

# CHAPTER 6.5: CITY OF ROBINSON

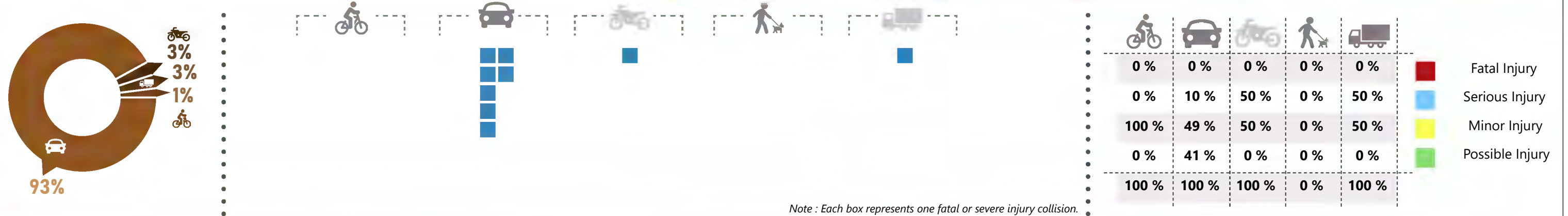
## INTRODUCTION

The City of Robinson is located along US-77 due southeast of Waco in McLennan County. IH-35 and Highway 6 also are located in the city limits. The city has an estimated population of 12,443 according to the 2020 census. This chapter provides information on the City of Robinson’s collision statistics from 2014 to 2023. A total of 76 collisions occurred on Robinson streets in the last 10 years including zero fatalities and nine serious injuries. TxDOT roadways within Robinson city limits observed 443 collisions during the same period, with 11 fatal injuries and 54 serious injuries. The majority of injury collisions in both City and TxDOT rights-of-way resulted in minor injuries, with 50 percent in City right-of-way and approximately 43 percent in TxDOT right-of-way.

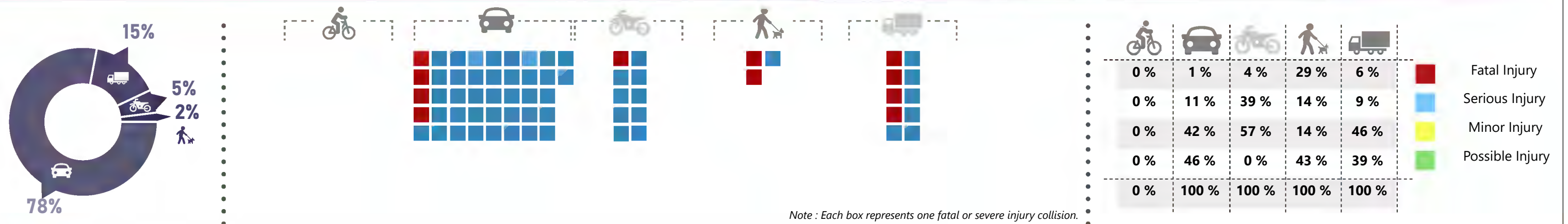


COLLISIONS 2014 TO 2023		CITY		TxDOT	
<b>Total Collisions</b>	<b>76</b>	<b>100 %</b>	<b>443</b>	<b>100 %</b>	
Fatal Injury	0	0.00 %	11	2.48 %	
Serious Injury	9	11.84 %	54	12.19 %	
Minor Injury	38	50.00 %	190	42.89 %	
Possible Injury	29	38.16 %	188	42.44 %	
<b>Total Persons Involved</b>	<b>91</b>	<b>100 %</b>	<b>676</b>	<b>100 %</b>	
Fatal Injury	0	0.00 %	12	1.78 %	
Serious Injury	12	13.19 %	63	9.32 %	
Minor Injury	43	47.25 %	284	42.01 %	
Possible Injury	36	39.56 %	317	46.89 %	

### COLLISIONS BY MODE - CITY



### COLLISIONS BY MODE - TxDOT



The following summary provides information on the number of collisions, persons injured, and the proportion of persons involved in collisions based on mode of transportation, age group, and gender. It also draws comparisons between collisions on Robinson's city streets, TxDOT facilities and McLennan County across various categories.

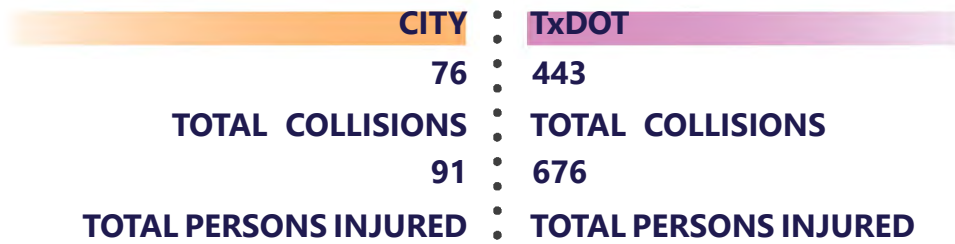
On Robinson city streets, there were a total of 76 collisions, resulting in 91 persons injured. In comparison, TxDOT reported a total of 443 collisions resulting in 676 persons injured within Robinson city limits.

This section also identifies several major collision trends on Robinson city streets, including hit object collisions involving unsafe speeds, right-of-way violations by automobiles, and nighttime collisions. On TxDOT roadways, the prominent trends were hit object collisions, rear end collisions, unsafe speed violations, and nighttime collisions. A detailed summary analyzing these collision trends is provided in the collision profile section of this chapter.

The pie charts below compare the severity of collisions on roadways with different speed limits. The charts indicate that roads with a 60 mph speed limit accounted for the highest proportion of KSI collisions out of the speed limits examined.

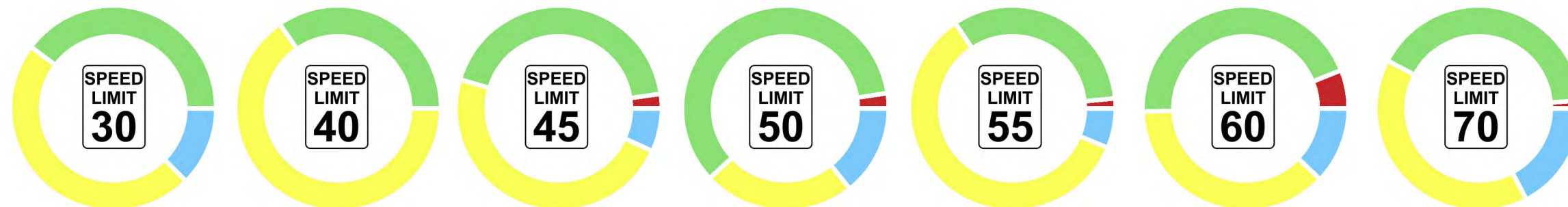
CITY OF ROBINSON VS. McLENNAN COUNTY COLLISIONS - RELATIVE SHARES

CITY		TxDOT		McLENNAN COUNTY	
Bicycle	1 %	Bicycle	0 %	Bicycle	1 %
Car	93 %	Car	78 %	Car	85 %
Motorcycle	3 %	Motorcycle	5 %	Motorcycle	4 %
Pedestrian	0 %	Pedestrian	2 %	Pedestrian	3 %
Truck	3 %	Truck	15 %	Truck	7 %
<b>FIRST HARMFUL EVENT</b>					
Fixed Object	54 %	Motor Vehicle in Transport	63 %	Motor Vehicle in Transport	72 %
Motor Vehicle in Transport	32 %	Fixed Object	25 %	Fixed Object	17 %
Overtaken	7 %	Overtaken	7 %	Overtaken	4 %
<b>MANNER OF COLLISION</b>					
Hit Object	68 %	Hit Object	37 %	Broadside	42 %
Broadside	18 %	Rear End	33 %	Hit Object	28 %
Head On	8 %	Broadside	19 %	Rear End	24 %
Rear End	4 %	Sideswipe	8 %	Sideswipe	5 %
<b>VIOLATION CATEGORY</b>					
Unsafe Speed	20 %	Unsafe Speed	32 %	Unsafe Speed	23 %
Driving/ Bicycling under Influence	16 %	Over Improper Driving	11 %	Automobile Right-of-Way	22 %
Distracted Driving	16 %	Other Unforeseen Reasons	9 %	Traffic Signals and Signs	12 %
Driver Condition	14 %	Automobile Right-of-Way	9 %	Distracted Driving	8 %
Other Improper Driving	9 %	Distracted Driving	9 %	Other Improper Driving	6 %
Automobile Right-of-Way	8 %	Driving under Influence	5 %	Other Unforeseen Reasons	6 %
<b>LOCATION</b>					
Intersection	39 %	Intersection	37 %	Intersection	59 %
Roadway	61 %	Roadway	63 %	Roadway	41 %
<b>LIGHTING</b>					
Daylight	54 %	Daylight	62 %	Daylight	70 %
Dark, Lighted	16 %	Dark, Lighted	21 %	Dark, Lighted	16 %
Dark, Not Lighted	25 %	Dark, Not Lighted	12 %	Dark, Not Lighted	11 %



	CITY				TxDOT			
	MODE	MODE	MODE	MODE	MODE	MODE	MODE	MODE
<b>Bicycle</b>	0 %	0 %	1 %	0 %	0 %	0 %	0 %	0 %
<b>Car</b>	0 %	12 %	45 %	40 %	1 %	7 %	38 %	44 %
<b>Motorcycle</b>	0 %	1 %	1 %	0 %	0 %	1 %	2 %	0 %
<b>Pedestrian</b>	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
<b>Truck</b>	0 %	0 %	0 %	0 %	0 %	0 %	2 %	2 %
<b>AGE</b>								
<b>Below 15</b>	0 %	0 %	1 %	1 %	0 %	0 %	4 %	6 %
<b>15 - 65</b>	0 %	13 %	42 %	33 %	1 %	8 %	34 %	37 %
<b>Above 65</b>	0 %	0 %	4 %	5 %	1 %	1 %	4 %	4 %
<b>GENDER</b>								
<b>Male</b>	0 %	10 %	22 %	25 %	1 %	6 %	23 %	20 %
<b>Female</b>	0 %	3 %	25 %	14 %	1 %	3 %	19 %	27 %

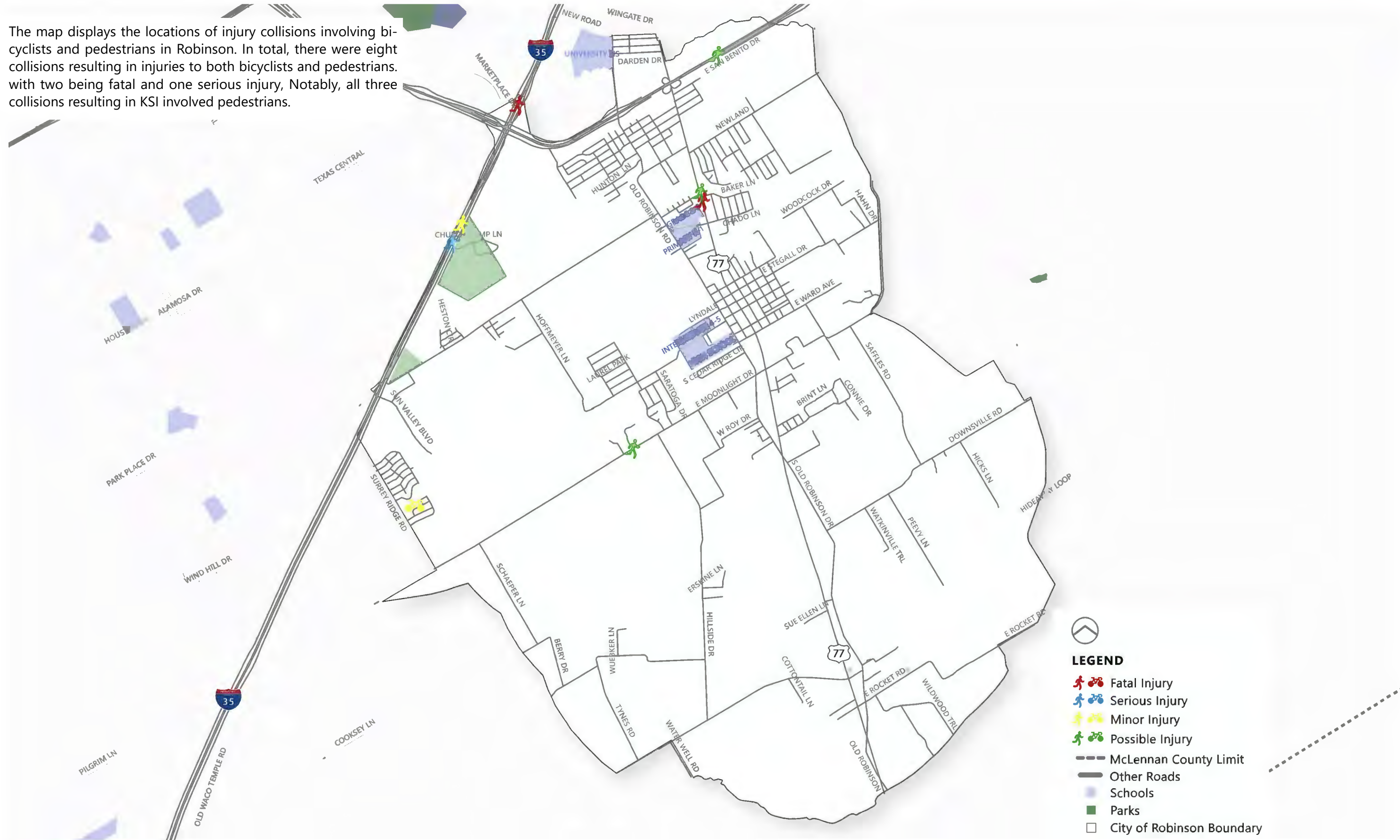
SPEED LIMIT



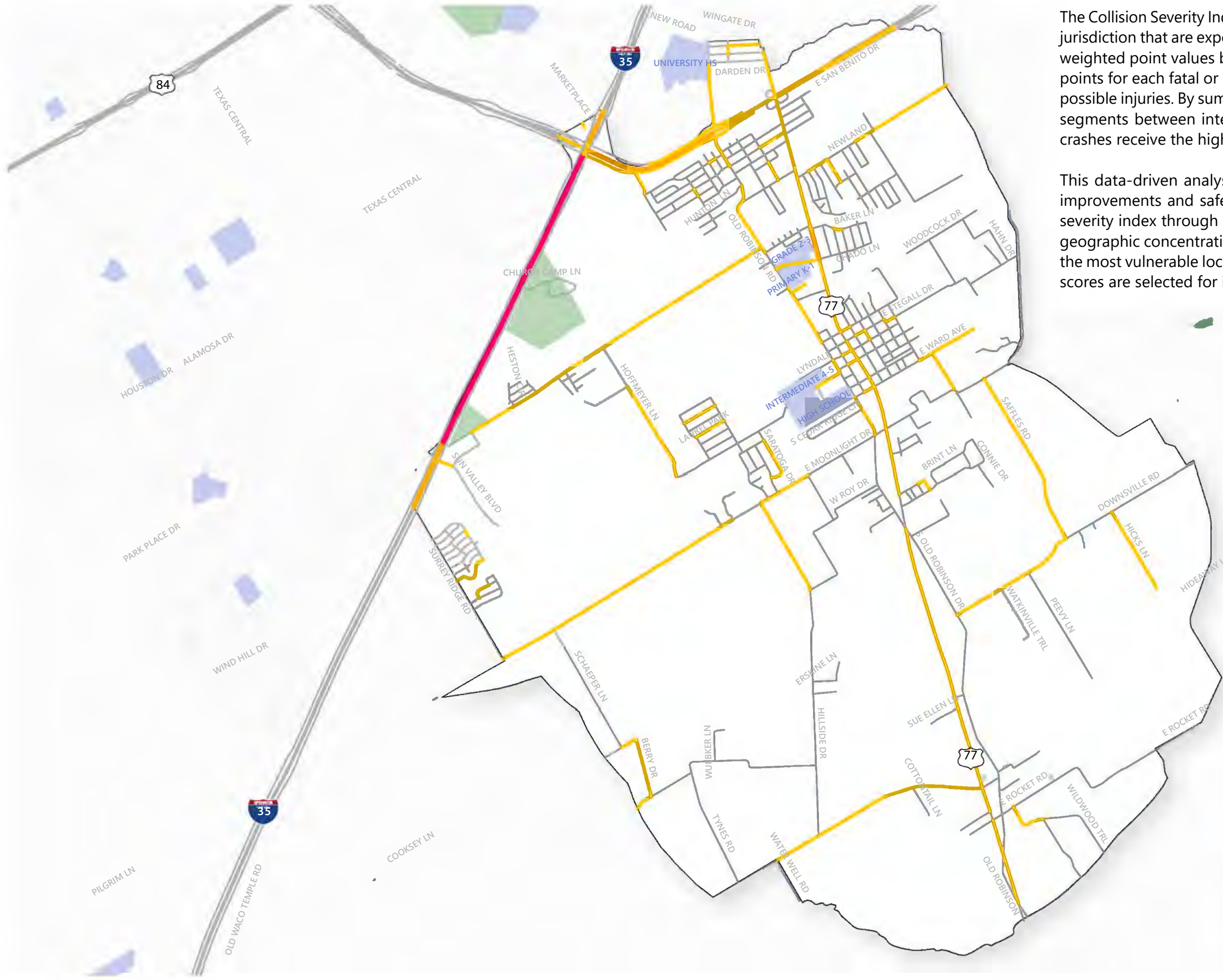


### BICYCLE & PEDESTRIAN COLLISION BY SEVERITY

The map displays the locations of injury collisions involving bicyclists and pedestrians in Robinson. In total, there were eight collisions resulting in injuries to both bicyclists and pedestrians, with two being fatal and one serious injury. Notably, all three collisions resulting in KSI involved pedestrians.



SEVERITY INDEX



The Collision Severity Index methodology is used to identify the locations within a jurisdiction that are experiencing the most severe crashes. This approach assigns weighted point values based on the injury outcomes of individual collisions - 3 points for each fatal or severe injury, 2 points for minor injuries, and 1 point for possible injuries. By summing these scores for all crashes along defined roadway segments between intersections, locations with a history of the most severe crashes receive the highest overall severity index.

This data-driven analysis allows the project team to prioritize infrastructure improvements and safety countermeasures in high-risk areas. Visualizing the severity index through a color-coded collision heat map further highlights the geographic concentrations of injury crashes, guiding decision-makers to target the most vulnerable locations for mitigation. Locations with the highest severity scores are selected for inclusion in the High Risk Network, shown on this map.

**LEGEND**

Severity Index

Low  High

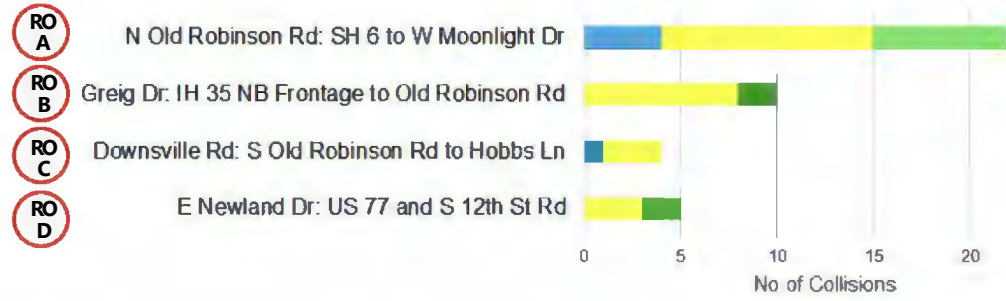
- McLennan County Limit
- Other Roads
- Schools
- Parks
- City of Robinson Boundary



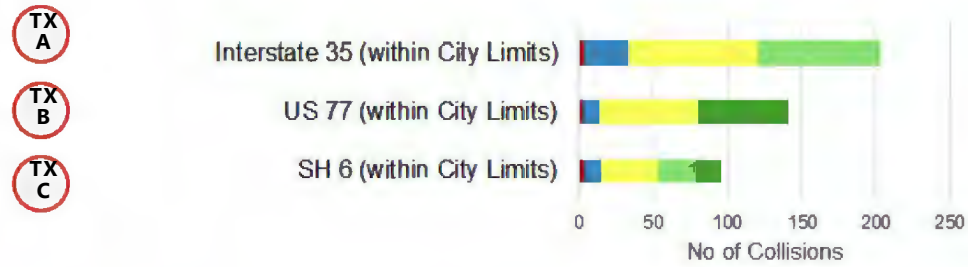
## ROADWAYS & INTERSECTIONS

This section lists high risk roadway segments and intersections within the City of Robinson. The accompanying graph depicts the name and limits of each roadway along with the number of collisions categorized by severity at that location. A severity index methodology was utilized to identify these high risk spots. This methodology assigns 3 points for each fatal or severe injury collision, 2 points for each minor injury collision, and 1 point for each possible injury collision.

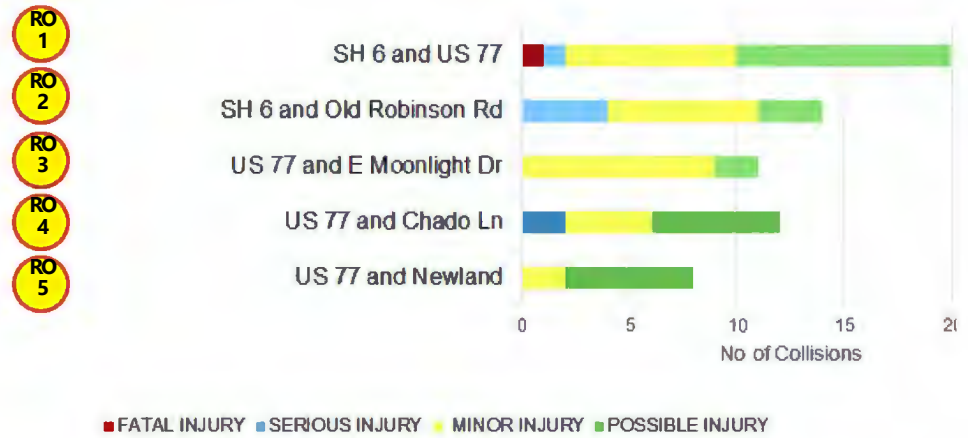
### ROADWAYS



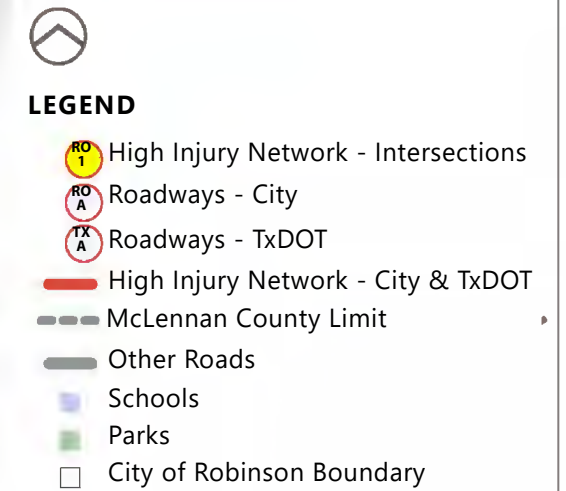
### TxDOT ROADWAYS



### INTERSECTIONS



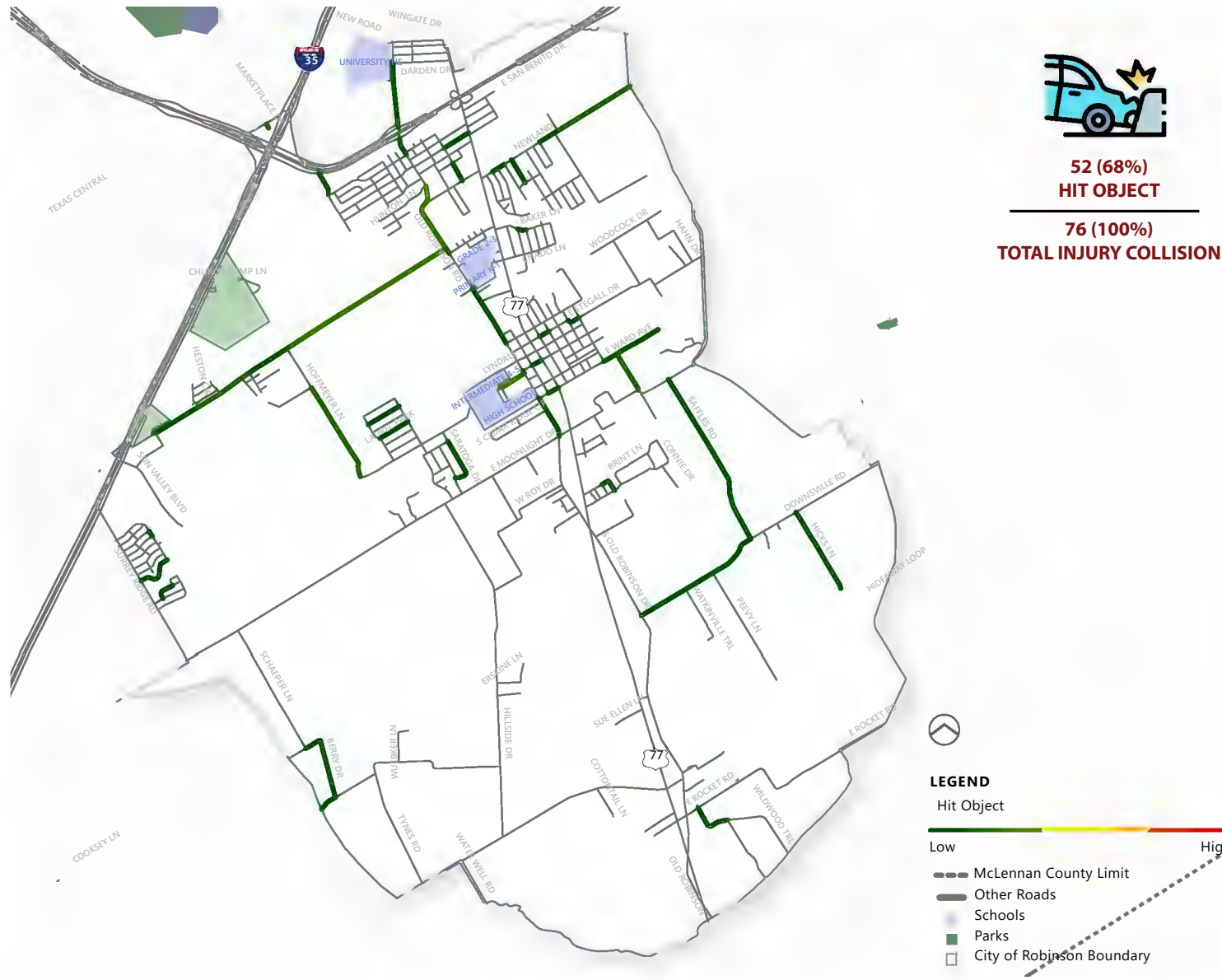
■ FATAL INJURY ■ SERIOUS INJURY ■ MINOR INJURY ■ POSSIBLE INJURY



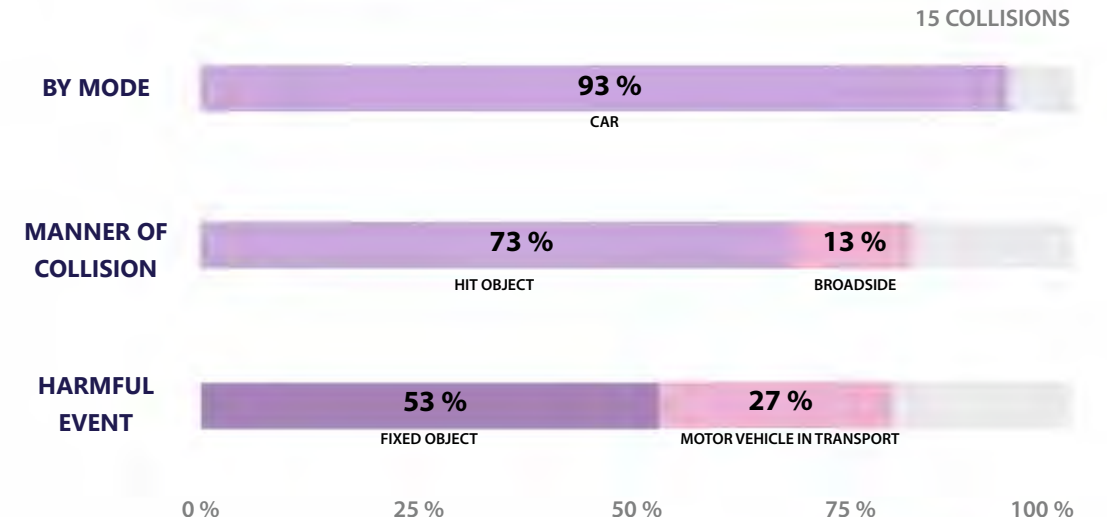
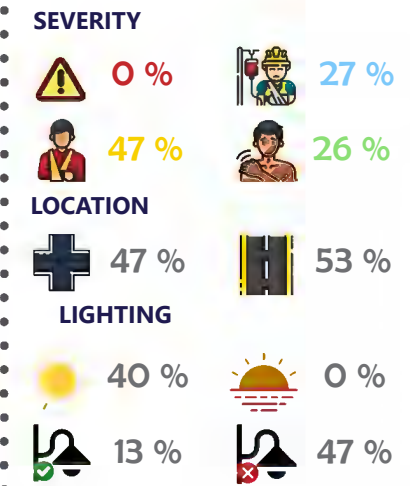
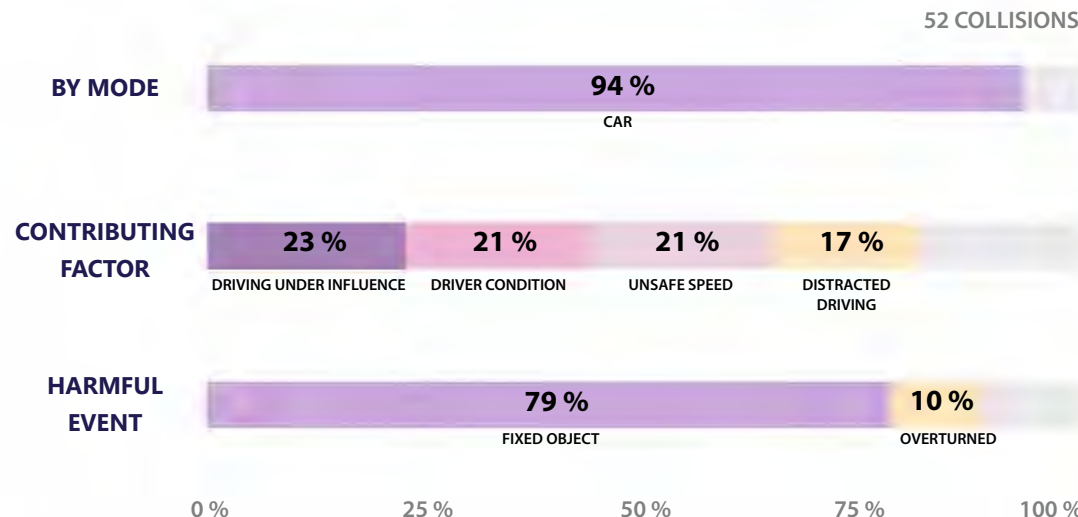
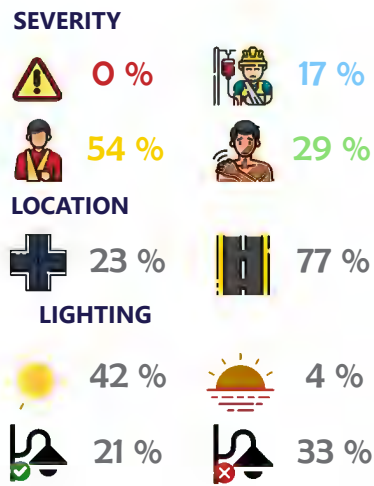
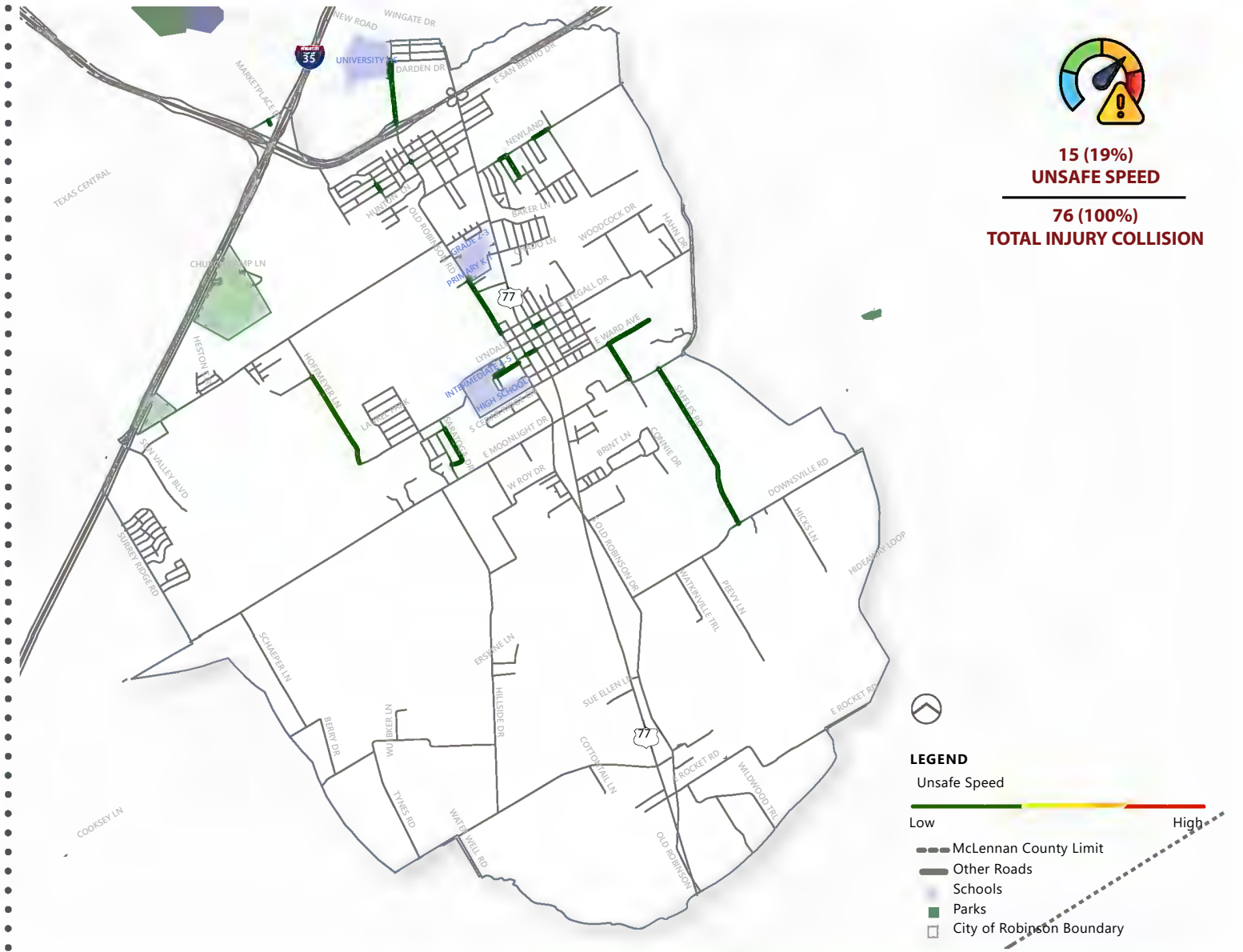


PROFILES - CITY

PROFILE 1 - HIT OBJECT

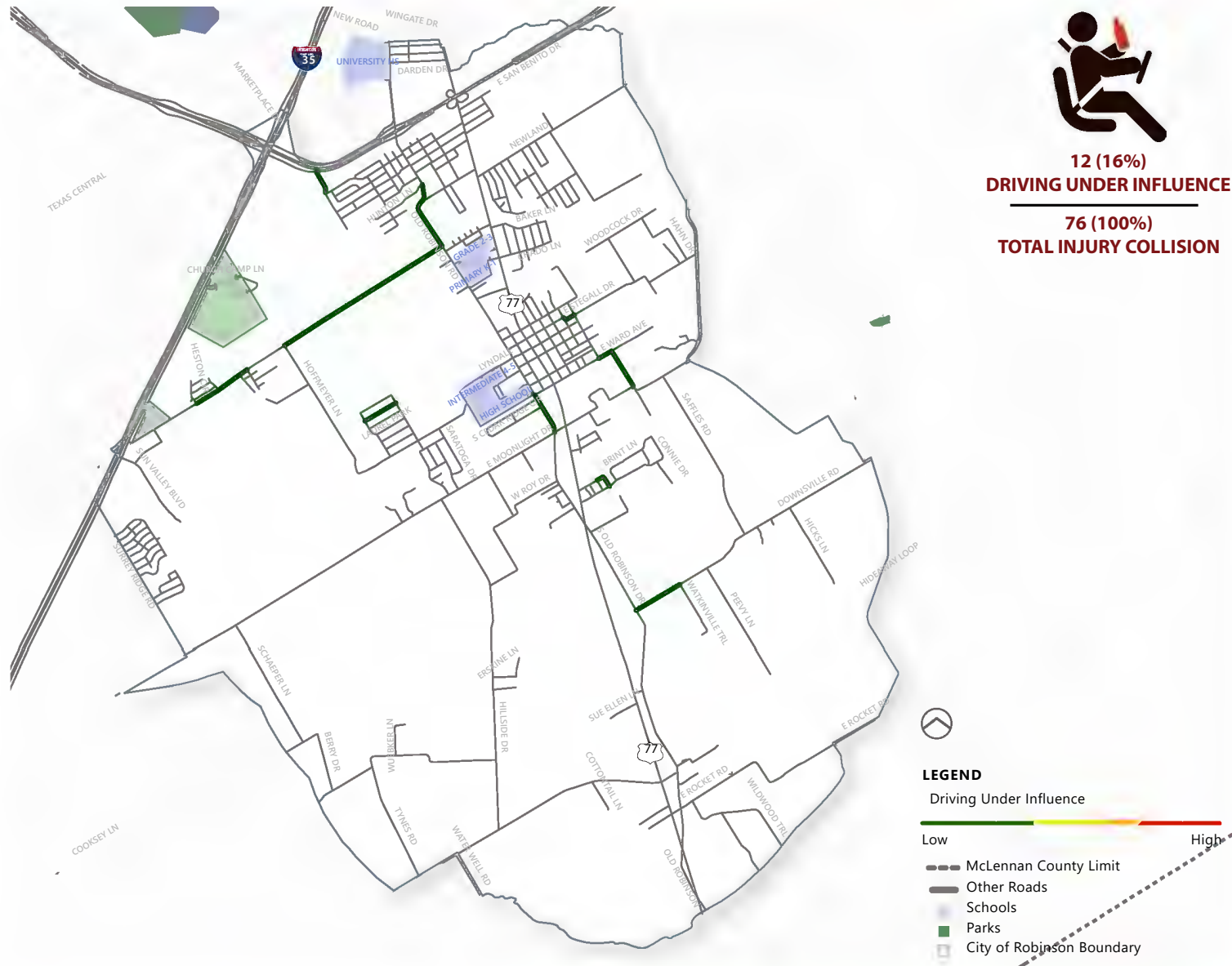


PROFILE 2 - UNSAFE SPEED

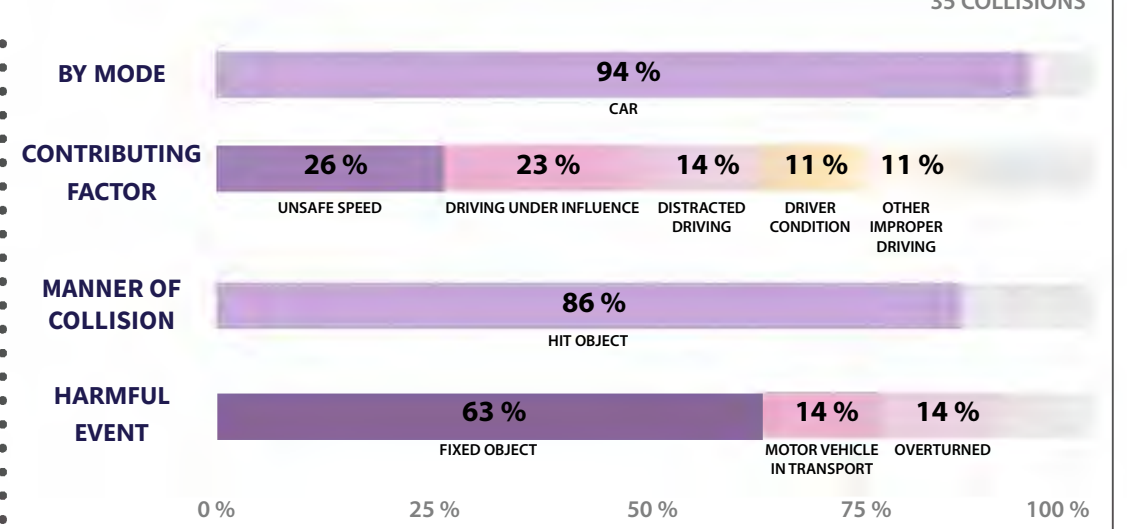
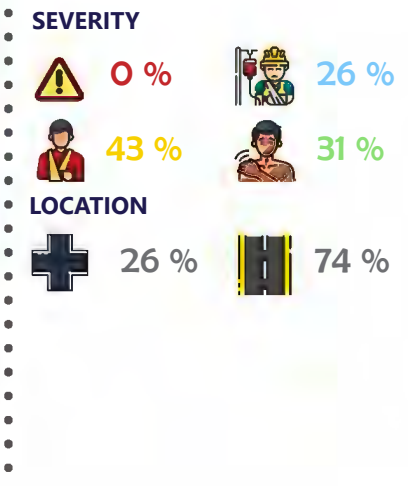
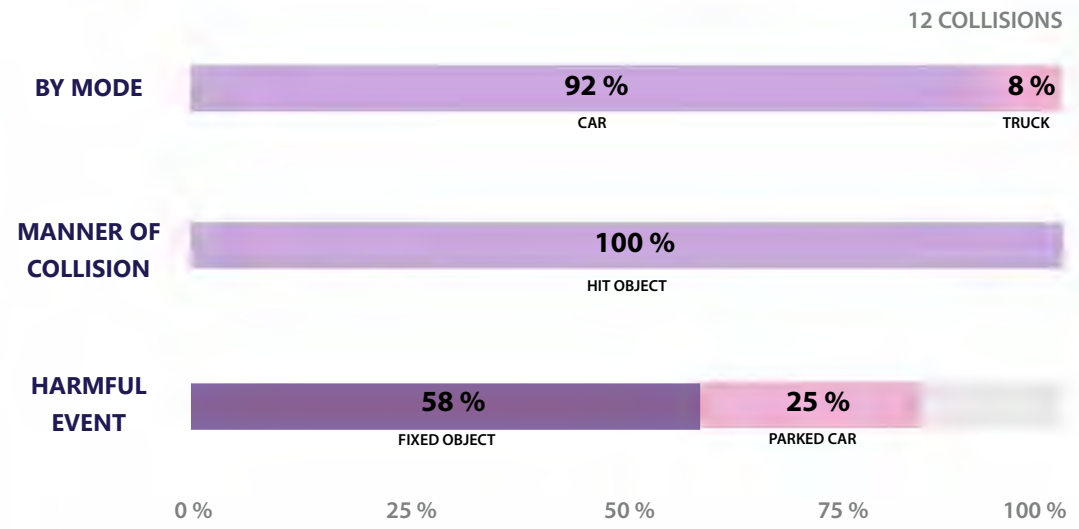
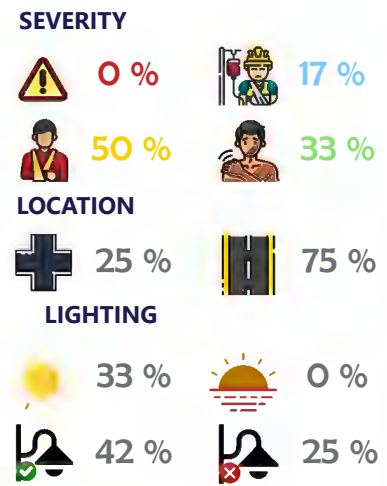
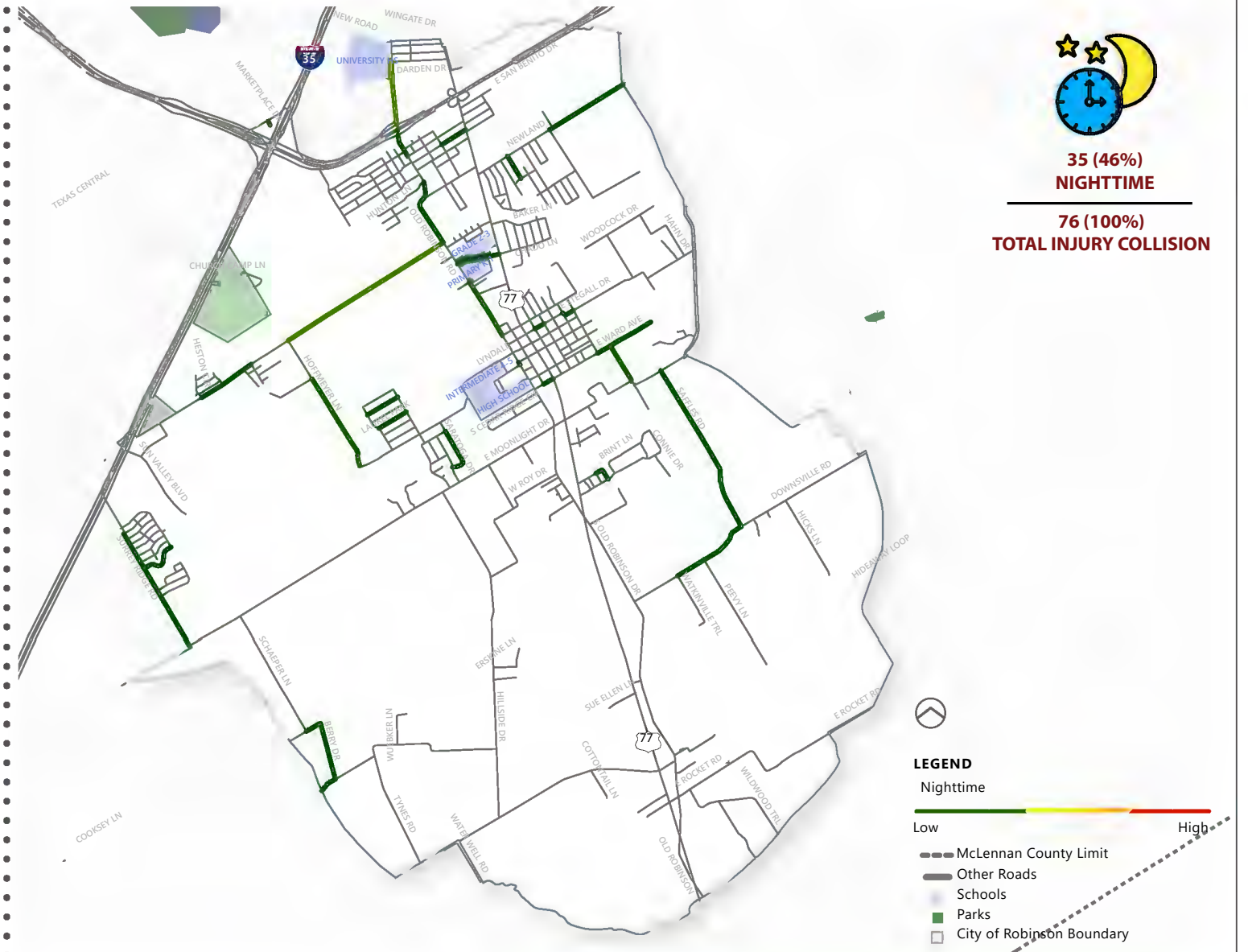


PROFILES - CITY

PROFILE 3 - DRIVING UNDER INFLUENCE



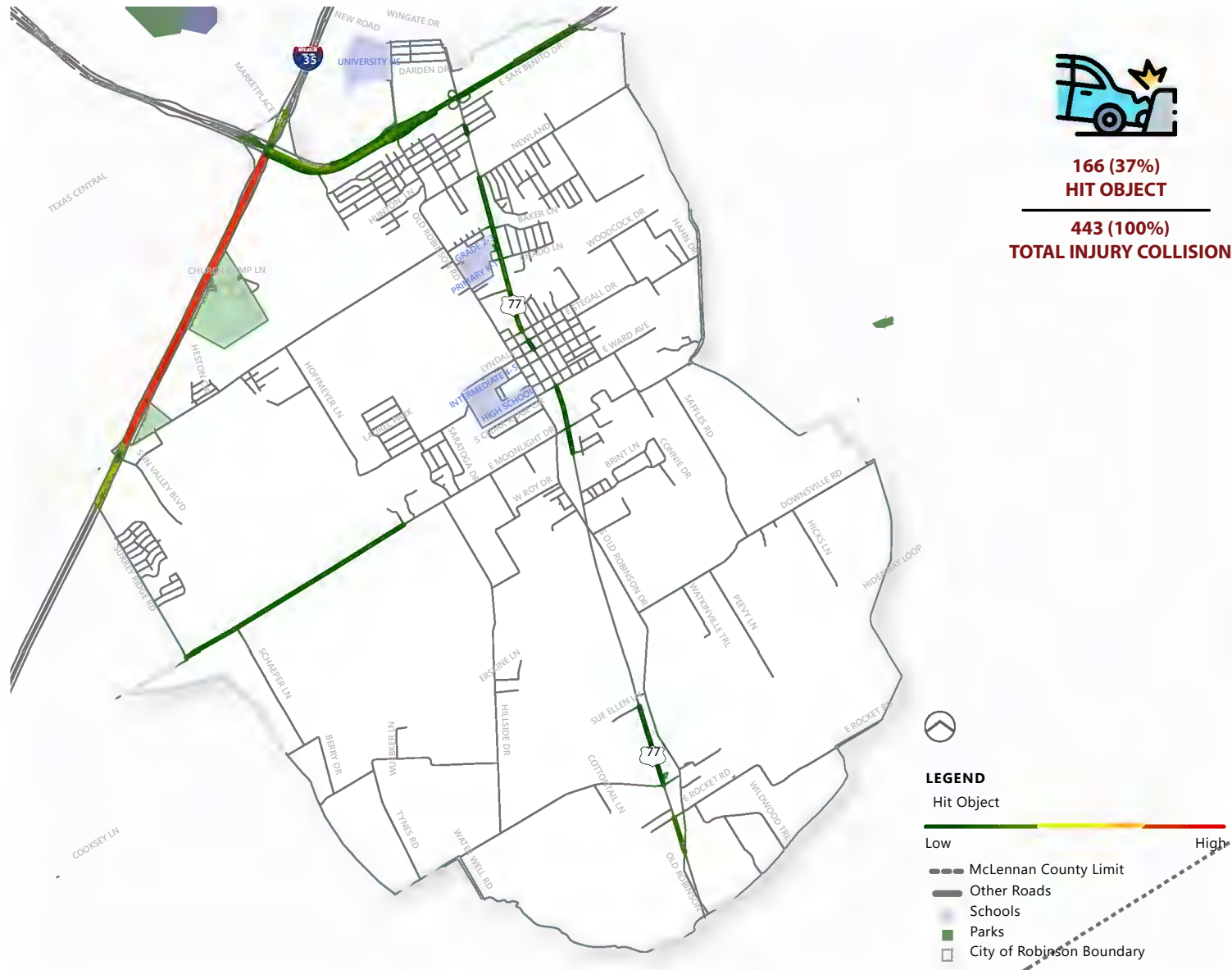
PROFILE 4 - NIGHTTIME



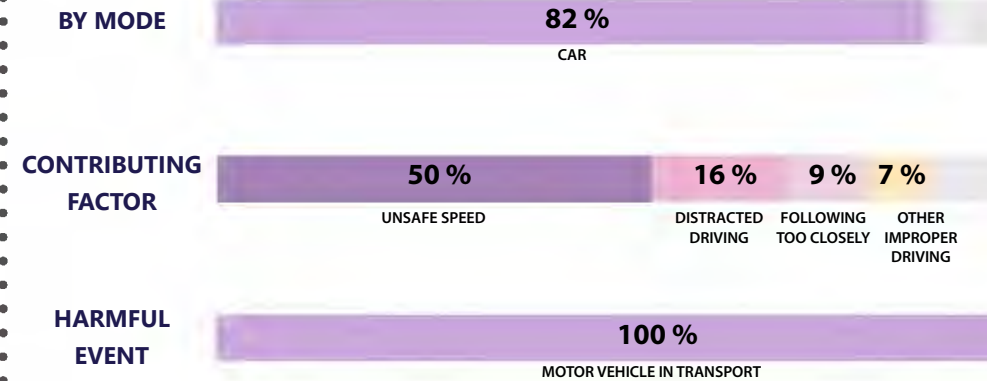
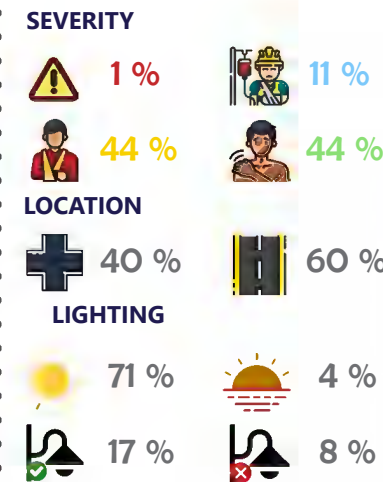
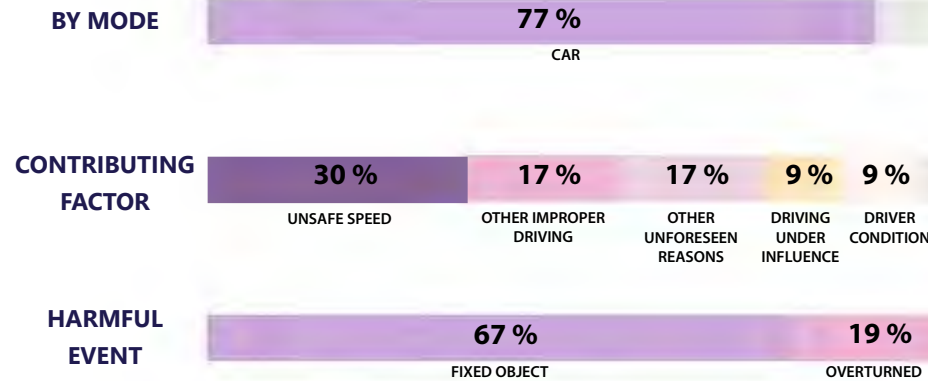
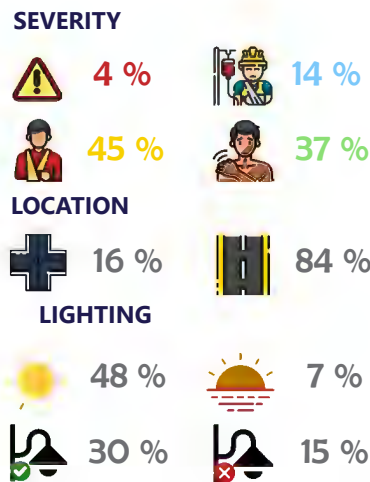
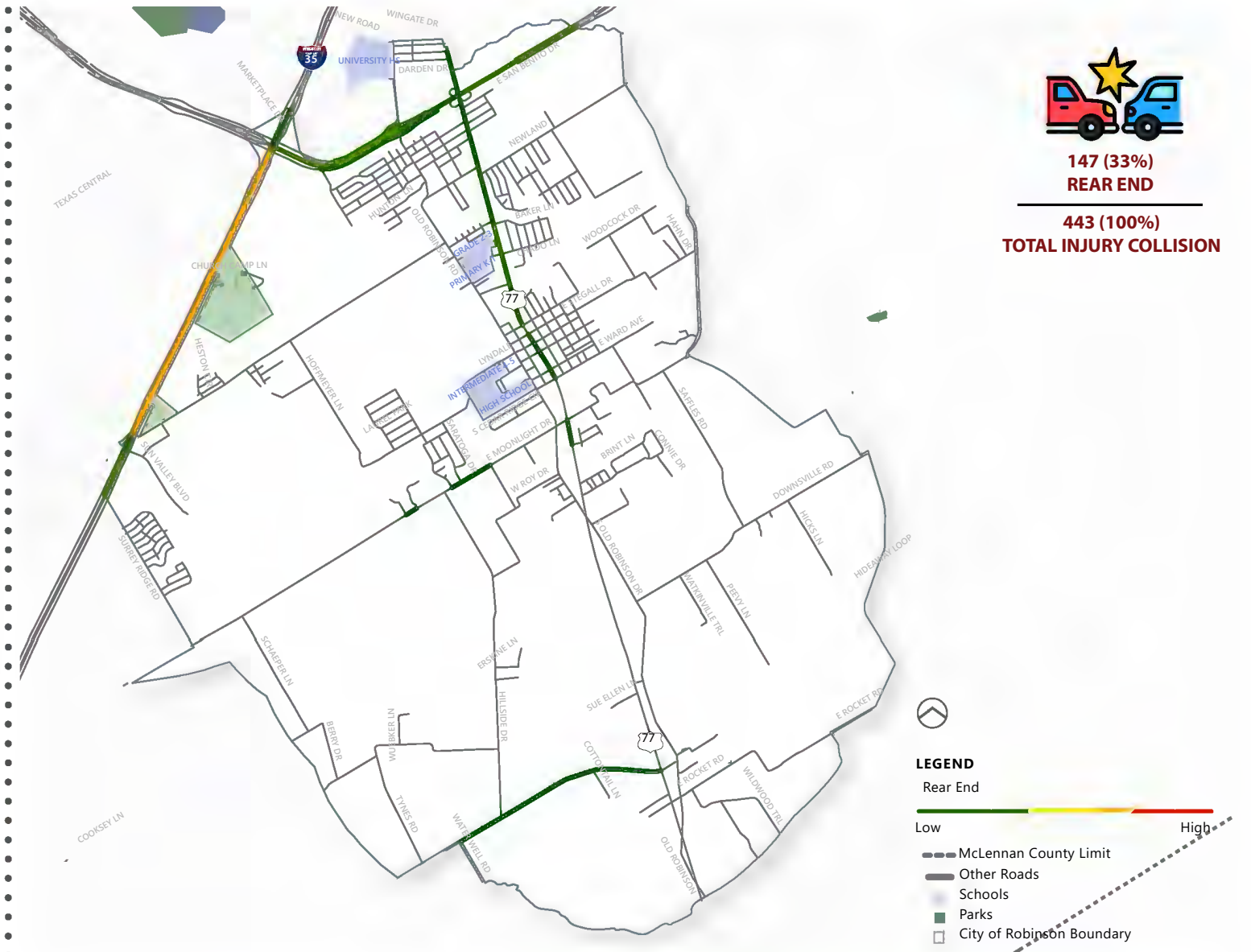


PROFILES - TXDOT

PROFILE 1 - HIT OBJECT



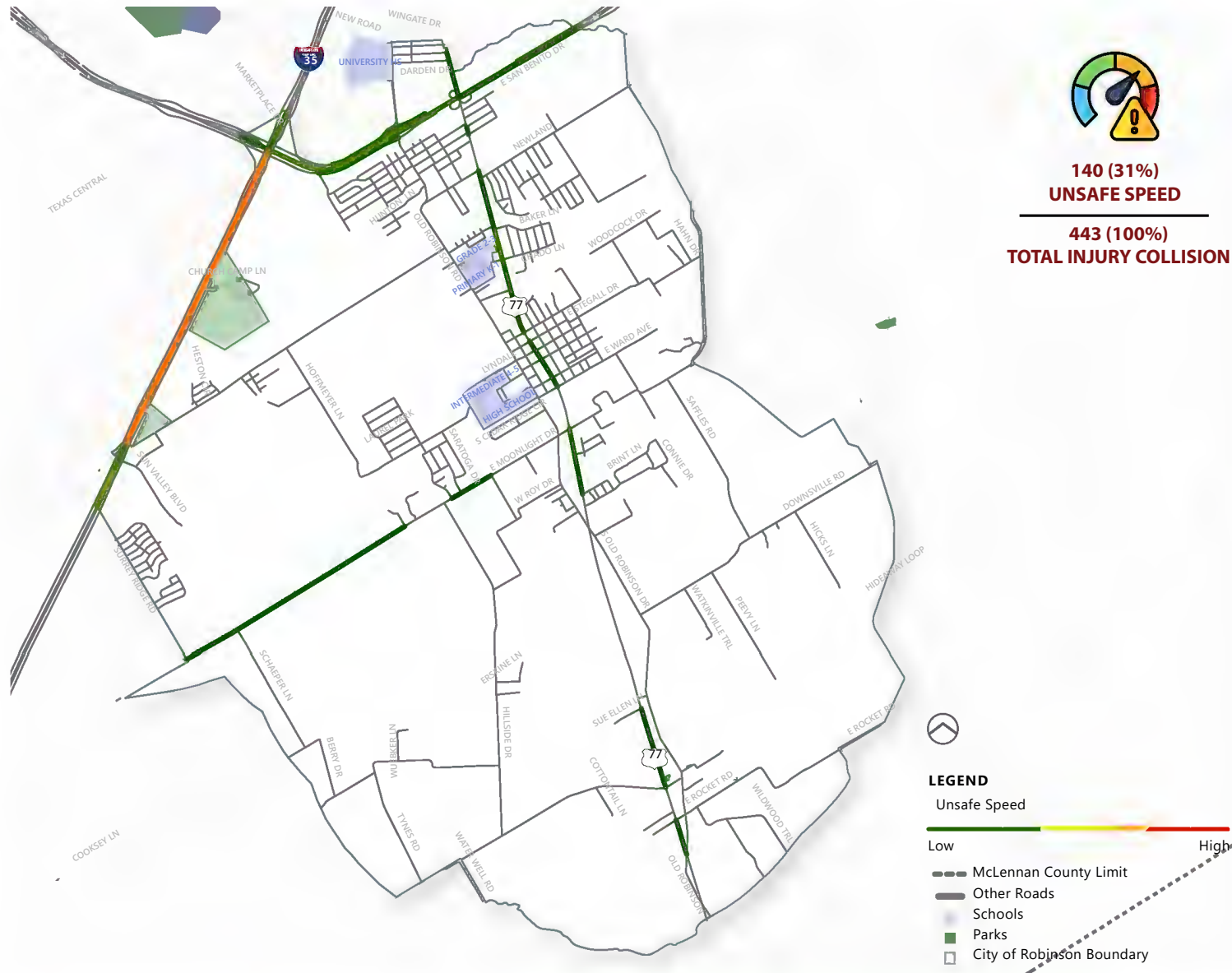
PROFILE 2 - REAR END



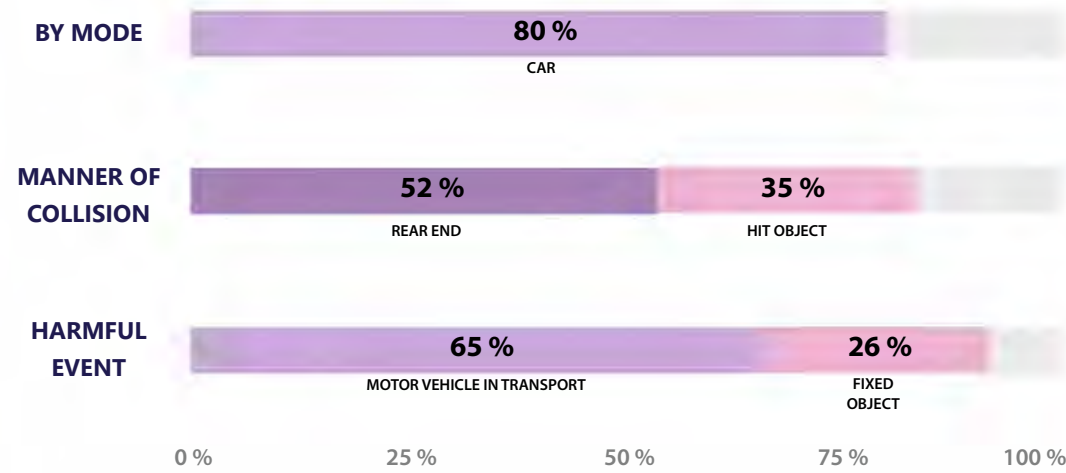
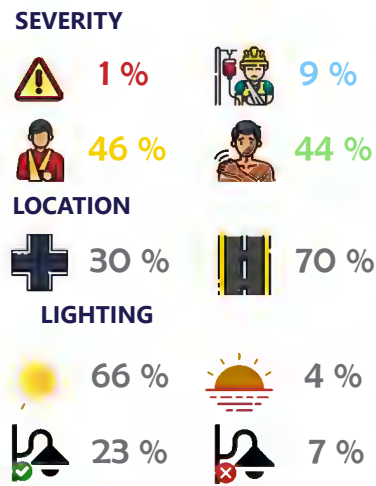


PROFILES - TXDOT

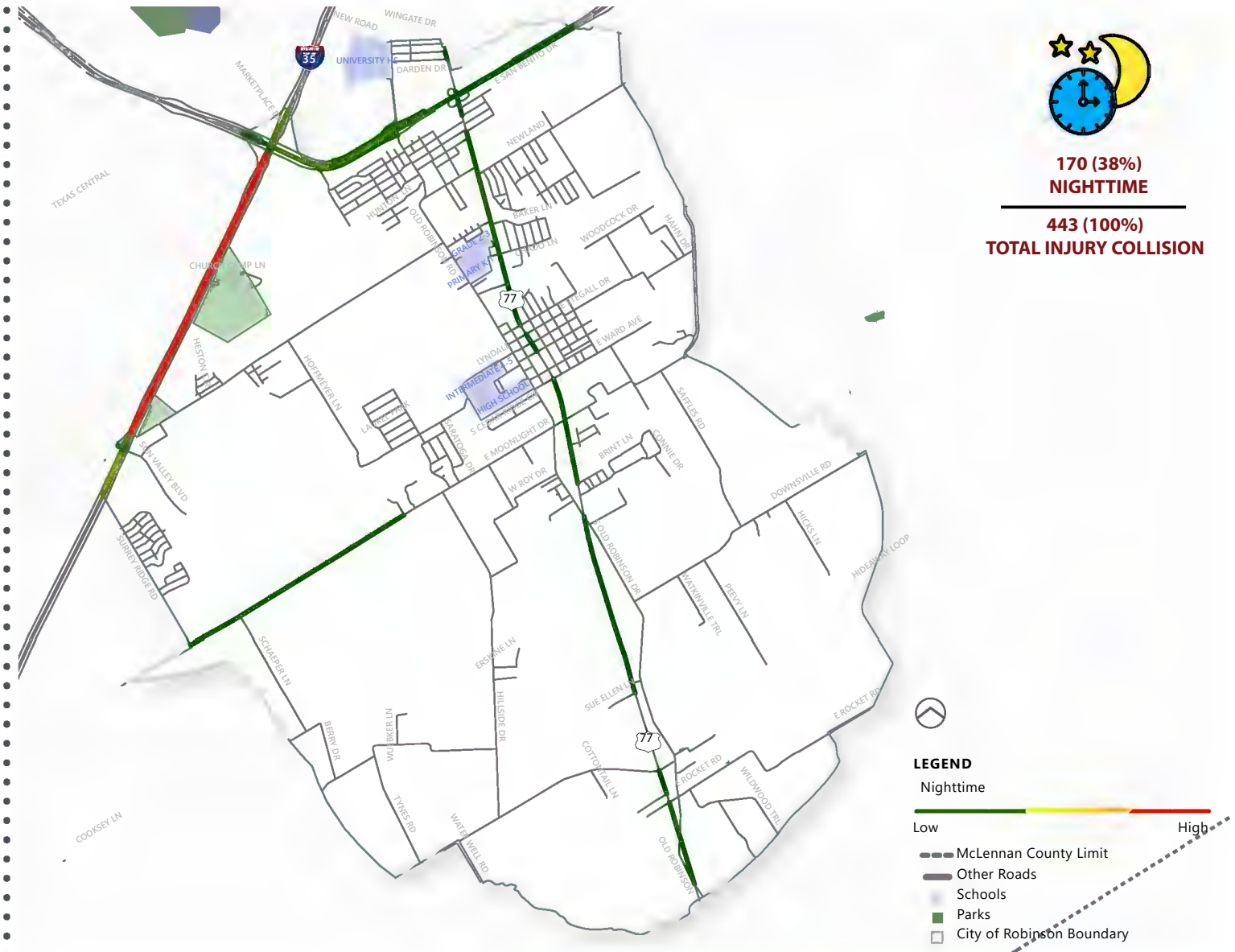
PROFILE 3 - UNSAFE SPEED



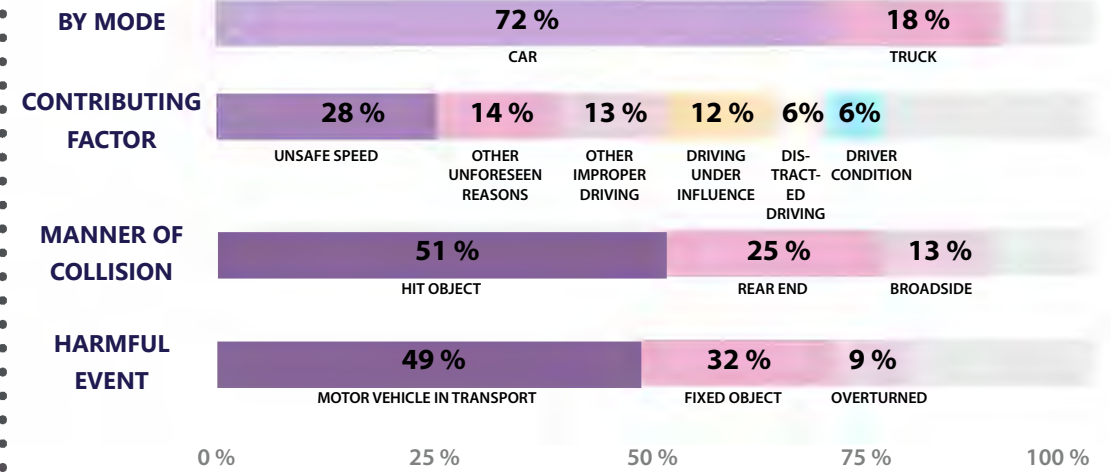
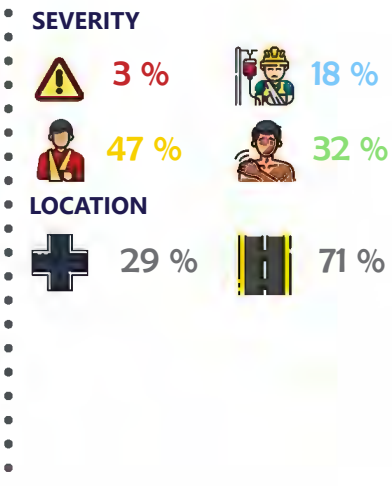
140 COLLISIONS



PROFILE 4 - NIGHTTIME



170 COLLISIONS

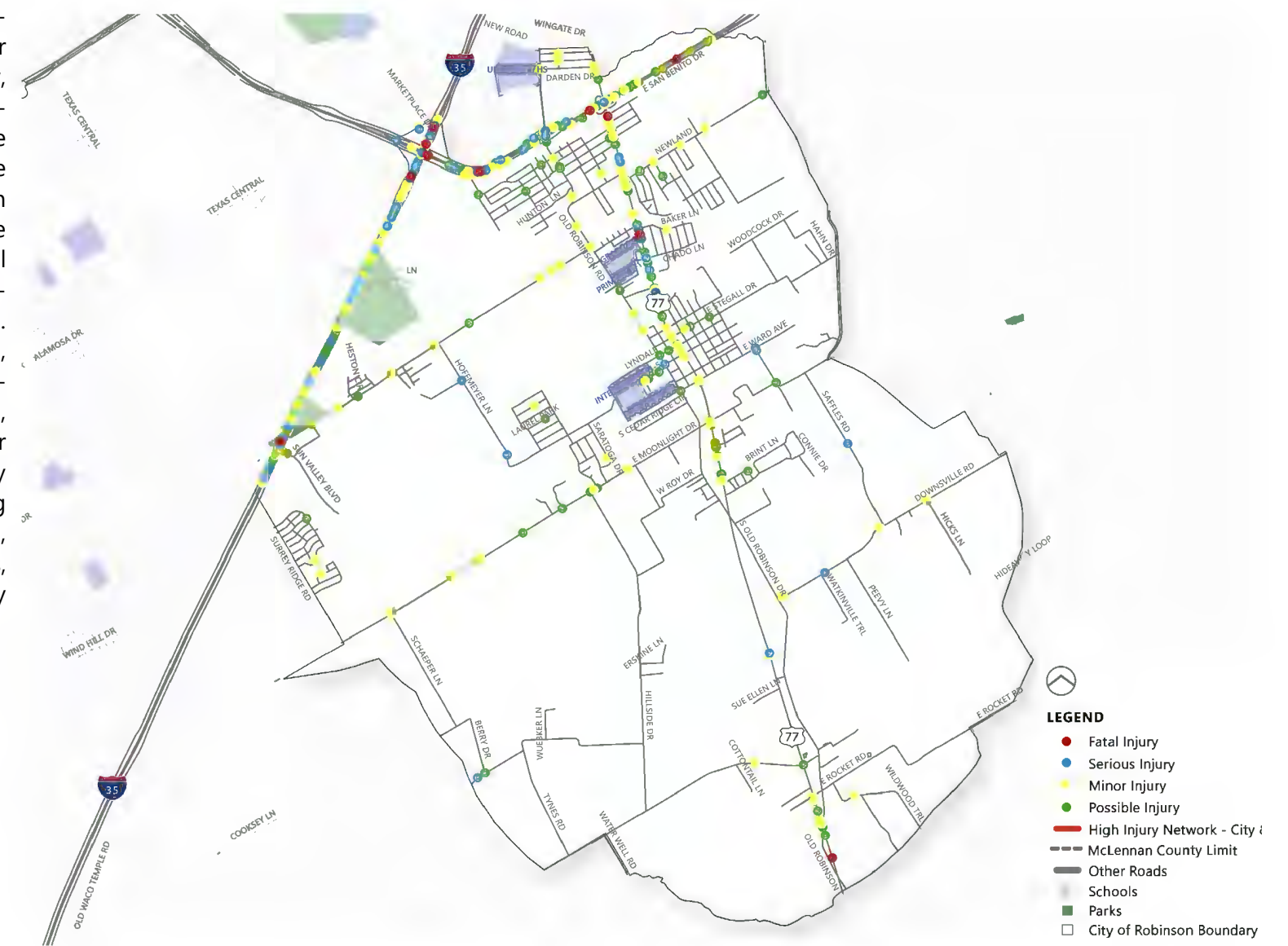


**PAVEMENT MAINTENANCE & REPAIR PROGRAM**

The City of Robinson should consider a comprehensive Pavement Maintenance and Repair Program to address the deteriorating condition of its roadways. Many streets throughout the city are showing signs of significant wear and tear, including cracking, potholes, and uneven surfaces. These pavement issues not only create an unpleasant driving experience for residents and visitors, but they also pose safety hazards and can lead to more costly repairs if left unchecked. The proposed program would involve a systematic evaluation of the condition of all city-maintained roads, followed by a strategic plan to prioritize and undertake necessary maintenance and rehabilitation activities. This may include resurfacing, patching, crack sealing, and other treatments to extend the useful life of the pavement. By proactively investing in the upkeep of its roadway infrastructure, the City of Robinson can improve overall transportation safety and efficiency, while also protecting its long-term capital assets.

**SUPPLEMENTAL PLANNING STUDY FOR FEASIBILITY OF SAFE ROUTES TO SCHOOL**

The City of Robinson recognizes the importance of providing safe and accessible transportation options for students traveling to and from local schools. Currently, many neighborhoods lack sufficient pedestrian and bicycle infrastructure to allow children to safely walk or bike to school. This poses safety risks and discourages active transportation, leading to increased vehicle congestion and emissions around school zones. To address these concerns, the city is proposing to conduct a Supplemental Planning Study to evaluate the feasibility of implementing a comprehensive Safe Routes to School program. The study would involve assessing existing conditions, identifying key routes and infrastructure needs, and engaging with the community - including school districts, parents, and students - to develop a strategic plan for improving sidewalks, crosswalks, signage, and other safety enhancements around Robinson's schools. By investing in this planning effort, the city aims to remove barriers, promote healthy and sustainable transportation choices, and ensure the safety of its youngest residents as they commute to and from their places of learning.



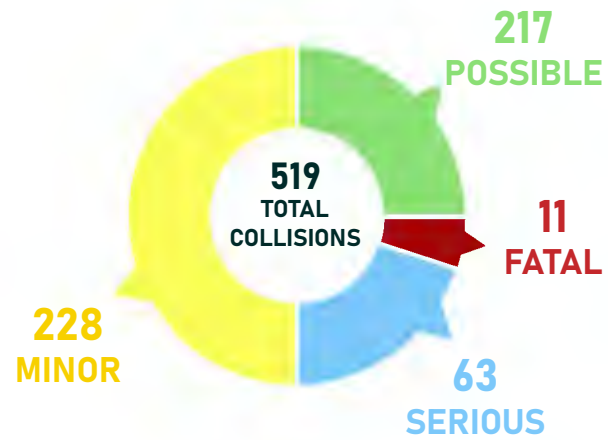


# PROJECT 1: CITYWIDE SIGN INVENTORY & PAVEMENT DELINEATION

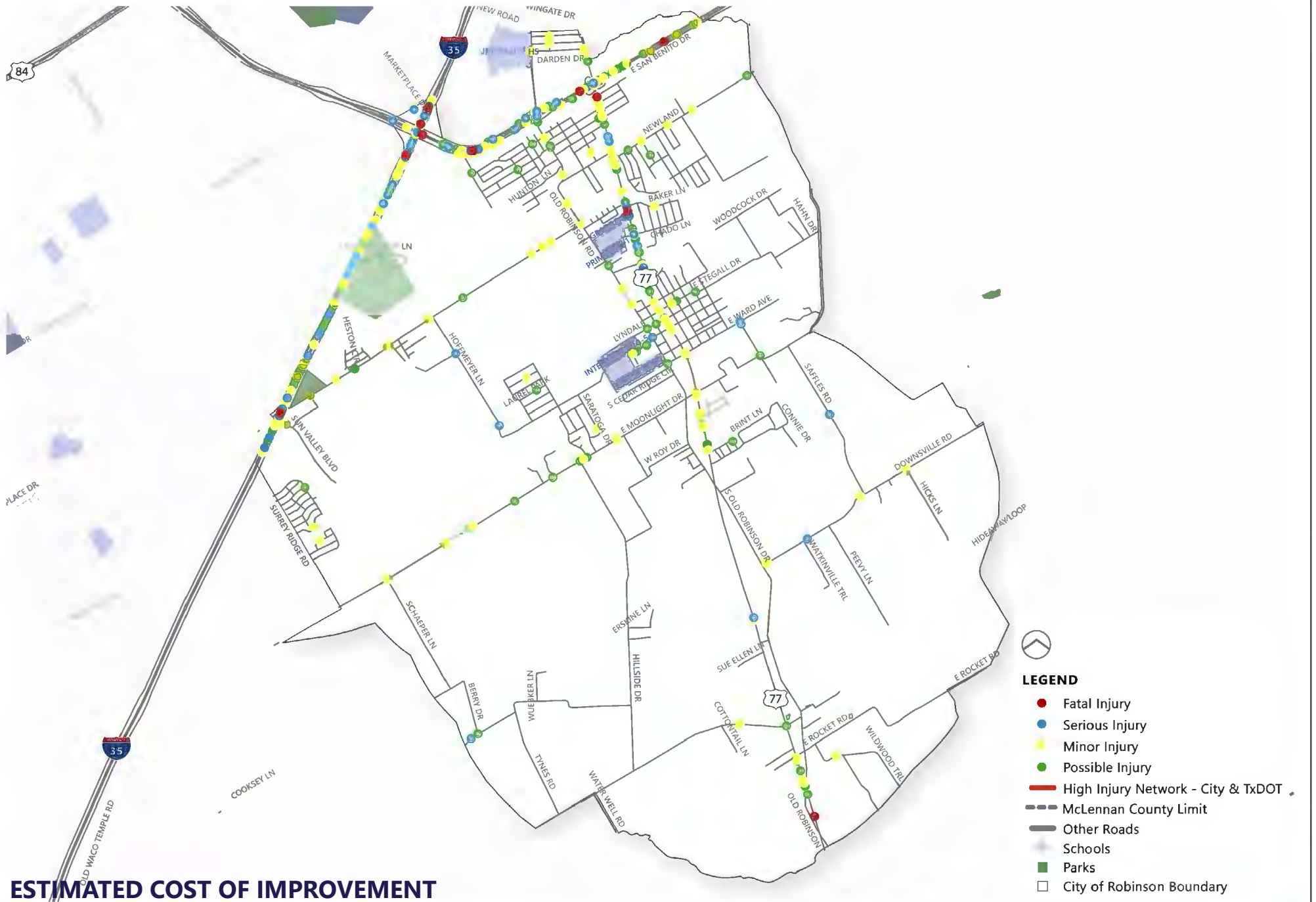
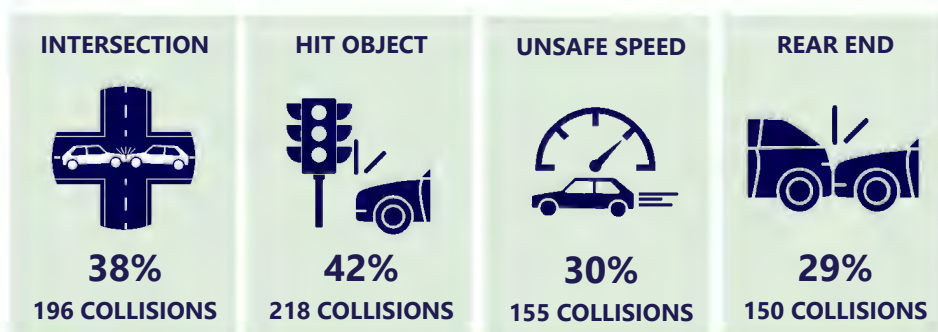
The City of Robinson is proposing a Citywide Sign Inventory and Pavement Delineation project to enhance roadway safety and navigation for drivers. The initiative would begin with a comprehensive evaluation of all existing traffic signs throughout the city to identify any that are damaged, faded, obstructed or non-compliant with current regulations. These signs would be replaced as needed to provide clear, up-to-date messaging for motorists. The project would also involve surveying all road markings such as lane lines, turn arrows, crosswalks and other pavement delineations across the city.

## INJURY COLLISION STATISTICS

- 7
- 1
- 25
- 417
- 69



## TRENDS



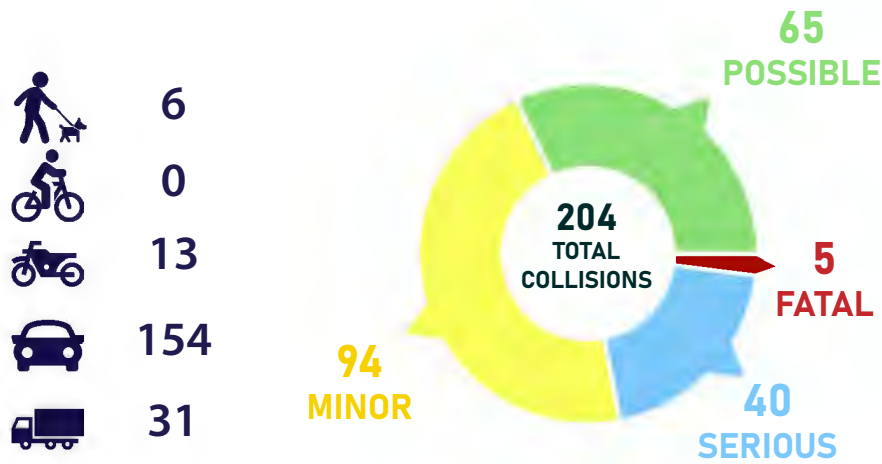
## ESTIMATED COST OF IMPROVEMENT

	IMPROVEMENTS	LIMIT	ESTIMATED COST
	Citywide Sign Inventory, Replacement & Installation	Citywide	\$576,900
	Citywide Pavement Delineation	Citywide	\$5,320,500
		CONTINGENCY COST	\$1,179,500
		ENGINEERING COST	\$1,769,300
		<b>TOTAL COST</b>	<b>\$8,846,200</b>

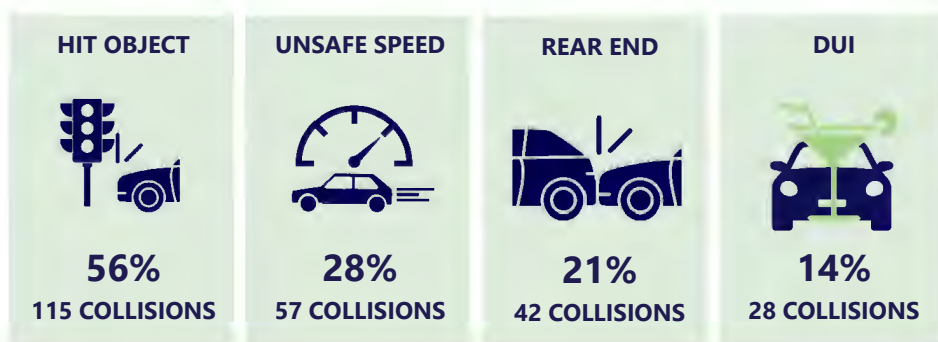
## PROJECT 2: CITYWIDE STREET LIGHT INVENTORY & REPLACEMENT

The City of Robinson is proposing a Citywide Streetlight Inventory and Replacement project to improve nighttime visibility and safety for motorists, cyclists, and pedestrians. The proposed project would involve conducting a comprehensive assessment of all existing streetlights throughout the city. The inventory would evaluate the condition, light output, and energy efficiency of the current streetlights. Lights that are outdated, damaged, or providing inadequate illumination would then be replaced with new, more efficient LED streetlights.

### NIGHTTIME INJURY COLLISION STATISTICS



### TRENDS



### ESTIMATED COST OF IMPROVEMENT

IMPROVEMENTS	LIMIT	ESTIMATED COST
Install/ Replace Street Lights	Citywide	\$6,595,300
	CONTINGENCY COST	\$1,319,060
	ENGINEERING COST	\$2,770,100
	<b>TOTAL COST</b>	<b>\$10,684,460</b>

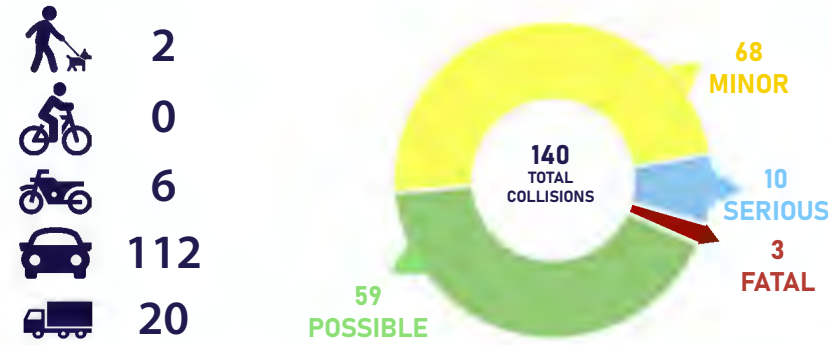


# PROJECT 3: US-77 (ROBINSON DRIVE)- WITHIN CITY LIMITS- CORRIDOR SAFETY IMPROVEMENTS

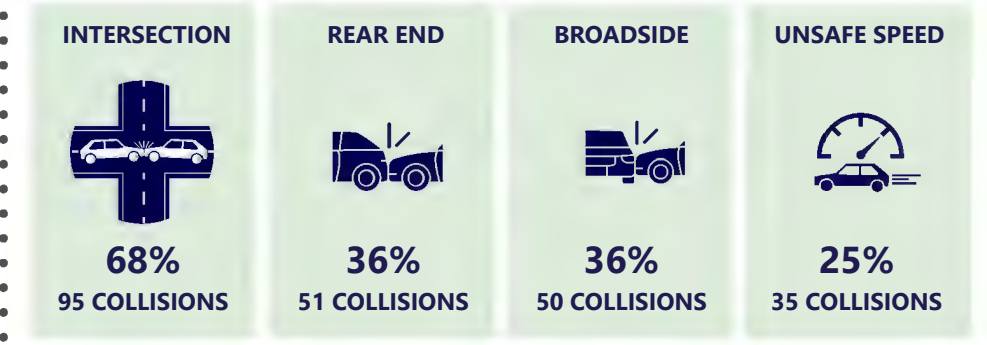


Robinson Drive, part of US-77, serves as the primary north-south arterial within Robinson. This roadway consists of four lanes, including a center two-way turn lane. Speed limits along this section vary between 40 mph and 55 mph. The corridor is within 0.25 mile of Robinson Elementary and Primary School.

## INJURY COLLISION STATISTICS



## TRENDS



## EXISTING CONDITIONS



**Existing Condition:**  
US-77 (Robinson Dr) facing north

**Existing Condition:**  
US-77 (Robinson Dr) at Water View Ln facing south



## ESTIMATED COST OF IMPROVEMENT

3: US-77 (ROBINSON DR)- CORRIDOR SAFETY IMPROVEMENTS		
IMPROVEMENTS	LOCATIONS	ESTIMATED COST
Install Median and Access Management		\$6,969,600
Fill Street Light Gaps		\$956,800
Install Sidewalks	From North City Limits to Lux Dr	\$11,319,000
Install Speed Feedback Sign		\$69,000
Pedestrian Hybrid Beacon	US-77 and E Ward Ave	\$462,300
Shoulder Rumble Striping	From Lux Dr to the South City Limits	\$86,300
	CONTINGENCY COST	\$3,972,600
	ENGINEERING COST	\$8,342,500
	<b>TOTAL COST</b>	<b>\$32,178,100</b>

■ Fatal Injury   
 ■ Serious Injury   
 ■ Minor Injury   
 ■ Possible Injury



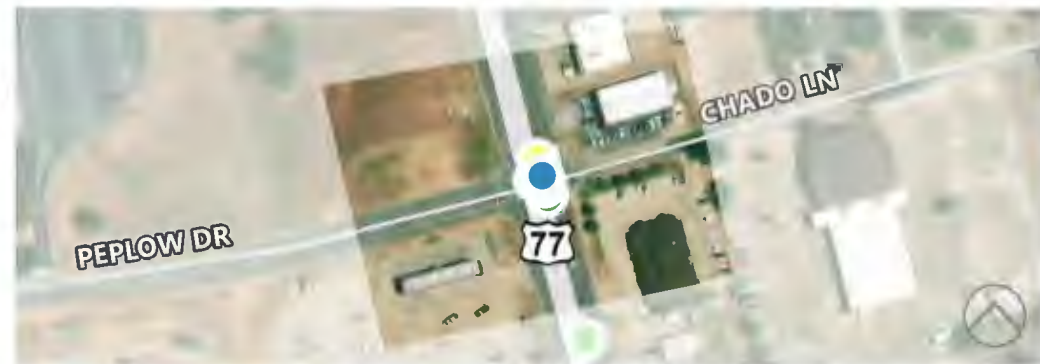
**PROJECT 4: US-77 (ROBINSON DRIVE): SIGNALIZED INTERSECTION SAFETY IMPROVEMENTS**



E/W Moonlight Dr



E Lyndale Dr



Peplow Dr/Chado Ln

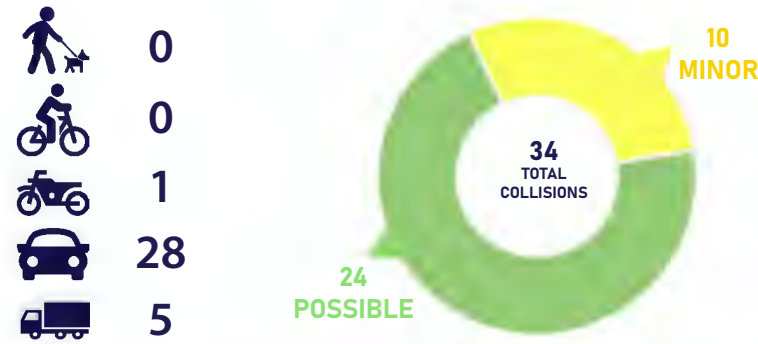


Newland Dr

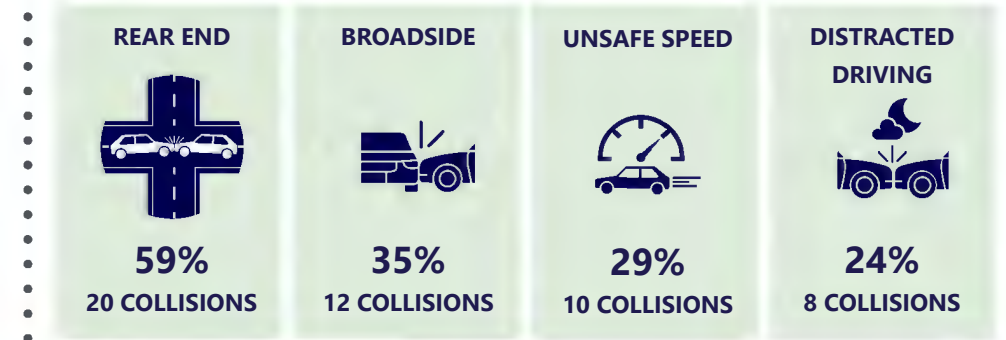
■ Fatal Injury   
 ■ Serious Injury   
 ■ Minor Injury   
 ■ Possible Injury

US-77 (Robinson Drive) runs north-south through the city, serving as a primary road. It's a four lane undivided arterial with a center two-way left turn lane. Speed limits along this section range from 40 mph to 50 mph. The Peplow Dr/Chado Ln intersection of US-77 provides access to Robinson Elementary, and Primary Schools, and Peplow park.

**INJURY COLLISION STATISTICS**



**TRENDS**



**EXISTING CONDITIONS**



**Existing Condition:**  
US-77 Robinson Dr at W Lyndale Dr facing north



**Existing Condition:**  
US-77 Robinson Dr at Peplow Dr facing south

**ESTIMATED COST OF IMPROVEMENT**

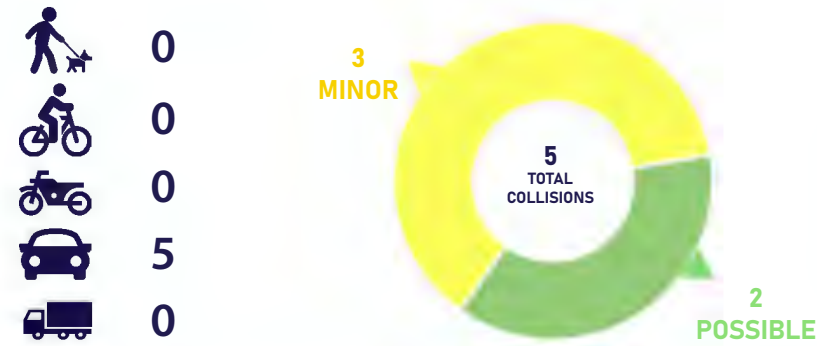
4: US-77 (ROBINSON DR)- SIGNALIZED INTERSECTION SAFETY IMPROVEMENTS			
IMPROVEMENTS	LOCATIONS	ESTIMATED COST	
Intersection Lighting		\$430,100	
Approach Medians	Intersections along US-77 (Robinson Dr):	\$914,000	
Signal Hardware Upgrades	E/W Moonlight Dr	\$34,500	
Pedestrian Safety Enhancement (Sidewalk and Crosswalk)	E Lyndale Dr	\$471,700	
Protected Left Turn Improvements	Peplow Dr/ Chado Ln	\$41,600	
Advance Warning Flashing Beacon	Newland Dr	\$138,000	
	CONTINGENCY COST	\$406,000	
	ENGINEERING COST	\$852,600	
	<b>TOTAL COST</b>	<b>\$3,288,500</b>	



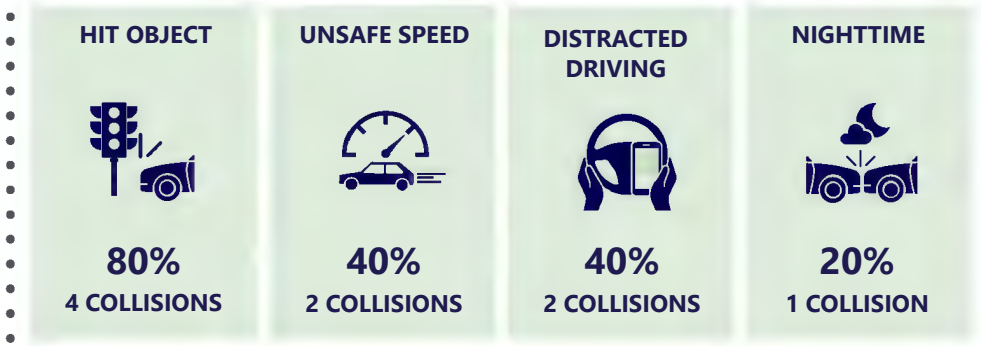


Newland Drive is a east-west major collector within Robinson. The segment from US-77 (Robinson Drive) to South 12th Street, is a two lane undivided roadway with a posted speed limit of 30 mph.

**INJURY COLLISION STATISTICS**



**TRENDS**



**EXISTING CONDITIONS**



**Existing Condition:**  
Newland Dr at Celeste Dr facing east



**Existing Condition:**  
Newland Dr Rio at Bonito Dr facing west

**ESTIMATED COST OF IMPROVEMENT**

**5: NEWLAND DR- CORRIDOR SAFETY IMPROVEMENT**

IMPROVEMENTS	LOCATIONS	ESTIMATED COST
Clear Recovery Zone		\$43,700
Install Striping	From US-77 (Robinson Dr) to S 12th St Rd	\$102,900
Sign Upgrade		\$6,500
	CONTINGENCY COST	\$30,700
	ENGINEERING COST	\$64,400
	<b>TOTAL COST</b>	<b>\$248,100</b>

■ Fatal Injury   
 ■ Serious Injury   
 ■ Minor Injury   
 ■ Possible Injury



**PROJECT 6: FM-3148 (W MOONLIGHT DRIVE)- CORRIDOR SAFETY IMPROVEMENTS**



■ Fatal Injury   
 ■ Serious Injury   
 ■ Minor Injury   
 ■ Possible Injury

FM-3148 (W Moonlight Drive) serves as an east-west arterial stretching from US-77 to the western boundary of the City of Robinson. Along this segment, from US-77 (Robinson Drive) to the city limit, the road is a two-lane undivided corridor with speed limits varying between 55 and 60 mph.

**INJURY COLLISION STATISTICS**

- 1
- 0
- 1
- 8
- 0



**TRENDS**

<p><b>DISTRACTED DRIVING</b></p> <p><b>30%</b> 3 COLLISIONS</p>	<p><b>REAR END</b></p> <p><b>30%</b> 3 COLLISIONS</p>	<p><b>HIT OBJECT</b></p> <p><b>30%</b> 3 COLLISIONS</p>	<p><b>NIGHTTIME</b></p> <p><b>30%</b> 3 COLLISIONS</p>
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**EXISTING CONDITIONS**



**Existing Condition:**  
W Moonlight Dr at S Old Robinson Rd facing west

**Existing Condition:**  
W Moonlight Dr at Clear Creek Ln facing east

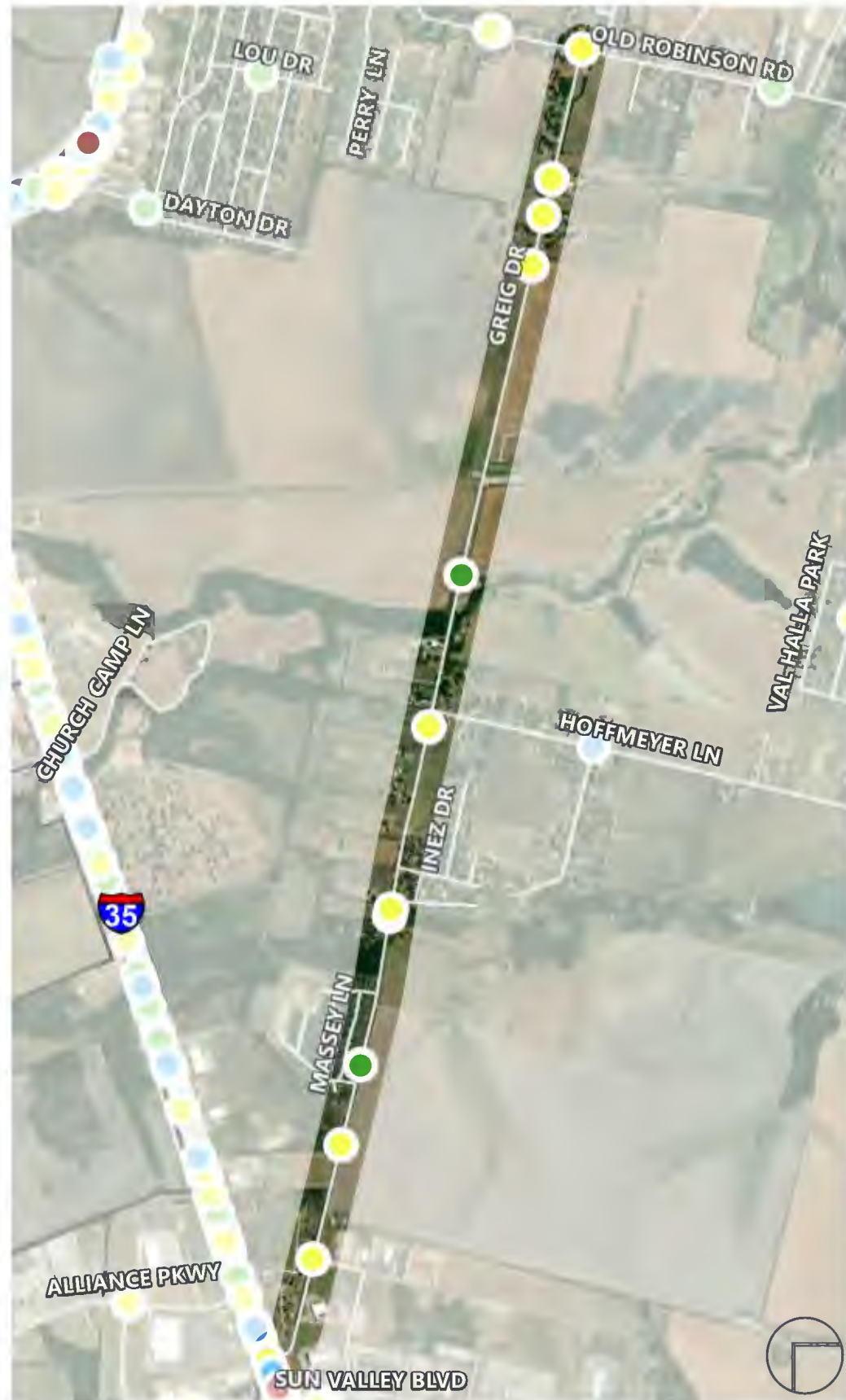


**ESTIMATED COST OF IMPROVEMENT**

6: FM-3148 (W MOONLIGHT DR)- CORRIDOR SAFETY IMPROVEMENTS		
IMPROVEMENTS	LOCATIONS	ESTIMATED COST
Install Speed Feedback Sign		\$34,500
Speed Reduction Marking	From US-77 (Robinson Dr) to West City Limits	\$8,300
Install Shoulder Rumble Striping		\$69,000
	CONTINGENCY COST	\$22,400
	ENGINEERING COST	\$47,000
	<b>TOTAL COST</b>	<b>\$181,200</b>



# PROJECT 7: GREIG DRIVE- CORRIDOR SAFETY IMPROVEMENTS



Greig Drive is an east-west collector within Robinson. The corridor from North Old Robinson Road to I-35 N Frontage Road is a two lane undivided roadway, with a designated speed limit of 40 mph.

## INJURY COLLISION STATISTICS



## TRENDS



## EXISTING CONDITIONS



**Existing Condition:**  
Greig Dr at Hoffmeyer Ln facing east

**Existing Condition:**  
Greig Dr at N Old Robinson Rd facing west



## ESTIMATED COST OF IMPROVEMENT

7 : GREIG DR- CORRIDOR SAFETY IMPROVEMENTS		
IMPROVEMENTS	LOCATIONS	ESTIMATED COST
Add Shoulder	From N Old Robinson Rd to I- 35 N Frontage Rd	\$423,000
Install Striping		\$219,500
Install Signage		\$4,400
Install Street Lighting		\$490,700
	CONTINGENCY COST	\$227,400
	ENGINEERING COST	\$477,500
	<b>TOTAL COST</b>	<b>\$1,841,600</b>

● Fatal Injury   
 ● Serious Injury   
 ● Minor Injury   
 ● Possible Injury

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