RECORD OF RESOLUTION

Resolution No. 4-31-2025 *Passed* 4-3-2025 ~~20~~

A RESOLUTION ALLOWING THE CITY OF CIRCLEVILLE TO ADOPT THE CIRCLEVILLE SAFETY ACTION PLAN.

WHEREAS, the City of Circleville has shown commitment to roadway safety through targeted infrastructure improvements using proven safety countermeasures to improve safety for all road users; and

WHEREAS, in 2024 the City of Circleville, with input from the community and public and private stakeholders, developed the Circleville Safety Action Plan. The Circleville Safety Action Plan identifies projects, strategies, and programs to be implemented to address the identified roadway safety issues with the ultimate goal of eliminating serious injury and fatal crashes on Circleville streets; and

WHEREAS, based on a collection of safety data and with input from the community and stakeholders, the Circleville Safety Action Plan focuses on the following emphasis areas: intersections, speed, younger drivers, and vulnerable road users; and

WHEREAS, , the Circleville Safety Action Plan aligns with the Central Ohio Rural Planning Organization (CORPO) Safety Action Plan, which identifies the most significant roadway safety concerns and establishes specific strategies and action items for implementation to address the identified roadway safety issues for the seven-county CORPO planning area, including Pickaway County; and

WHEREAS, the City of Circleville commits to a proactive Safe System Approach using proven safety countermeasures in planning, design, construction, and maintenance to encourage lower vehicle speeds and foster a safer roadside environment for all users and improve the quality of life for all citizens.

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF CIRCLEVILLE, COUNTY OF PICKAWAY, STATE OF OHIO AS FOLLOWS:

SECTION I. City Council hereby adopts the Circleville Safety Action Plan.

SECTION II. City Council hereby commits to a target of 2% annual reduction in fatalities and serious injuries, to move toward the ultimate target of zero roadway fatalities and serious injuries.

SECTION III. That this resolution shall take effect and be in force from and after the earliest period permitted by law.

PASSED: 4-3-2025
DATE

Barry D. Keller
PRESIDENT OF COUNCIL

ATTEST: Melissa J. Shaw
CLERK OF COUNCIL

APPROVED: 4-3-2025
DATE

Nicholas L. Benton
MAYOR

APPROVED AS FORM:

KENDRA C. KINNEY - LAW DIRECTOR

RECORD OF RESOLUTION

Resolution No. _____ *Passed* _____, *20*_____

Report for

City of Circleville, Ohio

Safety Action Plan

Prepared by:

STRAND ASSOCIATES, INC.®
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February 2025

STATE OF OHIO
SCOTT LEWIS GREEN
E-82458
REGISTERED PROFESSIONAL ENGINEER

Scott Green 2/11/2025

STRAND ASSOCIATES®
Excellence in Engineering℠

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SECTION 1
INTRODUCTION

1.01 INTRODUCTION

The streets and sidewalks in the City of Circleville (City) are an essential resource that enable people to travel freely to their destinations and back home, as well as providing trucking routes through south-central Ohio. A priority for the City is to ensure family members, friends, visitors, and other essential users can use the City's transportation network without the risk of a serious crash.

The City (in coordination with several stakeholders) developed its Safety Action Plan (SAP). This document establishes near- and long-term strategies to reduce fatalities and serious injuries from occurring within the City's transportation network. Between 2018 to 2022, 17 people had their lives altered from a crash resulting in a serious injury and three families unexpectedly lost a loved one.

To prevent future fatalities and serious injuries, the SAP looks at the critical issues, trends, and roadway characteristics causing crashes. The SAP lays out policy, programs, and project ideas that aim to ensure roads are designed with safety as the top priority for road users, road users are educated, speeds are appropriate for road context, laws are enforced, and emergency responders can be as efficient and effective as possible.

1.02 CREATING A SAFE SYSTEM AND THE SAFE SYSTEM APPROACH (SSA)

> *"U.S. DOT adopts a Safe System Approach as the guiding paradigm to address roadway safety. The SSA has been embraced by the transportation community as an effective way to address and mitigate the risks inherent in our enormous and complex transportation system. It works by building and reinforcing multiple layers of protection to prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur. It is a holistic and comprehensive approach that provides a guiding framework to make places safer for people. This is a shift from a conventional safety approach because it focuses on both human mistakes and human vulnerability and designs a system with many redundancies in place to protect everyone. The United States Department of Transportation's (USDOT) National Roadway Safety Strategy and its ongoing safety programs are working toward a future with no roadway fatalities or serious injuries. In support of this approach, safety programs are focused on infrastructure, human behavior, responsible oversight of the vehicle and transportation industry, and emergency response[1]."*

[1]What Is a Safe System Approach? | USDOT.

A. Principles of the SSA

The SSA incorporates the following principles:

1. Death and Serious Injuries are Unacceptable–Prioritizing the elimination of crashes that result in serious injury or death.

2. Humans Make Mistakes–People will inevitably make mistakes and decisions that can lead or contribute to crashes, but the transportation system can be designed and operated to accommodate certain types and levels of human mistakes and avoid death and serious injuries when a crash occurs.

3. Humans are Vulnerable–Human bodies have physical limits for tolerating crash forces before death or serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates physical human vulnerabilities.

4. Responsibility is Shared–Stakeholders, including all levels of government, industry, nonprofit and advocacy, researchers, and the public, are vital to preventing fatalities and serious injuries on roadways.

5. Safety is Proactive–Proactive tools should be used to identify and address safety issues in the transportation system, rather than waiting for crashes to occur and reacting afterwards.

6. Redundancy is Crucial–Reducing risks requires that all parts of the transportation system are strengthened, so that if one part fails, the other parts still protect people.

B. Elements of the SSA

Within the six principles of the SSA, there are five elements that address each aspect of crash risks and together create a SSA that works toward eliminating fatal and serious injuries (FSI) for road users. The elements are listed in the following and displayed in Figure 1.02-1.

1. Safe Road Users–Encourage safe, responsible driving behavior by people who use roads and create conditions that prioritize people's ability to reach their destination unharmed.

2. Safe Vehicles–Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and nonoccupants.

3. Safe Speeds–Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed limit setting, targeted education, outreach campaigns, and enforcement.

4. Safe Roads–Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safe behaviors, and to facilitate safe travel by the most vulnerable users.

5. Post-Crash Care–Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management.

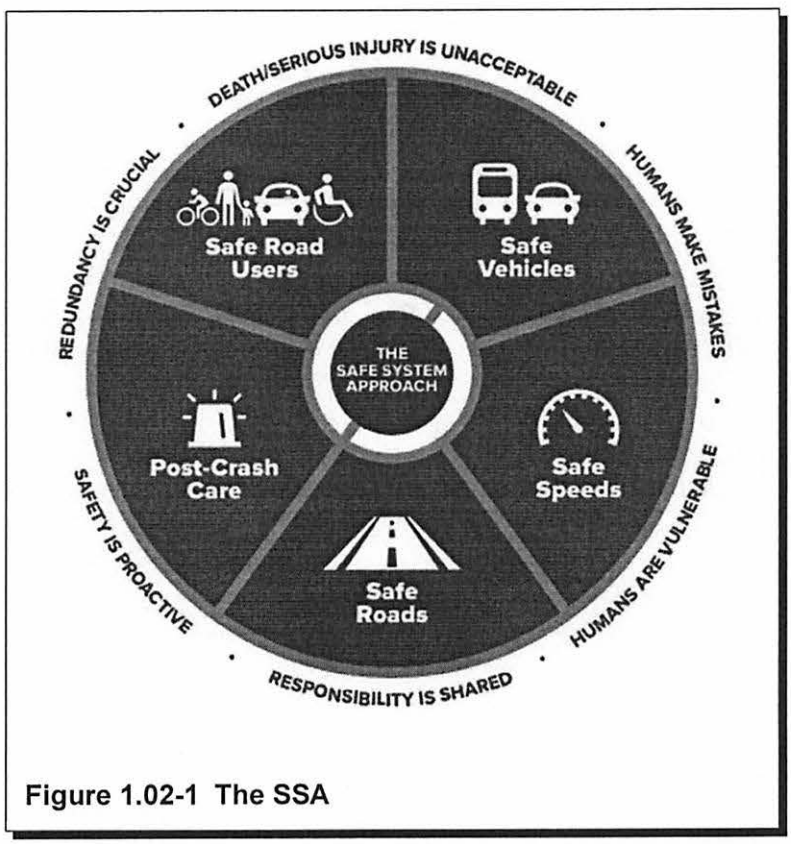


Figure 1.02-1 The SSA

1.03 SAFETY ACTION PLAN (SAP)

The Safe Streets and Roads for All (SS4A) Program emphasizes the development of a comprehensive SAP at the core of safety or transportation investments. The SAP identifies the most significant roadway safety concerns and develops a holistic, well-defined strategy to prevent roadway fatalities and serious injuries. Development of this SAP for the City makes the community eligible to apply for Implementation Grants through the SS4A Program, which provide federal funds to implement projects and strategies identified in the SAP. The SS4A Program requires an eligible SAP to be in place before agencies can apply for the Implementation Grant funds. The City's SAP was developed to fulfill this requirement.

There are several required components of an SS4A SAP that require a process-oriented approach during the development of the SAP. The USDOT considers this process to be critical for the success of the SAP. The components of a comprehensive SAP addressed in this SAP are listed in the following and the SAP addresses how they will be achieved throughout the document and in Section 1.04 Planning Process.

1. Leadership Commitment and Goal Setting
2. Planning Structure
3. Safety Analysis
4. Engagement and Collaboration
5. Equity Considerations
6. Strategy and Project Selections
7. Progress and Transparency

1.04 PLANNING PROCESS

The SAP was prepared by Strand Associates Inc.® (Strand), with guidance from the City's Public Service Department, a stakeholder group formed for development and implementation of this SAP, the Central Ohio Rural Planning Organization (CORPO) committee, and with input from the public. Stakeholder and public involvement were key components in developing the SAP and was instrumental in understanding local roadway safety issues, needs, and in identifying impactful recommendations.

Table 1.04-1 expands on the comprehensive SAP components and how they were addressed for the City in this SAP.

Table 1.04-1 The City's SAP Planning Process

	Comprehensive SAP Components	How Addressed for the City
1	The governing body in the jurisdiction publicly committed to a percentage reduction of roadway fatalities and serious injuries and an eventual goal of eliminating roadway fatalities and serious injuries	City Council reviewed and approved a resolution committing to the annual reduction percentage outlined in this plan
2	A committee, task force, implementation group, or similar body charged with oversight of the Action Plan development, implementation, and monitoring	A stakeholder/implementation group was convened for plan development and will implement the strategies and actions within. Stakeholders included: ▪ The City ▪ City Police ▪ City Fire and EMS ▪ City Schools ▪ City Council ▪ CORPO
3	Analysis of existing conditions and historical trends to provide a baseline level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region	Documented in Current Conditions section of the SAP
	Analysis of the location where there are crashes, the severity, as well as contributing factors and crash types	Documented in Current Conditions and Regional Safety Priorities section of the SAP
	Analysis of systemic and specific safety needs is also performed, as needed (e.g., high risk road features, specific safety needs of relevant road users)	Documented in Current Conditions and Regional Safety Priorities section of the SAP
	A geospatial identification (geographic or locational data using maps) of higher risk locations	Documented in Current Conditions and Regional Safety Priorities section of the Plan
4	Engagement with the public and relevant stakeholders, including the private sector and community groups	Documented in Engagement and Collaboration section of the SAP
	Incorporation of information received from the engagement and collaboration into the SAP	The SAP strategies and action items are a direct result of the stakeholder and public input survey and stakeholder meeting

	Comprehensive SAP Components	How Addressed for the City
	Plans and processes are coordinated with other governmental plans and planning processes to the extent practical	The City coordinated with the Police and Fire Departments and CORPO as part of this planning process
5	Considerations of equity using inclusive and representative processes	Documented in the Equity Considerations sub-section of the SAP
	The identification of underserved communities through data	Documented in the Equity Considerations sub-section of the SAP
	Equity analysis, in collaboration with appropriate partners, focused on initial equity impact assessments of the proposed projects and strategies, and population characteristics	Documented in the Equity Considerations subsection of the SAP
6	The SAP discusses implementation through revised or new policies, guidelines, and standards	Programs and projects were identified through the planning process. The implementation of these efforts is documented in the Strategies and Action Items section of the SAP and each action is assigned a "lead agency"
7	The plan identifies a comprehensive set of projects and strategies to address the safety problems in the SAP, time ranges when projects and strategies will be deployed, and explain project prioritization criteria	Documented in the Strategies, Action Items, and Project Selection section of the SAP
8	A description of how progress will be measured over time that includes, at a minimum, outcome data	Documented in the Progress and Transparency subsection of the Plan
	The SAP is posted publicly online	The final SAP is posted on the City's Web site

1.05 LEADERSHIP COMMITMENT AND GOAL SETTING

Providing a safe transportation system for all users is one of the most important goals for the City. In developing the City's SAP, the stakeholder committee endorsed a target of reducing fatalities and serious injuries by 2 percent each year across the city. This is in line with the targets adopted by the Ohio Department of Transportation (ODOT) for the statewide safety performance measures, as well as the targets adopted by the Mid-Ohio Regional Planning Commission (MORPC) for the Metropolitan Planning Organization (MPO) planning area safety performance measures, and the target adopted by the CORPO SAP.

The target is a 2 percent annual reduction in fatalities and serious injuries, to move toward the ultimate target of zero roadway fatalities and serious injuries.

The SAP provides a framework and action items to support this long-term safety goal. The SAP and associated materials are intended to be a resource and guide for the City and its stakeholders to use in addressing the safety of road users with data-informed decisions and scalable investments.

Figure 1.05-1 illustrates the identified target (a 2 percent annual reduction in fatalities and serious injuries) during the period between 2025 and 2050 in 5-year increments. By 2050, a 2 percent annual reduction will result in at least one less serious injury and nearly cut the average annual rate of a fatality occurring in half compared to the 2018 to 2022 annual averages. Achieving the annual reduction target will make progress toward the ultimate goal of no roadway fatalities and serious injuries, creating a safer transportation system for all users.

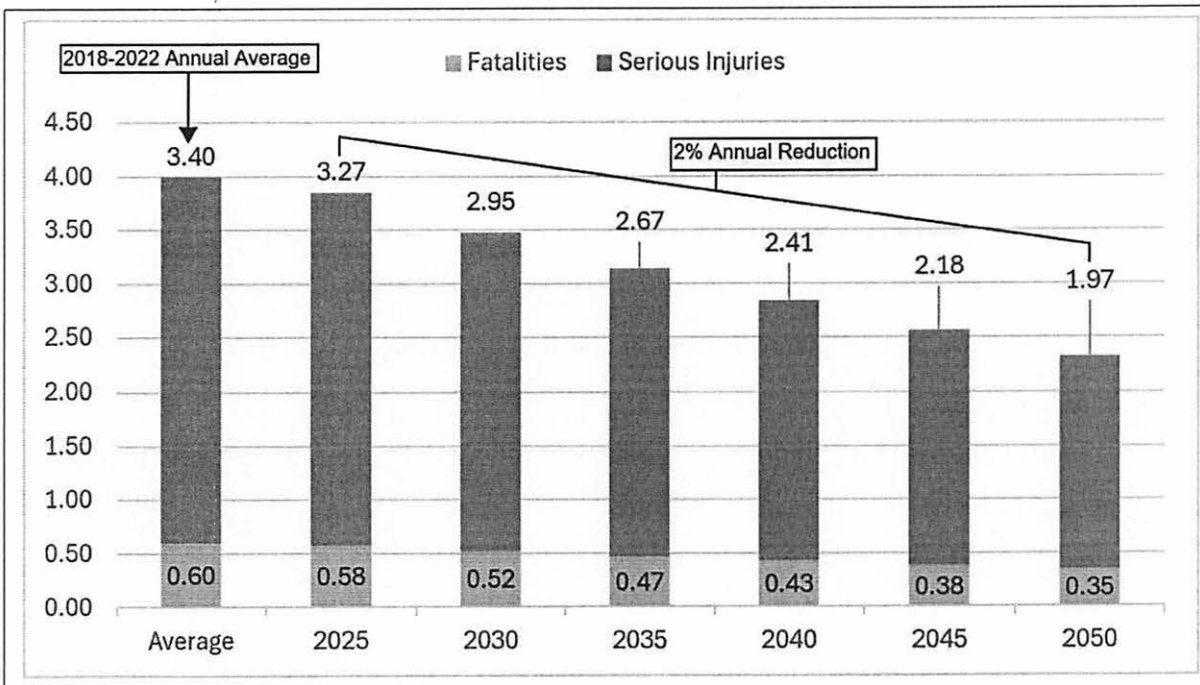


Figure 1.05-1 Targeted Number of Average Fatalities and Serious Injuries by Calendar Year (2025 to 2050)

SECTION 2
CURRENT CONDITIONS

2.01 PLANNING AREA

The area being considered for this SAP is the City's limits as of July 2024 are shown in Figure 2.01-1.

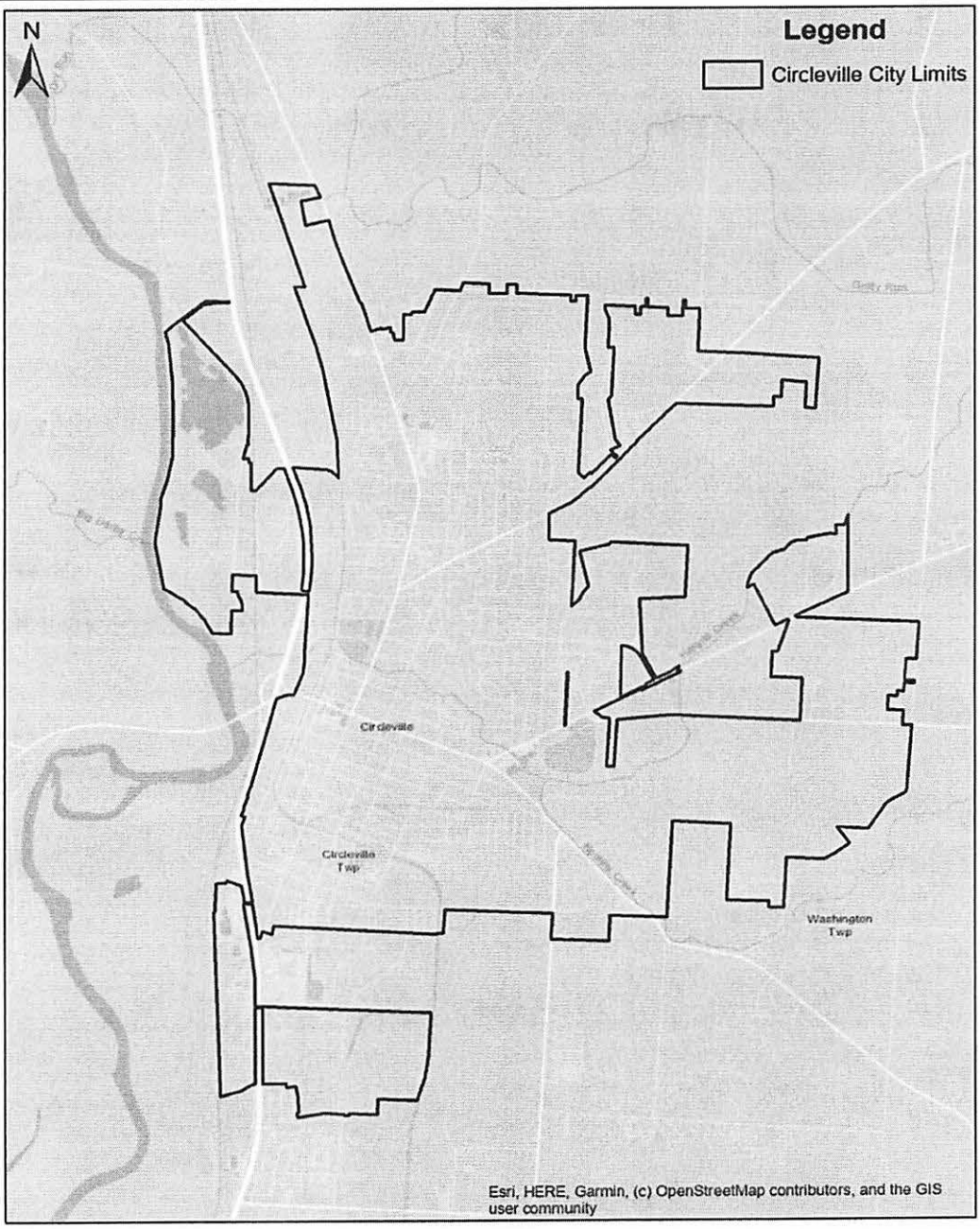


Figure 2.01-1 The City's SAP Planning Area

2.02 CRASH DATA ANALYSIS

For this SAP, crash data was gathered from ODOT's GIS Crash Analysis Tool (GCAT) and analyzed using the ODOT's Crash Analysis Module (CAM) Tool. All the crash trend, crash type, and contributing factors analysis used this data. In addition to this data, and in collaboration with CORPO, CORPO crash data was used to corroborate this data. The CORPO SS4A Action Plan Interactive Web Map was also used to analyze the motorized, pedestrian, and bicycle high injury networks, as well as to analyze the ODOT Highway Safety Improvement Program (HSIP) Systemic Safey Priorities, which included pedestrian safety priority corridors and roadway departure priority corridors. Both analyses were shared with the stakeholder group to provide context on crash trends and locations. This information was used to inform and prioritize the action items resulting from this planning process.

Between 2018 and 2022, 792 total traffic crashes were reported in the City. In 19 of those 792 crashes, 16 crashes involved 17 serious injuries and three crashes involved fatalities as the worst injury reported in the crash. Figure 2.02-1 illustrates these crashes annually over the analysis period. The locations of each serious injury and fatal crash can be found on the map in Figure 2.02-2.

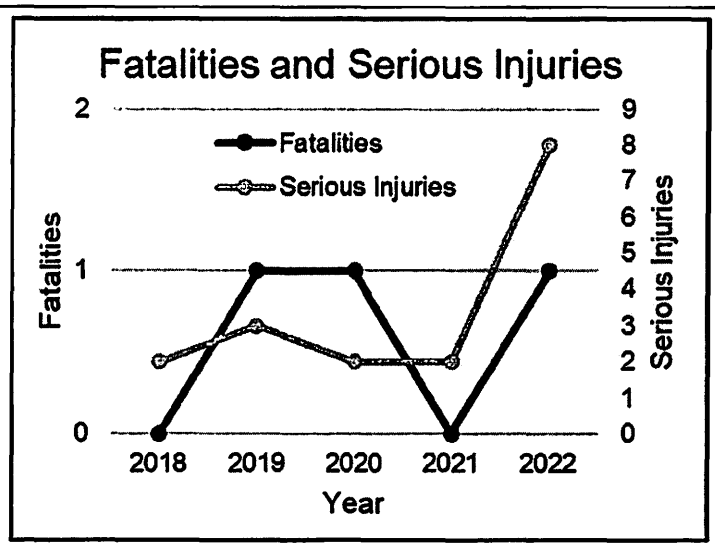


Figure 2.02-1 Crash Statistics

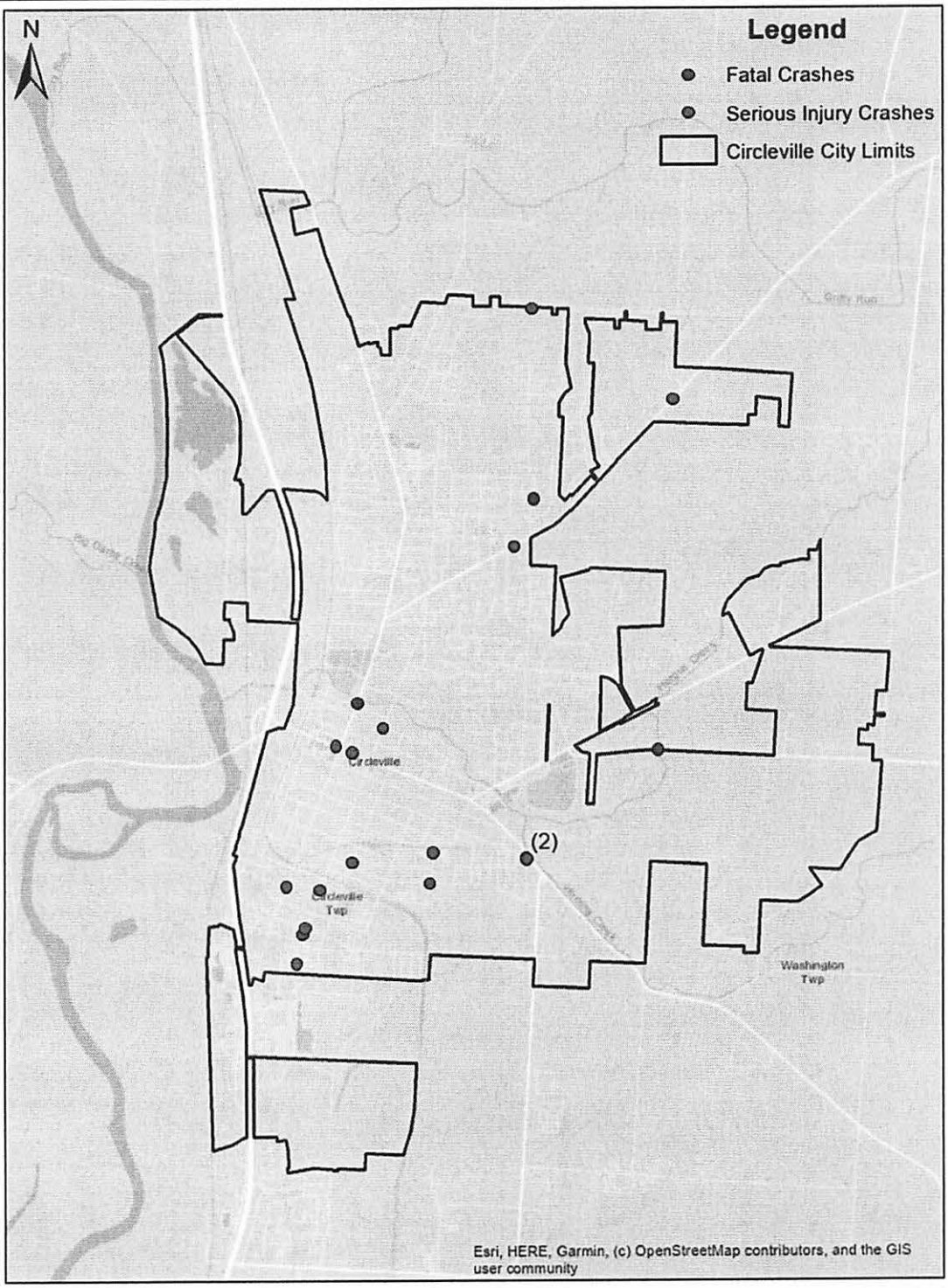


Figure 2.02-2 Locations of Individual FSI Crashes

2.03 CRASH TYPE

Many different types of crashes occurred throughout the City during the 2018 to 2022 analysis period. While certain crash types occurred more frequently, other crash types that occurred less frequently resulted in more FSI crashes. Figure 2.03-1 provides additional detail on the frequency and severity of each crash type by displaying the percentage of total crashes, as well as the percentage of FSI crashes for each crash type. The list below highlights some key takeaways from the crash data.

1. Rear end and angle crashes where the two most frequent crash types reported, accounting for approximately 45 percent of all crashes. However, they account for just over 20 percent of FSI crashes.

2. Fixed object crashes accounted for 7.6 percent of all reported crashes, while accounting for 26.3 percent of FSI crashes.

3. Pedestrian crashes accounted for 1.5 percent of all reported crashes, while accounting for 15.8 percent of FSI crashes.

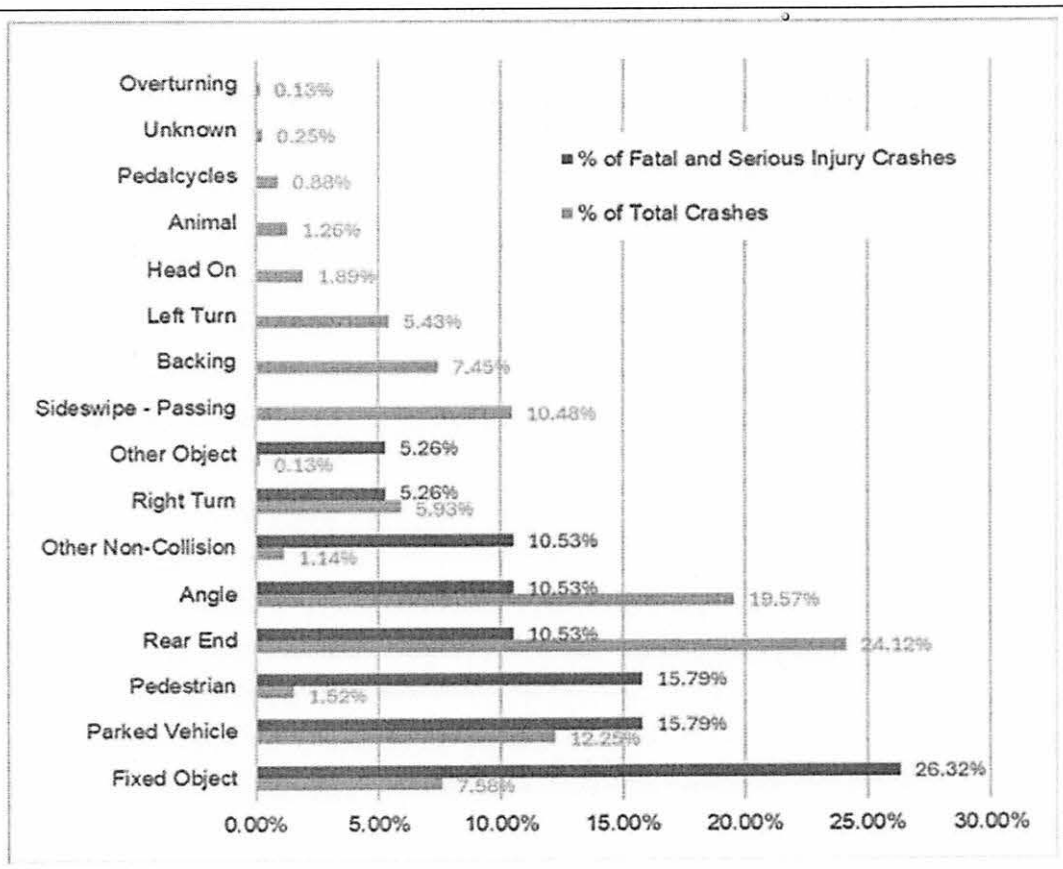


Figure 2.03-1 Percentage of Crashes by Crash Type and Severity

2.04 ROADWAY CHARACTERISTICS

Roadway characteristics are a crucial piece of the puzzle when trying to pinpoint why FSI crashes are happening at certain locations across the City. By identifying the roadway characteristics at the location of each FSI crash location, common roadway characteristics can be identified, and systemic improvements can be made to various locations throughout the city with similar roadway characteristics. This approach aligns with the SSA principle that safety is proactive and that proactive tools should be used to identify and mitigate latent risks in the transportation system, rather than waiting for crashes to occur and reacting afterwards. The following list provides insight into common roadway characteristics at FSI crash locations in the City and the impact that each roadway characteristic has on the transportation system:

1. Poor roadway lighting–Poor lighting or a lack of lighting on the roadway hinders nighttime visibility for the driver and can make obstructions harder to see, as well as vulnerable road users as they travel along and across roadways. In general, the number of fatal crashes occurring in daylight is approximately the same as those that occur in darkness. However, the nighttime fatality rate per miles traveled is three times the daytime rate because only 25 percent of vehicle miles traveled (VMT) occur at night. At nighttime, vehicles traveling at higher speeds may not have the ability to stop once a hazard or change in the road ahead becomes visible by the headlights[2].

2. Presence of on-street parking–The presence of on-street parking was one of the most common roadway characteristics found at the locations of FSI crashes within the City. On-street parking can hinder the driver's visibility or approaching vehicles from adjacent roadway segments, as well as from pedestrians, bicyclists, and other vulnerable road users crossing the roadway. Vehicles parked on the street also add obstructions that can be struck if a vehicle leaves their lane.

3. Same lane used for turning and through movements–When vehicles use the same lane for turning and through movements traffic backups, hard braking, and rear end collisions can be amplified as vehicles slow or stop to make a turn as the vehicle behind them intends to proceed through an intersection.

4. Straight and straight level grades–Road contours play a significant role in how vehicles operate on a given roadway. Most of the FSI crashes occurred on straight and straight level grades as shown in Figure 2.04-1. Straight and straight level grades in combination with wider roads on many of the corridors that hosted FSI crashes leads to a runway effect. These flat, open corridors often lead to vehicles traveling at higher speeds than is permitted by the surrounding land use context and posted speed limits.

[2]Lighting | Federal Highway Administration (FHWA) (dot.gov)

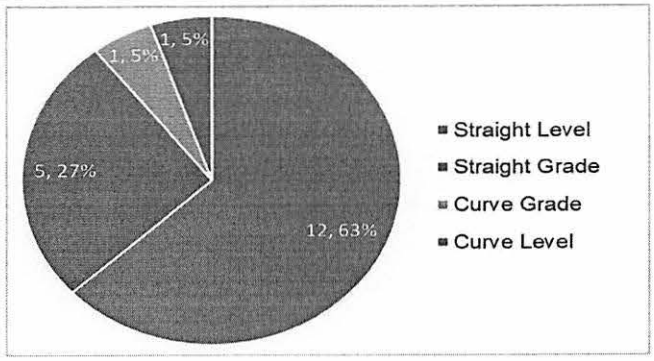


Figure 2.04-1 FSI Crashes by Road Contour (by Number, Percentage)

A. Vulnerable Road Users

The City contains a centrally located east to west downtown corridor and a north to south commercial corridor, both with retail shops, restaurants, and other businesses. The remainder of the city is comprised of primarily residential properties, as well as schools, educational and recreational facilities, parks, and various businesses. The City is relatively small. As a result, people commute and travel from place to place by various modes of transportation. With ample opportunity to walk and bike throughout the City, that presents the safety risk of having vulnerable road users sharing the transportation network with vehicles. Figure 2.04-2 depicts the percentage of FSI crashes and percentage of all crashes categorized by pedestrian crashes, bicycle crashes, motorcycle crashes, and motor vehicle crashes. The key highlight of this data is that while the 12 pedestrian crashes make up only 1.5 percent of all crashes, the three fatal or serious injury pedestrian crashes make up 15.8 percent of all FSI crashes.

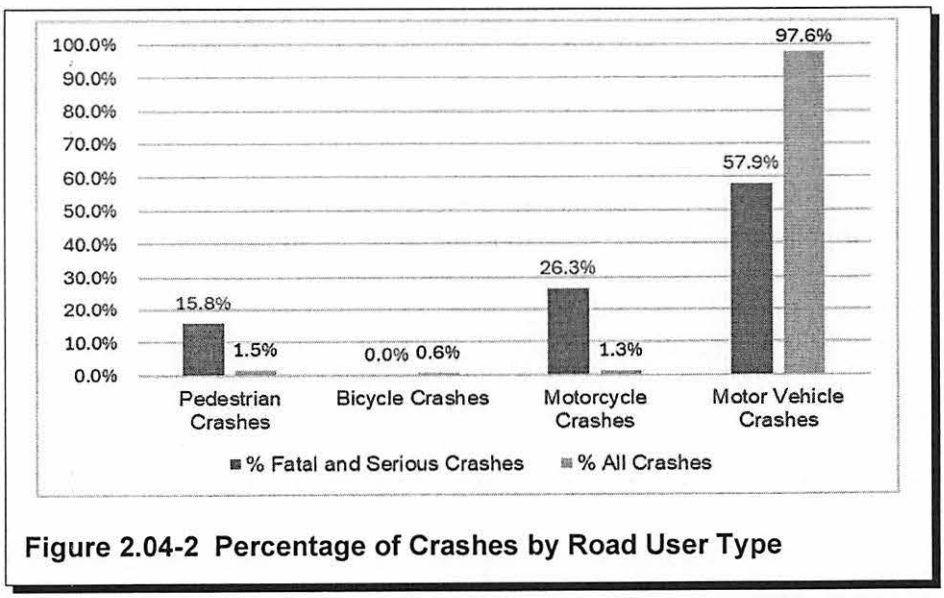


Figure 2.04-2 Percentage of Crashes by Road User Type

B. Contributing Factors

One key principle of the SSA is that responsibility is shared. Stakeholders including vehicle manufacturers, transportation system managers, designers and users must ensure that crashes do not lead to fatalities or serious injuries. Designers can create a safe system and law enforcement can discourage certain behaviors across the system, but the people using the transportation system have the responsibility to behave in a safe manner. Road user age, behavior, and usage of restraints while operating a vehicle are all contributing factors that can highlight where to target safety interventions and action items to mitigate fatalities and serious injuries throughout the City.

1. Road User Age

The age of people involved in crashes can provide helpful information to better educate the community and target educational programs to specific age groups that are adversely affected by known safety issues. Figure 2.04-3 highlights the ages of people injured in crashes in the City during the 2018 to 2022 analysis period, categorized by the severity of the injury that resulted from the crash.

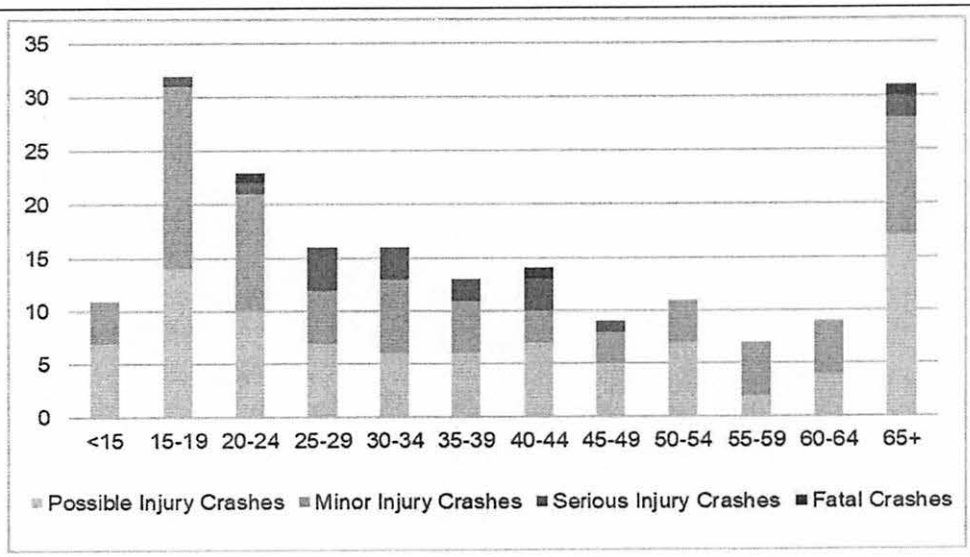


Figure 2.04-3 Crashes by Severity and Age Group

Key takeaways from this data are noted in the following.

a. People ages 15 to 19 account for the most total injury crashes and people ages 20 to 24 account for the third most injury crashes. This indicates a need to target educational programs to younger drivers.

b. People aged 65 and older experienced the second most total injury crashes including significant percentages for minor injuries, serious injuries, and fatalities. As people age, our bodies become more fragile and less capable of withstanding the forces associated with crashes. Older drivers can also experience issues such as misjudging gaps in traffic.

2. Road User Behavior

Road user behavior is a critical element of the shared responsibility to keep our roadways safe that lies in the hands of the roadway users. Road user behaviors that can play a significant role in roadway safety include using a seatbelt or other restraint while operating a motor vehicle, driving sober (not under the influence of drugs or alcohol), traveling at an appropriate speed, and being focused on driving while when behind the wheel. When drivers operate with poor road user behaviors, the transportation system can become far more dangerous and lead to more crashes including more serious crashes. Figure 2.04-4 shows how each of these behaviors factored into the percentage of FSI crashes that occurred in the City during the 2018 to 2022 analysis period. It is important to note that this figure represents only primary factors. Although these behaviors are not mutually exclusive, there can be other behaviors for each crash that are not represented. For example, a crash could occur where an alcohol impaired driver is also speeding, or a distracted driver and a driver speeding could have both been involved in the same crash. Additionally, these road user behaviors are collected from data that is based on what the reporting officer marks on a crash report as identified factors that contributed to the crash. Officers cannot always make the determination as to what factors contributed to each crash. For example, it is difficult to tell whether a driver being distracted contributed to the crash. For this reason, it is understood that this data is most likely underestimated even though it is the leading factor shown in Figure 2.04-4.

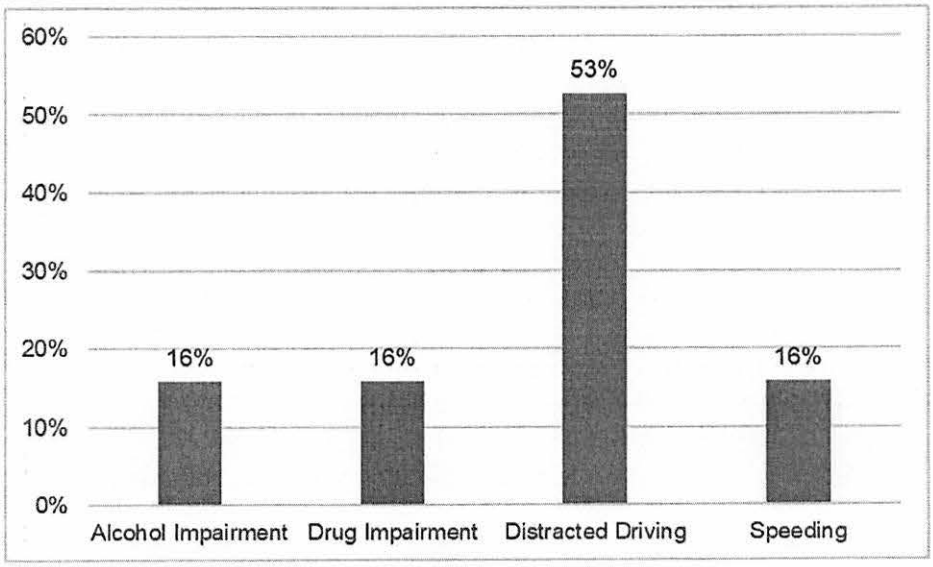


Figure 2.04-4 Percentage of Fatalities and Serious Injuries by Road User Behavior

As illustrated by the Figure 2.04-4, it is evident that distracted driving is the leading primary contributing factor to FSI crashes in the City. Alcohol impairment, drug impairment, and speeding have also been identified as primary factors in some of these crashes. This data helps to better

understand what to emphasize in safety interventions and education programs to help mitigate the road user behaviors that contribute to FSI crashes.

3. Restraint Usage

Seat belt or other designated restraint usage while operating motor vehicles is one of the primary safety tools deployed in vehicles to reduce the severity of crashes when they do occur. Figure 2.02-8 illustrates the percentage of FSI where the crash report indicated the victim was not using a restraint during the crash. In more than 40 percent of FSI crashes, the victim of the crash was reportedly not using a restraint.

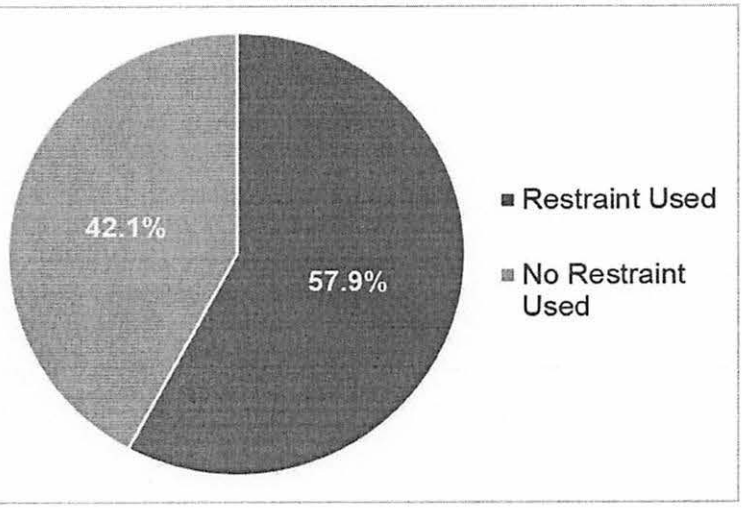


Figure 2.04-5 Percentage of Fatalities and Serious Injuries by Restraint Use

C. Emphasis Areas

ODOT's Strategic Highway Safety Plan (SHSP) has identified several safety emphasis areas that contribute to FSI across the state of Ohio. Data analysis depicted in Figure 2.04-6 categorizes each FSI crash by the emphasis areas associated with the crash, and by crash severity. It is important to note that an individual crash can be counted for more than one emphasis area. For example, A serious injury crash involving a younger driver could also be at an intersection and that crash would be counted once for each emphasis area.

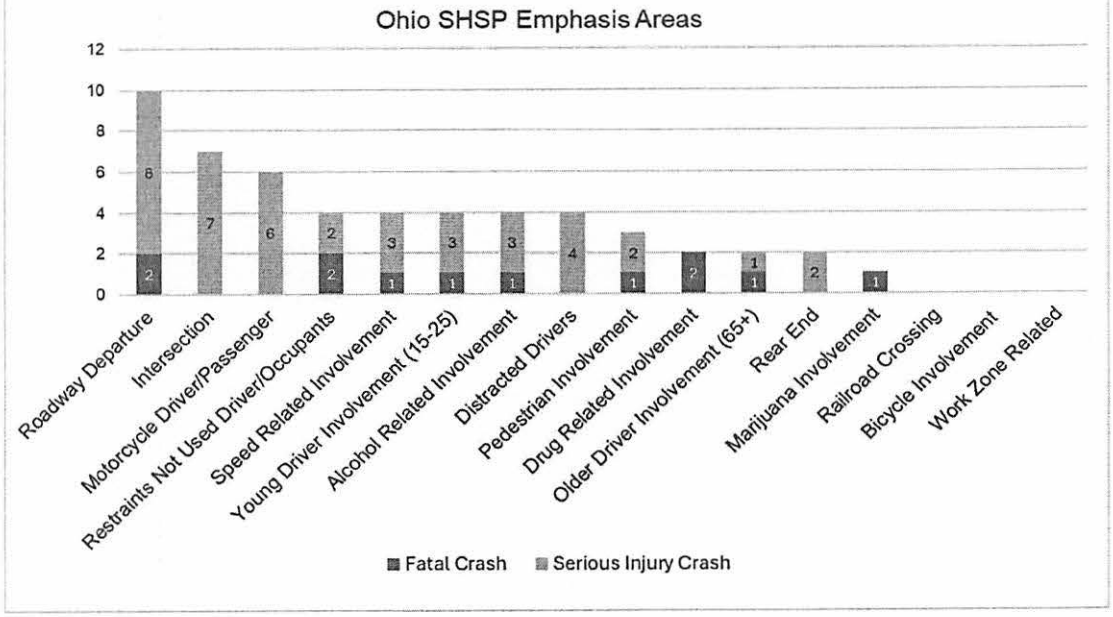


Figure 2.04-6 City FSI Crashes by Emphasis Area

FSI crash percentages by emphasis area compared to the statewide percentage of FSI crashes are shown in Table 2.04-1.

SHSP Emphasis Area	Statewide (%) (2015 to 2019)	City Roads (%) (2018 to 2022)
Roadway Departure	43.0	56.2
Intersection	39.0	31.6
Motorcycle Driver/Passenger	11.5	31.6
Restraints Not Used Driver/Occupants	19.0	21.1
Speed Related Involvement	24.3	21.1
Young Driver Involvement (15-25)	35.0	21.1
Alcohol Related Involvement	16.4	21.1
Distracted Drivers	7.9	21.1
Pedestrian Involvement	7.0	15.8
Drug Related Involvement	9.3	10.5
Older Driver Involvement (65+)	19.1	10.5
Above state average	Below state average	

Table 2.04-1 Emphasis Area FSI Crash Percentages

2.05 RELATED PLANNING EFFORTS

In development of the SAP, the project team reviewed several related planning efforts and initiatives for the City that align with the efforts of the SAP. These resources include the CORPO 2023 to 2050 Transportation Plan (CTP) the CORPO SAP, and the City's Proposed Bike Lanes planning effort.

The City's SAP establishes local safety strategies and priorities and provides a blueprint for accomplishing them. The framework set by this SAP should be incorporated into future planning processes in the City, aiding the ability to further incorporate effective safety planning into transportation plans, programs, and project development. Where possible, effort should be made to evaluate planned projects and prioritize projects based on the SAP to realize the benefits set forward in this document.

A. CTP

The update to the long-range transportation plan for the CORPO region was adopted in November 2023. Of the six regional emphasis areas outlined in the CTP, a safe transportation system for all users directly aligns with the efforts of the City's SAP, as this SAP provides a framework and actions to support this long-term safety goal.

The CTP includes recommended system management strategies composed of action items and polices to manage the existing system efficiently. Many action items and strategies align with the goals of this SAP, such as the following:

1. Set ambitious safety targets
2. Modernize corridors with multimodal improvements
3. Provide dedicated facilities for non-motorized users
4. Improve intersection controls to reduce crash severity
5. Promote safety education
6. Improve incident response
7. Focus on underserved communities
8. Develop a transportation system to serve all demographic population groups
9. Improve human services transportation and coordination with public transit

B. CORPO SAP

This plan is in conjunction with the CORPO SAP completed in April 2024. CORPO is designated as an official Ohio Regional Transportation Planning Organization (RTPO) for the seven counties surrounding the City of Columbus metropolitan area, including Fairfield, Knox, Madison, Marion, Morrow, Pickaway, and Union. In partnership with ODOT, each RTPO is tasked with several roles and responsibilities

including long-range transportation planning, transportation equity, public involvement, transportation technical assistance, and transportation special studies, such as SAPs.

The City is located within Pickaway County, in the CORPO region. Members of the City's SAP stakeholder group participated in the development of the CORPO SAP to ensure alignment between the two plans. The plans have overlaps and similarities in the strategies and action items identified in each SAP. Additionally, data and information from the CORPO SAP were shared with the City's team to assist in the development of this SAP.

C. The City's Proposed Bike Lanes Planning Effort

The City is in the process of planning proposed bike lanes throughout the City. This planning effort will help foster a safer environment for vulnerable road users to use the transportation system in the city. Additionally, this effort highlights equity considerations as not all road users have vehicles for their daily transportation, making it imperative that those who choose to and those who need to use alternative forms of transportation have safe means to travel the city. The City's SAP aims to identify priority corridors for bicycle and pedestrian improvements and provide a framework for implementation. This effort supports the goals of the CTP as well as the City and CORPO SAPs.

SECTION 3
ENGAGEMENT AND COLLABORATION

3.01 STAKEHOLDER MEETING

A stakeholder meeting was held on June 20, 2024. The goal of this meeting was to gather a diverse group of stakeholders that would be responsible for the implementation and monitoring of the SAP, as they will ultimately be the ones driving safety improvements in the City. At the meeting, Strand presented information on the SS4A program and its requirements, how it aimed to achieve each component of the SS4A program, and the data analysis of the existing crash history within the City during the evaluation period from 2018 to 2022. The stakeholder group provided valuable anecdotal evidence on priority safety locations within the planning area as well as strategies and action items to help improve the safety of the transportation network of the City. The stakeholder group consisted of:

1. The City's Public Service Department
2. The City's Police Department
3. The City's Fire and EMS Department
4. The City School District
5. Pickaway County Community Action Agency (PICCA)
6. Strand

Stakeholders at the meeting were provided with comment sheets with questions pertaining to safety concerns and potential improvements within the planning area. This feedback and anecdotal evidence were recorded and analyzed for incorporation into the SAP. Figure 3.01-1 shows feedback received from 11 PICCA transit drivers and staff and depicts the results asking them to rank the top priority for transportation safety improvements for the City. Rankings are 1 through 9, with 1 being the top priority. This means the lower the average ranking, the higher priority the safety improvement is. This feedback supports reducing speeds, adding roundabouts at busy intersections, making other intersection improvements, and increasing enforcement of traffic laws as top priorities by PICCA Transit operators and staff members within the planning area.

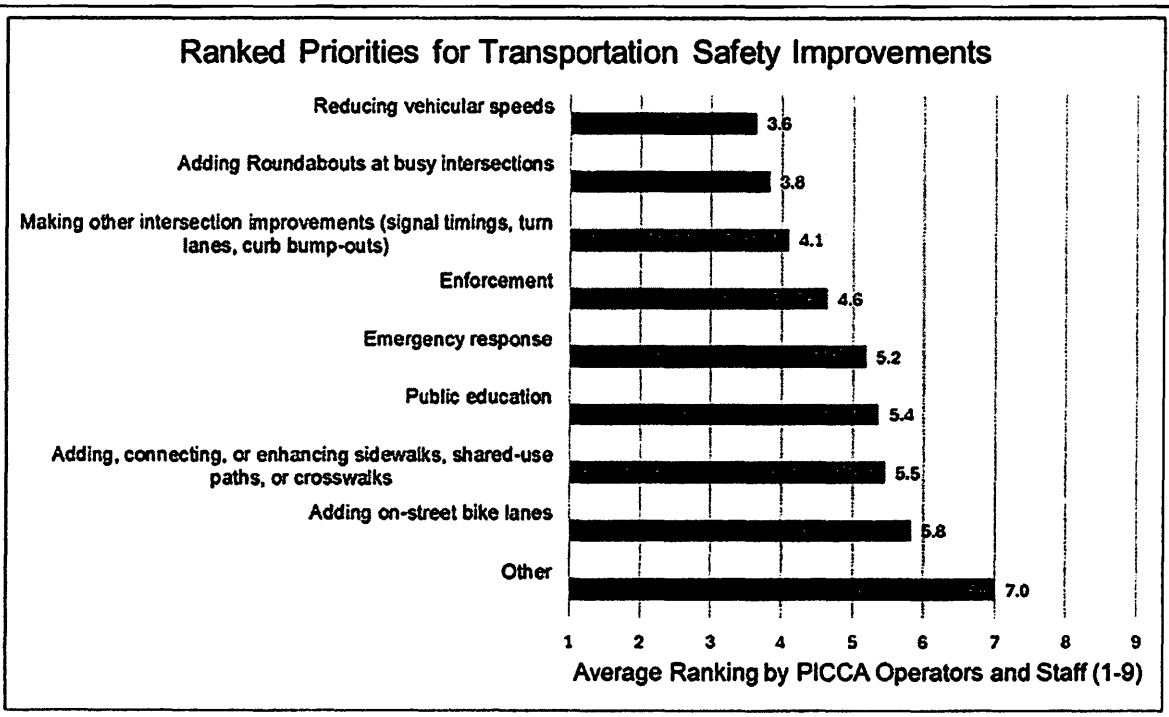


Figure 3.01-1 Ranked Priorities for Transportation Safety Improvements (PICCA)

3.02 PUBLIC ENGAGEMENT

A public involvement meeting was held on July 30, 2024, in conjunction with the City's Service Committee Meeting to present the SS4A SAP findings to the Service Committee and the public, and to hear feedback from the public on the information presented and current safety conditions of the City. The presentation by Strand covered the principles and elements of the SSA, the components of a comprehensive SAP and how they were addressed for the City, figures to depict some of the crash data analysis to demonstrate how the data is being used to inform the decision making process, and some example action items to illustrate how implementation of the SAP aims to reduce FSI crashes. There was a comment period during the meeting in which participants were able to ask questions and provide feedback on the SAP.

In addition to the public meeting, a public survey was posted online on the City's Web site to gain more organized input on specific safety concerns and potential improvements. Figure 3.02-1 shows feedback received from the 34 public survey responses and depicts the results asking them to rank the top priority for transportation safety improvements for the City. Similar to Figure 3.01-1, rankings are 1 through 9, with 1 being the top priority, meaning the lower the average ranking, the higher priority the safety improvement is. Figure 3.02-2 shows the ranked priorities for transportation safety improvements combining the data from the public survey and the PICCA transit operators and staff. This gives a more comprehensive look at the community's preferences for transportation safety improvements. The top ranked improvements from this combined data set were, making other intersection improvements (signal timings, turn lanes, curb bump-outs); reducing vehicular speeds; enforcement; and adding roundabouts

at busy intersections. Figures 3.02-3 through 3.02-6 depict public survey results regarding the perceived transportation safety in the City. Anecdotal evidence from City residents on intersection, driver, walking, and biking safety provides added insight to compare and corroborate the data gathered from the crash history.

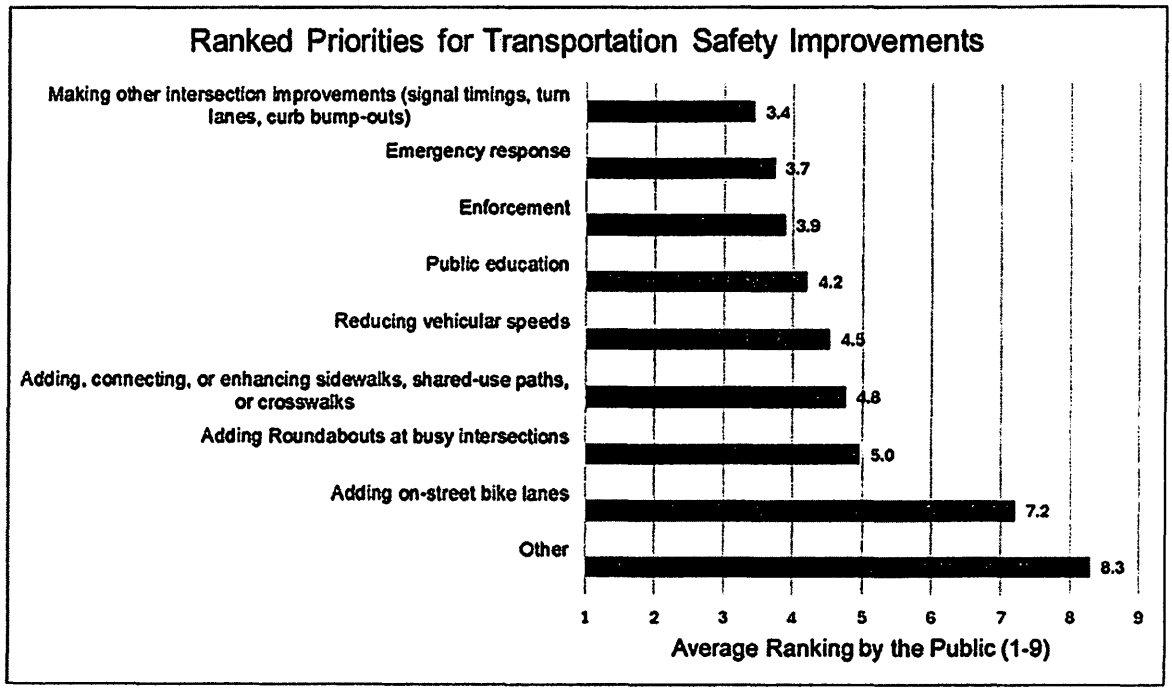


Figure 3.02-1 Ranked Priorities for Transportation Safety Improvements (Public)

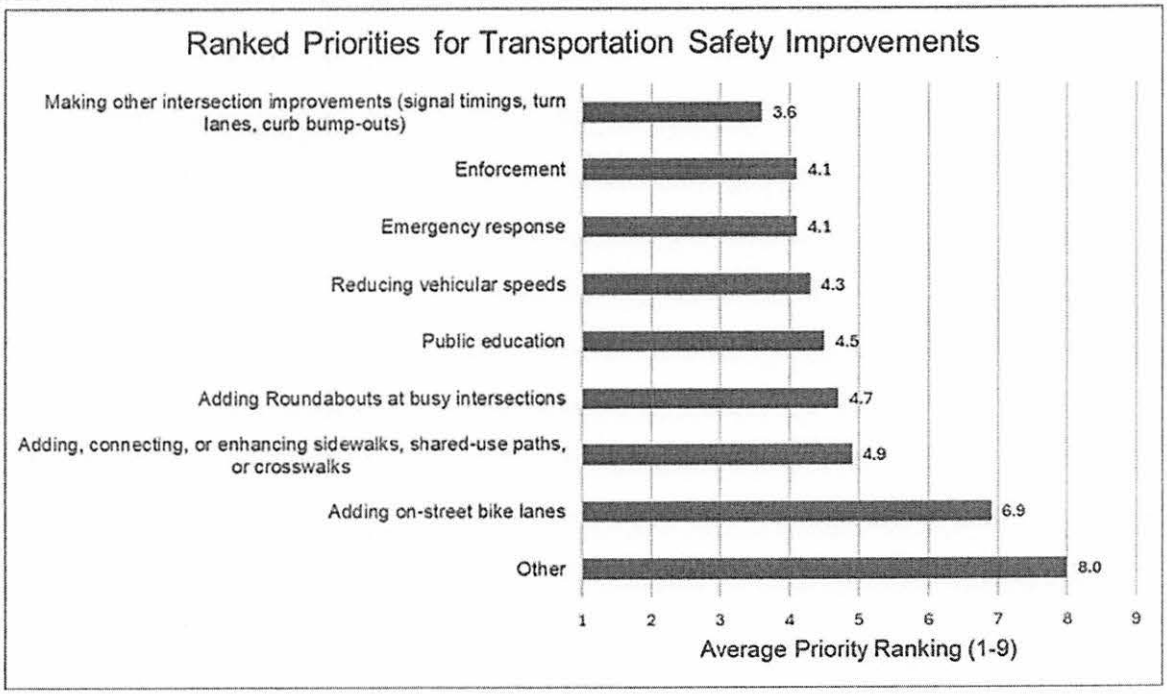


Figure 3.02-2 Ranked Priorities for Transportation Safety Improvements (Combined)

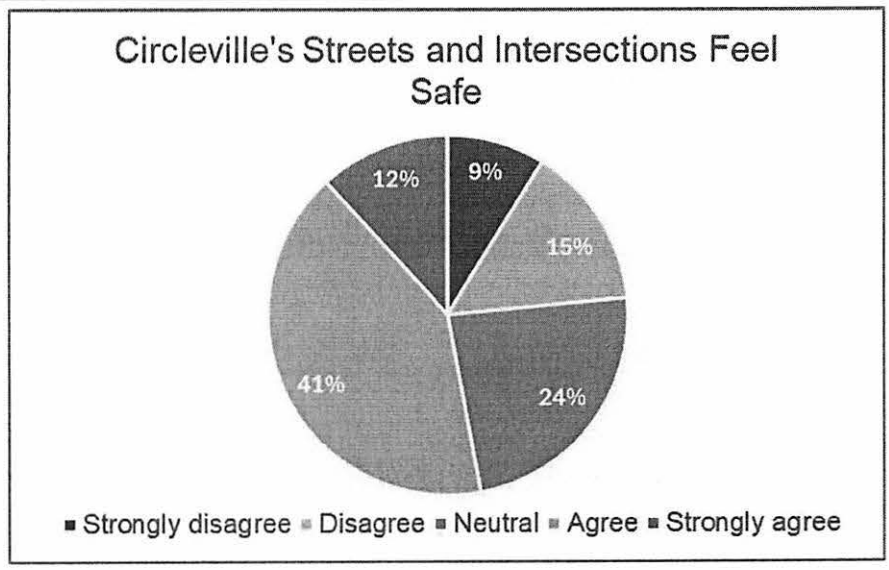


Figure 3.02-3 Perceived Intersection Safety

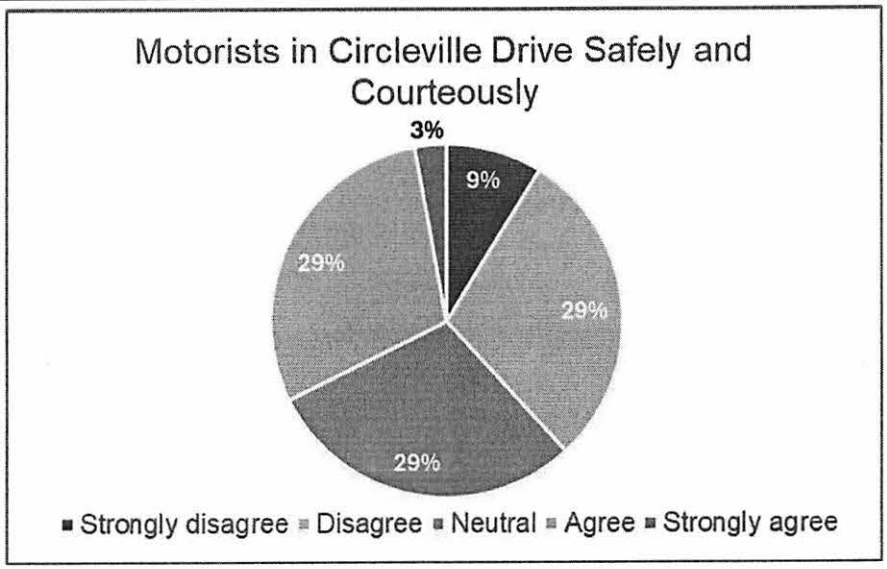


Figure 3.02-4 Perceived Driver Behavior

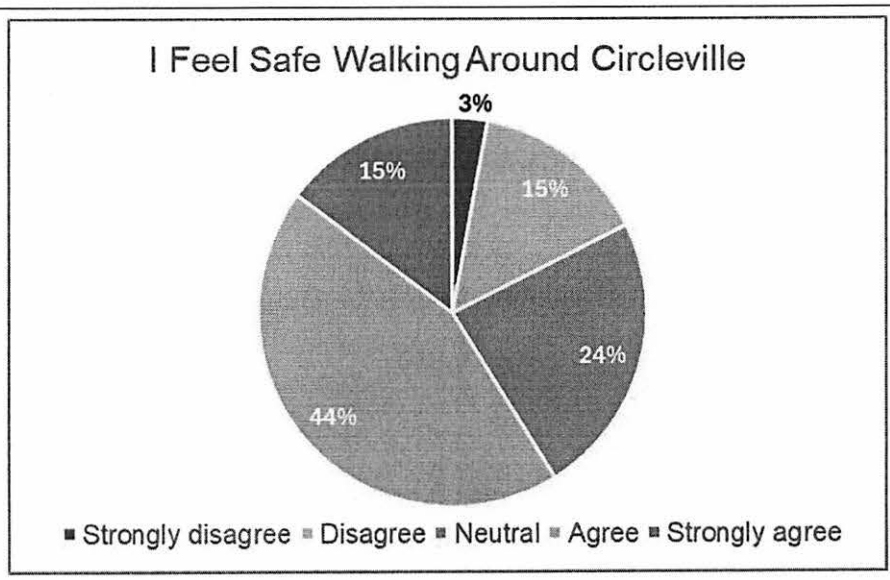


Figure 3.02-5 Perceived Walking Safety

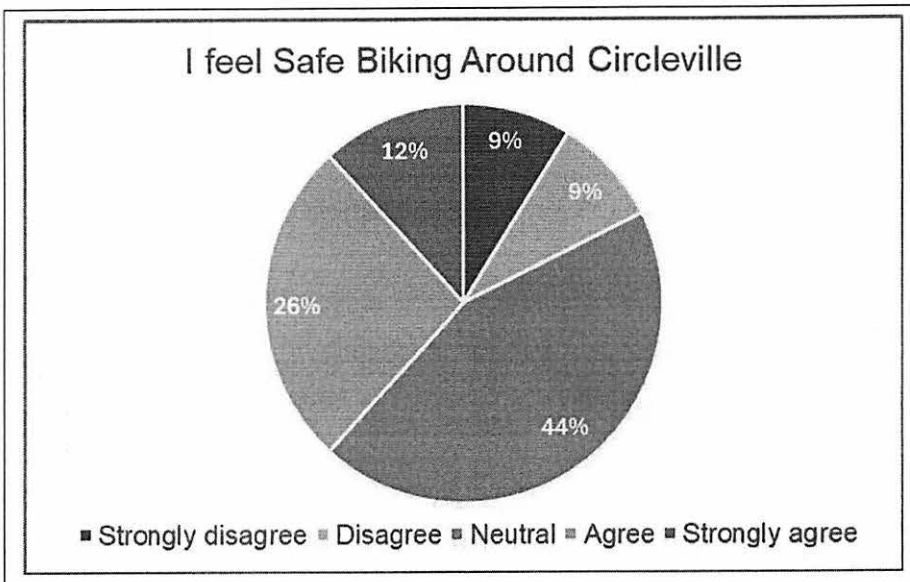


Figure 3.02-6 Perceived Biking Safety

SECTION 4
REGIONAL SAFETY PRIORITIES

4.01 EMPHASIS AREAS

Extensive analysis of the crash data from 2018 to 2022 in the planning area and stakeholder engagement input was collated to identify critical areas of focus, or emphasis areas, for the City. Countermeasures and strategies developed to address each emphasis area will often overlap and be complimentary to each other. Additionally, just because these emphasis areas were chosen to be a focus of concern for the action items outlined in this SAP, does not mean that the SAP does not address other potential emphasis areas. The emphasis areas that were identified as a priority for the City are listed in the following.

1. Intersections–Intersections are the most common place where interactions between motor vehicles occur and are also the place where different modes of transportation are most likely to interact as nonmotorized, vulnerable road users traverse the roadway. Because of the increased interactions that come with intersection, they can often be a focal point for crashes. Intersection crashes accounted for 31.6 percent of the FSI crashes in the City between 2018 to 2022 and 41.2 percent of the serious injuries over the same period resulted from intersection crashes. Infrastructure improvements at intersections are crucial to mitigate fatalities and serious injuries in the City.

2. Vulnerable road users–Pedestrians accounted for only 0.5 percent of all crashes in the City between 2018 to 2022, but account for 15.8 percent of FSI crashes in the same period. Pedestrians and other vulnerable road users such as bicyclists are at higher risk of fatalities and serious injuries when involved in a crash. For this reason, incorporating safety improvements dedicated to people walking and biking will be critical aspect of mitigating fatalities and serious injuries in the City.

3. Contributing factors–Key contributing factors were identified from the crash data as common themes seen across the FSI crashes in the City. These include speed, young drivers, alcohol and drug impairment, restraint usage, and distracted driving. Targeting these factors as points of emphasis in strategies and educational outreach programs across the City could help reduce fatalities and serious injuries.

4.02 EQUITY CONSIDERATIONS

As part of the planning process, the City and the project team considered the demographic makeup of the City, particularly focusing on populations that are more likely to be mobility limited. This includes individuals with an income below the poverty line, individuals aged 65 and older, households that do not own a personal vehicle, and households that with a higher transportation cost burden. Figure 4.02-1 depicts a snapshot of the USDOT Equitable Transportation Community (ETC) Explorer, which illustrates the four USDOT Disadvantaged Census Tracts that makeup the City's Areas of Persistent Poverty. The USDOT's ETC Explorer calculates the cumulative impacts of transportation disadvantage across 85.5 thousand 2020 census tracts.

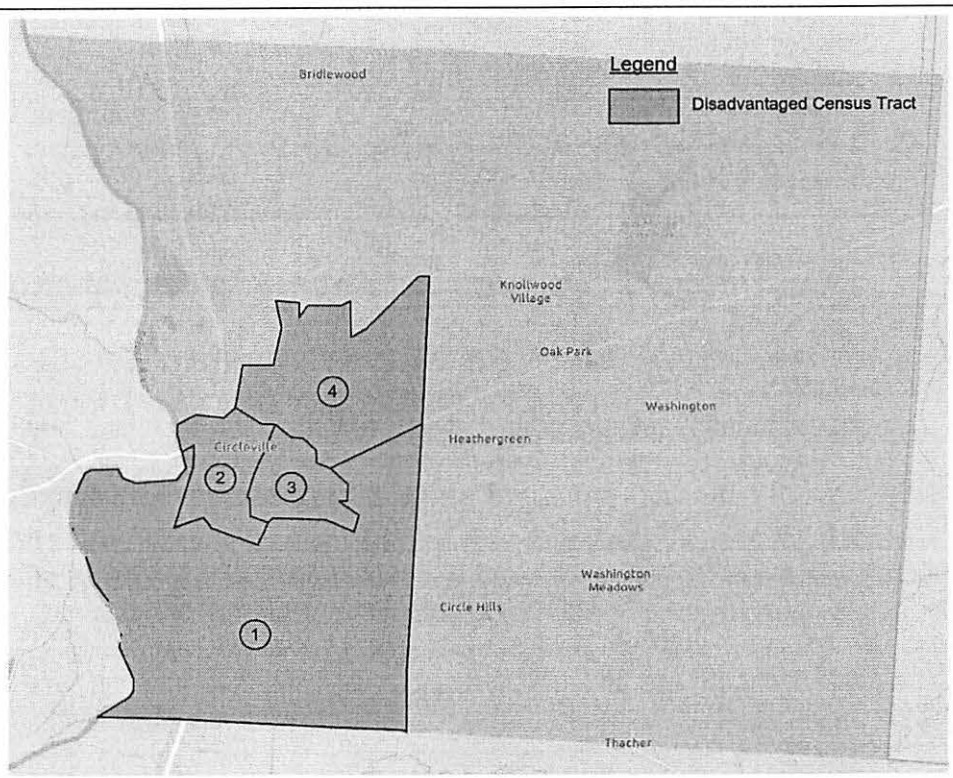


Figure 4.02-1 USDOT ETC Explorer Areas of Persistent Poverty

It is important to note that the USDOT ETC Explorer does not narrow the query down to the City limits and provides population data for the entire gray highlighted area in Figure 4.02-1. This area has an estimated population of 19,500 people, with approximately 12,200 (or 67 percent) of that population living within the purple highlighted disadvantaged census tracts. The City itself is closer to a population of 14,500 people based on July 1, 2023, United States Census Bureau population estimates. Although not all the City's population lives within these disadvantaged census tracts, the majority of the City's population resides in these areas. The data from each of the four disadvantaged census tracts was analyzed to produce the following economic, transportation, and social insecurity statistics that provide valuable insight to ensuring that transportation investments have an equitable impact on underserved communities within the City.

Disadvantaged Census Tract Data	Census Tract 1	Census Tract 2	Census Tract 3	Census Tract 4
Population Living in Disadvantaged Census Tract	2,700	1,800	2,700	4,900
Poverty Level (percent of population at or below 200% of the federal poverty line)	56.94%	46.36%	44.74%	38.49%
Median household income	$33,090	$38,672	$40,833	$47,650
Transportation cost burden (percent of income spent on transportation in the average household)	26.72%	22.44%	21.14%	18.39%
Estimated cost of transportation	$10,309	$10,709	$10,253	$11,241
Housing cost burden (percent of households that spend over 30% of their income on housing)	40.08%	36.72%	30.33%	32.98%
Percent of households with no personal vehicle	3.10%	25.20%	13.70%	5.90%
Transportation Insecurity - Percentile Rank (65th percentile and over considered disadvantaged)				
Transportation access	45th	29th	37th	35th
Transportation cost burden	89th	80th	77th	66th
Transportation safety	60th	77th	NA	NA
Social Insecurity - Percentile Rank (65th percentile and over considered disadvantaged)				
65 or older	81st	38th	24th	92nd
Disability	96th	87th	93rd	92nd

NA=not applicable

Table 4.02-1 USDOT ETC Explorer Disadvantaged Census Tract Statistics

It is crucial to understand the demographic makeup of the planning area to ensure that transportation improvements provide equity to underserved communities. The Area of Persistent Poverty, that is the collective of the four disadvantaged census tracts, covers the majority of the City and includes areas outside of the City, especially in Tract 1. This area excludes less dense populations on the north and east portions of the City. As a result, it will be a priority to ensure that transportation improvements are made to:

1. Increase transportation access for the southern portion of the City where the transportation cost burden is the highest and more disadvantaged groups of people aged 65 and older and people with disabilities reside. This can be done by increasing transit services to provide disadvantaged groups with safe transportation. Additionally, providing pedestrian and bicycle facilities that connect to the downtown area to provide safe and cost-effective modes for those people to get to their destinations could help alleviate the higher transportation cost burden.

2. Increase pedestrian and bicycle facilities in the downtown area of the City, where the highest percentages of household without a personal vehicle are located. These more dense locations also have the most vehicle interactions, as well as vehicle and vulnerable road user interactions. As a result, increasing vulnerable road user facilities will provide cost effective and safer transportation for those who cannot rely on having a vehicle.

3. Intersection safety is a concern in the downtown area, where the most vehicle and vulnerable road user interactions take place. This generally results in more crashes and increased chances of fatalities and serious injuries. Implementing intersection improvements such as crosswalk enhancements, road diets, and intersection control could foster a safer environment for all users within these areas of persistent poverty.

4.03 PRIORITY SAFETY LOCATIONS

All of the data analysis, stakeholder input, and equity considerations can be used to inform a process for identifying and prioritizing investments in various safety countermeasures, including location-specific infrastructure improvements, targeted enforcement activities, road user education, or other strategies and action items identified in this SAP. This section provides insight on the priority locations that have been identified in the City based on the data available.

Priority corridors were identified based on Geographic Information System (GIS) tools that were used to analyze crash data and roadway characteristics. As part of the development of this SAP, crash data from ODOT TIMS was processed through the ODOT CAM tool to sort the crash data as seen in Section 2.02 Crash Data Analysis of this document. Additionally, in the development of the CORPO SAP, CORPO shared their Interactive Web Map with the City's team. The Interactive Web Map contains the CORPO HINs and the ODOT Highway Safety Improvement Program (HSIP) Systemic Safety Priority Corridors.

A. CORPO Interactive Web Map

As part of the development of the CORPO SAP, CORPO created the CORPO SS4A SAP Interactive Web Map for stakeholder reference, containing key data related to transportation safety. This map covers the seven counties in the CORPO region (including Pickaway County) which contains the City. The map includes the CORPO identified High Injury Networks (HIN) and ODOT HSIP data sets, including the ODOT HSIP Systemic Safety Priority Corridors. The map was a crucial part of the process of identifying priority safety locations for future safety projects. Figure 4.03-1 on the following page shows a snapshot of the Interactive Web map, depicting the City's area of the map. The interactive data layers of the map that can be toggled on and off are listed in the following.

1. Schools–Individual locations of schools throughout the seven-county area, including elementary, middle, high, university, and vocational schools.

2. Severe Crashes–Individual locations of and key information for each FSI crash reported during the 5-year period 2018 to 2022 in the seven-county area.

3. Severe Nonmotorized Crashes–Individual locations of and key information for each FSI crash reported during the 5-year period 2018 to 2022 in the seven-county area.

4. At-Grade Rail Crossings–Individual locations of at-grade railroad crossings throughout the seven-county area, including key details about each location.

5. CORPO Pedestrian HIN–Roadway segments within the seven-county area that have a higher concentration and severity of pedestrian crashes per mile.

6. CORPO Bicyclist HIN–Roadway segments within the seven-county area that have a higher concentration and severity of bicyclist crashes per mile.

7. CORPO Motorized HIN–Roadway segments within the seven-county area that have a higher concentration and severity of motorized crashes per mile.

8. Severe Crashes Heat Map–The heat map illustrates the concentration or density of the FSI crashes reported during the 5-year period 2018 to 2022.

9. ODOT HSIP Systemic Safety Priorities

    a. Pedestrian Safety Priority Corridors–Roadway segments that have been identified by ODOT as priorities for systemic safety funding for pedestrian safety improvements based on roadway characteristics and risk factors.

    b. Roadway Departure Priority Corridors–Roadway segments that have been identified by ODOT as priorities for systemic safety funding for roadway departure safety improvements based on roadway characteristics and risk factors.

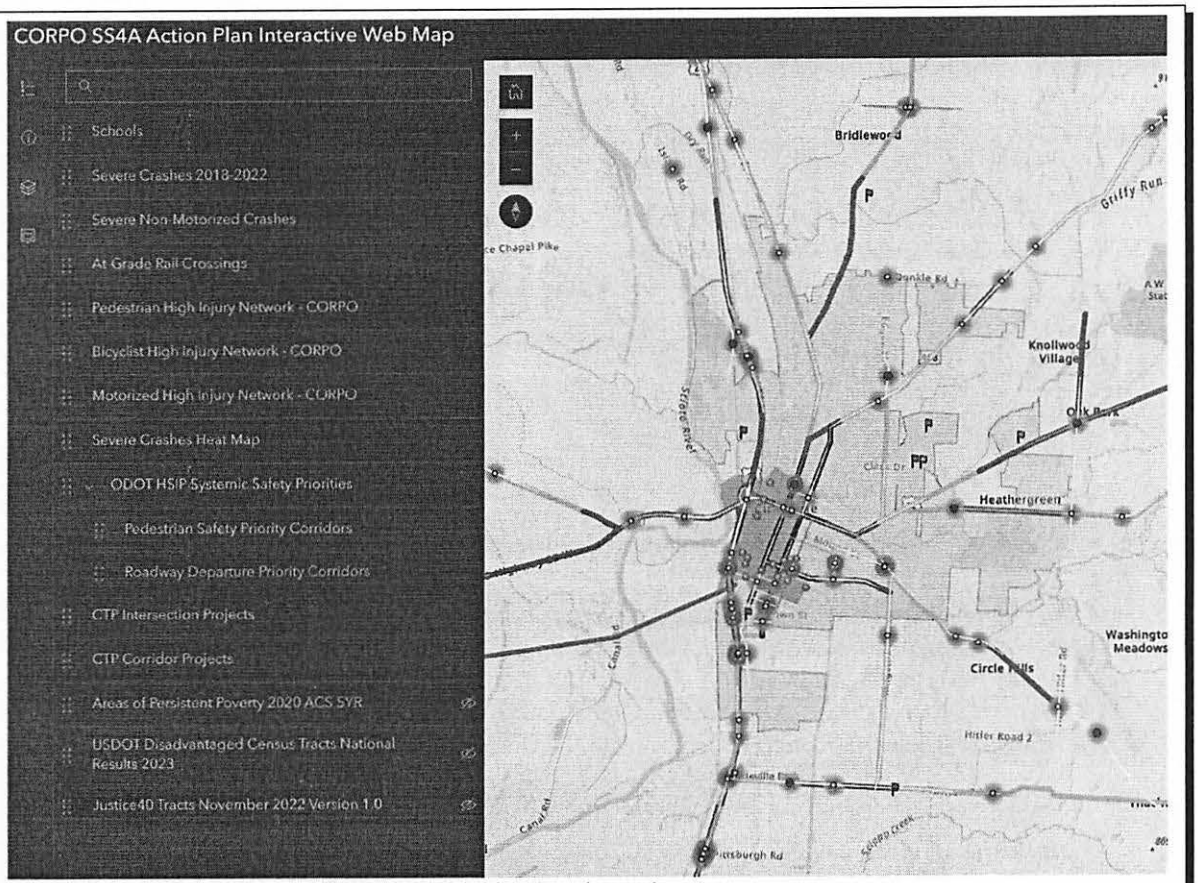
10. CTP Intersection Projects–Individual locations of intersection projects included in the CTP, including project type information.

11. CTP Corridor Projects–Locations and extents of corridor projects included in the CTP, including project type information.

12. USDOT Transportation Disadvantaged Communities–Census tracts identified by USDOT as being in the 65th percentile or higher in the Transportation Disadvantage scoring completed for the ETC Explorer. This includes elements of transportation insecurity, health vulnerability, environmental burden, social vulnerability, as well as climate and disaster risk burden.

13. Area of Persistent Poverty–Census tracts designated by the USDOT as having a poverty rate of at least 20 percent, according to the 2014 to 2018 5-year data series from the American Community Survey.

14. Justice40 Census Tracts–Census tracts designated by the USDOT as "Historically Disadvantaged Communities" and identified in the Climate and Economic Justice Screening Tool Climate and Economic Justice Screening Tool (CEJST). This dataset is larger and more general than the Transportation Disadvantaged Communities dataset, which provides deeper insight into the Transportation Disadvantage component of the CEJST.



Source: CORPO SS4A ASAP Interactive Web Map (arcgis.com)

Figure 4.03-1 CORPO SS4A SAP Interactive Web Map (The City)

B. CORPO HIN

CORPO used the Safer Streets Priority Finder to develop a series of HIN for the CORPO area, including the City, categorized by road user type. These include a pedestrian HIN, a bicyclist HIN, and a motorized-vehicle HIN. Crash data for the CORPO area from 2018 to 2022 was input into the Safer Streets Priority Finder to conduct a "Sliding Windows Analysis," which allocates the crashes to the roadways on which they occurred based on sliding half-mile segments. The crashes are weighted based on severity, with FSI crashes receiving a weight of 3 and all minor injury crashes receiving a weight of 1. Possible injury and property-damage only crashes are not included in the analysis. The weights are then aggregated into "scores" for each roadway segment based on the sliding window segments. The resulting HIN displays the total weighted score for each roadway segment. The three HIN datasets are described in the *CORPO Interactive Web Map* section of this document and listed in the following[4]:

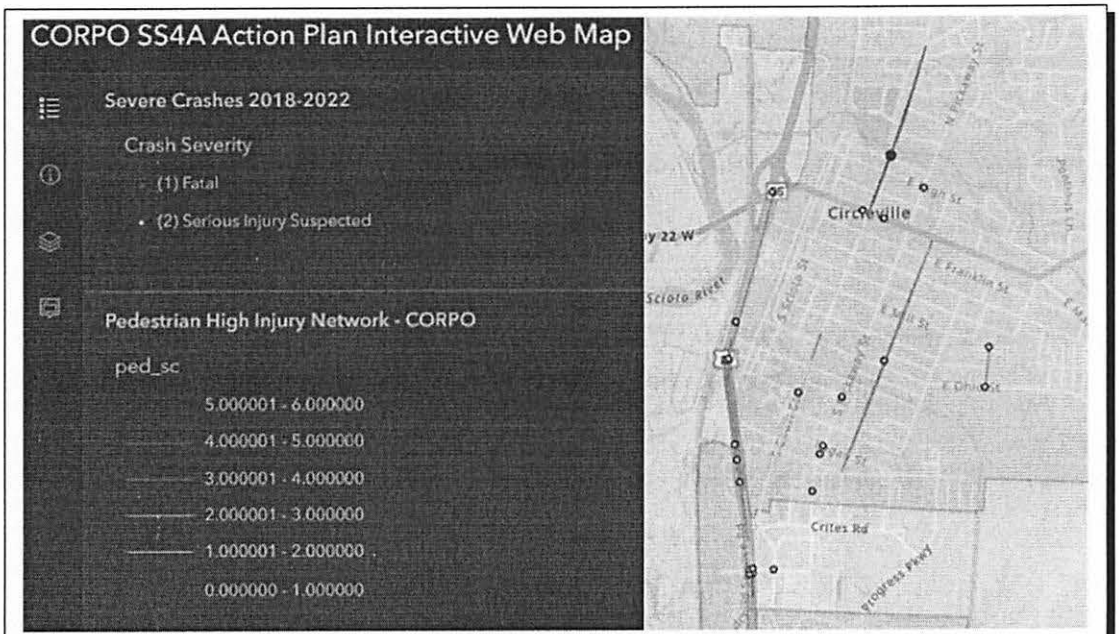
[4]CORPO Safety Action Plan (morpc.org)

1. CORPO Pedestrian HIN–Roadway segments within the seven-county area that have a higher concentration and severity of pedestrian crashes per mile.

2. CORPO Bicyclist HIN–Roadway segments within the seven-county area that have a higher concentration and severity of bicyclist crashes per mile.

3. CORPO Motorized HIN–Roadway segments within the seven-county area that have a higher concentration and severity of motorized crashes per mile.

These three HIN datasets can be used to identify specific roadway segments or intersections where safety investments for each of the three user types should be prioritized. An example of the Pedestrian HIN in the City is shown in Figure 4.03-2.



Source: CORPO SS4A SAP Interactive Web Map (arcgis.com)

Figure 4.03-2 CORPO Interactive Web Map (The City's Pedestrian HIN)

C. ODOT Systemic Safety Priorities

In January 2022, ODOT's HSIP launched a new systemic safety improvement program with a focus on preventing injuries related to pedestrian and roadway departure crashes. Systemic improvements are meant to be proactive and widely implemented based on roadway features that have been associated with specific crash types.

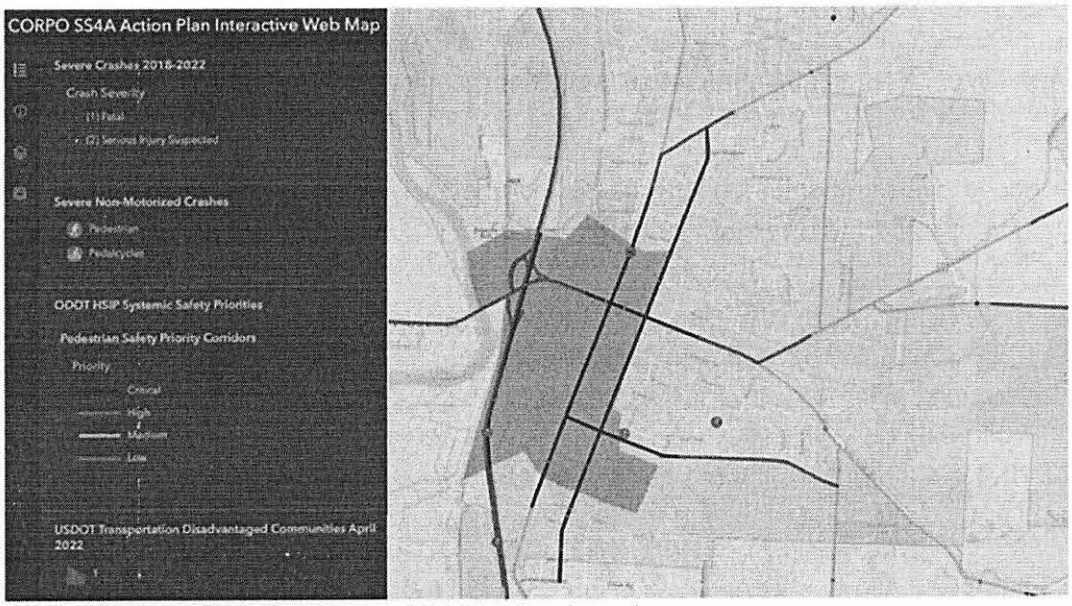
Through this HSIP systemic safety improvement program, ODOT is currently prioritizing addressing pedestrian safety and roadway departure crashes using proven safety countermeasures at priority locations. Those priority locations were established based on analysis of the statewide road network for specific criteria identified as contributing factors in pedestrian and roadway departure crashes. These

analyses resulted in the development of two GIS-based datasets that highlight specific roadway segments and the priority level assigned to those segments. This includes the following:

1. Pedestrian Safety Priority Corridors–Roadway segments that have been identified by ODOT as priorities for systemic safety funding for pedestrian safety improvements based on roadway characteristics and risk factors.

2. Roadway Departure Priority Corridors–Roadway segments that have been identified by ODOT as priorities for systemic safety funding for roadway departure safety improvements based on roadway characteristics and risk factors.

The systemic safety improvement program funds will be prioritized for segments assigned values of "critical," "high," or "medium" priority. For communities looking to obtain this funding, or simply prioritizing corridors for these particular investment types, these datasets will be important to review in tandem with the HIN datasets[5]. Figure 4.03-3 depicts the ODOT HSIP pedestrian safety corridors layer across the City, illustrating how these layers can be used to review the highest priority locations for pedestrian investments.



Source: CORPO SS4A SAP Interactive Web Map (arcgis.com)

Figure 4.03-3 ODOT HSIP Pedestrian Safety Priority Corridors

[5]CORPO Safety Action Plan (morpc.org)

SECTION 5
STRATEGIES, ACTION ITEMS, AND PROJECT SELECTION

The City's SAP was developed based on data, the best available evidence and noteworthy practices, as well as stakeholder input and equity considerations. In doing this, strategies and action items were developed to address the safety problems identified in this SAP. The strategies and action items focus on the SSA and proven safety countermeasures to reduce fatalities and serious injuries across the City's transportation network. This section provides additional insight into using this SAP as a framework for developing projects to create a safer transportation system for all.

5.01 STRATEGIES AND ACTION ITEMS

Strategies were developed to align with the five elements of the SSA. Through data analysis, stakeholder and public input, and equity considerations, action items were developed for each identified SSA strategy to represent steps toward implementation of each strategy and together foster a safer system for all road users.

A. Strategy 1–Safe Roads

Retrofit existing streets and intersections to accommodate human mistakes and facilitates safe travel for vulnerable road users to reduce the severity of crashes that do occur and to prevent future crashes.

Safe Roads Action Items			
ID	**Action Item**	**Outcome**	**Lead Agency**
1-1	Conduct Road Safety Audits (RSA), Pedestrian and Bicyclist RSA, or Walk Audits at priority safety locations to identify proven safety countermeasures for implementation.	Identify prioritized locations within the City.	The City's Department of Public Service
1-2	Identify critical gaps in the existing pedestrian and bicycle infrastructure networks and prioritize implementation of those connections.	Prioritize construction projects that close existing pedestrian and bicycle network gaps.	The City's Department of Public Service
1-3	Identify opportunities to incorporate proven safety countermeasures into standard roadway maintenance procedures.	Include proven safety countermeasures in future transportation/roadway planning efforts.	The City's Department of Public Service
1-4	Implement low-cost, quick-build safety improvements at strategic priority locations to pilot solutions for permanent construction.	Continue systemic and systematic application of countermeasures.	The City's Department of Public Service
1-5	Pursue funding opportunities to implement safety projects at priority safety locations and for infrastructure that prioritizes pedestrian, bicycle, and other vulnerable road users.	Develop projects that prioritize vulnerable road users.	The City's Department of Public Service
1-6	Implement proven safety countermeasures at traffic signals and crosswalks to reduce vehicle, pedestrian, and bicycle crashes, especially retroreflective backplates, countdown pedestrian signals, leading pedestrian intervals (LPI), rectangular rapid flashing beacons (RRFB), and high-visibility crosswalks.	Continue systemic and systematic application of countermeasures.	The City's Department of Public Service
1-7	In high pedestrian areas, install "no right turn on red" and/or "yield to pedestrian" signage.	Identify locations for signage.	The City's Department of Public Service
1-8	Review left-turn phasing at intersections, prioritizing high-crash intersections and/or intersections with a high frequency of angle crashes.	Identify areas where existing permissive or protected left-turns should be converted to protected only.	The City's Department of Public Service
1-9	Consider roundabouts when an intersection is being modified or a new major intersection is being constructed.	Develop a plan or policy that will include specific language on safe pedestrian and bicycle movement through current and future roundabouts.	The City's Department of Public Service
1-10	Prioritize locations for safety improvements thats align with CORPO's HIN and ODOT's HSIP Systemic Safety Corridors.	Identify improvements on these corridors.	The City's Department of Public Service

Table 5.01-1 Strategy 1 Action Items

B. Strategy 2–Safe Road Users

Address the safety of all road users by encouraging safe and responsible driving behavior to create road conditions that prioritize people's ability to reach their destinations safely.

Safe Road Users Action Items			
ID	**Action Item**	**Outcome**	**Lead Agency**
2-1	Collaborate with local law enforcement to conduct strategic, high-visibility enforcement of traffic safety laws.	Enforcement of traffic laws.	The City's Police Department
2-2	Collaborate with partners to increase access to programs and services that provide mobility options for community members who cannot or choose not to drive, particularly older adults and disabled individuals.	Vulnerable road users have access to safe transportation.	The City's Department of Public Service PICCA Transit
2-3	Prioritize and improve upon education and outreach efforts focused on the identified safety priorities and target audiences.	Enhance the road user's knowledge of roadway safety practices and the dangers of poor road user behavior.	The City's School District, Fire Department, Police Department, and the Ohio Department of Public Safety PICCA
2-4	Partner with agencies to sponsor trainings at Circleville High School and youth education programs, or motivational speakers for teen driver education.	Conduct trainings such as "Impact Teen Drivers."	The City's School District. Fire Department, and Police Department. Agencies such as Impact Teen Drivers PICCA
2-5	Coordinate community events to provide education materials and outreach.	Materials distributed and events held.	The City's Department of Public Service

Table 5.01-2 Strategy 2 Action Items

C. Strategy 3–Safe Speeds

Promote safe speeds on all streets through a combination of thoughtful, equitable, context-appropriate roadway design, and appropriate speed-limit setting and signage to mitigate the severity of crashes.

Safe Speeds Action Items			
ID	**Action Item**	**Outcome**	**Lead Agency**
3-1	Implement self-enforcing speed management techniques, like narrowing lanes, roundabouts, curb bump outs, medians, and others into roadway design and project development.	Apply speed management design strategies along priority corridors.	The City's Department of Public Service
3-2	Re-evaluate speed limits using ODOTs 2021 updated guidance on using 50th percentile speeds in lieu of the 85th percentile when there is a high presence of vulnerable road users or significant land use characteristics supporting the presence of vulnerable road users.	Consider this policy during project development as applicable.	The City's Department of Public Service
3-3	Conduct a City wide review of speeds to understand where average speeds are higher than posted speeds to prioritize locations for review.	Prioritize locations.	The City's Department of Public Service
3-4	Identify opportunities to address safety conflicts along higher-speed roadways that transition into residential districts or community centers.	Prioritize speed transition locations based on land use characteristics.	The City's Department of Public Service
3-5	Consider speed signage at priority locations.	Deploy speed signs on a wider basis and/or at priority locations.	The City's Department of Public Service

Table 5.01-3 Strategy 3 Action Items

D. Strategy 4–Safe Vehicles

Explore opportunities for education and incorporation of vehicle safety systems and proper vehicle maintenance to help ensure the vehicles on the road provide the maximum safety benefit.

Safe Vehicles Action Items			
ID	**Action Item**	**Outcome**	**Lead Agency**
4-1	Identify opportunities to improve the function of emerging vehicle safety features (such as lane departure warnings) through regular roadway maintenance practices (such as enhanced pavement markings).	Prioritize roadway maintenance projects that will enhance current and future vehicle safety features.	The City's Department of Public Service
4-2	Explore opportunities to update fleet vehicles with the latest safety technologies.	Equip fleet vehicles with updated safety features.	The City's Department of Public Service
4-3	Explore opportunities to provide and/or promote regular vehicle maintenance to ensure that the vehicles on our roadways are operating safely.	Conduct community outreach on the impacts of proper vehicle maintenance and collaborate with the appropriate partners to provide access to basic vehicle maintenance.	The City's Department of Public Service, Fire Department, and Police Department

Table 5.01-4 Strategy 4 Action Items

E. Strategy 5–Post-Crash Care

Enhance the survivability of crashes by improving emergency response systems and preventing secondary crashes through improved incident management practices.

Safe Vehicles Action Items			
ID	**Action Item**	**Outcome**	**Lead Agency**
5-1	Promote and raise awareness of "Move Over" law and safe driving tips regarding behavior around crashes.	Work with partners to provide education on the law and safe practices.	The City's Department of Public Service and Police Department
5-2	Evaluate current procedures for traffic incident management and any needs or potential for improvement.	Collaborate with the City's Police, Fire, and EMS departments to ensure procedures are in place provide and optimize traffic safety.	The City's Fire Department Police Department
5-3	Implement or enhance traffic signal preemption at key locations and ensure relevant emergency vehicles are equipped with the appropriate technologies to use these features.	Emergency response vehicles are able to efficiently and safely respond to emergencies.	The City's Department of Public Service and Fire Department

Table 5.01-5 Strategy 5 Action Items

5.02 PROJECT IDENTIFICATION

The project identification and prioritization process is a framework built upon applying the data analysis, equity considerations, and stakeholder input that went into the development of Section 4–Regional Safety Priorities and Section, to the strategies and action items previously discussed.

A. Review Priority Safety Locations

The first step in the project identification process should be to review the CORPO Interactive Web Map. Using the CORPO HIN (Motorized, Pedestrian, and Bicyclist HIN) and ODOT's HSIP Systemic Safety Priorities (Pedestrian Safety Corridors/Roadway Departure Priority Corridors) in conjunction with the fatal and serious injury crash layer to identify locations or corridor segments to prioritize for safety improvements. ODOT HSIP Systemic Safety Priority Corridors with "High and "Critical" rankings indicate a significant safety challenge and a priority for improvement along the corridor. As discussed in *Section 4.03 Priority Safety Locations*, numerous map layers can be toggled on and off to display the data that best narrows down locations for safety improvements. Contextual evidence, such as proximity to schools or parks, crash types, contributing factors and data from Section 4.02 Equity Considerations, should factor into this review. It is important to understand whether safety risks at identified corridors and locations have been addressed through a recent project, or whether there are any projects or initiatives currently underway or being planned for this area.

B. Identify Project Area

Overall, priority locations will be split between a site-specific approach or a systemic approach.

1. Site-specific approach–This approach reactively identifies project locations based on crash history. This generally includes priority safety locations such as individual corridors and intersections. For the City, the site-specific approach will tend to be more urban based locations with high vehicle to vehicle and vehicle to vulnerable road user interactions.

2. Systemic approach–This approach more proactively identifies sites by focusing on risks such as crash types and common contributing factors to crashes, and identifying locations across the network where these risks could be identified and prevented. The systemic approach typically involves multiple sites per project.

C. Conduct Safety Audits or Studies

Once a project area is identified, the next step in the process is to conduct some form of Data-Driven Safety Analysis for the identified study area to further assess the existing safety problems and identify appropriate countermeasures. This could include the following, depending on the scope and scale of the project:

1. Full Safety Study

2. RSA

3. Pedestrian and Bicyclist RSA

4. Walk Audit

A full safety study should follow the guidelines and requirements established by ODOT in the Safety Analysis Guidelines. A formal road safety audit should follow the FHWA Road Safety Audit Guidelines or the Pedestrian and Bicyclist RSA Guide and Prompt List. Additional information about road safety audits can be found on the FHWA website. A walk audit is a much less in-depth version of a RSA that could be used for smaller projects or as a method of community engagement in the project.

The purpose of conducting these detailed studies is to identify the specific safety challenges within the identified study area and then recommend potential improvements to address those challenges. At a minimum, these studies should result in recommendations for implementation of Proven Safety Countermeasures that specifically address the identified safety challenges. The FHWA has identified 28 Proven Safety Countermeasures (PSC) to reduce fatal and serious injury crashes that are applicable to a range of contexts and roadway types. Another resource for identifying countermeasures is the Crash Modification Factors (CMF) Clearinghouse. A CMF is an estimate used to quantify the change in crashes expected after the implementation of a countermeasure and whether it is a decrease in crashes (CMF below 1.0), an increase in crashes (CMF over 1.0), or no change in crashes (CMF of 1.0).

D. Fund and Implement

Once the specific safety challenges have been identified and recommendations have been established for mitigating those challenges, the relevant agency (and relevant partners) should work to prioritize implementation of those recommendations. In most instances the City's Public Service Department would be the responsible agency for infrastructure improvements within the City.

Additionally, the City could apply for funding assistance through various grant programs available for various infrastructure projects. Potential sources for this type of funding are identified in Section 6.02–Funding. If the project area identified is on a ODOT HSIP Priority Corridor, safety improvements would be eligible for and likely receive a higher score for safety funding through the HSIP. Similarly, if the project area identified is on a CORPO High Injury Network, the City could submit the projects for inclusion in the CTP, which would make it eligible for CORPO dedicated funds.

E. Evaluate

The final step in the process should be completed in tandem with project implementation. Before improvements are implemented, sufficient data should be collected regarding the current conditions of the study area. This could include, traffic volumes, nonmotorized user volumes, total crashes (and related performance measures), vehicle speeds, and traffic citations.

Collecting this data can help the City's team and partners understand the benefits of specific safety countermeasures and inform future decision-making for similar infrastructure investments. Additionally, if the evaluation indicates that the implemented improvements are not functioning as intended, then there is opportunity to remedy the situation.

5.03 PROJECT PRIORITIZATION

The goal of the strategies and corresponding action items in this document is to address the primary emphasis areas identified by the project team, stakeholder and public input, data analysis, and equity considerations. These emphasis areas pose the most significant safety challenges, and the identified projects should be prioritized by how many and how well they mitigate the safety challenges of each:

1. Intersections
2. Vulnerable road users
3. Contributing factors such as speed, young drivers, alcohol and drug impairment, restraint usage, and distracted driving.

Many solutions to these risk factors are cross cutting and the goal is to complete or initiate progress on all of them, but the highest priorities are to:

1. Identify critical gaps in the existing pedestrian and bicycle infrastructure networks and prioritize implementation of those connections. Particularly along the CORPO HIN and ODOT HSIP Pedestrian Priority Corridors.

2. Implement proven safety countermeasures at traffic signals and crosswalks to reduce vehicle, pedestrian, and bicycle crashes, especially retroreflective backplates, countdown pedestrian signals, LPI, RRFB, and high visibility crosswalks. Particularly along CORPO Pedestrian HIN and ODOT HSIP Pedestrian Priority Corridors.

3. Prioritize and improve upon education and outreach efforts focused on the identified safety priorities (speeding, alcohol and drug impairment, restraint usage, and distracted driving) and target audiences (younger drivers aged 15 to 25).

5.04 Project Lists

Roadway Rehabilitation and Widening Projects		
Location	**Project Description**	**Implementation Time Period**
Lancaster Pike (US 22)	East Main Street to Brockhill Lane: Widening for TWLTL and shoulders	1 to 5 Years
Pontius Road	Northridge Road to 2,250 feet east: Widening lanes and adding shoulders	1 to 5 Years
North Pickaway Street	East Water Street to Beverly Road: Widening for TWLTL and shoulders	1 to 5 Years
North Court Street	York Street to Wilson Avenue: Widening for TWLTL	1 to 5 Years
Northridge Road	North Court Street to Nicholas Drive: Widening for TWLTL and shoulders	10+ Years
Dunkle Road	Walnut Creek Pike to CR 188: Widening lanes and adding shoulders	10+ Years
Stoutsville Pike	Lancaster Pike to Bolender Pontius Road: Widening lanes and adding shoulders	10+ Years

Table 5.04-1 Roadway Rehabilitation and Widening Projects

Intersection Projects (Implementation: 5 to 10 Years)	
Location	**Project Description**
Walnut Creek Pike and North Court Street	A single-lane roundabout to improve intersection safety and alleviate future congestion: ICD=130 feet
Lancaster Pike (US 22) and Stoutsville Pike	A single-lane roundabout to improve intersection safety: ICD=120 feet

Table 5.04-2 Intersection Projects

Road Diet Projects (Implementation: 1 to 5 Years)	
Location	**Project Description**
Court Street	Court Street Connection to Pleasant Street–Converting two lanes in each direction with parking lanes on each side of the road to one lane in each direction, with a TWLTL and dedicated left-turn lanes and parking lanes on each side of the road
South Pickaway Street	Town Street to East Mound Street–Covert one open lane in each direction with parking on each side of the road to one lane in each direction with a TWLTL and dedicated left-turn lanes and parking lanes on each side of the road (Potential inclusion of dedicated bike lanes)

Table 5.04-3 Road Diet Projects

Sidewalk Gap Projects (Implementation: 1 to 5 Years)					
Main Road	Location	Distance (feet)	Side of Road	ODOT HSIP Pedestrian Safety Priority Corridor	Ranking
East Ohio Street	South Court Street to Clinton Street	2,165	West	Critical	1
South Pickaway Street	Crites Road to Town Street	1,162	Both	Critical	2
North Pickaway Street	Sharon Road to Northridge Road	845	West	Critical	3
	Linden Lane to Sharon Road	950	East	Critical	4
Northridge Road	North Court Street to Hawthorne Drive	6,336	Both	Medium to High	5
East Ohio Street	Clinton Street to Kingston Pike	3,907	Both	High	6
North Court Street	Morris Road to Walnut Creek Pike	739	Right	Low	7
East Main Street	Existing sidewalk across from Kroger to Eastmoor Avenue	528	West	Medium	8
Lancaster Pike (US 22)	Nicholas Drive to Stoutsville Pike	1,056	Both	Medium	9
Walnut Creek Pike	North Court Street to Dunkle Road	3,326	West	Low	10
	North Court Street to Existing	422	East	Low	11
	Harwich Road to Dunkle Road	2,323	East	Low	12
Kingston Pike	East Ohio Street to East Main Street	634	West	Medium	13
Mound Street	Existing (at approximately Sumpter Avenue) to East Main Street	1,214	North		14
	Eastmoor Avenue to East Main Street	686	South		15
Watt Street	McCrea Avenue to the alleyway before Dollar General	1,109	South		16
Atwater Avenue	Wilson Avenue to Seyfert Avenue	1,100	West		17

Table 5.04-4 Sidewalk Gap Projects

Pedestrian Safety Improvement Projects (Implementation: 1 to 5 Years)			
Intersection	Project Description	ODOT HSIP Pedestrian Safety Priority Corridor	CORPO Motorized and Pedestrian High Injury Network (1: Low Priority) (5: High Priority)
Ohio Street and South Court Street	Crosswalk improvements	Critical	2
East Ohio Street and Clinton Street	Crosswalk improvements	Critical	1
South Pickaway Street and East Corwin Street	Crosswalk improvements	Critical	2
South Pickaway Street and East Union Street	Crosswalk improvements	Critical	1
South Pickaway Street and East Mill Street	Crosswalk improvements	Critical	2
North Pickaway Street and East High Street	Pedestrian crossing improvements	Critical	1
South Washington Street and East Ohio Street	Crosswalk improvements		3
South Washington Street and East Mill Street	Crosswalk improvements		3
North Washington Street and Watt Street	Crosswalk improvements		

Table 5.04-5 Intersection Pedestrian Safety Improvement Projects

SECTION 6
PROGRESS AND TRANSPARENCY

The City's SAP is intended to be used by stakeholders and partners to continually advance the safety of the City's transportation system via the strategies and action items listed in this SAP.

6.01 IMPLEMENTATION AND MONITORING

A. Implementation

The City's Public Service Department assumes leadership of this SAP and will support its implementation. The City's Public Service Department is responsible for identifying engineering improvements on City roads to address safety needs and convening stakeholders involved in this SAP to discuss implementation activities. The group of agencies and stakeholders that will play a role in the implementation of the action items set forth in this SAP include:

1. The City's Police Department
2. The City's Fire/EMS Department
3. The City's City Planner
4. The City's Engineer and Pickaway County Engineer
5. PICCA and PICCA Transit
6. City Council and Service Committee
7. CORPO
8. ODOT
9. Ohio Department of Public Safety

These partners will be critical to the implementation of the SAP, and some will serve as champions for the action items they are associated with in the SAP.

B. Monitoring and Evaluation

Monitoring and evaluating the progress of the SAP is a crucial element to achieving the goal of reducing and ultimately eliminating fatalities and serious injuries. As mentioned in Section 5.02 Project Identification and Prioritization, it is important to evaluate the current conditions of a project area before implementation. It is also vital to conduct project evaluation once implementation is in progress and completed. Project evaluation is essential to inform future funding and policy decisions. If certain programs and countermeasures are consistently successful in achieving desired outcomes, then effort can be focused on continuing to implement those programs or similar countermeasures at additional locations. If a program or project is not meeting performance expectations, then there is an opportunity to re-evaluate and address the situation differently. As action items identified in the SAP are implemented, important project details to track include:

1. Specific countermeasures used and the area of emphasis targeted by that countermeasure

2. Locations targeted for improvement

3. Project or program beginning and end dates

4. Project or program costs

5. Crash data (before and after), especially related to the targeted emphasis

6. Evaluate if the applied countermeasure was effective at addressing the area of emphasis

Agencies can refer to the HSIP Evaluation Guide for information and resources on how to effectively evaluate implemented programs and projects.

When the previous year's crash data becomes available, the City will evaluate progress toward the goal of reducing and ultimately eliminating fatalities and serious injuries on City roads by analyzing the crash data of the FSI crashes that have occurred. Part of this analysis will be considering the contributing factors of these crashes and determining whether the emphasis areas this SAP set out to mitigate have improved. Based on this analysis, the effectiveness of the strategies and action items can be documented and reported annually. These results will be accessible online on the City's Web site for stakeholder review to be available to the public.

C. Updating the SAP

Based on the evaluation of progress and outcomes, the City's team will determine when to make updates to the SAP. At a minimum the SAP should be revised every 5 years to ensure that the safety priorities and priority safety locations are still relevant. This will ensure that crash data is up to date and solutions are revised to meet evolving implementation policies, programs, and project needs.

6.02 FUNDING

Local funding can be path with the least hurdles to implementation of the action items in this SAP but could also be the slowest if no money is available. This may include funds from general revenue or other special-purpose sources. Although local governments go through cycles of experiencing budget problems, it is expected that the local governments will continue to have funds available for system management, operations, and preservation. Local funds are often used to match state and federal dollars, but local governments completely fund some projects themselves.

As discussed in Section 5.02 Project Identification and Prioritization, Projects included in the CTP are eligible for CORPO dedicated funds. At ODOT's discretion, CORPO has made a certain amount of Surface Transportation Block Grant funds available to allocate toward transportation projects across the region. These funds have been used for a variety of transportation projects, including roadway widenings, reconstruction, and active transportation infrastructure.

Larger projects that exceed local budgets or include state-owned facilities may require state or federal funding sources. In general, larger projects involving several elements or safety countermeasures may be most appropriate for federal funding and smaller, low-cost projects may be most suitable for state or local funding. Tables 6.2-1 and 6.2-2 show transportation funding sources through the federal government and ODOT respectively.

Program	Agency	Types of Projects Eligible	Funding Available
SS4A	USDOT	Provides funding for activities related to the development of a SAP that identifies significant roadway safety concerns in a community. The program also provides funding for projects and strategies identified in an SAP to address a roadway safety problem.	In fiscal year 2024, Congress authorized $1 billion to be awarded for SS4A grants under the Bipartisan Infrastructure Law.
Community Traffic Safety Grants	USDOT	Supports project proposals that implement evidence-based countermeasures to enhance traffic safety.	$750,000 is available to be disbursed every calendar year, and requested amounts must fall between $50,000 to $200,000.
Rebuilding American Infrastructure with Sustainability and Equity Grants	USDOT	Provides funding for surface transportation projects that will enhance safety, equity, sustainability, and economic development.	$1.5 billion in grant funding is provided every year from 2022 to 2026.
Active Transportation Infrastructure Investment Program (ATIIP)	USDOT	Supports planning and active transportation implementation at the network scale. The ATIIP awards competitive grants to plan, design, and construct networks of safe and connected active transportation facilities that connect between destinations within a community or metropolitan region.	$60 million in funding available in fiscal year 2024.
Reconnecting Communities and Neighborhoods Program	USDOT	Aims to foster equitable economic development by funding projects that improve access to economic opportunity and mitigate the harmful impacts of past infrastructure projects. Applicants can apply to one of three different categories of grants: capital construction grants, community planning grants, and regional partnerships challenge grants.	USDOT expects to award up to $188 million to Community Planning Grants, up to $2.718 billion to Capital Construction Grants, and up to $450 million to Regional Partnerships Challenge Grants.
Rural Surface Transportation Grant Program	USDOT	Supports projects that improve and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, and spur economic development.	This program was passed as part of the Bipartisan Infrastructure Law in 2021 and will provide $2 billion over 5 fiscal years.

Table 6.02-1 Federal Transportation Safety Discretionary Grant Programs

Program	Agency	Types of Projects Eligible	Funding Available
Safe Routes to School Grants	ODOT	Provides resources, technical assistance, and project funding to encourage and enable students in grades Kindergarten through 12 to walk or ride their bike to school. This grant program funds both infrastructure projects and educational initiatives.	ODOT awards $5 million in funding every year. Funding requests for infrastructure projects cannot exceed $500,000, and non-infrastructure requests cannot exceed $60,000 for each year of the project.
Transportation Alternatives Program	ODOT	According to ODOT, this program "provides funds for projects that advance non-motorized transportation facilities, historic transportation preservation, and environmental mitigation and vegetation management activities"	This program is a reimbursable, pay-as-you-go funding opportunity. ODOT will pay up to 80% of the construction cost up to a maximum amount determined by the Funding Committee, with the additional 20% due by the applicant.
HSIP– Systemic Safety Funding	ODOT	Aims to provide resources and financial support for projects preventing deaths and serious injuries related to pedestrian and roadway departure crashes. This opportunity will provide funding for projects that integrate FHWA's proven countermeasures in high-traffic areas	Applicants can request up to $2 million for pedestrian safety enhancements and up to $5 million for roadway departure safety improvements. A 10% local match will be required.
HSIP– Abbreviated Safety Funding	ODOT	The HSIP has an abbreviated safety funding application meant to expedite the implementation of quick-build safety enhancements at crucial locations. Projects must be simple, integrate proven safety countermeasures, and must be constructed within 2 years.	Funding requests cannot exceed $500,000
HSIP–Formal Safety Funding Application	ODOT	Intended to provide funding for higher-cost, more complex safety improvements that require a more detailed review. Funding is available for all stages of project planning and development.	Funding requests typically range from $500,000 to $5 million, and requests typically require a 10% local match.
Small City Program	ODOT	Provides funding for roadway infrastructure projects to small cities with populations from 5,000 to 24,999 not located within the boundaries of an MPO. This program may be used for any road, safety, or signal project on the Federal-aid system.	A funding limit of $2 million per project is set, and historically, funding has been set at $10 million annually for the program in its entirety.

Table 6.02-2 ODOT Transportation Safety Funding Programs

SECTION 7
CONCLUSION

7.01 CONCLUSION

Like many communities in Ohio and the country, the City experiences crashes on the roads that result in fatalities and serious injuries to its citizens. Through data analysis, stakeholder and public engagement, and equity considerations, the City's team has identified and prioritized safety risks for motorists and nonmotorist, vulnerable road users and strategies and action items to remedy these risks. This SAP provides a framework to address these safety risks and contribute to enhancing the safety of the City's transportation network.