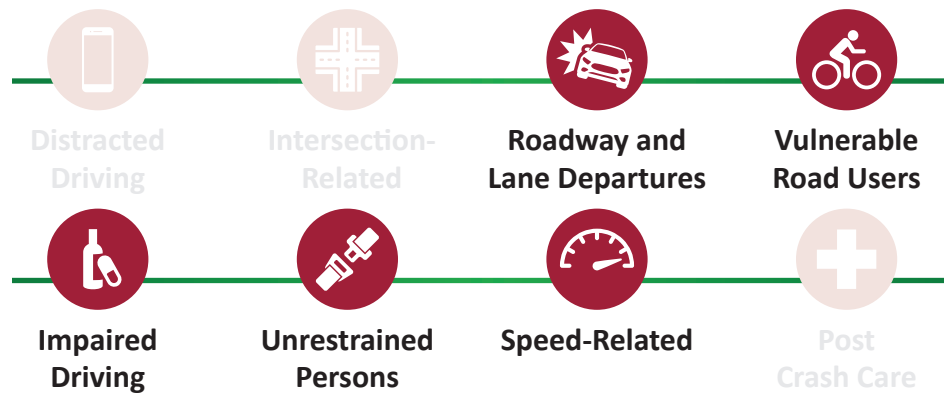


Figure 14. Raised Median Example



Source: FHWA, City of Charlotte, NC



Corridor Access Management

Access management pertains to the planning, implementation, and regulation of entry and exit locations along a road, encompassing intersections with other roads and driveways serving nearby properties. Thoughtful management of access along a corridor can improve safety for all transportation modes, promote walking and cycling, and alleviate traffic congestion and delays. Closure or relocation of driveways from the functional area of the intersection has a CMF of 0.93 for all crash types and severities (CMF ID: 442). **Figure 15** provides an example of corridor access management elements.

Applicable Safety Emphasis Areas:

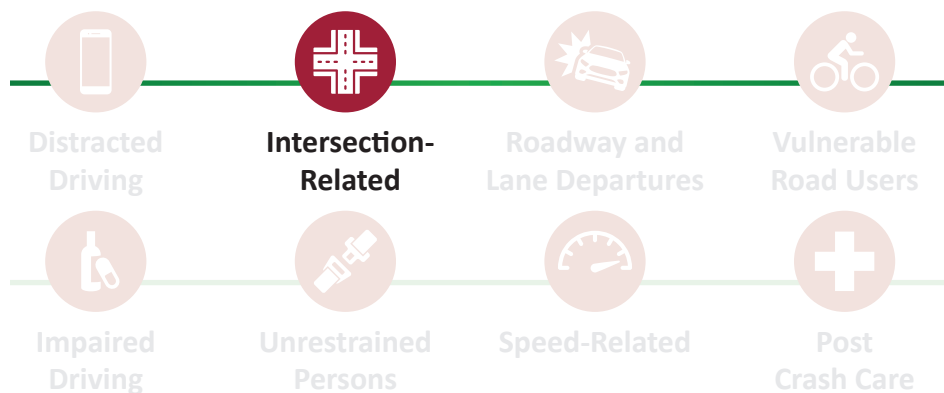
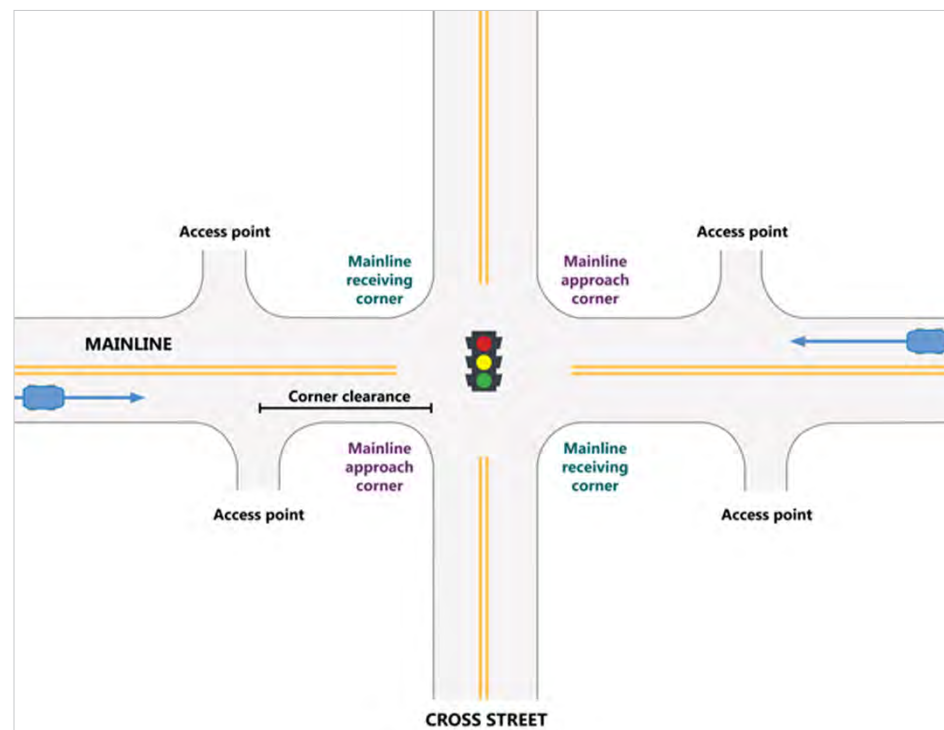


Figure 15. Corridor Access Management Example



Source: FHWA

IMPROVED SIGNALS

Traffic signals are often implemented for operational reasons, such as improving traffic flow, but can create new safety issues, such as an increased rate of red-light running. To remedy the safety issues that may develop from traffic signals and enhance their effectiveness, several countermeasures have been recommended. Although most of the suggested countermeasures have an assigned CMF value, the countermeasure of improved signals still needs sufficient research to warrant a CMF value.

Improve Signing and Visibility at Signals

The minimum improvements to the equipment and facilities at signalized intersections should include high-contrast crosswalks, pedestrian signal heads and push buttons, and ADA-compliant curb ramps. When constructed, pedestrians and other vulnerable road users are provided adequate facilities to make safe crossings, and motorists are alerted to dedicated crossing areas. Installing a high-visibility crosswalk and pedestrian signals has a CMF of 0.732 for vehicle and pedestrian crashes for all severities (CMF ID: 8967). **Figure 16** provides an example of a high-contrast crosswalk with a pedestrian signal head and push buttons.

Applicable Safety Emphasis Areas:

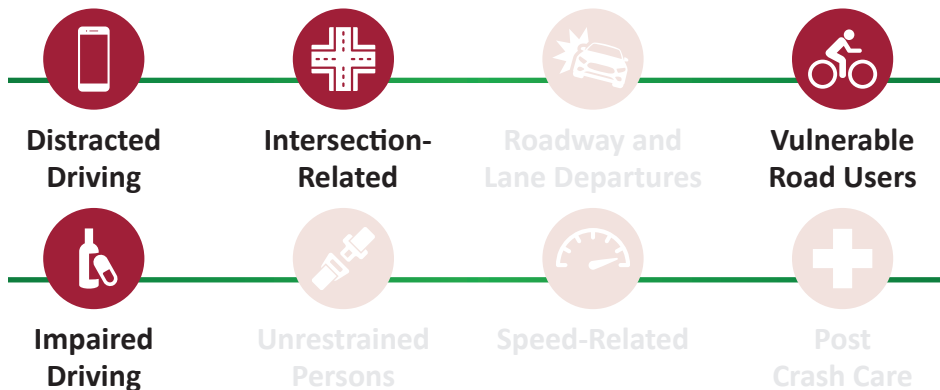


Figure 16. Crosswalk and Pedestrian Crossing Example



Source: pedbikeimages.org/ Greg Griffin, AICP



Retroreflective Backplates

A retroreflective backplate is made by framing a signal head with a 1-to-3-inch yellow retroreflective border. It improves the visibility of the illuminated face of the signal by introducing a controlled-contrast background. Retroreflective backplates are also more visible and conspicuous in both daytime and nighttime conditions. Installing retroreflective backplates has a CMF of 0.85 for all crash types and severities (CMF ID: 1410). **Figure 17** provides an example of a retroreflective backplate installed on a signal head.

Applicable Safety Emphasis Areas:

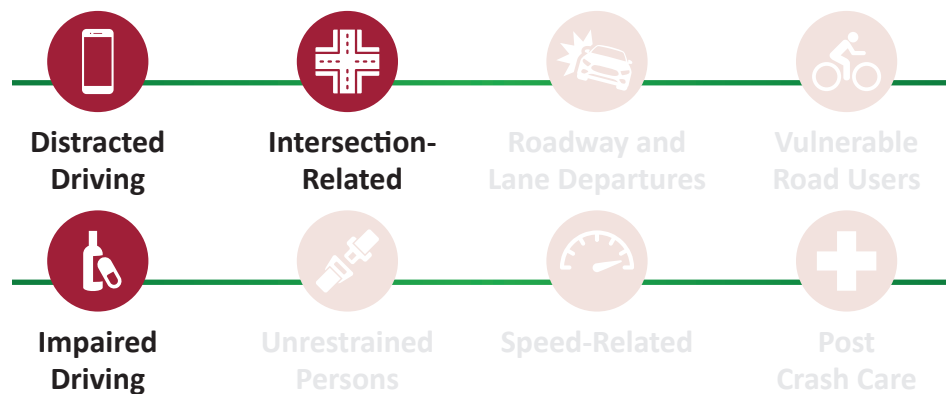
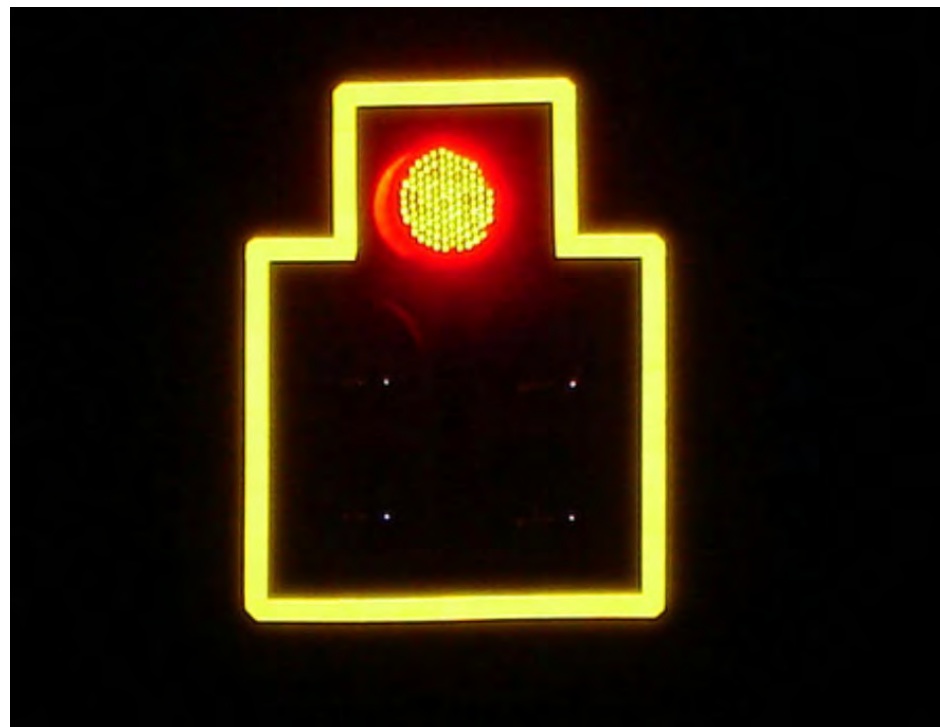


Figure 17. Retroreflective Backplate Example



Source: FHWA

Flashing Yellow Arrow

A flashing yellow arrow (FYA) indicates that drivers can turn left but should yield to pedestrians and oncoming traffic during a permissive circular green. This countermeasure is a national standard adopted by the FHWA to increase intersection safety. Adding an FYA is meant to decrease the number of left-turn crashes, especially those involving crashes between vehicles turning left and those going straight. Installing an FYA has a CMF of 0.975 (CMF ID: 7729). **Figure 18** shows an example of an FYA installed at an intersection.

Applicable Safety Emphasis Areas:

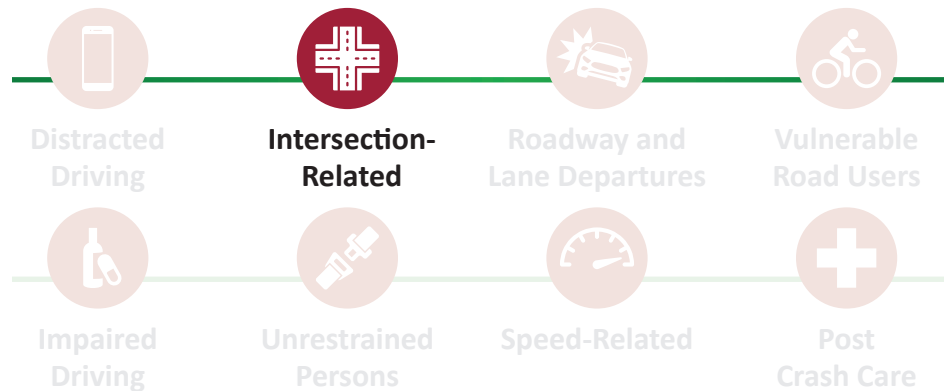


Figure 18. Flashing Yellow Arrow Example



Source: mntransportationresearch.org



Coordinated Signal Timing

Coordinating signal timing phases can synchronize traffic movements and manage traffic speed on corridors where uninterrupted flow is wanted. Although coordinated signals are traditionally used to improve traffic flow and reduce delays during peak hours, coordinated signals can help create a pedestrian and bicyclist-friendly environment by optimizing slow speeds. This type of timing is commonly applied on corridors where intersections are closely spaced, typically 0.25 miles or less, and “platooning” (when groups of vehicles travel together) is desired. While this countermeasure can benefit drivers and other roadway users, there has not been enough research to determine its crash modification factor.

Applicable Safety Emphasis Areas:

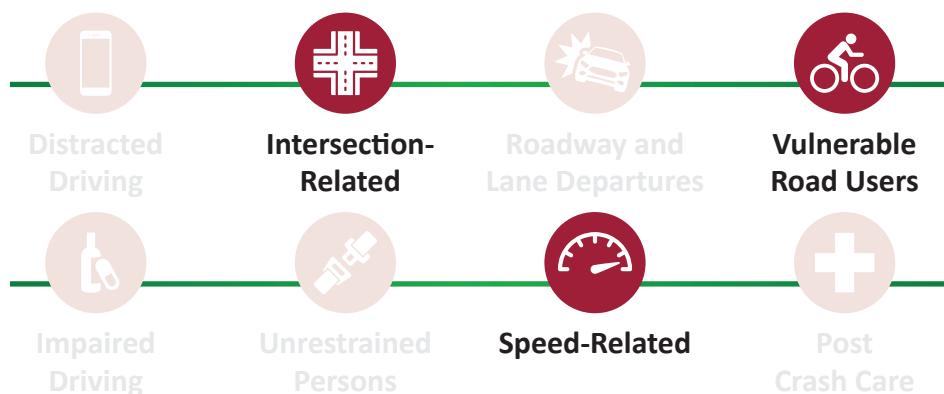
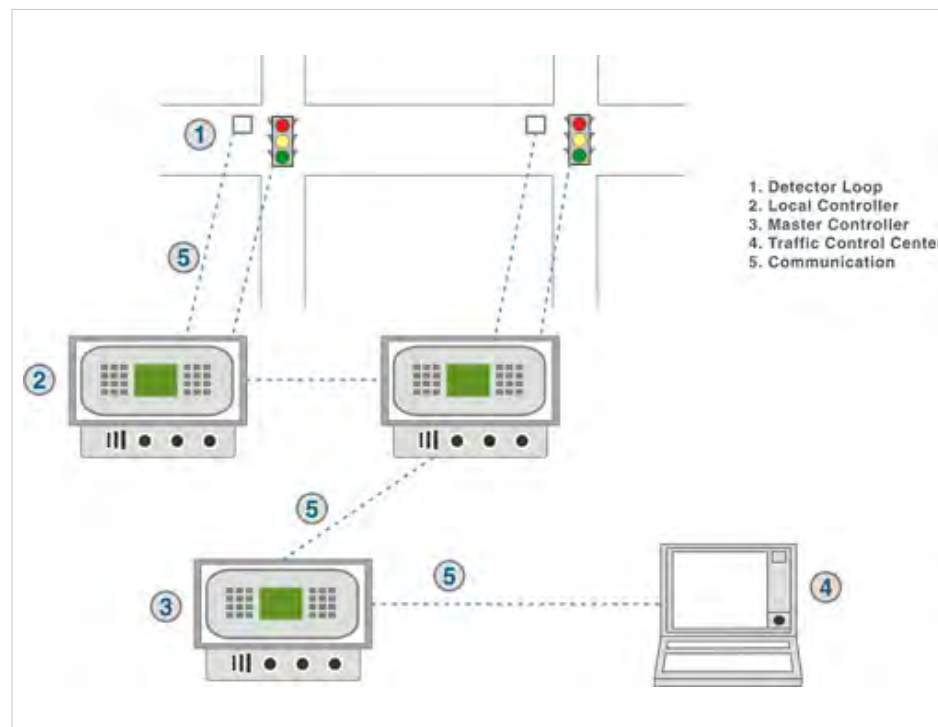


Figure 19. Coordinated Signal Timing Process Example



Source: FHWA

IMPROVED STRIPING

Although roadway striping can be easily overlooked, roadway striping and signage are pivotal parts of safe roadway environments for all. Striping and signage denote lanes, turning signals, pedestrian facilities, and stop locations; all essential information drivers should know. When roadway markings are not clearly visible to drivers, it can lead to confusion and crashes; therefore, countermeasures have been recommended to improve signage and marking practices in DeSoto.

Lane Designation Markings and Signs

Pavement markings are painted or applied symbols, lines, and patterns on road surfaces to convey traffic regulations, guidance, and warnings to drivers. They enhance safety by providing clear visual cues for lane delineation, intersection control, and other traffic management purposes. Pavement markings help reduce confusion, improve traffic flow, and minimize the risk of crashes by assisting drivers in navigating roadways effectively and safely. Upgrading pavement markings has a CMF of 0.75 for all crash types and severities (CMF ID: NS01). **Figure 20** provides an example of pavement markings for lane designation.

Applicable Safety Emphasis Areas:

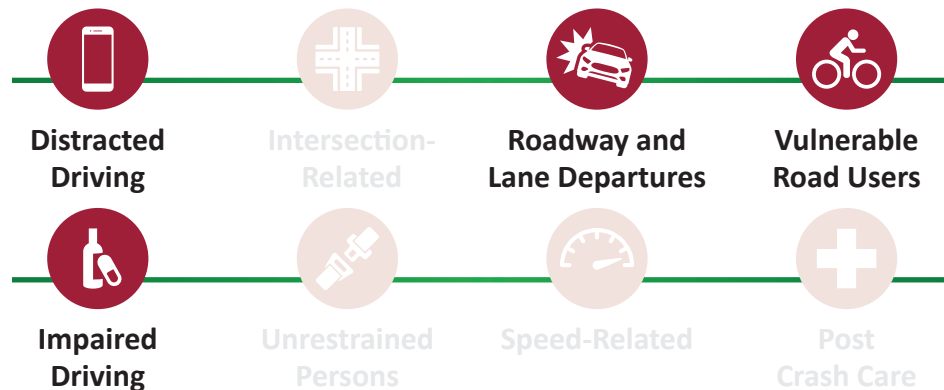
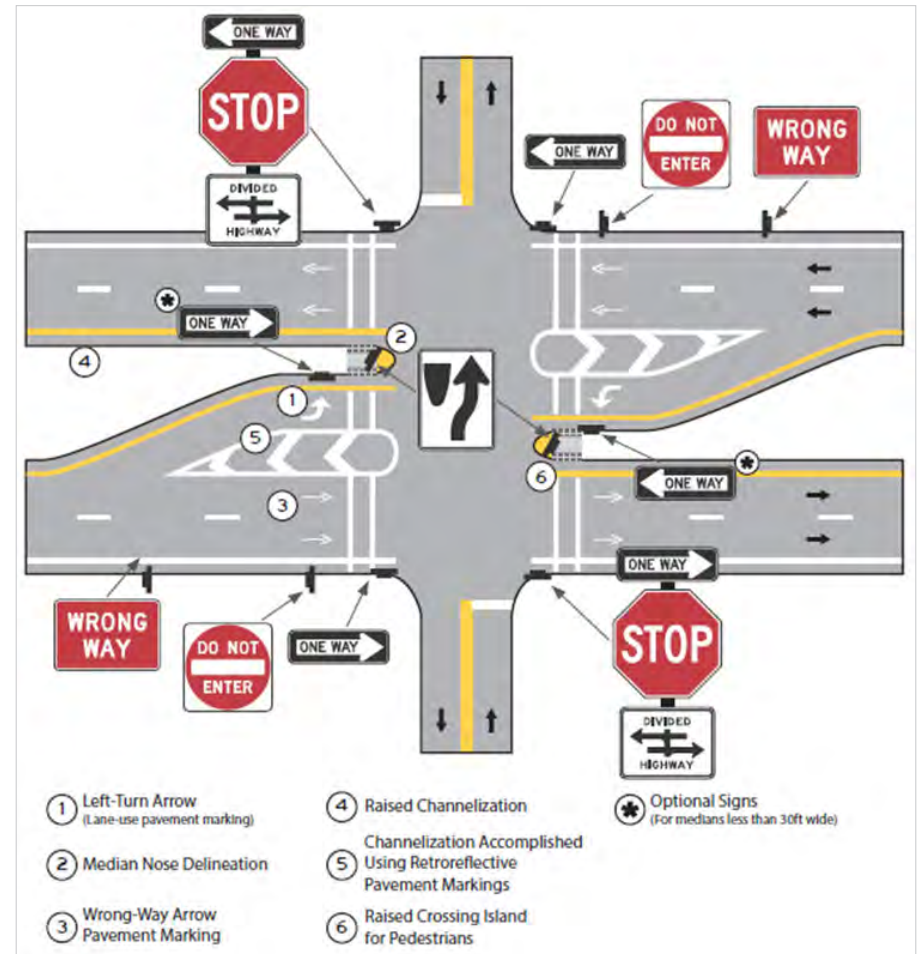


Figure 20. Lane Designation Markings Example



Source: FHWA



Wide Edge Lines

Edge lines are the pavement markings at the edge of travel lanes and are designed to help drivers clearly identify the road alignment ahead. Edge lines are considered “wider” when the marking width is increased from the minimum normal line width of 4 inches to the maximum normal width of 6 inches. Wider edge lines enhance the visibility of travel lane boundaries compared to traditional edge lines. This has a CMF of 0.635 for all crash types and for K, A, B, or C crash severities (CMF ID: 4737).

Figure 21 provides an example of a wide edge line.

Applicable Safety Emphasis Areas:

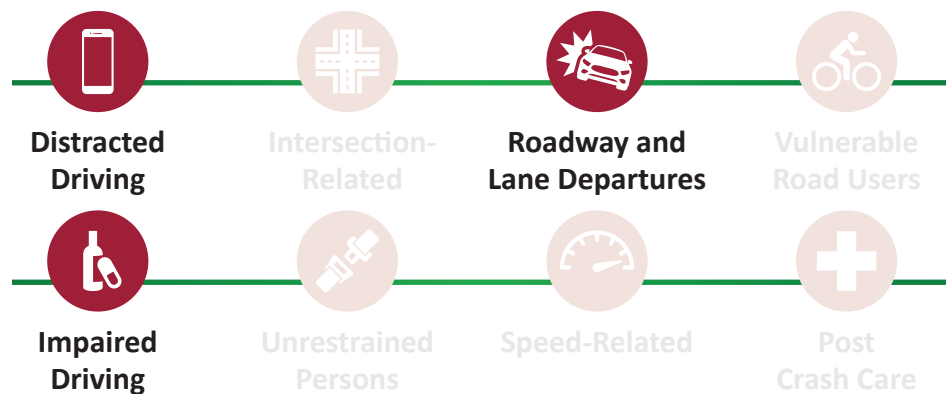


Figure 21. Wide Edge Line Example



Source: FHWA, Texas Transportation Institute

High-Contrast Lane Markings

High-contrast lane markings refer to road markings designed to be easily distinguishable from the surrounding pavement, typically through contrasting colors or materials. These markings are intended to enhance drivers' visibility and clarity, especially in challenging conditions such as low light, inclement weather, or areas with poor visibility. This has a CMF of 0.75 for all crash types and severities (CMF ID: NS01). **Figure 22** provides an example of high-contrast lane markings.

Applicable Safety Emphasis Areas:

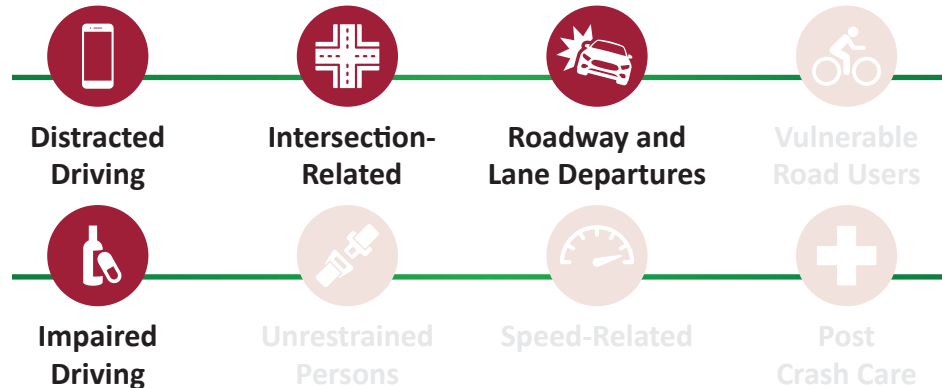


Figure 22. High-Contrast Lane Markings Example



Source: FHWA



Implement Systemic Signing and Marking Improvements at Stop-Controlled Intersections

Deploying a variety of low-cost countermeasures at several stop-controlled intersections within a jurisdiction can increase overall intersection safety in that location. Countermeasures that could be applied to stop-controlled intersections are properly placed stop bars, doubled-up oversized stop signs, doubled-up oversized advance “stop ahead” signs, and vegetation removal. These countermeasures increase driver awareness of the upcoming intersection and any potential conflicts. Implementing signing and marking improvements at stop-controlled intersections through a systemic approach has a CMF of 0.734 (CMF ID: 8874). **Figure 23** provides an example of some low-cost countermeasures that could be utilized.

Applicable Safety Emphasis Areas:

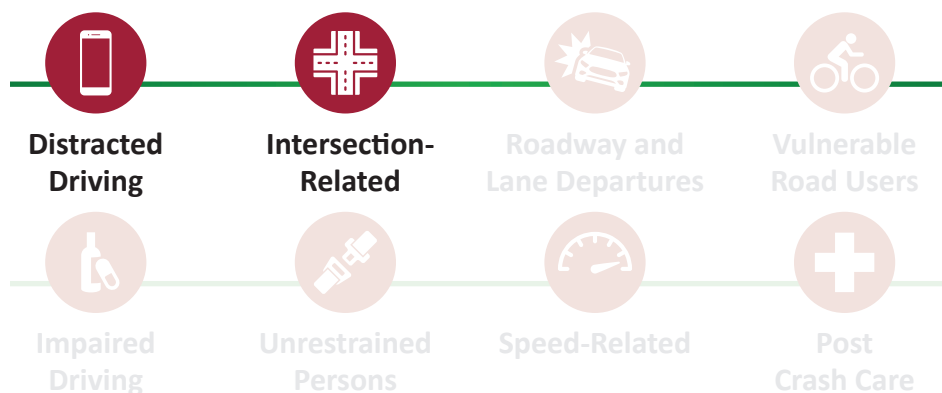


Figure 23. Countermeasures at a Stop-Controlled Intersection Example



Source: FHWA

OPERATIONS

The operation and design of a roadway can play a large role in the overall safety performance of a transportation network. Roadway geometry alone can impact driving behaviors, so a countermeasure is recommended to improve the geometry of dedicated right-turn lanes in DeSoto. This countermeasure is suggested due to the several right turn lanes observed throughout the City.

Change Right-turn Lane Geometry to Increase Line of Sight (Intersection Level)

Reducing the turning radii to create a sharper entry angle onto the cross street on dedicated right-turn lanes will enhance safety at the intersection. By reducing the turn radii, the turning path for vehicles is narrowed, which causes slower turning speeds, increased sight distance, and enhanced visibility of any vulnerable road users at these intersections. Additionally, this geometry creates a shorter crossing distance for pedestrians and bicyclists. Changing the existing geometry to the suggested has a CMF of 0.558 (CMF ID: 8496). **Figure 24** shows an example of what the updated right-turn lane could look like after the improvements.

Applicable Safety Emphasis Areas:

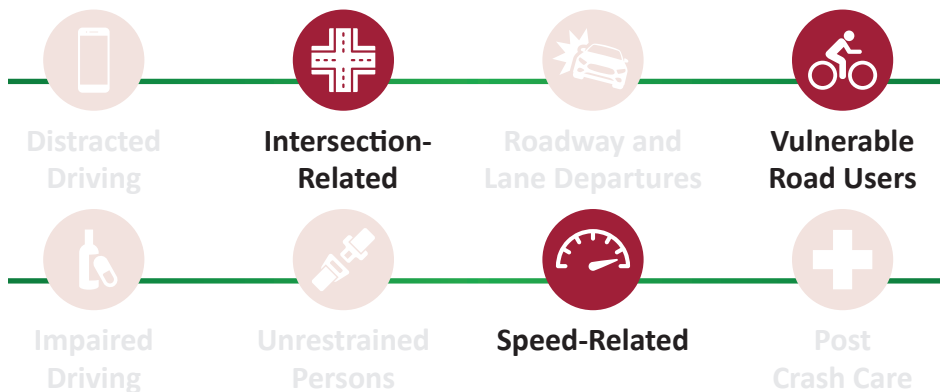
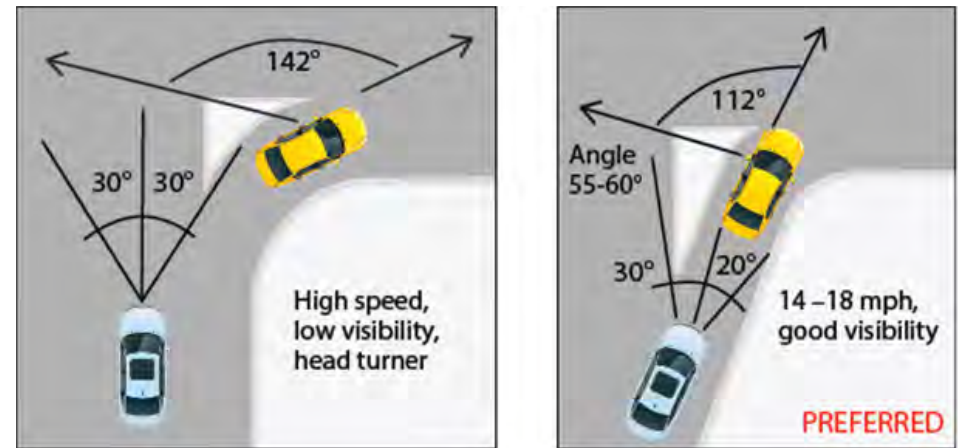


Figure 24. Improved Geometry for Right-Turn Lanes Example



Source: FHWA



These policies and programs are meant to help solve the safety deficiencies in the City's transportation system.

CHAPTER 7. ACTION PLAN

IMPLEMENTATION PROGRAM

This chapter outlines the recommended policies and programs that could aid in achieving the CSAP goals set by the CSAPPT. These policies and programs are meant to help solve the safety deficiencies in the City's transportation system. The policies and programs are organized by the eight Emphasis Areas discussed previously. To create a clear path toward achieving the CSAP goals, each Emphasis Area has actions that should be done as part of implementation efforts.

Figure 25. Example Action Item Policy Hierarchy



DESOTO COMPREHENSIVE SAFETY ACTION PLAN EMPHASIS AREAS



CITY-WIDE



INTERSECTION-RELATED



IMPAIRED DRIVING



ROADWAY AND LANE DEPARTURES



SPEED-RELATED



UNRESTRAINED PERSONS



VULNERABLE ROAD USERS



ACTION MATRIX ELEMENTS

Texas SHSP Emphasis Areas and Six “E’s” of Safety: The first two elements of the action matrix are the Texas SHSP Emphasis Areas and the Six “E’s” of Safety, described in **Chapter 1**.

Timeframe: For every strategy, each action provides an estimated timeframe for implementation. The estimated timeframe for implementation allows for better decision-making and allocation of funding to complete the action plan strategies and actions promptly. This is broken out into the following:

Short (<2 years)	Medium (2 – 5 years)	Long (>5 years)
This action is a top priority and can be a “quick win” for CSAP.	This action may take more time but can be accomplished before the next CSAP update.	This action will require many years but will have significant impact when complete.

Partners: In many instances, collaboration with partner organizations, entities, or stakeholders is crucial for successfully implementing the recommended actions. These partners play a vital role by contributing resources, expertise, and support to achieve the Plan’s goals. The following list identifies internal and external partners that could aid in the implementation process, though it is not exhaustive:

- ▶ Engineering Division (ED)
- ▶ Planning and Zoning Division (PZD)
- ▶ Community Service and External Affairs Department (CSEAD)
- ▶ DeSoto Fire Department (DFD)
- ▶ DeSoto Police Department (DPD)
- ▶ Texas Department of Transportation (TxDOT)
- ▶ DeSoto Independent School District (DISD)

Funding: Funding and its source are essential in implementing the action plan. The matrix also provides information on the action that can be accomplished through two different funding sources:

- ▶ City
- ▶ Grant Acquisition



CITY-WIDE

Table 12. City-Wide Actions

ID	ACTION	WHICH SIX E'S OF SAFETY	TIMEFRAME	PARTNERS	POTENTIAL FUNDING SOURCE
C.1	Create a targeted enforcement campaign that focuses on distracted driving, impaired driving, and speeding in the City	Enforcement	Short (<2 years)	DPD, DFD, TxDOT	City; Grant
C.2	Utilize existing resources from TxDOT and NHTSA to promote traffic safety education in the City	Education	Short (<2 years)	CSEAD, TxDOT, DPD, DFD, DISD	City; Grant
C.3	Conduct engineering studies on the remaining HIN segments	Evaluation Engineering	Medium (2–5 years)	ED, TxDOT	City
C.4	Obtain funding and construct the targeted counter-measures along each study corridor	Engineering	Long (>5 years)	TxDOT, ED, PZD	City; Grant

C.1 Create a targeted enforcement campaign focusing on distracted driving, impaired driving, and speeding in the City.

To address significant traffic safety concerns, a targeted enforcement campaign in the City can focus on curbing distracted driving, impaired driving, and speeding. Each of these violations poses a significant risk to public safety, leading to severe injuries and fatalities. Law enforcement aims to create safer roadways, deter irresponsible driving habits, and reduce traffic-related crashes and deaths by concentrating on these dangerous behaviors. The campaign can include increased patrols, checkpoints, and community outreach efforts to educate drivers on the risks and penalties associated with these behaviors. By raising awareness and enforcing stricter penalties, the City hopes to see a measurable decrease in these high-risk crash behaviors.

Supporting this initiative, the Texas Department of Transportation (TxDOT) provides funding through the Selective Traffic Enforcement Program (STEP), which aids local enforcement agencies in addressing specific traffic safety issues. The STEP program allows departments to dedicate additional resources to tackle common but preventable offenses, such as distracted driving, impaired driving, and speeding. Through TxDOT's support, the campaign will benefit from additional workforce, data-driven enforcement strategies, and public awareness campaigns. STEP funding aims to create safer road environments by empowering cities to adopt focused, effective enforcement and education strategies, leading to long-term behavioral changes among drivers.



C.2 Utilize existing resources from TxDOT and NHTSA to promote traffic safety education in the City

The City can leverage existing resources from the TxDOT and the National Highway Traffic Safety Administration (NHTSA) to enhance traffic safety education. TxDOT's established campaigns, such as "Click It or Ticket," "Plan While You Can," and "Drive Sober. No Regrets," play a vital role in promoting safe driving behaviors and reducing crashes across Texas. By tapping into these campaigns, the City can effectively educate the community about the dangers of impaired driving, the importance of seatbelt use, and the need for responsible driving habits. Additionally, these resources include ready-made educational materials, media assets, and data that can be tailored to local needs, allowing the City to implement impactful outreach efforts. This approach increases awareness and reinforces the importance of personal responsibility on the road, contributing to a safer environment for all road users.

C.3 Conduct engineering studies on the remaining HIN segments

Conducting engineering studies on the City's remaining High-Injury Network (HIN) segments offers crucial benefits for public safety and infrastructure planning. These studies provide detailed insights into specific road conditions, traffic patterns, and environmental factors contributing to accidents, enabling the City to address high-risk areas more effectively. The City can proactively reduce collisions and enhance overall road safety by identifying targeted improvements, such as better signage, safer crosswalks, and optimized traffic signals. Ultimately, these engineering studies support the City's goal of creating a safer, more efficient transportation network by ensuring data-driven decisions for future infrastructure investments.

C.4 Obtain funding and construct the targeted countermeasures along each study corridor

Securing funding to construct the targeted countermeasures along each study corridor brings significant safety and accessibility benefits to the City. Implementing these improvements, such as adding traffic calming measures, enhancing pedestrian crossings, and upgrading intersection controls and timing, can reduce crashes and safer travel for all road users. Texas offers several transportation funding programs that support these goals, including the TxDOT Highway Safety Improvement Program (HSIP), Transportation Alternatives (TA) program, and the SS4A implementation grant program. These programs provide essential financial resources for projects directly addressing safety and accessibility concerns in areas with high crash rates or underserved pedestrian infrastructure. By leveraging such funding opportunities, DeSoto can prioritize data-driven, high-impact countermeasures to create a safer, more connected transportation network across the City.



INTERSECTION-RELATED

Table 13. Intersection-Related Actions

ID	ACTION	WHICH SIX E'S OF SAFETY	TIMEFRAME	PARTNERS	POTENTIAL FUNDING SOURCE
IN.1	Update the Construction Standards and Specifications to expand on the requirements for pedestrian crossing treatments	Engineering	Short (<2 years)	ED, PZD	City
IN.2	Update the Thoroughfare Plan to require dedicated left-turn lanes at signalized or high left-turn volume intersections	Engineering	Medium (2–5 years)	ED, PZD	City
IN.3	Upgrade all existing signalized intersections to include pedestrian crossing facilities	Equity Engineering	Long (>5 years)	ED, PZD	City; Grant
IN.4	Conduct a Citywide traffic signal timing improvement plan	Engineering Evaluation	Medium (2–5 years)	ED, TxDOT	City; Grant



IN.1 Update the Construction Standards and Specifications to expand on the requirements for pedestrian crossing treatments

Updating the Construction Standards and Specifications to include detailed pedestrian crossing requirements at intersections can help provide adequate facilities for vulnerable road users. The updates should include high-visibility crosswalks, ADA-compliant ramps, and pedestrian push buttons at intersections. Mid-block pedestrian crossing treatments should be detailed to include specifications for Rectangular Rapid Flashing Beacons (RRFB) or Pedestrian Hybrid Beacons (PHB) and reduce pedestrian-related crashes throughout the City.

IN.2 Update the Thoroughfare Plan to require dedicated left-turn lanes at signalized or high left-turn volume intersections

The Master Thoroughfare Plan (MTP) outlines the ultimate cross sections along City thoroughfares and guides the future widening of existing roadways. Updating the MTP to require dedicated left-turn lanes at signalized high left-turn volume intersections will help reduce potential rear-end crashes and left-turn conflicts throughout the City. This can also help reduce delays and improve overall traffic operations.

IN.3 Upgrade all existing signalized intersections to include pedestrian crossing facilities

Upgrading all signalized intersections to include pedestrian crossing facilities significantly enhances city safety and accessibility. Marked crosswalks and pedestrian signals reduce crashes and encourage walking, promoting a healthier, less congested environment. These upgrades make streets safer and more accessible for everyone in all lighting and weather conditions, including children, older adults, and people with disabilities, creating a more walkable and inclusive community.

IN.4 Conduct a Citywide traffic signal timing improvement plan

Implementing a Citywide traffic signal timing improvement plan, which includes adjustments to yellow and all-red intervals and pedestrian clearance times, offers substantial safety and efficiency benefits. Optimized yellow and all-red timing reduces the risk of crashes by allowing vehicles enough time to clear intersections safely, helping to prevent crashes caused by sudden stops or red-light-running vehicles. Additionally, adjusted pedestrian clearance intervals ensure that people on foot have adequate time to cross, reducing the risk of pedestrian-related fatalities or severe injuries. These timing improvements enhance traffic flow, reduce congestion, and create a safer environment for all road users. By carefully coordinating signal timing across the city, this plan supports smoother, safer travel for drivers, cyclists, and pedestrians.



IMPAIRED DRIVING

Table 14. Impaired Driving Actions

ID	ACTION	WHICH SIX E’S OF SAFETY	TIMEFRAME	PARTNERS	POTENTIAL FUNDING SOURCE
ID.1	Conduct a study to understand impaired driving citation patterns throughout the City	Enforcement	Short (<2 years)	DPD, DFD	City

ID.1 Conduct a study to understand impaired driving citation patterns throughout the City

Conducting a study on impaired driving citation patterns throughout the City helps identify high-risk areas and times, allowing for more strategic enforcement and resource allocation. By understanding these patterns, the City can deploy targeted interventions and public education efforts to deter impaired driving in areas with higher incidences. This proactive approach enhances road safety, reduces impaired driving incidents, and provides a safer environment for all road users.



ROADWAY AND LANE DEPARTURES

Table 15. Roadway and Lane Departures Actions

ID	ACTION	WHICH SIX E'S OF SAFETY	TIMEFRAME	PARTNERS	POTENTIAL FUNDING SOURCE
LD.1	Update minimum procurement requirements for purchasing City vehicles with enhanced safety features	Encouragement	Medium (2–5 years)	CSEAD	City
LD.2	Conduct an inventory and condition assessment of pavement markings throughout the City and implement a restriping program	Engineering	Medium (2–5 years)	ED, PZD	City

LD.1 Update minimum procurement requirements for purchasing City vehicles with enhanced safety features

Updating minimum procurement requirements to include enhanced safety features for City vehicles significantly increases the safety of City employees and the public. Advanced features like collision avoidance systems, lane departure warnings, and backup cameras help reduce accidents and protect drivers in various conditions. By prioritizing safety-focused purchases, the City also sets a positive example, showing a commitment to adopting new technologies that promote road safety. This proactive investment in safety technology can reduce operational costs over time, with fewer accidents, lower insurance expenses, and improved vehicle longevity.

LD.2 Conduct an inventory and condition assessment of pavement markings throughout the City and implement a restriping program

Conducting an inventory and condition assessment of Citywide pavement markings and implementing a restriping program improves road safety and visibility. Clear, well-maintained pavement markings help drivers stay within lanes, follow proper road guidance, and navigate complex intersections, especially in low-light or adverse weather conditions. This proactive approach also supports vulnerable road users (i.e., cyclists and pedestrians) by marking crosswalks and bike lanes. A systematic restriping program helps prevent accidents and extends the life of roadway infrastructure, creating safer and more navigable streets for the entire community.



SPEED-RELATED

Table 16. Speed-Related Actions

ID	ACTION	WHICH SIX E'S OF SAFETY	TIMEFRAME	PARTNERS	POTENTIAL FUNDING SOURCE
SP.1	Provide access to driver safety courses and re-sources for City employees using City vehicles	Education	Short (<2 years)	CSEAD	City
SP.2	Create a system to deploy speed feedback signs/trailers along the HIN or other problem locations	Encouragement	Short (<2 years)	ED, PZD	City
SP.3	Conduct a study to understand the history of speed enforcement patterns and compare them to the HIN	Equity	Short (<2 years)	DPD, DFD	City



SP.1 Provide access to driver safety courses and resources for City employees using City vehicles

Providing access to driver safety courses and resources for City employees who use City vehicles offers significant benefits in enhancing road safety and reducing liability. By equipping employees with the knowledge and skills to drive safely and responsibly, the City fosters a culture of safety and accountability among its workforce. Implementing this action involves partnering with local organizations or agencies specializing in driver education, developing a tailored curriculum that addresses City employees' specific challenges, and incorporating hands-on training sessions. The Texas Department of Licensing and Regulation provides access to defensive driving courses.

SP.2 Create a system to deploy speed feedback signs/trailers along the HIN or other problem locations

Creating a system to deploy speed feedback trailers along the High-Injury Network (HIN) and other problem locations significantly enhances traffic safety by actively alerting drivers to their speed. These signs encourage compliance with speed limits, helping to reduce speeding-related crashes in areas that experience the most speeding-related crashes. Implementation involves identifying critical locations with high traffic volumes or crash rates, strategically placing the feedback signs to maximize visibility and effectiveness, and using data collection tools to monitor traffic patterns. The City should utilize its existing inventory of speed feedback trailers to accomplish this action.

SP.3 Conduct a study to understand the history of speed enforcement patterns and compare them to the HIN

By understanding where enforcement has been concentrated relative to high-risk areas, the City can identify gaps or shifts in enforcement that may contribute to ongoing speeding issues. Implementing this study involves collecting and analyzing historical data on speed enforcement activities, such as ticketing locations and frequency, and comparing it to current HIN segments and data. This approach enables the City to align enforcement resources with areas of highest need, optimizing the effectiveness of enforcement strategies to reduce speeding-related crashes.



UNRESTRAINED PERSONS

Table 17. Unrestrained Persons Actions

ID	ACTION	WHICH SIX E’S OF SAFETY	TIMEFRAME	PARTNERS	POTENTIAL FUNDING SOURCE
UP.1	Continue to partner with entities such as TxDOT and Texas A&M AgriLife to promote safe seatbelt and car seat usage	Education Encouragement	Short (<2 years)	DPD, DFD	City; Grant

UP.1 Continue to partner with entities such as TxDOT and Texas A&M AgriLife to promote safe seatbelt and car seat usage

Continuing partnerships with entities like TxDOT and Texas A&M AgriLife to promote safe seatbelt and car seat usage strengthens community safety and awareness efforts in the City. These partnerships provide access to expertise, resources, and data-driven strategies that enhance educational outreach on the importance of proper seatbelt and car seat use. Implementation involves organizing joint workshops, distributing educational materials, and hosting fitting events where residents can receive guidance on correctly installing car seats. By fostering these collaborations, the City can reach a broader audience, helping reduce injury rates in vehicle crashes and promote a safety culture across all age groups.



VULNERABLE ROAD USERS

Table 18. Vulnerable Road Users Actions

ID	ACTION	WHICH SIX E'S OF SAFETY	TIMEFRAME	PARTNERS	POTENTIAL FUNDING SOURCE
VRU.1	Upgrade lighting along all City roadways to meet current standards with an emphasis on pedestrian crossings	Engineering	Long (>5 years)	ED, PZD	City; Grant
VRU.2	Prioritize capital projects that overlap with the HIN, ADA Transition Plan, and Active Transportation Framework Plan	Engineering	Medium (2–5 years)	ED, PZD	City
VRU.3	Complete the remaining facilities assessments for the ADA Transition Plan	Equity Engineering Evaluation	Medium (2–5 years)	ED, PZD	City

VRU.1 Upgrade lighting along all City roadways to meet current standards with an emphasis on pedestrian crossings

Enhanced lighting at crosswalks makes pedestrians more visible, reducing the risk of crashes, particularly during nighttime and low-visibility conditions. Implementing this upgrade involves assessing current lighting conditions, identifying areas needing improvement, and installing lighting that meets the latest standards. These improvements increase public safety and encourage walking, creating a more accessible, walkable city environment while enhancing the overall nighttime appearance of City streets.

VRU.2 Prioritize capital projects that overlap with the HIN, ADA Transition Plan, and Active Transportation Framework Plan

By aligning projects with these critical plans, the City can address high-crash areas, enhance accessibility for individuals with disabilities, and improve infrastructure for pedestrians and cyclists. This integrated approach maximizes the impact of each project, ensuring that resources are directed toward areas with the greatest need and potential benefit. Moreover, it supports a cohesive, multimodal transportation network that prioritizes safety and inclusivity, making the City more accessible and connected for all residents, regardless of their mobility needs.

VRU.3 Complete the remaining facilities assessments for the ADA Transition Plan

The City has completed two phases of assessing facilities as part of the ADA Transition Plan. To provide a complete and cohesive ADA-compliant network for vulnerable road users, it is recommended that the remaining facilities within the City be completed. Improving sidewalks, pedestrian crossings, intersections, and other facilities will help all mode users to travel to and from their desired areas safely and without barriers. Adequate facilities are the minimum in providing opportunities for those with disabilities to travel by all modes.

PLAN ADMINISTRATION

The City of DeSoto and CSAP Planning Team partners are responsible for administering this Plan. City staff will oversee the Plan's day-to-day implementation, monitoring, and amendments. This section details the administration activities.

CITY DEPARTMENTS

Through the safe system approach, all City of DeSoto departments will be involved to some extent. The Engineering, Planning and Zoning, and Development Services departments will primarily oversee the administration and provide annual updates to the City Council.

CITY COUNCIL

The City Council will play a pivotal role by providing continuous guidance and direction to staff and other boards and commissions and making decisions on budget allocations and regulatory modifications as specified in the Implementation Program.

OTHER BOARDS, COMMITTEES, AND COMMISSIONS

City boards, committees, and commissions are designated to review and guide specific initiatives. They will play a crucial role in implementing the recommendations in the Implementation Program that align with their areas of focus.

CSAP PLANNING TEAM AND OTHER PARTNERS

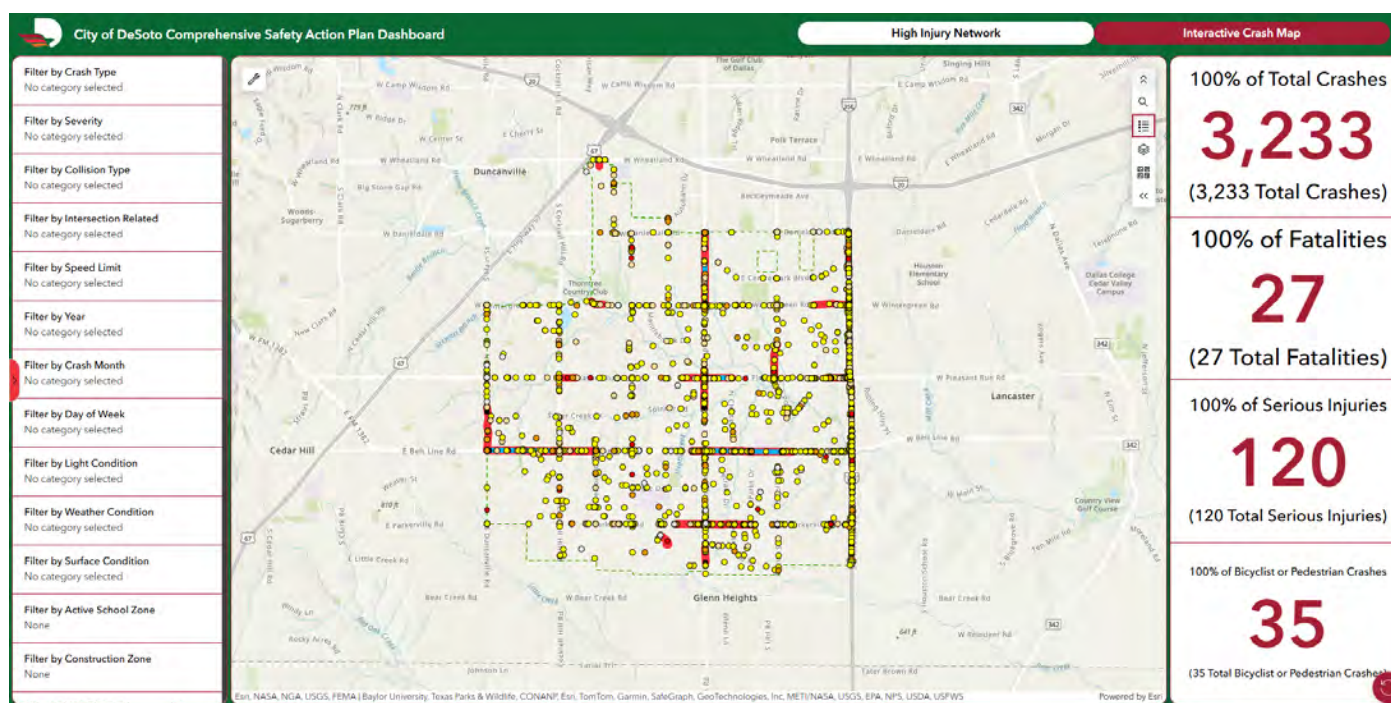
The CSAPPT plays a crucial role in implementation by overseeing the plan's actions and initiatives to ensure goals are met efficiently and effectively. The committee provides continuous guidance, supports implementing agencies, monitors progress, and adjusts for emerging challenges. Additionally, the CSAPPT fosters collaboration among stakeholders—including residents, regional entities, and external departments—facilitates communication and promotes community engagement to maintain momentum and accountability.



MONITORING PROGRESS

Extensive efforts were dedicated throughout the planning process to engage a broad spectrum of external stakeholders to ensure the Plan aligns with the overarching community vision. To sustain community engagement and enthusiasm, transparency about forthcoming progress in Plan implementation is crucial. An effective approach for conveying this progress is through an annual progress report, which should provide updates on the status of implementation strategies and showcase achievements accomplished in the preceding year. The responsibility of producing the annual progress report will be led by the Engineering Division and presented to the City Council. Annual reporting will be supported by the Safety Dashboard, which tracks crash trends and identifies various behavioral, design, and environmental characteristics. As new data is entered, the Safety Dashboard can be used to illustrate and describe these trends.

Figure 26. Safety Dashboard



AMENDING THE PLAN

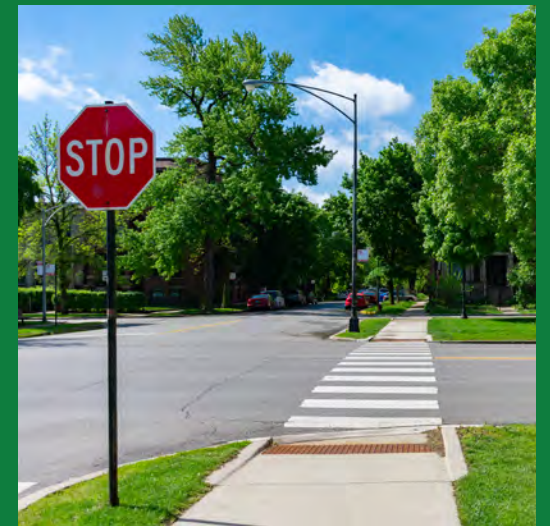
DeSoto's CSAP captures a moment in time, with changes expected as the City grows and matures. To ensure the attainability of the overarching vision, the implementation approach must remain adaptable, capable of accommodating shifts in crash trends. The Engineering Division will provide annual updates to the City Council on Implementation Program progress, including necessary High-Injury Network revisions due to changes in trends. The Plan should undergo a comprehensive review and update every five years to align with these trends and evaluate the relevance of action plan strategies.





A

APPENDIX





APPENDIX

A. CSAP RESOLUTION



RESOLUTION

**A RESOLUTION OF THE CITY COUNCIL OF CITY OF DESOTO, TEXAS,
ADOPTING A VISION ZERO POLICY FOR THE COMPREHENSIVE
SAFETY ACTION PLAN.**

WHEREAS, the life and health of all persons living and traveling within the City of DeSoto are our utmost priority, and no one should die or be seriously injured while traveling on our city streets;

WHEREAS, Vision Zero is the concept that traffic deaths and serious injuries on our roadways are unacceptable;

WHEREAS, Vision Zero is a holistic strategy aimed at eliminating all traffic fatalities and severe injuries suffered by all road users while increasing safe, healthy, equitable mobility for all;

WHEREAS, streets and transportation systems have traditionally been designed primarily to move cars efficiently, and Vision Zero supports a paradigm shift by designing streets and transportation systems to move all people safely, including people of all ages and abilities, pedestrians, bicyclists, public transit users, scooter riders, and motorcyclists, as well as drivers and passengers of motor vehicles;

WHEREAS, Vision Zero recognizes that people will sometimes make mistakes, so the road system and related policies should be designed to ensure that those inevitable mistakes do not result in severe injuries or fatalities; therefore, transportation planners and engineers, and policymakers are expected to improve the roadway environment, policies, and other related systems to lessen the severity of crashes;

WHEREAS, 37 people in the City lost their lives to traffic deaths in 2019-2023, and traffic crashes are among the leading cause of deaths in the United States;

WHEREAS, the City's transportation infrastructure serves an increasing number of vulnerable road users, such as pedestrians and bicyclists;

WHEREAS, according to the TxDOT Crash Records Information System, pedestrians and bicyclists are involved in 1.2 percent of collisions and account for 20 percent of traffic deaths in the City;

WHEREAS, the injury rate for pedestrians involved in collisions is approximately 94 percent, and the injury rate for bicyclists involved in collisions is 100 percent;

WHEREAS, speed is recognized as a major determining factor of survival in a crash;

WHEREAS, the City will work toward reducing vehicle speeds because the likelihood of a pedestrian surviving a crash is 10 percent if hit by a vehicle moving 40 mph;

WHEREAS, children, older adults, people of color, people with disabilities, people who are unhoused, and people with low income face a significantly disproportionate risk of traffic injuries and fatalities;

WHEREAS, people of color are disproportionately affected by racial profiling and inequitable enforcement of traffic violations;

WHEREAS, making streets safer for all people using all modes of transportation will encourage people to travel on foot, by bicycle, and by public transit, which supports a healthier, more active lifestyle and reduces environmental pollution;

WHEREAS, successful Vision Zero programs are a result of both a complete government approach (i.e., interdepartmental, coordinated initiatives) and community support of Vision Zero objectives and action plans;

WHEREAS, Vision Zero resolutions have been adopted by many jurisdictions across the United States; and

NOW, THEREFORE, BE IT RESOLVED, BY THE CITY COUNCIL OF DESOTO, TEXAS, THAT:

1. The City adopts the goal of zero traffic deaths and serious injuries, stating that no loss of life or serious injury is acceptable on our streets.
2. The City adopts the goal of reducing fatal and serious injury crashes by 10% annually with the goal of eliminating fatal crashes by 2035 and endorses Vision Zero as a comprehensive and holistic approach to achieving this goal.
3. The City adopts the Vision Zero policy attached hereto as Exhibit A and makes it part of this Resolution, effective immediately.
4. The City Secretary shall certify the adoption of this Resolution, effective immediately, by the City Council.

DULY RESOLVED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF DESOTO, TEXAS, ON THE 21ST DAY OF JANUARY, 2025.



CITY OF DESOTO, TEXAS

APPROVED:

Rachel L. Proctor, Mayor

ATTEST:

Alicia Thomas, City Secretary

Exhibit A

This Vision Zero Policy was adopted by Resolution No.25-05 by the City Council of DeSoto, Texas on January 21, 2025.

VISION ZERO POLICY OF THE CITY OF DESOTO, TEXAS

A. PURPOSE

The purpose of this Vision Zero Policy ("Policy") is to eliminate all traffic fatalities and traffic-related severe injuries by using data-driven policy changes and equity-focused community engagement of diverse and necessary stakeholders to design and implement a transportation system that provides safe, healthy, and equitable mobility for all. This Policy seeks to achieve this purpose by (1) establishing that Vision Zero is a priority goal for the City of DeSoto and (2) creating a Comprehensive Safety Action Plan (CSAP) Planning Team consisting of senior city officials (or their designees) that is responsible for gathering data and working with the community – including traditionally underrepresented groups – to develop an action plan for achieving the goals of Vision Zero through equity-focused strategies that establish safe speeds, create safe streets, and improve safety culture and collaboration.

B. DEFINITIONS

1. "Community Engagement" means the various methods of informing, consulting, collaborating with, involving, or empowering community members with respect to government decisions.
2. "Fatal Injury" means a person is pronounced dead at the scene or dies as a result of injuries received in a traffic crash within thirty days of the date of the crash.
3. "High-Injury Network" means specific streets or roads (or portions thereof) and/or intersections within the boundaries of the City that have a high concentration of traffic fatalities and/or severe injuries, according to Traffic Safety Data.
4. "Priority Populations" means youth, older adults, communities of color, people with low income, people with disabilities, people with limited English proficiency, people who are unhoused, or others who have a higher risk of Severe or Fatal Injury resulting from a collision with a motor vehicle, due to limited access to efficient and affordable transportation options; unsafe neighborhood transit infrastructure; or population-specific risk factors.
5. "Severe Injury" is an injury other than fatal which results in one or more of the following: Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood; Broken or distorted extremity (arm or leg); Crush injuries; Suspected skull, chest or abdominal injury other than bruises or minor lacerations; Significant burns (second and third degree burns over 10% or more of the body); Unconsciousness when taken from the crash scene; or Paralysis.

6. "Traffic Safety Data" means data collected for each traffic collision that results in a Fatal or Severe Injury and, to the extent possible, shall include but are not limited to the following data elements: (a) exact location; (b) date and time of day; (c) category of each road user involved (e.g., pedestrian, bicyclist, scooter rider, driver of motor vehicle); (d) type of vehicle(s) involved, if applicable (e.g., motorcycle, car, bus, commercial truck); (e) whether any road users were fatally or severely injured; (f) ages of people involved; (g) collision factors (e.g., unsafe speed, driver distraction, poor lighting); and (h) the movement preceding the collision (e.g., left turn, changing lanes).
7. "Vulnerable Road Users" means pedestrians, bicyclists, people using mobility devices, scooter riders, and any other road users who are at high risk of Severe or Fatal Injury resulting from a collision with a motor vehicle.

C. CSAP PLANNING TEAM

1. The purpose of the CSAP Planning Team is to develop and implement a Vision Zero action plan, ensuring coordination across all relevant departments, agencies, and stakeholders. The CSAP Planning Team is hereby established and shall comprise the City Manager (or designee) and the Directors / Managers (or designees) of the Engineering, Development Services, Street, Planning and Zoning, Fire, Police, and Community Service and External Affairs Departments or Divisions, as well as the DeSoto Development Corporation.
2. The City Manager (or designee) shall chair the Planning Team and be responsible for ensuring that the duties of the Planning Team set forth in Section C.3 are completed in a timely manner.
3. The Planning Team shall perform the following tasks:
 - a. Within 12 months of the effective date of this Policy, (1) develop and finalize a Vision Zero Action Plan ("Action Plan") and (2) present the Action Plan to the Mayor and City Council.
 - b. Convene its first meeting no later than 60 days from the effective date of this Policy and meet at least bi-monthly until the Action Plan is finalized and any revisions have been fully implemented.
 - c. Revise the Action Plan, as needed.
 - d. Report on implementation of the Action Plan and progress toward Vision Zero goals pursuant to Section D of this Policy.
 - e. Maintain a comprehensive public web page to share information on the City of DeSoto's Vision Zero endeavors – for example, relevant data; the adopted Resolution; the Action Plan and any updates to it; and progress on the

strategies in the Action Plan – as well as to solicit feedback on safety concerns, projects, and strategies.

D. ONGOING IMPLEMENTATION AND EVALUATION

The Planning Team shall be responsible for ongoing implementation and oversight of the Action Plan, including the following tasks:

1. Implementation of all strategies identified in the Action Plan, prioritizing strategies that benefit Priority Populations and the High-Injury Network.
2. Identification of funding needs and oversight of strategies to obtain the funding needed to fully implement the Action Plan, prioritizing Priority Populations and the High-Injury Network.
3. Obtaining the data necessary to determine whether the performance goals for each strategy have been met; assessing whether the goals have been met based on these data; and if any goals have not been met, ascertaining the reasons.
4. Pursuit and oversight of any partnerships with other public or private entities necessary to implementation of the Action Plan.
5. Revision of the Action Plan as needed to meet the Vision Zero goals of the Resolution.

E. REQUIREMENTS FOR REPORTING AND COMMUNITY MEETINGS

1. Within 6 months of finalizing the Action Plan, the Planning Team shall submit to the City Council and the Office of the Mayor a written report on the progress made toward finalizing and/or implementing the Action Plan.
2. Within 12 months of finalizing the Action Plan and annually thereafter, the Planning Team shall submit to City Council and the Office of the Mayor and make publicly available online a written implementation report based on the performance goals of the Action Plan. The implementation report shall include, at a minimum, the following items:
 - a. An overview of progress toward full implementation of the Action Plan (and any revisions thereto) and the Vision Zero goals of the Resolution.
 - b. The status of all strategies set forth in the Action Plan (and any revisions thereto), including specific highlighting of the status of all strategies benefitting Priority Populations and the High-Injury Network.
 - c. The status of funding necessary for implementation of the Action Plan, and steps taken to address any unmet funding needs.
 - d. A description of any unanticipated obstacles to implementing the Action Plan and plans to address those obstacles.



APPENDIX

B. *SOCIAL PINPOINT* – PUBLIC ENGAGEMENT RESULTS



Kimley-Horn Social Pinpoint

Report Type: Form Results Summary
Date Range: 26-09-2024 - 16-11-2024
Exported: 20-11-2024 15:21:05

Open

DeSoto Comprehensive Safety Action Plan Safety Survey
City of DeSoto Comprehensive Safety Action Plan

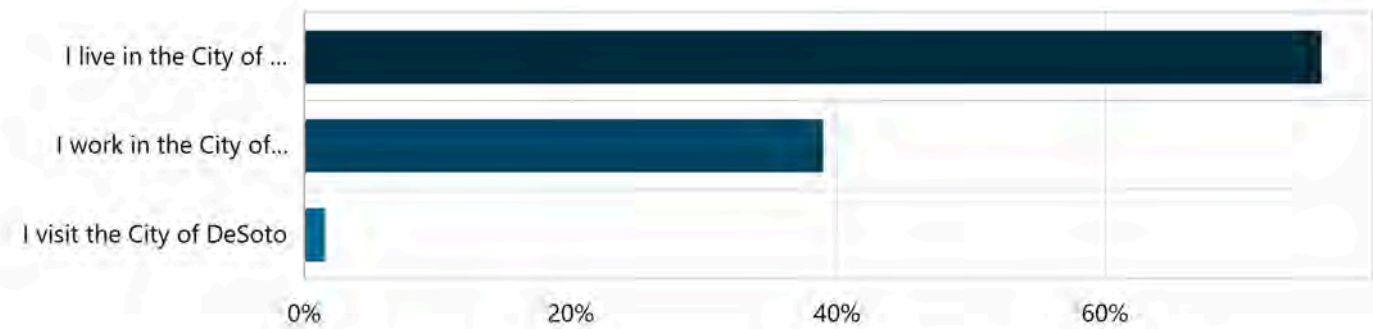
53
Contributors

67
Contributions

Contribution Summary

1. Which of the following statement(s) describe your relationship to DeSoto? Required

Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
I live in the City of DeSoto	76.12%	51
I work in the City of DeSoto	38.81%	26
I visit the City of DeSoto	1.49%	1

2. What is your home zip code? Required

Short Text | Skipped: 0 | Answered: 67 (100%)

Sentiment

No sentiment data

Tags

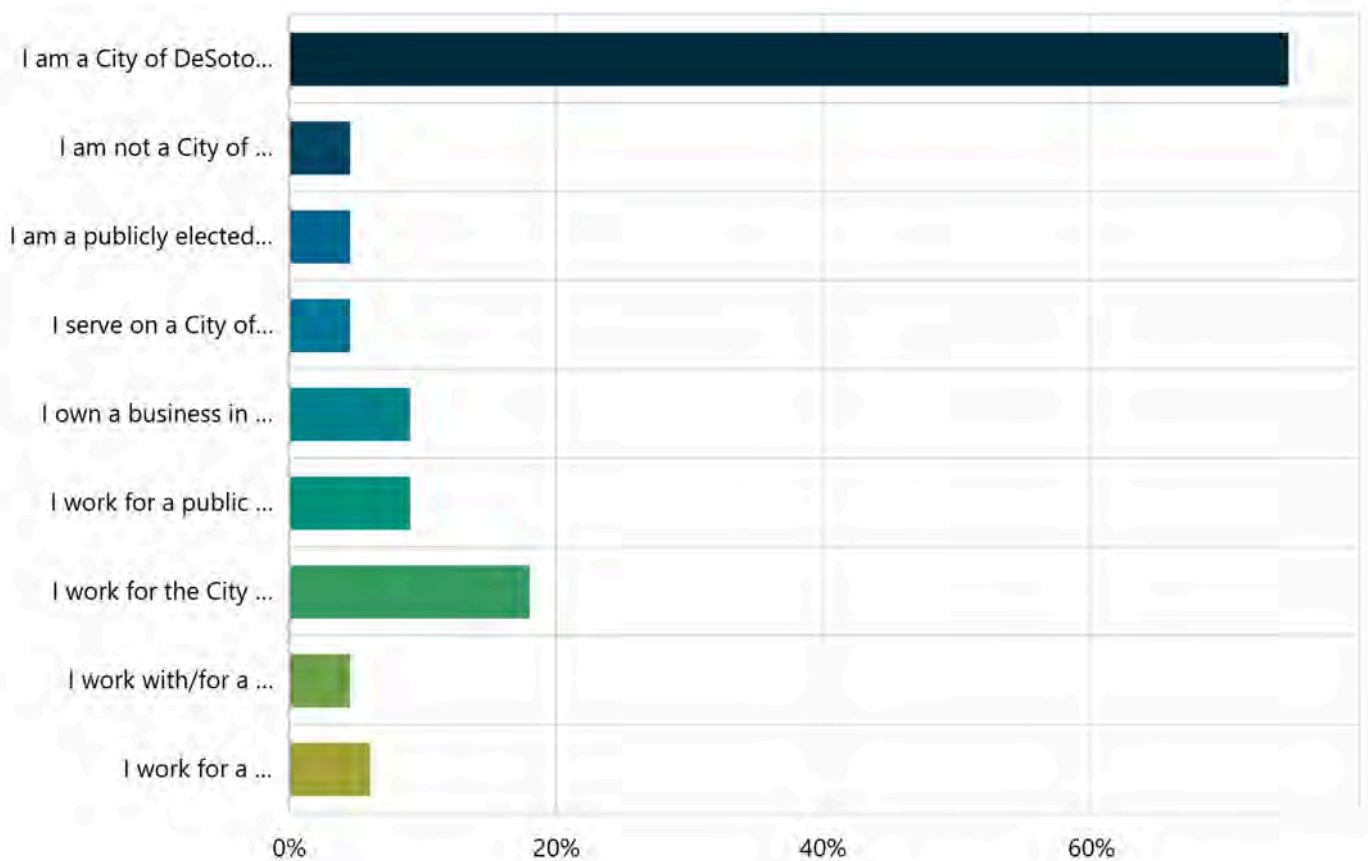
No tag data

Featured Contributions

No featured contributions

3. Which of the following statements best describes your role to public decision-making? Required

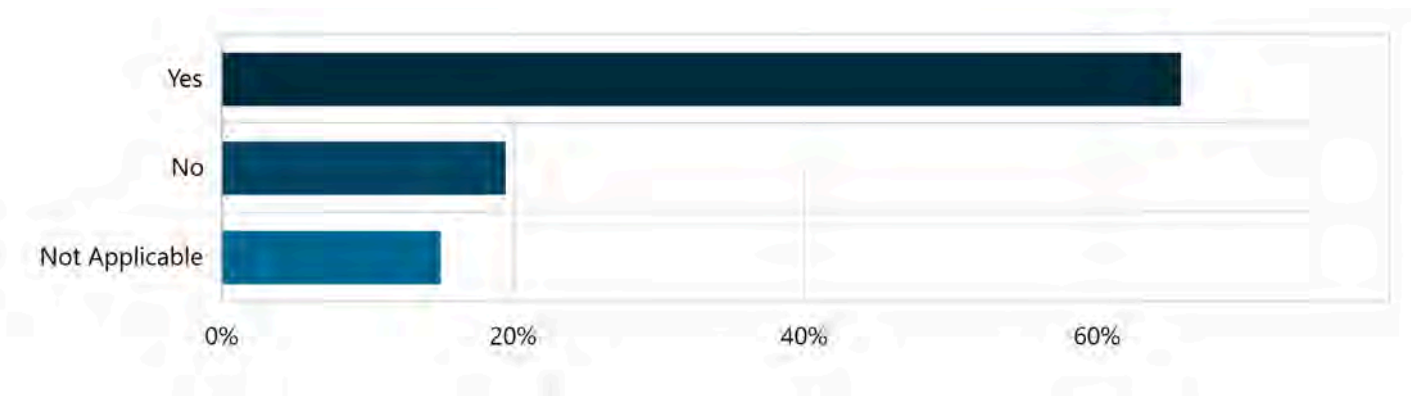
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
I am a City of DeSoto citizen	74.63%	50
I am not a City of DeSoto resident	4.48%	3
I am a publicly elected official	4.48%	3
I serve on a City of DeSoto Advisory Board or Committee	4.48%	3
I own a business in DeSoto	8.96%	6
I work for a public agency	8.96%	6
I work for the City of DeSoto	17.91%	12
I work with/for a nonprofit or community-based organization in DeSoto	4.48%	3
I work for a religious organization in DeSoto	5.97%	4

4. Do you commute to work? Required

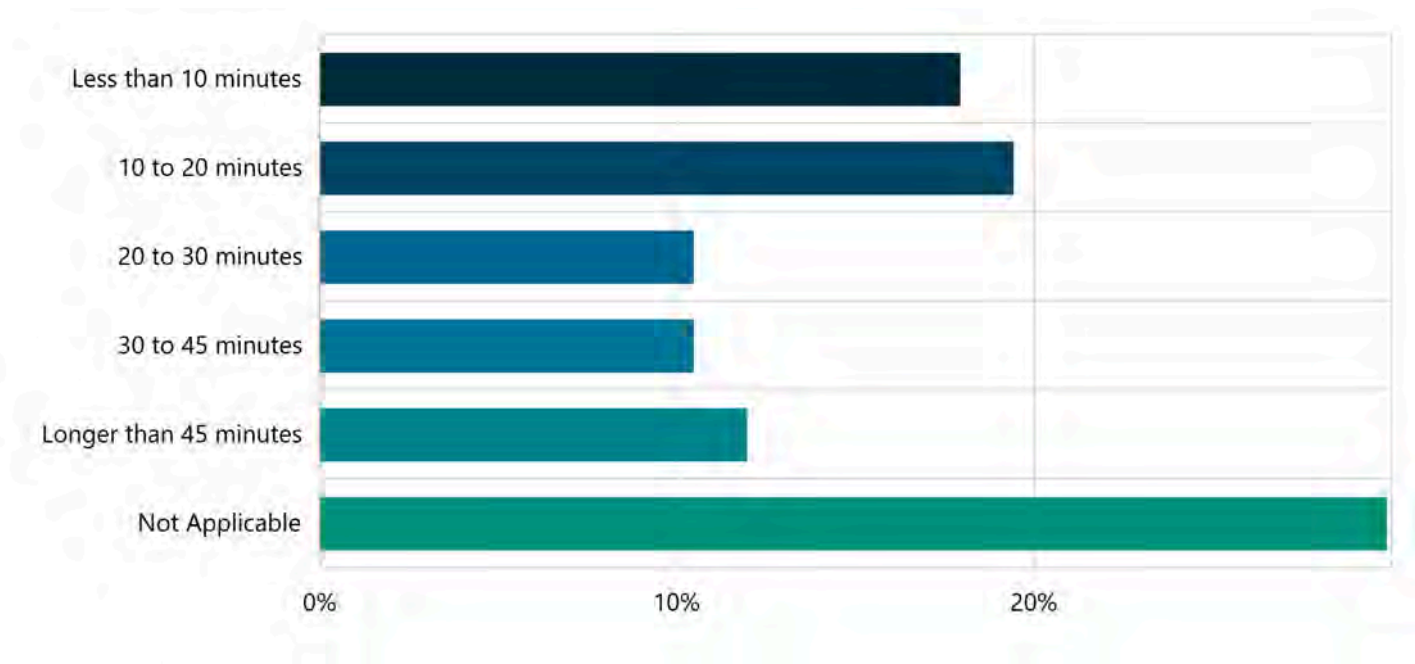
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Yes	65.67%	44
No	19.40%	13
Not Applicable	14.93%	10
Total	100.00%	67

5. How long is the commute to your place of work? Required

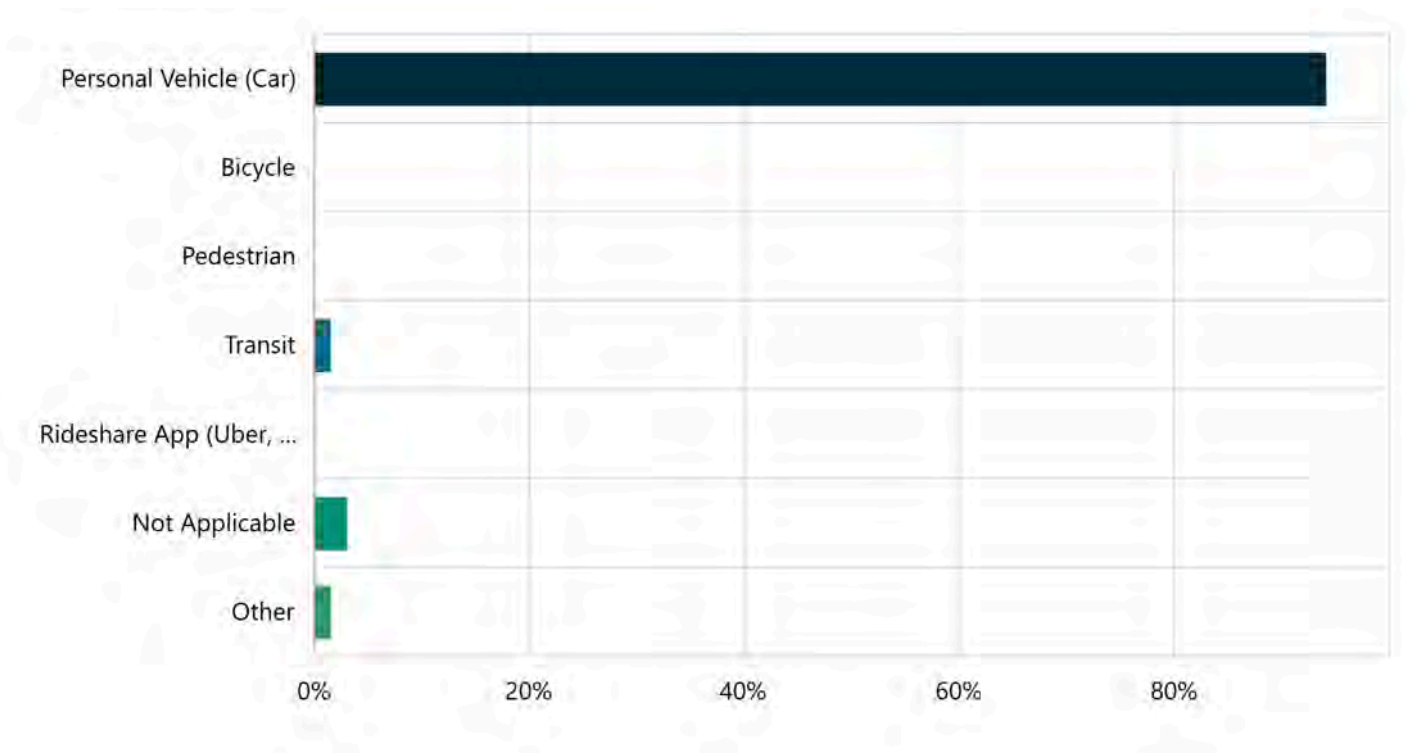
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Less than 10 minutes	17.91%	12
10 to 20 minutes	19.40%	13
20 to 30 minutes	10.45%	7
30 to 45 minutes	10.45%	7
Longer than 45 minutes	11.94%	8
Not Applicable	29.85%	20
Total	100.00%	67

6. What is your primary mode of transportation? Required

Multi Choice | Skipped: 0 | Answered: 67 (100%)

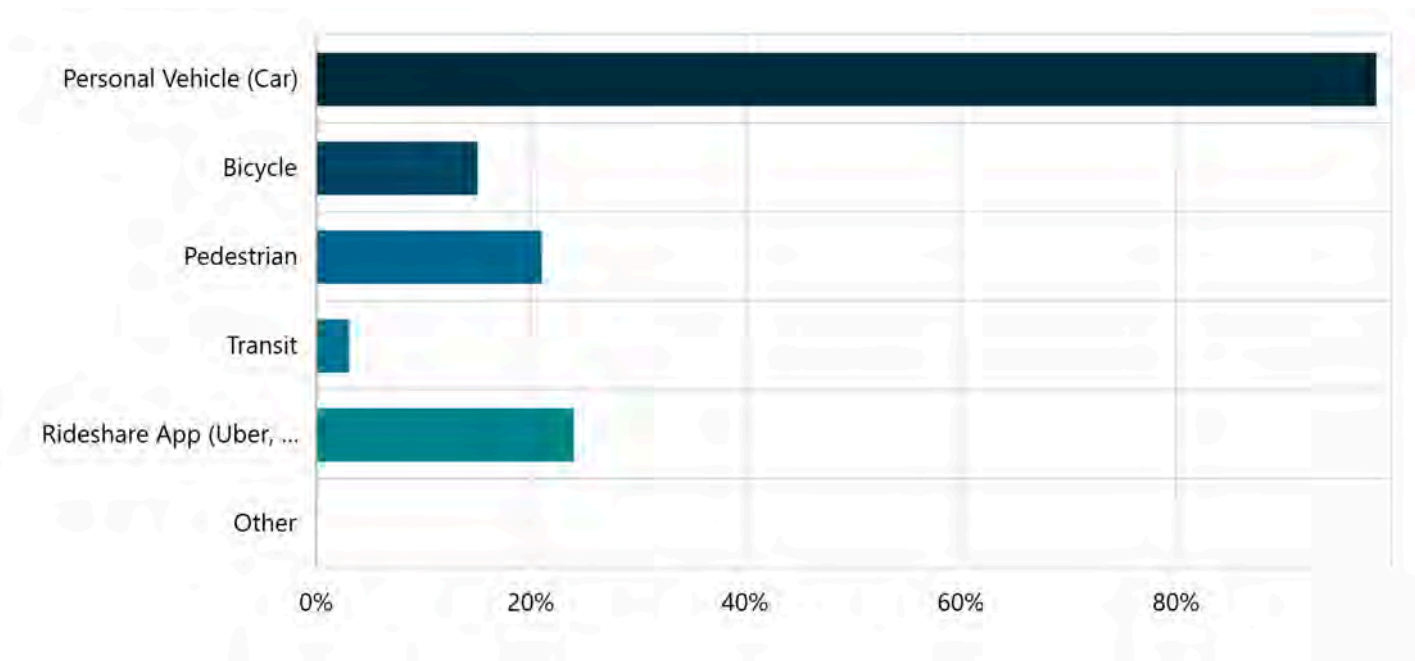


Answer choices	Percent	Count
Personal Vehicle (Car)	94.03%	63
Bicycle	0%	0
Pedestrian	0%	0
Transit	1.49%	1
Rideshare App (Uber, Lyft, etc)	0%	0
Not Applicable	2.99%	2
Other	1.49%	1
Total	100.00%	67

7. Which of the following modes of transportation have you used in the last 2 years? (Select all that apply)

Required

Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Personal Vehicle (Car)	98.51%	66
Bicycle	14.93%	10
Pedestrian	20.90%	14
Transit	2.99%	2
Rideshare App (Uber, Lyft, etc)	23.88%	16
Other	0%	0

8. Please rank the following modes from 1 to 5 in order of how often you use them (excluding modes that you ever use): Required

Ranking | Skipped: 13 | Answered: 54 (80.6%)



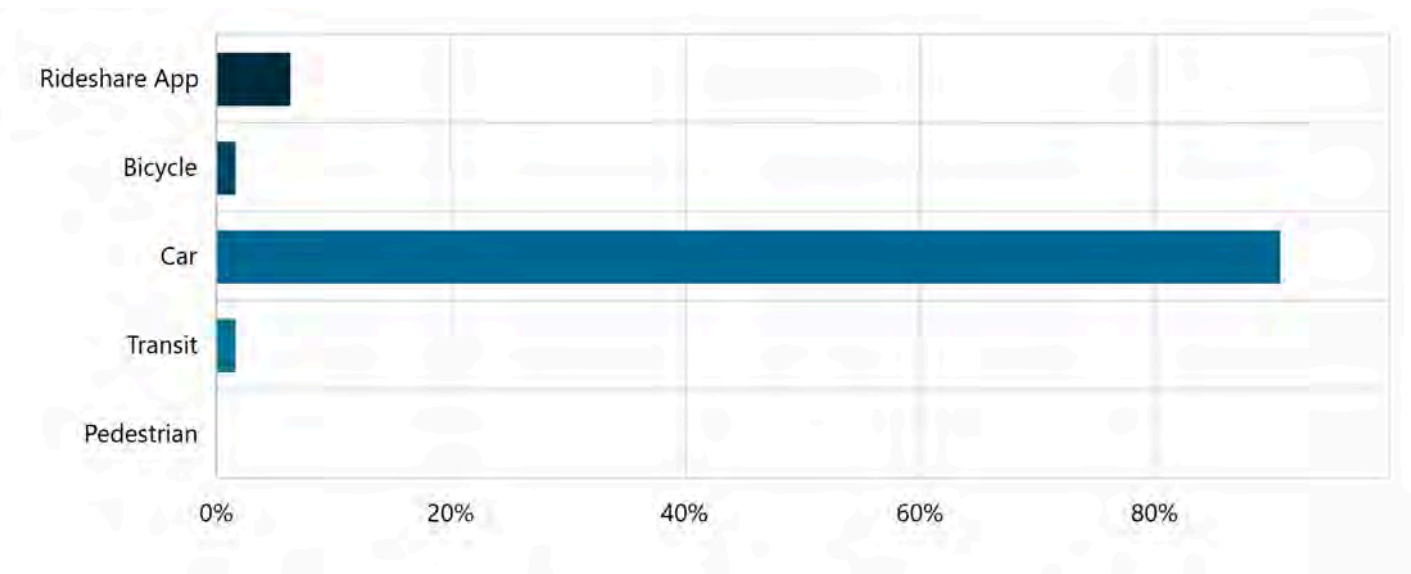
	1	2	3	4	5	Count	Score	Avg Rank
Personal Vehicle (Car)	98.08% 51	1.92% 1	0% 0	0% 0	0% 0	52	4.80	1.02
Bicycle	0% 0	15.38% 4	34.62% 9	15.38% 4	34.62% 9	26	1.11	3.69
Pedestrian	0% 0	58.62% 17	24.14% 7	10.34% 3	6.90% 2	29	1.80	2.66
Transit	15.00% 3	0% 0	20.00% 4	35.00% 7	30.00% 6	20	0.87	3.65
Rideshare App (Uber, Lyft, etc)	0% 0	57.58% 19	21.21% 7	18.18% 6	3.03% 1	33	2.04	2.67

Score - Sum of the weight of each ranked position, multiplied by the response count for the position choice, divided by the total contributions. Weights are inverse to ranked positions.

Avg Rank - Sum of the ranked position of the choice, multiplied by the response count for the position choice, divided by the total 'Count' of the choice.

9. I use this mode often and feel safe doing so. Required

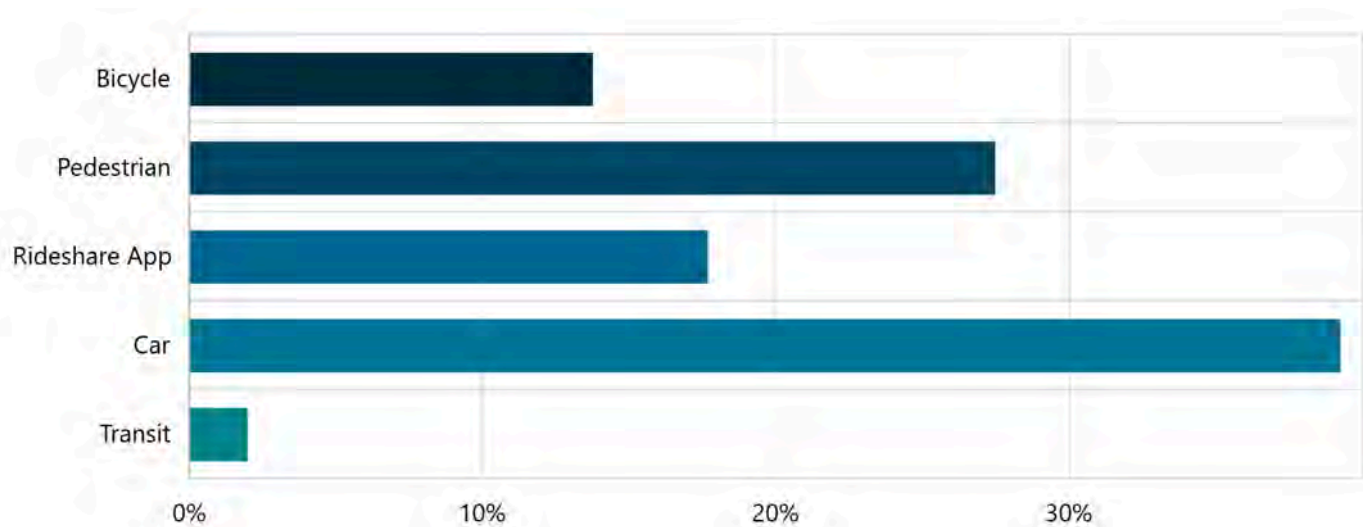
Multi Choice | Skipped: 3 | Answered: 64 (95.5%)



Answer choices	Percent	Count
Rideshare App	6.25%	4
Bicycle	1.56%	1
Car	90.63%	58
Transit	1.56%	1
Pedestrian	0%	0
Total	100.00%	64

10. I use this mode often, but do not always feel safe doing so. Required

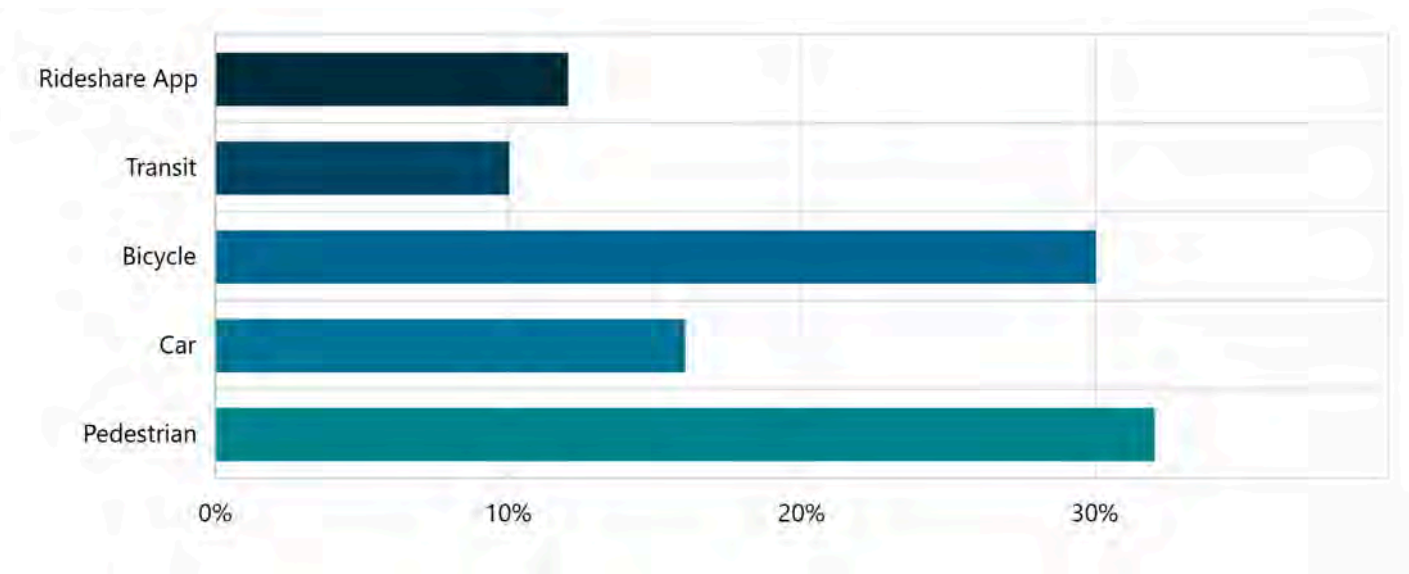
Multi Choice | Skipped: 16 | Answered: 51 (76.1%)



Answer choices	Percent	Count
Bicycle	13.73%	7
Pedestrian	27.45%	14
Rideshare App	17.65%	9
Car	39.22%	20
Transit	1.96%	1
Total	100.00%	51

11. I would use this mode more often if it were safer. Required

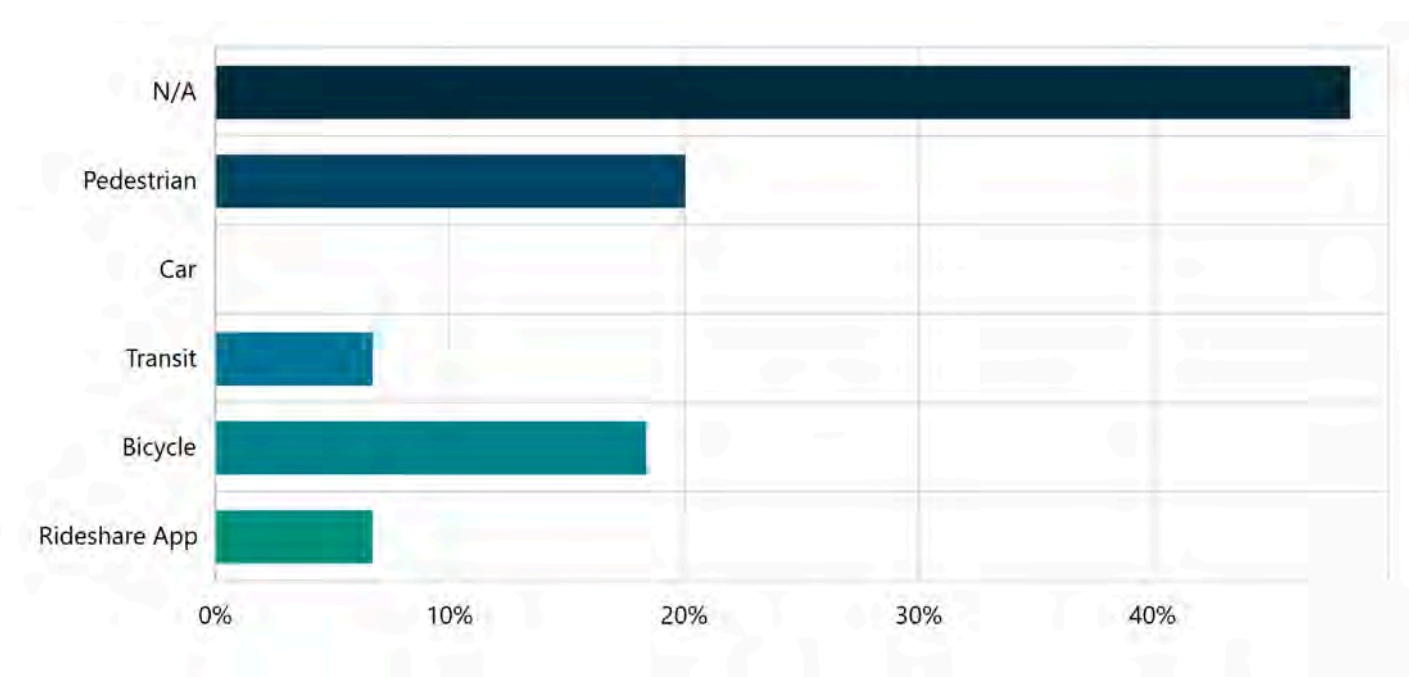
Multi Choice | Skipped: 17 | Answered: 50 (74.6%)



Answer choices	Percent	Count
Rideshare App	12.00%	6
Transit	10.00%	5
Bicycle	30.00%	15
Car	16.00%	8
Pedestrian	32.00%	16
Total	100.00%	50

12. I do not use this mode because I do not feel safe. Required

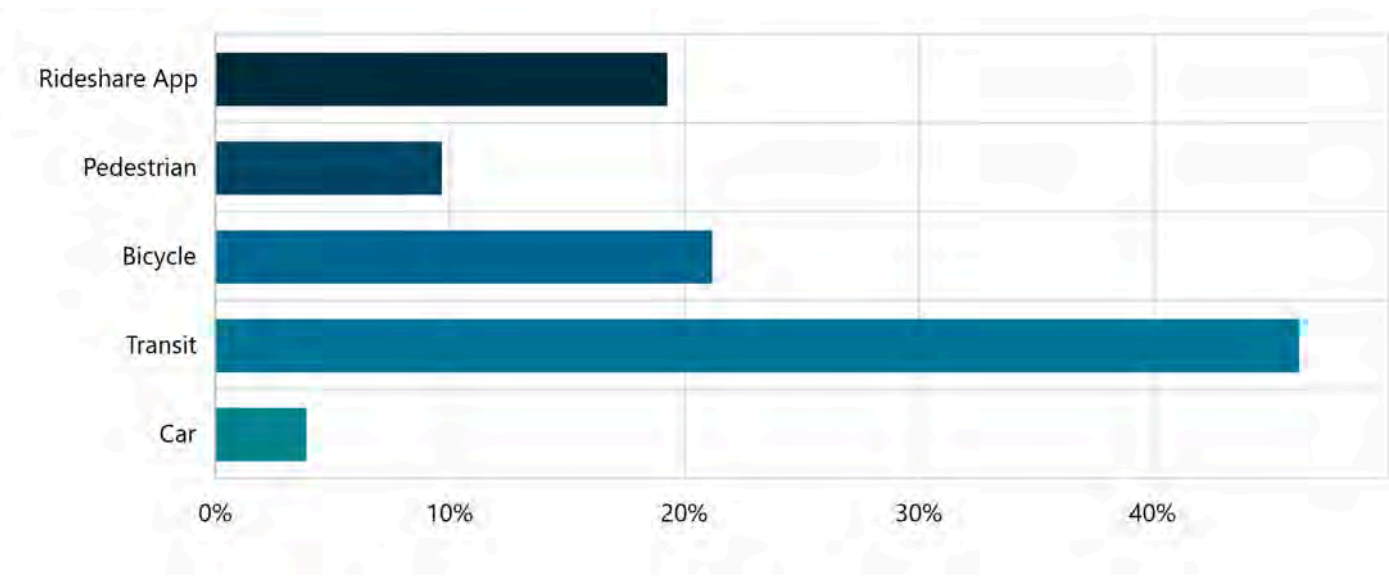
Multi Choice | Skipped: 7 | Answered: 60 (89.6%)



Answer choices	Percent	Count
N/A	48.33%	29
Pedestrian	20.00%	12
Car	0%	0
Transit	6.67%	4
Bicycle	18.33%	11
Rideshare App	6.67%	4
Total	100.00%	60

13. I do not use this mode but not for safety reasons. Required

Multi Choice | Skipped: 15 | Answered: 52 (77.6%)



Answer choices	Percent	Count
Rideshare App	19.23%	10
Pedestrian	9.62%	5
Bicycle	21.15%	11
Transit	46.15%	24
Car	3.85%	2
Total	100.00%	52

14. Would you like to add anything regarding mode choice and safety in DeSoto? Required

Long Text | Skipped: 47 | Answered: 20 (29.9%)

Sentiment

No sentiment data

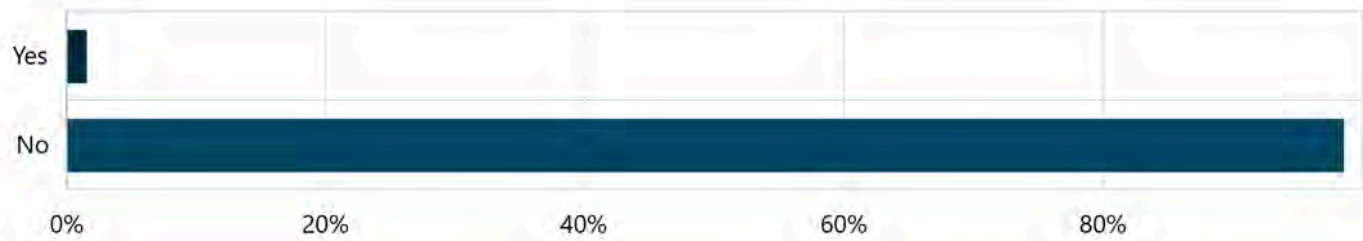
Tags

No tag data

Featured Contributions

No featured contributions

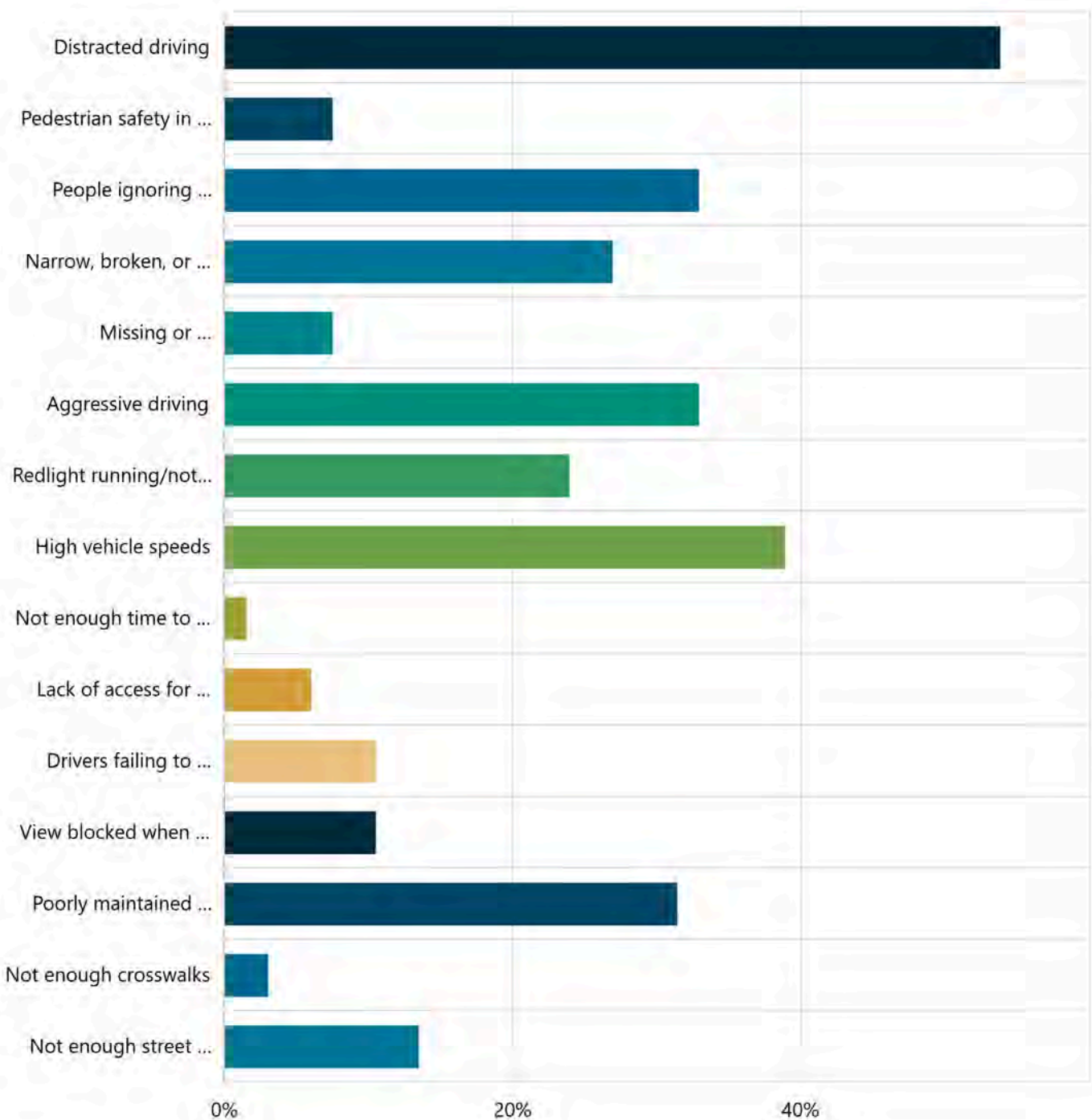
15. Are there any members of your household eligible to have a driver's license but do not have one? Required
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Yes	1.49%	1
No	98.51%	66
Total	100.00%	67

16. What are your top three (3) traffic safety concerns? (Choose 3) Required

Multi Choice | Skipped: 0 | Answered: 67 (100%)

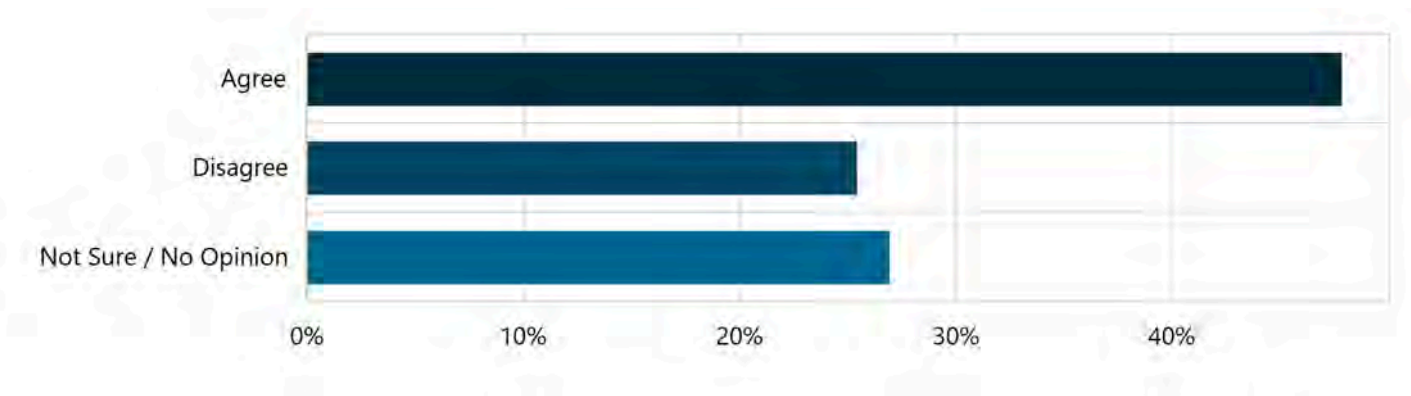


Answer choices	Percent	Count
Distracted driving	53.73%	36
Pedestrian safety in school zones	7.46%	5
People ignoring traffic laws while driving	32.84%	22
Narrow, broken, or missing sidewalks	26.87%	18

Missing or inadequate bike lanes or paths	7.46%	5
Aggressive driving	32.84%	22
Redlight running/not stopping at stop signs	23.88%	16
High vehicle speeds	38.81%	26
Not enough time to cross the street (too many lanes of traffic, streets are too wide)	1.49%	1
Lack of access for people with disabilities	5.97%	4
Drivers failing to yield to pedestrians and cyclists	10.45%	7
View blocked when turning	10.45%	7
Poorly maintained roads	31.34%	21
Not enough crosswalks	2.99%	2
Not enough street lighting	13.43%	9

17. I support reducing speed limits to slow down unsafe drivers. Required

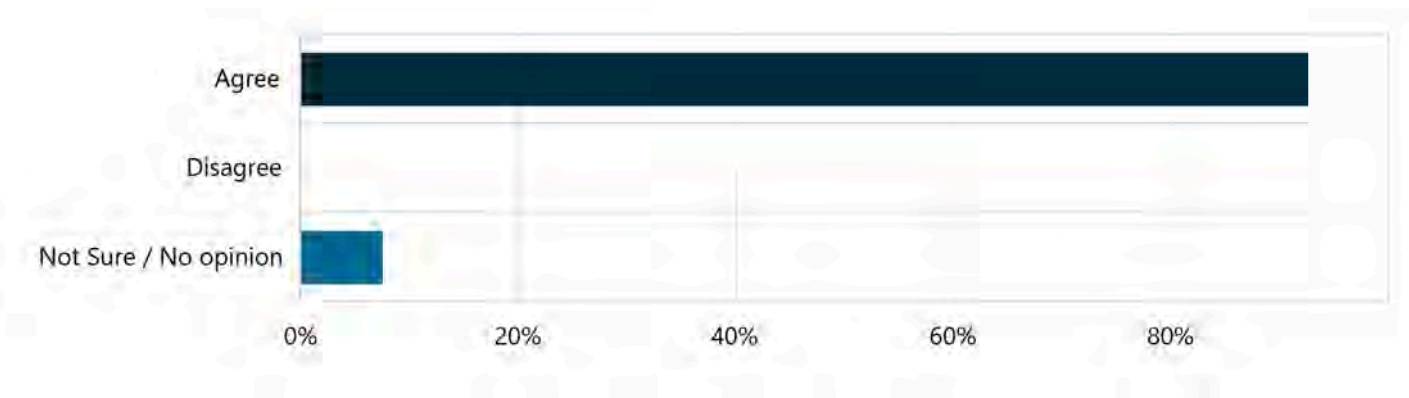
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Agree	47.76%	32
Disagree	25.37%	17
Not Sure / No Opinion	26.87%	18
Total	100.00%	67

18. I support investing in making walking safer (more sidewalks, high visibility crosswalks, midblock crossing, etc) Required

Multi Choice | Skipped: 0 | Answered: 67 (100%)

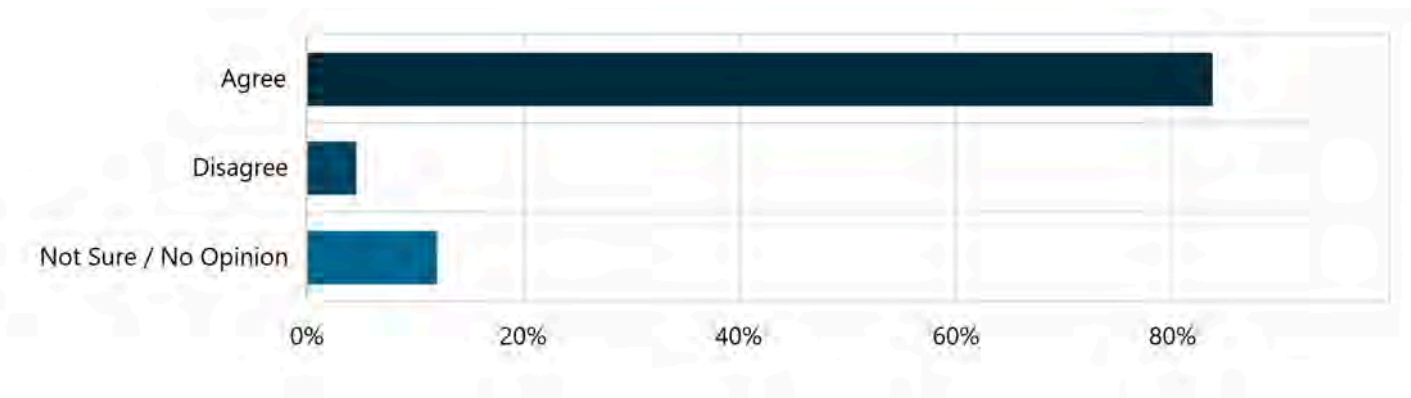


Answer choices	Percent	Count
Agree	92.54%	62
Disagree	0%	0
Not Sure / No opinion	7.46%	5
Total	100.00%	67

19. I support investing in making bicycling safer (more bike lanes and separation from vehicle traffic)

Required

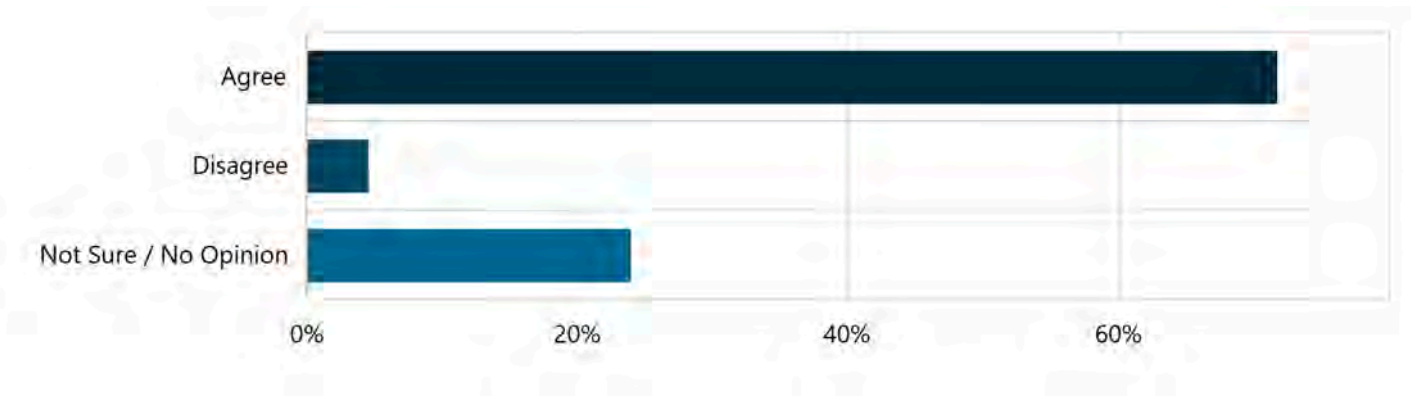
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Agree	83.58%	56
Disagree	4.48%	3
Not Sure / No Opinion	11.94%	8
Total	100.00%	67

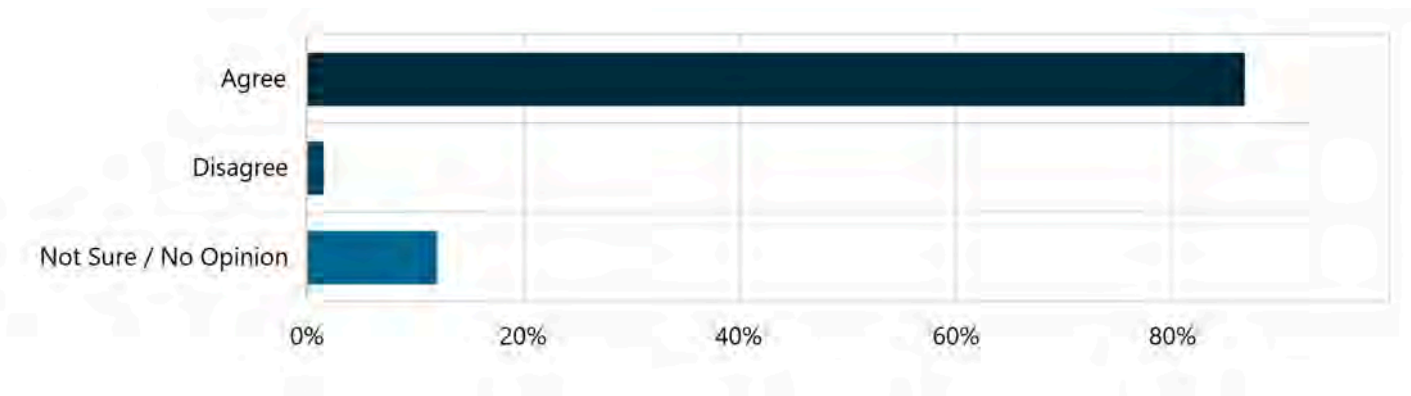
20. I support the creation of protected and/or dedicated facilities for multiple modes of travel (pedestrians, bicycles, transit). Required

Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Agree	71.64%	48
Disagree	4.48%	3
Not Sure / No Opinion	23.88%	16
Total	100.00%	67

21. I support funding for educational programs for driver safety and enhanced enforcement. Required
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Agree	86.57%	58
Disagree	1.49%	1
Not Sure / No Opinion	11.94%	8
Total	100.00%	67

22. What is the most important roadway safety concern you would like to see addressed in DeSoto? Required

Short Text | Skipped: 19 | Answered: 48 (71.6%)

Sentiment

No sentiment data

Tags

No tag data

Featured Contributions

No featured contributions

23. Are there any other specific opportunities to improve roadway safety in the City of DeSoto that you would like to see addressed? Required

Long Text | Skipped: 38 | Answered: 29 (43.3%)

Sentiment

No sentiment data

Tags

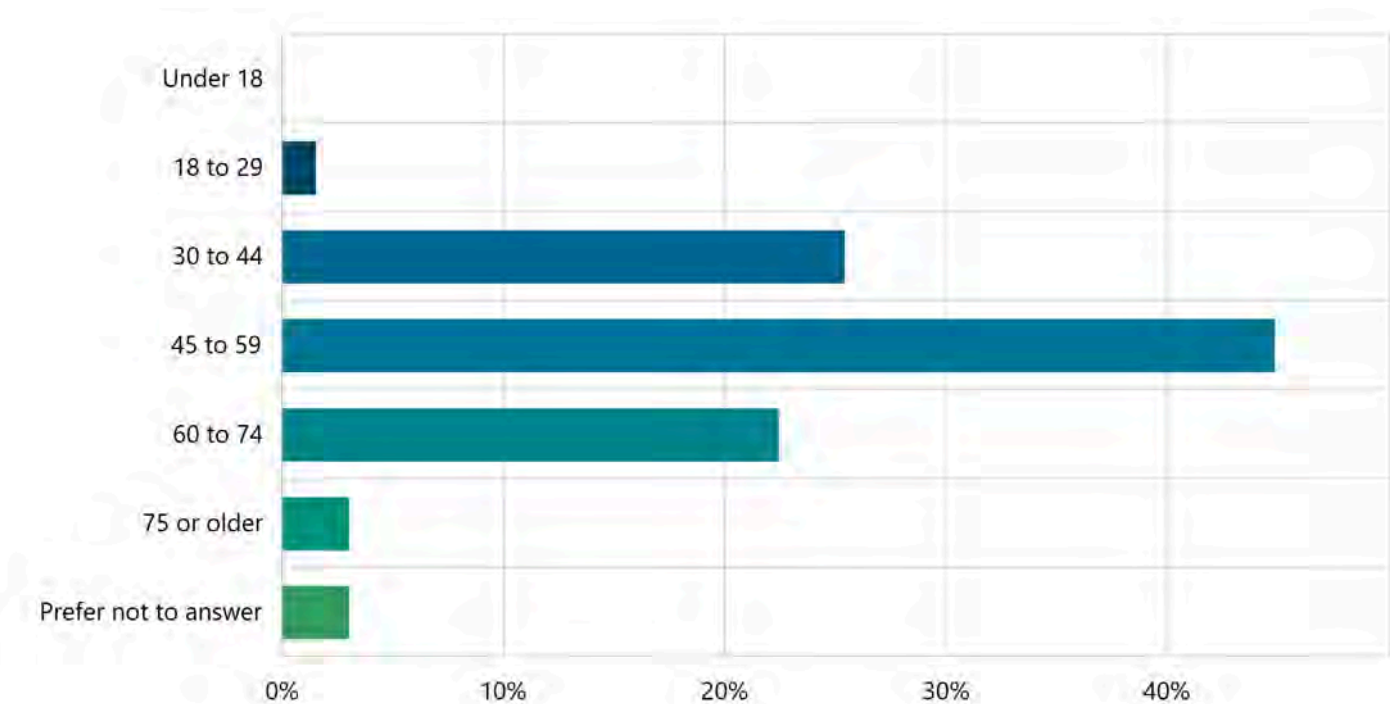
No tag data

Featured Contributions

No featured contributions

24. Please select your age range: Required

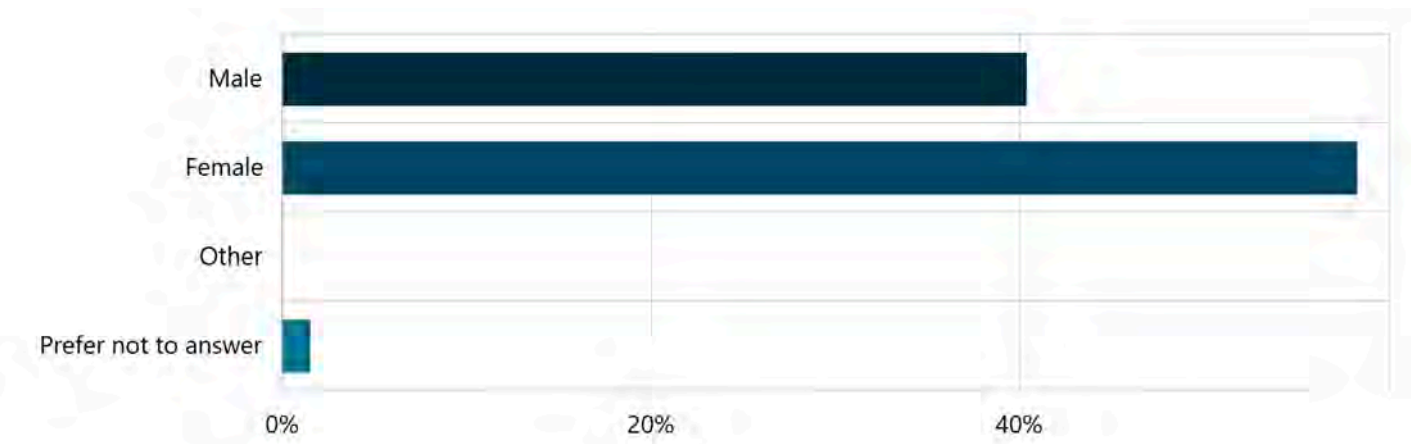
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Under 18	0%	0
18 to 29	1.49%	1
30 to 44	25.37%	17
45 to 59	44.78%	30
60 to 74	22.39%	15
75 or older	2.99%	2
Prefer not to answer	2.99%	2
Total	100.00%	67

25. What is your gender? Required

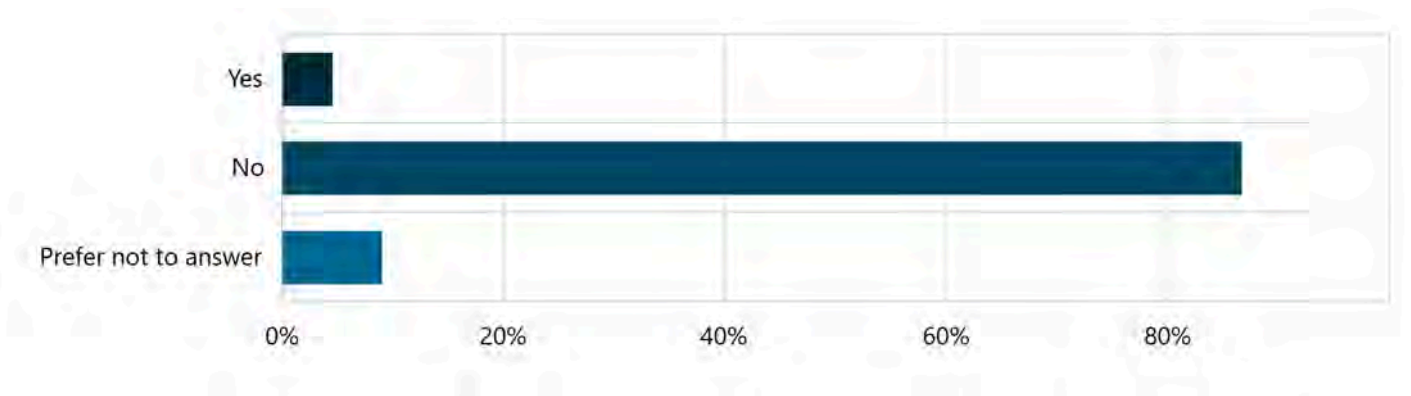
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Male	40.30%	27
Female	58.21%	39
Other	0%	0
Prefer not to answer	1.49%	1
Total	100.00%	67

26. Are you Hispanic, Latino, or Spanish origin? Required

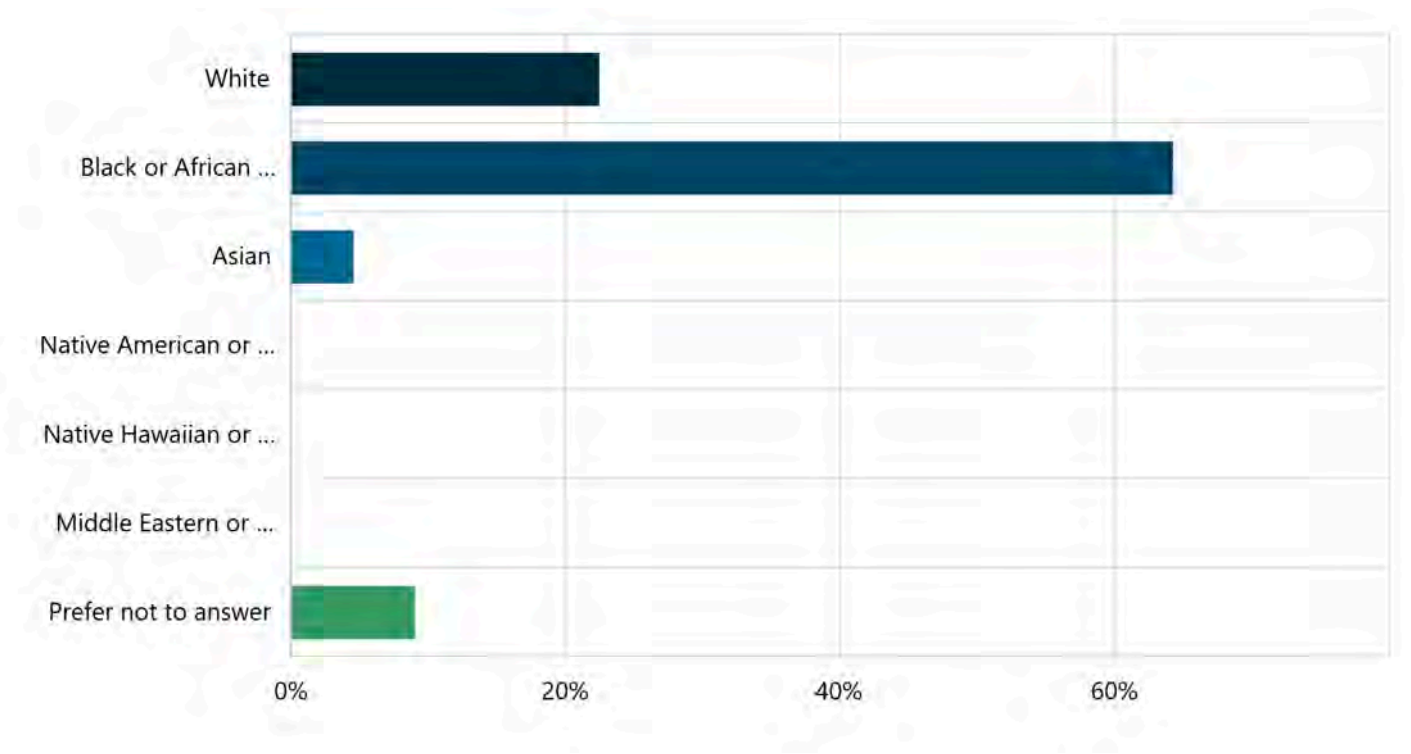
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Yes	4.48%	3
No	86.57%	58
Prefer not to answer	8.96%	6
Total	100.00%	67

27. Select the option(s) that best describe your race or ethnicity:

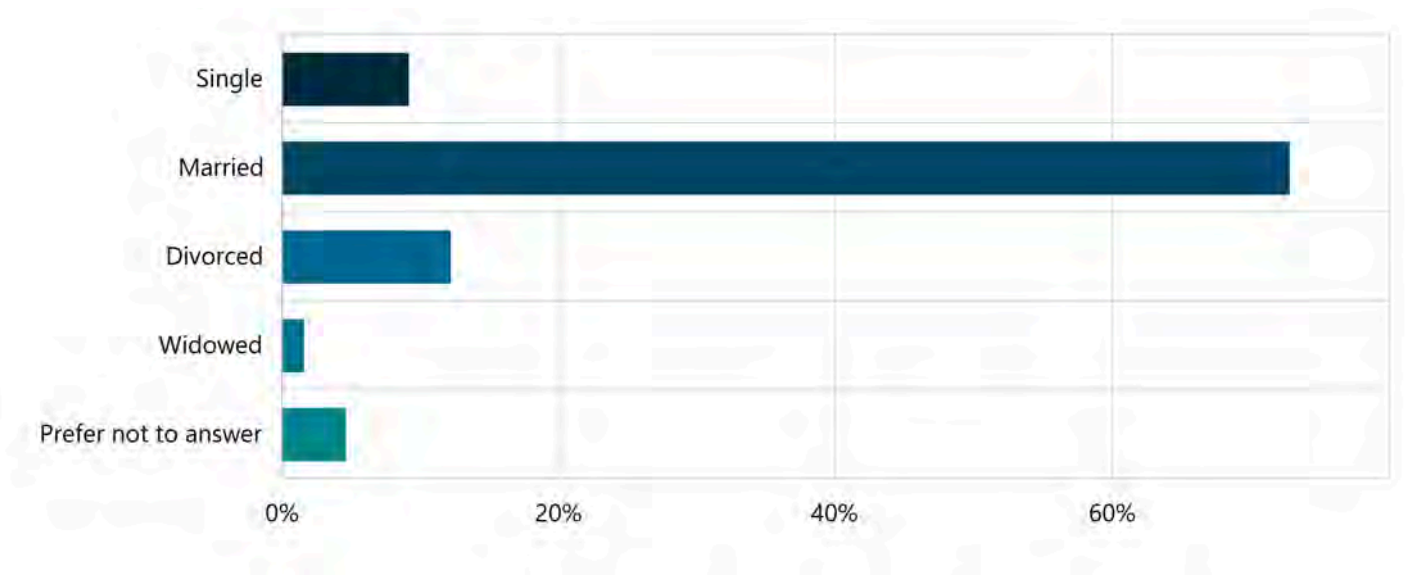
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
White	22.39%	15
Black or African American	64.18%	43
Asian	4.48%	3
Native American or Alaska Native	0%	0
Native Hawaiian or Other Pacific Islander	0%	0
Middle Eastern or North African	0%	0
Prefer not to answer	8.96%	6

28. Marital Status:

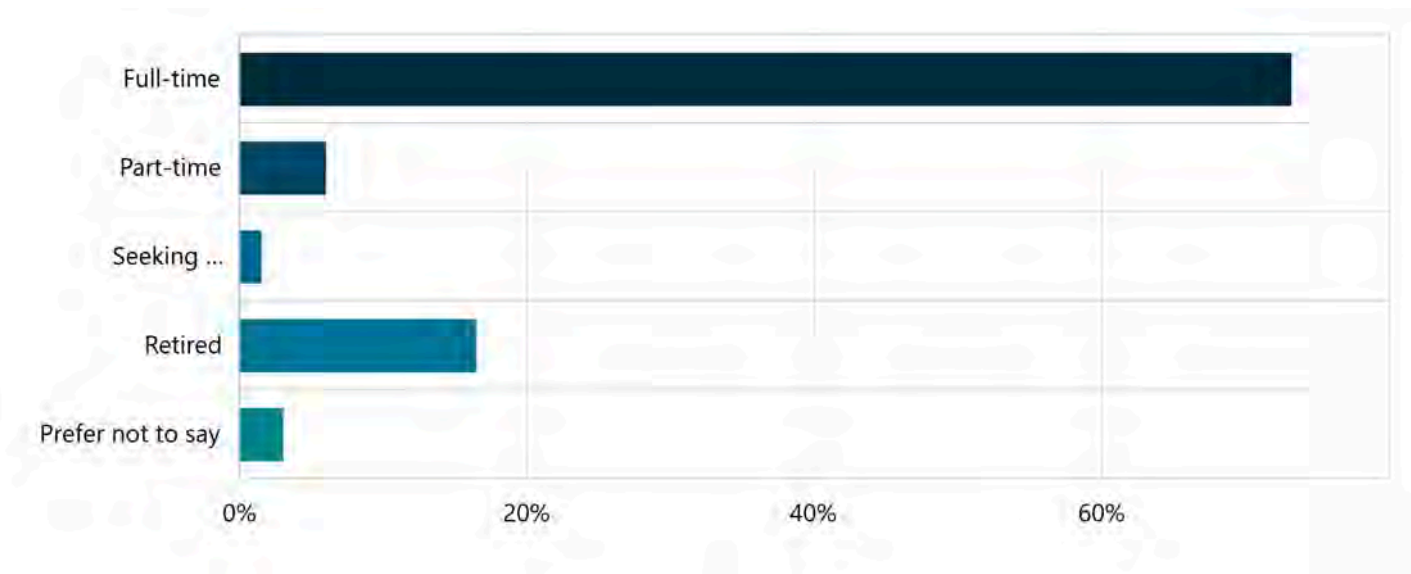
Multi Choice | Skipped: 1 | Answered: 66 (98.5%)



Answer choices	Percent	Count
Single	9.09%	6
Married	72.73%	48
Divorced	12.12%	8
Widowed	1.52%	1
Prefer not to answer	4.55%	3
Total	100.00%	66

29. What is your employment status?

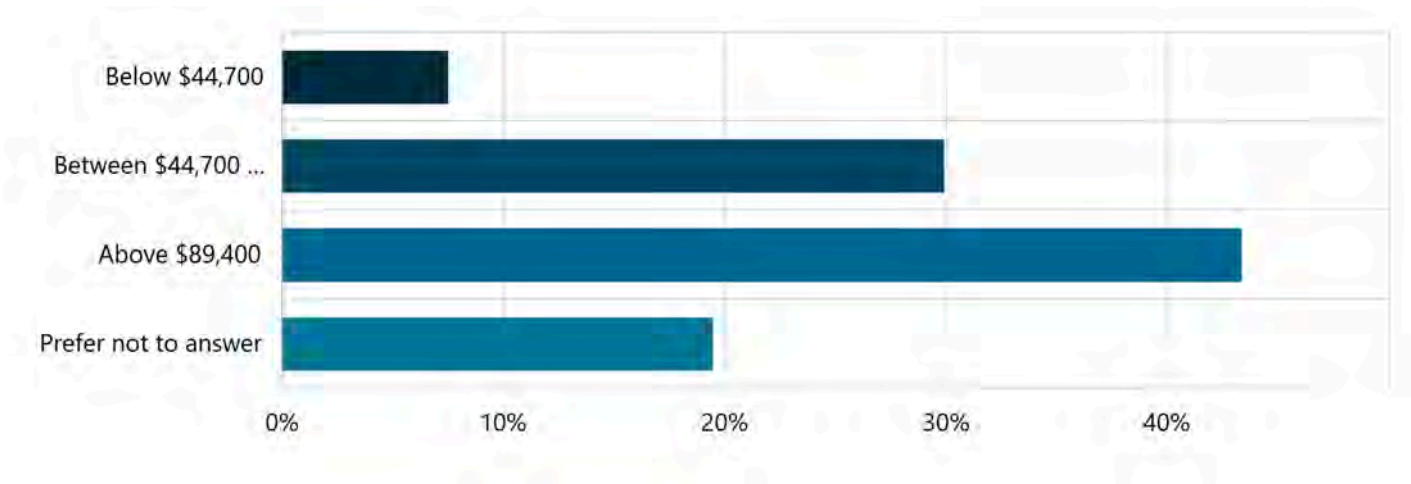
Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Full-time	73.13%	49
Part-time	5.97%	4
Seeking opportunities currently	1.49%	1
Retired	16.42%	11
Prefer not to say	2.99%	2
Total	100.00%	67

30. Income:

Multi Choice | Skipped: 0 | Answered: 67 (100%)



Answer choices	Percent	Count
Below \$44,700	7.46%	5
Between \$44,700 and \$89,400	29.85%	20
Above \$89,400	43.28%	29
Prefer not to answer	19.40%	13
Total	100.00%	67

Kimley-Horn Social Pinpoint

Report Type: Social Map Results Summary

Date Range: 18-10-2024 - 04-11-2024

Exported: 20-11-2024 15:23:14

Open

City of DeSoto Interactive Map Survey
[City of DeSoto Comprehensive Safety Action Plan](#)

10Contributors

36Contributions

Key Statistics

Top-level information about the activity.



36

Posts

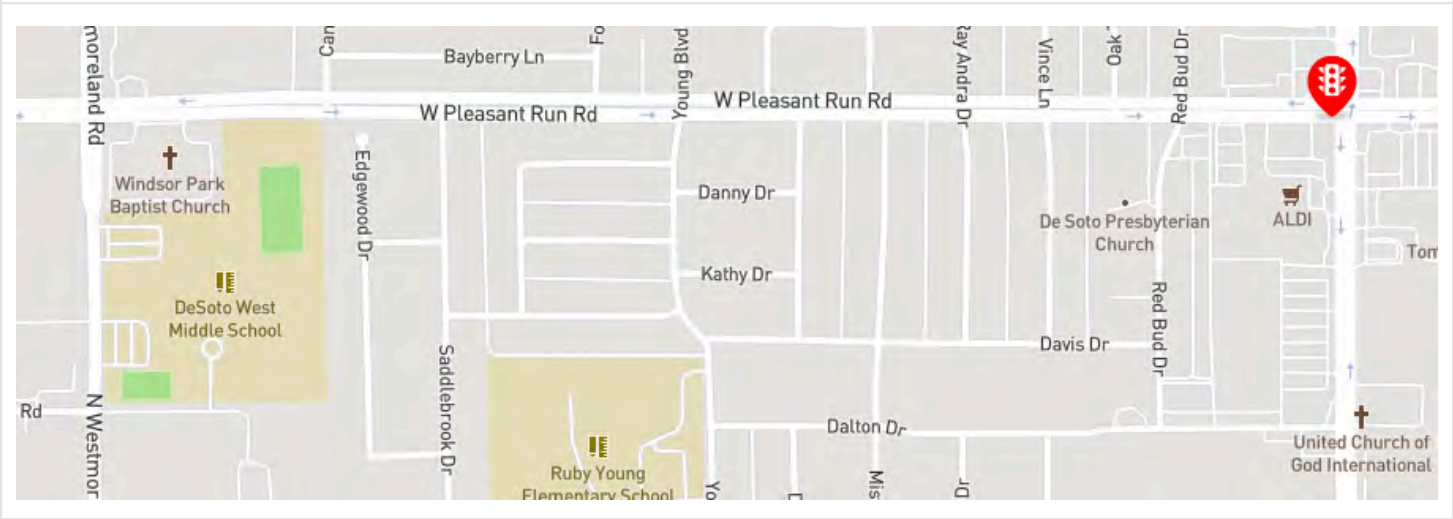
10 contributors

Map Post Summary

Summary of content contributed by participants including location information, voting results and more.

Posts by Location

Map showing all posts contributed by participants.



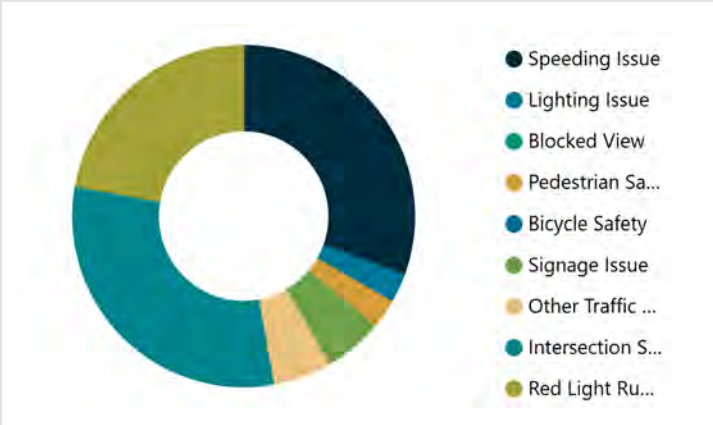
Top Contributions by Location

Top 10 most frequent postal/ZIP codes of posts submitted by participants.

Location	Total Contributions	% Contributions
75115, DeSoto, Dallas County, Texas, United States	24	66.67%
Windmill Hill, 75115, DeSoto, Dallas County, Texas, United States	3	8.33%
Creek Tree Estates, 75115, DeSoto, Dallas County, Texas, United States	2	5.56%
Frost Farms, 75115, DeSoto, Dallas County, Texas, United States	2	5.56%
Meadowbrook Estates, 75115, DeSoto, Dallas County, Texas, United States	2	5.56%
Chapel Hill, 75115, DeSoto, Dallas County, Texas, United States	1	2.78%
Mantlebrook, 75115, DeSoto, Dallas County, Texas, United States	1	2.78%
South Meadows, 75115, DeSoto, Dallas County, Texas, United States	1	2.78%

Posts by Category

Comparison showing the number of posts for each category, as selected by participants.





APPENDIX

C. FIELD OBSERVATIONS



MEMORANDUM

To: City of DeSoto

From: Brian Shamburger, PE, PTOE
Matt Pool, PE
Mason Shoaf, EIT
Tanner Hansard
Kimley-Horn and Associates, Inc.

Date: November 14, 2024

Subject: DeSoto CSAP – Field Observations and Recommendations

OVERVIEW

The following memorandum summarizes the data collection efforts, field observations, and recommendations along the four (4) study corridors as part of the City of DeSoto's Safe Streets and Roads for All (SS4A) Comprehensive Safety Action Plan.

FIELD DATA COLLECTION

In October 2024, the project team conducted field observations for the four (4) study corridors to understand the existing conditions and crash locations. The observations were gathered by walking and driving along each corridor.

The field observation data was collected via mobile phones using the ArcGIS Field Maps app (**Figure 1**). The team utilized this approach to examine crash data and compare it with the current conditions observed in the field. Field notes and photos were logged using a mobile app, which geo-tagged the observations to their respective locations. The findings were organized into corridor-wide and intersection-focused categories for each study corridor.

Figure 1. Mobile Crash Data and Notes



CITY-WIDE RECOMMENDATIONS

The following observations and recommendations were made at the City-wide level for all study corridors:

Upgrade Traffic Signal Visibility

Traffic signal equipment throughout the City was observed to be outdated and missing enhanced visibility components. Retroreflective backplates should be installed at all signal heads to increase drivers' visibility in all weather and lighting conditions. This relatively inexpensive improvement will increase visibility for all drivers and help increase adherence to the traffic signal phases.

Increase Lighting at Intersections

Nearly all sections of the study corridors provided sufficient lighting along the roadway. Lighting at signalized intersections along the study corridors was insufficient, where many intersections only provided lighting on one corner or none at all. It is recommended that lighting at each signalized intersection along the study corridors be improved, and a luminaire should be installed on each corner of the intersection. Increasing lighting at signalized intersections will increase visibility so pedestrians can use crosswalks safely and vehicles can move through the intersection without endangering other vehicles or pedestrians.

Enhance Pavement Markings

At each signalized intersection along the study corridors, pavement markings (i.e., stop bars, turn lane arrows, and crosswalks) have deteriorated and are hard to differentiate from the pavement or concrete. Pavement markings at all signalized intersections should be restriped or refreshed. All brick paver crosswalks should have enhanced longitudinal markings outlining the crosswalk, and all others should be replaced with high-visibility continental (or "ladder-style") markings. These improvements will significantly improve visibility for all vehicles in whatever lighting or weather condition is present, which will also help provide enhanced walkable spaces for pedestrians at the intersections.

Provide ADA Compliant Facilities

Throughout each corridor, pedestrian facilities at signalized intersections were either missing or had non-ADA-compliant curb ramps, push buttons, or pedestrian signal heads. This poses a barrier for many pedestrians or vulnerable road users who require this equipment to cross intersection crosswalks safely. It is recommended that all curb ramps, push buttons, or pedestrian signal heads be updated to adhere to the latest ADA requirements. This will improve safety for vulnerable road users and provide adequate pedestrian facilities for persons with disabilities.

Corridor Signal Timing

Based on field observations, many signalized intersections throughout the City experience moderate congestion during peak periods. Many vehicle platoons arrive at these intersections when the signal is red, which can lead to rear-end collisions. To reduce delays and enhance safety, it is recommended that the City implement coordinated signal timing along key arterial corridors, such as Hampton Road, Pleasant Run Road, and Belt Line Road. Additionally, existing vehicle and pedestrian yellow and all-red clearance intervals should be updated to meet current standards as part of this initiative.

1. W BELT LINE ROAD

Corridor Observations and Recommendations

The following observations were made at the corridor level along W Belt Line Road:

Wide Edge Line

W Belt Line Rd was observed to have edge lines denoting the edge of the travel way along the corridor. To enhance the presence of the edge lines and increase lane visibility, it is recommended to install a 6-inch-wide edge line along the northern and southern outside lanes of both directions of the roadway.

Speed Feedback Signs

It was noted that vehicles often speed through the corridor, especially with long distances between signalized intersections and vertical curve hills. To help drivers manage their speed along the long stretch of W Belt Line Rd, it is recommended to install a speed feedback sign at the following locations:

- 500 ft west of Sandy Creek Dr in the eastbound direction
- 1,000 ft west of Cockrell Hill Rd in the westbound direction

Intersection Observations and Recommendations

The following observations were made at the intersection level along W Belt Line Road:

S Duncanville Road Intersection

It was noted that the pedestrian pushbutton in the southwest corner was not functioning correctly, and the “DON’T WALK” indication was not functioning on the northeast corner of the intersection. Additionally, the pedestrian signal timing clearance intervals should be evaluated to ensure they meet traffic engineering standards. It is recommended that the pedestrian signal equipment be repaired and the pedestrian signal timing clearances for each crossing be assessed in more detail.

Sandy Creek Drive Intersection

During observations, the intersection of Sandy Creek Dr is located near the bottom of a hill along E Belt Line Rd, and sight distance for left-turning vehicles is limited. Implementing a positive offset left-turn for the eastbound and westbound approaches is recommended. Pulling the left-turn into the median further will help improve sight distance and safety for turning vehicles.

Laurel Springs Drive Intersection

During observations, the intersection of Laurel Springs Dr is located at the bottom of a hill along E Belt Line Rd, and the sight distance for left-turning vehicles is limited. Implementing a positive offset left-turn for the eastbound and westbound approaches is recommended. Pulling the left-turn into the median further will help improve sight distance and safety for turning vehicles.

N Cockrell Hill Road Intersection

Like the other intersections along E Belt Line Rd, implementing positive offset left-turns in the median at the intersection will improve sight distance for all drivers traveling along the study corridor.

2. E BELT LINE ROAD

Corridor Observations and Recommendations

The following observations were made at the corridor level along E Belt Line Road:

Install a Raised Median

It was observed that there is currently a two-way left-turn lane running from N Hampton Rd to approximately 750 ft west of Polk St along E Belt Line Rd. E Belt Line Rd west of N Hampton Rd is a six-lane section and has a raised median and east of Polk St it is a four-lane section with a raised median. Installing a raised median from N Hampton Rd to 750 ft west of Polk St is recommended to complete the median along the study corridor. As part of this, it is recommended that median openings be provided at all residential streets to offer controlled access along E Belt Line Rd. The raised median will help reduce turning conflicts and lane departures throughout the corridor, thus reducing the locations of crashes to just controlled median openings.

Driveway Consolidation

Access management measures, like driveway consolidations, should be implemented along the corridor based on the frequency and spacing of existing driveways along the E Belt Line Road. It is recommended that driveways be consolidated near signalized intersections, prioritizing closing the driveways closest to intersections where multiple driveways at an approach are present. Consolidating driveways near intersections will help increase access spacing, providing sufficient queueing space for vehicles and safer conditions for exiting vehicles at these driveways.

Intersection Observations and Recommendations

The following observations were made at intersections along E Belt Line Road:

N Hampton Road Intersection

It was observed that there was no median divide between lanes of travel at the intersection on the southbound and westbound approaches. 250-foot-long medians should be installed along these approaches to reduce turn conflicts or lane departures at the intersection.

Lyndalyn Avenue Intersection

It was observed that a faded crosswalk (**Figure 2**) is installed at the Lyndalyn Avenue intersection, crossing E Belt Line Rd. This crosswalk spans five lanes and provides access to the DeSoto ISD Language and Conference Center and many residential areas nearby. To improve safety at this pedestrian crossing, the installation of a pedestrian hybrid beacon (PHB) is recommended. A PHB provides a high-visibility crosswalk with overhead flashing lights that will alert drivers to stop when a pedestrian is crossing.

It should be noted that the proposed median along E Belt Line Rd just east of N Hampton Rd would create the opportunity to provide an eastbound left-turn lane at Lyndalyn Ave; however, the offset northbound approach at Lyndalyn Ave would be limited to right-in/right-out only operations.

Figure 2. Lyndalyn Ave Pedestrian Crosswalk



N Parks Drive Intersection

It was observed that an existing sign in the intersection's southwest corner obstructs drivers' sight distance looking west along E Belt Line Road (**Figure 3**). It is recommended that the sign be relocated or removed to increase sight distance and improve safety.

Figure 3. Sight Distance Obstruction



3. E PLEASANT RUN ROAD

Corridor Observations and Recommendations

The following observations were made at the corridor level along E Pleasant Run Road:

Access Management

Several issues related to sight distance and multiple median openings exist along the corridor, which create numerous conflict points for vehicles at driveways. Full-access median openings are at Tom Thumb, Whataburger, and the Hilltop Circle/DeSoto Town Center driveways. These openings are all within 750 feet of the N Hampton Rd signalized intersection. To improve safety and traffic flow, consolidating the median openings and installing hooded left-turn lanes for the Whataburger and the easternmost Tom Thumb driveway are recommended.

Eliminate Sidewalk Gaps

It was observed that the corridor had sidewalk gaps, especially on the south side of E Pleasant Run Rd and parts of the north side near N Hampton Rd. Additionally, worn grass paths show that pedestrians use this area, and a sidewalk would provide safer conditions along the corridor (**Figure 4**). It is recommended to construct a sidewalk between the following locations:

- From Fuzzy's driveway to Chattey Rd on the south side
- From the Whataburger driveway to N Hampton Rd intersection on the north side

Figure 4. Example of Existing Worn Pedestrian Paths within the Parkway



Intersection Observations and Recommendations

The following observations were made at the intersection level along E Pleasant Run Road:

N Hampton Road Intersection

The existing median noses extend into the crosswalk and impede a clear path for pedestrians to use the crosswalk. To provide ADA-compliant crosswalks, it is recommended that the median nose be pulled back to clear the crosswalk path and restripe it with longitudinal high-visibility pavement markings. Additionally, the signal is outdated and does not provide flashing yellow arrows, but only "Left Turn Yield on Green" (**Figure 5**). It is recommended that the signal heads and associated

signage be upgraded to provide flashing yellow arrows that are much clearer and safer for turning vehicles at the intersection.

Figure 5. Signal Head Adjustment



DeSoto Town Center/Hilltop Circle Intersection

It was observed that vehicles traveling northbound and southbound to enter E Pleasant Run Road do not have adequate sight distance. This limited sight distance poses a safety issue for turning vehicles. Along with the corridor recommendation to limit access between N Hampton Road and Hilltop Circle, installing a signal at the intersection is recommended. In addition, the northbound approach should be restriped to provide two lanes with high-visibility crosswalks and stop bars. Also, ADA-compliant curb ramps should be constructed, and pedestrian signal heads and push buttons should be installed, similar to other signalized intersection improvements.

Trimming the bushes and vegetation on the north side of the road near DeSoto Town Center is recommended to improve sight distance at the intersection. Installing a traffic signal will create a safe crossing point for pedestrians traveling from the DeSoto Town Center to Tom Thumb and other retail areas across E Pleasant Run Road. Additionally, it will improve safe turning movements for vehicles approaching from the north and south.

N Chattey Road Intersection

There are sidewalks on both the north and south sides of the road, but only east of Chattey Road. However, there is no crosswalk connecting those sidewalks besides at N Hampton Road (about ½ mile west) and Polk Street (about ½ mile east). Chattey Road is the approximate midpoint for providing a pedestrian crossing at a signalized intersection. Therefore, installing a high-visibility north-south crosswalk along the westbound approach is recommended. When installed, the existing traffic signal must be modified to provide accessible pedestrian signals, pushbutton assemblies, and ADA-compliant curb ramps. Additionally, the City should consider implementing a leading pedestrian interval with the new pedestrian clearance timing.

Figure 6. No North-South Crosswalk at Chattey Road



4. N HAMPTON ROAD

Corridor Observations and Recommendations

The following observations were made at the corridor level along N Hampton Road:

Sidewalk and Curb Ramp Improvements

Many sections of the sidewalk throughout the corridor were not constructed or are in disrepair, not providing a safe refuge for pedestrians. It is recommended that all missing sections of sidewalk along N Hampton Road be completed and constructed. In addition, curb ramps at driveways and intersections should be provided for ADA accessibility.

Speed Feedback Signs

Driving over the posted speed limit of 40 mph is common along the corridor. N Hampton Road, being six lanes wide with a median, makes it easy for drivers to exceed the speed limit. To help mitigate this issue, it is recommended to install speed feedback signs at the following locations:

- 100 feet north of Seahawk Drive in the northbound direction
- 100 feet south of Executive Way in the southbound direction

Intersection Observations and Recommendations

The following observations were made at the intersection level along N Hampton Road:

E Centre Park Boulevard Intersection

It was noted that the median noses on each approach extend into or beyond the existing crosswalks. All medians should be pulled back to prevent obstructions within the pedestrian crosswalk. Additionally, the existing signal equipment was found to be outdated, and it is advised that it be updated to include flashing yellow arrows for each left-turn movement. Furthermore, the existing curb ramps should be reconstructed as ADA-compliant, providing safe passage for vulnerable road users and persons with disabilities.

Figure 7. Median Nose Extends Past Existing Crosswalk



Seahawk Drive Intersection

The intersection serves a large portion of the area's development and the school. It has also experienced crashes in the past, so a traffic signal should be installed at the intersection to mitigate turning conflicts and provide a safe exit onto N Hampton Road.

E Wintergreen Road Intersection

Many existing driveways are situated too close to the intersection (see **Figure 8**). It is recommended that these driveways be consolidated near the intersection, prioritizing closing those closest to the intersection, especially where multiple driveways are present along one approach. This consolidation will help reduce vehicle conflicts and create safer conditions for vehicles entering and exiting N Hampton Rd.

Figure 8. Driveway Closures





