

# **Safe Streets Clinton County**

August 2022











The **Safe Streets Clinton County** Plan represents a shared priority to *implement solutions to make roads* safer, educate road users, address speed, ensure reliable post-crash care, and consider technologies to lower severe crashes.

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

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

We now have a roadmap in place to bring our community closer to a day with zero fatalities, getting everyone back home safely.

- Adams Township
- Clinton County Engineer's Office
- Clinton County Emergency Management
- Clinton County Regional Planning Commission
- Clinton County Sherriff's Office
- Clinton-Massie Local Schools
- Chester Township
- City of Wilmington

- City of Wilmington Fire/EMS
- City of Wilmington School Transportation
- SRWW Joint Fire District
- Ohio Department of Transportation
- Ohio State Highway Patrol
- R&L Carriers
- Union Township
- Vernon Township





### **Executive Summary**

The streets and sidewalks of Clinton County are essential resources. To ensure people can get where they need to go and back safely, the Clinton County Engineer's Office, in coordination with several stakeholders, developed the **Safe Streets Clinton County Plan**. This document establishes near and long-

term strategies to reduce, with the goal of someday eliminating, fatalities and serious injuries on Clinton County roads.

#### A Safe System

The process to develop this plan and implement it, is structured around the Safe System Approach (SSA). The conversations, data analysis, and decisions made for this plan were done so with a consideration for safe roads, safer road users, safe speeds, post-crash care, safe vehicles, culture, and equity.



#### **Everyone Shares Responsibility**

Transportation crashes occur for a multitude of reasons, so the solutions in this plan are multi-faceted and address the objectives in the SSA. To ensure diverse needs were identified, stakeholders were coordinated, and solutions addressed engineering and behavioral needs, a group of engaged agencies participated throughout. They represented the County, City of Wilmington, Towns, emergency responders, educators, enforcement, freight, planners, engineers, and active transportation.

Severe crashes occur for a multitude of reasons. By collaborating with transportation and safety practitioners with diverse backgrounds and perspectives, the Safe Streets Clinton County Plan addresses solutions more holistically.

#### **Death and Serious Injuries are Unacceptable**

Stakeholders agreed that "Together, we will implement solutions to make roads safer, educate road users, address speed, ensure reliable post-crash care, and consider technologies to lower severe crashes in Clinton County." This plan was created using data-driven analysis combined with stakeholder conversations that led to an understanding of how to reduce deaths and serious injuries.

#### **Key Challenges**

Building on the results of the data analysis, stakeholders identified distracted driving, speed, young drivers, and roadway departure crashes as the key issues to address.









#### Solutions

The Action Plan component of this document identifies strategies to move solutions forward on these key issues. It is organized by strategy, outcome, responsible party, and emphasis areas addressed-this table is intended to be actively utilized and updated over the life of this plan by the parties identified. It is the roadmap to reduce fatal crashes in Clinton County.



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## **Section 1. Transportation Safety in Clinton County**

#### **Making it Home on the Transportation System**

The streets and sidewalks of Clinton County are essential resources— they allow people to get where they need to go and back. They enable a person to drive to work at Amazon, receive an important delivery to their home, walk to Denver Williams Park, or ride a bike to one of the state parks. A priority for this small community is to make sure friends, family members, visitors, and other essential



Exhibit 1: Excerpt from Safety Education Resource

users can use the transportation network without the risk of a severe crash.

The Clinton County Engineer's Office, in coordination with several stakeholders, developed the **Safe Streets Clinton County Plan**. This document establishes near and long-term strategies to reduce, and one day eliminate, fatalities and serious injuries from occurring on Clinton County roads. Every year, on average, six people in the County die in a crash.

To prevent future tragedies, this plan looks at the critical issues causing crashes. The plan also lays out policy, program, and project ideas to ensure roads are as safe as possible, road users are educated, laws are enforced, speeds are appropriate to the road context, and emergency responders can be as efficient and effective as possible.

#### **Vision, Goals and Targets**

"Together, we will implement solutions to make roads safer, educate road users, address speed, ensure reliable post-crash care, and consider technologies to lower severe crashes in Clinton County."

This vision statement, developed during the planning process, expresses how stakeholders want to achieve transportation safety interests for all road users. This vision helped identify and prioritize strategies based on how well they met this desired future. The goals for this plan are to reduce severe crashes in Clinton County, with a focus on:

- Distracted Driving
- Speed
- Young Drivers
- Roadway Departures



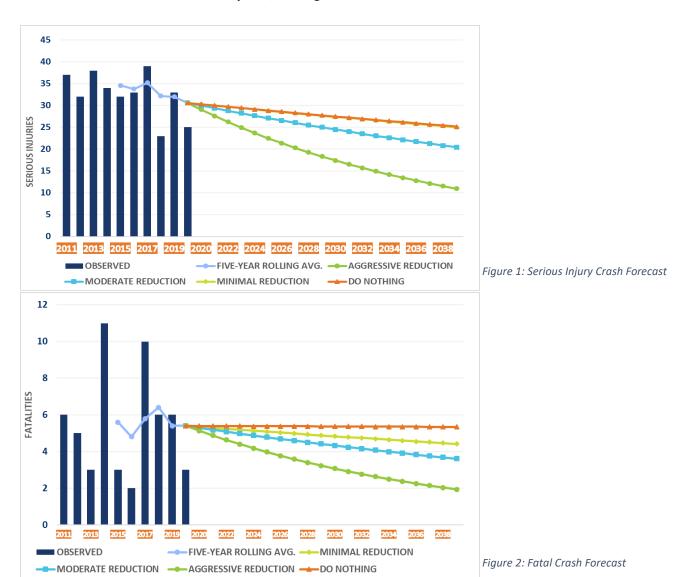
Exhibit 2: Emphasis Areas for Safe Streets Clinton County



This will be accomplished by identifying policies, programs, and projects that:

- Make roads safer and address speed
- Ensure everyone takes personal responsibility for their safety and the safety of others
- Ensure reliable post-crash care
- Consider safety-related innovations and technologies, where possible
- Invest equitably in safety improvements for all people
- Enhance the culture of safety

By following the recommendations and strategies in this plan, Clinton County can drastically reduce the amount and severity of crashes that result in fatalities or life-changing injuries. Figure 1 shows the forecast of what the possibilities are for the future of Clinton County's roadways depending on the level of action taken in terms of serious injuries, and Figure 2 shows the same in terms of fatalities.





#### **All Streets**

The planning area for this study is the entirety of Clinton County, as shown in Exhibit 3. When people get in the car or go for a walk, they aren't thinking about whether they are on a state or locally-owned street. They are thinking about getting groceries or dropping the kids off at school. And while different agencies have different resources to take care of their roads, the most important thing is to make sure crashes don't occur <u>anywhere</u>. The **Safe Streets Clinton County Plan** convened stakeholders from across the County and the state to collaborate on safety solutions for all roads.



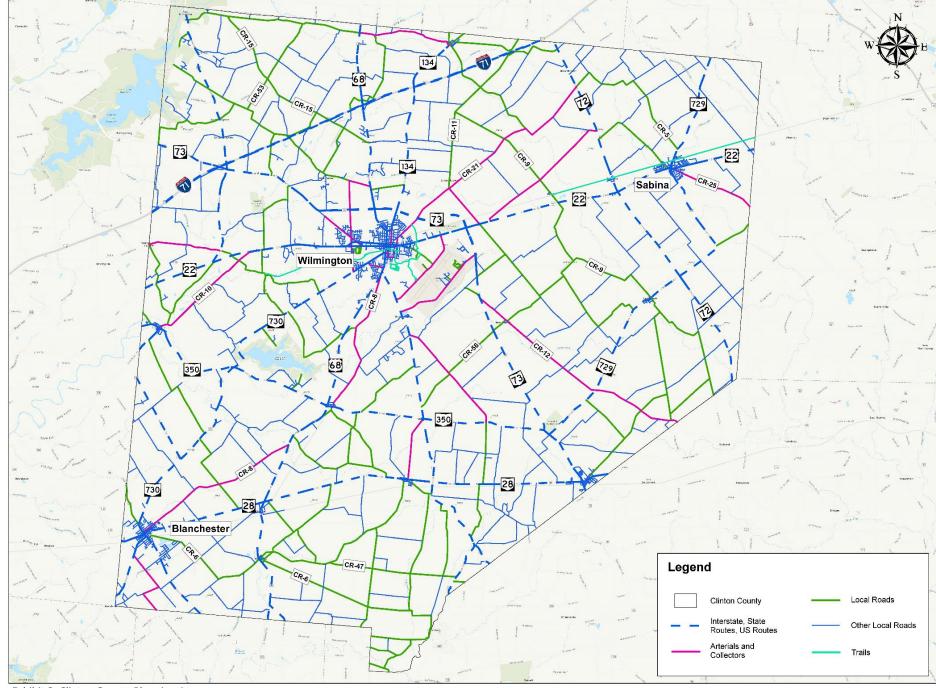


Exhibit 3: Clinton County Planning Area



#### **The Safe System Approach**

The United States Department of Transportation's <u>National Roadway Safety Strategy</u> endorses the Safe System Approach (SSA) as the framework, or guiding paradigm, to address safety needs.

For the **Safe Streets Clinton County Plan**, the five objectives (inner ring) and five principles (outer ring) of the SSA (Exhibit 4) were used to frame the data analysis, stakeholder input, and ultimately the strategy solutions. Safety culture and equity are underlying tenets of the SSA and were also considered throughout the planning process. The following describes

how the SSA objectives are thought of in this plan.

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

**Safer Road Users**: Encouraging Road users to execute safe driving behaviors, shifting the focus from "how I am going to get home" to "how can I be safe and considerate to those around me."

**Safe Speeds**: Considering speeds in coordination with the surrounding environments and contexts by looking at average speeds and comparing them to crash locations.

**Post-Crash Care**: Improving the ability for first responders to respond to a crash scene and make it to the hospital in an expedient amount of time.

**Safer Vehicles**: Understanding the policy direction and technology needs related to safe vehicles in Ohio.



Exhibit 4: Safe System Approach

**Culture**: Demonstrate a commitment to safety over competing goals and demands. As part of individual job responsibilities, everyone is responsible for planning, engineering, and educating on the safe system concepts. As part of being good system stewards, everyone is taking responsibility for being safe system users.

**Equity**: Ensuring all types of road users have options for safe travel (walking, biking, driving a vehicle or truck) and implementing safety improvements across the entirety of the transportation network.

By identifying and implementing solutions for these five objectives in addition to addressing culture and equity, Clinton County will be achieving the SSA principles.

**Death and Serious Injury are Unacceptable**: A focus on mitigating and preventing fatalities and serious injuries first and foremost.

**Humans Make Mistakes**: A combination of changes to the safety culture in Clinton County and improvements to the roadway to prevent or mitigate mistakes.

**Humans are Vulnerable**: A focus on speed and roadway/environment context to prevent crash impacts in total or reduce the impacts.

Responsibility is Shared: Stakeholder accountability and buy-in through the development of this plan.



**Safety Is Proactive**: Addressing road risks and safety needs across the system using the results of the systemic analysis completed for this plan.

**Redundancy is Critical**: Stakeholder commitment to implement the multidisciplinary strategies in this plan and convene regularly to evaluate and assess progress.

#### **Clinton County's Safe System Approach**

The process to inform the **Safe Streets Clinton County Plan** included regular internal project team meetings, stakeholder education, a survey, two stakeholder engagement meetings, and data analysis. This structure led to the development of informed safety solutions organized around the principles and objectives of the Safe System Approach.

#### **Project Management Team**

A good plan requires a committed group of individuals to set project expectations, identify stakeholders, brainstorm solutions, and inform critical tasks to keep the process moving forward. On a monthly basis, staff from the Clinton County Engineer's Office, the Ohio Department of Transportation's (ODOT) Central Office and District 8, and the consultant team met. The Clinton County Engineer's Office assumes leadership of this plan and will continue to convene the stakeholder group to implement the safety strategies.

#### **Stakeholder Identification**

Entities in the county who focus on or have an interest in transportation safety were invited to provide ideas, feedback, and solutions for this plan. Engaged participants included:



Severe crashes occur for a multitude of reasons. By collaborating with transportation and safety practitioners with diverse backgrounds and perspectives, the Safe Streets Clinton County Plan addresses solutions more holistically.

- Adams Township
- Clinton County Engineer's Office
- Clinton County Emergency Management
- Clinton County Regional Planning Commission
- Clinton County Sherriff's Office
- Clinton-Massie Local Schools
- Chester Township
- City of Wilmington

- City of Wilmington Fire/EMS
- City of Wilmington School Transportation
- SRWW Joint Fire District
- Ohio Department of Transportation
- Ohio State Highway Patrol
- R&L Carriers
- Union Township
- Vernon Township



#### **Stakeholder Education**

It was important to engage Clinton County's stakeholders early in the plan to buy into the transportation safety process and understand the purpose of the plan and their role in it. A *Safety Education Resource* was created for those purposes as seen in Exhibit 5. The project team created the resource as a primer for the planning process and it was then emailed to each stakeholder prior to the first stakeholder meeting.

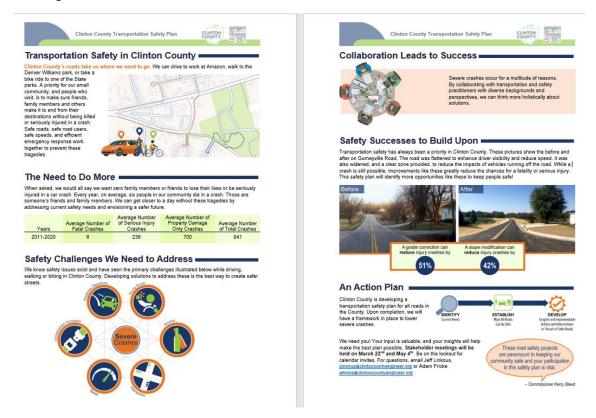


Exhibit 5: Screenshot of the Safety Education Resource Document

#### Survey

To understand the current culture of safety in Clinton County and what the public and stakeholders felt could be improved to reduce severe crashes, a short survey was made available. The responses were split, with several respondents feeling motorists, pedestrians, and bicyclists were exhibiting safe behaviors while others did not or were neutral. Some of the biggest challenges identified were motorists driving aggressively, pedestrians crossing the roads in locations without crosswalks and being distracted, and bicyclists not following the rules of the road. Moving forward, respondents want to see a focus on programs that address road user behavior, changes to signal timing, and treatments that address unsafe speeds (Figure 3).



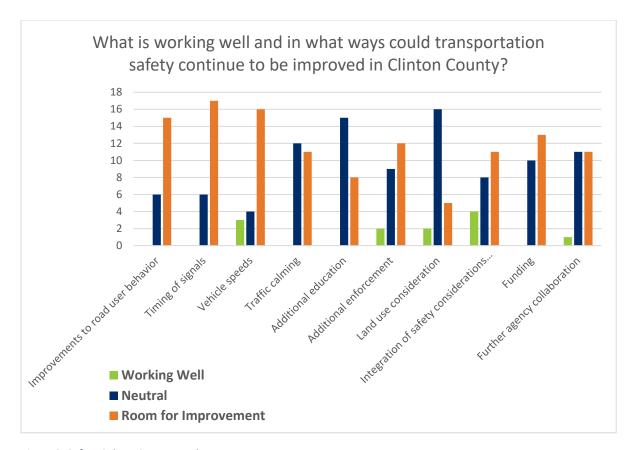


Figure 3: Safety Culture Survey Results

#### **Data Analysis**

Data were used to determine safety challenges in Clinton County and were discussed with the project management team and at stakeholder meetings. The results of the analysis are shown in Section 2 and include crash trends, performance targets, crashes by type, contributing factors to crashes, crash heat maps, and a systemic analysis.

#### **Stakeholder Engagement**

Stakeholders were engaged and provided input into safety challenges and needs during two workshops. They also reviewed the final plan to ensure the strategies aligned with their current safety activities and ideas for future initiatives. They will continue to meet to discuss implementation efforts and progress toward achieving a safe system.



Exhibit 6: First stakeholder workshop



The purpose of the first stakeholder meeting was to:

- Inform participants on the purpose and need for the plan;
- Understand what is currently being done to address safety and known challenges that could hinder success; and
- Obtain feedback on current safety priorities and specific locations on the Clinton County transportation network that would benefit from safety investments

The purpose of the second stakeholder meeting was to:

- Finalize the core concepts for the vision statement;
- Identify program, policy, and project solutions to address distraction, speed, young drivers, and roadway departures; and
- Discuss the results of the systemic analysis

#### **Developing Solutions**

Inputs from all the above tasks in the **Safe Streets Clinton County** planning process led to the identification of four key safety challenges and strategy solutions. The key issues, distraction, speed, young drivers, and roadway departures are detailed in Section 2. The solutions, organized around the Safe System Approach objectives, including equity and culture are in Section 3.

#### **Current Safety Program**

The transportation safety program in Clinton County is well established. Safety policies and goals in other plans; data analysis and project identification; education and enforcement; and emergency response are in place to keep fatality and serious injury trends from seeing sharp increases. These efforts are evident in the strategies of this plan, but in some cases have been modified to meet evolving safety needs. The following shows the current portfolio of work in the Clinton County safety program.

#### **Safe Roads and Safe Speeds**

- Maintain a crash database for county and township roads (separate from ODOT crash database). Several variables are captured, including location, direction, date, time, day of week, and contributing factors
- Maintain an annual list of crash hot spots, which identifies around 20 locations (segments and intersections) on county or township roads which are potential candidates for safety improvements
- Create crash reports on demand for stakeholder partners to assist with identifying crash patterns, enforcement and education needs, or specific improvements.
- Use ODOT-developed crash maps to pursue Highway Safety Improvement Program (HSIP) funding at all the locations on the map that fall within the county





Exhibit 7: Before and after example of a clear zone project



- Completed a ranked list of all the places (500 locations) on the roadway network where a hazard is present in the right-of-way. One hundred of these locations have been addressed
- Inspect all guardrails in the county once every five years
- Maintain a sign database which includes which road the signs are on, the mileage post
  where they are located, a description, the level of white and red reflectiveness, and the
  material type
- Have completed several roadway safety improvements and have several programmed including: removing objects from clear zones, new guardrail, replacement guardrail, and new pavement markings
- 2040 Clinton County Comprehensive Plan includes an objective to adopt and implement a Complete Streets Policy.
- Radar speed warning detection signs are being utilized at some locations across the county
- City of Wilmington is actively working to design streets to be more bicycle and pedestrian friendly. They are also reviewing all new roads and developments with speed calming in mind
- Where appropriate, county and township roads are being narrowed and berms added to slow vehicles and prevent roadway departure crashes, which tend to be severe
- Converting 2-way stop-controlled intersections to 4-way

#### **Safe Road Users**

- School resource officers are educating students on some transportation safety concepts. This is currently primarily focused on seat belt use
- State patrol and local authorities are frequently communicating on speeding issues and needs
- Some educational campaigns in the schools including mock crashes, Car Teen Program, and "Blood on the Road"
- Targeted enforcement areas and occasional blitzes to deter unsafe behaviors

#### **Post-Crash Care**

- Have access to helicopters for assistance in the case of a severe crash
- The State Patrol issues a public release when a crash closes a road
- Cross-jurisdictional collaboration between the fire department and EMS is occurring in the county

#### **Section Summary**

Clinton County stakeholders are committed to a day where all visitors and residents make it to their destinations without a crash. "Together, we will implement solutions to make roads safer, educate road users, address speed, ensure reliable post-crash care, and consider technologies to lower severe crashes in Clinton County." This plan and planning process used the SSA to frame the data analysis, stakeholder input, and ultimately the strategy solutions. Section 2 outlines the key challenges in Clinton County.



## **Section 2. Safety Problem Identification**

#### **The Challenges**

Four primary safety concerns were identified during the **Safe Streets Clinton County** planning process. Section 2 describes the trends, crash types, and contributing factors for the County and provides a deeper dive into the issues addressed in this plan:









Distraction

**Analysis Overview** 

The crash and roadway analysis completed for the plan was used to understand where fatality and serious injury crashes are currently occurring (reactive), where they have the potential to occur (proactive), and where the needs for all road users can be further targeted. The results led to an understanding of the challenges related to the roads, speeds, road users, post-crash care, equitable investments, and culture.

For the reactive approach, recent crash data and trends were analyzed, and feedback was solicited from stakeholders to identify locations deemed problematic for roadway safety. For the proactive approach, a systemic analysis of the county roadway network was completed, using common crash factors in the County to determine additional high-risk locations that do not have a significant crash history. An equity analysis map was also developed to demonstrate future areas of need for all road users.

#### **Crash Trends**

For the previous ten-year period (2011-2020), Clinton County had 55 fatal crashes and 425 serious injury crashes, resulting in an annual average of 6 fatal crashes and 43 serious injury crashes (Table 1). There has been a general downward trend in fatalities and injuries in recent years, but people are still having their lives altered on the transportation network; thus, vigilance is required to further decrease severe crashes on Clinton County's transportation network.



| YEAR           | FATAL<br>CRASHES | INJURY<br>CRASHES | PROPERTY<br>DAMAGE<br>CRASHES | TOTAL<br>CRASHES | FATALITIES | SERIOUS<br>INJURIES | MINOR INJURIES | POSSIBLE<br>INJURIES | PDO/ NO INJURIES | TOTAL<br>PEOPLE<br>INVOLVED |
|----------------|------------------|-------------------|-------------------------------|------------------|------------|---------------------|----------------|----------------------|------------------|-----------------------------|
|                |                  |                   |                               |                  |            |                     |                |                      |                  |                             |
| 2011           | 6                | 242               | 743                           | 991              | 6          | 54                  | 184            | 109                  | 1,598            | 1,951                       |
| 2012           | 5                | 243               | 734                           | 982              | 5          | 42                  | 171            | 145                  | 1,618            | 1,981                       |
| 2013           | 3                | 236               | 635                           | 874              | 4          | 56                  | 134            | 135                  | 1,335            | 1,664                       |
| 2014           | 11               | 237               | 734                           | 982              | 12         | 43                  | 170            | 134                  | 1,570            | 1,929                       |
| 2015           | 3                | 280               | 693                           | 976              | 3          | 36                  | 216            | 166                  | 1,556            | 1,977                       |
| 2016           | 2                | 232               | 786                           | 1,020            | 2          | 40                  | 189            | 132                  | 1,748            | 2,111                       |
| 2017           | 10               | 229               | 705                           | 944              | 10         | 46                  | 144            | 144                  | 1,736            | 2,080                       |
| 2018           | 6                | 222               | 736                           | 964              | 6          | 31                  | 166            | 102                  | 1,508            | 1,813                       |
| 2019           | 6                | 230               | 621                           | 857              | 7          | 44                  | 202            | 98                   | 1,316            | 1,667                       |
| 2020           | 3                | 212               | 608                           | 823              | 3          | 33                  | 166            | 99                   | 1,285            | 1,586                       |
| 10-YEAR TOTAL  | 55               | 2,363             | 6,995                         | 9,413            | 58         | 425                 | 1,742          | 1,264                | 15,270           | 18,759                      |
| ANNUAL AVERAGE | 6                | 236               | 700                           | 941              | 6          | 43                  | 174            | 126                  | 1,527            | 1,876                       |

Table 1: 10-year Crash Trends

#### **Crash Types**

Two approaches (Figures 4-5) were presented to stakeholders, depicting the different crash types using the most recent five-year period (2016-2020). Figure 4 shows data for all crashes. Using this data, fixed object crashes occurred most frequently, followed by animal crashes, rear-end, angle, and sideswipe. Fixed object crashes occur when a vehicle departs the road and hits an object. Rear-end, angle, and sideswipe often occur because of distraction, speed, or inexperience behind the wheel.

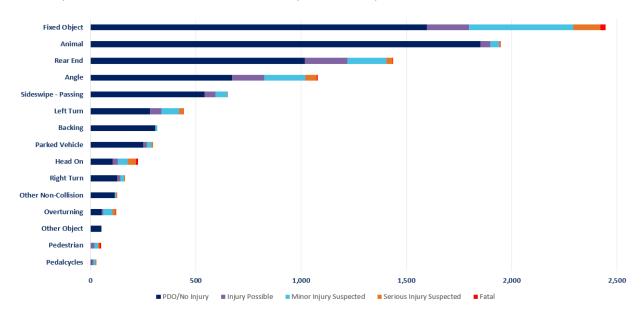
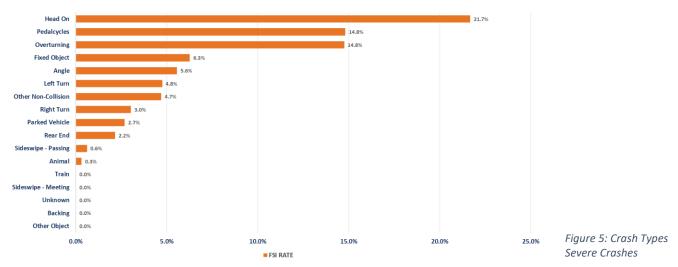


Figure 4: Crash Types All Crashes



Figure 5 shows data for fatality and serious injury crashes. Using this data, head on, pedestrians, overturning, and fixed object severe crashes occurred most frequently. Head on and fixed object crashes occur when a vehicle departs the road or their lane. Pedestrian involved and overturning are often caused by speeding and distraction.



#### **Contributing Factors**

Four approaches (Figures 6-8, Exhibit 8, Table 2) were presented to stakeholders, depicting the different factors contributing to crashes using the most recent five-year period (2016-2020). Figure 6 shows data for all crashes. Using this analysis, roadway departure related, young driver related, intersection-related, rear end related, and senior driver related crashes are most prevalent.

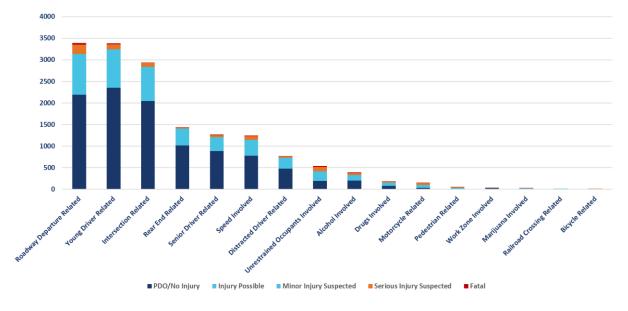


Figure 6: Contributing Factors All Crashes



Figure 7 shows the contributing factor data for fatal and serious injury crashes. Using this analysis approach, roadway departure related, young driver related, unrestrained occupant involved, speed involved, and intersection related are most prevalent.

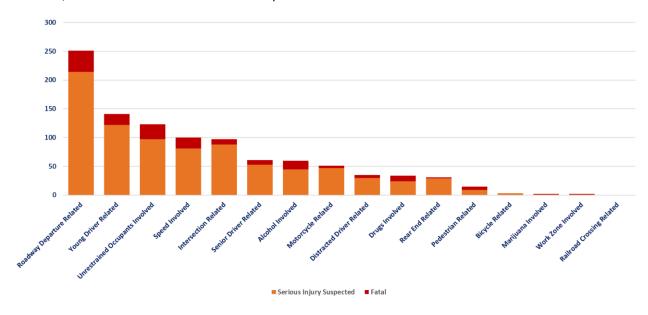


Figure 7: Contributing Factors Severe Crashes



Figure 8 shows the contributing factor data by equivalent property damage only (EPDO). In this approach weights are given to the different crash types. So fatal and serious injury crashes are weighted the highest, visible and possible injury crashes are weighted on the lower end, and property damage crashes receive no weight (see specific formula in callout box). Using this analysis approach, motorcycle involved, pedestrian involved, bicycle involved, unrestrained occupant involved, and drug-related are the most prevalent. While the frequency of these types of crashes are less, when they do occur, the chances of a fatality or serious injury are higher. The EPDO analysis in this plan followed the current ODOT safety analysis guidelines.

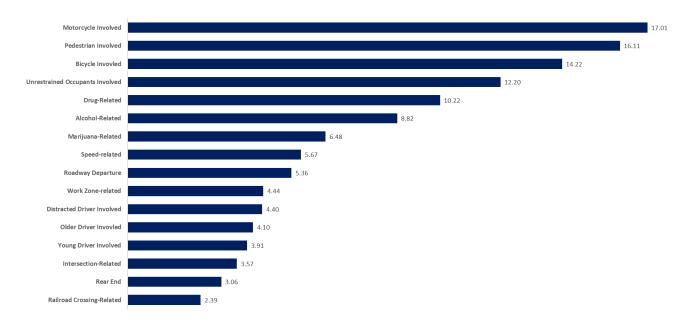


Figure 8: Contributing Factors EPDO

Exhibit 8 displays where roadways in Clinton County rank on the EPDO scale. The thicker, redder the line, the higher that segment ranks in EPDO compared to its peers. Many of the higher-ranking roadways exist in more urban, traveled areas with a few key intersections in the rural part of the County also ranking highly. EPDO rankings are looked at in coordination with the systemic analysis to prioritize locations for safety improvements.



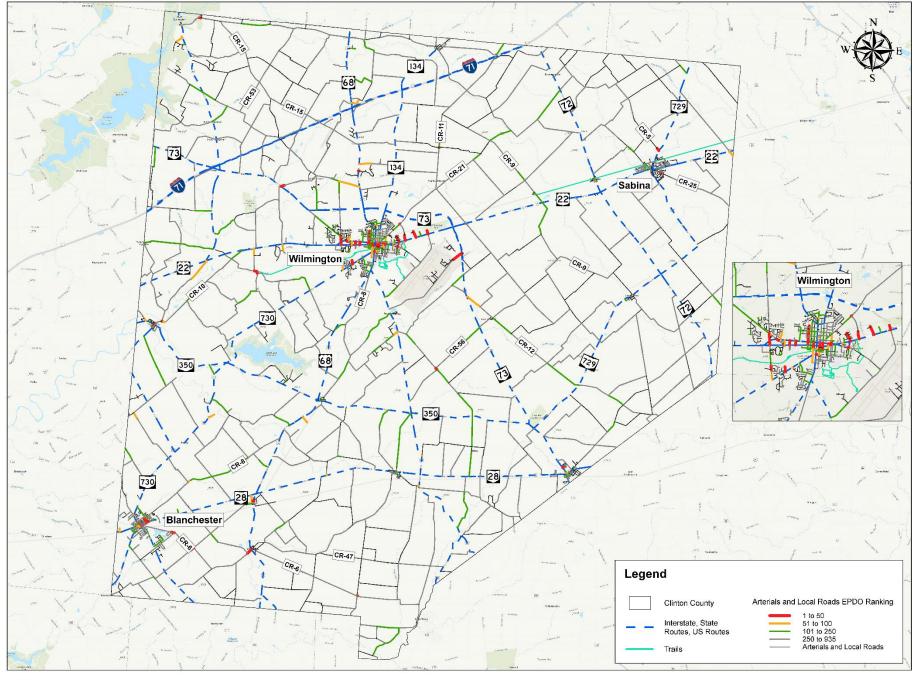


Exhibit 8: EPDO Ranking Map



Table 2 shows the contributing factor data based on its overlaps with other contributing factors. The table needs to be read, starting with the horizontal bar at the top (primary emphasis area) and moving down to the vertical bar on the left (secondary emphasis area. For example, reading from the top - 35% of roadway departure crashes involve a young driver; 63% of young driver crashes occur because they depart the road; 84% of the speed involved crashes result in the driver running off the road. Using this analysis approach, it is possible to see that roadway departure, young drivers, unrestrained occupants, and speed are predominant factors across all types of crashes.

|            |   |         |               |                  |                  |                  |                 | Step 1: S     | elect Emph | asis Area      |          |             |                   |                |           |
|------------|---|---------|---------------|------------------|------------------|------------------|-----------------|---------------|------------|----------------|----------|-------------|-------------------|----------------|-----------|
|            |   | Q.O.B.C | May Departure | of Drive Related | A SEED SEED SEED | d Involved inter | section Related | Driver Relate | d Indhed   | sedcle Related | All Drug | Indued Real | crid Related Pedé | Strian Related | e Reitler |
| <u>s</u>   | Roadway Departure                         |         | 63%           | 74%              | 84%              | 25%              | 41%             | 78%           | 43%        | 57%            | 85%      | 19%         | 20%               | 67%            | ſ         |
| Emphasis   | Young Driver Related                      | 35%     | -             | 43%              | 45%              | 37%              | 18%             | 33%           | 20%        | 46%            | 35%      | 48%         | 27%               | 33%            |           |
| 립          | Unrestrained Occupants                    | 36%     | 38%           | -                | 37%              | 28%              | 26%             | 50%           | 2%         | 37%            | 56%      | 16%         | 0%                | 0%             |           |
|            | Speed Involved                            | 33%     | 32%           | 30%              |                  | 13%              | 13%             | 35%           | 22%        | 17%            | 32%      | 10%         | 20%               | 0%             |           |
| Overlaping | Intersection Related                      | 10%     | 26%           | 22%              | 13%              | -                | 52%             | 10%           | 35%        | 31%            | 18%      | 39%         | 20%               | 33%            |           |
| la<br>la   | Senior Driver Related                     | 10%     | 8%            | 13%              | 8%               | 33%              | -               | 0%            | 22%        | 11%            | 9%       | 23%         | 7%                | 33%            |           |
| Ne l       | Alcohol Involved                          | 19%     | 14%           | 24%              | 21%              | 6%               | 0%              | -             | 18%        | 11%            | 44%      | 6%          | 33%               | 0%             |           |
|            | Motorcycle Related                        | 9%      | 7%            | 1%               | 11%              | 19%              | 18%             | 15%           | -          | 14%            | 15%      | 29%         | 7%                | 0%             |           |
| nat        | Distracted Driver Related                 | 8%      | 11%           | 11%              | 6%               | 11%              | 7%              | 7%            | 10%        | -              | 12%      | 29%         | 7%                | 33%            |           |
| Evaluate   | Drugs Involved                            | 12%     | 9%            | 15%              | 11%              | 6%               | 5%              | 25%           | 10%        | 11%            | -        | 6%          | 7%                | 0%             |           |
| 2: E       | Rear End Related                          | 2%      | 11%           | 4%               | 3%               | 12%              | 11%             | 3%            | 18%        | 26%            | 6%       | -           | 0%                | 0%             |           |
| à          | Pedestrian Related                        | 1%      | 3%            | 0%               | 3%               | 3%               | 2%              | 8%            | 2%         | 3%             | 3%       | 0%          | -                 | 0%             |           |
| Step       | Bicycle Related                           | 1%      | 1%            | 0%               | 0%               | 1%               | 2%              | 0%            | 0%         | 3%             | 0%       | 0%          | 0%                | -              |           |
|            | Total Fatal and Serious<br>Injury Crashes | 251     | 141           | 123              | 100              | 97               | 61              | 60            | 51         | 35             | 34       | 31          | 15                | 3              |           |

Table 2: Contributing Factors Overlaps

#### **Systemic Analysis**

A systemic analysis was performed, and the results presented to stakeholders. Because of the high occurrence of roadway departure crashes on County roads, this method was used to identify conditions where a roadway departure crash was likely to occur. The factors identified, leading to this crash type are:

- Roads defined as Major Collectors (major collectors are defined as roads that connect local roads and streets with arterials)
- Roads with a fixed object within 10 feet of the edge of roadway
- Roads with total pavement width less than 18 feet
- The presence of curve(s) within segment
- Roads with edge line but no shoulder
- Roads with traffic Volume between 1,000 and 2,000 vehicles per day



#### **Equity Analysis**

Exhibit 9 displays demographic data about the population of Clinton County. The over 65 years old demographic represents 16.9% of the population. Additionally, 5.2% of all households do not have access to a vehicle. The map shows that a higher proportion of individuals living below the poverty level are concentrated in and around the urban areas of the county. Safety investments, including sidewalks, bicycle lanes, and access points to transit can be considered in these areas, for those individuals that might rely on forms of side from a private vehicle.



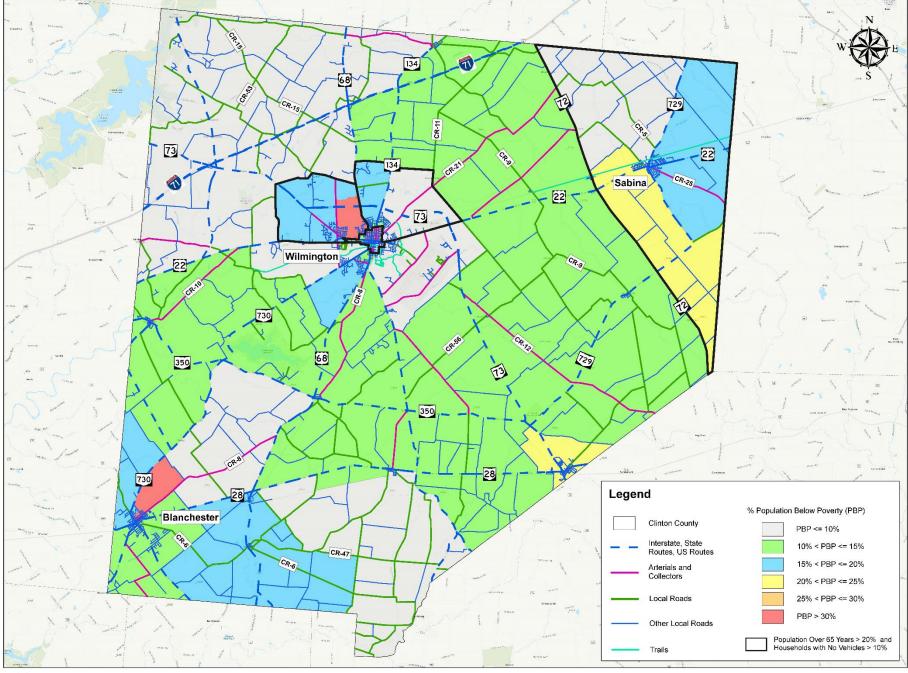


Exhibit 9: Equity Measures



#### **Priority Safety Emphasis Areas**

Using all the data presented and local knowledge, stakeholders identified the topics and issues most pertinent to transportation safety in Clinton County, also known as "emphasis areas". Using a prioritization exercise (Exhibit 10), the top safety emphasis areas identified for this Plan are:

- Distracted Driver Related (12 votes)
- Speed Involved (12 votes)
- Young Driver Related (5 votes)
- Road Departure Related (4 votes)

Speed, young drivers, and roadway departures arose as priority issues from the crash type,



Exhibit 10: Photo of Selected Safety Priorities

contributing factor, and systemic analysis results. Distracted driving was not as prevalent, but stakeholders felt this was a major issue, not accurately captured in the data. They discussed the difficulty for enforcement to prevent these types of crashes and the challenges with determining whether a driver was distracted as the primary cause for a crash. Anecdotally, stakeholders agreed that a significant amount of people are distracted while driving and wanted to address this issue.

Exhibit 11 is a combined heat map of the crashes primarily attributed to each of the emphasis areas for this plan. The map shows a high level of overlap between each emphasis area and further reinforces the need to take multidisciplinary approaches to solve these issues simultaneously. Often, solutions will be multifaceted and be multi-tiered, rarely will they only be a single solution that is effective enough to address all the safety concerns at a given location.



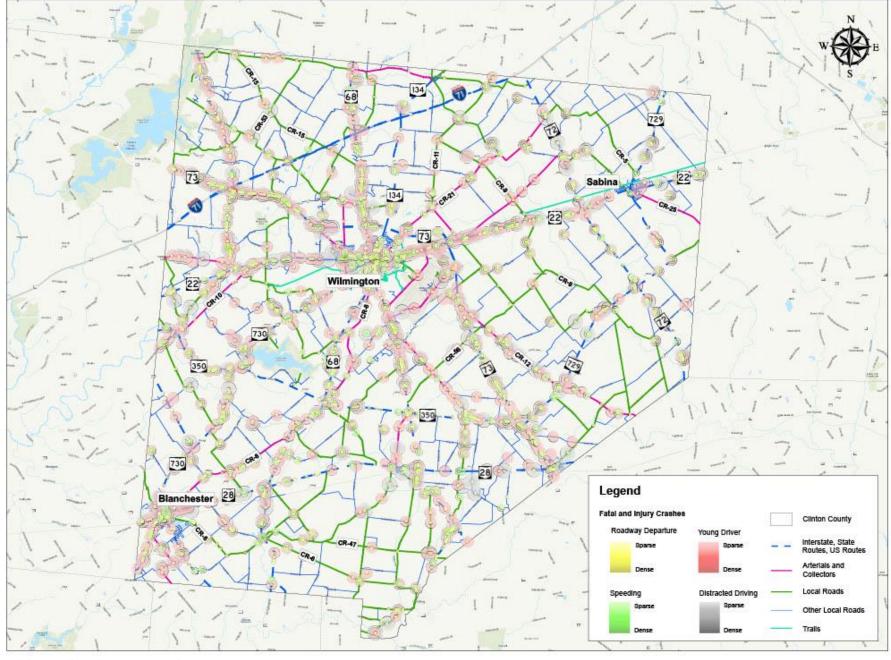


Exhibit 11: All Emphasis Areas Crash Heat Map



#### **Further Exploring the Key Needs**

Once the four key safety issues were prioritized, understanding why these crashes were occurring would help identify targeted solutions, later in the process. Through a combination of data and stakeholder input, the full picture for these four challenges was pieced together.



# ■ Description

Distracted driving is one of the most dangerous and ubiquitous causes of crashes in the country and Clinton County. Distracted driving encompasses crashes that occur due to a vehicle operator not giving due attention to the roadway, usually completing another activity such as using a cell phone, eating, or interacting with passengers.



#### Data

Crash trends show distracted driving crashes peak in 2016, but since then they have been steadily declining. 2020 saw the fewest amount of distracted driving crashes in the ten-year period (Figure 9). However, it was noted by stakeholders, including enforcement, that identifying distracted drivers on the road and/or knowing when distraction was a factor in a crash can be challenging. As a result, the annual statistics are likely under-reported.

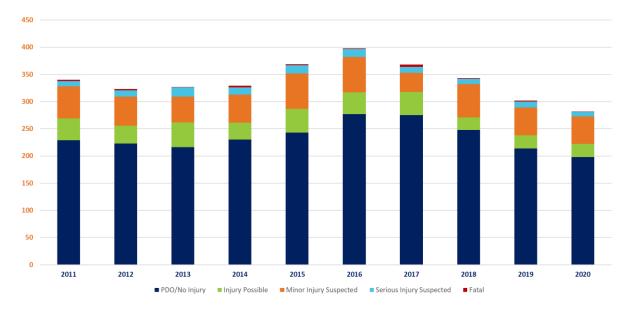


Figure 9: Ten-Year Distracted Driving Crash Trends

Distracted driving fatalities and serious injuries are often young drivers, occur because people are distracted and speeding, or because they are distracted and don't notice they are departing the road



(Figure 10). Three of the top four distracted driving overlaps (young drivers, speed, and roadway departures) are also a focus for this plan.

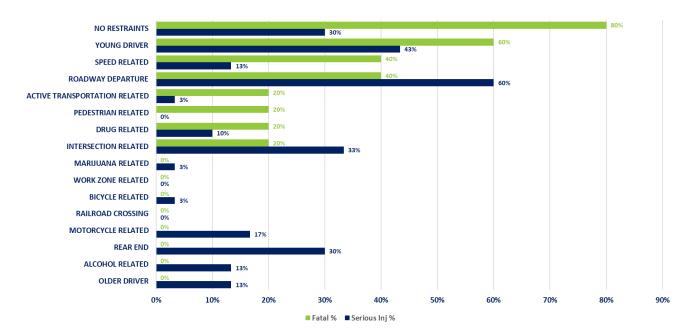


Figure 10: Distracted Driving - Overlapping Emphasis Areas



Based on the results of the data and local knowledge, stakeholders identified the following as key challenges to address distracted driving.

- Ohio does not have a primary law for distracted driving, meaning an offender needs to be pulled over for another offense (i.e., drinking and driving) to also be ticketed for distracted driving.
- Limitations places on law enforcement because distracted driving isn't a primary offense and available resources to deter and prevent distracted driving.
- Ohio has a Graduated Drivers License (GDL) law, which places limitation on young drivers, including having other young adults in the car with them, but it is difficult to enforce.
- Drivers eating, using navigation or devices, and engaging in other activities while operating a vehicle
- People don't leave home without their cell phone they use them for navigation in cars and it's hard to disconnect from them in general. It's now just part of the driving culture.
- It easier to be distracted on the wide, straight roads in the County







#### Description

Speeding is when someone drives over the posted speed limit. Higher driving speeds lead to higher collision speeds and increase the likelihood for a severe injury. Higher driving speeds also provide less time to process information and to act on it, and the braking distance is longer. Therefore, the possibility of avoiding a collision is smaller. Evaluating posted and actual speeds based on roadway and environmental contexts can result in a safer transportation network.



#### Data

Speed has been a consistent and top contributor to fatalities and injuries over the ten-year period between 2011 and 2020. There is no discernible trend in crashes related to speed over the past ten years, indicating it is a persistent issue on Clinton County roadways (Figure 11).

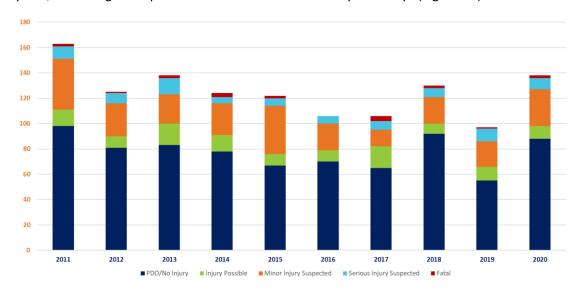


Figure 11: Ten-Year Speed Crash Trends

Speed fatalities and serious injuries are closely related to roadway departures (Figure 12) and fixed object crashes. Many drivers will be traveling at a speed higher than appropriate for conditions, exit the roadway as a result, and contact with a fixed object just beyond the right-of-way. Young drivers are also frequently involved in speed-related crashes, which is due to inexperience and higher propensity to take risks.



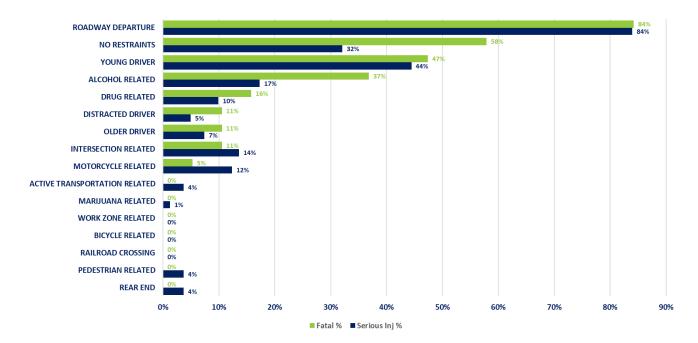


Figure 12: Speed- Overlapping Emphasis Areas

Streetlight data were used to show average speeds on County roads, which was then overlaid that with the most recent five years of fatality and serious injury data (Exhibit 12). Several roads are highlighted in orange (50-60MPH) and red (60-70MPH). Roads in those colors, that also experience crashes, are being reviewed as an initial priority, but higher speed roads without crashes can also be assessed to identify what is causing the higher speeds and whether they match the context of the road and environment. In addition, roads where speeds are lower (under 50MPH), but experience higher numbers of crashes, can also be reviewed to determine if those speeds are appropriate to the context or improvements needs to be made to slow vehicles further.



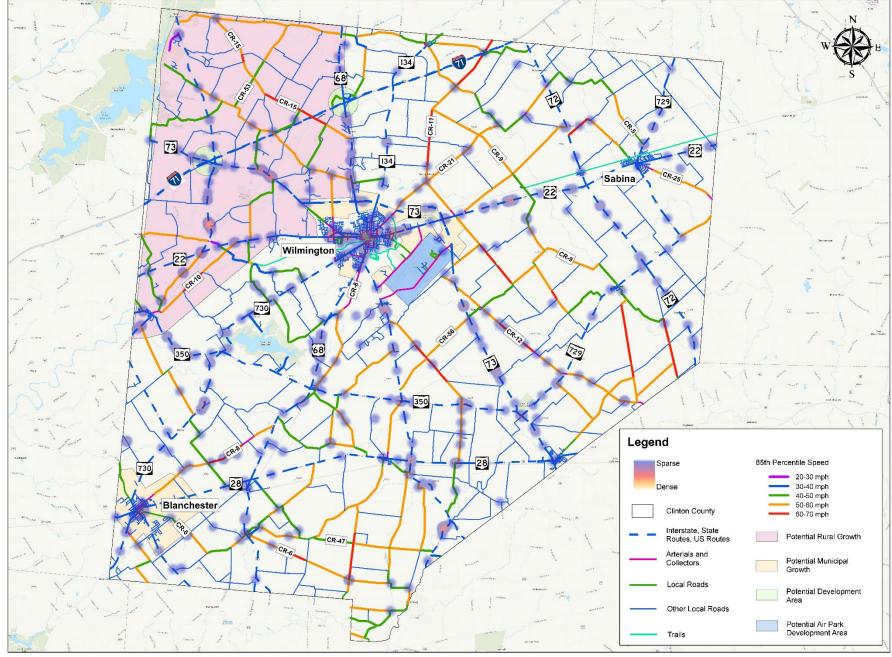


Exhibit 12: Speed-Related Crash Heat Map





# Other Identified Challenges

Based on the results of the data and local knowledge, stakeholders identified the following as key challenges to address speed.

- Staff and resource shortages at law enforcement agencies, inhibiting the ability to deter speeding.
- Lack of available funds to implement rumble strips, address curves, and remove fixed objects adjacent to the right-of-way on or along every road.
- Resources to address roadway context that would help to self-enforce speeds.
- A culture of speeding where people are just trying to get to their destinations as quickly as possible without enough regard to safety.
- Desensitized to speed-related education campaigns.
- Speed differentials between highways and local roads and difficulty converting from high speeds to low speeds in a minimal amount of time.







#### Description

Young drivers are defined as persons in the age range of 15-25. Young drivers are more likely to be involved in a severe crash than other age cohorts because they lack experience on the roadways and tend to take greater risks.



#### Data

In the ten-year period between 2011-2020, crashes among young drivers have been trending downwards since 2016, with the fewest number of overall crashes in the ten-year period occurring in 2020 (Figure 13). However, young driver related crashes, fatalities, and serious injuries over the last five years have been high compared to other crash types – second to roadway departure related crashes.

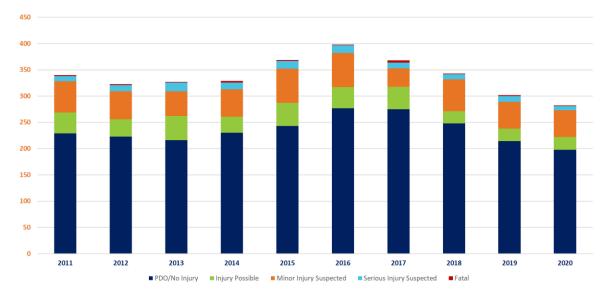


Figure 13: Ten-Year Young Driver Crash Trends

Young driver fatalities and serious injuries correlate strongly with the other emphasis areas in this plan (roadway departures, speed, distraction) as seen in Figure 14. A lack of proper use of restraints was also a present factor in over half fatal crashes and was considered during strategy development.



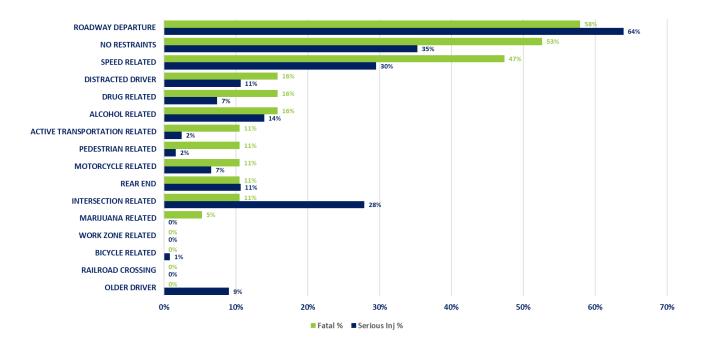


Figure 14: Young Drivers- Overlapping Emphasis Areas



## Other Identified Challenges

Based on the results of the data and local knowledge, stakeholders identified the following as key challenges to address young-driver related crashes.

- In Ohio, drivers' education isn't required if you are over 18 years old. Drivers' education training is also private and can be cost prohibitive, encouraging youth to wait until they are 18 and do not need to complete it.
- The driver's education curriculum and qualifying requirements are handled at the state level leaving the County limited in their impact to shaping content.
- Ohio has a Graduated Driver's License (GDL) law, which places limitation on young drivers, including having other young adults in the car with them, conditional licensing, and curfews, but it is difficult to enforce.
- Limited resources to help parents with in-car learning to assist their young drivers.
- Young drivers use their phones to navigate to everything and see it as an essential part of their daily lives and commutes. Unsure how to break that connection.







#### Description

Roadway departure is when a vehicle leaves the road or their lane as part of the incident. Roadway departure is the highest-correlated emphasis area with each of the other three emphasis areas. Most crashes involve a roadway departure at some point and many severe crashes involve roadway departure paired with a fixed object.



#### Data

The ten-year trend of roadway departure crashes has trended flat, oscillating between 300 and 375 roadways departure crashes per year between 2011 and 2020 (Figure 15). Unlike the other emphasis areas that have seen slight trend decreases since 2016, roadway departures have not.

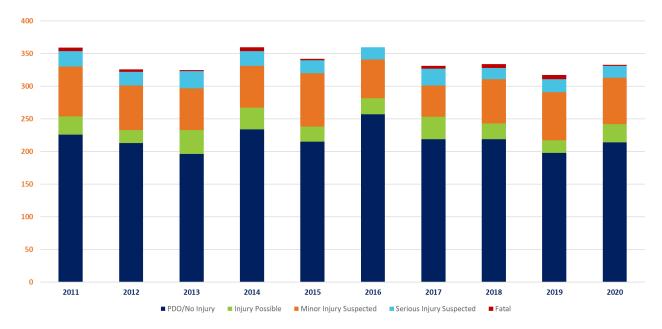


Figure 15: Ten-Year Roadway Departure Crash Trends



Roadway departure fatalities and serious injuries are closely related to speed, impairment, and young drivers (Figure 16). Many drivers will be traveling at a speed higher than appropriate for conditions, exit the roadway as a result, and contact with a fixed object just beyond the right-of-way. Impaired and young drivers are also frequently involved in roadway departure-related crashes, due to inexperience or levels of impairment, impacting a driver's ability to stay on the road. Unbelted occupants are also a factor – drivers who run off the road and hit an object are likely to be involved in a high impact crash. Without a seat belt keeping drivers and occupants in their seats, the chances of a fatality or serious injury increase.

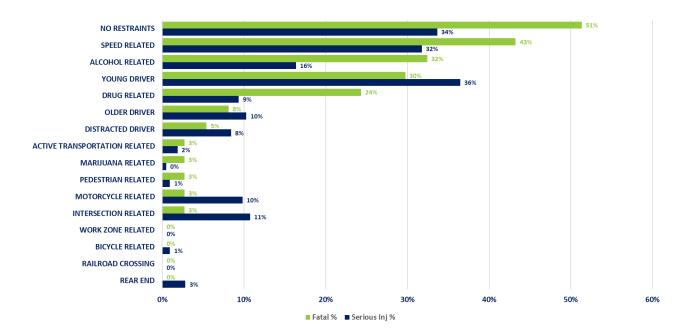


Figure 16: Roadway Departure- Severe Crashes by Contributing Factor

Many of the severe roadway departure crashes involve a fixed object (Figure 17). Moving fixed objects further from the edge of the right-of-way when possible or removing the fixed object all together has been a priority in the County to reduce the frequency and severity of these crashes when they do occur.



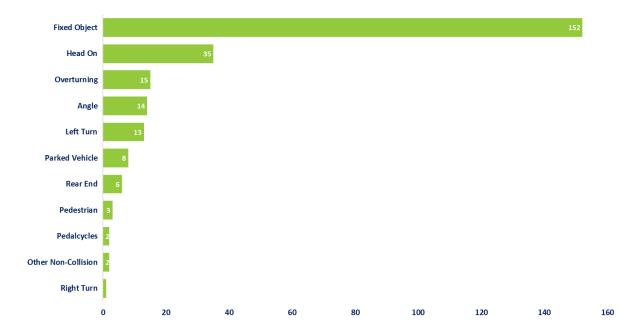


Figure 17: Roadway Departures - Severe Crash by Type

The systemic analysis identified six potential conditions where a roadway departure crash was likely to occur. The map (Exhibit 13) shows where these conditions are present. The dark red identifies locations with several risk factors and the purple is where fewer are present. This information was overlaid with the most recent five years of crash data to help prioritize locations for improvements that would reduce roadway departure fatalities and serious injuries.



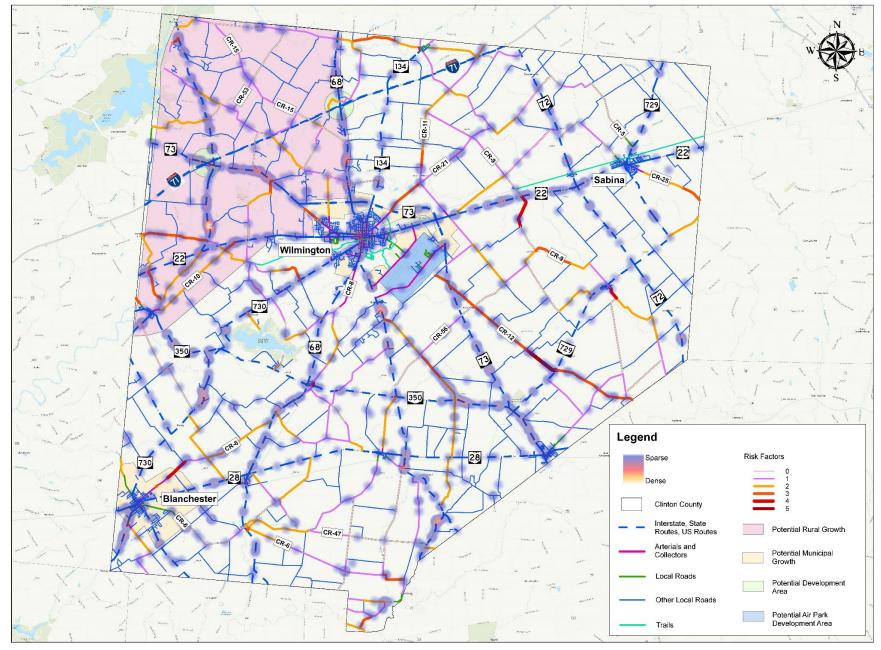


Exhibit 13: Roadway Departure Systemic Analysis and Crash Heat Map Overlay





### Other Identified Challenges

Based on the results of the data and local knowledge, stakeholders identified the following as key challenges to address roadway departure crashes.

- A culture of not wearing seatbelts is contributing to more severe crashes when people depart the road.
- Pavement markings and signage are not always enough to draw attention to curves and edge lines and keep drivers on the road.
- Roadside ditches are present in several locations around the County and make leaving the roadway unrecoverable. However, widening roadways and surfaces may improve recovery space but could also increase user speeds.
- Lack of available funds to implement rumble strips, address curves, and remove fixed objects adjacent to the right-of-way on or along every road.

#### **Section Summary**

Distracted driving, speed, young drivers, and roadway departures were identified during the **Safe Streets Clinton County** planning process as the top priorities to address in this plan. A combination of crash history, roadway conditions and risks, and stakeholder input led to the decision to focus on these four factors. In further studying the data, these issues frequently overlap and some combination of them is present in nearly every fatality and serious injury. Section 3 identifies solutions to the key challenges in Clinton County.



### **Section 3. Action Plan and Strategy Solutions**

The Safe Streets Clinton County Action Plan is organized around the five objectives of the SSA. For each safety challenge identified - distracted driving, speed, young drivers, and roadway departures - the solutions are cross cutting to address the roads, road users, speeds, post-crash care, technology/vehicles, equity, and culture. The solutions achieve the following:

Safe Roads: Consider how the safety engineering treatments can increase alertness, address speed, and keep drivers on the road.

Safe Speeds: Review average speeds, in coordination with crashes, to identify roadway improvements, educational needs, and/or policies to reduce the severity of this crash type.

Safer Road Users: Educate all road users and support enforcement to reduce distracted driving, young driver risk taking, and speeding to keep vehicle on the road.

**Post-Crash Care**: Ensure when any of these types of crashes occur, first responders have what they need to respond to a crash scene and make it to the hospital in an expedient amount of time.

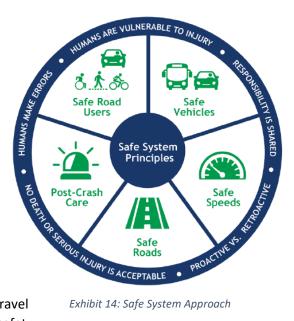
Safer Vehicles: Understand the policy direction and technology needs related to safe vehicles in Ohio to consider future considerations for Clinton County's roads.

**Culture**: Help all road users commit to safety over competing goals and demands. For transportation and safety stakeholders, making sure they responsible for planning, engineering, and educating on the safe system concepts. As part of being good system stewards, everyone is taking responsibility for being safe system users.

**Equity**: Ensuring all types of road users have options for safe travel (walking, biking, driving a vehicle or truck) and implementing safety improvements across the entirety of the network – not just in certain locations/neighborhoods.

Exhibit 14: Safe System Approach

The Action Plan identifies strategies to move these objectives forward to reduce distracted driving, speed-related, young driver, and roadway departure severe crashes. The Action Plan is organized by strategy, outcome, responsible party, and emphasis areas addressed- this table is intended to be actively utilized and updated over the life of this plan by the parties identified.





# **Safe Roads**

**Safe Roads**: Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.

|  |   |  | Emphasis Areas Addressed |                  |                       |       |
|--|---|--|--------------------------|------------------|-----------------------|-------|
| Strategy   | Outcome   | Lead Agency  | Distracted Driving       | Young<br>Drivers | Roadway<br>Departures | Speed |
| Increase attentiveness for visitors to the county, especially near Worldwide Equestrian Center and Majestic Springs Golf Course, by implementing retro-reflective signs and enhanced wayfinding.                             | Determine where signs/wayfinding would be impactful | Clinton County<br>Engineer's Office &<br>ODOT                                      | X                        |                  | X                     |       |
| Identify and implement treatments to increase driver attentiveness and reduce speeds in school zones.  | Prioritize school zone locations for interventions  | Clinton County<br>Engineer's Office, City<br>of Wilmington,<br>Townships, Villages | х                        | х                |                       | Х     |
| Install rumble stripes, raised pavement markers, narrow lanes, or other treatments to prevent drivers from departing the road, emphasizing locations identified through heat maps, systemic analysis, and stakeholder input. | Prioritize locations                                | Clinton County<br>Engineer's Office, City<br>of Wilmington,<br>Townships, Villages | х                        | х                | х                     | Х     |
| Install berms, guardrails, or other treatments to prevent a severe crash if a driver departs the road, emphasizing locations identified through heat maps, systemic analysis, and stakeholder input.                         | Prioritize locations                                | Clinton County<br>Engineer's Office, City<br>of Wilmington,<br>Townships, Villages | х                        | х                | х                     | Х     |
| Where appropriate, convert two-way stops to fourway stops at intersections to increase attentiveness and decrease speeds.  | Prioritize locations                                | Clinton County Engineer's Office, City of Wilmington, Townships, Villages          | х                        |                  |                       | Х     |



# **Safe Roads**

**Safe Roads**: Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.

|  |   |  | Emphasis Areas Addressed |                  |                       |       |  |
|--|---|--|--------------------------|------------------|-----------------------|-------|--|
| Strategy   | Outcome   | Lead Agency  | Distracted Driving       | Young<br>Drivers | Roadway<br>Departures | Speed |  |
| Identify and implement treatments (advisory signs, markings, other) to increase attentiveness of drivers prior to and at curves.   | Prioritize locations                                    | Clinton County<br>Engineer's Office, City<br>of Wilmington,<br>Townships, Villages | х                        |                  | х                     | Х     |  |
| Provide examples and share information on existing complete streets/speed calming practices being implemented within the county (City of Wilmington as an example).        | Education session/resource sharing on current practices | City of Wilmington   |                          | Х                |                       | Х     |  |
| Make recommendations to add field to OH-1 indicating what made a driver depart the road (e.g. medical, distraction, avoidance, sleeping) to better inform decision-making. | Collaboration with ODOT and OH State Police             | Clinton County<br>Engineer's Office & Ohio<br>State Highway Patrol                 | Х                        | х                | х                     | х     |  |
| Where appropriate, consider ODOT Multimodal Design Guide when designing streets for all road users.  | Review guidance and share with stakeholders             | Clinton County<br>Engineer's Office, City<br>of Wilmington,<br>Townships, Villages | Х                        | х                | х                     | Х     |  |

Table 3: Safe Roads Action Items



# **Safe Speeds**

**Safe Speeds**: Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.

|   |  |  | Emphasis Areas Addressed |         |            |       |
|---|--|--|--------------------------|---------|------------|-------|
|   |  |  | Distracted               | Young   | Roadway    | Speed |
| Strategy  | Outcome  | Lead Agency  | Driving                  | Drivers | Departures |       |
| Consider policy, program, and/or project interventions where average speeds were determined to be higher than posted speed limits.  | Prioritize locations and projects                                | Clinton County<br>Engineer's Office,<br>City of Wilmington,<br>Townships, Villages |                          |         |            | х     |
| Implement self-enforcing speed management techniques, like narrowing lanes, retaining curves, speed and red-light running cameras, curb bump outs, and others.  | Apply speed management strategies where appropriate              | Clinton County<br>Engineer's Office,<br>City of Wilmington,<br>Townships, Villages |                          |         |            | х     |
| Increase driver attentiveness on straight, wide roads in the county by identifying and implementing treatments, such as speed detection signs.  | Deploy speed signs on a wider basis and/or at priority locations | Clinton County<br>Engineer's Office,<br>City of Wilmington,<br>Townships, Villages | х                        |         |            | х     |
| Increase the use and application of speed interventions in work zones.  | Deploy solutions in work zones to lower speeds                   | Clinton County<br>Engineer's Office,<br>City of Wilmington,<br>Townships, Villages | Х                        |         |            | х     |
| Re-evaluate speed limits considering ODOTs new guidance on using 50 <sup>th</sup> percentile speeds in locations where there is a significant 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   | Clinton County<br>Engineer's Office,<br>City of Wilmington,<br>Villages            |                          |         |            | х     |



# **Safe Speeds**

**Safe Speeds**: Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.

|   |  |                                     |                    | nphasis Ar       | eas Addressed         |       |
|---|--|-------------------------------------|--------------------|------------------|-----------------------|-------|
| Strategy  | Outcome  | Lead Agency                         | Distracted Driving | Young<br>Drivers | Roadway<br>Departures | Speed |
| Review corridors with high densities of intersections or higher than average speeds for possible signal timing adjustments.           | Revised signal timings designed to reduce harmful interactions on the roadways | City of Wilmington,<br>Villages     |                    |                  |                       | Х     |
| Review crash locations where the interstate (or other high speed-limit roads) transition to lower-speed roads, to identify solutions. | Prioritize locations for needed improvements                                   | Clinton County<br>Engineer's Office |                    |                  |                       | Х     |

Table 4: Safe Speeds Action Items



# **Safe Road Users**

**Safe Road Users**: The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.

|  |   |   | En                 | nphasis Ar       | eas Addressed         |       |
|--|---|---|--------------------|------------------|-----------------------|-------|
| Strategy   | Outcome   | Lead Agency   | Distracted Driving | Young<br>Drivers | Roadway<br>Departures | Speed |
| Stay up to date on evolving statewide policies, programs, driver's education curriculum, and legislation related to safe driving.  | Coordinate with ODOT to obtain annual updates   | Clinton County<br>Regional Planning<br>Commission   | х                  | Х                | х                     | х     |
| Utilize available state and national safety education resources and share with local stakeholders and through social media outreach.   | Coordinate with ODOT, the Highway Safety Office, and review National Highway Traffic Safety Administration (NHTSA) materials to select information to share with stakeholders | Clinton County<br>Regional Planning<br>Commission   | Х                  | х                |                       | х     |
| Engage with middle and high schools to identify opportunities to provide education on safe driving using mock crashes, social media platforms, student councils, and enforcement visits. | Identify impactful education opportunities  | Clinton-Massie Local<br>Schools, Wilmington<br>City Schools,<br>Blanchester Local<br>Schools, East Clinton<br>Local Schools, Ohio<br>State Highway Patrol | Х                  | Х                |                       | Х     |
| Coordinate with a school successfully employing safety practices and programs and identify opportunities to share lessons learned and ideas with other schools.                          | Draft lessons learned from successful safety education efforts to share with other schools  | Clinton-Massie Local<br>Schools   |                    | х                |                       |       |
| Create education materials for elementary and middle school students to share with their parents, encouraging them to practice safe driving behaviors.                                   | Develop a one-page fact sheet or similar resource   | Clinton County Sheriff's<br>Office, Clinton County<br>Regional Planning<br>Commission   |                    | Х                |                       |       |



# **Safe Road Users**

**Safe Road Users**: The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.

|   |   |   | Emphasis Areas Addressed |                  |                       |       |
|---|---|---|--------------------------|------------------|-----------------------|-------|
| Strategy  | Outcome   | Lead Agency   | Distracted Driving       | Young<br>Drivers | Roadway<br>Departures | Speed |
| Identify and share available resources for parents to help them understand the Graduated Driver's License laws and educate and properly train their children. | Develop a one-page fact sheet or similar resource         | Clinton County Sheriff's<br>Office, Clinton County<br>Regional Planning<br>Commission   |                          | Х                |                       |       |
| Continue to identify and conduct enforcement blitzes at critical locations to prevent unsafe driving behaviors.   | Utilize data to prioritize locations and conduct blitzes  | Clinton County Sheriff's<br>Office, Ohio State<br>Highway Patrol  | х                        | х                |                       | Х     |
| Utilize social media and email mailers to reinforce safe driving habits and to disseminate crash-related statistics.  | Educate public about the benefits of safe driving habits. | Clinton County Engineer's Office, Clinton County Sheriff's Office, Clinton County Emergency Management Agency, Clinton County Regional Planning Commission, City of Wilmington, Blanchester Local Schools, Clinton Massie Local Schools, East Clinton Local Schools, City of Wilmington Schools | X                        | X                | X                     | X     |

Table 5: Safe Road Users Action Items



# **Post-Crash Care**

**Post-Crash Care**: When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.

|  |                                       |   | Emphasis Areas Addressed |         |            |       |
|--|---------------------------------------|---|--------------------------|---------|------------|-------|
|  |                                       |   | Distracted               | Young   | Roadway    | Speed |
|  |                                       |   | Driving                  | Drivers | Departures |       |
| Strategy   | Outcome                               | Lead Agency   |                          |         |            |       |
| Continue to coordinate with state highway patrol to issue a public release when a crash closes the interstate. | Issue public releases                 | Clinton County Sheriff's Office, Ohio State Highway Patrol, Clinton County Emergency Management Agency  | х                        | X       | Х          | Х     |
| Continue quick, accurate, and geo-coded crash reporting while at the crash scene.                              | Accurate data collected at scene      | Clinton County Emergency Management Agency, SRWW Joint Fire District, Clinton Highland Joint Fire District, Wilmington Fire/EMS, Clinton County Sheriff's Office, Ohio State Highway Patrol | X                        | X       | X          | X     |
| Continue communication and coordination efforts between the county fire department and EMS.                    | Continued meetings and communications | Clinton County Emergency Management Agency, SRWW Joint Fire District, Clinton Highland Joint Fire District, Wilmington Fire/EMS   | X                        | X       | X          | X     |



### **Post-Crash Care**

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|  |   |   | Emphasis Areas Addressed |         |            |       |
|--|---|---|--------------------------|---------|------------|-------|
|  |   |   | Distracted               | Young   | Roadway    | Speed |
|  |   |   | Driving                  | Drivers | Departures |       |
| Strategy   | Outcome   | Lead Agency   |                          |         |            |       |
| Identify opportunities to recruit more EMS volunteers.   | Identify challenges to hiring and solutions       | Clinton County Emergency Management Agency, SRWW Joint Fire District, Clinton Highland Joint Fire District, Wilmington Fire/EMS | Х                        | Х       | X          | Х     |
| Educate drivers on moving to the side of the road when an emergency vehicle is approaching.  | Develop a one-page fact sheet or similar resource | Clinton County Emergency Management Agency, SRWW Joint Fire District, Clinton Highland Joint Fire District, Wilmington Fire/EMS | X                        | X       |            |       |
| Discuss and identify opportunities to overcome key challenges impacting effective post-crash care including access to response vehicles, lack of trauma center, and administrative issues. | Continued meetings and communications             | Clinton County Emergency Management Agency, SRWW Joint Fire District, Clinton Highland Joint Fire District, Wilmington Fire/EMS | X                        | X       | X          | Х     |



# **Post-Crash Care**

**Post-Crash Care**: When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.

|   |   |                                     | <b>Emphasis Areas Addressed</b> |                  |                       |       |
|---|---|-------------------------------------|---------------------------------|------------------|-----------------------|-------|
| Strategy  | Outcome   | Lead Agency                         | Distracted Driving              | Young<br>Drivers | Roadway<br>Departures | Speed |
| Continue to perform analysis at crash sites using OSP OH-1 Crash Reports and site visits. | Improve understanding of causes of crashes and relevant mitigating efforts. | Clinton County<br>Engineer's Office | x                               | Х                | x                     | X     |

Table 6: Post-Crash Care Action Items



### **Safe Vehicles**

Safe Vehicles: Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology. **Emphasis Areas Addressed** Young **Distracted** Roadway Speed **Drivers** Departures **Driving** Strategy **Lead Agency** Outcome Stay up to date on evolving statewide policies, Coordinate with ODOT to obtain Clinton County programs, and legislation related to safe vehicles and annual updates Engineer's Office Χ Χ Χ Χ share with local stakeholders.

Table 7: Safe Vehicles Action Items



### **Culture**

**Culture**: A transportation safety culture is the shared values, actions, and behaviors that demonstrate a commitment to safety over competing goals and demands. As part of individual job responsibilities, everyone is responsible for planning, engineering, and educating on the safe system concepts. As part of being good system stewards, everyone is taking responsibility for being safe system users.

|   |   |   | Emphasis Areas Addressed |          |            |       |
|---|---|---|--------------------------|----------|------------|-------|
|   |   |   | Distracted               | Young    | Roadway    | Speed |
|   |   |   | Driving                  | Drivers  | Departures |       |
| Strategy  | Outcome   | Lead Agency   |                          | <b>P</b> |            |       |
| Meet bi-annually with local safety and transportation stakeholders to continue discussions on safety needs and actions to address the priority strategies.  | Organize quarterly meetings   | Clinton County<br>Engineer's Office   | X                        | X        | Х          | Х     |
| Obtain buy-in from local officials to prioritize resources, time, and communications for safety and use traditional and social media outlets to highlight improvements.   | Present bi-annual safety updates<br>to the Board of Clinton County<br>Commissioners         | Clinton County Engineer's Office, Clinton County Regional Planning Commission, City of Wilmington | Х                        | X        | Х          | х     |
| Meet with area business leaders to provide education on safety priorities, create buy-in for safety improvements, and decrease resistance to needed treatments along corridors and at intersections.                              | Engage in dialogue with local businesses on safety priorities                               | Clinton County Engineer's Office, Clinton County Regional Planning Commission                     | Х                        |          |            | Х     |
| Create opportunities to increase public awareness on safety through increased education/exposure to safety, a safe driving contest, regular disbursement of crash statistics, and/or more consistent communications on the topic. | Identify priority communications efforts and implement                                      | Clinton County<br>Engineer's Office,<br>Clinton County<br>Regional Planning<br>Commission         | х                        | Х        | Х          | Х     |
| Institutionalize the consideration of safety or safety-<br>related improvements in coordination with capital<br>investment and maintenance projects.  | Review scoring criteria for transportation projects to ensure safety metrics are considered | Clinton County<br>Engineer's Office,<br>City of Wilmington  |                          |          | Х          | Х     |



### **Culture**

**Culture**: A transportation safety culture is the shared values, actions, and behaviors that demonstrate a commitment to safety over competing goals and demands. As part of individual job responsibilities, everyone is responsible for planning, engineering, and educating on the safe system concepts. As part of being good system stewards, everyone is taking responsibility for being safe system users.

|  |  |   | En                 | Emphasis Areas Addressed |                       |       |  |
|--|--|---|--------------------|--------------------------|-----------------------|-------|--|
| Strategy   | Outcome  | Lead Agency   | Distracted Driving | Young<br>Drivers         | Roadway<br>Departures | Speed |  |
| Apply for safety-related federal grants and continue to pursue ODOT resources to address safety needs. | Apply for HSIP projects and other available safety funds | Clinton County Engineer's Office, City of Wilmington, Townships | х                  | X                        | X                     | X     |  |

Table 8: Culture Action Items



# **Equity**

**Equity**: Making sure all types of road users have options for safe travel (walking, biking, and/or driving a vehicle or truck) and implementing safety improvements across the entirety of the network – not just in certain locations/neighborhoods.

|   |   |  | <b>Emphasis Areas Addressed</b> |                  |                       |       |
|---|---|--|---------------------------------|------------------|-----------------------|-------|
| Strategy  | Outcome   | Lead Agency  | Distracted Driving              | Young<br>Drivers | Roadway<br>Departures | Speed |
| Continue to identify and obtain funding for Safe Routes to School programs and projects.                                  | Identify projects for funding   | Clinton County Engineer's Office, City of Wilmington, Villages                               | Х                               | Х                |                       | Х     |
| Identify locations and context where opportunities exist for bicycle and pedestrian infrastructure and safety treatments. | Identify gaps in existing bicycle<br>and pedestrian network to<br>determine where improvements<br>would be beneficial | Clinton County Engineer's Office, City of Wilmington, Villages, Regional Planning Commission |                                 |                  |                       | х     |
| Review Census data to determine equity areas of opportunity in Clinton County.  | Review data and create a map  | Clinton County<br>Regional Planning<br>Commission  | Х                               | Х                | Х                     | Х     |

Table 9: Equity Action Items



### **Section 4. Implementation and Evaluation**

The **Safe Streets Clinton County Plan** establishes safety priorities and strategies; provides an Action Plan to track implementation of activities and safety investments across organizations; and helps maximize resources as various agencies and organizations work together to prevent injuries and save lives on all roads within Clinton County.

**Plan Leadership**: The Clinton County Engineer's Office assumes leadership of this plan and will support implementation. In this role, they are responsible for identifying engineering improvements on County and Town roads to address safety needs, but also convening stakeholders involved in this plan on a regular basis to discuss all implementation activities.

**Stakeholders**: The following stakeholders, and others that may become interested over time, are responsible for implementing engineering improvements on their roads or leading/supporting other solutions identified in the Action Plan to reduce severe crashes.

- Adams Township
- Clinton County Engineer's Office
- Clinton County Emergency Management
- Clinton County Regional Planning Commission
- Clinton County Sherriff's Office
- Clinton-Massie Local Schools
- Chester Township
- City of Wilmington

- City of Wilmington Fire/EMS
- City of Wilmington School Transportation
- SRWW Joint Fire District
- Ohio Department of Transportation
- Ohio State Highway Patrol
- R&L Carriers
- Union Township
- Vernon Township

**Implementation Meetings:** The Clinton County Engineer's Office will convene stakeholders, either in person or virtually at a minimum of two times a year to discuss progress and associated challenges with implementing the Action Plan.

**Annual Evaluation**: At the beginning of every calendar year, when the previous year's crash data are available, the Clinton County Engineer's Office will evaluate progress toward County-wide fatalities and serious injuries and crashes as well as for each of the four emphasis areas.

**Refreshing the Plan**: From the date of adoption, the **Safe Streets Clinton County Plan** will be refreshed or fully updated every five years. This will ensure the crash and other data are up to date and solutions are revised to meet evolving implementation of policies, programs and projects.

