



REGIONAL CRASH FACT SHEETS 2011 - 2015

JULY 2016



The Regional Crash Fact Sheets were prepared by the Mid-Ohio Regional Planning Commission (MORPC), 111 Liberty St., Columbus, OH 43215, 614-228-2663, with funding from the Federal Highway Administration, Federal Transit Administration, Ohio Department of Transportation, and Delaware, Fairfield, Franklin, Licking, and Union counties. The contents of this report reflect the views of MORPC which is solely responsible for the information presented herein.

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EXECUTIVE SUMMARY

The Mid-Ohio Regional Planning Commission (MORPC) is the principal public agency conducting regional transportation studies for the Central Ohio area because it serves as the designated Metropolitan Planning Organization (MPO) for the Columbus Urbanized Area. It covers Franklin County, Delaware County and portions of Licking, Fairfield and Union counties. As an MPO, MORPC must seek to increase the safety of the transportation system for motorized and non motorized users. MPOs must also coordinate with state departments of transportation to develop performance measures that aim to realize a significant reduction in traffic fatalities and serious injuries on all public roads.

Since 2005, MORPC has analyzed regional crash data in order to better understand regional crash trends. The majority of crash data represented within this document is received from standardized police reports (OH-1) that are generated each time a traffic crash occurs and law enforcement responds. The Ohio Department of Public Safety (ODPS) is responsible for compiling, analyzing, and publishing crash data and statistics in the State of Ohio. ODPS works closely with the Ohio Department of Transportation (ODOT) to disseminate this information to various safety partners within the state for the purposes of identifying transportation safety issues and determining which strategies seem most appropriate to address them, whether they be engineering, education, enforcement, or emergency services. The information that follows is meant to provide a comprehensive picture of the state of transportation safety within the Central Ohio region, as well as provide insight into opportunities for further reducing serious injuries and fatalities.



REGIONAL OVERVIEW



SECTION 1

OVERALL CRASH STATISTICS

Between 2011 and 2015 there were a total of 185,755 crashes reported within MORPC's Transportation Planning Area. Close to 472,000 people were involved in these crashes, of which 498 were fatally injured and 4,378 suffered serious injuries. Compared to previous years, 2015 represented a significant increase in both crashes and injuries for the region. Over the 5 year period, there was around a 14% increase in total crashes and a 4% increase in serious and fatal injuries resulting from crashes.

CRASH TRENDS BY YEAR, 2011 TO 2015

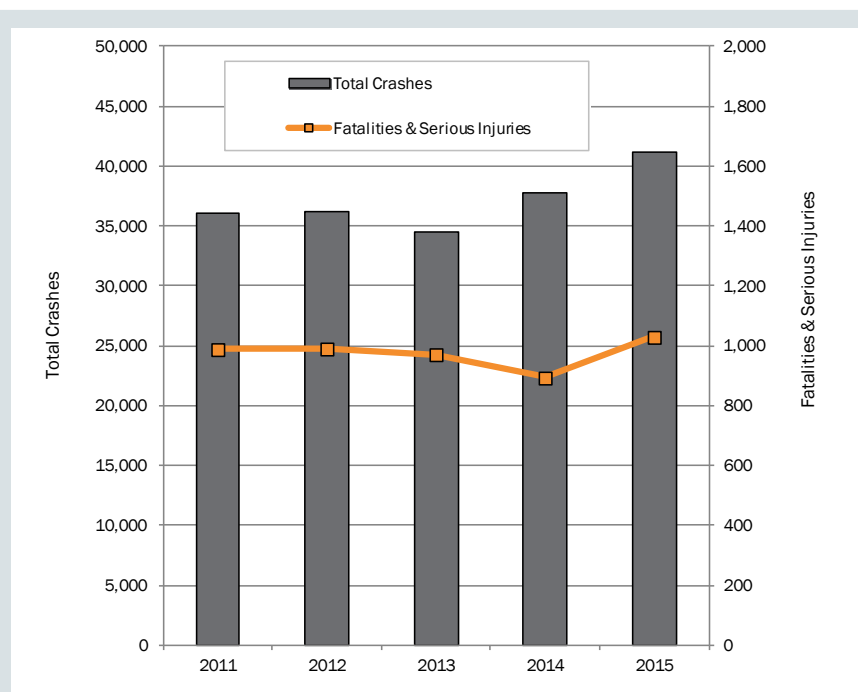
YEAR	CRASH STATISTICS				OCCUPANT STATISTICS					SAFETY METRICS		
	Fatal	Injury Crashes	Property Damage Crashes	Total Crashes	Fatalities	Serious Injuries	Minor Injuries	No Injuries	Total People Involved	Injury Rate	EPDO	Fatalities and Serious Injuries per 100,000 population
2011	97	9,080	26,949	36,126	103	886	12,260	78,549	91,798	25.40%	2.87	68.87
2012	97	9,092	27,069	36,258	106	885	12,053	79,972	93,016	25.34%	2.89	68.64
2013	81	8,783	25,583	34,447	90	882	11,694	75,312	87,978	25.73%	2.93	66.88
2014	84	9,341	28,339	37,764	91	803	12,377	82,039	95,310	24.96%	2.75	60.96
2015	96	10,487	30,577	41,160	108	922	14,176	88,974	104,180	25.71%	2.83	69.59
5-Year Total	455	46,783	138,517	185,755	498	4,378	62,560	404,846	472,282			
Annual Average	91	9,357	27,703	37,151	100	876	12,512	80,969	94,456	25.4%	2.85	67
Percent Change (2011 to 2015)	-1.0%	15.5%	13.5%	13.9%	4.9%	4.1%	15.6%	13.3%	13.5%	1.2%	-1.7%	1.1%

Notes

- Shaded orange cells indicate the year with the highest value for each respective column.
- The Equivalent Property Damage Only (EPDO) index is calculated by the following formula: $[(37.56 \times (\#FatalCrashes + \#SeriousInjuryCrashes)) + (6.55 \times \#MinorInjuryCrashes) + (4.44 \times \#PossibleInjuryCrashes) + \#NoInjuryCrashes] / \#TotalCrashes$.

KEY FACTS:

- The total number of crashes reported in MORPC's Transportation Planning Area was 13.9 percent higher in 2015 compared to 2011.
- On average, around 259 people were involved in a car crash every day.
- On average, a fatal crash occurred every 4 days.
- Approximately one out of four crashes resulted in an injury; however 93 percent of those injuries were minor.
- The number of fatalities was 4.9 percent higher in 2015 compared to 2011.



OVERALL CRASH TRENDS, 2011 TO 2015

**TOTAL CRASH DENSITY
(2011 TO 2015)**

LEGEND

- High Crash Density
- Low Crash Density
- County Boundaries
- MORPC Transportation Planning Area
- Rivers/Water
- Railroads
- Streets

The information shown on this map is compiled from various

The information shown on this map is compiled from various sources made available to us which we believe to be reliable.

REGIONAL PERFORMANCE

The MAP-21 and the FAST Act transformed the Federal-aid highway program by establishing new performance management requirements to ensure that State Departments of Transportation (DOT) and Metropolitan Planning Organizations (MPO) choose the most efficient investments for Federal transportation funds. The Safety Performance Measure Final Rule supports a data-driven performance focus by establishing five performance measures that carry out the Highway Safety Improvement Program (HSIP). They include the five-year rolling averages of:

1. **Number of Fatalities**
2. **Rate of Fatalities per 100 MVMT**
3. **Number of Non-motorized Fatalities & Serious Injuries**
4. **Number of Serious Injuries**
5. **Rate of Serious Injuries per 100 MVMT**

In coordination with the State DOT, MPOs are required to establish targets for these five performance measures considering all public roads in the MPO's planning area. As such, these five performance measures, and respective targets, were included in the most recent update of MORPC's Metropolitan Transportation Plan (MTP) under the goal of increasing the health, safety and the welfare of Central Ohio residents through transportation investments.

KEY FACTS:

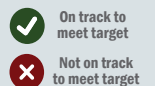
- The number non-motorized fatal & serious injuries resulting from a collision with a motor-vehicle are increasing within the region.
- While for the most part serious & fatal injuries continue to trend downward, the Central Ohio Region is not on track to meet any of the transportation safety performance targets established in the 2016-2040 Metropolitan Transportation Plan.
- If current trends continue, between 2016-2020 there will be on average 96 fatalities and 816 serious injuries per year.

TRANSPORTATION SAFETY PERFORMANCE MEASURES

PERFORMANCE MEASURE	2015 BENCHMARK	2020		2040		2016 GRADE
		TARGET	TRACK	TARGET	TRACK	
Number of fatalities	96	-10%	0.09%	-39%	-14.6%	✗
Number of serious injuries	890	-10%	-8.3%	-39%	-35.6%	✗
Number of non-motorized fatal & serious injuries	138	-10%	12.5%	-39%	84.3%	✗
Rate of fatalities per 100 million VMT	0.69	0.63	0.69	0.42	0.60	✗
Rate of serious injuries per 100 million VMT	6.40	5.83	5.86	3.91	4.17	✗

Notes

- The benchmark and targets represent five year rolling averages
- Million Vehicle Miles Traveled (MVMT)
- "TARGET" = Performance target included in the 2016-2040 MTP
- "TRACK" = Progress should current trends continue



YEAR-BY-YEAR COMPARISON OF SAFETY PERFORMANCE

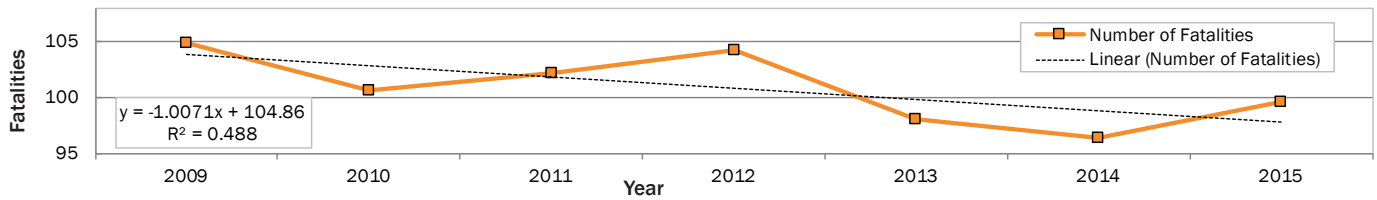
YEAR	NUMBER OF FATALITIES	NUMBER OF SERIOUS INJURIES	NUMBER OF NON-MOTORIZED FATAL & SER INJ	RATE OF FATALITIES/ 100 MVMT	RATE OF SERIOUS INJ/ 100 MVMT
2009	105	973	121	0.75	6.95
2010	101	969	124	0.72	6.95
2011	102	948	125	0.74	6.84
2012	104	932	129	0.75	6.75
2013	98	912	130	0.71	6.58
2014	96	890	138	0.69	6.40
2015	100	876	140	0.71	6.28
TREND	↓ (Decreasing)	↓ (Decreasing)	↑ (Increasing)	↓ (Decreasing)	↓ (Decreasing)

Notes

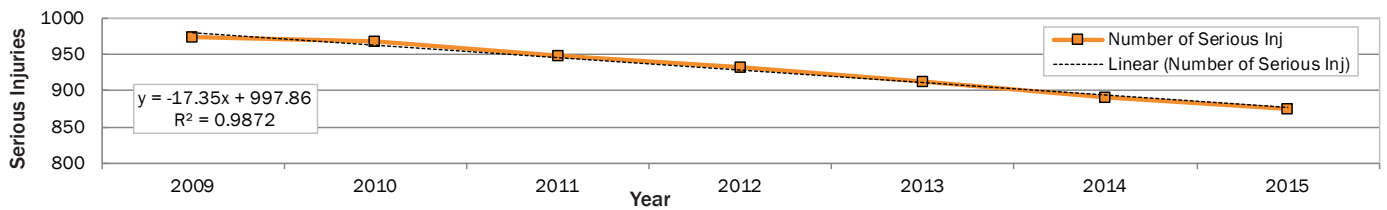
- The values shown represent five year rolling averages (ex. for 2004-2008) $(106+113+95+93+121)/5=106$
- Shaded orange cells indicate the highest value for each respective column

REGIONAL PERFORMANCE

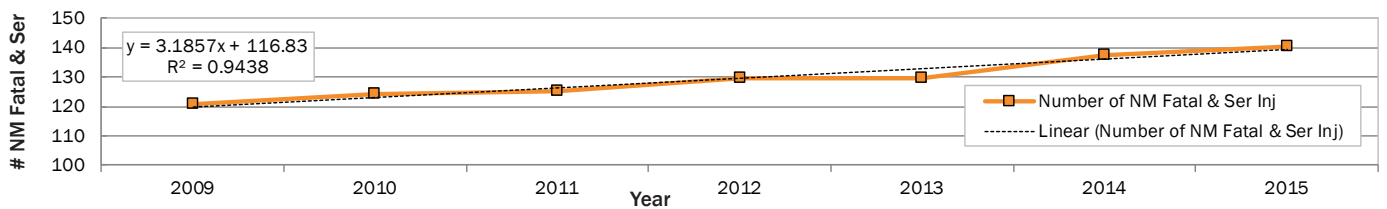
The figures below show a year-by-year comparison of the five transportation safety performance measures discussed earlier, along with a linear trend line:



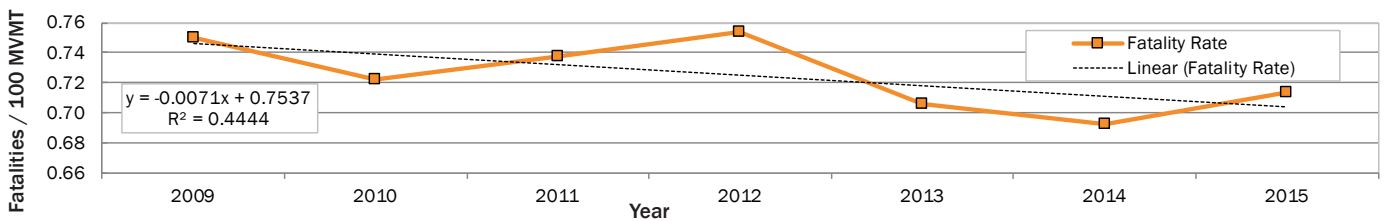
NUMBER OF FATALITIES



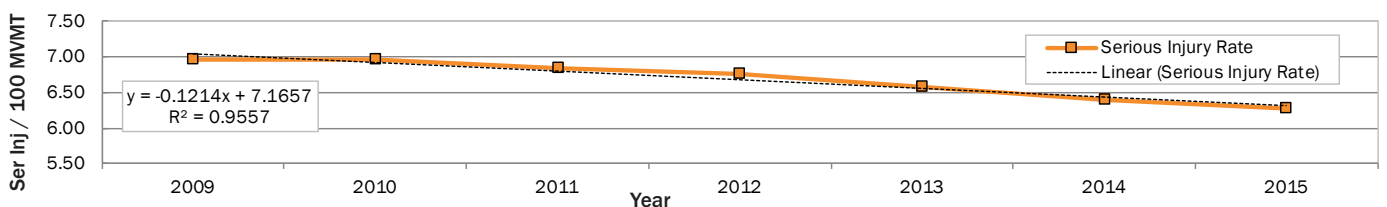
NUMBER OF SERIOUS INJURIES



NUMBER OF NON-MOTORIZED FATAL & SERIOUS INJURIES



RATE OF FATALITIES PER 100 MVMT



RATE OF SERIOUS INJURIES PER 100 MVMT



SERIOUS CRASH TYPES



SECTION 2

CRASH TYPES

While every crash is unique, they are often categorized according to the circumstances of the crash. Categorizing crashes in this way is an important step, as each crash type indicates a particular problem that may be addressed through a targeted engineering, enforcement, or behavioral countermeasure.

KEY FACTS:

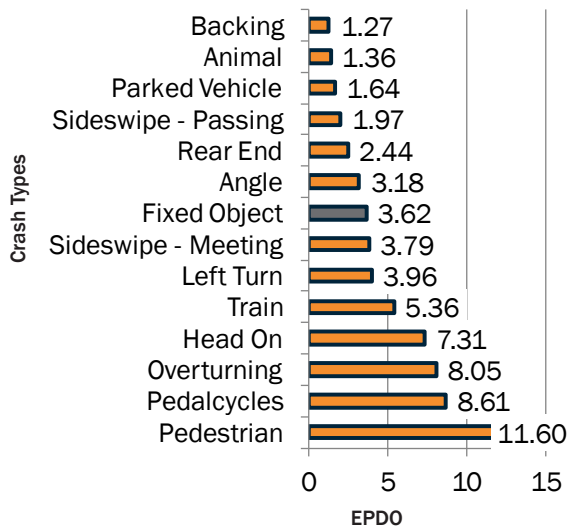
- From 2011 to 2015, there were 60,599 rear-end crashes in Central Ohio, making this the most common crash type. Fortunately, only one percent of rear-end crashes resulted in a fatality or serious injury.
- Although only half as many angle crashes as rear-end crashes occurred, they resulted in many more fatal and serious injury crashes.
- Fixed-object crashes represented the fourth most frequent crash type, but accounted for the largest share of fatal and serious injury crashes (21 percent).
- Over 19 percent of reported pedestrian crashes and 11 percent of reported bicycle crashes resulted in a fatality or serious injury.

CRASH TYPE BY FREQUENCY AND SEVERITY

CRASH TYPE	TOTAL CRASHES	CRASH SEVERITY					FSI RATE
		Fatal	Serious Injury	Minor Injury	No Injury	Possible Injury	
Rear End	60,599	45	574	5,846	44,729	9,404	1.0%
Angle	29,533	42	673	4,235	20,312	4,271	2.4%
Sideswipe - Passing	23,820	8	227	1,495	20,265	1,825	1.0%
Fixed Object	21,049	123	732	3,049	15,131	2,014	4.1%
Parked Vehicle	15,375	12	109	620	14,053	581	0.8%
Left Turn	10,052	27	334	2,001	6,105	1,585	3.6%
Backing	6,225	2	14	86	5,948	175	0.3%
Animal	4,545	0	12	126	4,265	142	0.3%
Sideswipe - Meeting	3,812	25	132	552	2,569	534	4.1%
Other	2,904	4	78	323	2,259	240	2.8%
Pedestrian	2,610	90	421	1,234	244	621	19.6%
Head On	1,387	37	129	326	641	254	12.0%
Other Object	1,362	1	14	67	1,191	89	1.1%
Pedalcycles	1,335	14	137	667	244	272	11.3%
Overtuning	806	17	87	262	316	124	12.9%
Unknown	322	7	11	41	235	28	5.6%
Train	13	0	1	3	8	1	7.7%
Other Non-Vehicle	5	0	0	1	2	2	0.0%
Falling From Or In Vehicle	1	1	0	0	0	0	100%

Notes

- Shaded yellow cells indicate the crash type with the highest value for each respective column.
- FSI Rate refers to the percentage of crashes resulting in a fatality or serious injury

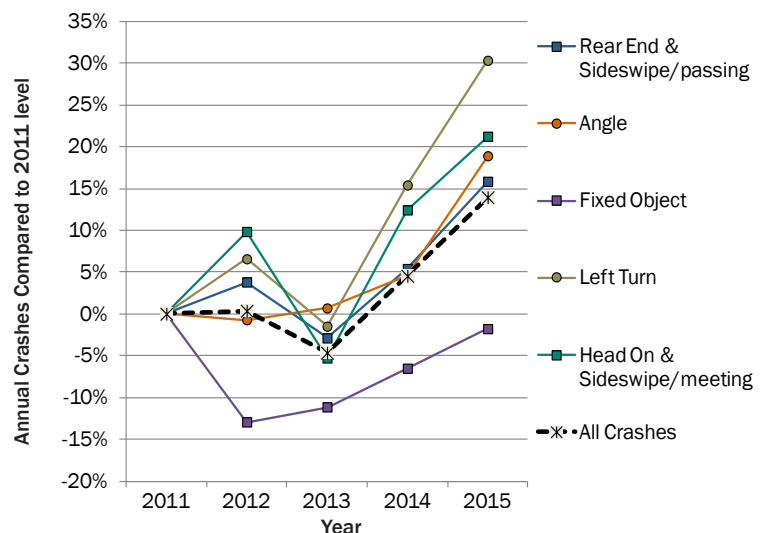


EPDO FOR SELECT CRASH TYPES

Notes

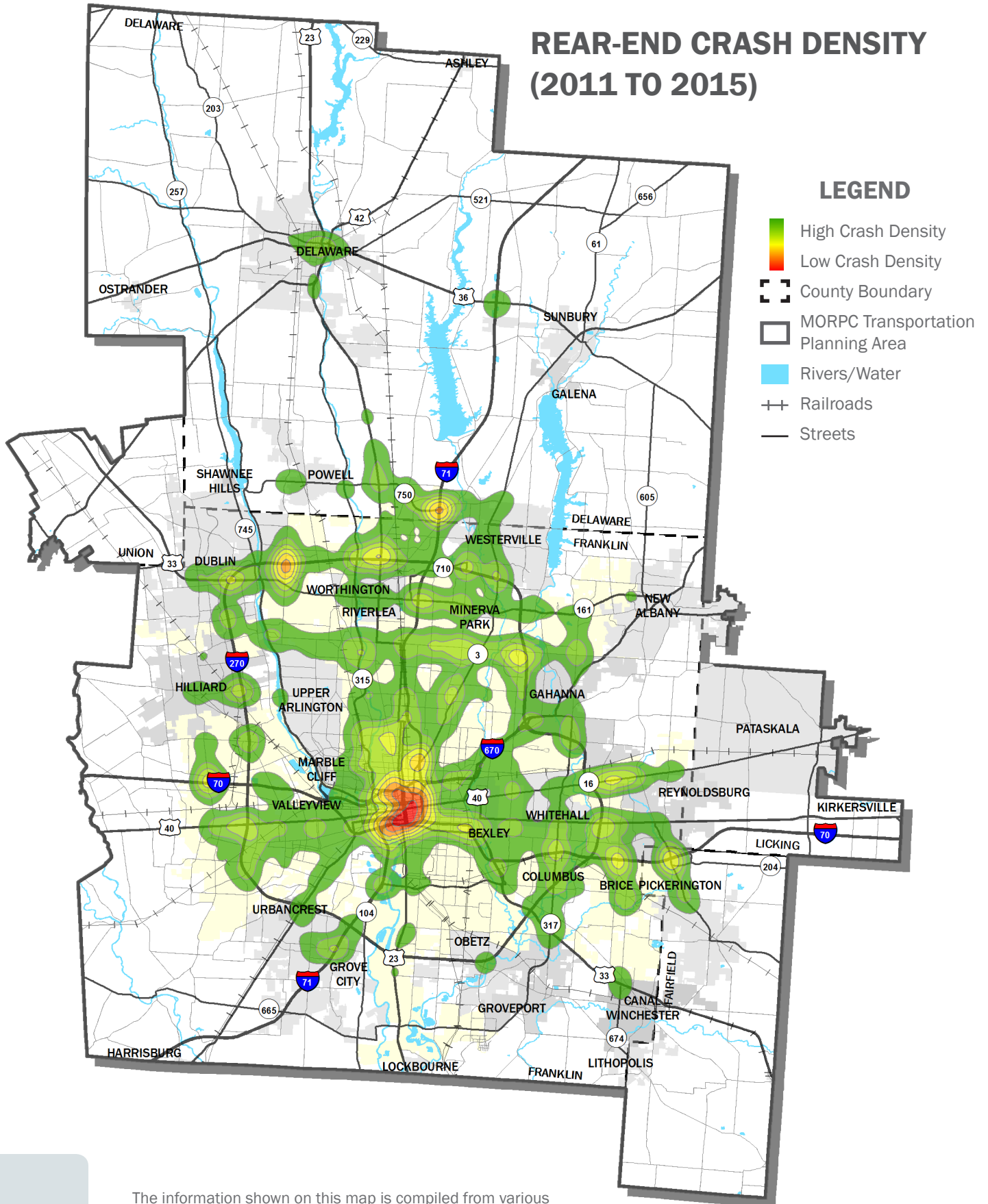
- The Equivalent Property Damage Only (EPDO) index is calculated using the following formula:

$$\left[\frac{(37.56 \times \text{\#FatalCrashes} + \text{\#SeriousInjuryCrashes}) + (6.55 \times \text{\#MinorInjuryCrashes}) + (4.44 \times \text{\#PossibleInjuryCrashes}) + \text{\#NoInjuryCrashes}}{\text{\#TotalCrashes}} \right]$$



SELECT CRASH TYPE TRENDS, 2011 - 2015

REAR-END CRASH DENSITY (2011 TO 2015)

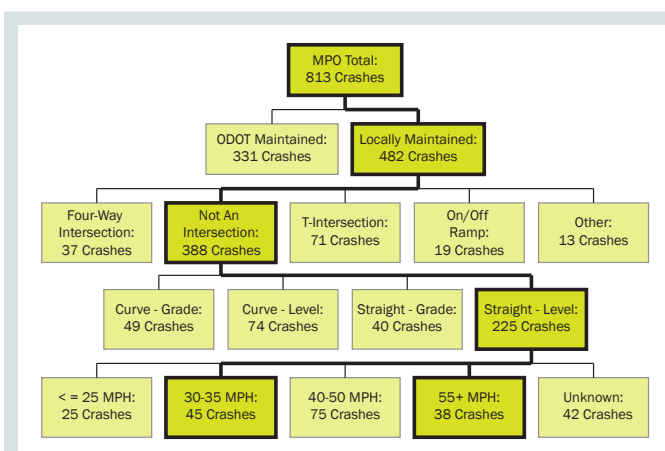
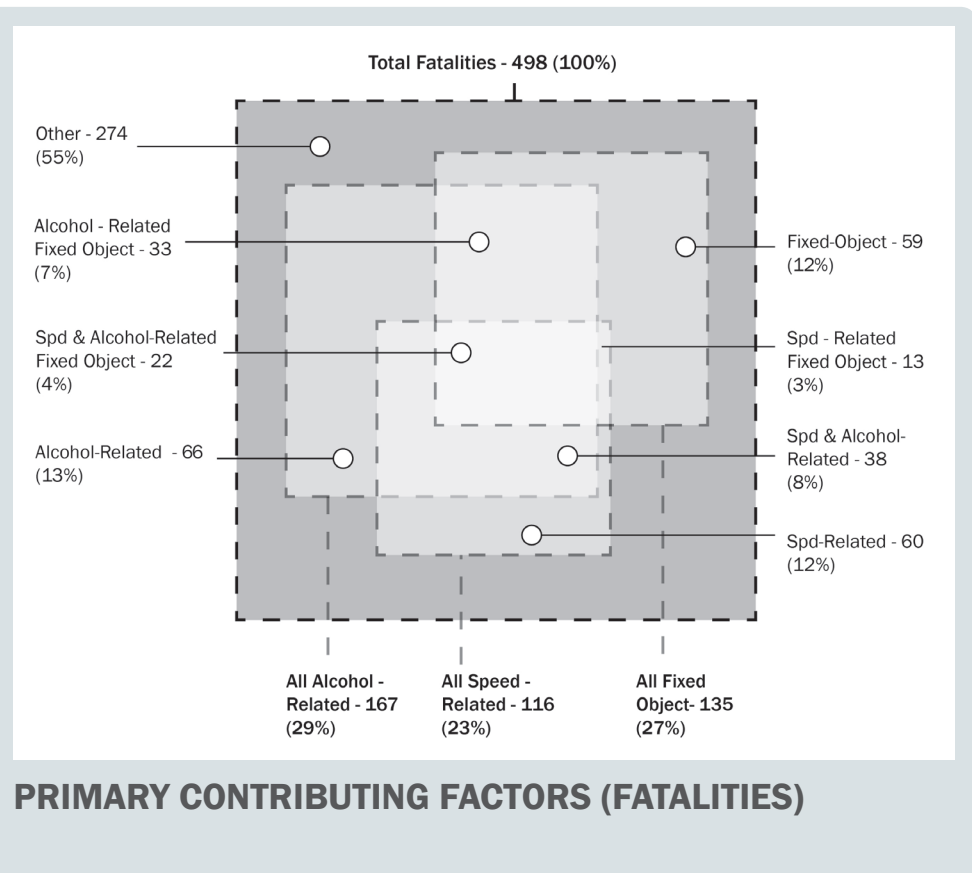


FIXED OBJECT CRASHES

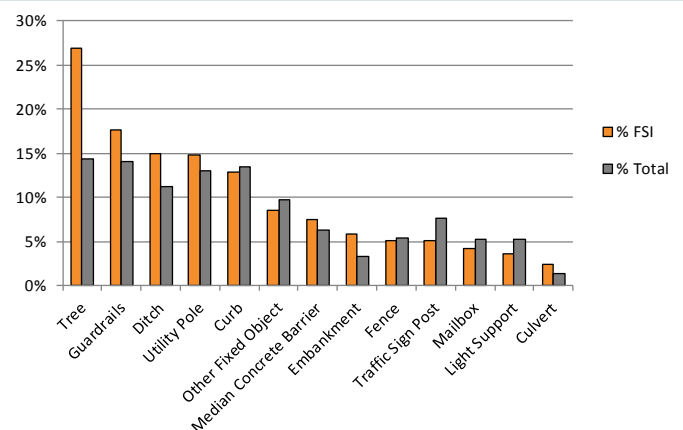
Fixed object crashes regionally account for the largest number of both fatalities and serious injury crashes. Fixed object crashes occur when a motorist leaves the roadway and strikes a stationary object such as a tree or utility pole. Between 2011 and 2015, of the 21,049 fixed object crashes that occurred, 123 were fatal crashes, while 732 were serious injury crashes.

KEY FACTS:

- Fixed object crashes accounted for only 11 percent of all crashes, but 27 percent of all fatal crashes
- 45 percent of all fatalities involved alcohol, speeding, striking a fixed object or a combination there of.
- Over 11 percent of all fatalities occurred when a driver struck a fixed object under the influence of alcohol.
- Guardrails, trees, utility poles, and curbs were the most commonly struck fixed objects.
- Tree related crashes represented 14 percent of all fixed object crashes, but over 27 percent of fatal and serious injury crashes.
- Fixed object crashes occurred most often on straight, level roadway segments.










**FIXED OBJECT CRASH TREE DIAGRAM
(FATAL AND SERIOUS INJ. CRASHES)**

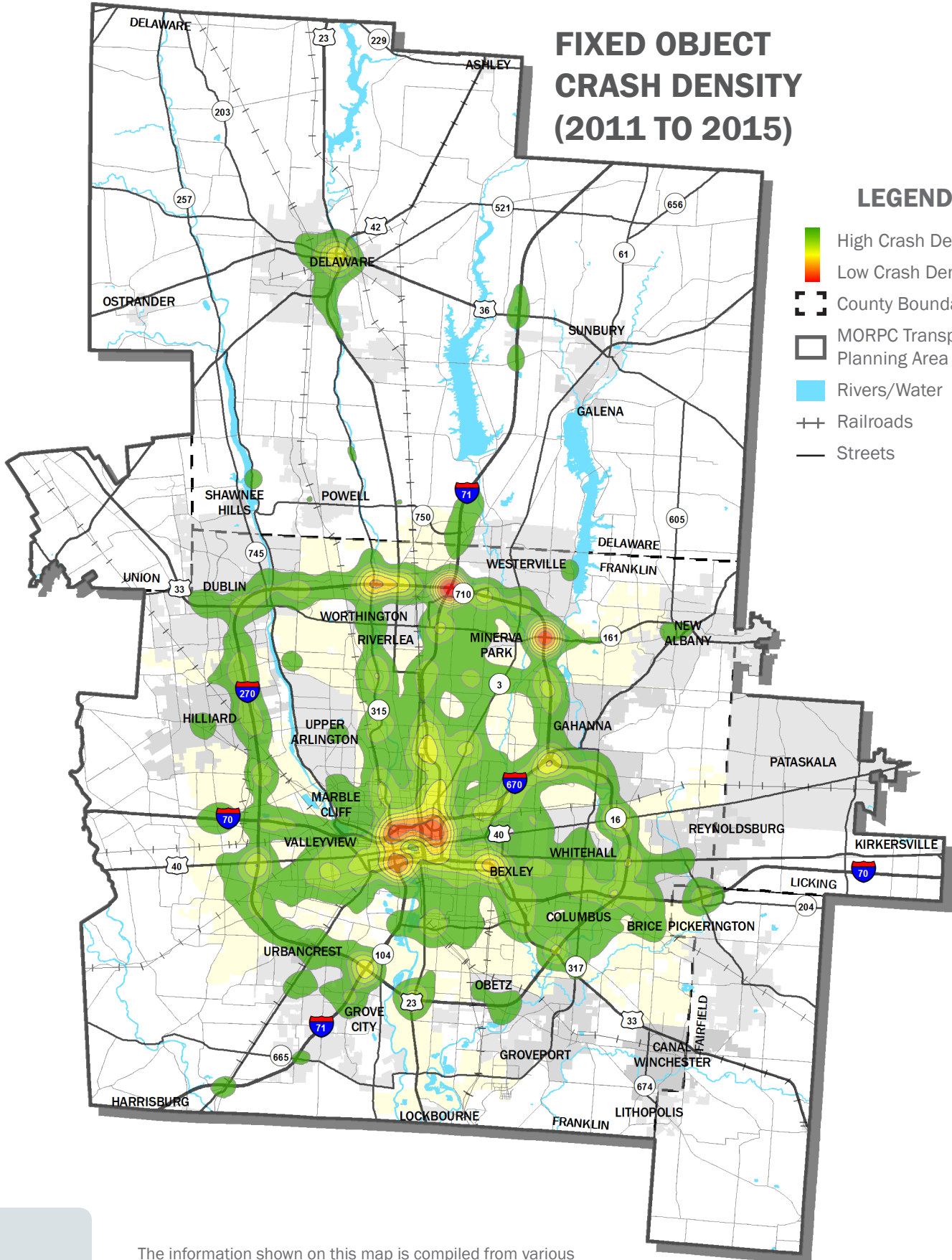


**PERCENT FATAL & SERIOUS INJURY (FSI)
BY OBJECT STRUCK**








FIXED OBJECT CRASH DENSITY (2011 TO 2015)

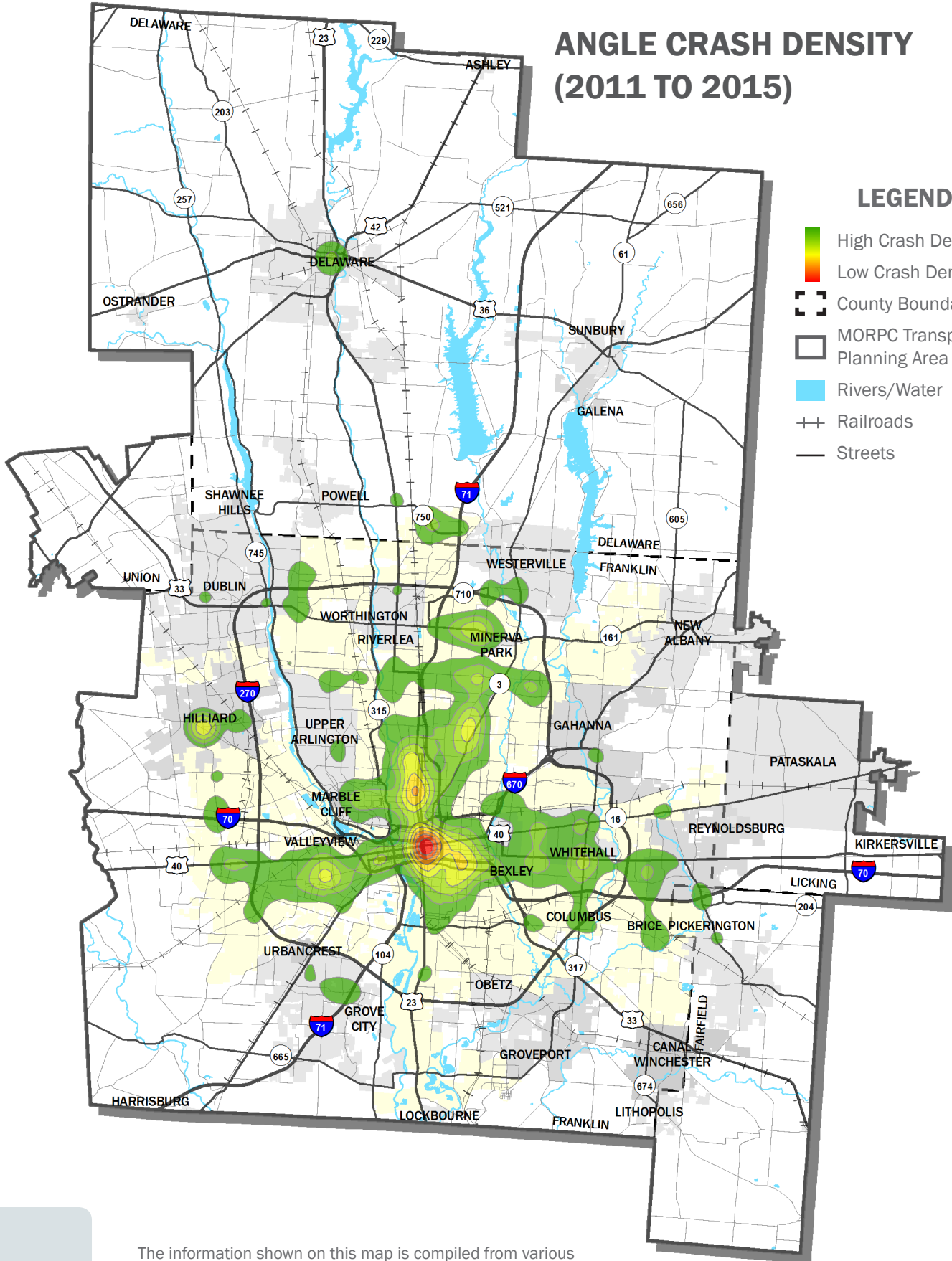
LEGEND

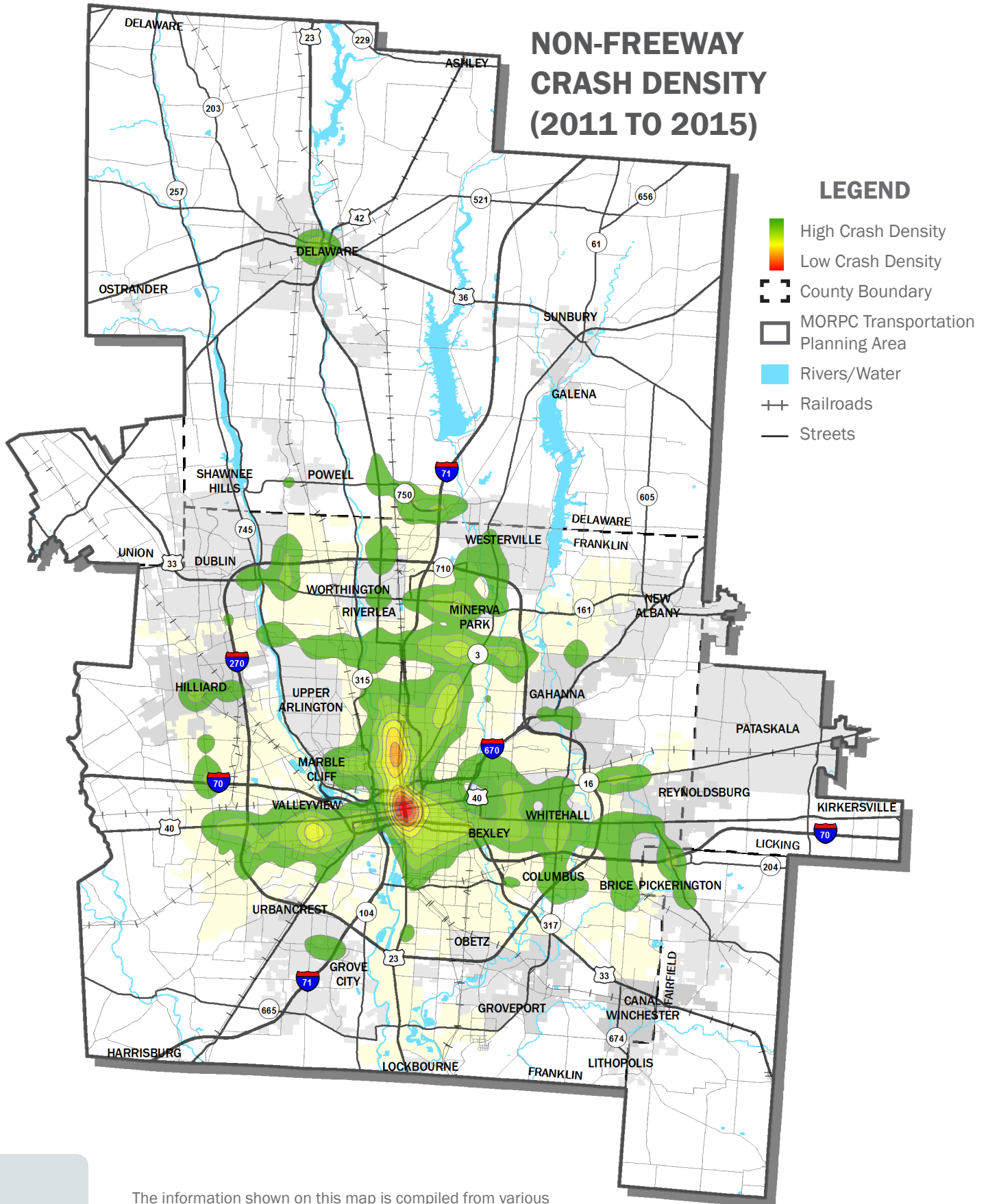
-  High Crash Density
-  Low Crash Density
-  County Boundary
-  MORPC Transportation Planning Area
-  Rivers/Water
-  Railroads
-  Streets



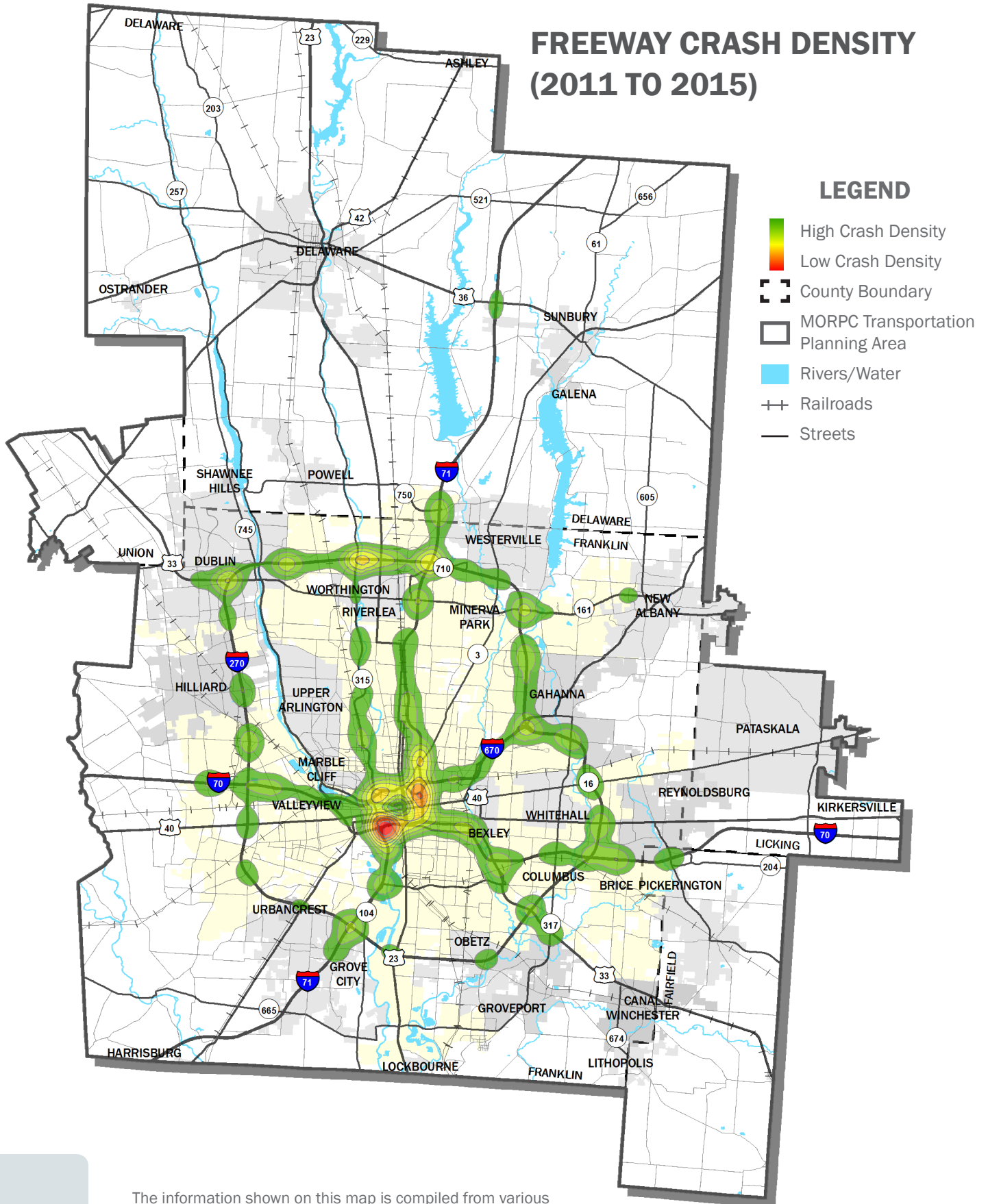
LEGEND

-  High Crash Density
-  Low Crash Density
-  County Boundary
-  MORPC Transportation Planning Area
-  Rivers/Water
-  Railroads
-  Streets





FREEWAY CRASH DENSITY (2011 TO 2015)





HIGH RISK DRIVERS AND BEHAVIORS



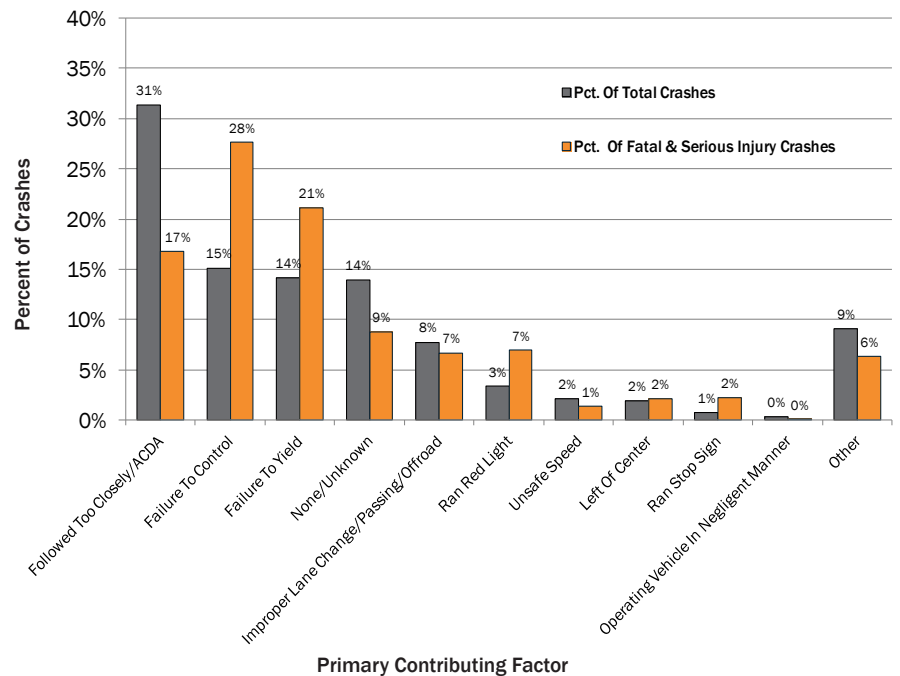
SECTION 3

CONTRIBUTING FACTORS & ROADWAY CONDITIONS

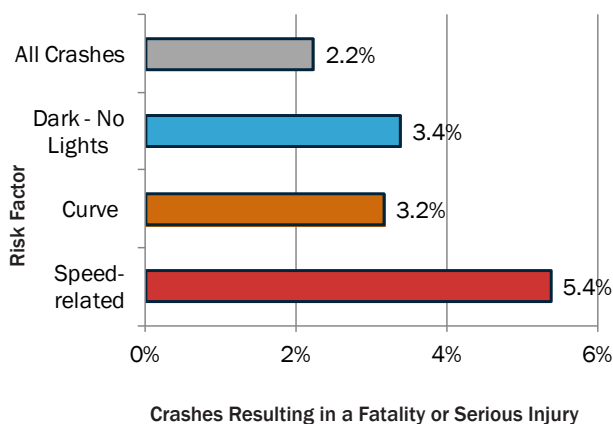
The factors leading up to a crash provide engineers and law enforcement officials with valuable information needed to reduce the severity and frequency of future crashes. In this regard, behavioral aspects, along with infrastructure and environmental conditions, must be considered. The statistics shown here refer to the contributing factor for the at-fault vehicle (the *Unit in Error* as noted on the crash report).

KEY FACTS:

- *Following too closely* was the most common contributing factor, accounting for around 31 percent of all crashes.
- *Failure to control* accounted for only 15 percent of all crashes, but 28 percent of fatal & serious injury crashes.
- Around 3.4 percent of crashes occurring under dark, unlit conditions resulted in a fatality or serious injury, compared to 2.0 percent during daylight conditions.
- Speed-related crashes were more than twice as likely to result in a fatal or serious injury than other crashes.
- Over 3.5 percent of single-car crashes resulted in a fatality or serious injury compared to less than 2 percent of crashes involving two vehicles.



PRIMARY CONTRIBUTING FACTORS (EXCLUDING PED/BIKE)



RISK FACTORS FOR FATAL & SERIOUS INJURIES

EFFECT OF SPEEDING & NUMBER OF UNITS ON SEVERITY

Number of Units Involved in Crash		1	2	3 or more	Total
Not Speed-Related	Total Crashes	23,103	131,522	15,375	170,000
	FSI Crashes	715	2,155	529	3,399
	FSI Rate	3.1%	1.6%	3.4%	2.0%
Speed-Related	Total Crashes	4,828	7,563	1,333	13,724
	FSI Crashes	289	343	105	737
	FSI Rate	6.0%	4.5%	7.9%	5.4%
All Crashes	Total Crashes	27,931	139,085	16,708	183,724
	FSI Crashes	1,004	2,498	634	4,136
	FSI Rate	3.59%	1.8%	3.79%	2.3%

Notes

- These data include only those crashes where a determination was made as to whether the crash was speed-related.
- The shaded yellow cells indicate the highest value for each row.
- FSI Crashes = the number of fatal and serious injury crashes.
- FSI Rate = the percent of crashes that resulted in a fatal or serious injury.

ALCOHOL-RELATED FATALITIES & SERIOUS INJURIES

Alcohol is a suspected factor in many of the fatal and serious injury crashes in MORPC's Transportation Planning Area. Between 2011 and 2015, an average of 33 people died in alcohol-related crashes each year and close to 125 more sustained serious injuries. For the purposes here, a fatality or serious injury is classified as *alcohol-related* if the reporting officer suspected the driver, pedestrian, or bicyclist of the at-fault vehicle of being under the influence of alcohol.

KEY FACTS:

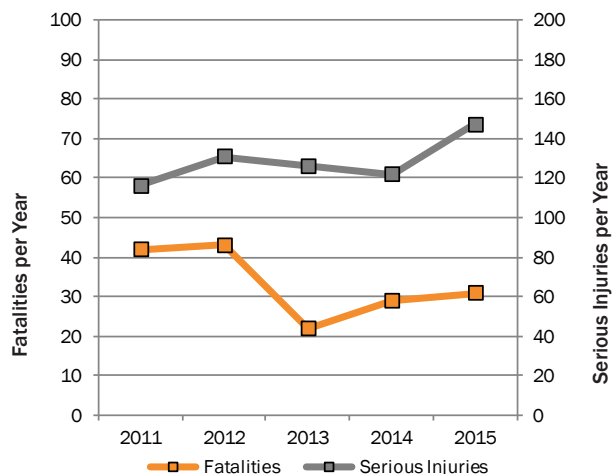
- From 2011 to 2015, alcohol was suspected in 34 percent of all fatalities and 15 percent of serious injuries.
- Alcohol was suspected in over 50 percent of all fatalities resulting from fixed-object crashes.
- Alcohol-related serious injuries increased between 2011 and 2015.
- Alcohol-related fatalities also did not decrease between 2011 to 2015.

ALCOHOL-RELATED FATALITIES & SERIOUS INJURIES BY CRASH TYPE

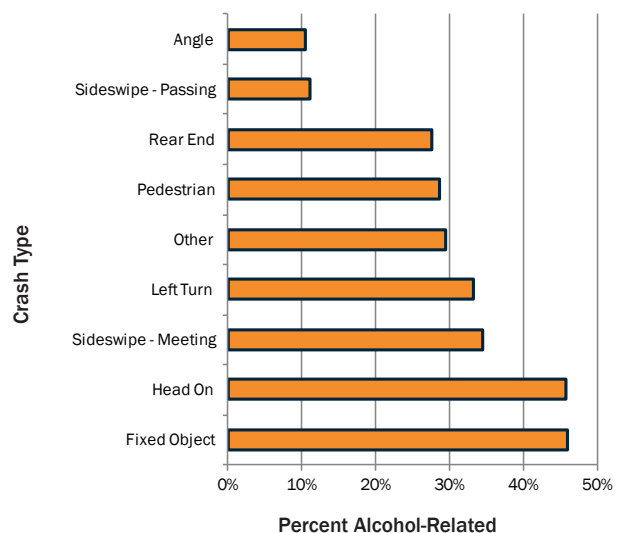
CRASH TYPE	FATALITIES				SERIOUS INJURIES			
	Total Fatalities	Alcohol-Related Fatalities	% Alcohol-Related	% All Fatalities (Alcohol-Related)	Total Serious Injuries	Alcohol-Related Serious Injuries	% Alcohol-Related	% All Serious Injuries (Alcohol-Related)
Angle	48	5	10%	1%	848	59	7%	1%
Fixed Object	135	62	46%	12%	821	224	27%	5%
Head On	48	22	46%	4%	208	50	24%	1%
Left Turn	30	10	33%	2%	408	1	0%	0%
Pedestrian	91	26	29%	5%	457	75	16%	2%
Rear End	47	13	28%	3%	691	88	13%	2%
Sideswipe - Meeting	29	10	34%	2%	173	38	22%	1%
Sideswipe - Passing	9	1	11%	0%	273	13	5%	0%
Other	61	18	30%	4%	499	94	19%	2%
Total	498	167	34%	34%	4,378	642	15%	15%

Notes

- The column titled %All Fatalities/Serious Injuries (Alcohol-Related) refers to the percent of all fatalities or serious injuries that are attributable to alcohol-related crashes of the particular crash type. For example, alcohol-related fixed-object crashes account for 15% of all fatal crashes and 7% of all serious injury crashes.
- Shaded yellow cells indicate the crash type with the highest value for each respective column. In this case, fixed-object crashes are the most problematic for alcohol-related crashes in all categories.



ALCOHOL-RELATED FATALITIES & SERIOUS INJURIES BY YEAR



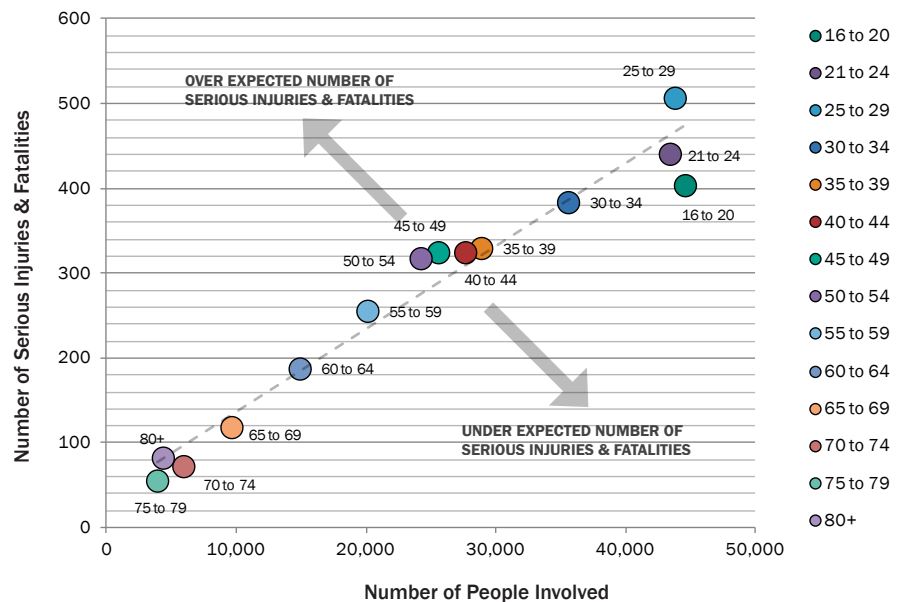
PERCENT OF FATALITIES RESULTING FROM ALCOHOL-RELATED CRASHES, BY CRASH TYPE

OCCUPANT AND VEHICLE CHARACTERISTICS

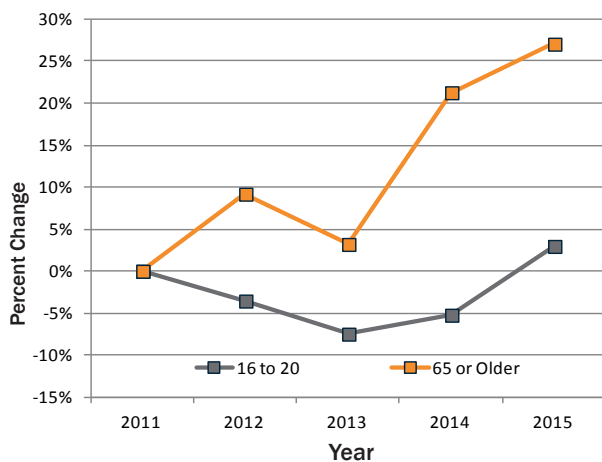
Of the factors that influence whether someone is involved in a crash and the severity of resulting injuries, driver experience and skill are important factors, as well as the safety features of the vehicles involved. Additionally, a person's underlying health may affect the extent of their injuries.

KEY FACTS:

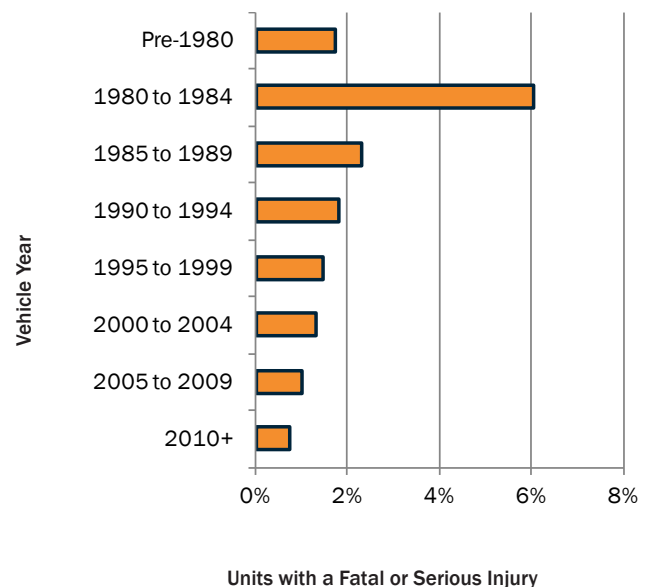
- While individuals between the ages of 16 and 20 accounted for the highest number of serious and fatal injuries, individuals between the ages of 45 and 49 were the most likely to suffer serious or fatal injuries when involved in a crash.
- Crashes attributed to senior drivers has increased by around 25 percent since 2011.
- The number of crashes with a teenager listed as the at-fault driver was around 3 percent higher in 2015, compared to 2011.
- Drivers and occupants of vehicles built prior to 1995 were more than 2.8 times as likely to suffer a fatal or serious injury during a crash compared to vehicles built since 2010.



NUMBER PEOPLE INVOLVED IN CRASHES BY NUMBER OF SERIOUS INJURIES & FATALITIES



CRASH TREND BY AGE OF AT-FAULT DRIVER, SELECT AGE GROUPS



FATAL & SERIOUS INJURY RATE BY VEHICLE YEAR



SPECIAL VEHICLES AND ROADWAY USERS



SECTION 4

UNIT STATISTICS

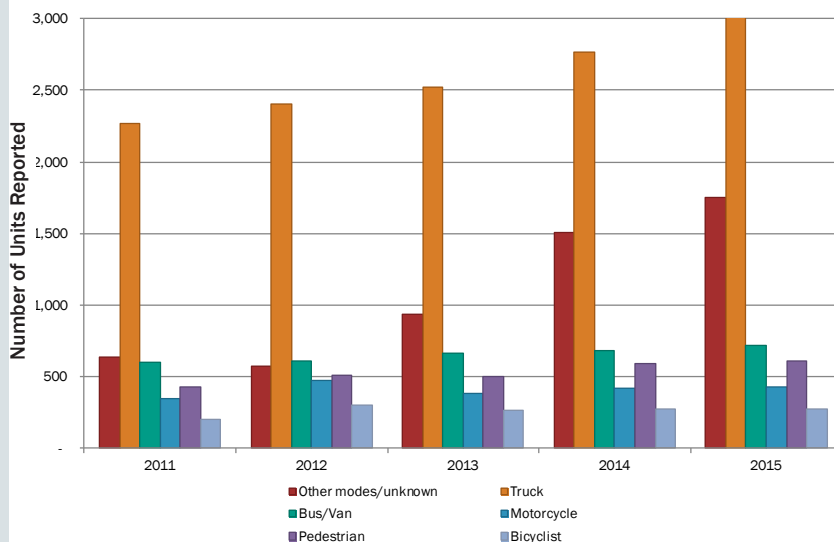
The majority of crashes in MORPC's Transportation Planning Area involved one or more motor vehicles. However, it is also important to understand the frequency and severity of the other types of *units* involved. In this context, the term *unit* refers to the vehicle involved in the crash. For bicycle and pedestrian crashes, the *unit* refers to the person involved.

KEY FACTS:

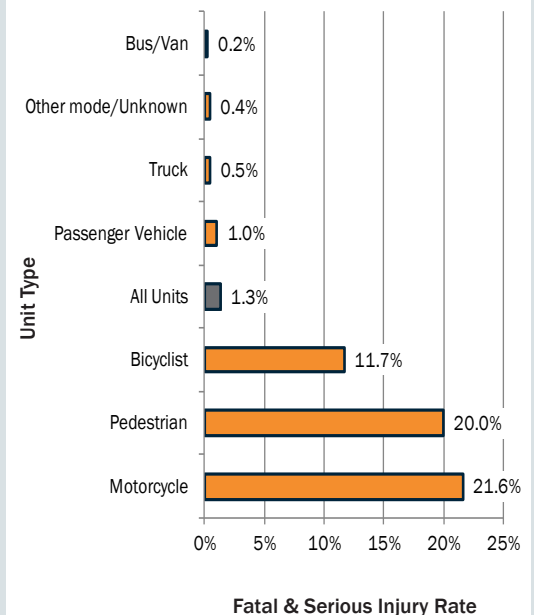
- From 2011 through 2015, there were 344,777 units involved in reported crashes. Of these, over 300,000 (91 percent) were passenger vehicles. Trucks were the next most common type, accounting for over 12,000 units (3.8 percent).
- Occupants of buses and vans were the least likely to suffer a fatal or serious injury during a crash, while motorcyclists, pedestrians, and bicyclists were the most vulnerable.
- Motorcyclists and their passengers were 22 times more likely to be killed or seriously injured in a crash during a collision than the occupants of a passenger vehicle. The comparable figures for pedestrians and bicyclists are 19.5 and 11, respectively.
- The number of units reported has similarly increased since 2011 for each mode.

UNIT STATISTICS, 2011 TO 2015

UNIT TYPE	MOST SEVERE INJURY				TOTAL UNITS	UNITS IN ERROR
	Fatal Injury	Serious Injury	Minor Injury	No Injury		
Bicyclist	16	139	899	224	1,328	47%
Bus/Van	0	8	328	2,940	3,276	36%
Motorcycle	68	376	1,147	466	2,057	49%
Other modes	1	13	157	725	896	41%
Passenger Vehicle	280	3,011	48,943	264,814	317,048	47%
Pedestrian	88	440	1,892	223	2,643	36%
Truck	11	48	591	12,369	13,019	54%
Unknown	0	10	102	4,398	4,510	88%



NUMBER OF UNITS REPORTED BY YEAR



FATAL & SERIOUS INJURY RATE BY UNIT TYPE

MOTORCYCLE CRASHES

Motorcycle crashes tend to be particularly severe due to the speed and vulnerability of the motorcyclist. Educational programs that seek to improve the motorcyclist's skill can reduce the number and severity of crashes; however, behavioral issues, such as speeding, also need to be addressed.

KEY FACTS:

- Motorcyclists had the highest rate of fatal and serious injuries reported among all types of roadway users: 22 percent of motorcyclists suffered a serious injury or fatality when involved in a collision.
- Over 20 percent of fatal and serious injury motorcycle crashes were reported as being *speed-related*.
- Motorcyclist errors accounted for 55 percent of all motorcycle crashes. They accounted for 73 percent of fatal crashes.

MOTORCYCLE CRASH SEVERITY BY CONTRIBUTING FACTOR

CONTRIBUTING FACTOR		CRASH SEVERITY					TOTAL CRASHES
		Fatal	Serious Injury	Minor Injury	No Injury	Possible Injury	
MOTORCYCLIST ERROR	Failure To Control	33%	33%	38%	11%	12%	27%
	Followed Too Closely/ACDA	5%	5%	11%	12%	4%	9%
	Improper Lane Change/Passing/Offroad	11%	5%	3%	3%	1%	3%
	Operating Vehicle In Negligent Manner	2%	2%	2%	0%	1%	1%
	Unsafe Speed or Exceeded Speed Limit	11%	3%	2%	0%	1%	2%
	Other Factors	13%	10%	13%	8%	7%	11%
	Total	73%	57%	69%	35%	26%	55%
OTHER UNIT IN ERROR	Failure To Yield	14%	29%	9%	37%	10%	22%
	Followed Too Closely/ACDA	3%	2%	12%	9%	7%	9%
	Improper Lane Change/Passing/Offroad	2%	4%	3%	8%	3%	5%
	Improper Turn	0%	3%	1%	5%	2%	3%
	Ran Red Light	0%	2%	0%	2%	0%	1%
	Other Factors	8%	4%	5%	5%	3%	5%
	Total	27%	43%	31%	65%	25%	45%
TOTAL CRASHES		4%	20%	35%	28%	14%	100%

Notes

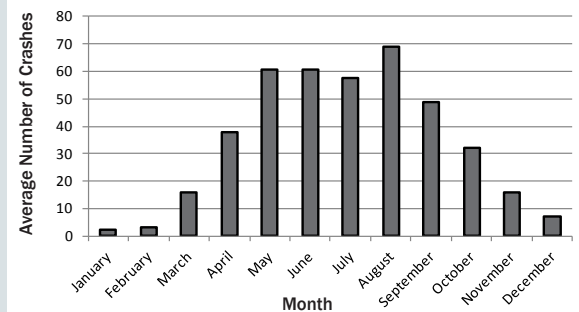
- Percentages shown are based only on crashes with an *at-fault* vehicle reported.
- Percentages shown refer to the portion of total crashes attributable to the contributing factor, for each severity level. For instance, *Failure to Control* accounts for 29% of all fatal motorcycle crashes.
- Shaded yellow cells indicate the contributing factor with the highest value for each respective column, excluding grouped categories (*Other Factors*).

MOTORCYCLE CRASHES BY SEVERITY, 2011 TO 2015

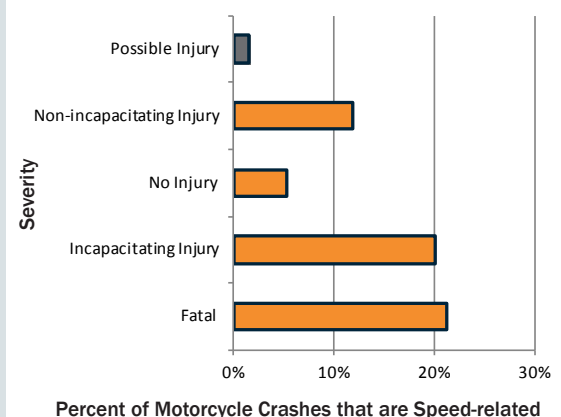
YEAR	CRASH SEVERITY		TOTAL CRASHES	FSI RATE
	Fatal	Serious Injury		
2011	11	78	350	25%
2011	16	92	471	23%
2012	13	66	384	21%
2013	13	65	421	19%
2015	15	75	431	21%
Total	68	376	2,057	22%

Notes

- FSI Rate = the percent of crashes that resulted in a fatal or serious injury.

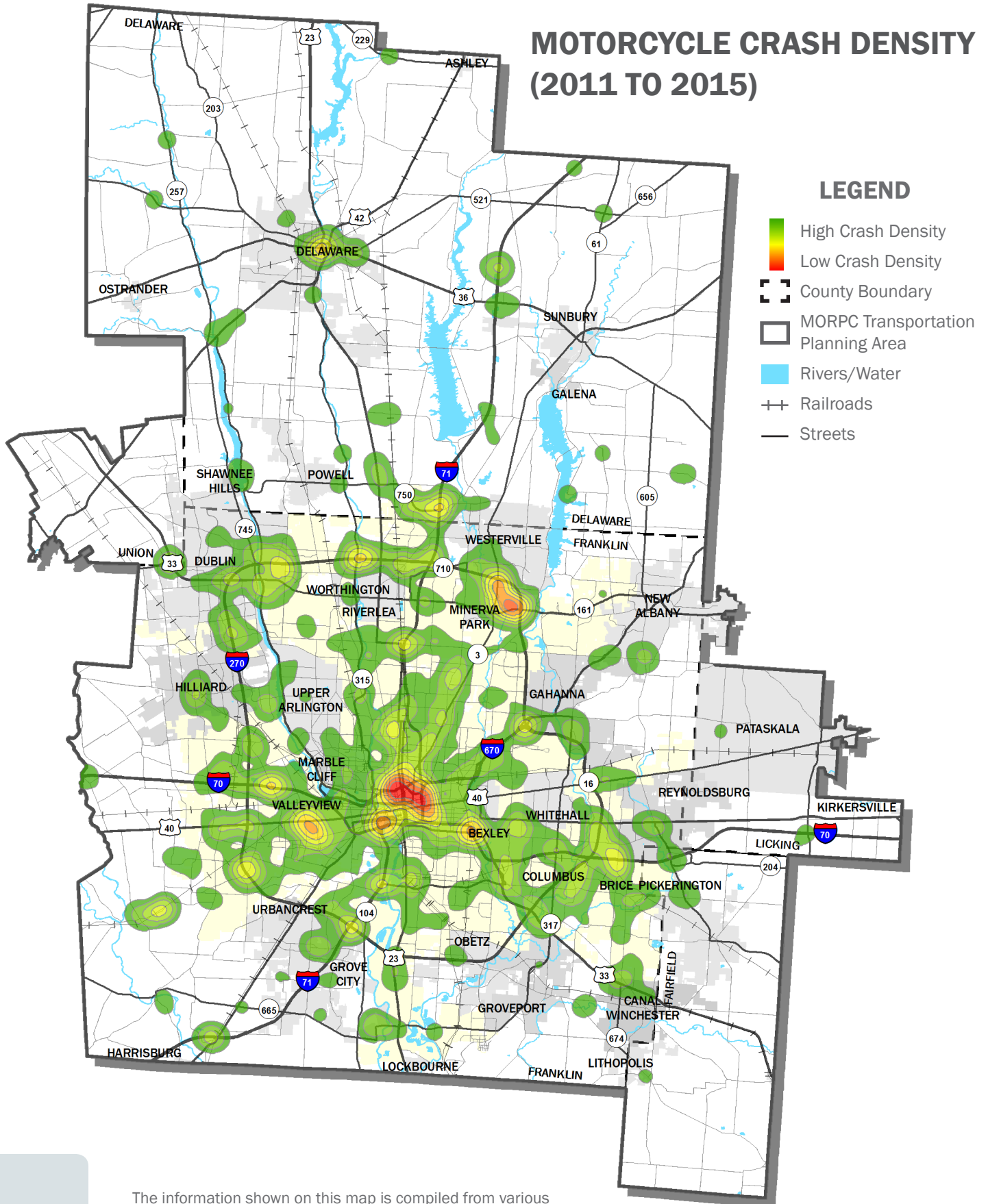


AVERAGE MOTORCYCLE CRASHES BY MONTH



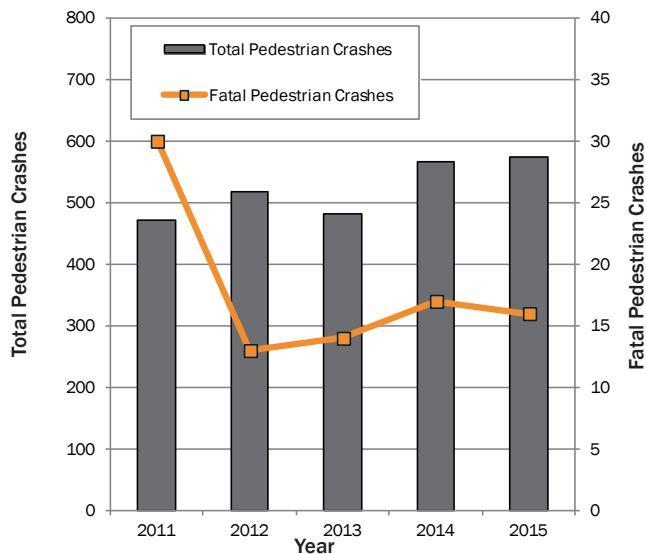
MOTORCYCLE CRASH SPEED & SEVERITY

MOTORCYCLE CRASH DENSITY (2011 TO 2015)

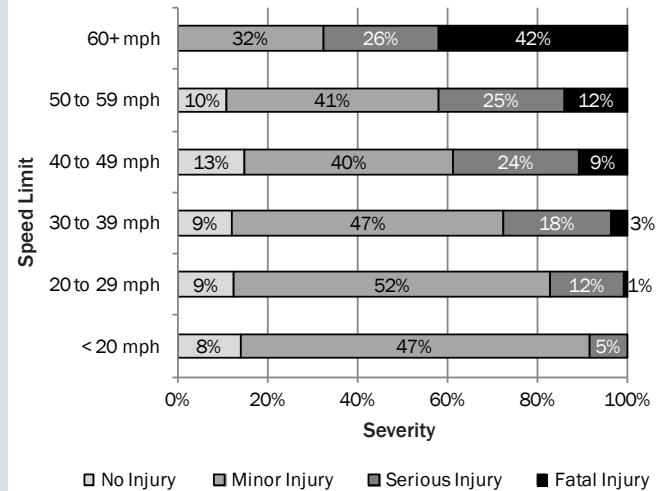


PEDESTRIAN CRASHES

Although the number of pedestrian crashes in central Ohio is relatively low compared to other crash types, they tend to be much more severe, and therefore are a major area of concern. From 2011 to 2015, pedestrian crashes accounted for almost 20 percent of all fatal crashes.



PEDESTRIAN CRASH TREND, 2011 TO 2015



PEDESTRIAN CRASH SEVERITY BY SPEED LIMIT

KEY FACTS:

- Almost 20 percent of pedestrian crashes resulted in the pedestrian suffering serious or fatal injuries.
- Pedestrian fatalities increased 22 percent from 2011 to 2015.
- Pedestrian crashes on roads with a posted speed limit less than 30 miles per hour (mph) rarely lead to a fatality. The fatality rate increased sharply beyond 30 mph, rising to over 42 percent where the speed limit is 60 mph or greater.
- Over the last five years, pedestrians were reported to be at fault in 46 percent of all pedestrian crashes, but 74 percent of fatal crashes.

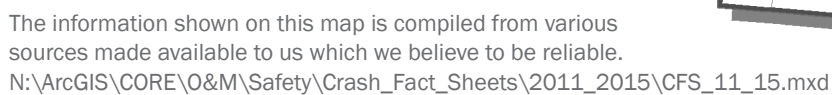
PEDESTRIAN CRASH SEVERITY BY CONTRIBUTING FACTOR

CONTRIBUTING FACTOR		CRASH SEVERITY					TOTAL CRASHES
		Fatal	Serious Injury	Minor Injury	No Injury	Possible Injury	
PEDESTRIAN ERROR	Improper Crossing	32%	29%	16%	16%	12%	18%
	Darting	7%	8%	4%	9%	7%	8%
	Lying And/Or Illegally In Roadway	17%	5%	7%	3%	2%	4%
	Other Pedestrian Factors	18%	18%	13%	16%	14%	16%
	Total (Pedestrian in Error)	74%	60%	40%	44%	35%	46%
OTHER UNIT IN ERROR	Failure To Yield	8%	17%	28%	27%	32%	26%
	Failure To Control	7%	4%	6%	6%	4%	5%
	Operating Vehicle In Negligent Manner	1%	1%	3%	1%	3%	2%
	Other Driver-related factors	10%	18%	23%	22%	26%	22%
	Total (Driver in Error)	26%	40%	60%	56%	65%	54%
TOTAL CRASHES		3%	17%	8%	48%	23%	100%

Notes

- Percentages shown are based only on crashes with an *at-fault* vehicle reported.
- Percentages shown refer to the portion of total crashes attributable to the contributing factor, for each severity level. For instance, *darting* accounts for 10% of all fatal pedestrian crashes.
- Shaded yellow cells indicate the contributing factor with the highest value for each respective column, excluding grouped categories (other driver and pedestrian-related factors).

LEGEND

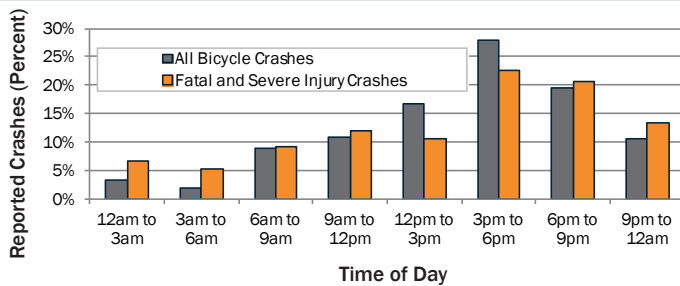


BICYCLE CRASHES

Similar to pedestrians and motorcyclists, bicyclists are especially vulnerable in collisions with motor vehicles. Over 10 percent of all reported crashes involving a bicyclist resulted in either a fatal or serious injury in 2015, a slight decrease from 2014. The total number of crashes has remained relatively constant over the last 5 years, with a 10 percent decrease in 2015 compared to 2011.

KEY FACTS:

- Around 11 percent of bicycle crashes resulted in a fatality or serious injury, compared to 2.2 percent of all crashes.
- Bicyclists 10 to 20 years old comprised the most common age range, accounting for over 30 percent of all bicyclists involved in a crash.
- Crashes that occurred between 3pm and 9pm accounted for nearly 45 percent of all fatal and serious injury crashes.



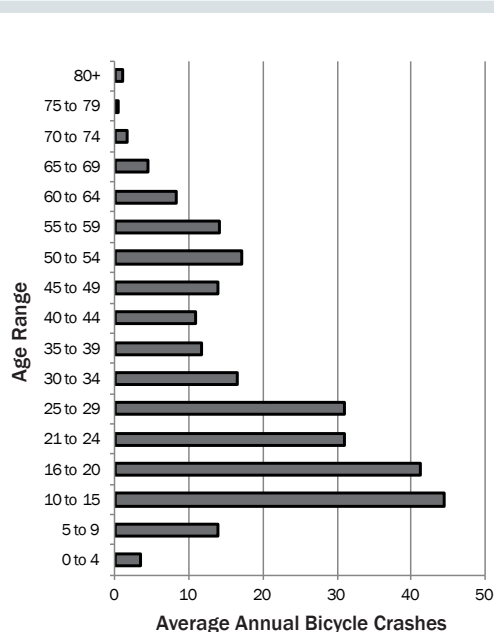
REPORTED BICYCLE CRASHES BY TIME OF DAY & SEVERITY

BICYCLE CRASHES BY SEVERITY, 2011 TO 2015

YEAR	CRASH SEVERITY		TOTAL CRASHES	FSI RATE
	Fatal	Serious Injury		
2011	1	24	214	12%
2012	3	35	298	13%
2013	3	29	267	12%
2014	3	26	275	11%
2015	4	23	281	10%
Total	14	137	1,335	11%

Notes

- FSI Rate = the percent of crashes that resulted in a fatal or serious injury.



AVERAGE ANNUAL BICYCLE CRASHES BY BICYCLISTS' AGE RANGE, 2011 TO 2015

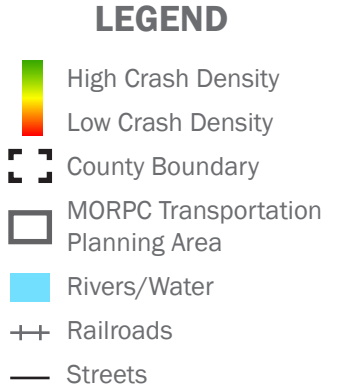
BICYCLE CRASH SEVERITY BY CONTRIBUTING FACTOR

CONTRIBUTING FACTOR		CRASH SEVERITY					TOTAL CRASHES
		Fatal Injury	Serious Injury	Minor Injury	No Injury	Possible Injury	
BICYCLIST ERROR	Improper Crossing	25%	11%	10%	11%	12%	11%
	Failure To Yield Right Of Way	0%	7%	8%	11%	11%	2%
	Failure To Obey Signs/Signals/Officer	0%	12%	6%	4%	8%	7%
	Other Factors	38%	27%	28%	30%	28%	36%
	Total (Bicyclist in Error)	63%	57%	53%	57%	58%	55%
OTHER UNIT IN ERROR	Failure To Yield	0%	25%	27%	20%	31%	26%
	Followed Too Closely/ACDA	38%	6%	4%	7%	2%	5%
	Improper Lane Change/Passing/Offroad	0%	4%	3%	1%	1%	2%
	Other Factor (Driver Factors)	0%	9%	13%	15%	8%	12%
	Total (Other Unit in Error)	38%	43%	47%	43%	42%	45%
TOTAL CRASHES		0.8%	11.5%	51.1%	17.5%	19.2%	100%

Notes

- Percentages shown refer to the portion of total crashes attributable to the contributing factor for each severity level.
- Shaded cells indicate the contributing factor with the highest value for each respective column, excluding grouped categories (other driver and pedestrian-related factors).

BICYCLE CRASH DENSITY (2011 TO 2015)





Mid-Ohio Regional
Planning Commission

111 Liberty Street, Suite 100
Columbus, Ohio 43215

T 614.228.2663
1.800.750.0750

www.morpc.org