



2016

**MTCF**  
Michigan Traffic  
Crash Facts

# Michigan Traffic Crash Facts

## Reporting Criteria

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

### Crash

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

Examples: Time, weather, and location.

### Units

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 = Suspected Serious Injury

B = Suspected Minor Injury

C = Possible Injury

O = No Injury

Property Damage Only (PDO)



## Muskegon County

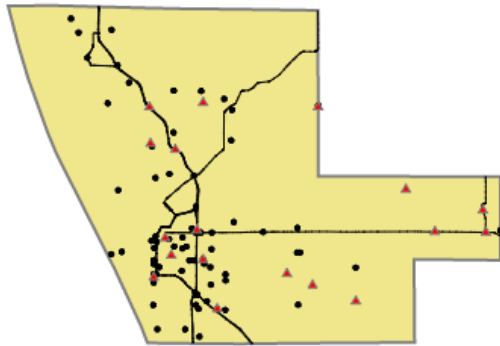
### 2016 Traffic Crash Data & 2012-2016 5-Year Trends



### 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.

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Crashes by most severe injury (mapped/actual)

- ▲ K - Fatal (18/18)
- A - Suspected Serious (75/76)

## Muskegon County

In 2016:

There were 8,196 drivers involved in 4,864 motor vehicle crashes in Muskegon County. Of those crashes, 18 were classified as fatal, resulting in 21 fatalities. An additional 1,282 persons were injured.

Muskegon County experienced the highest number of motor vehicle crashes (600) in December, the highest number of fatal crashes (3) in February, September, and November, and the highest number of persons killed (4) in February and September.

Michigan driver statistics indicate 6.5 percent of licensed drivers in Muskegon County were age 16-20, and 12.0 percent of drivers in crashes were also in that age group.

## 2016 - Crashes and Injuries by Month

Month	Crashes				Persons	
	Total	Fatal	Injury	Property Damage Only (PDO)	Fatalities	Injuries
January	514	0	68	446	0	87
February	362	3	72	287	4	109
March	399	1	62	336	1	91
April	311	1	68	242	1	95
May	359	1	68	290	1	92
June	393	1	89	303	1	116
July	370	1	82	287	2	112
August	394	1	91	302	1	135
September	366	3	84	279	4	119
October	362	2	65	295	2	103
November	434	3	66	365	3	87
December	600	1	100	499	1	136
<b>Total</b>	<b>4,864</b>	<b>18</b>	<b>915</b>	<b>3,931</b>	<b>21</b>	<b>1,282</b>

## 2016 - Driver Statistics

Age Group	Statewide			Driver Rates	
	2016 Population	Licensed Drivers	Drivers in Crashes	Per 10k Population	Per 10k Licensed
0 - 15	35,889	713	14	3.9	196.4
16 - 20	10,741	7,879	981	913.3	1,245.1
21 - 24	8,971	7,874	789	879.5	1,002.0
25 - 64	90,194	80,613	4,867	539.6	603.7
65 +	27,613	25,053	883	319.8	352.5
Unknown	0	0	662	- -	- -
<b>Total</b>	<b>173,408</b>	<b>122,132</b>	<b>8,196</b>	<b>472.6</b>	<b>671.1</b>

## 2016 - Vehicles in Crashes

Vehicle Type	Motor Vehicles		Fatal Crashes		Injury Crashes	PDO Crashes
	Number of Vehicles	% of Total	Number	% of Total	Number	Number
Passenger car, SUV, van	6,611	80.7	22	71.0	1,271	5,318
Motor home	136	1.7	1	3.2	28	107
Pickup truck	840	10.2	3	9.7	179	658
Small truck under 10,000 lbs. GVWR	137	1.7	0	0.0	18	119
Motorcycle	83	1.0	1	3.2	58	24
Moped / goped	12	0.1	0	0.0	11	1
Go-cart / golf cart	0	0.0	0	0.0	0	0
Snowmobile	2	0.0	0	0.0	1	1
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	1	0.0	0	0.0	1	0
Other	106	1.3	2	6.5	35	69
Truck/bus over 10,000 lbs.	127	1.5	2	6.5	16	109
Unknown	141	1.7	0	0.0	7	134
<b>Total</b>	<b>8,196</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>1,625</b>	<b>6,540</b>

# Muskegon County (continued)

## 5-Year Trend - Crashes by Month

Month	2012		2013		2014		2015		2016	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
January	518	1	529	3	735	1	524	2	514	0
February	297	0	518	0	477	0	583	0	362	3
March	276	3	315	0	393	0	324	1	399	1
April	265	0	238	0	246	1	243	0	311	1
May	362	3	309	4	316	1	364	1	359	1
June	305	1	324	1	330	1	333	1	393	1
July	285	3	333	0	295	2	390	2	370	1
August	295	2	262	0	307	2	294	3	394	1
September	301	2	292	2	296	1	317	2	366	3
October	377	0	388	0	365	1	423	0	362	2
November	373	0	569	0	627	0	447	2	434	3
December	420	0	599	1	377	3	376	2	600	1
<b>Total</b>	<b>4,074</b>	<b>15</b>	<b>4,676</b>	<b>11</b>	<b>4,764</b>	<b>13</b>	<b>4,618</b>	<b>16</b>	<b>4,864</b>	<b>18</b>

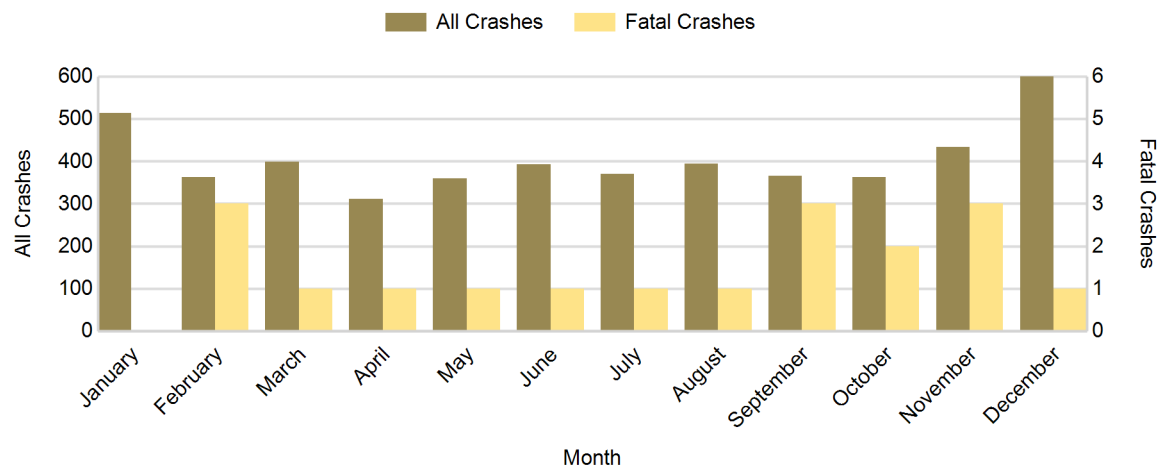
Note: † Indicates that the highest number of total crashes reported in the 5-year period occurred in the same month

## 5-Year Trend - Crashes by Day of Week

Day	2012		2013		2014		2015		2016	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Monday	556	1	660	0	732	1	680	1	690	5
Tuesday	644	3	700	3	734	0	656	1	753	4
Wednesday	558	2	663	0	675	1	712	4	663	0
Thursday	640	1	727	4	851	3	706	4	726	3
Friday	710	2	787	0	767	2	743	1	869	2
Saturday	569	4	674	2	592	3	642	3	639	3
Sunday	397	2	465	2	413	3	479	2	524	1
<b>Total</b>	<b>4,074</b>	<b>15</b>	<b>4,676</b>	<b>11</b>	<b>4,764</b>	<b>13</b>	<b>4,618</b>	<b>16</b>	<b>4,864</b>	<b>18</b>

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

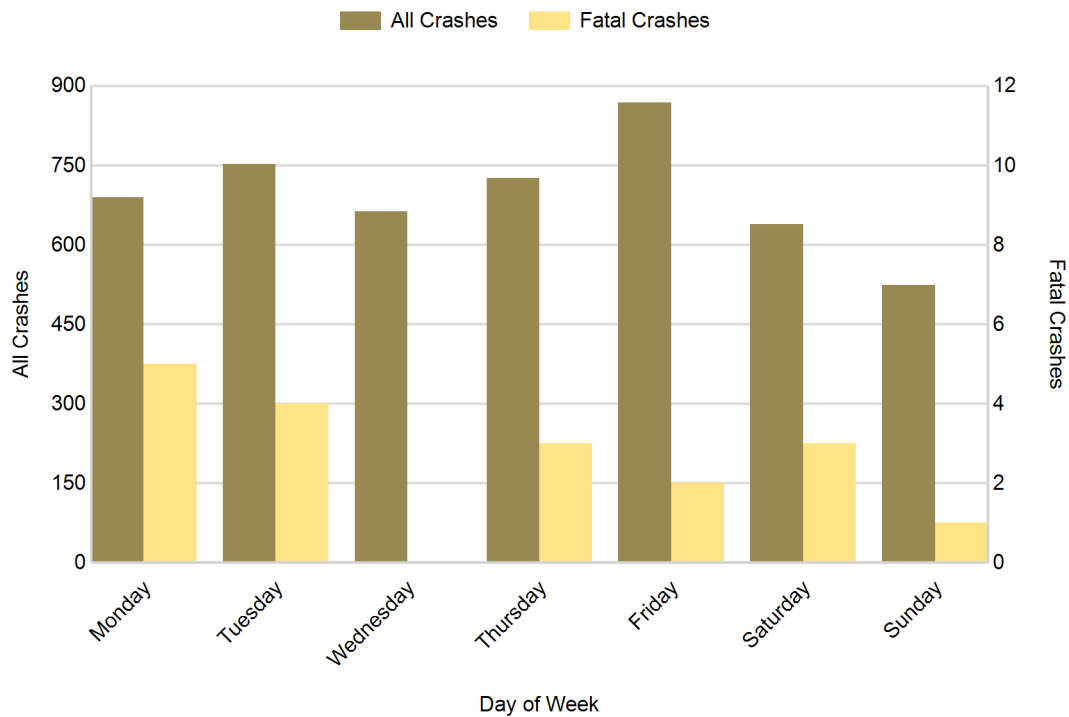
## 2016 Crashes by Month



## 2016 - Crashes by Day of Week

Day	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	Number
Monday	690	14.2	5	27.8	11	46	78	550
Tuesday	753	15.5	4	22.2	16	48	85	600
Wednesday	663	13.6	0	0.0	11	30	70	552
Thursday	726	14.9	3	16.7	7	40	82	594
Friday	869	17.9	2	11.1	15	47	94	711
Saturday	639	13.1	3	16.7	9	50	67	510
Sunday	524	10.8	1	5.6	7	42	60	414
<b>Total</b>	<b>4,864</b>	<b>100.0</b>	<b>18</b>	<b>100.0</b>	<b>76</b>	<b>303</b>	<b>536</b>	<b>3,931</b>

## 2016 Day of Week and Severity

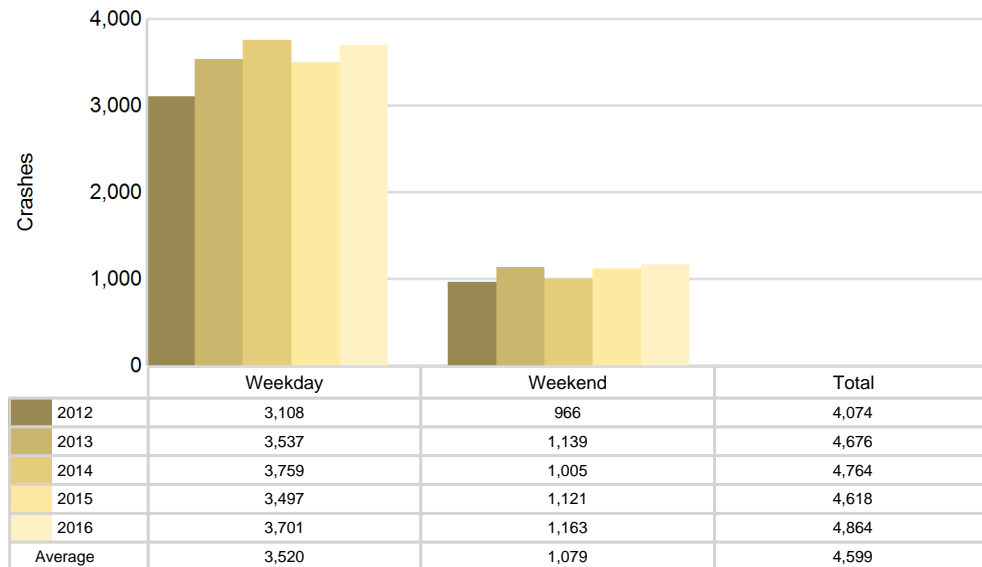


# Muskegon County (continued)

## 5-Year Trend - Crashes by Weekday and Weekend

Portion of Week	2012		2013		2014		2015		2016	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Weekday	3,108	9	3,537	7	3,759	7	3,497	11	3,701	14
Weekend	966	6	1,139	4	1,005	6	1,121	5	1,163	4
<b>Total</b>	<b>4,074</b>	<b>15</b>	<b>4,676</b>	<b>11</b>	<b>4,764</b>	<b>13</b>	<b>4,618</b>	<b>16</b>	<b>4,864</b>	<b>18</b>

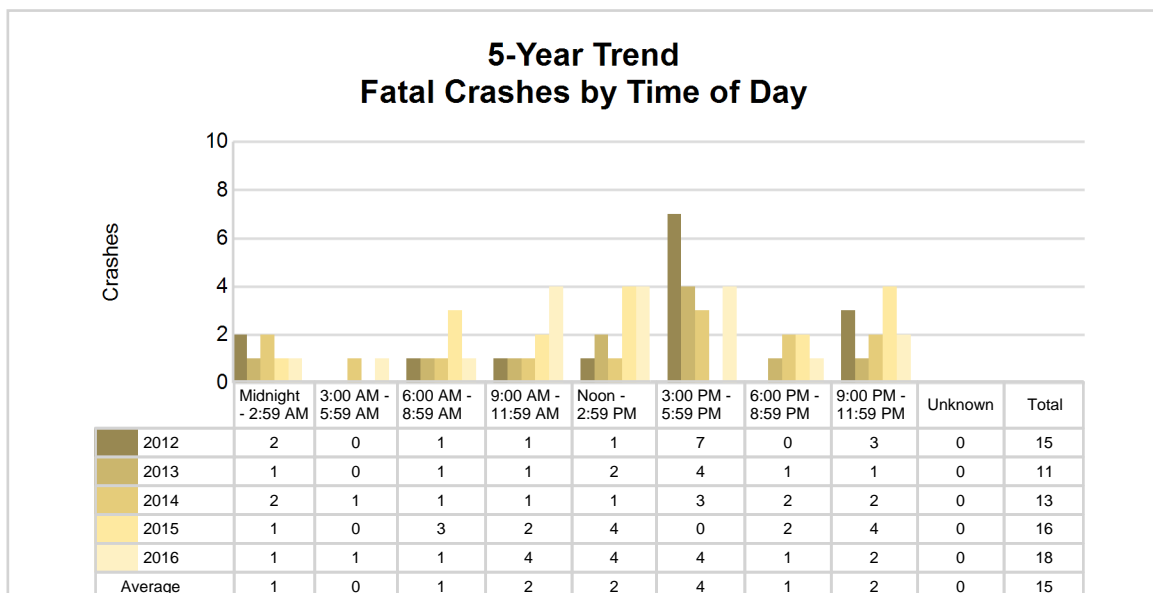
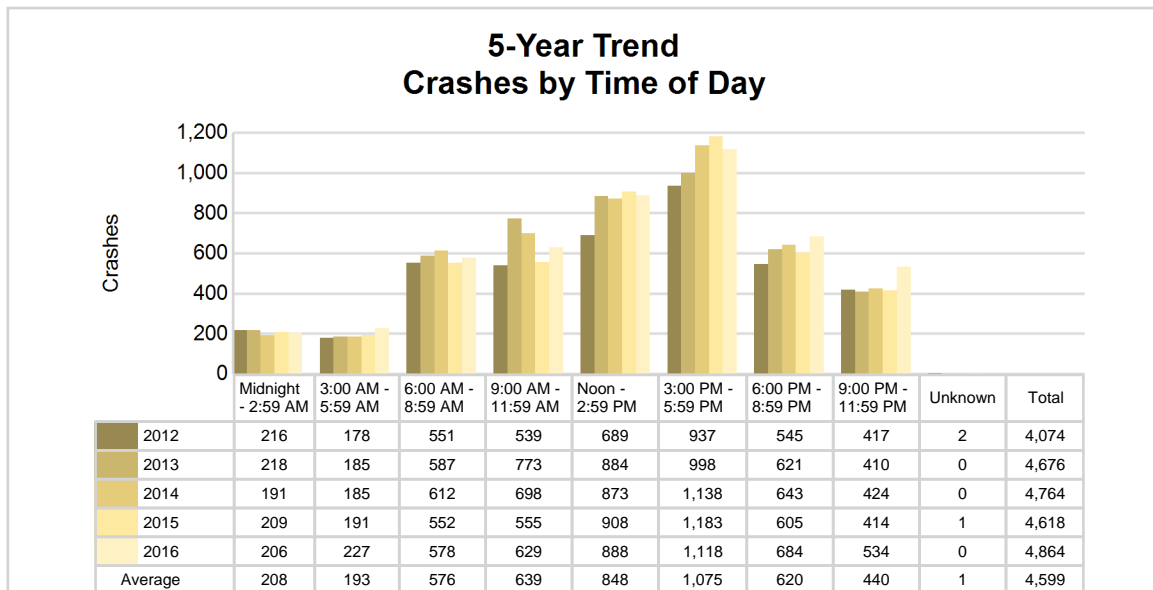
## 5-Year Crash Trends by Weekday (Monday - Friday) and Weekend (Saturday & Sunday)



## 5-Year Trend - Crashes by Time of Day

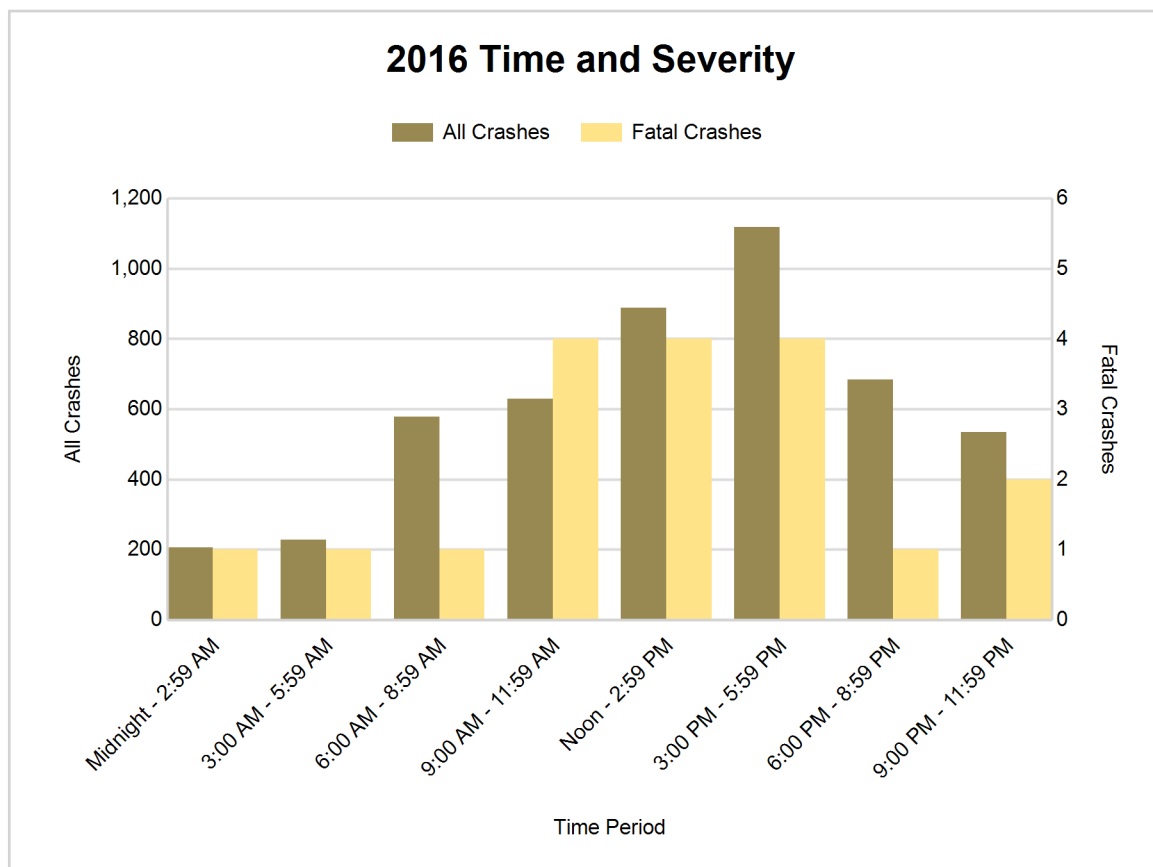
Time of Day	2012		2013		2014		2015		2016	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Midnight - 2:59 AM	216	2	218	1	191	2	209	1	206	1
3:00 AM - 5:59 AM	178	0	185	0	185	1	191	0	227	1
6:00 AM - 8:59 AM	551	1	587	1	612	1	552	3	578	1
9:00 AM - 11:59 AM	539	1	773	1	698	1	555	2	629	4
Noon - 2:59 PM	689	1	884	2	873	1	908	4	888	4
3:00 PM - 5:59 PM	937 †	7	998 †	4	1,138 †	3	1,183 †	0	1,118 †	4
6:00 PM - 8:59 PM	545	0	621	1	643	2	605	2	684	1
9:00 PM - 11:59 PM	417	3	410	1	424	2	414	4	534	2
Unknown	2	0	0	0	0	0	1	0	0	0
<b>Total</b>	<b>4,074</b>	<b>15</b>	<b>4,676</b>	<b>11</b>	<b>4,764</b>	<b>13</b>	<b>4,618</b>	<b>16</b>	<b>4,864</b>	<b>18</b>

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



## 2016 - Time and Severity

Time of Day	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	Number
Midnight - 2:59 AM	206	4.2	1	5.6	3	19	21	162
3:00 AM - 5:59 AM	227	4.7	1	5.6	1	14	27	184
6:00 AM - 8:59 AM	578	11.9	1	5.6	5	26	63	483
9:00 AM - 11:59 AM	629	12.9	4	22.2	9	42	59	515
Noon - 2:59 PM	888	18.3	4	22.2	14	52	110	708
3:00 PM - 5:59 PM	1,118	23.0	4	22.2	18	75	133	888
6:00 PM - 8:59 PM	684	14.1	1	5.6	9	44	67	563
9:00 PM - 11:59 PM	534	11.0	2	11.1	17	31	56	428
Unknown	0	0.0	0	0.0	0	0	0	0
<b>Total</b>	<b>4,864</b>	<b>100.0</b>	<b>18</b>	<b>100.0</b>	<b>76</b>	<b>303</b>	<b>536</b>	<b>3,931</b>

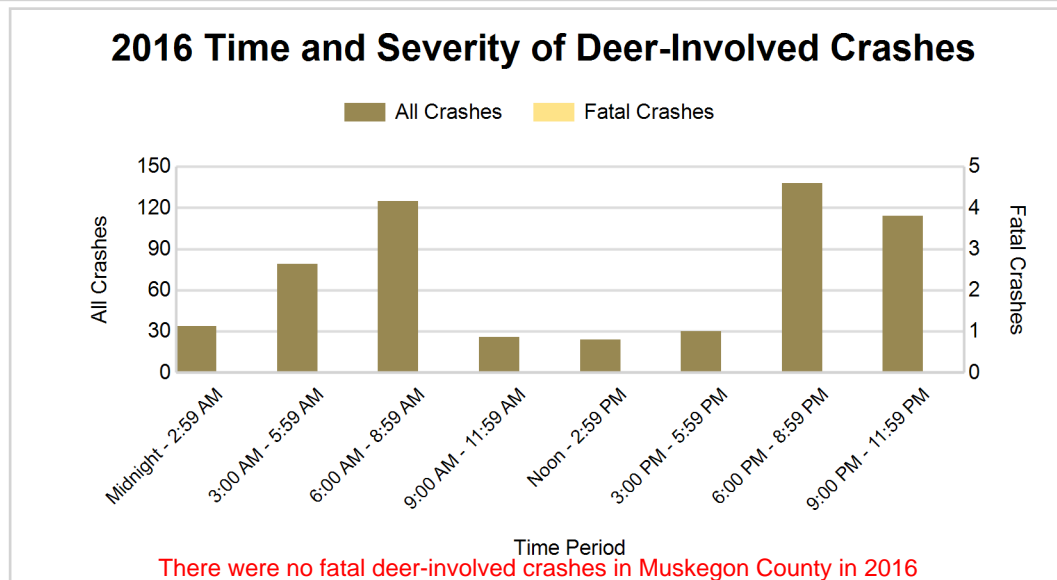
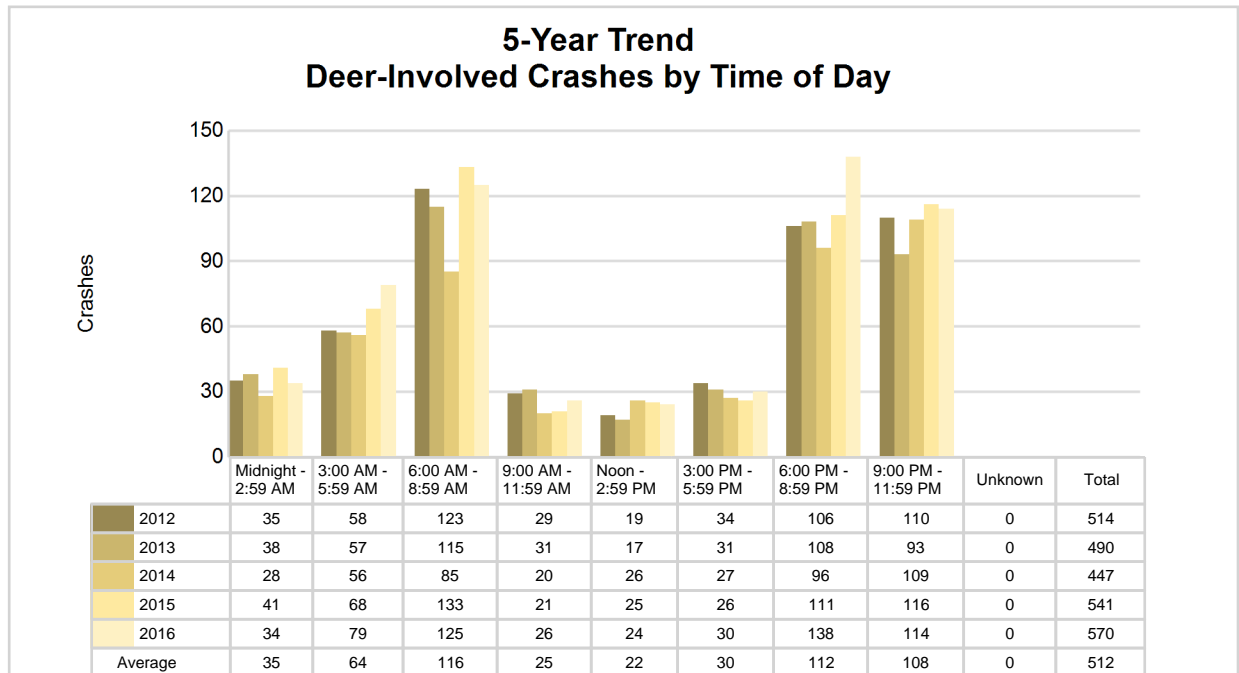




## 5-Year Trend - Deer-Involved Crashes by Time of Day

Time of Day	2012		2013		2014		2015		2016	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Midnight - 2:59 AM	35	0	38	0	28	0	41	0	34	0
3:00 AM - 5:59 AM	58	0	57	0	56	0	68	0	79	0
6:00 AM - 8:59 AM	123	0	115	0	85	0	133	0	125	0
9:00 AM - 11:59 AM	29	0	31	0	20	0	21	0	26	0
Noon - 2:59 PM	19	0	17	0	26	0	25	0	24	0
3:00 PM - 5:59 PM	34	0	31	0	27	0	26	0	30	0
6:00 PM - 8:59 PM	106	0	108	0	96	0	111	0	138	0
9:00 PM - 11:59 PM	110	0	93	0	109	0	116	0	114	0
Unknown	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>514</b>	<b>0</b>	<b>490</b>	<b>0</b>	<b>447</b>	<b>0</b>	<b>541</b>	<b>0</b>	<b>570</b>	<b>0</b>

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



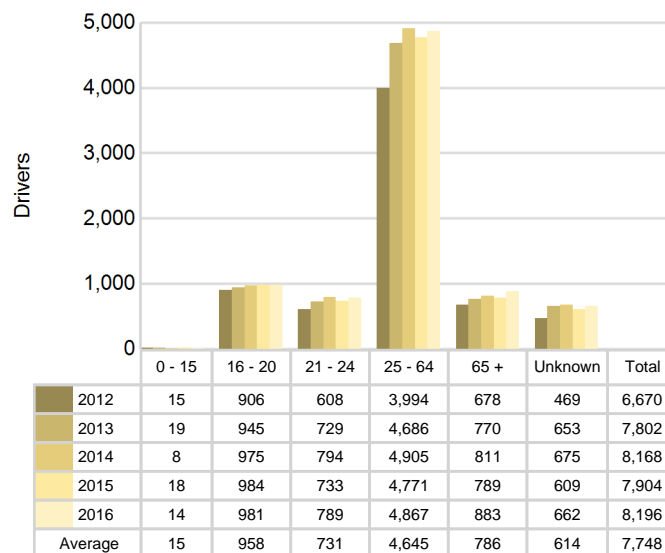
## 2016 - Reported Motor Vehicle Crashes by Municipality

Municipality	Crashes											Persons	
	Total	Fatal	Injury	Property Damage	Inter-state	US Route	State Route	Local Street	Alcohol-Involved	Drug-Involved	Deer-Involved	Fatalities	Injuries
Blue Lake Twp.	24	0	6	18	0	0	0	24	4	2	7	0	7
Casnovia	10	0	2	8	0	0	7	3	1	1	4	0	2
Casnovia Twp.	92	3	12	77	0	0	53	38	3	3	44	3	21
Cedar Creek Twp.	49	1	17	31	0	0	7	42	3	0	10	1	25
Dalton Twp.	251	4	68	179	0	68	66	117	15	2	37	5	101
Egelston Twp.	122	0	36	86	0	0	52	70	10	1	16	0	68
Fruitland Twp.	98	0	11	87	0	10	0	88	6	1	32	0	13
Fruitport	30	0	2	28	0	0	0	30	0	0	0	0	4
Fruitport Twp.	315	1	69	245	62	8	0	245	12	1	39	1	101
Holton Twp.	60	0	11	49	0	0	22	38	4	0	21	0	17
Laketon Twp.	95	0	19	76	0	0	0	95	4	3	25	0	27
Lakewood Club	16	0	3	13	0	9	0	7	1	0	2	0	3
Montague	43	0	2	41	0	19	0	24	1	0	13	0	2
Montague Twp.	87	0	13	74	0	48	0	39	6	2	39	0	16
Moorland Twp.	69	1	9	59	0	0	17	52	2	1	38	1	13
Muskegon	1,282	3	242	1,037	0	287	109	883	40	7	34	3	339
Muskegon Heights	362	1	45	316	0	18	0	344	6	0	4	2	53
Muskegon Twp.	549	0	137	412	0	145	196	207	12	1	24	0	190
North Muskegon	74	0	7	67	0	0	28	46	2	0	5	0	8
Norton Shores	883	1	151	731	8	390	0	482	15	8	49	1	195
Ravenna	8	0	0	8	0	0	0	8	0	0	2	0	0
Ravenna Twp.	91	1	13	77	0	0	0	91	1	0	52	1	23
Roosevelt Park	23	0	2	21	0	0	0	23	0	0	0	0	2
Sullivan Twp.	72	2	14	56	0	0	0	72	4	0	24	3	21
White River Twp.	16	0	2	14	0	0	0	16	1	0	11	0	3
Whitehall	53	0	9	44	0	21	0	31	0	0	11	0	11
Whitehall Twp.	90	0	13	77	0	59	0	31	1	0	27	0	17
Unknown Community	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,864</b>	<b>18</b>	<b>915</b>	<b>3,931</b>	<b>70</b>	<b>1,082</b>	<b>557</b>	<b>3,146</b>	<b>154</b>	<b>33</b>	<b>570</b>	<b>21</b>	<b>1,282</b>

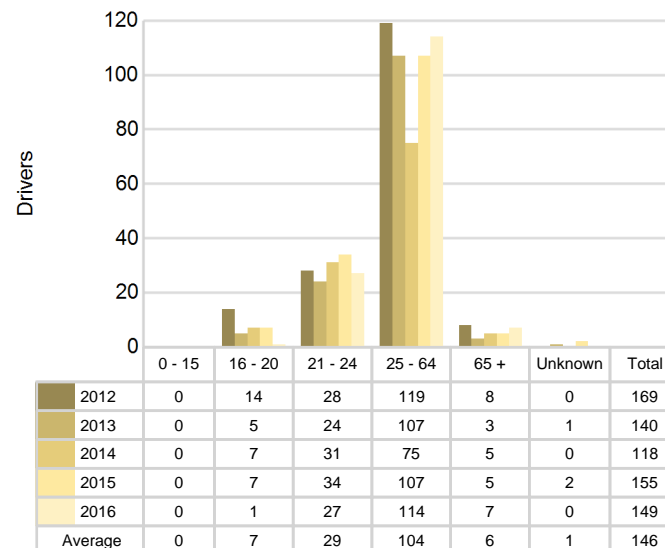
## 5-Year Trend - Drivers in Crashes Coded Drinking by Driver Age

Driver Age	2012		2013		2014		2015		2016	
	Total Drivers in Crashes	Total Drivers Coded Drinking	Total Drivers in Crashes	Total Drivers Coded Drinking	Total Drivers in Crashes	Total Drivers Coded Drinking	Total Drivers in Crashes	Total Drivers Coded Drinking	Total Drivers in Crashes	Total Drivers Coded Drinking
0 - 15	15	0	19	0	8	0	18	0	14	0
16 - 20	906	14	945	5	975	7	984	7	981	1
21 - 24	608	28	729	24	794	31	733	34	789	27
25 - 64	3,994	119	4,686	107	4,905	75	4,771	107	4,867	114
65 +	678	8	770	3	811	5	789	5	883	7
Unknown	469	0	653	1	675	0	609	2	662	0
<b>Total</b>	<b>6,670</b>	<b>169</b>	<b>7,802</b>	<b>140</b>	<b>8,168</b>	<b>118</b>	<b>7,904</b>	<b>155</b>	<b>8,196</b>	<b>149</b>

### 5-Year Trend Total Drivers in Crashes by Age



### 5-Year Trend Total Drivers Coded Drinking by Age



**2016 - Bodily Alcohol Concentration (BAC) Results Among All Vehicle Drivers in Alcohol-Involved Crashes by Age**

Age Group	Drivers				BAC Result Range for Drivers Coded Drinking				
	Total Drivers in Alcohol-Involved Crashes	Total Drivers Tested in all Crashes	Total Drivers Coded Drinking, Tested	Total Drivers Coded Drinking	BAC = 0.00	BAC 0.01 g/dL to 0.07 g/dL	BAC 0.08 g/dL to 0.16 g/dL	BAC 0.17 g/dL and Above	BAC Not Reported
0 - 15	0	0	0	0	0	0	0	0	0
16 - 20	5	5	1	1	0	1	0	0	0
21 - 24	34	33	23	27	1	1	5	7	13
25 - 64	161	123	92	114	5	9	23	25	52
65 +	10	17	7	7	0	1	3	1	2
Unknown	6	0	0	0	0	0	0	0	0
<b>Total</b>	<b>216</b>	<b>178</b>	<b>123</b>	<b>149</b>	<b>6</b>	<b>12</b>	<b>31</b>	<b>33</b>	<b>67</b>

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 2016, there were 216 drivers in alcohol-involved crashes; 149 (69.0%) of those drivers were coded as had-been-drinking by the officer on the crash form.

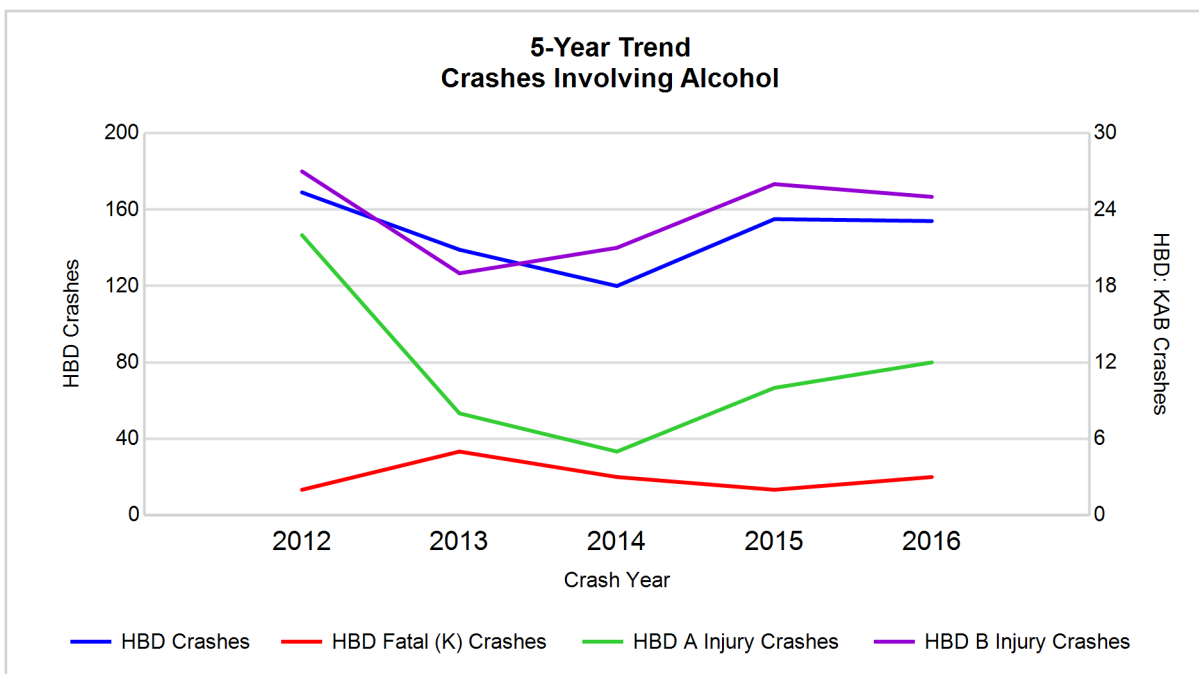
- 64 (43.0%) of the 149 drivers had a blood alcohol concentration (BAC) of 0.08 g/dL (grams per deciliter) or greater, and 33 (51.6%) of the 64 drivers had a BAC at or above 0.17 g/dL.
- 123 (82.6%) of the 149 drivers were coded as had-been-drinking and were tested for alcohol consumption.

**5-Year Trend - Crashes Involving Alcohol**

Year	All Crashes	HBD Crashes	% HBD	Fatal Crashes	HBD Fatal Crashes	% HBD	A Injury Crashes	HBD A Injury Crashes	% HBD	B Injury Crashes	HBD B Injury Crashes	% HBD
2012	4,074	169	4.1	15	2	13.3	105	22	21.0	300	27	9.0
2013	4,676	139	3.0	11	5	45.5	72	8	11.1	280	19	6.8
2014	4,764	120	2.5	13	3	23.1	93	5	5.4	299	21	7.0
2015	4,618	155	3.4	16	2	12.5	76	10	13.2	286	26	9.1
2016	4,864**	154	3.2	18**	3	16.7	76	12	15.8	303**	25	8.3

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

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



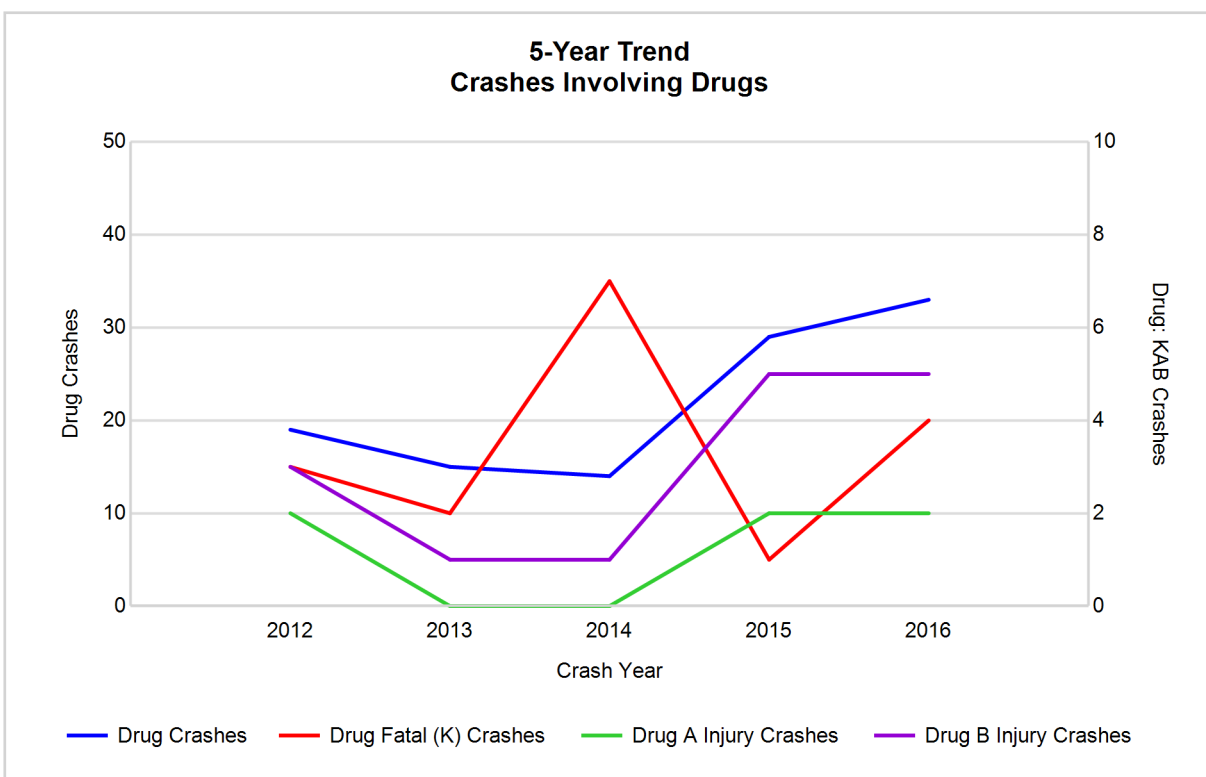
Note: Had-Been-Drinking (HBD)

## 5-Year Trend - Crashes Involving Drugs

Year	All Crashes	Drug Crashes	% Drug	Fatal Crashes	Drug Fatal Crashes	% Drug	A Injury Crashes	Drug A Injury Crashes	% Drug	B Injury Crashes	Drug B Injury Crashes	% Drug
2012	4,074	19	0.5	15	3	20.0	105	2	1.9	300	3	1.0
2013	4,676	15	0.3	11	2	18.2	72	0	0.0	280	1	0.4
2014	4,764	14	0.3	13	7	53.8	93	0	0.0	299	1	0.3
2015	4,618	29	0.6	16	1	6.3	76	2	2.6	286	5	1.7
2016	4,864**	33**	0.7**	18**	4	22.2	76	2	2.6	303**	5	1.7

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

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

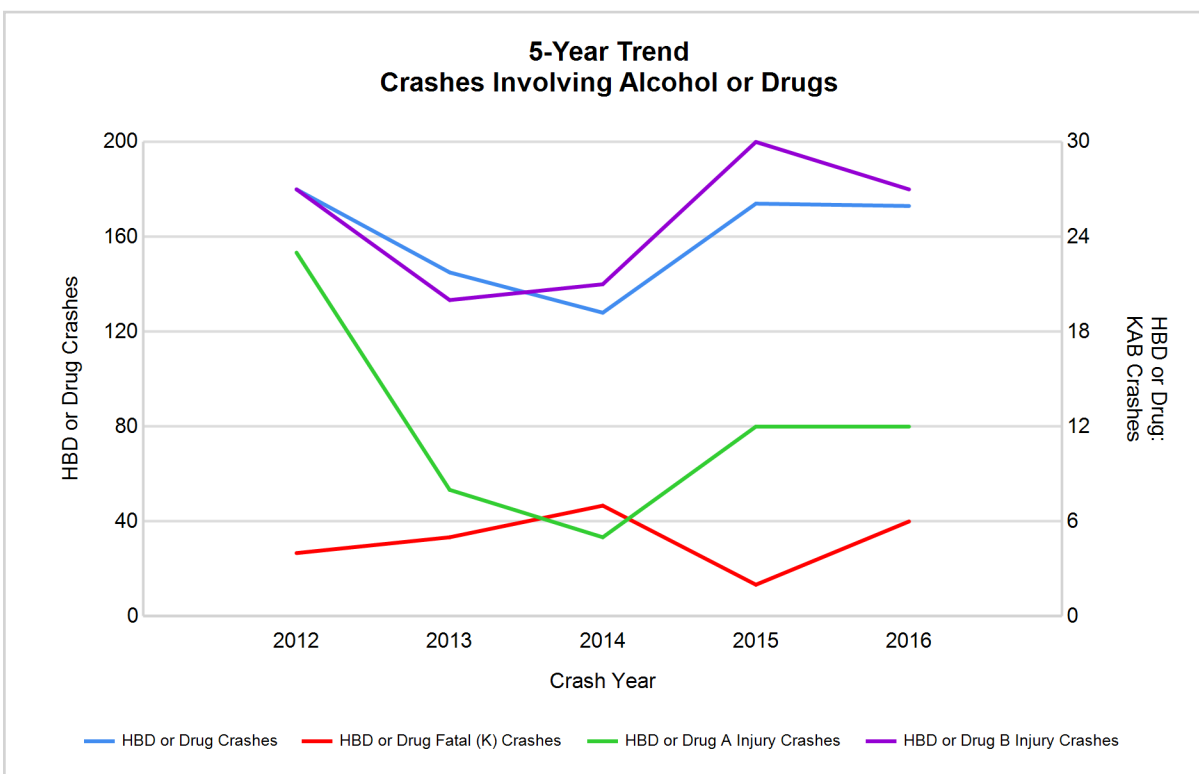


## 5-Year Trend - Crashes Involving Alcohol or Drugs

Year	All Crashes	HBD or Drug Crashes	% HBD or Drug	Fatal Crashes	HBD or Drug Fatal Crashes	% HBD or Drug	A Injury Crashes	HBD or Drug A Injury Crashes	% HBD or Drug	B Injury Crashes	HBD or Drug B Injury Crashes	% HBD or Drug
2012	4,074	180	4.4	15	4	26.7	105	23	21.9	300	27	9.0
2013	4,676	145	3.1	11	5	45.5	72	8	11.1	280	20	7.1
2014	4,764	128	2.7	13	7	53.8	93	5	5.4	299	21	7.0
2015	4,618	174	3.8	16	2	12.5	76	12	15.8	286	30	10.5
2016	4,864**	173	3.6	18**	6	33.3	76	12	15.8	303**	27	8.9

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

\*\* 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)

# Muskegon County (continued)

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## 2016 - Restraints Worn Among Vehicle Drivers and Injured Passengers by Vehicle Type

Vehicle Type	Total Occupants			Fatalities			A - Suspected Serious			B - Suspected Minor			C - Possible Injury			No Injury		
	Total	Used Restraint	%	Total	Used Restraint	%	Total	Used Restraint	%	Total	Used Restraint	%	Total	Used Restraint	%	Total	Used Restraint	%
Passenger car, SUV, van	6,908	6,106	88.4	14	9	64.3	52	45	86.5	292	263	90.1	632	582	92.1	5,542	5,202	93.9
Motor home	143	129	90.2	2	2	100.0	1	1	100.0	3	2	66.7	13	12	92.3	120	112	93.3
Pickup truck	865	772	89.2	1	0	0.0	6	6	100.0	30	27	90.0	64	60	93.8	726	679	93.5
Small truck under 10,000 lbs. GVWR	140	134	95.7	0	0	0.0	0	0	0.0	5	5	100.0	9	9	100.0	122	120	98.4
Motorcycle	89	49	55.1	1	0	0.0	7	2	28.6	35	19	54.3	17	11	64.7	27	17	63.0
Moped / goped	13	3	23.1	0	0	0.0	3	1	33.3	7	1	14.3	2	1	50.0	1	0	0.0
Go-cart / golf cart	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Snowmobile	2	1	50.0	0	0	0.0	0	0	0.0	1	1	100.0	0	0	0.0	1	0	0.0
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	2	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	2	0	0.0	0	0	0.0
Other	115	62	53.9	2	0	0.0	5	2	40.0	4	2	50.0	23	10	43.5	79	48	60.8
Truck/bus over 10,000 lbs.	130	109	83.8	0	0	0.0	1	1	100.0	1	1	100.0	5	3	60.0	118	104	88.1
Unknown	141	7	5.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	14	5	35.7
<b>Total</b>	<b>8,548</b>	<b>7,372</b>	<b>86.2</b>	<b>20</b>	<b>11</b>	<b>0.0</b>	<b>75</b>	<b>58</b>	<b>77.3</b>	<b>378</b>	<b>321</b>	<b>84.9</b>	<b>767</b>	<b>688</b>	<b>89.7</b>	<b>6,750</b>	<b>6,287</b>	<b>93.1</b>

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.

## 2016 - Restraints Worn Among Vehicle Drivers and Injured Passengers by Age

Age Group	Total Occupants			Fatalities			A - Suspected Serious			B - Suspected Minor			C - Possible Injury			No Injury		
	Total	Used Restraint	%	Total	Used Restraint	%	Total	Used Restraint	%	Total	Used Restraint	%	Total	Used Restraint	%	Total	Used Restraint	%
0 - 15	123	108	87.8	2	1	50.0	2	1	50.0	41	33	80.5	65	61	93.8	13	12	92.3
16 - 20	1,034	971	93.9	1	1	100.0	6	4	66.7	46	41	89.1	108	96	88.9	867	829	95.6
21 - 24	819	757	92.4	1	1	100.0	8	8	100.0	49	42	85.7	86	76	88.4	670	630	94.0
25 - 64	5,000	4,621	92.4	10	5	50.0	47	34	72.3	202	169	83.7	434	384	88.5	4,261	4,029	94.6
65 +	910	864	94.9	6	3	50.0	12	11	91.7	39	36	92.3	73	70	95.9	771	743	96.4
Unknown	662	51	7.7	0	0	0.0	0	0	0.0	1	0	0.0	1	1	100.0	168	44	26.2
<b>Total</b>	<b>8,548</b>	<b>7,372</b>	<b>86.2</b>	<b>20</b>	<b>11</b>	<b>0.0</b>	<b>75</b>	<b>58</b>	<b>77.3</b>	<b>378</b>	<b>321</b>	<b>84.9</b>	<b>767</b>	<b>688</b>	<b>89.7</b>	<b>6,750</b>	<b>6,287</b>	<b>93.1</b>

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

Restraint Use	2012			2013			2014			2015			2016		
	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers
No belts available	20	0	1	18	0	4	27	0	3	69	0	5	58	1	1
Shoulder belt only used	5	0	1	3	0	0	10	0	1	32	0	2	55	0	2
Lap belt only used	17	0	3	13	0	0	14	0	2	19	0	0	11	0	1
Both lap & shoulder belts used	5,782	3	640	6,814	3	618	7,114	5	710	6,890	4	689	6,955	6	739
No belts used	54	3	17	56	1	10	58	0	12	64	3	23	49	3	15
Child restraint used	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1
Child restraint not used, unavailable or improper use	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Restraint failure	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0
Restraint use unknown	298	0	29	346	1	26	356	2	23	239	1	16	412	1	46
Helmet worn	80	1	62	53	2	36	55	0	41	52	0	36	51	0	34
Helmet not worn	42	2	30	48	3	37	46	2	38	33	0	22	43	1	32
Helmet use unknown	4	1	1	8	0	3	7	0	2	6	0	4	9	0	5
Uncoded & errors	366	0	1	443	0	0	480	0	0	500	0	0	548	0	0
<b>Total</b>	<b>6,670</b>	<b>10</b>	<b>785</b>	<b>7,802</b>	<b>10</b>	<b>734</b>	<b>8,168</b>	<b>9</b>	<b>833</b>	<b>7,904</b>	<b>8</b>	<b>797</b>	<b>8,196</b>	<b>12</b>	<b>876</b>

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

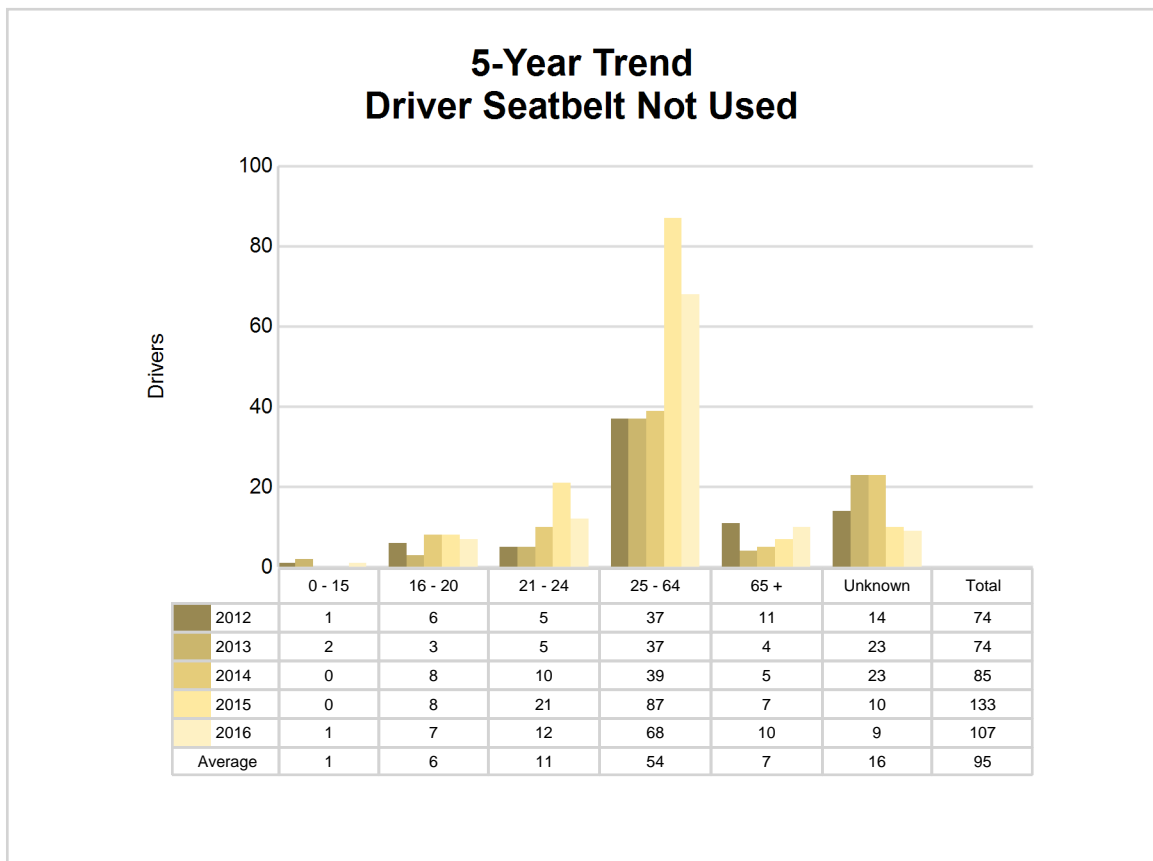
Restraint Use	2012			2013			2014			2015			2016		
	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers
No belts available	0	0	0	1	0	0	0	0	0	6	0	0	2	0	0
Shoulder belt only used	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Lap belt only used	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Both lap & shoulder belts used	116	0	34	108	0	23	90	0	20	122	0	29	114	0	31
No belts used	10	1	7	2	1	1	4	0	3	10	1	6	8	0	3
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	0	0	0	1	0	1	0	0	0	0	0	0
Restraint use unknown	35	0	11	22	1	2	13	1	3	12	0	4	16	0	4
Helmet worn	3	0	3	1	0	1	2	0	0	2	0	2	1	0	1
Helmet not worn	4	0	3	6	3	3	7	1	5	2	0	2	7	1	6
Helmet use unknown	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
Uncoded & errors	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
<b>Total</b>	<b>169</b>	<b>2</b>	<b>58</b>	<b>140</b>	<b>5</b>	<b>30</b>	<b>118</b>	<b>2</b>	<b>32</b>	<b>155</b>	<b>1</b>	<b>43</b>	<b>149</b>	<b>1</b>	<b>46</b>



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

Age Group	2012			2013			2014			2015			2016		
	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers
0 - 15	1	0	1	2	0	1	0	0	0	0	0	0	1	0	0
16 - 20	6	0	1	3	0	0	8	0	2	8	0	1	7	0	3
21 - 24	5	0	2	5	0	3	10	0	1	21	1	8	12	0	1
25 - 64	37	2	13	37	1	8	39	0	8	87	2	19	68	2	10
65 +	11	1	1	4	0	2	5	0	4	7	0	0	10	2	2
Unknown	14	0	0	23	0	0	23	0	0	10	0	0	9	0	0
<b>Total</b>	<b>74</b>	<b>3</b>	<b>18</b>	<b>74</b>	<b>1</b>	<b>14</b>	<b>85</b>	<b>0</b>	<b>15</b>	<b>133</b>	<b>3</b>	<b>28</b>	<b>107</b>	<b>4</b>	<b>16</b>

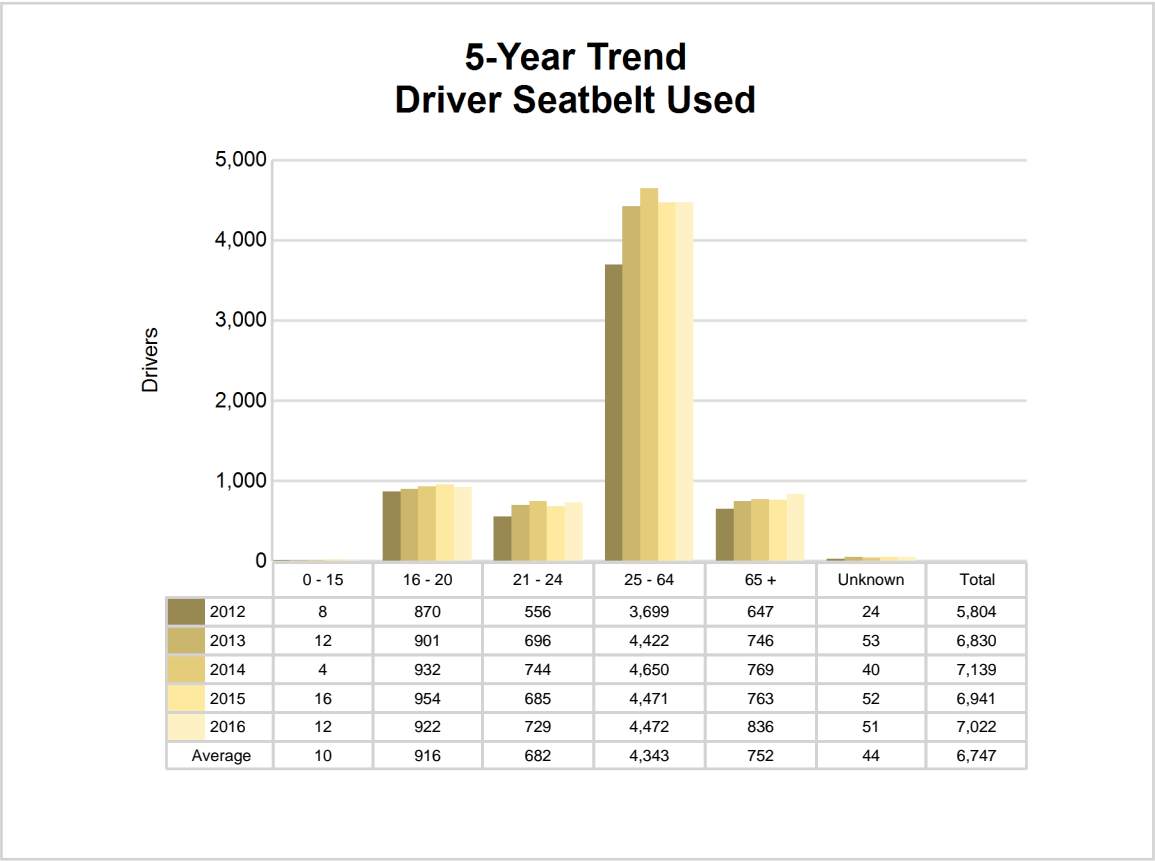
Note: Seatbelt Not Used includes no belts available or no belts used.



5-Year Trend - Seatbelt Used Among Drivers by Age

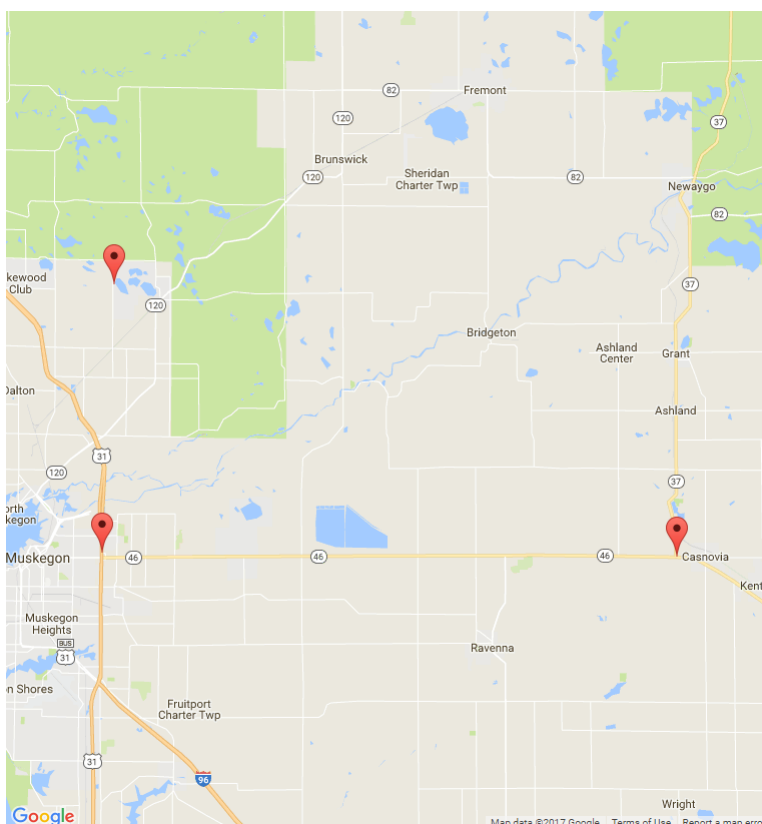
Age Group	2012			2013			2014			2015			2016		
	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers
0 - 15	8	0	1	12	0	1	4	0	1	16	0	3	12	0	0
16 - 20	870	0	121	901	0	78	932	1	90	954	0	88	922	0	95
21 - 24	556	0	63	696	1	49	744	0	81	685	0	56	729	1	99
25 - 64	3,699	2	378	4,422	1	393	4,650	2	447	4,471	2	462	4,472	2	455
65 +	647	1	81	746	1	97	769	2	95	763	2	82	836	3	92
Unknown	24	0	0	53	0	0	40	0	0	52	0	0	51	0	1
Total	5,804	3	644	6,830	3	618	7,139	5	714	6,941	4	691	7,022	6	742

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



## 5-Year Trend - Drivers in Crashes by Hazardous Action

Hazardous Action	2012		2013		2014		2015		2016	
	Total Drivers in Crashes	Drivers in Fatal Crashes	Total Drivers in Crashes	Drivers in Fatal Crashes	Total Drivers in Crashes	Drivers in Fatal Crashes	Total Drivers in Crashes	Drivers in Fatal Crashes	Total Drivers in Crashes	Drivers in Fatal Crashes
None	3,374	9	3,859	21	4,157	9	4,134	7	4,271	17
Speed too fast	760	2	1,252	8	1,069	2	879	3	914	2
Speed too slow	6	0	5	0	1	0	4	0	4	0
Failed to yield	676	2	721	1	865	2	812	4	892	3
Disregard traffic control	163	0	164	1	177	0	177	1	199	5
Drove wrong way	4	0	5	0	2	0	4	0	5	0
Drove left of center	52	0	51	0	50	0	45	2	45	1
Improper passing	56	1	45	0	57	0	60	1	56	0
Improper lane use	156	0	142	0	154	1	168	0	191	1
Improper turn	66	1	77	0	65	0	56	0	70	0
Improper/no signal	11	0	6	0	6	0	4	0	7	0
Improper backing	127	0	170	0	184	0	165	0	158	0
Unable to stop in assured clear distance	688	0	775	2	815	0	801	0	797	0
Other	207	2	154	1	186	1	187	1	192	1
Unknown	140	3	174	3	203	3	208	3	199	0
Reckless driving	26	1	35	1	34	2	30	0	33	1
Careless/negligent driving	158	0	165	0	143	0	169	2	141	0
Uncoded & errors	0	0	2	0	0	0	1	0	22	0
<b>Total</b>	<b>6,670</b>	<b>21</b>	<b>7,802</b>	<b>38</b>	<b>8,168</b>	<b>20</b>	<b>7,904</b>	<b>24</b>	<b>8,196</b>	<b>31</b>



The picture above represents all 2016 alcohol-involved fatal crashes in Muskegon County.

In 2016, there were 154 alcohol-involved crashes in Muskegon County:

- 3 K - Fatal Crashes
- 12 A - Suspected Serious Injury Crashes
- 25 B - Suspected Minor Injury Crashes
- 27 C - Possible Injury Crashes
- 87 O - Property Damage Only/No Injury Crashes

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