

CHAPTER 6.5: CITY OF ROBINSON

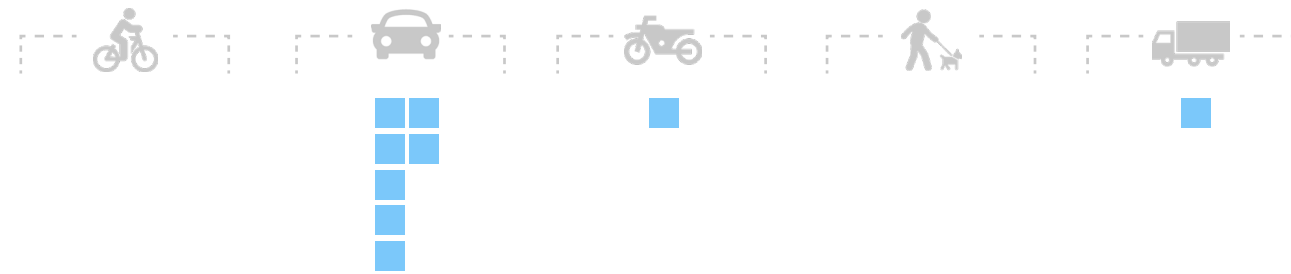
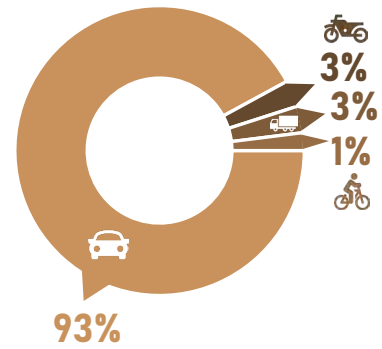
INTRODUCTION

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	
Total Collisions	76	100 %	443	100 %	
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 %	
Total Persons Involved	91	100 %	676	100 %	
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 %	

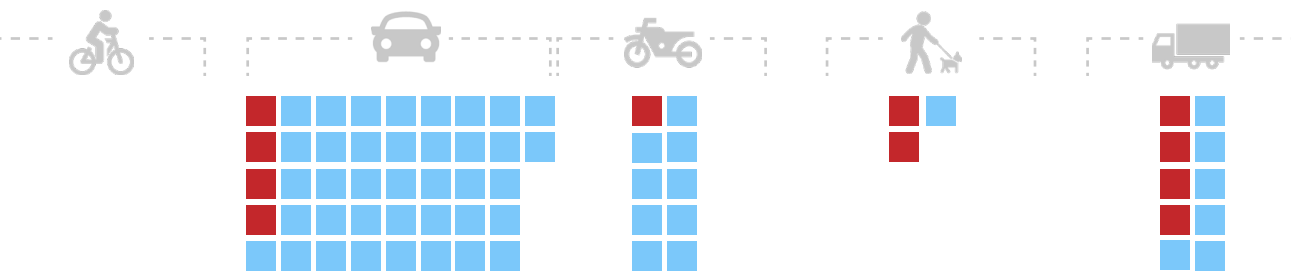
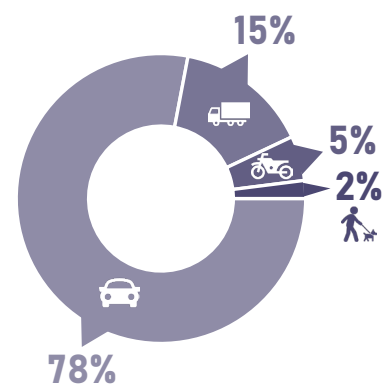
COLLISIONS BY MODE - CITY



Mode	Fatal Injury	Serious Injury	Minor Injury	Possible Injury
Bicycle	0 %	0 %	100 %	0 %
Car	0 %	10 %	49 %	41 %
Motorcycle	0 %	50 %	50 %	0 %
Truck	0 %	50 %	50 %	0 %
Pedestrian	0 %	0 %	0 %	100 %

Note : Each box represents one fatal or severe injury collision.

COLLISIONS BY MODE - TxDOT



Mode	Fatal Injury	Serious Injury	Minor Injury	Possible Injury
Bicycle	0 %	1 %	42 %	46 %
Car	1 %	11 %	42 %	46 %
Motorcycle	4 %	39 %	57 %	0 %
Truck	6 %	9 %	46 %	39 %
Pedestrian	29 %	14 %	43 %	100 %

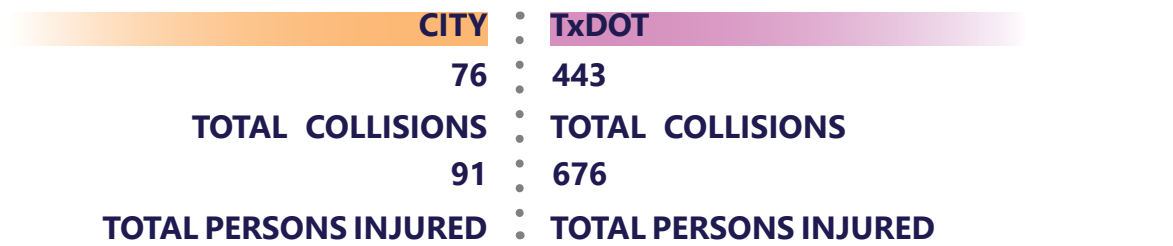
Note : Each box represents one fatal or severe injury collision.

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.

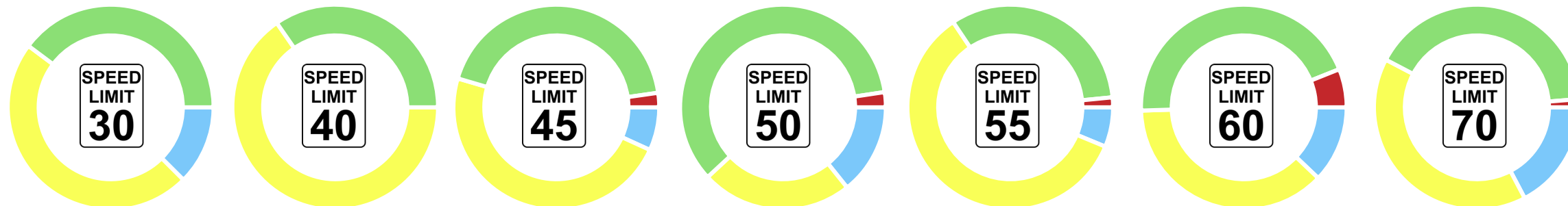


PERSONS INVOLVED								
	CITY				TxDOT			
	MODE							
Bicycle	0 %	0 %	1 %	0 %	0 %	0 %	0 %	0 %
Car	0 %	12 %	45 %	40 %	1 %	7 %	38 %	44 %
Motorcycle	0 %	1 %	1 %	0 %	0 %	1 %	2 %	0 %
Pedestrian	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Truck	0 %	0 %	0 %	0 %	0 %	0 %	2 %	2 %
	AGE							
Below 15	0 %	0 %	1 %	1 %	0 %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

CITY OF ROBINSON VS. McLENNAN COUNTY COLLISIONS - RELATIVE SHARES

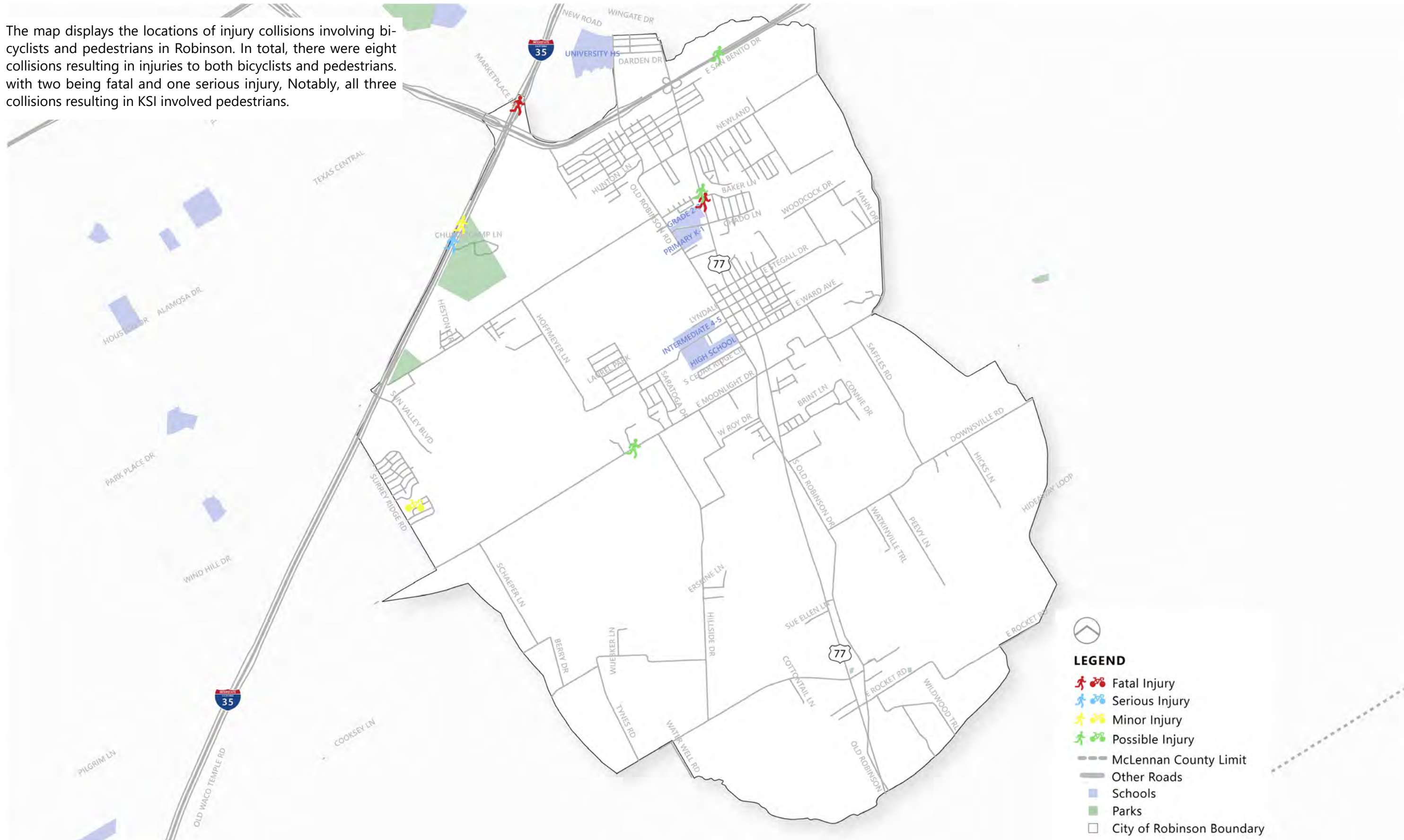
CITY		TxDOT		McLENNAN COUNTY	
MODE					
Bicycle	1 %	Bicycle	0 %	Bicycle	1 %
Car	93 %	Car	78 %	Car	85 %
Motorcycle	3 %	Motorcycle	5 %	Motorcycle	4 %
Pedestrian	0 %	Pedestrian	2 %	Pedestrian	3 %
Truck	3 %	Truck	15 %	Truck	7 %
FIRST HARMFUL EVENT					
Fixed Object	54 %	Motor Vehicle in Transport	63 %	Motor Vehicle in Transport	72 %
Motor Vehicle in Transport	32 %	Fixed Object	25 %	Fixed Object	17 %
Overtaken	7 %	Overtaken	7 %	Overtaken	4 %
MANNER OF COLLISION					
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 %
VIOLATION CATEGORY					
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 %
LOCATION					
Intersection	39 %	Intersection	37 %	Intersection	59 %
Roadway	61 %	Roadway	63 %	Roadway	41 %
LIGHTING					
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 %

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.



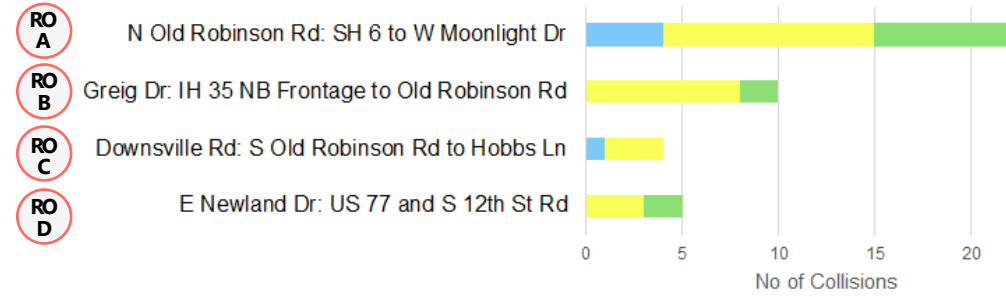
SEVERITY INDEX



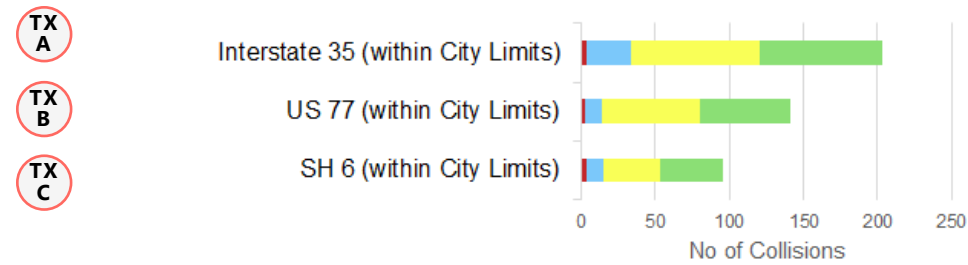
ROADWAYS & INTERSECTIONS

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.

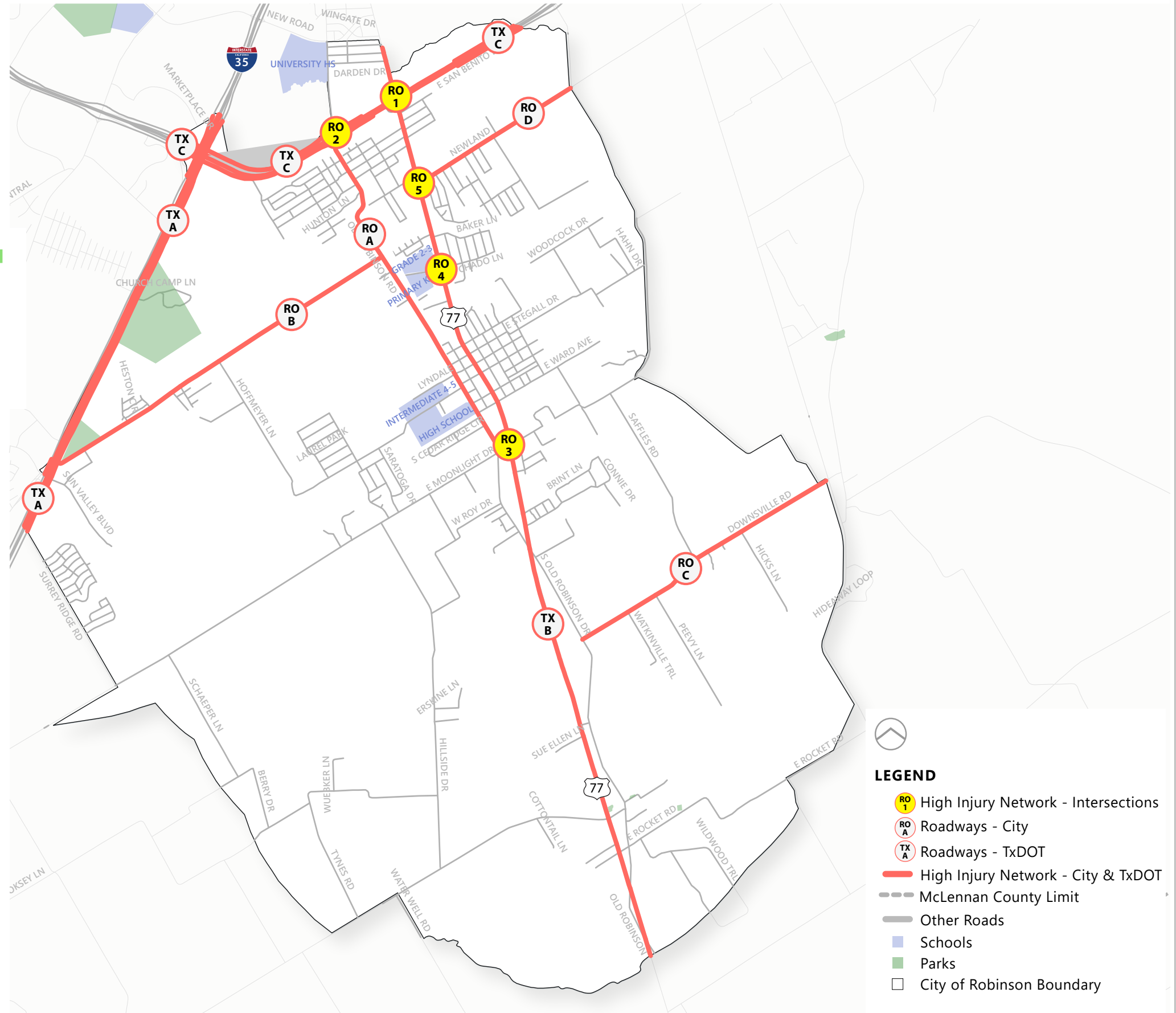
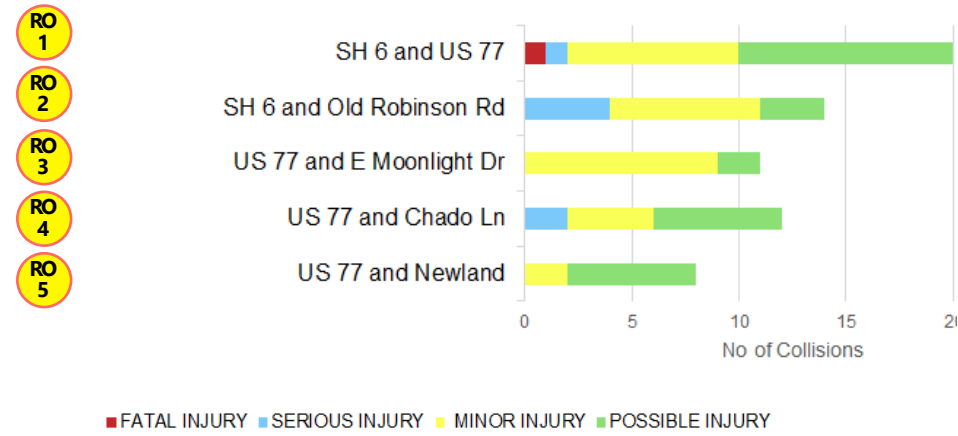
ROADWAYS



TxDOT ROADWAYS



INTERSECTIONS

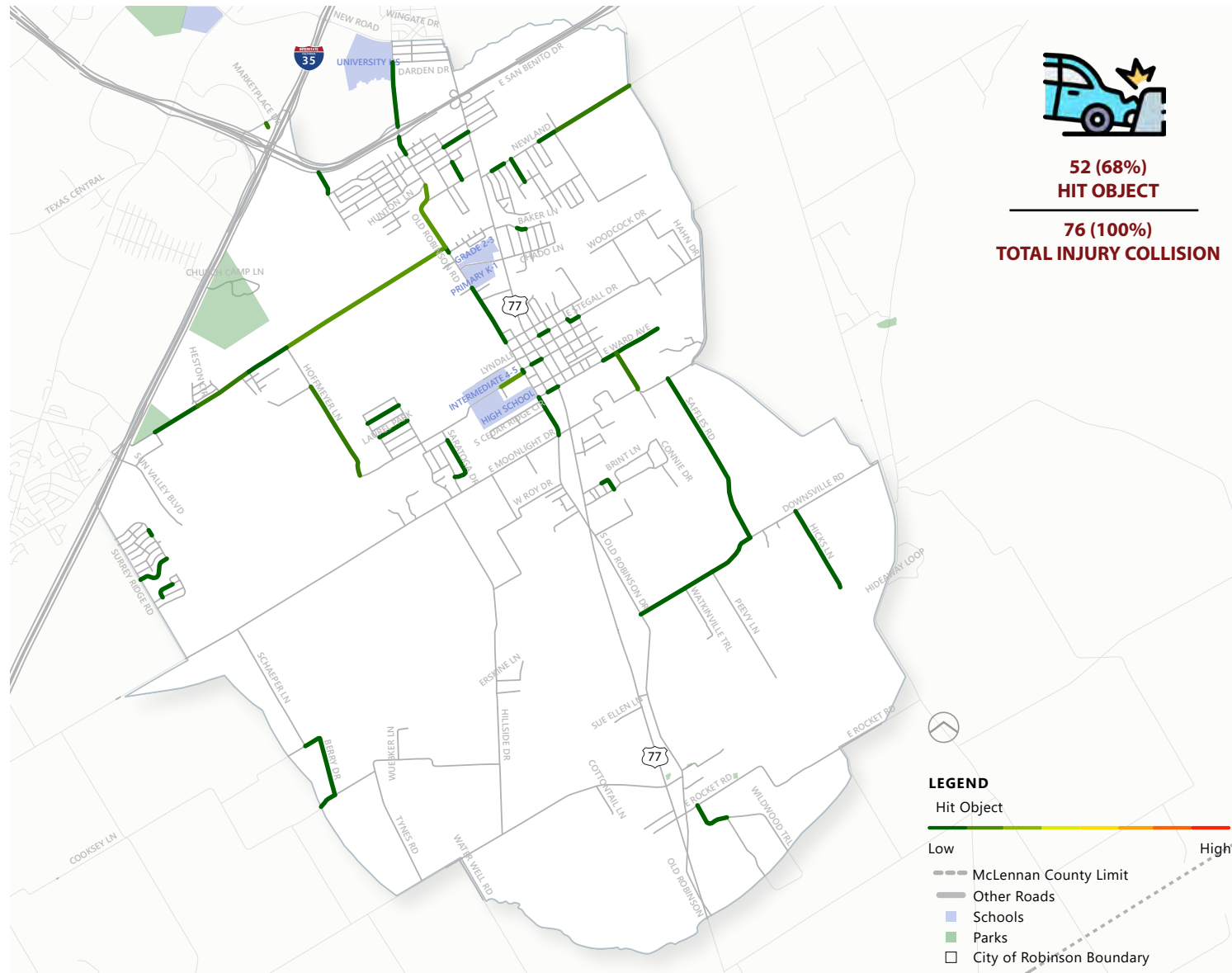


LEGEND

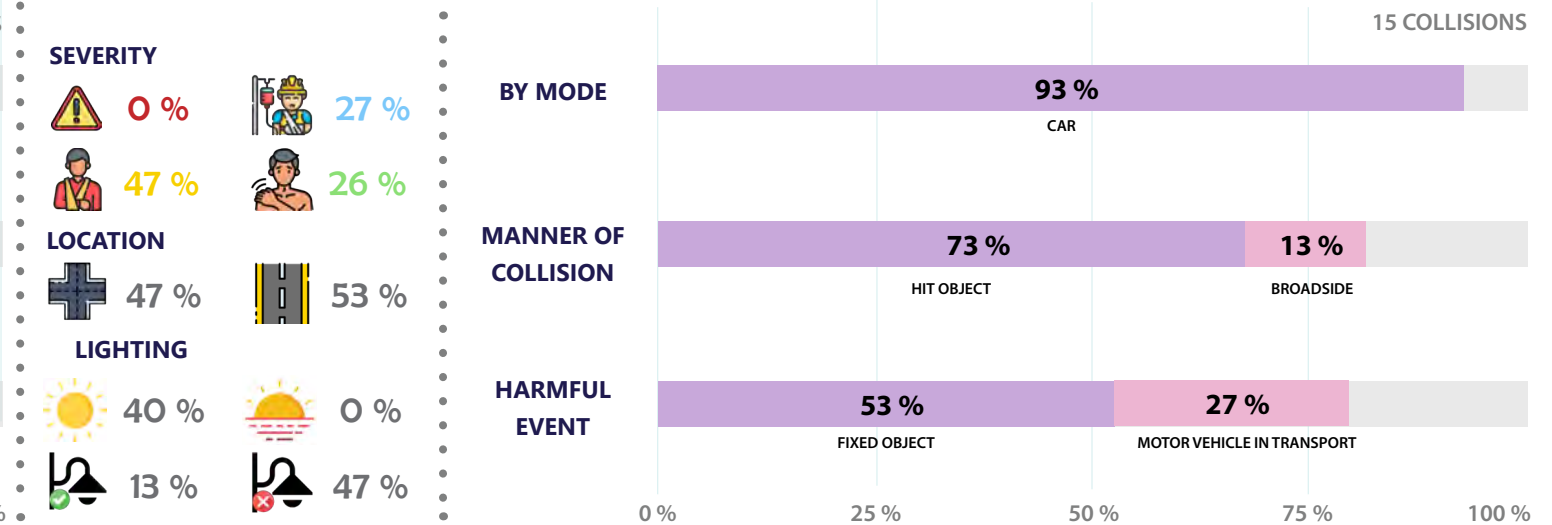
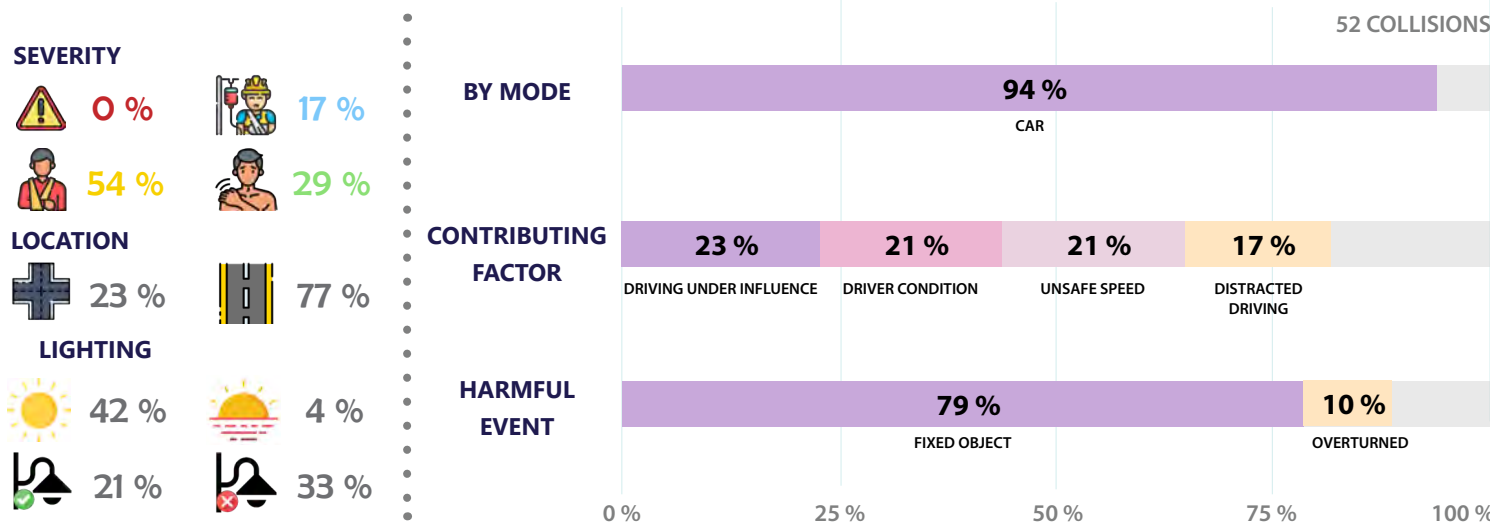
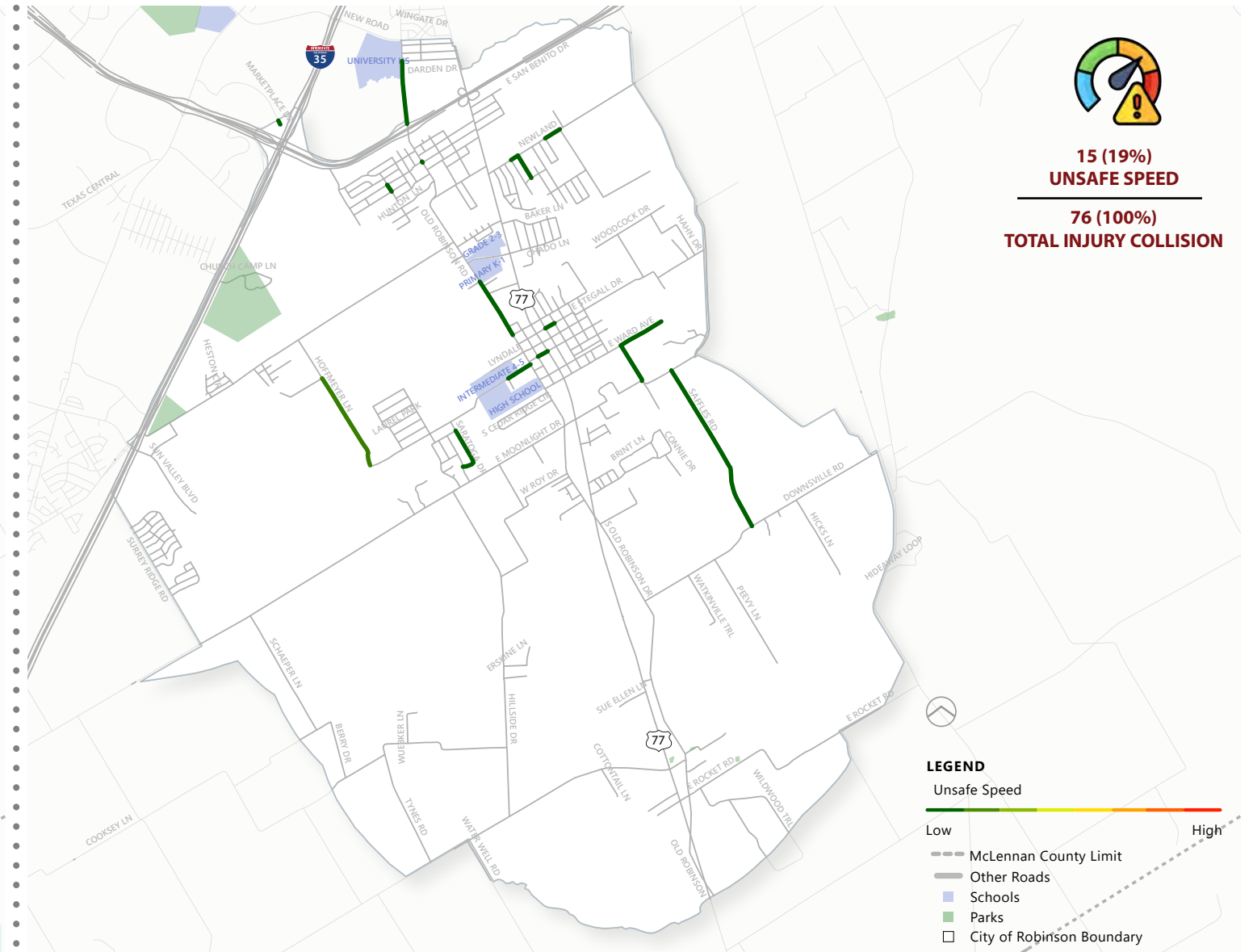
- RO 1-5: High Injury Network - Intersections
- RO A: Roadways - City
- TX A: Roadways - TxDOT
- : High Injury Network - City & TxDOT
- : McLennan County Limit
- : Other Roads
- : Schools
- : Parks
- : City of Robinson Boundary

PROFILES - CITY

PROFILE 1 - HIT OBJECT

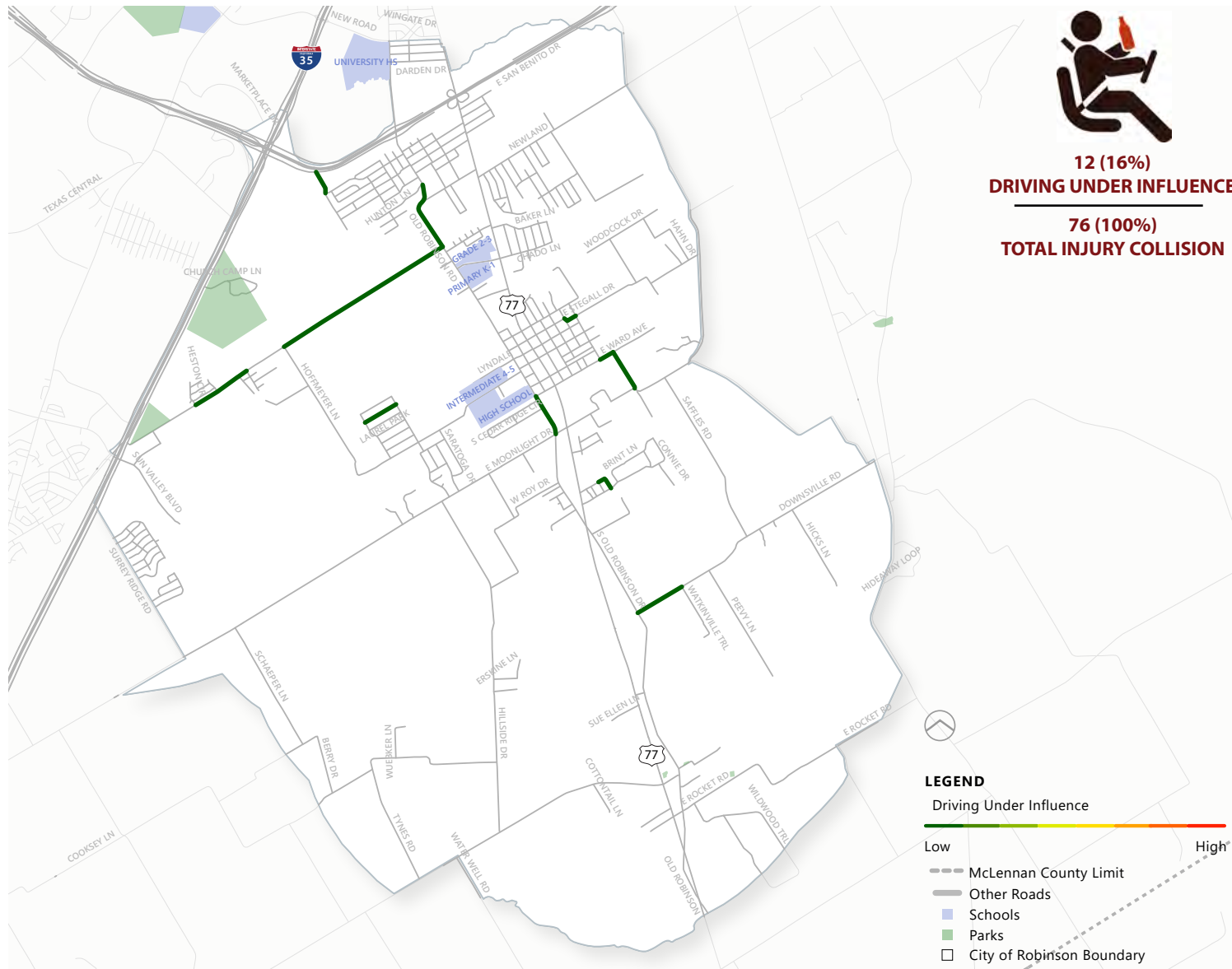


PROFILE 2 - UNSAFE SPEED

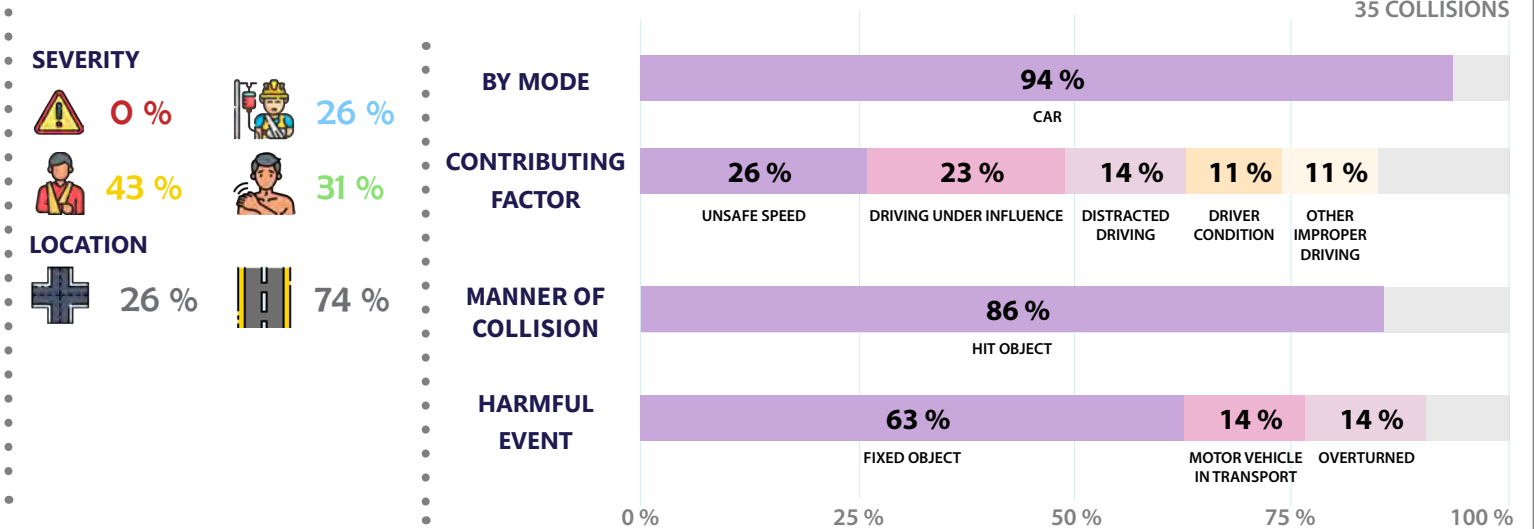
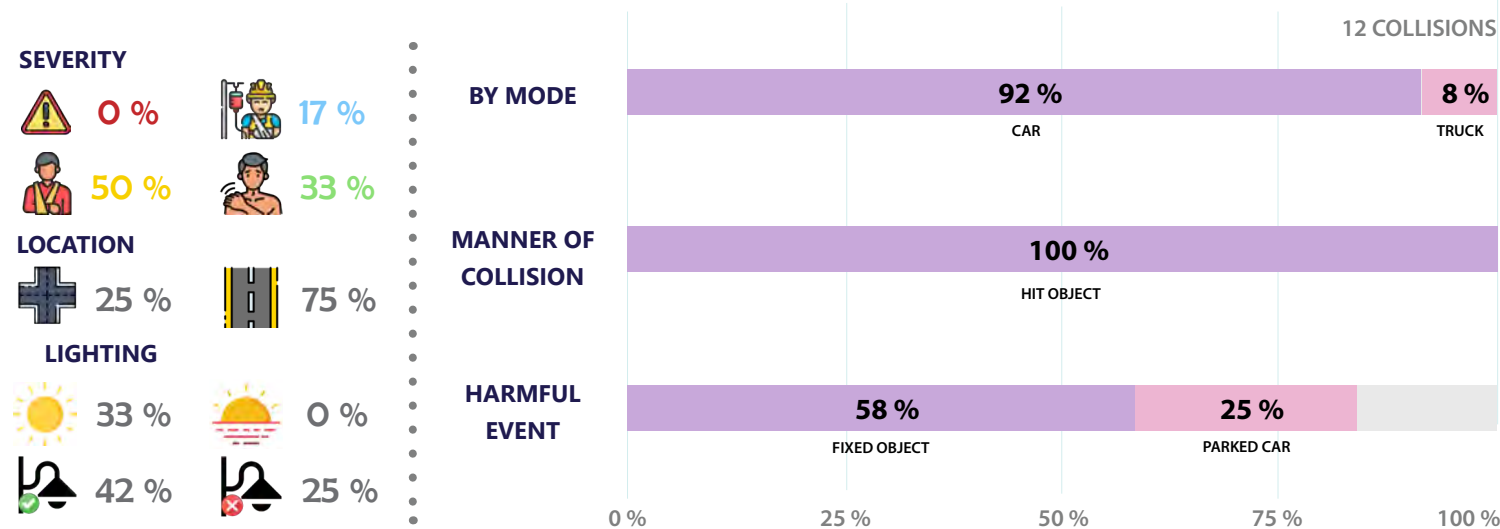
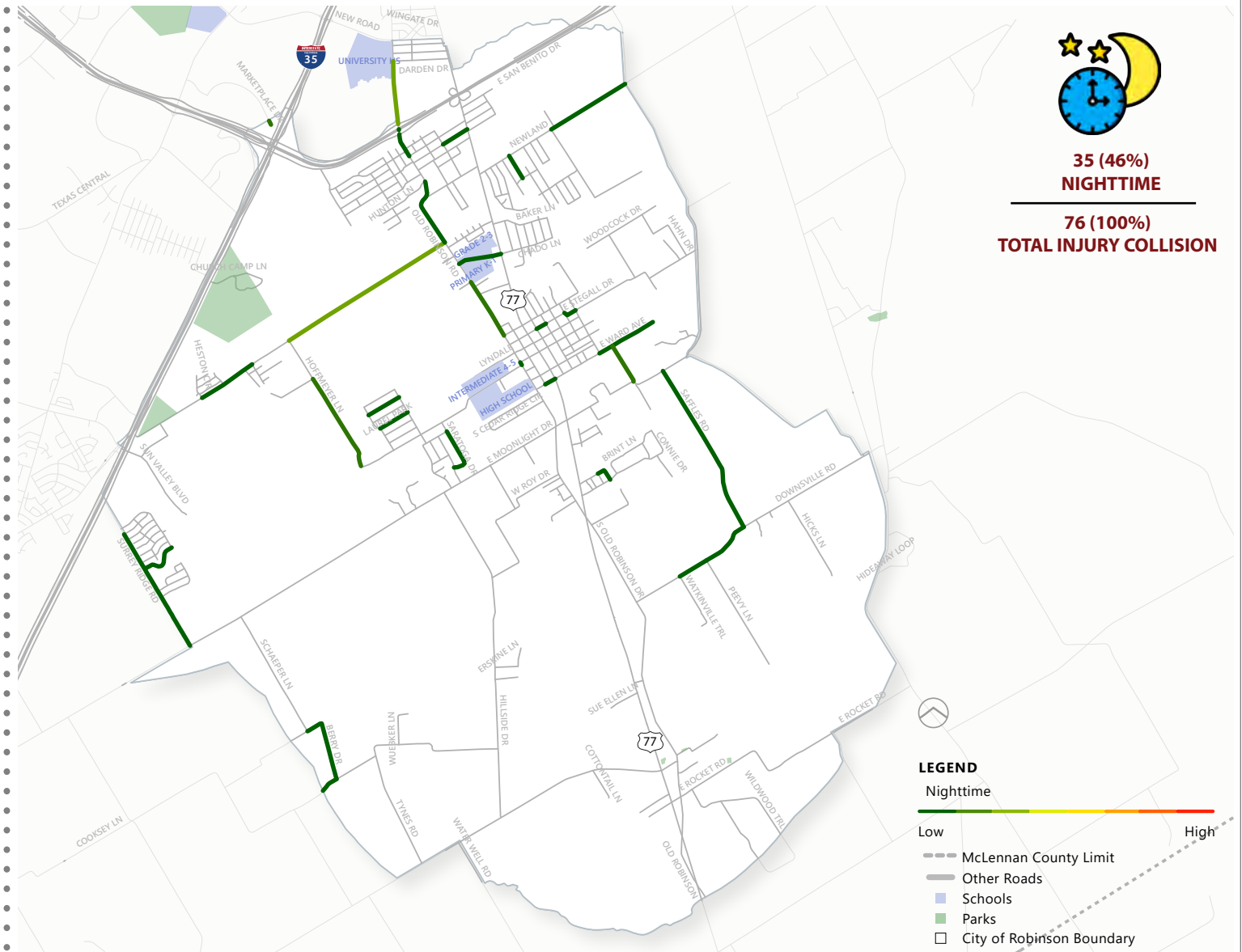


PROFILES - CITY

PROFILE 3 - DRIVING UNDER INFLUENCE

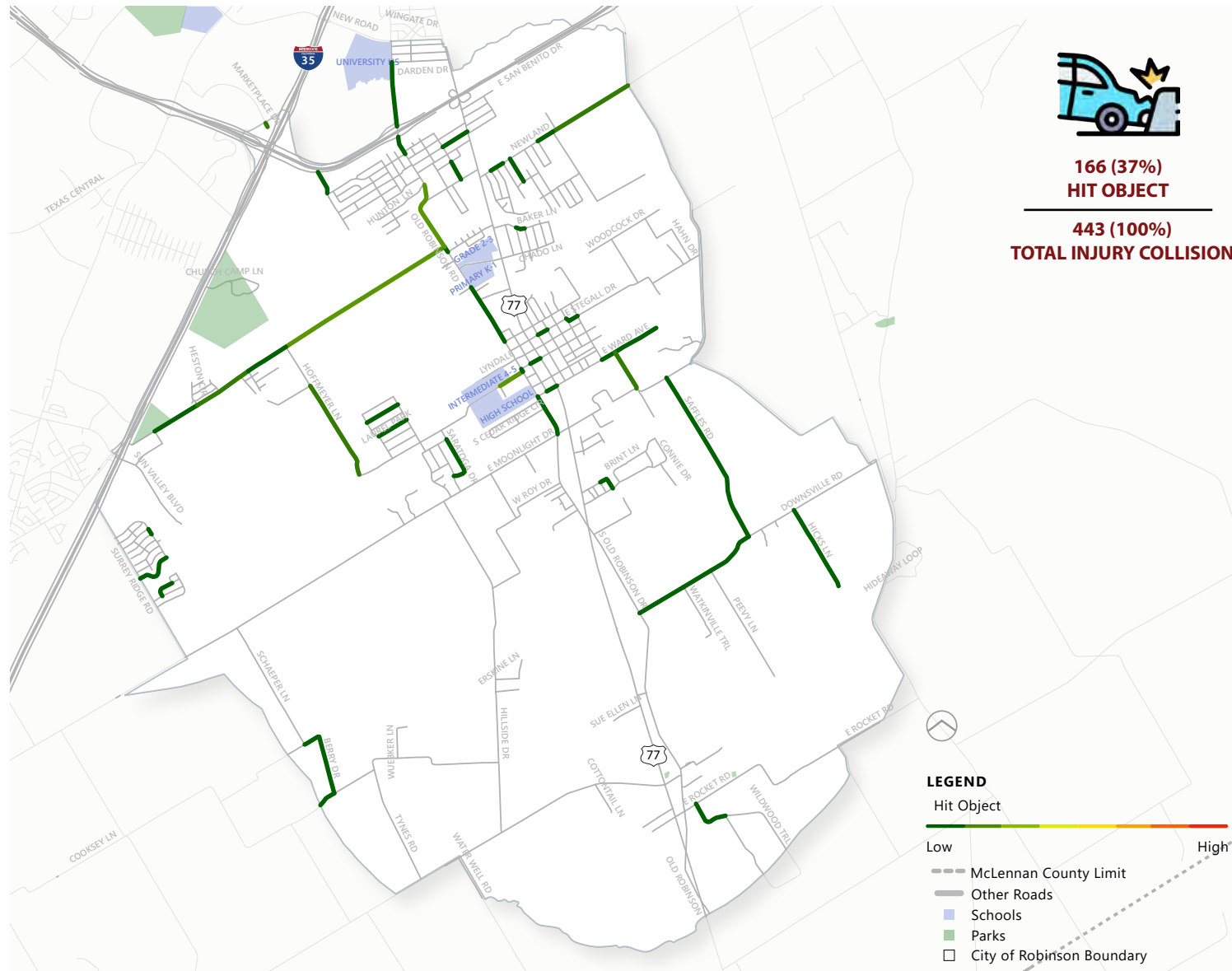


PROFILE 4 - NIGHTTIME

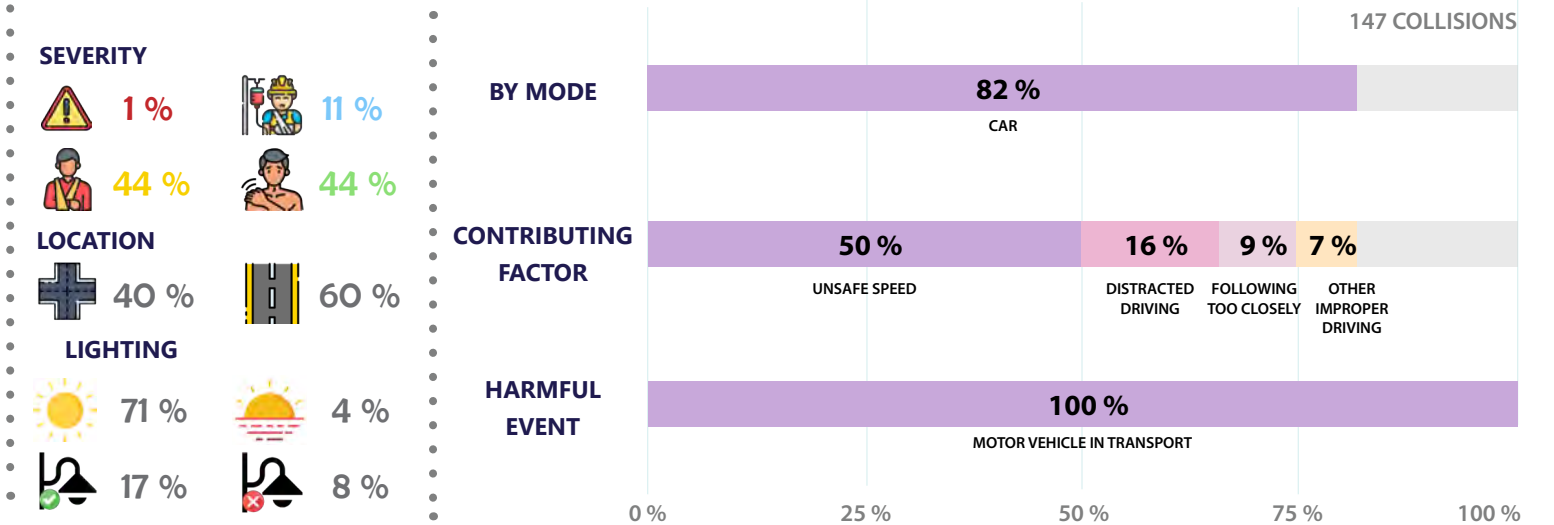
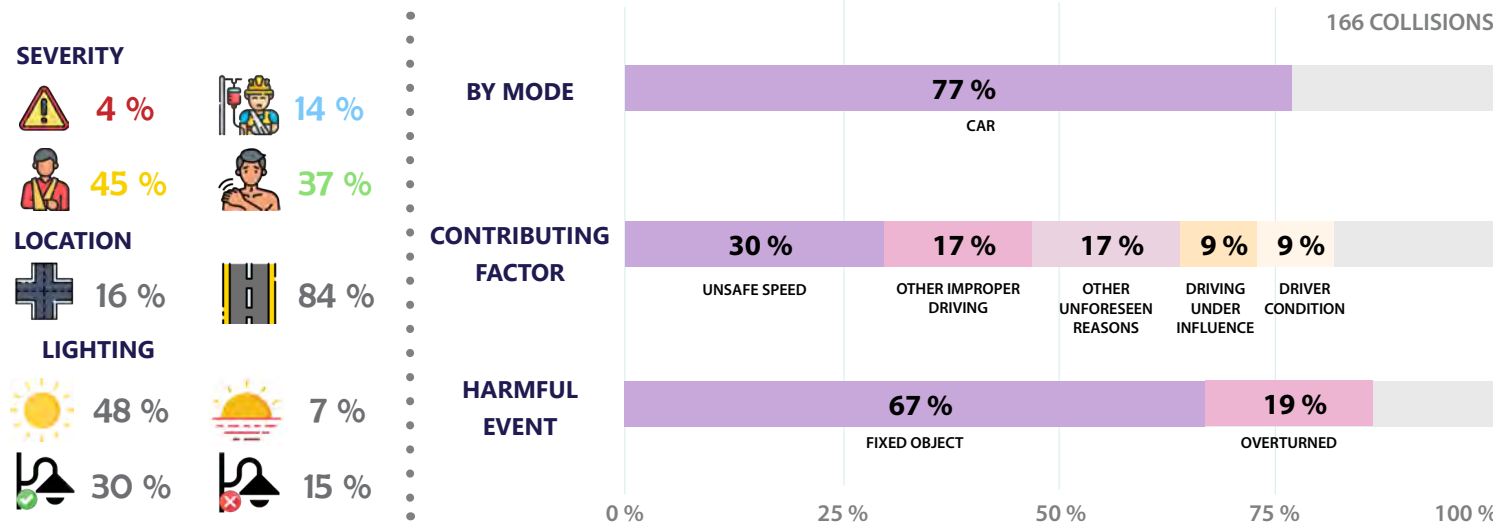
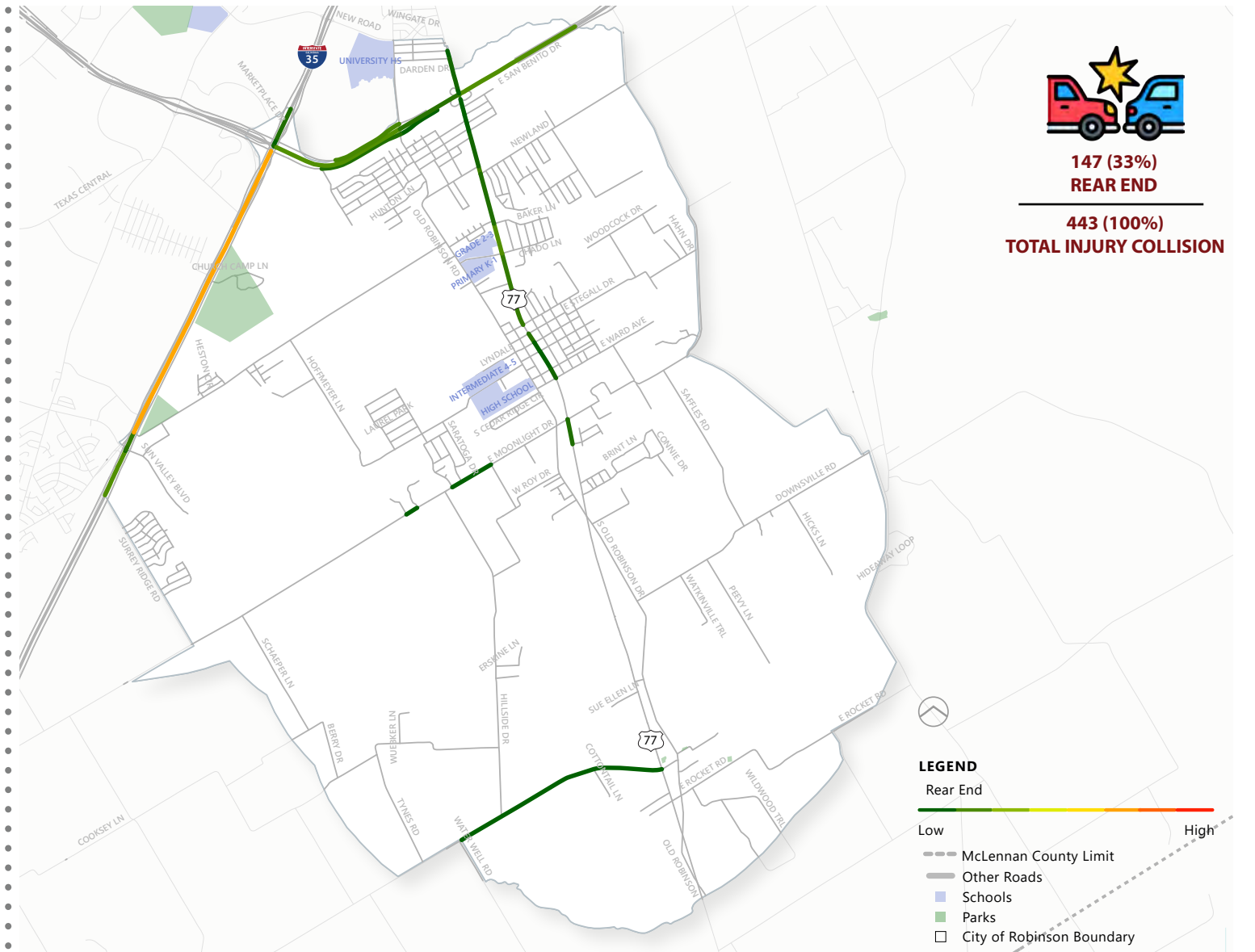


PROFILES - TXDOT

PROFILE 1 - HIT OBJECT

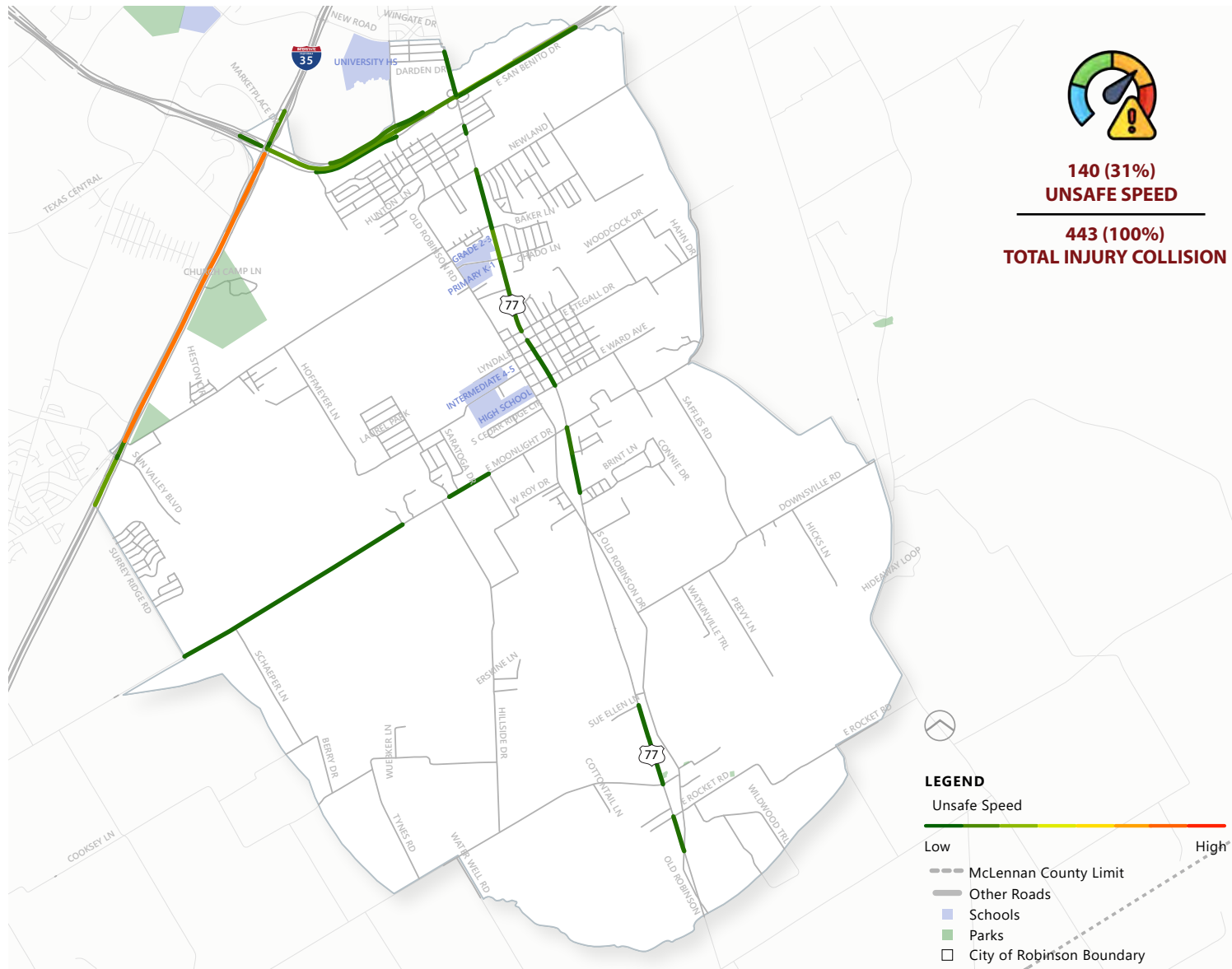


PROFILE 2 - REAR END

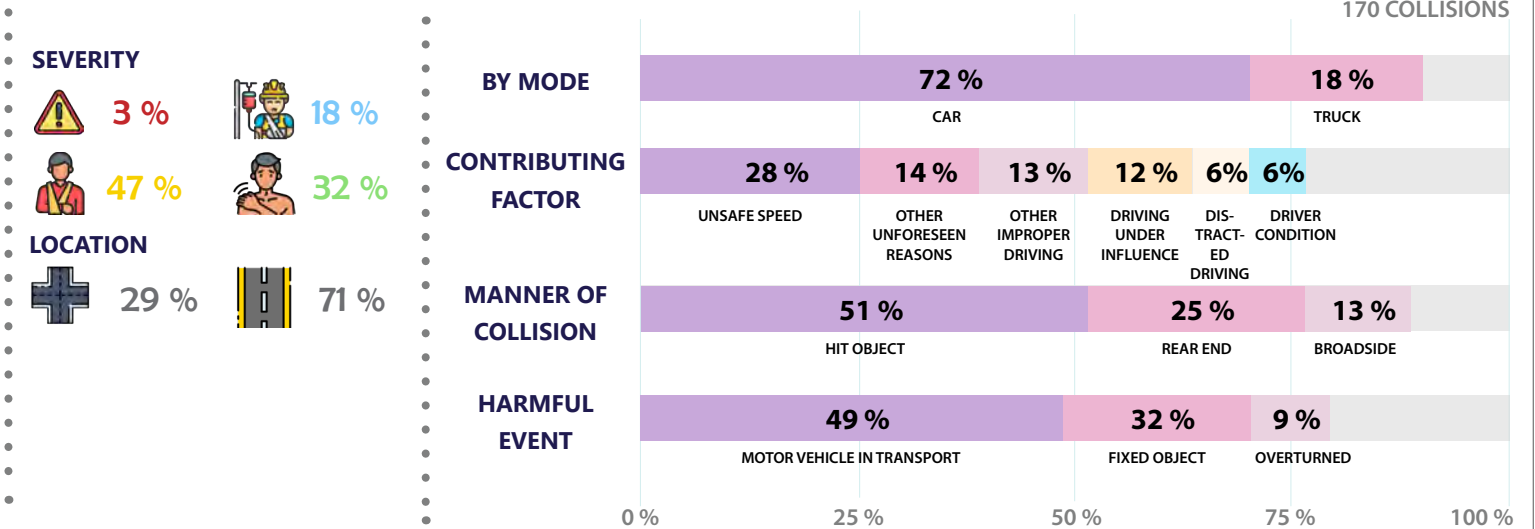
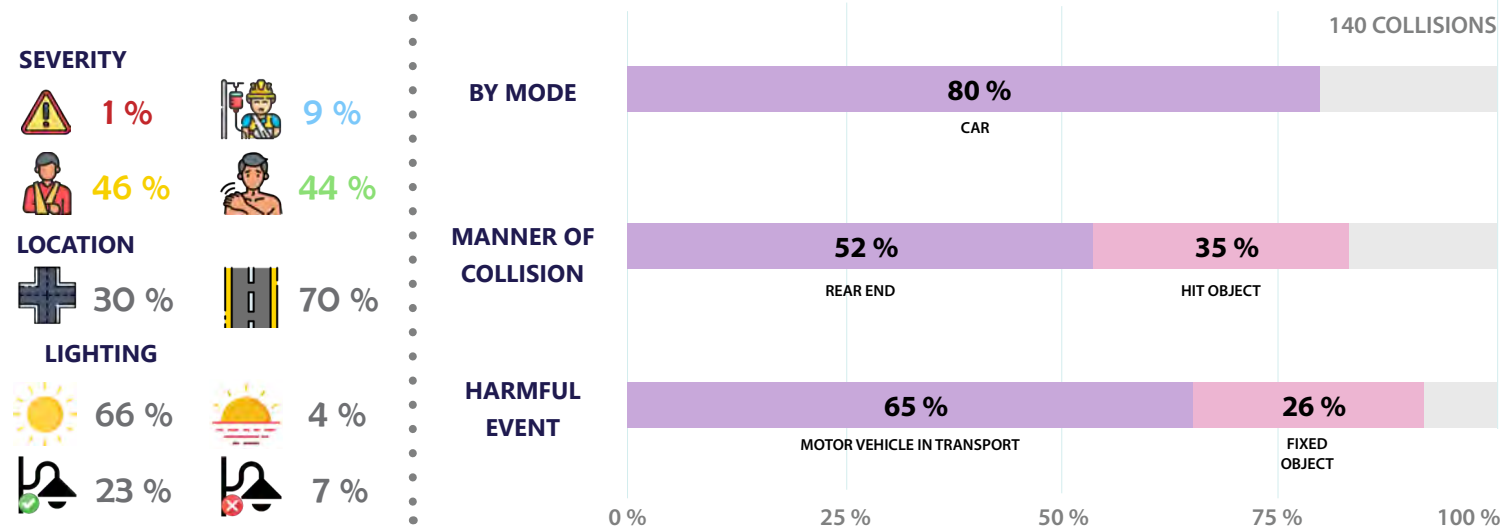
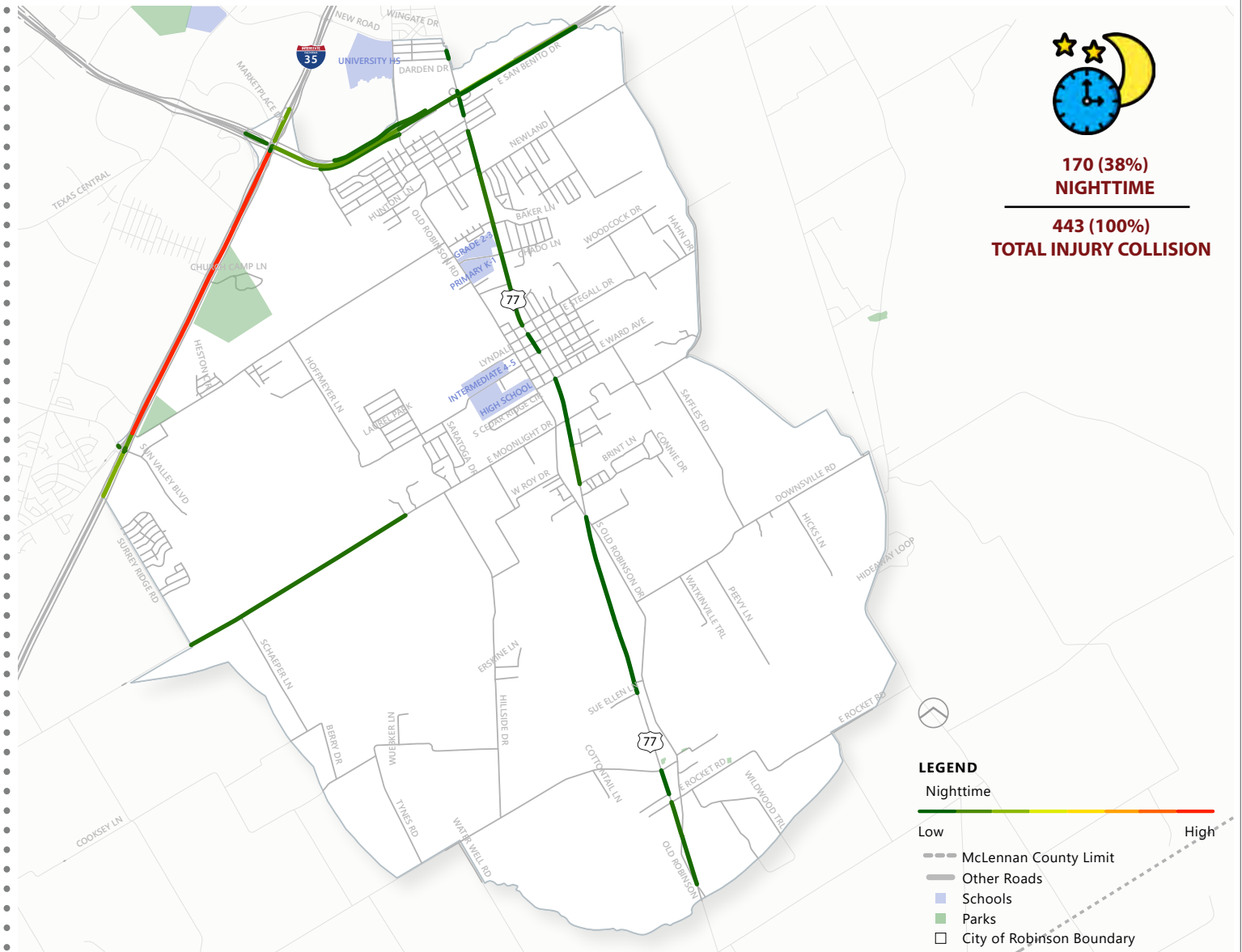


PROFILES - TXDOT

PROFILE 3 - UNSAFE SPEED



PROFILE 4 - NIGHTTIME

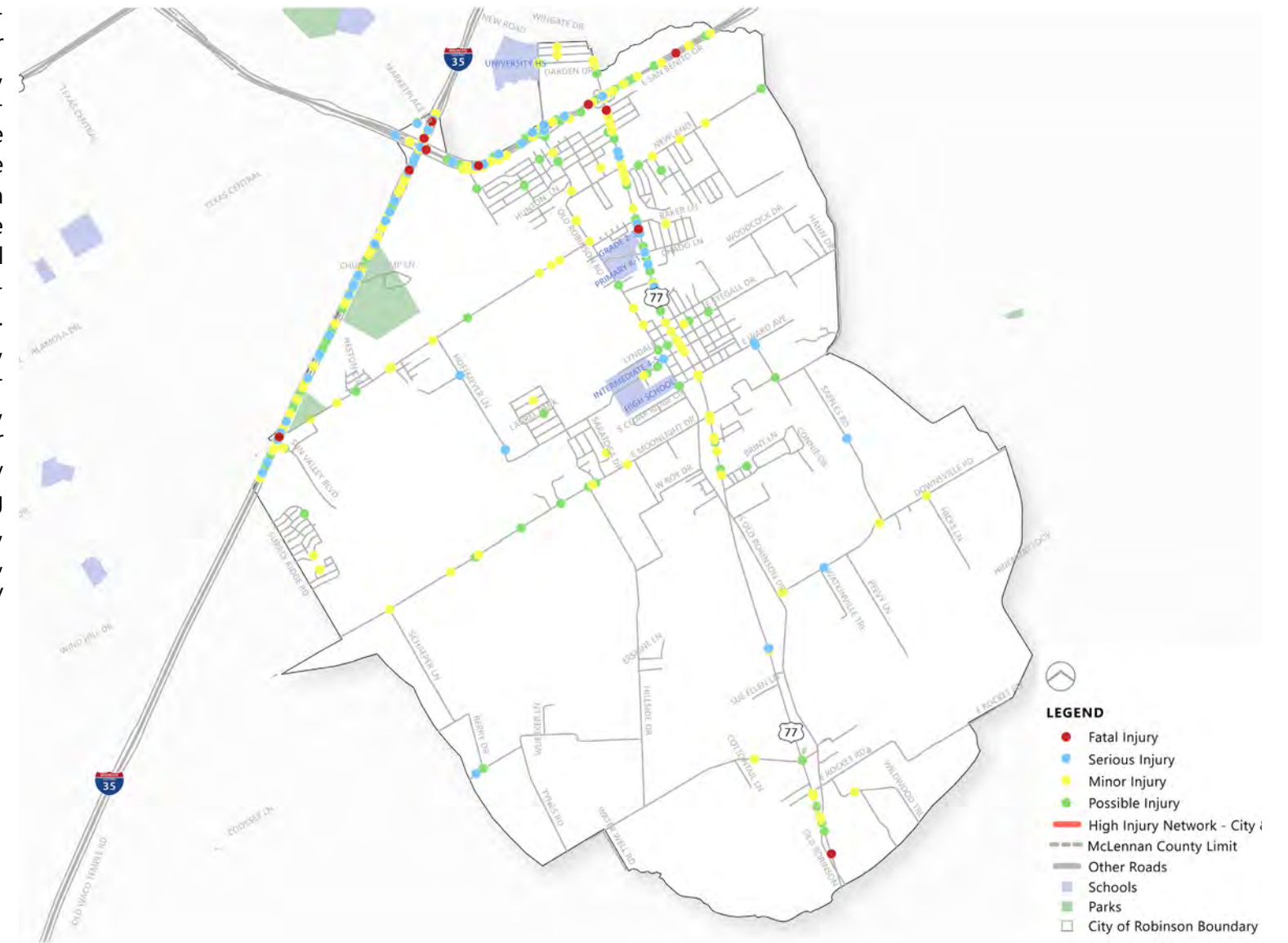


PAVEMENT MAINTENANCE & REPAIR PROGRAM

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.

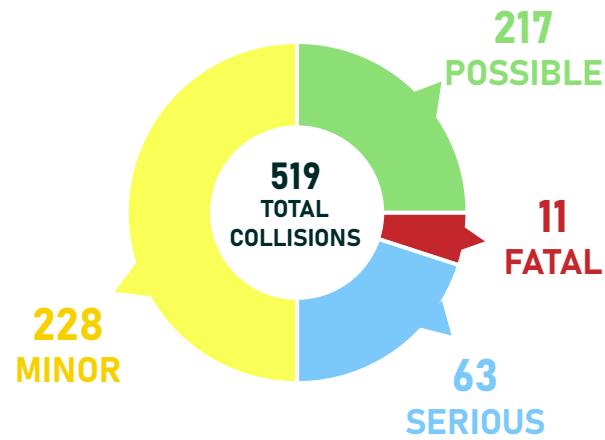


PROJECT 1: CITYWIDE SIGN INVENTORY & PAVEMENT DELINEATION

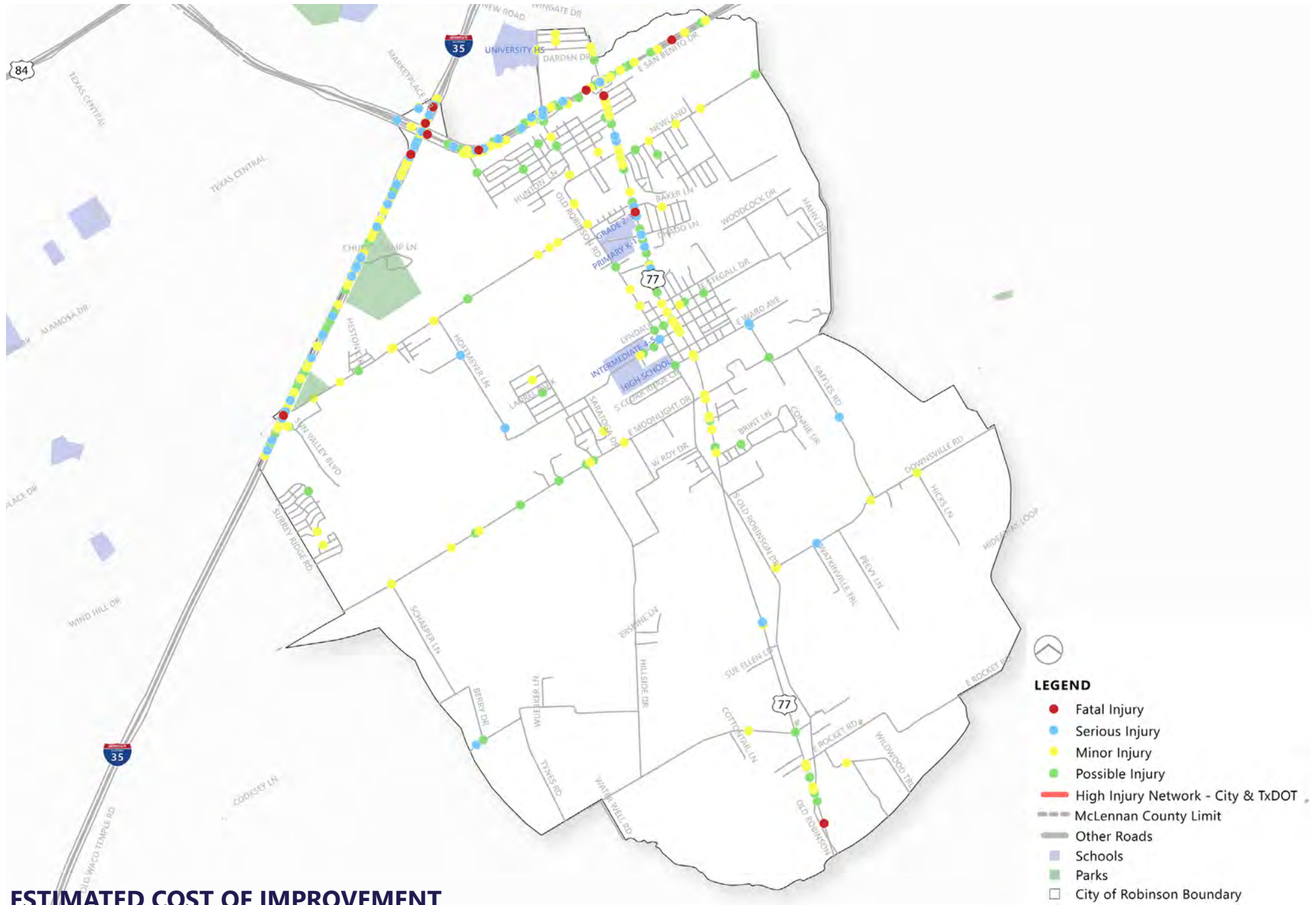
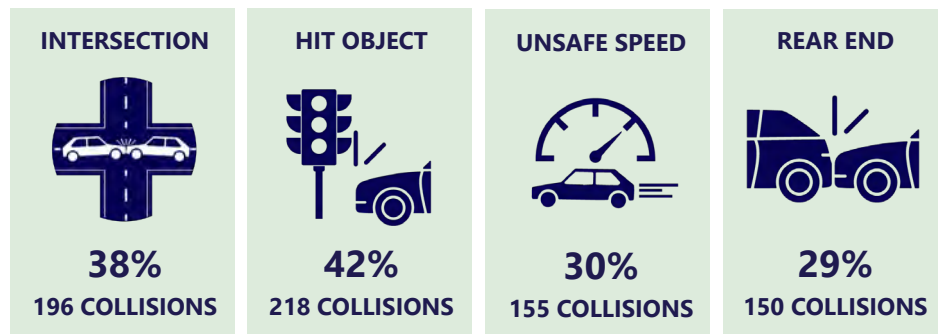
The City of Robinson is proposing a Citywide Sign Inventory and Pavement Delineation project to enhance roadway safety and navigation for drivers. The initiative would begin with a comprehensive evaluation of all existing traffic signs throughout the city to identify any that are damaged, faded, obstructed 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



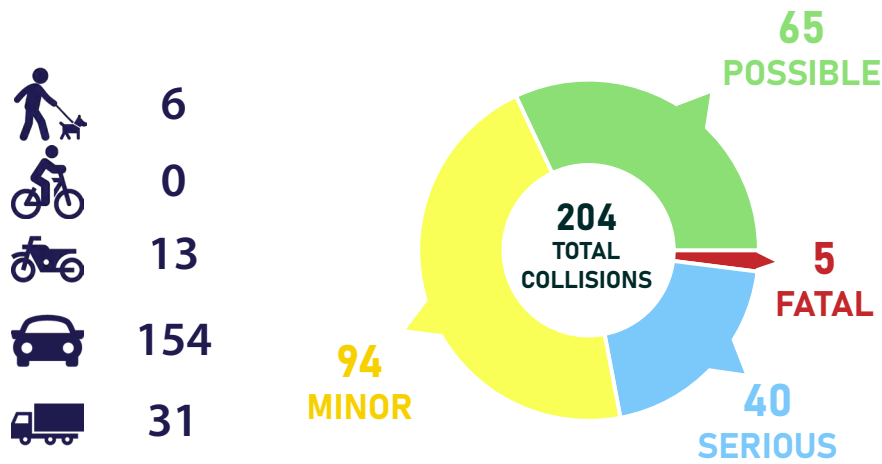
ESTIMATED COST OF IMPROVEMENT

	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
		TOTAL COST	\$8,846,200

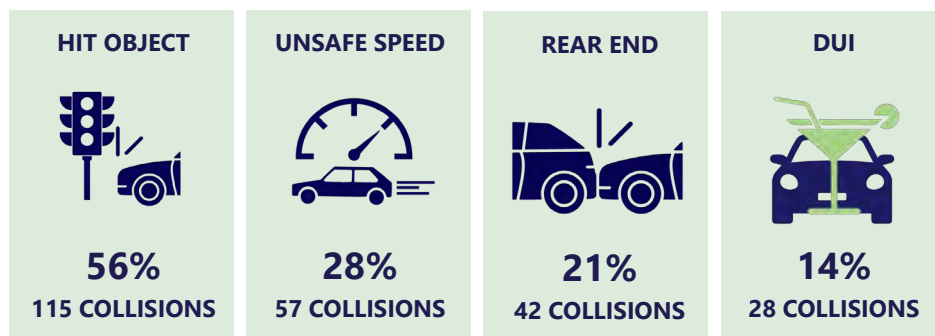
PROJECT 2: CITYWIDE STREET LIGHT INVENTORY & REPLACEMENT

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



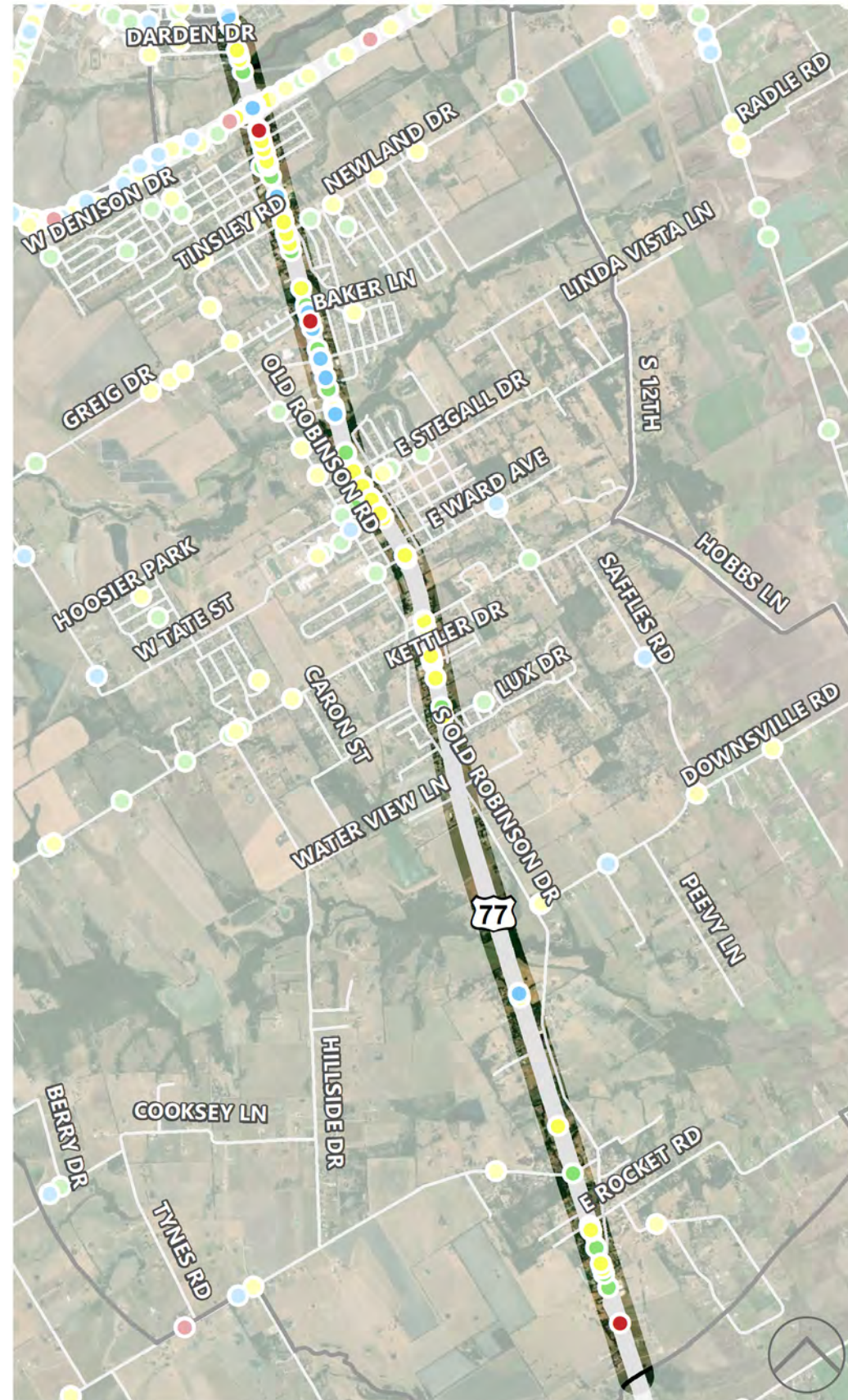
TRENDS



ESTIMATED COST OF IMPROVEMENT

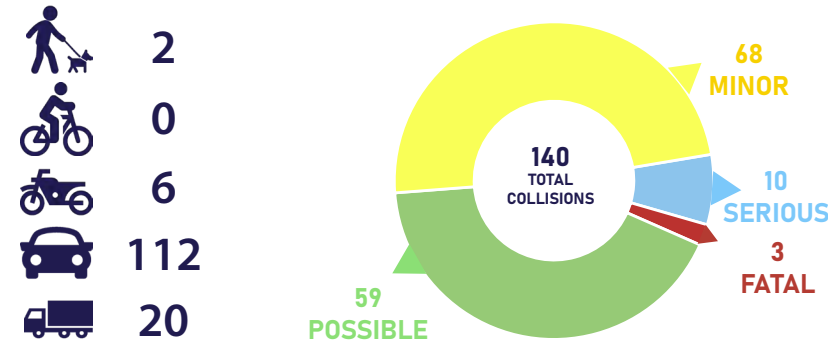
IMPROVEMENTS	LIMIT	ESTIMATED COST
Install/ Replace Street Lights	Citywide	\$6,595,300
	CONTINGENCY COST	\$1,319,060
	ENGINEERING COST	\$2,770,100
	TOTAL COST	\$10,684,460

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

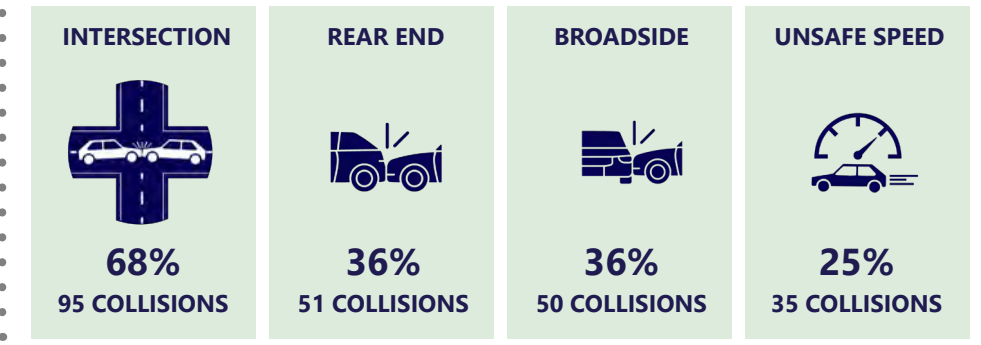


Robinson Drive, part of US-77, serves as the primary north-south arterial within Robinson. This roadway consists of four lanes, including a center two-way turn lane. Speed limits along this section vary between 40 mph and 55 mph. The corridor is within 0.25 mile of Robinson Elementary and Primary School.

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

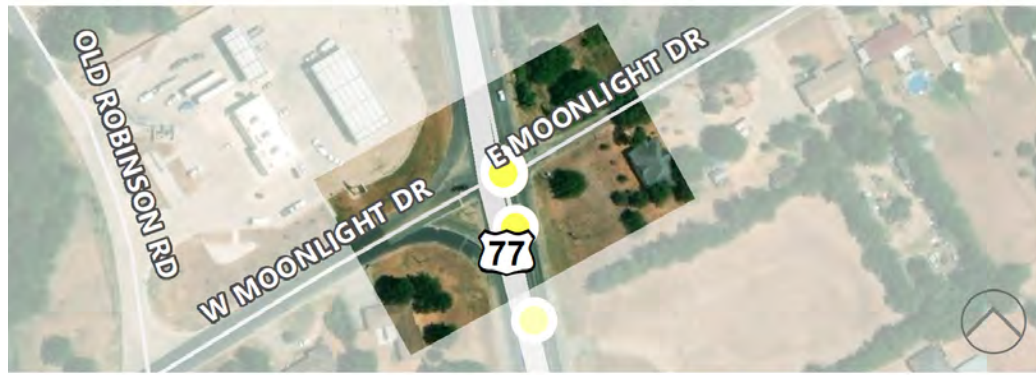


ESTIMATED COST OF IMPROVEMENT

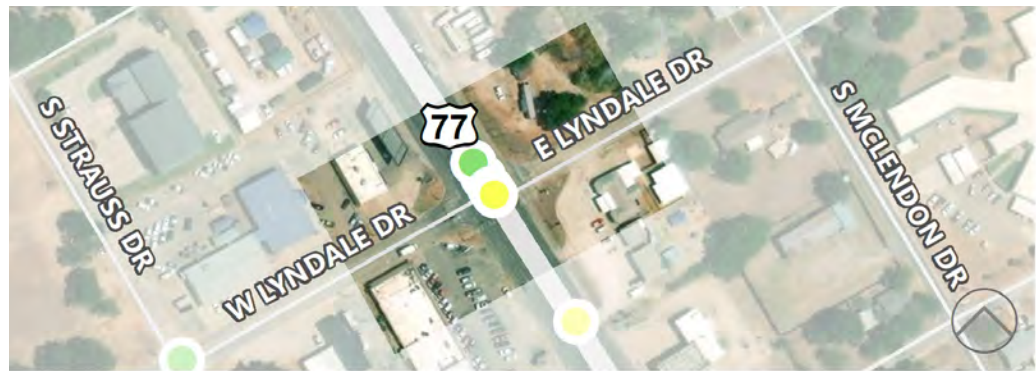
3: US-77 (ROBINSON DR)- CORRIDOR SAFETY IMPROVEMENTS			
	IMPROVEMENTS	LOCATIONS	ESTIMATED COST
	Install Median and Access Management		\$6,969,600
	Fill Street Light Gaps		\$956,800
	Install Sidewalks	From North City Limits to Lux Dr	\$11,319,000
	Install Speed Feedback Sign		\$69,000
	Pedestrian Hybrid 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
		TOTAL COST	\$32,178,100

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

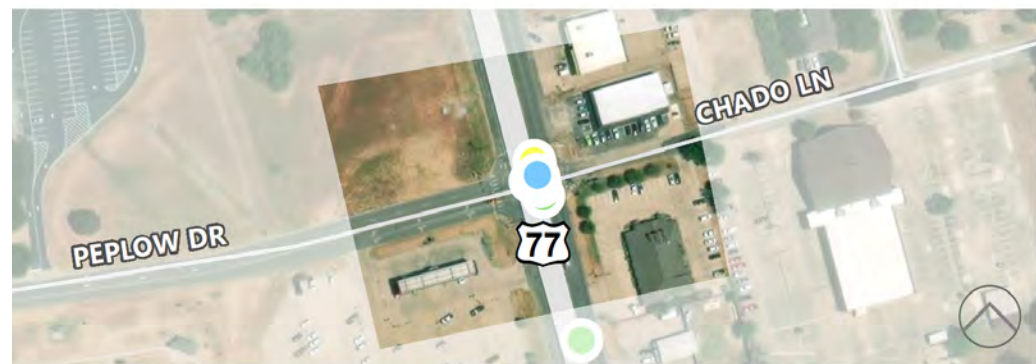
PROJECT 4: US-77 (ROBINSON DRIVE): SIGNALIZED INTERSECTION SAFETY IMPROVEMENTS



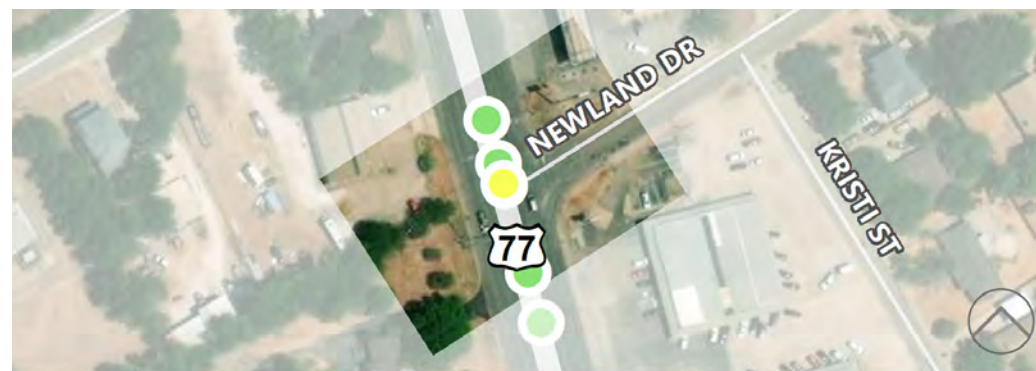
E/W Moonlight Dr



E Lyndale Dr



Peplow Dr/Chado Ln

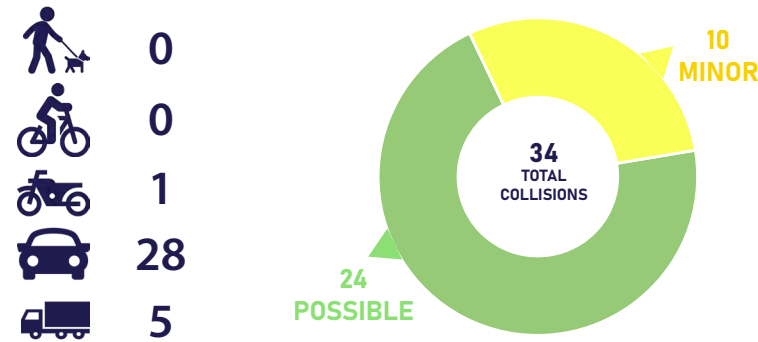


Newland Dr

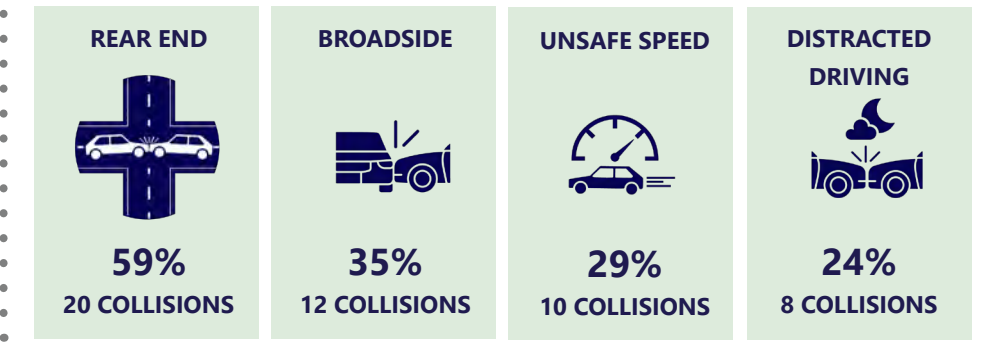
■ Fatal Injury
 ■ Serious Injury
 ■ Minor Injury
 ■ Possible Injury

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

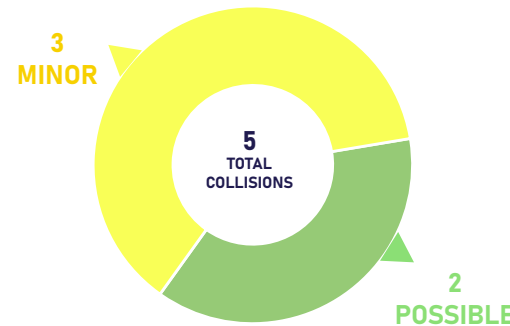
4: US-77 (ROBINSON DR)- SIGNALIZED INTERSECTION SAFETY IMPROVEMENTS			
	IMPROVEMENTS	LOCATIONS	ESTIMATED COST
	Intersection Lighting		\$430,100
	Approach Medians	Intersections along US-77 (Robinson Dr):	\$914,000
	Signal Hardware Upgrades	E/W Moonlight Dr	\$34,500
	Pedestrian Safety Enhancement (Sidewalk 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
		TOTAL COST	\$3,288,500



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

- 0
- 0
- 0
- 5
- 0



TRENDS

HIT OBJECT 80% 4 COLLISIONS	UNSAFE SPEED 40% 2 COLLISIONS	DISTRACTED DRIVING 40% 2 COLLISIONS	NIGHTTIME 20% 1 COLLISION
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EXISTING CONDITIONS



Existing Condition:
Newland Dr at Celeste Dr facing east



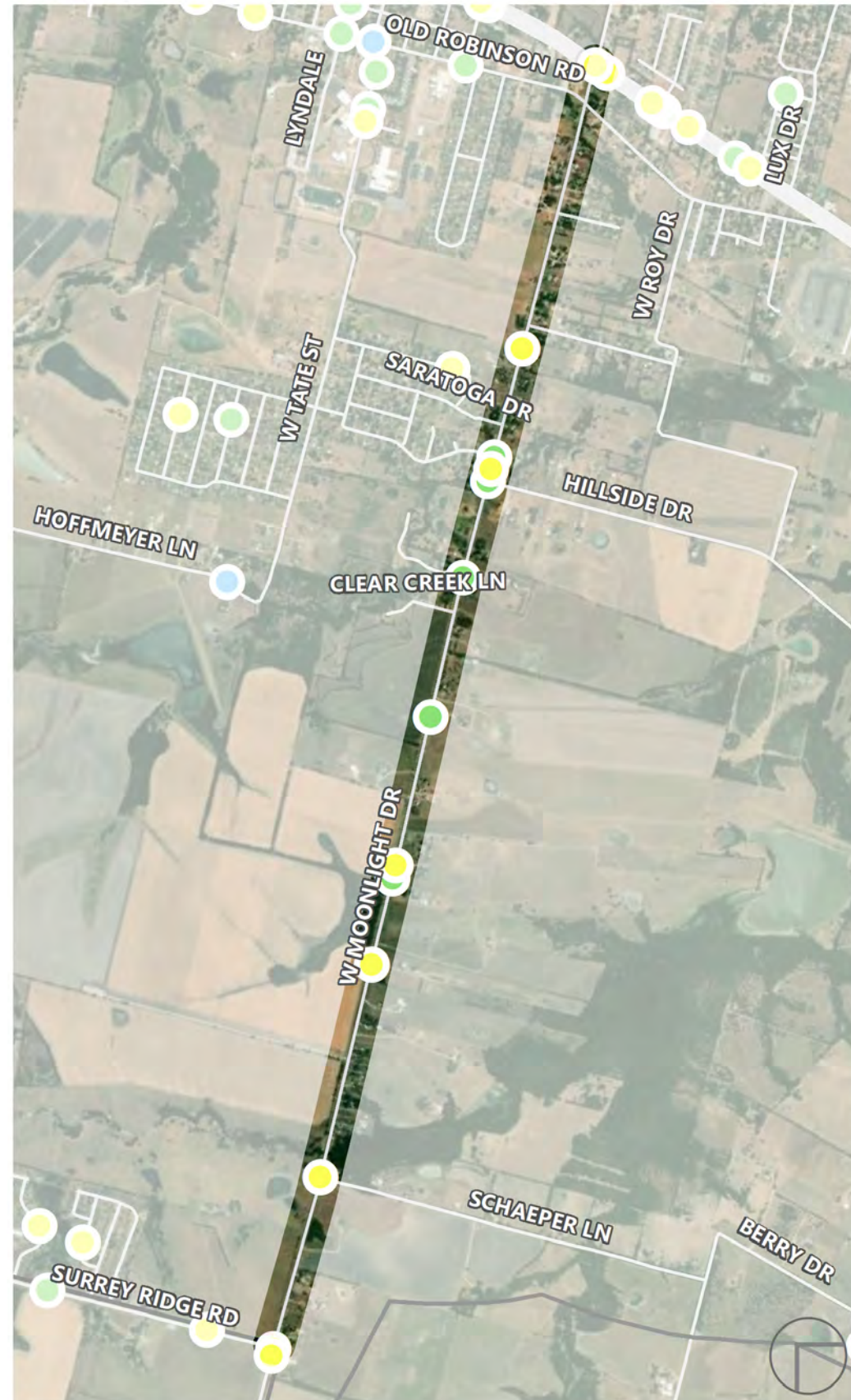
Existing Condition:
Newland Dr Rio at Bonito Dr facing west

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
	TOTAL COST	\$248,100

■ 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

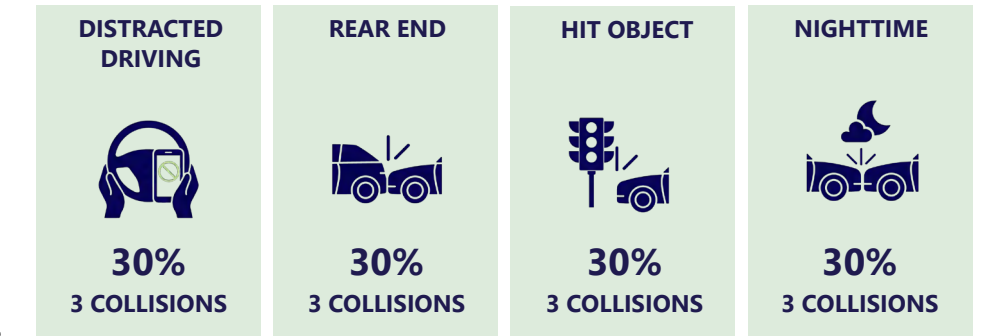
FM-3148 (W Moonlight Drive) serves as an east-west arterial stretching from US-77 to the western boundary of the City of Robinson. Along this segment, from US-77 (Robinson Drive) to the city limit, the road is a two-lane undivided corridor with speed limits varying between 55 and 60 mph.

INJURY COLLISION STATISTICS

- 1
- 0
- 1
- 8
- 0



TRENDS



EXISTING CONDITIONS



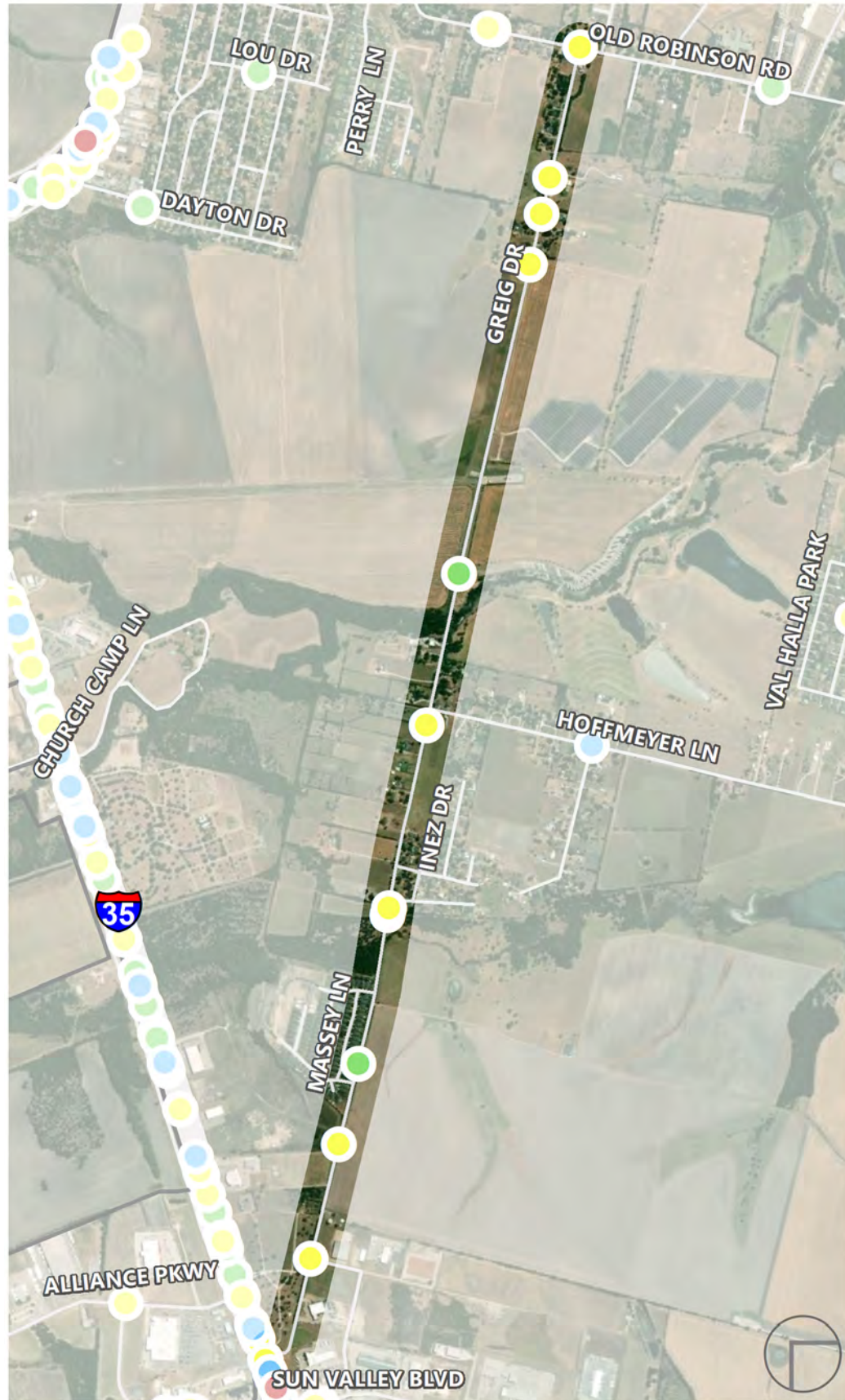
Existing Condition:
W Moonlight Dr at S Old Robinson Rd facing west

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



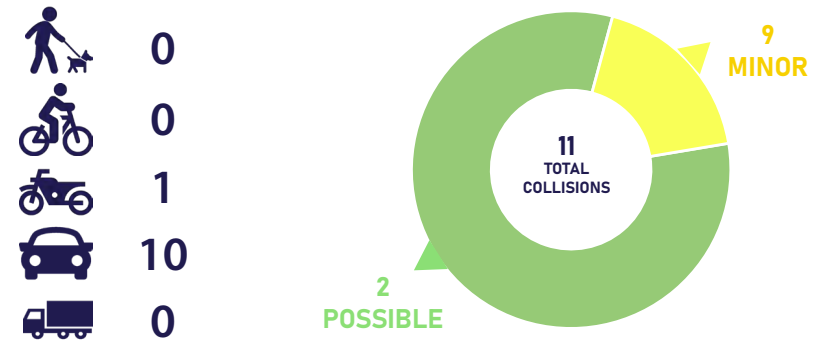
ESTIMATED COST OF IMPROVEMENT

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 Stripping		\$69,000
	CONTINGENCY COST	\$22,400
	ENGINEERING COST	\$47,000
	TOTAL COST	\$181,200

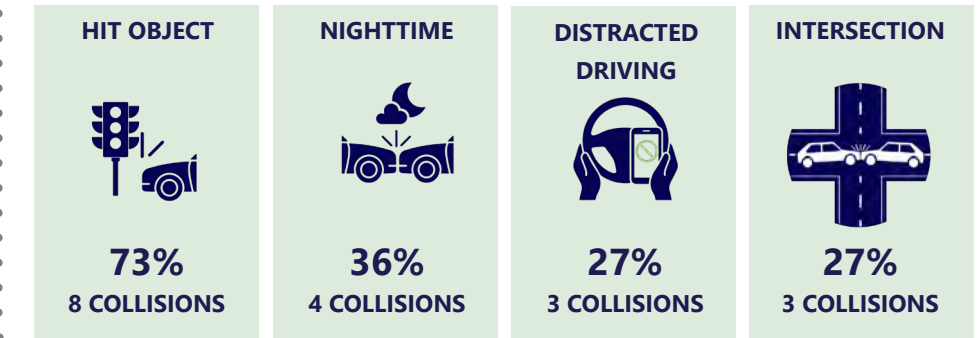


Greig Drive is an east-west collector within Robinson. The corridor from North Old Robinson Road to I-35 N Frontage Road is a two lane undivided roadway, with a designated speed limit of 40 mph.

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			\$423,000
Install Striping	From N Old Robinson Rd to I- 35 N Frontage Rd		\$219,500
Install Signage			\$4,400
Install Street Lighting			\$490,700
	CONTINGENCY COST		\$227,400
	ENGINEERING COST		\$477,500
	TOTAL COST		\$1,841,600

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