



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

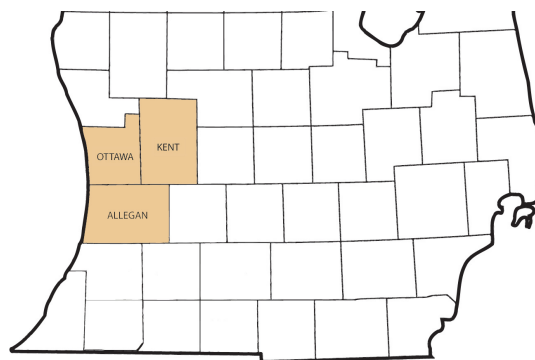
Property Damage Only (PDO)



## Traffic Safety Network West Michigan

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

Traffic Safety Network West Michigan is comprised of Allegan, Kent, and Ottawa counties. Trend tables for this report are based on those counties.



### 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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## TSN West Michigan Experience

In 2016:

There were 60,632 drivers involved in 34,284 motor vehicle crashes in Traffic Safety Network West Michigan. Of those crashes, 95 were classified as fatal, resulting in 100 fatalities. An additional 8,656 persons were injured.

Traffic Safety Network West Michigan experienced the highest number of motor vehicle crashes (4,171) in December, the highest number of fatal crashes (12) and the highest number of persons killed (12) in September, April.

Michigan driver statistics indicate 6.6 percent of licensed drivers in Traffic Safety Network West Michigan were age 16-20, and 12.5 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	3,238	6	486	2,746	6	625
February	2,611	6	431	2,174	8	568
March	2,455	4	424	2,027	6	553
April	2,352	12	424	1,916	12	595
May	2,671	5	559	2,107	5	766
June	2,598	10	548	2,040	11	797
July	2,408	8	592	1,808	8	827
August	2,705	6	588	2,111	6	816
September	2,724	12	590	2,122	12	814
October	3,123	9	571	2,543	9	778
November	3,228	10	552	2,666	10	742
December	4,171	7	587	3,577	7	775
<b>Total</b>	<b>34,284</b>	<b>95</b>	<b>6,352</b>	<b>27,837</b>	<b>100</b>	<b>8,656</b>

## 2016 - Driver Statistics

Age Group	Statewide			Driver Rates	
	2016 Population	Licensed Drivers	Drivers in Crashes	Per 10k Population	Per 10k Licensed
0 - 15	1,923,244	49,678	100	0.5	20.1
16 - 20	672,666	471,135	7,579	112.7	160.9
21 - 24	570,792	470,489	6,766	118.5	143.8
25 - 64	5,149,843	4,748,323	36,004	69.9	75.8
65 +	1,611,755	1,437,067	4,894	30.4	34.1
Unknown	0	0	5,289	--	--
<b>Total</b>	<b>9,928,300</b>	<b>7,176,692</b>	<b>60,632</b>	<b>61.1</b>	<b>84.5</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	49,645	81.9	115	71.9	9,828	39,702
Motor home	868	1.4	1	0.6	186	681
Pickup truck	5,995	9.9	15	9.4	1,120	4,860
Small truck under 10,000 lbs. GVWR	458	0.8	0	0.0	75	383
Motorcycle	359	0.6	13	8.1	268	78
Moped / goped	69	0.1	1	0.6	55	13
Go-cart / golf cart	4	0.0	0	0.0	1	3
Snowmobile	2	0.0	0	0.0	2	0
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	10	0.0	0	0.0	7	3
Other	213	0.4	1	0.6	47	165
Truck/bus over 10,000 lbs.	1,542	2.5	13	8.1	267	1,262
Unknown	1,467	2.4	1	0.6	111	1,355
<b>Total</b>	<b>60,632</b>	<b>100.0</b>	<b>160</b>	<b>100.0</b>	<b>11,967</b>	<b>48,505</b>

# Traffic Safety Network West Michigan (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	2,908	1	3,155	1	4,389	1	3,526	8	3,238	6
February	2,478	8	3,295	1	3,717	8	3,146	8	2,611	6
March	1,966	4	2,031	5	2,357	5	2,151	5	2,455	4
April	1,821	8	1,911	4	1,642	8	1,895	4	2,352	12
May	2,291	7	2,284	7	2,130	7	2,373	11	2,671	5
June	2,196	4	2,006	6	2,170	8	2,400	9	2,598	10
July	1,959	7	2,076	11	2,016	15	2,285	3	2,408	8
August	2,147	5	2,095	15	2,186	9	2,194	17	2,705	6
September	2,009	9	2,212	3	2,264	10	2,360	3	2,724	12
October	2,799	8	2,759	11	2,823	8	3,070	9	3,123	9
November	2,346	4	3,208	8	3,986	4	2,988	8	3,228	10
December	2,639	6	3,413	4	2,325	2	2,832	8	4,171	7
<b>Total</b>	<b>27,559</b>	<b>71</b>	<b>30,445</b>	<b>76</b>	<b>32,005</b>	<b>85</b>	<b>31,220</b>	<b>93</b>	<b>34,284</b>	<b>95</b>

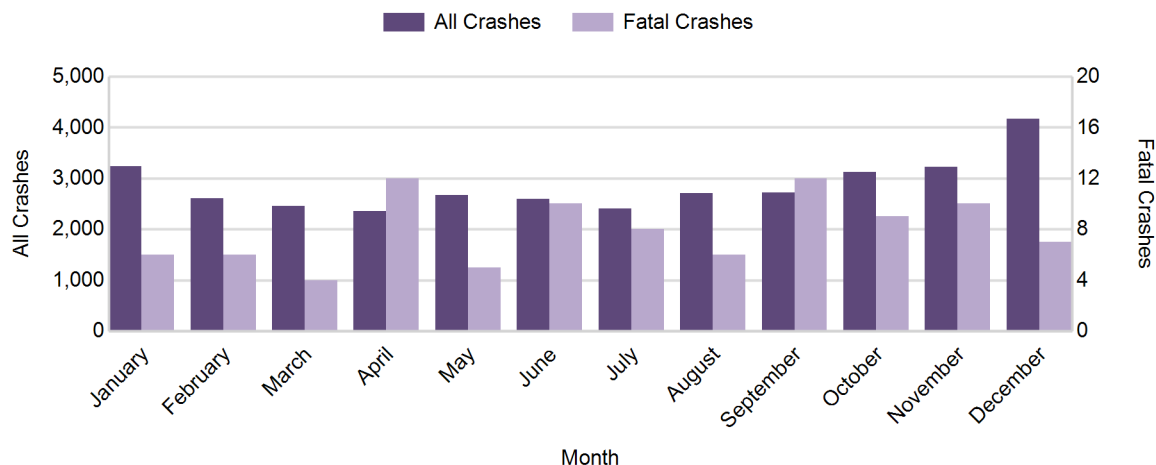
Note: † Indicates that the highest number of total crashes reported in the 5-year period occurred in the same month

## 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	3,770	11	4,583	11	4,508	6	4,576	10	4,880	12
Tuesday	3,767	7	4,969	14	4,875	9	4,685	16	5,146	13
Wednesday	4,044	6	4,558	11	5,292	15	4,958	13	5,301	15
Thursday	4,103	10	4,907	11	5,284	12	4,804	10	5,540	11
Friday	5,360	14	4,845	11	5,428	12	5,207	13	5,882	15
Saturday	3,768	14	3,812	13	3,747	17	4,086	14	4,261	16
Sunday	2,747	9	2,771	5	2,871	14	2,904	17	3,274	13
<b>Total</b>	<b>27,559</b>	<b>71</b>	<b>30,445</b>	<b>76</b>	<b>32,005</b>	<b>85</b>	<b>31,220</b>	<b>93</b>	<b>34,284</b>	<b>95</b>

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

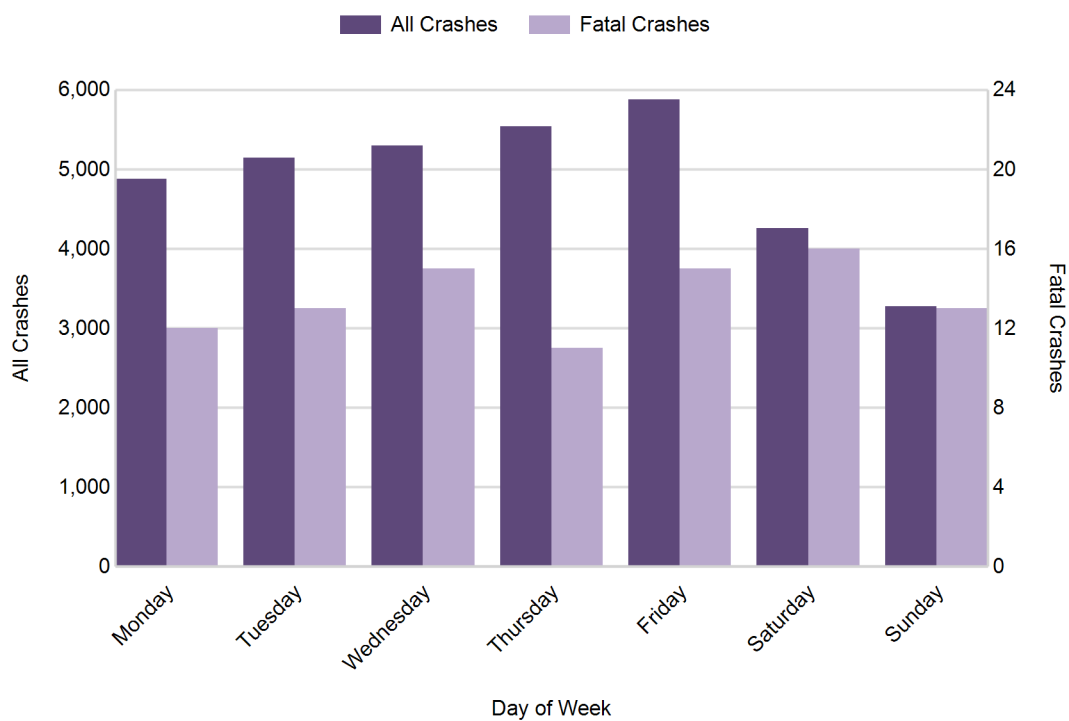
## 2016 Crashes by Month



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	4,880	14.2	12	12.6	77	193	600	3,998
Tuesday	5,146	15.0	13	13.7	91	223	642	4,177
Wednesday	5,301	15.5	15	15.8	82	222	661	4,321
Thursday	5,540	16.2	11	11.6	81	229	707	4,512
Friday	5,882	17.2	15	15.8	95	261	734	4,777
Saturday	4,261	12.4	16	16.8	80	242	494	3,429
Sunday	3,274	9.5	13	13.7	73	182	383	2,623
<b>Total</b>	<b>34,284</b>	<b>100.0</b>	<b>95</b>	<b>100.0</b>	<b>579</b>	<b>1,552</b>	<b>4,221</b>	<b>27,837</b>

2016 Day of Week and Severity

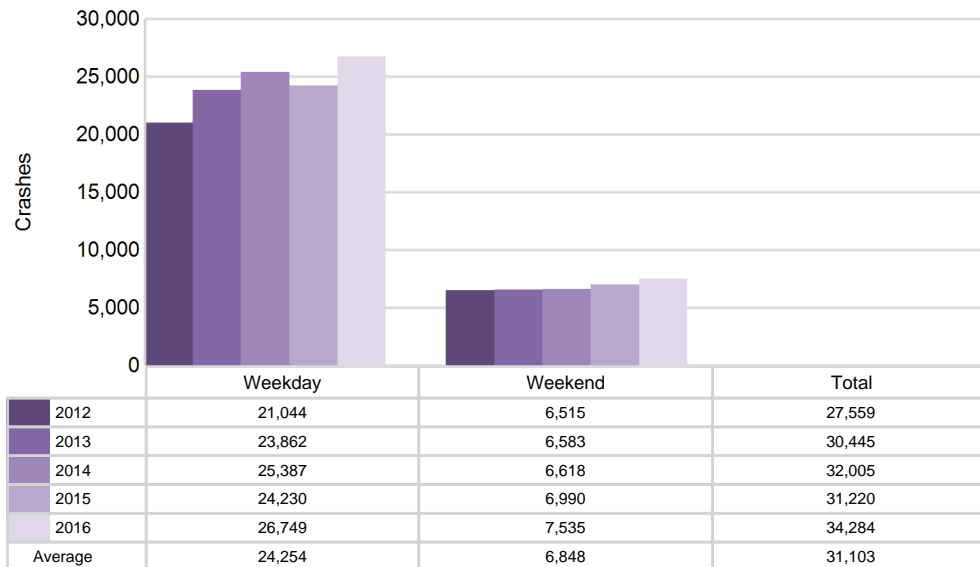


## Traffic Safety Network West Michigan (continued)

### 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	21,044	48	23,862	58	25,387	54	24,230	62	26,749	66
Weekend	6,515	23	6,583	18	6,618	31	6,990	31	7,535	29
<b>Total</b>	<b>27,559</b>	<b>71</b>	<b>30,445</b>	<b>76</b>	<b>32,005</b>	<b>85</b>	<b>31,220</b>	<b>93</b>	<b>34,284</b>	<b>95</b>

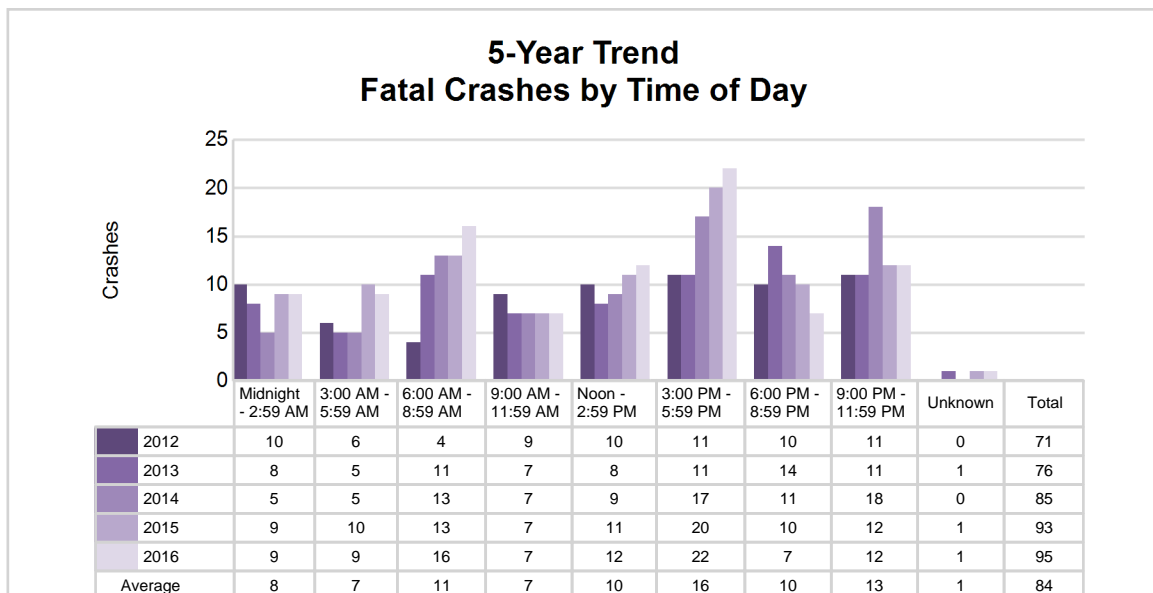
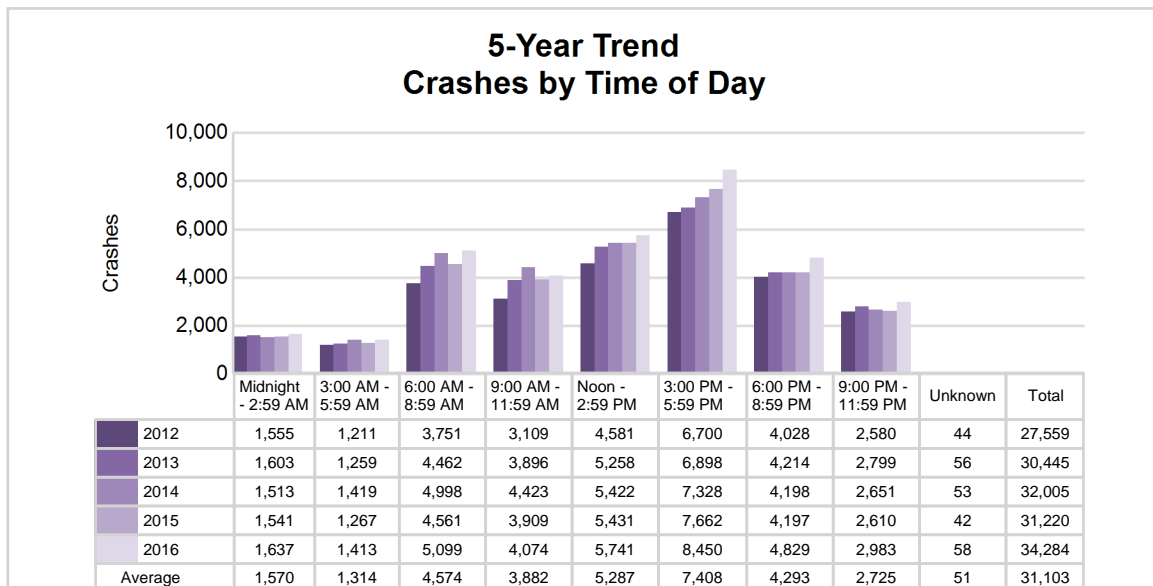
### 5-Year Crash Trends by Weekday (Monday - Friday) and Weekend (Saturday & Sunday)



## 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	1,555	10	1,603	8	1,513	5	1,541	9	1,637	9
3:00 AM - 5:59 AM	1,211	6	1,259	5	1,419	5	1,267	10	1,413	9
6:00 AM - 8:59 AM	3,751	4	4,462	11	4,998	13	4,561	13	5,099	16
9:00 AM - 11:59 AM	3,109	9	3,896	7	4,423	7	3,909	7	4,074	7
Noon - 2:59 PM	4,581	10	5,258	8	5,422	9	5,431	11	5,741	12
3:00 PM - 5:59 PM	6,700 †	11	6,898 †	11	7,328 †	17	7,662 †	20	8,450 †	22
6:00 PM - 8:59 PM	4,028	10	4,214	14	4,198	11	4,197	10	4,829	7
9:00 PM - 11:59 PM	2,580	11	2,799	11	2,651	18	2,610	12	2,983	12
Unknown	44	0	56	1	53	0	42	1	58	1
<b>Total</b>	<b>27,559</b>	<b>71</b>	<b>30,445</b>	<b>76</b>	<b>32,005</b>	<b>85</b>	<b>31,220</b>	<b>93</b>	<b>34,284</b>	<b>95</b>

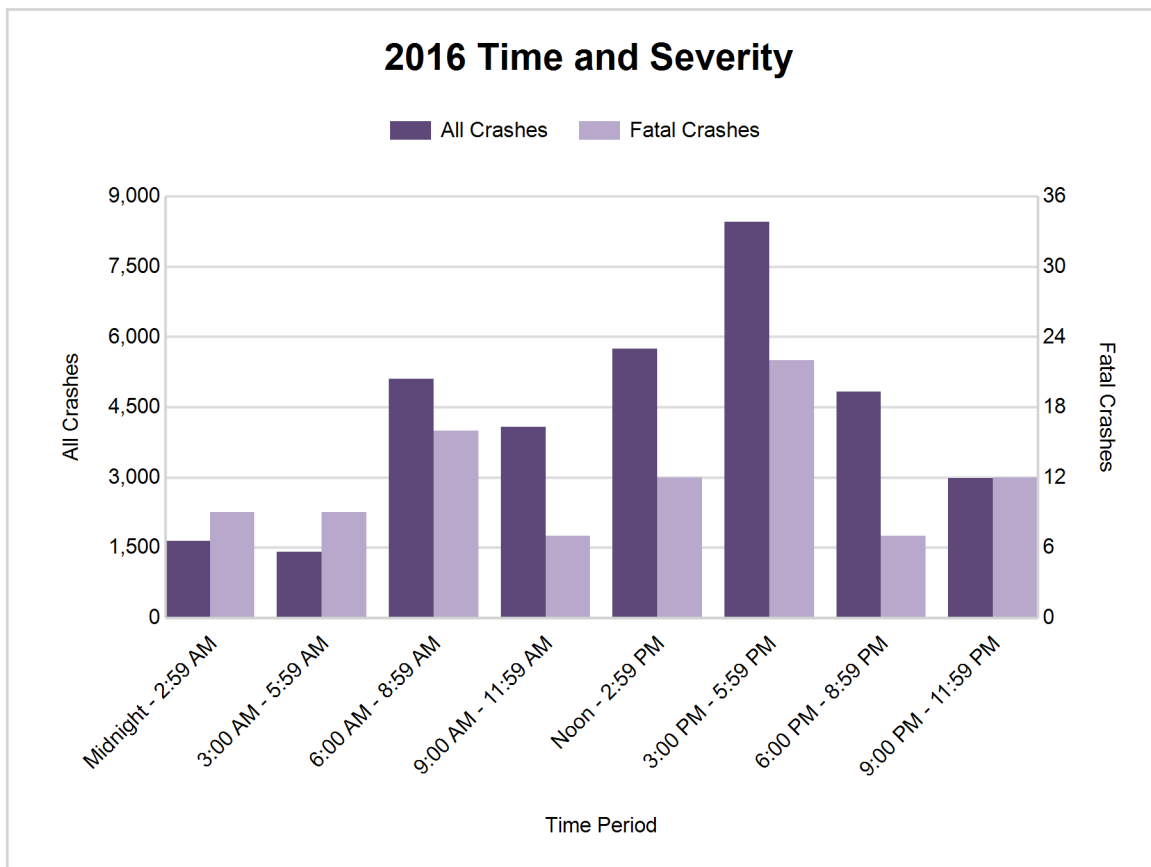
Note: † Indicates that the highest number of total crashes reported in the 5-year period occurred in the same time period



# Traffic Safety Network West Michigan (continued)

## 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	1,637	4.8	9	9.5	46	93	158	1,331
3:00 AM	- 5:59 AM	1,413	4.1	9	9.5	26	56	138	1,184
6:00 AM	- 8:59 AM	5,099	14.9	16	16.8	53	167	580	4,283
9:00 AM	- 11:59 AM	4,074	11.9	7	7.4	71	185	472	3,339
Noon	- 2:59 PM	5,741	16.7	12	12.6	122	257	804	4,546
3:00 PM	- 5:59 PM	8,450	24.6	22	23.2	121	392	1,174	6,741
6:00 PM	- 8:59 PM	4,829	14.1	7	7.4	79	250	538	3,955
9:00 PM	- 11:59 PM	2,983	8.7	12	12.6	60	152	357	2,402
Unknown		58	0.2	1	1.1	1	0	0	56
<b>Total</b>		<b>34,284</b>	<b>100.0</b>	<b>95</b>	<b>100.0</b>	<b>579</b>	<b>1,552</b>	<b>4,221</b>	<b>27,837</b>

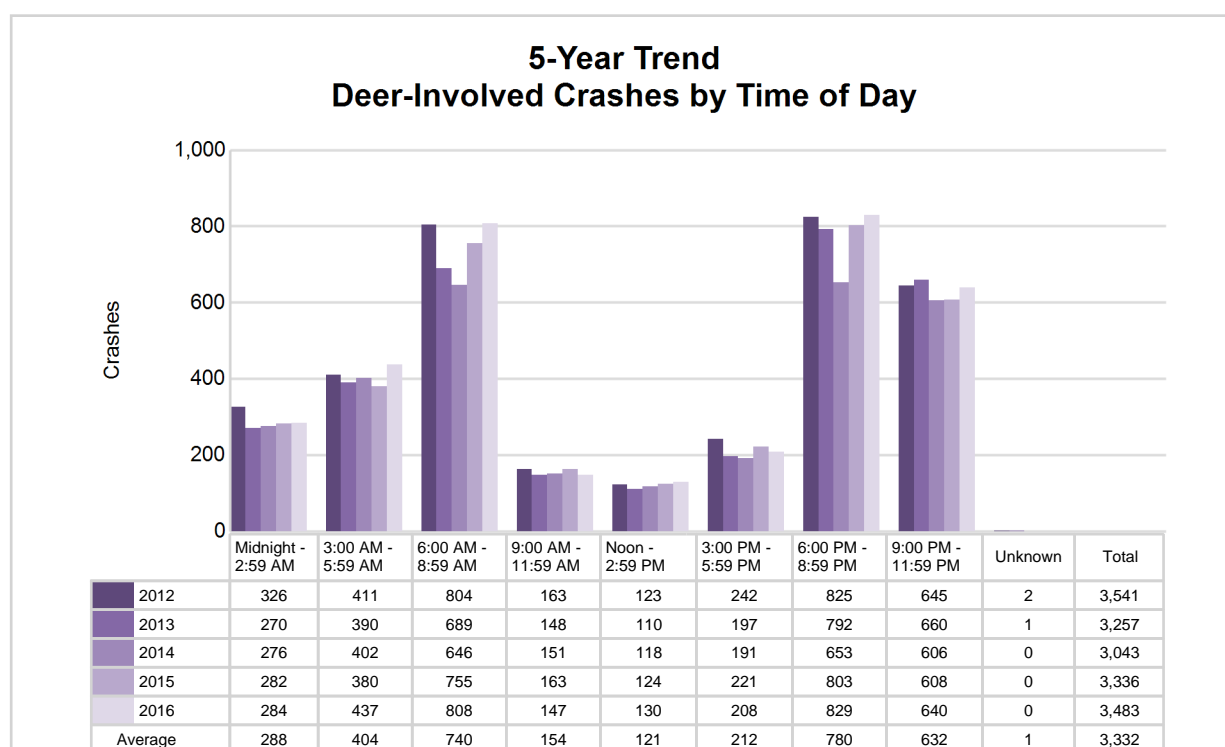




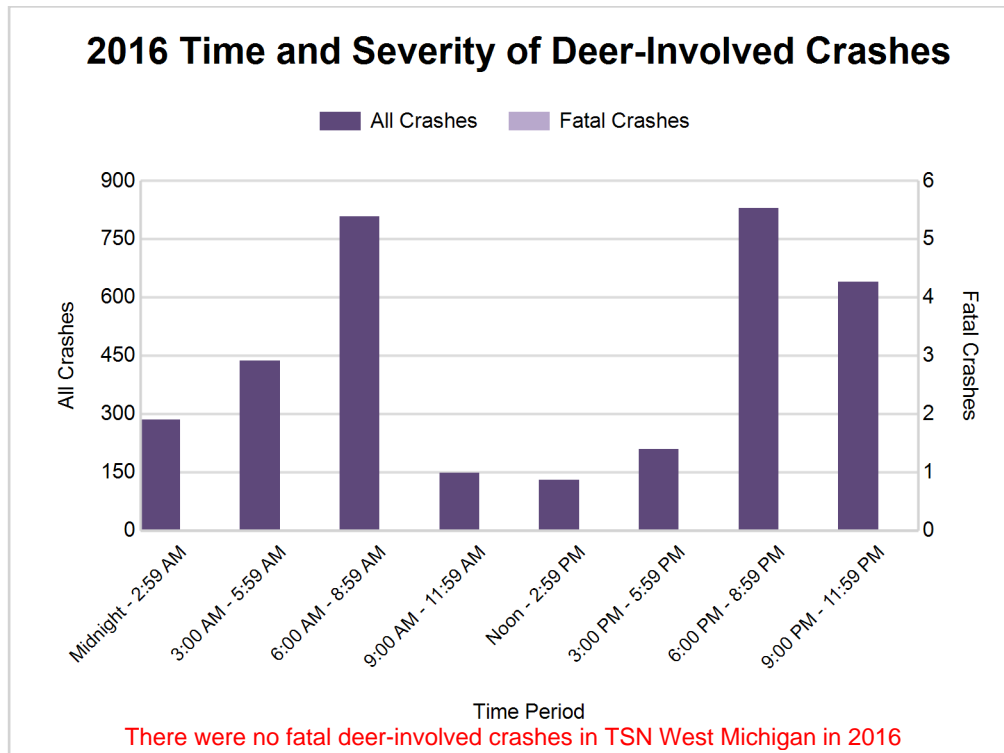
## 5-Year Trend - Deer-Involved Crashes by Time of Day

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	326	0	270	0	276	0	282	1	284	0
3:00 AM - 5:59 AM	411	0	390	0	402	0	380	0	437	0
6:00 AM - 8:59 AM	804	0	689	0	646	0	755	0	808	0
9:00 AM - 11:59 AM	163	1	148	0	151	0	163	0	147	0
Noon - 2:59 PM	123	0	110	0	118	0	124	0	130	0
3:00 PM - 5:59 PM	242	0	197	0	191	0	221	0	208	0
6:00 PM - 8:59 PM	825 †	0	792 †	0	653 †	0	803 †	0	829 †	0
9:00 PM - 11:59 PM	645	0	660	0	606	0	608	0	640	0
Unknown	2	0	1	0	0	0	0	0	0	0
<b>Total</b>	<b>3,541</b>	<b>1</b>	<b>3,257</b>	<b>0</b>	<b>3,043</b>	<b>0</b>	<b>3,336</b>	<b>1</b>	<b>3,483</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



## Traffic Safety Network West Michigan (continued)



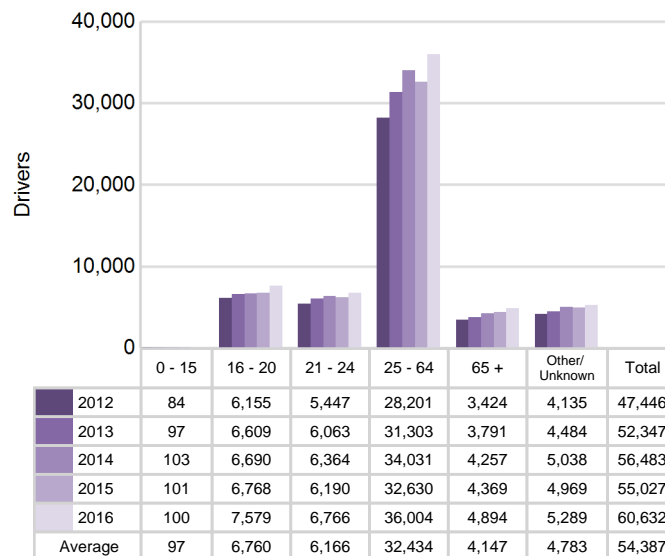
### 2016 - Reported Motor Vehicle Crashes by County

County	Crashes											Persons	
	Total	Fatal	Injury	Property Damage	Inter-state	US Route	State Route	Local Street	Alcohol-Involved	Drug-Involved	Deer-Involved	Fatalities	Injuries
Allegan	3,673	16	574	3,083	328	576	721	2,044	160	50	886	16	823
Kent	22,183	55	4,266	17,862	2,546	2,257	4,530	12,842	806	147	1,481	57	5,771
Ottawa	8,428	24	1,512	6,892	848	928	795	5,839	276	59	1,116	27	2,062
<b>Total</b>	<b>34,284</b>	<b>95</b>	<b>6,352</b>	<b>27,837</b>	<b>3,722</b>	<b>3,761</b>	<b>6,046</b>	<b>20,725</b>	<b>1,242</b>	<b>256</b>	<b>3,483</b>	<b>100</b>	<b>8,656</b>

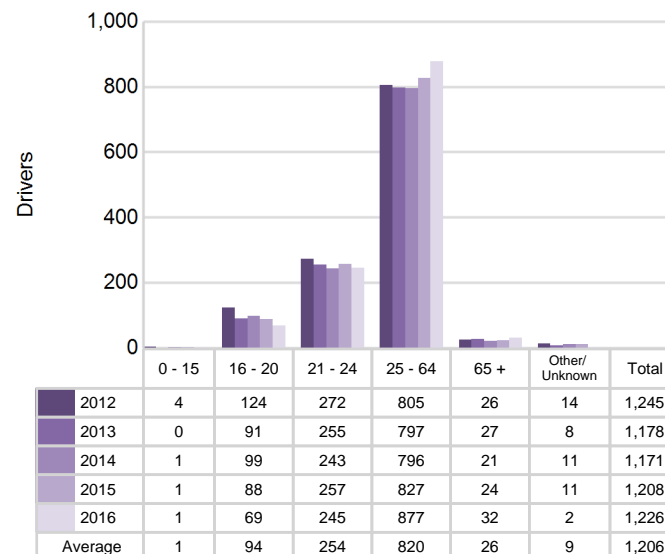
## 5-Year Trend - Drivers in Crashes Coded Drinking by Driver Age

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	84	4	97	0	103	1	101	1	100	1
16 - 20	6,155	124	6,609	91	6,690	99	6,768	88	7,579	69
21 - 24	5,447	272	6,063	255	6,364	243	6,190	257	6,766	245
25 - 64	28,201	805	31,303	797	34,031	796	32,630	827	36,004	877
65 +	3,424	26	3,791	27	4,257	21	4,369	24	4,894	32
Unknown	4,135	14	4,484	8	5,038	11	4,969	11	5,289	2
<b>Total</b>	<b>47,446</b>	<b>1,245</b>	<b>52,347</b>	<b>1,178</b>	<b>56,483</b>	<b>1,171</b>	<b>55,027</b>	<b>1,208</b>	<b>60,632</b>	<b>1,226</b>

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



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



# Traffic Safety Network West Michigan (continued)

## 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	3	1	1	1	0	0	0	1	0
16 - 20	131	114	57	69	1	9	25	13	21
21 - 24	309	244	202	245	1	29	77	52	86
25 - 64	1,253	923	709	877	7	80	226	244	320
65 +	82	52	27	32	0	6	9	3	14
Unknown	170	7	0	2	0	0	0	0	2
<b>Total</b>	<b>1,948</b>	<b>1,341</b>	<b>996</b>	<b>1,226</b>	<b>9</b>	<b>124</b>	<b>337</b>	<b>313</b>	<b>443</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 1,948 drivers in alcohol-involved crashes; 1,226 (62.9%) of those drivers were coded as had-been-drinking by the officer on the crash form.

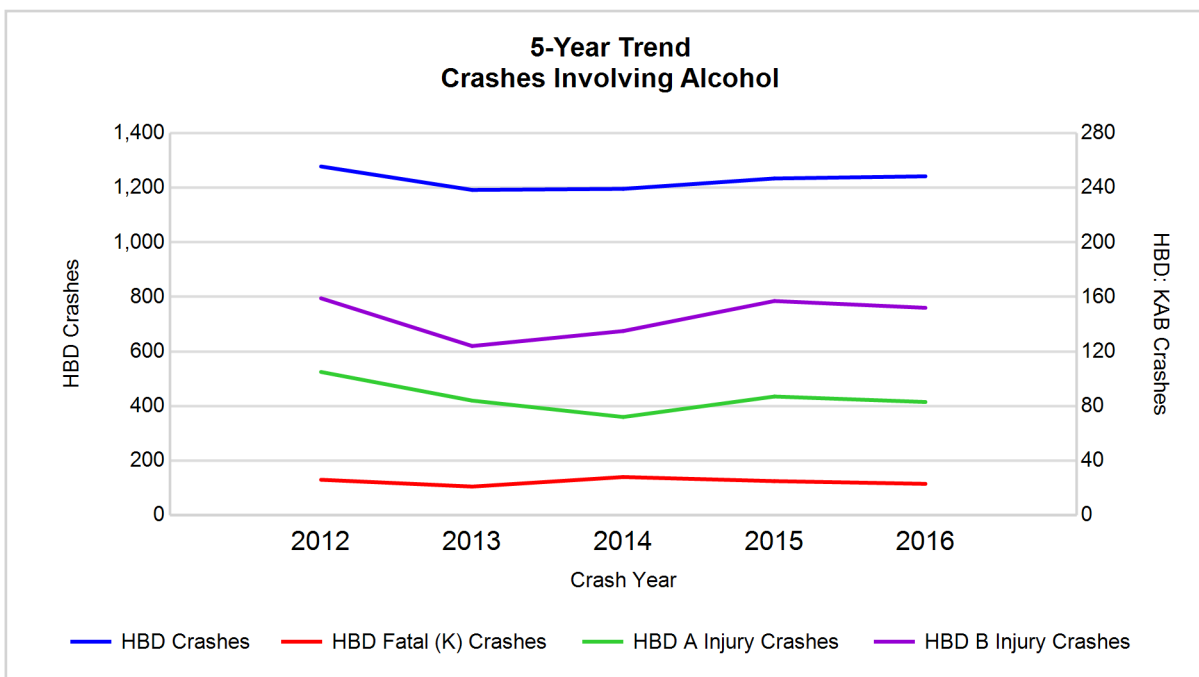
- 650 (53.0%) of the 1,226 drivers had a blood alcohol concentration (BAC) of 0.08 g/dL (grams per deciliter) or greater, and 313 (48.2%) of the 650 drivers had a BAC at or above 0.17 g/dL.
- 996 (81.2%) of the 1,226 drivers were coded as had-been-drinking and were tested for alcohol consumption.

## 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	27,559	1,278	4.6	71	26	36.6	435	105	24.1	1,343	159	11.8
2013	30,445	1,192	3.9	76	21	27.6	405	84	20.7	1,229	124	10.1
2014	32,005	1,196	3.7	85	28	32.9	400	72	18.0	1,210	135	11.2
2015	31,220	1,234	4.0	93	25	26.9	443	87	19.6	1,197	157	13.1
2016	34,284**	1,242	3.6*	95**	23	24.2*	579**	83	14.3*	1,552**	152	9.8*

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



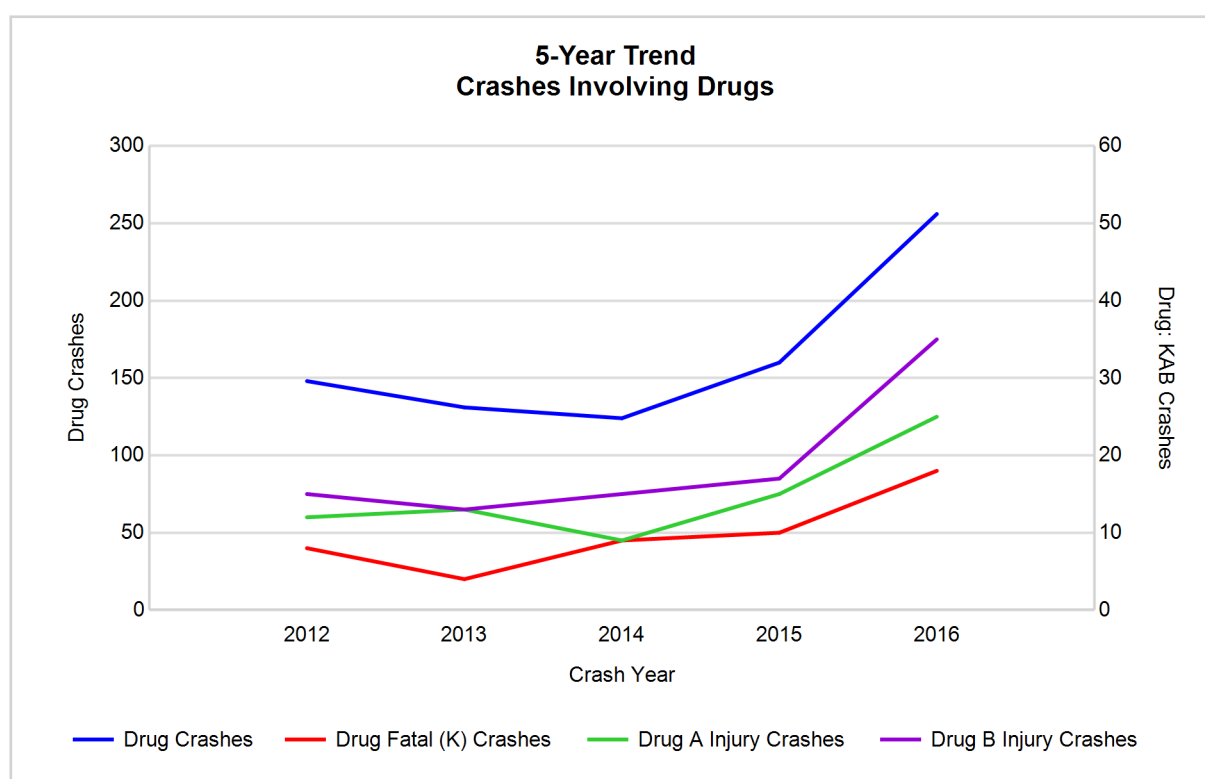
Note: Had-Been-Drinking (HBD)

## 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	27,559	148	0.5	71	8	11.3	435	12	2.8	1,343	15	1.1
2013	30,445	131	0.4	76	4	5.3	405	13	3.2	1,229	13	1.1
2014	32,005	124	0.4	85	9	10.6	400	9	2.3	1,210	15	1.2
2015	31,220	160	0.5	93	10	10.8	443	15	3.4	1,197	17	1.4
2016	34,284**	256**	0.7**	95**	18**	18.9**	579**	25**	4.3**	1,552**	35**	2.3**

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



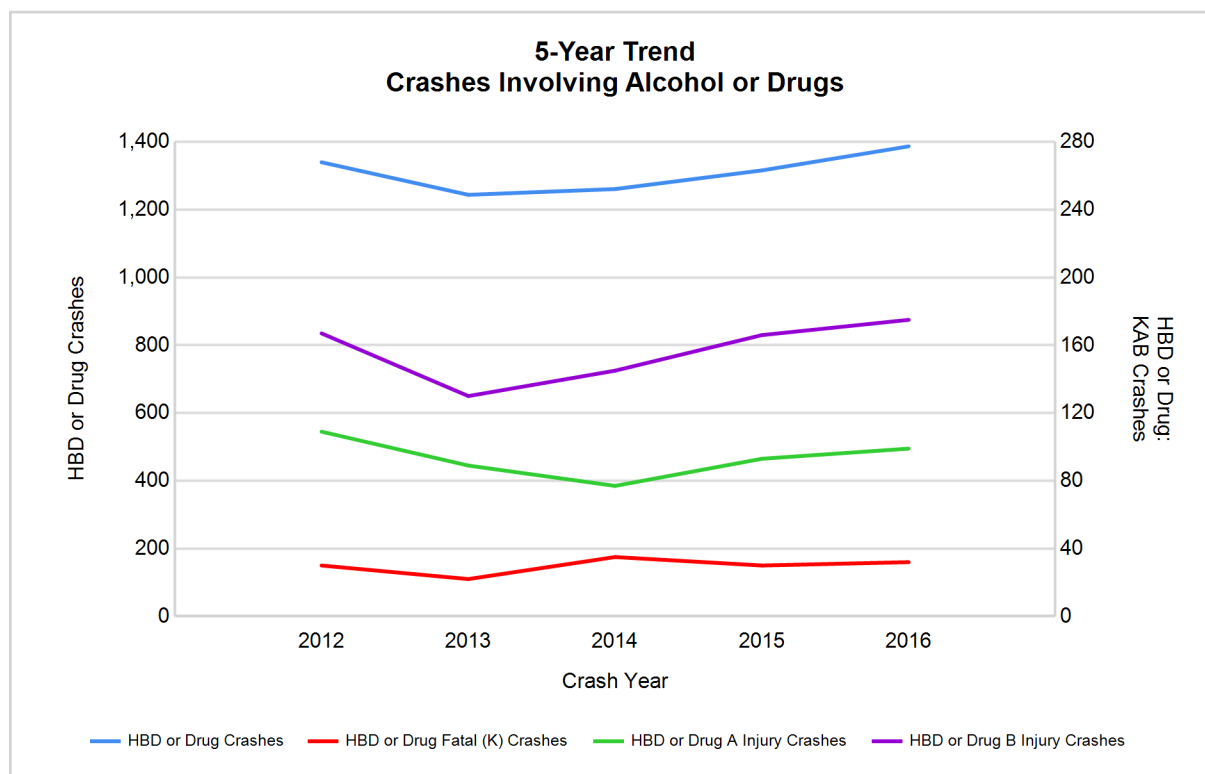
# Traffic Safety Network West Michigan (continued)

## 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	27,559	1,340	4.9	71	30	42.3	435	109	25.1	1,343	167	12.4
2013	30,445	1,244	4.1	76	22	28.9	405	89	22.0	1,229	130	10.6
2014	32,005	1,261	3.9	85	35	41.2	400	77	19.3	1,210	145	12.0
2015	31,220	1,316	4.2	93	30	32.3	443	93	21.0	1,197	166	13.9
2016	34,284**	1,387**	4.0	95**	32	33.7	579**	99	17.1*	1,552**	175**	11.3

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)

# Traffic Safety Network West Michigan (continued)

13

## 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	51,457	46,324	90.0	70	40	57.1	465	397	85.4	1,430	1,290	90.2	5,071	4,865	95.9	41,145	39,722	96.5
Motor home	903	825	91.4	0	0	0.0	4	3	75.0	19	18	94.7	98	93	94.9	736	711	96.6
Pickup truck	6,156	5,575	90.6	2	1	50.0	55	44	80.0	151	132	87.4	418	396	94.7	5,172	5,002	96.7
Small truck under 10,000 lbs. GVWR	468	401	85.7	0	0	0.0	3	2	66.7	10	9	90.0	25	20	80.0	392	370	94.4
Motorcycle	379	231	60.9	14	4	28.6	73	47	64.4	119	77	64.7	86	54	62.8	77	49	63.6
Moped / goped	72	36	50.0	1	0	0.0	12	3	25.0	25	18	72.0	21	12	57.1	10	3	30.0
Go-cart / golf cart	5	2	40.0	0	0	0.0	0	0	0.0	1	0	0.0	1	0	0.0	3	2	66.7
Snowmobile	2	2	100.0	0	0	0.0	1	1	100.0	0	0	0.0	1	1	100.0	0	0	0.0
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	11	1	9.1	0	0	0.0	1	0	0.0	6	0	0.0	0	0	0.0	3	1	33.3
Other	227	128	56.4	0	0	0.0	3	0	0.0	8	2	25.0	13	3	23.1	162	123	75.9
Truck/bus over 10,000 lbs.	1,577	1,464	92.8	1	0	0.0	10	7	70.0	18	16	88.9	67	55	82.1	1,425	1,385	97.2
Unknown	1,467	4	0.3	0	0	0.0	0	0	0.0	0	0	0.0	1	0	0.0	10	2	20.0
<b>Total</b>	<b>62,724</b>	<b>54,993</b>	<b>87.7</b>	<b>88</b>	<b>45</b>	<b>51.1</b>	<b>627</b>	<b>504</b>	<b>80.4</b>	<b>1,787</b>	<b>1,562</b>	<b>87.4</b>	<b>5,802</b>	<b>5,499</b>	<b>94.8</b>	<b>49,135</b>	<b>47,370</b>	<b>96.4</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	691	614	88.9	1	1	100.0	32	24	75.0	124	100	80.6	452	418	92.5	81	71	87.7
16 - 20	7,928	7,635	96.3	14	6	42.9	82	66	80.5	303	266	87.8	780	736	94.4	6,734	6,560	97.4
21 - 24	6,942	6,582	94.8	12	7	58.3	59	45	76.3	225	201	89.3	616	583	94.6	6,003	5,746	95.7
25 - 64	36,796	35,214	95.7	48	23	47.9	382	307	80.4	971	841	86.6	3,407	3,235	95.0	31,877	30,804	96.6
65 +	5,077	4,916	96.8	13	8	61.5	72	62	86.1	164	154	93.9	544	527	96.9	4,264	4,164	97.7
Unknown	5,290	32	0.6	0	0	0.0	0	0	0.0	0	0	0.0	3	0	0.0	176	25	14.2
<b>Total</b>	<b>62,724</b>	<b>54,993</b>	<b>87.7</b>	<b>88</b>	<b>45</b>	<b>51.1</b>	<b>627</b>	<b>504</b>	<b>80.4</b>	<b>1,787</b>	<b>1,562</b>	<b>87.4</b>	<b>5,802</b>	<b>5,499</b>	<b>94.8</b>	<b>49,135</b>	<b>47,370</b>	<b>96.4</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.

# Traffic Safety Network West Michigan (continued)

## 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	244	1	51	295	0	34	251	2	36	183	0	17	119	2	10
Shoulder belt only used	15	1	5	61	0	7	97	0	11	192	0	22	324	0	28
Lap belt only used	127	1	14	282	0	22	501	0	52	424	2	31	344	0	41
Both lap & shoulder belts used	40,960	20	4,452	45,071	23	4,564	47,969	27	4,620	47,070	28	4,588	52,193	30	5,474
No belts used	246	14	93	325	6	89	418	17	118	429	15	89	400	11	115
Child restraint used	3	0	0	2	0	0	5	0	1	0	0	0	1	0	0
Child restraint not used, unavailable or improper use	4	0	0	1	0	1	7	0	1	2	0	0	1	0	0
Restraint failure	17	0	4	18	0	2	62	0	8	49	1	4	47	0	7
Restraint use unknown	1,618	5	94	1,700	1	116	2,093	3	123	1,702	2	111	5,323	9	148
Helmet worn	341	6	259	303	5	221	270	10	193	274	5	195	259	4	201
Helmet not worn	126	6	91	129	9	91	98	4	75	131	6	95	150	8	112
Helmet use unknown	14	1	7	19	0	8	31	2	14	16	1	8	17	1	9
Uncoded & errors	3,731	0	5	4,141	0	9	4,681	0	4	4,555	0	7	1,454	0	2
<b>Total</b>	<b>47,446</b>	<b>55</b>	<b>5,075</b>	<b>52,347</b>	<b>44</b>	<b>5,164</b>	<b>56,483</b>	<b>65</b>	<b>5,256</b>	<b>55,027</b>	<b>60</b>	<b>5,167</b>	<b>60,632</b>	<b>65</b>	<b>6,147</b>

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

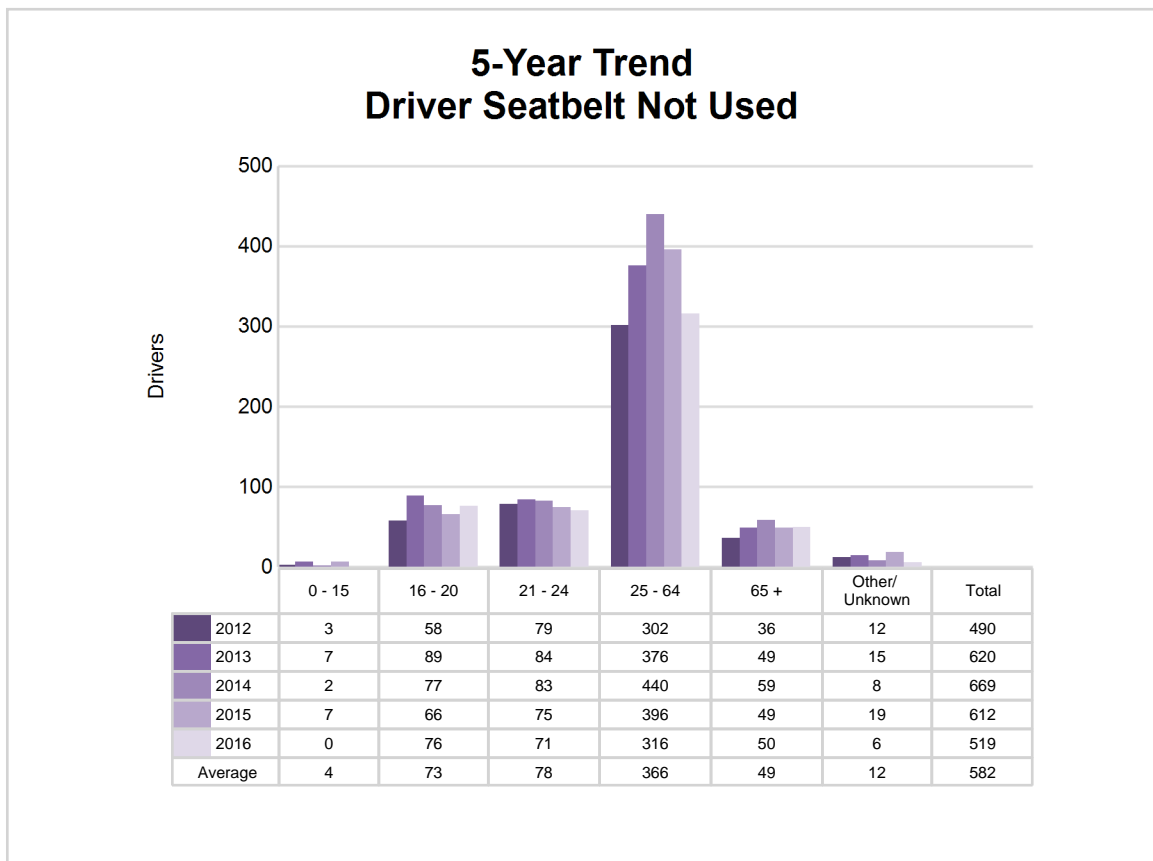
Restraint Use	2012			2013			2014			2015			2016		
	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers
No belts available	14	0	8	6	0	1	13	0	4	1	0	0	3	0	0
Shoulder belt only used	2	0	1	3	0	2	1	0	0	10	0	1	11	0	0
Lap belt only used	4	1	1	5	0	1	9	0	2	13	1	1	7	0	2
Both lap & shoulder belts used	890	3	191	894	6	198	849	4	182	888	2	204	886	2	208
No belts used	78	9	48	47	1	28	61	5	37	62	3	30	55	6	28
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	1	0	1	2	0	0	0	0	0	0	0	0
Restraint failure	3	0	2	3	0	1	6	0	0	7	0	0	4	0	2
Restraint use unknown	202	2	45	178	0	45	187	1	38	180	1	41	222	3	56
Helmet worn	24	1	22	12	1	9	11	2	9	12	2	8	13	0	10
Helmet not worn	16	3	10	24	4	19	16	0	14	22	3	17	25	4	20
Helmet use unknown	2	0	2	1	0	1	8	2	5	4	1	2	0	0	0
Uncoded & errors	10	0	1	4	0	0	8	0	1	9	0	0	0	0	0
<b>Total</b>	<b>1,245</b>	<b>19</b>	<b>331</b>	<b>1,178</b>	<b>12</b>	<b>306</b>	<b>1,171</b>	<b>14</b>	<b>292</b>	<b>1,208</b>	<b>13</b>	<b>304</b>	<b>1,226</b>	<b>15</b>	<b>326</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	3	0	1	7	0	2	2	0	0	7	0	2	0	0	0
16 - 20	58	0	17	89	2	17	77	2	25	66	1	13	76	3	15
21 - 24	79	4	31	84	0	19	83	2	17	75	0	12	71	1	13
25 - 64	302	9	85	376	4	74	440	12	97	396	12	67	316	5	80
65 +	36	2	9	49	0	10	59	3	15	49	2	12	50	4	17
Unknown	12	0	1	15	0	1	8	0	0	19	0	0	6	0	0
<b>Total</b>	<b>490</b>	<b>15</b>	<b>144</b>	<b>620</b>	<b>6</b>	<b>123</b>	<b>669</b>	<b>19</b>	<b>154</b>	<b>612</b>	<b>15</b>	<b>106</b>	<b>519</b>	<b>13</b>	<b>125</b>

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



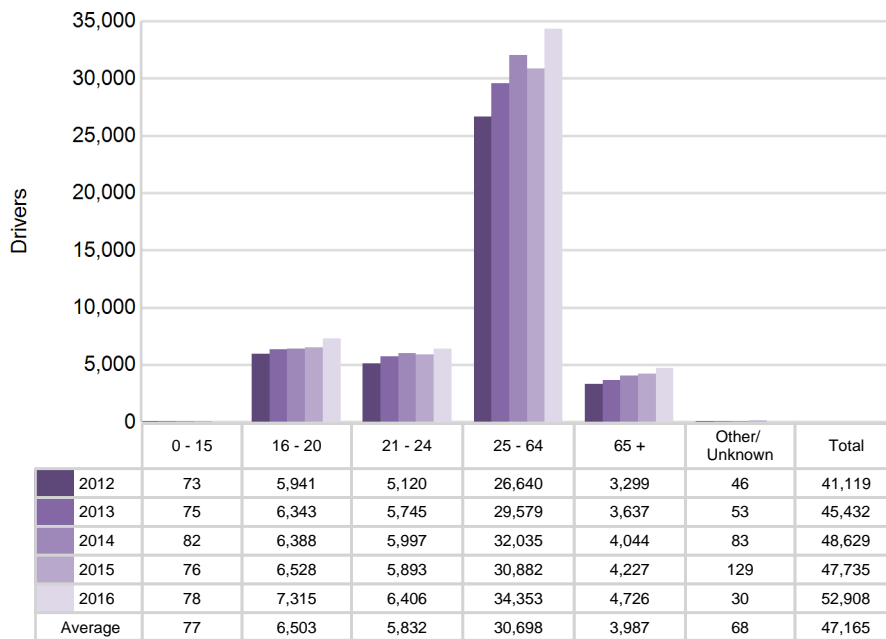
# Traffic Safety Network West Michigan (continued)

## 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	73	0	7	75	0	9	82	0	5	76	0	8	78	0	8
16 - 20	5,941	7	597	6,343	4	625	6,388	2	559	6,528	6	645	7,315	4	755
21 - 24	5,120	2	565	5,745	3	562	5,997	4	561	5,893	4	532	6,406	5	661
25 - 64	26,640	10	2,885	29,579	9	2,984	32,035	8	3,060	30,882	15	2,991	34,353	17	3,564
65 +	3,299	3	420	3,637	7	415	4,044	13	504	4,227	6	469	4,726	4	562
Unknown	46	0	1	53	0	0	83	0	2	129	0	0	30	0	0
<b>Total</b>	<b>41,119</b>	<b>22</b>	<b>4,475</b>	<b>45,432</b>	<b>23</b>	<b>4,595</b>	<b>48,629</b>	<b>27</b>	<b>4,691</b>	<b>47,735</b>	<b>31</b>	<b>4,645</b>	<b>52,908</b>	<b>30</b>	<b>5,550</b>

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

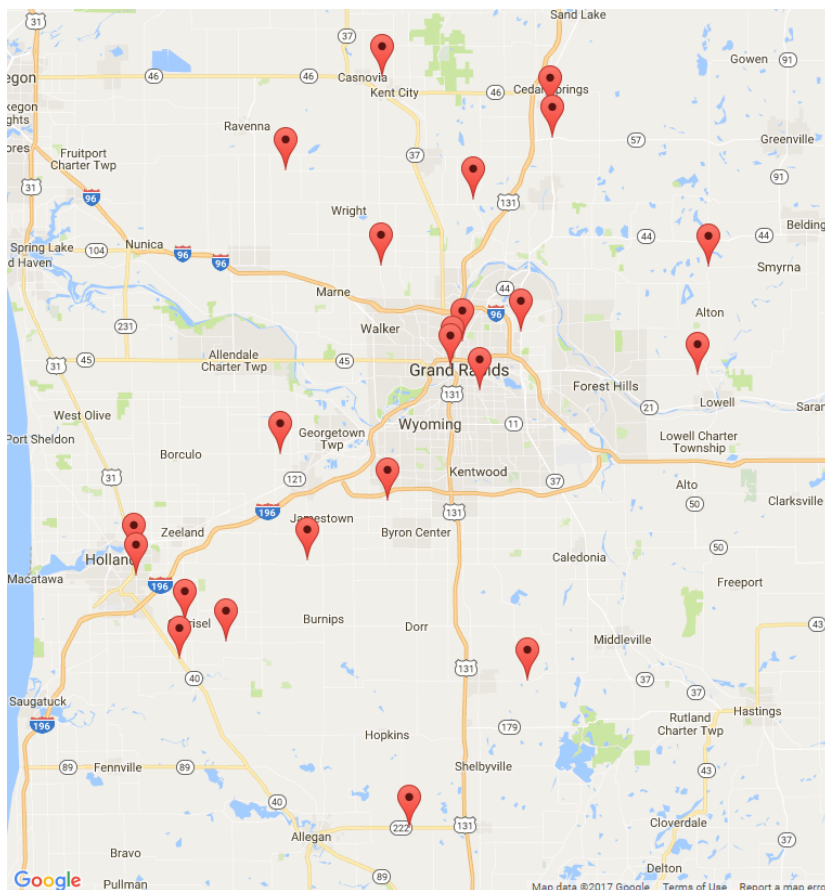
## 5-Year Trend Driver Seatbelt Used



## 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	24,030	45	26,033	69	28,407	70	28,111	71	30,645	75
Speed too fast	3,019	20	4,723	7	4,792	11	3,418	15	4,026	17
Speed too slow	32	0	67	0	98	0	88	1	86	0
Failed to yield	4,300	7	4,545	12	5,288	13	5,110	9	5,605	14
Disregard traffic control	1,130	7	1,220	12	1,257	6	1,370	9	1,395	15
Drove wrong way	36	0	41	1	57	6	57	0	53	0
Drove left of center	194	1	251	6	261	9	223	6	261	3
Improper passing	241	1	223	1	318	0	262	4	323	1
Improper lane use	956	1	962	0	1,052	2	1,229	1	1,435	3
Improper turn	423	0	476	0	563	0	570	0	576	0
Improper/no signal	80	0	141	0	150	1	151	0	84	0
Improper backing	754	0	859	0	923	0	925	0	968	0
Unable to stop in assured clear distance	7,189	2	7,542	4	7,823	3	8,053	2	9,091	4
Other	2,026	8	2,258	6	2,303	13	2,093	6	2,156	9
Unknown	1,572	11	1,607	7	1,632	10	1,774	15	2,229	10
Reckless driving	197	2	203	1	258	2	285	2	293	7
Careless/negligent driving	1,071	5	1,045	7	1,209	3	1,285	6	1,387	2
Uncoded & errors	196	0	151	0	92	0	23	0	19	0
<b>Total</b>	<b>47,446</b>	<b>110</b>	<b>52,347</b>	<b>133</b>	<b>56,483</b>	<b>149</b>	<b>55,027</b>	<b>147</b>	<b>60,632</b>	<b>160</b>

## Traffic Safety Network West Michigan (continued)



The picture above represents all 2016 alcohol-involved fatal crashes in TSN West Michigan.

In 2016, there were 1,242 alcohol-involved crashes in TSN West Michigan:

23 K - Fatal Crashes

83 A - Suspected Serious Injury Crashes

152 B - Suspected Minor Injury Crashes

210 C - Possible Injury Crashes

774 O - Property Damage Only/No Injury Crashes

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