

2014

Tippecanoe County Vehicle Crash Report



Prepared by The Area Plan Commission of
Tippecanoe County
7/16/2015

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Glossary

Analysis Period- The calendar years for which data was queried, studied, and analyzed while this report was being produced. For this report, the analysis period is 2011 through and including 2013.

ARIES – Automated Reporting Information Exchange System developed and maintained by the Indiana State Police. ARIES provides officer's an electronic way to complete and submit the Indiana Officer's Standard Crash Report form. The system also allows authorized individuals access to the Indiana State Police crash records database. ARIES was formerly known as the Vehicle Crash Record System (VCRS).

Bicycle – Indiana Code IC 9-13-2-14, "Bicycle" means any foot-propelled vehicle, irrespective of the number of wheels in contact with the ground.

Curve Crash- A crash that occurs on a segment of road with a horizontal curve.

Fatal Injury Crash- A crash that results in death for one or more of the vehicle(s) occupants or non-motorists. Other occupants or non-motorists may be injured in addition to the fatality.

Motorcycle- Indiana Code IC 9-13-2-108, "Motorcycle" means a motor vehicle with motive power that has a seat or saddle for the use of the rider, is designed to travel on not more than three wheels in contact with the ground, and satisfies the operational and equipment specifications described in 49 CFR 571 and IC 9-19.

Pedestrian- Any person afoot. This includes persons walking bicycles, riding skateboards, rollerblading and using other forms of non-motorized/non-pedaled forms of transportation.

Personal Injury Crash- A crash where at least one of the vehicle occupants or non-motorists were injured, but not fatally. Non-Fatal Injuries are classified as Incapacitating, Non-Incapacitating, or Probable.

Property Damage Only Crash (PDO)- A crash in which a vehicle or property is damaged and the occupant or non-motorist is not injured. A crash is required by law to be reported if the amount of the damage is \$750 or more.

Roadway – That portion of a highway improved, designed, or ordinarily used for vehicular travel. The roadway does not include unpaved areas, paved sidewalks, or shared use paths.

Street, Road or Highway – The entire width between the right-of-way lines of every way or place open to the use of the public for purposes of vehicular traffic. This includes the sidewalk.

Vehicle – Is any vehicle, whether it be an automobile, truck, motorcycle, moped, scooter, or bicycle.

Contents

| | |
|--|-----|
| Glossary..... | 3 |
| Contents..... | 5 |
| List of Figures | 6 |
| List of Tables | 8 |
| Chapter 1: Introduction | 10 |
| Chapter 2: Age and Gender | 27 |
| Chapter 3: Time of Crashes..... | 36 |
| Chapter 4: Weather and Road Conditions..... | 42 |
| Chapter 5: Injuries and Fatalities | 48 |
| Chapter 6: Drug and Alcohol Involvement in Crashes | 67 |
| Chapter 7: Curve Crashes..... | 74 |
| Chapter 8: Motorcycle Crashes..... | 82 |
| Chapter 9: Bicycle Crashes..... | 88 |
| Chapter 10: Pedestrian Crashes..... | 94 |
| Chapter 11: Other Crash Types and Factors | 100 |
| Recommendations | 110 |

List of Figures

| | |
|--|----|
| Figure 1: Percentage of Crashes by Crash Severity..... | 11 |
| Figure 2: Tippecanoe County Crashes..... | 12 |
| Figure 3: Lafayette and West Lafayette Crashes | 13 |
| Figure 4: Percentage of Crashes by Primary Factor Category | 25 |
| Figure 5: Crashes by Gender and Type | 33 |
| Figure 6: Drivers in Crashes by Gender..... | 34 |
| Figure 7: Injured Passengers by Gender | 35 |
| Figure 8: Crashes by Month | 36 |
| Figure 9: 3 Most Common Crash Types by Month | 37 |
| Figure 10: Crashes by Day of the Week | 38 |
| Figure 11: 3 Most Common Crash Types by Day of the Week..... | 39 |
| Figure 12: Crashes by Time of Day..... | 40 |
| Figure 13: 3 Most Common Crash Types by Time of Day | 41 |
| Figure 14: Tippecanoe County Crashes in Clear Weather Conditions | 43 |
| Figure 15: Lafayette and West Lafayette Crashes in Clear Weather | 44 |
| Figure 16: Tippecanoe County Winter Weather Crashes | 45 |
| Figure 17: Lafayette and West Lafayette Winter Weather Crashes | 46 |
| Figure 18: Injuries by Time of Day | 52 |
| Figure 19: Injuries by Day of the Week..... | 52 |
| Figure 20: Tippecanoe County Incapacitating Injuries..... | 54 |
| Figure 21: Incapacitating Injuries by Gender | 57 |
| Figure 22: Incapacitating Injuries by Day of the Week | 59 |
| Figure 23: Tippecanoe County Fatality Crashes..... | 61 |
| Figure 24: Lafayette and West Lafayette Fatality Crashes..... | 62 |
| Figure 25: Fatalities by Gender | 64 |
| Figure 26: Fatalities by Day of the Week | 65 |
| Figure 27: Fatalities by Time of Day..... | 66 |
| Figure 28: Tippecanoe County Alcohol Crashes..... | 68 |
| Figure 29: Tippecanoe County Drug Crashes..... | 69 |
| Figure 30: Drug and Alcohol Crashes by Month | 71 |
| Figure 31: Drug and Alcohol Crashes by Day of the Week | 71 |
| Figure 32: Drug and Alcohol Crashes by Time of Day | 72 |
| Figure 33: Drivers in Drug and Alcohol Crashes by Gender | 73 |
| Figure 34: Tippecanoe County Curve Crashes | 75 |
| Figure 35: Lafayette and West Lafayette Curve Crashes | 76 |
| Figure 36: Curve Crashes by Month..... | 79 |
| Figure 37: Curve Crashes by Day of the Week..... | 79 |
| Figure 38: Curve Crashes by Time of Day..... | 80 |
| Figure 39: Curve Crashes by Road Surface Condition..... | 81 |

| | |
|--|-----|
| Figure 40: Tippecanoe County Motorcycle Crashes | 83 |
| Figure 41: Lafayette and West Lafayette Motorcycle Crashes | 84 |
| Figure 42: Motorcycle Crashes by Month..... | 86 |
| Figure 43: Motorcycle Crashes by Time of Day | 87 |
| Figure 44: Tippecanoe County Bicycle Crashes..... | 89 |
| Figure 45: Lafayette and West Lafayette Bicycle Crashes | 90 |
| Figure 46: Bicycle Crashes by Time of Day..... | 93 |
| Figure 47: Tippecanoe County Pedestrian Crashes | 95 |
| Figure 48: Lafayette and West Lafayette Pedestrian Crashes | 96 |
| Figure 49: Pedestrian Crashes by Time of Day..... | 99 |
| Figure 50: Tippecanoe County Deer Crashes..... | 101 |
| Figure 51: Tippecanoe County Hit and Run Crashes..... | 102 |
| Figure 52: Lafayette and West Lafayette Hit and Run Crashes..... | 103 |
| Figure 53: Tippecanoe County Single Vehicle Crashes | 105 |
| Figure 54: Lafayette and West Lafayette Single Vehicle Crashes | 106 |

List of Tables

| | |
|---|----|
| Table 1: Crash Severity..... | 11 |
| Table 2: Crashes by Township..... | 14 |
| Table 3: Crashes by City/Town..... | 15 |
| Table 4: Crashes 0-100 Feet from Intersection..... | 16 |
| Table 5: Crashes 0-250 Feet from Intersection..... | 18 |
| Table 6: Intersections with Multiple Fatalities/Incapacitating Injuries | 20 |
| Table 7: Primary Factors in Crashes..... | 21 |
| Table 8: Primary Factor Categories..... | 23 |
| Table 9: Summary of Crashes by Primary Factor Categories | 24 |
| Table 10: Crashes by Crash Type..... | 26 |
| Table 11: Crashes by Age and Gender | 27 |
| Table 12: Crash Participants by Age..... | 27 |
| Table 13: Primary Factors by Age of Driver | 28 |
| Table 14: Primary Factors by Gender..... | 30 |
| Table 15: Crash Type by Age | 32 |
| Table 16: Crash Percentages by Day of the Week | 38 |
| Table 17: Crashes by Weather Conditions..... | 42 |
| Table 18: Crashes by Road Surface Condition | 47 |
| Table 19: Crashes by Amount of Sunlight..... | 47 |
| Table 20: Injury and Fatality Crashes | 48 |
| Table 21: Injuries by Primary Factor | 49 |
| Table 22: Injuries by Crash Type | 50 |
| Table 23: Injuries by Month..... | 51 |
| Table 24: Injuries by Age and Gender..... | 53 |
| Table 25: Severity of Injuries in Crashes | 53 |
| Table 26: Incapacitating Injuries by Primary Factor..... | 55 |
| Table 27: Incapacitating Injuries by Crash Type..... | 56 |
| Table 28: Incapacitating Injuries by Age and Gender | 56 |
| Table 29: Incapacitating Injuries by Month | 58 |
| Table 30: Incapacitating Injuries by Time of Day | 60 |
| Table 31: Fatalities by Primary Factor..... | 63 |
| Table 32: Fatalities by Crash Type..... | 63 |
| Table 33: Fatalities by Age | 63 |
| Table 34: Fatalities by Month | 65 |
| Table 35: Drug and Alcohol Crash Statistics..... | 67 |
| Table 36: Drug and Alcohol Crash Data | 67 |
| Table 37: Crash Types for Drug and Alcohol Crashes | 70 |
| Table 38: Drug and Alcohol Crashes by Age and Gender..... | 73 |
| Table 39: Crashes by Road Curvature | 74 |

| | |
|---|-----|
| Table 40: Curve Crash Severity | 74 |
| Table 41: Primary Factors for Curve Crashes..... | 77 |
| Table 42: Crash Type for Curve Crashes | 78 |
| Table 43: Curve Crashes by Weather Conditions..... | 80 |
| Table 44: Motorcycle Crash Injuries and Fatalities..... | 82 |
| Table 45: Crash Types for Motorcycle Crashes | 85 |
| Table 46: Motorcycle Crashes by Day of Week | 86 |
| Table 47: Bicycle Crash Injuries and Fatalities | 88 |
| Table 48: Crash Types for Bicycle Crashes | 91 |
| Table 49: Bicycle Crashes by Month | 92 |
| Table 50: Bicycle Crashes by Day of the Week | 92 |
| Table 51: Pedestrian Injuries and Fatalities..... | 94 |
| Table 52: Crash Types for Pedestrian Crashes..... | 97 |
| Table 53: Pedestrian Crashes by Month | 98 |
| Table 54: Pedestrian Crashes by Day of the Week | 98 |
| Table 55: Summary of Number of Vehicles Involved in Crashes | 104 |
| Table 56: Crashes by Road Surface | 107 |
| Table 57: Crashes by Driver's State of Residence | 108 |

Chapter 1: Introduction

Every year, thousands of vehicle crashes occur in Tippecanoe County. Given the large number of crashes, the task of identifying specific factors that contribute to the cause of a crash can be very complex. The process of identifying contributing factors is also complicated by the seemingly random nature of vehicle crashes. A single crash can have several variables that cause it to occur. Extracting those variables from a crash report is not an exact science, but some trends can be extracted and analyzed.

The objective of this report is to analyze crashes in Tippecanoe County and identify any area wide trends and hazardous intersections. The problem areas can then receive follow-up analysis to identify specific problems. The analysis in this report includes all *Personal Injury*, *Fatal*, and *Property Damage* crashes that occurred on public streets (local as well as state maintained). Crashes that occurred in alleys, parking lots, parking garages, loading docks, and other private property were not analyzed.

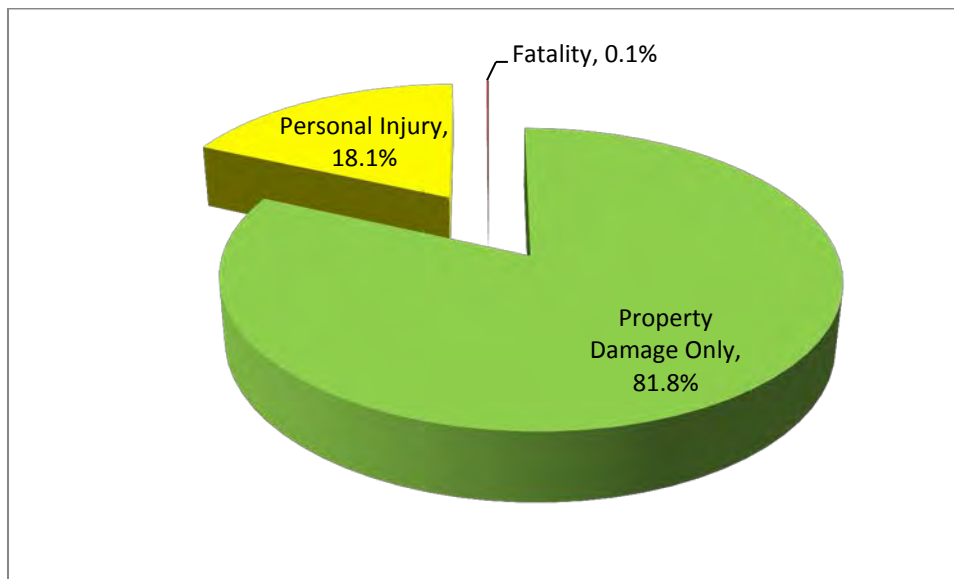
The data for this report came from the Indiana State Police (ISP) Automated Reporting Information Exchange System (ARIES) database of crash reports submitted by the police departments of Lafayette, West Lafayette, Purdue, Dayton, Battleground, the Tippecanoe County Sheriff, the Department of Natural Resources, and the Indiana State Police. The ARIES database contains general information about crashes, but in many cases, individual crash reports were reviewed in detail to get more information. This data required some quality control, because it did not always match up with the officer's crash report. This chapter gives a general overview of crashes in 2014.

Crashes are classified according to severity as *Property Damage Only* (damage only to vehicles and objects), *Personal Injury* (one or more persons injured), and *Fatality* (one or more fatalities). Table 1 and Figure 1 show that the majority of crashes can be categorized as "property damage only." More details on injury and fatal crashes are given in chapter 5.

Table 1: Crash Severity

| Severity of Crash | Crashes | Percentage of Total Crashes | Total Injured Persons | Total Fatalities |
|----------------------|---------|-----------------------------|-----------------------|------------------|
| Property Damage Only | 4379 | 81.8% | 0 | 0 |
| Personal Injury | 972 | 18.1% | 1266 | 0 |
| Fatality | 6 | 0.1% | 2 | 6 |
| Total | 5357 | 100.0% | 1268 | 6 |

Figure 1: Percentage of Crashes by Crash Severity



Figures 2 and 3 show the locations of crashes in 2014 in Tippecanoe County.

Figure 2: Tippecanoe County Crashes

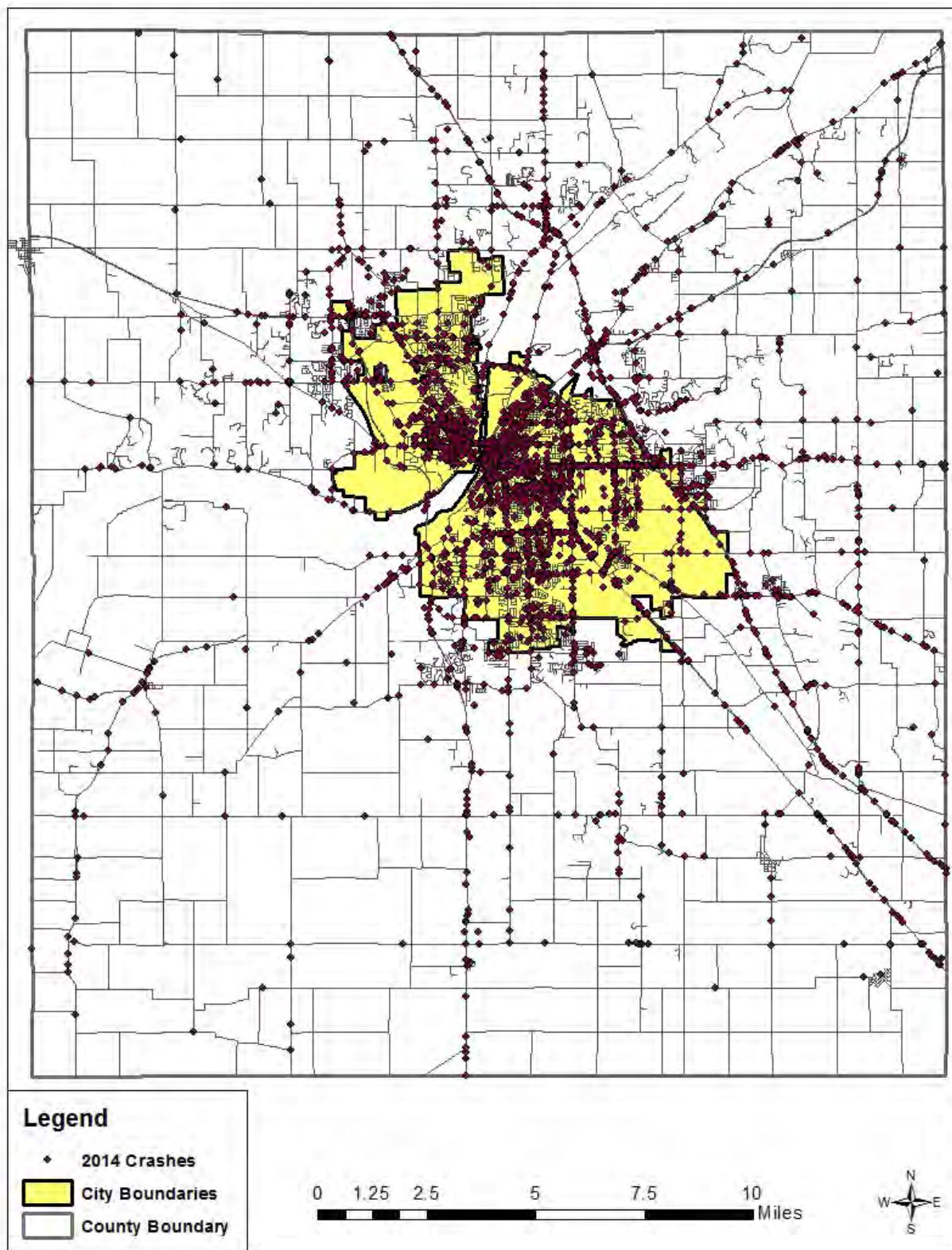


Figure 3: Lafayette and West Lafayette Crashes

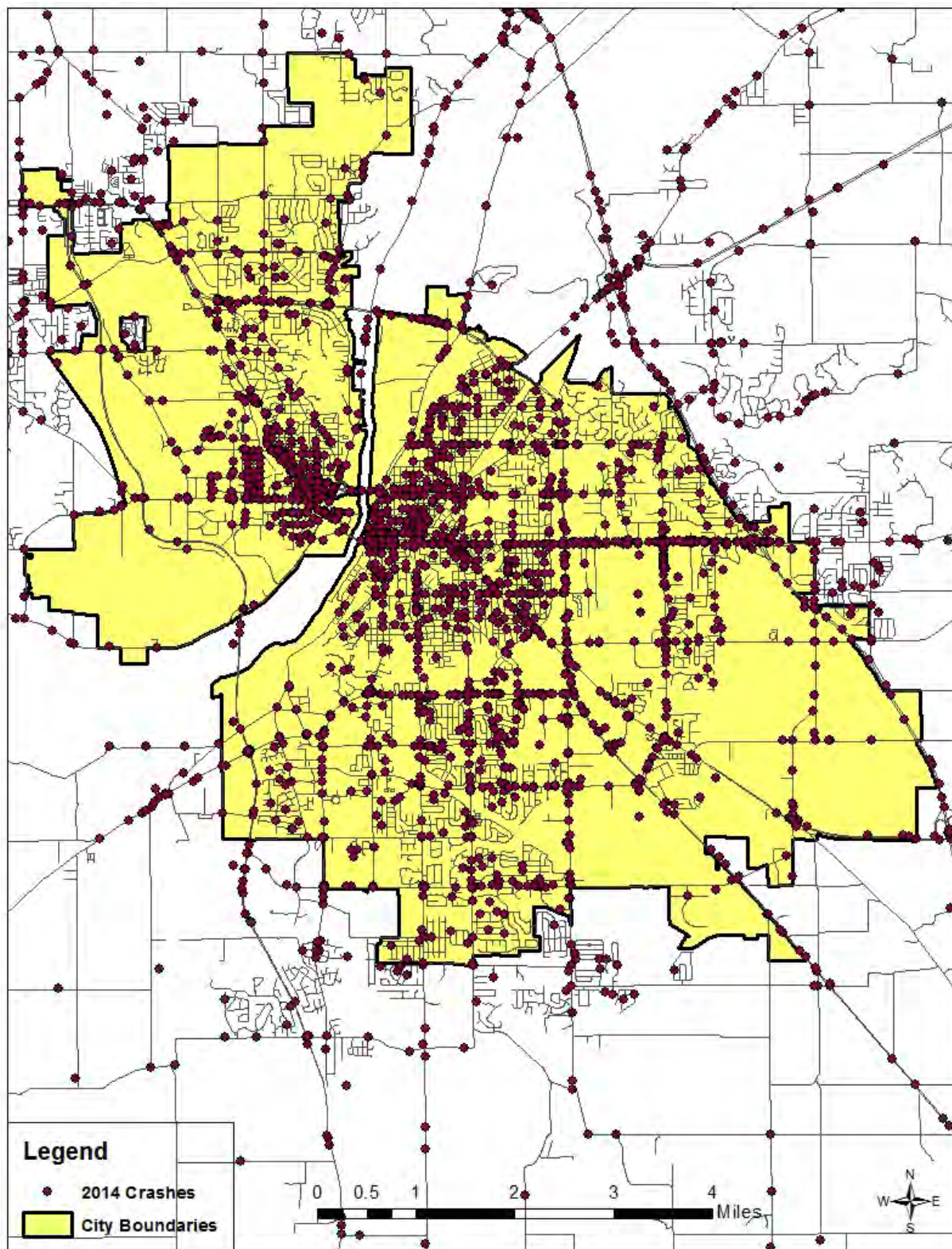


Table 2 shows that the Fairfield and Wabash townships had the most crashes in 2014.

Table 2: Crashes by Township

| Township | Number of Crashes |
|-------------------|--------------------------|
| Fairfield | 2692 |
| Wabash | 1262 |
| Wea | 452 |
| Tippecanoe | 277 |
| Sheffield | 214 |
| Perry | 112 |
| Lauramie | 107 |
| Washington | 71 |
| Shelby | 46 |
| Union | 37 |
| Wayne | 34 |
| Randolph | 31 |
| Jackson | 22 |
| Total | 5357 |

In ARIES, each crash was assigned to the closest city or town. Table 3 shows that Lafayette had the most crashes.

Table 3: Crashes by City/Town

| City/Town | Crashes | Percentage |
|-----------------------|----------------|-------------------|
| BATTLE GROUND | 90 | 1.7% |
| CLARKS HILL | 16 | 0.3% |
| DAYTON | 110 | 2.1% |
| LAFAYETTE | 3706 | 69.2% |
| OTTERBEIN | 2 | 0.0% |
| SHADELAND | 19 | 0.4% |
| WEST LAFAYETTE | 1407 | 26.3% |
| UNLISTED | 7 | 0.1% |
| TOTAL | 5357 | 100.0% |

Crashes occurred at various locations throughout Tippecanoe County. Some occurred in the middle of an intersection, some in the approach to an intersection, and others far away from the influence of an intersection. Crashes can be put into three categories based on their distance from an intersection: 0-100 feet from the intersection, 0-250 feet from an intersection, and mid-block.

Both the 0-100 feet from intersection and 0-250 feet from intersection categories include crashes that took place inside of the intersection.

Table 4 shows the intersections with the highest number of crashes within 100 feet of that intersection.

Table 4: Crashes 0-100 Feet from Intersection

| Rank | Intersection | Crashes 0-100 Feet from Intersection |
|-------------|--|---|
| 1 | Sagamore Parkway and South Street | 49 |
| 2 | South Street and Creasy Lane | 33 |
| 3 | McCarty Lane and Sagamore Parkway | 30 |
| 4 | Sagamore Parkway and Teal Road | 29 |
| T5 | Creasy Lane and McCarty Lane | 27 |
| T5 | Interstate 65 and State Road 26 | 27 |
| 7 | Sagamore Parkway and Schyuler Avenue | 25 |
| T8 | Northwestern Avenue and Stadium Avenue | 24 |
| T8 | River Road and State Street | 24 |
| T10 | Happy Hollow Road and River Road | 23 |
| T10 | Sagamore Parkway and Union Street | 23 |
| T12 | Cumberland Avenue and Sagamore Parkway | 22 |
| T12 | Sagamore Parkway and Salisbury Street | 22 |
| T14 | 18th Street and Teal Road | 20 |
| T14 | Creasy Lane and State Road 38 | 20 |
| T14 | Sagamore Parkway and Yeager Road | 20 |
| 17 | 22nd Street and Teal Road | 19 |
| 18 | Cherry Lane and Northwestern Avenue | 18 |
| 19 | Farabee Drive and South Street | 17 |
| 20 | 18th Street and Kossuth Street | 16 |
| T21 | Grant Street and State Street | 15 |
| T21 | Greenbush Street and Sagamore Parkway | 15 |
| T21 | Northwestern Avenue and Lindberg Road | 15 |
| T21 | Sagamore Parkway and State Road 38 | 15 |
| T25 | Park Avenue and South Street | 14 |
| T25 | Shenandoah Drive and South Street | 14 |
| T27 | 9th Street and Salem Street | 13 |
| T27 | Interstate 65 and River Road | 13 |
| T27 | Northwestern Avenue and Yeager Road | 13 |
| T30 | 18th Street and Union Street | 12 |
| T30 | 4th Street and Columbia Street | 12 |
| T30 | Earl Avenue and Main Street | 12 |
| T30 | Earl Avenue and South Street | 12 |
| T30 | Veteran's Memorial Parkway and State Road 38 | 12 |
| T30 | Main Street and McCarty Lane | 12 |
| T36 | 9th Street and Columbia Street | 11 |
| T36 | Brady Lane and Concord Road | 11 |

| Rank | Intersection | Crashes 0-100 Feet From Intersection |
|-------------|--------------------------------------|---|
| T36 | Creasy Lane and Sagamore Parkway | 11 |
| T36 | Old State Road 25 and State Road 25 | 11 |
| T40 | 18th Street and South Street | 10 |
| T40 | 2nd Street and Columbia Street | 10 |
| T40 | 4th Street and South Street | 10 |
| T40 | 9th Street and South Street | 10 |
| T40 | 9th Street and Teal Road | 10 |
| T40 | Chauncey Avenue and State Street | 10 |
| T40 | Creasy Lane and Greenbush Street | 10 |
| T40 | Interstate 65 and Old State Road 25 | 10 |
| T40 | Northwestern Avenue and State Street | 10 |
| T40 | 18th Street and J R Hiatt Drive | 10 |
| T40 | Russell Street and State Street | 10 |

Table 5 shows the intersections with the highest number of crashes within 250 feet of that intersection.

Table 5: Crashes 0-250 Feet from Intersection

| Rank | Intersection | Crashes 0-250 Feet from Intersection |
|-------------|--|---|
| 1 | Sagamore Parkway and South Street | 56 |
| 2 | South Street and Creasy Lane | 38 |
| 3 | Creasy Lane and McCarty Lane | 36 |
| 4 | McCarty Lane and Sagamore Parkway | 35 |
| 5 | Sagamore Parkway and Teal Road | 32 |
| 6 | Interstate 65 and State Road 26 | 29 |
| 7 | Sagamore Parkway and Schyuler Avenue | 26 |
| T8 | River Road and State Street | 25 |
| T8 | Sagamore Parkway and Union Street | 25 |
| T10 | Northwestern Avenue and Stadium Avenue | 24 |
| T10 | Sagamore Parkway and Salisbury Street | 24 |
| T12 | Happy Hollow Road and River Road | 23 |
| T12 | Cumberland Avenue and Sagamore Parkway | 23 |
| 14 | 22nd Street and Teal Road | 22 |
| T15 | 18th Street and Teal Road | 21 |
| T15 | Sagamore Parkway and Yeager Road | 21 |
| T15 | Greenbush Street and Sagamore Parkway | 21 |
| 18 | Creasy Lane and State Road 38 | 20 |
| T19 | Cherry Lane and Northwestern Avenue | 18 |
| T19 | Farabee Drive and South Street | 18 |
| T21 | Northwestern Avenue and Lindberg Road | 17 |
| T21 | Sagamore Parkway and State Road 38 | 17 |
| T23 | 18th Street and Kossuth Street | 16 |
| T23 | Grant Street and State Street | 16 |
| T23 | Park Avenue and South Street | 16 |
| T23 | Earl Avenue and South Street | 16 |
| 27 | Shenandoah Drive and South Street | 15 |

| Rank | Intersection | Crashes 0-250 Feet from Intersection |
|-------------|--|---|
| T28 | Interstate 65 and River Road | 14 |
| T28 | Earl Avenue and Main Street | 14 |
| T28 | Brady Lane and Concord Road | 14 |
| T28 | Creasy Lane and Sagamore Parkway | 14 |
| T32 | 9th Street and Salem Street | 13 |
| T32 | Northwestern Avenue and Yeager Road | 13 |
| T32 | 18th Street and Union Street | 13 |
| T32 | Veteran's Memorial Parkway and State Road 38 | 13 |
| T32 | Main Street and McCarty Lane | 13 |
| 37 | 4th Street and Columbia Street | 12 |
| T38 | 9th Street and Columbia Street | 11 |
| T38 | Old State Road 25 and State Road 25 | 11 |
| T38 | 9th Street and South Street | 11 |
| T41 | 18th Street and South Street | 10 |
| T41 | 2nd Street and Columbia Street | 10 |
| T41 | 4th Street and South Street | 10 |
| T41 | 9th Street and Teal Road | 10 |
| T41 | Chauncey Avenue and State Street | 10 |
| T41 | Creasy Lane and Greenbush Street | 10 |
| T41 | Interstate 65 and Old State Road 25 | 10 |
| T41 | Northwestern Avenue and State Street | 10 |
| T41 | 18th Street and J R Hiatt Drive | 10 |
| T41 | Russell Street and State Street | 10 |
| T41 | Kossuth Street and Sagamore Parkway | 10 |
| T41 | 18th Street and Brady Lane | 10 |

5 intersections had more than one fatality or incapacitating injury. Table 6 gives a summary of fatalities and incapacitating injuries at those locations. More details on fatalities and incapacitating injuries are included in chapter 5.

Table 6: Intersections with Multiple Fatalities/Incapacitating Injuries

| Street 1 | Street 2 | Fatalities | Incapacitating Injuries |
|----------------------|----------------------------|-------------------|--------------------------------|
| South Street | Creasy Lane | 1 | 1 |
| US 231 | Cumberland | 1 | 1 |
| Lindberg Road | Northwestern Avenue | 0 | 2 |
| McCarty Lane | Navco Drive | 0 | 2 |
| US 231 | Lindberg Road | 0 | 2 |

In each crash report, officers can specify up to two “Driver”, one “Vehicle”, and one “Environmental” contributing circumstance for each vehicle. One of the contributing circumstances must be listed as the primary contributing circumstance (also called the “primary factor”) for the crash. Table 7 shows that “Following too closely” and “Failure to Yield Right of Way” were the most common primary factors in crashes.

Table 7: Primary Factors in Crashes

| PRIMARY FACTOR | CRASHES |
|---|----------------|
| FOLLOWING TOO CLOSELY | 1115 |
| FAILURE TO YIELD RIGHT OF WAY | 839 |
| SPEED TOO FAST FOR WEATHER CONDITIONS | 542 |
| ANIMAL/OBJECT IN ROADWAY | 339 |
| RAN OFF ROAD RIGHT | 320 |
| UNSAFE BACKING | 312 |
| IMPROPER LANE USAGE | 311 |
| OTHER (DRIVER) - EXPLAIN IN NARRATIVE | 286 |
| UNSAFE SPEED | 274 |
| DISREGARD SIGNAL/REG SIGN | 267 |
| IMPROPER TURNING | 182 |
| ROADWAY SURFACE CONDITION | 99 |
| LEFT OF CENTER | 79 |
| IMPROPER PASSING | 67 |
| OVERCORRECTING/OVERSTEERING | 66 |
| UNSAFE LANE MOVEMENT | 47 |
| DRIVER DISTRACTED - EXPLAIN IN NARRATIVE | 45 |
| DRIVER ASLEEP OR FATIGUED | 26 |
| OTHER (ENVIRONMENTAL) - EXPLAIN IN NARRATIVE | 21 |
| OTHER (VEHICLE) - EXPLAIN IN NARRATIVE | 18 |
| PEDESTRIAN ACTION | 15 |
| BRAKE FAILURE OR DEFECTIVE | 14 |
| STEERING FAILURE | 11 |
| DRIVER ILLNESS | 10 |
| INSECURE/LEAKY LOAD | 10 |
| OBSTRUCTION NOT MARKED | 10 |
| WRONG WAY ON ONE WAY | 8 |
| CELL PHONE USAGE | 7 |

| PRIMARY FACTOR | CRASHES |
|------------------------------------|----------------|
| HOLES/RUTS IN SURFACE | 4 |
| TIRE FAILURE OR DEFECTIVE | 3 |
| ENGINE FAILURE OR DEFECTIVE | 2 |
| OTHER TELEMATICS IN USE | 2 |
| OVERSIZE/OVERWEIGHT LOAD | 2 |
| VIEW OBSTRUCTED | 2 |
| SEVERE CROSSWINDS | 1 |
| TOW HITCH FAILURE | 1 |
| TOTAL | 5357 |

In this report, the term “fault” refers to the party who had the legal responsibility for causing a crash. Determining fault can be difficult because there are often complex circumstances that affect pedestrian, bicyclist, and vehicle behavior. This data is also not usually available from a vehicle owner’s private insurance provider, so it was approximated for this report using the primary factor information from ARIES. Each of the primary factors was sorted into one of four categories: Driver Error, Environmental Factors, Vehicular Factors, and Miscellaneous Factors. Table 8 shows which primary factors were grouped into these categories.

Table 8: Primary Factor Categories

| PRIMARY FACTOR CATEGORY | PRIMARY FACTOR |
|--------------------------------|--|
| Driver Error | FOLLOWING TOO CLOSELY |
| Driver Error | FAILURE TO YIELD RIGHT OF WAY |
| Driver Error | RAN OFF ROAD RIGHT |
| Driver Error | IMPROPER LANE USAGE |
| Driver Error | SPEED TOO FAST FOR WEATHER CONDITIONS |
| Driver Error | UNSAFE BACKING |
| Driver Error | DISREGARD SIGNAL/REGULATORY SIGN |
| Driver Error | UNSAFE SPEED |
| Driver Error | IMPROPER TURNING |
| Driver Error | LEFT OF CENTER |
| Driver Error | DRIVER DISTRACTED - EXPLAIN IN NARRATIVE |
| Driver Error | IMPROPER PASSING |
| Driver Error | UNSAFE LANE MOVEMENT |
| Driver Error | OVERCORRECTING/OVERSTEERING |
| Driver Error | DRIVER ASLEEP OR FATIGUED |
| Driver Error | CELL PHONE USAGE |
| Driver Error | WRONG WAY ON ONE WAY |
| Environmental Factors | ANIMAL/OBJECT IN ROADWAY |
| Environmental Factors | ROADWAY SURFACE CONDITION |
| Environmental Factors | OTHER (ENVIRONMENTAL) - EXPLAIN IN NARRATIVE |
| Environmental Factors | HOLES/RUTS IN SURFACE |
| Environmental Factors | OBSTRUCTION NOT MARKED |
| Environmental Factors | SEVERE CROSSWINDS |
| Environmental Factors | VIEW OBSTRUCTED |
| Miscellaneous Factors | OTHER (DRIVER) - EXPLAIN IN NARRATIVE |
| Miscellaneous Factors | PEDESTRIAN ACTION |
| Miscellaneous Factors | DRIVER ILLNESS |

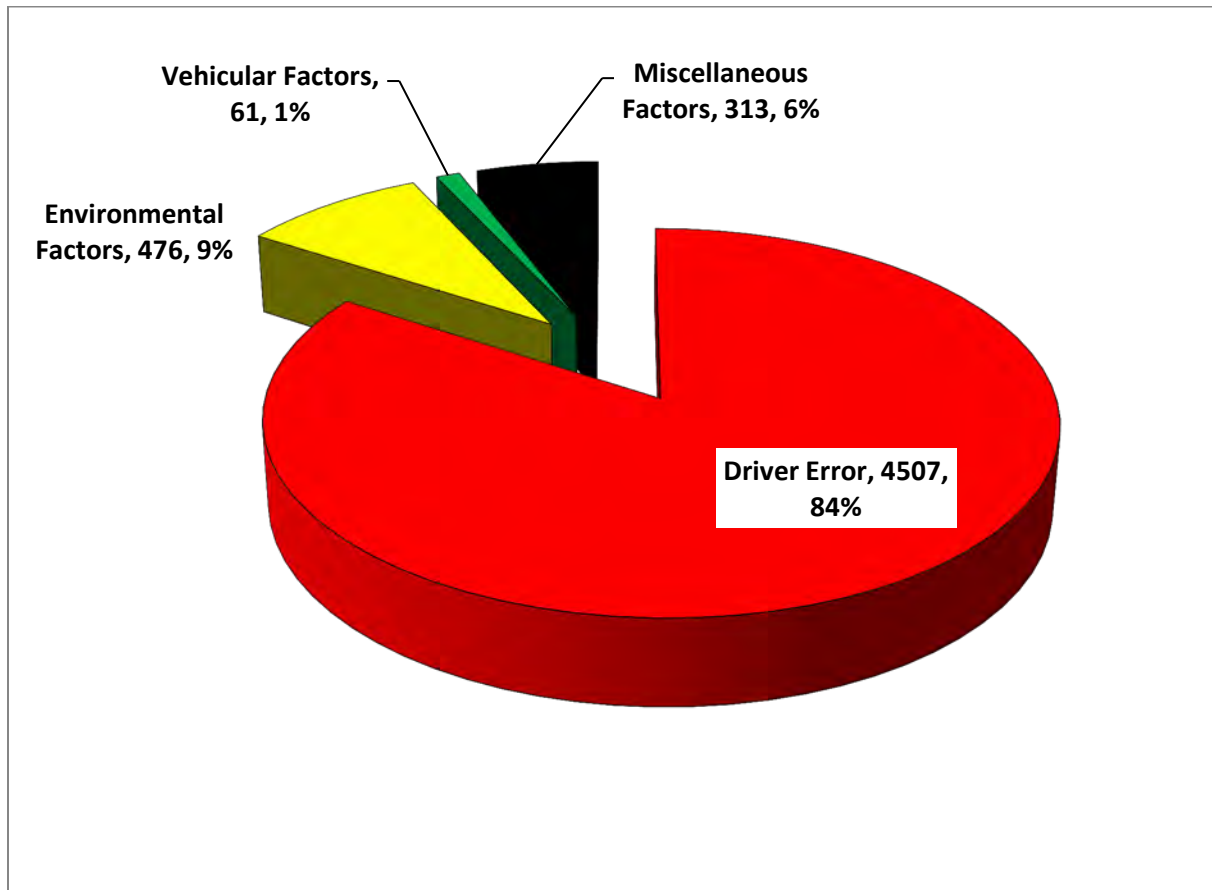
| PRIMARY FACTOR CATEGORY | PRIMARY FACTOR |
|-------------------------|--|
| Miscellaneous Factors | OTHER TELEMATICS IN USE |
| Miscellaneous Factors | UNKNOWN |
| Vehicular Factors | BRAKE FAILURE OR DEFECTIVE |
| Vehicular Factors | TIRE FAILURE OR DEFECTIVE |
| Vehicular Factors | INSECURE/LEAKY LOAD |
| Vehicular Factors | OTHER (VEHICLE) - EXPLAIN IN NARRATIVE |
| Vehicular Factors | STEERING FAILURE |
| Vehicular Factors | ENGINE FAILURE OR DEFECTIVE |
| Vehicular Factors | OVERSIZE/OVERWEIGHT LOAD |
| Vehicular Factors | TOW HITCH FAILURE |

Table 9 and Figure 4 show that driver error was the primary factor category that was most common in 2014 crashes.

Table 9: Summary of Crashes by Primary Factor Categories

| PRIMARY FACTOR CATEGORY | CRASHES |
|-------------------------|---------|
| Driver Error | 4507 |
| Environmental Factors | 476 |
| Vehicular Factors | 61 |
| Miscellaneous Factors | 313 |
| Total | 5357 |

Figure 4: Percentage of Crashes by Primary Factor Category



The manner of collision (also referred to as crash type in this report), is a description of the way a collision between vehicles or objects occurs. Table 10 shows that rear end crashes were the most common crash type.

Table 10: Crashes by Crash Type

| CRASH TYPE | CRASHES |
|---|----------------|
| REAR END | 1690 |
| RIGHT ANGLE | 912 |
| SAME DIRECTION SIDESWIPE | 726 |
| RAN OFF ROAD | 641 |
| BACKING CRASH | 294 |
| LEFT TURN | 264 |
| HEAD ON BETWEEN TWO MOTOR VEHICLES | 189 |
| HEAD ON | 185 |
| OTHER - EXPLAIN IN NARRATIVE | 134 |
| OPPOSITE DIRECTION SIDESWIPE | 122 |
| RIGHT TURN | 76 |
| NON-COLLISION | 61 |
| LEFT/RIGHT TURN | 17 |
| UNKNOWN | 14 |
| REAR TO REAR | 11 |
| COLLISION WITH DEER | 9 |
| COLLISION WITH OBJECT IN ROAD | 9 |
| COLLISION WITH ANIMAL-OTHER | 3 |
| TOTAL | 5357 |

Chapter 2: Age and Gender

Different age groups and genders may behave differently when using the road. These behavioral differences may affect how, when, and where crashes occur. This chapter analyzes trends in the age and gender of crash participants.

Table 11 shows that 16-24 year-old drivers were most likely to be involved in crashes.

Table 11: Crashes by Age and Gender

| | <16 | 16-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | TOTAL |
|--------|-----|-------|-------|-------|-------|-------|-----|-------|
| MALE | 8 | 1401 | 989 | 704 | 687 | 529 | 429 | 4747 |
| FEMALE | 4 | 1211 | 794 | 564 | 535 | 377 | 327 | 3812 |
| TOTAL | 12 | 2612 | 1783 | 1268 | 1222 | 906 | 756 | 8559 |

In a crash, there are several different types of participants that can be categorized as follows: drivers, injured persons, pedalcyclists, or pedestrians. Table 12 gives a summary (by age) of participants in crashes. In this table, “Injured Person” refers to a passenger in one of the vehicles that sustained an injury. It does not apply to a driver, pedestrian, or pedalcyclist that was injured.

Table 12: Crash Participants by Age

| | <16 | 16-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | TOTAL |
|----------------|-----|-------|-------|-------|-------|-------|-----|-------|
| DRIVER | 31 | 2612 | 1783 | 1268 | 1223 | 906 | 757 | 8580 |
| INJURED PERSON | 95 | 107 | 36 | 19 | 21 | 25 | 25 | 328 |
| PEDALCYCLIST | 5 | 15 | 4 | 4 | 1 | 3 | 1 | 33 |
| PEDESTRIAN | 6 | 14 | 8 | 3 | 5 | 4 | 1 | 41 |
| TOTAL | 137 | 2748 | 1831 | 1294 | 1250 | 938 | 784 | 8982 |

Table 13 shows that following too closely was the primary cause of crashes for almost every age group.

Table 13: Primary Factors by Age of Driver

| PRIMARY FACTOR | <16 | 16-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | TOTAL |
|--|-----|-------|-------|-------|-------|-------|-----|-------|
| FOLLOWING TOO CLOSELY | 6 | 739 | 481 | 340 | 332 | 229 | 173 | 2300 |
| FAILURE TO YIELD RIGHT OF WAY | 3 | 522 | 308 | 192 | 226 | 175 | 200 | 1626 |
| SPEED TOO FAST FOR WEATHER CONDITIONS | 4 | 290 | 205 | 120 | 104 | 81 | 35 | 839 |
| DISREGARD SIGNAL/REG SIGN | 0 | 128 | 115 | 64 | 82 | 63 | 67 | 519 |
| UNSAFE SPEED | 0 | 137 | 102 | 74 | 74 | 42 | 32 | 461 |
| IMPROPER LANE USAGE | 1 | 109 | 72 | 54 | 53 | 51 | 51 | 391 |
| UNSAFE BACKING | 0 | 99 | 72 | 68 | 44 | 54 | 45 | 382 |
| OTHER (DRIVER) - EXPLAIN IN NARRATIVE | 3 | 99 | 68 | 57 | 51 | 37 | 29 | 344 |
| ANIMAL/OBJECT IN ROADWAY | 0 | 50 | 81 | 79 | 76 | 36 | 19 | 341 |
| RAN OFF ROAD RIGHT | 1 | 114 | 60 | 47 | 33 | 26 | 14 | 295 |
| IMPROPER TURNING | 4 | 74 | 59 | 36 | 38 | 29 | 22 | 262 |
| ROADWAY SURFACE CONDITION | 0 | 56 | 28 | 22 | 19 | 10 | 4 | 139 |
| LEFT OF CENTER | 0 | 36 | 24 | 23 | 14 | 7 | 10 | 114 |
| IMPROPER PASSING | 1 | 28 | 21 | 13 | 16 | 18 | 13 | 110 |
| UNSAFE LANE MOVEMENT | 6 | 17 | 14 | 17 | 16 | 11 | 7 | 88 |
| DRIVER DISTRACTED - EXPLAIN IN NARRATIVE | 0 | 34 | 16 | 12 | 9 | 10 | 5 | 86 |
| OVERCORRECTING/OVERSTEERING | 0 | 23 | 19 | 13 | 5 | 5 | 8 | 73 |
| DRIVER ASLEEP OR FATIGUED | 0 | 12 | 8 | 3 | 3 | 1 | 4 | 31 |
| OTHER (ENVIRONMENTAL) - EXPLAIN IN NARR | 1 | 4 | 4 | 3 | 4 | 5 | 2 | 23 |
| BRAKE FAILURE OR DEFECTIVE | 0 | 9 | 6 | 3 | 2 | 0 | 2 | 22 |
| OTHER (VEHICLE) - EXPLAIN IN NARRATIVE | 1 | 4 | 1 | 5 | 3 | 3 | 2 | 19 |
| INSECURE/LEAKY LOAD | 0 | 1 | 4 | 5 | 5 | 2 | 1 | 18 |
| PEDESTRIAN ACTION | 0 | 4 | 3 | 2 | 4 | 2 | 0 | 15 |

| PRIMARY FACTOR | <16 | 16- 24 | 25- 34 | 35- 44 | 45- 54 | 55- 64 | 65+ | TOTAL |
|------------------------------------|---------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------|--------------|
| WRONG WAY ON ONE WAY | 0 | 5 | 3 | 2 | 0 | 2 | 3 | 15 |
| CELL PHONE USAGE | 0 | 5 | 3 | 3 | 1 | 0 | 2 | 14 |
| DRIVER ILLNESS | 0 | 2 | 2 | 1 | 2 | 1 | 4 | 12 |
| STEERING FAILURE | 0 | 5 | 0 | 3 | 3 | 1 | 0 | 12 |
| OBSTRUCTION NOT MARKED | 0 | 2 | 1 | 2 | 0 | 3 | 2 | 10 |
| HOLES/RUTS IN SURFACE | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 4 |
| ENGINE FAILURE OR DEFECTIVE | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3 |
| OTHER TELEMATICS IN USE | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 3 |
| TIRE FAILURE OR DEFECTIVE | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 3 |
| OVERSIZE/OVERWEIGHT LOAD | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| VIEW OBSTRUCTED | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SEVERE CROSSWINDS | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| TOW HITCH FAILURE | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| TOTAL | 31 | 2612 | 1783 | 1268 | 1223 | 906 | 757 | 8580 |

Table 14 shows that following too closely was the most common primary cause of crashes for both genders.

Table 14: Primary Factors by Gender

| PRIMARY FACTOR | MALE | FEMALE | TOTAL |
|---|-------------|---------------|--------------|
| FOLLOWING TOO CLOSELY | 1185 | 1109 | 2294 |
| FAILURE TO YIELD RIGHT OF WAY | 850 | 776 | 1626 |
| SPEED TOO FAST FOR WEATHER CONDITIONS | 480 | 356 | 836 |
| DISREGARD SIGNAL/REG SIGN | 278 | 240 | 518 |
| UNSAFE SPEED | 252 | 209 | 461 |
| IMPROPER LANE USAGE | 220 | 171 | 391 |
| UNSAFE BACKING | 225 | 157 | 382 |
| OTHER (DRIVER) - EXPLAIN IN NARRATIVE | 209 | 132 | 341 |
| ANIMAL/OBJECT IN ROADWAY | 217 | 124 | 341 |
| RAN OFF ROAD RIGHT | 178 | 117 | 295 |
| IMPROPER TURNING | 140 | 122 | 262 |
| ROADWAY SURFACE CONDITION | 87 | 52 | 139 |
| LEFT OF CENTER | 70 | 44 | 114 |
| IMPROPER PASSING | 54 | 55 | 109 |
| UNSAFE LANE MOVEMENT | 61 | 21 | 82 |
| DRIVER DISTRACTED - EXPLAIN IN NARRATIVE | 55 | 31 | 86 |
| OVERCORRECTING/OVERSTEERING | 42 | 31 | 73 |
| DRIVER ASLEEP OR FATIGUED | 19 | 12 | 31 |
| OTHER (ENVIRONMENTAL) - EXPLAIN IN NARR | 14 | 9 | 23 |
| BRAKE FAILURE OR DEFECTIVE | 14 | 8 | 22 |
| OTHER (VEHICLE) - EXPLAIN IN NARRATIVE | 14 | 4 | 18 |
| INSECURE/LEAKY LOAD | 13 | 5 | 18 |
| PEDESTRIAN ACTION | 10 | 5 | 15 |
| WRONG WAY ON ONE WAY | 11 | 4 | 15 |
| CELL PHONE USAGE | 10 | 4 | 14 |
| DRIVER ILLNESS | 7 | 5 | 12 |
| STEERING FAILURE | 9 | 3 | 12 |
| OBSTRUCTION NOT MARKED | 6 | 4 | 10 |

| PRIMARY FACTOR | MALE | FEMALE | TOTAL |
|------------------------------------|-------------|---------------|--------------|
| HOLES/RUTS IN SURFACE | 4 | 0 | 4 |
| ENGINE FAILURE OR DEFECTIVE | 3 | 0 | 3 |
| OTHER TELEMATICS IN USE | 3 | 0 | 3 |
| TIRE FAILURE OR DEFECTIVE | 2 | 1 | 3 |
| OVERSIZE/OVERWEIGHT LOAD | 2 | 0 | 2 |
| VIEW OBSTRUCTED | 1 | 1 | 2 |
| SEVERE CROSSWINDS | 1 | 0 | 1 |
| TOW HITCH FAILURE | 1 | 0 | 1 |
| TOTAL | 4747 | 3812 | 8559 |

Table 15 shows that rear end crashes were the most common crash type for every age group.

Table 15: Crash Type by Age

| CRASH TYPE | <16 | 16-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | TOTAL |
|---------------------------------------|-----|-------|-------|-------|-------|-------|-----|-------|
| BACKING CRASH | 0 | 98 | 65 | 61 | 40 | 52 | 44 | 360 |
| COLLISION WITH ANIMAL OTHER | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| COLLISION WITH DEER | 0 | 2 | 2 | 2 | 0 | 2 | 1 | 9 |
| COLLISION WITH OBJECT IN ROAD | 0 | 3 | 1 | 5 | 0 | 0 | 1 | 10 |
| HEAD ON | 1 | 67 | 41 | 29 | 36 | 24 | 9 | 207 |
| HEAD ON BETWEEN TWO MOTOR VEHICLES | 0 | 52 | 51 | 42 | 40 | 19 | 15 | 219 |
| LEFT TURN | 2 | 154 | 100 | 57 | 61 | 49 | 66 | 489 |
| LEFT/RIGHT TURN | 0 | 11 | 6 | 3 | 2 | 4 | 5 | 31 |
| NON-COLLISION | 4 | 9 | 20 | 9 | 10 | 11 | 4 | 67 |
| OPPOSITE DIRECTION SIDESWIPE | 0 | 52 | 32 | 22 | 20 | 16 | 12 | 154 |
| OTHER - EXPLAIN IN NARRATIVE | 1 | 43 | 28 | 22 | 21 | 18 | 9 | 142 |
| RAN OFF ROAD | 0 | 253 | 128 | 87 | 70 | 46 | 28 | 612 |
| REAR END | 7 | 1064 | 724 | 521 | 517 | 338 | 246 | 3417 |
| REAR TO REAR | 0 | 5 | 9 | 4 | 1 | 2 | 1 | 22 |
| RIGHT ANGLE | 2 | 475 | 326 | 229 | 239 | 179 | 198 | 1648 |
| RIGHT TURN | 0 | 37 | 33 | 19 | 17 | 10 | 14 | 130 |
| SAME DIRECTION SIDESWIPE | 14 | 287 | 214 | 155 | 148 | 134 | 104 | 1056 |
| UNKNOWN | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 4 |
| TOTAL | 31 | 2612 | 1783 | 1268 | 1223 | 906 | 757 | 8580 |

Figure 5 shows that rear end crashes were the most common crash type for both genders.

Figure 5: Crashes by Gender and Type

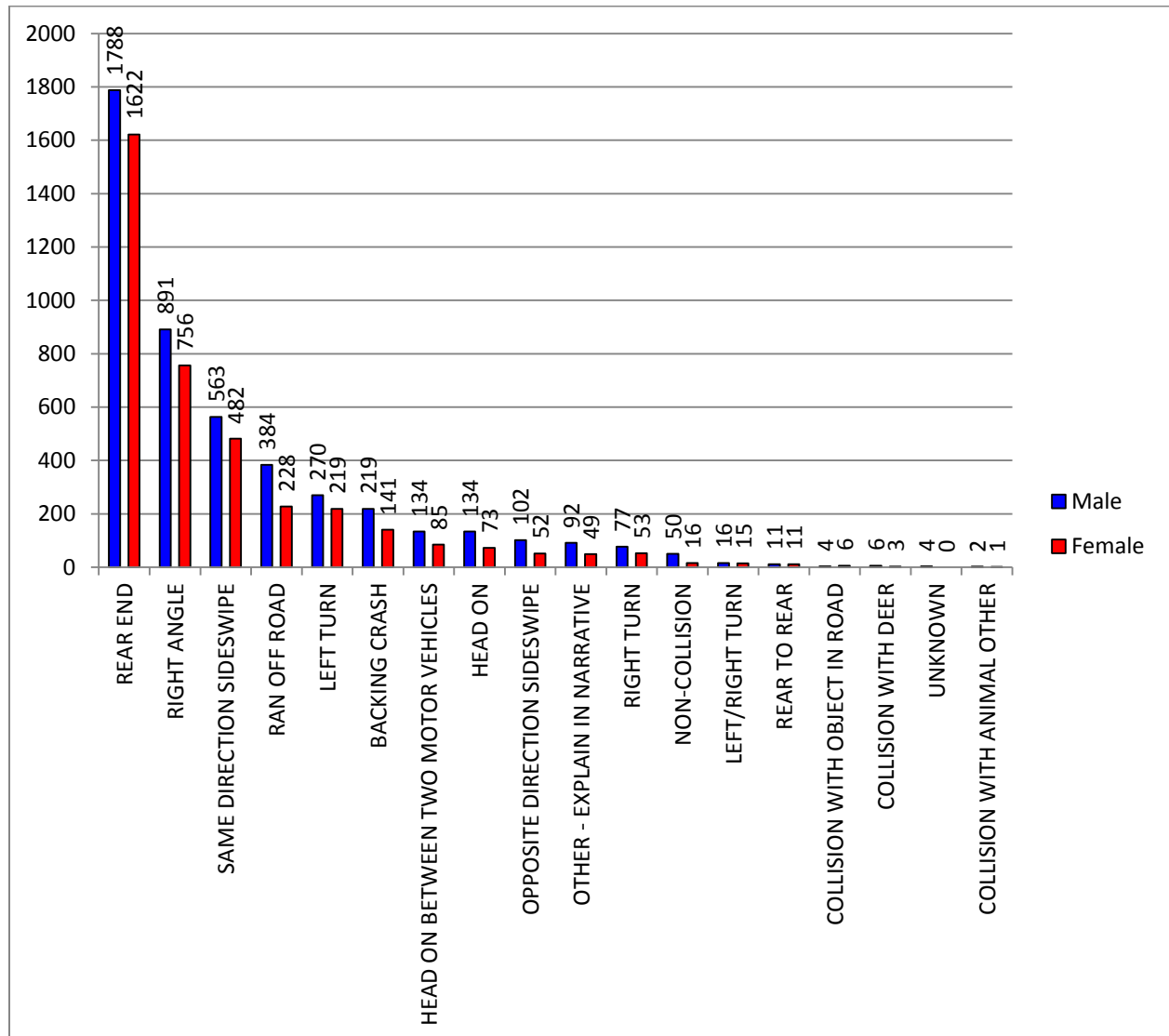


Figure 6 shows that males were the drivers in 55% of crashes.

Figure 6: Drivers in Crashes by Gender

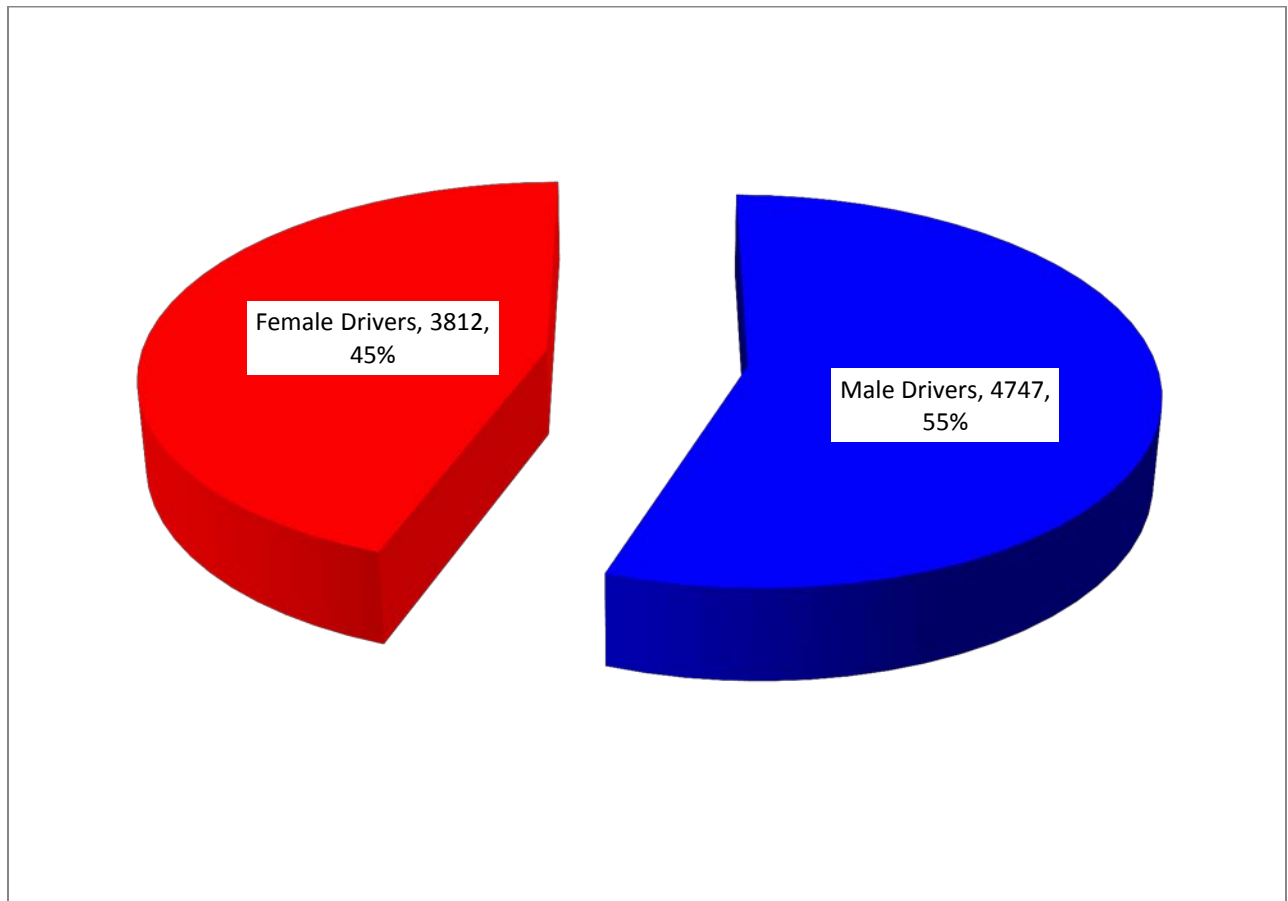
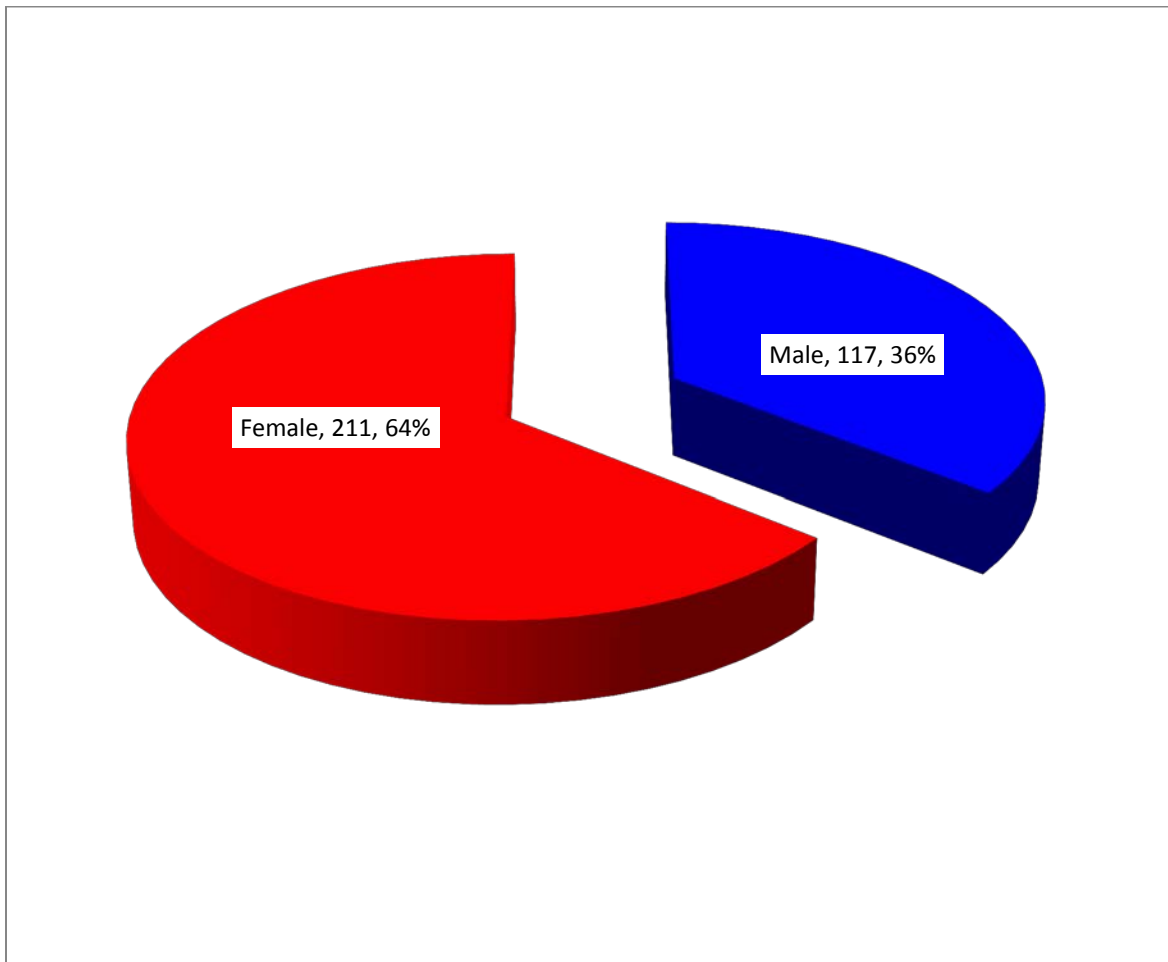


Figure 7 shows the number of passengers injured in crashes. More female passengers were injured than male passengers.

Figure 7: Injured Passengers by Gender



Chapter 3: Time of Crashes

Drivers often behave differently at different times of the year, week, or day. These behavioral changes can be due to weather, increased/decreased level of distraction, fatigue, or several other factors. This chapter analyzes trends in the times when crashes occurred.

Figure 8 shows that the highest number of crashes occurred in January.

Figure 8: Crashes by Month

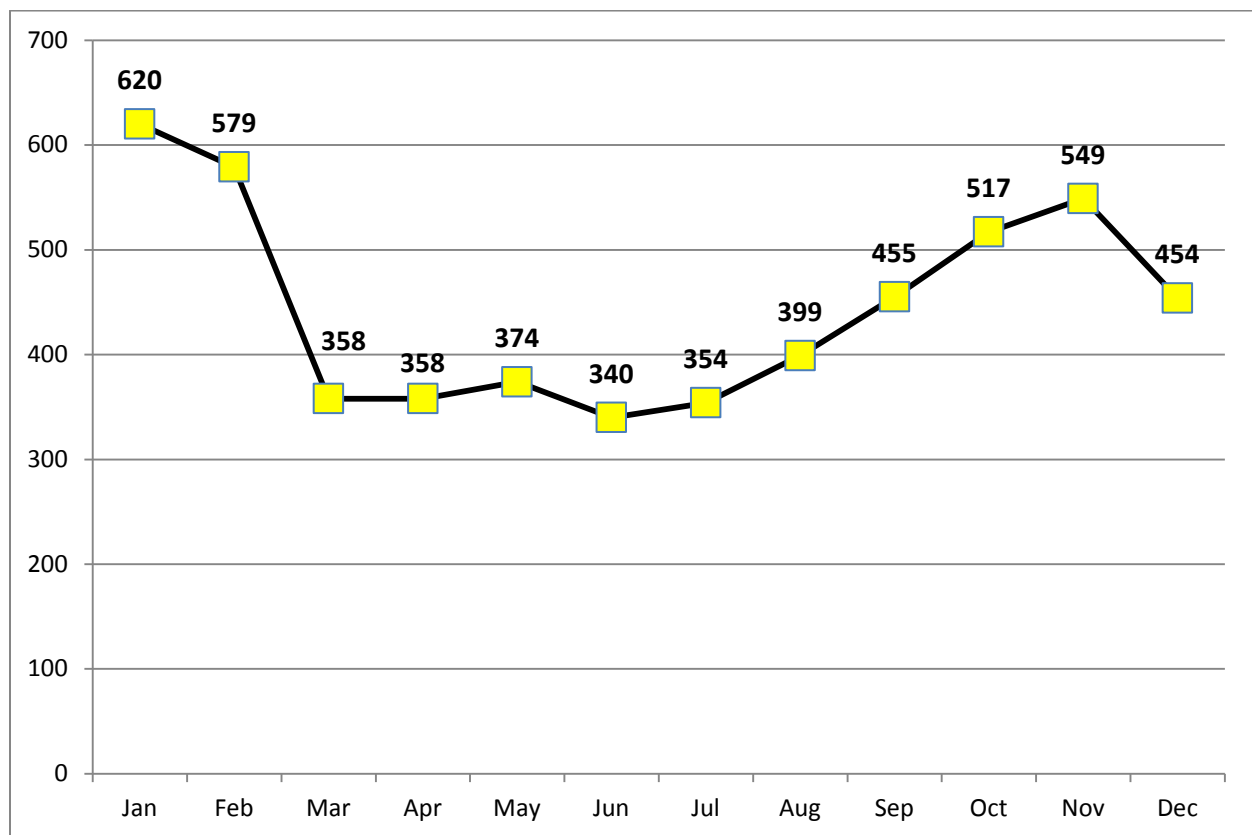


Figure 9 shows crashes by month for the three most common crash types (rear end, right angle, and same direction sideswipe).

Figure 9: 3 Most Common Crash Types by Month

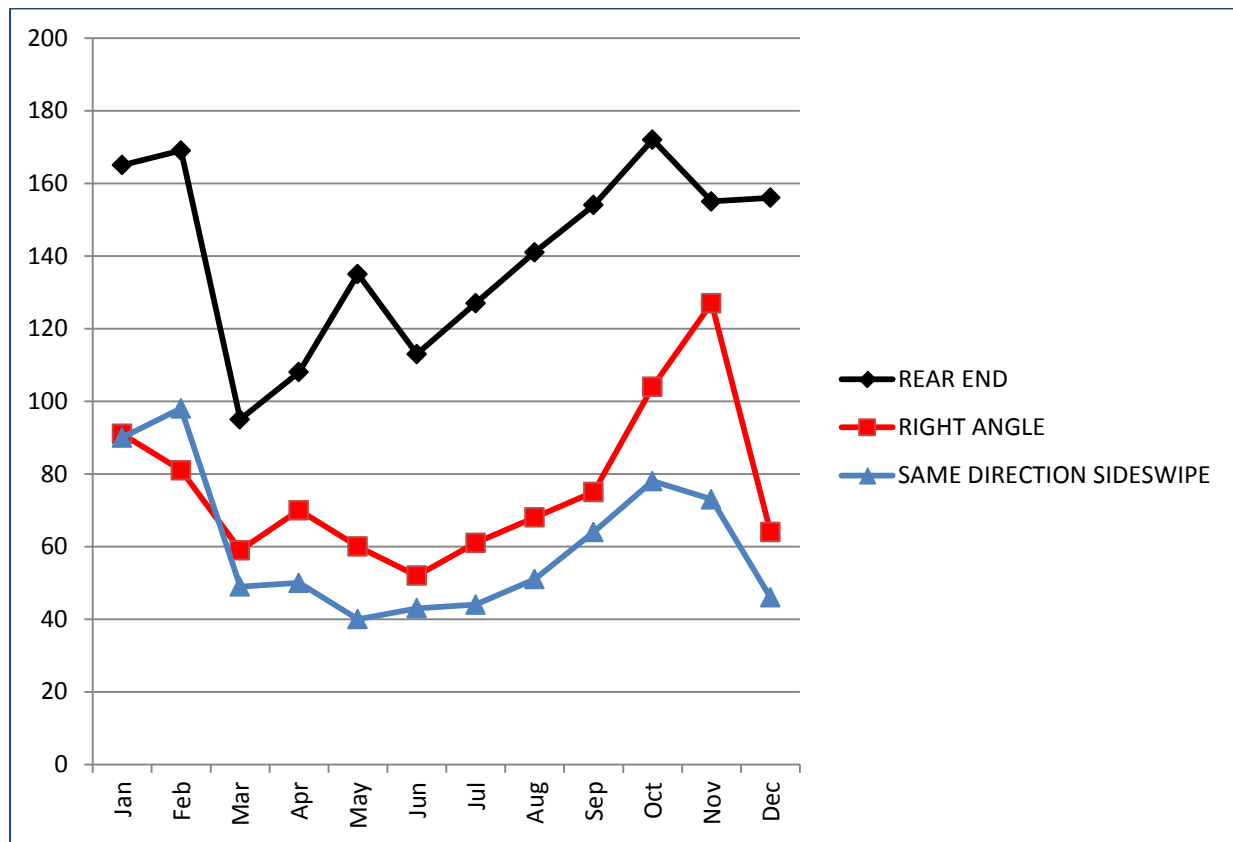


Figure 10 and Table 16 show that Friday had the highest number of crashes.

Figure 10: Crashes by Day of the Week

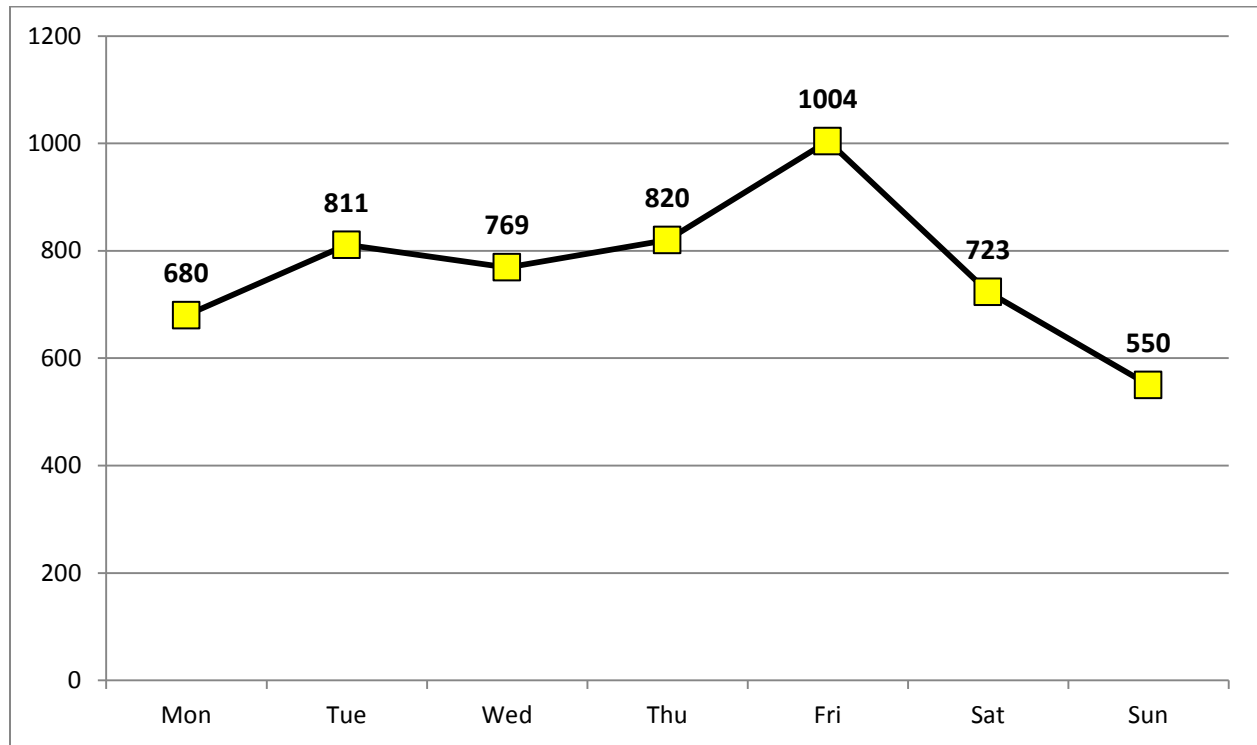


Table 16: Crash Percentages by Day of the Week

| | MON | TUE | WED | THU | FRI | SAT | SUN | TOTAL |
|-------------------|-------|-------|-------|-------|-------|-------|-------|--------|
| CRASHES | 680 | 811 | 769 | 820 | 1004 | 723 | 550 | 5357 |
| PERCENTAGE | 12.7% | 15.1% | 14.4% | 15.3% | 18.7% | 13.5% | 10.3% | 100.0% |

Figure 11 shows crashes by day of the week for the three most common crash types.

Figure 11: 3 Most Common Crash Types by Day of the Week

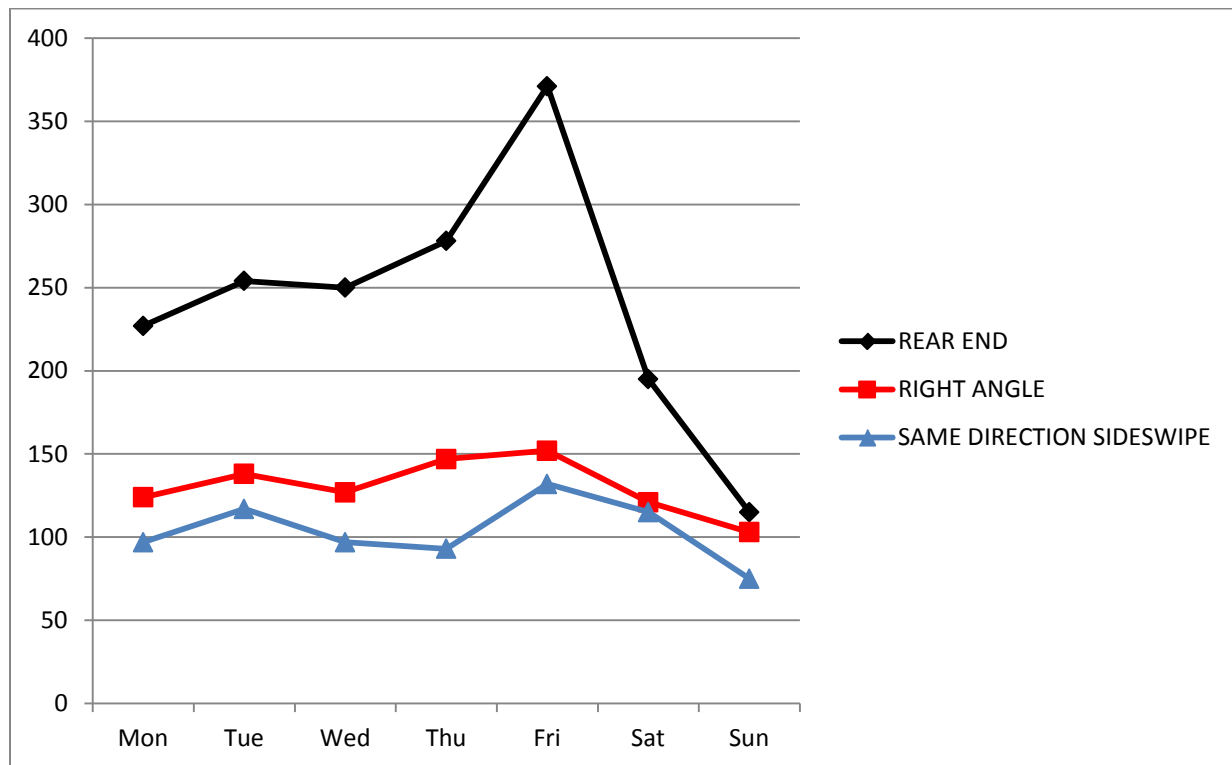


Figure 12 shows that the majority of crashes occurred during the daylight hours (from 7 a.m. to 7 p.m.).

Figure 12: Crashes by Time of Day

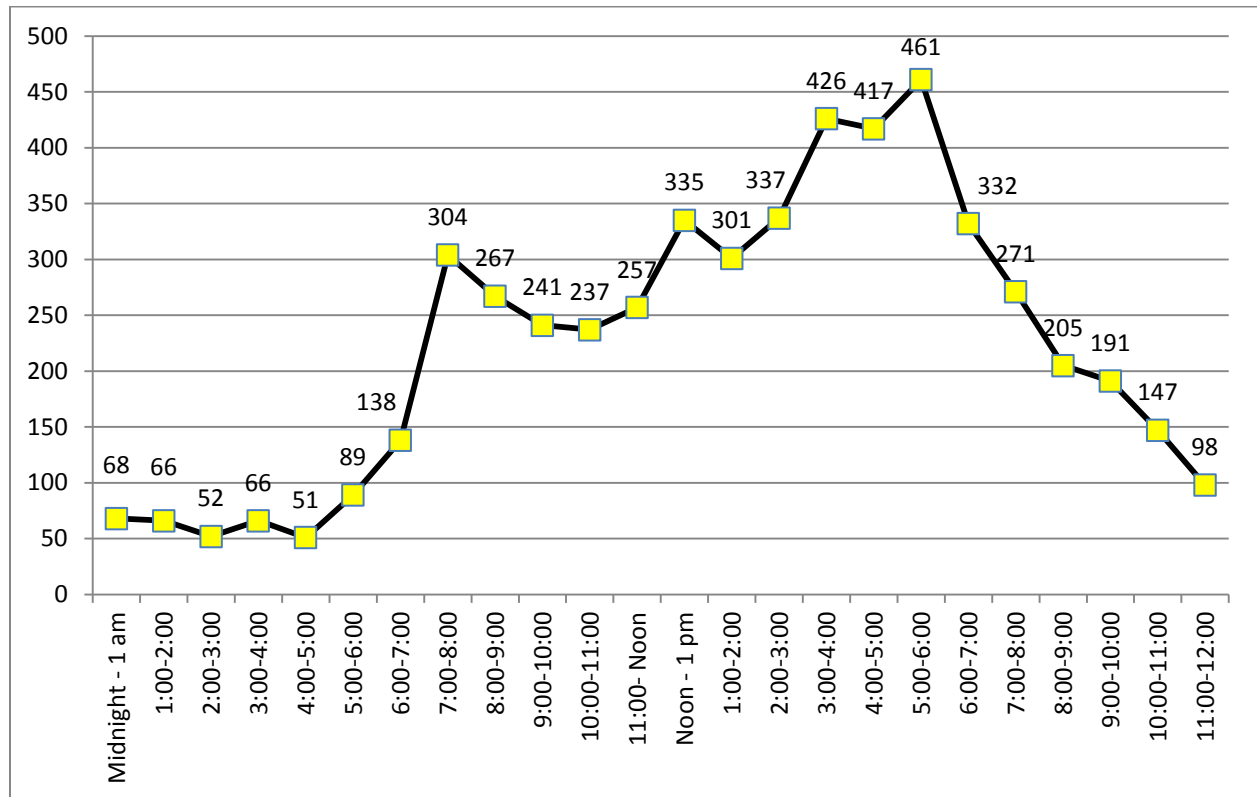
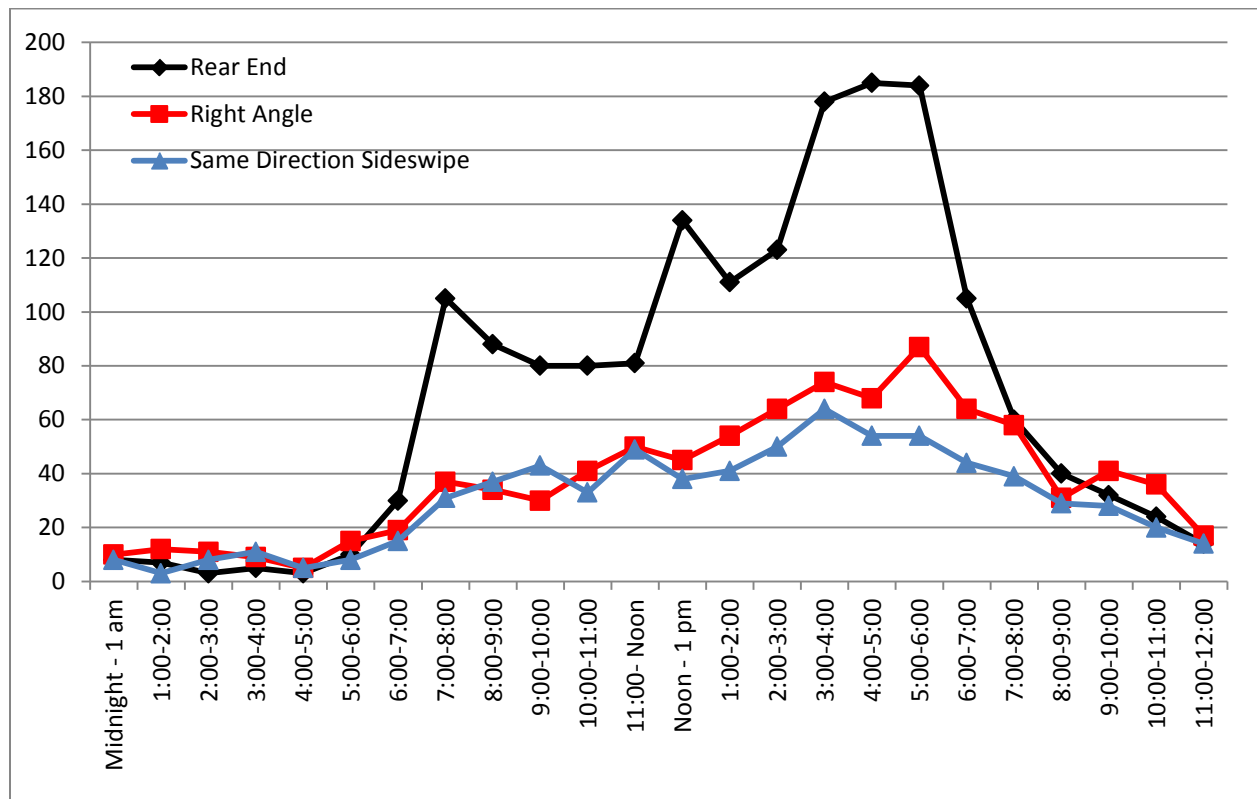


Figure 13 shows crashes by time of day for the three most common crash types.

Figure 13: 3 Most Common Crash Types by Time of Day



Chapter 4: Weather and Road Conditions

Weather and road conditions can contribute to crashes. Decreased visibility, slick pavement, and other weather/road factors increase the chances for crashes. This chapter analyzes trends in crashes with different weather and pavement conditions.

Table 17 shows that the highest number of crashes occurred when weather conditions were clear. A large number of crashes also occurred when weather conditions were cloudy. Figures 14 and 15 show the location of crashes in clear weather conditions.

Table 17: Crashes by Weather Conditions

| WEATHER CONDITIONS | CRASHES |
|---------------------------------|----------------|
| BLOWING SAND/SOIL/SNOW | 64 |
| CLEAR | 2964 |
| CLOUDY | 1227 |
| FOG/SMOKE/SMOG | 9 |
| RAIN | 558 |
| SEVERE CROSS WIND | 3 |
| SLEET/HAIL/FREEZING RAIN | 35 |
| SNOW | 491 |
| UNKNOWN | 6 |
| TOTAL | 5357 |

Figure 14: Tippecanoe County Crashes in Clear Weather Conditions

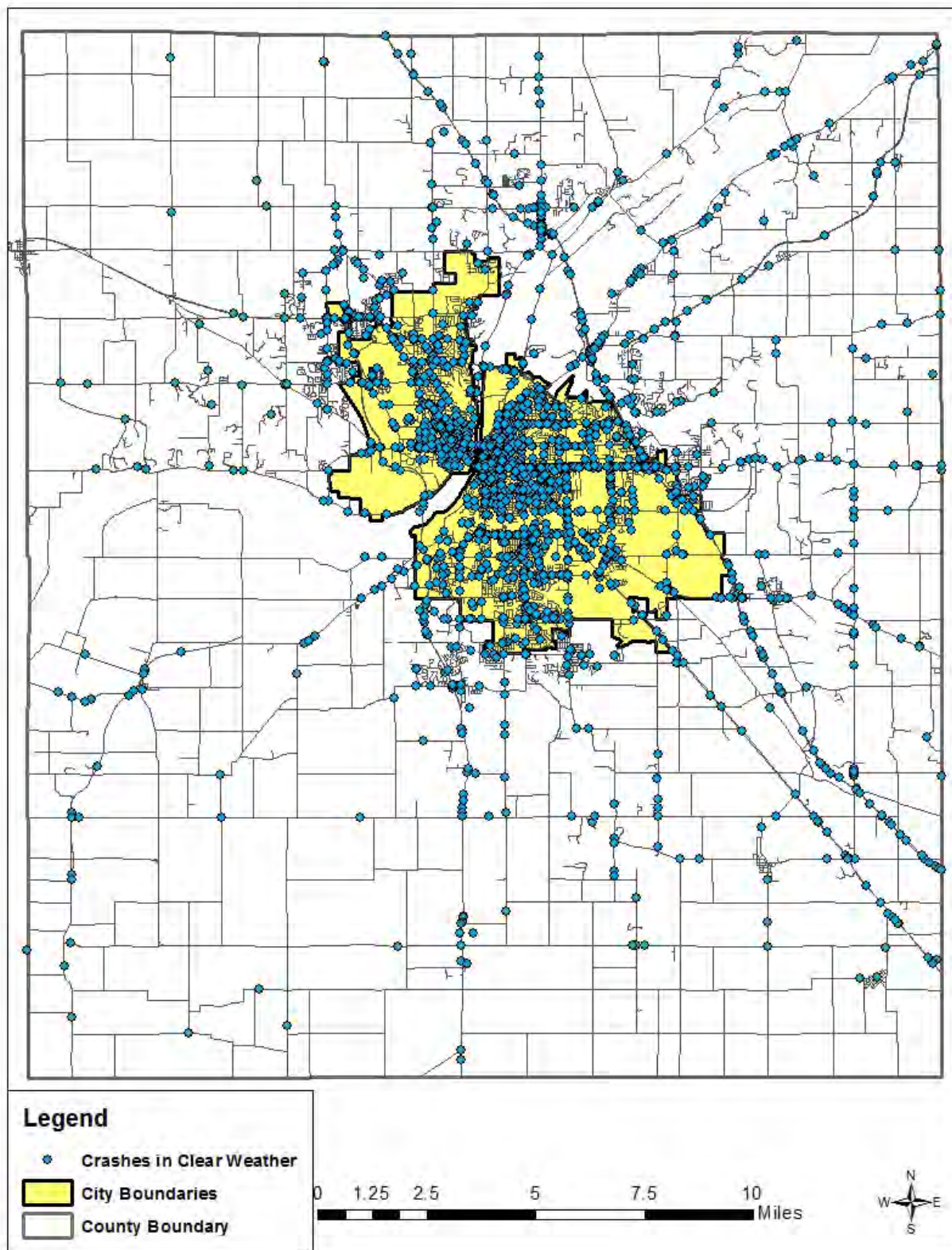
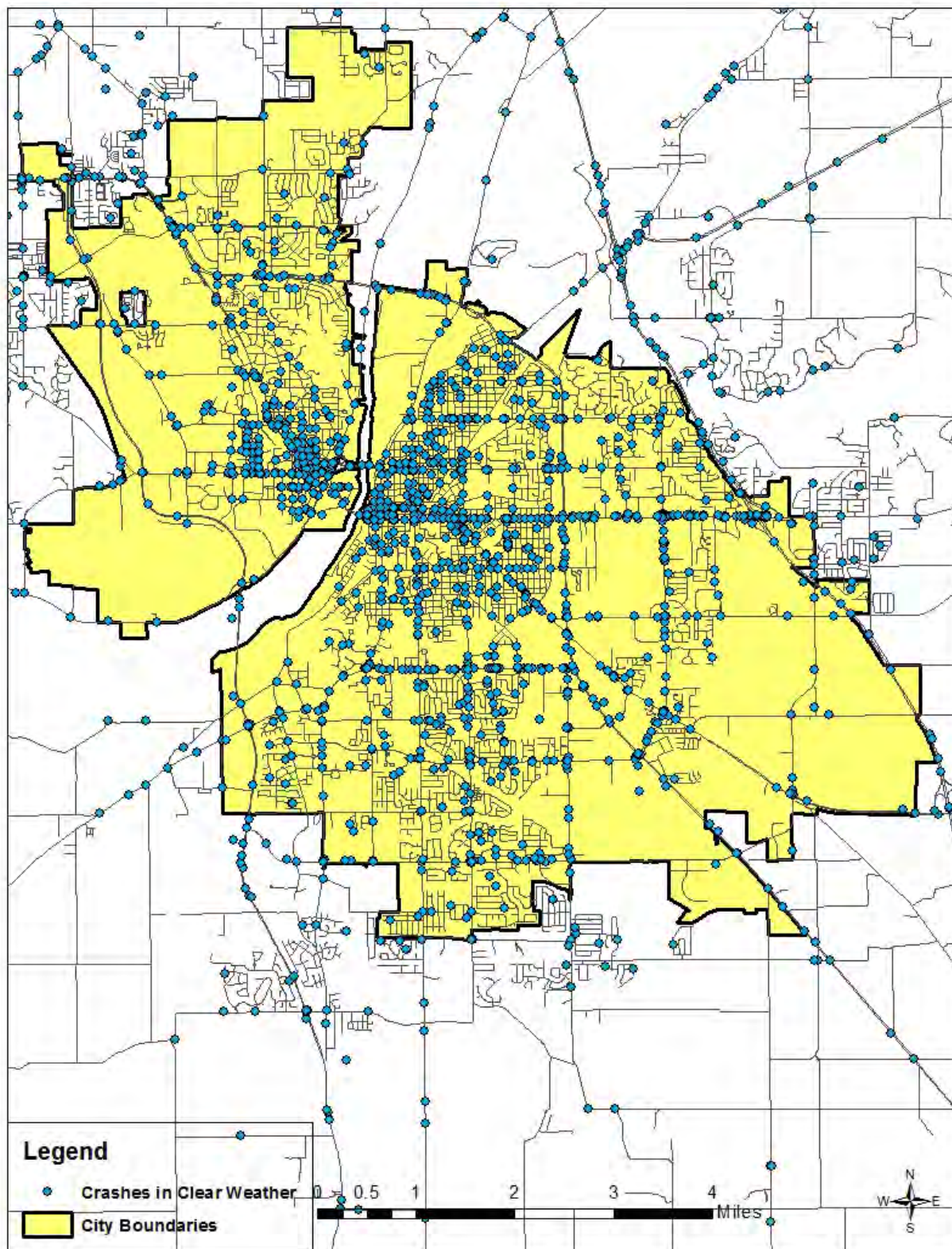


Figure 15: Lafayette and West Lafayette Crashes in Clear Weather



Figures 16 and 17 show the location of winter weather crashes (where the road surface had snow, ice, or slush on it).

Figure 16: Tippecanoe County Winter Weather Crashes

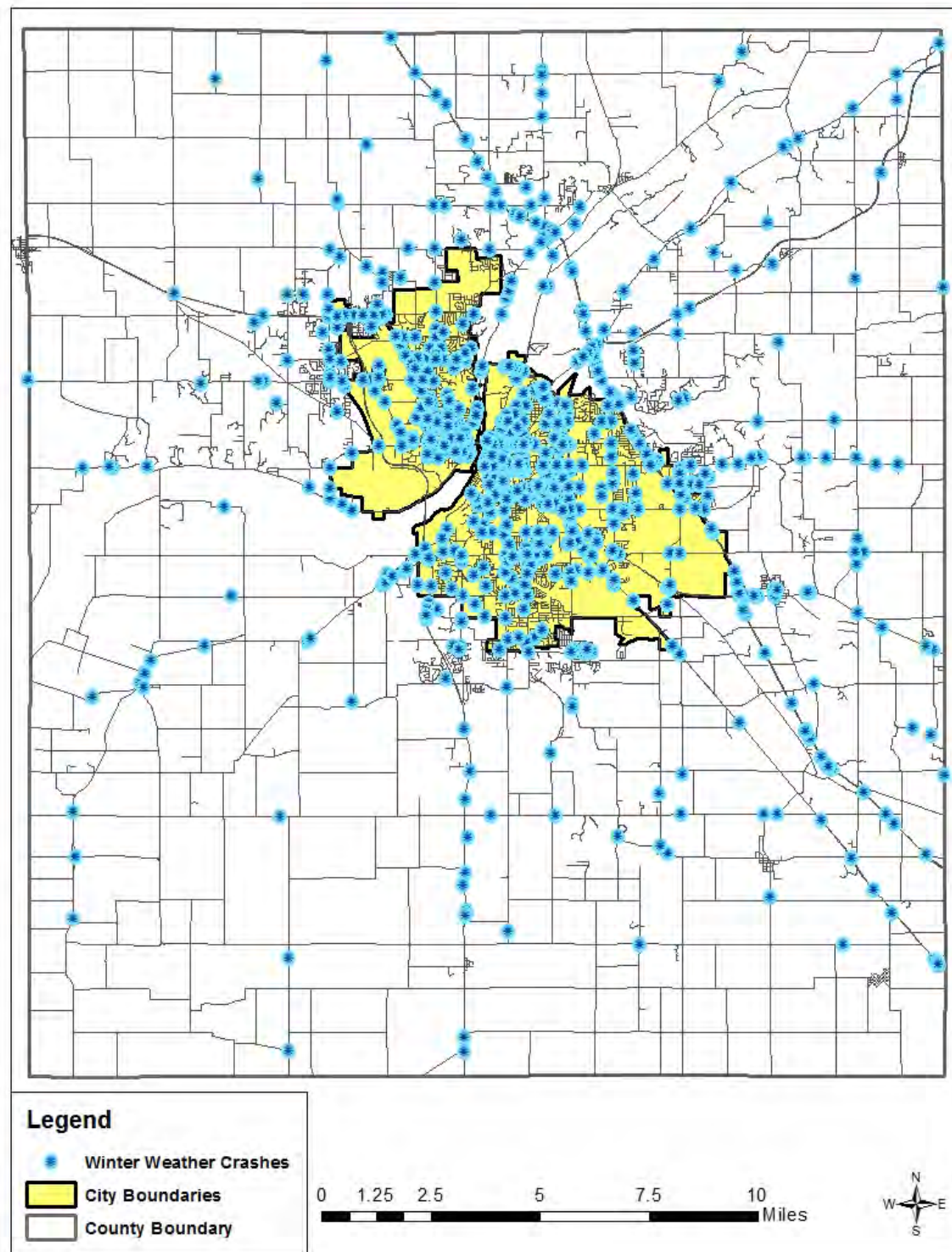


Figure 17: Lafayette and West Lafayette Winter Weather Crashes

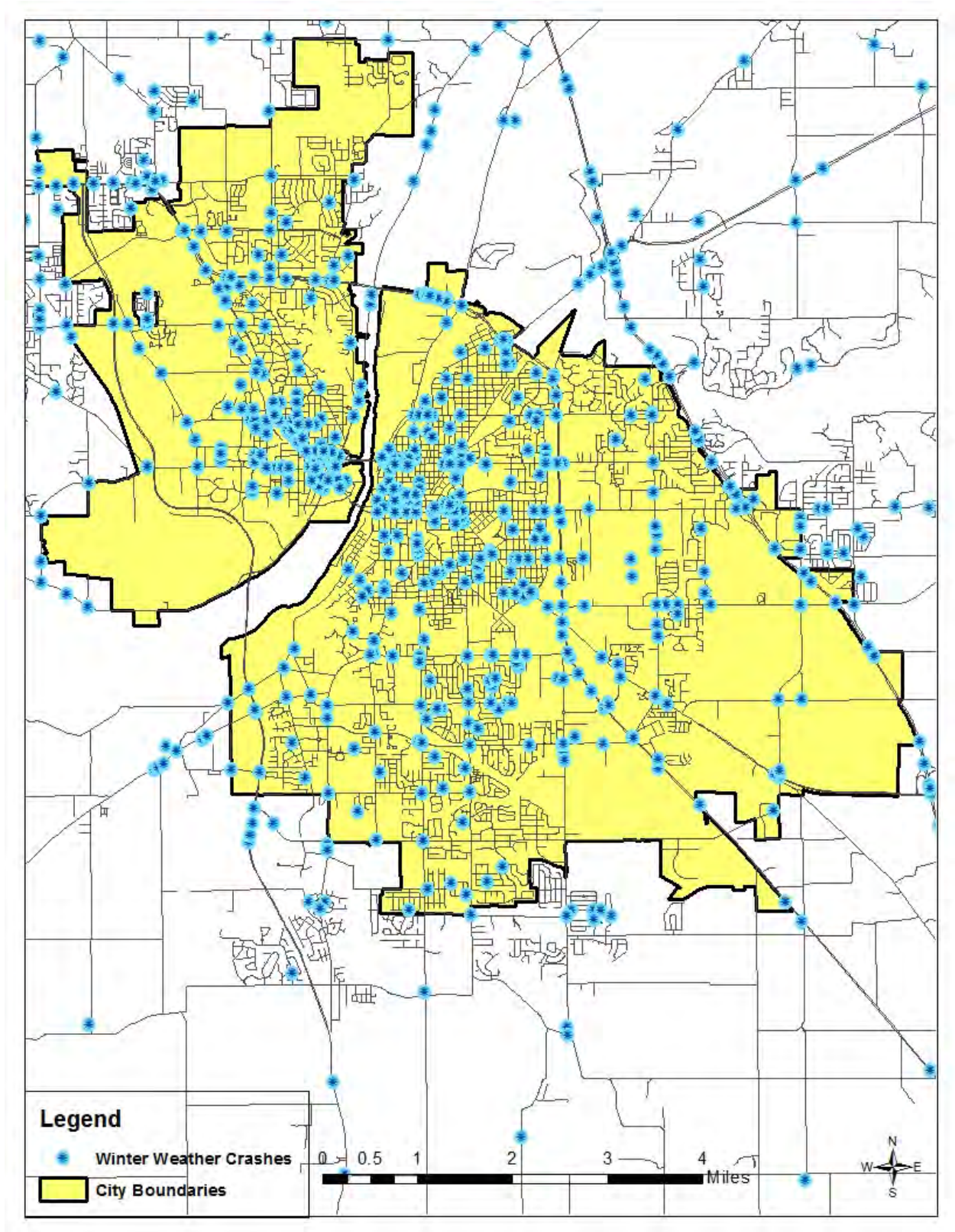


Table 18 shows that the majority of crashes occurred when pavement was dry.

Table 18: Crashes by Road Surface Condition

| SURFACE CONDITIONS | CRASHES |
|-----------------------------------|----------------|
| DRY | 3388 |
| ICE | 416 |
| LOOSE MATERIAL ON ROAD | 19 |
| MUDDY | 2 |
| SNOW/SLUSH | 637 |
| WATER (STANDING OR MOVING) | 4 |
| WET | 886 |
| UNKNOWN | 5 |
| TOTAL | 5357 |

Table 19 shows that the majority of crashes occurred when there was daylight.

Table 19: Crashes by Amount of Sunlight

| LIGHT CONDITION | CRASHES |
|---------------------------|----------------|
| DARK (LIGHTED) | 822 |
| DARK (NOT LIGHTED) | 652 |
| DAWN/DUSK | 289 |
| DAYLIGHT | 3539 |
| UNKNOWN | 55 |
| TOTAL | 5357 |

Chapter 5: Injuries and Fatalities

Although the majority of crashes only cause property damage, some crashes result in injury or fatality for a driver or passenger. Crashes with injuries or fatalities are much more costly to those involved than property damage crashes are. The costs of a severe injury or fatality include high medical costs, lost income, and emotional distress. This chapter analyzes trends in crashes with at least one injury or fatality.

Injuries suffered range in severity. Some injuries are as minor as temporary pain, others are as major as paralysis. In ARIES, injuries are classified in two categories: non-incapacitating and incapacitating. This information is not always 100% reliable. The responding officer marks down an estimate of the category of the severity of the injury at the scene of the crash. This estimate does not have the same accuracy as medical records would. However, it is very difficult to obtain medical records to verify the severity of an injury in a crash after the crash has happened. Therefore, the officer's estimate is used in this report.

Table 20 shows data about injury and fatality crashes in Tippecanoe County.

Table 20: Injury and Fatality Crashes

| CRASH STATISTIC | NUMBER |
|----------------------|--------|
| INJURY CRASHES | 972 |
| NUMBER OF INJURIES | 1268 |
| FATALITY CRASHES | 6 |
| NUMBER OF FATALITIES | 6 |

Table 21 shows that failure to yield right of way was the biggest cause of injuries.

Table 21: Injuries by Primary Factor

| PRIMARY FACTOR | INJURIES |
|---|-----------------|
| FAILURE TO YIELD RIGHT OF WAY | 306 |
| FOLLOWING TOO CLOSELY | 232 |
| DISREGARD SIGNAL/REG SIGN | 123 |
| SPEED TOO FAST FOR WEATHER CONDITIONS | 104 |
| UNSAFE SPEED | 98 |
| RAN OFF ROAD RIGHT | 91 |
| OTHER (DRIVER) - EXPLAIN IN NARRATIVE | 62 |
| IMPROPER TURNING | 36 |
| LEFT OF CENTER | 33 |
| OVERCORRECTING/OVERSTEERING | 30 |
| IMPROPER LANE USAGE | 28 |
| ROADWAY SURFACE CONDITION | 18 |
| PEDESTRIAN ACTION | 14 |
| UNSAFE BACKING | 13 |
| ANIMAL/OBJECT IN ROADWAY | 12 |
| IMPROPER PASSING | 10 |
| DRIVER DISTRACTED - EXPLAIN IN NARRATIVE | 8 |
| DRIVER ASLEEP OR FATIGUED | 7 |
| OTHER (ENVIRONMENTAL) - EXPLAIN IN NARR | 7 |
| DRIVER ILLNESS | 6 |
| WRONG WAY ON ONE WAY | 6 |
| UNSAFE LANE MOVEMENT | 4 |
| OTHER (VEHICLE) - EXPLAIN IN NARRATIVE | 4 |
| STEERING FAILURE | 4 |
| OTHER TELEMATICS IN USE | 4 |
| BRAKE FAILURE OR DEFECTIVE | 3 |
| CELL PHONE USAGE | 3 |
| OBSTRUCTION NOT MARKED | 2 |
| TOTAL | 1268 |

Table 22 shows that rear end crashes caused the highest number of injuries.

Table 22: Injuries by Crash Type

| CRASH TYPE | CRASHES |
|---|----------------|
| REAR END | 402 |
| RIGHT ANGLE | 322 |
| RAN OFF ROAD | 177 |
| LEFT TURN | 94 |
| SAME DIRECTION SIDESWIPE | 60 |
| HEAD ON BETWEEN TWO MOTOR VEHICLES | 50 |
| HEAD ON | 43 |
| OTHER - EXPLAIN IN NARRATIVE | 33 |
| NON-COLLISION | 32 |
| OPPOSITE DIRECTION SIDESWIPE | 23 |
| RIGHT TURN | 18 |
| BACKING CRASH | 11 |
| LEFT/RIGHT TURN | 1 |
| REAR TO REAR | 1 |
| COLLISION WITH OBJECT IN ROAD | 1 |
| UNKNOWN | 0 |
| COLLISION WITH DEER | 0 |
| COLLISION WITH ANIMAL-OTHER | 0 |
| TOTAL | 1268 |

Table 23 shows that October had the highest number of injuries.

Table 23: Injuries by Month

| MONTH | INJURIES |
|--------------|-----------------|
| JAN | 86 |
| FEB | 117 |
| MAR | 79 |
| APR | 99 |
| MAY | 113 |
| JUN | 88 |
| JUL | 107 |
| AUG | 121 |
| SEP | 112 |
| OCT | 133 |
| NOV | 111 |
| DEC | 102 |
| TOTAL | 1268 |

Figure 18 shows that the highest number of injuries occurred between 3 and 4 p.m.

Figure 18: Injuries by Time of Day

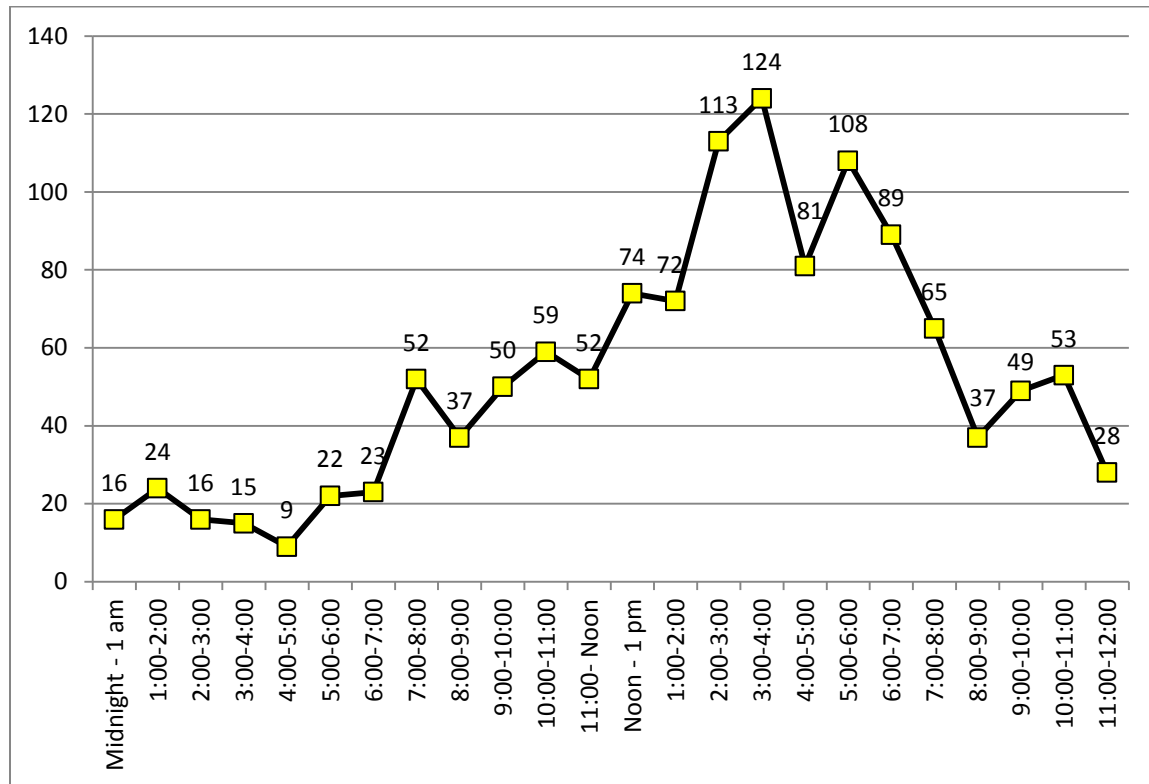


Figure 19 shows that Friday had the highest number of injuries.

Figure 19: Injuries by Day of the Week

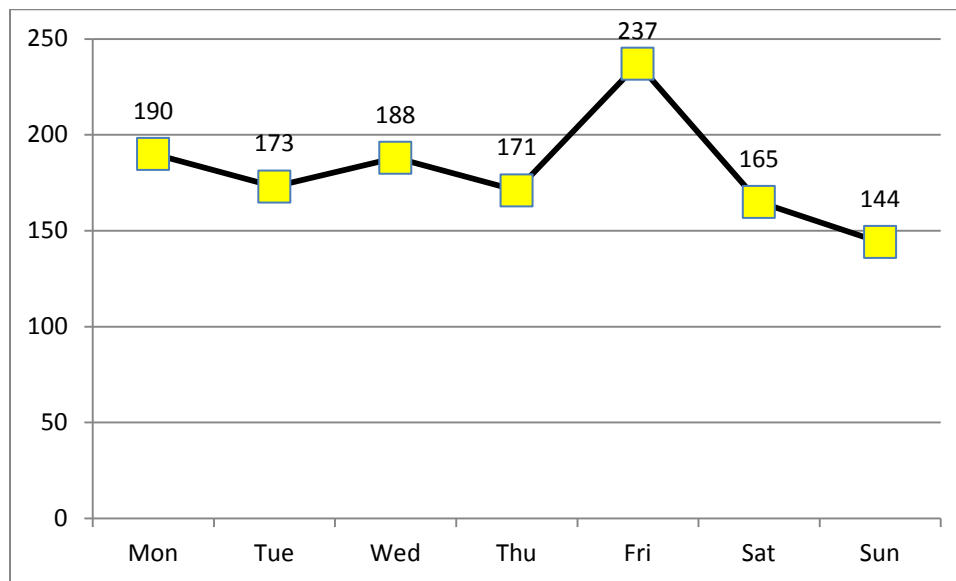


Table 24 shows that most of the injuries were to those 34 years old or younger.

Table 24: Injuries by Age and Gender

| | <16 | 16-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | TOTAL |
|---------------|-----|-------|-------|-------|-------|-------|-----|-------|
| MALE | 42 | 159 | 97 | 72 | 79 | 71 | 47 | 567 |
| FEMALE | 66 | 208 | 139 | 89 | 79 | 64 | 69 | 714 |
| TOTAL | 108 | 367 | 236 | 161 | 158 | 135 | 116 | 1281 |

Table 25 shows that most of the injuries suffered in crashes were categorized as non-incapacitating.

Crashes with fatal or incapacitating injuries are considered very severe. In 2014, there were 70 of these crashes.

Table 25: Severity of Injuries in Crashes

| INJURY TYPE | INJURIES |
|---------------------------|-----------------|
| FATAL | 6 |
| INCAPACITATING | 64 |
| NON-INCAPACITATING | 1173 |
| POSSIBLE | 24 |
| REFUSED TREATMENT | 10 |
| UNKNOWN | 6 |
| NONE | 7699 |
| TOTAL | 8982 |

Figure 20 shows the locations of incapacitating injuries in the county.

Figure 20: Tippecanoe County Incapacitating Injuries

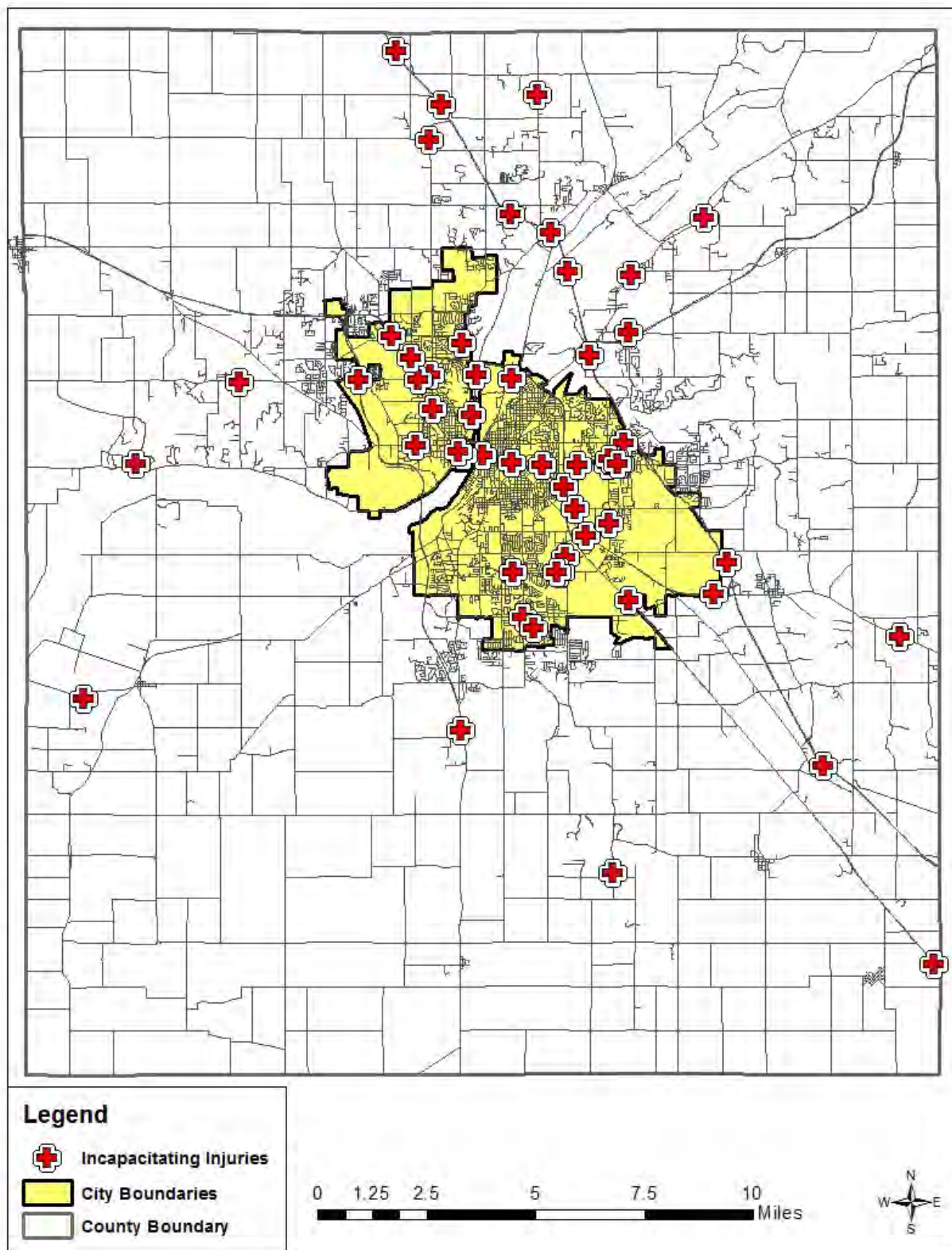


Table 26 shows that failing to yield the right of way led to the highest number of incapacitating injuries.

Table 26: Incapacitating Injuries by Primary Factor

| PRIMARY FACTOR | INCAPACITATING INJURIES |
|---|--------------------------------|
| FAILURE TO YIELD RIGHT OF WAY | 14 |
| RAN OFF ROAD RIGHT | 10 |
| FOLLOWING TOO CLOSELY | 7 |
| DISREGARD SIGNAL/REG SIGN | 7 |
| UNSAFE SPEED | 6 |
| OTHER (DRIVER) - EXPLAIN IN NARRATIVE | 2 |
| LEFT OF CENTER | 2 |
| OVERCORRECTING/OVERSTEERING | 2 |
| PEDESTRIAN ACTION | 2 |
| WRONG WAY ON ONE WAY | 2 |
| SPEED TOO FAST FOR WEATHER CONDITIONS | 1 |
| IMPROPER LANE USAGE | 1 |
| ANIMAL/OBJECT IN ROADWAY | 1 |
| IMPROPER TURNING | 1 |
| ROADWAY SURFACE CONDITION | 1 |
| IMPROPER PASSING | 1 |
| DRIVER DISTRACTED - EXPLAIN IN NARRATIVE | 1 |
| DRIVER ASLEEP OR FATIGUED | 1 |
| DRIVER ILLNESS | 1 |
| OBSTRUCTION NOT MARKED | 1 |
| TOTAL | 64 |

Table 27 shows that right angle crashes caused the highest number of incapacitating injuries, followed closely by running off the road.

Table 27: Incapacitating Injuries by Crash Type

| CRASH TYPE | INCAPACITATING INJURIES |
|------------------------------------|-------------------------|
| RIGHT ANGLE | 16 |
| RAN OFF ROAD | 14 |
| REAR END | 9 |
| LEFT TURN | 6 |
| OTHER - EXPLAIN IN NARRATIVE | 6 |
| HEAD ON BETWEEN TWO MOTOR VEHICLES | 5 |
| NON-COLLISION | 3 |
| SAME DIRECTION SIDESWIPE | 3 |
| HEAD ON | 1 |
| RIGHT TURN | 1 |
| TOTAL | 64 |

Table 28 shows that younger people were more likely to suffer incapacitating injuries than older people were.

Table 28: Incapacitating Injuries by Age and Gender

| | <16 | 16-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | TOTAL |
|--------|-----|-------|-------|-------|-------|-------|-----|-------|
| MALE | 1 | 6 | 9 | 2 | 6 | 9 | 8 | 41 |
| FEMALE | 1 | 5 | 3 | 6 | 4 | 2 | 2 | 23 |
| TOTAL | 2 | 11 | 12 | 8 | 10 | 11 | 10 | 64 |

Figure 21 shows that males were more likely to suffer incapacitating injuries than females were.

Figure 21: Incapacitating Injuries by Gender

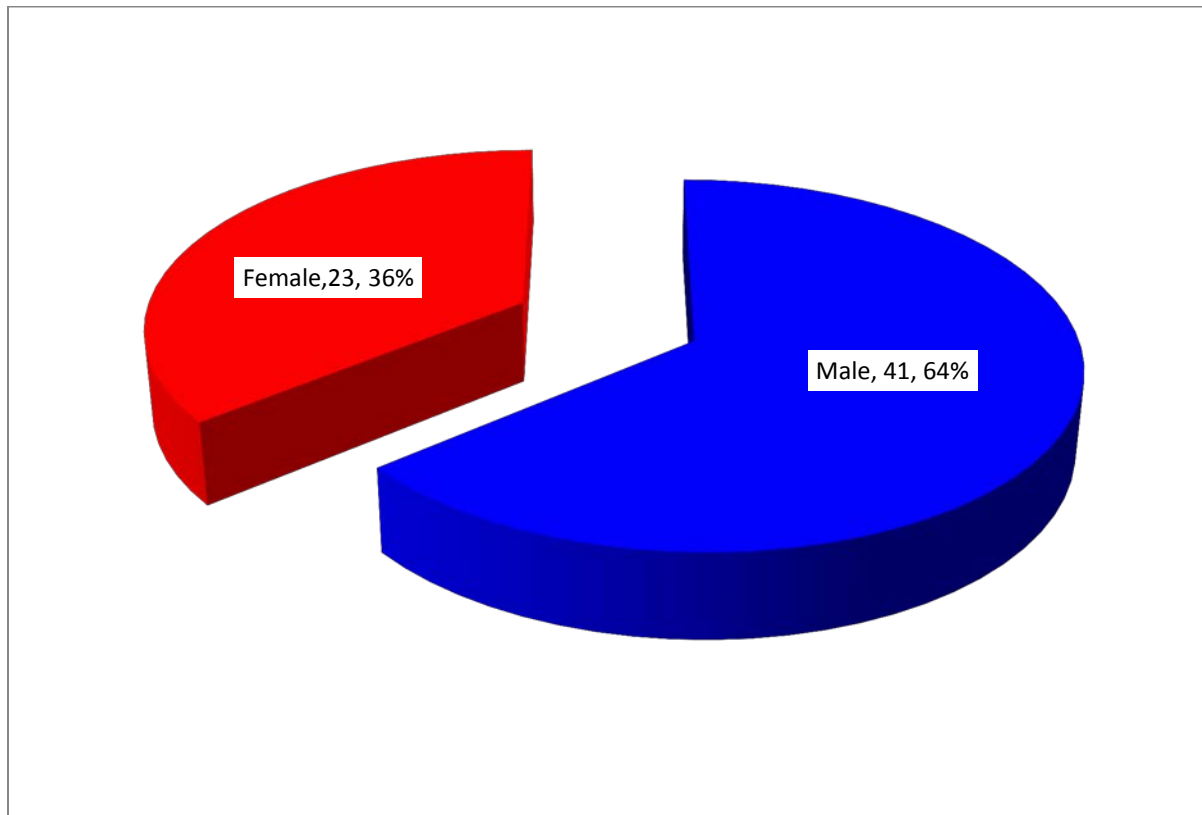


Table 29 shows that November had the most incapacitating injuries.

Table 29: Incapacitating Injuries by Month

| MONTH | INCAPACITATING INJURIES |
|--------------|--------------------------------|
| JAN | 1 |
| FEB | 3 |
| MAR | 2 |
| APR | 3 |
| MAY | 2 |
| JUN | 7 |
| JUL | 5 |
| AUG | 7 |
| SEP | 8 |
| OCT | 9 |
| NOV | 11 |
| DEC | 6 |
| TOTAL | 64 |

Figure 22 shows that Monday had the most incapacitating injuries.

Figure 22: Incapacitating Injuries by Day of the Week

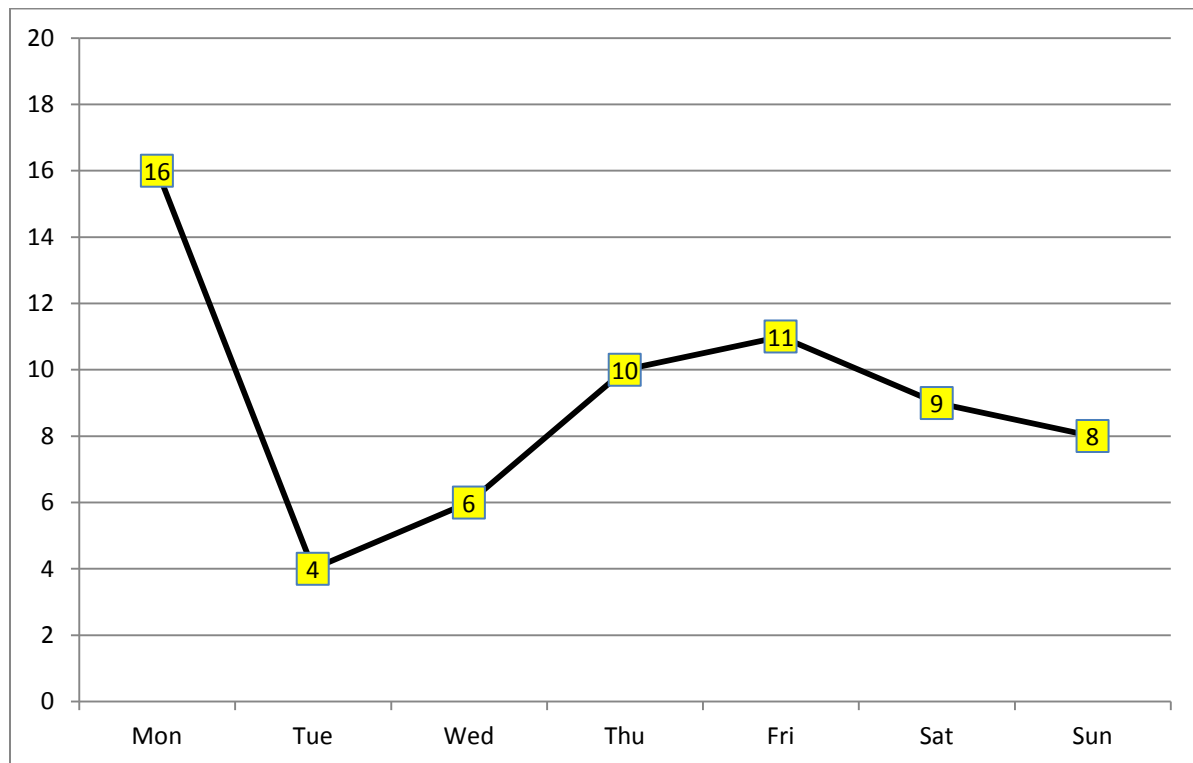


Table 30 shows that the highest number of incapacitating injuries occurred between 1 and 2 a.m.

Table 30: Incapacitating Injuries by Time of Day

| TIME | INCAPACITATING INJURIES |
|------------------------|--------------------------------|
| Midnight - 1 am | 3 |
| 1:00-2:00 | 11 |
| 2:00-3:00 | 1 |
| 3:00-4:00 | 2 |
| 4:00-5:00 | 1 |
| 5:00-6:00 | 1 |
| 6:00-7:00 | 4 |
| 7:00-8:00 | 1 |
| 8:00-9:00 | 0 |
| 9:00-10:00 | 1 |
| 10:00-11:00 | 2 |
| 11:00- Noon | 1 |
| Noon - 1 pm | 3 |
| 1:00-2:00 | 4 |
| 2:00-3:00 | 3 |
| 3:00-4:00 | 5 |
| 4:00-5:00 | 3 |
| 5:00-6:00 | 3 |
| 6:00-7:00 | 2 |
| 7:00-8:00 | 1 |
| 8:00-9:00 | 2 |
| 9:00-10:00 | 2 |
| 10:00-11:00 | 3 |
| 11:00-12:00 | 5 |
| TOTAL | 64 |

Fatalities (and injuries that lead to fatalities) are the most severe consequences that come from crashes. Figure 23 shows that fatality crashes were spread all throughout the county. Figure 24 shows the locations of fatal crashes in Lafayette and West Lafayette.

Figure 23: Tippecanoe County Fatality Crashes

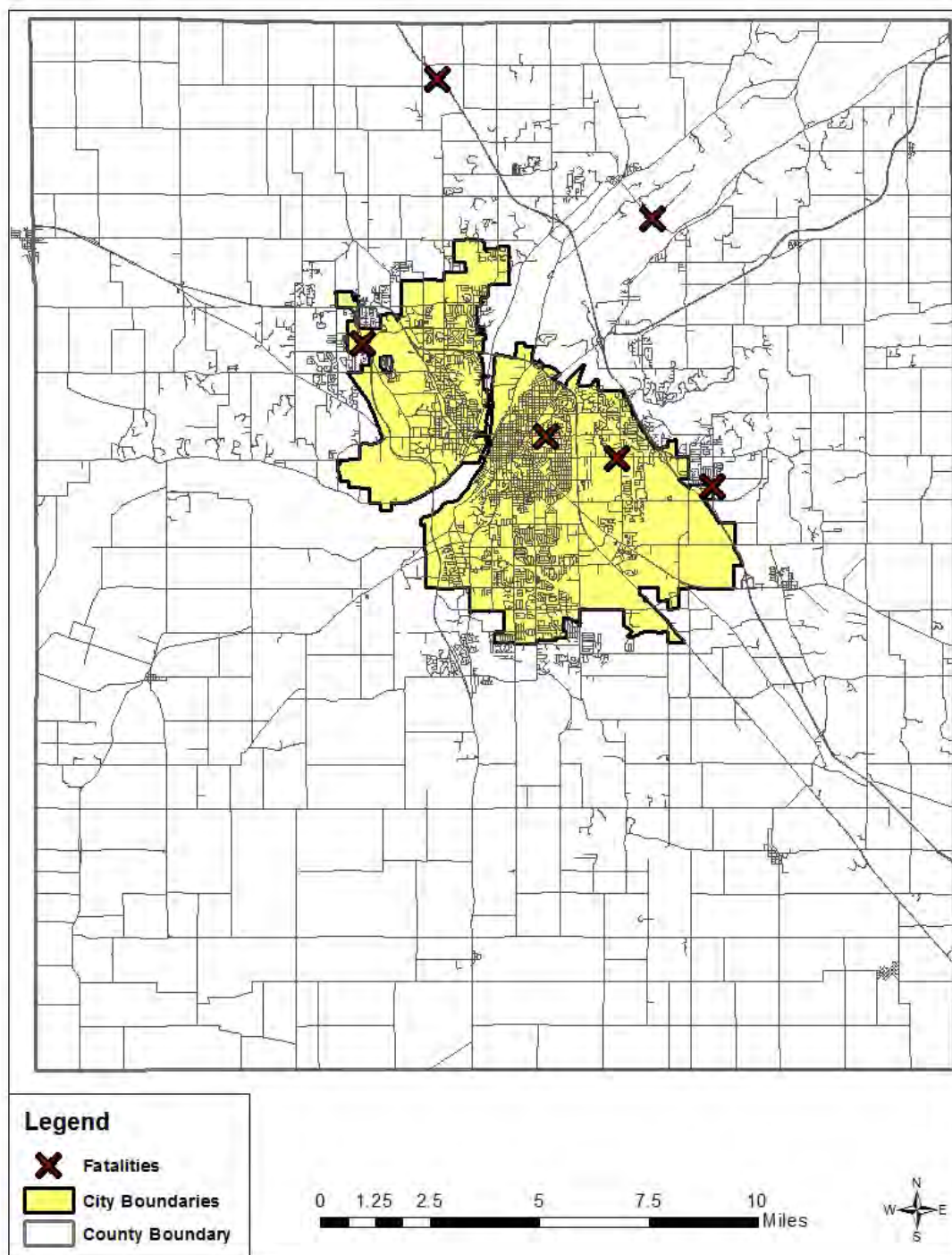


Figure 24: Lafayette and West Lafayette Fatality Crashes

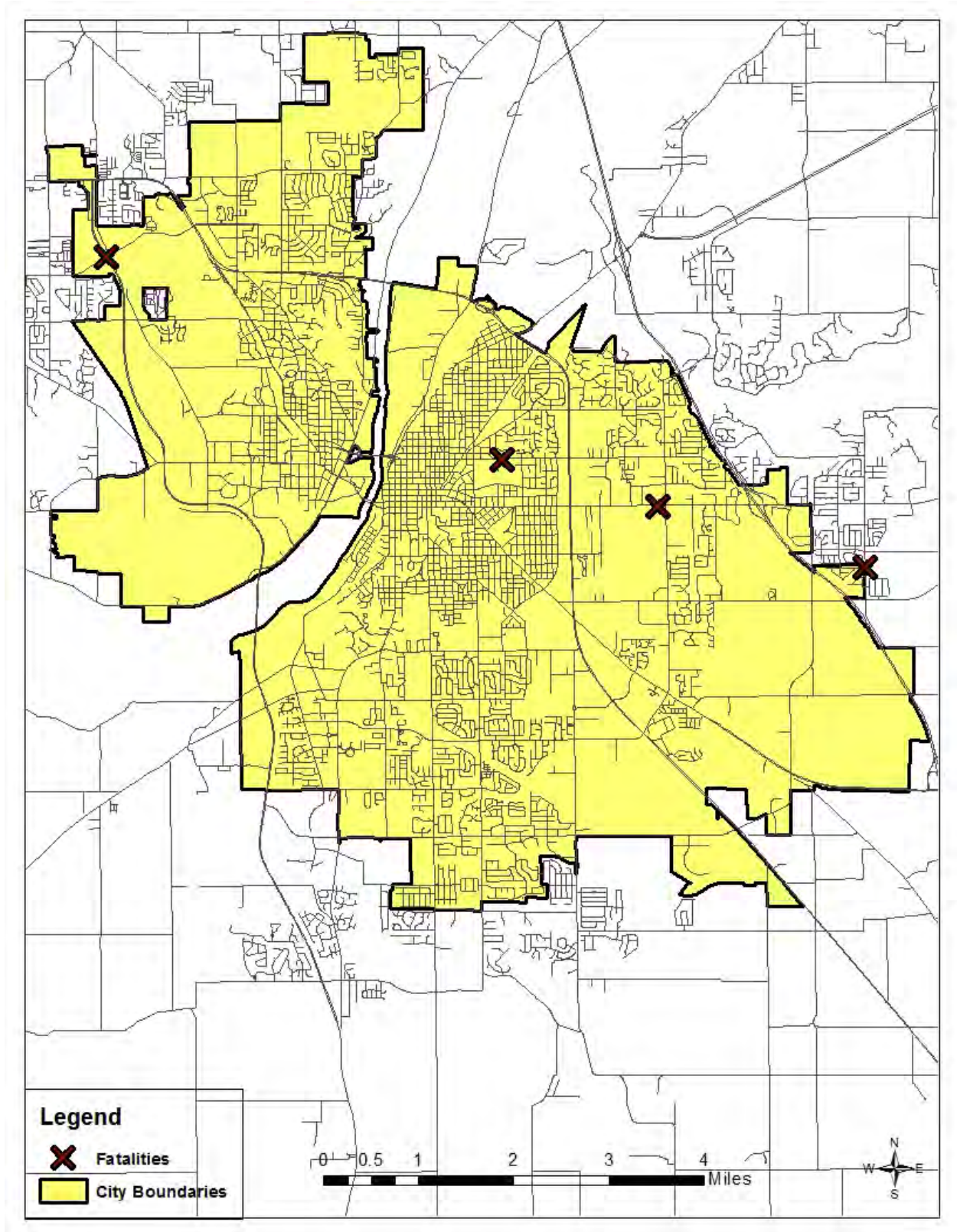


Table 31 shows that the most common cause of fatalities was failure to yield right of way.

Table 31: Fatalities by Primary Factor

| PRIMARY FACTOR | FATALITIES |
|---------------------------------------|------------|
| FAILURE TO YIELD RIGHT OF WAY | 2 |
| UNSAFE SPEED | 1 |
| OTHER (DRIVER) - EXPLAIN IN NARRATIVE | 1 |
| UNSAFE LANE MOVEMENT | 1 |
| DRIVER ILLNESS | 1 |
| TOTAL | 6 |

Table 32 shows that running off the road, right angle, and same direction sideswipe crashes were the only crash types that caused fatalities in 2014.

Table 32: Fatalities by Crash Type

| CRASH TYPE | FATALITIES |
|--------------------------|------------|
| RAN OFF ROAD | 2 |
| RIGHT ANGLE | 2 |
| SAME DIRECTION SIDESWIPE | 2 |
| TOTAL | 6 |

Table 33 shows that people of various age groups died in crashes.

Table 33: Fatalities by Age

| | <16 | 16-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | TOTAL |
|--------|-----|-------|-------|-------|-------|-------|-----|-------|
| MALE | 0 | 1 | 0 | 1 | 2 | 0 | 2 | 6 |
| FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 1 | 0 | 1 | 2 | 0 | 2 | 6 |

Figure 25 shows that no females died in crashes in 2014.

Figure 25: Fatalities by Gender

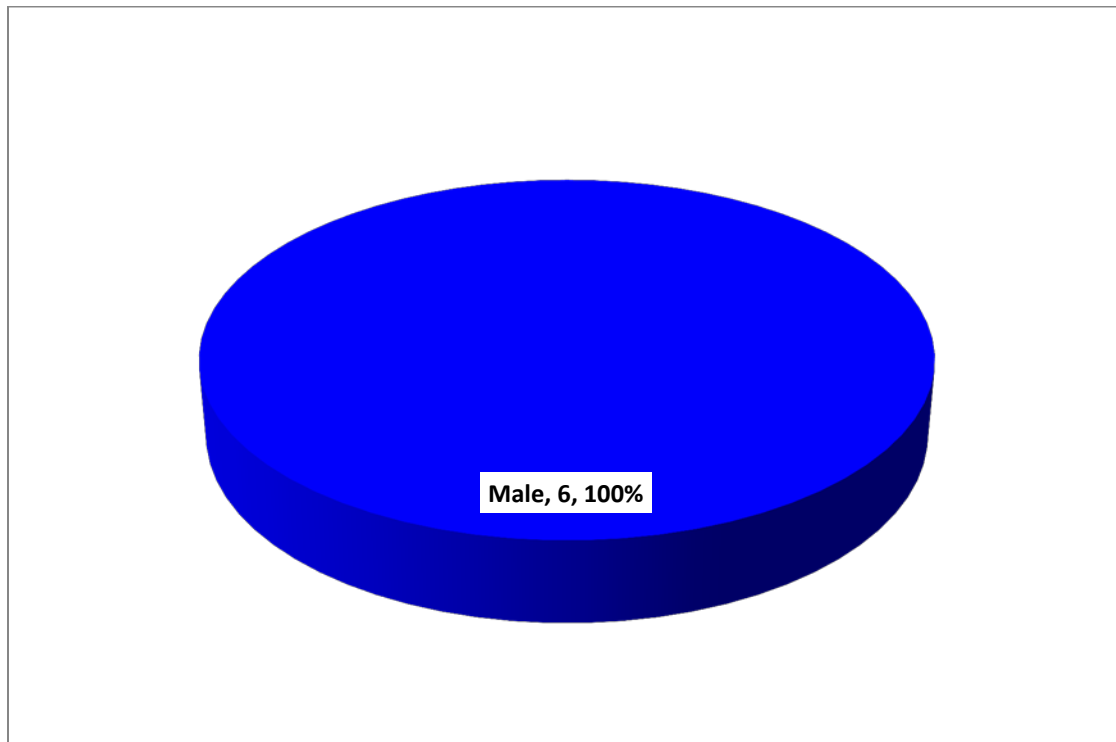


Table 34 shows that no month had more than one fatality.

Table 34: Fatalities by Month

| MONTH | FATALITIES |
|-------|------------|
| JAN | 0 |
| FEB | 1 |
| MAR | 0 |
| APR | 1 |
| MAY | 0 |
| JUN | 0 |
| JUL | 1 |
| AUG | 1 |
| SEP | 1 |
| OCT | 1 |
| NOV | 0 |
| DEC | 0 |
| TOTAL | 6 |

Figure 26 shows that Thursday and Sunday had the highest number of fatalities.

Figure 26: Fatalities by Day of the Week

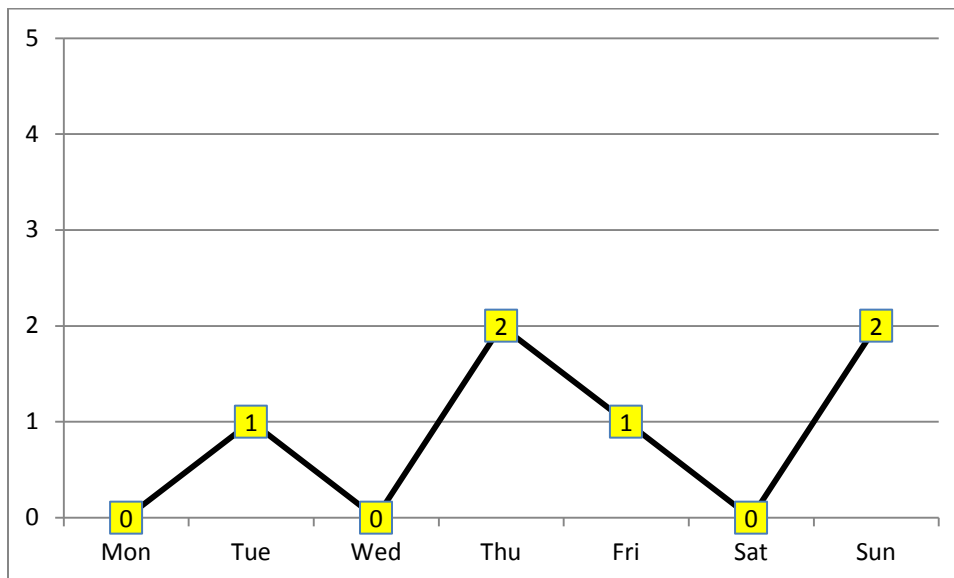
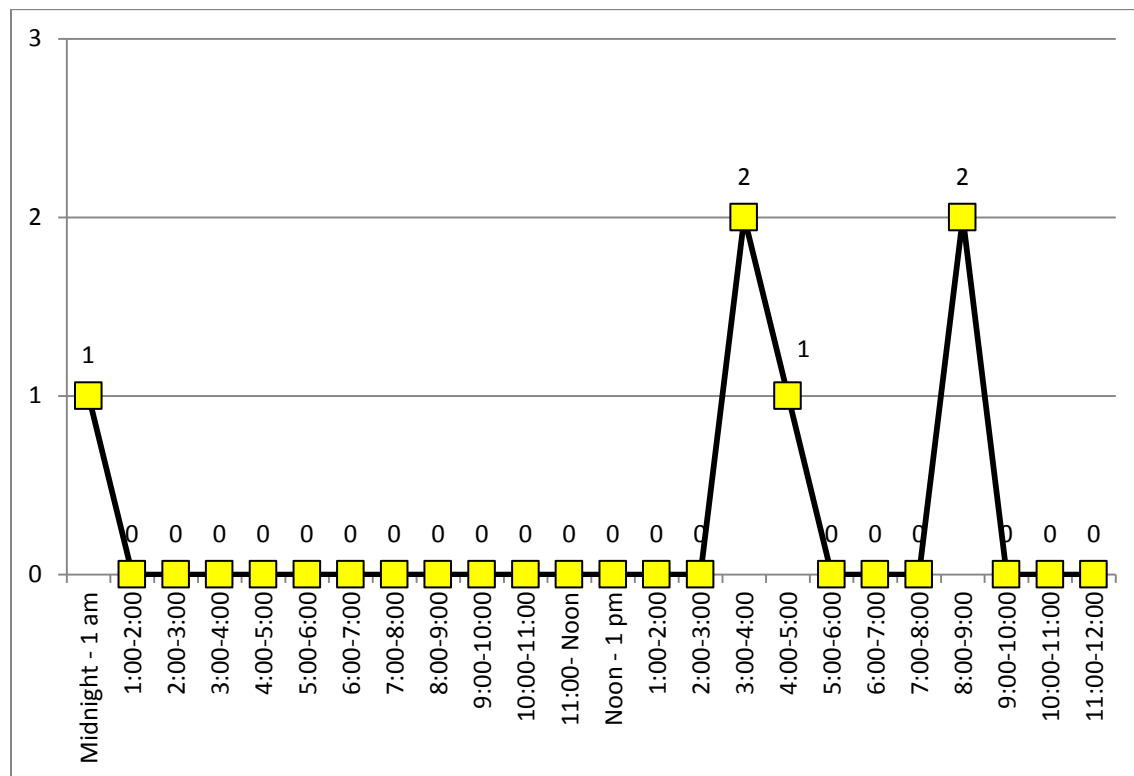


Figure 27 shows that the highest number of fatalities occurred between 3 and 4 p.m. and 8 and 9 p.m.

Figure 27: Fatalities by Time of Day



Chapter 6: Drug and Alcohol Involvement in Crashes

When drivers operate a vehicle in an impaired state, it hinders their ability to safely use the road. Not only does this endanger the driver, but also others around them. Some drivers operating in an impaired state may not end up in a crash, but they increase their risk of being involved in a crash when they drive impaired. This chapter analyzes factors that may contribute to drug and alcohol crashes.

In 2013, there were at least 51 drivers under the influence of alcohol and 2 drivers under the influence of drugs involved in crashes. It should be noted that for some of the data used, test results were listed as “pending” for alcohol or drug use.

Tables 35 and 36 show information on alcohol and drug crashes.

Table 35: Drug and Alcohol Crash Statistics

| OWI/DRUG CRASH DATA | STATISTIC |
|--|------------------|
| DRIVERS OPERATING UNDER THE INFLUENCE OF ALCOHOL | 51 |
| PERCENTAGE OF DRIVERS IN CRASHES UNDER THE INFLUENCE OF ALCOHOL | 0.59% |
| MAXIMUM BLOOD ALCOHOL CONTENT IN A CRASH | 0.33 |
| DRIVERS OPERATING UNDER THE INFLUENCE OF DRUGS | 2 |
| PERCENTAGE OF DRIVERS IN CRASHES UNDER THE INFLUENCE OF DRUGS | 0.02% |

Table 36: Drug and Alcohol Crash Data

| STATISTIC | ALCOHOL | DRUGS |
|--|----------------|--------------|
| FATALITY OR INCAPACITATING INJURY | 0 | 0 |
| INJURY | 10 | 2 |
| MOTORCYCLE CRASHES | 1 | 0 |
| BICYCLE CRASHES | 0 | 0 |
| PEDESTRIAN CRASHES | 0 | 0 |

Figure 28 shows the location of alcohol related crashes and Figure 29 shows the location of drug crashes.

Figure 28: Tippecanoe County Alcohol Crashes

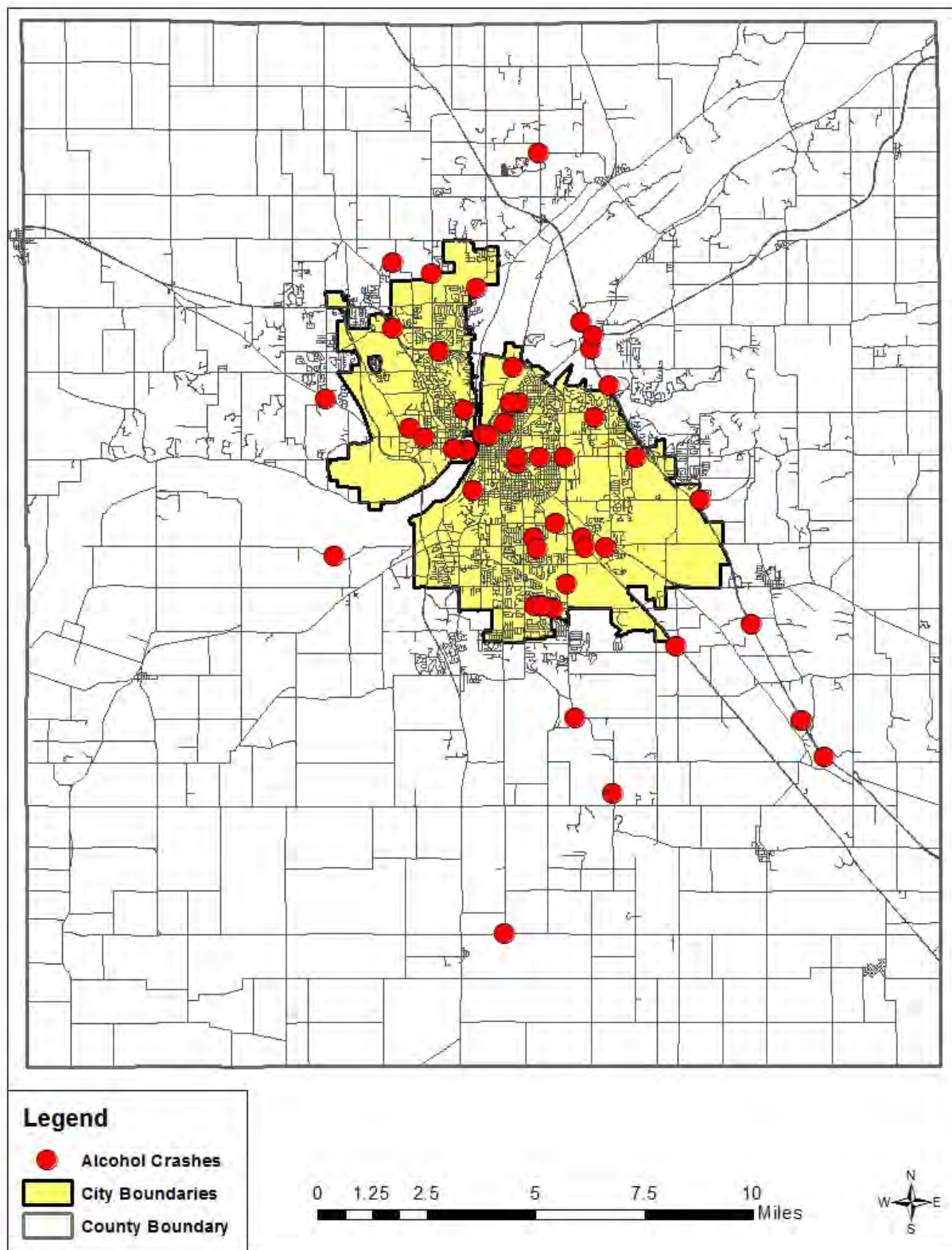


Figure 29: Tippecanoe County Drug Crashes

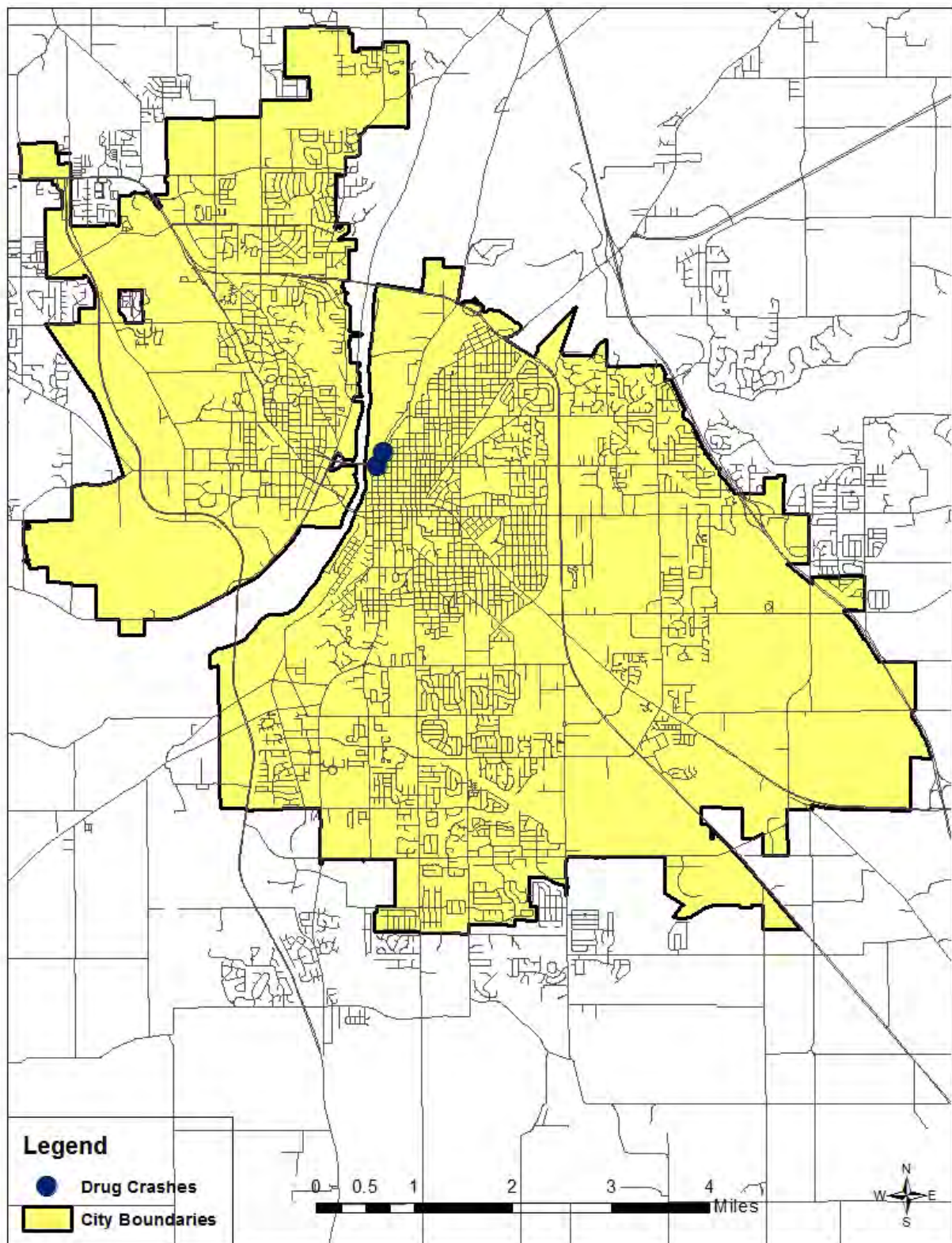


Table 37 shows that run off the road crashes were the most common type when alcohol or drugs were involved.

Table 37: Crash Types for Drug and Alcohol Crashes

| CRASH TYPE | ALCOHOL CRASHES | DRUG CRASHES | TOTAL |
|---|------------------------|---------------------|--------------|
| RAN OFF ROAD | 21 | 2 | 23 |
| REAR END | 11 | 0 | 11 |
| SAME DIRECTION SIDESWIPE | 5 | 0 | 5 |
| HEAD ON | 4 | 0 | 4 |
| BACKING CRASH | 2 | 0 | 2 |
| RIGHT TURN | 2 | 0 | 2 |
| HEAD ON BETWEEN TWO MOTOR VEHICLES | 1 | 0 | 1 |
| LEFT TURN | 1 | 0 | 1 |
| NON-COLLISION | 1 | 0 | 1 |
| OPPOSITE DIRECTION SIDESWIPE | 1 | 0 | 1 |
| OTHER - EXPLAIN IN NARRATIVE | 1 | 0 | 1 |
| RIGHT ANGLE | 1 | 0 | 1 |
| TOTAL | 51 | 2 | 53 |

Figure 30 shows that February had the highest number of alcohol crashes, and January and August were the only months with drug crashes.

Figure 30: Drug and Alcohol Crashes by Month

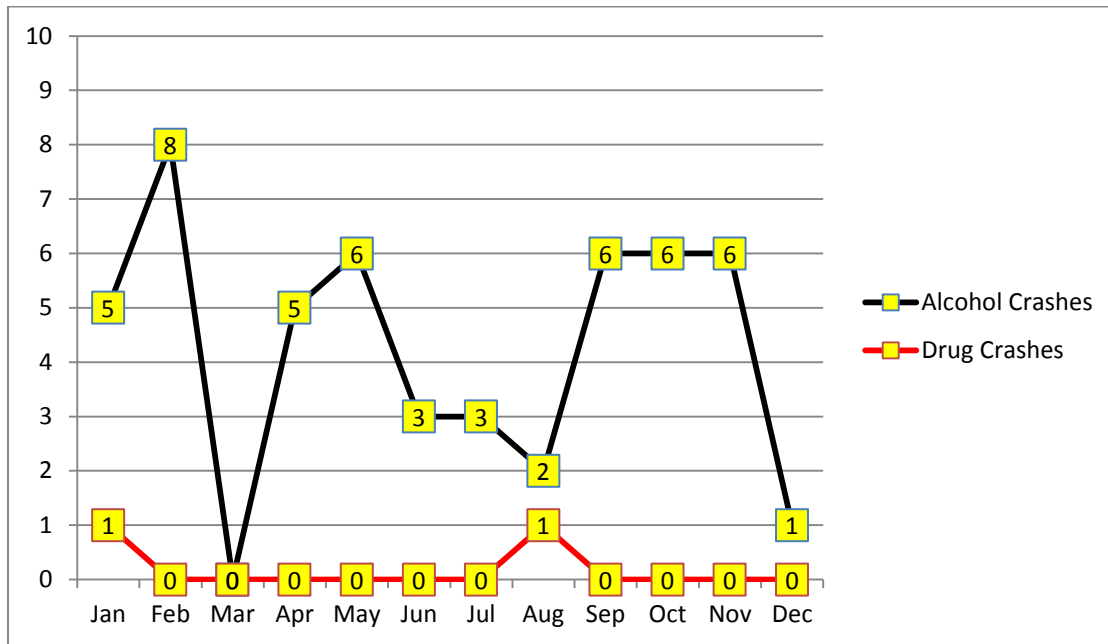


Figure 31 shows that Sunday had the highest number of alcohol crashes. Wednesday and Friday were the only days when drug crashes occurred.

Figure 31: Drug and Alcohol Crashes by Day of the Week

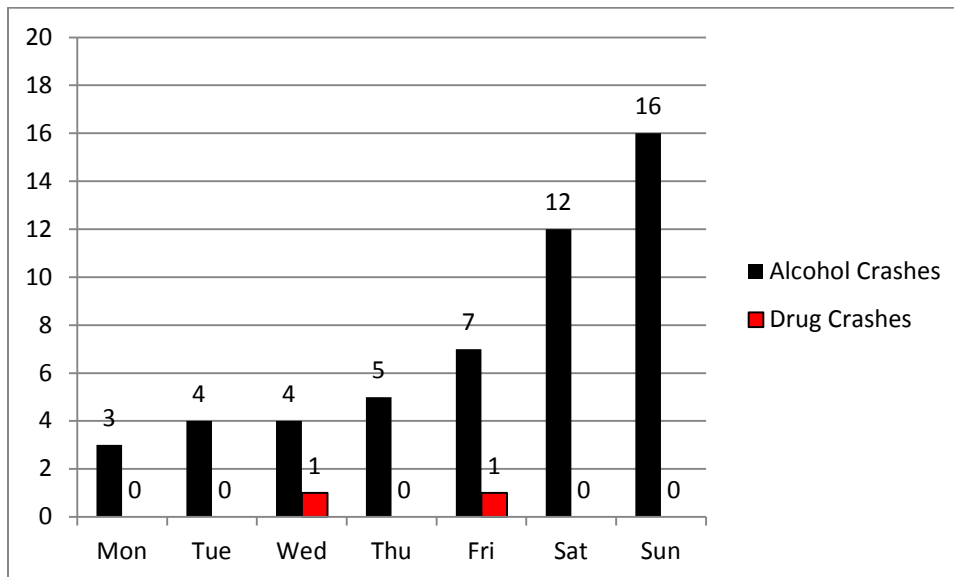


Figure 32 shows that the highest number of alcohol and drug crashes occurred in the early morning hours.

Figure 32: Drug and Alcohol Crashes by Time of Day

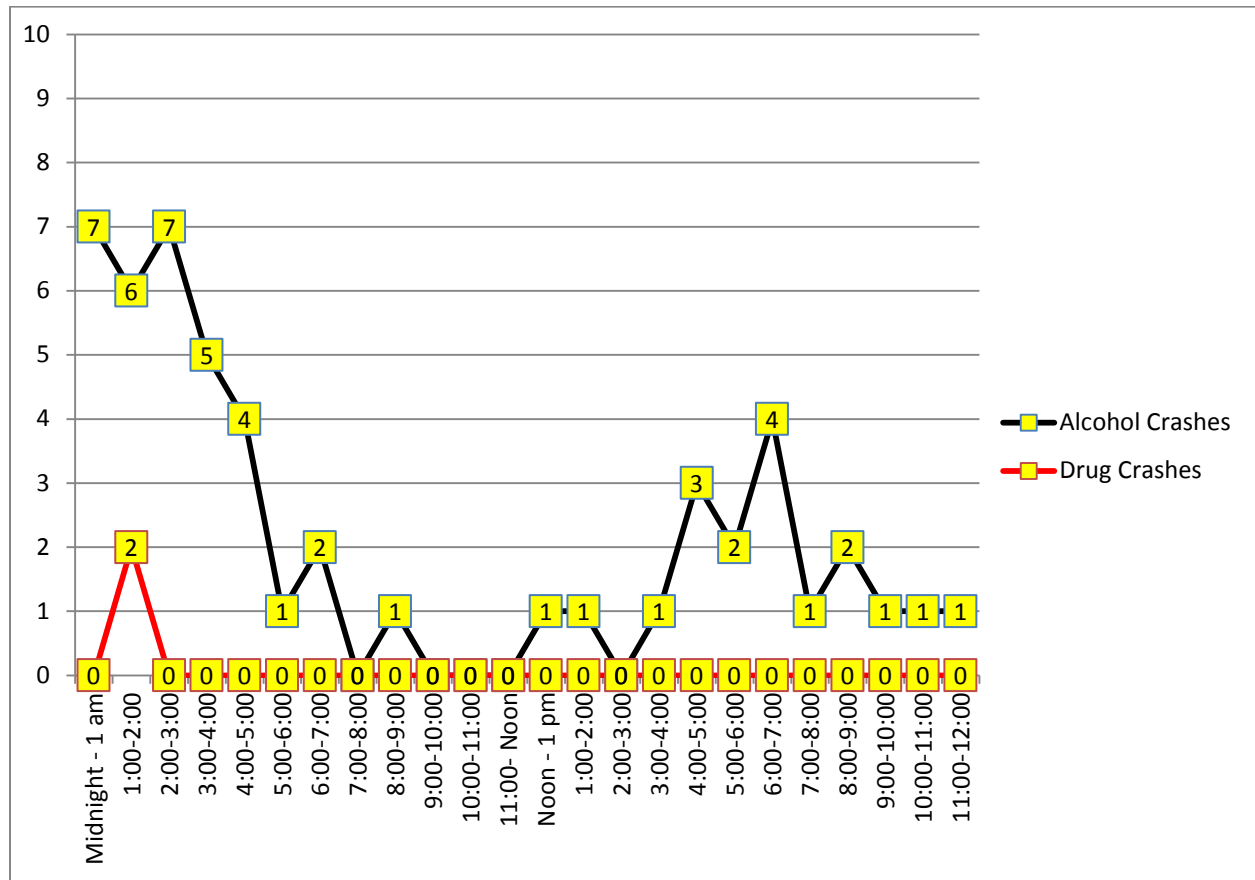


Figure 33 shows that males were more likely to be the drivers in drug and alcohol crashes.

Figure 33: Drivers in Drug and Alcohol Crashes by Gender

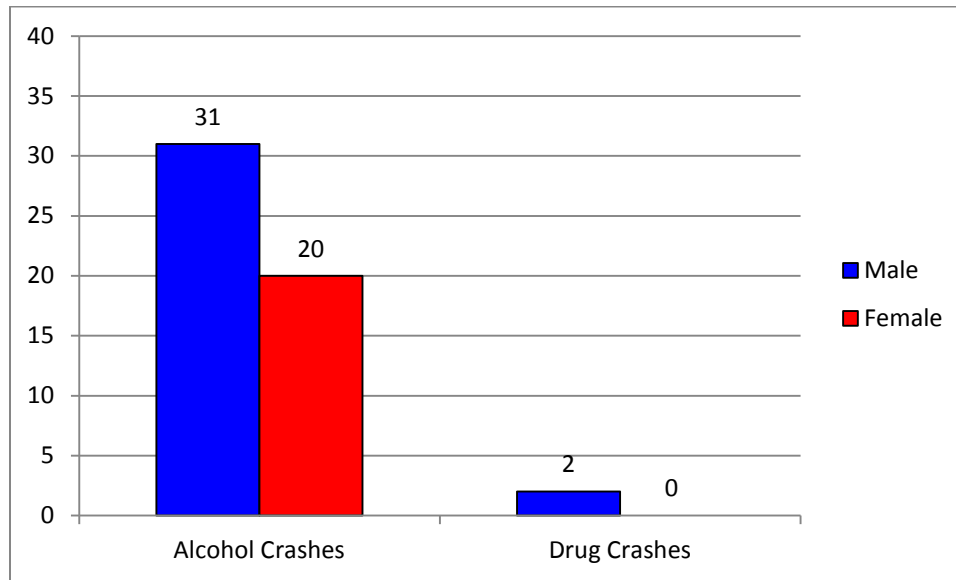


Table 38 shows that people under the age of 34 were most likely to be involved in an alcohol or drug crash.

Table 38: Drug and Alcohol Crashes by Age and Gender

| | <16 | 16-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | TOTAL |
|--------|-----|-------|-------|-------|-------|-------|-----|-------|
| MALE | 0 | 8 | 8 | 9 | 2 | 5 | 1 | 33 |
| FEMALE | 0 | 9 | 8 | 1 | 1 | 1 | 0 | 20 |
| TOTAL | 0 | 17 | 16 | 10 | 3 | 6 | 1 | 53 |

Chapter 7: Curve Crashes

There are a variety of reasons why crashes may occur on curves. Poor pavement conditions, distracted driving, or the presence of drugs or alcohol are a few of these reasons. This chapter analyzes trends in curve crashes.

Table 39 shows that the majority of crashes occur on segments of roadway that are straight or level. However, crashes that occur on curves can often be dangerous. Table 40 shows that crashes on curves made up 9.5% of the total crashes. Crashes on curves made up about 9% of injuries, but 14.1% of incapacitating injuries.

Table 39: Crashes by Road Curvature

| ROAD CURVATURE | CRASHES |
|--------------------|---------|
| CURVE/GRADE | 174 |
| CURVE/HILLCREST | 22 |
| CURVE/LEVEL | 315 |
| NON-ROADWAY CRASH | 9 |
| STRAIGHT/GRADE | 527 |
| STRAIGHT/HILLCREST | 93 |
| STRAIGHT/LEVEL | 4214 |
| UNKNOWN | 3 |
| TOTAL | 5357 |

Table 40: Curve Crash Severity

| | NUMBER OF CRASHES | PERCENTAGE OF ALL CRASHES |
|--|-------------------|---------------------------|
| CURVE CRASHES | 511 | 9.5% |
| INJURIES FROM CURVE CRASHES | 106 | 9.0% |
| INCAPACITATING INJURIES FROM CURVE CRASHES | 9 | 14.1% |
| FATALITIES FROM CURVE CRASHES | 0 | 0.0% |

Figures 34 and 35 show the locations of curve crashes.

Figure 34: Tippecanoe County Curve Crashes

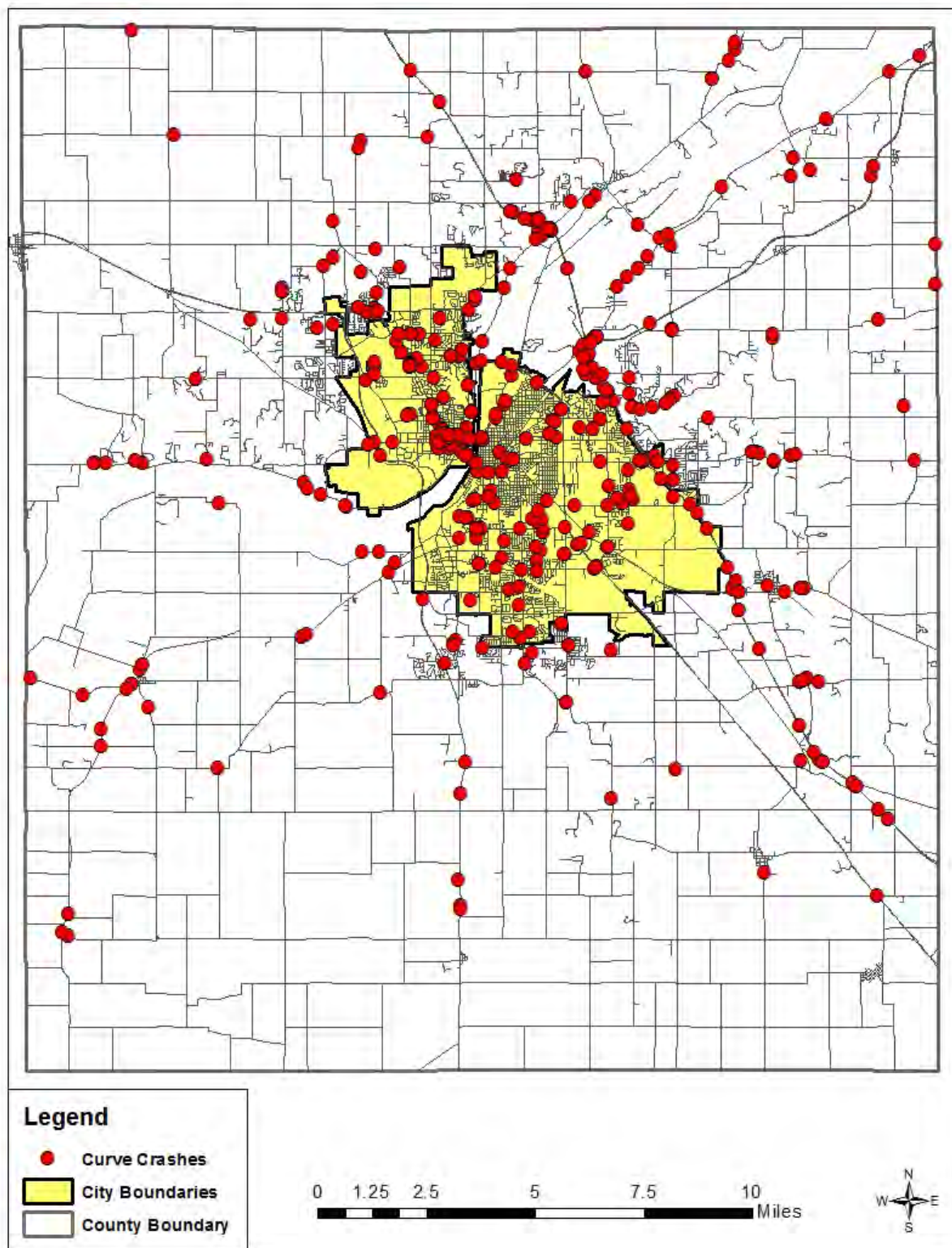


Figure 35: Lafayette and West Lafayette Curve Crashes

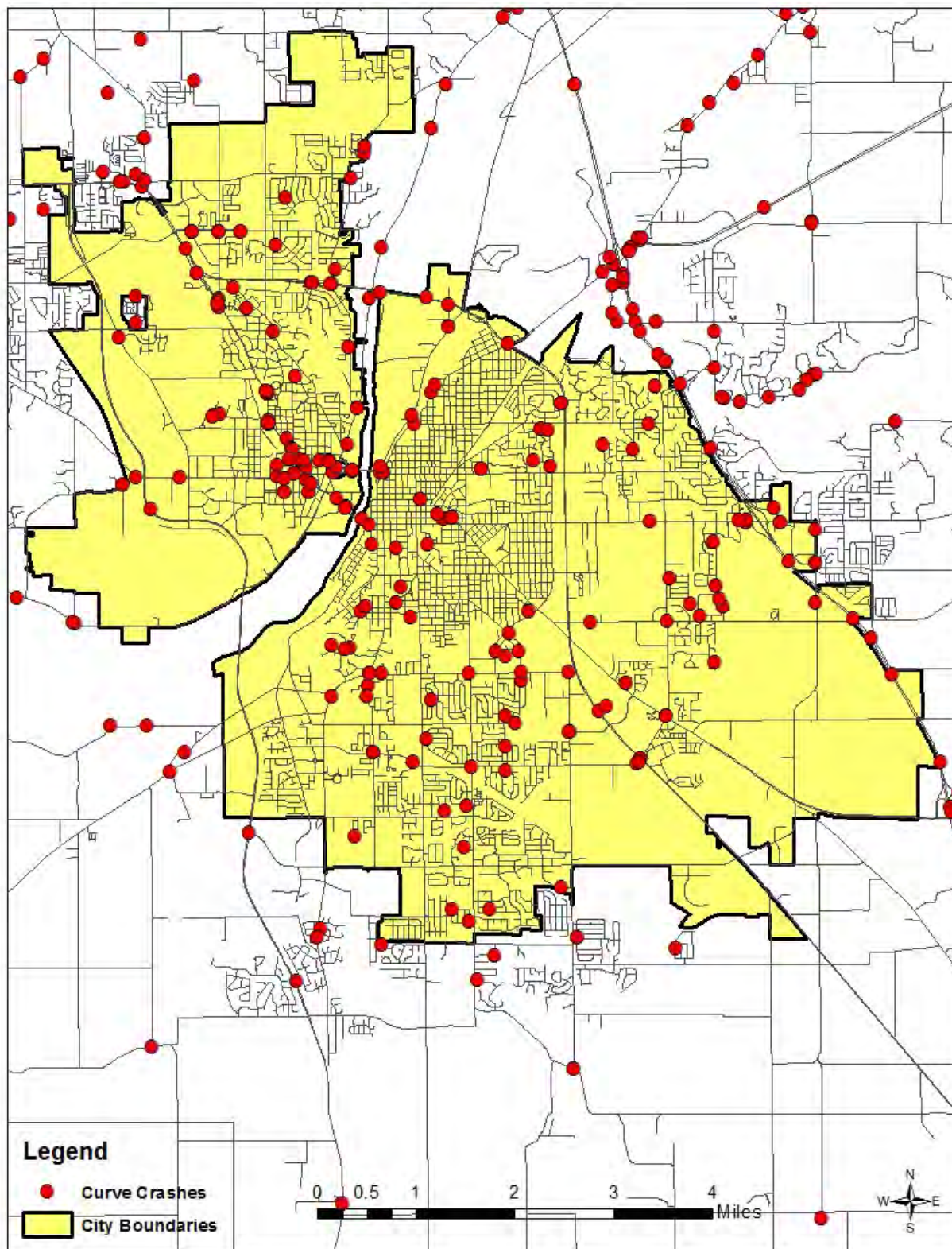


Table 41 shows that speed too fast for weather conditions was the most common primary factor in curve crashes.

Table 41: Primary Factors for Curve Crashes

| PRIMARY FACTOR | CRASHES |
|---|----------------|
| SPEED TOO FAST FOR WEATHER CONDITIONS | 110 |
| RAN OFF ROAD RIGHT | 86 |
| FOLLOWING TOO CLOSELY | 53 |
| UNSAFE SPEED | 50 |
| FAILURE TO YIELD RIGHT OF WAY | 46 |
| ANIMAL/OBJECT IN ROADWAY | 30 |
| OTHER (DRIVER) - EXPLAIN IN NARRATIVE | 30 |
| IMPROPER LANE USAGE | 19 |
| OVERCORRECTING/OVERSTEERING | 17 |
| ROADWAY SURFACE CONDITION | 16 |
| LEFT OF CENTER | 10 |
| UNSAFE BACKING | 10 |
| IMPROPER TURNING | 8 |
| UNSAFE LANE MOVEMENT | 7 |
| DRIVER ASLEEP OR FATIGUED | 5 |
| DRIVER DISTRACTED - EXPLAIN IN NARRATIVE | 4 |
| DISREGARD SIGNAL/REG SIGN | 2 |
| DRIVER ILLNESS | 2 |
| OTHER (ENVIRONMENTAL) - EXPLAIN IN NARR | 2 |
| IMPROPER PASSING | 1 |
| OTHER (VEHICLE) - EXPLAIN IN NARRATIVE | 1 |
| STEERING FAILURE | 1 |
| VIEW OBSTRUCTED | 1 |
| TOTAL | 511 |

Table 42 shows that run off the road crashes were the most common crash type for curve crashes.

Table 42: Crash Type for Curve Crashes

| MANNER OF CRASH | CRASHES |
|------------------------------------|---------|
| RAN OFF ROAD | 181 |
| REAR END | 84 |
| SAME DIRECTION SIDESWIPE | 71 |
| RIGHT ANGLE | 47 |
| HEAD ON | 28 |
| HEAD ON BETWEEN TWO MOTOR VEHICLES | 24 |
| OPPOSITE DIRECTION SIDESWIPE | 24 |
| OTHER - EXPLAIN IN NARRATIVE | 21 |
| LEFT TURN | 12 |
| BACKING CRASH | 8 |
| NON-COLLISION | 4 |
| RIGHT TURN | 2 |
| COLLISION WITH DEER | 2 |
| UNKNOWN | 2 |
| REAR TO REAR | 1 |
| TOTAL | 511 |

Figure 36 shows that the highest number of curve crashes occurred in December.

Figure 36: Curve Crashes by Month

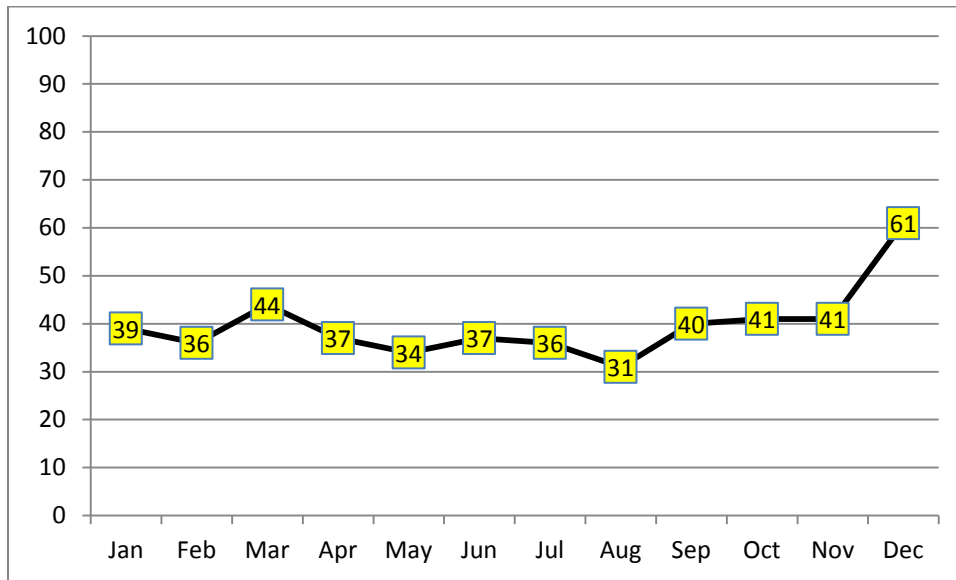


Figure 37 shows that the highest number of curve crashes occurred on Saturday.

Figure 37: Curve Crashes by Day of the Week

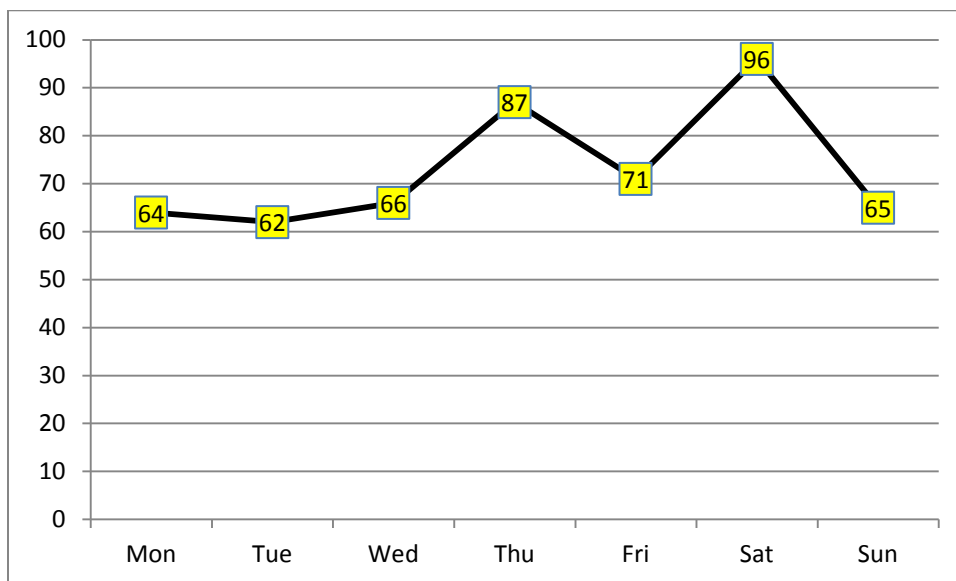


Figure 38 shows that the highest number of curve crashes occurred between 4 and 5 p.m.

Figure 38: Curve Crashes by Time of Day

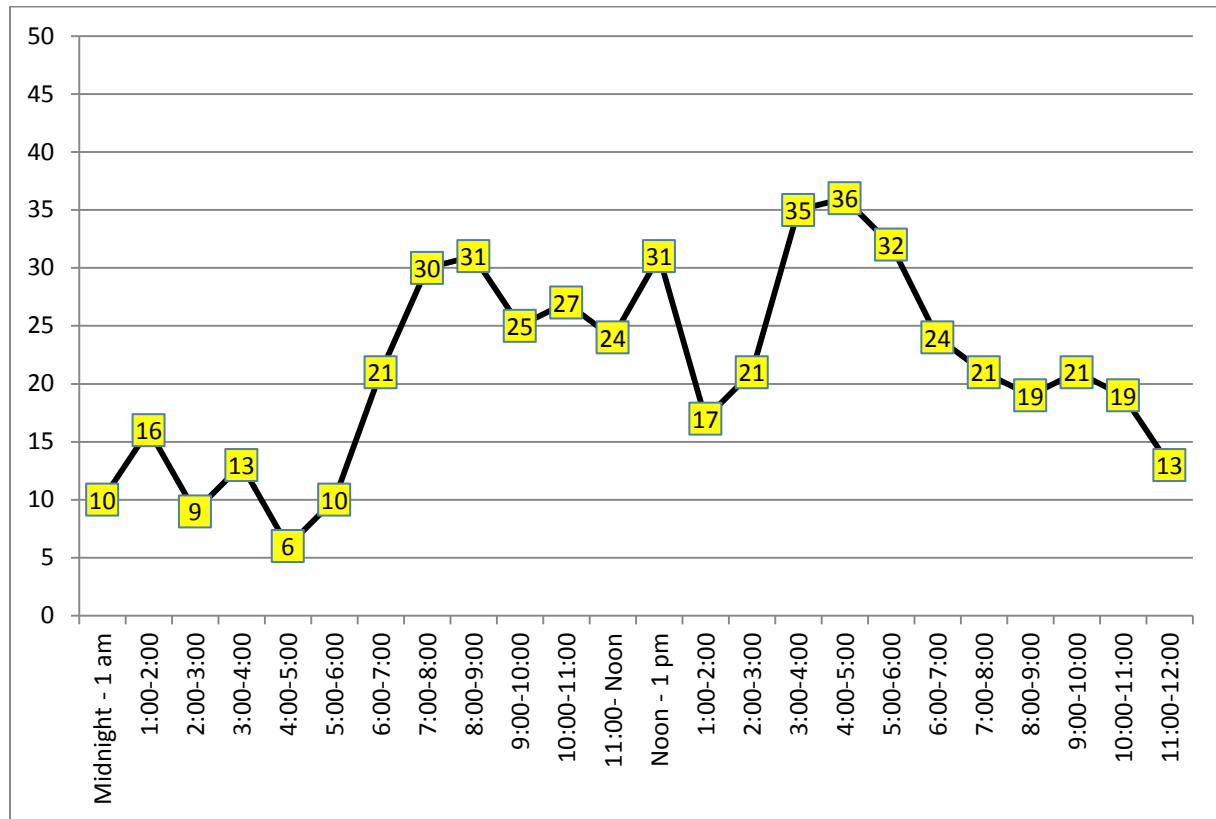


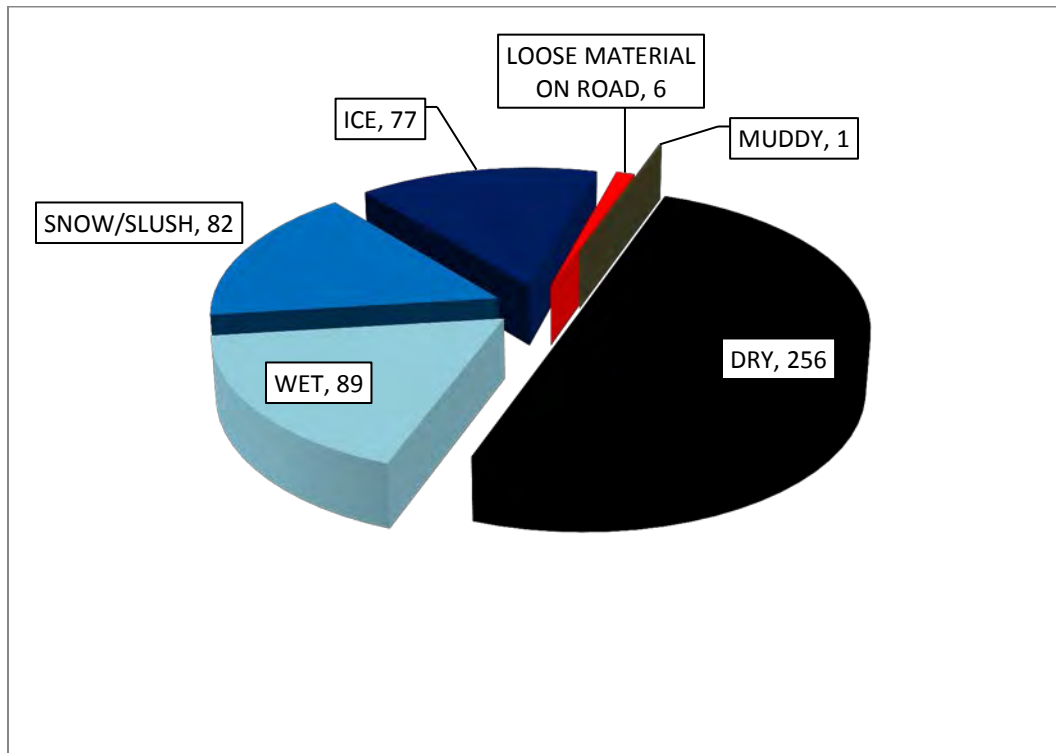
Table 43 shows that the majority of curve crashes occur when weather conditions are clear.

Table 43: Curve Crashes by Weather Conditions

| WEATHER CONDITIONS | CRASHES |
|--------------------------|---------|
| CLEAR | 264 |
| CLOUDY | 103 |
| SNOW | 64 |
| RAIN | 63 |
| BLOWING SAND/SOIL/SNOW | 8 |
| SLEET/HAIL/FREEZING RAIN | 6 |
| FOG/SMOKE/SMOG | 3 |
| TOTAL | 511 |

Figure 39 shows that the majority of curve crashes occur when the road is dry.

Figure 39: Curve Crashes by Road Surface Condition



Chapter 8: Motorcycle Crashes

In 2013, there were 134 crashes involving motorcycles or mopeds. Of those crashes, 92 had at least one injury and 1 had a fatality. There were 109 injuries and 1 fatality in those crashes. This chapter further analyzes trends in this data.

Table 44 shows how 2014 motorcycle crash data compares to data from 2012 and 2013.

Table 44: Motorcycle Crash Injuries and Fatalities

| MOTORCYCLE CRASH STATISTIC | 2014 | 2013 | 2012 | TOTAL |
|-----------------------------------|-------------|-------------|-------------|--------------|
| CRASHES WITH INJURIES | 92 | 108 | 87 | 287 |
| NUMBER OF INJURIES | 109 | 132 | 98 | 339 |
| CRASHES WITH FATALITIES | 1 | 4 | 4 | 9 |
| NUMBER OF FATALITIES | 1 | 4 | 4 | 9 |

Most of the motorcycle crashes in 2014 occurred within the city limits of Lafayette or West Lafayette. There were no areas outside of the city limits where crashes were concentrated (Figures 40 and 41).

Figure 40: Tippecanoe County Motorcycle Crashes

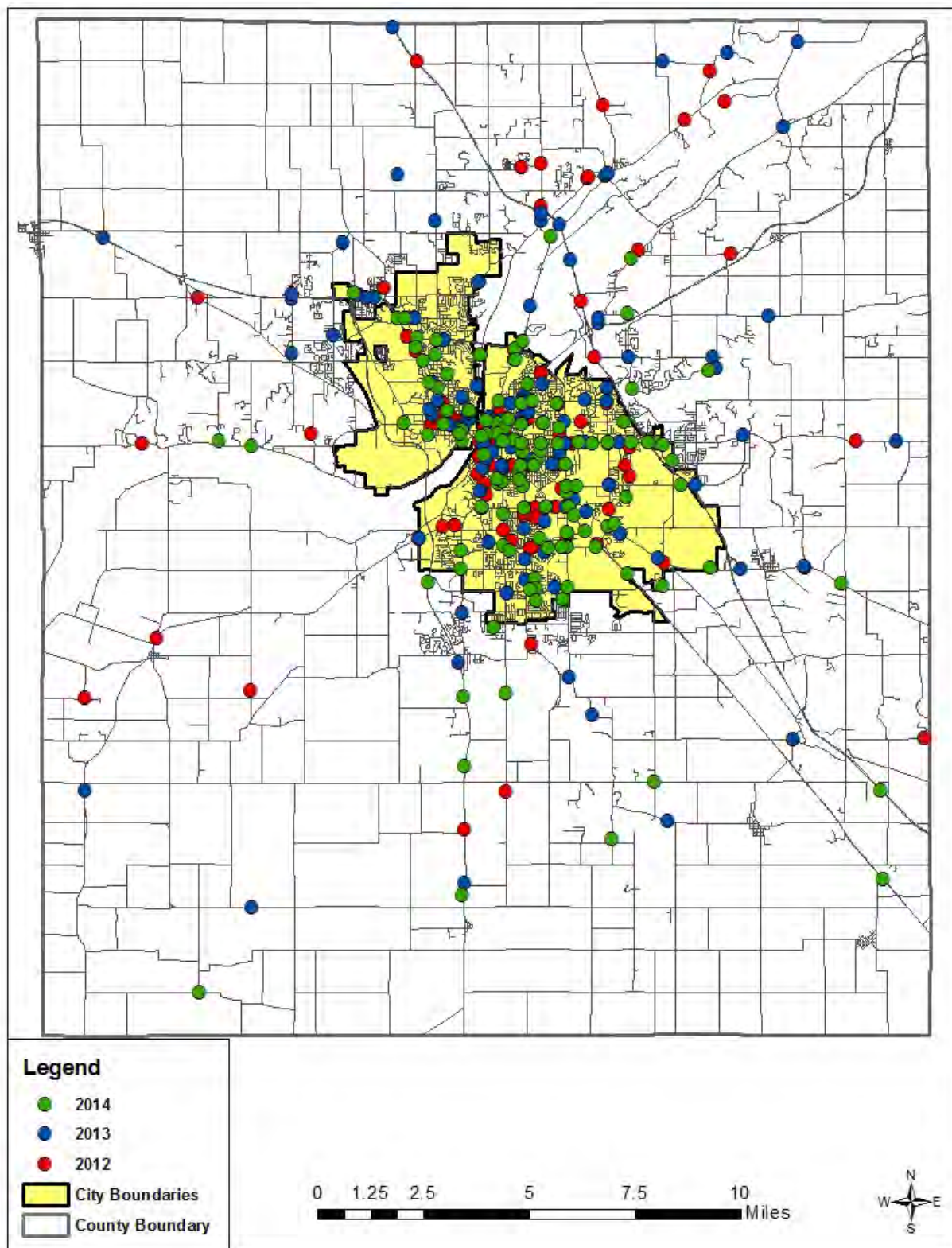
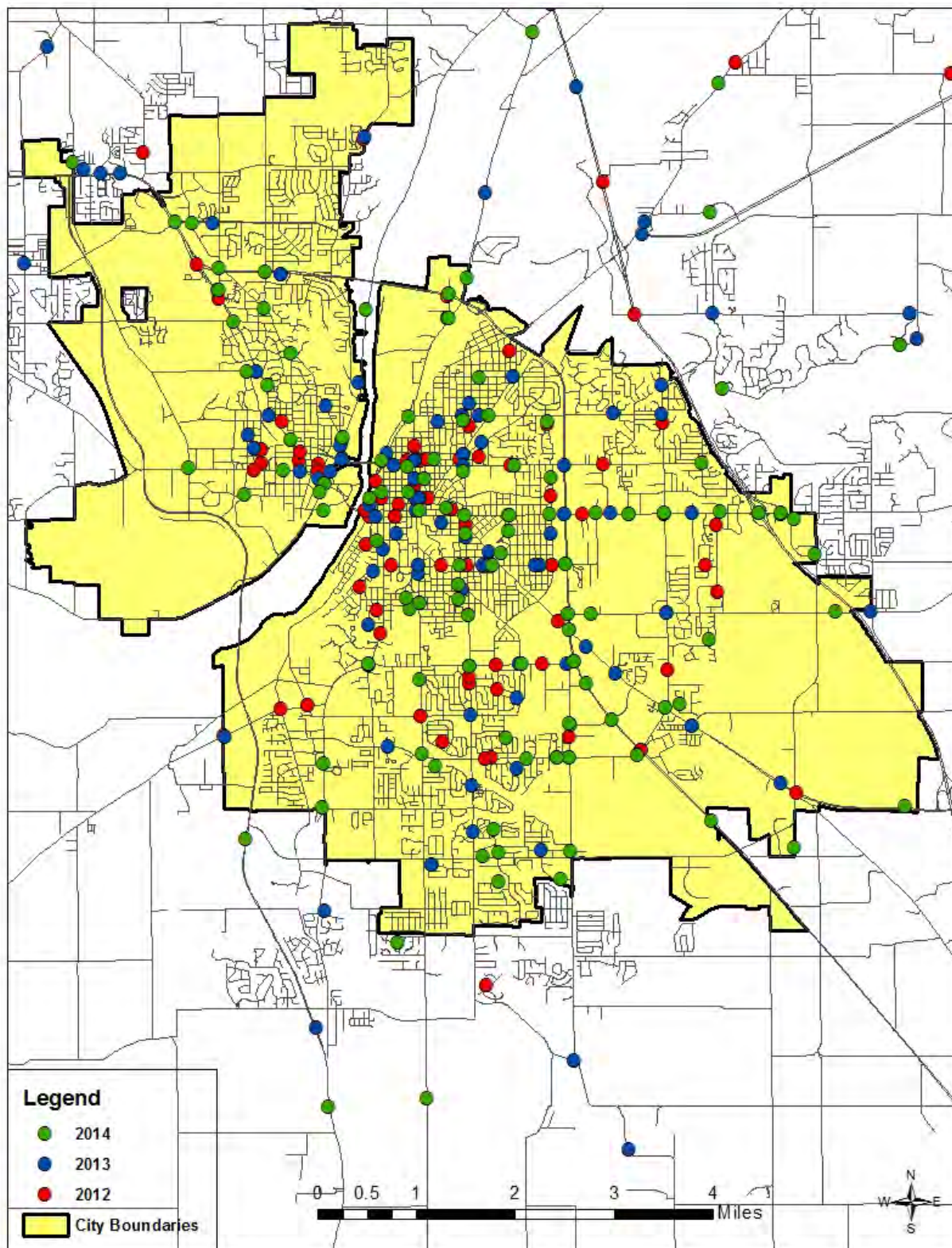


Figure 41: Lafayette and West Lafayette Motorcycle Crashes



Single vehicle crashes were the most common type of motorcycle crashes. Table 45 shows that in 2014 “non-collision” and “rear end” were the two most common types. There were a total of 52 motorcycle crashes in 2014, 61 crashes in 2013, and 61 crashes in 2012 that did not involve another vehicle.

Table 45: Crash Types for Motorcycle Crashes

| CRASH TYPE | 2014 | 2013 | 2012 | TOTAL |
|---|-------------|-------------|-------------|--------------|
| NON-COLLISION | 27 | 27 | 11 | 65 |
| REAR END | 22 | 15 | 23 | 60 |
| RAN OFF ROAD | 8 | 19 | 32 | 59 |
| RIGHT ANGLE | 17 | 16 | 18 | 51 |
| LEFT TURN | 7 | 19 | 11 | 37 |
| OTHER - EXPLAIN IN NARRATIVE | 12 | 7 | 15 | 34 |
| SAME DIRECTION SIDESWIPE | 11 | 10 | 7 | 28 |
| HEAD ON | 3 | 9 | 6 | 18 |
| OPPOSITE DIRECTION SIDESWIPE | 8 | 5 | 1 | 14 |
| BACKING CRASH | 1 | 3 | 6 | 10 |
| RIGHT TURN | 5 | 3 | 2 | 10 |
| HEAD ON BETWEEN TWO MOTOR VEHICLES | 4 | 0 | 0 | 4 |
| LEFT/RIGHT TURN | 0 | 0 | 1 | 1 |
| REAR TO REAR | 0 | 1 | 0 | 1 |
| TOTAL | 125 | 134 | 133 | 392 |

Figure 42 shows that the months of June, July, August, and September had the highest number of motorcycle crashes, and January and February had the lowest.

Figure 42: Motorcycle Crashes by Month

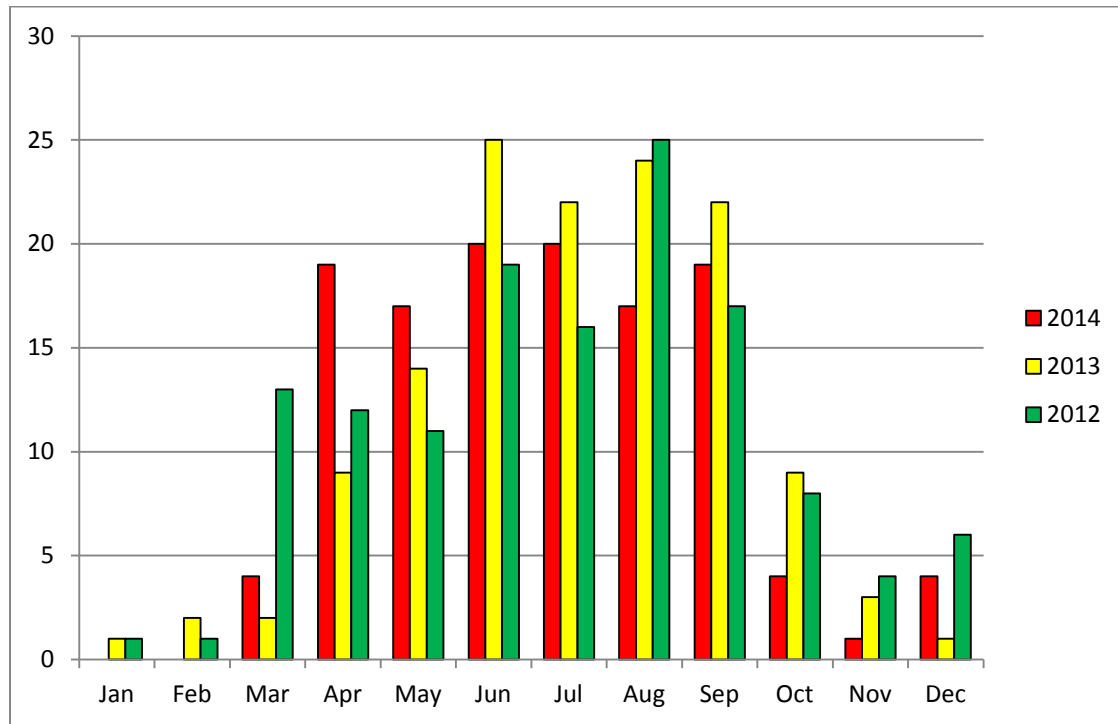


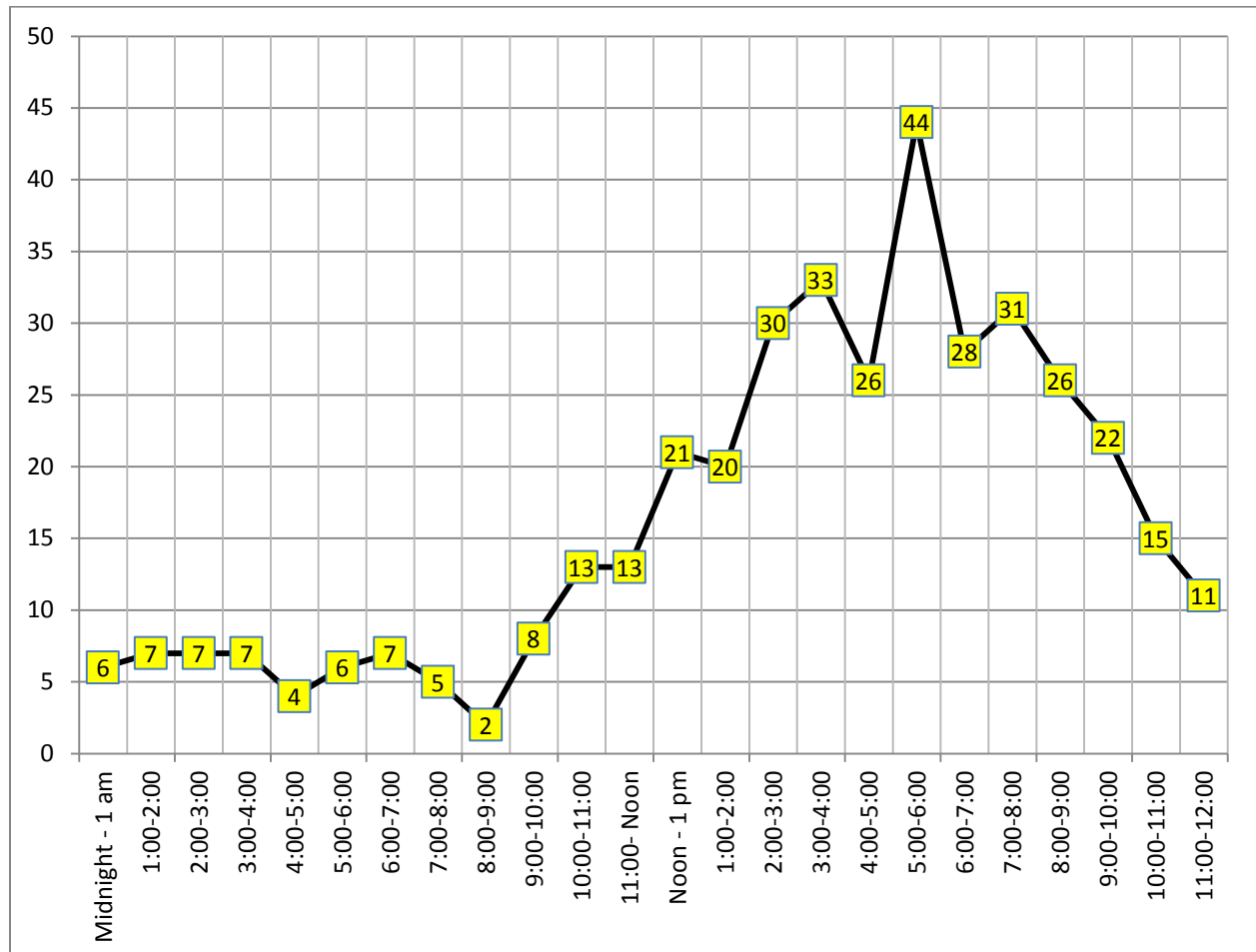
Table 46 shows that Friday and Saturday had the highest number of motorcycle crashes, but crashes were relatively high every day of the week.

Table 46: Motorcycle Crashes by Day of Week

| | MON | TUE | WED | THU | FRI | SAT | SUN | TOTAL |
|-------------|-----|-----|-----|-----|-----|-----|-----|-------|
| 2014 | 16 | 18 | 21 | 18 | 21 | 18 | 13 | 125 |
| 2013 | 14 | 11 | 23 | 22 | 25 | 24 | 15 | 134 |
| 2012 | 14 | 23 | 16 | 12 | 28 | 22 | 18 | 133 |

Figure 43 shows that the highest number of crashes occurred from 5-6 p.m. (44) with a high number of crashes between 2:00 p.m. and 9:00 p.m. The number of crashes was lowest in the early morning hours.

Figure 43: Motorcycle Crashes by Time of Day



Chapter 9: Bicycle Crashes

In 2014, there were 37 crashes involving bicyclists that occurred on public right of way (crashes on private property are removed from this analysis). Of those crashes, 23 had at least one injury. There were 25 total injuries in those crashes. This chapter further analyzes bicycle crashes in 2014.

Table 47 compares bicycle crash statistics from 2012 to 2014.

Table 47: Bicycle Crash Injuries and Fatalities

| BICYCLE CRASH STATISTIC | 2014 | 2013 | 2012 | TOTAL |
|-------------------------|------|------|------|-------|
| CRASHES WITH INJURIES | 23 | 43 | 38 | 104 |
| NUMBER OF INJURIES | 25 | 43 | 38 | 106 |
| CRASHES WITH FATALITIES | 0 | 1 | 0 | 1 |
| NUMBER OF FATALITIES | 0 | 1 | 0 | 1 |

Figures 44 and 45 show the locations of bicycle crashes.

Figure 44: Tippecanoe County Bicycle Crashes

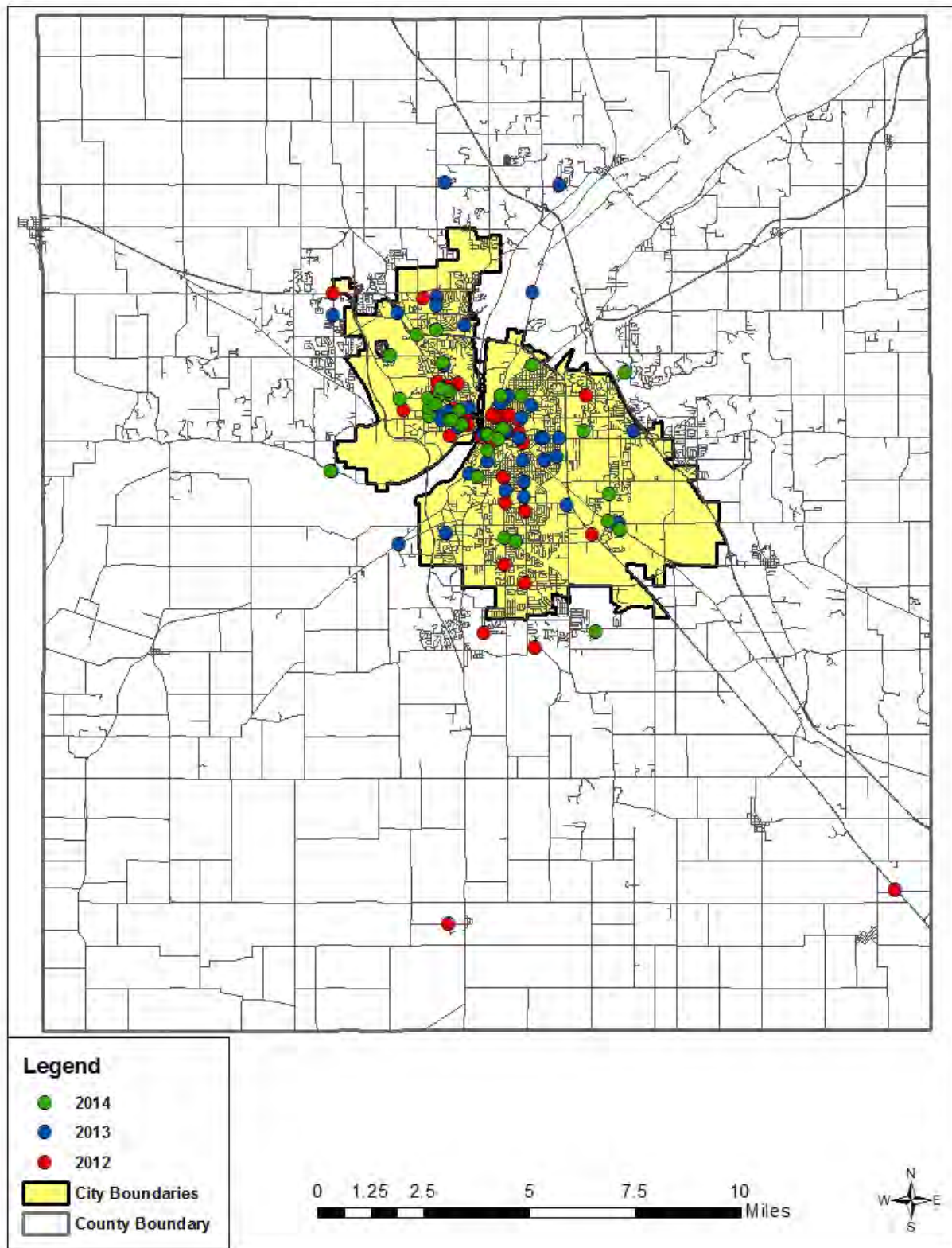


Figure 45: Lafayette and West Lafayette Bicycle Crashes

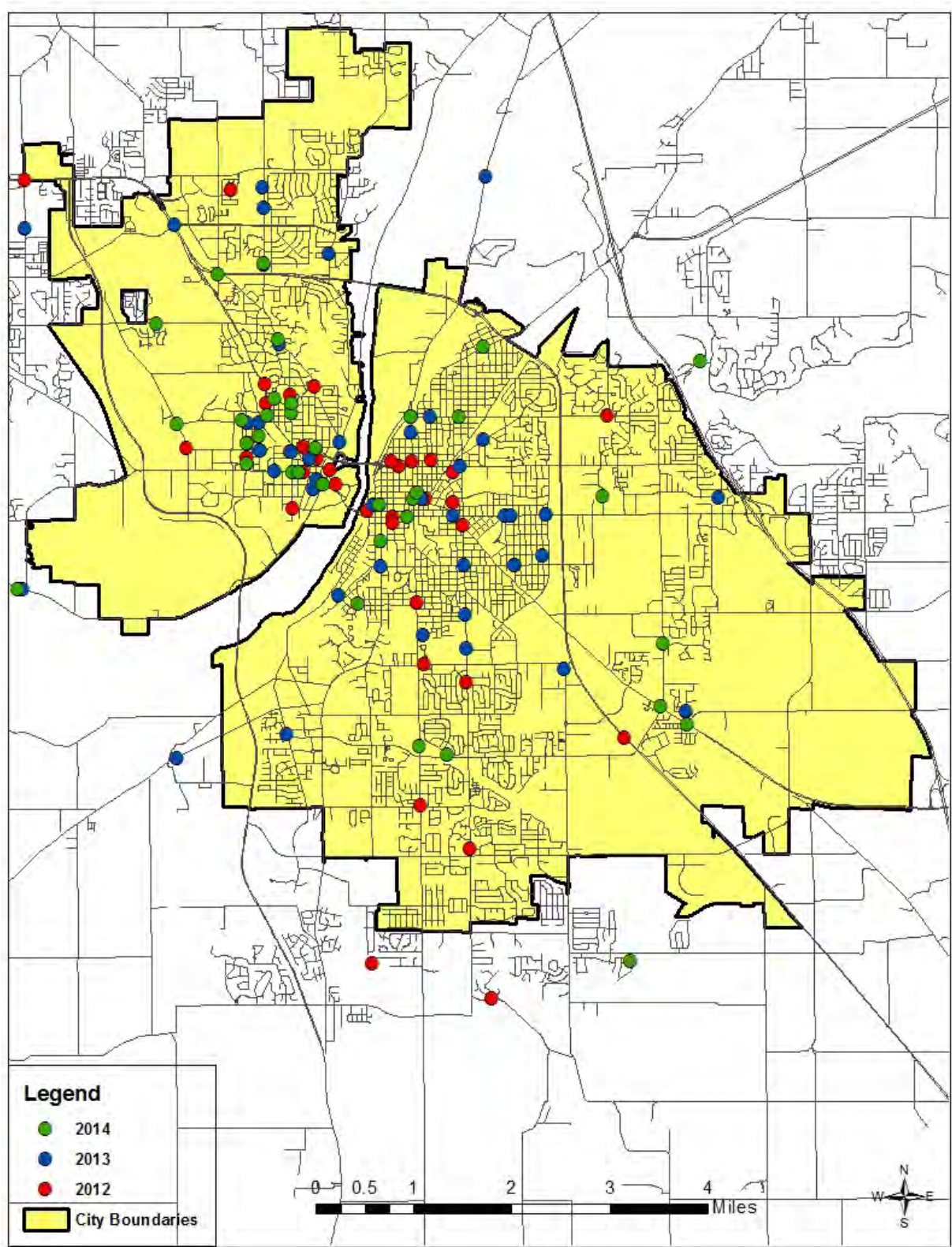


Table 48 shows that right angle crashes were the most common type of bicycle crashes.

Table 48: Crash Types for Bicycle Crashes

| CRASH TYPE | 2014 | 2013 | 2012 | TOTAL |
|---|-------------|-------------|-------------|--------------|
| RIGHT ANGLE | 23 | 26 | 23 | 72 |
| LEFT TURN | 1 | 6 | 4 | 11 |
| RIGHT TURN | 2 | 3 | 5 | 10 |
| SAME DIRECTION SIDESWIPE | 2 | 2 | 5 | 9 |
| REAR END | 1 | 4 | 3 | 8 |
| HEAD ON | 0 | 5 | 2 | 7 |
| OTHER - EXPLAIN IN NARRATIVE | 3 | 2 | 1 | 6 |
| OPPOSITE DIRECTION SIDESWIPE | 3 | 1 | 1 | 5 |
| RAN OFF ROAD | 1 | 0 | 0 | 1 |
| HEAD ON BETWEEN TWO MOTOR VEHICLES | 1 | 0 | 0 | 1 |
| LEFT/RIGHT TURN | 0 | 0 | 1 | 1 |
| TOTAL | 37 | 49 | 45 | 131 |

Table 49 shows that September had the highest number of bicycle crashes.

Table 49: Bicycle Crashes by Month

| | 2014 | 2013 | 2012 | TOTAL |
|--------------|-------------|-------------|-------------|--------------|
| JAN | 1 | 0 | 0 | 1 |
| FEB | 0 | 2 | 3 | 5 |
| MAR | 0 | 2 | 6 | 8 |
| APR | 1 | 4 | 2 | 7 |
| MAY | 3 | 7 | 2 | 12 |
| JUN | 2 | 2 | 0 | 4 |
| JUL | 3 | 4 | 3 | 10 |
| AUG | 7 | 3 | 10 | 20 |
| SEP | 11 | 7 | 6 | 24 |
| OCT | 4 | 11 | 5 | 20 |
| NOV | 2 | 5 | 6 | 13 |
| DEC | 3 | 2 | 2 | 7 |
| TOTAL | 37 | 49 | 45 | 131 |

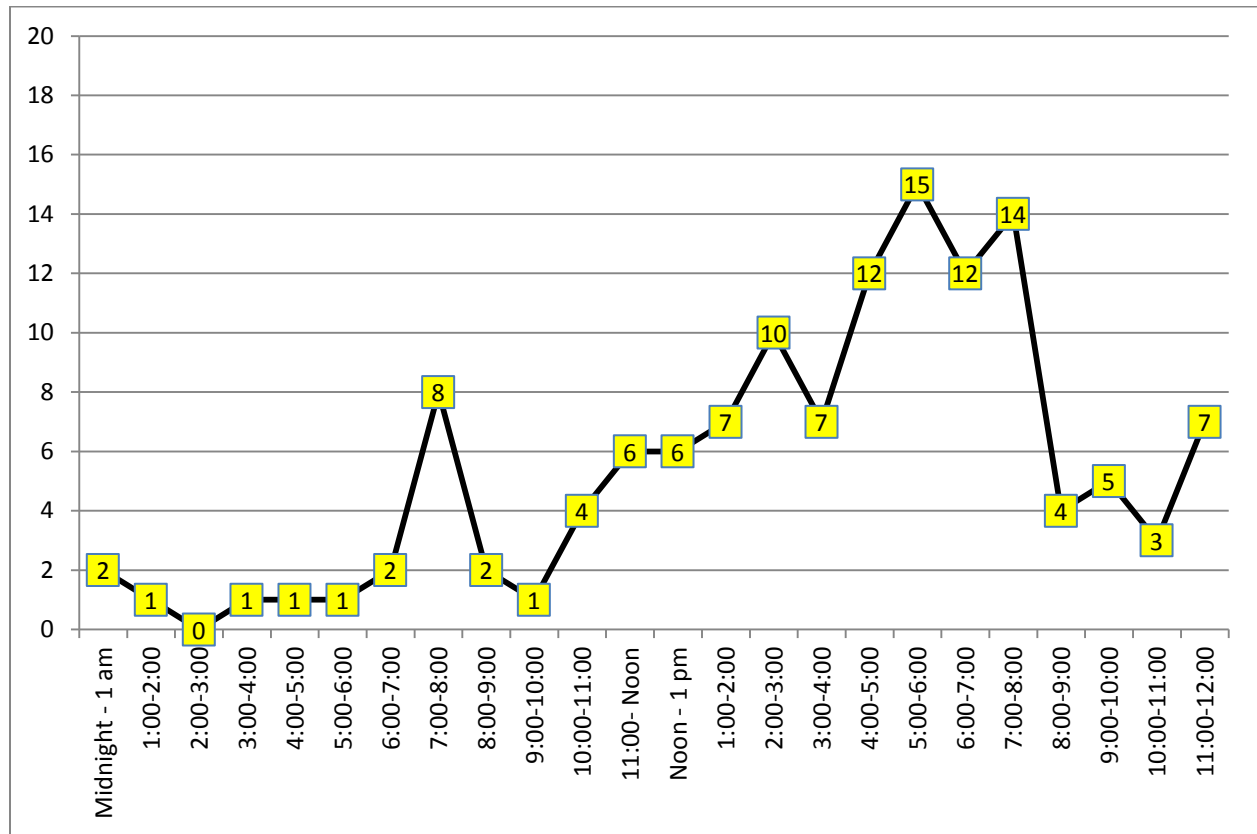
Table 50 shows that Monday through Thursday had the highest number of bicycle crashes.

Table 50: Bicycle Crashes by Day of the Week

| | MON | TUE | WED | THU | FRI | SAT | SUN | TOTAL |
|-------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| 2014 | 9 | 7 | 3 | 6 | 6 | 3 | 3 | 37 |
| 2013 | 8 | 7 | 10 | 7 | 7 | 5 | 5 | 49 |
| 2012 | 5 | 8 | 9 | 9 | 5 | 7 | 2 | 45 |

Figure 46 shows the peak period for bicycle crashes occurred between 4 and 8 p.m.

Figure 46: Bicycle Crashes by Time of Day



Chapter 10: Pedestrian Crashes

In 2014, there were 41 crashes involving pedestrians. Of those crashes, 46 had at least one injury and 1 had at least one fatality. There were 37 injuries and 1 fatality in those crashes. This chapter further analyzes pedestrian crashes.

Table 51 compares pedestrian crash statistics from 2012 to 2014.

Table 51: Pedestrian Injuries and Fatalities

| PEDESTRIAN CRASH STATISTIC | 2014 | 2013 | 2012 | TOTAL |
|----------------------------|------|------|------|-------|
| CRASHES WITH INJURIES | 36 | 43 | 35 | 114 |
| NUMBER OF INJURIES | 37 | 49 | 37 | 123 |
| CRASHES WITH FATALITIES | 1 | 3 | 1 | 5 |
| NUMBER OF FATALITIES | 1 | 4 | 1 | 6 |

Most of the pedestrian crashes in 2014 occurred within the city limits of Lafayette or West Lafayette. There were no areas outside of the city limits where crashes were concentrated. Figures 47 and 48 show the locations of these crashes.

Figure 47: Tippecanoe County Pedestrian Crashes

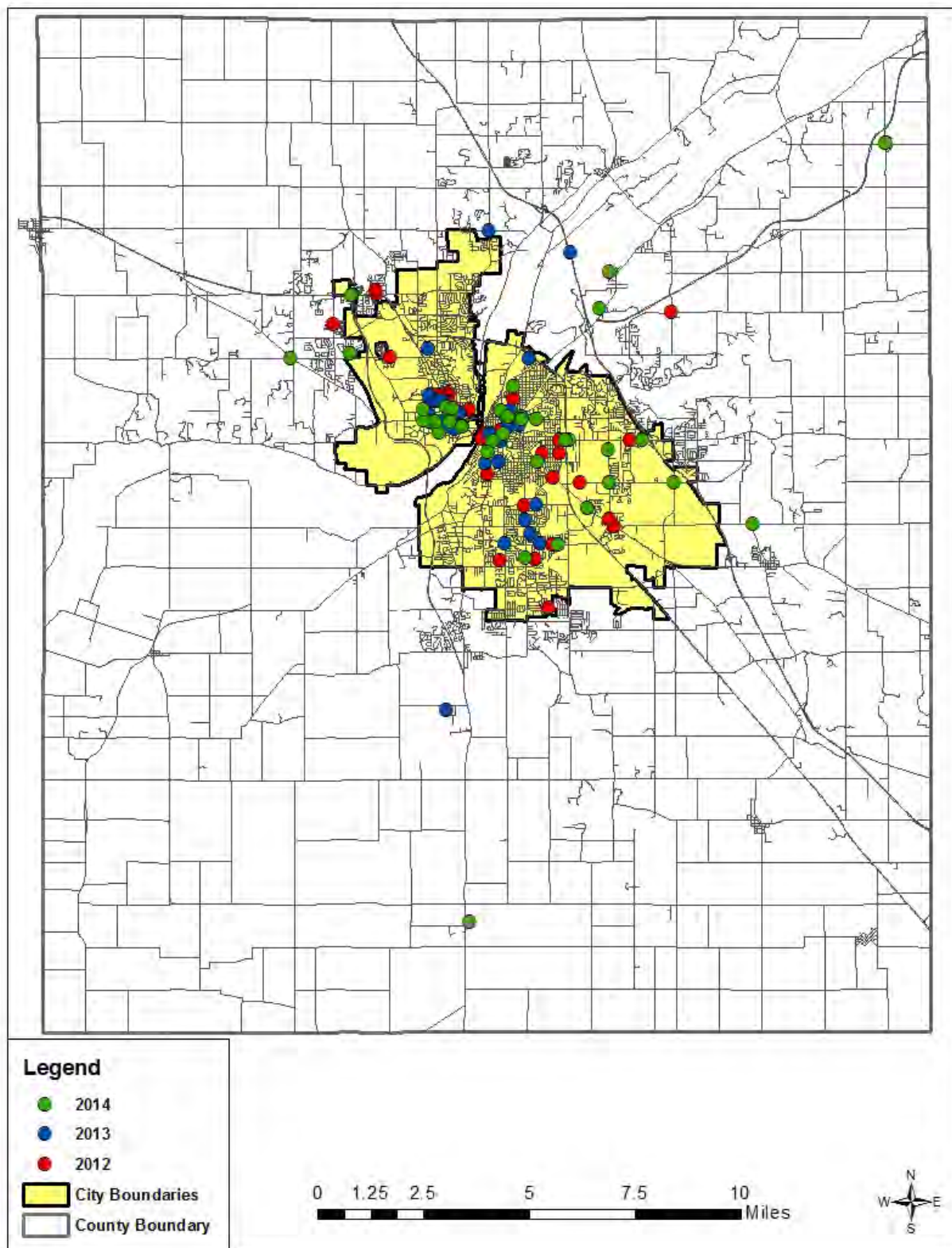


Figure 48: Lafayette and West Lafayette Pedestrian Crashes

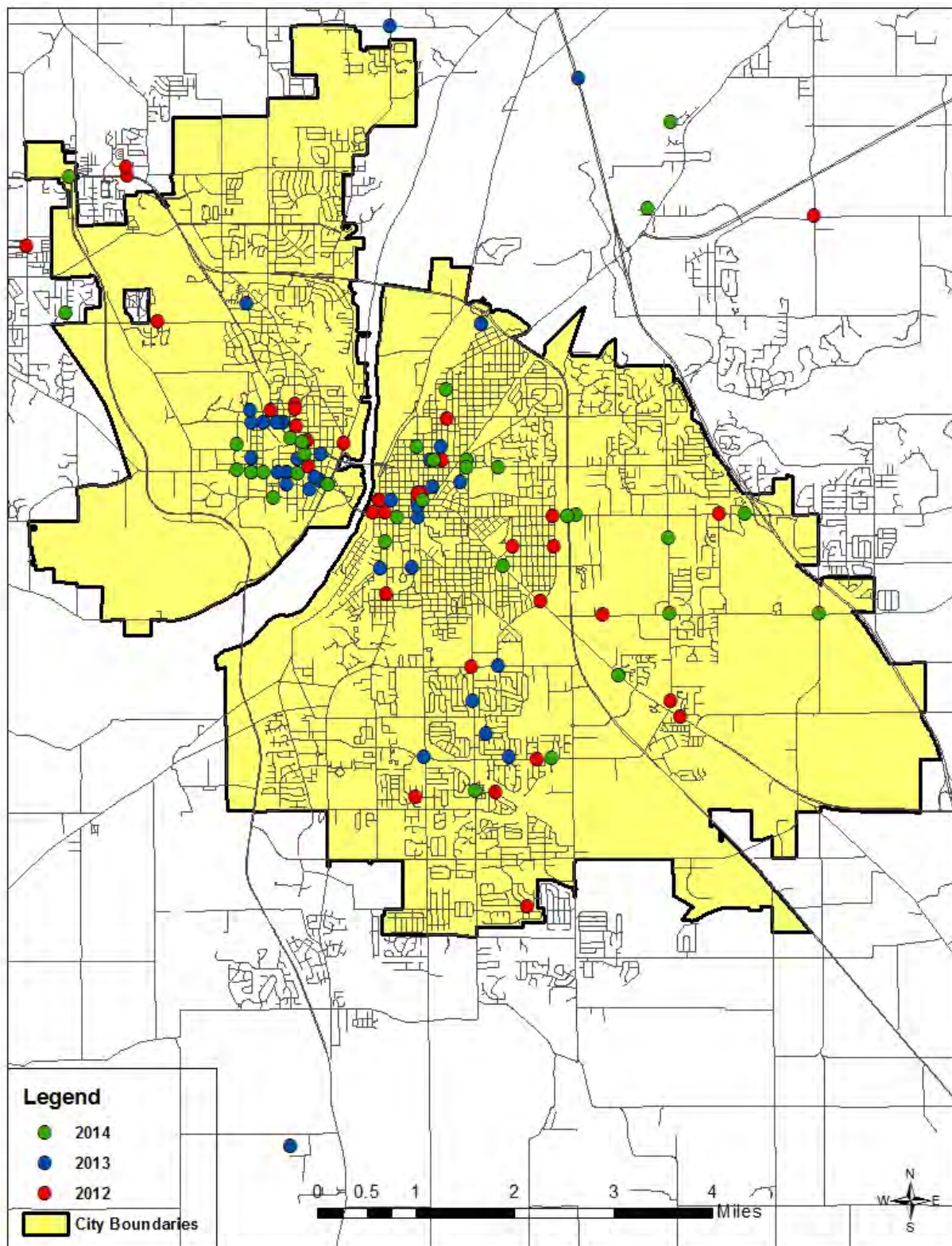


Table 52 shows that “Left Turn” and “Head On” were the most common types of pedestrian crashes.

Table 52: Crash Types for Pedestrian Crashes

| CRASH TYPE | 2014 | 2013 | 2012 | TOTAL |
|---|-------------|-------------|-------------|--------------|
| LEFT TURN | 10 | 12 | 9 | 31 |
| HEAD ON | 5 | 11 | 11 | 27 |
| OTHER - EXPLAIN IN NARRATIVE | 6 | 11 | 4 | 21 |
| RIGHT ANGLE | 3 | 4 | 8 | 15 |
| SAME DIRECTION SIDESWIPE | 7 | 4 | 2 | 13 |
| BACKING CRASH | 4 | 0 | 1 | 5 |
| REAR END | 1 | 1 | 2 | 4 |
| NON-COLLISION | 2 | 2 | 0 | 4 |
| HEAD ON BETWEEN TWO MOTOR VEHICLES | 3 | 0 | 0 | 3 |
| RAN OFF ROAD | 0 | 1 | 1 | 2 |
| LEFT/RIGHT TURN | 0 | 2 | 0 | 2 |
| OPPOSITE DIRECTION SIDESWIPE | 0 | 0 | 1 | 1 |
| RIGHT TURN | 0 | 0 | 1 | 1 |
| TOTAL | 41 | 48 | 40 | 129 |

Table 53 shows that April had the highest number of pedestrian crashes.

Table 53: Pedestrian Crashes by Month

| | 2014 | 2013 | 2012 | TOTAL |
|--------------|-------------|-------------|-------------|--------------|
| JAN | 4 | 5 | 1 | 10 |
| FEB | 5 | 3 | 3 | 11 |
| MAR | 2 | 2 | 1 | 5 |
| APR | 3 | 9 | 5 | 17 |
| MAY | 2 | 4 | 5 | 11 |
| JUN | 2 | 1 | 4 | 7 |
| JUL | 3 | 4 | 4 | 11 |
| AUG | 3 | 3 | 1 | 7 |
| SEP | 2 | 4 | 6 | 12 |
| OCT | 2 | 3 | 5 | 10 |
| NOV | 8 | 6 | 2 | 16 |
| DEC | 5 | 4 | 3 | 12 |
| TOTAL | 41 | 48 | 40 | 129 |

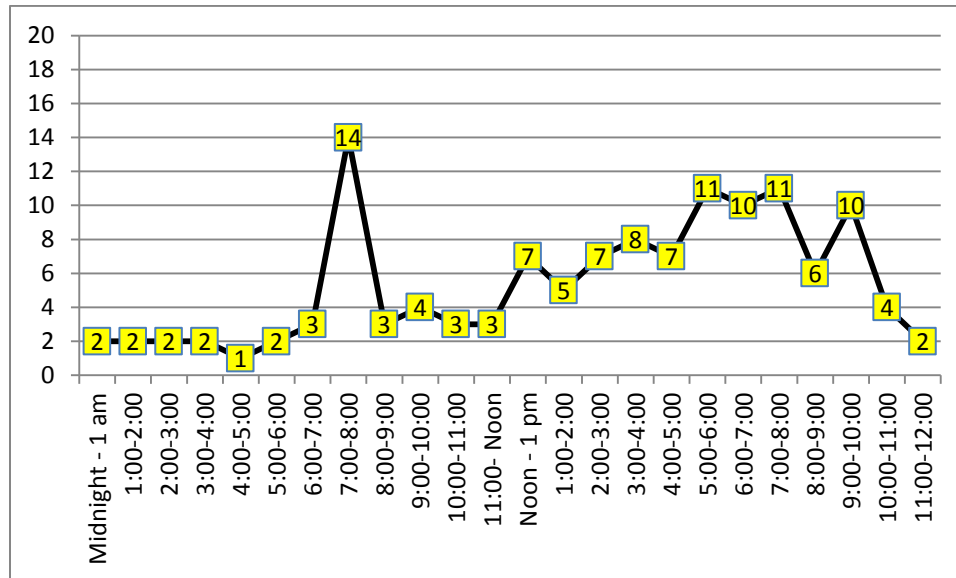
Table 54 shows that Wednesday had the highest number of pedestrian crashes.

Table 54: Pedestrian Crashes by Day of the Week

| | MON | TUE | WED | THU | FRI | SAT | SUN | TOTAL |
|--------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| 2014 | 4 | 6 | 6 | 10 | 9 | 2 | 4 | 41 |
| 2013 | 9 | 3 | 12 | 8 | 9 | 3 | 4 | 48 |
| 2012 | 5 | 7 | 9 | 7 | 4 | 3 | 5 | 40 |
| TOTAL | 18 | 16 | 27 | 25 | 22 | 8 | 13 | 129 |

Figure 49 shows that the highest number of pedestrian crashes occurred from 7-8 a.m.

Figure 49: Pedestrian Crashes by Time of Day

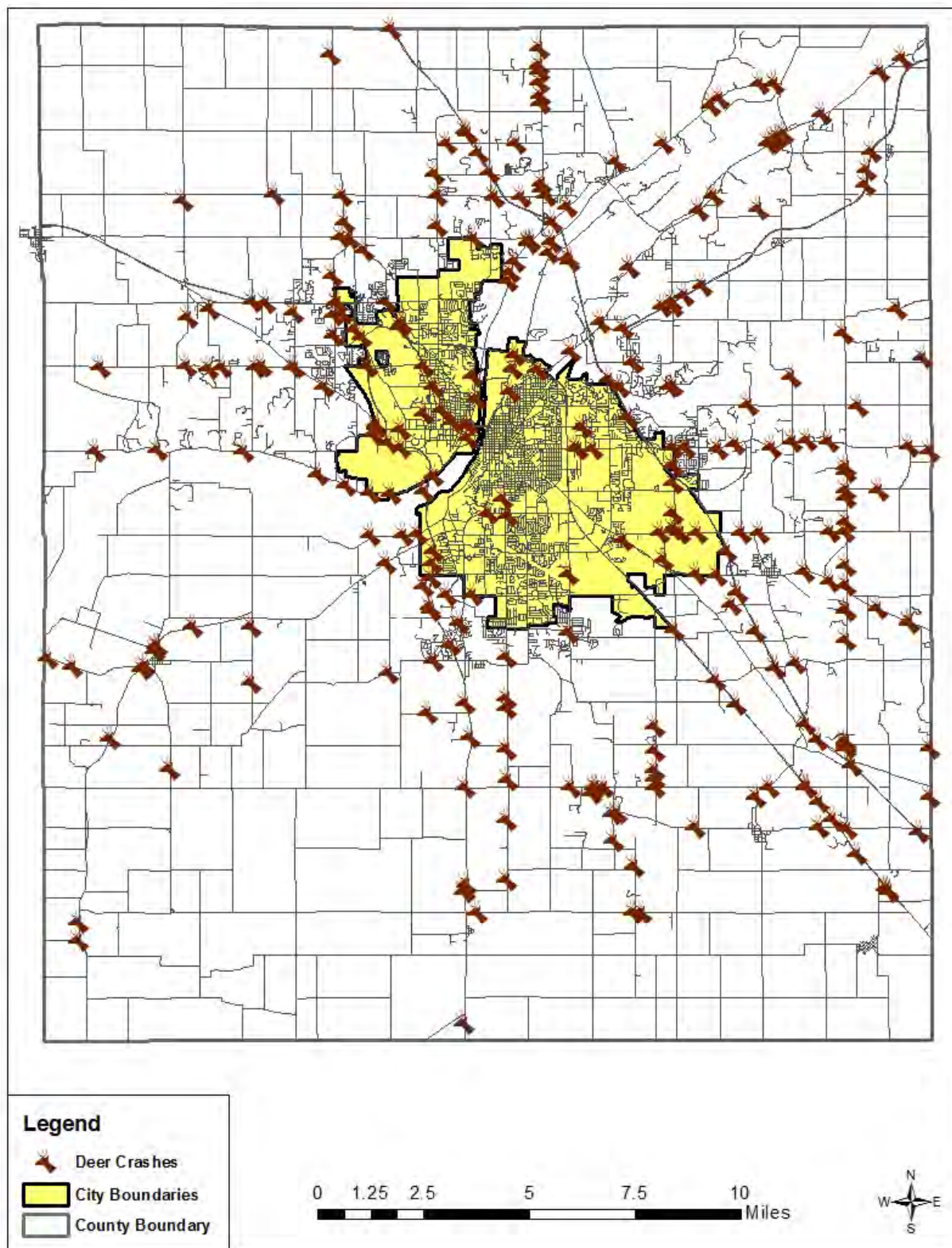


Chapter 11: Other Crash Types and Factors

There were several other crash types and a few additional factors to analyze in 2014 crashes. These crash types and factors are not as prevalent as other crash types and factors. Therefore, the analysis for these crash types and factors is not as in-depth as some of the previous analysis in this report. However, these crash types and factors are still important to consider, so this chapter analyzes them.

Figure 50 shows that deer crashes are distributed throughout Tippecanoe County.

Figure 50: Tippecanoe County Deer Crashes



Figures 51 and 52 show that most hit and run crashes occur inside the city limits of Lafayette and West Lafayette.

Figure 51: Tippecanoe County Hit and Run Crashes

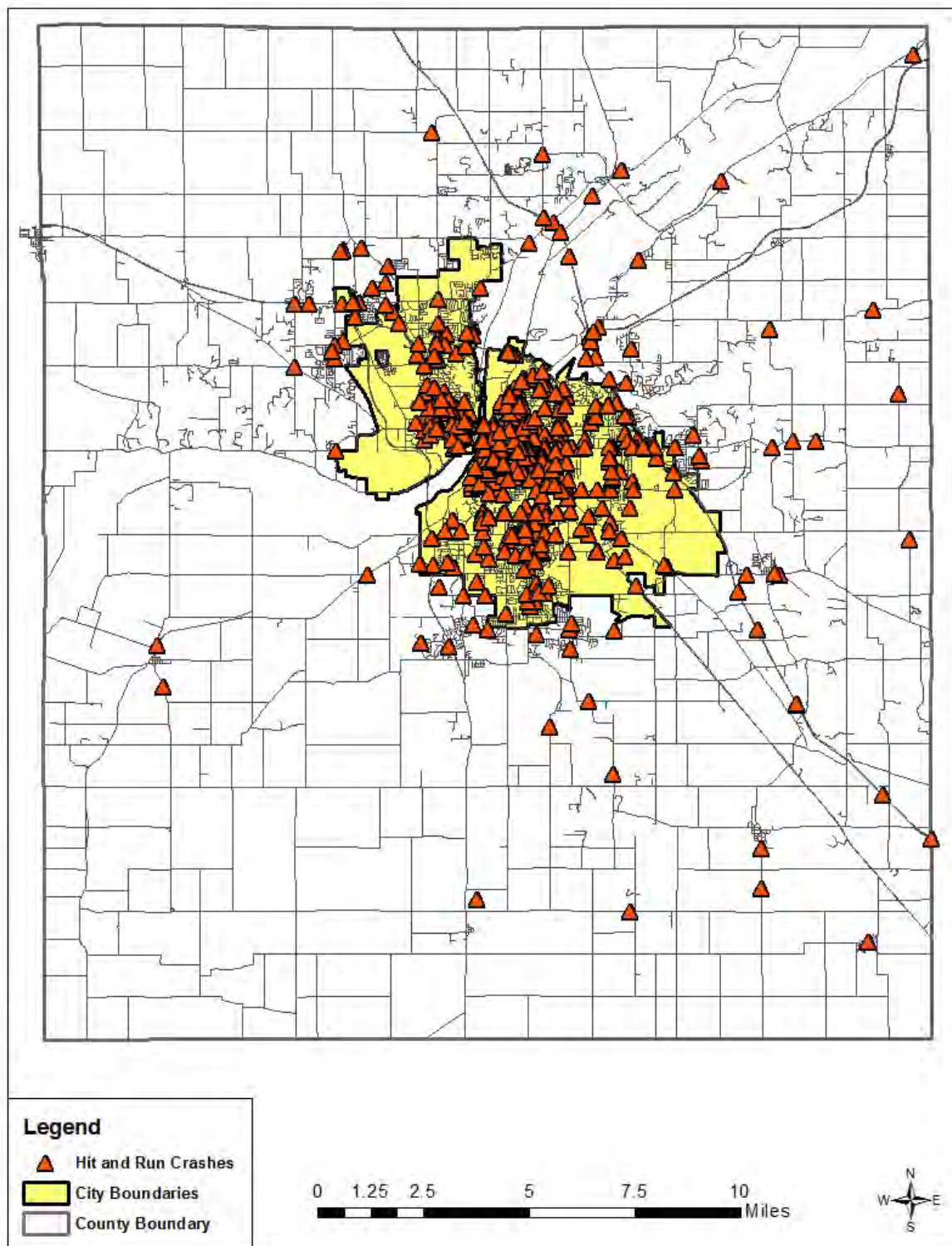


Figure 52: Lafayette and West Lafayette Hit and Run Crashes

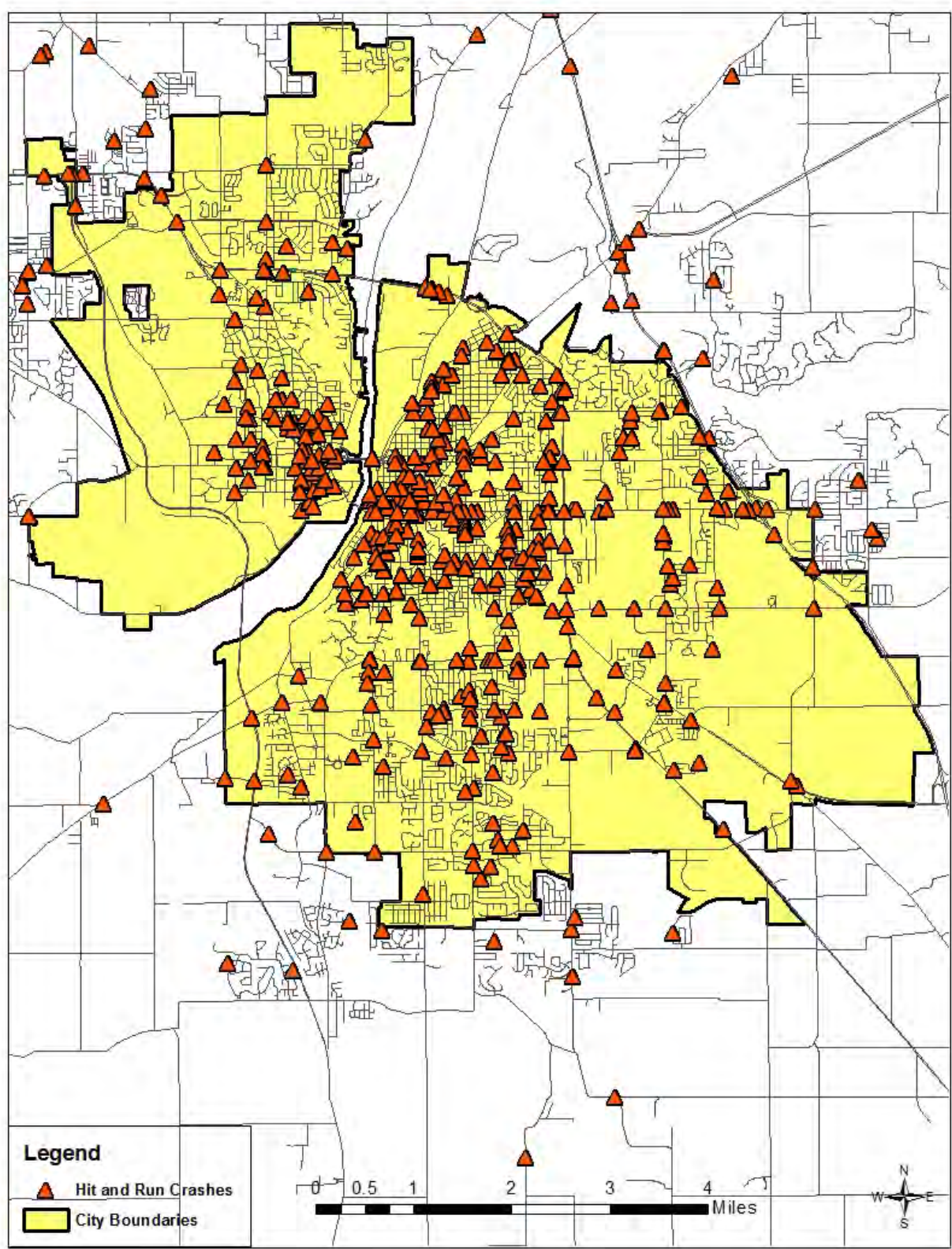


Table 55 shows that most of the crashes in 2014 involved two vehicles.

Table 55: Summary of Number of Vehicles Involved in Crashes

| NUMBER OF VEHICLES INVOLVED | CRASHES |
|-----------------------------|---------|
| 1 | 1395 |
| 2 | 3700 |
| 3 | 225 |
| 4 | 30 |
| 5 | 6 |
| 6 | 0 |
| 7 | 1 |
| TOTAL | 5357 |

Although crashes with two vehicles were the most common type, the amount of single vehicle crashes was also significant. Single vehicle crashes can happen for a variety of reasons. Some of those reasons include driver confusion or unfamiliarity with a segment of road. If a road has dangerous or non-intuitive geometry, it may lead to a high number of crashes. Figures 53 and 54 show the locations of single vehicle crashes in 2014.

Figure 53: Tippecanoe County Single Vehicle Crashes

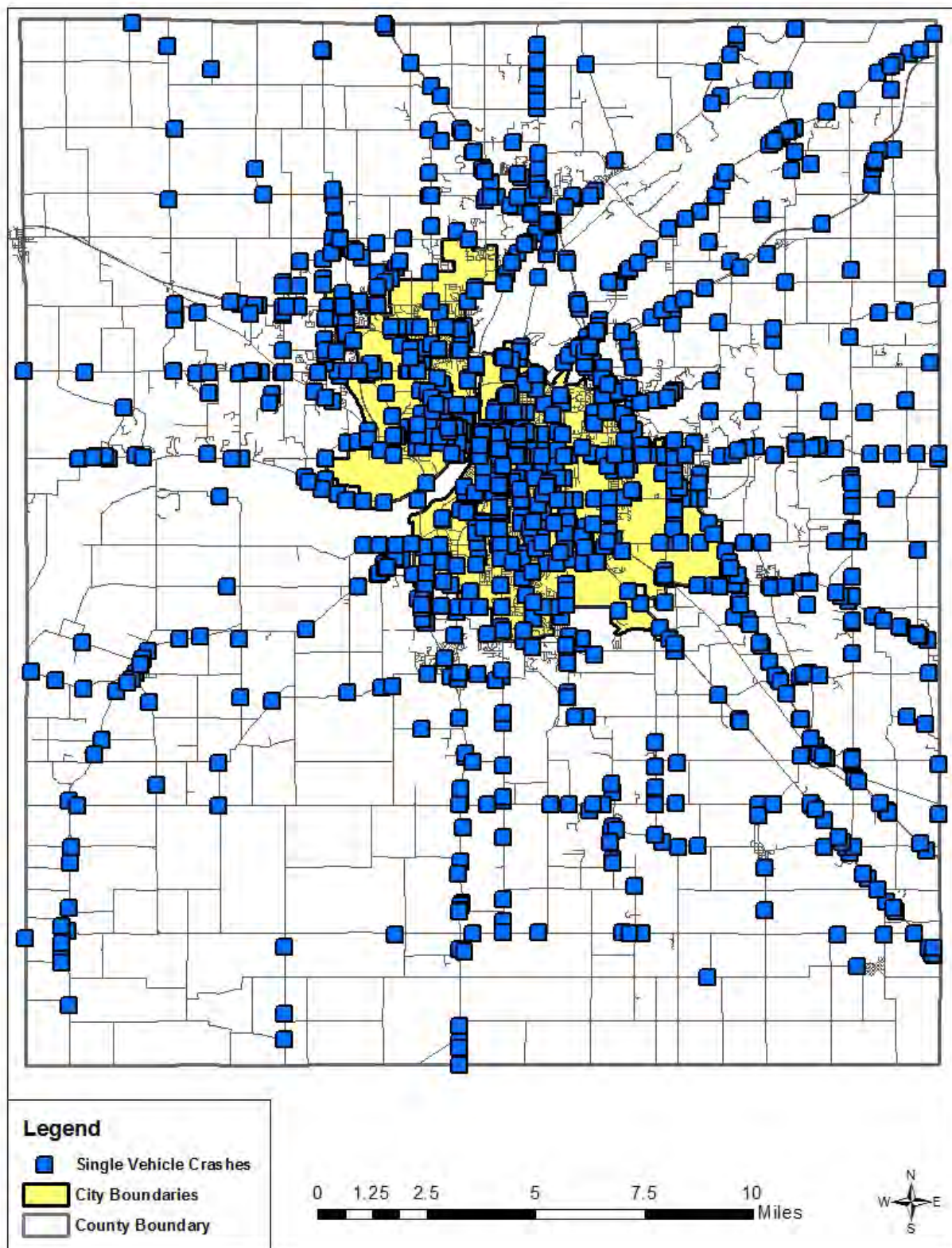


Figure 54: Lafayette and West Lafayette Single Vehicle Crashes

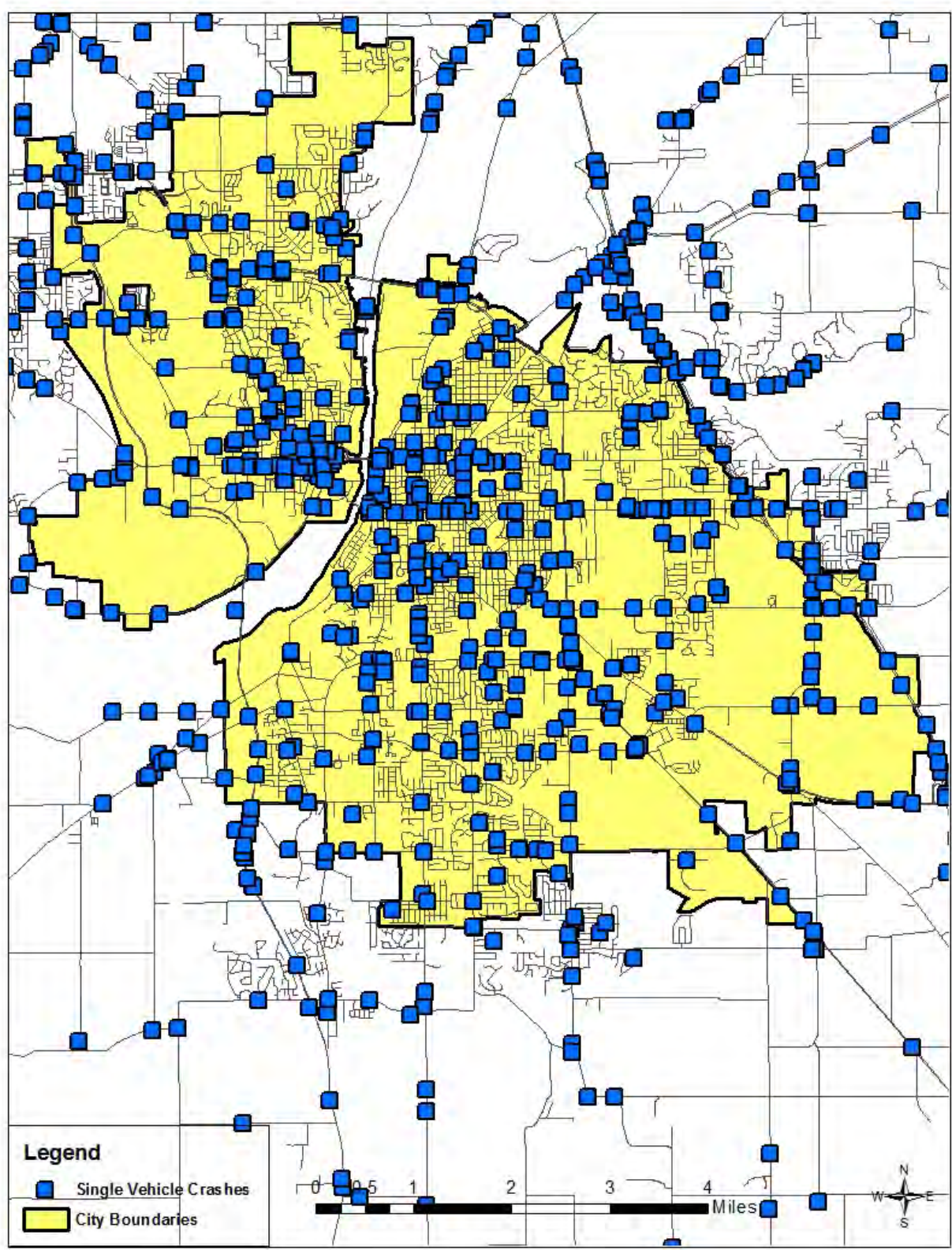


Table 56 shows that the majority of crashes occur on roads with an asphalt surface.

Table 56: Crashes by Road Surface

| ROAD SURFACE | CRASHES |
|---------------------|----------------|
| ASPHALT | 4581 |
| CONCRETE | 739 |
| GRAVEL | 14 |
| OTHER | 21 |
| UNKNOWN | 2 |
| TOTAL | 5357 |

Table 57 shows that aside from Indiana, Illinois had the highest number of licensed drivers involved in crashes in Tippecanoe County.

Table 57: Crashes by Driver's State of Residence

| STATE | DRIVERS |
|-------|---------|
| AK | 3 |
| AL | 11 |
| AR | 5 |
| AZ | 4 |
| CA | 13 |
| CO | 3 |
| CT | 2 |
| DC | 1 |
| FL | 17 |
| GA | 19 |
| IA | 7 |
| IL | 208 |
| IN | 7982 |
| KS | 5 |
| KY | 25 |
| LA | 2 |
| MA | 2 |
| MD | 4 |
| ME | 1 |
| MI | 34 |
| MN | 11 |
| MO | 10 |
| MS | 4 |
| MT | 1 |
| NC | 16 |

| STATE | DRIVERS |
|-------|---------|
| ND | 1 |
| NE | 3 |
| NJ | 5 |
| NM | 4 |
| NY | 8 |
| OH | 51 |
| OK | 1 |
| PA | 10 |
| SC | 7 |
| SD | 1 |
| TN | 10 |
| TX | 15 |
| UT | 1 |
| VA | 5 |
| WA | 1 |
| WI | 35 |
| WV | 4 |

Recommendations

Based on the analysis in this report, the following safety improvement measures are recommended:

1. Review findings with local Technical Transportation Committee and Local Public Agencies to develop safety improvement projects.
2. Identify locations where constructing sidewalks and/or trails may improve connectivity and give non-motorized road users a more continuous route to safely travel on.
3. Evaluate signage and pavement markings in high crash locations.
4. Evaluate signalization/intersection control at high crash intersections.
5. Continue to evaluate crashes in future years to look at trends in crashes. These trends can continue to inform future safety decisions.