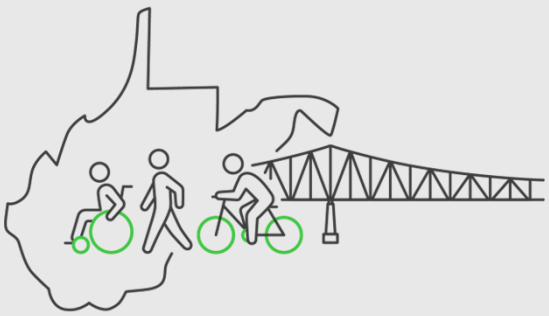
City of New Martinsville

Comprehensive Safety Action Plan



GETTING EVERYONE BACK HOME

NEW MARTINSVILLE, WV

THE CITY OF NEW MARTINSVILLE, W.Va. 1838

BURGESS & NIPLE
Engineers ■ Architects ■ Planners

February 2025

CITY OF NEW MARTINSVILLE, WEST VIRGINIA

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEW MARTINSVILLE, WEST VRIGINIA ADOPTING THE COMPREHENSIVE SAFETY ACTION PLAN (CSAP)

WHEREAS, in 2024 the City of New Martinsville, with input from the community and public and private stakeholders, developed a Comprehensive Safety Action Plan following the format specified by the Safe Streets and Roads for All (SS4A) grant Notice of Funding Opportunity, known as the Comprehensive Safety Action Plan for the City of New Martinsville, which identifies strategies to be implemented with the goal to eliminate severe injury and fatal crashes in the City of New Martinsville by 2045;

WHEREAS, based on collection of safety data and input from the community, the Comprehensive Safety Action Plan for the City of New Martinsville focuses on the following emphasis areas: speeding and aggressive driving, intersections, pedestrians and distracted driving;

NOW, THEREFORE, BE IT RESOLVED that the Mayor and the City Council of New Martinsville, West Virginia hereby adopts the Comprehensive Safety Action Plan for the City of New Martinsville to reduce and ultimately eliminate roadway fatalities and serious injuries.

Adopted by the New Martinsville City Council on the 3rd day of February 2025.

Keith Nelsen, Mayor

Kim Whiteman, City Recorder

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Introduction

The streets and sidewalks in the City of New Martinsville, especially along WV-2, are an essential resource – they enable people to travel freely to their destinations and back home. A priority for the City is to make sure residents and visitors can use this network without the risk of a severe crash.

The City of New Martinsville, in coordination with stakeholders, developed a Comprehensive Safety Action Plan (CSAP) for the City. This document establishes strategies with the purpose of reducing and eliminating fatal and serious injury crashes. Between the years 2017 and 2021, six people had their lives forever altered due to serious injuries as a result of a traffic crash and one person tragically lost their life.

This CSAP identifies and evaluates the critical issues causing crashes and lays out recommended countermeasures to mitigate them. These countermeasures were created with safety as the top priority. In addition, potential projects and grants have been identified to help further the action plan and help the City of New Martinsville achieve its vision and goals.

Comprehensive Safety Action Plan Components

The following sections are outlined in the plan to lay the foundation for safety discussions and decisions in the City and to provide a roadmap for advancing the safety priorities throughout New Martinsville.

Safe System Approach

The Safe System Approach (SSA) is a methodology adopted by the US Department of Transportation (USDOT) intended to build redundancies and protections to prevent crashes and minimize harm when crashes occur. The SSA is a tool that consists of five complementary elements - Safer People, Safer Roads, Safer Vehicles, Safer Speeds, and Post-Crash Care. All five of these elements were considered during the making of this plan and three of these objectives were used as focal points for New Martinsville's CSAP.

Vision and Goals

The vision and goals were created in collaboration with community and regional stakeholders.

Vision Statement: "Getting Everyone Back Home! Striving for zero deaths and serious injuries by 2045."
Goal: Reduce fatalities and serious injuries by 5% annually.

Current Safety Program

Previous safety programs, plans, and studies potentially affecting New Martinsville area were researched. These plans were limited to the Statewide Strategic Highway Safety Plan and Vulnerable Road User Assessment. Key takeaways from each plan and how each applies to the City of New Martinsville are documented herein.

Existing Conditions

In order to provide adequate safety recommendations, existing data must be gathered and analyzed. Crash data was evaluated and turned into maps, charts, and graphs to depict critical areas in the City and why the chosen recommendations were made in this plan.

Equity Analysis

Equity factors evaluated included disabled status, people aged 65 and over, and no vehicle access to ascertain if there was a relationship between crashes and disadvantaged communities and to determine where investments will help vulnerable populations.

Public and Stakeholder Engagement

This plan gathered input from stakeholders and the public in order determine the biggest safety needs and concerns in New Martinsville. A public survey was distributed, collecting nearly 90 responses. A stakeholder group was formed to guide the planning process.

Emphasis Areas

Emphasis areas help direct resources and guide safety improvements where they are needed the most and have the greatest potential impact. Through data analysis and stakeholder engagement, four emphasis areas were selected: Speeding and Aggressive Driving, Intersections, Pedestrians, and Distracted Driving.

Action Plan

Countermeasures were developed based on the contributing factors, emphasis areas, and applicability to New Martinsville.

Project Identification

To support the action plan, specific projects and associated funding opportunities were identified for the region. The specific projects and associated funding opportunities are identified in **Appendix A**.

Next Steps

Next steps were identified for stakeholders and partners to continually advance traffic safety in New Martinsville.

Safe System Approach

The USDOT's SSA is a comprehensive and proactive framework to eliminate fatalities and serious injuries on roadways. The SSA is based on the fundamental concept that fatal and serious injury traffic crash outcomes are preventable. Instead of blaming road users for crashes, this approach recognizes that the responsibility for road safety lies with multiple stakeholders including road users, road designers, vehicle manufacturers, law enforcement, and policymakers. By designing a forgiving road system that accommodates human error, the SSA aims to prevent fatal crashes and minimize the severity of injuries.

To help achieve the goal of zero deaths and serious injuries, additional resources are being allocated to safety improvements. Traditional funding programs, like the Highway Safety Improvement Program, are seeing financial boosts and new sources, like the Safe Streets and Roads for All (SS4A) discretionary grants, are now available.

To support their goal of zero deaths and serious injuries and to capitalize on these resources, the New Martinsville CSAP was developed using the SSA. The SSA was used as a tool to frame stakeholder conversations and data analysis to identify solutions that more intentionally address safe roads, safe road users, safe speeds, post-crash care, and safe vehicles. The five elements (inner ring) and six principles (outer ring) of the SSA were considered throughout the development of this plan (**Figure 1**).

Figure 1: Safe System Approach

The Action Plan describes solutions for the issues most relevant in the City of New Martinsville:

Safe Roads: Improving roads through planning, engineering, and design to facilitate safe travel for all road users.

Safe Road Users: Encouraging road users to execute safe driving behaviors and enforcing traffic laws.

Safe Speeds: Considering speeds in coordination with the surrounding environments and contexts.

Vision and Goals

The following vision expresses the ideal safety conditions for the City of New Martinsville.

GETTING EVERYONE BACK HOME!
STRIVING FOR ZERO DEATHS AND SERIOUS INJURIES BY 2045.

The following goal emphasizes where investments and resources will be directed to achieve the vision.

REDUCE FATALITIES AND SERIOUS INJURIES BY 5% ANNUALLY WITH A FOCUS ON:

INTERSECTIONS

SPEEDING & AGGRESSIVE DRIVING

PEDESTRIANS

DISTRACTED DRIVING

Current Plans

There are plans that have been adopted to support the transportation needs of West Virginia. At the time of publication, there were no local or regional transportation plans that were specific to the New Martinsville area. The Strategic Highway Safety Plan and the Vulnerable Road User Assessment were reviewed to determine how their findings and recommendations may be applicable to this safety plan. A summary is provided below.

Title	Agency	Key Findings	Application to New Martinsville

West Virginia Strategic Highway Safety Plan *2022-2026*	West Virginia Division of Highways	Statewide crash statistics for three of the four emphasis areas between 2016 and 2020:
		• Speeding and Aggressive Driving
		  ○ 57% were serious injury (up by 32%)
		  ○ 57% were fatal
		• Intersections
		  ○ 19% were serious injury (up by 1%)
		  ○ 14% were fatal (up by 4%)
		• Pedestrians & Cyclists
		  ○ 6% were serious injury (up by 3%)
		  ○ 9% were fatal (up by 3%)
			Compared to statewide statistics, New Martinsville has seen less severe crash rates by emphasis area. However, given the existing roadway and traffic conditions in New Martinsville, local crash statistics could rise closer to statewide levels.

West Virginia Vulnerable Road User Assessment 2023	West Virginia Department of Highways	Crash trends involving Vulnerable Road Users (pedestrians, cyclists, etc.) in West Virginia between 2012-2021: • 580 pedestrian and 83 cyclist injuries resulted in fatality or serious injury • 6% of all fatal and serious injuries are VRU related in 2021 • Males in the 20-29 age range were the most common at-fault drivers	While the VRU crash history in New Martinsville is low, the risk is still high enough to take immediate action. The recorded pedestrian crash on WV-2 featured a 27-year-old male driver, which fits the statewide trend.

Existing Safety Performance

A comprehensive examination of the crash data for the City of New Martinsville was conducted to identify patterns and trends, determine the causes of crashes, and develop strategies to reduce the frequency and severity of crashes. Conducting a crash analysis is a critical step in improving roadway safety as it enables stakeholders to identify problem areas and develop targeted strategies to address them.

Crash Analysis

Crash data for years 2017 through 2021 was obtained from West Virginia Division of Highways using AASHTOWare Safety which is West Virginia's safety data management system. In addition to the data presented herein, additional crash information is provided in **Appendix B**.

Figure 2 represents the number of crashes that occurred during this five-year period. In this time period, there were 411 reported crashes in New Martinsville. One person was killed, and 90 crashes resulted in injury in New Martinsville.

Total crashes were relatively trending downward, with an exception in 2018. Fatal and severe injury crashes were also on a downward trend, except for a spike in 2020 (**Figure 3**). Nationally, as a result of the COVID-19 pandemic, fewer vehicles on the road generally led to higher travel speeds which resulted in more severe outcomes when a crash did occur.

Figure 2: Total Crash Trends (2017-2021)

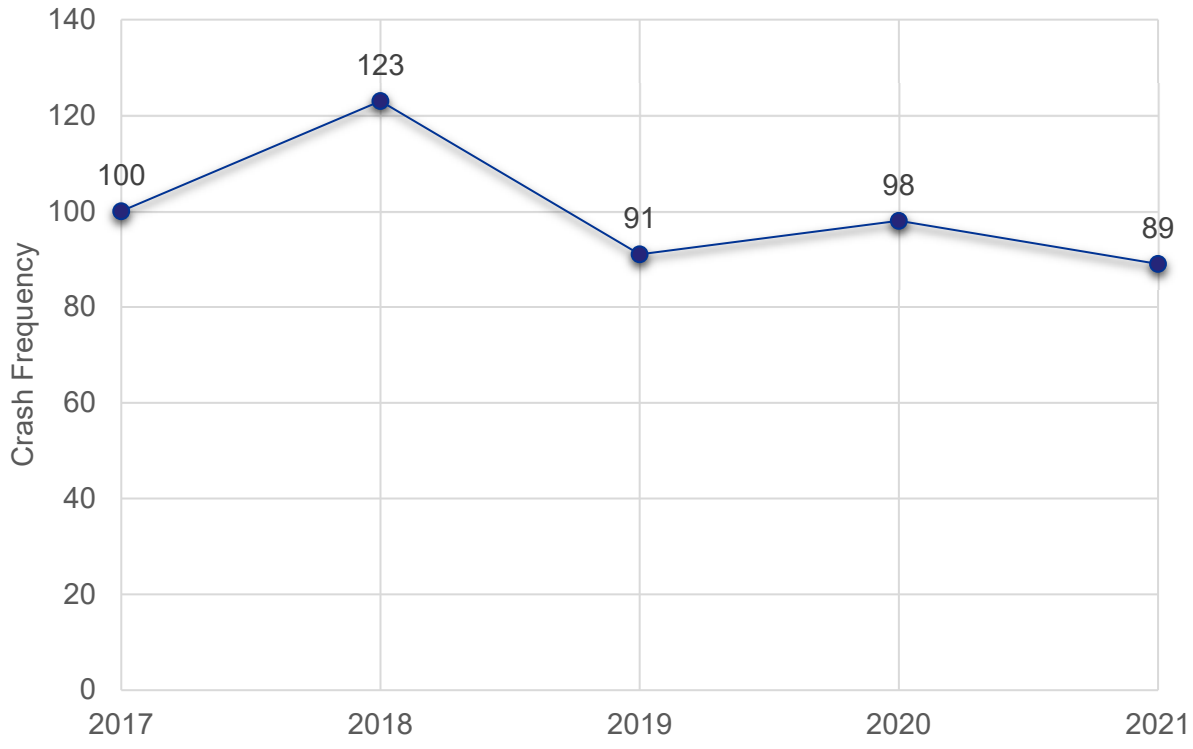
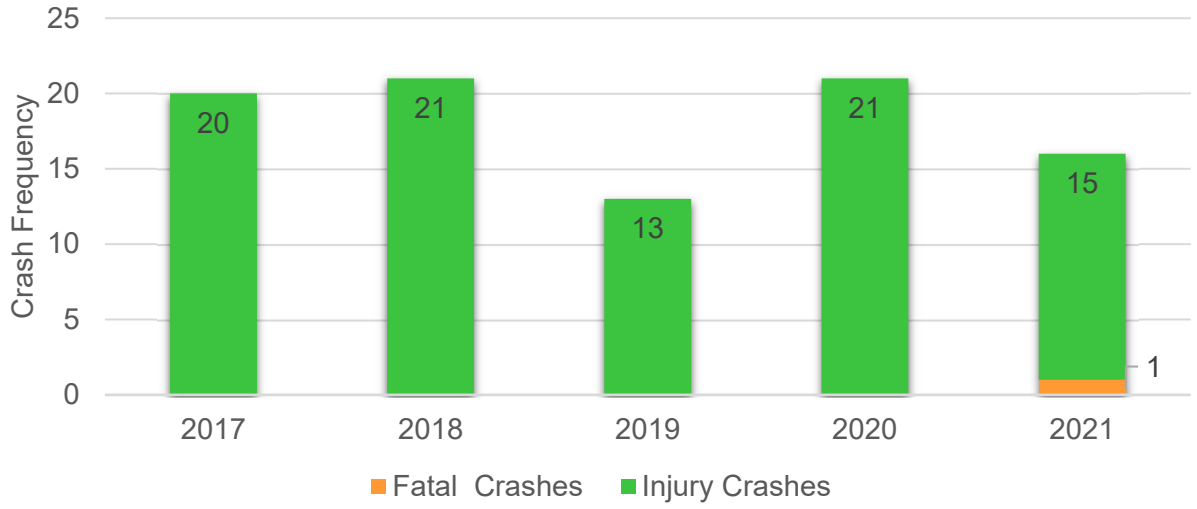


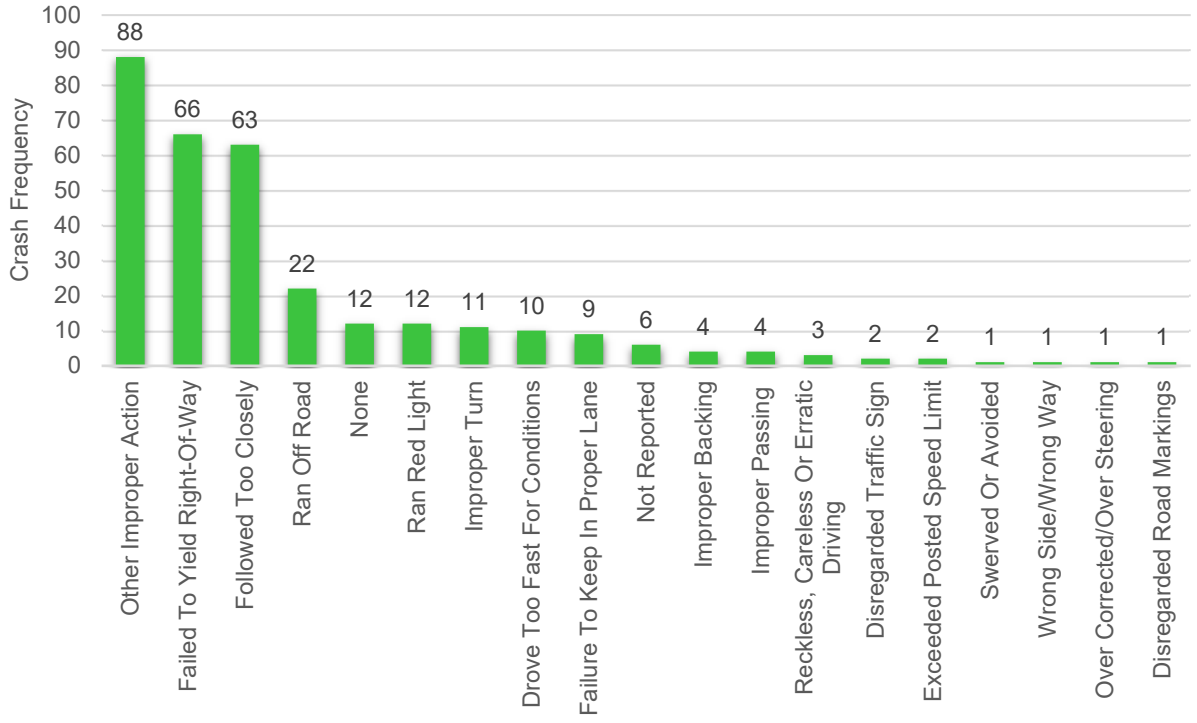
Figure 3: Fatal & Injury Crash Trends (2017-2021)



Contributing Factors

Crashes within the City of New Martinsville were evaluated based on contributing factors. The leading contributing factor for New Martinsville was other improper action. This means that an improper action made by a driver involved in the crash that is not listed as an option, contributed to the crash occurring. For example, a rear end crash was caused by the driver failing to maintain control of the vehicle. The next leading contributing factors were followed too closely and failed to yield right of way.

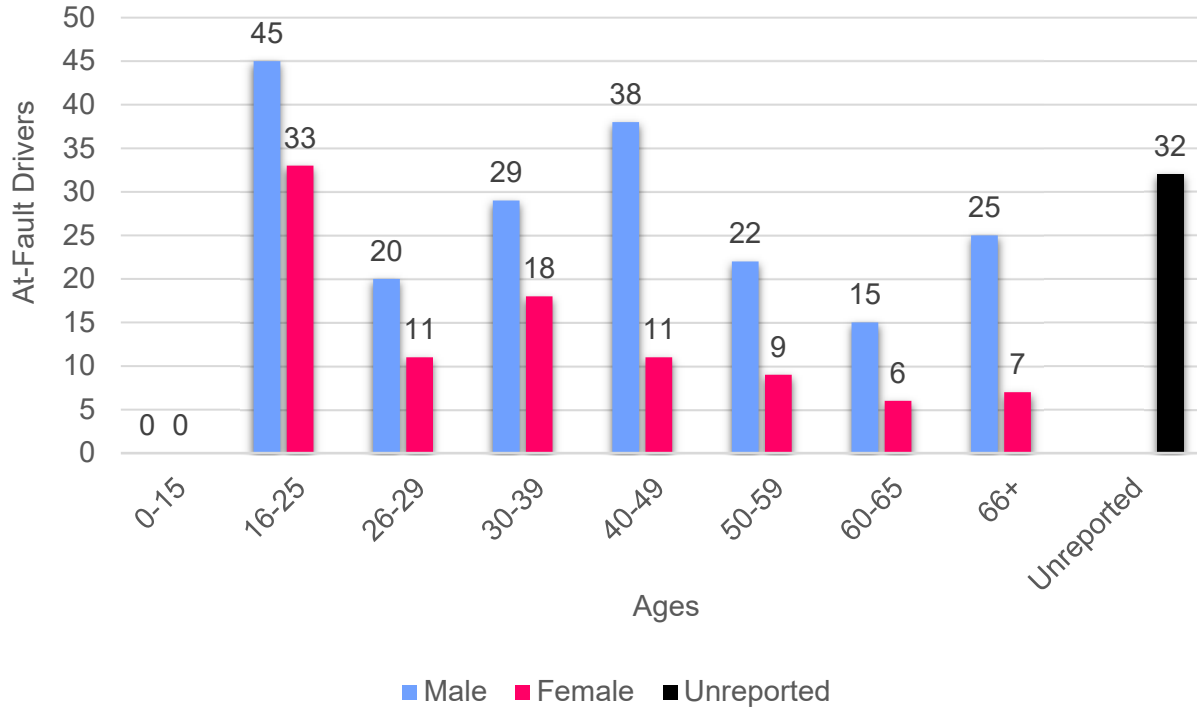
Figure 4: Crash Contributing Factors



Gender and Age Range of At-Fault Drivers

The gender and age range of drivers (presumed to be “at-fault” in the crash) involved in fatal and injury crashes were evaluated. The majority of drivers involved in fatal and injury crashes were aged 16 to 49 years old. In 78 instances of fatal or injury crashes, the at-fault driver was between the ages of 16 and 25. According to the 2020 US Census Data, this age group makes up less than 10 percent of the population in New Martinsville. However, this age group is at fault for almost a quarter of the injury and fatal crashes. Furthermore, the population of New Martinsville is roughly half male and half female per the Census data; however, over 60 percent of the at-fault drivers in fatal and injury crashes were males.

Figure 5: Gender and Age of At-Fault Drivers Involved in Fatal and Injury Crashes



Crash Hot Spot Identification

A High Injury Network (HIN) was identified by determining the Equivalent Property Damage Only (EPDO) factors for roadway segments and intersections. This EPDO factor weights injury crashes in terms of an equivalent number of property damage crashes. The weighting factors are developed from the economic crash costs determined and used by West Virginia Division of Highways in their AASHTOWare Safety analysis tool. For example, a possible injury crash is equivalent to just over 10 property damage only crashes based on its economic crash cost. A composite scoring comprised of the ranks for the EPDO value per crash, total EPDO value at the location, and the crash frequency was used to determine the priorities for New Martinsville roadway segments and intersections. **Table 1** summarizes the weights of each level of injury severity. The top Highway Injury Network Roadway Segments and Intersections are listed below with maps and larger lists provided in **Appendix C**.

Table 1: EPDO Crash Weights by Severity

	Costs	Weight
Fatal Crash (K)	$9,646,264	930.119
Serious Injury Crash (A)	$552,237	53.248
Minor Injury Crash (B)	$177,292	17.095
Possible Injury Crash (C)	$104,838	10.109
Property Damage Only (O)	$10,371	1.000

High Injury Network Roadway Segments – Top 5

All located on WV-2:

1. Between Franklin Street & North Street
2. Between Orchard Drive & Mound Street
3. Between Foundry Street & Central Street
4. Between Rosary Road & Cemetery
5. In front of Riverview Plaza

High Injury Network Intersections – Top 5

1. Mound Street* & WV-2
2. Harlan Drive & WV-2
3. Brickyard Alley (Near Choo Choo's) & WV-2
4. North Street & WV-2
5. Rosary Road & WV-2

*This location was reconfigured/updated with a turn lane with the development of the credit union

Systemic Analysis

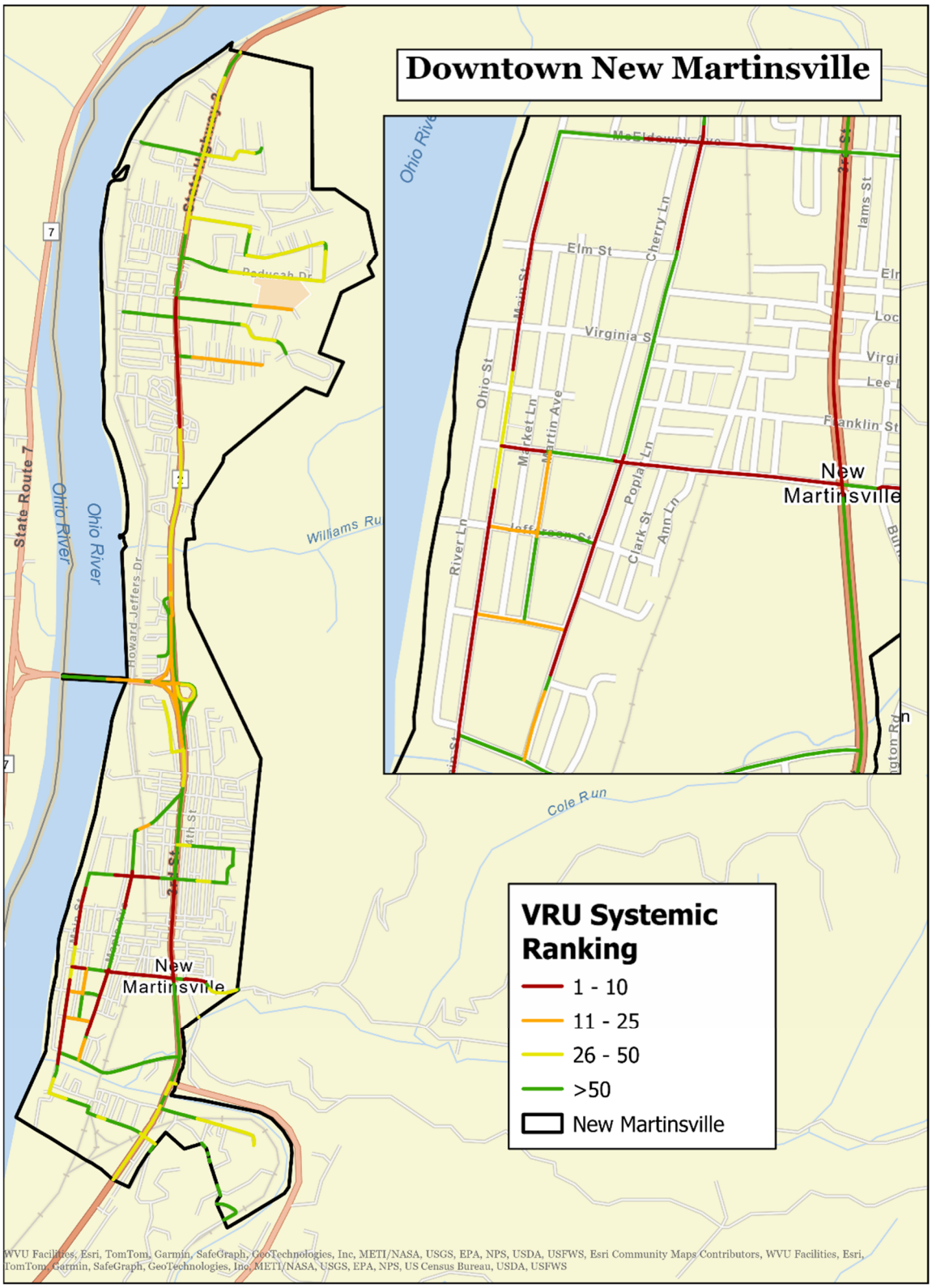
A systemic analysis was also conducted for roadway segments in New Martinsville for Vulnerable Road Users (VRUs). VRUs are defined as bicyclists, pedestrians, and other road users not in a motor vehicle. West Virginia's VRU Assessment methodologies were used for this analysis due to the lack of sufficient pedestrian and bicycle crash data in New Martinsville to establish New Martinsville-specific factors. Risk factors such as posted speed limit, bicycle and pedestrian volumes, traffic volumes, and roadway functional classification were used to identify segments that may be more susceptible to VRU crashes based on their characteristics, regardless of if a crash has occurred at that location in the past. A VRU Systemic Ranking map is provided in **Figure 6** and the top five locations were identified.

The list of the top 25 segments in its entirety is provided in **Appendix D**.

Systemic Analysis Results for VRUs – Top 5

1. WV-2 between McEldowney Avenue & North Street
2. Main Street between sports fields & College Street
3. WV-2 between E Benjamin Drive & Cemetery
4. North Street between Maple Avenue & WV-2
5. North Street between Pine Street & Beech Street

Figure 6: VRU Systemic Rankings for Roadway Segments in New Martinsville



Equity Analysis

In analyzing safety conditions, it is typical to study equity factors to determine if there is a relationship between crashes and a disadvantaged community, and to determine where investments will help vulnerable populations. For this equity analysis, 5-Year American Community Survey (ACS) data was used at the census tract level. The equity measures used in this analysis were disability status, population over 65 years old, and vehicle access.

However, the ACS data only identified three census tracts within New Martinsville, none of which show up as a disadvantaged census tract on the USDOT Equitable Transportation Community (ETC) Explorer. The ETC Explorer did indicate a relatively high Health Vulnerability and Transportation Insecurity for the entire area of New Martinsville as shown in **Figure 7** & **Figure 8**:

Figure 7: ETC Explorer Health Vulnerability

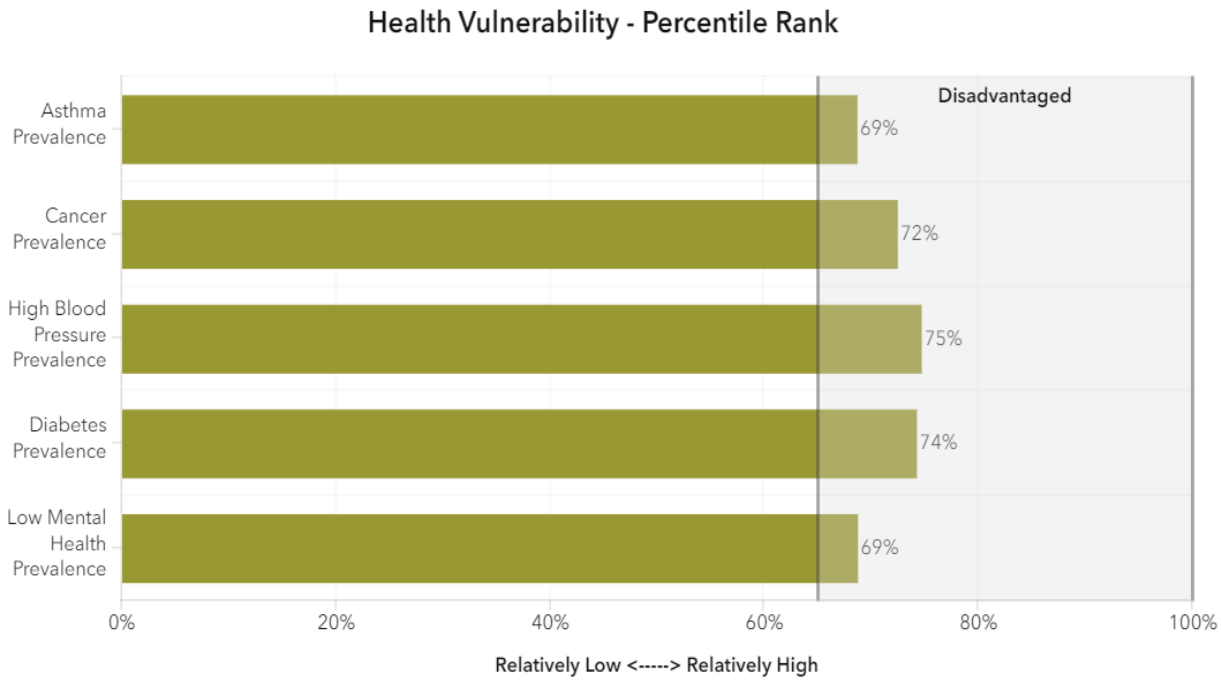
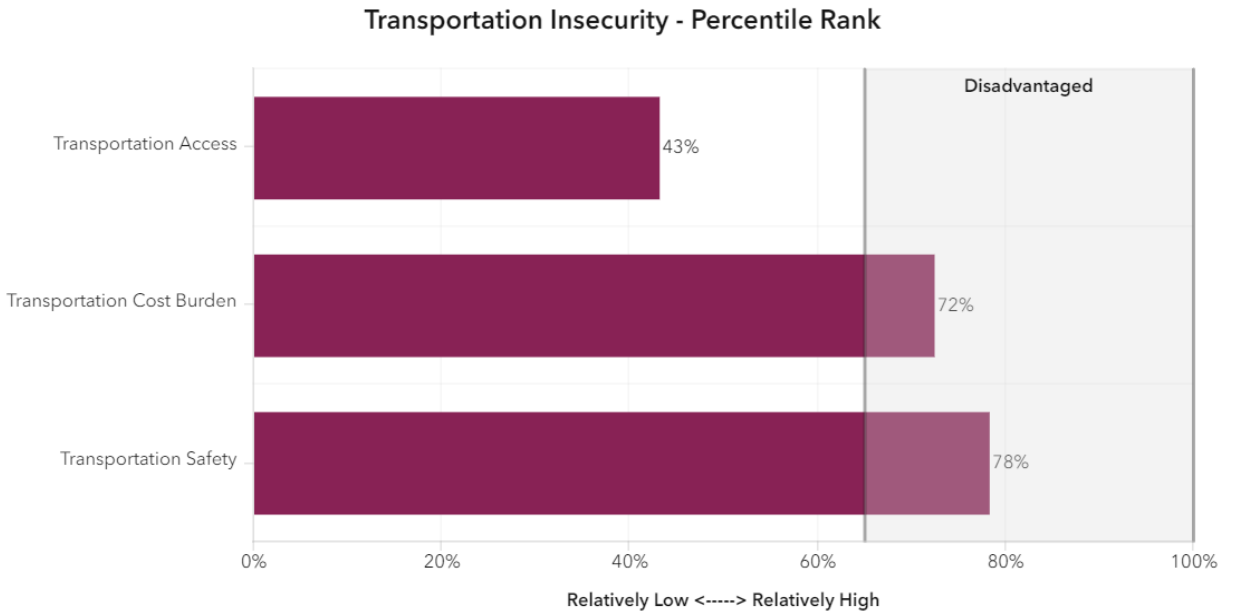


Figure 8: ETC Explorer Transportation Insecurity



Additionally, too few ACS census tract areas for comparison did not yield meaningful results of the relationship between crashes and community equity factors. Therefore, anecdotal and land use information was used for the equity considerations. Comparisons of the census tracts and equity measures are included in **Appendix E** for reference.

An equity need identified by stakeholders and members of the public was lower income housing areas along WV-2 and the lack of a low stress accessible pedestrian accommodation along the roadway. One location was where the posted speed limit is 45 mph, from the New Martinsville Villas (187 WV-2) north of the bridge to south of bridge “interchange” to destinations of interest including Walmart near Russell Ave. People were frequently observed walking along the shoulder of the busy road and crossing the interchange ramps in this area.

Public and Stakeholder Engagement

This planning process solicited input from several sources to better get an idea of priority safety needs and concerns in the City of New Martinsville. Input was solicited through two methods:

- An online public engagement survey and comment map
- An in-person Stakeholder engagement workshops

Public Survey

To gather public opinion and concerns on road safety in New Martinsville, an online survey was conducted. The first portion of the survey included questions about behaviors of road users, general safety concerns, and what type(s) of improvements would best serve the community. The second part of the survey included an interactive map-based comment option where participants could add a point to a map and explain their safety concerns at that location.

The survey took place between February 14th, 2024 - March 14th, 2024. In total, the survey received results from 86 respondents. Key survey responses are summarized in **Figure 9** through **Figure 13.** The survey questions included:

- Please indicate your age, race, and gender
- What is your home zip code?
- Do you work in New Martinsville?
- How do you regularly or most frequently commute?
- What is your *second* most used form of transportation?
- Where do you commute to the most?
- How safe are other motorists when driving?
- How are pedestrians behaving?
- How are bicyclists behaving?
- I feel safe traveling by car – Agree or Disagree
- I feel safe when biking – Agree or Disagree
- I feel safe when walking – Agree or Disagree
- Which roadway safety issues in New Martinsville concern you the most?
- Cars tend to travel at safe speeds – Agree or Disagree
- There is sufficient traffic law enforcement in New Martinsville – Agree or Disagree
- Infrastructure in New Martinsville (bikeways, paths, etc.) is generally available to make safe biking trips – Agree or Disagree
- Infrastructure in New Martinsville (sidewalks, crosswalks, etc.) is generally available to make safe walking trips – Agree or Disagree
- Choose your top 3 priorities for investment for the City of New Martinsville
- Are there any other infrastructure improvements you believe could help alleviate safety concerns in New Martinsville.

Figure 9: How safe are other motorists when driving?

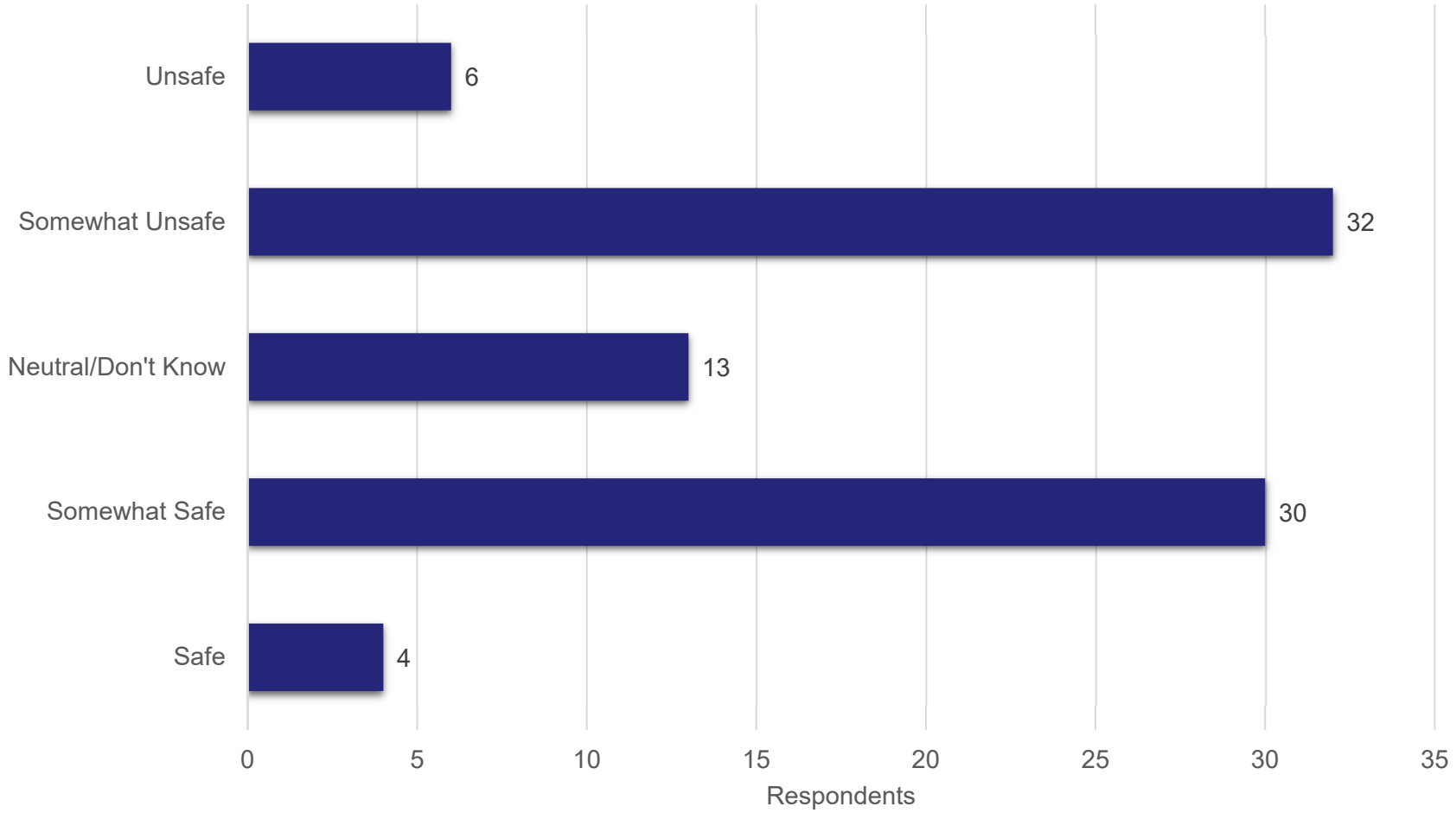


Figure 10: I feel safe when traveling by car, biking, or walking.

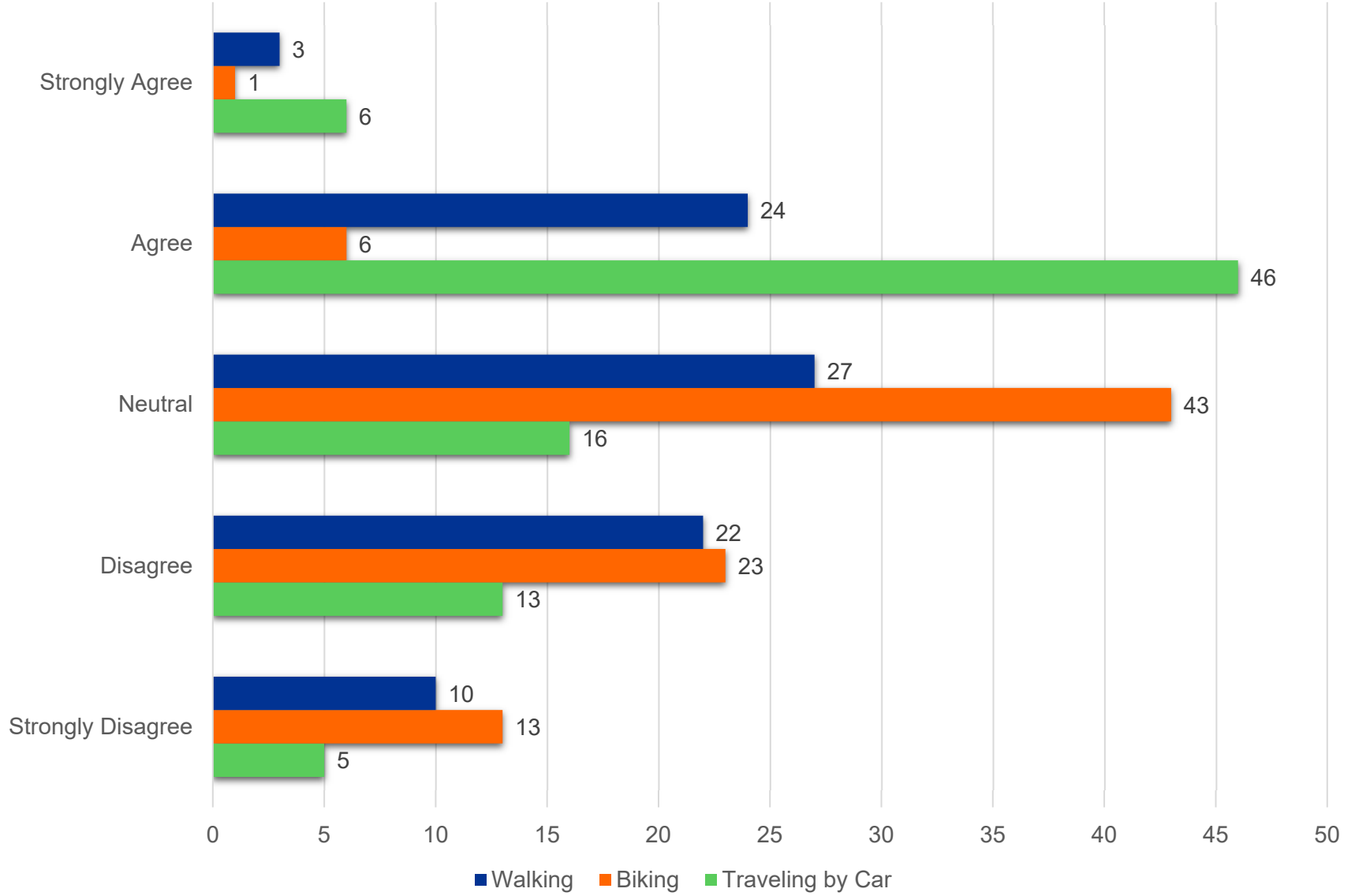


Figure 11: Which roadway safety issues in New Martinsville concern you the most? Select all that apply.

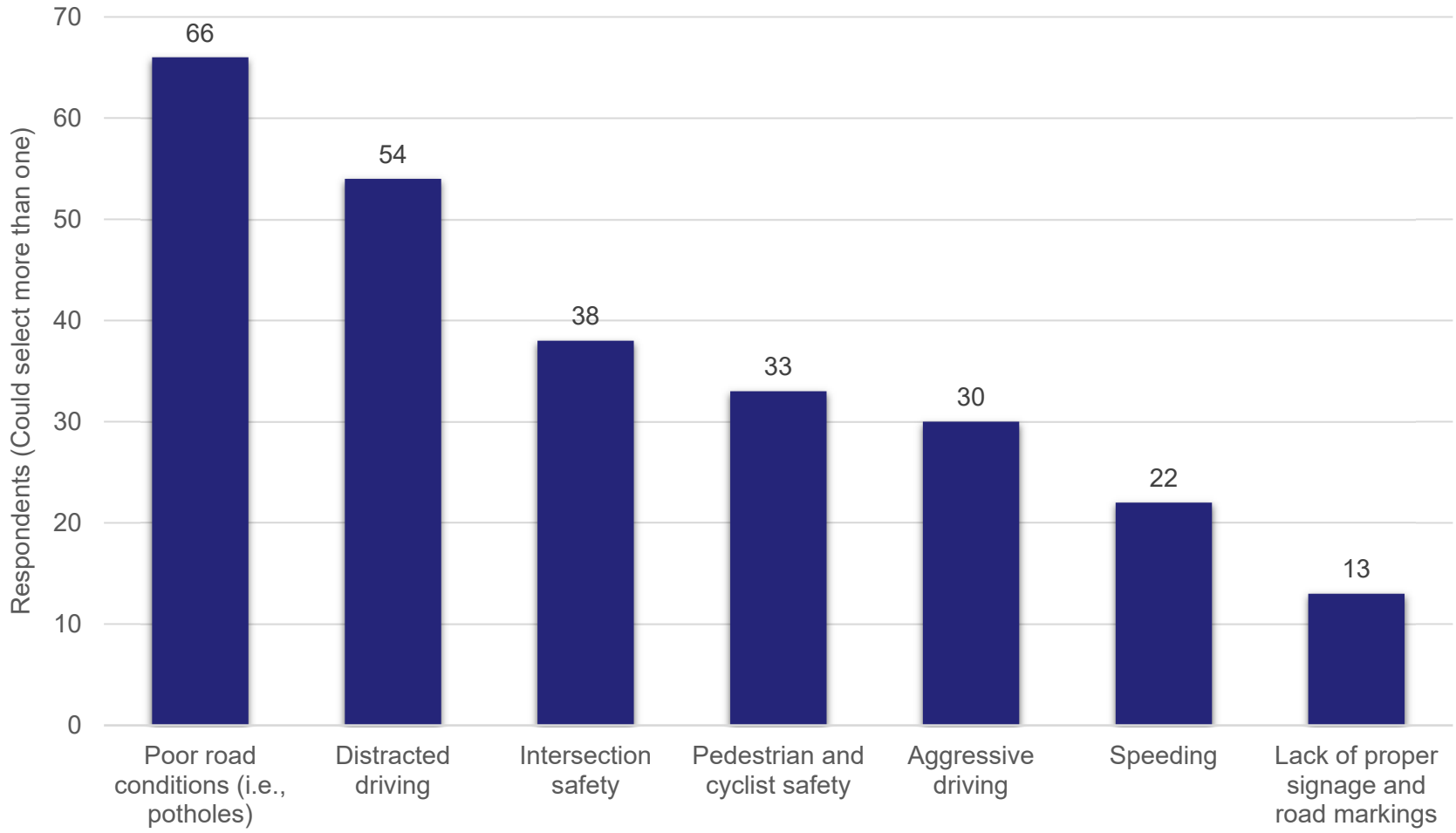


Figure 12: Cars tend to travel at safe speeds.

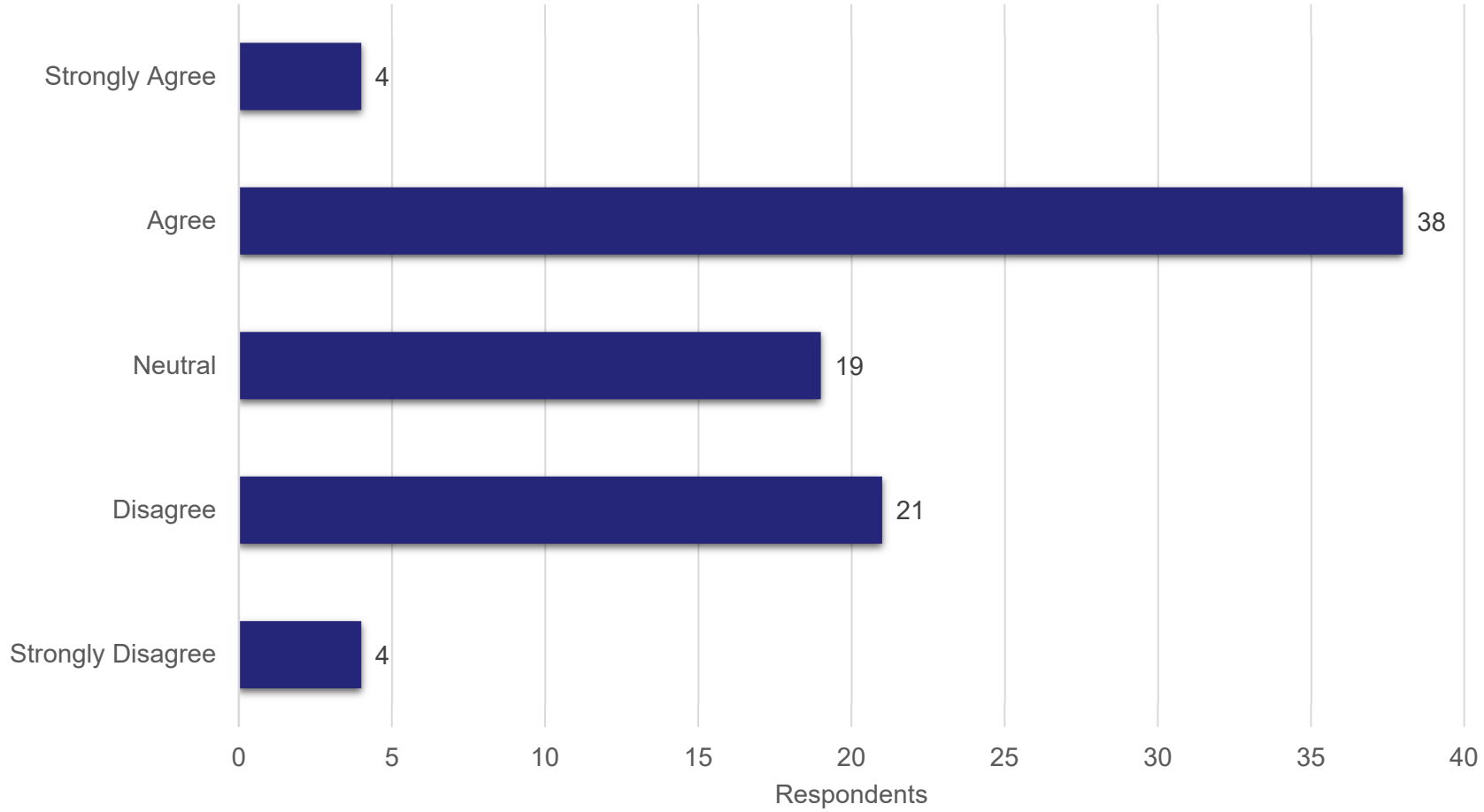
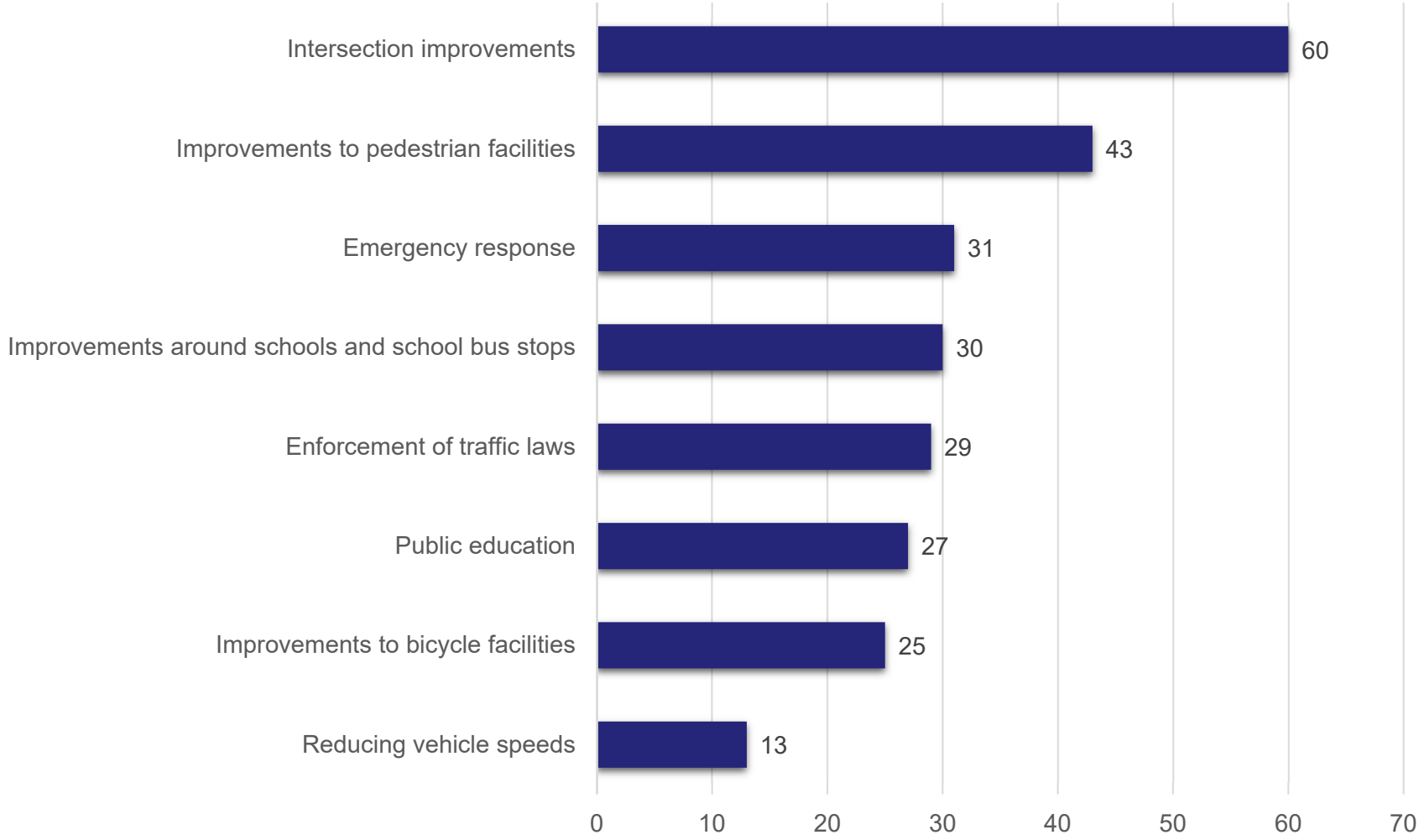


Figure 13: Choose your 3 top priorities for investment for the City of New Martinsville.



The survey map showed that residents had varying concerns about the safety of New Martinsville. The table below summarizes the survey results. The full survey results are provided in **Appendix F**.

- **Congestion and traffic jams**, particularly at intersections and around popular destinations such as Walmart, Walgreens, and the schools.
- **Train crossing** issues at the WV-2 and CSX railroad cause backups and congestion, and especially cause issues for EMS vehicles trying to pass through.
- **Speeding** from impatient drivers along WV-2, particularly when trying to beat red lights at intersections.
- **Drivers' behavior** running red lights and stop signs, causing dangerous situations for pedestrians and other drivers.
- **Lack of sidewalks and crosswalks** making it difficult and unsafe for pedestrians to navigate the city, particularly for lower-income individuals and Villas Apartment residents.
- **Poor roadway conditions**, including potholes, rough patches, debris, and faded pavement markings which makes roads harder to drive on.
- **Poorly timed traffic signals,** which increases long queues at intersections, congestion, and frustrated drivers.
- **Lack of police enforcement** causes more drivers to get away with unsafe driving.
- **Truck traffic** routinely disobeys speed limits, damages infrastructure and run red lights throughout town.

Stakeholder Engagement

A multi-disciplinary group of stakeholders was established to offer feedback on the formation of the CSAP and provide guidance and recommendations throughout the process, ultimately ensuring the successful development of the plan. This group of professionals with knowledge from the area was invited to share insight, feedback, and solutions. Participants in this stakeholder group included individuals from various organizations:

- New Martinsville Mayor
- New Martinsville City Council
- New Martinsville Police
- New Martinsville Fire/EMS
- New Martinsville Street Department
- New Martinsville Planning Commission
- New Martinsville Electric Department
- Congressman Alex Mooney's Office
- WV Governor's Highway Safety Program
- New Martinsville Bicycle Club
- Wetzel-Tyler Chamber of Commerce
- Belomar Regional Council
- West Virginia Division of Highways

Three meetings took place to help inform plan development. Over the course of the meetings, the team was provided relevant data and informational materials to identify the safety challenges and needs within the area. Stakeholders discussed safety opportunities, challenges, and problems, directly leading to plan focus and formation. Meetings ensured the strategies and implementation efforts aligned with the vision and goals of the region. Presentations were given to provide context and resources for the planning process. Summaries of each meeting are included in **Appendix G**.

Photo 1: Stakeholder Engagement Discussions

Stakeholder Meeting #1

Held in January of 2024, the purpose of this first meeting was to introduce the concept of the CSAP, the SSA, and the goal of getting everyone home safely. High-level crash data was provided to start initial conversations. Meeting participants were asked to share safety efforts in progress in the region to understand what effective solutions are already being implemented to address Safe System priorities. Discussion continued identifying challenges to overcome and specific location problem areas.

Stakeholder Meeting #2

In the second stakeholder meeting in March of 2024, preliminary public survey results were presented and comprehensive data was reviewed to set the stage for discussions. Vision and Goals were set for the plan as noted in the section above and the stakeholders identified the following focus safety areas to address with the CSAP:

- Speed & Aggressive Driving
- Intersections
- Distracted Driving
- Pedestrians

Stakeholders also reviewed priority crash locations based on both reactive and proactive data and provided additional anecdotal feedback on the locations.

Stakeholder Meeting #3

The third stakeholder meeting took place in June 2024 where specific projects and strategies that could be implemented to eliminate severe crashes were discussed. The strategies were based on the four chosen emphasis areas, with added improvement ideas for the railroad crossing. From some of the best practices in West Viriginia and the nation, potential countermeasures and strategies were presented. The stakeholders partook in a dot sticker exercise to choose which strategies would be most effective in New Martinsville. Some even wrote in additional strategies desired.

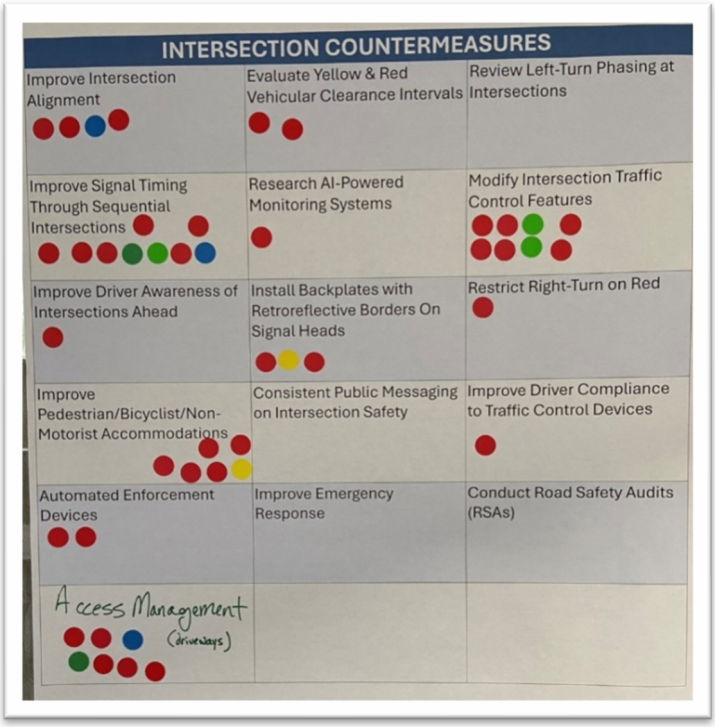


Photo 2: Countermeasure Dot Sticker Exercise

Emphasis Areas

Emphasis areas focus on specific types of crashes and contributing factors to help direct resources and guide safety improvements where it is needed most. To determine the regional specific emphasis areas for New Martinsville, the state emphasis areas defined in the SHSP were used as a starting point. Stakeholder feedback indicated that distracted driving was a problem in the city and should be evaluated for an emphasis area consideration. Additionally, the number of younger drivers at fault in some of the severe crashes resulted in younger drivers being considered in the emphasis area analysis. **Figure 14** summarizes the fatal and injury crash frequency by emphasis area while **Table 2** compares the crash occurrences in New Martinsville with statewide percentages. Based on the data analysis and stakeholder engagement processes, four emphasis areas were determined for New Martinsville: speed & aggressive driving, intersections, distracted driving, and pedestrians. Solutions and countermeasures addressing each of the emphasis areas will often overlap and be complimentary. Additionally, even though the four emphasis areas have been chosen to be the focus of the plan, the other emphasis areas are considered throughout the CSAP, especially for those emphasis areas that overlap.

Figure 14: Fatal and Injury Crashes by Emphasis Area

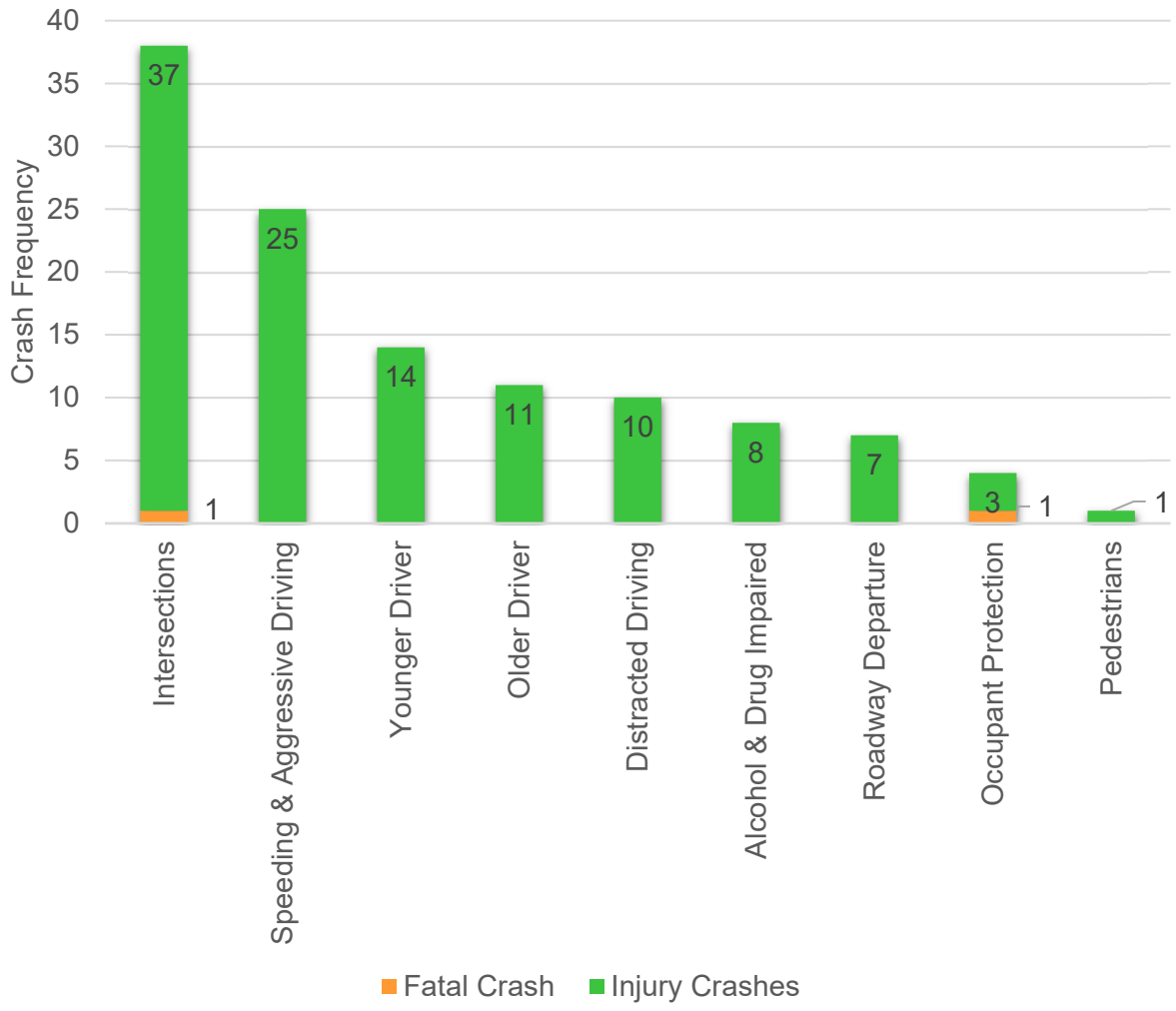


Table 2: Percentage of Injury Crashes by Emphasis Area

Emphasis Area	Statewide Fatal and Serious Injury Crashes	New Martinsville Fatal and Serious Injury Crashes	New Martinsville All Crashes
Speed and Aggressive Driving	57%	29%	23%
Roadway Departure	55%	0%	5%
Occupant Protection	32%	29%	1%
Older Driver	22%	43%	24%
Alcohol and Drug Impaired	22%	29%	3%
Intersections	18%	43%	37%
Pedestrians	7%	0%	0%

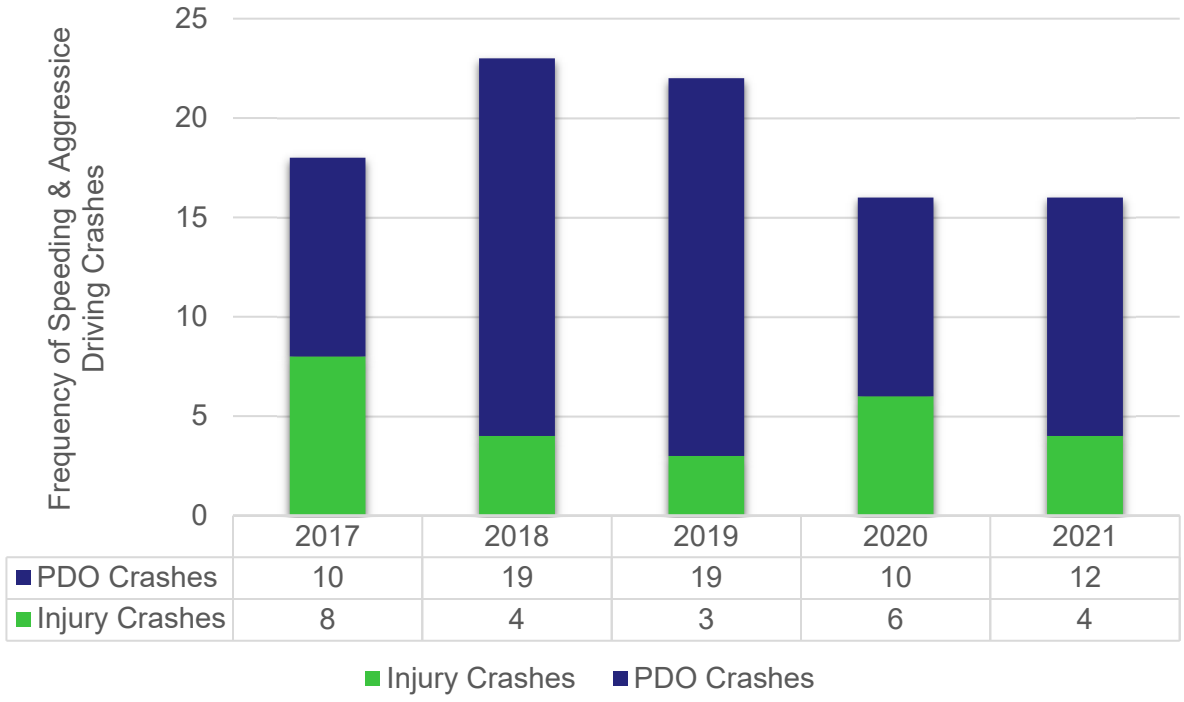
*Only for SHSP Emphasis Areas

Higher than State Average
Lower than State Average

Speeding & Aggressive Driving

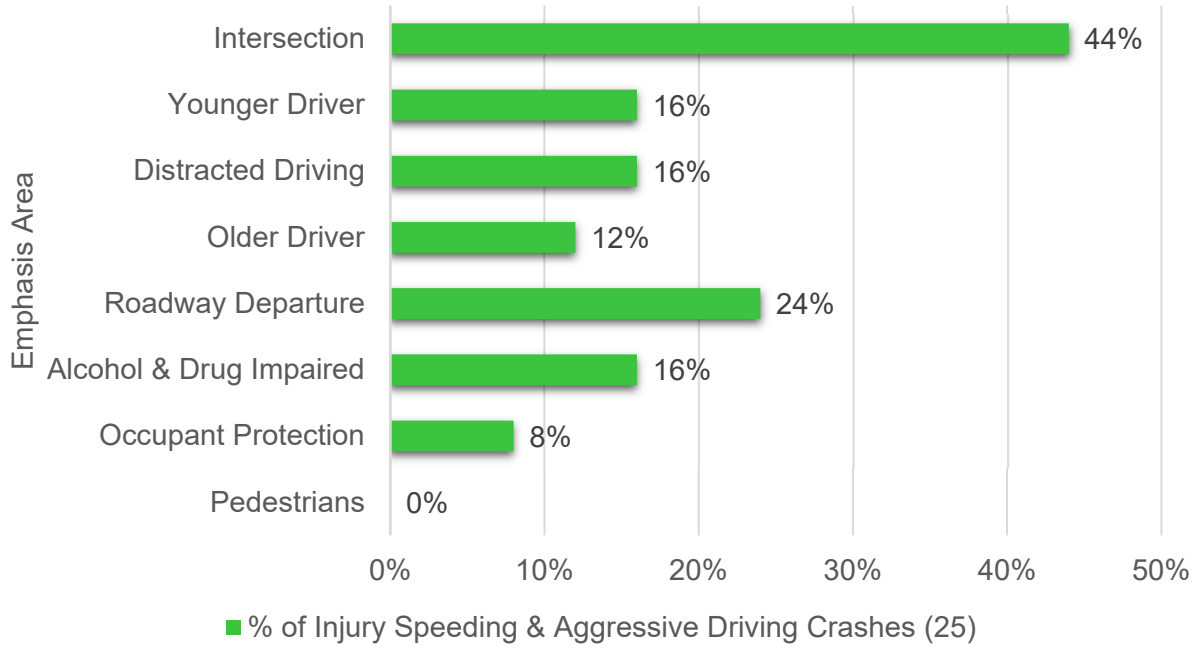
Studying crashes involving speeding and aggressive driving is crucial because these behaviors are significant contributing factors to road traffic crashes, injuries, and fatalities. Aggressive driving refers to any combination of driving behaviors that put other road users at risk, such as excessive speed, tailgating, running red lights or stop signs, and weaving in and out of traffic. Between 2017 and 2021, 95 crashes related to speed occurred, 26 percent of which were injury crashes in the City of New Martinsville (**Figure 15**). No fatal crashes due to speed or aggressive driving occurred during the study period. Speeding causes an average of five injury crashes per year, a trend that is mostly stable throughout the study period.

Figure 15: Speeding & Aggressive Driving Annual Crashes by Severity



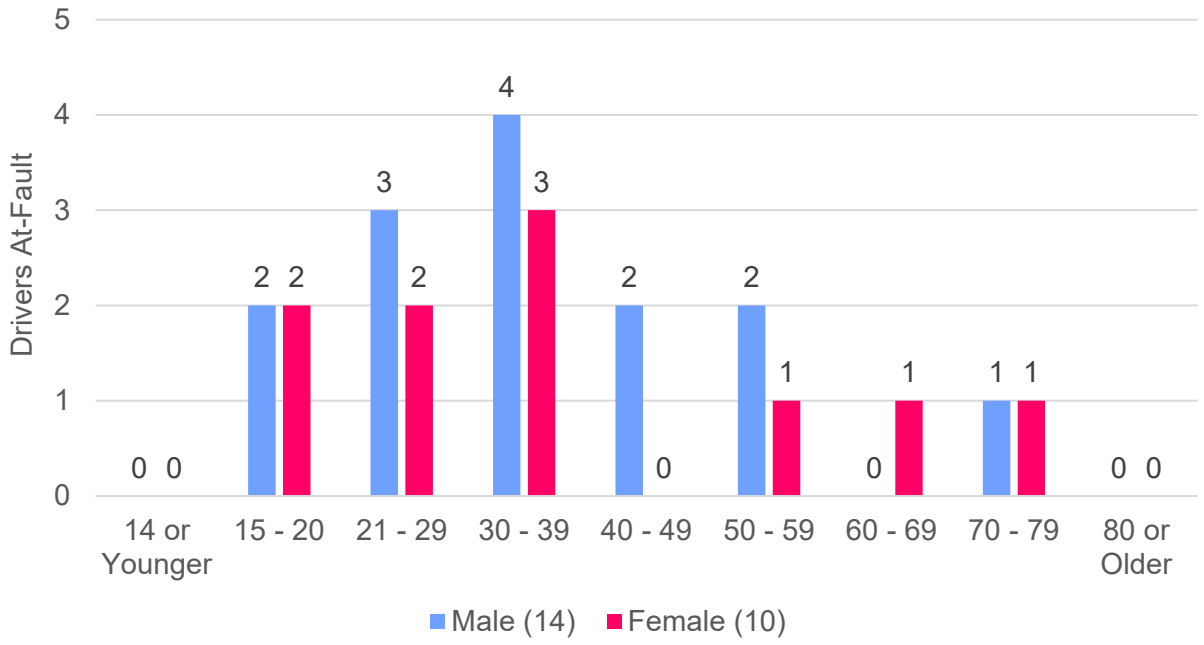
WHY? Several other factors also contribute to speed-related injury crashes. Nearly half of all speeding crashes are intersection related, many which involve younger drivers. Due to inexperience, younger drivers demonstrate riskier driving behaviors such as speeding, running red lights and overall misjudging traffic conditions when navigating intersections. Other factors that contribute to speed-related injury crashes include intersection-related factors, roadway departure, alcohol involvement, and lack of restraint usage.

Figure 16: Speeding & Aggressive Driving Injury Crashes by Emphasis Area



WHO? The majority of speed-related crashes have been caused by males, particularly between the ages of 30 and 49. Female drivers tend to speed less frequently and drive less aggressively throughout all age ranges.

Figure 17: Speeding & Aggressive Driving Injury Crashes by Age and Gender of "At-Fault" Driver



WHEN? Speed and aggressive driving-related crashes resulting in injury were dispersed throughout the week without a notable trend. Injury crashes involving speed mainly occurred in the afternoon between 1:00 PM and 7:00 PM, and spikes at around 6:00 PM. This spike is around the same time drivers leave work to travel home or to evening activities.

Figure 18: Speeding & Aggressive Driving Crashes by Day of Week

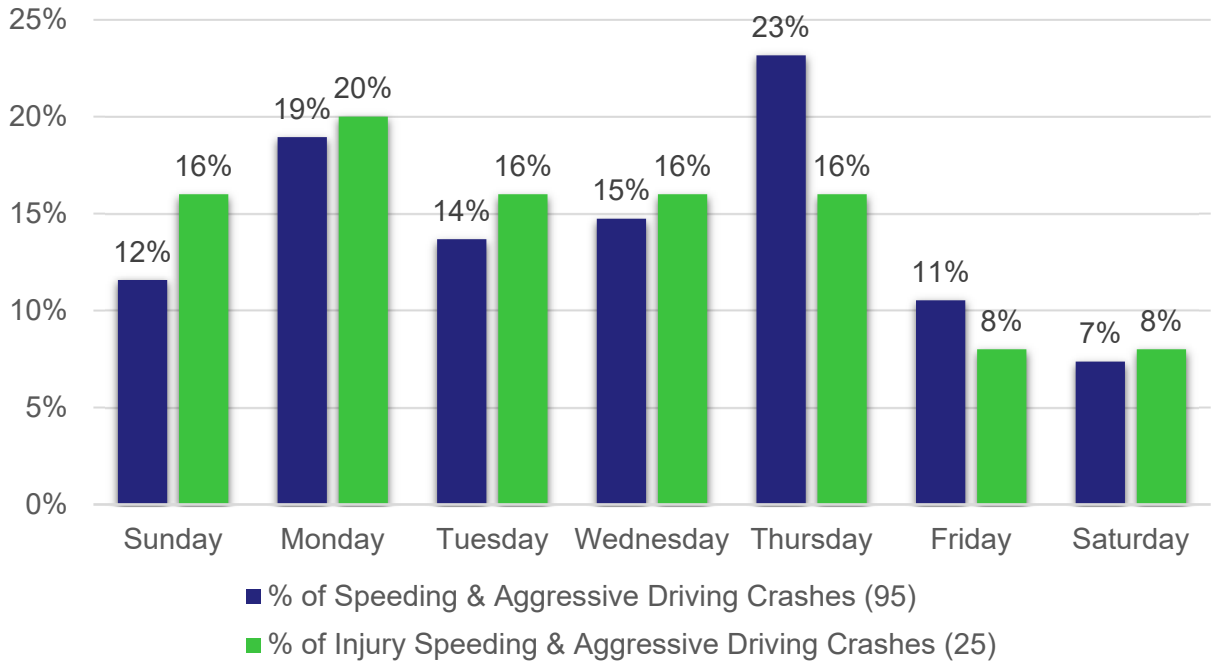
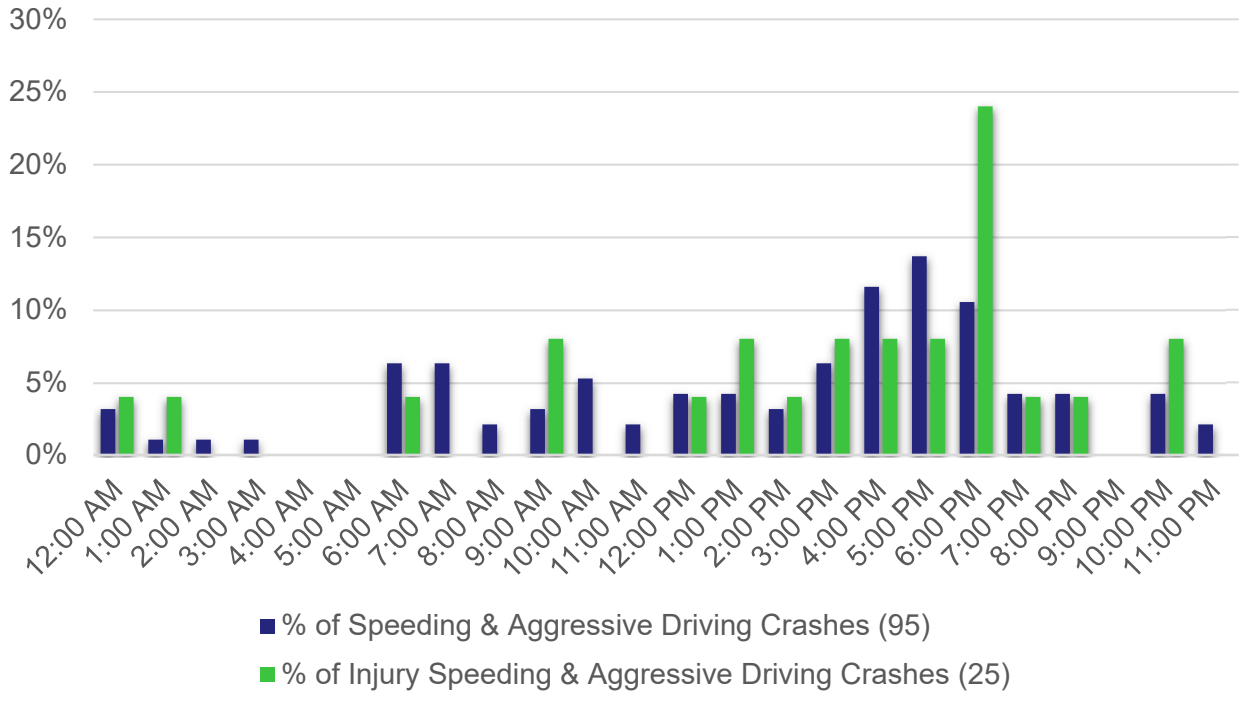
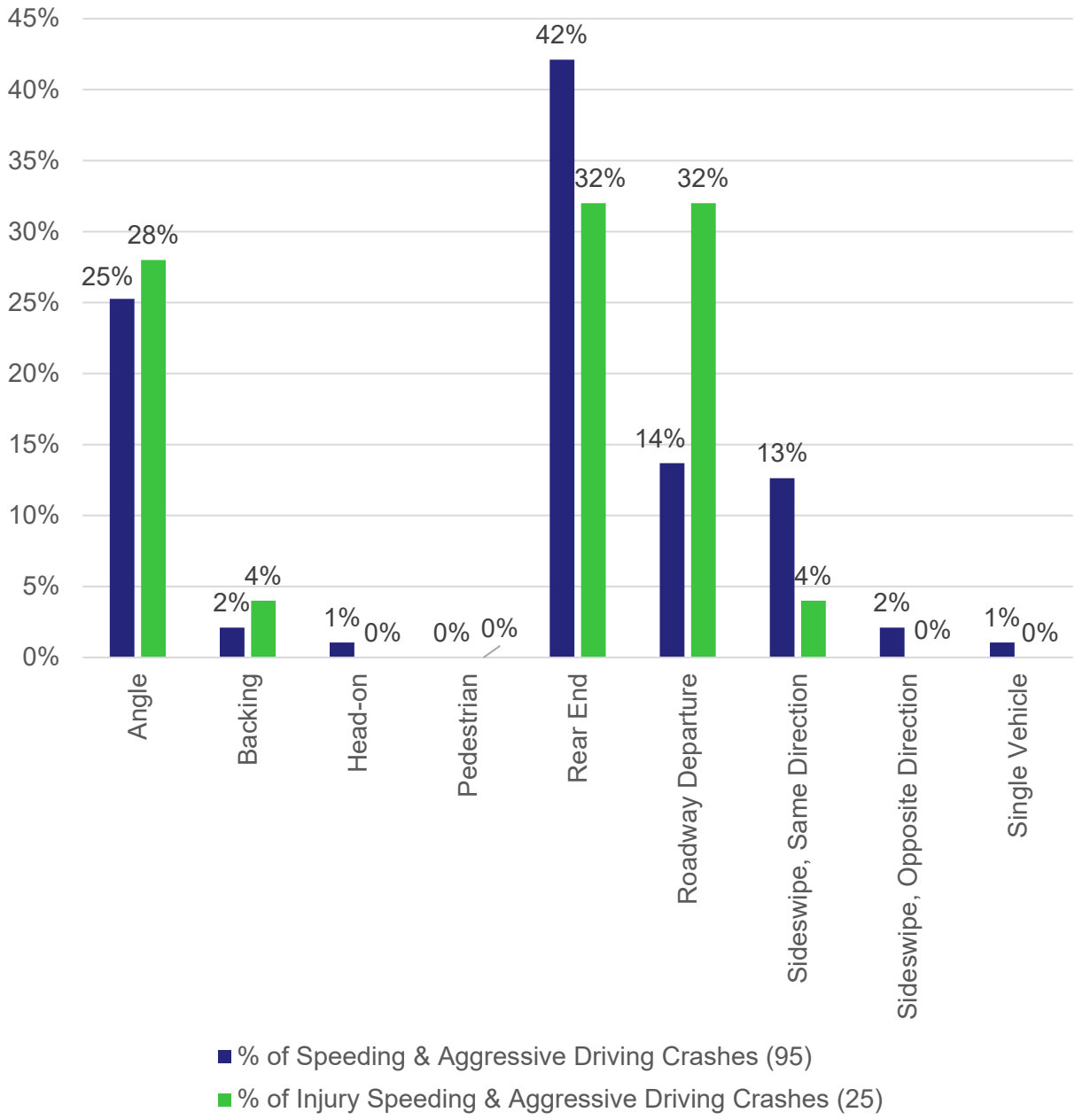


Figure 19: Speeding & Aggressive Driving Crashes by Time of Day



HOW? Rear end, roadway departure and angle crash types made up 92 percent of all speed and aggressive driving-related injury crashes. There is a prominent overlap between speed and aggressive driving and intersection crashes, as intersections are primarily where these crash types occur.

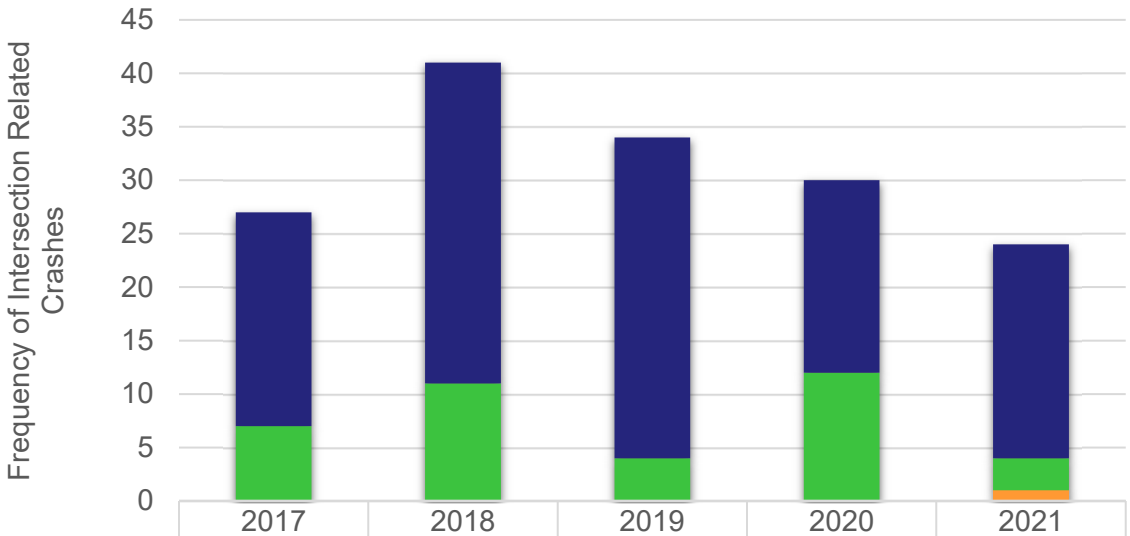
Figure 20: Speeding & Aggressive Driving Crashes by Crash Type



Intersections

At intersections, motorist interactions are all but guaranteed. Intersections are also places where different modes of travel interact, as non-motorized travelers often must traverse across vehicle travel lanes. Due to the increased interactions that come with intersections, they can be a focal point for crashes. Intersections were selected to be an emphasis area in part because of the frequency of crashes that occurred at intersections, including one fatal crash and 37 injury crashes (**Figure 21**).

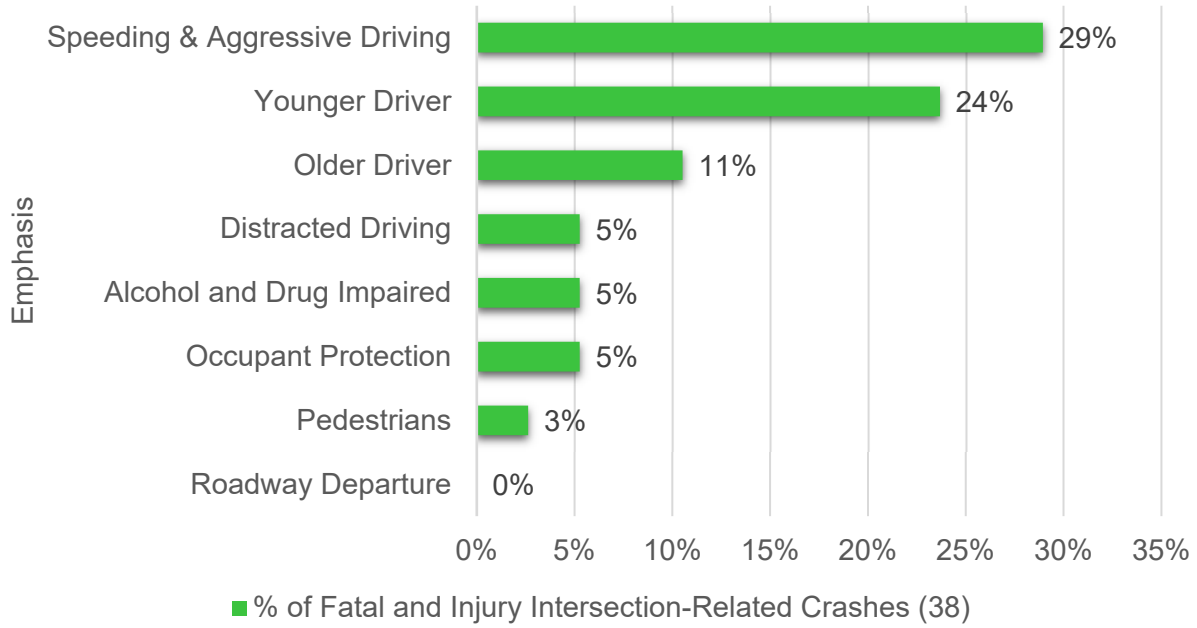
Figure 21: Intersection-Related Annual Crashes by Severity



	2017	2018	2019	2020	2021
PDO Crashes	20	30	30	18	20
Injury Crashes	7	11	4	12	3
Fatal Crash	0	0	0	0	1

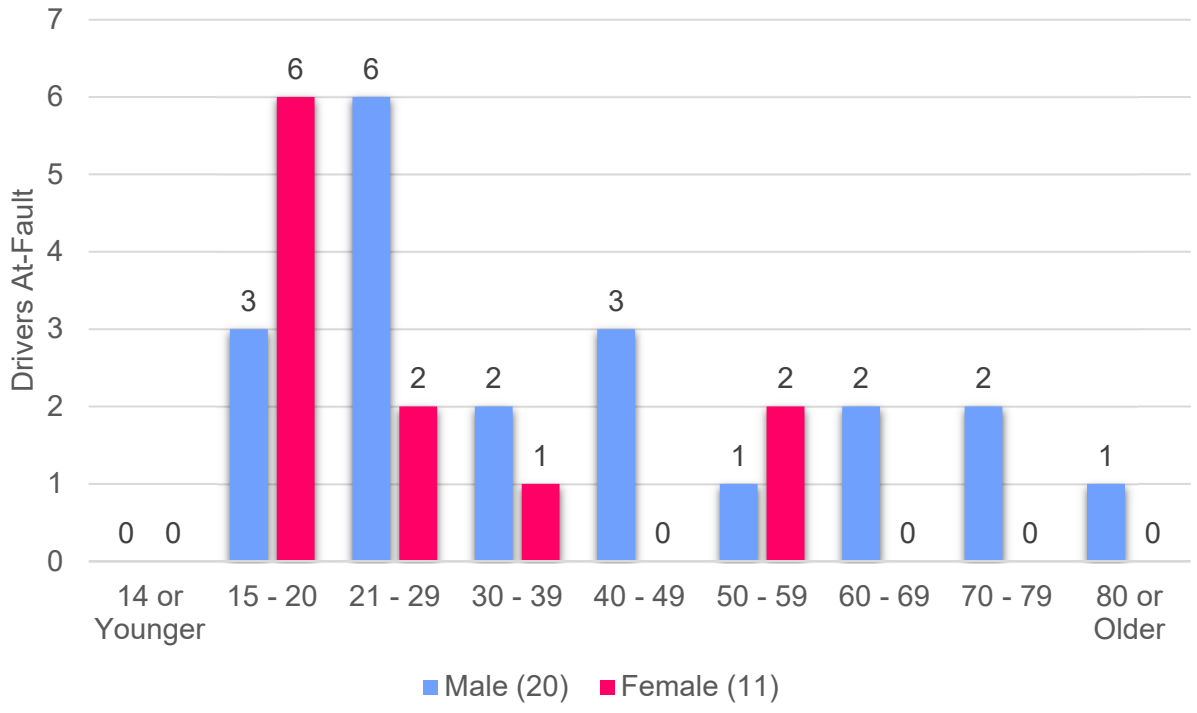
WHY? Through data analysis, overlaps in emphasis areas can be determined. Intersection-related crashes show overlap with the other emphasis areas, particularly with younger drivers and speed and aggressive driving. 29 percent of intersection-related fatal and injury crashes also involved speeding and aggressive driving. Other areas included older drivers, alcohol involvement and lack of restraint usage in intersection crash events.

Figure 22: Intersection-Related Fatal and Injury Crashes by Emphasis Area



WHO? The majority of intersection-related crashes have been caused by drivers between the ages of 15 and 29 for both genders. For other age ranges female drivers tend to cause fewer intersection related crashes than males.

Figure 23: Intersection-Related Fatal and Injury Crashes by Age and Gender of "At-Fault" Driver



WHEN? There are no notable trends on which day crashes occur, though crashes are the lowest on Saturdays. Intersection-related fatal and injury crashes occurred in the afternoon and evening, with the peak hours being 3:00 PM and 10:00 PM.

Figure 24: Intersection-Related Crashes by Day of Week

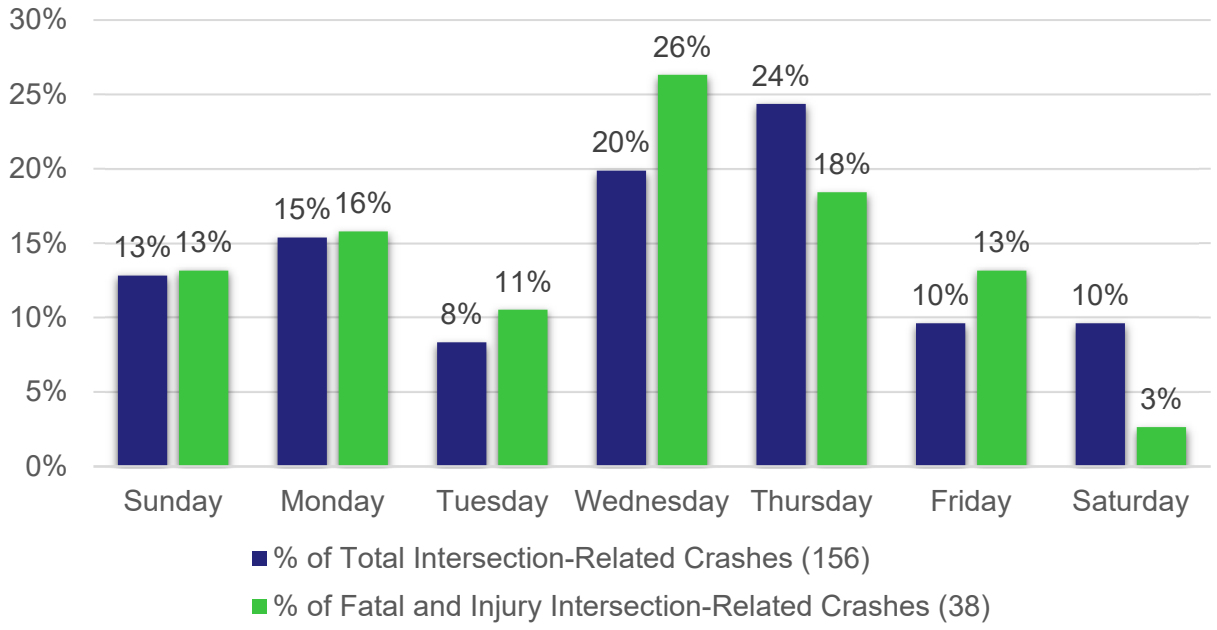
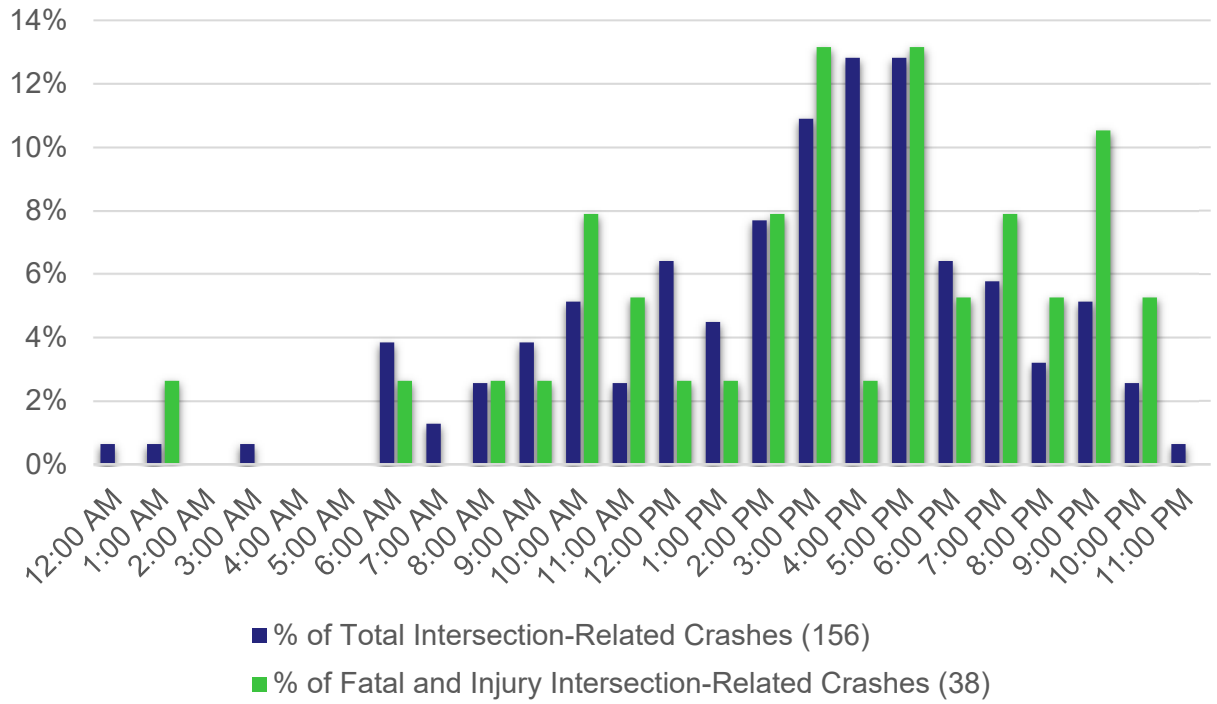
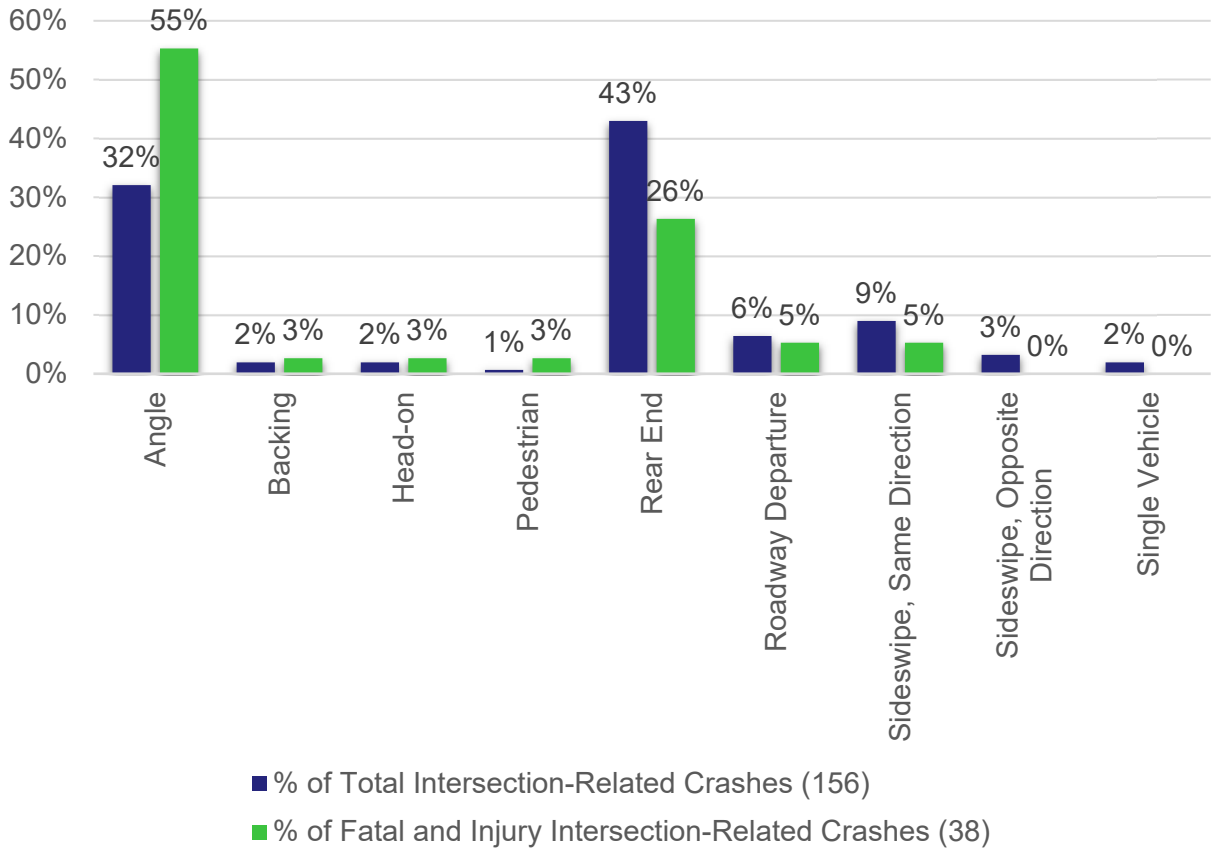


Figure 25: Intersection-Related Crashes by Time of Day



HOW? Over half of intersection-related fatal and injury crashes were angle crashes. The next highest crash type is rear end with 26 percent. Intersections are most likely where angle and rear end crashes are going to occur.

Figure 26: Intersection-Related Crashes by Crash Type



Pedestrians

While only one pedestrian-related crash was reported in the study period, it is important to analyze it to prevent the possibility of future pedestrian crashes. Pedestrians along WV-2 are seen daily like in **Photo 3**, and the public is concerned about their safety, especially in areas where sidewalk and lighting are not provided.

The single pedestrian crash in New Martinsville during the five-year study period occurred on February 4th, 2020, at the intersection of Route 180 and WV-2 during dark-unlighted conditions. The driver was a 27-year-old male, and the pedestrian was a 52-year-old male who was intoxicated. There are no pedestrian facilities such as sidewalks or crosswalks in this area, nor is there street lighting.

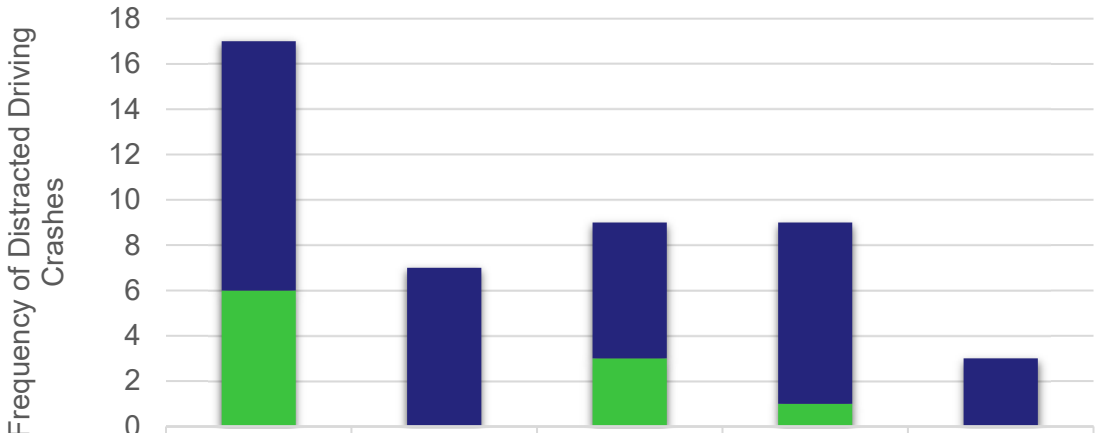
Concerns regarding pedestrian safety include the lack of street lighting, and the disrepair or lack of pedestrian facilities along WV-2. The most notable VRUs are lower-income residents and families that have limited mobility.

Photo 3: Pedestrian Walking along WV-2

Distracted Driving

While not a West Virginia SHSP emphasis area, distracted driving has been a growing concern within the City of New Martinsville. Distracted driving has contributed to 45 crashes in the five-year study period, with 10 of those crashes resulting in injuries. Distracted driving includes any activity that diverts attention from driving, including looking at a cellphone, eating and drinking, or focusing on objects outside the vehicle. It is important to note that distracted driving is often under-reported, as drivers tend to not admit they were driving distracted. Anecdotally, survey respondents and stakeholders both indicated that distraction was an observed and concerning behavior.

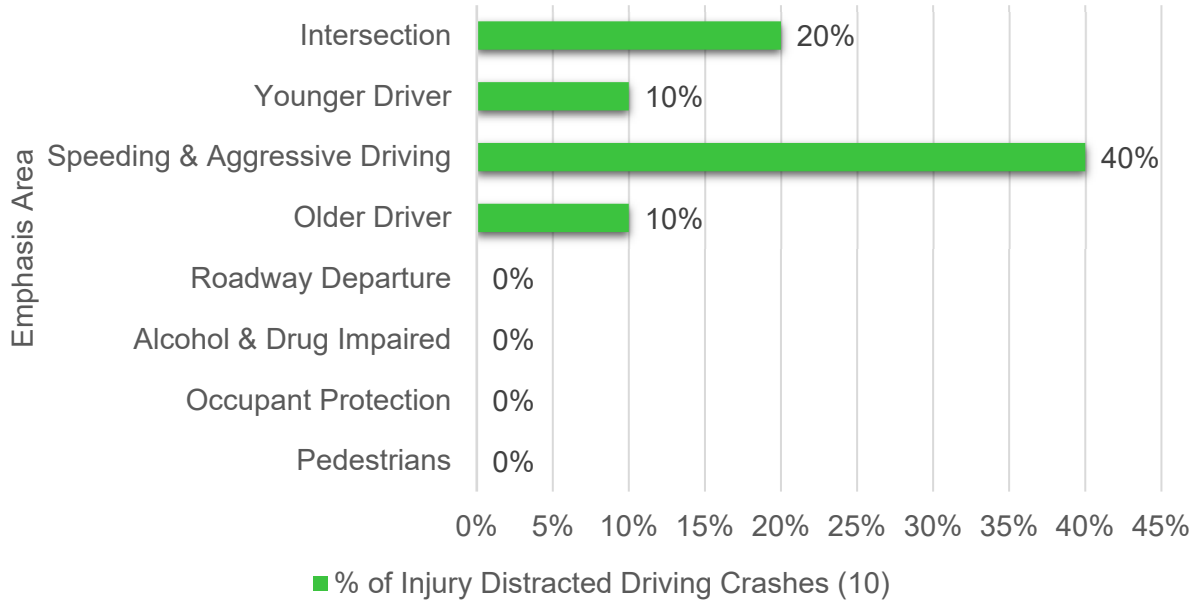
Figure 27: Distracted Driving Annual Crashes by Severity



	2017	2018	2019	2020	2021
PDO Crashes	11	7	6	8	3
Injury Crashes	6	0	3	1	0

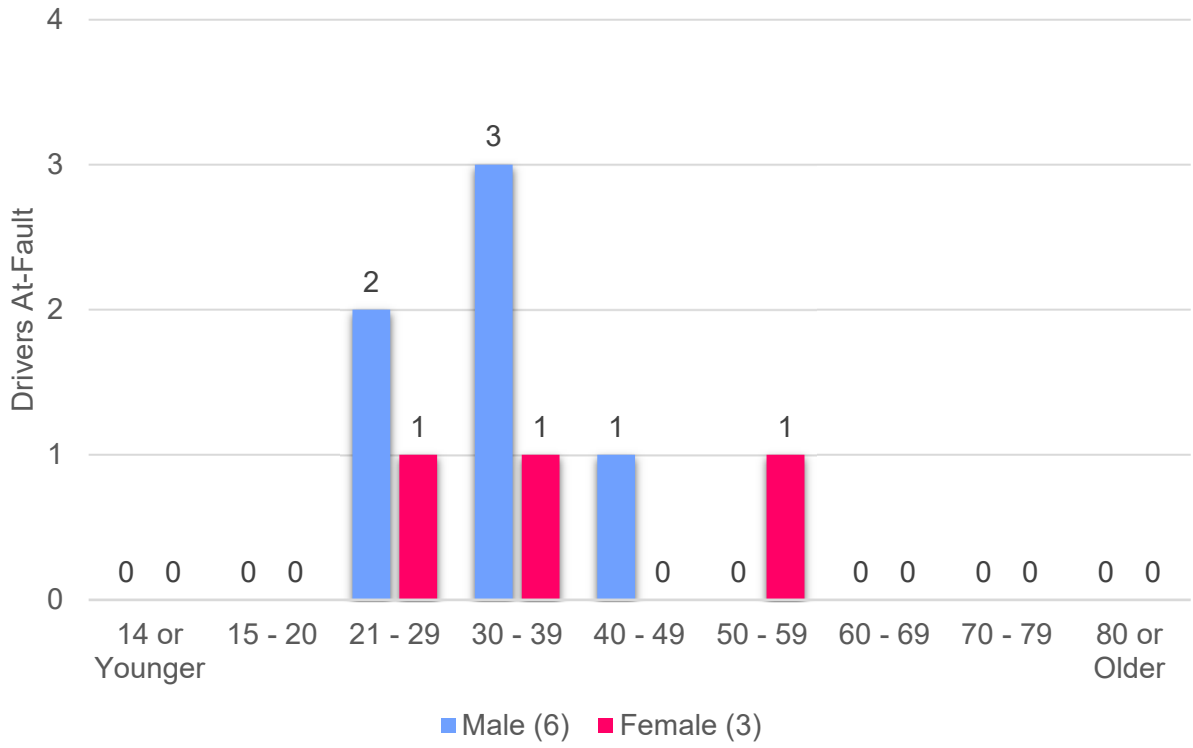
WHY? Overlapping emphasis areas can be identified through the data. The most common related factor in distracted driving-related injury crashes was speeding and aggressive driving. Other factors included intersections, younger drivers, and older drivers.

Figure 28: Distracted Driving Injury Crashes by Emphasis Area



WHO? Most crashes resulting in injury due to distracted driving have been caused by males aged 21 to 39, and with females aged 21 to 39. Other than males in the 30 to 39 age range, the general trend is that distracted driving becomes less frequent as drivers get older.

Figure 29: Distracted Driving Injury Crashes by Age and Gender of "At-Fault" Driver



WHEN? Most of the distracted driving crashes occurred in the afternoon between 12:00 PM and 7:00 PM. The crashes tend to occur mid-week between Wednesday to Thursday.

Figure 30: Distracted Driving Crashes by Day of Week

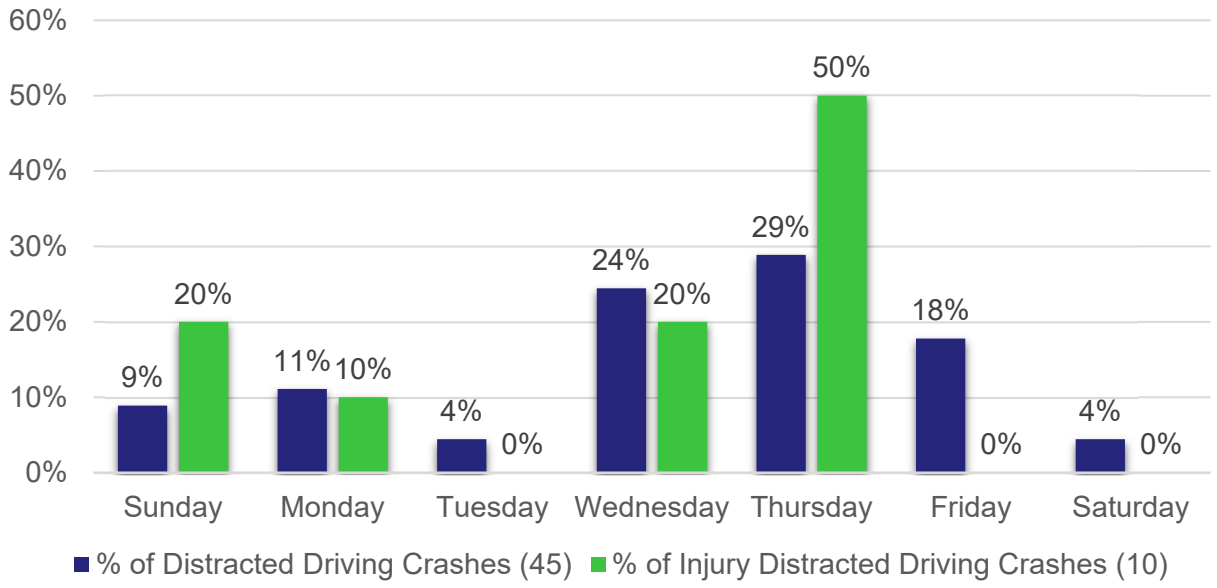
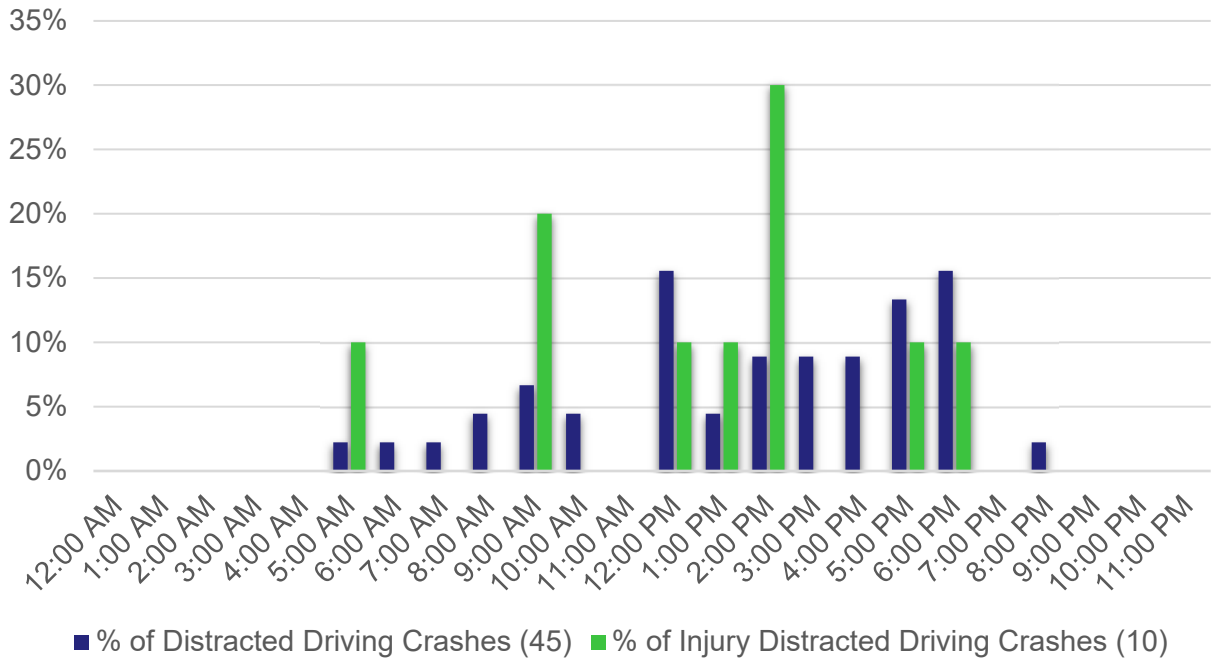
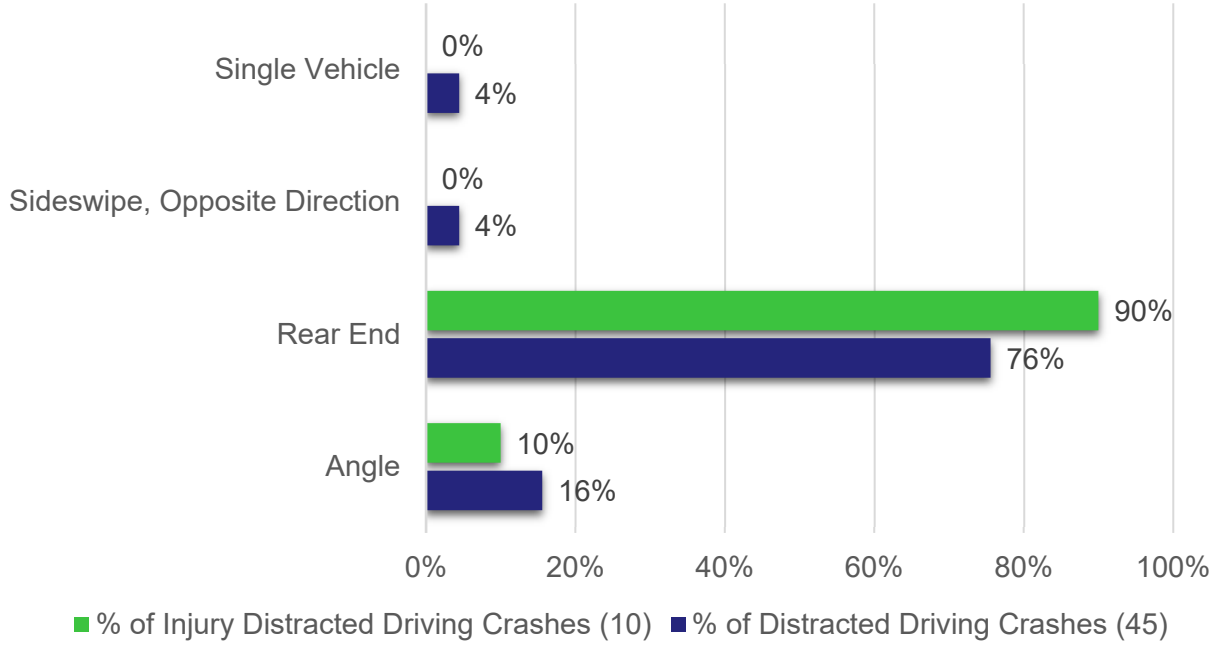


Figure 31: Distracted Driving Crashes by Time of Day



HOW? 90 percent of all distracted driving-related injury crashes were rear ends, while rest of the distracted driving injury crashes were angle collisions. 4 percent each of total distracted driving crashes were single vehicle and sideswipe, opposite direction crashes.

Figure 32: Distracted Driving Crashes by Crash Type



Implementation Strategies

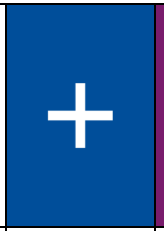
Short Term: 1 Year Medium Term: 2-5 Years Long Term: 5+ Years

				EMPHASIS AREA ADDRESSED			
ACTION	**OUTCOME**	**TIMEFRAME**	**LEAD AGENCY**	**INT.**	**SPEED & AGGR.**	**PED.**	**DIST.**
Strategy 1: Retrofit existing streets and intersections to accommodate human mistakes to prevent and reduce the severity of crashes.							
1.1. Improve signal timing through sequential intersections.	Identify segments with multiple signalized intersections and sync signals to increase traffic flow and predictability.	Medium Term	WVDOH/ City of New Martinsville				
1.2. Select locations to implement proven safety countermeasures at traffic signals and crosswalks to reduce vehicle, bicycle, and pedestrian crashes, including signal backplates, yellow change intervals, Leading Pedestrian Intervals, rapid flashing beacons and high visibility crosswalks.	List of locations for systemic and systematic application of countermeasures. Implement identified countermeasures.	Short Term Long Term	WVDOH/ City of New Martinsville				
1.3. Improve access management.	Reduce or remove access points (such as driveways) or add medians near an intersection to decrease conflicts.	Long Term	WVDOH/ City of New Martinsville				
1.4. Improve intersection geometry.	Identify and reconfigure priority intersections (positively offsetting turn lanes, aligning off-set T- intersections, or improving skewed intersections).	Long Term	WVDOH/ City of New Martinsville				
1.5. Develop a database of existing walkways and prioritize filling gaps in locations connecting to points of interest and locations based on public input.	Database is developed	Short Term	City of New Martinsville				
1.6. Identify and implement proven safety countermeasures such as walkways, roadway reconfigurations, protected bikeways, medians, and refuge islands, along the pedestrian high-risk corridors.	List of locations for systemic and systematic application of countermeasures. Implement countermeasures.	Short Term Long Term	WVDOH/ City of New Martinsville				

Short Term: 1 Year Medium Term: 2-5 Years Long Term: 5+ Years

ACTION	OUTCOME	TIMEFRAME	LEAD AGENCY	EMPHASIS AREA ADDRESSED			
				INT.	SPEED & AGGR.	PED.	DIST.
Strategy 1 (continued): Retrofit existing streets and intersections to accommodate human mistakes to prevent and reduce the severity of crashes.							
1.7. Improve lighting at priority pedestrian crossing locations.	Identify locations to improve vulnerable road user visibility. Modify crossing locations for improved vulnerable road user visibility.	Short Term Long Term	WVDOH/ City of New Martinsville				
1.8. Modify intersection traffic control.	Evaluate unsignalized intersections for all-way stop control, roundabouts, or signalization or signalized intersections for updated phasing or roundabouts; and apply the current signage and pavement marking standards. Implement recommended traffic control changes.	Medium Term Long Term	WVDOH/ City of New Martinsville				
1.9. Secure funding for large scale infrastructure that prioritizes pedestrian, bicycle, and other vulnerable road users.	Apply for federal or state funds for large scale safety projects (SS4A, HSIP, etc.).	Long Term	WVDOH/ City of New Martinsville				
1.10. Implement roundabouts at priority intersections.	Determine intersections in which a roundabout would be beneficial then implement said roundabouts.	Long Term	WVDOH/ City of New Martinsville				
1.11. Improve railroad crossing on WV 2 (reduce queuing caused by train stoppage, etc.)	Determine locations to determine railroad crossings by building a bridge over a railroad or adding a connector road to bypass crossing the railroad.	Long Term	City of New Martinsville				

Short Term: 1 Year | Medium Term: 2-5 Years | Long Term: 5+ Years

				EMPHASIS AREA ADDRESSED			
ACTION	**OUTCOME**	**TIMEFRAME**	**LEAD AGENCY**	**INT.**	**SPEED & AGGR.**	**PED.**	**DIST.**
Strategy 2: Address the safety of all road users, including those who walk, bike, drive, and travel by other modes by providing education on transportation safety and enforcement of related rules.							
2.1. Create and implement public awareness and education campaign tailored to awareness for people walking, biking, and driving (particular focus on distractions and speed/aggressive driving).	Identify partner agencies to plan and create a regional traffic safety campaign targeting demographics outlined in this plan utilizing social media and other available high impact communication resources.	Short Term, then ongoing	City of New Martinsville				
2.2. Provide distracted driving education in schools.	Research existing age-appropriate distracted driving educational resources and integrate safe driving curricula.	Short Term, then annually	Wetzel County School District				
2.3. Inform out-of-state drivers on distracted laws	Post informational signage at state point of entry.	Short Term	City of New Martinsville				
2.4. Continue consistent, high visibility enforcement of speed limit and distracted driving laws	Enforcement and compliance of traffic laws.	Ongoing	State and Local Law Enforcement				
2.5. Support the State's efforts to explore the viability of automated speed enforcement and automated red-light running enforcement programs.	Collaboration with the State.	Ongoing	City of New Martinsville				

Short Term: 1 Year | Medium Term: 2-5 Years | Long Term: 5+ Years

				EMPHASIS AREA ADDRESSED			
ACTION	**OUTCOME**	**TIMEFRAME**	**LEAD AGENCY**	**INT.**	**SPEED & AGGR.**	**PED.**	**DIST.**
Strategy 3: Assess speeds and adjust where needed or consider changes to the roadway to accommodate human injury tolerance, reduce impact forces, and provide additional time for drivers to stop.							
3.1. Conduct a citywide review of speeds to understand where average speeds are higher than posted speeds to prioritize locations for review.	Prioritize and review locations.	Short Term	City of New Martinsville				
3.2. Continue use of speed feedback signs near schools.	Continue to deploy signs near schools.	Short Term	City of New Martinsville				
3.3. Implement use of speed feedback signs at high-speed priority locations.	Deploy speed signs at priority locations.	Medium Term	City of New Martinsville				
3.4. Implement High-Visibility Enforcement (HiVE) Campaign to alert the community about increased law enforcement presence at priority locations.	Identify partner media and other outreach methods to propagate HiVE messaging to the community.	Medium Term	City of New Martinsville				

Next Steps

The New Martinsville CSAP is a dynamic document, intended to be used by stakeholders and partners to continually advance safety via the countermeasures and actions listed herein.

Plan Leadership: The City of New Martinsville assumes leadership of this plan and will support implementation. In this role, they are responsible for identifying engineering improvements on city roads to address safety needs, but also convening stakeholders involved in this plan on a regular basis to discuss all implementation activities.

Implementation Meetings: The City of New Martinsville will convene stakeholders, either in person or virtually at a minimum of one time per year to discuss progress and associated challenges with implementing the Action Plan. The meeting will focus on the "outcomes" for each action. Upon conclusion of the meeting(s), progress will be documented, and the Action Plan updated, as needed.

Stakeholders/Champions: The key stakeholders for this plan reviewed the data, discussed other known challenges, and collectively agreed to the strategies found within. And while they each take responsibility for traffic safety in different ways, crashes occur for a multitude of reasons. So, they committed to implementing the policies, programs, and projects that pertain to them as well as supporting the efforts of others. They will do this by:

- Being champions for safety in job responsibilities
- Participating in events and campaigns relevant to this plan
- Sharing information about transportation safety within our agencies and to peers
- Meeting annually to share progress on safety activities

Annual Evaluation: When the previous year's crash data is available, the City of New Martinsville will evaluate progress toward the goal of toward zero deaths by assessing city-wide fatal and serious injury crashes as well as crashes for each of the four emphasis areas.

Other Planning Efforts: The City of New Martinsville will remain informed of current and new WVDOH safety programs, policies, plans, guidelines, and/or standards. Based on this information, the City can continue to identify opportunities to build upon the current Action Plan. Neighboring Belomar MPO is actively seeking to develop a CSAP for their region. There may be opportunities to collaborate on strategy implementation, especially in education and messaging campaigns.

Refreshing the Plan: From the date of adoption, the New Martinsville Safety Plan will be refreshed or fully updated every five years. This update will ensure crash data is up to date and the solutions are revised to meet evolving implementation of policies, programs, and projects.