MAURY COUNTY
SAFETY ACTION PLAN

March 2025

Approval Letter from Leadership

Message from the County's Commissioner Chair

Dear County Residents,

On behalf of Maury County Commission and the other leaders of our great County, I am proud to support this effort toward making our roadways safer for all who travel them. Between 2019 and 2023, our County experienced 8,911 reported roadway crashes, of which 312 crashes led to 45 deaths and 267 seriously injured individuals. These events are tragedies for the victims, their families, and our communities. The impacts are profound and devastating.

Fatalities and serious injuries due to traffic crashes are preventable, and Maury County is committed to significantly reducing and ultimately eliminating these occurrences. This Comprehensive Safety Action Plan is a crucial first step toward making this commitment a reality. As a data-driven and actionable document, this Safety Action Plan lays the groundwork for projects and strategies that can make a tangible difference on our roadways.

Access to safer roadways should not be reserved only for a select few; rather, the entire population of the Maury County should be able to travel safely daily, regardless of their income level, where they live, their race, or their age. Maury County cannot achieve its goals without the support and participation of the people in our communities and our partner agencies. Every person has a role to play and a responsibility to help make our roads safer. Together, we can accomplish a great deal.

Our intent is that this Safety Action Plan will provide a roadmap of the steps that Maury County will take toward improving safety on the roadways within our jurisdiction. The plan will show us what to do first, what to do next, and how to keep track of our progress along the way. The work has only just begun, but having a solid plan is the foundation for achieving our goals and eliminating these preventable tragedies from our roadways.

Thank you for your interest in roadway safety in Maury County.

Sincerely,

Kevin Markham

Chairman of the Board of Commissioners

Special Thanks

We extend our sincere appreciation and gratitude to the residents, advocacy groups, stakeholders, and the public who assisted in the public surveys, meetings, and the entire planning process. The critical input guided the development of the Safety Action Plan and in turn will have a positive impact on the county.

Maury County Highway Department
Ken McKee – Highway Road Superintendent
Benida Oliver – Project Manager

Maury County Mayor
Sheila K. Butts – County Mayor

Maury County Pupil Transportation
Eric Perryman – Assistant Superintendent of Operations

Maury County Emergency Management
Jeff Hardy – Director of Emergency Management
Pat Woodmansee – Assistant Director at Maury County Office of Emergency Management

Maury County Sheriff Department
Lieutenant Brandon Park

Maury County EMS
Tim Hobbs - Shift Supervisor Maury Regional Medical Center Emergency Management

Maury County Fire & Rescue Department
Jose Periut - Chief
Richard Schaltz - Deputy Chief

City of Columbia
Glen Harper, P.E. – City Engineer

City of Spring Hill
Missy Stahl, CIP – Director

County Commissioners (Previous)
Vincent Fuqua – District 5
Ray Jeter – District 8

County Commissioners (Current)
Jerry Strahan – District 1
Pam Huffman – District 1
Patricia Hollinsworth – District 2
Eric Previti – District 2
Talvin Barner – District 3
Gary Stovall – District 3
Connie Green – District 4
Carl McCullen – District 4
Scott Sumners – District 5
Brandon Nutt – District 5
Kathey Grodi – District 6
Cindy Hestla – District 6
Aaron Miller – District 7
Kenny Morrow – District 7
Gabe Howard – District 8
Jerry Bridenbaugh – District 9
Kevin Markham – District 9, Chairman
Danny Grooms – District 10, Safety Committee Chair
Tommy Wolaver – District 10
Gwynne Evans – District 11
Chad Brothers – District 11

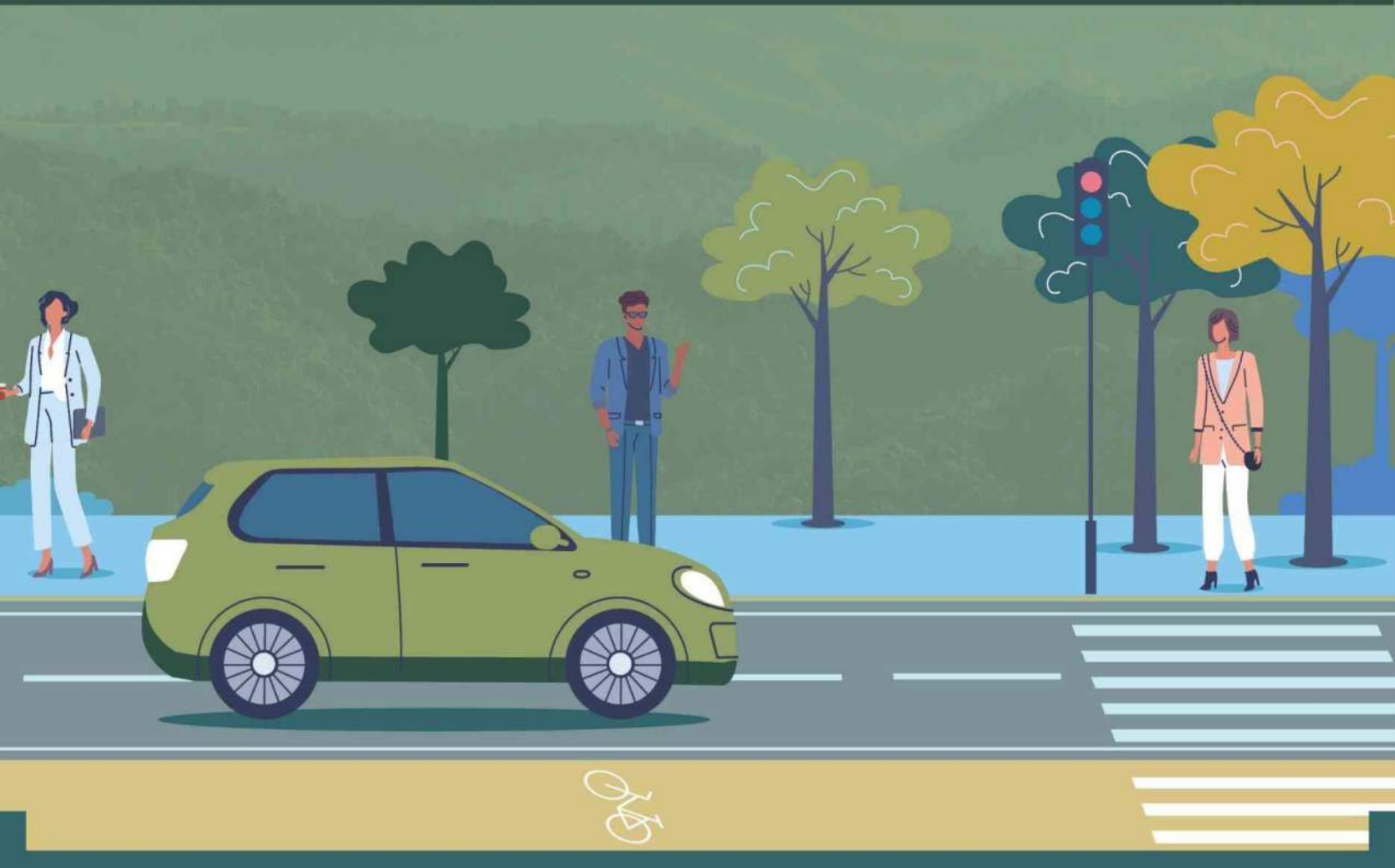
Contents

List of Figures

List of Tables

MAURY COUNTY
SAFETY ACTION PLAN

INTRODUCTION



1. Introduction

1.1 Alignment with SS4A

The Bipartisan Infrastructure Law (BIL) established the Safe Streets and Roads for All (SS4A) discretionary program to fund regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries involving motorists, pedestrians, and cyclists.

One of the initiatives funded by the SS4A program is the development of a Comprehensive Safety Action Plan. A Safety Action Plan (SAP) is a planning document that prioritizes safety improvements and justifies investment decisions. Having a formal plan will help Maury County communicate clearly with stakeholders and access funding opportunities under this program. Below is the list of requirements established by the SS4A program identifying the section within the plan where the information is included.

Figure 1: Alignment with SS4A

1.1.1 Document Organization

Maury County SAP is organized into the following Chapters:

- **Introduction**: Presents the project background, goals, and purpose of the SAP.
- **Safety Analysis**: Provides an overview of countywide crash trends and explains how demographics and community characteristics informed the SAP.
- **Demographics and Community Characteristics Considerations**: Identifies underserved communities through data and partner collaboration, and analyzing the population characteristics impacts of proposed projects and strategies.
- **Engagement and Collaboration**: Provides a summary of the County's efforts to inform, consult, involve, collaborate with, and empower the public in the development of this plan.
- **Strategies**: Describes potential engineering and driver-related countermeasures.
- **Policy and Process Changes**: Includes an assessment of current policies, plans, and standards to identify opportunities for prioritizing transportation safety, with implementation through adopting revised or new policies and guidelines.
- **Project Selections**: Includes criteria for prioritizing projects and corridors, indicating where improvements should be implemented first.
- **Progress and Transparency**: Includes a description of measures the County will take over time to ensure transparency with stakeholders, including annual reporting on progress toward reducing roadway fatalities and serious injuries, and posting the Action Plan online.

1.2 Purpose of the Safety Action Plan

The Maury County SAP provides a framework for identifying and prioritizing safety improvements that can be implemented. The SAP recommendations focus on transportation improvements that can be used to reduce fatal and suspected serious injury crashes guided by the principles established in the TN SHSP and through a systemic data analysis conducted specifically for Maury County.

This report serves as an SS4A SAP, aligning with the components required to apply for SS4A implementation Grant funding. As such, the SAP involves a community-informed and data-driven approach to roadway safety, with commitment from County leadership to reducing roadway fatalities and suspected serious injuries.

1.3 Leadership Commitment and Goal Setting

The Maury County leadership commits to making progress toward the long-term goal of zero traffic deaths and serious injuries with an interim goal of a 20-percent reduction in fatal and serious injury crash rates (expressed in crashes per 1 million vehicle miles traveled [VMT]) by 2035 from the projected trend. **Figure 1** illustrates the five-year rolling averages of fatal/serious injury crash rates for the years 2019 to 2023. More detail is included in **Section 2.3**, the Crash Data Analysis section of this document. The activities conducted during this study build upon the Federal Highway Administration (FHWA) Safe System Approach, the TN SHSP, and County-specific data analysis findings and community feedback.

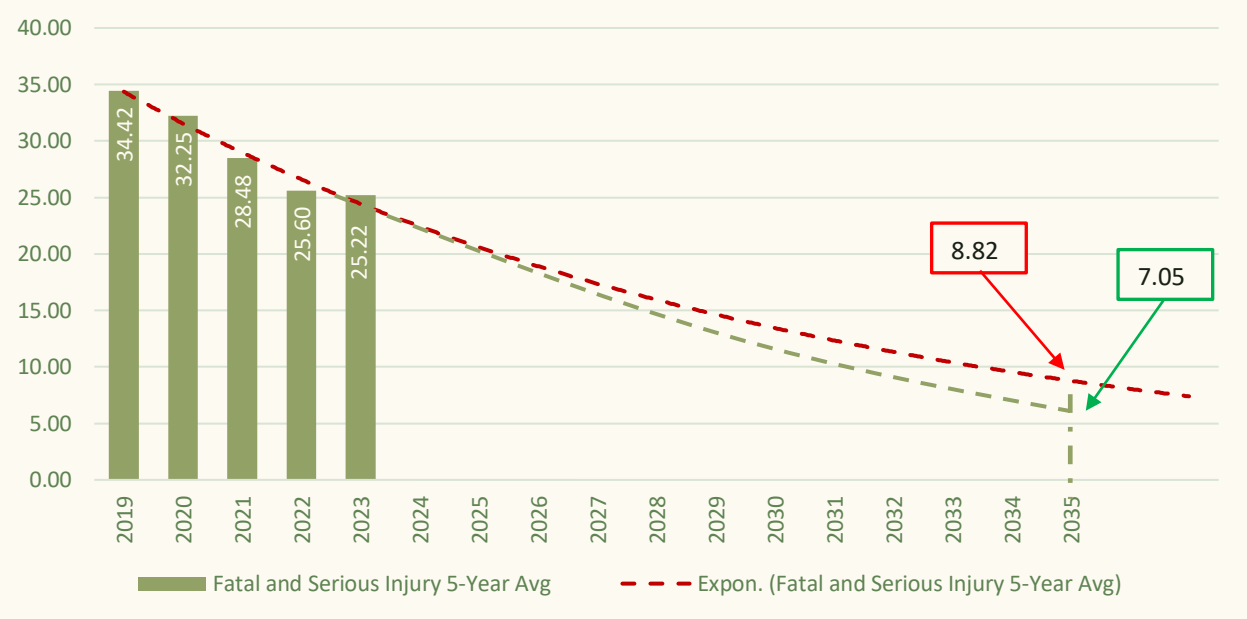


Figure 2: Maury County Fatal and Serious Injury Crash Rate Trend

The Safe System Approach is the guiding paradigm of the United States Department of Transportation (USDOT) regarding roadway safety (see **Figure 2**). It prioritizes the elimination of crashes that result in death or serious injury. This approach is a shift from the conventional safety approach in that it focuses on both human mistakes and human vulnerability and seeks to design a system with multiple layers of protection. See **Figure 3** for a comparison between the traditional approach versus Safe System Approach. This SAP will integrate the Safe System Approach by analyzing the transportation system holistically and proposing solutions and strategies across the spectrum of principles that make up the Safe System Approach. Those principles are as follows:

- Deaths and Serious Injuries are Unacceptable
- Humans Make Mistakes
- Humans Are Vulnerable
- Responsibility is Shared
- Safety is Proactive
- Redundancy is Crucial

Figure 3: Elements of the Safe Systems Approach (SOURCE:USDOT)

Traditional Approach	vs	Safe Systems Approach
Traffic Deaths and Serious Injuries are **Inevitable**		Traffic Deaths and Serious Injuries are **Preventable**
Improve Human Behavior		**Integrate** Human Error into Approach
Individual Responsibility		**Shared** Responsibility
Prevent **Collisions**		Prevent **Fatal** and **Serious Injury Crashes**
React Based on Crash History		**Proactively** Identify and Address Risks
Saving Lives is **Expensive**		Saving Lives is **Not Expensive**

Figure 4: Traditional Approach vs Safe Systems Approach

1.4 Study Area

Maury County is located within the Nashville Metropolitan area. The county is comprised of a mixture of urban and rural area and has approximately 110,000 residents. The City of Spring Hill, home to over 55,000 residents, is the largest city located within Maury County, with a portion of it located within Williamson County. The City of Columbia is the second largest city within the county and is home to 45,000 residents. The County Commission serves as the legislative and policy setting body of Maury County, with the County Mayor acting as the chief executive officer. The County shares its borders with Williamson, Marshall, Giles, Lawrence, Lewis and Hickman counties.

Figure 5: Maury County with Surrounding Areas

1.4.1 History

The Tennessee General Assembly established Maury County on November 16, 1807, partitioning land from the neighboring Williamson and Dickson Counties. The county spans over 615 square miles of total area, including approximately 612.92 square miles of land and 2.65 square miles of water. Columbia, one of the two largest cities in the County, had a leading mule market for more than 100 years and is still celebrated annually with the annual Mule Day celebration. The city was also the home to the 11th president of the United States, James Knox Polk. Today, Maury County leads the state in the production of beef cattle, and remains a major producer of corn, wheat, grain, sorghum, and cotton.

1.4.2 Land Uses and Attractions

The General Motors Spring Hill plant provides the largest volume of jobs in Maury County, the manufacturing plant employs approximately 3,700 people. The Ultium Cells battery plant in Spring Hill employs approximately 1,700 people. Other major employers include Maury Regional Health, the largest health system between Nashville and Huntsville, Tennessee Farm Bureau and IBEX Global. The largest land use in Maury County is agriculturally zoned, with single family residential and unimproved being the highest. Other large land uses in the county are zoned as public and single family residential (with more than five acres).

Regarding the residents' quality of life, the Maury County Parks and Recreation Department is dedicated to creating spaces for families to exercise and engage in recreational activities. Maury County has Parks and Recreation maintains approximately 1,000 acres of land throughout Maury County including the following six parks: Chickasaw Trace Park, Hampshire Park, Jerry Erwin Park, Maury County Park, Williams Spring Park, and Yanahli Park. Additionally, a new park is currently under construction in the Culleoka community. The department also maintains a variety of local trails for community members of all ages.

1.4.3 Schools

The following 31 schools are all located within Maury County:

- Acton Tristar Academy
- Agathos Classical School
- Baker Elementary School
- Battle Creek Elementary School
- Battle Creek Middle School
- Battle Creek High School
- Brooks Christian Academy
- Brown Elementary School
- Columbia Academy
- Columbia Central High School
- Cox Middle School
- Culleoka Unit School
- Hampshire Unit School
- Highland Park Elementary School
- Horace O. Porter School
- Howell Elementary STEM School
- The King's Daughters' School
- Mt. Pleasant Elementary School
- Mt. Pleasant Middle School
- Mt. Pleasant High School
- Riverside Elementary School
- Santa Fe Unit School
- Spring Hill Christian Academy
- Spring Hill Elementary School
- Spring Hill Middle School
- Spring Hill High School
- Whitthorne Middle School
- White Stone Academy
- Woodard Elementary School
- Wright Elementary School
- Zion Christian Academy

1.4.4 Roadway Networks

Maury County is located approximately 35-miles south of Nashville and roughly 80-miles northwest of Huntsville, AL. I-65 runs through the eastern side of Maury County, with major highways US-31, US-43, and US-412 intersecting near the center of the county. Excluding I-65, the roadways with the highest volume include U.S. Highway 31 (Nashville Highway) between Columbia and Spring Hill, and U.S. Highway 412 (Brear Creek Pike) east of Columbia, which experience an Annual Average Daily Traffic (AADT) of approximately 45,858 and 15,530 vehicles per day, respectively. Other prominent roadways in Maury County include SR 6 (Lawrenceburg Highway), U.S 412 (Hampshire Pike) and SR 50 (James Campbell Boulevard).

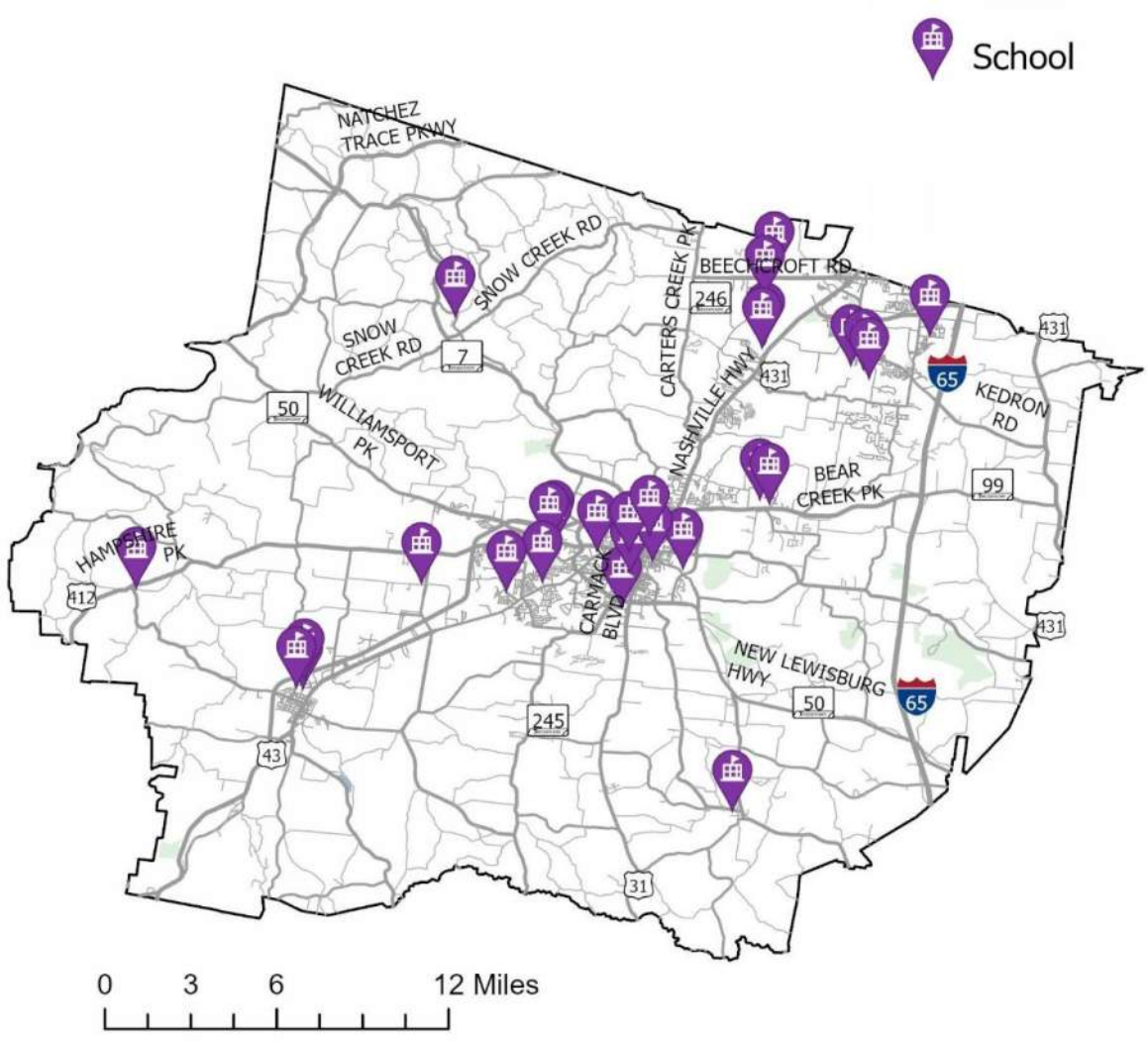
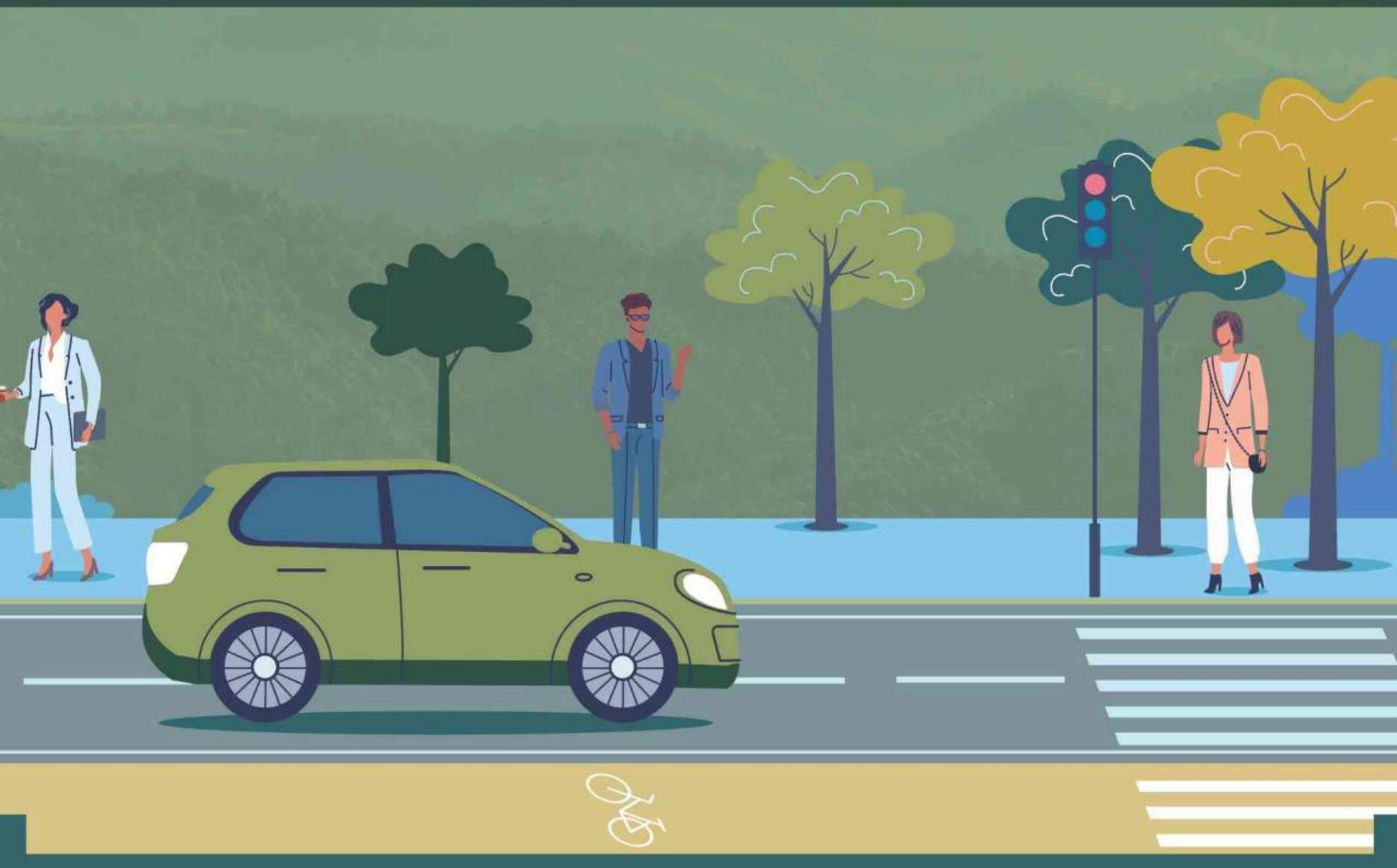


Figure 6: Roadway Networks of Maury County

MAURY COUNTY
SAFETY ACTION PLAN

SAFETY ANALYSIS



2. Safety Analysis

The safety analysis for the Maury County SS4A SAP examined county-wide historical trends to understand crash locations, severities, and contributing factors. This section summarizes data sources, safety emphasis areas, county-wide crash trends, transportation demographics and community characteristics considerations, and the identification of the high injury network. The findings from this analysis informed the development of the engineering projects and strategies outlined in this plan.

KABCO Crash Severity: The KABCO scale measures the injury severity for any person involved in the crash and is defined as K for fatal injury, A for suspected serious injury, B for suspected minor injury, C for possible injury, and O for no apparent injury. From January 2019 to December 2023, there were 8,911 reported crashes on roadways in Maury County, of which 312 resulted in fatalities or serious injuries.

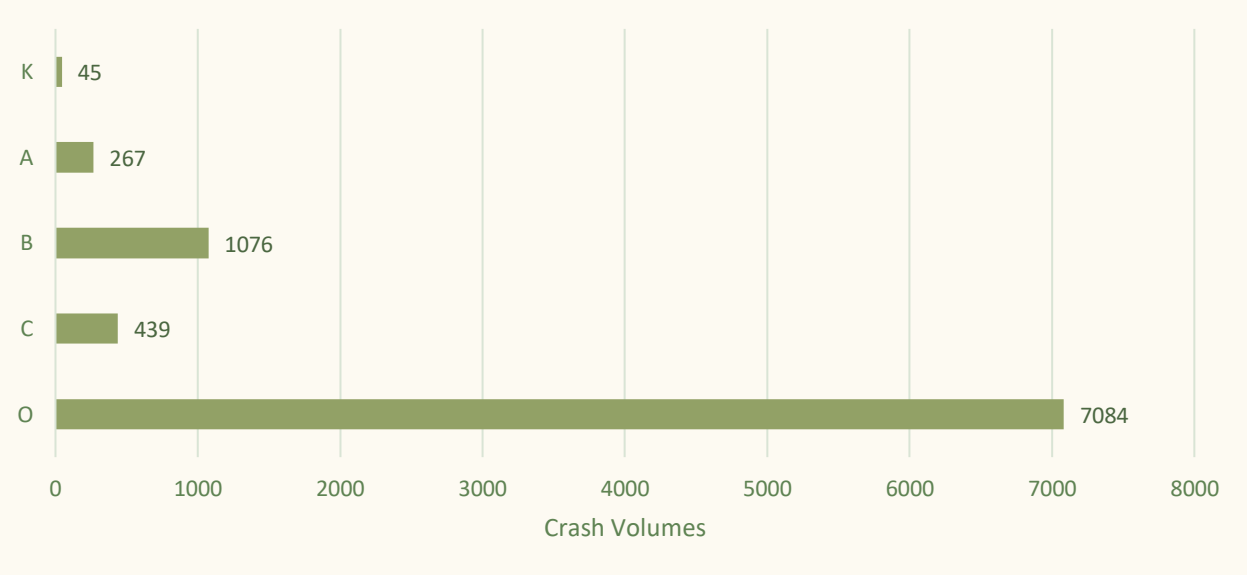


Figure 7: Crashes in Maury County by KABCO Scale

2.1 Data Gathering

Historical data was obtained from TDOT's AASHTOWare Safety for crashes reported from 2019 to 2023. These findings are intended to represent trends for the study area, and the absolute values may not match different statewide crash data reporting sources. The data was combined and cleaned at a high level to provide a more complete record of crashes within the County. This cleaning included filtering out interstate crashes, duplicate crashes, erroneous crash information, and geographically inaccurate crash data. The analysis also incorporated roadway ownership information and additional roadway characteristics (such as road type and signal locations) provided by TDOT.

2.2 Emphasis Areas

State Departments of Transportation, like TDOT, are required to develop Strategic Highway Safety Plans under the Federal Highway Administration's (FHWA) direction to identify safety emphasis areas based on historical crash trends and severities. Crashes resulting in fatalities and suspected serious injuries were evaluated in the 2020-2024 Tennessee Strategic Highway Safety Plan (TN SHSP) to identify the top statewide safety emphasis areas. These analysis results help inform how transportation safety funding should be directed to reduce statewide fatal and serious injury crashes for all road users.

Table 1 shows a comparison of Maury County's fatal and serious injury crashes to statewide totals for crashes reported between 2019 and 2023 by emphasis area. As shown in the table, Maury County experienced a higher percentage of fatal and severe injury crashes for several emphasis areas, including crashes involving unrestrained occupants, aggressive or speeding drivers, involving motorcycles or involving trucks. It should be noted that individual crash events may be associated with more than one emphasis area. For example, a roadway departure crash could have involved an impaired young driver. As such, the values in the columns may not add to equal the total number of crashes. In Table 1, blue shaded cells show which contributing factors were more prevalent in Maury County than the statewide data over the five-year study period, while the light-gold shaded cells show which contributing factors were less prevalent in Maury County.

Table 1: Crashes in Maury County by Contributing Factors

Category	Emphasis Areas	Maury County (2019-2023)				State of Tennessee (2019-2023)			
		# of Fatal Crashes	# of Suspected Serious Injury Crashes	Total	% Fatal & Serious Injury Crashes	# of Fatal Crashes	# of Suspected Serious Injury Crashes	Total	% Fatal & Serious Injury Crashes
All Severe Crashes		73	380	453	100.0%	5,344	25,731	31,075	100.0%
Roadway	Roadway Departure	29	138	167	36.9%	2,892	10,046	12,938	41.6%
	Intersections	14	98	112	24.7%	1,241	8,267	9,508	30.6%
Drivers	Unrestrained Occupants	31	79	110	24.3%	1,659	4,242	5,901	19.0%
	Senior Drivers (65+)	16	74	90	19.9%	1,155	4,893	6,048	19.5%
	Teen Drivers (13-19)	9	67	76	16.8%	941	5,673	6,614	21.3%
	Impaired Drivers	12	49	61	13.5%	1,418	3,495	4,913	15.8%
	Inattentive, Distracted, and Drowsy Drivers	0	12	12	2.6%	341	2,609	2,950	9.5%
	Aggressive Drivers/ Speeding	23	79	102	22.5%	916	2,770	3,686	11.9%
Vehicles	Motorcycles	18	51	69	15.2%	782	3,558	4,340	14.0%
	Large Trucks (Truck/Bus)	8	23	31	6.8%	474	1,331	1,805	5.8%
Special Users	Pedestrians	6	11	17	3.8%	754	1,753	2,507	8.1%
	Bicycles	0	3	3	0.7%	49	286	335	1.1%

2.3 Crash Data Analysis

Table 2 summarizes crashes by KABCO Scale severity and year occurring on all roadways (excluding interstates) in Maury County.

Table 2: Yearly Crashes in Maury County by KABCO Scale

Year	Fatal Injury (K)	Suspected Serious Injury (A)	Suspected Minor Injury (B)	Possible Injury (C)	Property Damage Only (O)	Total
2019	11	52	296	39	1,518	1,916
2020	8	55	224	81	1,360	1,728
2021	7	34	112	80	923	1,156
2022	8	67	218	137	1,640	2,070
2023	11	59	226	102	1,643	2,041
Total	45	267	1,076	439	7,084	8,911
Percentage of All Crashes	0.5%	3.0%	12.1%	4.9%	79.5%	100%

For the purposes of this study, the data includes the total number of fatal and serious injury crashes within the analysis period. It's important to note that a single fatal crash can result in multiple fatalities, and similarly, a serious injury crash can lead to multiple serious injuries. Normalizing the crashes in a year by million vehicle miles traveled (VMT) allows for a comparison between trends as historical traffic fluctuates. Historical crash rates were calculated using crash records from TDOT's AASHTOWare Safety and annualized with VMT information for Wilson County obtained from TDOT's Highway Performance Monitoring System. **Figures 7-10** provide the VMT information used and the five-year rolling averages of total fatal crashes, total serious injuries, and fatal and serious injuries combined for the period of 2019-2023. The historic data points are considered to have a "best fit" with the fatality trend as all values fall along or are close to the projected trendline. As shown in the figures, the overall trend for vehicles miles traveled in Maury County is increasing, and the five-year rolling average of fatal crashes is also growing. The overall trend for severe crashes, and total severe crashes in decreasing.

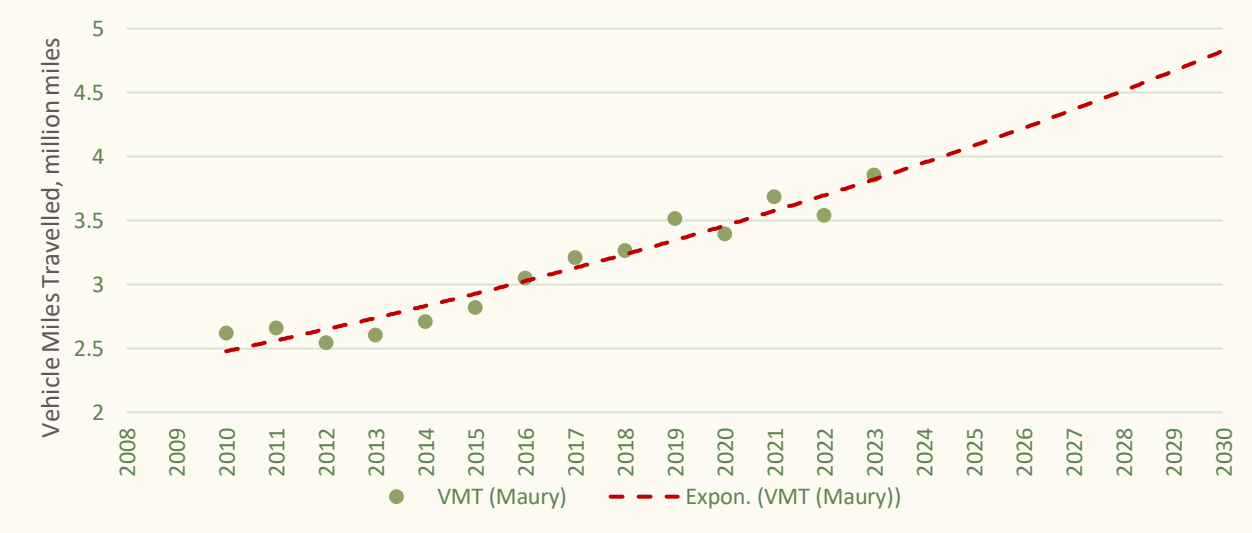


Figure 8: Vehicle Miles Traveled, Maury County

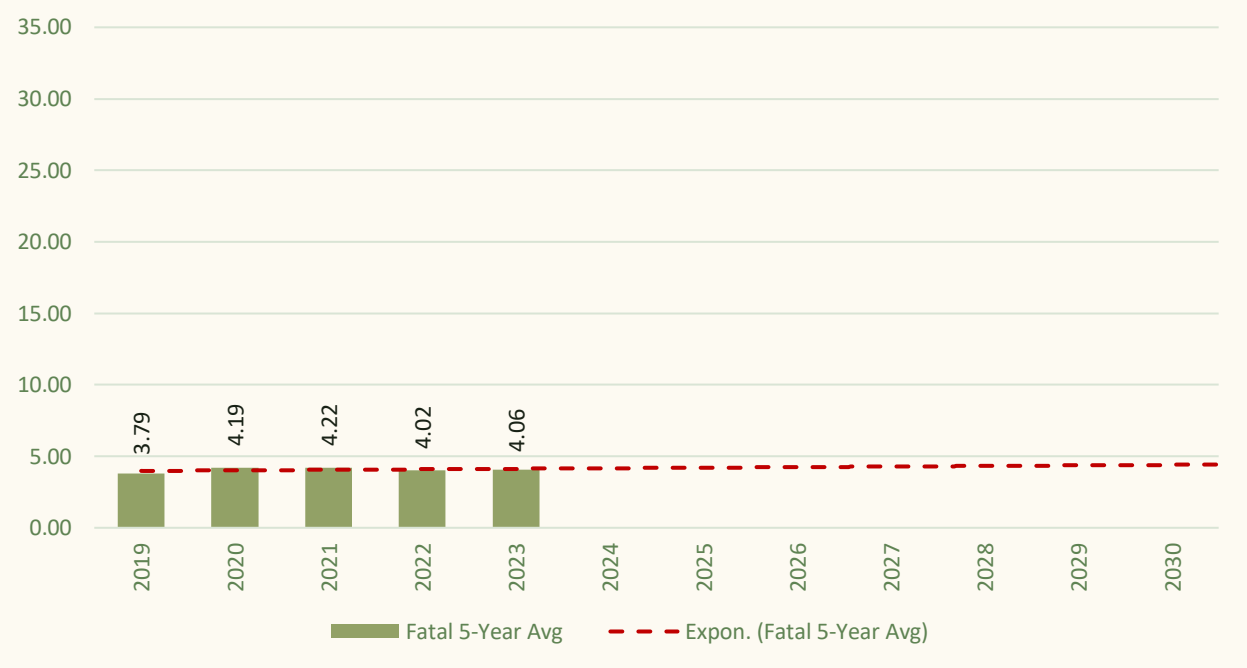


Figure 9: Five-year Rolling Average of Fatal Crash Rates in Maury County

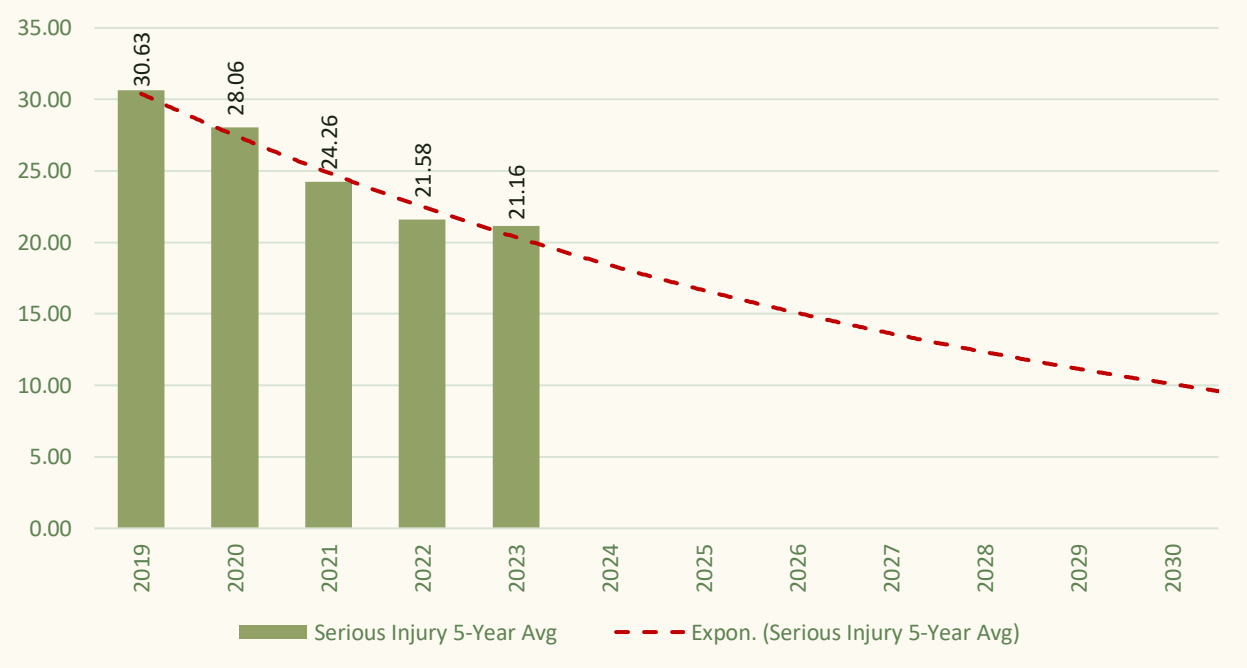


Figure 10: Five-year Rolling Average of Severe-Injury Crash Rates in Maury County

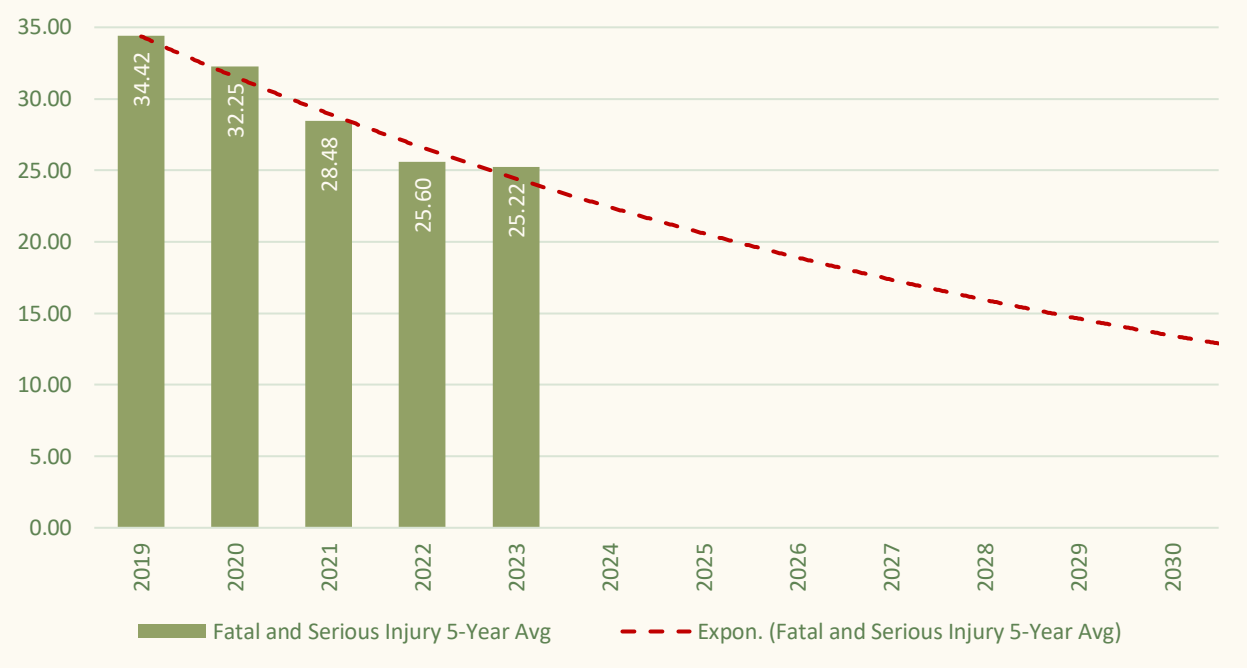


Figure 11: Five-year Rolling Average of Combined Fatal and Severe-Injury Crashes in Maury County

2.3.1 Crash Density

Crash density is defined as the total number of crashes per unit of road length, commonly measured as crashes per mile. **Figure 11** displays a total crash density map, highlighting locations where fatal and suspected serious injury crashes occurred along the roadway network. The highest crash densities are typically observed at locations with higher traffic volumes, as this translates to more exposure and potential risk for all road users. The highest crash density is found near the intersection of Nashville Highway (US-31) and Bear Creek Pike (SR-412), both major thoroughfares in the county. Both Nashville Highway and Bear Creek Pike show high crash densities along the corridors.

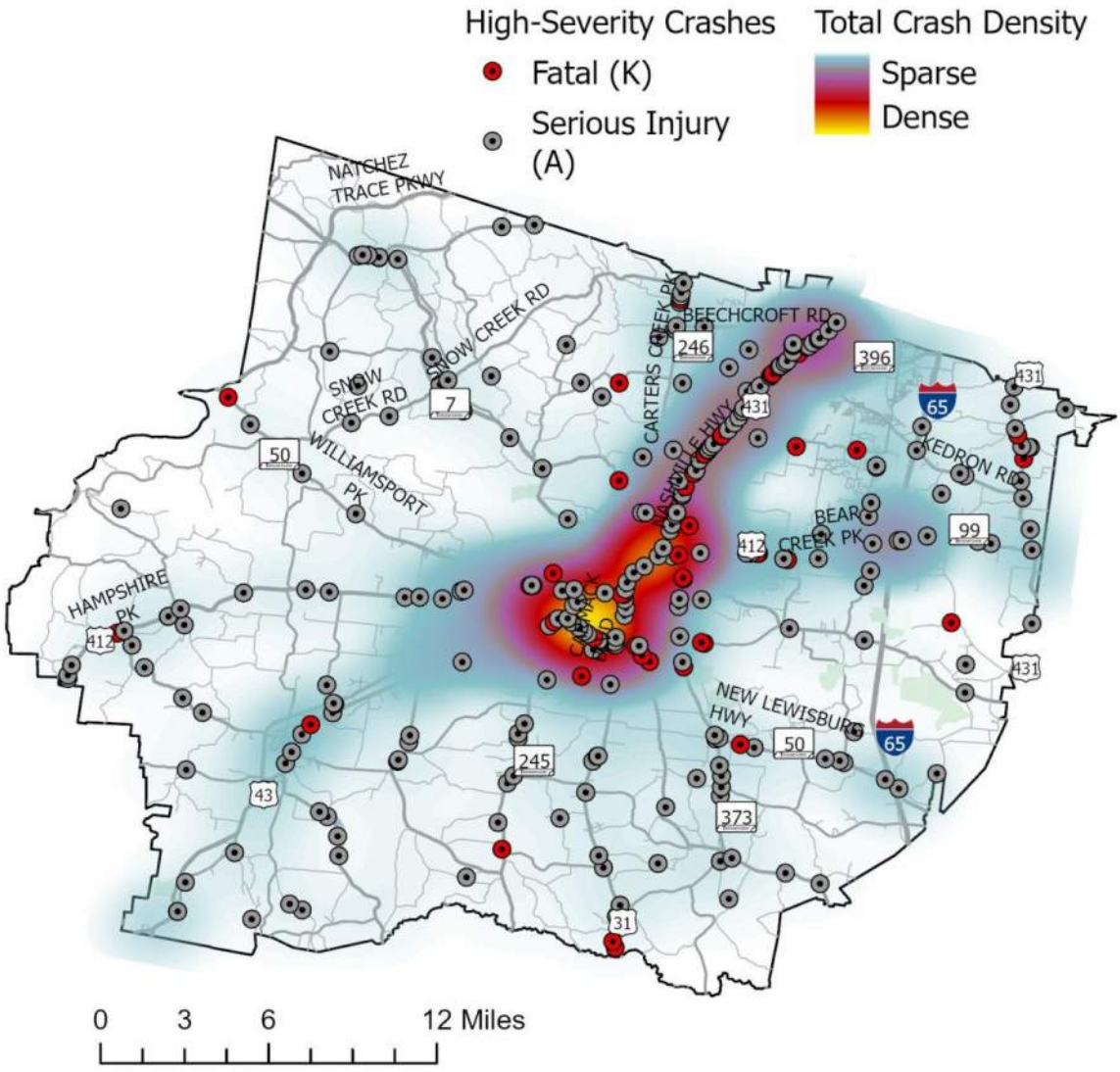


Figure 12: Fatal and Severe Injury Crashes with Overall Heatmap

2.3.2 Crashes by Type

Crash type is indicated on crash reports submitted by law enforcement agencies. Collisions involving no other vehicle crashes were the most common overall crash type over the study period, often occurring on rural highways and result in lane departure crashes, due to speed, distraction, animals, etc.. These types of crashes tend to be more severe and damaging due to speed and fixed objects including trees and powerline poles. Rear-end crashes were the second most common crash type often occurring in congested traffic or when drivers are distracted. These types of crashes tend to be less severe because they often occur at lower speeds with less damaging crash angles.

Table 3: Crashes in Maury County by Type

Type of Crash	2019	2020	2021	2022	2023	Total
Not a Collision with Motor Vehicle	530	550	342	562	562	2,546
Rear-End	524	449	286	603	512	2,374
Angle	372	311	208	320	352	1,563
Sideswipe	148	126	104	187	190	755
Head-On	38	22	16	45	40	161
Other	36	37	22	58	43	196
Unknown	268	233	178	295	342	1,316
Total	**1,916**	**1,728**	**1,156**	**2,070**	**2,041**	**8,911**

Compared to the statewide data, Maury County experienced a higher percentage speeding crashes. This is likely due to the County having more rural characteristics than other areas in the state resulting in less volume roadways, typically resulting in more speeding and lane departure crashes. Single-vehicle crashes often occur along curves and uninterrupted rural sections of roadways.

2.3.3 Crashes by Lighting Conditions

Street lighting serves as a streetscaping asset and safety countermeasure if it fits the context of the community and built environment. Approximately 41% of crashes in Maury County occurred during non-daylight conditions (i.e., Dark, Dark – Not Lighted, Dark – Lighted, Dusk, Dawn and Other) which is higher than the statewide average during the same period of 32% percent. Proper lighting along roadways and at intersections can increase driver awareness of the roadway and decrease the probability of a crash due to low visibility.

Table 4: Crashes by Lighting Conditions

Lighting Condition	2019	2020	2021	2022	2023	Total
Daylight	1,128	995	675	1,245	1,182	5,225
Dark - Not Lighted	258	271	159	273	269	1,230
Dark - Lighted	195	158	91	172	161	777
Dawn / Dusk	55	53	37	64	63	272
Other	280	251	194	316	366	1,407
Total	1,916	1,728	1,156	2,070	2,041	8,911

2.3.4 Crashes by Road Surface Conditions

Pavement friction affects how vehicles interact with the roadway and directly influences the frequency of crashes. Wet pavement can further reduce traction and exacerbate the frequency and severity of vehicle crashes. Approximately 13% of crashes in Maury County occurred during wet road surface conditions, which is only slightly lower than the statewide average of 19% over the same period.

Table 5: Crashes by Roadway Surface Conditions

Surface Condition	2019	2020	2021	2022	2023	Total
Dry	1,343	1,220	828	1,462	1,443	6,296
Wet	291	263	139	257	242	1,192
Ice	3	1	1	20	4	29
Snow	0	2	0	24	0	26
Other	279	242	188	307	352	1,368
Total	1,916	1,728	1,156	2,070	2,041	8,911

2.3.5 High-Crash Locations

The total number of crashes at a location could misrepresent the gravity of safety concerns, as areas with a higher traffic volume are more likely to experience a greater absolute number of crashes, as an example. Furthermore, locations with high traffic volumes often experience congestion which may result in lower crash severities but higher crash frequency. Crash rate calculations account for the traffic volumes at specific locations to provide a more effective comparison between similar locations with safety concerns. The crash rates shown below are expressed as crashes per 100 million vehicle-miles of travel and were calculated in AASHTOWare which uses the methodology from the FHWA Roadway Departure Safety Manual. The following tables summarize the top 10 county roadway segments and intersections, respectively, ranked by total crash frequency and crash rates. Identifying these segments and intersections was an important step toward defining the High Injury Network, which is introduced in a later section.

Table 6: High-Crash Segments

Segment (Milepost Length)	Length (miles)	Crashes	Rank by Frequency	Segment AADT	Crash Rate	Rank by Crash Rate
Nashville Hwy (23.29-25.74)	2.45	399	1	40,382	2.2	8
Nashville Hwy (28.41-31.61)	3.14	284	2	19,055	2.6	7
James M Campbell Blvd (14.34-15.65)	1.31	223	3	28,997	3.2	4
Bear Creek Pk (22.62-24.09)	1.46	194	4	13,309	5.5	3
Nashville Hwy (26.05-28.47)	2.42	177	5	35,920	1.1	10
Main St (31.92-32.56)	0.64	156	6	19,055	7.0	2
Nashville Hwy (14.37-15.27)	0.9	117	7	26,329	2.7	6
Bear Creek Pk (24.09-28.04)	3.95	82	8	6,102	1.9	9
Carters Creek Pk (0-4.25)	0.85	79	9	3,605	14.1	1
Hampshire Pk (12.19-13.32)	1.13	71	10	11,402	3.0	5

Table 7: High-Crash Intersections

Intersection	Crashes	Rank by Frequency	Intersection AADT	Crash Rate	Rank by Crash Rate
Nashville Hwy at Bear Creek Pk	314	1	72,370	3.7	1
James M Campbell Blvd at Pulaski Hwy	133	2	35,869	2.0	2
James M Campbell Blvd at Trotwood Ave	127	3	40,488	1.7	4
James M Campbell Blvd at Hampshire Pk	87	4	38,109	1.8	3
James M Campbell Blvd at Highland Ave	76	5	39,835	1.3	7
Main St at Kedron Pkwy	68	6	27,057	1.4	6
James M Campbell Blvd at Brookmeade Dr	65	7	28,997	0.6	9
Garden St at 7th St	65	8	38,274	1.6	5
Main St at Town Center Pkwy	64	9	19,055	0.9	8
James M Campbell Blvd at Shady Brook St	56	10	28,997	0.5	10

2.3.6 Crashes Involving Vulnerable Users

Vulnerable roadway users (VRUs) include pedestrians, cyclists, mobility device users (e.g., wheelchairs), and micromobility device users (e.g., e-scooter). VRUs are more exposed and at-risk in the event of a crash with motorists. Over 30% of crashes involving VRUs resulted in serious injuries or fatalities in Tennessee between 2019 to 2023[1]. Furthermore, fatal and serious injury pedestrian and cyclist crashes increased by over 32% and 18%, respectively, from 2018 to 2022. Maury County far exceeds that percentage, as over 32% of crashes involving vulnerable road users result in fatalities or serious injuries. In Maury County minor injuries were the most likely outcome of a VRU crash, at roughly 43% (13% serious, 10% fatal). The characteristics of roadways and their surrounding areas such as retail density, number of travel lanes, and roadway speed limits can pinpoint locations with potentially higher risk for VRUs.

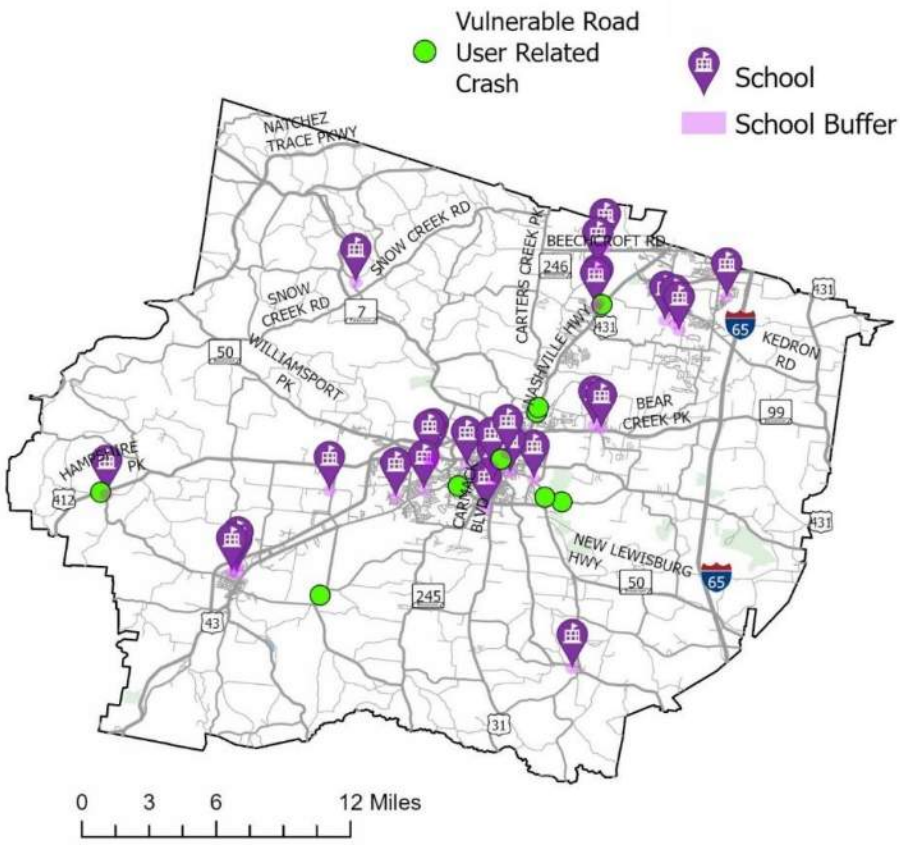


Figure 13: VRU Crashes

[1]TDOT, Tennessee VRU Safety Assessment, 2023
https://www.tn.gov/content/dam/tn/tdot/strategic/TDOT%202023%20VRU%20Safety%20Assessment%20Final%20w%20Appendix%2011-15-2023.pdf

2.4 Identifying a High Injury Network

A High Injury Network (HIN) was developed by identifying the routes with the highest frequency of fatal and serious injury crashes in Maury County, in order to prioritize specific corridors in the County. A HIN is a collection of corridors where a disproportionate number of these crashes occur, as well as corridors that may pose higher risks for all road users. Developing a HIN allows for the proper allocation of effort and funds towards specific areas of the County that need it most. While the HIN typically includes the major thoroughfares of a study area, the methodology used also allows for minor roads to be considered for improvements. Creating the HIN is a key step toward focusing resources in the right direction to develop projects that will help reduce fatal and serious injury crashes for all road users in Maury County.

2.4.1 Methodology

The HIN was identified by first evaluating segments throughout Maury County's roadway network with the highest reported crash rates during the study period (2019-2023) using TDOT's AASHTOWare Safety Network Screening platform. Thirty-eight high-crash-rate segments were identified at logical termini (i.e., municipal boundary, road name changes, or roadway changes such as number of lanes). **Figure 13** shows the HIN identified. Approximately 52% of all severe and fatal crashes occur on the HIN.

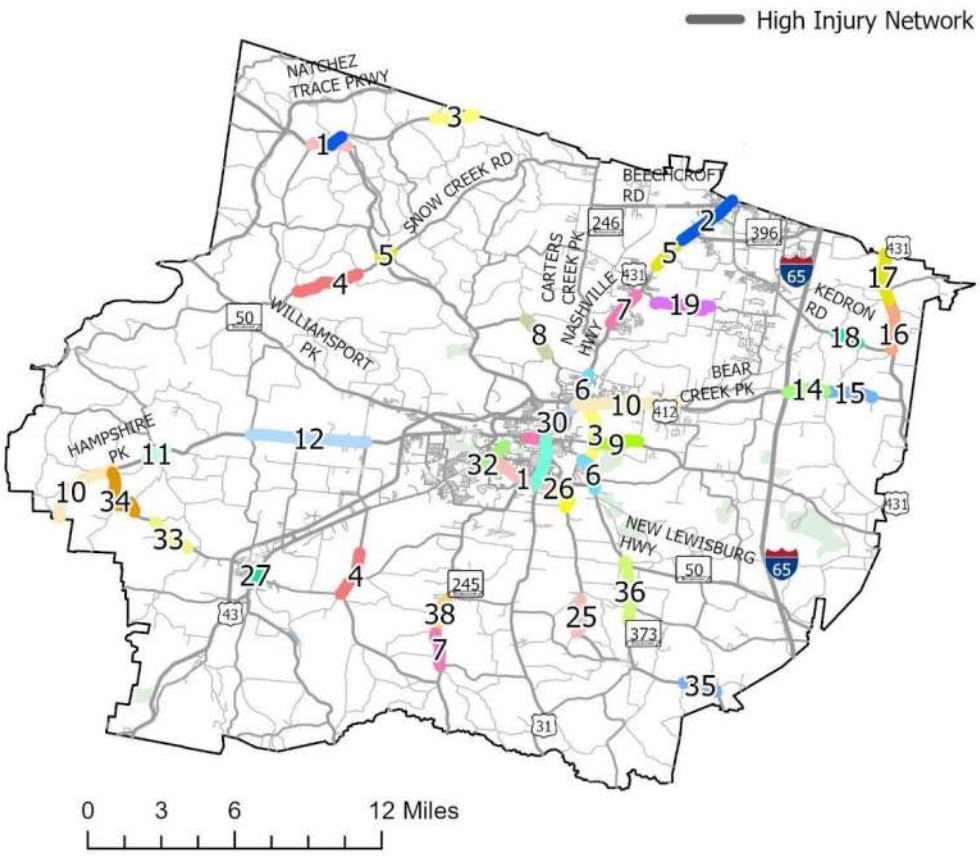
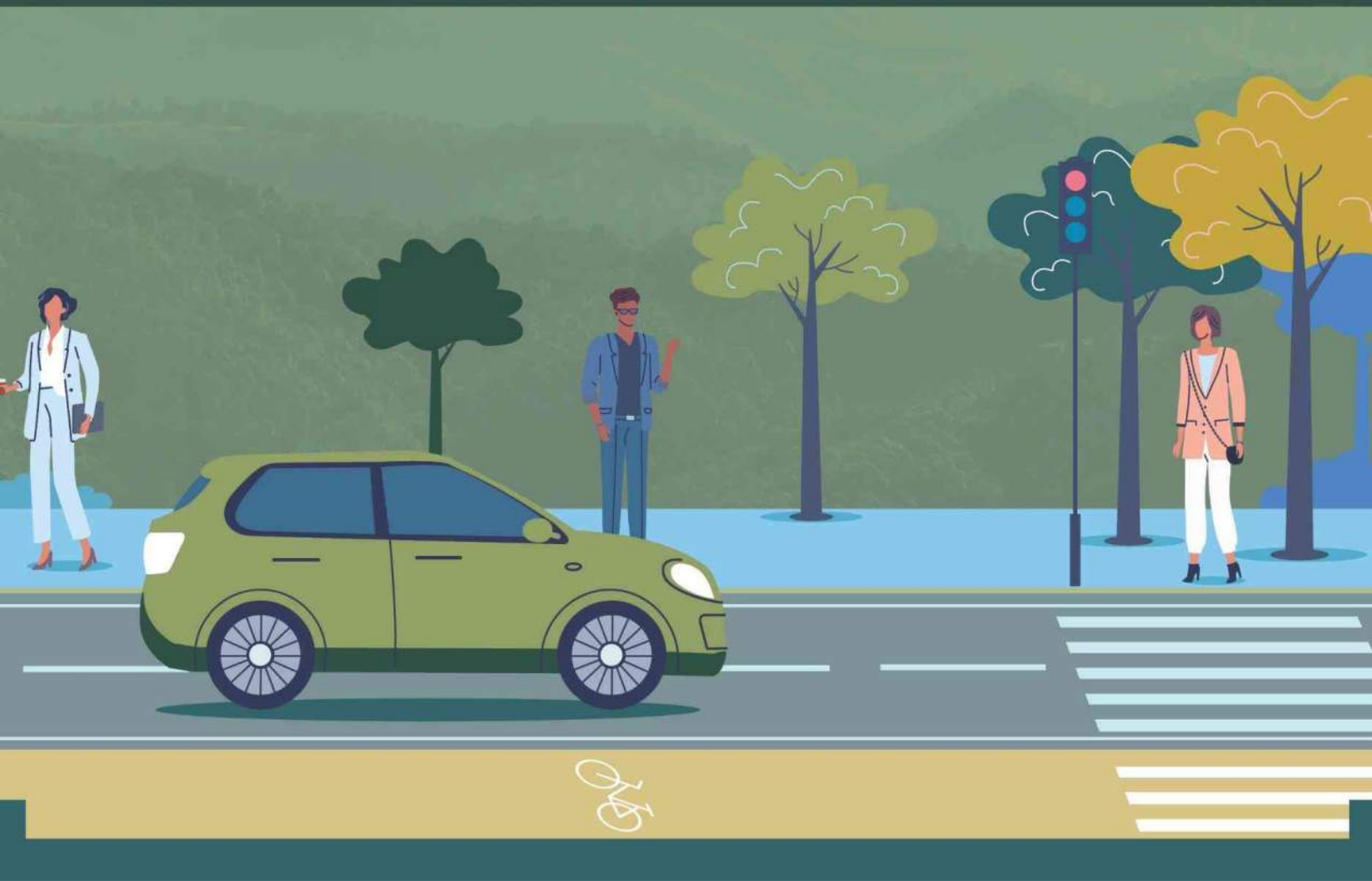


Figure 14: High Injury Network

MAURY COUNTY
SAFETY ACTION PLAN

DEMOGRAPHICS AND COMMUNITY CHARACTERISTICS CONSIDERATIONS



3. Demographics and Community Characteristics Considerations

Demographics and community characteristics considerations are integral to addressing the needs of disadvantaged communities or vulnerable populations. Three measures of demographics and community characteristics were utilized in the Maury County SAP process: the Centers for Disease Control (CDC) Social Vulnerability Index (SVI), Area of Persistent Poverty (APP) designation, and Historically Disadvantaged Community (HDC) designation. Justice40 Interim Guidance defines these measures as follows:

- The CDC's Social Vulnerability Index uses a combination of socioeconomic factors, household characteristics, racial and ethnic minority status, and housing and transportation issues to rank the social vulnerability of each census tract across the County. Those falling in or above the Medium-High (0.50-0.75) or High Vulnerability (0.75-1.00) groups were considered tracts of concern in the Maury County SAP.
- Areas of Persistent Poverty meet at least one of the following conditions:
    - The County in which the project is located consistently had greater than or equal to 20 percent of the population living in poverty in all three of the following datasets: (a) the 1990 decennial census; (b) the 2000 decennial census; and (c) the most recent (2021) Small Area Income Poverty Estimates; OR
    - The Census Tract in which the project is located has a poverty rate of at least 20 percent as measured by the 2014-2018 5-year data series available from the American Community Survey of the Bureau of the Census; OR
    - The project is in any territory or possession of the United States.
- Historically Disadvantaged Communities have been "marginalized by underinvestment and overburdened by pollution or include any Federally Recognized Tribe or Tribal entity, whether or not they have land". Note, the most recent downloadable geodatabase available (dated December 20, 2024) from the USDOT's Justice40 Initiative website included a list of census tracts considered by USDOT as Historically Disadvantaged Communities and Areas of Persistent Poverty in Maury County.

Maury County SAP considers this index in developing project implementation prioritization as these geographic areas are representative of demographics and community characteristics concerns. **Figures 14 to 16** show areas of community characteristics consideration. Disadvantaged communities and vulnerable populations in Maury County are more prevalent in and around the City of Columbia and in the southwest portion of the county. The public and stakeholder involvement activities which were part of Maury County SAP were done in person and virtually to be inclusive and representative of a broad cross-section of County's residents.

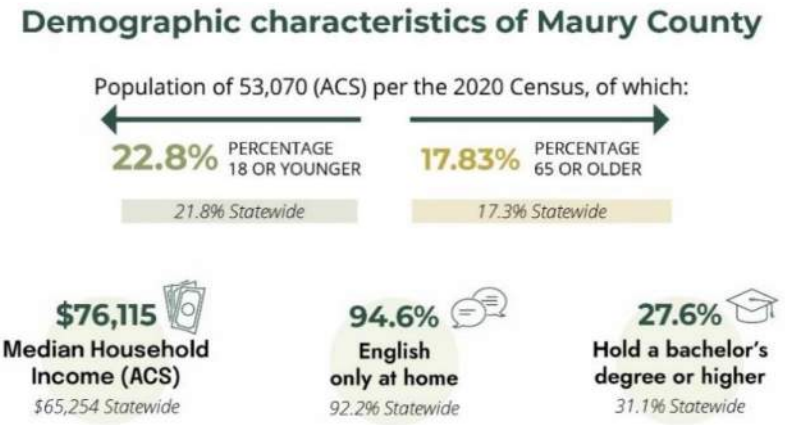


Figure 15: Maury County Demographics

3.1.1 Social Vulnerability Index

The CDC developed the SVI[2] tool that considers four overall categories of vulnerability: Socioeconomic Status, Household Characteristics, Racial & Ethnic Minority Status, and Housing Type & Transportation. Between these four (4) categories, 159 individual sub-categories are scaled and calculated to form an overall index score, ranging from 0 to 1 (where an index value of 1 is defined as the most socially vulnerable). Of the 312 KA crashes occurring in Maury County, 28 KA crashes were found to have occurred in areas of high social vulnerability, and 56 occurred in areas of median-high social vulnerability. These numbers represent approximately 27% of all total fatalities or suspected serious injury crashes within the County for the period between 2019 and 2023.

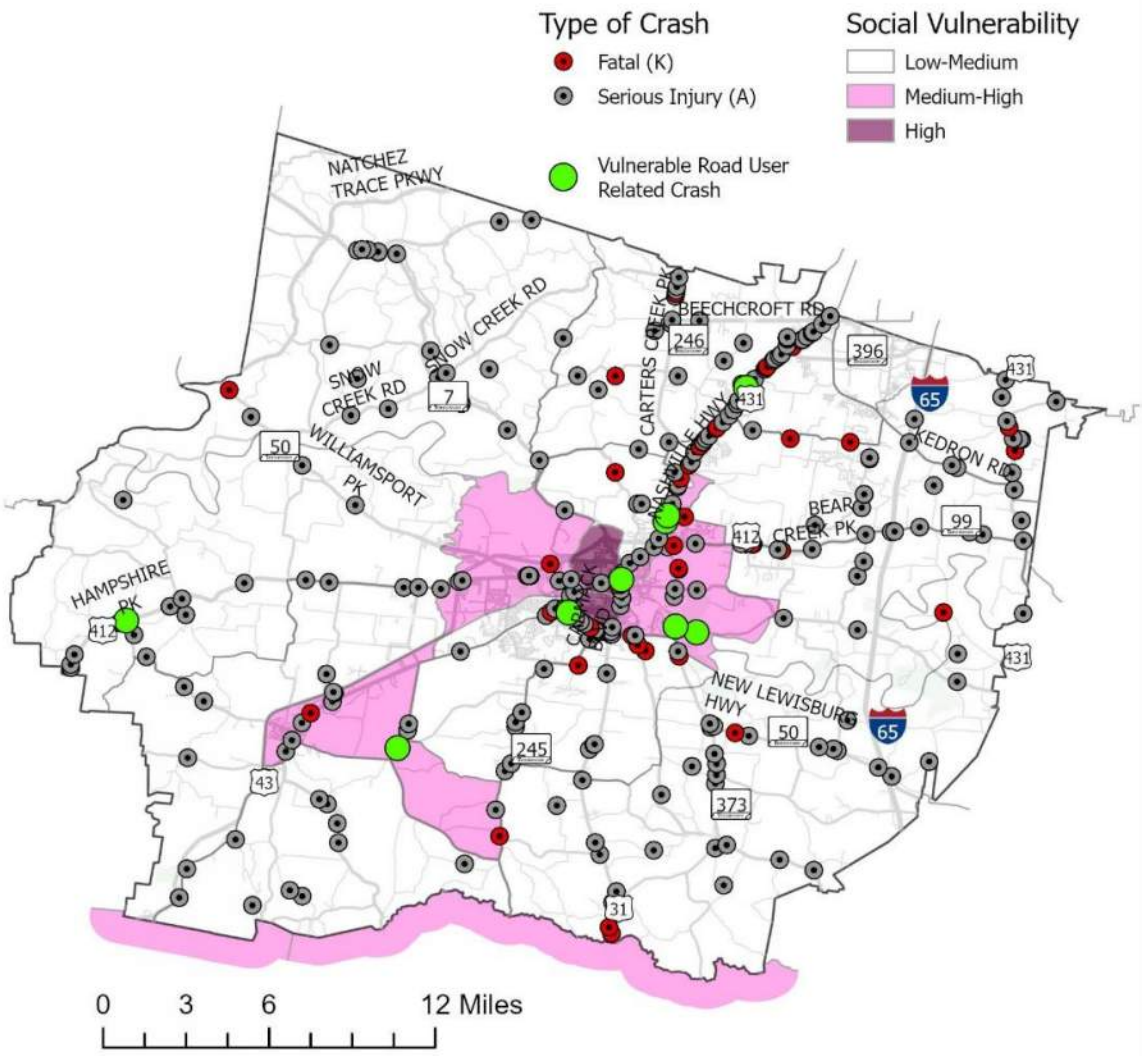


Figure 16: Social Vulnerability Index Map

CDC/ATSDR SVI, https://www.atsdr.cdc.gov/placeandhealth/svi/index.html

3.1.2 Areas of Persistent Poverty

Of the 8,911 crashes occurring in Maury County, 3,002 were found to have occurred in areas of persistent poverty, with 118 resulting in a fatality or suspected serious injury. These numbers represent approximately 38% of all total fatalities or suspected serious injury crashes within the County for the period between 2019 and 2023.

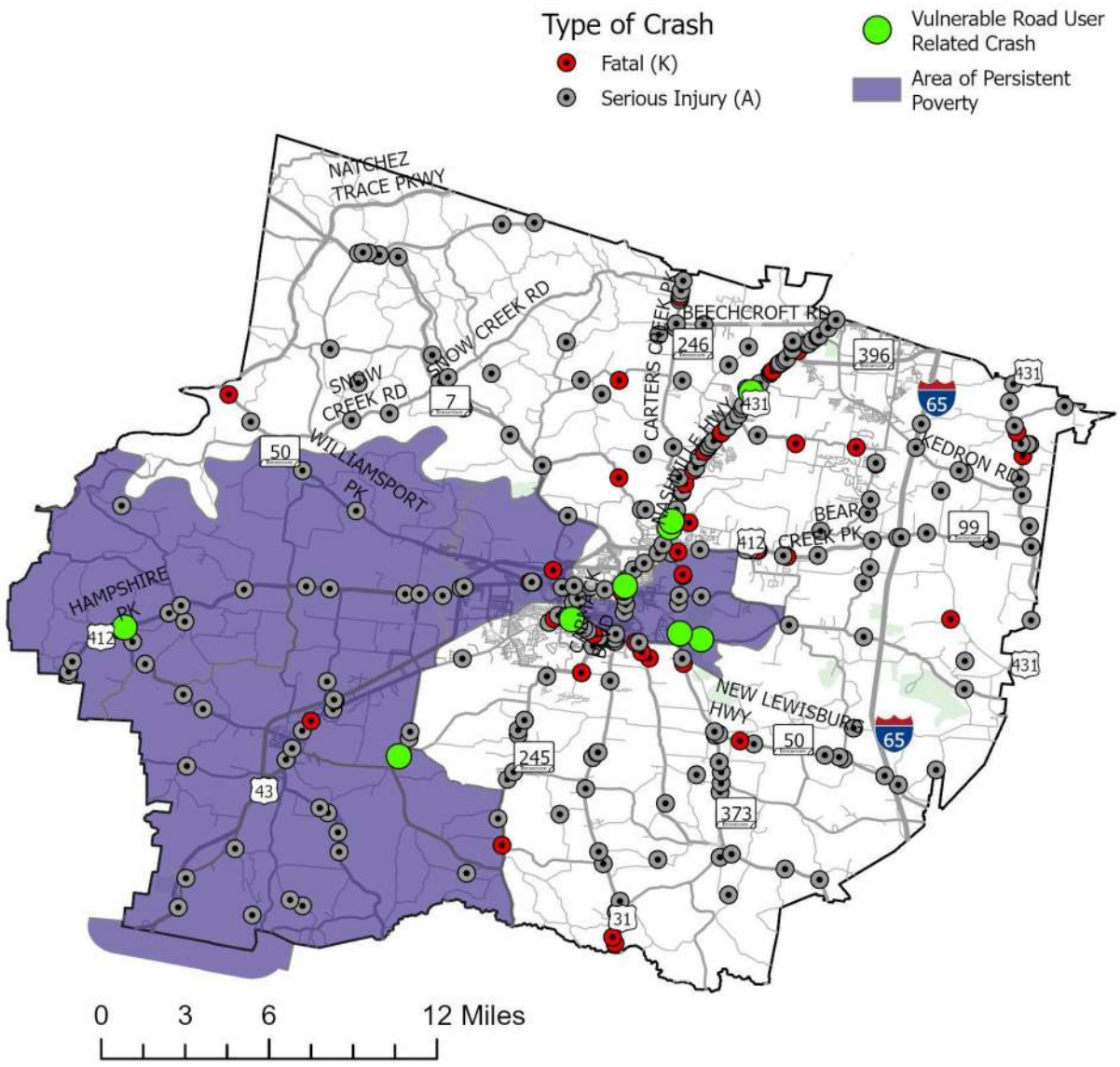


Figure 17: Areas of Persistent Poverty Map

3.1.3 Historically Disadvantaged Communities

The Climate and Economic Justice Screening Tool highlights disadvantaged census tracts nationwide. A community is considered disadvantaged if it is located within a census tract that meets the threshold for one or more environmental, climate, or other burdens, and at least two associated socioeconomic burdens. Of the 8,911 crashes that took place in Maury County during the study period, 2,965 occurred in areas determined by the USDOT to be labeled as a Historically Disadvantaged Community, with 90 resulting in a fatality or suspected serious injury. Those numbers represent approximately 13% percent of all total fatalities or suspected serious injury crashes within the County, for the period between 2019 and 2023.

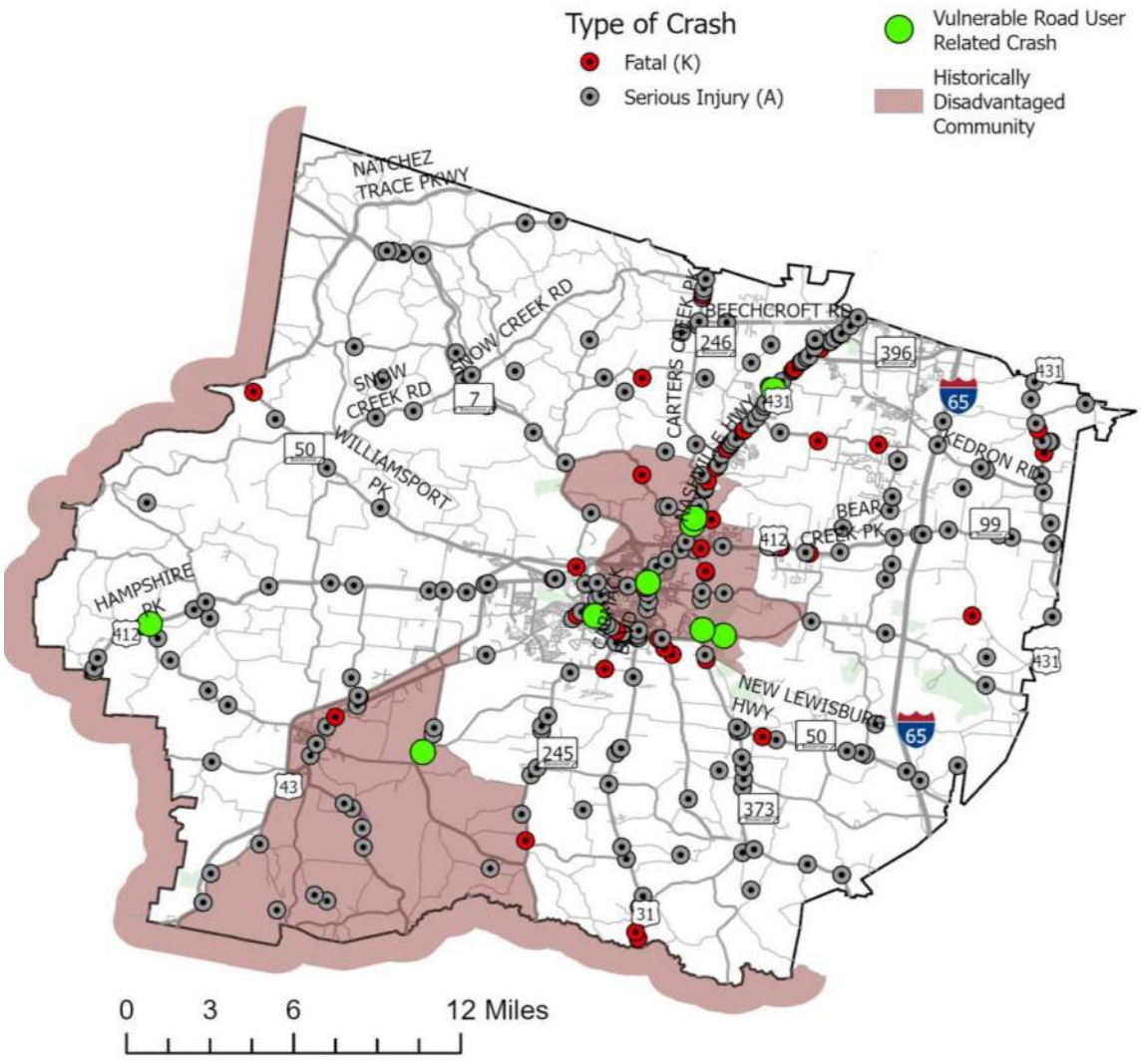
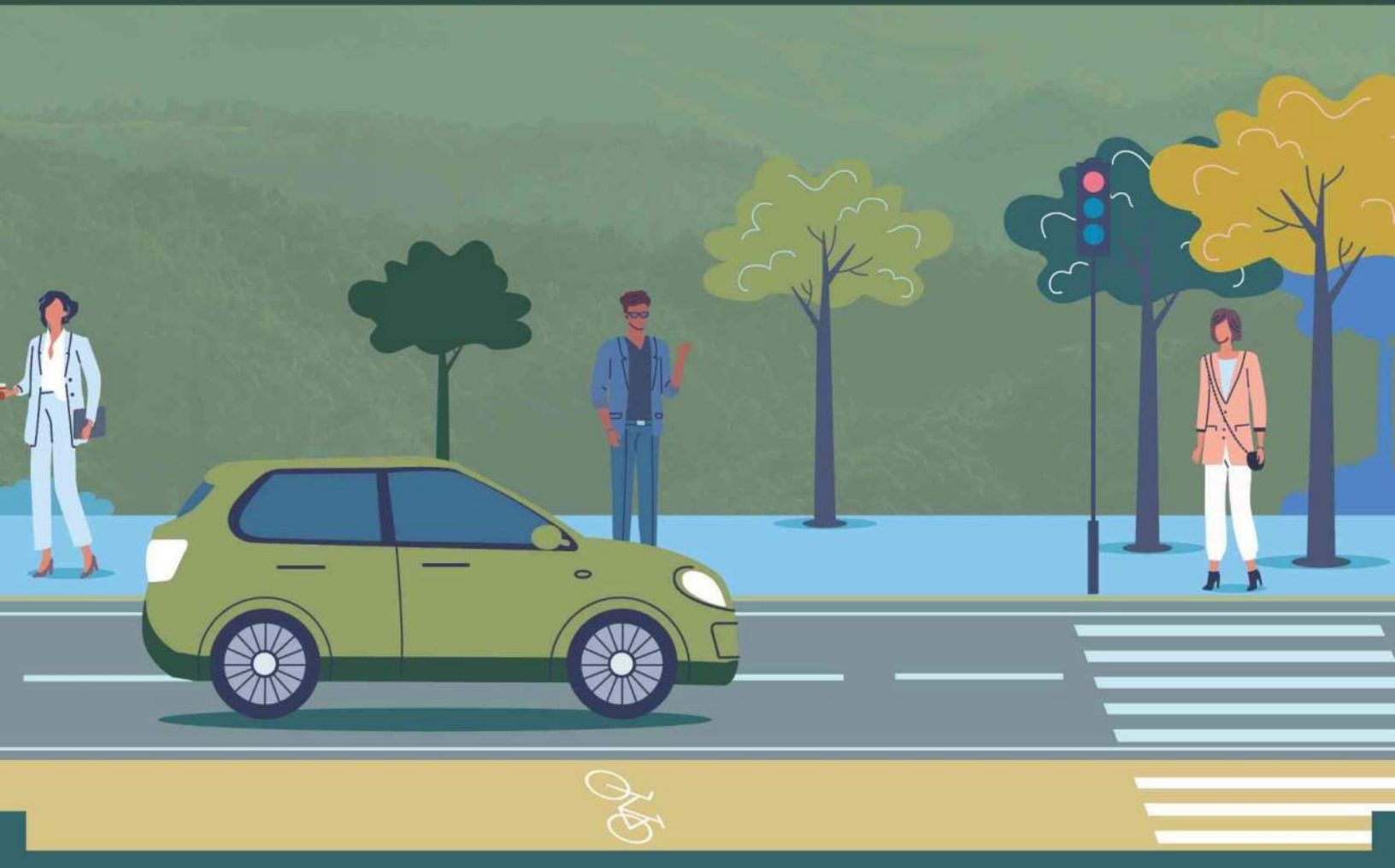


Figure 18: Historically Disadvantaged Communities Map

MAURY COUNTY
SAFETY ACTION PLAN

ENGAGEMENT AND COLLABORATION



4. Engagement and Collaboration

4.1 Introduction

Public outreach and engagement play a crucial role in collecting valuable insights into what community residents encounter daily while travelling routes in the study area, whether by car, bike, foot or bus. During the development of the plan, multiple opportunities for participation and input were offered to community stakeholders. These included in-person events, targeted e-mail outreach, social media postings, and a dedicated project website to gather and record public input, as well as to disseminate information regarding the SS4A Grant Program. Through this variety of methods, the aim was to capture feedback from all residents, especially those that are traditionally underserved population.

Following the kick-off meeting in February 2024, the following engagement schedule was followed:

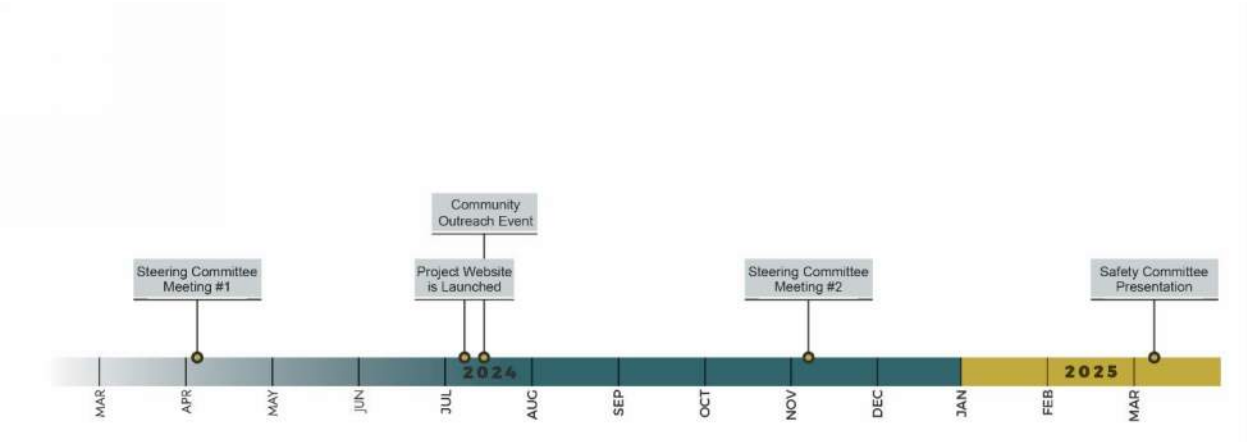


Figure 19: Engagement and Collaboration Schedule

4.2 Formation of a Steering Committee

To help guide the study, a steering community was created with a two-fold role. First, to provide local, informed input regarding current conditions and opportunities for improvement in Maury County. Second, the members of the Steering Committee were to act as outreach conduits to the community. During the public engagement phase, the county and members of the steering committee frequently engaged the community through direct e-mail communications, social media blasts or direct communication with community groups, encouraging them to get involved and provide input. The work of this committee is largely responsible for the success of the public outreach portion of this study.

4.3 Outreach Activities

4.3.1 Project Website

To facilitate the dissemination of crash related information and to provide a portal for community input and information gathering from community stakeholders, a project specific website was created, https://maurycountysafetyactionplan.com. Within the website, users could find information on what a Safety Action Plan is, how it can benefit the community, and how they can participate by providing input. This site yielded nearly 2,312 individual page views with almost 1,500 new users.

Figure 20: Maury County SAP Website

4.3.2 Public Meetings

In July 2024, Maury County hosted a First Friday event to inform residents about the new Safety Action Plan aimed at enhancing local safety measures. At the event, our team provided detailed information on the plan's objectives and implementation strategies.

To ensure inclusive community engagement, QR codes were made available, allowing attendees to easily access the plan's website and complete an online survey to share their feedback and suggestions.

4.4 Public Engagement Process (Online Engagement)

Dispersion of the online survey and interactive map were achieved through a combination of tools as outlined in this section, each intended to drive traffic to and through the project website for ease of data collection and dissemination of project information.

4.4.1 Online Survey

In addition to providing a broad range of safety information, the website hosted two key participation avenues. The first was an online survey that focused on user demographics and concerns. A total of 358 participants completed the online survey, providing input and background data, ranging from travel related characteristics and demographic information to specific safety concerns. Embedded within the survey were open ended questions that served to measure participant sentiment, which resulted in a broad range of inputs as shown below.

Figure 21: Online Survey Input by Improvement Category

Figure 22: Online Survey Improvement-related Public Comments

Increased law enforcement presence was mentioned frequently along with desires for pavement repairs. Additionally, people were concerned about a lack of proper infrastructure to support the growing population in the area.

The data gathered from the online survey as well as individual comments provided were shared with the steering committee as part of their review and ranking of projects during their second steering committee meeting.

4.4.2 Interactive Map

The second avenue for input on the website was an interactive map that allowed users to identify concerns related to vehicle, pedestrian and bike safety as well as general concerns (**Figure 23**). The map allowed the users to drop 'pins' at specific locations where they had or have experienced safety related concerns.

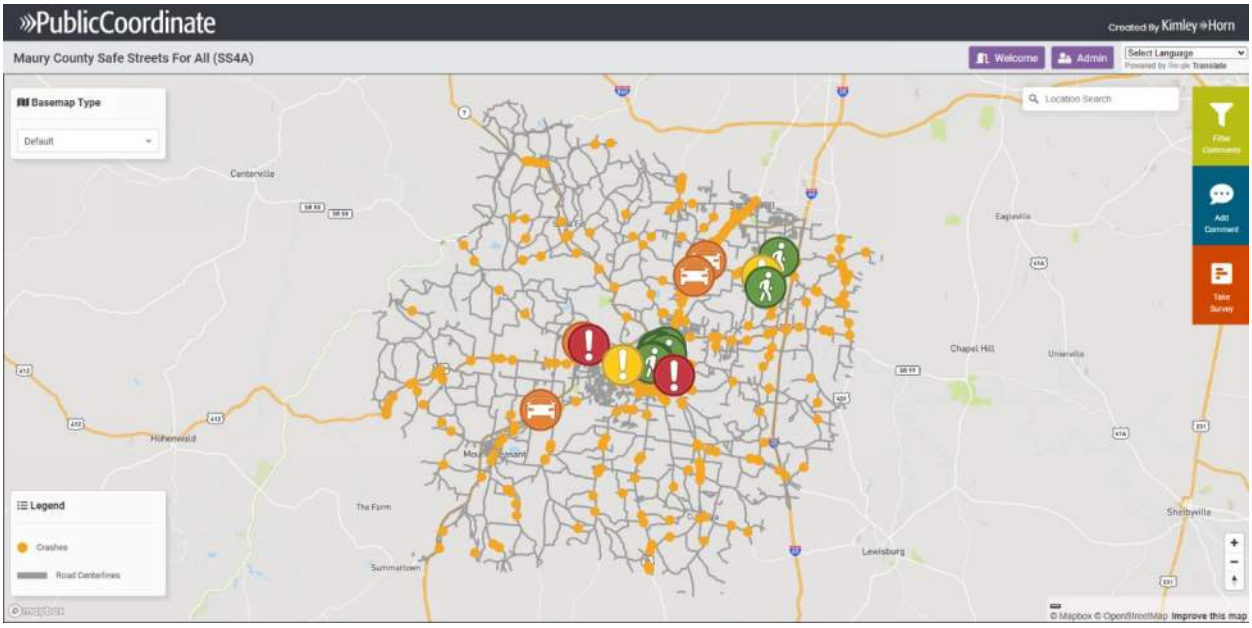


Figure 23: Results from Interactive Map

This map resulted in 18 separate comments or replies to comments in the categories of pedestrian, near crash, mobility, driver, and bicyclist. Individual comments were summarized by category for review by the steering committee as part of their considerations in corridor ranking. **Figure 24** and **Figure 25** summarize many of the comments received via the interactive map.

Figure 24: Interactive Map Input by Improvements Category

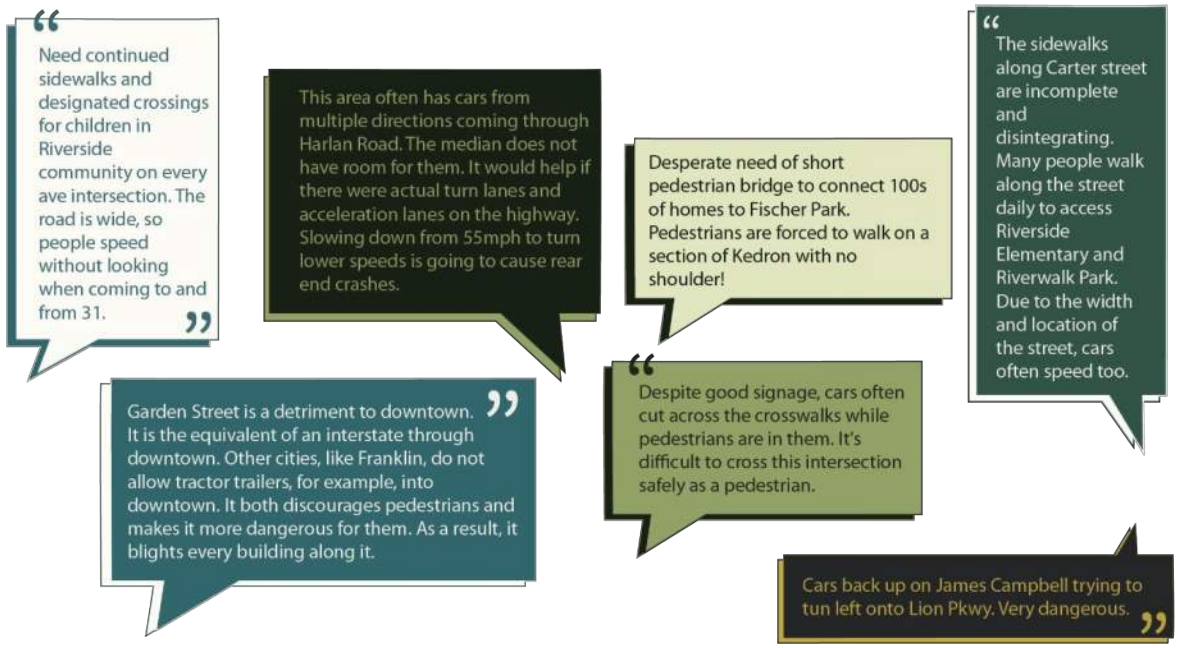


Figure 25: Interactive Map Improvement-Related Public Comments

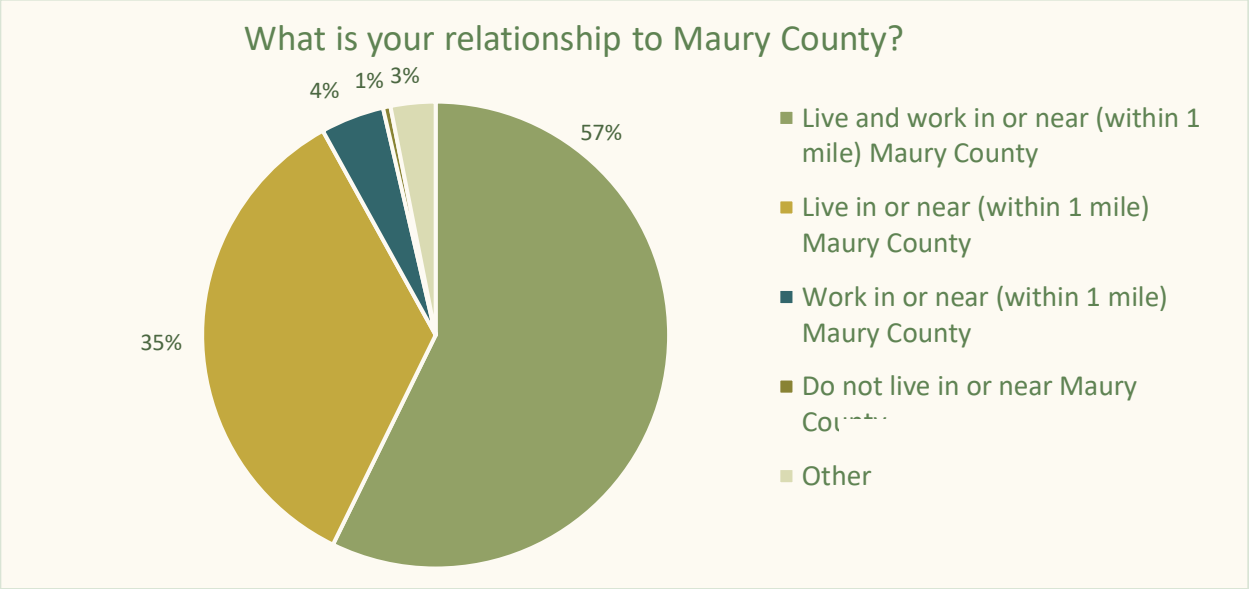
4.5 Public Outreach and Engagement Summary

Throughout the course of this study, thousands of community members were engaged across a variety of events and platforms as described above. This resulted in a robust response with 2,312 pageviews being logged on the project website. Additional engagement metrics are shown in **Figure 26**.

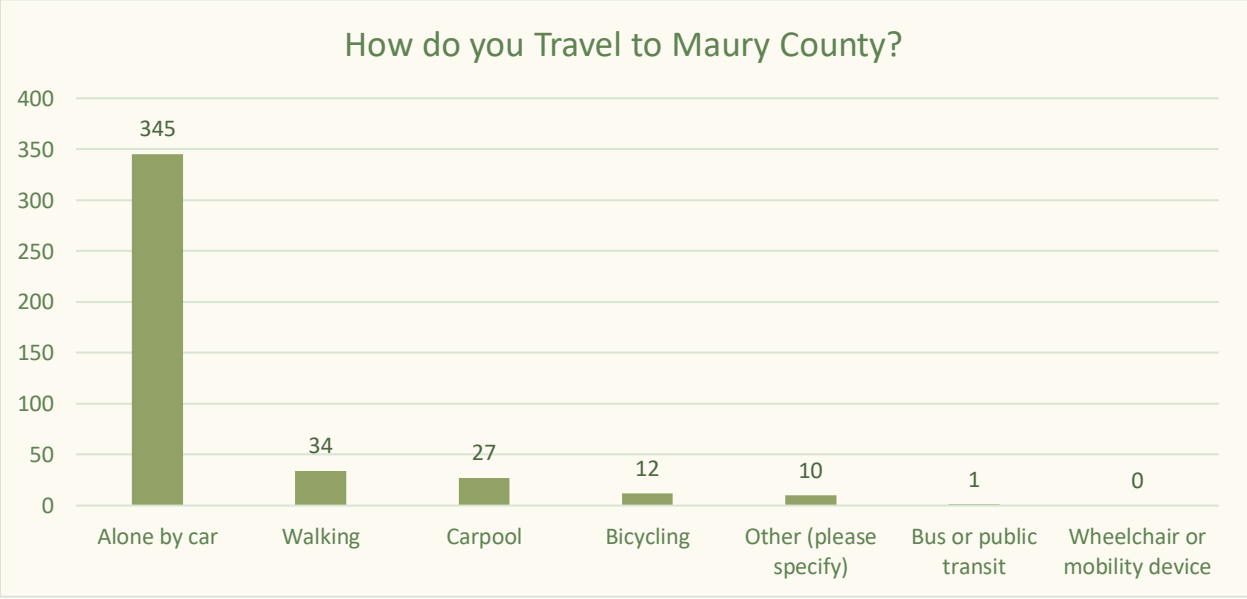
Figure 26: Engagement and Collaboration Summary

A "website pageview" refers to a single instance of a user loading the Maury County SAP website, whereas a "website session" refers to the instance of a user loading and remaining on the website. The online survey was designed to gather feedback from people in Maury County about safety issues or concerns they may have.

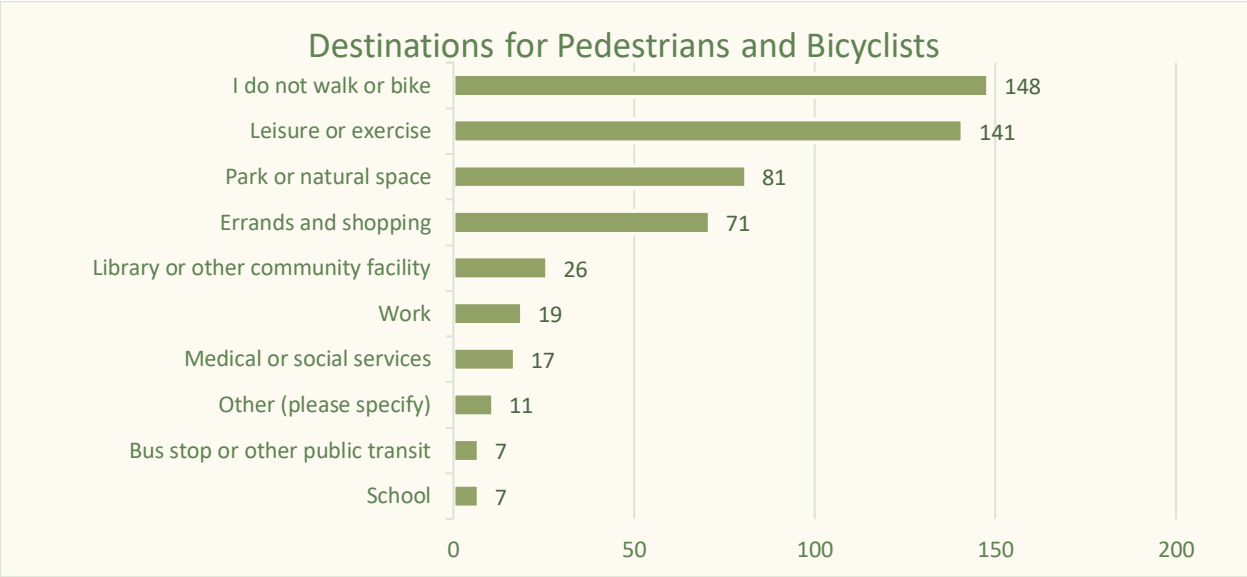
At the beginning of the survey, members were asked what their relationship to Maury County was, whether they live or work in the area. 92% of all respondents live or work either in or within one mile of Maury County, further validating that their experiences are relevant to the study area.



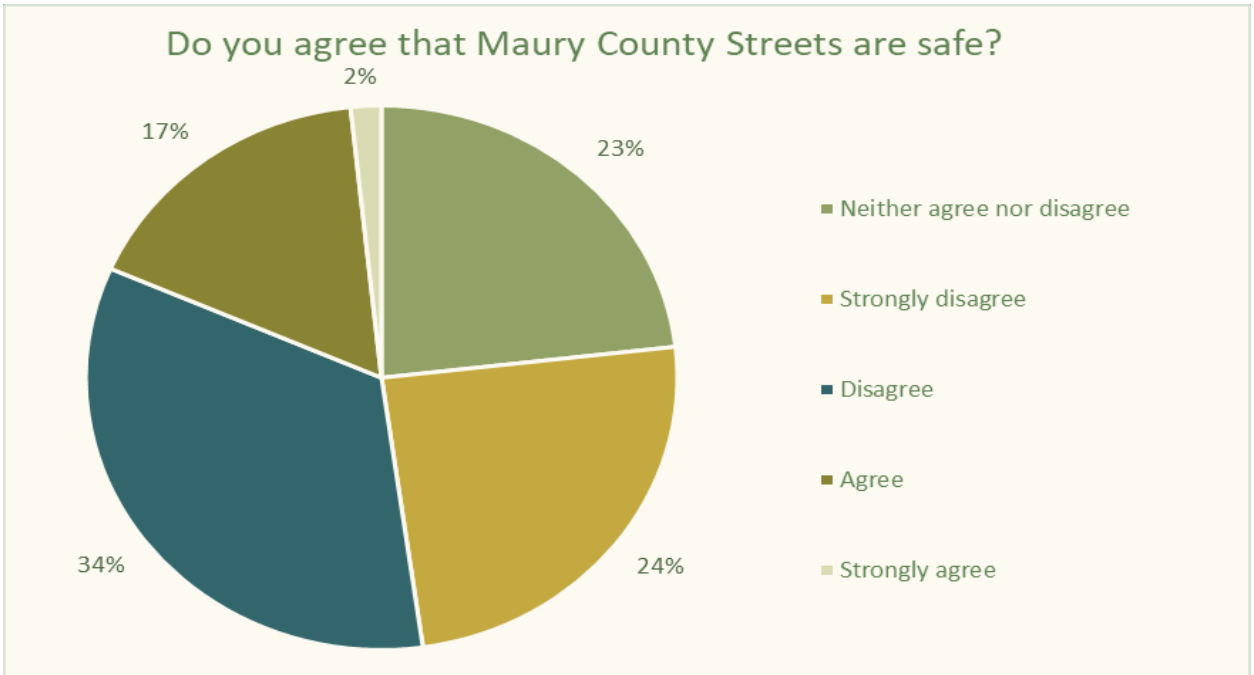
Respondents were also prompted to provide information on how they travel to Maury County. They were allowed to select all modes of travel that apply to them. Most respondents travel alone by car (345 responses), while others walk (34 responses) and carpool (27 responses).



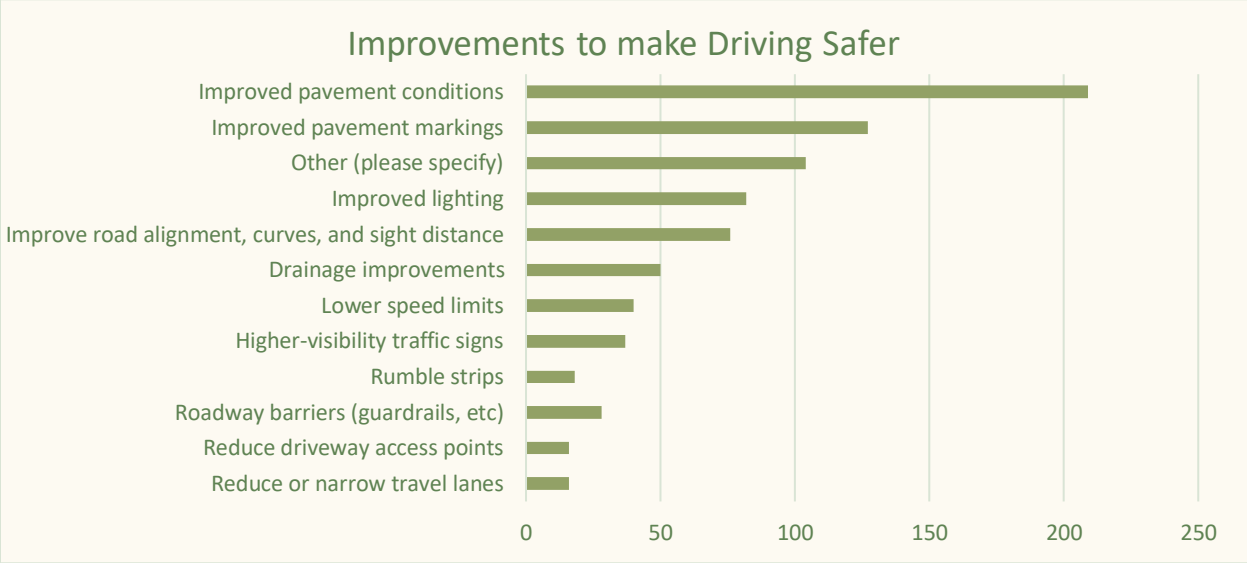
For people that walk or bike in Maury County, they were asked to select a destination category they are going to. The top two responses were split evenly among those that do not walk or bike (142 responses) and those who walk or bike for leisure or exercise (141 responses).



Respondents were also asked how strongly they agree that Maury County streets are safe. About a quarter of respondents were indifferent. Over half disagree however, indicating that they feel unsafe on the streets in Maury County.

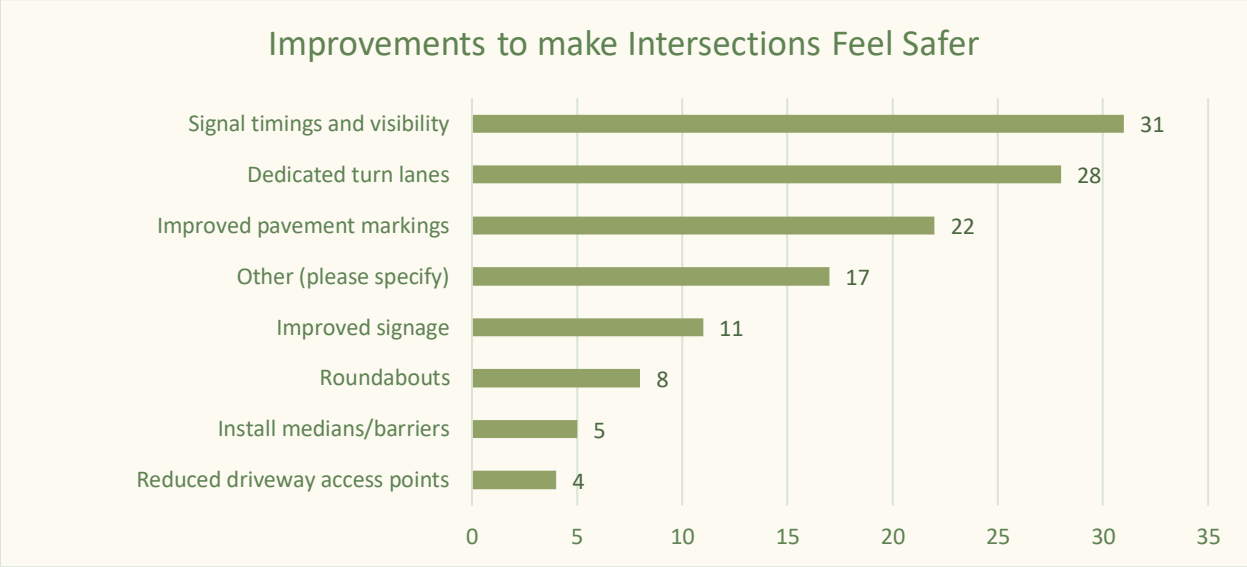


Respondents were asked to select up to three improvements that would make driving in Maury County feel safer. The top two responses were improved pavement conditions (209 responses), improved pavement markings (127 responses).

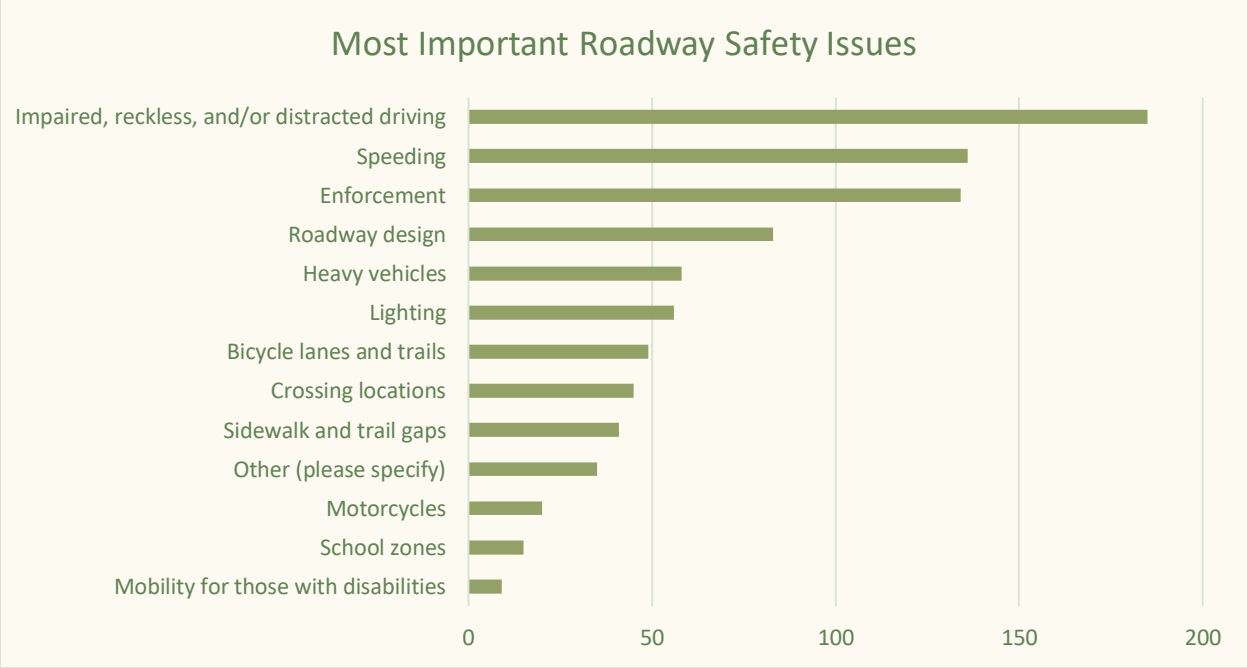


Respondents selected up to three improvements that may make walking/biking feel safer in Maury County. The top three were new sidewalk/crosswalk/bike connections (169 responses), improved sidewalks (129 responses), and improved crosswalks (101 responses).

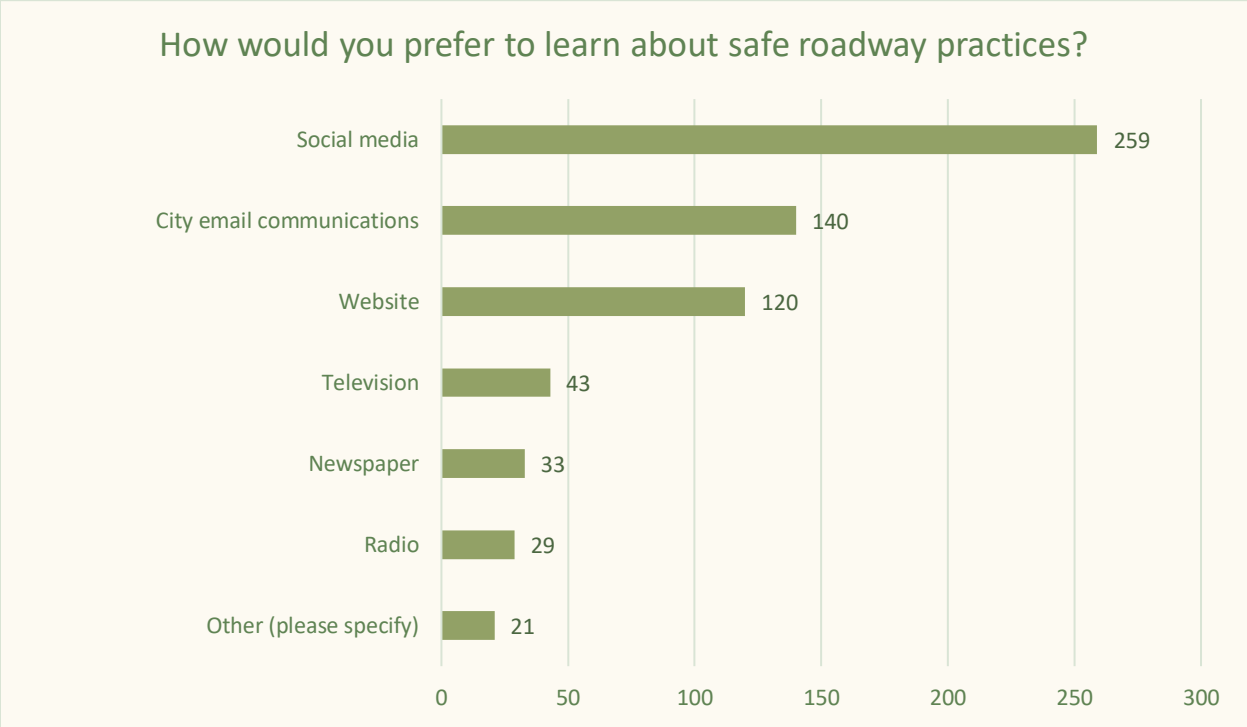
Respondents then selected up to three improvements that would make intersections feel safer. Signal timings and visibility (31 responses) received the highest count followed by dedicated turn lanes (28 responses) and improved pavement markings (22 responses).



Respondents were then given the opportunity to select up to three safety issues that are most important to them. The most selected issue was impaired, reckless, and/or distracted driving (185 responses) then speeding (136 responses) and enforcement (134 responses), all of which speak to enforcement as being a community priority.

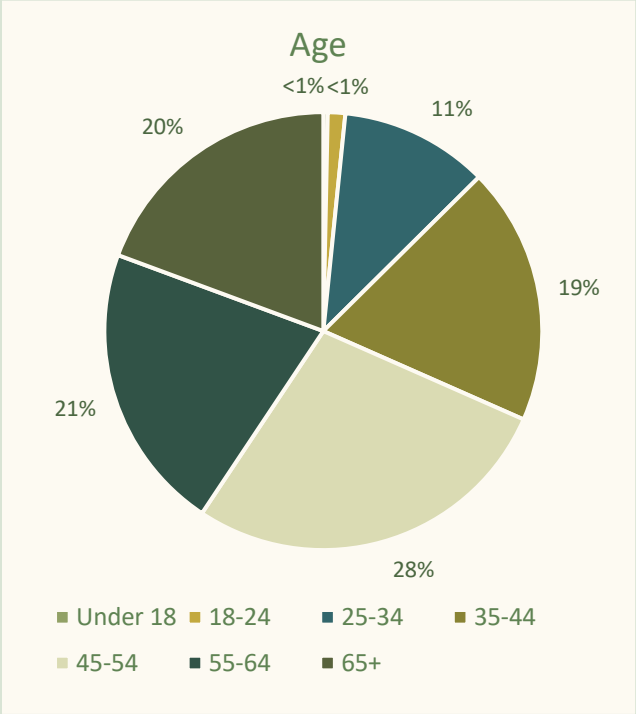


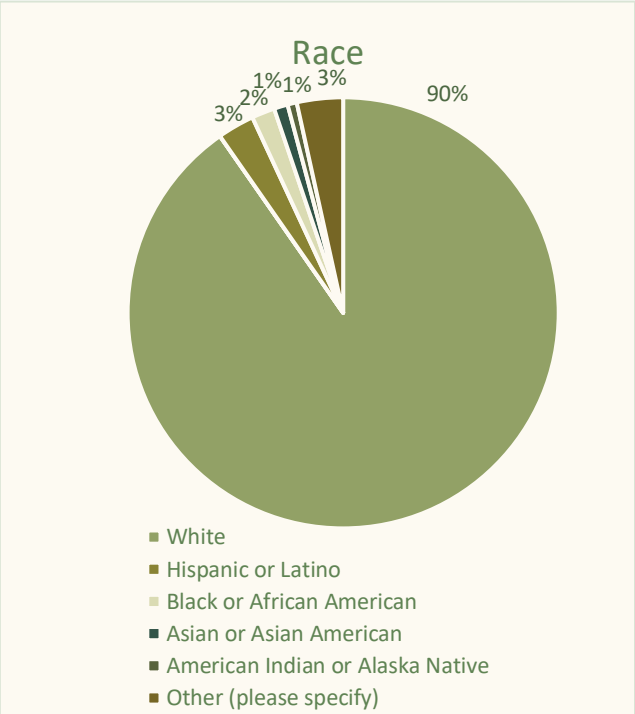
The next question then asked the preferred way people want to learn about safe roadway practices. The most common response was social media (259 responses). The second and third highest were County email communications (140 responses) and by website (120 responses), both of which were significant, indicating a broad communication approach would best serve the county for future projects.

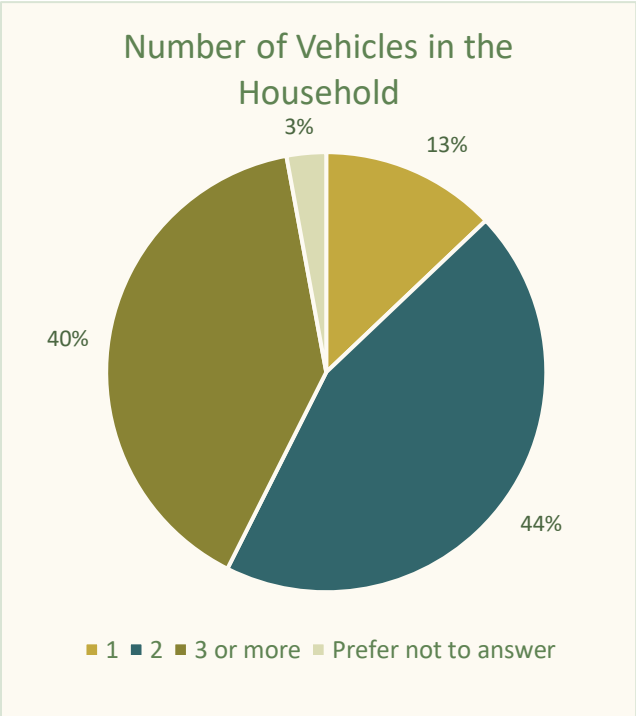


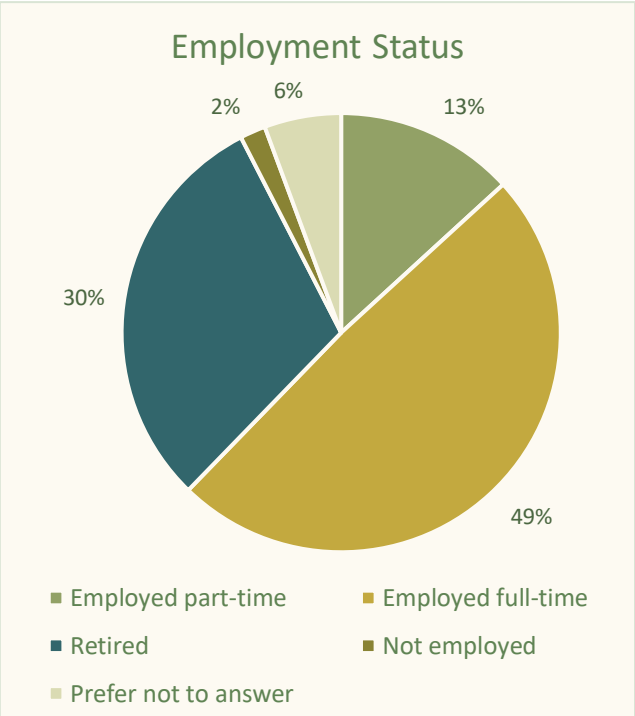
4.5.1 Key Demographics

The survey concluded by asking optional demographic questions. Responses were fairly representative, but responses were slightly higher in the White, not Hispanic category than what is reflected in the most recent census data. Other demographics appeared more representative as shown.









4.5.2 Summary of Survey Results

The survey results reveal that a significant number of respondents reside and work in Maury County and drive alone for their transportation needs. The majority of respondents bike or walk for leisure purposes. Interestingly, there is a prevailing perception among them that Maury County roundabouts and sidewalks are unsafe. There was strong support for various improvements, including better pavement conditions, developing multimodal infrastructure, creating dedicated turn lanes, and addressing signal timing and visibility. The survey also highlighted that the respondents considered the most prominent roadway concern in Maury County to be reckless driving and speeding. Concerns were expressed about the lack of transportation infrastructure to support the area's growth and development. Additionally, respondents indicated a preference for accessing safety information through social media platforms, County email communications, or the website.

4.5.3 Public Input Heat Map

Combining the input provided in Public Coordinate with the location specific comments provided in the survey, a heat map was prepared. As illustrated **Figure 27,** there is a direct correlation between the crash density heat map presented earlier in the report and the areas receiving the most public comments, highlighting the need for improvements in the area near Downtown Columbia. **Figure 23** show the concentrated of public input comments within the County. Additionally, APP, areas with medium to high SVI, and HDC tracts were displayed on the map. Multiple comments were placed within high SVI regions as shown with the heat map, which highlights the community's needs and concerns.

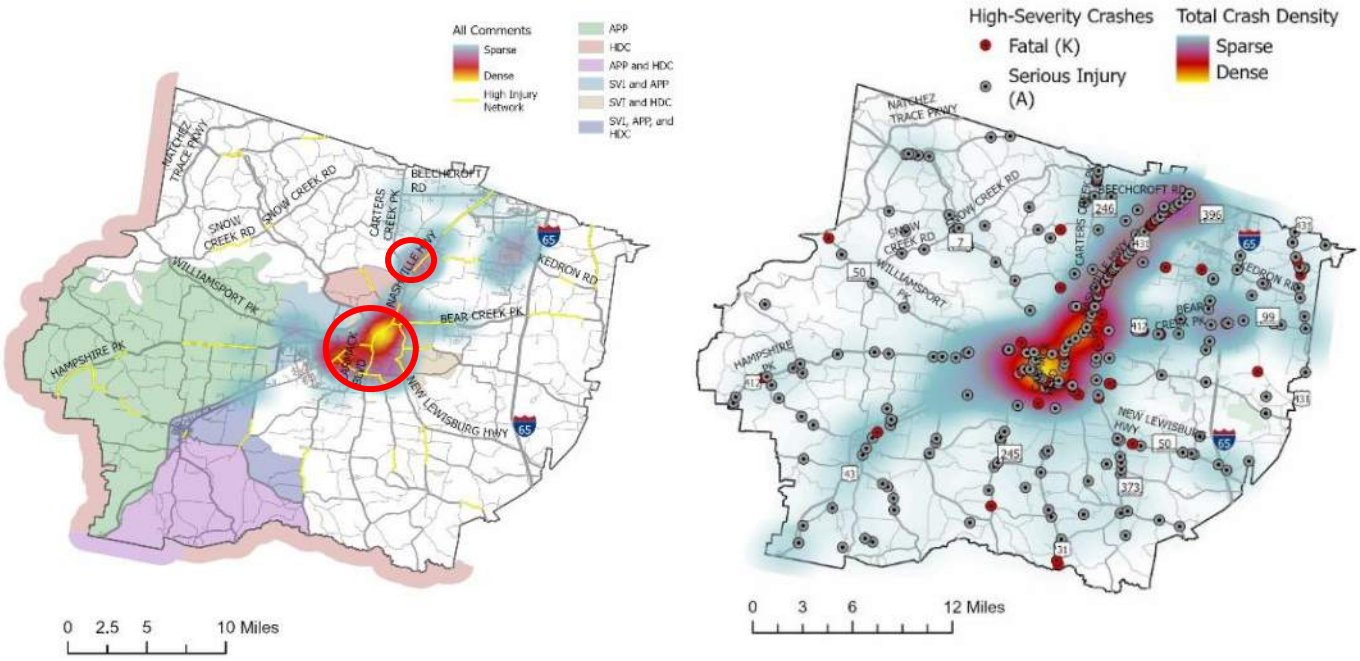


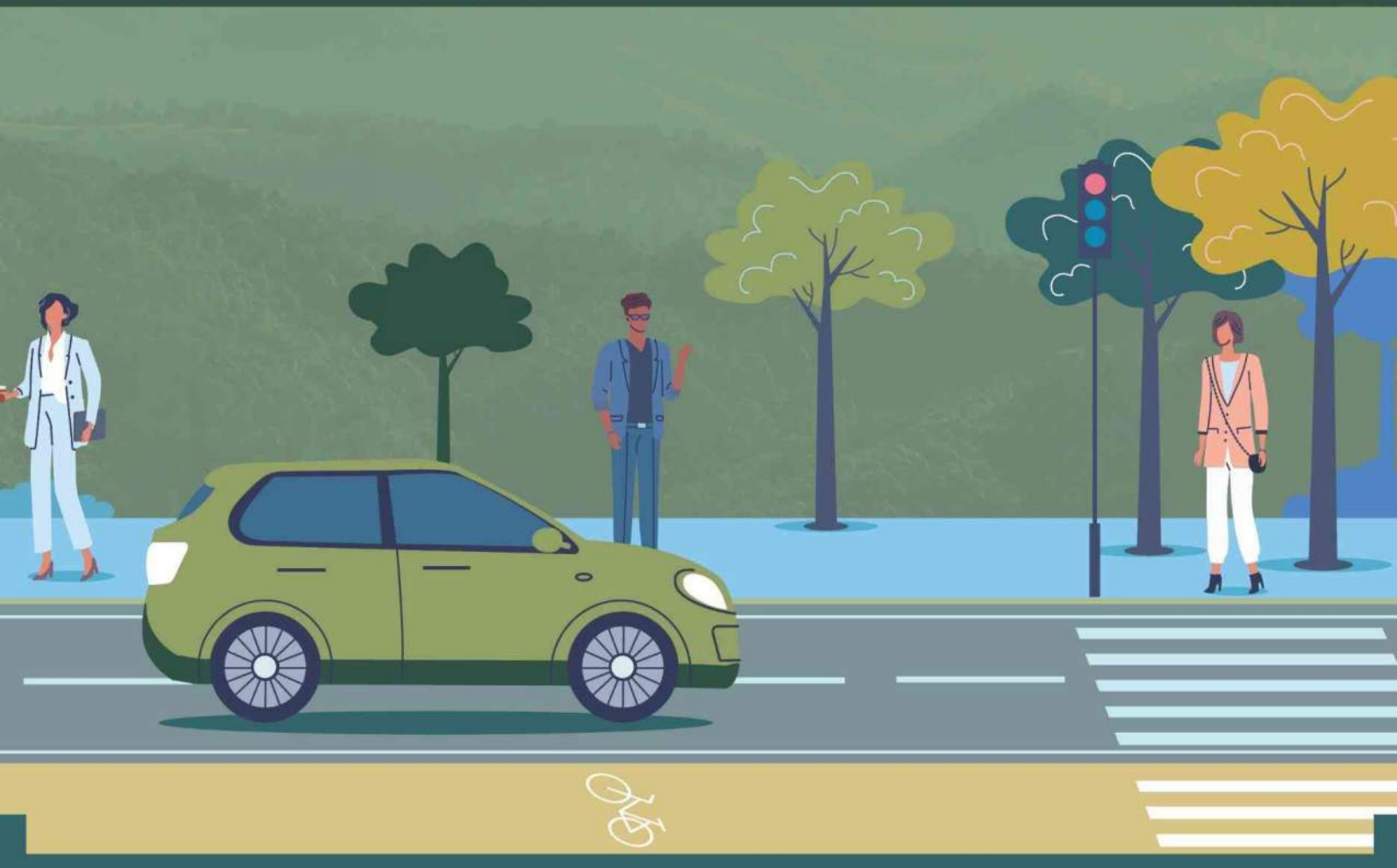
Figure 27: Concentration of Location Specific Public Comments

4.6 Key Takeaways

Many comments call for greater law enforcement to address reckless driving as well as repairing pavement. These suggestions aim to reduce accidents, improve traffic flow, foster better driving habits, and protect all road users. Additionally, there are several comments addressing the lack of transportation infrastructure, especially given the growth in the area. These comments align with the need to address safety concerns in locations that have a higher likelihood of accidents or injuries, as reflected in the high injury network. By incorporating improvements in these areas, it allows for a targeted approach to enhance transportation safety for both drivers and pedestrians.

MAURY COUNTY
SAFETY ACTION PLAN

STRATEGIES



5. Strategies

The SAP identifies countermeasures and strategies addressing the Counties fatal and suspected serious injury emphasis areas mentioned in the Safety Analysis Section. The countermeasures are classified into two categories: (1) Engineering Countermeasures (project recommendations) and (2) driver related countermeasures (Education, Enforcement, and Emergency Medical Services).

5.1 Engineering Countermeasures

Engineering Countermeasures in an SAP refer to specific physical changes to the transportation infrastructure. These measures can include:

- **Traffic signal upgrades**: Installing or improving traffic signals to better manage traffic flow.
- **Roadway design changes**: Modifying road layouts, such as adding roundabouts, medians, or bike lanes.
- **Pedestrian and cyclist infrastructure**: Installing or improving crosswalks, sidewalks, and bike paths.
- **Speed management**: Implementing measures such as road diets, bulb-out, chicanes, or reduce lane widths.
- **Visibility improvements**: Installing or improving street lighting, adding reflective signs, and improving roadway striping.

5.1.1 Crash Modification Factors (CMF)

Crash Modification Factors (CMF) can be used to assess the potential safety impact of improvements. A CMF is a numerical value that indicates the proportion of crashes that would be expected at a location after implementing a safety countermeasure. A CMF with a value of less than 1.0 indicates an expected decrease in crashes. Conversely, a CMF with a value greater than 1.0 indicates an expected increase in crashes. Because funding for infrastructure improvements is limited, Maury County can benefit from a way to quantify and compare the potential benefit of safety countermeasures and treatments. The FHWA maintains the CMF Clearinghouse, an online repository of CMFs documented in the Highway Safety Manual (HSM) and other industry resources. The following guidance should be considered when selecting and applying CMFs:

- Use a minimum of three years of crash data for urban and suburban sites and five years of crash data for rural sites.
- CMFs should be selected from Part D of the HSM or FHWA's CMF Clearinghouse website (https://www.cmfclearinghouse.org/).
- If possible, use CMFs with star ratings of four or five. The star rating indicates the quality or confidence in the results of the study producing the CMF.

5.1.2 Engineering Countermeasures Toolkit

A toolkit of engineering countermeasures was compiled based on general applicability in the study area, their level of evidence in crash reduction, and stakeholders and public feedback obtained during the public engagement. **Table 8** provides a summary of these countermeasures, their source, and the order of magnitude cost for their implementation.

Table 8: Maury County Toolkit

Source	Countermeasure	Cost
● ●	Install Combination Centerline / Edge line Rumble Strips	$$
●	Install Raised Pavement Markers (Both Sides of Road)	$
●	Install Merge/Turn/Taper Lane	$$$
● ● ●	Widen Shoulder	$$
● ●	Install Variable Speed Limit Signs	$
● ●	Implement Appropriate Signage to Improve Driver Awareness	$
● ●	Upgrade Signage and Pavement Marking	$
● ● ●	Evaluate Optimal Speed Limit for All Road Users	$
● ●	Convert Full-Access Driveways to Right-In Right-Out (RIRO)	$$
● ●	Install Backplates with Retroreflective Borders to Traffic Signal Heads	$
●	Install Flashing Yellow Arrows	$
● ●	Evaluate Signal Clearance Intervals	$$
● ●	Optimize Signal Phasing & Timing	$$
● ● ●	Install Rectangular Rapid Flashing Beacon (RRFBs)	$
● ● ●	Install Pedestrian Crossing Infrastructure	$$$
● ● ●	Implement Access Management	$$$
● ● ●	Install Raised Pedestrian Refuge Islands	$$
●	Upgrade Guardrail and Extend Guardrail Lengths at Bridges/Culverts	$$
●	Clear & Grub Vegetation to Optimize Driver Sight Distance	$
● ●	Install Curve Feedback Warning Signs	$
● ●	Install Stop Bars at Minor Street Approaches	$
●	Install Animal Crossing Advance Warning Signage	$
●	Install Advanced Narrow Bridge Warning Signage	$
● ●	Install Transverse Pavement Markings at Minor Street Approaches	$
● ● ●	Improve Lighting	$$

●	FHWA Proven Safety Countermeasure
●	Crash Modification Factors Countermeasure
●	Vulnerable Road User Related Countermeasure

$	0 - 50,000
$$	50,001 - 100,000
$$$	100,001 - 500,000
$$$$	> 500,0000

5.2 Driver-Related Countermeasures

As described and presented in Section 80. Safety Analysis Section. The data shows Maury County experienced higher percentages of crashes involving unrestrained occupants, older drivers and cyclists than the State of TN average. The following includes specific strategies to reduce crashes on these emphasis areas. These strategies incorporate the remaining three Es of traffic safety: Education, Enforcement, and Emergency Medical Services.

5.2.1 Unrestrained Occupants

Unrestrained occupants refer to individuals in a vehicle who are not using seat belts or other safety restraints (such as car seats for children) at the time of a crash. As shown earlier in Section 0. Safety Analysis Section, 24.3 percent (110 crashes) of all fatal and severe injury crashes between 2019 and 2023 in Maury County involved unrestrained occupants as a contributing factor. This is 5.3 percent higher than the TN State Average of 19 percent.

In Tennessee, the Child Passenger Restrain Law requires that:

- **Children under 1 year old or weighing 20 pounds or less** must be secured in a rear-facing child passenger restraint system in the rear seat, if available
- **Children aged 1 to 3 years and weighing more than 20 pounds** must be secured in a forward-facing child passenger restraint system in the rear seat, if available
- **Children aged 4 to 8 years and measuring less than 4 feet 9 inches** must be secured in a belt-positioning booster seat system in the rear seat, if available
- **Children aged 9 to 12 years or any child through 12 years of age measuring 4 feet 9 inches or more** must be secured in a seat belt system
- **Children aged 13 to 15 years** must be secured using a passenger restraint system, including safety belts

The law also provides for the use of medically prescribed modified child restraints for children who cannot be safely transported in conventional systems

The following are recommended strategies that should be implemented to reduce fatal and serious injury crashes with unrestrained occupants:

Table 9: Unrestrained Occupants Countermeasures

Countermeasure	Strategy
Conduct High-Visibility Enforcement	Continue to collaborate with Maury County Sheriff department to conduct high-visibility enforcement at targeted areas for occupant protection compliance.
Promote Proper Child Restraint Use	Continue to coordinate and promote child passenger safety initiatives.
Conduct Social Media Campaigns	Promote high-risk driver-education programs and defensive driving programs targeting drivers aged 15-21 focusing on seatbelt usage such as Bucke Up in your Truck Campaign and Click it or Ticket.
Enforce the Child Passenger Restraint Law	Participate in conference and training programs for law enforcement officers to be aware and implement the Child Passenger Restraint Law.

5.2.2 Aggressive Drivers

Aggressive drivers refer to individuals who engage in unsafe driving behaviors with deliberate disregard for safety. These behaviors can include speeding, tailgating, weaving in and out of traffic, running red lights, and other actions that endanger other road users.

Table 10: Aggressive Drivers/Speeding Countermeasures

Countermeasure	Strategy
Enforcement at high frequency areas	Develop and implement enforcement program aimed at aggressive driving in high frequency areas.
Develop a County-wide Traffic Calming Program	Develop an initiative designed to implement various measures across the County to reduce vehicle speeds, involving physical changes to the roadway environment, such curb extensions, and improved pedestrian crossings, to alter driver behavior and create safer conditions for all road users.

5.2.3 Motorcycle Involved

Motorcycle Involved crashes refer to crashes that involved at least one motorcycle.

Table 11: Motorcycle Involved Countermeasures

Countermeasure	Strategy
Conduct Social Media Campaigns	Promote safe riding awareness, including the impact of proper driver education, the use of high visibility clothing and gear and properly wearing personal protective equipment.
Enforcement at high frequency areas	Develop and implement enforcement programs aimed at motorcycle driver safety in high crash frequency areas.

5.2.4 Heavy Vehicle Involved

Heavy vehicle involved crashes refer to crashes that involved at least one heavy vehicle.

Table 12: Heavy Vehicle Involved Countermeasures

Countermeasure	Strategy
Enforce safety regulations in high frequency areas	Ensure size regulations, substance testing regulations, and proper inspections are being met to state regulations.

MAURY COUNTY
SAFETY ACTION PLAN

POLICY AND PROGRESS CHANGES

6. Policy and Process Changes

6.1 Documents Reviewed

Existing County's plans and policies were compiled and reviewed as a part of the SAP process to gain perspective on the existing efforts for transportation-related improvements within Maury County. High-level key points regarding transportation improvements and safety-related topics were identified to inform recommendations in the SAP. **Table 9** outlines the pertinent existing and past plans or policies that impact Maury County.

Table 13. Existing Plans Summary

Document	Summary/Goals
County Road Construction Standard	• The County Road Construction Standards and Procedures are a set of standards for private persons constructing a road to be dedicated to Maury County for its maintenance as a county road.
Maury County Comprehensive Plan 2011	• The Maury County Comprehensive Plan, adopted in 2011, provides the vision, goals, policies, key issues and opportunities to craft an action plan for implementing recommendations to achieve the community vision. • The plan is comprised of five chapters, including and Introduction, Issues and Opportunities, Community Vision, Future Development Guide and an Implementation Program. • The plan identified safety issues throughout the county and goals and strategies to address these issues and increase safety.
Coordinated Human Service Transportation Plan, South Central Tennessee Development District 2015	• The Coordinated Human Service Transportation Plan was updated in 2015 and submitted by the South Central Tennessee Development District. • The Coordination Plan aims to enhance public awareness of rural transportation, promote service coordination, eliminate duplication, improve affordable access for the disabled, and educate the elderly and disabled on using public transit.
Maury County Park and Recreation Master Plan 2019	• The Maury County Park and Recreation Master Plan, adopted in 2019, details the county strategy to protect greenspace and environmental assets and to provide opportunities for healthy and fun activities for all its residents. • The plan aims to offer diverse recreational opportunities that connect Maury County residents to its rich cultural, environmental, and athletic resources while promoting lifelong play and learning. • The master plan provides an inventory of existing conditions, a demands and needs assessment, recommendations, and implementation and policy strategies.

Middle Tennessee Connected 2021-2045 Regional Transportation Plan	• The Middle Tennessee Connected Regional Transportation Plan, prepared by the Greater Nashville Regional Council (GNRC), represents the collective goals of municipal and county governments, public transit agencies, county highway departments, and TDOT. • The plan provides a process for improving mobility and identifies top priorities for state funding.
Connect Columbia Comprehensive Plan 2024	• Connect Columbia, adopted in January 2018 and updated in 2023, provides a community-focused general plan for growth for the City of Columbia, located in Maury County, TN. • The plan establishes a framework plan for the long-range planning program, outlining the vision, goals, and objective, and coordinating the three main plan elements including a land use plan, parks & greenway plan, and transportation plan.

6.2 Plan Checklist

To ensure the safety and well-being of all individuals, it is imperative for agencies to have a set of plans and guidelines in place. A set of plans and guidelines have been compiled to serve as a roadmap for addressing safety concerns and implementing appropriate measures. The plans include Complete Street Policy Guidelines, the ADA Transition Plan, a Multi-Modal Plan, Traffic Impact Study Guidelines, and a Comprehensive Plan. These plans provide strategies for designing and managing streets that prioritize safety, address accessibility needs, promote various transportation modes, assess traffic impacts of new developments, and outline a long-term vision for land use, transportation, and community development with a focus on safety considerations. **Table 10** contains the list of plans and the corresponding plan in Maury County.

Table 14. Alignment of Safety Roadmap with Existing Plan

Checklist	Plan	Corresponding Maury County Plan
◐	**Complete Street Policy Guidelines**	Middle Tennessee Connected 2021-2045 Regional Transportation Plan
○	**ADA Transition Plan**	
◐	**Multi-Modal Plan**	Maury County Comprehensive Plan 2021 Connect Columbia Comprehensive Plan 2024 Middle Tennessee Connected 2021-2045 Regional Transportation Plan
◐	**Traffic Impact Study Guidelines (with Safety)**	Connect Columbia Comprehensive Plan 2024
●	**Comprehensive Plan**	Maury County Comprehensive Plan 2021
○	**Pavement Management Plan**	

● = Has Plan ◐ = Mentioned in Other Plans ○ = Does Not Have Plan

6.3 Recommendations

Policy recommendations were derived from the checklist of critical guidelines and policies described above, as well as a review of the emphasis areas that experienced high rates of fatal and severe injuries within the County. The top three emphasis areas identified were roadway departure, accounting for 36.9% of total serious and fatal injury crashes, followed by roadway intersections at 24.7%, and unrestrained occupants at 24.3%. The recommendations listed in Table 15: Recommended Policy and Process Changes**Table 15** specifically target these emphasis areas.

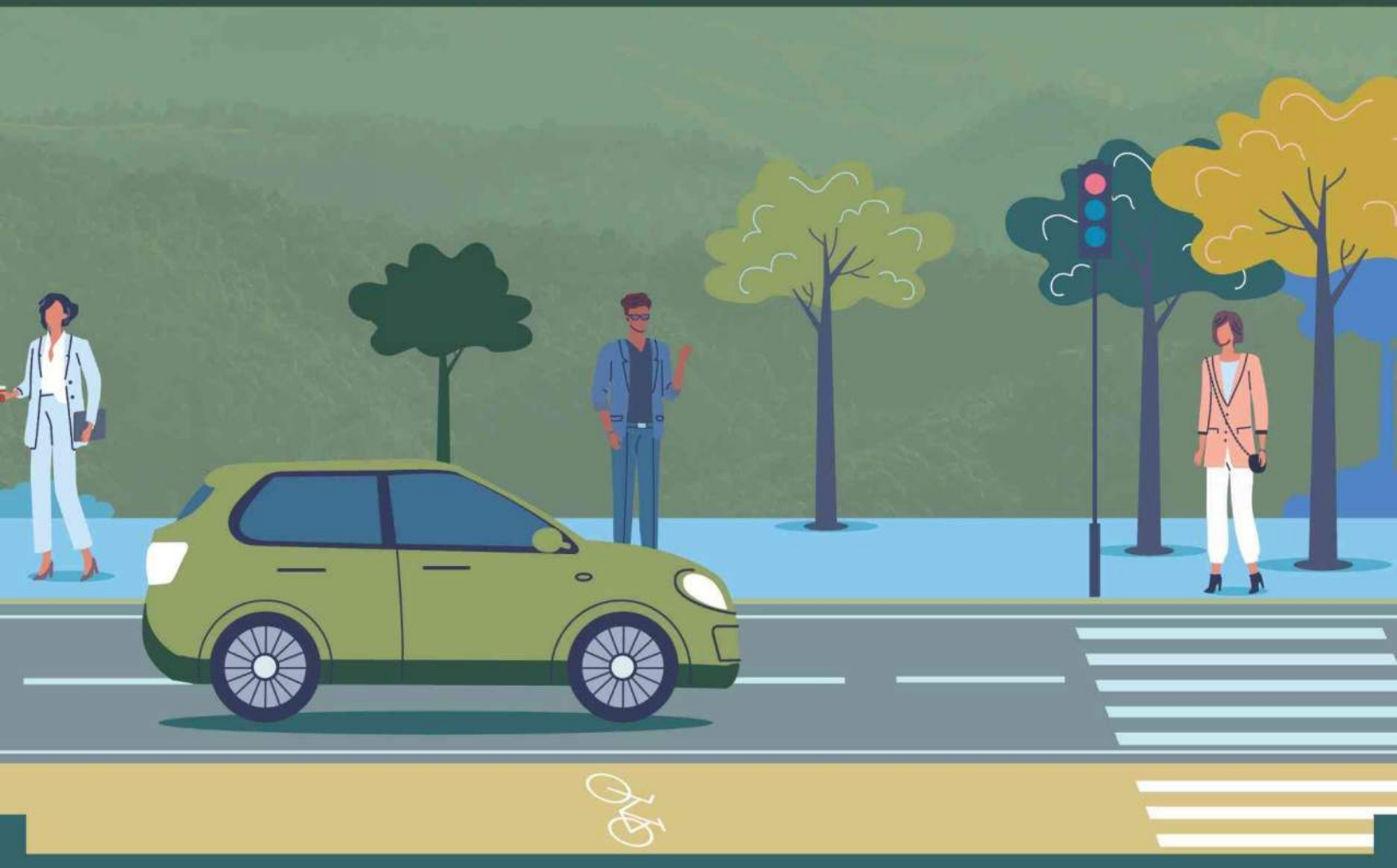
Table 15: Recommended Policy and Process Changes

Action	Timeframe	Lead
Integrate safety policy into all existing documents	Short-Term	Building and Zoning Department
Develop a Pavement Management Plan	Short-Term	Highway Department
Update roadway and intersection design standards to promote safety for all roadway users and address deficiencies	Short-Term	Highway Department
Establish a targeted enforcement program (for aggressive driving and high speeds) and coordinate with local law enforcement.	Short-Term	Police Department
Create a "Safety Champion" position/role within the County to organize educational campaigns/ provide information through community outreach. • Topics include: driving behavior, speed awareness, seatbelt usage, safe practices, for bicyclists and pedestrians • Celebrate projects that improve safety and positive movements toward the County's Safety Action Plan's goal annually. • Create increased awareness withing agency departments	Short-Term	Public Safety Department and Human Resources
Create a Safe Routes to School Partnership Program, coordinating with School Districts to organize Bike or Ride to School Days.	Short-Term	Maury County Schools and Highway Department
Partner with existing organizations that promote VRU safety.	Short-Term	Highway Department and Local Organizations
Review complete street policies regarding meeting the needs of the emergency responders.	Short-Term	Building and Zoning Department and Fire/Police Department
Update Municipal Codes Titles 15 and 16	Short-Term	Building and Zoning Department
Implement in-Field Prehospital Blood Product Administration	Short-Term	Maury County Emergency Management

Action	Timeframe	Lead
Implement a speed management program and traffic calming program	Mid-Term	Highway Department and Local Police
Create Traffic Impact Study guidelines for future development, considering Safety. If projects are proposed that will utility corridors within the HIN network, an evaluation of countermeasure to be implemented by the development project should be part of the process.	Mid-Term	Highway Department
Reprioritize future projects that achieve safety goals for future funding allocations.	Mid-Term	Building and Zoning Department and Regional Planning Commission
Implement streetscaping techniques to reduce distracted driving.	Mid-Term	Highway Department
Develop an Access Control Plan	Mid-Term	Regional Planning Commission
Incorporate proposed safety projects from this plan into future developments and transportation projects	Long-Term	Building and Zoning Department and Highway Department
Implement the use of ITS technologies as appropriate. Develop and ITS Master Plan and identify system upgrades such as TMC, etc.	Long-Term	Highway Department and IT Department
Conduct detailed studies on crash hotspots and regularly update the High Injury Network (HIN) with future crash data and update project priorities as needed.	Long-Term	Regional Planning Commission
Encourage businesses and special event permit holders to promote mobility alternatives for patrons through the permit process by identifying things such as bike parking areas or bike/ped connectors from parking areas to the event(s).	Long-Term	Building and Zoning Department
Establish a “Safety Team” that would meet regularly to review all fatal and serious injury crashes and identify/evaluate maintenance measures such as signage, pavement markings, and roadway/sidewalk modifications.	Long-Term	Police Department and Highway Department
Develop a Multi-Modal plan and prioritize design and construction of projects for future funding allocations, in combination with Complete Streets Plan	Long-Term	Regional Planning Commission
Develop a Countywide ADA Transition Plan	Long-Term	Regional Planning Commission

MAURY COUNTY
SAFETY ACTION PLAN

PROJECT SELECTION



7. Project Selections

Prioritization

After the review and validation of the HIN by the steering committee, ranking weight was determined for each of the following variable to be used for the project prioritization:

- Jurisdiction responsible for the roadway segment (15%)
- The number of fatal and serious injury crashes along the segment (25%)
- The number of pedestrian/bicycle crashes along the segment (10%)
- The segment crash rate expressed in crashes per million vehicle miles traveled per day (15%)
- Risk Index (20%)
- Demographics and community characteristics consideration, defined as the HIN segment crossing an area of the County with an SVI score of medium or high (15%)

Appendix A provides a summary of the HIN prioritization exercise that was completed by the Steering Committee. The results indicate that E James Campbell Boulevard from Trotwood Avenue to Mooresville Pike was the TDOT-owned roadway with the highest score, while Tom J Hitch Parkway from Mapleash Avenue to Bear Creek Pike was the highest-scoring local roadway.

7.1 Recommended Projects

Following the initial prioritization, a list of high-scoring County and State roadway segments and intersections was reviewed with County staff. Locations with known programmed capital improvement projects were removed from the list and replaced with subsequent high-ranking locations. County staff provided feedback on the locations to identify 10 road segments that would be candidates for engineering improvements. The 10 recommended locations are shown in **Figure 24** and listed below:

1. E James Campbell Boulevard (SR-50) from Trotwood Avenue to Mooresville Pike (State Owned)
2. Main Street (SR-31) from Northfield Lane to County Boarder (State Owned)
3. Tom J Hitch Parkway from Mapleleash Avenue to Bear Creek Pike (County Owned)
4. Polk Road from Southport Road to Polk Lane (MM 6.42) (County Owned)
5. Nashville Highway (SR-31) from Donald F. Ephlin Parkway to Northfield Lane (State Owned)
6. Mapleleash Avenue from Tom J. Hitch Parkway to New Lewisburg Pike (County Owned)
7. Campbellsville Pike (SR-245) from Moore Lane to Haley Lane (State Owned)
8. Theta Pike from Darks Mill Road to Witherspoon Road (County Owned)
9. Iron Ridge Road from Tom J. Hitch Parkway to Mount Olivet Road (County Owned)
10. Bear Creek Pike (SR-99) from Nashville Highway (SR-31) to Baker Road (State Owned)

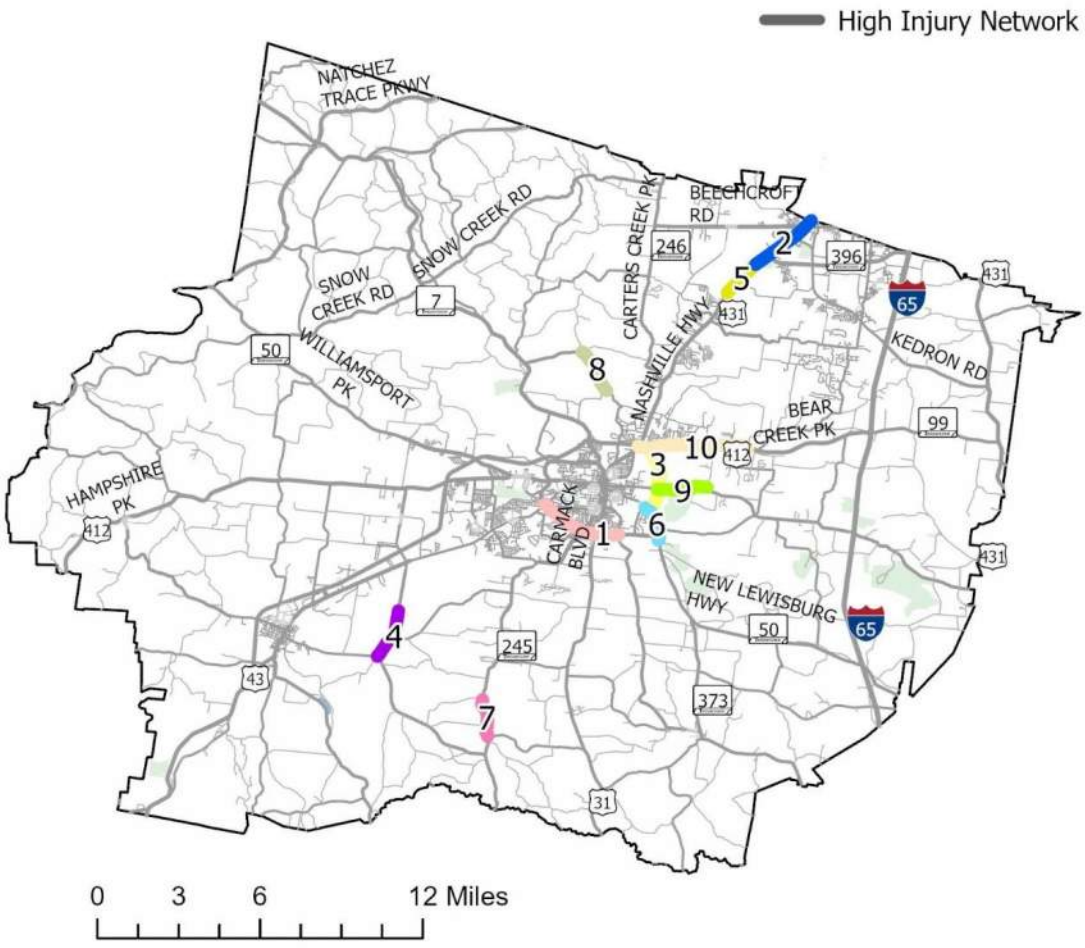


Figure 28: Project Locations

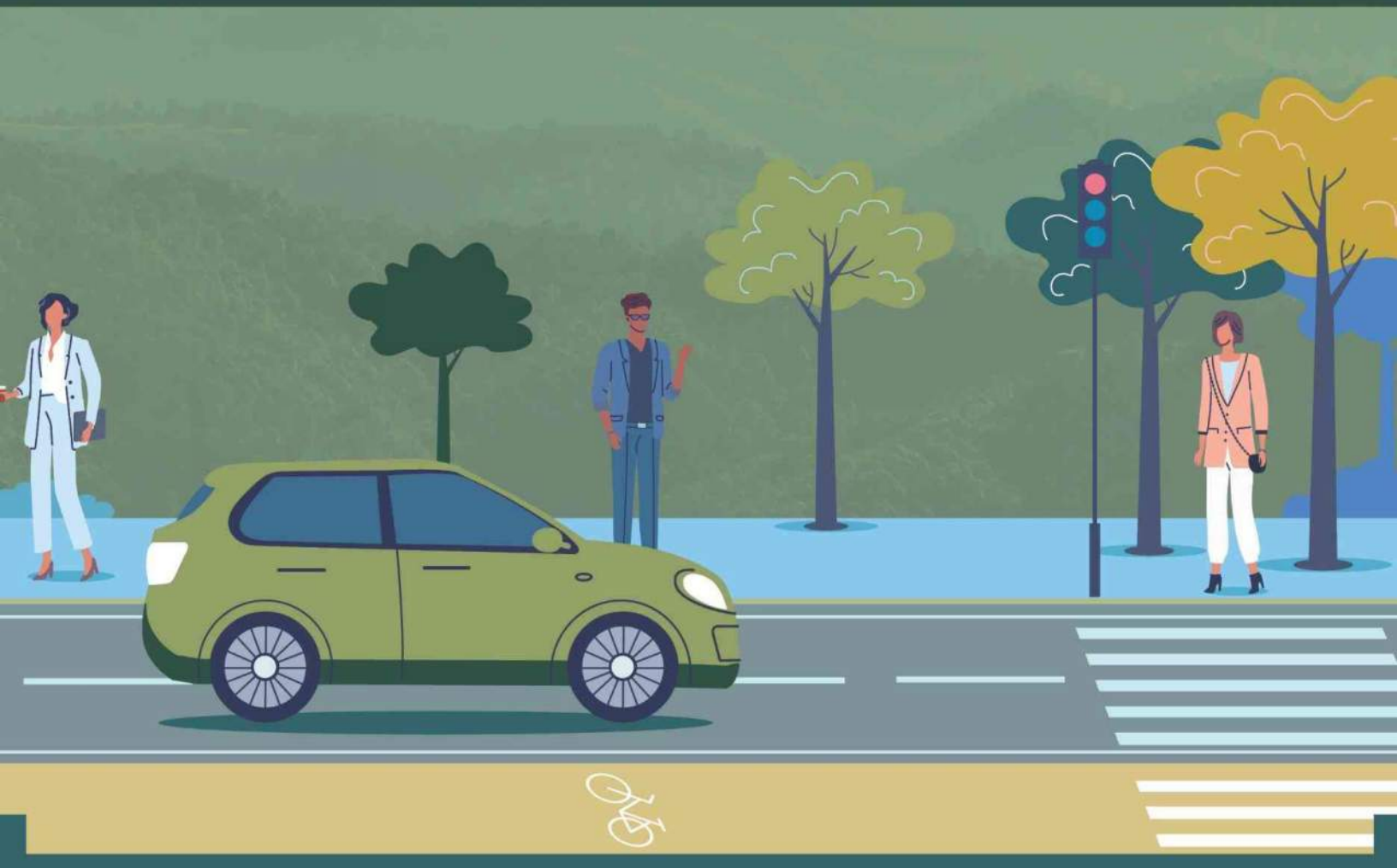
7.1.1 Recommended Project Fact Sheets

Following the selection of the top 10 project locations, safety improvement recommendations were developed for each location using the Engineering Countermeasures Toolkit presented earlier in the SAP.

Project fact sheets were developed for each of the ten locations and are included in **Appendix B**. The fact sheets summarize the crash data analysis, public input, and selected engineering countermeasures with their benefits. The draft project sheets were reviewed by County staff for input related to engineering judgment and site-specific knowledge. The fact sheets provide a concise summary of each priority project location for ease of reference in future funding and project programming opportunities.

MAURY COUNTY
SAFETY ACTION PLAN

PROGRESS AND TRANSPARENCY



8. Progress and Transparency

The Maury County SAP recommends a set of actions that will support the successful implementation and monitoring of the recommended projects and strategies.

8.1.1 Task Force Implementation and Monitoring

It is recommended that a subset of the steering committee regroup as a Maury County Safety Task Force to direct the SAP implementation and future progress. The Task Force may consist of Public Works staff, other Maury County departments, Maury County Sheriff's Office, other local emergency service providers, key Maury County staff, key TDOT staff, other adjacent communities, and other stakeholders as needed. It is recommended that this task force meet annually after the adoption of the Maury County SAP to review the latest available crash data trends, engineering project completion progress, and driver-related strategy performance measures. This will also provide the task force an opportunity to discuss modifications to the plan or identify additional resources needed based on changes in crash trends, community needs, and new technologies.

8.1.2 Public Posting of the Maury County SAP

Upon completion and adoption, this plan will be made public on a dedicated project website and the County's website. The project website should be maintained to update the public with the latest crash data trends and implementation status of projects.

Figure 29: Maury County SAP Website

MAURY COUNTY
SAFETY ACTION PLAN

APPENDIX A

RESOLUTION NO. 03-25-27

RESOLUTION APPROVING LEADERSHIP COMMITMENT AND COUNTY'S GOAL REGARDING THE HIGHWAY DEPARTMENT SAFE STREETS GRANT PROGRAM

WHEREAS, by Resolution No. 07-23-23 the County approved the 2022 Safe Streets Grant with the United States Department of Transportation; and

WHEREAS, as part of the grant program, the County Legislative Body must show commitment to the safe streets program and make progress toward the long-term goal of zero traffic deaths and serious injuries on Maury County roadways; and

WHEREAS, the Maury County Commission desires to adopt a long-term goal of zero traffic deaths and serious injuries on Maury County roadways; and

WHEREAS, the Maury County Commission desires to additionally adopt an interim goal of a twenty (20%) percent reduction in fatal and serious injury crash rates on Maury County roadways by the year 2035; and

WHEREAS, based upon a twenty percent reduction in fatal and serious injury crash rate by 2035, Maury County should experience by 2035 a decrease from 8.82 fatal and serious injury crashes for each one hundred million miles driven to 7.05 fatal and serious injury crashes for each one hundred million miles driven.

NOW, THEREFORE, BE IT RESOLVED by the Maury County Commission that it adopts a long-term goal of zero traffic deaths and serious injuries on Maury County roadways.

BE IT FURTHER RESOLVED by the Maury County Commission that it adopts an interim goal of a twenty (20%) percent reduction in fatal and serious injury crash rates on Maury County roadways by the year 2035.

This the 17th day of March 2025.

Sheila K. Butt

SHEILA K. BUTT
County Mayor

MAURY COUNTY
SAFETY ACTION PLAN

APPENDIX B

HIN ID	Road Name	From	To	Ownership	Ownership Index	Length (miles)	K&A Crashes	Bike/Ped Crashes	Crash Rate	Replica Risk Index	Demographics & Community Characteristics	Prioritization Score
28	E Jamples Campbell Boulevard	Trotwood Avenue	Mooresville Pike	State (SR050)	0	2.57	16	1	15.01	99	1	80
30	Nashville Highway	7th Street	US Highway 43	State (SR007)	0	1.83	8	2	11.32	99	1	68
32	Trotwood Avenue	Bigby Stream	Academy Lane	State (SR243)	0	1.01	7	0	15.26	99	1	61
9	Main Street	Northfield Lane	County Boarder	State (SR006)	0	2.32	12	0	5.08	99	1	59
21	Tom J Hitch Parkway	Mapleleash Avenue	Bear Creek Pike	County	1	2.46	4	0	1.83	94	1	57
6	Nashville Highway	Bear Creek Pike	Baker Road	State (SR006)	0	1.30	4	2	4.03	99	1	55
29	Nashville Highway	E James Campbell Boulevard	7th Street	State (SR007)	0	1.78	7	0	3.57	98	1	49
24	Polk Road	Southport Road	Polk Lane (MM 6.42)	County	1	1.78	4	1	6.41	0	1	48
31	W 7th Street	Trotwood Avenue	S Garden Street	State (SR099)	0	0.57	3	0	10.95	99	1	46
8	Nashville Highway	Donald F Ephlin Parkway	Northfield Lane	State (SR006)	0	1.32	11	1	2.87	99	0	45
22	Mapleleash Avenue	Tom J Hitch Parkway	New Lewisburg Pike	County	1	1.31	1	1	5.29	0	1	42
27	Main Street	E Merchant Street	1st Avenue	State (SR166)	0	0.49	1	0	4.49	95	1	40
37	Campbellsville Pike	Moore Lane	Haley Lane	State (SR245)	0	1.43	2	0	2.87	90	1	39
34	Highway 166 N	Old State Road	Garner Road	State (SR166)	0	2.26	2	0	4.11	83	1	39
7	Nashville Highway	Walnut Drive	Hidden Creek Lane	State (SR006)	0	1.38	11	0	1.00	99	0	38
20	Theta Pike	Darks Mill Road	Witherspoon Road	County	1	1.70	1	0	6.44	0	1	38
33	Highway 166 N	McAnally Road	Old Gibson Hollow Road	State (SR166)	0	1.58	2	0	2.43	83	1	37
38	Campbellsville Pike	Haley Lane	Bigbyville Road	State (SR245)	0	1.53	2	0	2.44	90	1	35
23	Iorn Ridge Road	Tom J Hitch Parkway	Mount Olivet Road	County	1	1.55	1	0	1.92	0	1	33
11	Hampshire Pike	Old State Road	Taylors Store Road	State (SR099)	0	0.78	4	0	11.58	0	1	33
13	Bear Creek Pike	Nashville Highway	Baker Road	State (SR099)	0	2.05	8	0	4.88	0	1	32
36	Culleoka Highway	Culleoka Highway (MM 2.506)	New Lewisburg Pike	State (SR373)	0	2.50	6	0	2.58	90	0	30
10	Hampshire Pike	County Boarder	Highway 466 N	State (SR099)	0	2.91	5	1	1.36	0	1	29
16	Franklin Pike	Kedron Road	Will Brown Road	State (SR106)	0	2.07	5	0	1.88	92	0	28
14	Bear Creek Pike	I-65	Carpenter Bridge Road	State (SR099)	0	1.32	2	0	5.80	93	0	27
5	Snow Creek Road	New Highway 7	Sante Fe Pike	State (SR247)	0	0.45	2	0	7.88	78	0	26
17	Franklin Pike	Will Brown Road	County Boarder	State (SR106)	0	1.94	4	0	1.74	92	0	26
4	Snow Creek Road	Turkey Creek Road	Pigg Schoolhouse Road	State (SR247)	0	2.27	3	0	3.54	78	0	24
35	Culleoka Highway	E Sheepneck Road	McKnight Road	State (SR373)	0	1.17	2	0	1.87	90	0	23
15	Bear Creek Pike	Carpenter Bridge Road	Green Schoolhouse Road	State (SR099)	0	1.61	2	0	1.17	93	0	23
19	Greens Mill Road	Poplar knoll Drive	Jackson Road	County	1	2.14	2	0	4.75	0	0	23
12	Hampshire Pike	S Gross Bridges Road	Zion Road	State (SR099)	0	3.90	4	0	1.49	0	1	23
26	Mooresville Pike	E James Campbell	Morrow Lane	County	1	1.11	2	0	3.65	0	0	22
25	Mooresville Pike	Peach Orchard Road	Phinney Murphy Road	County	1	1.42	1	0	4.70	0	0	21
18	Kedron Road	Ollie Chunn Road	Rally Hill Cutoff Road	County	1	0.87	2	0	2.21	0	0	20
2	Leipers Creek Road	New Highway 7	Brady Cemetary Road	State (SR230)	0	0.54	2	0	13.14	0	0	16
1	New Highway 7	Leipers Creek Road	Fly Road	State (SR050)	0	1.26	5	0	2.61	0	0	10
3	Leipers Creek Road	Fox Branch Road	County Boarder	State (SR230)	0	1.31	2	0	3.30	0	0	6

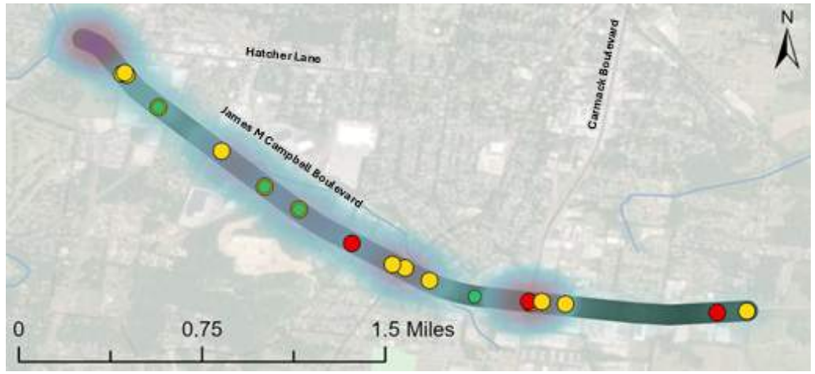
MAURY COUNTY
SAFETY ACTION PLAN

APPENDIX C

MAURY COUNTY
SAFETY ACTION PLAN

E James Campbell Boulevard (SR-50)

from Trotwood Avenue to Mooresville Pike



- VRU (1)
- Serious Injury (13)
- Fatal (3)

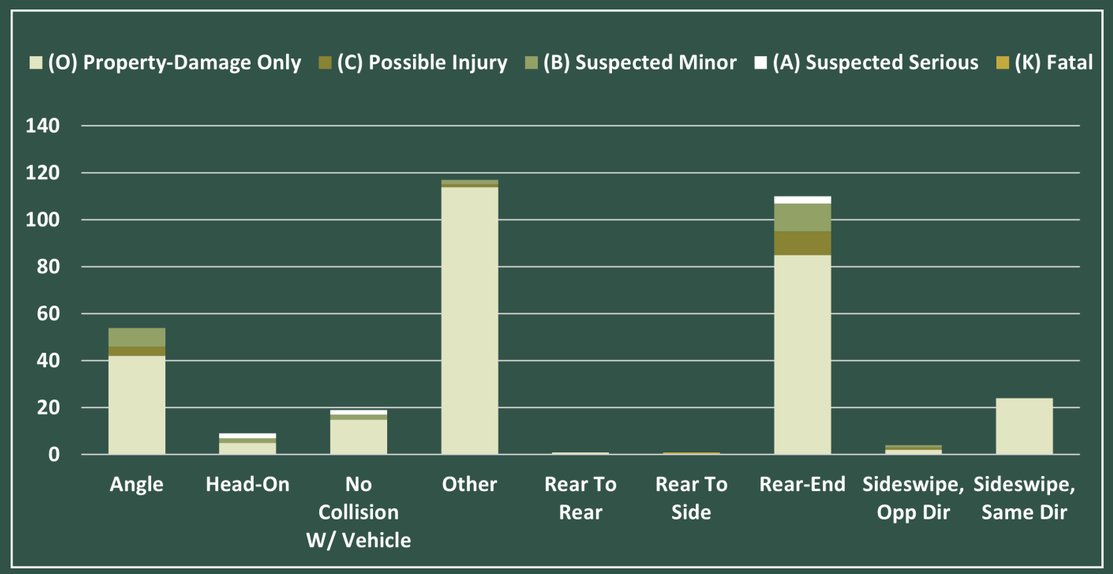
State Route

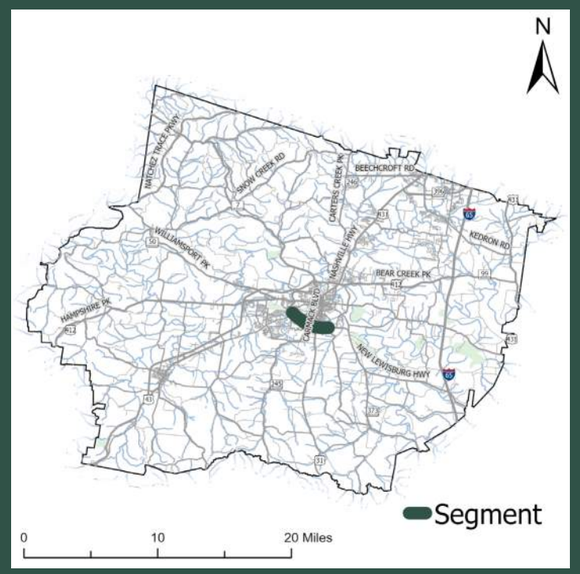
Speed Limit	40 mph
Lanes	2
Vehicles/Day	17,000
Total Crashes	1161
HIN Intersections	7

Characteristics

This section of E James Campbell Boulevard is a two-way roadway, divided by a grass median with a large number of median openings. The segment follows a largely curved alignment, with medium rolling terrain. Sidewalks are not present along this corridor.

Along James M Campbell Boulevard, Facing East, Just East of Brookmeade Drive





Overall Ranking: 1

Ranking Index

Fatal & Serious Injury Crashes:
low — high

Vulnerable Road User Crashes:
low — high

Crash Rate:
low — high

Replica Risk Index:
low — high

Demographics Consideration:
low — high

Community Input

- Removing the right turn lane to turn right onto James Campbell from Trotwood Avenue has negatively impacted traffic flow
- Other intersections with safety issues are E James Campbell Boulevard at Nashville Highway and at Hatcher Lane

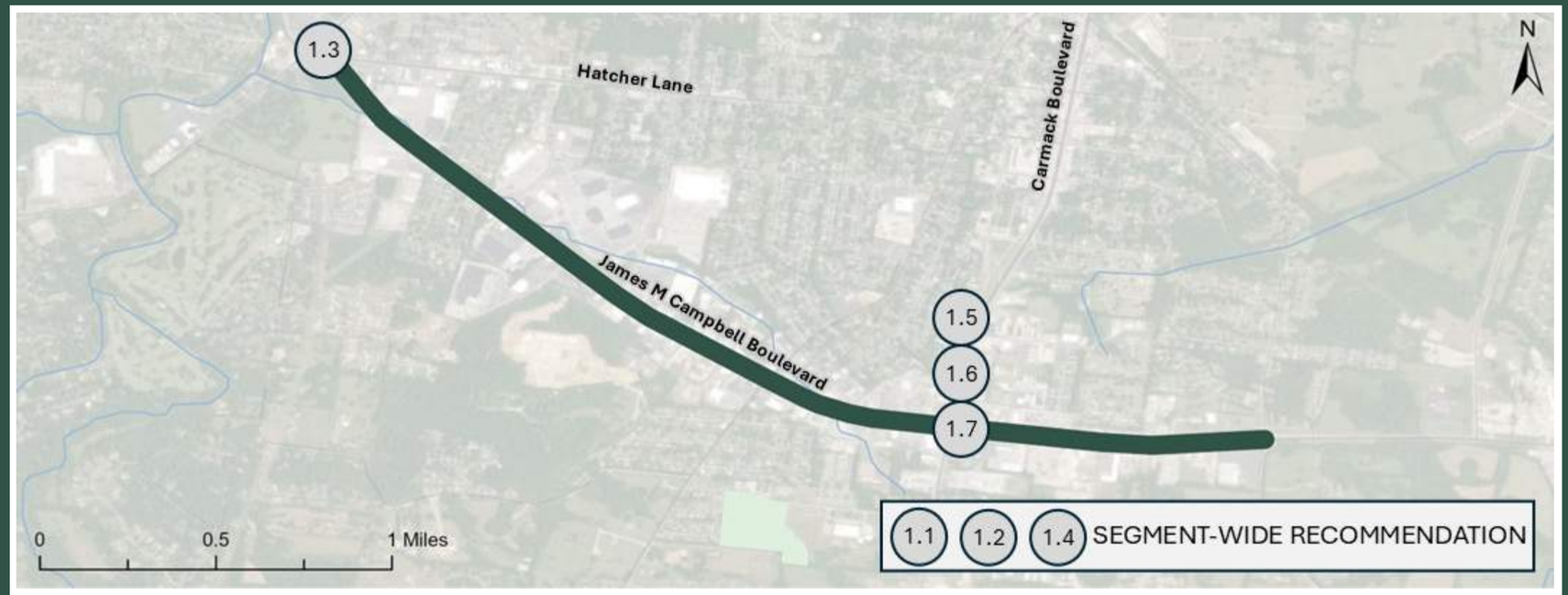
E James Campbell Boulevard (SR-50)
from Trotwood Avenue to Mooresville Pike

MAURY COUNTY
SAFETY ACTION PLAN

E James Campbell Boulevard (SR-50)

from Trotwood Avenue to Mooresville Pike

Recommended Countermeasures



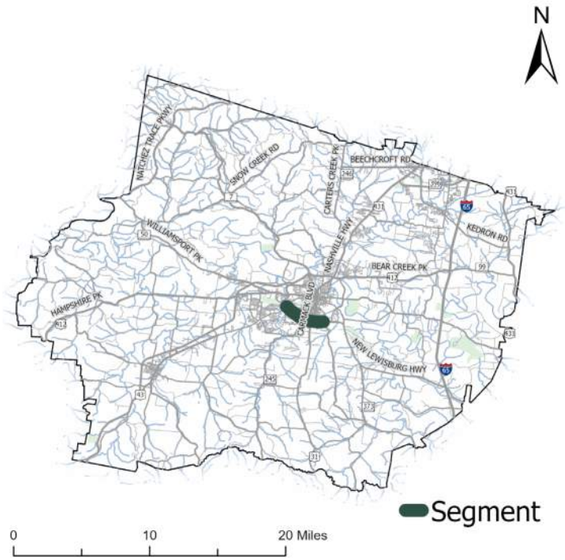
	ID	Countermeasure	Cost	Schedule	Project Readiness
● ● ○	1.1	Implement Access Management	$$$	Long-Term	● ●
●	1.2	Install Raised Pavement Markers (Both Sides of Road)	$	Short-Term	Ready
● ● ○	1.3	Evaluate Signal Clearance Intervals	$$	Short-Term	Ready
● ●	1.4	Install Backplates with Retroreflective Borders	$	Short-Term	Ready
● ●	1.5	Upgrade Signage & Pavement Marking	$	Short-Term	Ready
● ● ○	1.6	Install Raised Pedestrian Refuge Islands	$$	Short-Term	Ready
● ● ○	1.7	Install/Upgrade Pedestrian Infrastructure	$$$	Long-Term	● ●

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

● FHWA Proven Safety Countermeasure
● Crash Modification Factors Countermeasure
○ Vulnerable Road User Related Countermeasure
● Requires ROW Acquisition
● Requires Utility Relocation

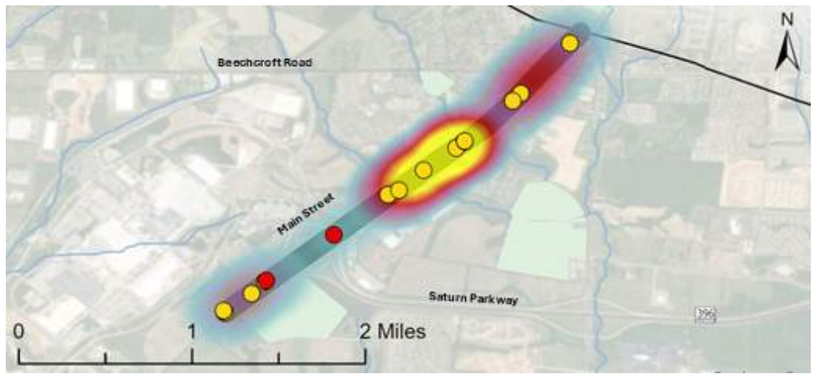
Benefit Summary

- **Backplates with retroreflective borders increase the conspicuity of traffic signal heads, especially under low-light conditions. They also help drivers quickly and easily identify traffic signals in the presence of visual clutter. This enhanced visibility and recognition can lead to a reduction in rear-end and angle crashes at signalized intersections.**
- **Enhanced infrastructure, such as well-maintained sidewalks, crosswalks, and pedestrian signals, reduces the risk of accidents involving pedestrians by providing clear and safe pathways**
- **Pedestrian refuge islands allow pedestrians to cross one direction of traffic at a time, significantly reducing the complexity of crossing and lowering the risk of pedestrian crashes.**
- **Medians can prevent left-turn and head-on crashes by separating opposing traffic flows. They also facilitate better access management by controlling where vehicles can turn, thereby reducing unpredictable movements that can lead to crashes.**



E James Campbell Boulevard (SR-50)
from Trotwood Avenue to Mooresville Pike

Main Street (SR-31)
from Northfield Lane to County Border



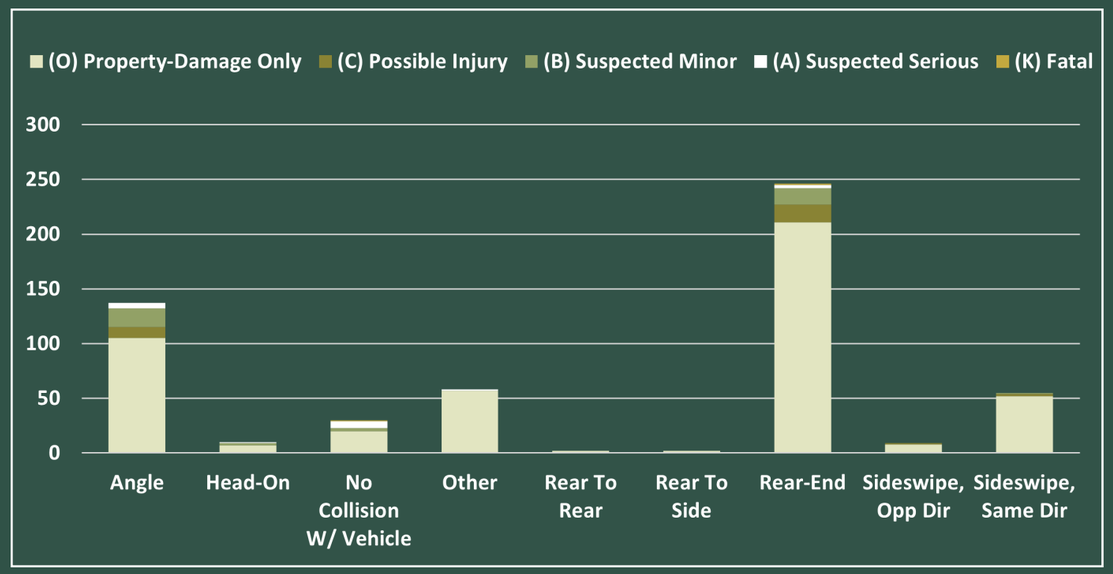
State Route

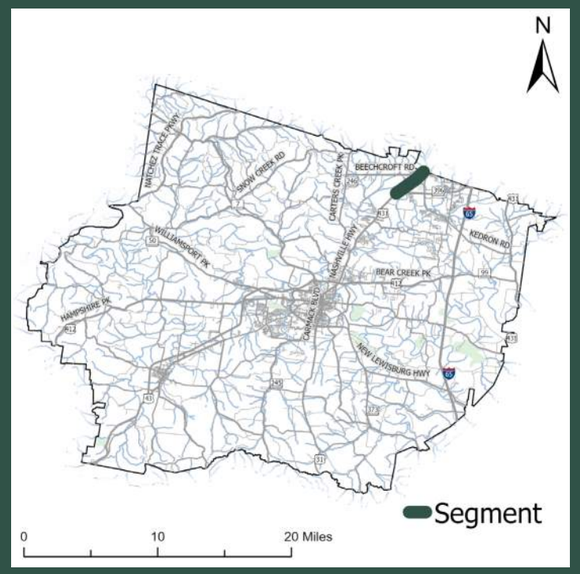
Speed Limit	35 - 55 mph
Lanes	4
Vehicles/Day	24,800
Total Crashes	549
HIN Intersections	1

Characteristics

This section of Main Street is a two-way roadway, divided by a grass median. The segment changes to undivided near the northeast end when entering the Spring Hill area. Main Street follows a relatively straight alignment, with a lightly rolling terrain. Sidewalks are present on both sides within the Spring Hill area, but not present in any portion outside of the city.

Along Main Street, Facing South, Just North of Kedron Parkway





Overall Ranking: 2

Ranking Index

Fatal & Serious Injury Crashes:
low — high

Vulnerable Road User Crashes:
low — high

Crash Rate:
low — high

Replica Risk Index:
low — high

Demographics Consideration:
low — high

Community Input

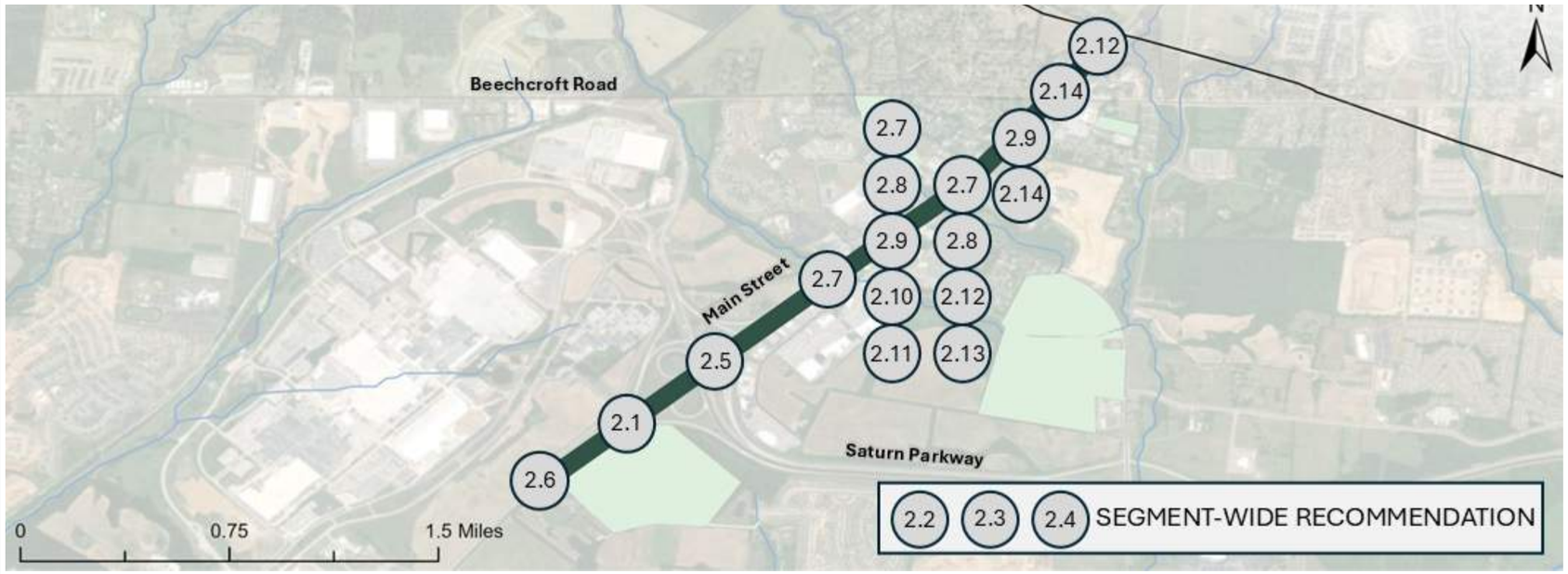
- Improvements are needed for the turn lanes at the Sonic in Spring Hill near Kedron Parkway and Main Street

Main Street (SR-31)
from Northfield Lane to County Border

Main Street (SR-31)
from Northfield Lane to County Border

MAURY COUNTY SAFETY ACTION PLAN

Recommended Countermeasures



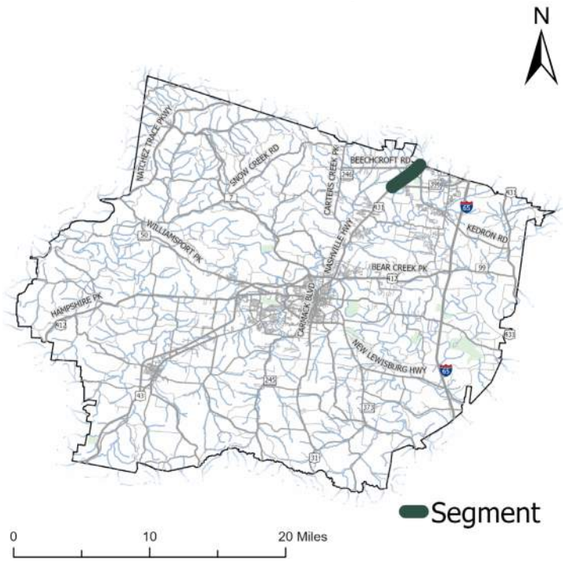
	ID	Countermeasure	Cost	Schedule	Project Readiness
●	2.1	Install Merge/Turn Lane	$$$	Long-Term	● ●
● ● ●	2.2	Widen Shoulder	$$$	Long-Term	● ●
●	2.3	Install Raised Pavement Markers (Both Sides of Road)	$	Short-Term	Ready
● ●	2.4	Install Combination Center/ Edge Line Rumble Strips	$$	Short-Term	Ready
● ● ●	2.5	Evaluate Optimal Speed Limit for All Road Users	$	Short-Term	Ready
● ●	2.6	Convert Full-Access Driveways to Right-In Right-Out (RIRO)	$$	Short-Term	Ready
● ●	2.7	Install Backplates with Retroreflective Borders	$	Short-Term	Ready
●	2.8	Install Flashing Yellow Arrows	$	Short-Term	Ready
● ●	2.9	Evaluate Signal Clearance Intervals	$$	Short-Term	Ready
● ●	2.10	Implement Appropriate Signage to Improve Driver Awareness	$	Short-Term	Ready
● ● ●	2.11	Optimize Signal Phasing & Timing	$$	Short-Term	Ready
● ●	2.12	Upgrade Signage and Pavement Marking	$	Short-Term	Ready
● ● ●	2.13	Install Rectangular Rapid Flashing Beacon (RRFBs)	$	Short-Term	Ready
● ● ●	2.14	Install Pedestrian Crossing Infrastructure	$$$	Long-Term	● ●

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

● FHWA Proven Safety Countermeasure
● Crash Modification Factors Countermeasure
● Vulnerable Road User Related Countermeasure
● Requires ROW Acquisition
● Requires Utility Relocation

Benefit Summary

- **Rumble strips use noise and vibration to alert inattentive or drowsy drivers that they are drifting out of their lane, prompting them to correct their path. Centerline rumble strips are effective in reducing head-on and opposite direction sidewipe collisions, while edgeine rumble strips are effective in redicing single-vehicle run-off-road crashes.**
- **Flashing yellow arrows help reduce the frequency of left-turn crashes, particularly those involving collisions between leftturning vehicles and oncoming traffic. Studies have shown a significant decrease in these types of crashes after implementing FYAs.**
- **RRFBs provide increased driver awareness, enhanced pedestrian visibility, and increased driver compliance, reducing the likelihood of pedestrian/vehicle crashes.**
- **RIRO driveways eliminate left-turn movements, which are often associated with higher crash rates. This reduces the number of conflict points where vehicles can collide, thereby lowering the risk of accidents.**
- **Wider shoulders provide an increased recovery area for errant vehicles and offer a safer space for non-motorized roadway users**

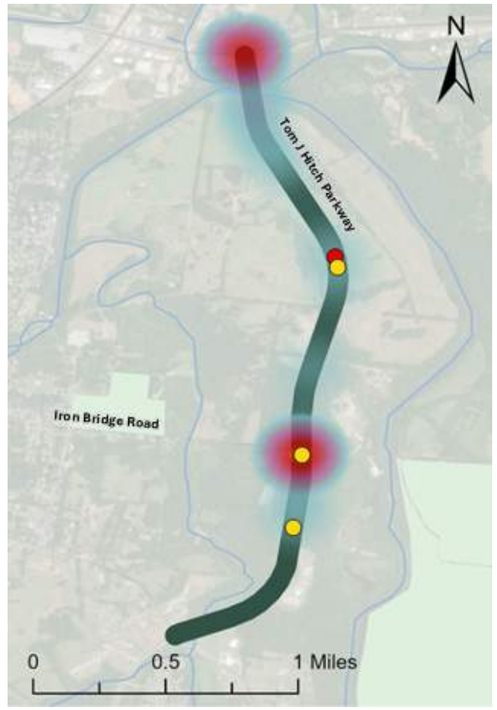


Main Street (SR-31)
from Northfield Lane to County Border

MAURY COUNTY
SAFETY ACTION PLAN

Tom J Hitch Parkway

from Mapleleash Avenue to Bear Creek Pike



VRU (0) Serious Injury (3) Fatal (1)

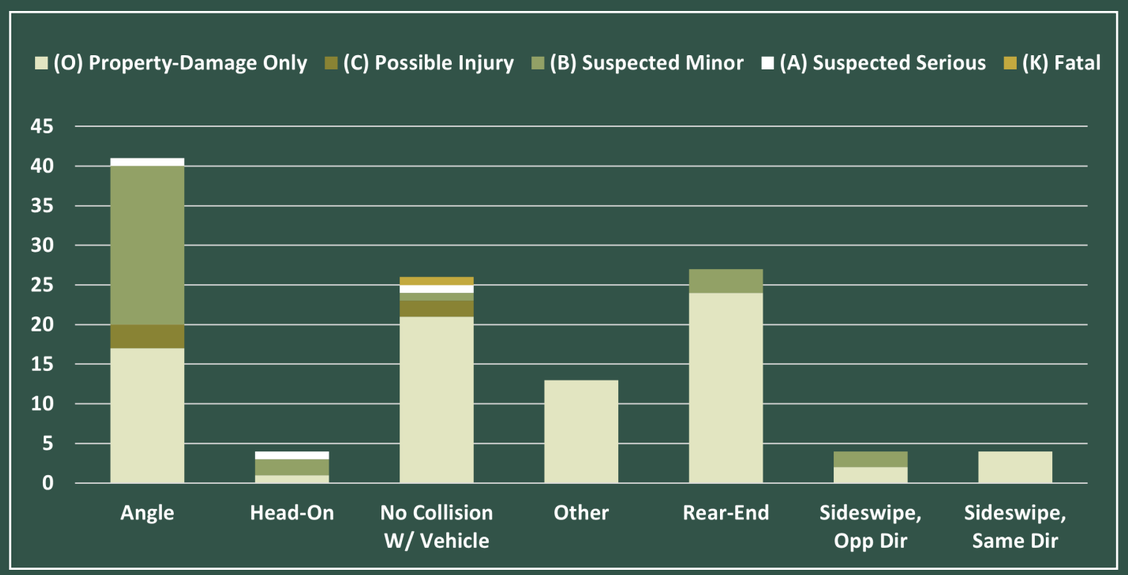
County Route

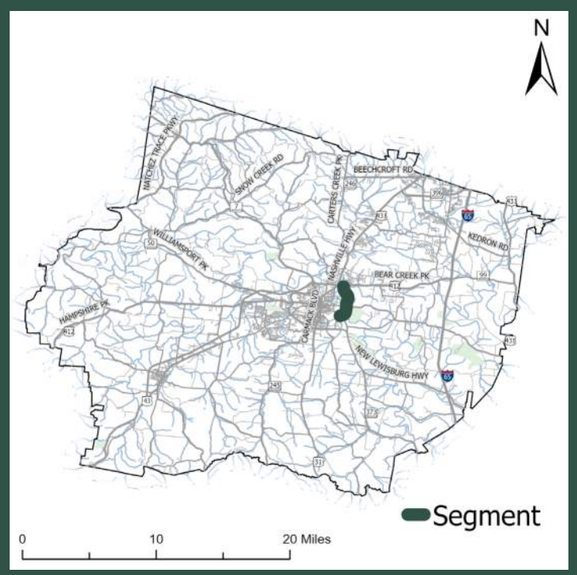
Speed Limit	50 mph
Lanes	2
Vehicles/Day	9,900
Total Crashes	119
HIN Intersections	0

Characteristics

This section of Tom J Hitch Parkway is a two-way roadway, with no separatino between opposing travel lanes. The segment follows a cured alignment, with rolling terrain. Sidewalks are not present along this section of Tom J Hitch Parkway.

Along Tom J Hitch Parkway, Facing North, Just North of Iron Bridge Road





Overall Ranking: 3

Ranking Index

Fatal & Serious Injury Crashes:

low — high

Vulnerable Road User Crashes:

low — high

Crash Rate:

low — high

Replica Risk Index:

low — high

Demographics Consideration:

low — high

Community Input

- A traffic light is needed at the intersection with Mapleleash Avenue. There have been lots of crashes and near crashes here and people drive too fast.
- Safety improvements are needed at the intersection with Iron Bridge Road

Tom J Hitch Parkway
from Mapleleash Avenue to Bear Creek Pike

Tom J Hitch Parkway

from Mapleleash Avenue to Bear Creek Pike

	ID	Countermeasure	Cost	Schedule	Project Readiness
● ●	3.1	Install Combination Centerline / Edge line Rumble Strips	$$	Short-Term	Ready
● ● ●	3.2	Evaluate Optimal Speed Limit for All Road Users	$	Short-Term	Ready
●	3.3	Install Raised Pavement Markers (Both Sides of Road)	$	Short-Term	Ready
● ●	3.4	Upgrade Signage and Pavement Marking	$	Short-Term	Ready
●	3.5	Upgrade Guardrail and Extend Guardrail Lengths at Bridges/Culverts	$$	Short-Term	Ready
● ●	3.6	Install Curve Feedback Warning Signs	$	Short-Term	Ready
● ●	3.7	Implement Appropriate Signage to Improve Driver Awareness	$	Short-Term	Ready

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

● FHWA Proven Safety Countermeasure

● Crash Modification Factors Countermeasure

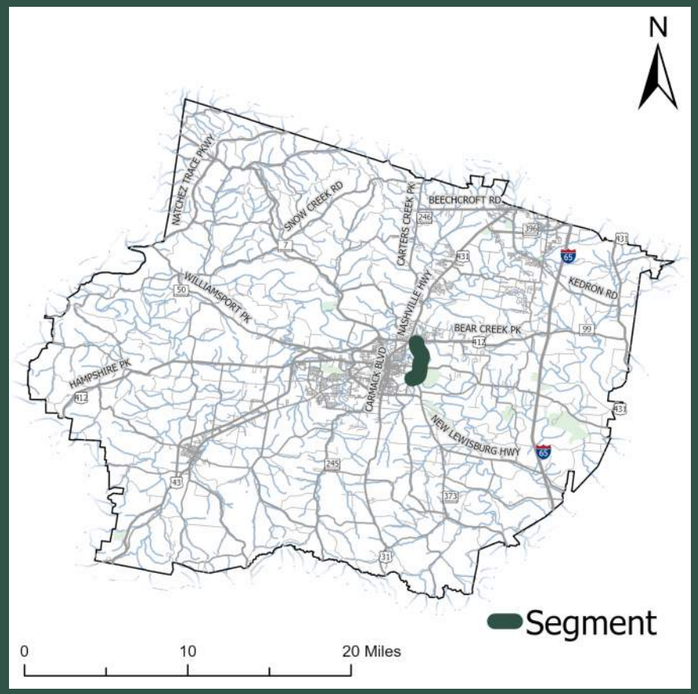
● Vulnerable Road User Related Countermeasure

● Requires ROW Acquisition

● Requires Utility Relocation

Benefit Summary

- Enhanced signage, striping, and rumble strips can collectively reduce the risk of crashes at stop-controlled intersections. These low-cost countermeasures provide a significant safety return on investment, improving safety without the need for expensive infrastructure modifications.
- Rumble strips use noise and vibration to alert inattentive or drowsy drivers that they are drifting out of their lane, prompting them to correct their path. Centerline rumble strips are effective in reducing head-on and opposite direction sidewipe collisions, while edgeine rumble strips are effective in redicing single-vehicle run-off-road crashes.
- Raised pavement markers provide clear, reflective cues that help drivers maintain proper lane discipline, especially in low-light conditions and adverse weather such as fog, rain, or snow.
- Enhanced signage, striping, and rumble strips can collectively reduce the risk of crashes at stop-controlled intersections. These low-cost countermeasures provide a significant safety return on investment, improving safety without the need for expensive infrastructure modifications.



Recommended Countermeasures

Tom J Hitch Parkway

from Mapleleash Avenue to Bear Creek Pike

Polk Road
from Southport Road to Polk Lane (MM 6.42)

MAURY COUNTY
SAFETY ACTION PLAN

VRU (1) Serious Injury (4) Fatal (0)

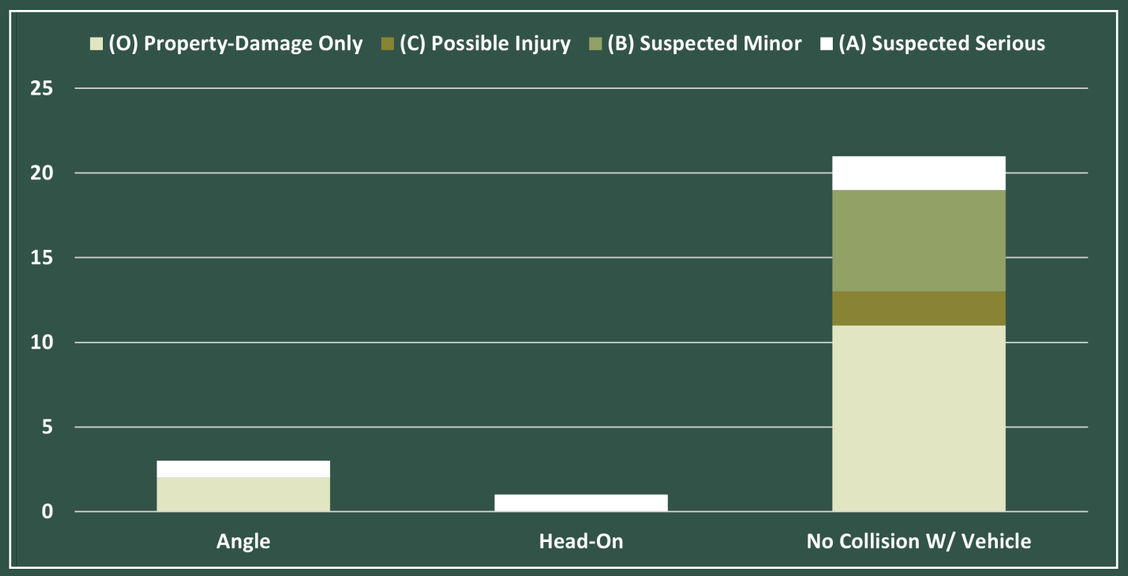
County Route

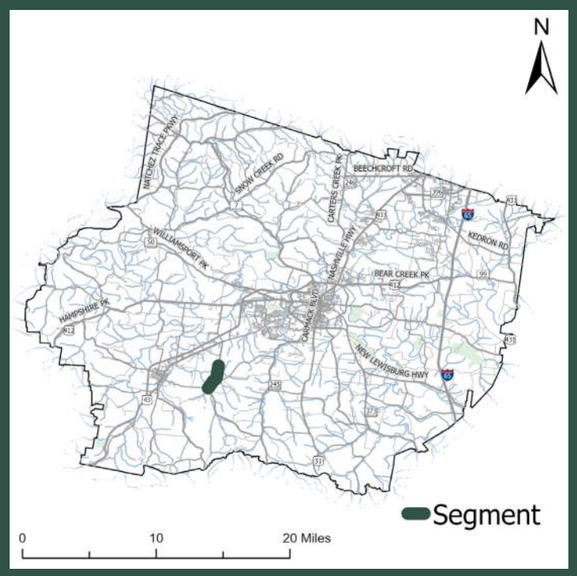
Speed Limit	45 mph
Lanes	2
Vehicles/Day	1,300
Total Crashes	25
HIN Intersections	0

Characteristics

This section of Polk Road is a two-way roadway, with no separation between opposing travel lanes. The segment follows a lightly curved alignment, with a large curve present near the middle, and experiences a medium rolling grade. Sidewalks are not present along this section of Polk Road.

Along Polk Road, Facing North, Just North of Southport Road





Overall Ranking: 4

Ranking Index

Fatal & Serious Injury Crashes:
low — high

Vulnerable Road User Crashes:
low — high

Crash Rate:
low — high

Replica Risk Index:
low — high

Demographics Consideration:
low — high

Community Input

- N/A

Polk Road
from Southport Road to Polk Lane (MM 6.42)

MAURY COUNTY
SAFETY ACTION PLAN

Polk Road

from Southport Road to Polk Lane (MM 6.42)

	ID	Countermeasure	Cost	Schedule	Project Readiness
	4.1	Implement Appropriate Signage to Improve Driver Awareness	$	Short-Term	Ready
	4.2	Upgrade Guardrail and Extend Guardrail Lengths at Bridges/Culverts	$$	Short-Term	Ready
	4.3	Install Combination Centerline / Edge line Rumble Strips	$$	Short-Term	Ready
	4.4	Widen Shoulder	$$	Short-Term	
	4.5	Upgrade Signage and Pavement Marking	$	Short-Term	Ready
	4.6	Install Raised Pavement Markers (Both Sides of Road)	$	Short-Term	Ready

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

FHWA Proven Safety Countermeasure

Crash Modification Factors Countermeasure

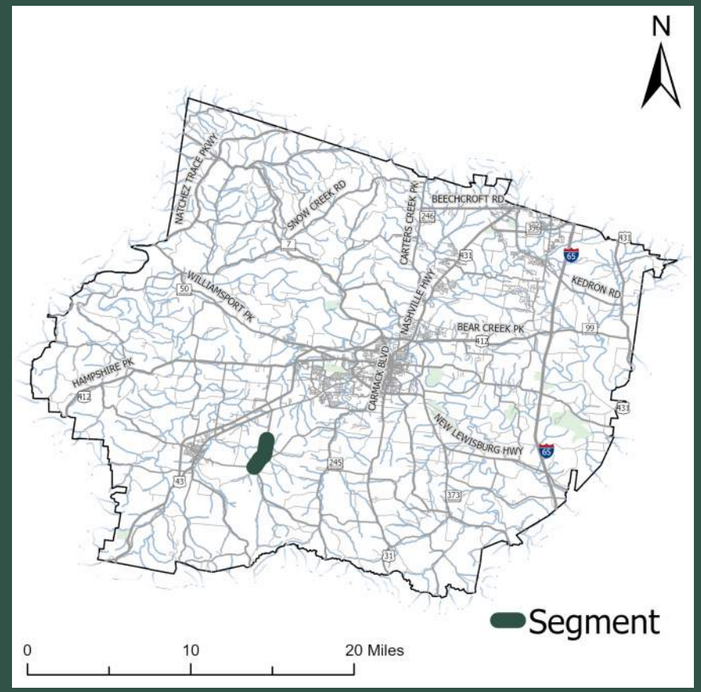
Vulnerable Road User Related Countermeasure

Requires ROW Acquisition

Requires Utility Relocation

Benefit Summary

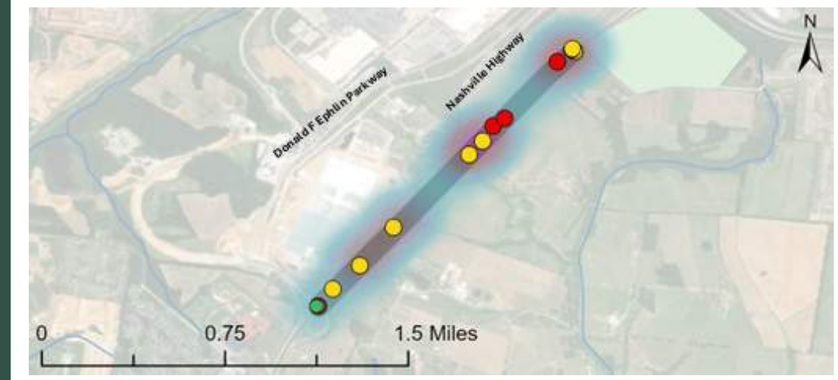
- Guardrails are designed to absorb and dissipate the energy of a crash, reducing the impact force on the vehicle and its occupants. This can significantly lower the risk of serious injuries or fatalities.
- Raised pavement markers provide clear, reflective cues that help drivers maintain proper lane discipline, especially in low-light conditions and adverse weather such as fog, rain, or snow.
- Wider shoulders provide an increased recovery area for errant vehicles and offer a safer space for non-motorized roadway users.
- Enhanced signage, striping, and rumble strips can collectively reduce the risk of crashes at stop-controlled intersections. These low-cost countermeasures provide a significant safety return on investment, improving safety without the need for expensive infrastructure modifications.
- Wider shoulders provide an increased recovery area for errant vehicles and offer a safer space for non-motorized roadway users.



Recommended Countermeasures

Polk Road
from Southport Road to Polk Lane (MM 6.42)

Nashville Highway (SR-31)
from Donald F Ephlin Parkway to Northfield Lane



- VRU (1)
- Serious Injury (7)
- Fatal (4)

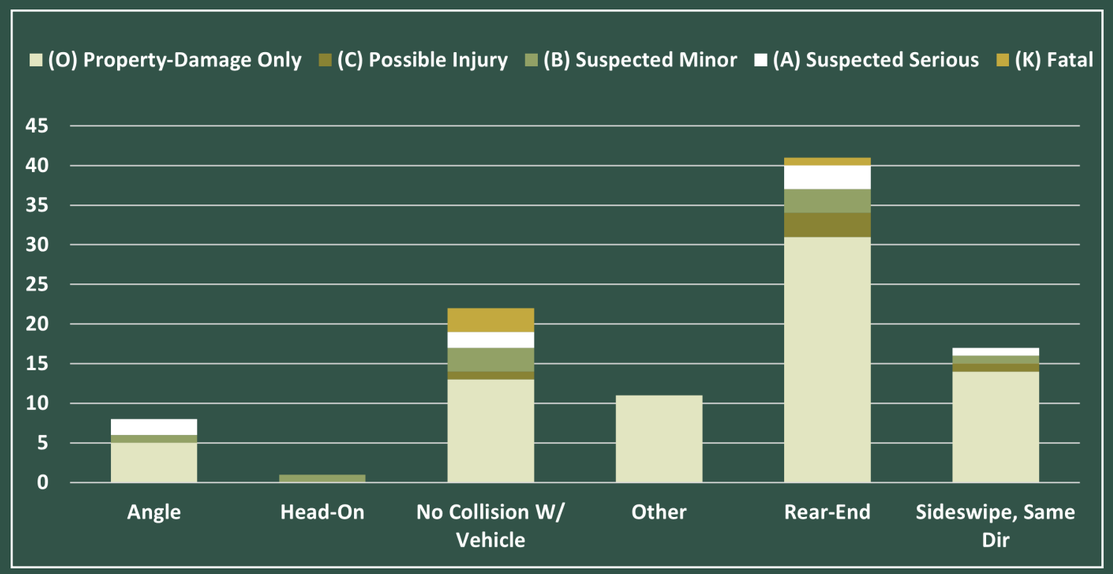
State Route

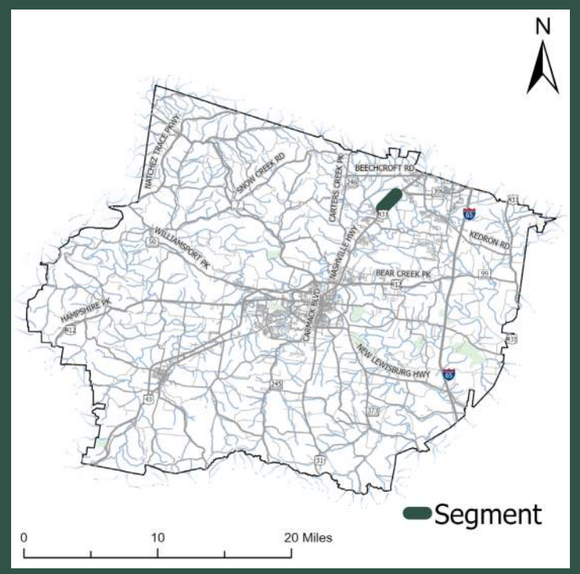
Speed Limit	55 mph
Lanes	4
Vehicles/Day	24,800
Total Crashes	100
HIN Intersections	0

Characteristics

This section of Nashville Higway is a two-way roadway, divided by a grass median with a large number of median openings. The segment follows a straight alignment, with relatively flat terrain. There are no sidewalks present along this section of Nashville Highway.

Along Nashville Highway, Facing South, Just South of Denning Lane





Overall Ranking: 5

Ranking Index

Fatal & Serious Injury Crashes:
low — high

Vulnerable Road User Crashes:
low — high

Crash Rate:
low — high

Replica Risk Index:
low — high

Demographics Consideration:
low — high

Community Input

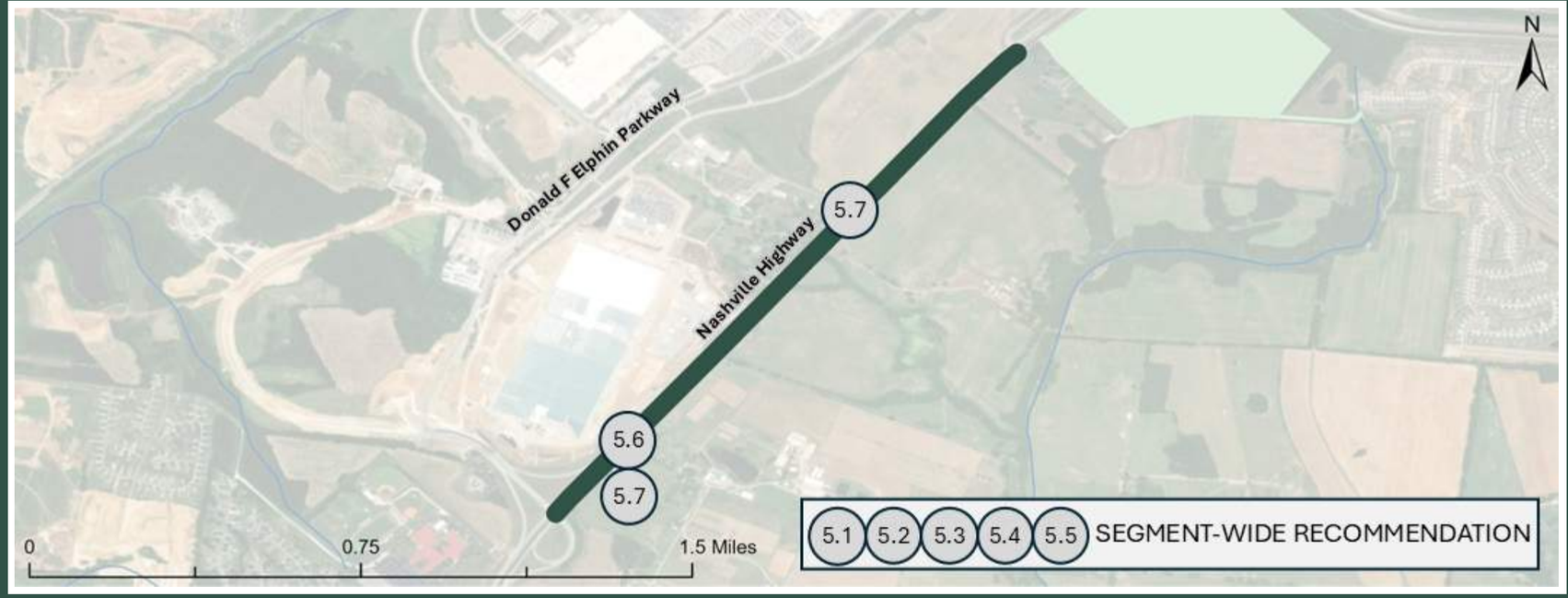
- N/A

Nashville Highway (SR-31)
from Donald F Ephlin Parkway to Northfield Lane

MAURY COUNTY
SAFETY ACTION PLAN

Nashville Highway (SR-31)
from Donald F Ephlin Parkway to Northfield Lane

Recommended Countermeasures



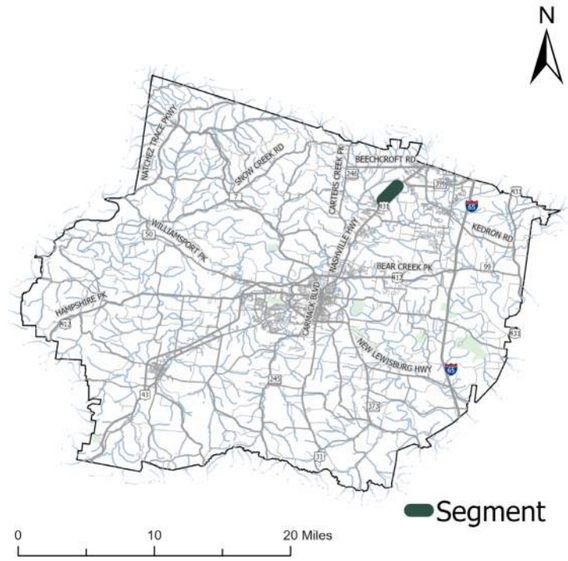
	ID	Countermeasure	Cost	Schedule	Project Readiness
● ●	5.1	Install Combination Centerline / Edge line Rumble Strips	$$	Short-Term	Ready
●	5.2	Install Raised Pavement Markers (Both Sides of Road)	$	Short-Term	Ready
●	5.3	Install Merge/Turn/Taper Lane	$$$	Long-Term	● ●
● ● ○	5.4	Widen Shoulder	$$	Short-Term	● ●
● ●	5.5	Install Variable Speed Limit Signs	$	Short-Term	Ready
● ●	5.6	Implement Appropriate Signage to Improve Driver Awareness	$	Short-Term	Ready
● ●	5.7	Upgrade Signage and Pavement Marking	$	Short-Term	Ready

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

● FHWA Proven Safety Countermeasure
● Crash Modification Factors Countermeasure
○ Vulnerable Road User Related Countermeasure
● Requires ROW Acquisition
● Requires Utility Relocation

Benefit Summary

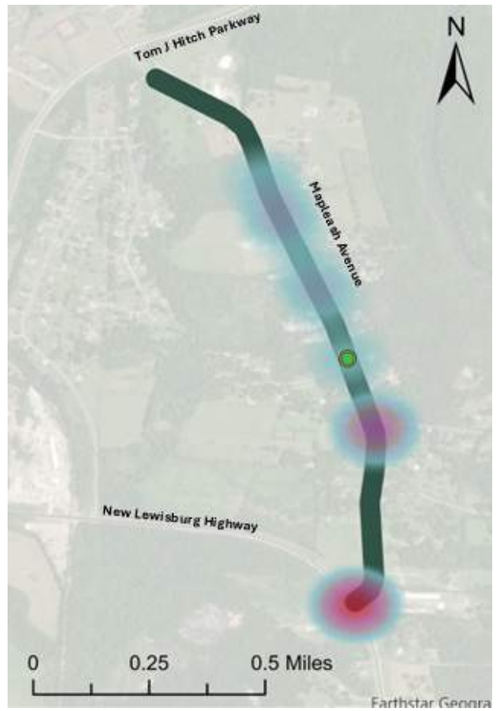
- Wider shoulders provide an increased recovery area for errant vehicles and offer a safer space for non-motorized roadway users.
- Raised pavement markers provide clear, reflective cues that help drivers maintain proper lane discipline, especially in low-light conditions and adverse weather such as fog, rain, or snow.
- High-quality, reflective signage and striping enhance visibility, especially at night or in adverse weather conditions. This helps drivers see and respond to road markings and signs more effectively.
- Rumble strips use noise and vibration to alert inattentive or drowsy drivers that they are drifting out of their lane, prompting them to correct their path. Centerline rumble strips are effective in reducing head-on and opposite direction sidewipe collisions, while edgeine rumble strips are effective in redicing single-vehicle run-off-road crashes.



Nashville Highway (SR-31)
from Donald F Ephlin Parkway to Northfield Lane

MAURY COUNTY
SAFETY ACTION PLAN

Mapleash Avenue
from Lytle Creek to New Lewisburg Pike



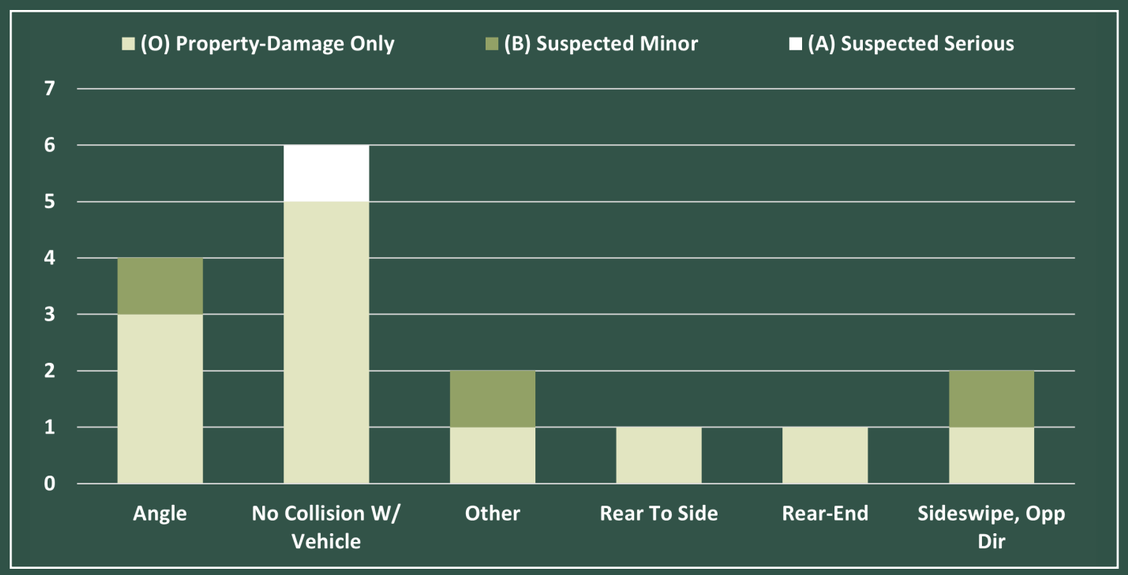
County Route

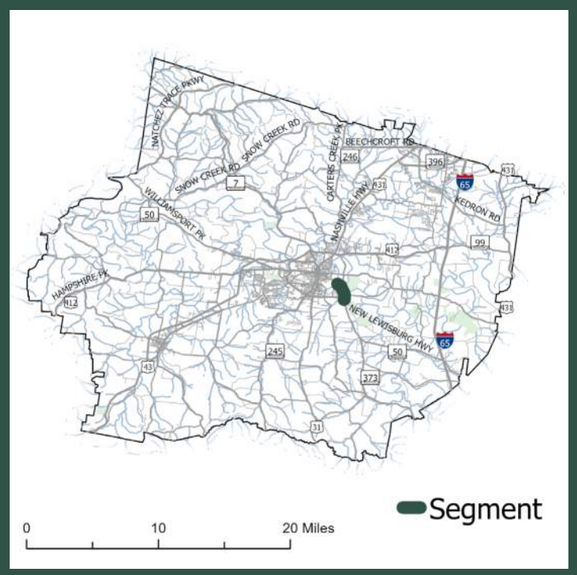
Speed Limit	35 mph
Lanes	2
Vehicles/Day	7,000
Total Crashes	16
HIN Intersections	0

Characteristics

This section of Mapleash Avenue is a two-way roadway, with no positive separation between opposing travel lanes. The segment follows a curved alignment, with rolling terrain. There are no sidewalks present along this section of Mapleash Avenue.

Along Mapleash Avenue, Facing North, Just North of Sowell Mill Pike





Overall Ranking: 6

Ranking Index

Fatal & Serious Injury Crashes:
low — high

Vulnerable Road User Crashes:
low — high

Crash Rate:
low — high

Replica Risk Index:
low — high

Demographics Consideration:
low — high

Community Input

- N/A

Mapleash Avenue
from Lytle Creek to New Lewisburg Pike

Mapleash Avenue
from Lytle Creek to New Lewisburg Pike

MAURY COUNTY
SAFETY ACTION PLAN

	ID	Countermeasure	Cost	Schedule	Project Readiness
● ●	6.1	Install Stop Bars at Minor Street Approaches	$	Short-Term	Ready
● ●	6.2	Install Combination Center / Edge Line Rumble Strips	$	Short-Term	Ready
●	6.3	Install Animal Crossing Advance Warning Signage	$	Short-Term	Ready
● ● ●	6.4	Widen Shoulder	$$$	Long-Term	● ●
● ●	6.5	Install Advanced Curve Feedback Warning Signage	$	Short-Term	Ready
●	6.6	Install Advanced Narrow Bridge Warning Signage	$	Short-Term	Ready
● ●	6.7	Install Transverse Pavement Markings at Minor Street Approaches	$	Short-Term	Ready

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

● FHWA Proven Safety Countermeasure

● Crash Modification Factors Countermeasure

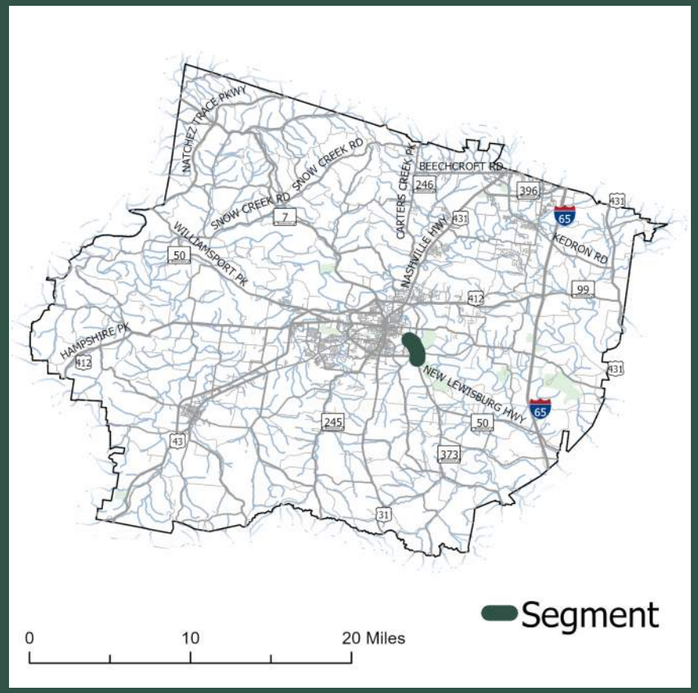
● Vulnerable Road User Related Countermeasure

● Requires ROW Acquisition

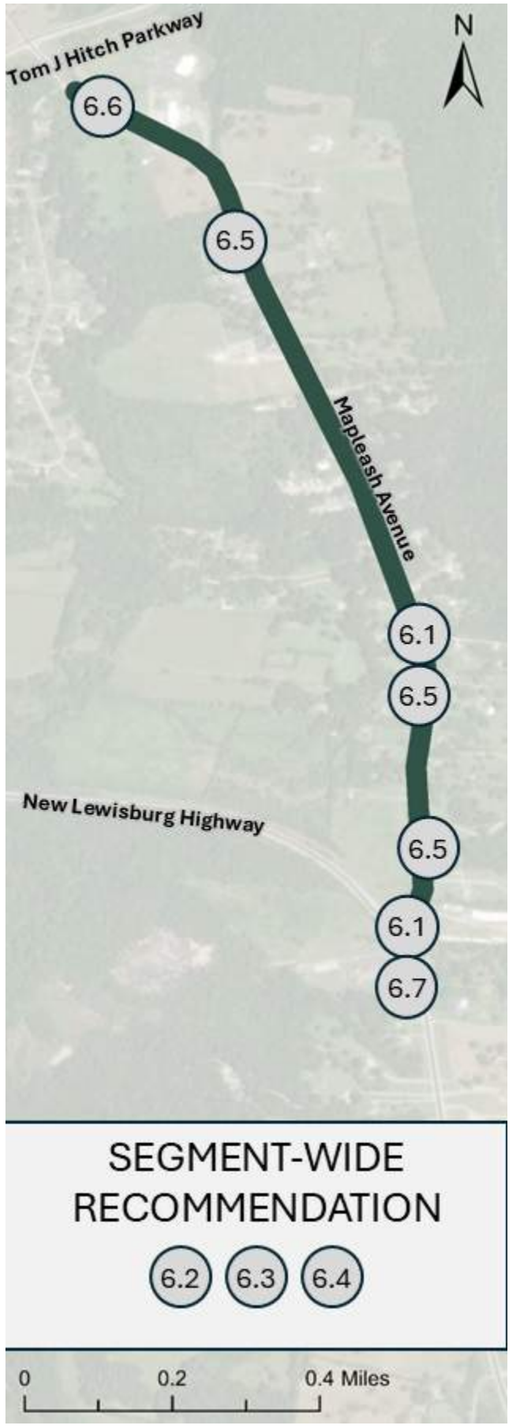
● Requires Utility Relocation

Benefit Summary

- Rumble strips use noise and vibration to alert inattentive or drowsy drivers that they are drifting out of their lane, prompting them to correct their path. Centerline rumble strips are effective in reducing head-on and opposite direction sidewipe collisions, while edgeine rumble strips are effective in redicing single-vehicle run-off-road crashes.
- Transverse pavement markings create a visual cue that encourages drivers to reduce their speed as they approach intersections, pedestrian crossings, or other critical areas.
- Advance narrow bridge warning signage helps maintain lane discipline by reminding drivers to stay in their lane and be cautious of oncoming traffic, especially on bridges that can accommodate two lanes but with limited clearance.
- By clearly indicating the stopping point, stop bars encourage drivers to stop at the correct location, reducing the likelihood of vehicles encroaching into the intersection and potentially causing collisions.
- Wider shoulders provide an increased recovery area for errant vehicles and offer a safer space for non-motorized roadway users.



Recommended Countermeasures

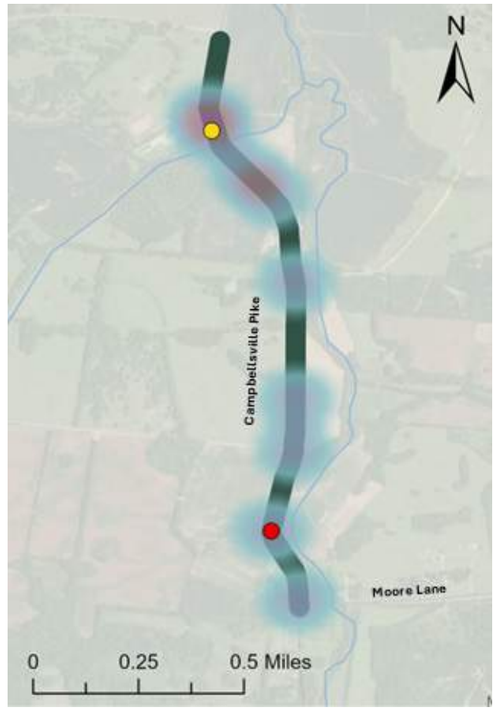


Mapleash Avenue
from Lytle Creek to New Lewisburg Pike

MAURY COUNTY
SAFETY ACTION PLAN

Camplesville Pike (SR-245)

from Moore Lane to Haley Lane



VRU (0) Serious Injury (1) Fatal (1)

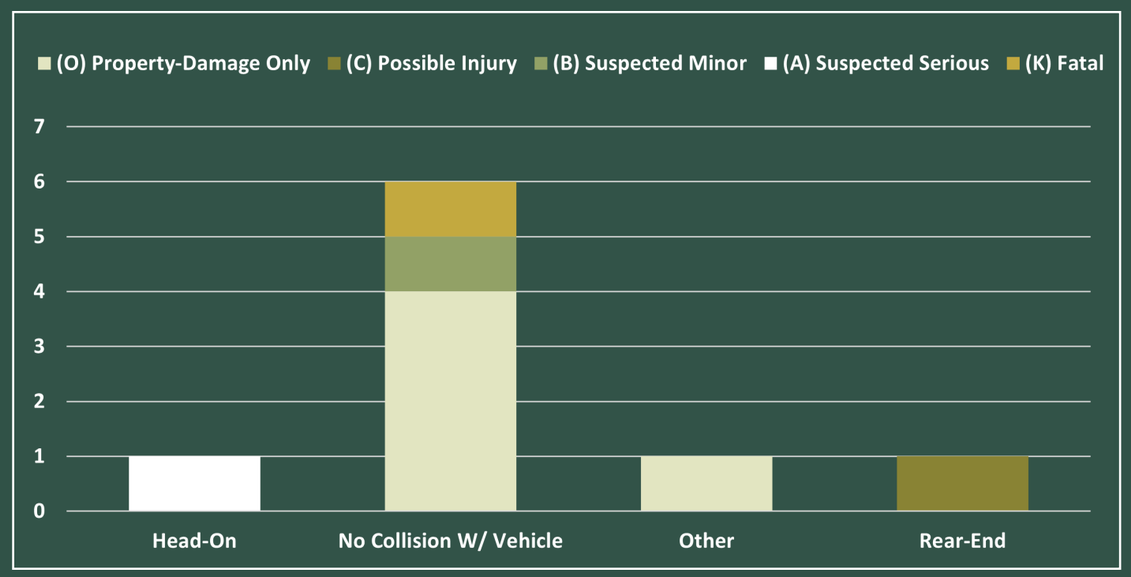
State Route

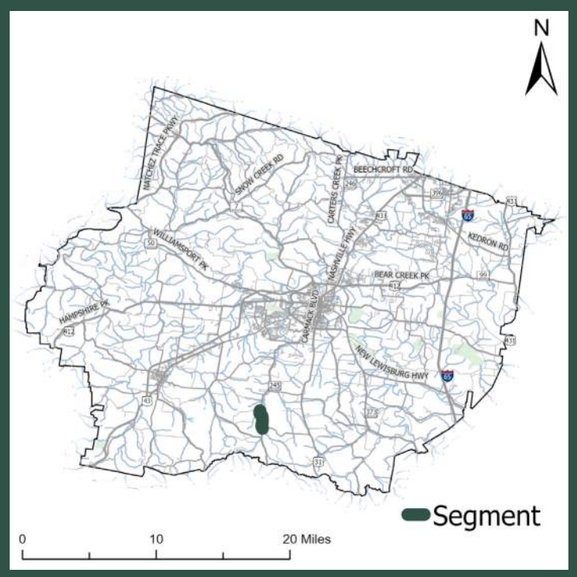
Speed Limit	55 mph
Lanes	2
Vehicles/Day	1,200
Total Crashes	9
HIN Intersections	0

Characteristics

This section of Campbellsville Pike is a two-way roadway, with no separation between opposig travel lanes. The segment follows a curved alignment, with rolling grade. Sidewalks are not present along this section of Campbellsville Pike.

Along Campbellsville Pike, Facing North, Just North of Moore Lane





Overall Ranking: 7

Ranking Index

Fatal & Serious Injury Crashes:

low — high

Vulnerable Road User Crashes:

low — high

Crash Rate:

low — high

Replica Risk Index:

low — high

Demographics Consideration:

low — high

Community Input

- N/A

Camplesville Pike (SR-245)
from Moore Lane to Haley Lane

Camplesville Pike (SR-245)
from Moore Lane to Haley Lane

MAURY COUNTY
SAFETY ACTION PLAN

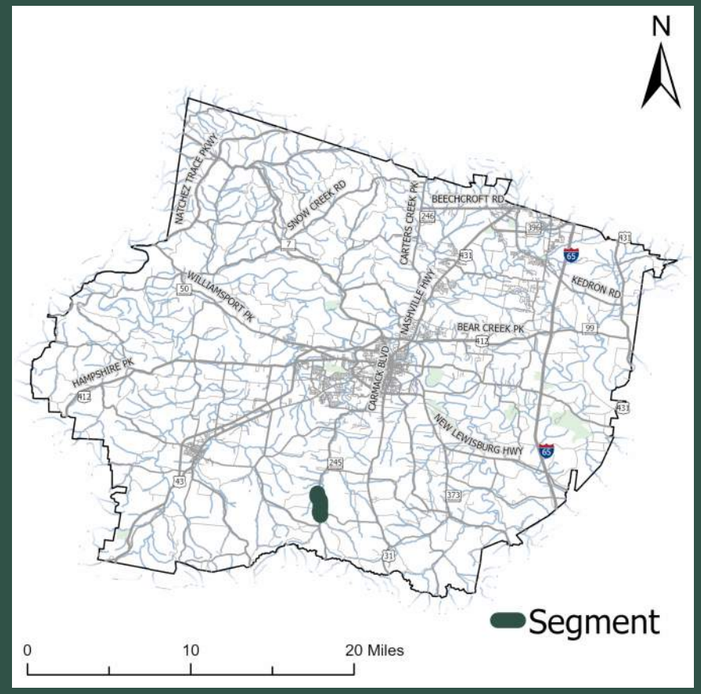
	ID	Countermeasure	Cost	Schedule	Project Readiness
●	7.1	Upgrade Guardrail and Extend Guardrail Lengths at Bridges/Culverts	$$	Short-Term	Ready
●	7.2	Remove Vegetation to Increase Driver Visibility & Sight Distance	$	Short-Term	Ready
● ●	7.3	Upgrade Signage and Pavement Marking	$	Short-Term	Ready
● ●	7.4	Implement Appropriate Signage to Improve Driver Awareness	$	Short-Term	Ready
● ●	7.5	Install Combination Centerline / Edge line Rumble Strips	$$	Short-Term	Ready
●	7.6	Install Raised Pavement Markers (Both Sides of Road)	$	Short-Term	Ready

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

● FHWA Proven Safety Countermeasure
● Crash Modification Factors Countermeasure
● Vulnerable Road User Related Countermeasure
● Requires ROW Acquisition
● Requires Utility Relocation

Benefit Summary

- Raised pavement markers provide clear, reflective cues that help drivers maintain proper lane discipline, especially in low-light conditions and adverse weather such as fog, rain, or snow
- Rumble strips use noise and vibration to alert inattentive or drowsy drivers that they are drifting out of their lane, prompting them to correct their path. Centerline rumble strips are effective in reducing head-on and opposite direction sidewipe collisions, while edgeine rumble strips are effective in redicing single-vehicle run-off-road crashes.
- Guardrails are designed to absorb and dissipate the energy of a crash, reducing the impact force on the vehicle and its occupants. This can significantly lower the risk of serious injuries or fatalities.
- Enhanced signage, striping, and rumble strips can collectively reduce the risk of crashes at stop-controlled intersections. These low-cost countermeasures provide a significant safety return on investment, improving safety without the need for expensive infrastructure modifications.



Recommended Countermeasures

Camplesville Pike (SR-245)
from Moore Lane to Haley Lane

MAURY COUNTY
SAFETY ACTION PLAN

Theta Pike
from Darks Mill Road to Witherspoon Road

VRU (0) Serious Injury (0) Fatal (1)

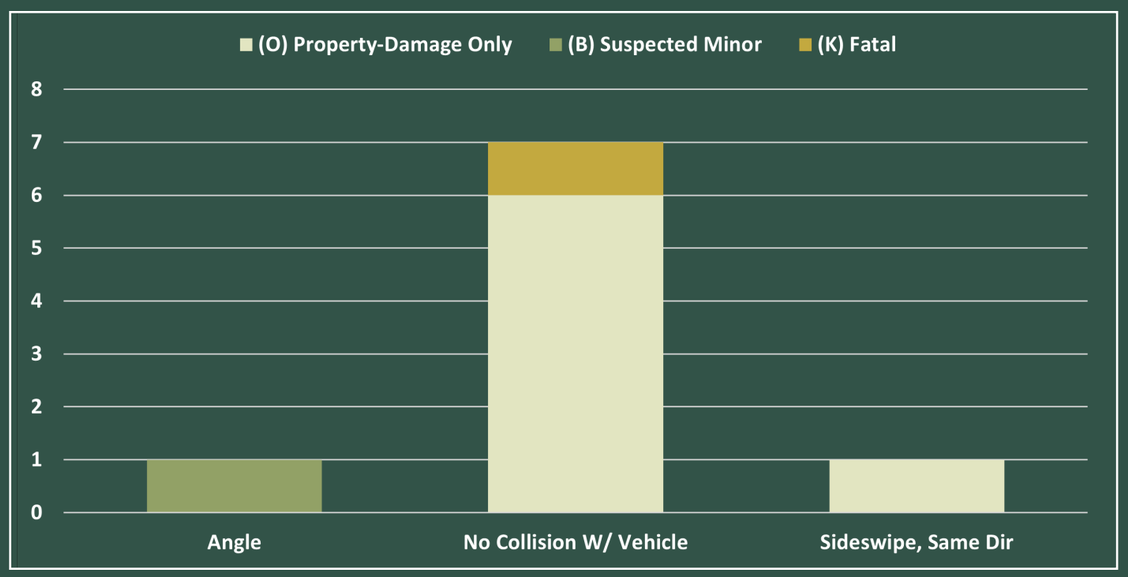
County Route

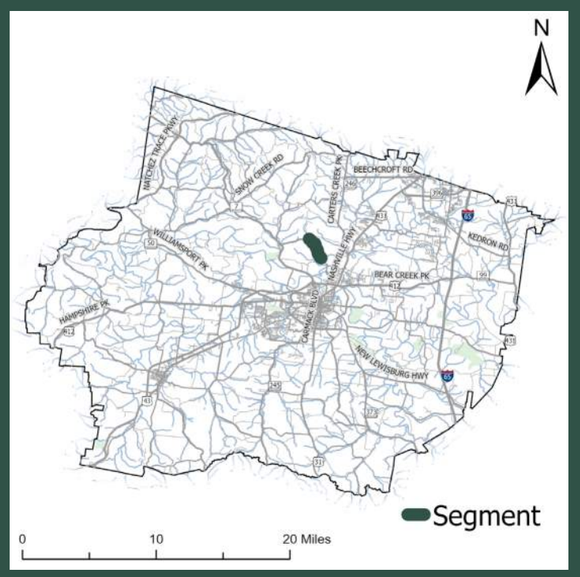
Speed Limit	35 mph
Lanes	2
Vehicles/Day	500
Total Crashes	9
HIN Intersections	0

Characteristics

This section of Theta Pike is a two-way roadway, with no separation between opposing travel lanes. The segment follows a curved alignment, with rolling terrain. Siewalks are not present along this corridor.

Along Theta Pike, Facing South, Just South of Darks Mill Road





Overall Ranking: 8

Ranking Index

Fatal & Serious Injury Crashes:
low — high

Vulnerable Road User Crashes:
low — high

Crash Rate:
low — high

Replica Risk Index:
low — high

Demographics Consideration:
low — high

Community Input

- N/A

Theta Pike
from Darks Mill Road to Witherspoon Road

MAURY COUNTY
SAFETY ACTION PLAN

Theta Pike
from Darks Mill Road to Witherspoon Road

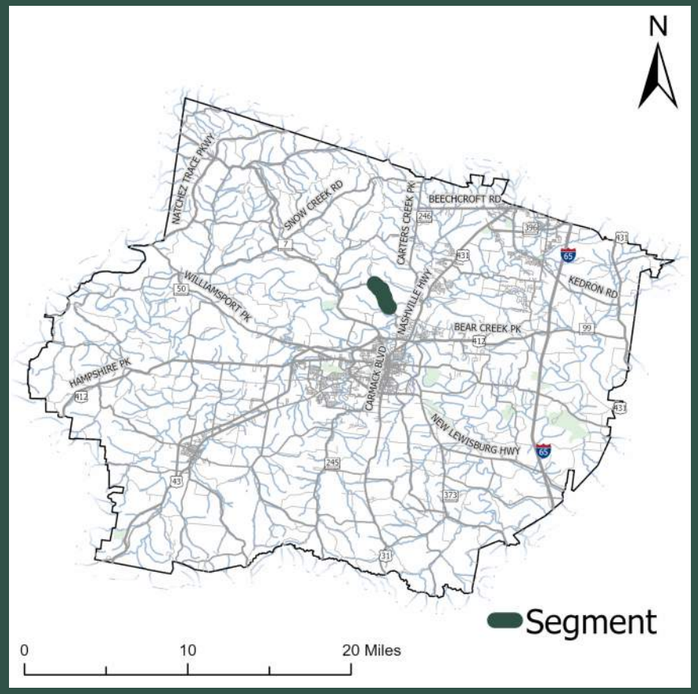
	ID	Countermeasure	Cost	Schedule	Project Readiness
● ●	8.1	Install Combination Centerline / Edge line Rumble Strips	$$	Short-Term	Ready
●	8.2	Upgrade Guardrail and Extend Guardrail Lengths at Bridges/Culverts	$$	Short-Term	Ready
●	8.3	Install Raised Pavement Markers (Both Sides of Road)	$	Short-Term	Ready
● ●	8.4	Upgrade Signage and Pavement Marking	$	Short-Term	Ready
●	8.5	Install Guardrail at Steep Slope Locations	$$	Short-Term	Ready
●	8.6	Clear & Grub Vegetation to Optimize Driver Sight Distance	$	Short-Term	Ready

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

● FHWA Proven Safety Countermeasure
● Crash Modification Factors Countermeasure
● Vulnerable Road User Related Countermeasure
● Requires ROW Acquisition
● Requires Utility Relocation

Benefit Summary

- Raised pavement markers provide clear, reflective cues that help drivers maintain proper lane discipline, especially in low-light conditions and adverse weather such as fog, rain, or snow.
- Clearing vegetation ensures that drivers have a clear view of the road ahead, traffic control devices, and approaching vehicles. This is crucial for making safe driving decisions, especially at intersections and curves. Clear sight triangles help prevent accidents caused by limited visibility. Drivers are better able to judge gaps in traffic and make safer turns or merges.
- Guardrails are designed to absorb and dissipate the energy of a crash, reducing the impact force on the vehicle and its occupants. This can significantly lower the risk of serious injuries or fatalities.
- Enhanced signage, striping, and rumble strips can collectively reduce the risk of crashes at stop-controlled intersections. These low-cost countermeasures provide a significant safety return on investment, improving safety without the need for expensive infrastructure modifications.



Recommended Countermeasures

Theta Pike
from Darks Mill Road to Witherspoon Road

MAURY COUNTY
SAFETY ACTION PLAN

Iron Bridge Road
from Tom J Hitch Parkway to Mount Olivet Road

- VRU (0)
- Serious Injury (1)
- Fatal (0)

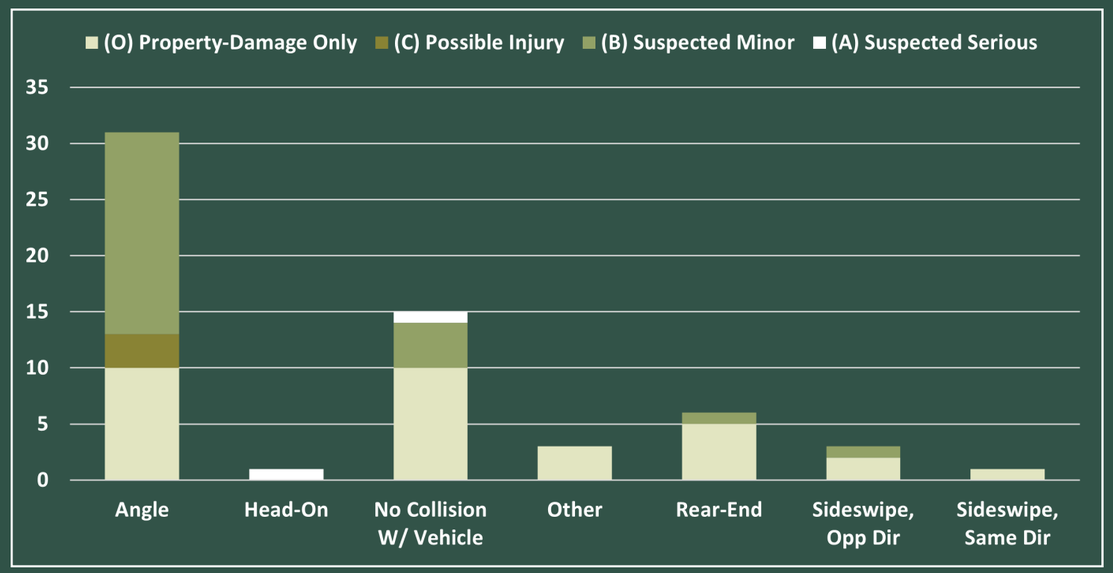
County Route

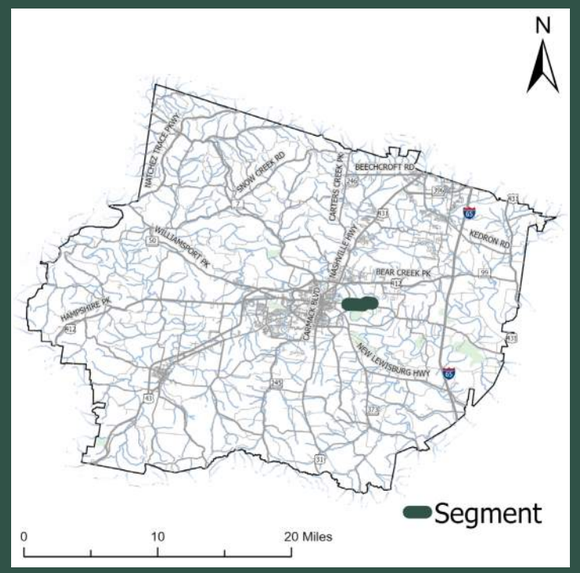
Speed Limit	45 mph
Lanes	2
Vehicles/Day	3,700
Total Crashes	60
HIN Intersections	0

Characteristics

This section of Iron Bridge Road is a two-way roadway, with no separation between opposing travel lanes. The segment follows a curved alignment, with a medium rolling grade. Sidewalks are not present along this section of Iron Bridge Road.

Along Iron Bridge Road, Facing East, Just East of Tom J Hitch Parkway





Overall Ranking: 9

Ranking Index

Fatal & Serious Injury Crashes:
low — high

Vulnerable Road User Crashes:
low — high

Crash Rate:
low — high

Replica Risk Index:
low — high

Demographics Consideration:
low — high

Community Input

- The intersection of Iron Bridge Road at Tom Hitch Parkway is a large safety concern

Iron Bridge Road
from Tom J Hitch Parkway to Mount Olivet Road

Iron Bridge Road

from Tom J Hitch Parkway to Mount Olivet Road

MAURY COUNTY
SAFETY ACTION PLAN

Recommended Countermeasures

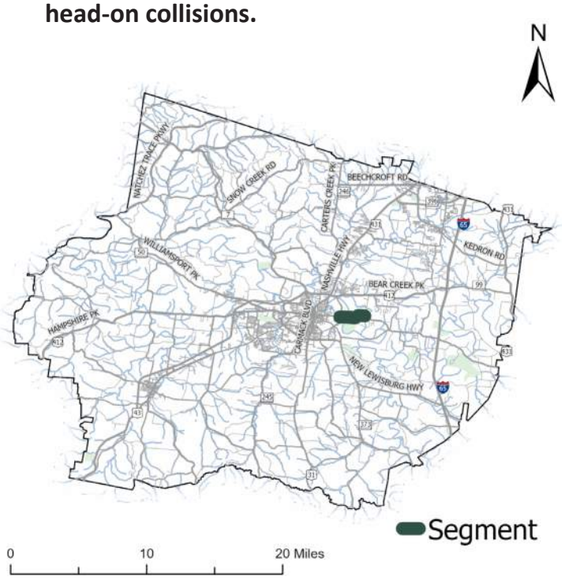
	ID	Countermeasure	Cost	Schedule	Project Readiness
● ●	9.1	Install Combination Center / Edge Line & Rumble Strips	$$	Short-Term	Ready
● ●	9.2	Implement Appropriate Signage to Improve Driver Awareness	$	Short-Term	Ready
●	9.3	Install Raised Pavement Markers (Both Sides of Road)	$	Short-Term	Ready
● ●	9.4	Upgrade Signage and Pavement Marking	$	Short-Term	Ready
●	9.5	Install Flashing Yellow Arrows (FYAs)	$	Short-Term	Ready
● ● ○	9.6	Optimize Signal Phasing & Timings	$$	Short-Term	Ready
● ● ○	9.7	Improve Lighting	$$	Short-Term	●
● ●	9.8	Provide Turn Lanes at Loftin Road	$$$	Long-Term	● ●
● ●	9.9	Install Guardrail	$$	Short-Term	Ready

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

● FHWA Proven Safety Countermeasure
● Crash Modification Factors Countermeasure
○ Vulnerable Road User Related Countermeasure
● Requires ROW Acquisition
● Requires Utility Relocation

Benefit Summary

- High-quality, reflective signage and striping enhance visibility, especially at night or in adverse weather conditions.
- RPMs provide continuous lane guidance, which is particularly useful in navigating curves and complex intersections. The reflective properties of RPMs make them highly visible at night, reducing the risk of accidents by guiding drivers safely along the road.
- Flashing yellow arrows help reduce the frequency of left-turn crashes, particularly those involving collisions between left-turning vehicles and oncoming traffic.
- Effective signal timing creates a steady and predictable flow of traffic, minimizing abrupt stops and starts that can lead to rear-end collisions or lane-change accidents.
- Improved lighting helps drivers see the road and its surroundings more clearly, reducing the likelihood of accidents caused by poor visibility.
- Grooved edge/centerlines provide tactile and auditory feedback to drivers when their vehicle strays from the lane, helping to reduce the risk for roadway departure crashes and head-on collisions.



Iron Bridge Road
from Tom J Hitch Parkway to Mount Olivet Road

MAURY COUNTY
SAFETY ACTION PLAN

Bear Creek Pike
from Nashville Highway to Baker Road

- VRU (0)
- Serious Injury (6)
- Fatal (2)

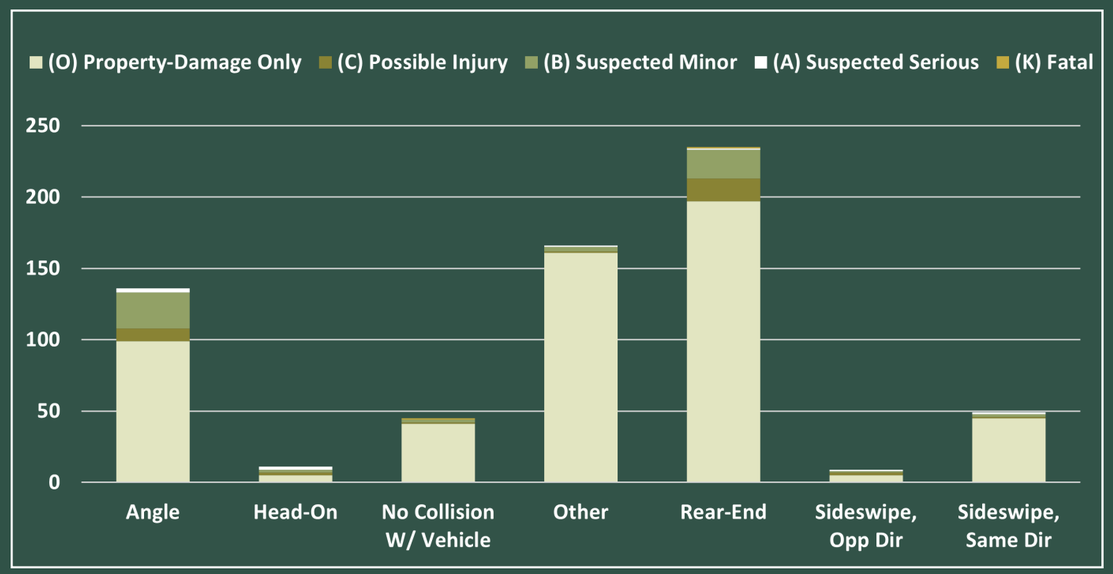
State Route

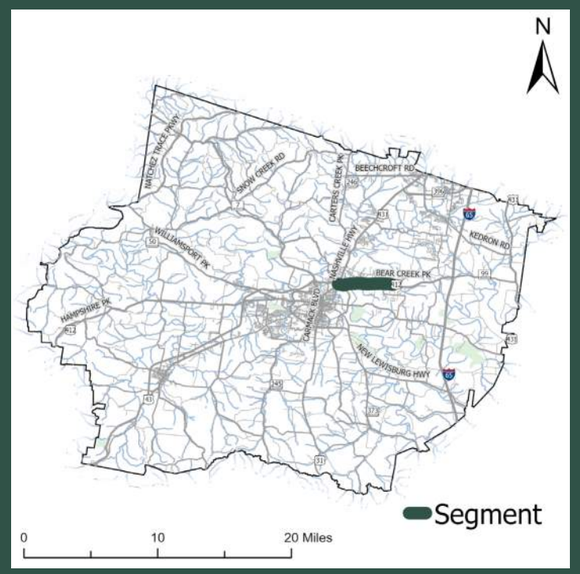
Speed Limit	55 mph
Lanes	2
Vehicles/Day	18,000
Total Crashes	651
HIN Intersections	0

Characteristics

This section of Bear Creek Pike is a two-way roadway, divided by a two-way left-turn lane (TWLTL) on the western end and undivided on the eastern end. The segment follows a lightly curved alignment, with medium rolling terrain. Sidewalks are not present along this corridor.

Along Bear Creek Pike, Facing East, Just East of Patterson Drive





Overall Ranking: 10

Ranking Index

Fatal & Serious Injury Crashes:
low — high

Vulnerable Road User Crashes:
low — high

Crash Rate:
low — high

Replica Risk Index:
low — high

Demographics Consideration:
low — high

Community Input

- At the intersection with Nashville Highway, traffic is increasing and dangerously fast, and people run red lights with no recourse
- Multiple concerns expressed about the intersection with Baker Road

Bear Creek Pike
from Nashville Highway to Baker Road

MAURY COUNTY
SAFETY ACTION PLAN

Bear Creek Pike
from Nashville Highway to Baker Road

Recommended Countermeasures

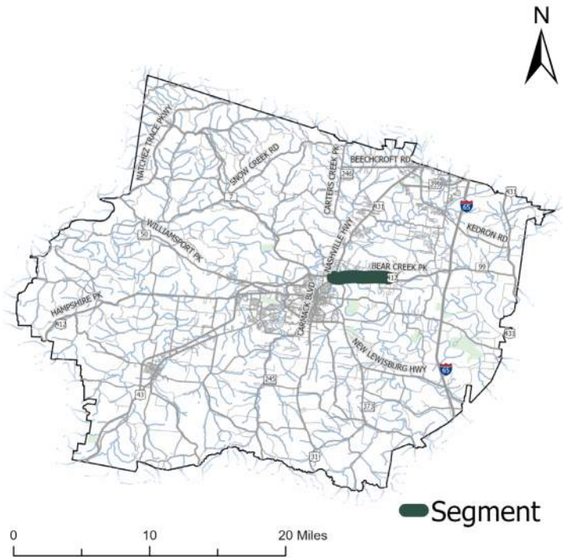
	ID	Countermeasure	Cost	Schedule	Project Readiness
● ● ○	10.1	Install Pedestrian Crossing Infrastructure	$$	Short-Term	● ●
●	10.2	Install Raised Pavement Markers (Both Sides of Road)	$	Short-Term	Ready
● ● ○	10.3	Evaluate Signal Clearance Intervals	$$	Short-Term	Ready
● ●	10.4	Install Backplates w/ Retroreflective Borders	$	Short-Term	Ready
●	10.5	Install Flashing Yellow Arrows	$	Short-Term	Ready
● ●	10.6	Install Combination Center / Edge Line & Rumble Strips	$$	Short-Term	Ready
● ●	10.7	Upgrade Signage and Pavement Marking	$	Short-Term	Ready

$ - 0 to 50,000; $$ - 50,001 to 100,000; $$$ - 100,001 to 500,000; $$$$ - Over 500,000

● FHWA Proven Safety Countermeasure
● Crash Modification Factors Countermeasure
○ Vulnerable Road User Related Countermeasure
● Requires ROW Acquisition
● Requires Utility Relocation

Benefit Summary

- Rumble strips use noise and vibration to alert inattentive or drowsy drivers that they are drifting out of their lane, prompting them to correct their path. Centerline rumble strips are effective in reducing head-on and opposite direction sidewipe collisions, while edgeine rumble strips are effective in redicing single-vehicle run-off-road crashes.
- Backplates with retroreflective borders increase the conspicuity of traffic signal heads, especially under low-light conditions. They also help drivers quickly and easily identify traffic signals in the presence of visual clutter. This enhanced visibility and recognition can lead to a reduction in rear-end and angle crashes at signalized intersections.
- RPMs provide continuous lane guidance, which is particularly useful in navigating curves and complex intersections. The reflective properties of RPMs make them highly visible at night, reducing the risk of accidents by guiding drivers safely along the road.



Bear Creek Pike
from Nashville Highway to Baker Road

MAURY COUNTY
SAFETY ACTION PLAN