

Office of Highway Safety Planning

2015



# Michigan Traffic Crash Facts

#### Reporting Criteria

Please pay particular attention to the wording when interpreting the three levels of data gathered for this report.

#### <u>Crash</u>

The Crash Level analyzes data related to crash events and returns one result per crash.

Examples: Time, weather, and location.

#### <u>Units</u>

The Units Level analyzes the experience of the units in the crash and returns one result per vehicle, driver, pedestrian, bicyclist, or train.

Examples: Vehicle type, driver condition, and unit events.

#### **People**

The People Level analyzes the experience of the people involved in the crash and returns one result per occupant/person/party.

Examples: Age, injury severity, and seat belt or helmet use.

#### **KABCO Injury Indicator:**

- K = Killed
- A = Incapacitating Injury
- B = Non-incapacitating Injury
- C = Possible Injury
- O = No Injury

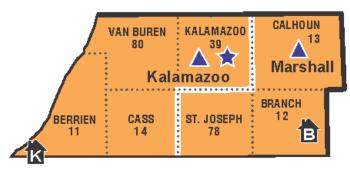
Property Damage Only (PDO)



### MDOT Region - Southwest

## 2015 Traffic Crash Data & 2011-2015 5-Year Trends

Beginning October 2015, MDOT Region - Southwest is comprised of Berrien, Branch, Calhoun, Cass, Kalamazoo, St. Joseph, and Van Buren counties. Trend tables for this report are based on those counties.



### SOUTHWEST

#### Sources:

The crashes in this report occurred on public roadways in Michigan and resulted in injuries, fatalities, or property damage (with \$1,000 as a reporting threshold). The information was gathered from Michigan Traffic Crash Report Forms (UD-10) submitted by local police departments, sheriff's offices, and the Michigan State Police. Other related information was obtained from the departments of Transportation, State, and Community Health.



### MDOT Region -Southwest Experience

#### In 2015:

There were 39,066 drivers involved in 24,660 motor vehicle crashes in MDOT Region Southwest. Of those crashes, 102 were classified as fatal, resulting in 115 fatalities. An additional 5,529 persons were injured.

MDOT Region Southwest experienced the highest number of motor vehicle crashes (2,892) in January, the highest number of fatal crashes (14) in June, and the highest number of persons killed (15) in September.

Michigan driver statistics indicate 6.5 percent of licensed drivers in MDOT Region Southwest were age 16-20, and 11.1 percent of drivers in crashes were also in that age group.

2015 - Crashes and Injuries by Month

|           |        | Cra   | shes   |                                  | Pers       | sons     |
|-----------|--------|-------|--------|----------------------------------|------------|----------|
| Month     | Total  | Fatal | Injury | Property<br>Damage Only<br>(PDO) | Fatalities | Injuries |
| January   | 2,892  | 11    | 339    | 2,542                            | 11         | 482      |
| February  | 2,649  | 5     | 358    | 2,286                            | 7          | 472      |
| March     | 1,623  | 3     | 251    | 1,369                            | 3          | 363      |
| April     | 1,423  | 7     | 260    | 1,156                            | 7          | 368      |
| May       | 1,775  | 8     | 338    | 1,429                            | 11         | 463      |
| June      | 1,821  | 14    | 335    | 1,472                            | 14         | 446      |
| July      | 1,862  | 12    | 403    | 1,447                            | 12         | 568      |
| August    | 1,607  | 9     | 384    | 1,214                            | 10         | 515      |
| September | 1,654  | 12    | 340    | 1,302                            | 15         | 466      |
| October   | 2,286  | 10    | 363    | 1,913                            | 12         | 514      |
| November  | 2,685  | 5     | 333    | 2,347                            | 5          | 441      |
| December  | 2,383  | 6     | 327    | 2,050                            | 8          | 431      |
| Total     | 24,660 | 102   | 4,031  | 20,527                           | 115        | 5,529    |

#### 2015 - Driver Statistics

|           |                    | MDOT Regio          | n - Southwest         | Driver Rates          |                     |  |  |
|-----------|--------------------|---------------------|-----------------------|-----------------------|---------------------|--|--|
| Age Group | 2015<br>Population | Licensed<br>Drivers | Drivers in<br>Crashes | Per 10k<br>Population | Per 10k<br>Licensed |  |  |
| 0 - 15    | 156,564            | 3,736               | 66                    | 4.2                   | 176.7               |  |  |
| 16 - 20   | 55,183             | 35,825              | 4,343                 | 787.0                 | 1,212.3             |  |  |
| 21 - 24   | 51,125             | 37,621              | 4,084                 | 798.8                 | 1,085.6             |  |  |
| 25 - 64   | 390,904            | 364,258             | 23,992                | 613.8                 | 658.7               |  |  |
| 65 +      | 126,853            | 113,802             | 3,899                 | 307.4                 | 342.6               |  |  |
| Unknown   |                    |                     | 2,682                 |                       |                     |  |  |
| Total     | 780,629            | 555,242             | 39,066                | 500.4                 | 703.6               |  |  |

#### 2015 - Vehicles in Crashes

|  | Motor Veh             | nicles        | Fatal Cr | ashes         | Injury<br>Crashes | PDO Crashes |
|--|-----------------------|---------------|----------|---------------|-------------------|-------------|
| Vehicle Type                                       | Number of<br>Vehicles | % of<br>Total | Number   | % of<br>Total | Number            | Number      |
| Passenger car & station wagon                      | 29,961                | 76.7          | 116      | 54.2          | 5,303             | 24,542      |
| Van & motorhome                                    | 1,390                 | 3.6           | 8        | 3.7           | 249               | 1,133       |
| Pickup truck                                       | 4,630                 | 11.9          | 28       | 13.1          | 754               | 3,848       |
| Small truck under 10,000 lbs. GVWR                 | 417                   | 1.1           | 2        | 0.9           | 76                | 339         |
| Cycle  | 303                   | 0.8           | 16       | 7.5           | 224               | 63          |
| Moped  | 52                    | 0.1           | 1        | 0.5           | 37                | 14          |
| Go Cart  | 3                     | 0.0           | 0        | 0.0           | 2                 | 1           |
| Snowmobile   | 5                     | 0.0           | 1        | 0.5           | 2                 | 2           |
| Off-Road Vehicle (ORV) & All-Terrain Vehicle (ATV) | 13                    | 0.0           | 0        | 0.0           | 13                | 0           |
| Other  | 176                   | 0.5           | 1        | 0.5           | 31                | 144         |
| Truck/bus over 10,000 lbs.                         | 1,465                 | 3.8           | 40       | 18.7          | 297               | 1,128       |
| Unknown  | 651                   | 1.7           | 1        | 0.5           | 44                | 606         |
| Total  | 39,066                | 100.0         | 214      | 100.0         | 7,032             | 31,820      |

#### 5-Year Trend - Crashes by Month

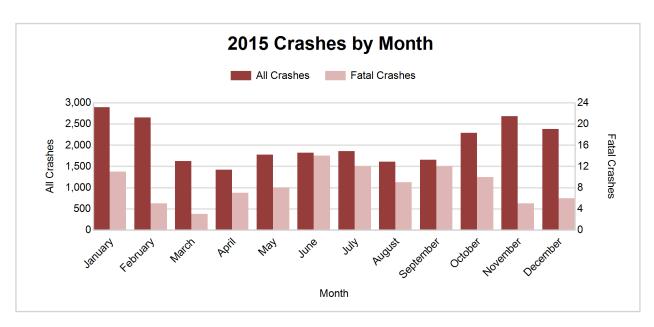
|           | 201              | 11               | 201              | 2                | 201              | 13               | 201              | 14               | 2015             |                  |  |
|-----------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|
| Month     | Total<br>Crashes | Fatal<br>Crashes |  |
| January   | 2,980            | 6                | 2,717            | 4                | 2,555            | 7                | 3,729            | 0                | 2,892            | 11               |  |
| February  | 2,220            | 6                | 2,094            | 6                | 2,363            | 7                | 2,447            | 3                | 2,649            | 5                |  |
| March     | 1,468            | 5                | 1,612            | 7                | 1,679            | 7                | 1,900            | 8                | 1,623            | 3                |  |
| April     | 1,436            | 5                | 1,363            | 4                | 1,394            | 6                | 1,317            | 10               | 1,423            | 7                |  |
| Мау       | 1,725            | 7                | 1,677            | 6                | 1,717            | 6                | 1,546            | 9                | 1,775            | 8                |  |
| June      | 1,743            | 4                | 1,631            | 11               | 1,651            | 10               | 1,580            | 5                | 1,821            | 14               |  |
| July      | 1,640            | 6                | 1,481            | 16               | 1,651            | 9                | 1,640            | 7                | 1,862            | 12               |  |
| August    | 1,478            | 9                | 1,423            | 3                | 1,577            | 9                | 1,483            | 6                | 1,607            | 9                |  |
| September | 1,804            | 9                | 1,525            | 9                | 1,637            | 15               | 1,621            | 6                | 1,654            | 12               |  |
| October   | 2,116            | 13               | 2,076            | 8                | 2,184            | 12               | 2,281            | 5                | 2,286            | 10               |  |
| November  | 2,809            | 5                | 2,015            | 8                | 2,770            | 16               | 3,193            | 5                | 2,685            | 5                |  |
| December  | 2,189            | 6                | 2,456            | 7                | 2,794            | 10               | 1,665            | 3                | 2,383            | 6                |  |
| Total     | 23,608           | 81               | 22,070           | 89               | 23,972           | 114              | 24,402           | 67               | 24,660           | 102              |  |

Note: † Indicates that the highest number of total crashes reported in the 5-year period occurred in the same month

5-Year Trend - Crashes by Day of Week

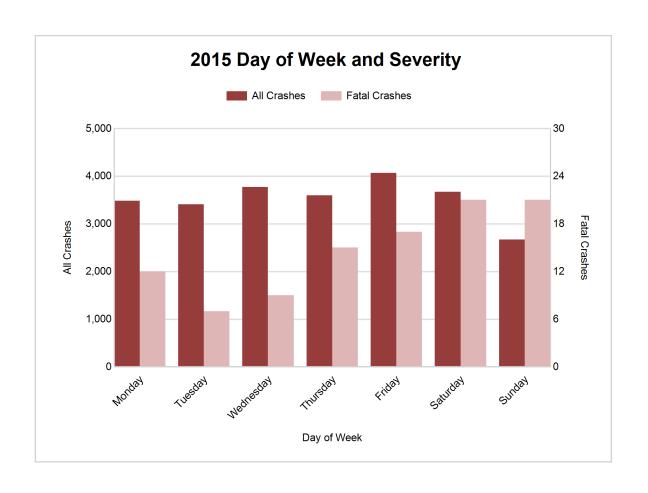
|           | 201              | 11               | 2012             |                  | 2013             |                  | 201              | 14               | 2015             |                  |
|-----------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Day       | Total<br>Crashes | Fatal<br>Crashes |
| Monday    | 3,337            | 10               | 3,223            | 16               | 3,587            | 14               | 3,262            | 7                | 3,486            | 12               |
| Tuesday   | 3,640            | 14               | 2,952            | 13               | 3,792            | 13               | 3,550            | 9                | 3,406            | 7                |
| Wednesday | 3,269            | 7                | 3,173            | 11               | 3,871            | 11               | 3,766            | 10               | 3,770            | 9                |
| Thursday  | 3,455            | 10               | 3,045            | 9                | 3,504            | 19               | 4,251            | 11               | 3,594            | 15               |
| Friday    | 3,889            | 10               | 4,099            | 12               | 3,619            | 23               | 4,012            | 7                | 4,069            | 17               |
| Saturday  | 3,384            | 17               | 3,124            | 7                | 3,076            | 17               | 3,087            | 15               | 3,668            | 21               |
| Sunday    | 2,634            | 13               | 2,454            | 21               | 2,523            | 17               | 2,474            | 8                | 2,667            | 21               |
| Total     | 23,608           | 81               | 22,070           | 89               | 23,972           | 114              | 24,402           | 67               | 24,660           | 102              |

Note: † Indicates that the highest number of total crashes reported in the 5-year period occurred on the same day of the week



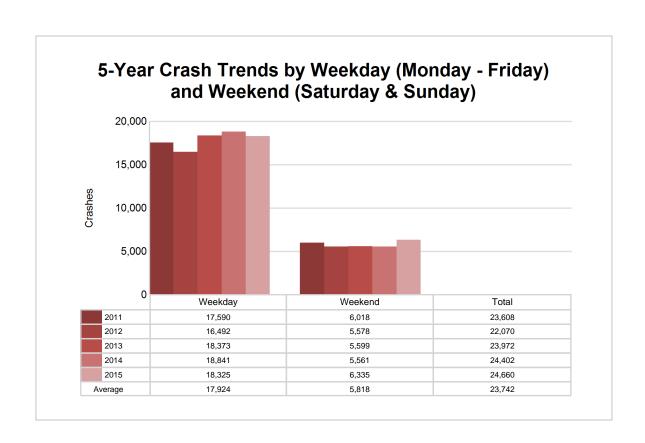
2015 - Crashes by Day of Week

|           | All Cra | ashes         | Fatal C | rashes        | In  | jury Crash | ies   | PDO<br>Crashes |
|-----------|---------|---------------|---------|---------------|-----|------------|-------|----------------|
| Day       | Number  | % of<br>Total | Number  | % of<br>Fatal | Α   | В          | С     | Number         |
| Monday    | 3,486   | 14.1          | 12      | 11.8          | 43  | 136        | 346   | 2,949          |
| Tuesday   | 3,406   | 13.8          | 7       | 6.9           | 56  | 145        | 390   | 2,808          |
| Wednesday | 3,770   | 15.3          | 9       | 8.8           | 42  | 157        | 384   | 3,178          |
| Thursday  | 3,594   | 14.6          | 15      | 14.7          | 52  | 164        | 370   | 2,993          |
| Friday    | 4,069   | 16.5          | 17      | 16.7          | 50  | 165        | 443   | 3,394          |
| Saturday  | 3,668   | 14.9          | 21      | 20.6          | 71  | 190        | 380   | 3,006          |
| Sunday    | 2,667   | 10.8          | 21      | 20.6          | 54  | 150        | 243   | 2,199          |
| Total     | 24,660  | 100.0         | 102     | 100.0         | 368 | 1,107      | 2,556 | 20,527         |



5-Year Trend - Crashes by Weekday and Weekend

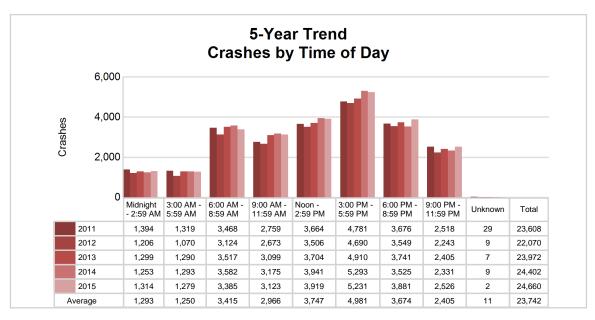
|                 | 201              | 1                | 2012             |                  | 2013             |                  | 201              | 4                | 2015             |                  |
|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Portion of Week | Total<br>Crashes | Fatal<br>Crashes |
| Weekday         | 17,590           | 51               | 16,492           | 61               | 18,373           | 80               | 18,841           | 44               | 18,325           | 60               |
| Weekend         | 6,018            | 30               | 5,578            | 28               | 5,599            | 34               | 5,561            | 23               | 6,335            | 42               |
| Total           | 23,608           | 81               | 22,070           | 89               | 23,972           | 114              | 24,402           | 67               | 24,660           | 102              |

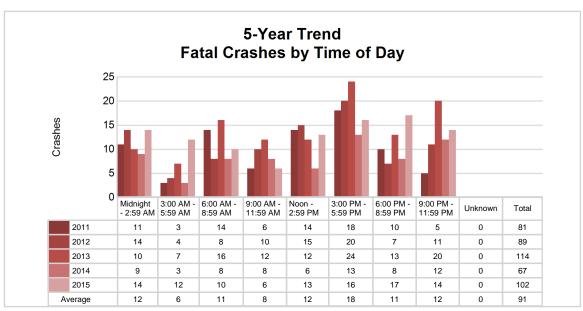


5-Year Trend - Crashes by Time of Day

|           |    |          | 201              | 1                | 201              | 2                | 201              | 3                | 201              | 4                | 2015             |                  |  |
|-----------|----|----------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|
| Time of D | ay |          | Total<br>Crashes | Fatal<br>Crashes |  |
| Midnight  | -  | 2:59 AM  | 1,394            | 11               | 1,206            | 14               | 1,299            | 10               | 1,253            | 9                | 1,314            | 14               |  |
| 3:00 AM   | -  | 5:59 AM  | 1,319            | 3                | 1,070            | 4                | 1,290            | 7                | 1,293            | 3                | 1,279            | 12               |  |
| 6:00 AM   | -  | 8:59 AM  | 3,468            | 14               | 3,124            | 8                | 3,517            | 16               | 3,582            | 8                | 3,385            | 10               |  |
| 9:00 AM   | -  | 11:59 AM | 2,759            | 6                | 2,673            | 10               | 3,099            | 12               | 3,175            | 8                | 3,123            | 6                |  |
| Noon      | -  | 2:59 PM  | 3,664            | 14               | 3,506            | 15               | 3,704            | 12               | 3,941            | 6                | 3,919            | 13               |  |
| 3:00 PM   | -  | 5:59 PM  | 4,781 †          | 18               | 4,690 †          | 20               | 4,910 †          | 24               | 5,293 †          | 13               | 5,231 †          | 16               |  |
| 6:00 PM   | -  | 8:59 PM  | 3,676            | 10               | 3,549            | 7                | 3,741            | 13               | 3,525            | 8                | 3,881            | 17               |  |
| 9:00 PM   | -  | 11:59 PM | 2,518            | 5                | 2,243            | 11               | 2,405            | 20               | 2,331            | 12               | 2,526            | 14               |  |
| Unknown   |    |          | 29               | 0                | 9                | 0                | 7                | 0                | 9                | 0                | 2                | 0                |  |
| Total     |    |          | 23,608           | 81               | 22,070           | 89               | 23,972           | 114              | 24,402           | 67               | 24,660           | 102              |  |

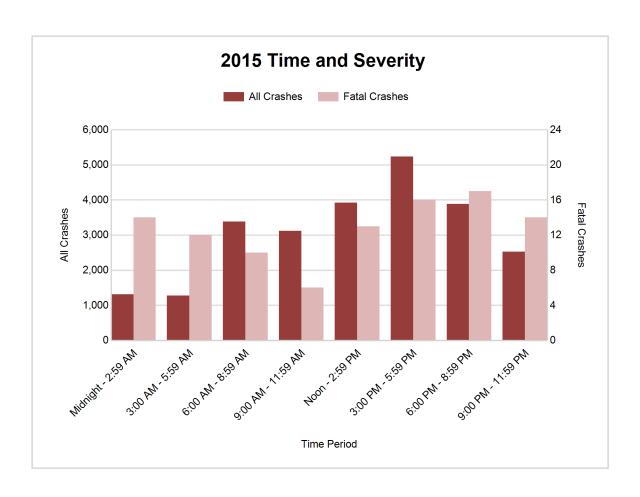
Note: † Indicates that the highest number of total crashes reported in the 5-year period occurred in the same time period





2015 - Time and Severity

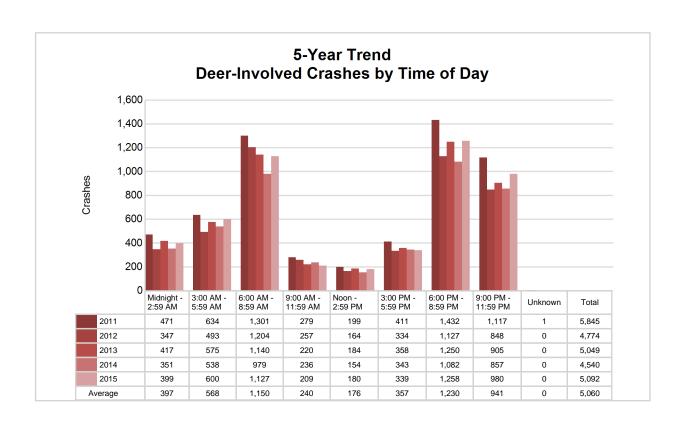
|            |            |         |               |         |               |     |            |       | DDO            |
|------------|------------|---------|---------------|---------|---------------|-----|------------|-------|----------------|
|            |            | All Cra | ashes         | Fatal C | rashes        | In  | jury Crash | es    | PDO<br>Crashes |
| Time of Da | ay         | Number  | % of<br>Total | Number  | % of<br>Fatal | Α   | В          | С     | Number         |
| Midnight   | - 2:59 AM  | 1,314   | 5.3           | 14      | 13.7          | 26  | 70         | 109   | 1,095          |
| 3:00 AM    | - 5:59 AM  | 1,279   | 5.2           | 12      | 11.8          | 21  | 51         | 85    | 1,110          |
| 6:00 AM    | - 8:59 AM  | 3,385   | 13.7          | 10      | 9.8           | 31  | 119        | 292   | 2,933          |
| 9:00 AM    | - 11:59 AM | 3,123   | 12.7          | 6       | 5.9           | 46  | 139        | 361   | 2,571          |
| Noon       | - 2:59 PM  | 3,919   | 15.9          | 13      | 12.7          | 59  | 181        | 512   | 3,154          |
| 3:00 PM    | - 5:59 PM  | 5,231   | 21.2          | 16      | 15.7          | 80  | 251        | 634   | 4,250          |
| 6:00 PM    | - 8:59 PM  | 3,881   | 15.7          | 17      | 16.7          | 56  | 177        | 370   | 3,261          |
| 9:00 PM    | - 11:59 PM | 2,526   | 10.2          | 14      | 13.7          | 49  | 119        | 193   | 2,151          |
| Unknown    |            | 2       | 0.0           | 0       | 0.0           | 0   | 0          | 0     | 2              |
| Total      |            | 24,660  | 100.0         | 102     | 100.0         | 368 | 1,107      | 2,556 | 20,527         |

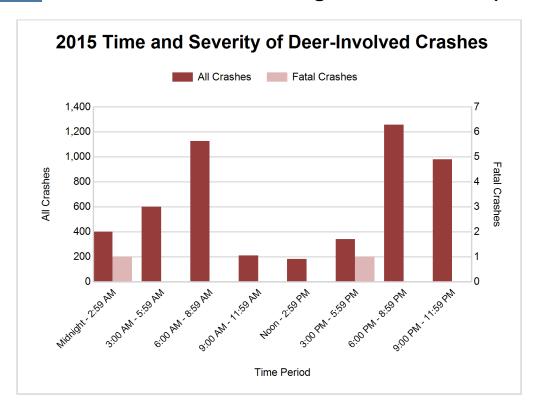


5-Year Trend - Deer-Involved Crashes by Time of Day

|               |        | 20               | 11               | 20               | 12               | 20               | 13               | 20               | 14               | 2015             |                  |
|---------------|--------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Time of Day   |        | Total<br>Crashes | Fatal<br>Crashes |
| Midnight - 2: | :59 AM | 471              | 0                | 347              | 0                | 417              | 0                | 351              | 0                | 399              | 1                |
| 3:00 AM - 5:  | :59 AM | 634              | 0                | 493              | 0                | 575              | 1                | 538              | 0                | 600              | 0                |
| 6:00 AM - 8:  | :59 AM | 1,301            | 0                | 1,204            | 0                | 1,140            | 0                | 979              | 0                | 1,127            | 0                |
| 9:00 AM - 11: | :59 AM | 279              | 0                | 257              | 0                | 220              | 0                | 236              | 0                | 209              | 0                |
| Noon - 2:     | :59 PM | 199              | 0                | 164              | 1                | 184              | 0                | 154              | 0                | 180              | 0                |
| 3:00 PM - 5:  | :59 PM | 411              | 0                | 334              | 0                | 358              | 0                | 343              | 0                | 339              | 1                |
| 6:00 PM - 8:  | :59 PM | 1,432            | 0                | 1,127            | 0                | 1,250            | 1                | 1,082            | 0                | 1,258            | 0                |
| 9:00 PM - 11: | :59 PM | 1,117            | 0                | 848              | 0                | 905              | 0                | 857              | 0                | 980              | 0                |
| Unknown       |        | 1                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| Total         |        | 5,845            | 0                | 4,774            | 1                | 5,049            | 2                | 4,540            | 0                | 5,092            | 2                |

Note: † Indicates that the highest number of total crashes reported in the 5-year period occurred in the same time period



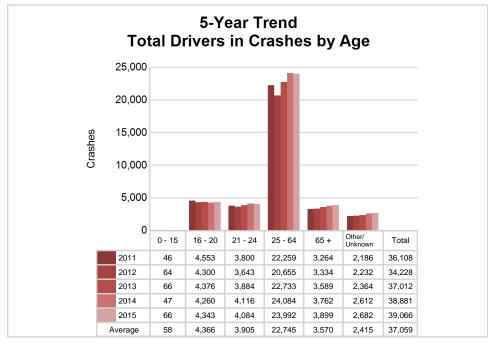


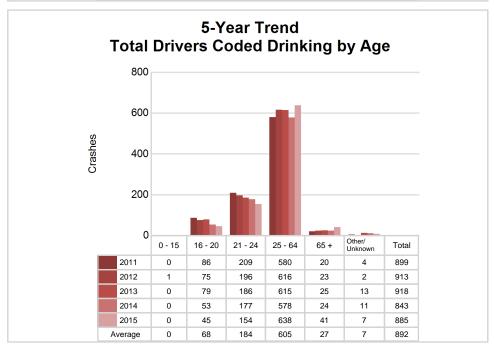
2015 - Reported Motor Vehicle Crashes by County

|            | Crashes |       |        |                    |                 |             |                |                 |                      |                   |                   | Persons    |          |
|------------|---------|-------|--------|--------------------|-----------------|-------------|----------------|-----------------|----------------------|-------------------|-------------------|------------|----------|
| County     | Total   | Fatal | Injury | Property<br>Damage | Inter-<br>state | US<br>Route | State<br>Route | Local<br>Street | Alcohol-<br>Involved | Drug-<br>Involved | Deer-<br>Involved | Fatalities | Injuries |
| Berrien    | 4,712   | 17    | 799    | 3,896              | 1,154           | 409         | 917            | 2,232           | 177                  | 42                | 830               | 18         | 1,121    |
| Branch     | 1,642   | 7     | 196    | 1,439              | 172             | 379         | 71             | 1,020           | 42                   | 13                | 790               | 8          | 290      |
| Calhoun    | 4,676   | 20    | 752    | 3,904              | 1,232           | 0           | 1,211          | 2,233           | 143                  | 24                | 1,009             | 25         | 1,012    |
| Cass       | 1,402   | 14    | 221    | 1,167              | 0               | 131         | 442            | 829             | 73                   | 10                | 411               | 15         | 313      |
| Kalamazoo  | 8,250   | 25    | 1,367  | 6,858              | 1,272           | 515         | 1,412          | 5,051           | 285                  | 53                | 917               | 27         | 1,826    |
| St. Joseph | 1,603   | 4     | 285    | 1,314              | 0               | 364         | 419            | 820             | 76                   | 13                | 484               | 4          | 394      |
| Van Buren  | 2,375   | 15    | 411    | 1,949              | 611             | 0           | 461            | 1,303           | 110                  | 27                | 651               | 18         | 573      |
| Total      | 24,660  | 102   | 4,031  | 20,527             | 4,441           | 1,798       | 4,933          | 13,488          | 906                  | 182               | 5,092             | 115        | 5,529    |

5-Year Trend - Drivers in Crashes Coded Drinking by Driver Age

|            | 20                             | 11                                    | 20                             | 12                                    | 20                             | 13                                    | 20                             | 14                                    | 2015                           |                                       |
|------------|--------------------------------|---------------------------------------|--------------------------------|---------------------------------------|--------------------------------|---------------------------------------|--------------------------------|---------------------------------------|--------------------------------|---------------------------------------|
| Driver Age | Total<br>Drivers in<br>Crashes | Total<br>Drivers<br>Coded<br>Drinking |
| 0 - 15     | 46                             | 0                                     | 64                             | 1                                     | 66                             | 0                                     | 47                             | 0                                     | 66                             | 0                                     |
| 16 - 20    | 4,553                          | 86                                    | 4,300                          | 75                                    | 4,376                          | 79                                    | 4,260                          | 53                                    | 4,343                          | 45                                    |
| 21 - 24    | 3,800                          | 209                                   | 3,643                          | 196                                   | 3,884                          | 186                                   | 4,116                          | 177                                   | 4,084                          | 154                                   |
| 25 - 64    | 22,259                         | 580                                   | 20,655                         | 616                                   | 22,733                         | 615                                   | 24,084                         | 578                                   | 23,992                         | 638                                   |
| 65 +       | 3,264                          | 20                                    | 3,334                          | 23                                    | 3,589                          | 25                                    | 3,762                          | 24                                    | 3,899                          | 41                                    |
| Unknown    | 2,186                          | 4                                     | 2,232                          | 2                                     | 2,364                          | 13                                    | 2,612                          | 11                                    | 2,682                          | 7                                     |
| Total      | 36,108                         | 899                                   | 34,228                         | 913                                   | 37,012                         | 918                                   | 38,881                         | 843                                   | 39,066                         | 885                                   |





2015 - Bodily Alcohol Concentration (BAC) Results Among All Vehicle Drivers in Alcohol-Involved Crashes by Age

|           |  | Dri   | vers   |                                       | BAC F      | Result Rang | ge for Drive                        | ers Coded                        | Drinking               |
|-----------|--|---|--|---------------------------------------|------------|-------------|-------------------------------------|----------------------------------|------------------------|
| Age Group | Total<br>Drivers in<br>Alcohol-<br>Involved<br>Crashes | Total<br>Drivers<br>Tested<br>in all<br>Crashes | Total<br>Drivers<br>Coded<br>Drinking,<br>Tested | Total<br>Drivers<br>Coded<br>Drinking | BAC = 0.00 | to          | BAC<br>0.08 g/dL<br>to<br>0.16 g/dL | BAC<br>0.17 g/dL<br>and<br>Above | BAC<br>Not<br>Reported |
| 0 - 15    | 1  | 0   | 0  | 0                                     | 0          | 0           | 0                                   | 0                                | 0                      |
| 16 - 20   | 73   | 79  | 37   | 45                                    | 3          | 5           | 10                                  | 10                               | 17                     |
| 21 - 24   | 185  | 180   | 140  | 154                                   | 2          | 17          | 49                                  | 42                               | 44                     |
| 25 - 64   | 833  | 752   | 552  | 638                                   | 6          | 54          | 165                                 | 209                              | 204                    |
| 65 +      | 64   | 71  | 34   | 41                                    | 3          | 3           | 11                                  | 10                               | 14                     |
| Unknown   | 81   | 4   | 0  | 7                                     | 0          | 0           | 0                                   | 0                                | 7                      |
| Total     | 1,237  | 1,086   | 763  | 885                                   | 14         | 79          | 235                                 | 271                              | 286                    |

Notes: BAC measured in grams (g) per deciliter (dL).

BAC may not be reported if drivers are not tested or if the results are not available immediately (as in the case of a blood test). A driver may be coded by the officer as drinking even though no test is administered.

#### Alcohol-Involved Crashes

In 2015, there were 1,237 drivers in alcohol-involved crashes; 885 (71.5%) of those drivers were coded as had-been-drinking by the officer on the crash form.

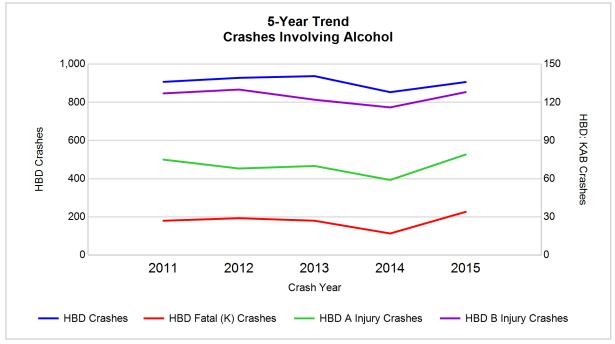
- 506 (57.2%) of the 885 drivers had a blood alcohol concentration (BAC) of 0.08 g/dL (grams per deciliter) or greater, and 271 (53.6%) of the 506 drivers had a BAC at or above 0.17 g/dL.
- 763 (86.2%) of the 885 drivers were coded as hadbeen-drinking and were tested for alcohol consumption.

#### 5-Year Trend - Crashes Involving Alcohol

| Year | All<br>Crashes | HBD<br>Crashes | %<br>HBD | Fatal<br>Crashes | HBD Fatal<br>Crashes | %<br>HBD | A Injury<br>Crashes | HBD<br>A Injury<br>Crashes | %<br>HBD | B Injury<br>Crashes | HBD<br>B Injury<br>Crashes | % HBD |
|------|----------------|----------------|----------|------------------|----------------------|----------|---------------------|----------------------------|----------|---------------------|----------------------------|-------|
| 2011 | 23,608         | 907            | 3.8      | 81               | 27                   | 33.3     | 379                 | 75                         | 19.8     | 969                 | 127                        | 13.1  |
| 2012 | 22,070         | 928            | 4.2      | 89               | 29                   | 32.6     | 390                 | 68                         | 17.4     | 1,019               | 130                        | 12.8  |
| 2013 | 23,972         | 937            | 3.9      | 114              | 27                   | 23.7     | 370                 | 70                         | 18.9     | 1,006               | 122                        | 12.1  |
| 2014 | 24,402         | 853            | 3.5      | 67               | 17                   | 25.4     | 365                 | 59                         | 16.2     | 1,055               | 116                        | 11.0  |
| 2015 | 24,660**       | 906            | 3.7      | 102              | 34**                 | 33.3     | 368                 | 79**                       | 21.5**   | 1,107**             | 128                        | 11.6  |

Note: \* Indicates that the most recent year is the lowest number or percentage reported in the 5-year period in that column

<sup>\*\*</sup> Indicates that the most recent year is the highest number or percentage reported in the 5-year period in that column



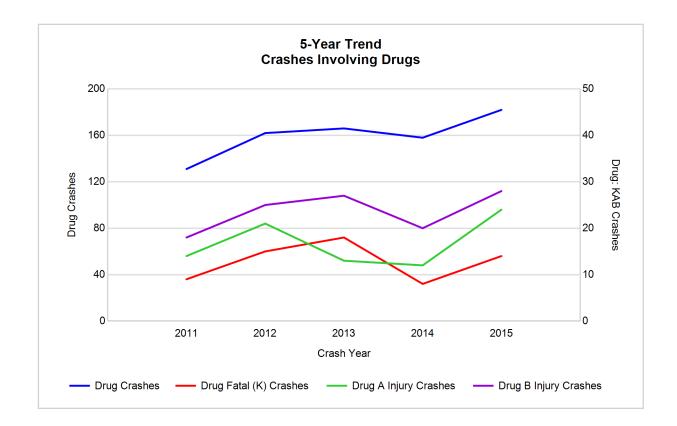
Note: Had-Been-Drinking (HBD)

#### 5-Year Trend - Crashes Involving Drugs

| Year | All<br>Crashes | Drug<br>Crashes | %<br>Drug | Fatal<br>Crashes | Drug<br>Fatal<br>Crashes | %<br>Drug | A Injury<br>Crashes | Drug<br>A Injury<br>Crashes | %<br>Drug | B Injury<br>Crashes | Drug<br>B Injury<br>Crashes | %<br>Drug |
|------|----------------|-----------------|-----------|------------------|--------------------------|-----------|---------------------|-----------------------------|-----------|---------------------|-----------------------------|-----------|
| 2011 | 23,608         | 131             | 0.6       | 81               | 9                        | 11.1      | 379                 | 14                          | 3.7       | 969                 | 18                          | 1.9       |
| 2012 | 22,070         | 162             | 0.7       | 89               | 15                       | 16.9      | 390                 | 21                          | 5.4       | 1,019               | 25                          | 2.5       |
| 2013 | 23,972         | 166             | 0.7       | 114              | 18                       | 15.8      | 370                 | 13                          | 3.5       | 1,006               | 27                          | 2.7       |
| 2014 | 24,402         | 158             | 0.6       | 67               | 8                        | 11.9      | 365                 | 12                          | 3.3       | 1,055               | 20                          | 1.9       |
| 2015 | 24,660**       | 182**           | 0.7       | 102              | 14                       | 13.7      | 368                 | 24**                        | 6.5**     | 1,107**             | 28**                        | 2.5       |

Note: \* Indicates that the most recent year is the lowest number or percentage reported in the 5-year period in that column

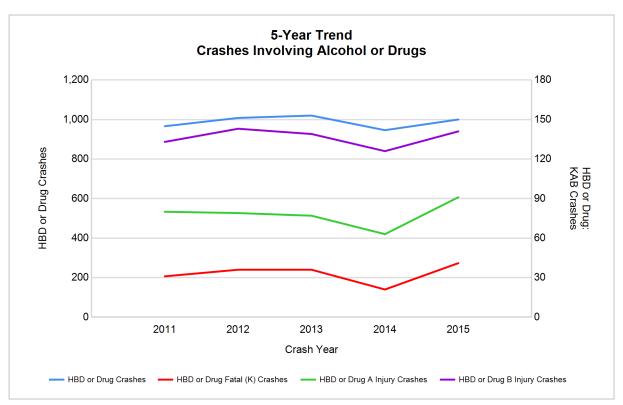
<sup>\*\*</sup> Indicates that the most recent year is the highest number or percentage reported in the 5-year period in that column



#### 5-Year Trend - Crashes Involving Alcohol or Drugs

| Year | All<br>Crashes | HBD or Drug<br>Crashes | % HBD<br>or Drug | Fatal<br>Crashes | HBD or Drug<br>Fatal Crashes | % HBD<br>or Drug | A Injury<br>Crashes | HBD or Drug<br>A Injury<br>Crashes | % HBD<br>or Drug | B Injury<br>Crashes | HBD or Drug<br>B Injury<br>Crashes | % HBD<br>or Drug |
|------|----------------|------------------------|------------------|------------------|------------------------------|------------------|---------------------|------------------------------------|------------------|---------------------|------------------------------------|------------------|
| 2011 | 23,608         | 966                    | 4.1              | 81               | 31                           | 38.3             | 379                 | 80                                 | 21.1             | 969                 | 133                                | 13.7             |
| 2012 | 22,070         | 1,008                  | 4.6              | 89               | 36                           | 40.4             | 390                 | 79                                 | 20.3             | 1,019               | 143                                | 14.0             |
| 2013 | 23,972         | 1,020                  | 4.3              | 114              | 36                           | 31.6             | 370                 | 77                                 | 20.8             | 1,006               | 139                                | 13.8             |
| 2014 | 24,402         | 946                    | 3.9              | 67               | 21                           | 31.3             | 365                 | 63                                 | 17.3             | 1,055               | 126                                | 11.9             |
| 2015 | 24,660**       | 1,000                  | 4.1              | 102              | 41**                         | 40.2             | 368                 | 91**                               | 24.7**           | 1,107**             | 141                                | 12.7             |

 $Note: {}^* \ Indicates \ that \ the \ most \ recent \ year \ is \ the \ lowest \ number \ or \ percentage \ reported \ in \ tha \ 5-year \ period \ in \ that \ column$ 



Note: Had-Been-Drinking (HBD)

<sup>\*\*</sup> Indicates that the most recent year is the highest number or percentage reported in the 5-year period in that column

2015 - Restraints Worn Among Vehicle Drivers and Injured Passengers by Vehicle Type

|   | Tota   | I Occupa          | nts   |       | Fatalities        |       | A - Iı | ncapacita         | ting  | B - No | n-incapacit       | ating | C - P | ossible In        | jury  |        | No Injury         |       |
|---|--------|-------------------|-------|-------|-------------------|-------|--------|-------------------|-------|--------|-------------------|-------|-------|-------------------|-------|--------|-------------------|-------|
| Vehicle Type  | Total  | Used<br>Restraint | %     | Total | Used<br>Restraint | %     | Total  | Used<br>Restraint | %     | Total  | Used<br>Restraint | %     | Total | Used<br>Restraint | %     | Total  | Used<br>Restraint | %     |
| Passenger car<br>& station wagon                            | 31,146 | 27,948            | 89.7  | 63    | 39                | 61.9  | 276    | 206               | 74.6  | 969    | 854               | 88.1  | 2,852 | 2,682             | 94.0  | 25,556 | 24,159            | 94.5  |
| Van & motorhome   | 1,471  | 1,325             | 90.1  | 2     | 1                 | 50.0  | 8      | 8                 | 100.0 | 61     | 57                | 93.4  | 132   | 118               | 89.4  | 1,206  | 1,141             | 94.6  |
| Pickup truck  | 4,753  | 4,251             | 89.4  | 12    | 5                 | 41.7  | 52     | 36                | 69.2  | 116    | 98                | 84.5  | 316   | 289               | 91.5  | 4,042  | 3,822             | 94.6  |
| Small truck<br>under 10,000<br>lbs. GVWR                    | 430    | 378               | 87.9  | 0     | 0                 | 0.0   | 2      | 0                 | 0.0   | 14     | 12                | 85.7  | 35    | 33                | 94.3  | 361    | 333               | 92.2  |
| Cycle   | 327    | 201               | 61.5  | 16    | 7                 | 43.8  | 56     | 28                | 50.0  | 117    | 76                | 65.0  | 67    | 50                | 74.6  | 68     | 39                | 57.4  |
| Moped   | 55     | 11                | 20.0  | 1     | 0                 | 0.0   | 10     | 0                 | 0.0   | 16     | 5                 | 31.3  | 12    | 2                 | 16.7  | 15     | 4                 | 26.7  |
| Go Cart   | 5      | 0                 | 0.0   | 0     | 0                 | 0.0   | 0      | 0                 | 0.0   | 2      | 0                 | 0.0   | 1     | 0                 | 0.0   | 2      | 0                 | 0.0   |
| Snowmobile  | 5      | 5                 | 100.0 | 1     | 1                 | 100.0 | 1      | 1                 | 100.0 | 0      | 0                 | 0.0   | 1     | 1                 | 100.0 | 2      | 2                 | 100.0 |
| Off-Road<br>Vehicle (ORV)<br>& All-Terrain<br>Vehicle (ATV) | 17     | 7                 | 41.2  | 0     | 0                 | 0.0   | 3      | 2                 | 66.7  | 6      | 1                 | 16.7  | 6     | 3                 | 50.0  | 2      | 1                 | 50.0  |
| Other   | 181    | 106               | 58.6  | 1     | 0                 | 0.0   | 1      | 0                 | 0.0   | 7      | 2                 | 28.6  | 5     | 3                 | 60.0  | 143    | 101               | 70.6  |
| Truck/bus over 10,000 lbs.                                  | 1,478  | 1,375             | 93.0  | 3     | 0                 | 0.0   | 9      | 8                 | 88.9  | 24     | 22                | 91.7  | 63    | 57                | 90.5  | 1,345  | 1,288             | 95.8  |
| Unknown   | 651    | 8                 | 1.2   | 0     | 0                 | 0.0   | 0      | 0                 | 0.0   | 0      | 0                 | 0.0   | 1     | 1                 | 100.0 | 23     | 7                 | 30.4  |
| Total   | 40,519 | 35,615            | 87.9  | 99    | 53                | 53.5  | 418    | 289               | 69.1  | 1,332  | 1,127             | 84.6  | 3,491 | 3,239             | 92.8  | 32,765 | 30,897            | 94.3  |

Note: Restraint Use includes shoulder belt only used, lap belt only used, both lap and shoulder belts used, child restraint used, restraint failure, and helmet worn.

2015 - Restraints Worn Among Vehicle Drivers and Injured Passengers by Age

|           | Tota   | al Occupar        | nts  |       | Fatalities        |      | A - Iı | ncapacitat        | ing  | B - No | n-incapacit       | ating | C - P | ossible Inj       | ury  | 1      | No Injury         |      |
|-----------|--------|-------------------|------|-------|-------------------|------|--------|-------------------|------|--------|-------------------|-------|-------|-------------------|------|--------|-------------------|------|
| Age Group | Total  | Used<br>Restraint | %    | Total | Used<br>Restraint | %    | Total  | Used<br>Restraint | %    | Total  | Used<br>Restraint | %     | Total | Used<br>Restraint | %    | Total  | Used<br>Restraint | %    |
| 0 - 15    | 416    | 358               | 86.1 | 3     | 1                 | 33.3 | 22     | 18                | 81.8 | 93     | 77                | 82.8  | 244   | 218               | 89.3 | 54     | 44                | 81.5 |
| 16 - 20   | 4,613  | 4,358             | 94.5 | 11    | 7                 | 63.6 | 66     | 47                | 71.2 | 208    | 170               | 81.7  | 464   | 432               | 93.1 | 3,862  | 3,702             | 95.9 |
| 21 - 24   | 4,220  | 3,957             | 93.8 | 11    | 8                 | 72.7 | 32     | 18                | 56.3 | 180    | 151               | 83.9  | 340   | 306               | 90.0 | 3,653  | 3,474             | 95.1 |
| 25 - 64   | 24,543 | 23,046            | 93.9 | 53    | 25                | 47.2 | 254    | 164               | 64.6 | 714    | 603               | 84.5  | 2,033 | 1,895             | 93.2 | 21,445 | 20,358            | 94.9 |
| 65 +      | 4,045  | 3,848             | 95.1 | 21    | 12                | 57.1 | 43     | 42                | 97.7 | 137    | 126               | 92.0  | 401   | 387               | 96.5 | 3,437  | 3,281             | 95.5 |
| Unknown   | 2,682  | 48                | 1.8  | 0     | 0                 | 0.0  | 1      | 0                 | 0.0  | 0      | 0                 | 0.0   | 9     | 1                 | 11.1 | 314    | 38                | 12.1 |
| Total     | 40,519 | 35,615            | 87.9 | 99    | 53                | 53.5 | 418    | 289               | 69.1 | 1,332  | 1,127             | 84.6  | 3,491 | 3,239             | 92.8 | 32,765 | 30,897            | 94.3 |

Note: Restraint Use includes shoulder belt only used, lap belt only used, both lap and shoulder belts used, child restraint used, restraint failure, and helmet worn.

#### 5-Year Trend - Restraint Use Among Drivers

|   |         | 2011             |                    |         | 2012             |                    |         | 2013             |                    |         | 2014             |                    |         | 2015             |                    |
|---|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|
| Restraint Use   | Drivers | Fatal<br>Drivers | Injured<br>Drivers |
| No belts available                                    | 265     | 0                | 33                 | 236     | 3                | 40                 | 194     | 2                | 26                 | 173     | 0                | 19                 | 187     | 1                | 18                 |
| Shoulder belt only used                               | 42      | 0                | 4                  | 68      | 0                | 1                  | 89      | 0                | 11                 | 212     | 0                | 8                  | 117     | 0                | 8                  |
| Lap belt only used                                    | 125     | 1                | 17                 | 124     | 0                | 11                 | 130     | 1                | 11                 | 128     | 0                | 19                 | 168     | 1                | 20                 |
| Both lap & shoulder belts used                        | 31,777  | 28               | 2,983              | 29,895  | 25               | 3,025              | 32,380  | 43               | 3,155              | 33,850  | 18               | 3,222              | 33,881  | 33               | 3,251              |
| No belts used   | 262     | 15               | 110                | 276     | 21               | 112                | 293     | 20               | 97                 | 291     | 13               | 96                 | 269     | 16               | 92                 |
| Child restraint used                                  | 2       | 0                | 0                  | 1       | 0                | 0                  | 0       | 0                | 0                  | 1       | 0                | 0                  | 1       | 0                | 0                  |
| Child restraint not used, unavailable or improper use | 3       | 0                | 0                  | 1       | 0                | 0                  | 2       | 0                | 0                  | 1       | 0                | 0                  | 0       | 0                | 0                  |
| Restraint failure                                     | 12      | 0                | 4                  | 18      | 0                | 2                  | 6       | 0                | 0                  | 10      | 0                | 0                  | 7       | 0                | 1                  |
| Restraint use<br>unknown                              | 1,272   | 5                | 142                | 1,161   | 7                | 115                | 1,374   | 11               | 159                | 1,476   | 5                | 133                | 1,562   | 9                | 150                |
| Helmet worn   | 289     | 9                | 212                | 256     | 10               | 193                | 241     | 6                | 174                | 206     | 4                | 134                | 207     | 8                | 152                |
| Helmet not worn                                       | 44      | 0                | 32                 | 133     | 1                | 103                | 122     | 5                | 96                 | 119     | 4                | 93                 | 144     | 10               | 99                 |
| Helmet use<br>unknown                                 | 6       | 0                | 2                  | 13      | 0                | 5                  | 23      | 1                | 12                 | 15      | 1                | 6                  | 26      | 0                | 12                 |
| Uncoded & errors                                      | 2,009   | 0                | 9                  | 2,046   | 0                | 3                  | 2,158   | 0                | 2                  | 2,399   | 0                | 4                  | 2,497   | 0                | 6                  |
| Total   | 36,108  | 58               | 3,548              | 34,228  | 67               | 3,610              | 37,012  | 89               | 3,743              | 38,881  | 45               | 3,734              | 39,066  | 78               | 3,809              |

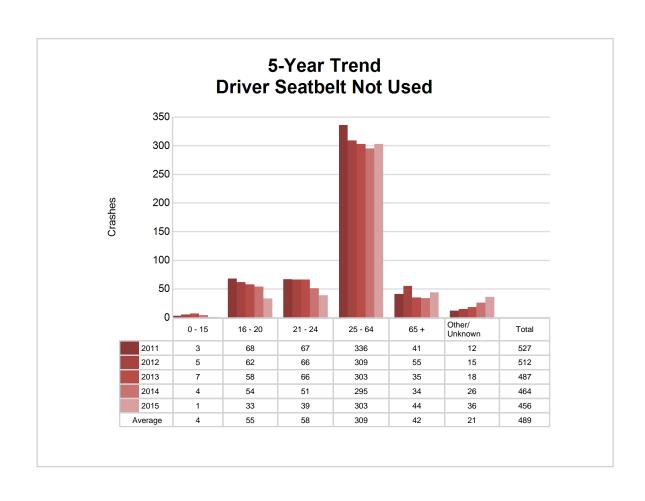
#### 5-Year Trend - Restraint Use Among Drivers Coded Drinking

|   |         | 2011             |                    |         | 2012             |                    |         | 2013             |                    |         | 2014             |                    |         | 2015             |                    |
|---|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|
| Restraint Use   | Drivers | Fatal<br>Drivers | Injured<br>Drivers |
| No belts available                                    | 12      | 0                | 6                  | 5       | 1                | 2                  | 7       | 0                | 5                  | 5       | 0                | 0                  | 7       | 1                | 3                  |
| Shoulder belt only used                               | 4       | 0                | 2                  | 6       | 0                | 0                  | 5       | 0                | 1                  | 2       | 0                | 0                  | 2       | 0                | 2                  |
| Lap belt only used                                    | 6       | 1                | 3                  | 2       | 0                | 0                  | 2       | 0                | 1                  | 3       | 0                | 1                  | 4       | 0                | 1                  |
| Both lap & shoulder belts used                        | 622     | 5                | 156                | 651     | 5                | 181                | 632     | 5                | 168                | 615     | 3                | 150                | 618     | 8                | 165                |
| No belts used   | 62      | 8                | 37                 | 69      | 8                | 44                 | 62      | 11               | 34                 | 53      | 2                | 31                 | 66      | 4                | 41                 |
| Child restraint used                                  | 0       | 0                | 0                  | 0       | 0                | 0                  | 0       | 0                | 0                  | 0       | 0                | 0                  | 0       | 0                | 0                  |
| Child restraint not used, unavailable or improper use | 0       | 0                | 0                  | 0       | 0                | 0                  | 0       | 0                | 0                  | 0       | 0                | 0                  | 0       | 0                | 0                  |
| Restraint failure                                     | 0       | 0                | 0                  | 3       | 0                | 1                  | 0       | 0                | 0                  | 0       | 0                | 0                  | 0       | 0                | 0                  |
| Restraint use<br>unknown                              | 166     | 1                | 45                 | 149     | 3                | 35                 | 176     | 3                | 48                 | 131     | 2                | 31                 | 151     | 1                | 44                 |
| Helmet worn   | 19      | 0                | 15                 | 11      | 1                | 7                  | 12      | 0                | 9                  | 12      | 0                | 11                 | 12      | 4                | 6                  |
| Helmet not worn                                       | 7       | 0                | 7                  | 14      | 0                | 13                 | 14      | 1                | 11                 | 15      | 2                | 11                 | 19      | 3                | 14                 |
| Helmet use<br>unknown                                 | 1       | 0                | 1                  | 1       | 0                | 0                  | 1       | 0                | 1                  | 0       | 0                | 0                  | 1       | 0                | 1                  |
| Uncoded & errors                                      | 0       | 0                | 0                  | 2       | 0                | 0                  | 7       | 0                | 0                  | 7       | 0                | 0                  | 5       | 0                | 1                  |
| Total   | 899     | 15               | 272                | 913     | 18               | 283                | 918     | 20               | 278                | 843     | 9                | 235                | 885     | 21               | 278                |

5-Year Trend - Seatbelt Not Used Among Drivers by Age

|           |         | 2011             |                    |         | 2012             |                    |         | 2013             |                    |         | 2014             |                    |         | 2015             |                    |
|-----------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|
| Age Group | Drivers | Fatal<br>Drivers | Injured<br>Drivers |
| 0 - 15    | 3       | 0                | 2                  | 5       | 1                | 1                  | 7       | 0                | 1                  | 4       | 0                | 0                  | 1       | 0                | 0                  |
| 16 - 20   | 68      | 4                | 21                 | 62      | 4                | 21                 | 58      | 1                | 18                 | 54      | 2                | 19                 | 33      | 2                | 6                  |
| 21 - 24   | 67      | 3                | 12                 | 66      | 2                | 28                 | 66      | 2                | 27                 | 51      | 3                | 13                 | 39      | 1                | 15                 |
| 25 - 64   | 336     | 7                | 93                 | 309     | 15               | 91                 | 303     | 15               | 71                 | 295     | 7                | 73                 | 303     | 8                | 78                 |
| 65 +      | 41      | 1                | 15                 | 55      | 2                | 11                 | 35      | 4                | 6                  | 34      | 1                | 9                  | 44      | 6                | 10                 |
| Unknown   | 12      | 0                | 0                  | 15      | 0                | 0                  | 18      | 0                | 0                  | 26      | 0                | 1                  | 36      | 0                | 1                  |
| Total     | 527     | 15               | 143                | 512     | 24               | 152                | 487     | 22               | 123                | 464     | 13               | 115                | 456     | 17               | 110                |

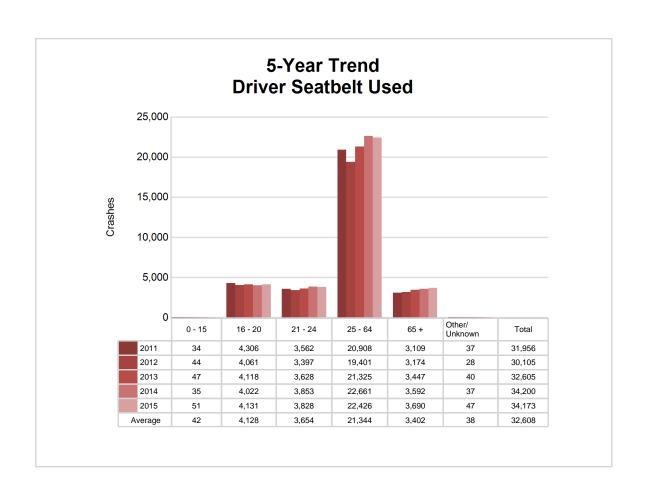
Note: Seatbelt Not Used includes no belts available or no belts used.

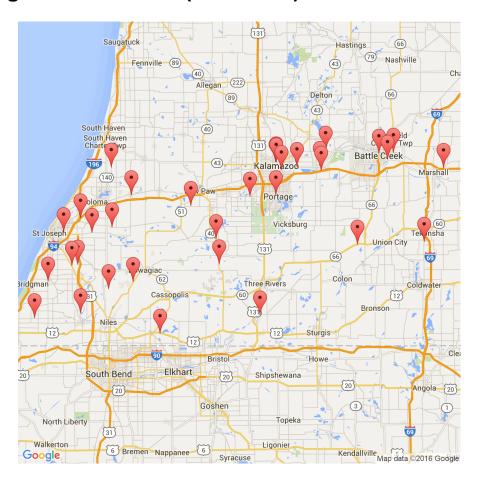


5-Year Trend - Seatbelt Used Among Drivers by Age

|           |         | 2011             |                    |         | 2012             |                    |         | 2013             |                    |         | 2014             |                    |         | 2015             |                    |
|-----------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|---------|------------------|--------------------|
| Age Group | Drivers | Fatal<br>Drivers | Injured<br>Drivers |
| 0 - 15    | 34      | 0                | 2                  | 44      | 0                | 5                  | 47      | 0                | 4                  | 35      | 0                | 4                  | 51      | 0                | 9                  |
| 16 - 20   | 4,306   | 5                | 430                | 4,061   | 3                | 410                | 4,118   | 5                | 419                | 4,022   | 1                | 387                | 4,131   | 5                | 427                |
| 21 - 24   | 3,562   | 3                | 320                | 3,397   | 7                | 343                | 3,628   | 3                | 348                | 3,853   | 3                | 380                | 3,828   | 6                | 356                |
| 25 - 64   | 20,908  | 14               | 1,924              | 19,401  | 9                | 1,915              | 21,325  | 14               | 1,981              | 22,661  | 10               | 2,123              | 22,426  | 16               | 2,078              |
| 65 +      | 3,109   | 7                | 332                | 3,174   | 6                | 365                | 3,447   | 22               | 423                | 3,592   | 4                | 352                | 3,690   | 7                | 409                |
| Unknown   | 37      | 0                | 0                  | 28      | 0                | 1                  | 40      | 0                | 2                  | 37      | 0                | 3                  | 47      | 0                | 1                  |
| Total     | 31,956  | 29               | 3,008              | 30,105  | 25               | 3,039              | 32,605  | 44               | 3,177              | 34,200  | 18               | 3,249              | 34,173  | 34               | 3,280              |

Note: Seatbelt Used includes shoulder belt only used, lap belt only used, both lap and shoulder belts used, and restraint failure.





The picture above represents all 2015 alcohol-involved fatal crashes in MDOT Region - Southwest. In

2015, there were 906 alcohol-involved crashes in MDOT Region - Southwest:

- 34 K Fatal Crashes
- 79 A Incapacitating Injury Crashes
- 128 B Non-incapacitating Injury Crashes
- 147 C Possible Injury Crashes
- 518 O Property Damage Only/No Injury Crashes

### Office of Highway Safety Planning

Physical Address: 7150 Harris Drive Dimondale, Michigan 48821

Mailing Address: P.O. Box 30634 Lansing, Michigan 48909

Phone: (517) 284-3140 Fax: (517) 284-3151

Find us on the web: MichiganTrafficCrashFacts.org

