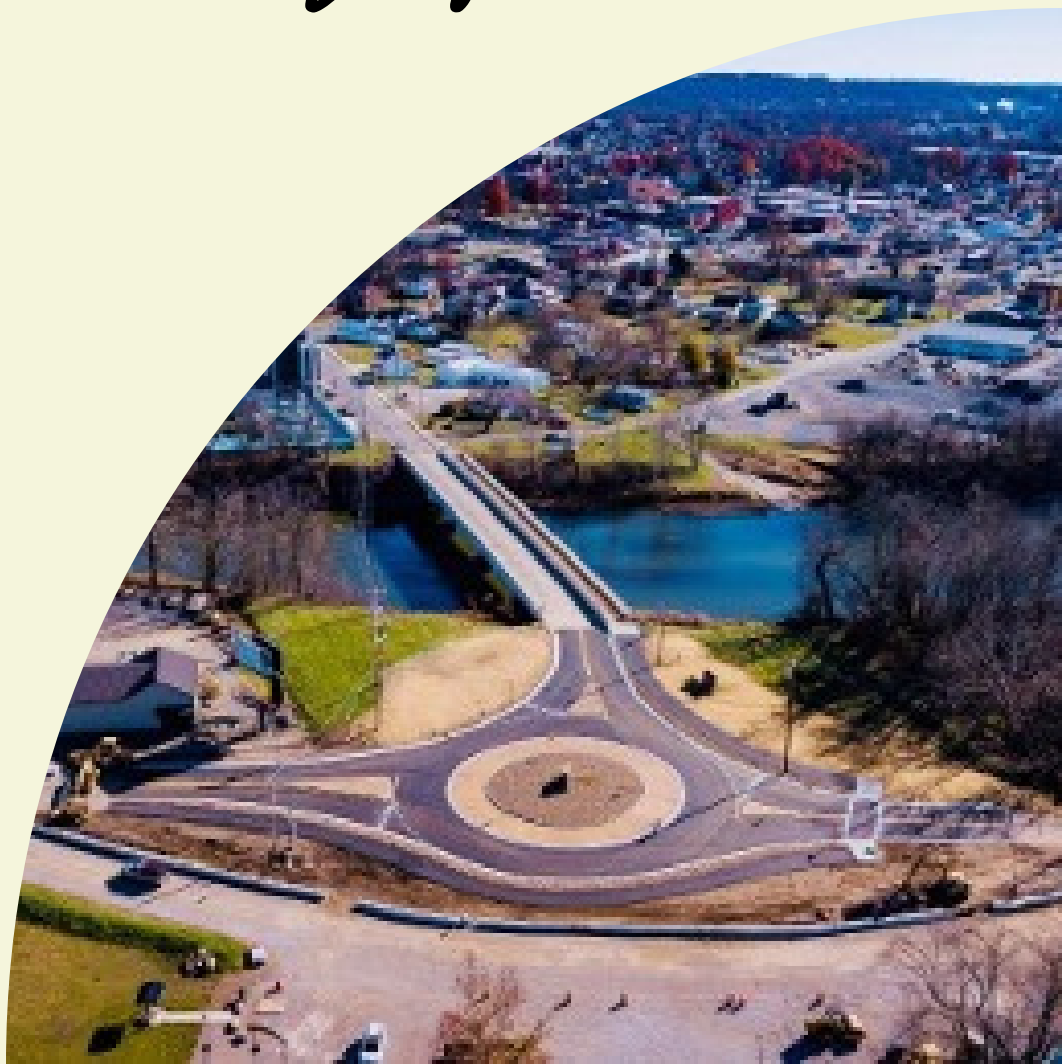


DRAFT

OMEGA

*Regional Safety Plan*

2026





# ACKNOWLEDGEMENTS

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The preparation of this plan has been financed through funding from the Federal Highway Administration, Federal Transit Administration, U.S. Department of Transportation, and the Ohio Department of Transportation. The contents of this plan reflect the views of the authors, who are responsible for the facts and accuracy of the data presented. The contents do not necessarily reflect the official views or policies of either the U.S. Department of Transportation, or the State of Ohio at the time of publication.



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# CHAPTER 1 - Setting the Stage

## Regional Trends

### PLAN DEVELOPMENT

The OMEGA Regional Transportation Planning Organization (RTPO) was formally established in 2016 after a two-year pilot. In 2020-2021, OMEGA worked with its RTPO member communities and partner agencies to assemble the first iteration of this regional safety plan to provide a regional approach to safety aligned with state and federal roadway safety campaigns and performance measures. The first plan was data-driven, largely using reported crashes and demographic data, so that it could be updated more easily in the future.

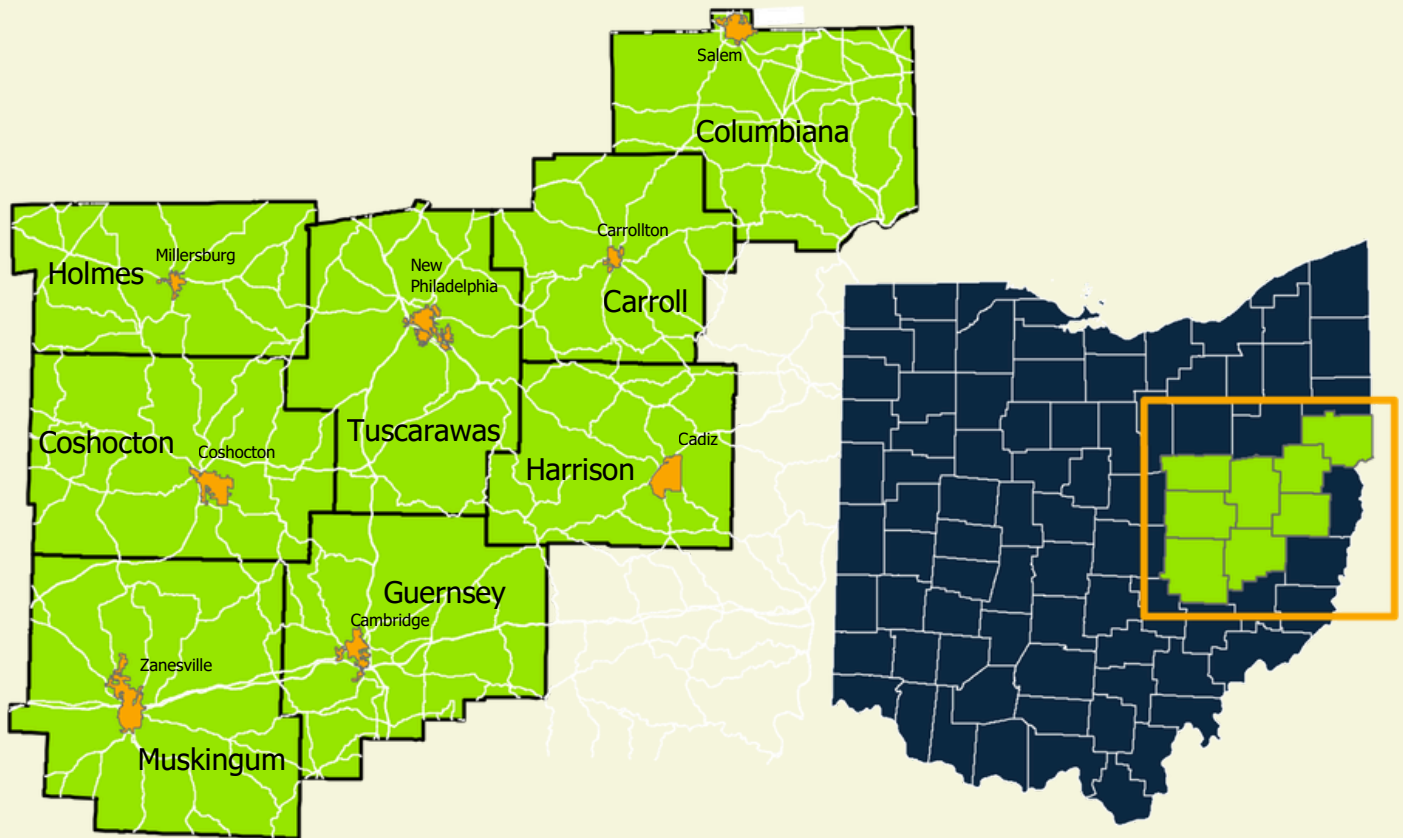
In the years since this plan was deployed, the United States Congress passed the Infrastructure Investment and Jobs Act (IIJA) which created the Safe Streets and Roads for All (SS4A) funding program. The Toward Zero Death campaign was retooled into Vision Zero and the Federal Highway Administration (FHWA), and subsequently the Ohio Department of Transportation (ODOT), adopted the Safe System Approach to achieve Vision Zero.

Upon completion of OMEGA's long-range transportation update in 2025, it was determined an update to this plan was needed to incorporate five additional years of crash data as well as to ensure continued compliance as an SS4A action plan for OMEGA RTPO communities to seek funding without needing a local safety action plan of their own. OMEGA staff analyzed crash data from ODOT's AASHTOware Safety crash query tool and conducted outreach meetings with roadway and safety professionals the region to evaluate progress since the last safety plan and update the regional strategies looking to the future.



## STUDY AREA

The OMEGA Region includes member governments from the 10 counties in the Ohio Foothills - however, only eight counties are part of the OMEGA RTPO, including Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Muskingum, and Tuscarawas counties. The location of the RTPO and its member counties is shown in **Figure 1.1**. Belmont and Jefferson counties are part of Metropolitan Planning Organization (MPO) regions served by the Belomar Regional Planning Council and the Brooke-Hancock-Jefferson Metropolitan Planning Commission, respectively.



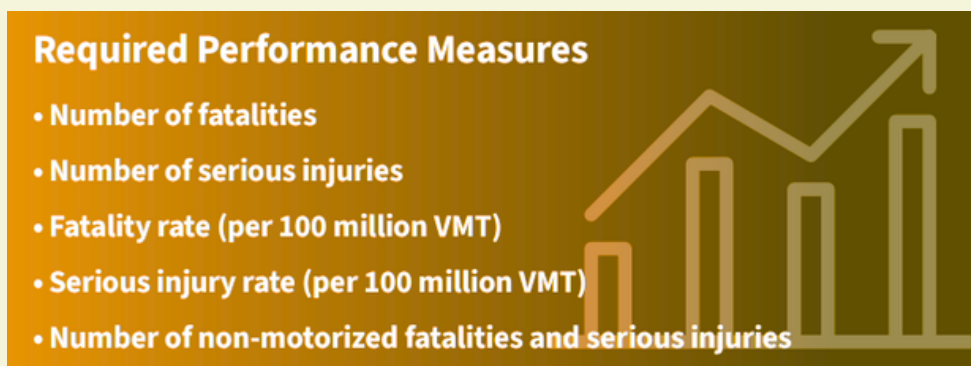
*Figure 1.1: The OMEGA RTPO Region*

In the study area, there are 11,193 centerline miles of roadway. Local roads account for 70% of the total roads while 20% are major or minor collectors, and 6% are arterials. Interstates 77 and 70 travel through the OMEGA Region and other freeways include OH-11, US-22, OH-16, and US-250, though these are two-lane roads in certain sections. The OMEGA region is primarily rural, nestled among the western foothills of the Appalachian Plateau, and sitting between the major urban centers of Columbus in the west, Pittsburgh in the east, and Akron-Canton in the north. The rolling hills at the northern and western edges of the region gradually transition to steeper terrain in the south and east. Although the landscape provides scenic views, the rough terrain creates challenges for roadway maintenance and safety measures.

## ODOT STRATEGIC HIGHWAY SAFETY PLAN

ODOT completed the most recent update to the Strategic Highway Safety Plan (SHSP) in Fall 2025 after a lengthy engagement process with partners around the state. This plan details statewide crash trends and includes performance measures and safety emphasis areas as required by the US Department of Transportation (USDOT) to guide resource allocation for safety outcomes and improvements.

ODOT developed an extensive list of actions plans for each of the 15 emphasis areas intended to be carried out by both ODOT and their partner agencies, such as OMEGA and county and local governments. Vision Zero and the Safe System Approach are foundational to the structure of ODOT's SHSP and are described below.



## VISION ZERO

Vision Zero is an international concept that began in the late 90s and informs roadway safety to this day. The vision is simple: that no one should die or suffer serious injuries from road traffic crashes (CDC). In 2016, the Road to Zero Coalition was launched in the United States to support this vision.

USDOT FHWA and ODOT have incorporated Vision Zero into their safety planning and programming and OMEGA strives to do the same with this plan to bring Vision Zero to a more localized approach to safety.

## SAFE SYSTEM APPROACH

The Safe System Approach is a framework designed to push toward Vision Zero through a holistic, multi-layered approach to roadway safety. It consists of six principles with five objectives to guide implementation and reduce roadway fatalities and serious injuries. The diagram below in **Figure 1.2** lists the principles around the outside of the circle and the objectives in each wedge. For more information, please visit the FHWA webpage for the Safe System Approach as <https://www.transportation.gov/safe-system-approach/>.



Figure 1.2: The Safe Sytem Approach (FHWA)

## EXISTING FACTORS

In this safety plan, crashes were examined over time to identify patterns and contributing factors. Population and Vehicle Miles Traveled (VMT) were also reviewed together with crash histories to understand road safety trends in the region.

### POPULATION

There are approximately 438,845 people living in the OMEGA RTPo region, according to US Census Bureau estimates for 2024. This is a 2.6% decline from the RTPo peak population in 2010. Based on the data in **Figure 1.3**, there had been a slow decline in traffic fatalities in the 2010 before a spike during the COVID-19 pandemic. However, the most recent years of data show a return to the trend of declining roadway deaths. Serious injury crashes have continued a downward trend, as shown in **Figure 1.4**, though there was a small increase in 2024. Neither the fatal or serious injury (FSI) crashes are following the rate and trend of the change in population, indicating that FSI and population are not strongly correlated and that roadway safety countermeasures are needed regardless of demographic trends.

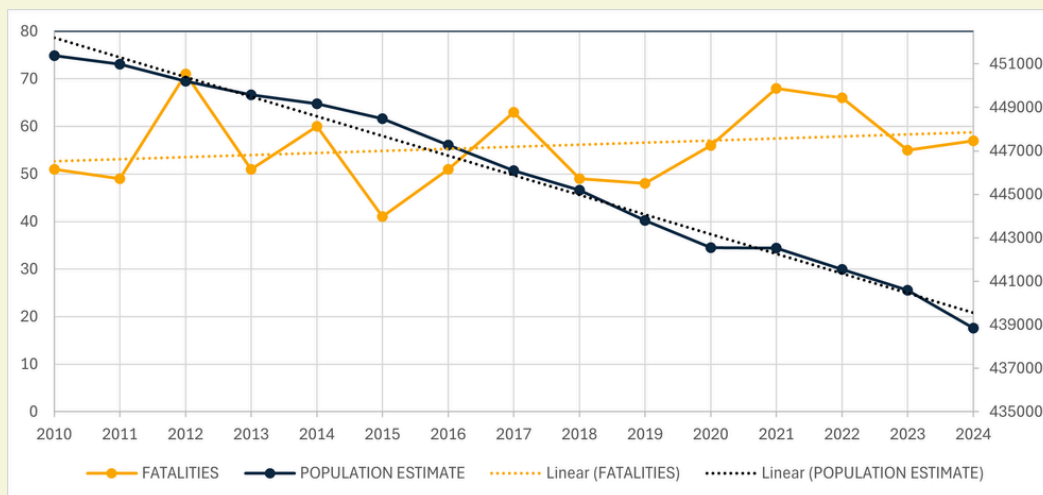


Figure 1.3: Population and Fatal Crashes, 2010-2024 (US Census Bureau, ODOT)

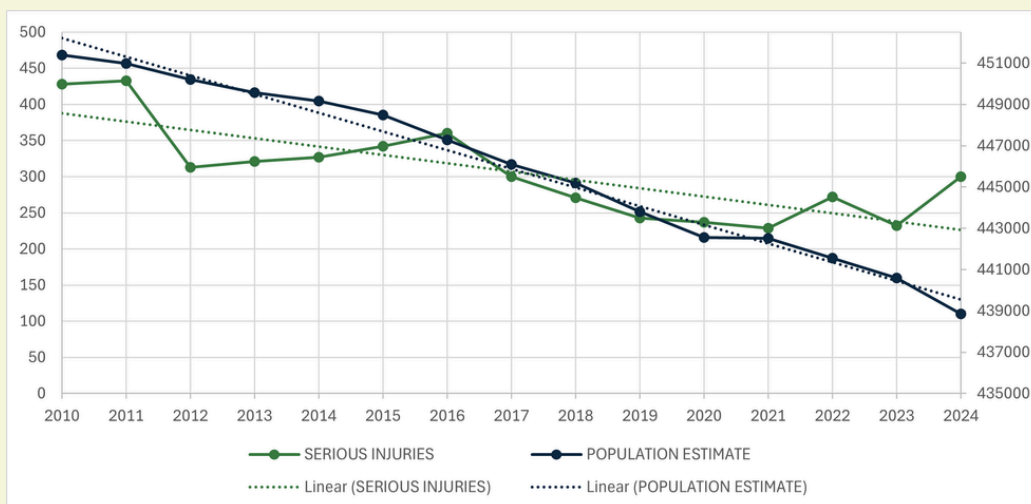


Figure 1.4: Population and Serious Injury Crashes, 2010-2024 (US Census Bureau, ODOT)

## VEHICLE MILES TRAVELED

Vehicle Miles Traveled (VMT) is a measure that calculates the number of centerline roadway miles by the Average Daily Traffic (ADT) volumes. VMT provides a clearer picture of the travel patterns through a region which includes residents, visitors, and travelers, rather than only people who live in a particular area. **Figures 1.5 and 1.6** compare MVMT (million vehicles miles traveled) per year from ODOT’s Daily VMT database with the trends in fatal and serious injury crashes, respectively. VMT has trended downward for the past 15 years, and serious injury crashes have closely followed this decline. Fatalities have not tracked with declines in VMT.

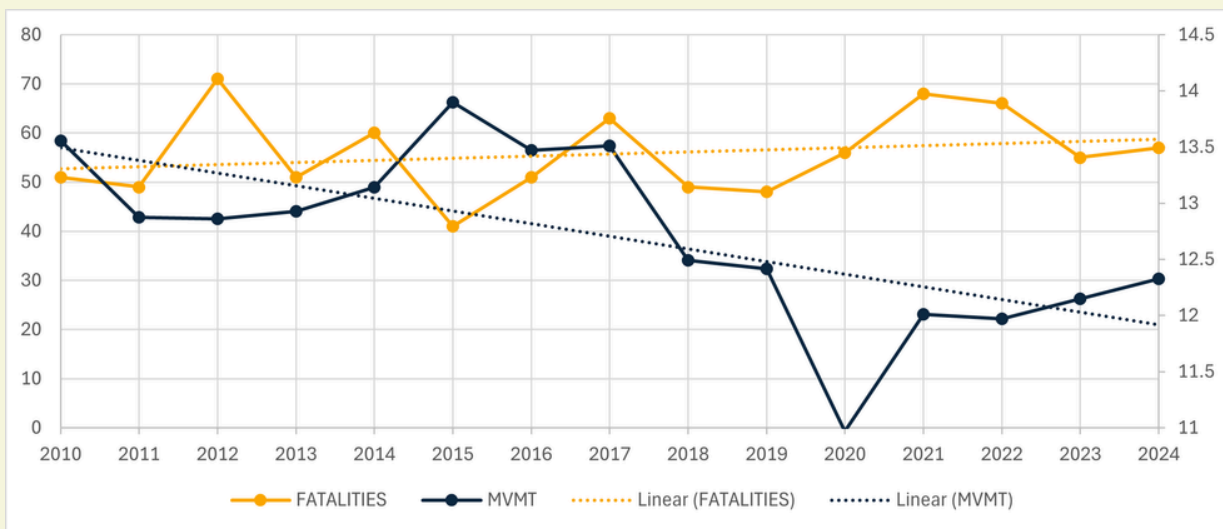


Figure 1.5: VMT and Fatal Crashes, 2010-2024 (ODOT)

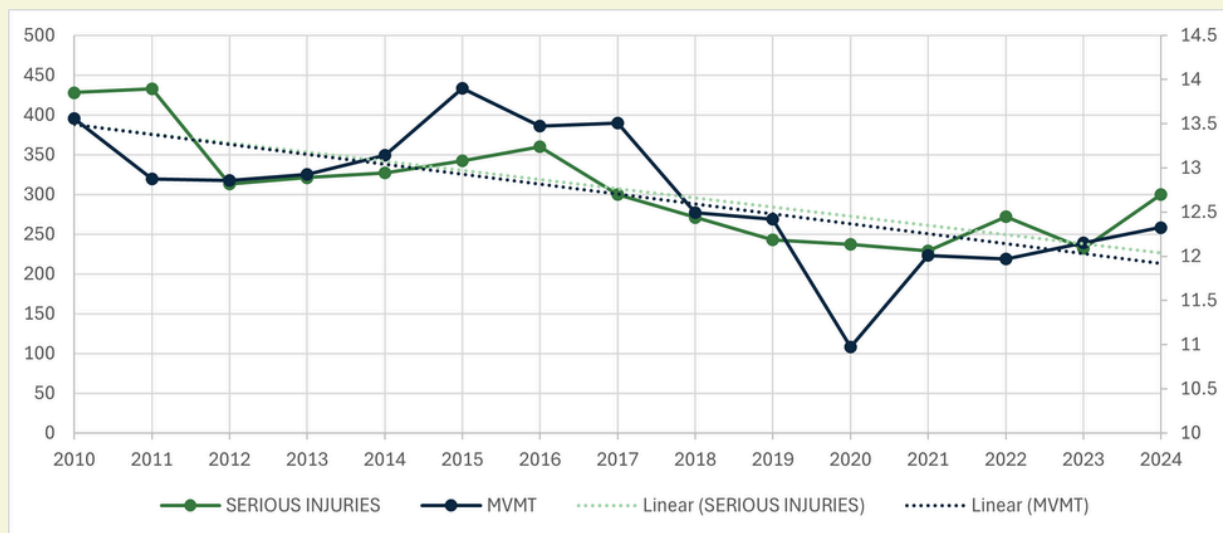


Figure 1.6: VMT and Serious Injury Crashes, 2010-2024 (ODOT)

## 5-YEAR ROLLING AVG FSI

Figures 1.7 and 1.8 plot fatal and serious injury crashes for all observed years since 2010 while also providing a trend line that matches ODOT’s target of a 2% reduction per year in FSI. OMEGA has chosen to adopt the same targets as ODOT to streamline annual safety data analysis. Unfortunately, however, this target does not see the achievement of Vision Zero within the next twenty years, should the state or the OMEGA RTPO region follow the forecasted trend.

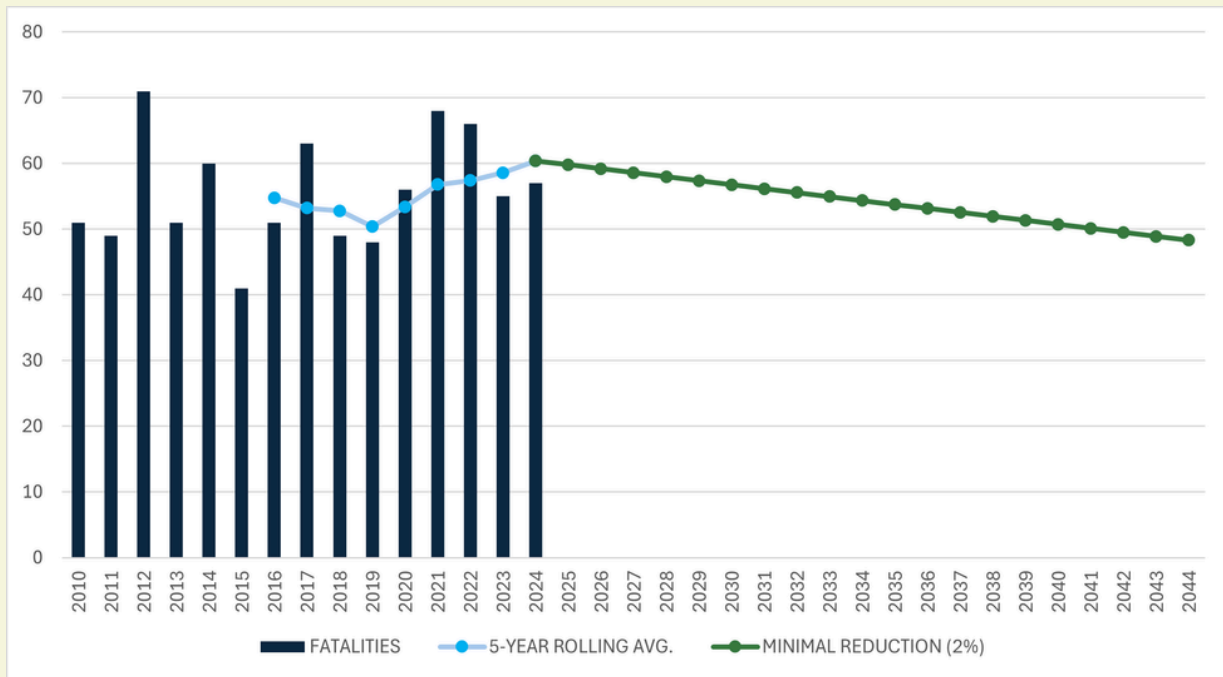


Figure 1.7: Fatal Crash Projections, 2010-2034 (ODOT)

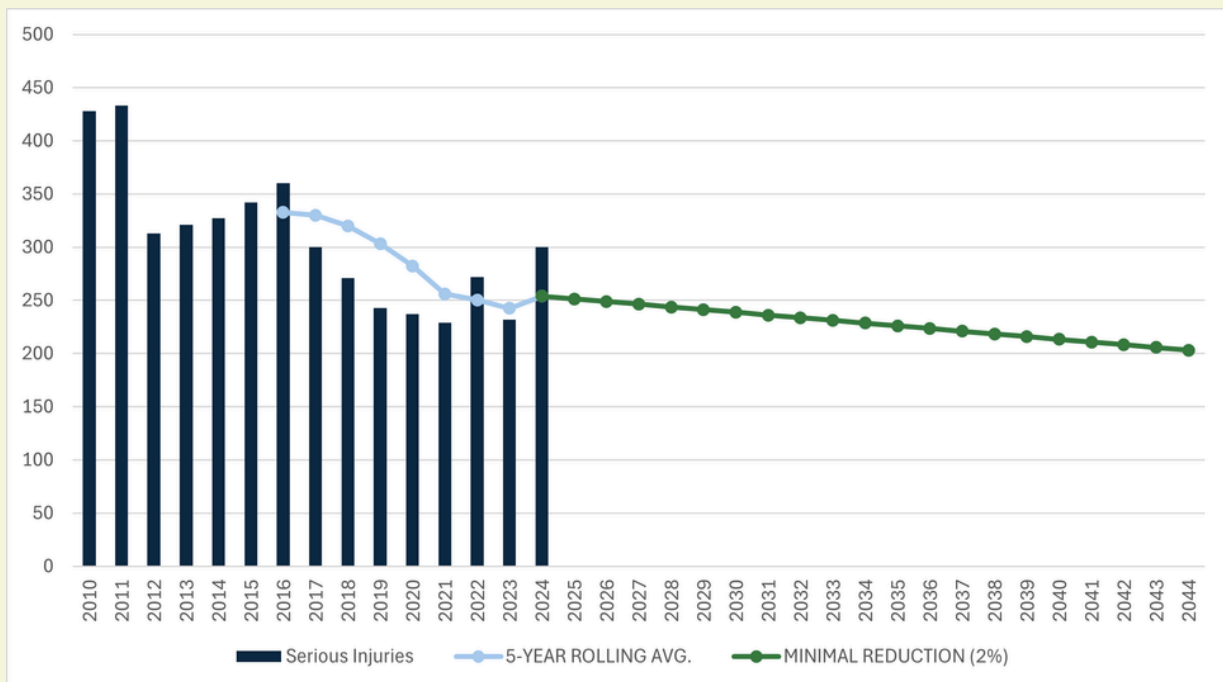
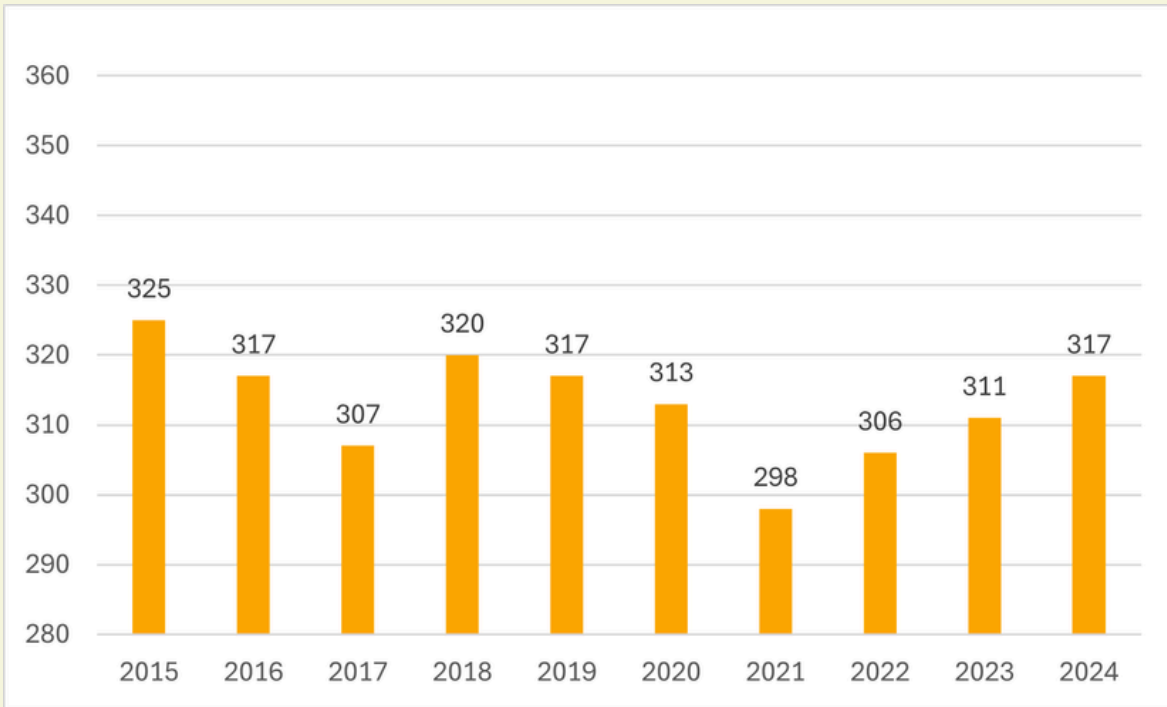


Figure 1.8: Serious Injury Crash Projections, 2010-2034 (ODOT)

## DAYS WITHOUT FATALITIES

**Figure 1.9** plots the number of days **WITHOUT** any fatal crashes in each year. This is an exciting statistic because it shows that over 80% of all days within a given year will have no traffic deaths in the OMEGA RTPPO region. It helps build the bridge toward Vision Zero by showing that it is possible to reach 365 days with no fatalities by chipping away a little at a time with systemic, targeted safety improvements in infrastructure, educational campaigns, enforcement, weather alerts, and vehicle technology enhancements.



*Figure 1.9: Days Without Fatalities (ODOT)*



## Engagement Summary

The OMEGA Transportation Advisory Committee (TAC) was used at the main source of engagement for the update of this plan. Safety and Distracted Driving were two major themes from the OMEGA Long-Range Transportation Plan engagement activities conducted in 2025, so that contributed to the decision to update this plan with more recent crash data.

The following topics were discussed at the OMEGA TAC meetings in Fall 2025 and Winter 2026 to guide the update of this plan:

- ✦ Revisiting the Vision, Goals, and Objectives
- ✦ Comparing regional safety emphasis area trends with statewide data
- ✦ Updating the recommended action steps to improve safety in the region

OMEGA staff used a combination of worksheets, small group discussion, and large group discussion to collect and summarize this information from across the eight RTPO counties.

The OMEGA TAC is made up of the following representatives from Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Muskingum, and Tuscarawas counties:

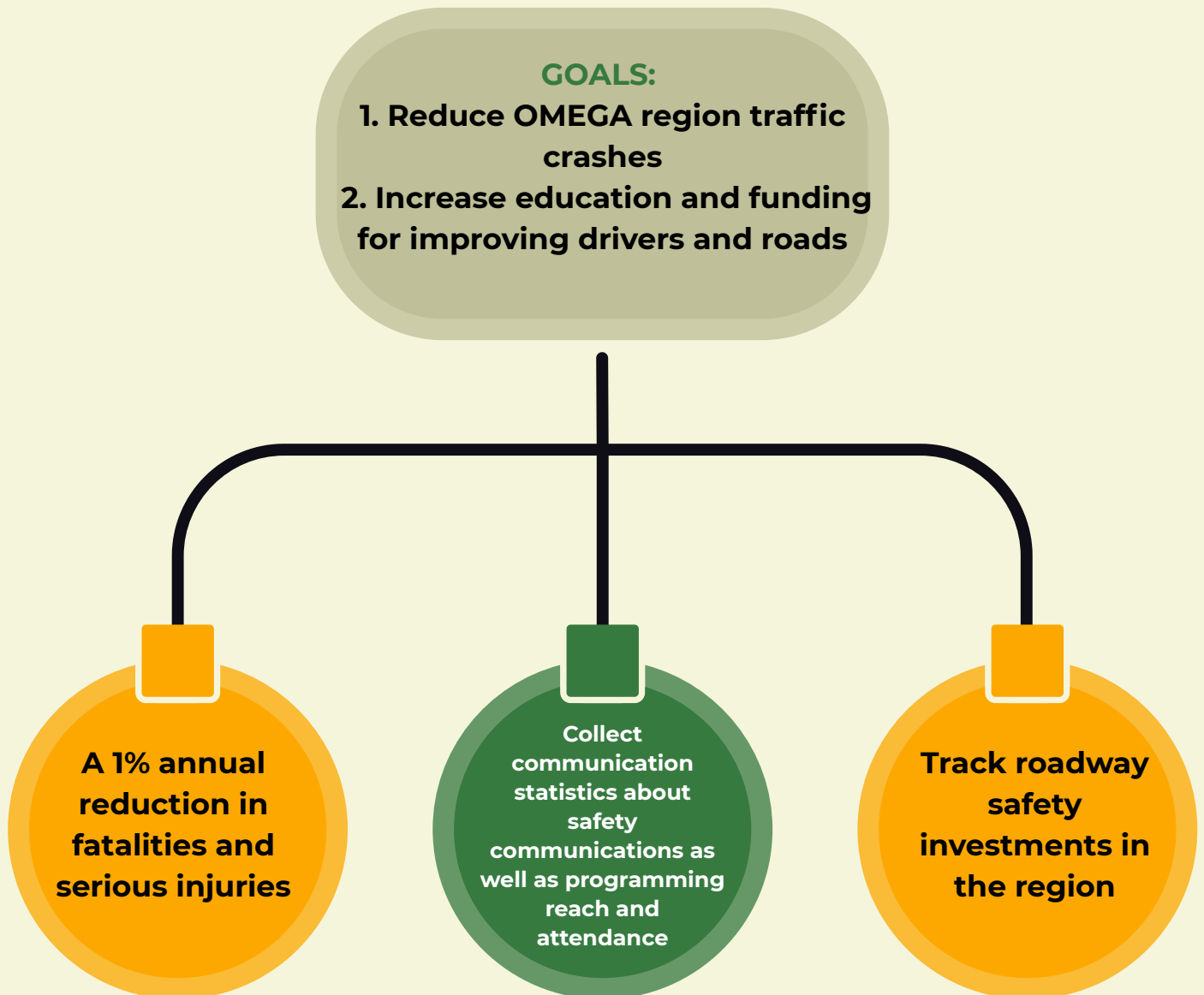
- ✦ County Engineer
- ✦ Representative from the most populous City or Village
- ✦ Port Authority, County Planning Director, Economic Development Director, or CIC/CDC Director
- ✦ Transit Agency
- ✦ Park District
- ✦ ODOT Districts Local Programs Administrator (Districts 5 and 11)



## VISION, GOALS, OBJECTIVES

The vision, goals, and objectives of a road safety plan align regional partners on a joint purpose of developing and executing region-wide efforts at roadway safety improvements and crash reduction. Stakeholders across all eight RTPO counties decided to keep the vision and goals from the original OMEGA plan in tact, but changed the existing objective to match ODOT's annual reduction target as well as adding two other objectives to measure safety. The Plan's vision is meant to be broad and offer a long-term focus for traffic safety in the region. The goals of the plan are how the long-term vision will be achieved. The elements below present a plan framework that will help the region focus funding and resources to implement safety policies, programs, and projects.

### ***VISION: Well-funded and safer OMEGA roads for all transportation modes***



## CH 2 - EXISTING CONDITIONS

Crash data from 2015 through 2024 were obtained from ODOT and analyzed along all public roads in the OMEGA RTPPO region. This is a rolling 10 years from the original regional safety plan that looked at 2010-2019. For this analysis, trends were examined involving all crashes to understand the existing state of roadway safety to guide what actions can help reduce these numbers. Each county in the RTPPO region has its own report with county-level trends.



## CRASH STATISTICS

Between 2015 and 2024 there were 99,419 total crashes across the eight counties with 549 resulting in a fatality and 23,583 resulting in an injury, as shown in **Table 2.1**. On average, there are 9,942 crashes per year in the OMEGA RTPO region with 55 fatalities and 2,358 injuries.

YEAR	FATAL CRASHES	INJURY CRASHES	PROPERTY DAMAGE CRASHES	TOTAL CRASHES
2015	48	2658	8027	10733
2016	48	2702	7906	10656
2017	62	2586	7702	10350
2018	50	2316	7611	9977
2019	47	2380	7695	10122
2020	56	2119	6796	8971
2021	65	2196	7442	9703
2022	60	2156	7788	10004
2023	53	2199	7055	9307
2024	60	2271	7265	9596
10-YEAR TOTAL	549	23583	75287	99419
ANNUAL AVERAGE	55	2358	7529	9942

YEAR WITH THE HIGHEST VALUE IN EACH COLUMN

Table 2.1: Crashes by Severity, 2015-2024 (ODOT)

## OCCUPANT STATISTICS

**Table 2.2** captures that 207,759 people were involved in crashes in the region between 2015 and 2024, including 1,209 individuals who died and 6,430 that were seriously injured. On average, 20,776 people were directly involved in crashes each year which is about 5% of the RTPO regional population. There is an average of 121 deaths and 643 serious injuries that result from these crashes.

YEAR	FATAL	SERIOUS INJURIES	MINOR INJURY SUSPECTED	INJURY POSSIBLE	PROPERTY DAMAGE ONLY
2015	96	782	2705	2867	16406
2016	99	781	2695	2860	15971
2017	155	770	2810	2673	15782
2018	118	570	2357	2363	14996
2019	118	599	2816	2131	15665
2020	113	547	2704	1580	13397
2021	156	519	2802	1749	14812
2022	114	668	2689	1611	15771
2023	114	526	2795	1655	14224
2024	126	668	3017	1444	14773
10-YEAR TOTAL	1209	6430	27390	20933	151797
ANNUAL AVERAGE	121	643	2739	2093	15180

YEAR WITH THE HIGHEST VALUE IN EACH COLUMN

Table 2.2: Occupants involved in crashes by Severity, 2015-2024 (ODOT)

## CRASH TYPES

The crash type describes how a crash took place - for example colliding with an animal, being sideswiped, or a vehicle overturning. Since different crash types have different infrastructure and behavioral elements involved, it is important to understand which ones are most prevalent in the OMEGA RTP region to properly tailor measures to address them. **Figure 2.1** shows that Fixed Object, Rear End, and Animal-related are the top three most frequent in the region over the past decade. However, **Figure 2.2** looks at crash types among FSI crashes only. Fixed object is still the most frequent among FSI crashes, but angled crashes and head-on collisions rise to the top.

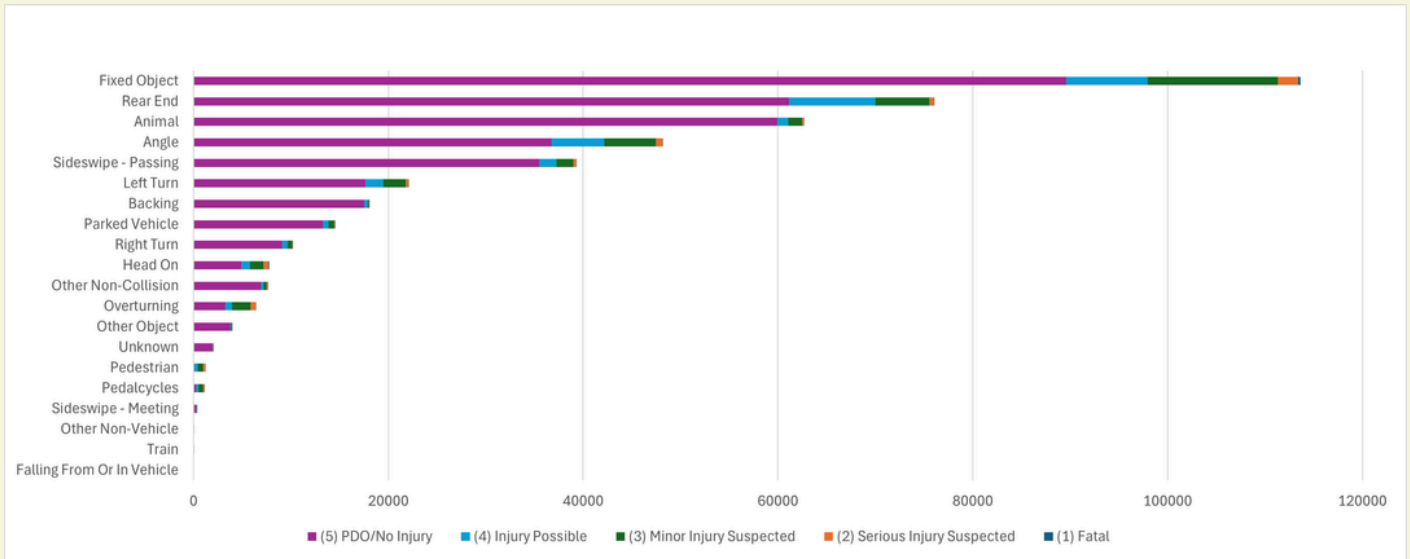


Figure 2.1: Crashes by Type and Severity, 2015-2024 (ODOT)

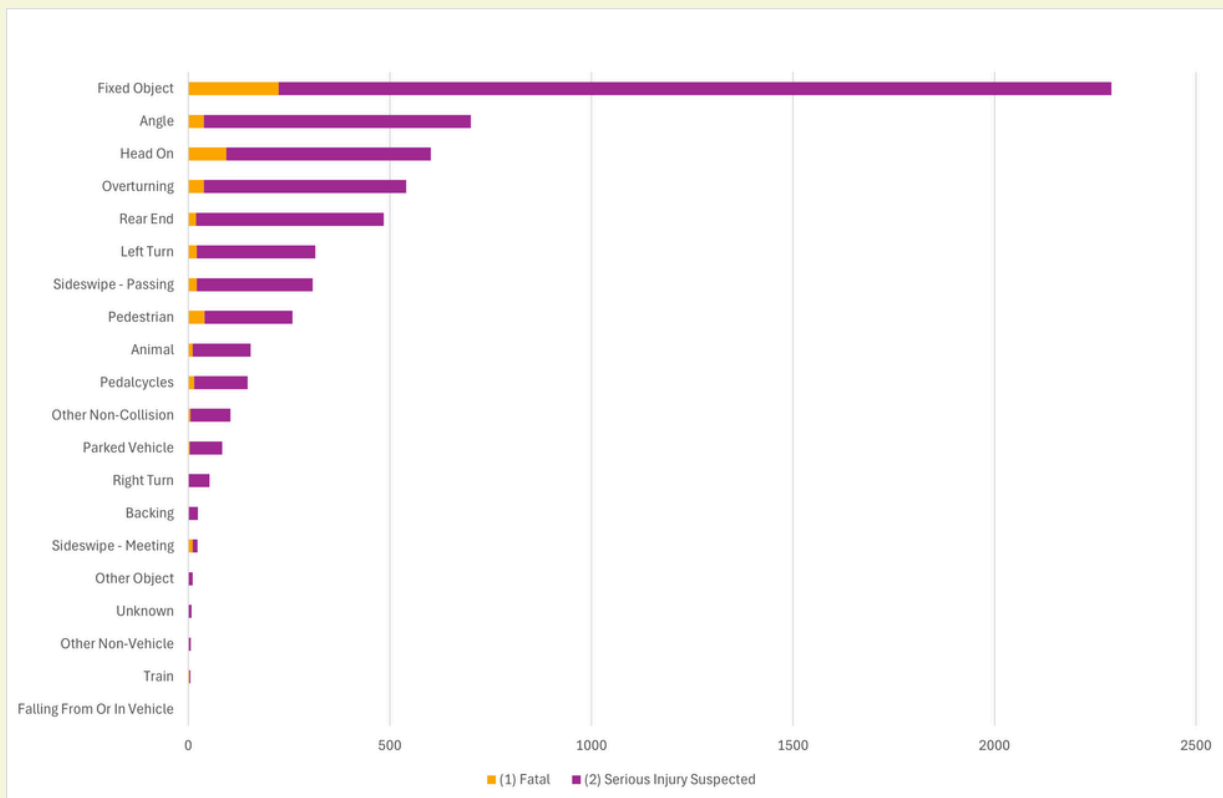


Figure 2.2: FSI Crashes by Type, 2015-2024 (ODOT)

## EQUIVALENT PROPERTY DAMAGE ONLY FREQUENCY

To look more deeply at the interrelation between the frequency and severity of crash types, this plan looks at the Equivalent Property Damage Only (EPDO) crash frequency. EPDO weights the crashes by severity where fatalities have the highest weight and property damage only crashes are multiplied by a weight of 1. The equation below was used for each road segment in the region and the crash weights were provided by the ODOT Economic Crash Analysis Tool (ECAT).

$$EPDO = \text{Fatal and Serious Injury} * 43.85 + \text{Visible Injury} * 6.55 + \text{Possible Injury} * 4.44 + \text{Property Damage Only}$$

EPDO crash frequencies compare frequency and severity together instead of each measure alone. When calculating EPDO for crash types, the ones with the highest combination of both rise to the top, allowing for better understanding of the most frequent crashes with fatalities or severe injuries. **Figure 2.3** shows that Pedestrian/Bicycle, Overturning, and Sideswipe have the highest EPDO values across the region. In contrast, Animal-related crashes have a low EPDO value, pointing to low severity, despite being one of the most frequent crash types. Focusing on treatments for crash types with high EPDO frequencies creates greater opportunities to reduce fatal and serious injury crashes even if the overall number of that crash type are relatively low across the region.

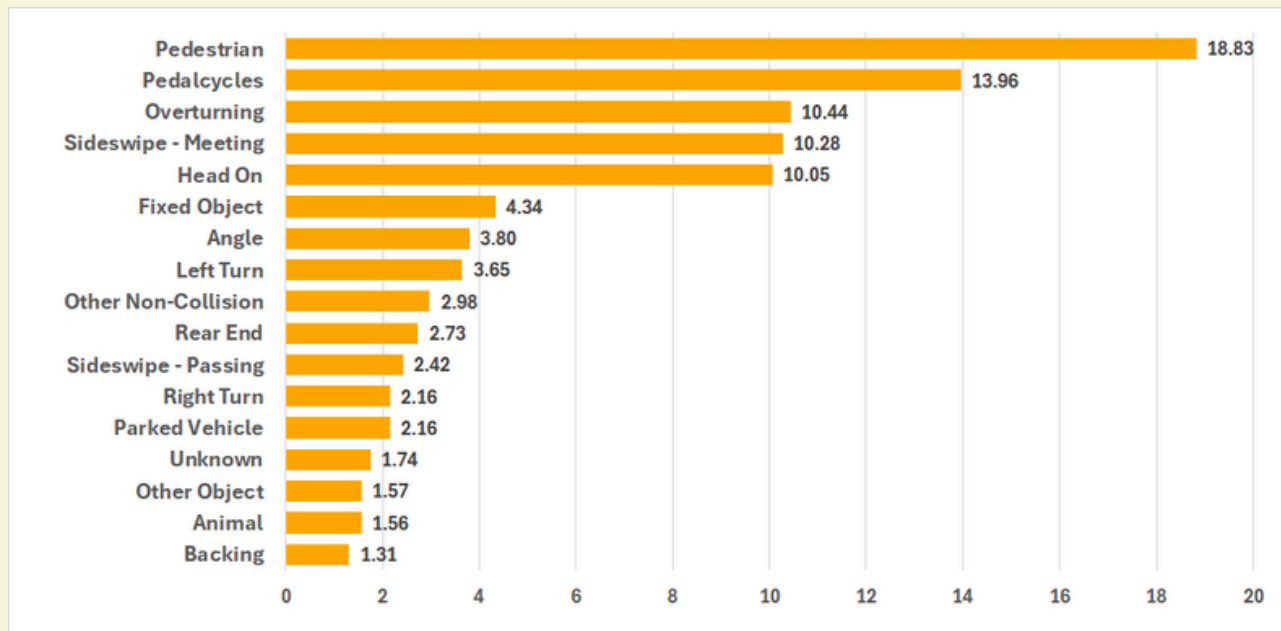


Figure 2.3: Crashes by Type and EPDO, 2015-2024 (ODOT)

## CRASH TYPES BY JURISDICTION

Figure 2.4 displays crashes by severity and which agency is responsible for roadway maintenance (state, county, township, city/village). Road safety is a joint responsibility between different levels of government in Ohio. For roads not owned by ODOT (a.k.a. “off-system“ roads), counties, municipal corporations, and townships must be active in decision-making to improve roadway safety.

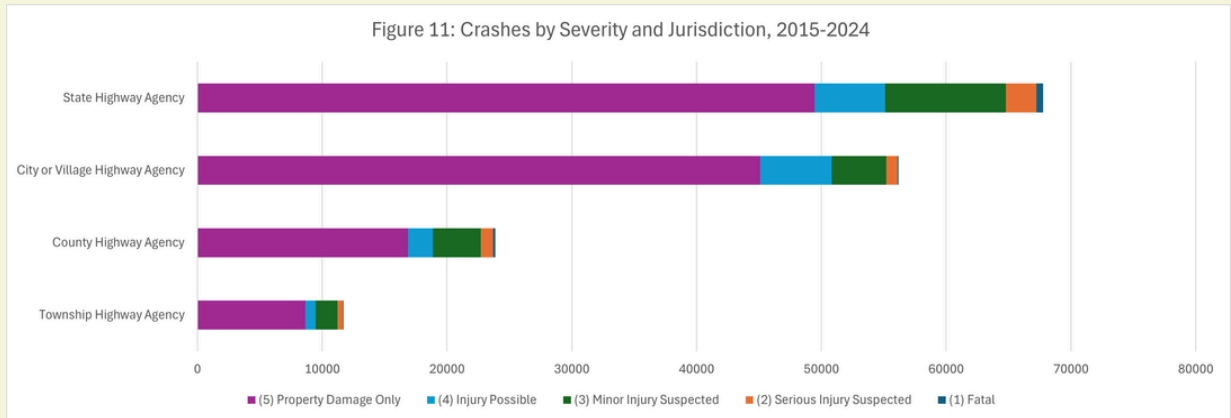


Figure 2.4: Crashes by Jurisdiction and Severity, 2015-2024 (ODOT)

Table 2.3 provides a further breakdown of the percentage of FSI crashes by jurisdiction and crash type. While fixed object crashes are the most frequent crashes across jurisdictions other than Cities and Villages, the other percentages show that crash types vary across different jurisdiction types in the region.

Crash type	State Highway Agency	County Highway Agency	City or Village Highway Agency	Township Highway Agency	Grand Total
Angle	6.8%	7.6%	18.8%	7.8%	11.3%
Animal	23.1%	16.2%	2.8%	6.6%	13.5%
Backing	1.2%	2.0%	7.2%	4.7%	3.7%
Fixed Object	28.6%	48.5%	10.9%	51.6%	27.0%
Head On	2.0%	2.7%	1.7%	3.4%	2.1%
Left Turn	3.8%	4.9%	6.4%	7.2%	5.2%
Other Non-Collision	2.2%	1.6%	1.0%	2.6%	1.7%
Other Object	1.5%	0.4%	0.3%	0.5%	0.8%
Overtuning	2.1%	3.3%	0.3%	4.6%	1.8%
Parked Vehicle	0.6%	1.1%	7.1%	2.0%	3.1%
Pedalcycles	0.2%	0.2%	0.6%	0.4%	0.4%
Pedestrian	0.2%	0.2%	0.8%	0.3%	0.4%
Rear End	15.4%	7.0%	26.9%	3.5%	17.4%
Right Turn	1.2%	1.1%	4.0%	1.6%	2.2%
Sideswipe - Meeting	0.1%	0.1%	0.1%	0.1%	0.1%
Sideswipe - Passing	10.2%	2.8%	10.8%	2.5%	8.7%
Train	0.0%	0.0%	0.0%	0.0%	0.0%
Unknown	0.6%	0.3%	0.3%	0.5%	0.4%
Other Non-Vehicle	0.0%	0.0%	0.0%	0.1%	0.0%
Falling From Or In Vehicle	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Table 2.3: Crashes by Type and Jurisdiction, 2015-2024 (ODOT)

## CRASHES BY COUNTY

Another piece of the location puzzle is how crashes are distributed across the region. **Figure 2.5** denotes FSI crashes in each county as well as in the most populous city or village in each county. While this plan looks at regional trends and strategies to address them, each county has its own unique context. Similarly, cities and villages have different safety needs and challenges compared to roads through unincorporated rural land.

To assist with localized strategies, **Appendix B** contains a sub-plan for each county in the OMEGA RTPO region to provide a localized look at crash trends as well as any additional safety emphasis areas each county would like to address. This also reflects the locally-driven planning approach developed for this plan to ensure the needs and concerns of each county have been met.

Regardless of the local geography and safety context, the Safe System Approach reminds us that it takes a multi-jurisdictional effort to reduce FSI crashes and infrastructure improvements are only once piece of the puzzle.

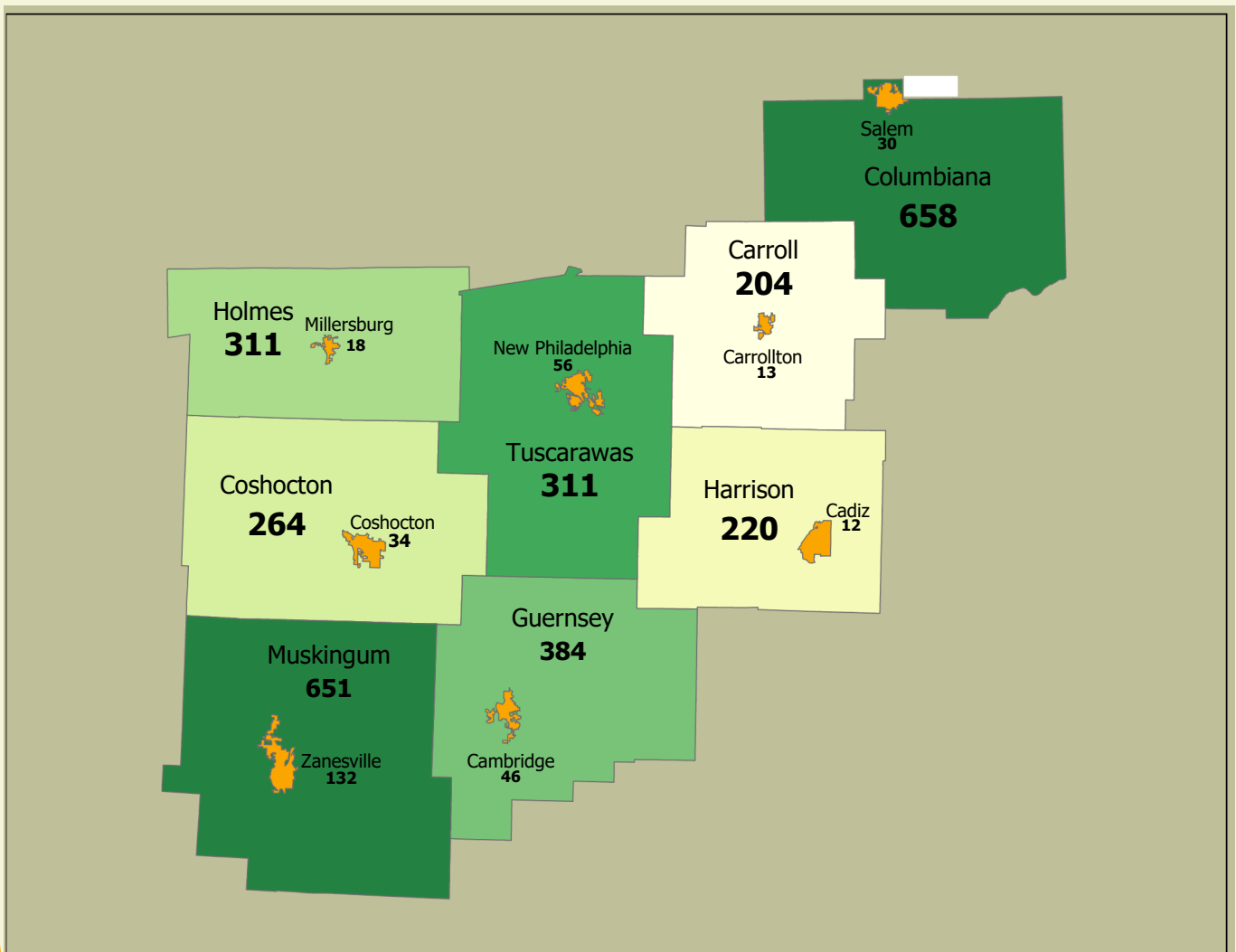


Figure 2.5: Crashes in each County and Largest Municipality, 2015-2024 (ODOT)

## CH 3 - Emphasis Areas

Crashes do not happen in isolation and often have multiple contributing factors, such as speed, weather, driver impairment, and the use of seatbelts (or lack thereof). As described in Chapter 2, ODOT has developed 15 emphasis areas as part of their Strategic Highway Safety Plan that are the state’s leading issues for FSI crashes, allowing ODOT to place more “emphasis” on these crashes in order to mitigate them. ODOT’s AASHTOWare Safety system includes 4 more emphasis areas for informational purposes.

For the this plan, 10 years of crash data were analyzed against statewide crash percentages to determine which emphasis areas have a higher than average frequency in the OMEGA RTPo region. The top emphasis areas were compared against the previous plan and discussed with regional stakeholders in each county for concurrence for this plan update. Each county was also given the option to keep, change, or add a seventh emphasis area for their county sub-plan. The table below highlights emphasis areas where the RTPo region has higher crash rates than the statewide average in red.

The top six emphasis areas are:

- ✦ Roadway Departure
- ✦ Younger Drive (Age 15 to 25)
- ✦ Intersection
- ✦ Senior Driver (Age 65+)
- ✦ Speed
- ✦ Distracted Driver

Emphasis Area	Statewide	Regionwide -	Regionwide -
		All Roads	Local Roads
Intersection	41.85%	31.48%	39.23%
Younger Driver (Age 15 to 25)	35.08%	34.58%	36.70%
ODOT Maintained Roadway	27.65%	40.96%	0.00%
Roadway Departure	25.51%	37.19%	36.88%
Senior Driver (Age 65+)	17.10%	19.10%	20.75%
Freeway	14.91%	12.63%	1.56%
Interstate Highway	11.84%	9.41%	0.00%
Speed	10.87%	17.00%	14.67%
Commercial Motor Vehicle	8.85%	9.66%	6.76%
Distracted Driver	5.34%	5.98%	6.26%
Unrestrained (No Seatbelt)	5.15%	6.29%	6.19%
Alcohol	3.90%	5.22%	5.83%
Work Zone	1.81%	1.10%	0.37%
Drug	1.40%	1.81%	1.76%
Motorcycle	1.39%	2.06%	1.80%
Pedestrian	0.94%	0.45%	0.60%
Bicycle	0.46%	0.35%	0.45%
School Zone	0.22%	0.14%	0.18%

# ROADWAY DEPARTURE

From 2015-2024, there were 1,998 FSI crashes involving roadway departures in the OMEGA RTPO.

- **Figure 3.1** shows that roadway departure crashes have shown a slight uptick in recent years after declining from a mid-2010s peak
- **Figure 3.2** indicates drivers between the ages of 15-34 are the most likely to be involved with a slight increase in in drivers 45-59
- **Figure 3.3** denotes Speed, Unrestrained Occupants, Younger Drivers, and Alcohol as the top other contributing factors for roadway departure crashes in the region
- Major Collectors, Local Roads, and Minor Arterials are the roads that most frequently see roadway departure crashes according to **Figure 3.4**

Figure 3.1: Roadway Departure Crashes, 2015-2024 (ODOT)

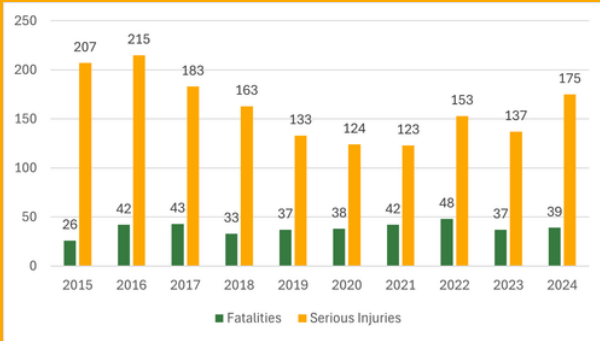


Figure 3.2: Roadway Departure by Age (ODOT)

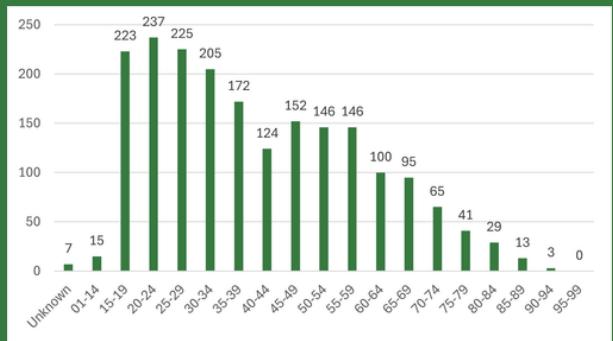


Figure 3.3: Roadway Departure by Emphasis Area (ODOT)

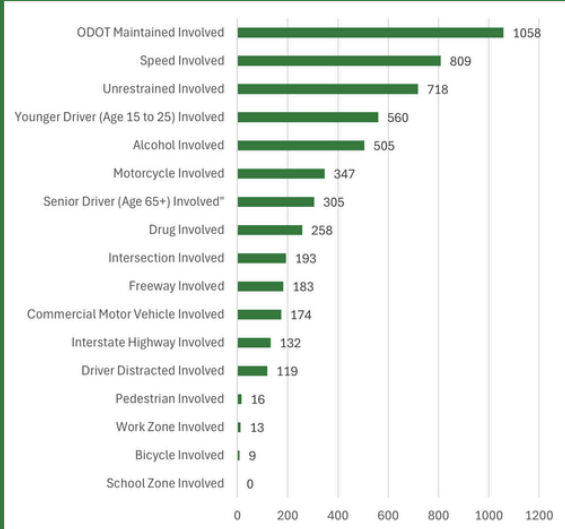
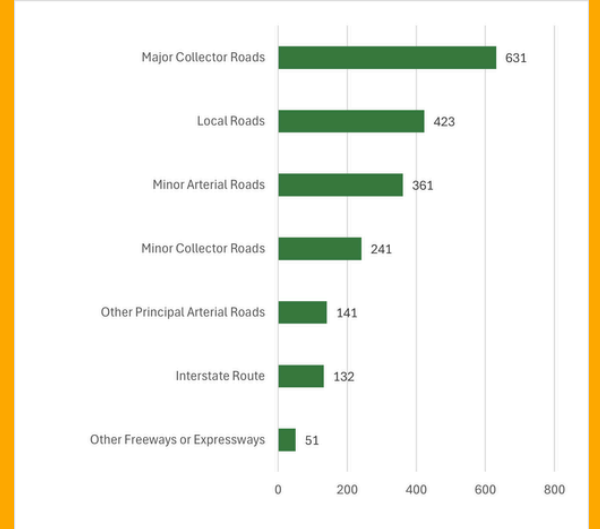


Figure 3.4: Roadway Departure by Functional Class (ODOT)



## ROADWAY DEPARTURE (CON'T)

Roadway departure crashes occurred most often from 3 pm - 6pm across the past ten years. May through September are the months where these crashes were the most frequent, and roadway departures were more likely to happen on Fridays and the weekend.

Figure 3.5: Roadway Departure by Hour (ODOT)

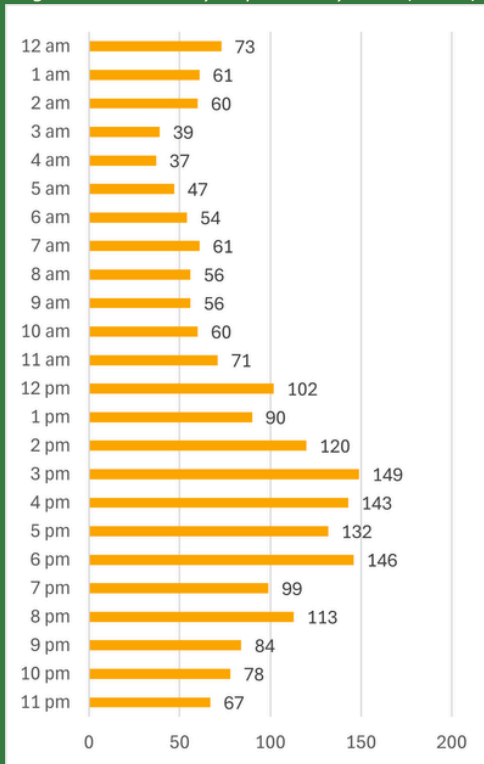


Figure 3.6: Roadway Departure by Month (ODOT)

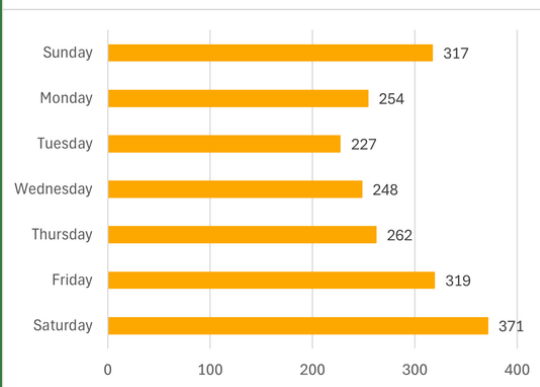
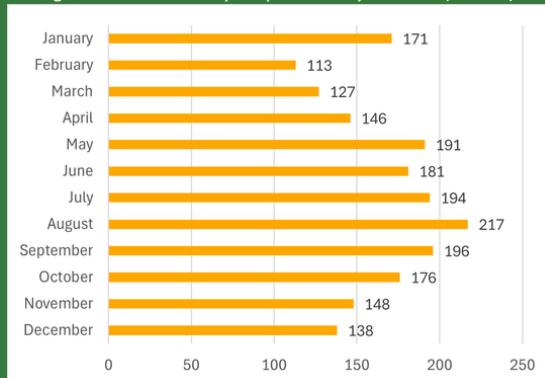


Figure 3.7: Roadway Departure by Day of Week (ODOT)

The Top 5 fixed objects most often involved in roadway departure crashes are listed below. These objects are involved in 58% of roadway departure crashes.

- \* Trees
- \* Embankments
- \* Guardrails
- \* Ditches
- \* Utility Poles

# YOUNGER DRIVER

From 2015-2024, there were 990 FSI crashes involving younger drivers in the OMEGA RTP region.

- **Figure 3.8** shows that crashes with younger drivers have declined from a mid-2010s peak but have seen a slight uptick in recent years
- **Figure 3.9** denotes that other age groups are not often involved in crashes with younger drivers
- **Figure 3.10** denotes Roadway Departure, Speed, Unrestrained Occupants, and Intersections as the top other contributing factors for younger driver crashes in the region beyond ODOT-maintained facilities
- Major Collectors, Minor Arterials, and Local Roads are the roads that most frequently see crashes with younger drivers according to **Figure 3.11**

Figure 3.8: Younger Driver Crashes, 2015-2024 (ODOT)

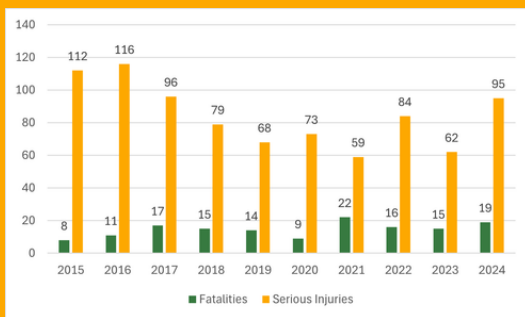


Figure 3.9: Younger Driver by Age (ODOT)

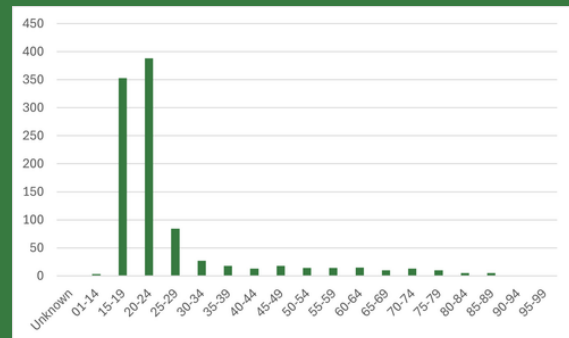


Figure 3.10: Younger Driver by Emphasis Area (ODOT)

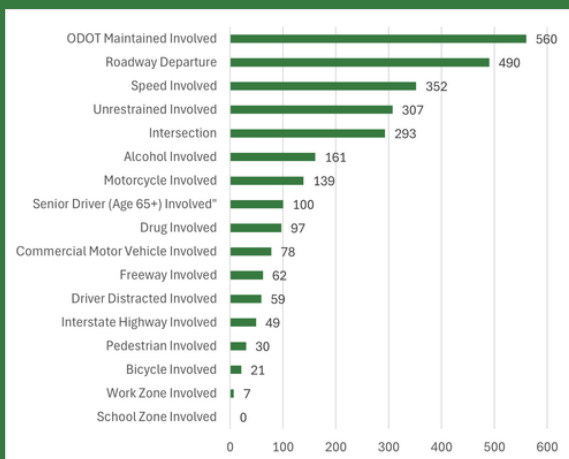
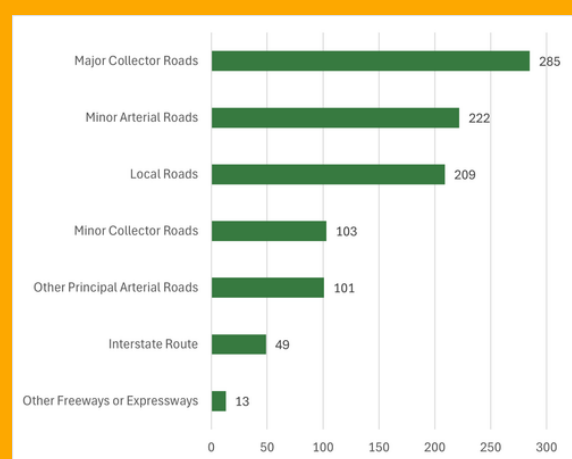


Figure 3.11: Younger Driver by Functional Class (ODOT)



## YOUNGER DRIVER (CON'T)

Crashes with younger drivers occurred most often from 3 pm - 6pm across the past ten years. May through September are the months where these crashes were the most frequent, and crashes with younger drivers were more likely to happen on Fridays and the weekend.

Figure 3.12: Younger Driver by Hour (ODOT)

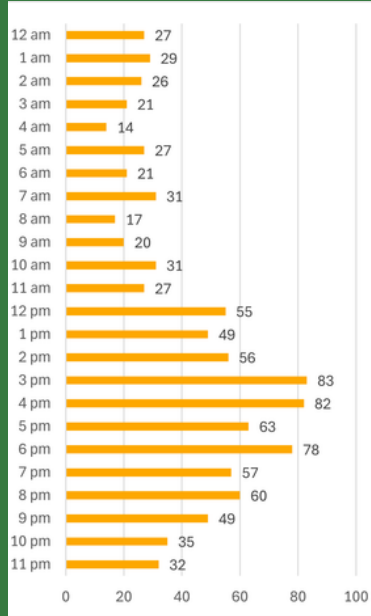


Figure 3.13: Younger Driver by Month (ODOT)

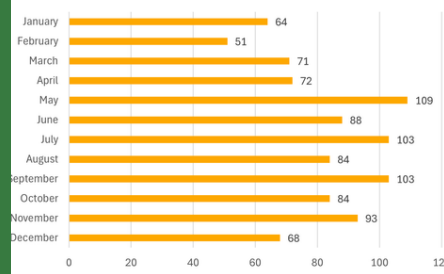
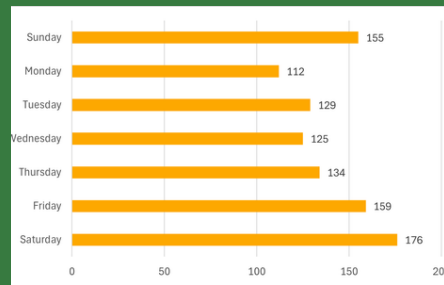
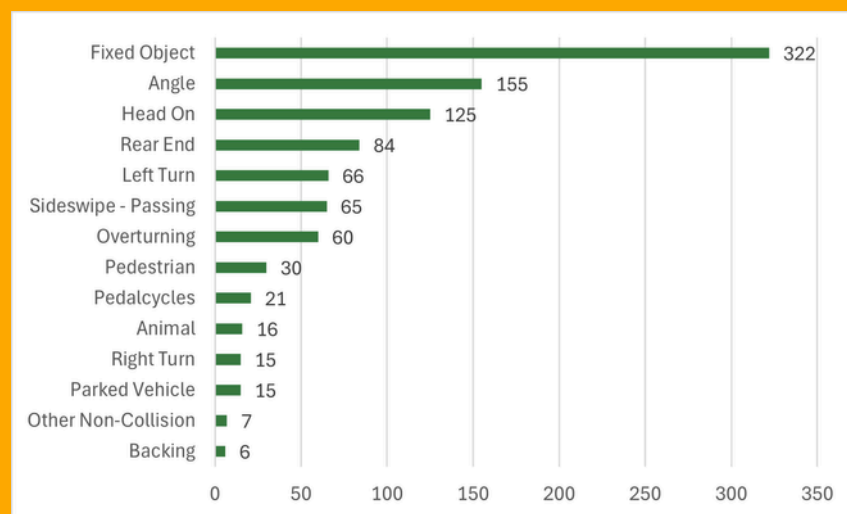


Figure 3.14: Younger Driver by Day of Week (ODOT)



The most frequent crash types involving younger drivers are listed below. Fixed objects are involved in 33% of crashes with younger drivers.

Figure 3.15: Younger Driver by Crash Type (ODOT)



# INTERSECTION

From 2015-2024, there were 813 FSI crashes at intersections in the OMEGA RTP region.

- **Figure 3.16** shows that intersection crashes have shown a slight decrease from a high in the mid-2010s
- **Figure 3.17** indicates drivers between the ages of 15-34 are the most likely to be involved in intersection crashes, with a secondary frequency in drivers 50-59 years old
- **Figure 3.18** denotes Roadway Departure, Younger Drivers, and Senior Drivers as the top other contributing factors for intersection crashes in the region
- Major Collectors, Minor Arterials, and Principal Arterials are the roads that most frequently see intersection crashes according to **Figure 3.19**, likely due to higher speeds and higher volumes

Figure 3.16: Intersection Crashes, 2015-2024 (ODOT)

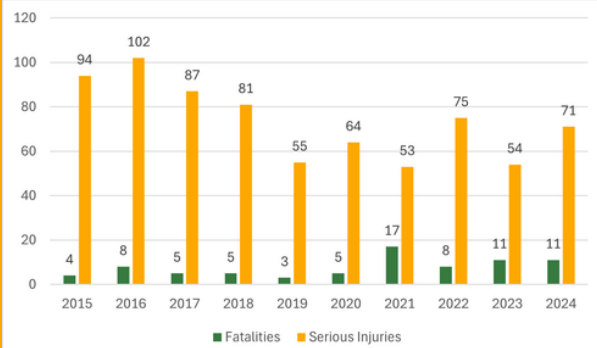


Figure 3.17: Intersection Crashes by Age (ODOT)

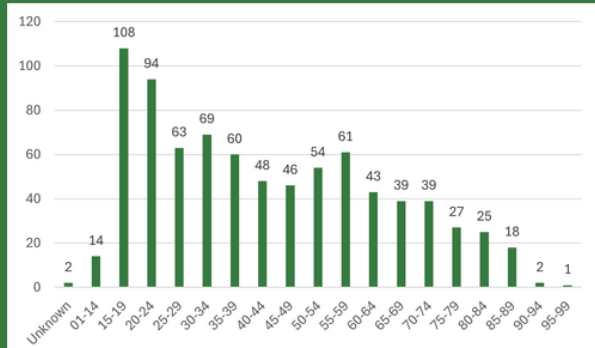


Figure 3.18: Intersection by Emphasis Area (ODOT)

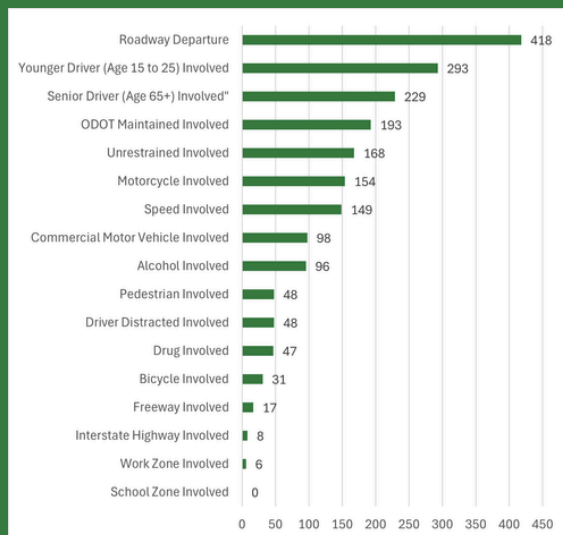
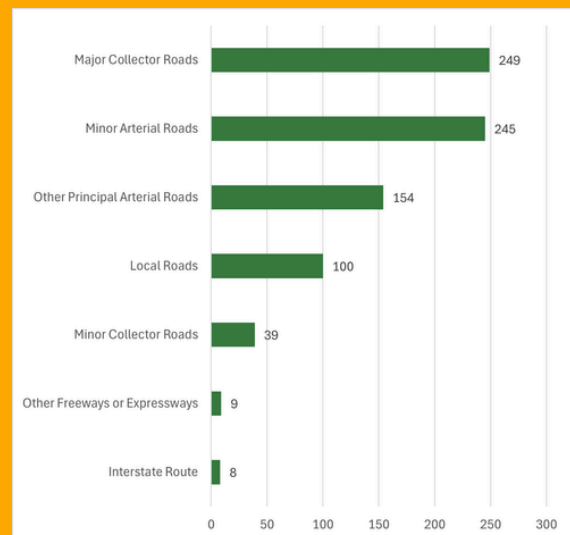


Figure 3.19: Intersection by Functional Class (ODOT)



## INTERSECTION (CON'T)

Intersection crashes occurred most often from 3 pm - 6pm across the past ten years. May through October are the months where these crashes were the most frequent, and intersection crashes were more likely to happen on Thursdays and Fridays.

Figure 3.20: Intersection by Hour (ODOT)

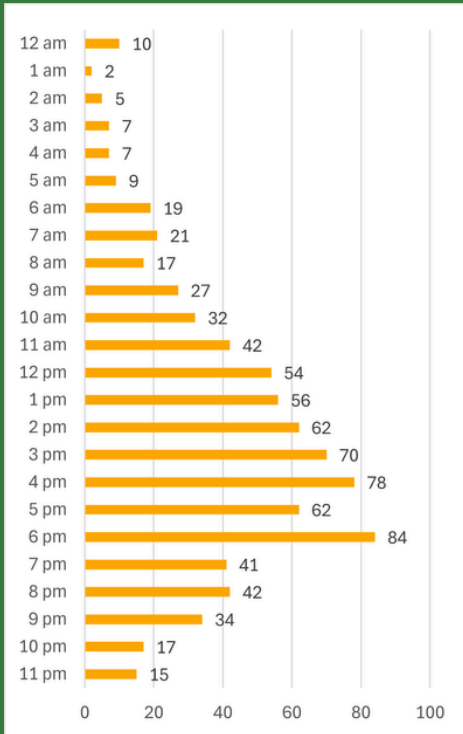


Figure 3.21: Intersection by Month (ODOT)

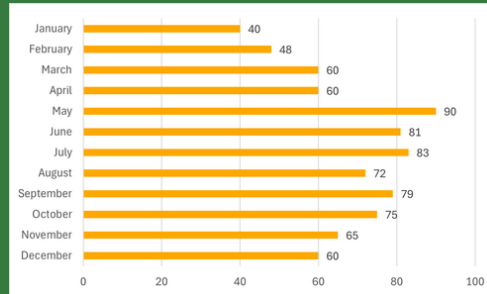
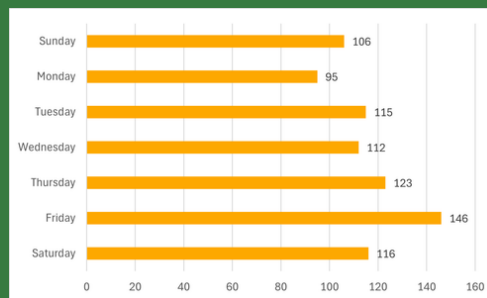


Figure 3.22: Intersection by Day of Week (ODOT)



The top crash types most often involved in intersection crashes are listed below. Angle crashes happened in 35% of intersection crashes.

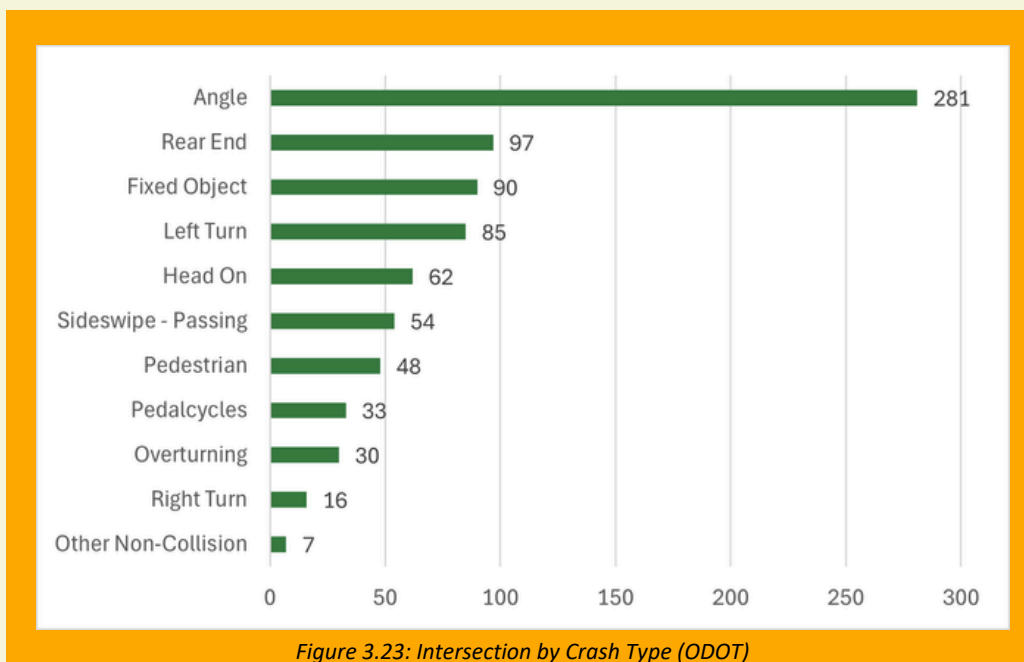


Figure 3.23: Intersection by Crash Type (ODOT)

# SENIOR DRIVER

From 2015-2024, there were 665 FSI crashes involving senior drivers in the OMEGA RTP region.

- **Figure 3.24** shows that crashes involving senior drivers increased in 2024 after a notable decline in the preceding nine years
- **Figure 3.25** confirms that drivers of other ages are not often involved in senior driver crashes
- **Figure 3.26** denotes Roadway Departure, Intersections, Unrestrained Occupants, and Speed as the top other contributing factors for senior driver crashes in the region other than ODOT-maintained roadways
- Major Collectors, Local Roads, and Principal Arterials are the roads that most frequently see crashes with senior according to **Figure 3.27**

Figure 3.24: Senior Driver Crashes, 2015-2024 (ODOT)

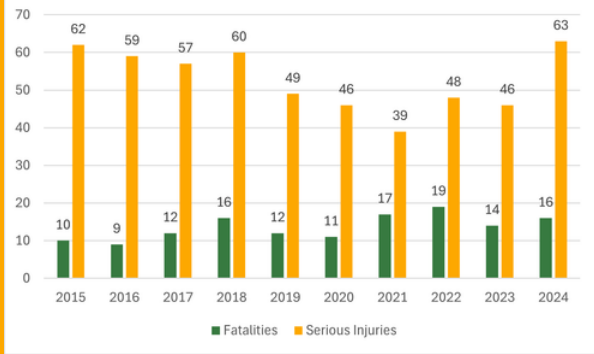


Figure 3.25: Senior Driver Crashes by Age (ODOT)

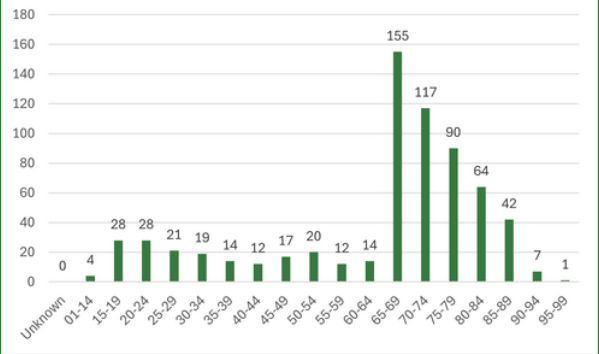


Figure 3.26: Senior Driver by Emphasis Area (ODOT)

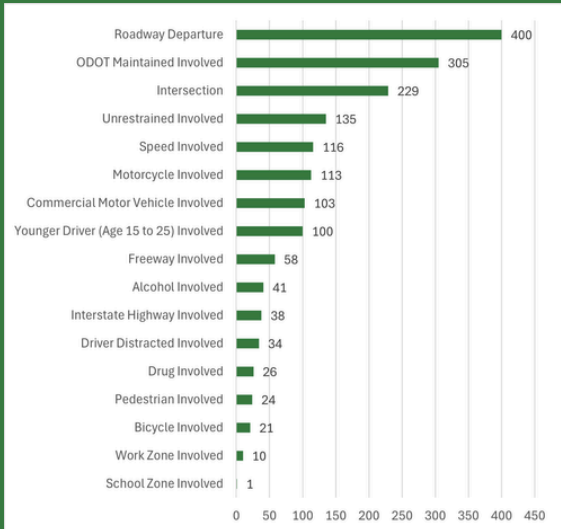
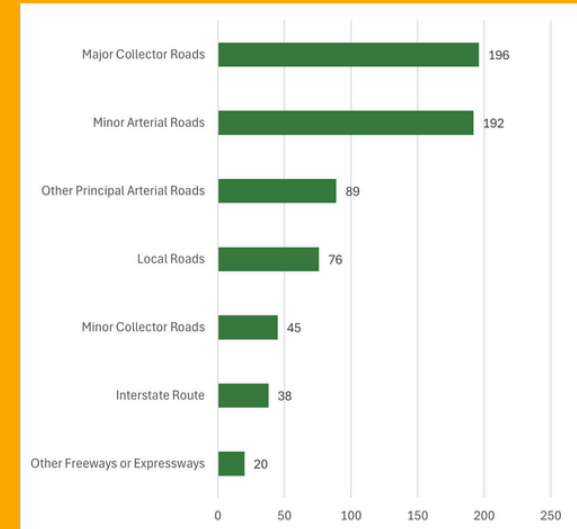


Figure 3.27: Senior Driver by Functional Class (ODOT)



## SENIOR DRIVER (CON'T)

Crashes involving senior drivers occurred most often from 1pm - 4pm across the past ten years. May through October are the months where these crashes were the most frequent, and senior driver crashes were more likely during weekdays with a particular spike on Fridays.

Figure 3.28: Senior Driver by Hour (ODOT)

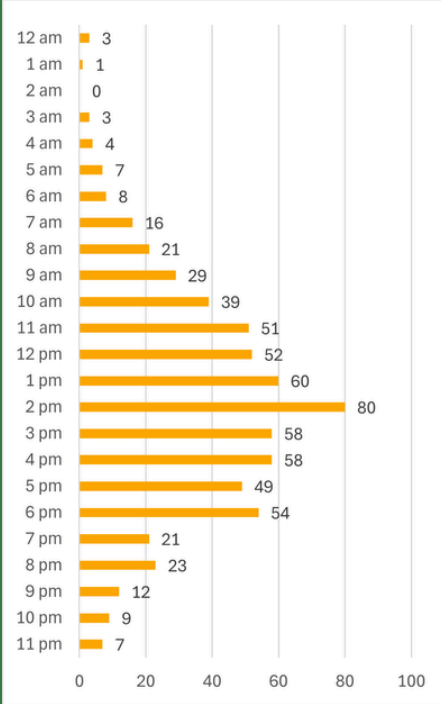


Figure 3.29: Senior Driver by Month (ODOT)

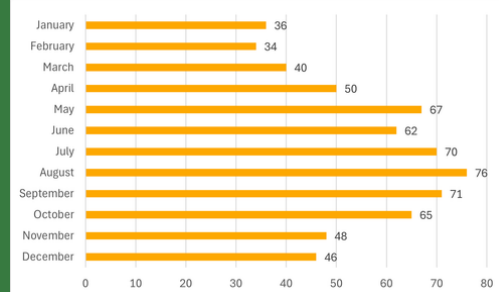
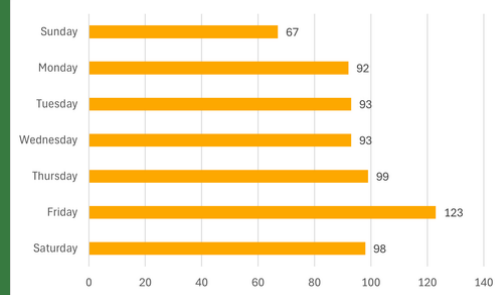


Figure 3.30: Senior Driver by Day of Week (ODOT)



The top crash types most often involved in senior driver crashes are listed below. Fixed object and angle crashes are involved in 41% of crashes with senior drivers.

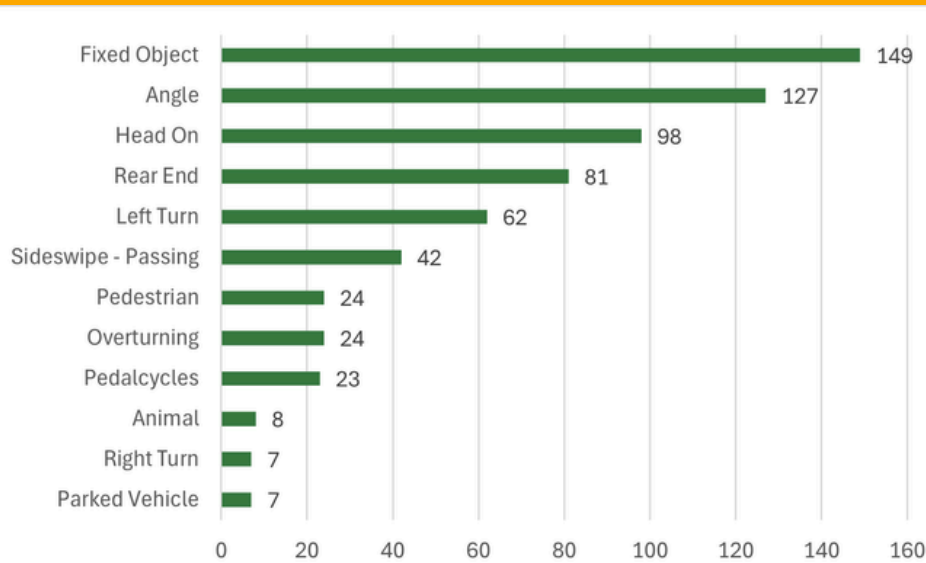


Figure 3.31: Senior Driver by Crash Type (ODOT)

# SPEED

From 2015-2024, there were 1,012 FSI crashes involving speeding in the OMEGA RTP region.

- **Figure 3.32** shows that crashes with high speeds have remained consistent across the past ten years except for a slight decline during the COVID-19 pandemic lockdown.
- **Figure 3.33** indicates a noticeable dropoff in speeding as drivers age
- **Figure 3.34** denotes Roadway Departure, Unrestrained Occupants, and Younger Driver as the top other contributing factors for roadway departure crashes in the region besides ODOT-maintained roadways
- Major Collectors, Local Roads, and Minor Arterials are the roads that most frequently see speed crashes according to **Figure 3.35**

Figure 3.32: Speed Crashes, 2015-2024 (ODOT)

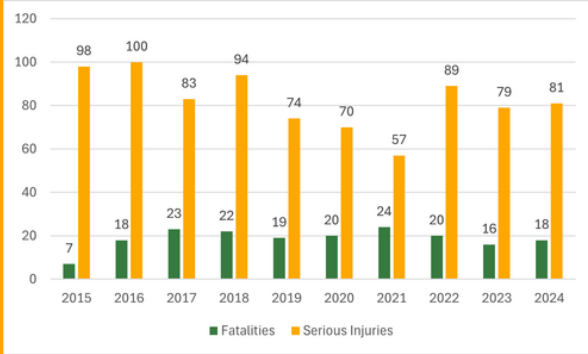


Figure 3.33: Speed Crashes by Age (ODOT)

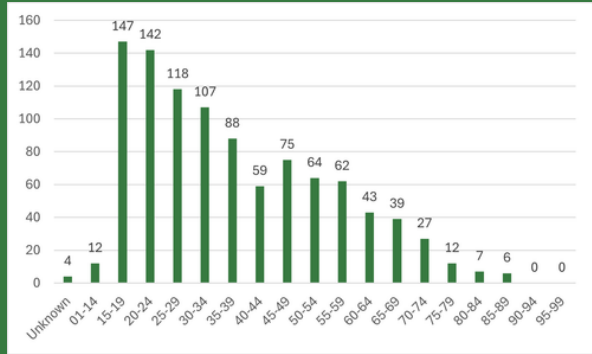


Figure 3.34: Speed Crashes by Emphasis Area (ODOT)

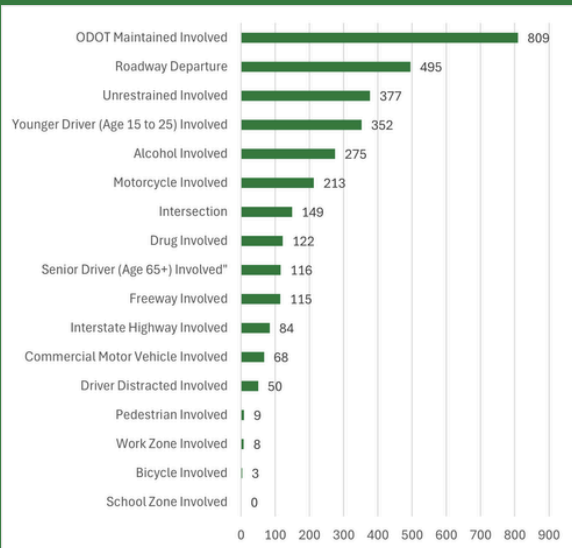
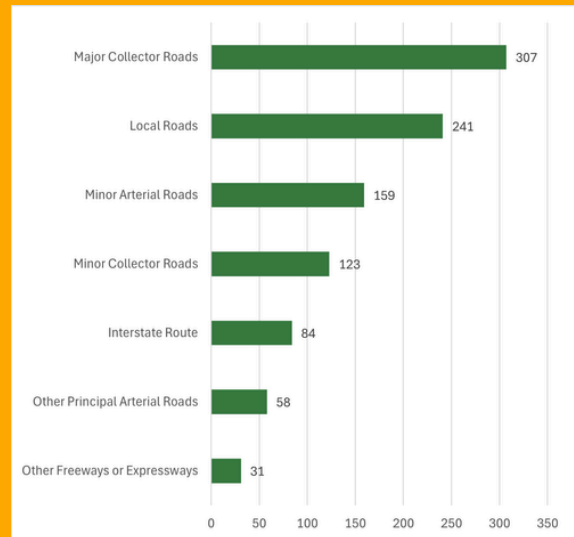


Figure 3.35: Speed Crashes by Functional Class (ODOT)



## SPEED (CON'T)

Crashes with speeding involved occurred most often from 3pm - 8pm across the past ten years. May through October are the months where these crashes were the most frequent, and crashes with speeding were more likely to happen on the weekend.

Figure 3.36: Speed Crashes by Hour (ODOT)

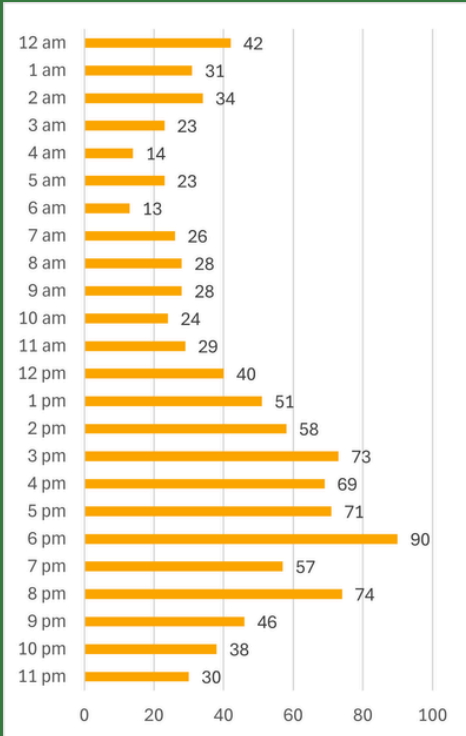


Figure 3.37: Speed Crashes by Month (ODOT)

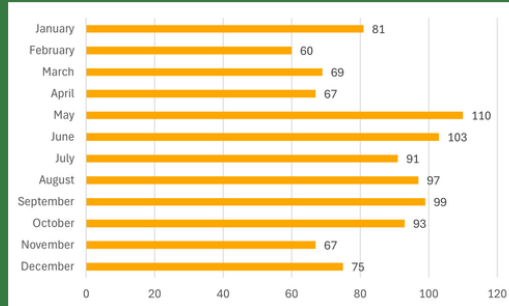
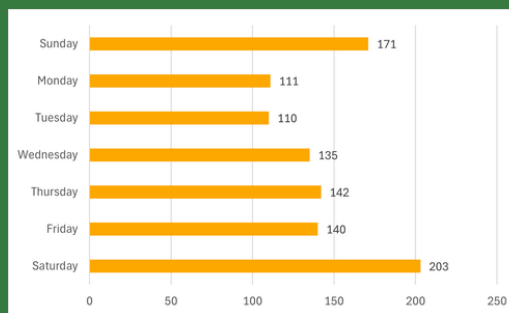


Figure 3.38: Speed Crashes by Day of Week (ODOT)



The top crash types most often involved in speed-related crashes are listed below. Fixed object crashes are involved in 58% of speeding incidents.

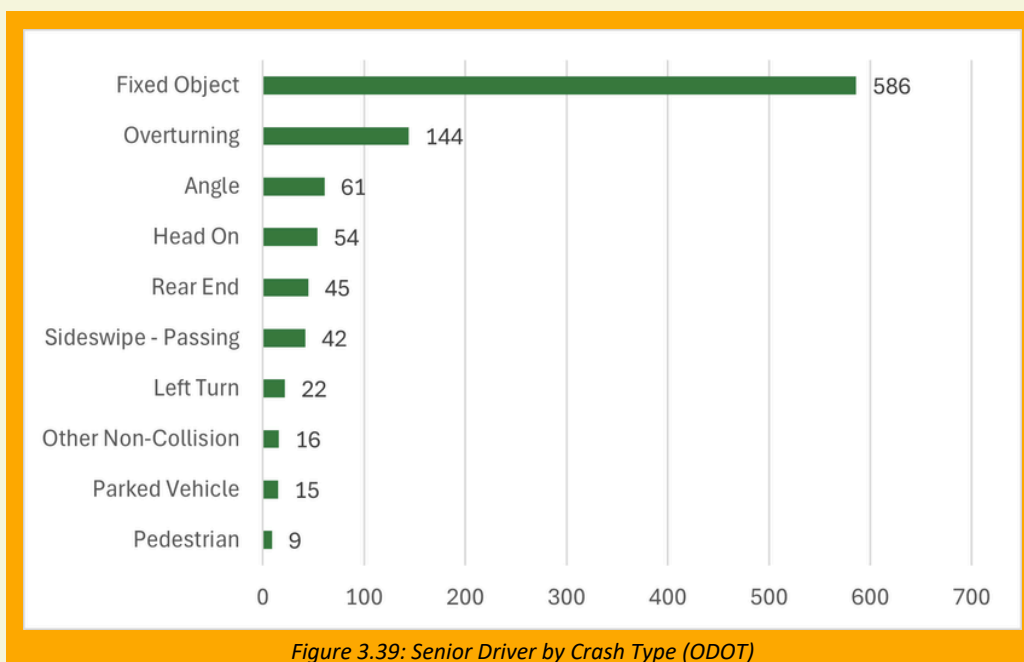


Figure 3.39: Senior Driver by Crash Type (ODOT)

## DISTRACTED DRIVER

From 2015-2024, there were 200 FSI distracted driver crashes in the OMEGA RTP region.

- **Figure 3.40** shows that distracted driver crashes have declined significantly since the mid-2010s
- **Figure 3.41** indicates a correlation between younger drivers and distracted driving
- **Figure 3.42** denotes Roadway Departure, Unrestrained Occupants, Younger Drivers, and Speed as the top other contributing factors for crashes with distracted drivers in the region
- Minor Arterials, Major Collectors, and Local Roads are the roads that most frequently see crashes with distracted drivers according to **Figure 3.43**

Figure 3.40: Distracted Driver Crashes, 2015-2024 (ODOT)

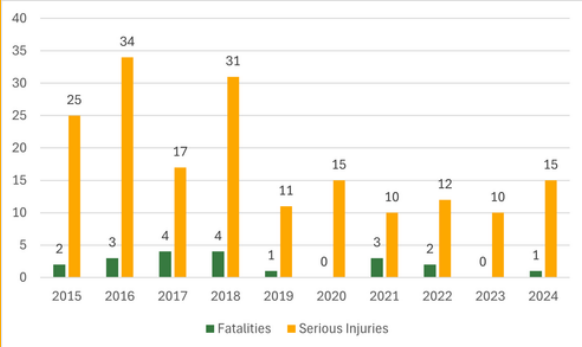


Figure 3.41: Distracted Driver by Age (ODOT)

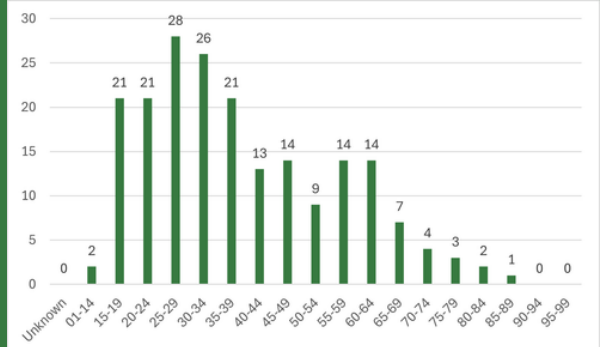


Figure 3.42: Distracted Driver by Emphasis Area (ODOT)

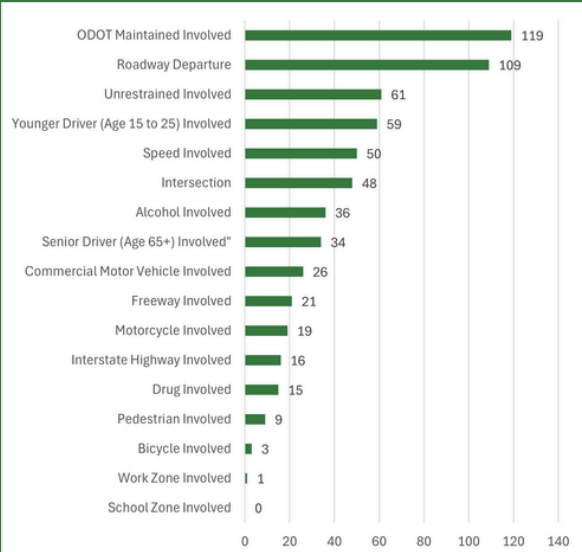
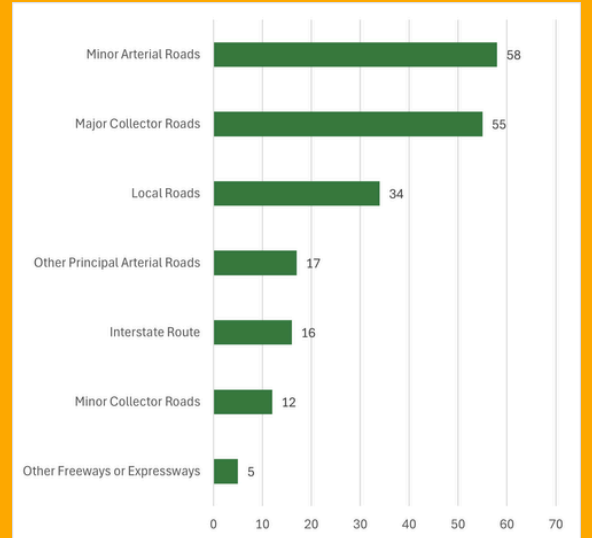


Figure 3.43: Distracted Driver by Functional Class (ODOT)



## DISTRACTED DRIVER (CON'T)

Crashes with distracted drivers occurred most often from 12pm - 6pm across the past ten years. July through November and February are the months where these crashes were the most frequent, and distracted driver crashes were fairly evenly distributed across all weekday, with a spike on Sundays.

Figure 3.44: Distracted Driver by Hour (ODOT)

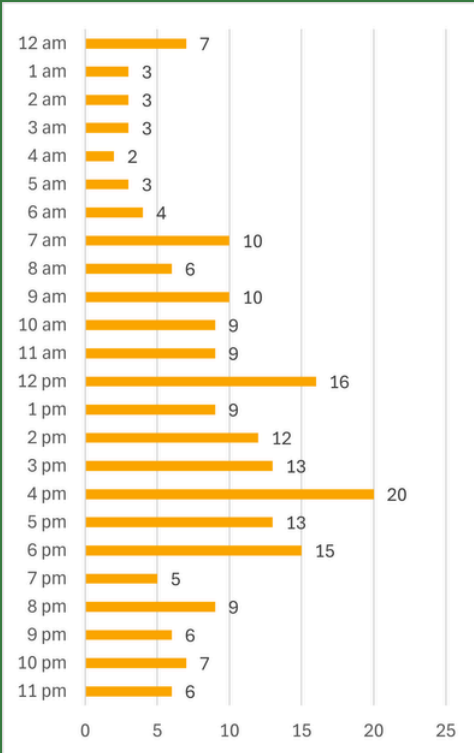


Figure 3.45: Distracted Driver by Month (ODOT)

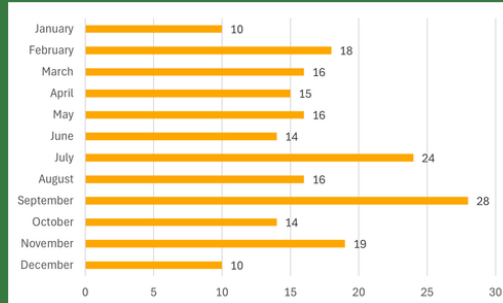
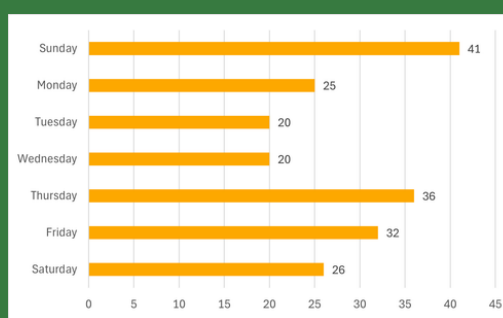


Figure 3.46: Distracted by Day of Week (ODOT)



The crash types most often involved in distracted driver crashes are listed below. Fixed object and rear ending are involved in 57% of distracted driver crashes.

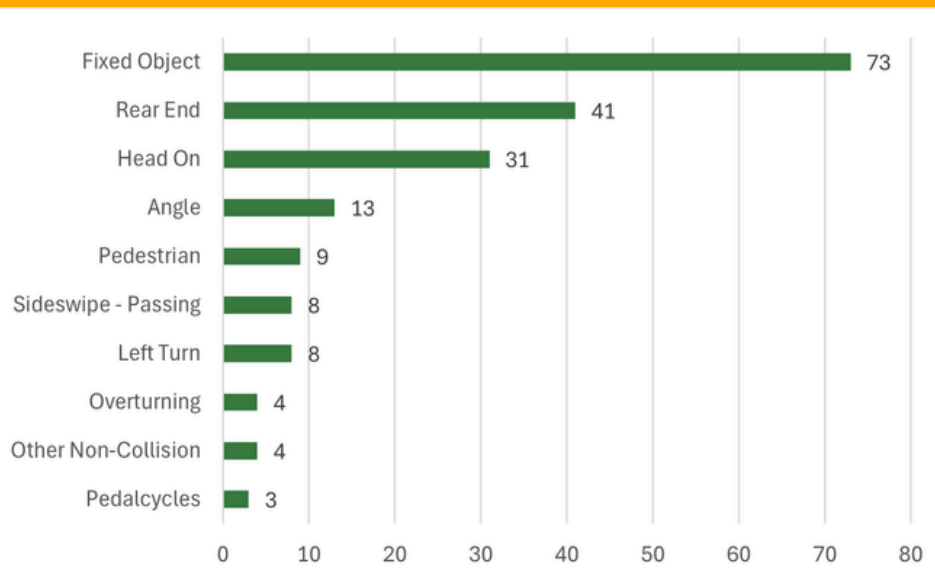


Figure 3.47: Distracted Driver by Crash Type (ODOT)

## CH 4 - NETWORK SCREENING

Network screening is the first component of the roadway safety management process and is a method of applying a data driven analysis to review a specific roadway network, or subset of a roadway network, and to determine and rank locations of need, priority, or potential for safety improvement. There are two basic approaches to data driven safety analysis: hot spot and systemic.

Both hot spot and systemic analyses are methods that can be used to perform network screening. However, regardless of the specific method, network screening results are still only a snapshot. Changes in traffic patterns, treatment implementation, and other factors can all impact network screening results. The process of network screening is cyclical, based on problem identification, project development, treatment implementation, and evaluation. This cycle allows for a consistent approach to project location identification with ability to adjust and make process or procedural improvements as needed as conditions change and the benefits of implemented treatments are appreciated.

In this plan, the Crash History Screening Method is used to identify hot spots and roadway risk factors are calculated to conduct a Systemic Screening analysis.



## CRASH HISTORY SCREENING METHOD

### Background

Crash history-based analyses use historic crash data to identify individual locations and then recommend treatments to address crashes at specific locations. Crash history-based screening methods result in high crash locations lists or maps.

### Purpose

Identifying and prioritizing high crash locations allows roadway agencies to implement infrastructure treatments at locations with the most pressing current need. Crash history-based methods are reactive, meaning they can only be determined after a large proportion of crashes occur at a particular spot.

### Process

- 1) Establish focus – For this plan, the focus crash type was all crashes in the OMEGA Region.
  
- 2) Identify network and establish reference populations – The network for the crash history screening included all roadways with a functional classification greater than local road (collectors and above). Note, functional classification does not have to do with jurisdiction or “locally owned” roads. For example, Vocational Road (CR-35) southeast of Cambridge is a “local road” in the sense that it is off the state maintained system. However, the functional classification of this section of roadway is a minor collector. This section of roadway is included in the network screening. While fatal and serious injury crashes occur on roads with local functional classifications, these roads count for a very large percentage of lane miles in the region but a much smaller percentage of traffic volume. Excluding these roadways in this first regional safety screening allows stakeholders to focus on roadway improvements on a more critical sub section of the region.
  
- 3) Select performance measures – EPDO crash rates for 2020-2024 were used as the performance measure for this network screening method. EPDO crash rates allow for rates to be calculated for all roadways experiencing crashes of any severity, but gives more weight to more severe crashes. The result is a range of crash rate values instead of simply identifying locations where fatal and/or serious injury crashes occur.
  
- 4) Select screening method – The network screening started with the base roadway segmentation from ODOT’s Transportation Information Mapping System (TIMS). Segments less than 500 feet in length were dropped to avoid prioritizing extremely short segments. For each resulting segment, EPDO crash rates were calculated using the EPDO calculation defined in Section 3. Traffic volumes were obtained from TIMS.
  
- 5) Screen and evaluate results – Top 50 high-crash locations for each county, as well as the OMEGA RTPO region as a whole, are determined by ranking each segment within the county by EPDO crash rate. **Table X** lists the top 50 locations on the local road system in the OMEGA RTPO region.

## CRASH HISTORY SCREENING RESULTS

Rank	County	Route Type	Route Number	Begin Mile Point	End Mile Point	Street Name	EPDO Crash
1	MUS	CR	14	2.447	2.549	Ferncliff Rd	2174.7
2	COL	CR	429	0.589	1.275	County Airport Rd	1443.7
3	HAS	CR	55	1.598	1.829	Deersville Rd	959.2
4	TUS	TR	360	0	0.095	Dutch Valley Dr NE	624.3
5	COS	CR	23	6.043	6.174	County Road 23	585.3
6	COL	TR	882	1.465	1.612	Heck Rd	511.2
7	HAS	CR	8	5.304	6.149	Plum Run Rd	455.4
8	COL	CR	425	6.147	6.563	East Liverpool Rd	441.9
9	TUS	CR	105	0	0.158	Dueber Rd NE	417.2
10	HOL	CR	168	0.173	1.076	County Road 168	394.2
11	HAS	CR	51	3.363	3.469	Bakers Ridge Rd	349.1
12	COS	CR	271	1.21	2.623	County Road 271	315.5
13	HAS	CR	13	12.003	12.131	Blairmont Rd	284.9
14	TUS	CR	82	0.687	0.746	E Front St	279.7
15	TUS	CR	90	10.527	10.541	E New Cumberland Rd	260.1
16	COL	CR	451	0	0.155	Old Lincoln Hwy	258.3
17	TUS	CR	79	0	0.203	Schilling Hill Rd NW	246.4
18	HAS	CR	8	5.304	6.149	Plum Run Rd	244.0
19	MUS	CR	22	2.32	3.271	Clay Pike	238.2
20	GUE	CR	15	1.473	1.611	Claysville Rd	232.9
21	HAS	CR	1	1.372	4.215	Brushy Fork Rd	230.2
22	GUE	MR	109	0	0.099	Clay Ave	227.6
23	TUS	MR	1330	0	0.188	Bluebell Dr SW	210.1
24	TUS	MR	97	0.21	0.348	Taylor Ave	209.8
25	TUS	CR	34	4.527	4.765	Edie Hill Rd SE	207.2
26	TUS	CR	22	2.815	3.556	Frys Valley Rd SW	203.7
27	TUS	MR	142	0.562	0.782	W 3rd St	200.1
28	CAR	TR	637	0	0.281	Sunflower Rd SW	195.9
29	TUS	MR	793	0.178	0.359	E 11th St	193.5
30	TUS	CR	21	6.913	6.993	Stonecreek Rd SW	193.5
31	COL	MR	1036	0.116	0.269	E Rebecca St	187.8
32	COS	CR	5	0	0.284	County Road 5	187.6
33	HAS	CR	20	3.569	4.258	Kennedy Ridge Rd	184.9
34	COS	CR	54	1.802	3.39	County Road 54	182.8
35	TUS	CR	80	0	0.162	Schneiders Crossing Rd	180.9
36	GUE	MR	81	0.594	0.974	N 7th St	167.7
37	HOL	CR	230	0	0.095	County Road 230	165.6
38	MUS	CR	616	0.11	2.822	Raiders Rd	159.2
39	HAS	CR	29	0	2.148	Industrial Park Rd	159.2
40	MUS	MR	903	0	0.691	Putnam Ave	157.2
41	MUS	CR	31	0	2.045	Rural Dale Rd	154.7
42	TUS	CR	102	5.41	5.436	S Park Ave	153.0
43	MUS	MR	401	0.033	0.1	Elberon Ave	152.2
44	TUS	CR	22	2.815	3.556	Frys Valley Rd SW	149.1
45	COL	MR	649	0	0.15	Roosevelt Ave	147.5
46	GUE	CR	35	6.319	6.402	Vocational Rd	146.7
47	CAR	CR	11	0.959	1.347	Antigua Rd SW	143.0
48	MUS	CR	127	2.133	2.239	Fultonrose Rd	142.5
49	GUE	CR	35	6.319	6.402	Vocational Rd	141.2
50	MUS	MR	271	0	0.214	S 5th St	138.1

Table 4.1: Top 50 Road Segments by EPDO, 2010-2024 (ODOT)

## SYSTEMIC SCREENING METHOD

### Background

Systemic analysis focuses on identifying conditions associated with higher occurrences of crashes and then treating locations where the conditions are present across a network regardless of crash history. Systemic safety analyses are considered a complimentary tool to crash history-based analyses.

### Purpose

A systemic analysis helps roadway owners to identify and prioritize locations with a potential risk of crashes and install countermeasures to reduce or prevent crashes before they occur. The proactive deployment of countermeasures represents a fundamental shift in traffic safety improvement and problem identification from a reactive, crash-history-only approach to roadway safety.

### Process

1) Data collection – For the OMEGA Regional Safety Plan, data collection involved compiling crash, roadway, and operational data from ODOT TIMS . Crashes from 2020-2024 were used in the screening process and assigned to routes based on the NLFID and county mile points in the crash data. Traffic volumes for state system roadways were also obtained from TIMS.

2) Risk factor analysis – Risk factors can be determined in several ways but should follow a data driven process. Overrepresentation was determined by comparing the proportion of fatal and severe injury crashes accounted for by a roadway feature to the proportion of traffic traveling on the segments (AADT) containing the feature. Roadway features are recommended as risk factors when they account for a greater proportion of FSI crashes than traffic volume.

3) Network screening – The OMEGA public roadway network was then screened for the presence of risk factors. Each segment was assigned a point towards a risk score for each risk factor present at that segment.

4) Priority locations – Segments were then ranked within each county based on risk factor score. Segments with the highest risk factor scores are considered the highest priority locations in terms of at-risk locations, though these sites may not have any history of fatal or serious injury crashes.

## SYSTEMIC SCREENING METHOD RESULTS

25 attributes were tested for overrepresentation in determining the systemic risk factors. Of the attributes tested, 5 showed unique overrepresentation and were chosen as risk factors including:

- Two-lane Roads in Rural Areas
- County-maintained Roads
- Lanes less than 12 feet wide
- 45 or 55 mph roadways (including unposted)
- Roads averaging less than 2,000 vehicles per day

Systemic screening results and high-risk locations for each county are contained within each county sub-plan. The region-wide results of the risk factor analysis are presented in **Figure Y** below. The roadways with scores of 4 or 5 (orange or red) make up the regional “high risk” network. While these roadways may not have significant crash trend histories, they show the roadways where the ingredients for a crash are present. Addressing at-risk locations with low cost or systemic improvements is a way to proactively address crashes before they occur.

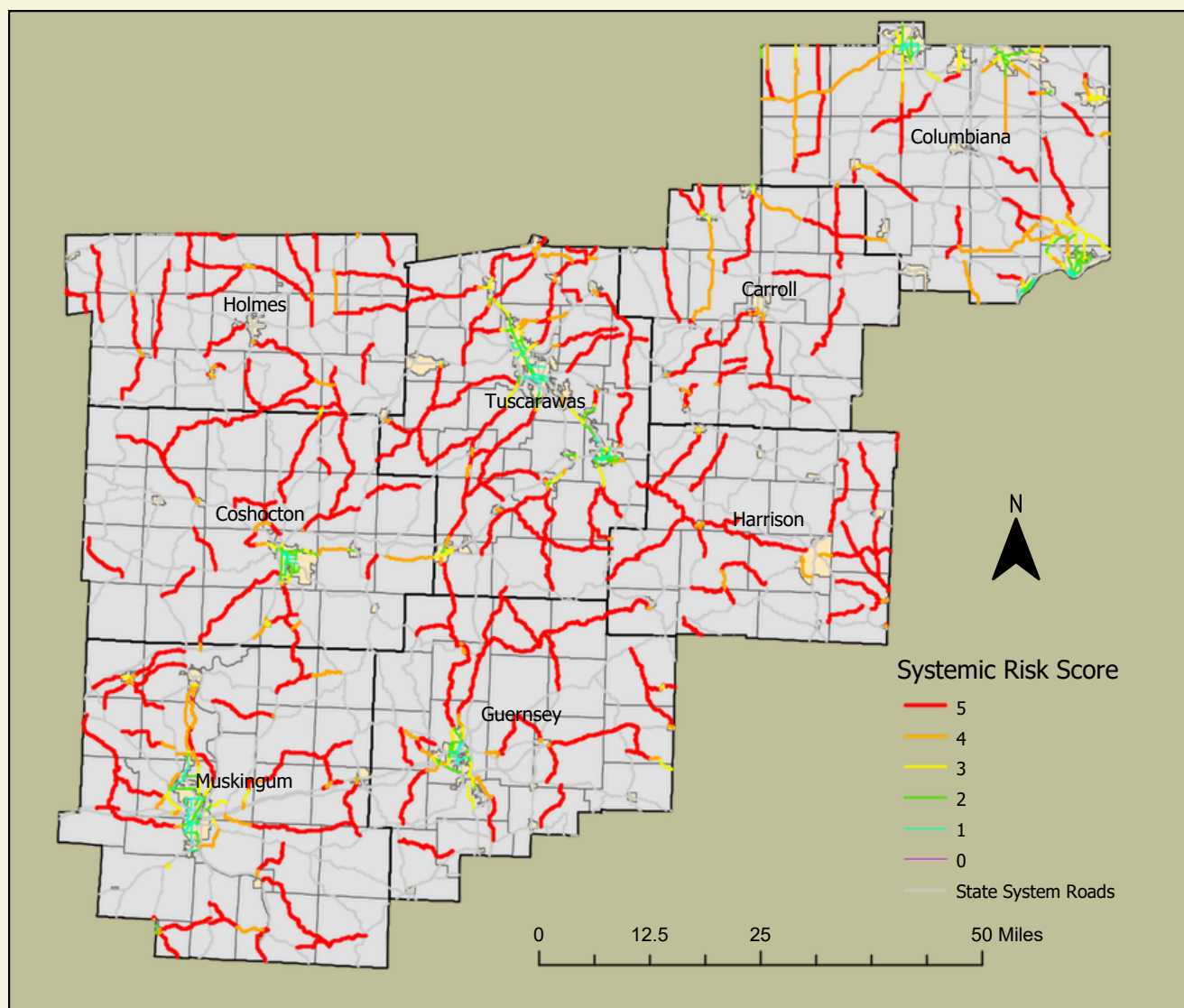


Figure 4.1: Road Segments by Risk Score, 2020-2024 (ODOT)

## CH 5 - IMPLEMENTATION

The strategies identified in this section were compared against the Safe System Approach objectives to ensure the region is addressing roadway safety in a comprehensive manner. This action plan combines infrastructure improvements with outreach campaigns and data monitoring for a multi-pronged approach to ensure the safety of the traveling public. The action steps are also grouped by emphasis area and responsible parties which shows that roadway safety is a multi-jurisdiction effort across levels of government.

The intention is to prepare an annual report on the progress of implementing this plan once it is adopted by the OMEGA Transportation Advisory Committee and Board.



Emphasis Area	Safe System Objective	Responsible Parties	Strategy
Roadway Departure	Safer Roads	County Engineers, Municipalities	Continue installing proven safety countermeasures addressing roadway departure as part of annual repaving programs and/or through safety funding applications
	Safer Roads	County Engineers, Municipalities	Widen clear zone through vegetation control as a part of annual maintenance (as a part of resurfacing projects or through general maintenance)
	Safer Roads	County Engineers, OMEGA	Identify corridors for vegetation control as a countermeasure for improving roadside clear zone and work with OMEGA to submit a joint systemic safety application
Speed	Safer Speeds	Municipalities	Install dynamic speed feedback signs
	Safer Speeds	OMEGA	Develop a region-wide list of traffic safety stakeholders, public agencies, and local businesses as a mailing list for dissemination of national traffic safety marketing campaign materials
	Safer Speeds	County Engineers, Cities	Contact local/regional law enforcement (Ohio State Highway Patrol, County Sheriffs, Local law enforcement) about availability of Ohio Department of Public Safety banners/signs, determine suitable locations, and install
	Safer Speeds	County Engineers, Cities	Identify partnership with local business for use of variable message boards for national traffic safety campaign messaging
	Safer Speeds	OMEGA, County Engineers	Reach out to local/regional law enforcement to understand their needs in improving/increasing speeding enforcement
Intersections	Safer Roads	County Engineers, Municipalities	Implement proven safety countermeasures for intersections at high crash and high risk locations
	Safer Roads	County Engineers, Municipalities	Install enhanced stop signs (LED, double signs, or adding reflective strips) at minor stop controlled intersections
	Safer Roads	County Engineers, Municipalities	Evaluate and remove unwarranted traffic signals
	Safer Roads	Municipalities	Upgrade outdated signal equipment and retime signal corridors
	Safer Roads	County Engineers, Municipalities	Provide clear zones to remove obstructions at all intersection improvement projects
	Safer Roads	County Engineers, Municipalities	Improve stop-controlled intersection geometry

Emphasis Area	Safe System Objective	Responsible Parties	Strategy
Younger Driver	Safer People	OMEGA, Counties	Partner with school districts to educate younger drivers on speeding and other roadway safety issues
	Safer People	OMEGA, Counties	Reach out to Medina County's Take Control Teen program to mirror results locally
	Safer People	OMEGA	Assist with ODOT campaigns and peer-to-peer program to educate younger drivers
	Safer People	OMEGA, Counties	Advocate for funding for lower-income households to access drivers education for younger drivers
Senior Driver	Safer People	OMEGA, Counties	Collaborate with mobility managers, senior centers, and other aging agencies on campaigns and programming (e.g. CarFit)
	Safer People	OMEGA, Counties	Assist with promotion of services senior citizens can access instead of driving
	Safer People	OMEGA, Counties	Work with regional partners to emphasize seat belt use for older drivers
Distracted Driving	Safer Roads	OMEGA	Reach out to local/regional law enforcement to understand their needs in improving/increasing distracted driving enforcement
	Safer People	OMEGA, Counties	Promote partner agency and state/national campaign messaging around the dangers of distracted driving
	Safer Vehicles	OMEGA	Monitor state and federal efforts to address vehicle technology to minimize distracted driving
General	Safer Roads	OMEGA	Hold townhall with ODOT and regional engineering leadership to discuss barriers of smaller local agencies using safety funding
	Safer People	OMEGA	Share County sub plans/OMEGA RSP with local law enforcement
	Post-Crash Care	OMEGA	Convene a regional working group to address post-crash care needs