May 2019
Revised 9/16/2019

MICHIGAN
Office of Highway Safety Planning
2018

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.

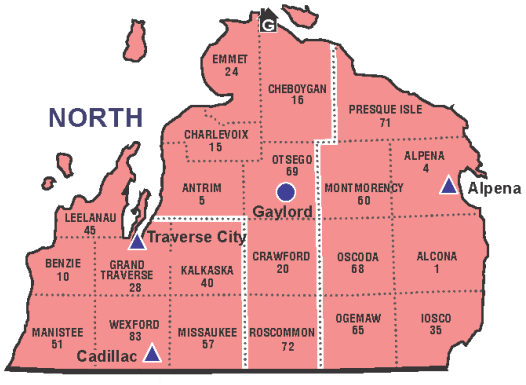
KABCO Injury Indicator:
K = Killed
A = Suspected Serious Injury
B = Suspected Minor Injury
C = Possible Injury
O = No Injury
Property Damage Only (PDO)

UMTRI
University of Michigan
Transportation Research Institute

MDOT Region - North

2018 Traffic Crash Data & 2014-2018 5-Year Trends

Beginning October 2015, MDOT Region - North is comprised of Alcona, Alpena, Antrim, Benzie, Charlevoix, Cheboygan, Crawford, Emmet, Grand Traverse, Iosco, Kalkaska, Leelanau, Manistee, Missaukee, Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, and Wexford 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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MDOT Region - North

MDOT Region - North Experience

In 2018:

There were 26,682 drivers involved in 19,919 motor vehicle crashes in MDOT Region North. Of those crashes, 55 were classified as fatal, resulting in 62 fatalities. An additional 3,463 persons were injured.

MDOT Region North experienced the highest number of motor vehicle crashes (2,576) in November, the highest number of fatal crashes (8) and the highest number of persons killed (10) in October.

Michigan driver statistics indicate 5.3 percent of licensed drivers in MDOT Region North were age 16-20, and 9.8 percent of drivers in crashes were also in that age group.

2018 - Crashes and Injuries by Month

Month	Crashes				Persons	
	Total	Fatal	Injury	Property Damage Only (PDO)	Fatalities	Injuries
January	1,843	1	177	1,665	1	238
February	1,506	4	158	1,344	4	200
March	1,479	4	160	1,315	5	234
April	1,469	3	164	1,302	3	217
May	1,266	6	200	1,060	6	288
June	1,622	7	214	1,401	9	277
July	1,603	4	286	1,313	6	386
August	1,390	3	272	1,115	3	383
September	1,292	5	226	1,061	5	321
October	1,782	8	194	1,580	10	293
November	2,576	7	245	2,324	7	349
December	2,091	3	218	1,870	3	277
Total	**19,919**	**55**	**2,514**	**17,350**	**62**	**3,463**

2018 - Driver Statistics

Age Group	MDOT Region - North			Driver Rates	
	2018 Population	Licensed Drivers	Drivers in Crashes	Per 10k Population	Per 10k Licensed
0 - 15	83,421	2,684	46	5.5	171.4
16 - 20	26,012	21,931	2,626	1,009.5	1,197.4
21 - 24	20,389	19,474	2,004	982.9	1,029.1
25 - 64	253,615	245,784	17,044	672.0	693.5
65 +	125,398	120,708	4,094	326.5	339.2
Unknown	0	0	868	- -	- -
Total	**508,835**	**410,581**	**26,682**	**524.4**	**649.9**

2018 - 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	19,642	73.6	53	62.4	2,806	16,783
Motor home	101	0.4	0	0.0	17	84
Pickup truck	5,519	20.7	13	15.3	726	4,780
Small truck under 10,000 lbs. GVWR	220	0.8	0	0.0	22	198
Motorcycle	194	0.7	7	8.2	152	35
Moped / goped	14	0.1	0	0.0	13	1
Go-cart / golf cart	4	0.0	0	0.0	1	3
Snowmobile	18	0.1	0	0.0	15	3
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	58	0.2	3	3.5	43	12
Other	96	0.4	1	1.2	15	80
Truck/bus over 10,000 lbs.	590	2.2	8	9.4	98	484
Unknown	226	0.8	0	0.0	12	214
Total	**26,682**	**100.0**	**85**	**100.0**	**3,920**	**22,677**

MDOT Region - North (continued)

5-Year Trend - Crashes by Month

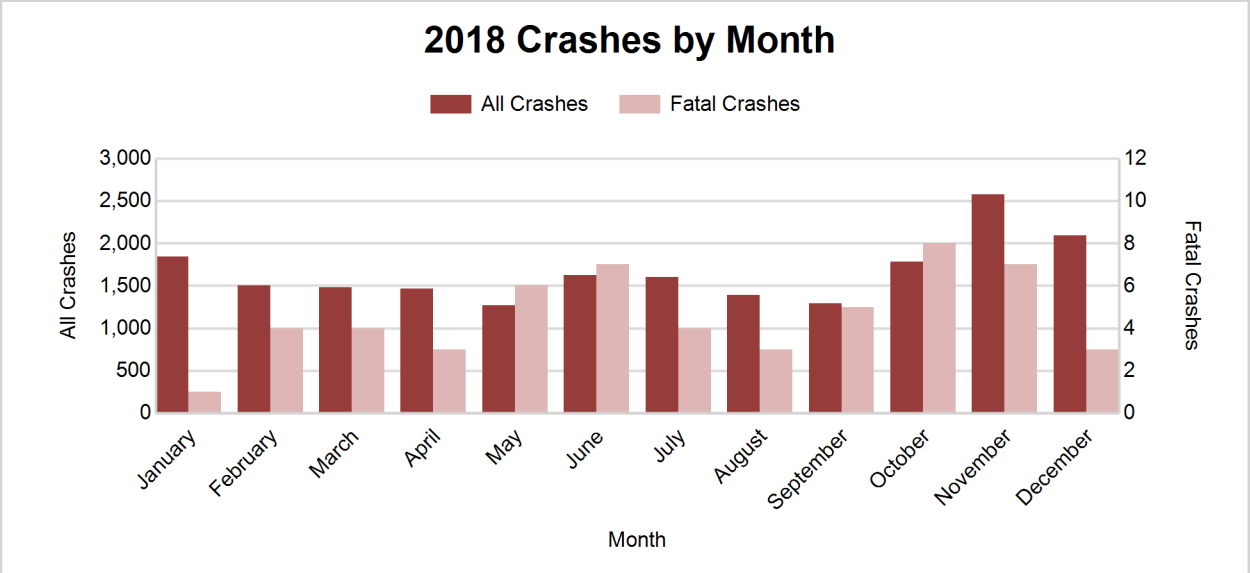
Month	2014		2015		2016		2017		2018	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
January	2,155	3	1,797	5	1,633	5	1,759	4	1,843	1
February	1,579	4	1,538	4	1,459	4	1,482	2	1,506	4
March	1,607	1	1,125	2	1,152	2	1,323	5	1,479	4
April	1,178	4	1,074	2	1,163	4	943	3	1,469	3
May	1,156	6	1,173	7	1,241	7	1,286	3	1,266	6
June	1,421	4	1,606	4	1,514	6	1,491	5	1,622	7
July	1,370	5	1,505	9	1,572	9	1,557	9	1,603	4
August	1,260	5	1,363	9	1,395	11	1,467	4	1,390	3
September	1,189	9	1,264	8	1,366	11	1,621	8	1,292	5
October	1,643	3	1,684	2	1,546	8	2,014	5	1,782	8
November	2,575	6	2,187	7	2,129	6	2,353	5	2,576	7
December	1,771	4	1,439	5	2,161	6	2,524	6	2,091	3
Total	**18,904**	**54**	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**

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	2014		2015		2016		2017		2018	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Monday	2,626	9	2,469	7	2,573	9	2,740	8	2,859	9
Tuesday	2,777	5	2,462	9	2,571	12	2,816	6	3,109	8
Wednesday	2,827	7	2,688	15	2,824	8	2,918	5	2,825	6
Thursday	2,801	5	2,698	8	2,746	13	3,054	10	2,974	6
Friday	3,289 †	6	2,890 †	13	3,055 †	12	3,245 †	6	3,383 †	9
Saturday	2,388	13	2,437	7	2,408	14	2,736	15	2,547	10
Sunday	2,196	9	2,111	5	2,154	11	2,311	9	2,222	7
Total	**18,904**	**54**	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**

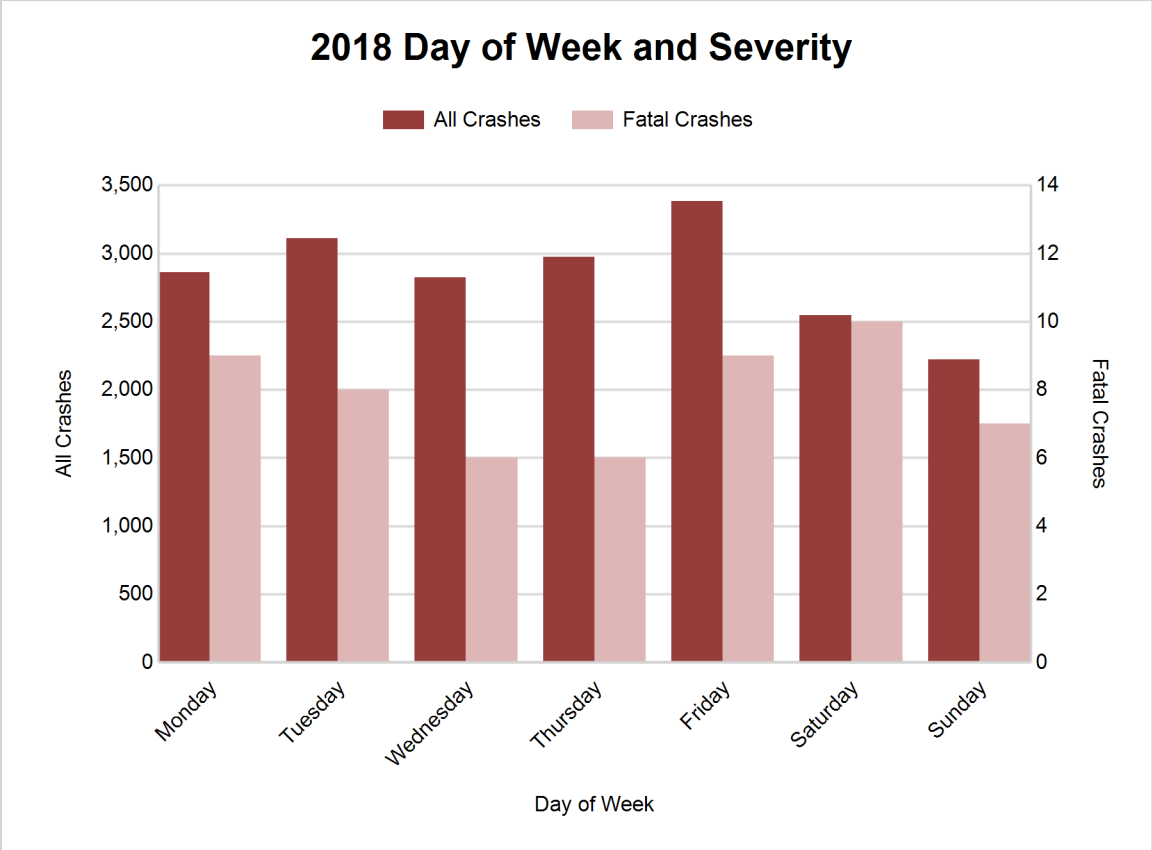
Note: † Indicates that the highest number of total crashes reported in the 5-year period occurred on the same day of the week



MDOT Region - North (continued)

2018 - Crashes by Day of Week

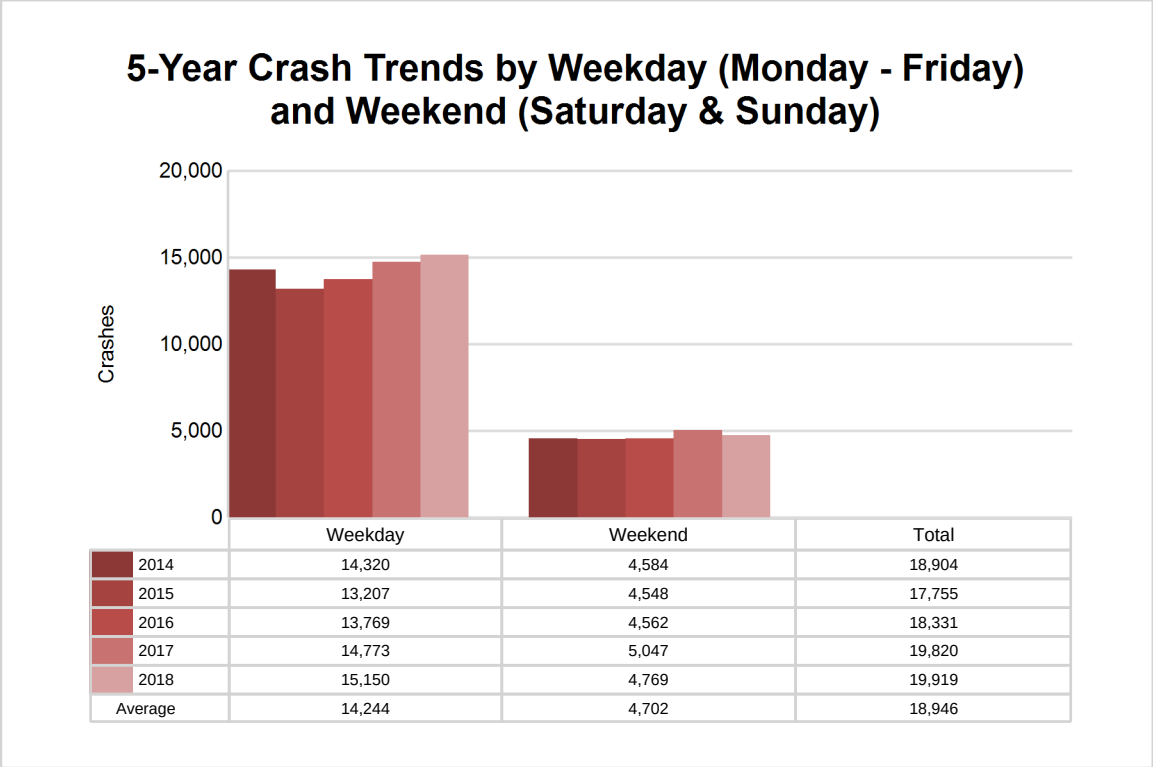
Day	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	Number
Monday	2,859	14.4	9	16.4	50	107	178	2,515
Tuesday	3,109	15.6	8	14.5	41	135	247	2,678
Wednesday	2,825	14.2	6	10.9	45	112	182	2,480
Thursday	2,974	14.9	6	10.9	40	108	198	2,622
Friday	3,383	17.0	9	16.4	46	143	251	2,934
Saturday	2,547	12.8	10	18.2	60	112	166	2,199
Sunday	2,222	11.2	7	12.7	67	95	131	1,922
Total	**19,919**	**100.0**	**55**	**100.0**	**349**	**812**	**1,353**	**17,350**



MDOT Region - North (continued)

5-Year Trend - Crashes by Weekday and Weekend

Portion of Week	2014		2015		2016		2017		2018	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Weekday	14,320	32	13,207	52	13,769	54	14,773	35	15,150	38
Weekend	4,584	22	4,548	12	4,562	25	5,047	24	4,769	17
Total	**18,904**	**54**	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**

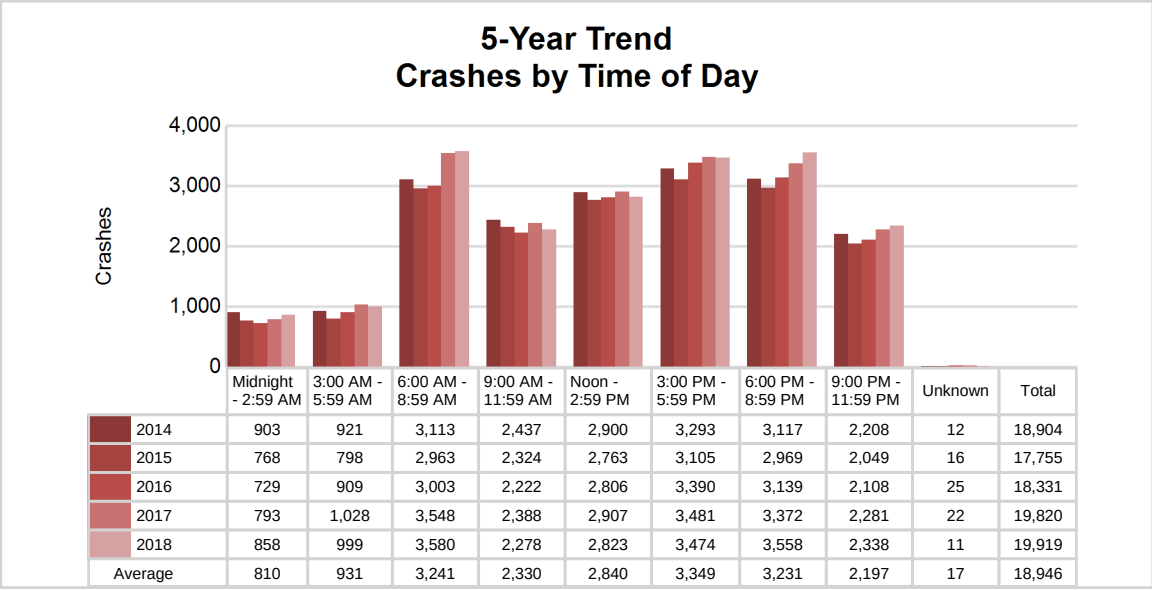


MDOT Region - North (continued)

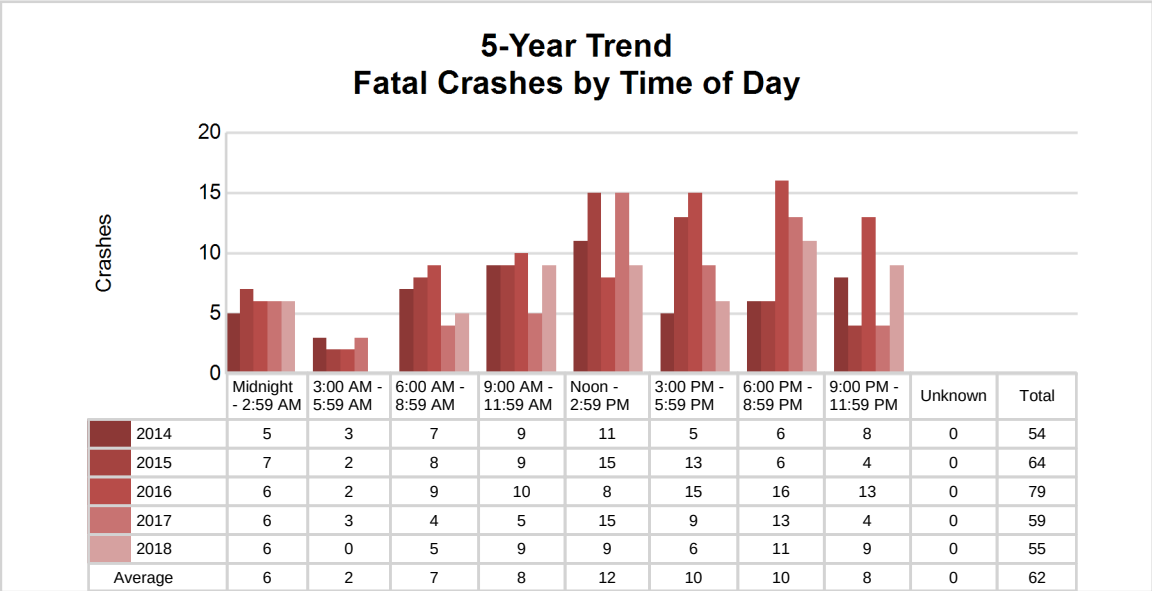
5-Year Trend - Crashes by Time of Day

Time of Day	2014		2015		2016		2017		2018	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Midnight - 2:59 AM	903	5	768	7	729	6	793	6	858	6
3:00 AM - 5:59 AM	921	3	798	2	909	2	1,028	3	999	0
6:00 AM - 8:59 AM	3,113	7	2,963	8	3,003	9	3,548	4	3,580	5
9:00 AM - 11:59 AM	2,437	9	2,324	9	2,222	10	2,388	5	2,278	9
Noon - 2:59 PM	2,900	11	2,763	15	2,806	8	2,907	15	2,823	9
3:00 PM - 5:59 PM	3,293	5	3,105	13	3,390	15	3,481	9	3,474	6
6:00 PM - 8:59 PM	3,117	6	2,969	6	3,139	16	3,372	13	3,558	11
9:00 PM - 11:59 PM	2,208	8	2,049	4	2,108	13	2,281	4	2,338	9
Unknown	12	0	16	0	25	0	22	0	11	0
Total	**18,904**	**54**	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**

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



	Midnight - 2:59 AM	3:00 AM - 5:59 AM	6:00 AM - 8:59 AM	9:00 AM - 11:59 AM	Noon - 2:59 PM	3:00 PM - 5:59 PM	6:00 PM - 8:59 PM	9:00 PM - 11:59 PM	Unknown	Total
2014	903	921	3,113	2,437	2,900	3,293	3,117	2,208	12	18,904
2015	768	798	2,963	2,324	2,763	3,105	2,969	2,049	16	17,755
2016	729	909	3,003	2,222	2,806	3,390	3,139	2,108	25	18,331
2017	793	1,028	3,548	2,388	2,907	3,481	3,372	2,281	22	19,820
2018	858	999	3,580	2,278	2,823	3,474	3,558	2,338	11	19,919
Average	810	931	3,241	2,330	2,840	3,349	3,231	2,197	17	18,946

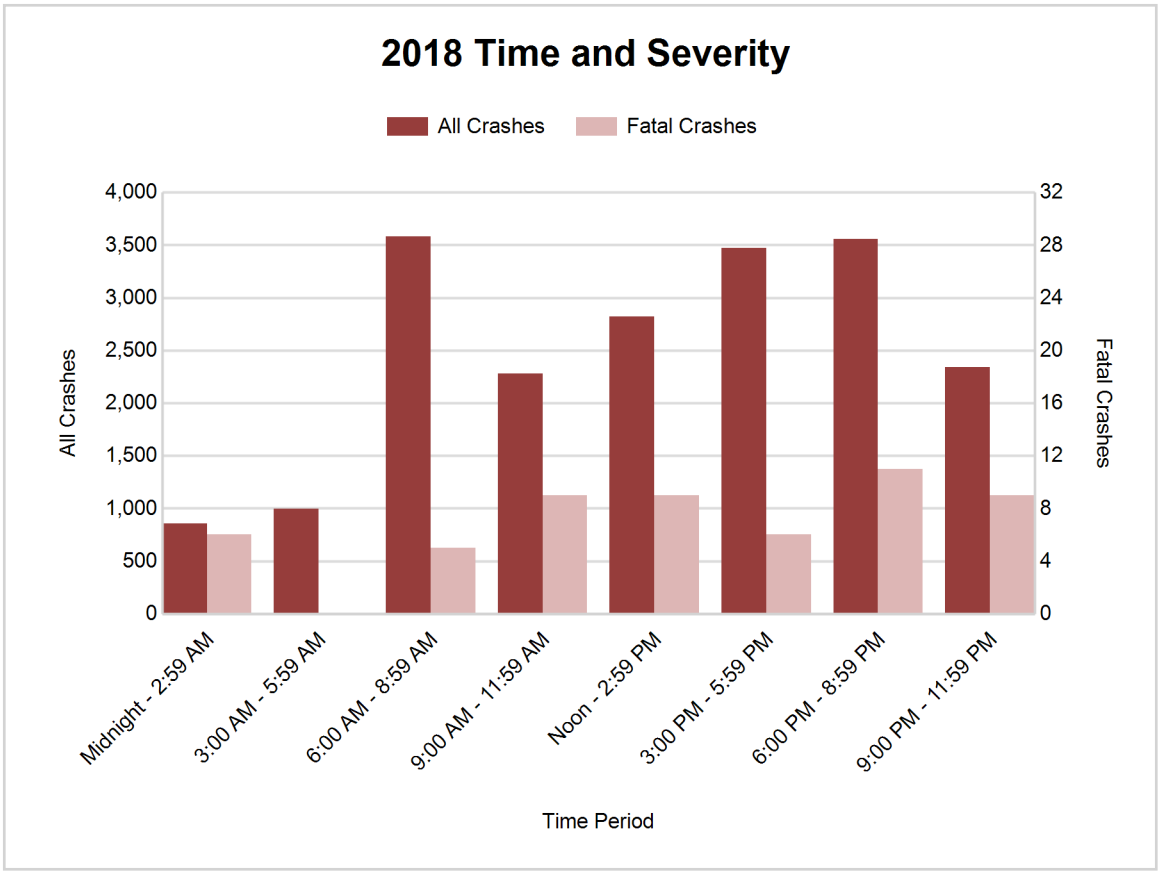


	Midnight - 2:59 AM	3:00 AM - 5:59 AM	6:00 AM - 8:59 AM	9:00 AM - 11:59 AM	Noon - 2:59 PM	3:00 PM - 5:59 PM	6:00 PM - 8:59 PM	9:00 PM - 11:59 PM	Unknown	Total
2014	5	3	7	9	11	5	6	8	0	54
2015	7	2	8	9	15	13	6	4	0	64
2016	6	2	9	10	8	15	16	13	0	79
2017	6	3	4	5	15	9	13	4	0	59
2018	6	0	5	9	9	6	11	9	0	55
Average	6	2	7	8	12	10	10	8	0	62

MDOT Region - North (continued)

2018 - 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	858	4.3	6	10.9	23	37	44	748
3:00 AM - 5:59 AM	999	5.0	0	0.0	11	25	51	912
6:00 AM - 8:59 AM	3,580	18.0	5	9.1	38	99	160	3,278
9:00 AM - 11:59 AM	2,278	11.4	9	16.4	44	105	201	1,919
Noon - 2:59 PM	2,823	14.2	9	16.4	65	173	270	2,306
3:00 PM - 5:59 PM	3,474	17.4	6	10.9	77	187	352	2,852
6:00 PM - 8:59 PM	3,558	17.9	11	20.0	59	121	160	3,207
9:00 PM - 11:59 PM	2,338	11.7	9	16.4	32	65	113	2,119
Unknown	11	0.1	0	0.0	0	0	2	9
Total	**19,919**	**100.0**	**55**	**100.0**	**349**	**812**	**1,353**	**17,350**

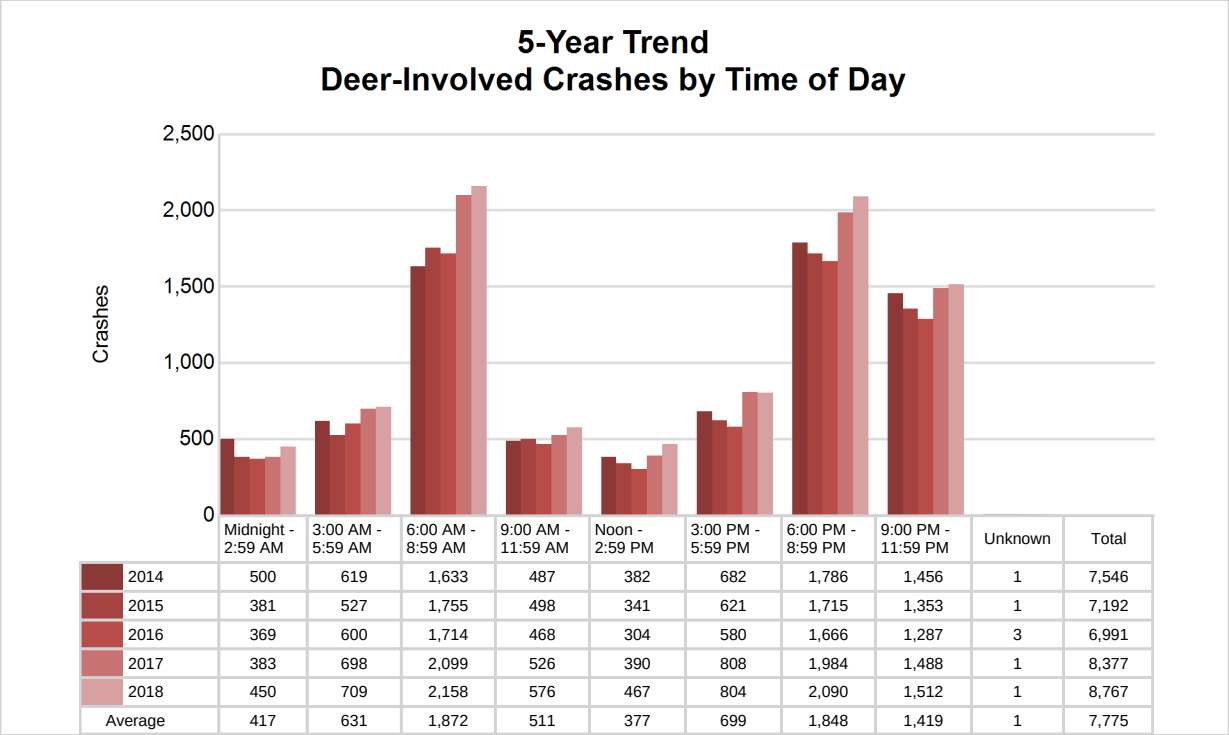


MDOT Region - North (continued)

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

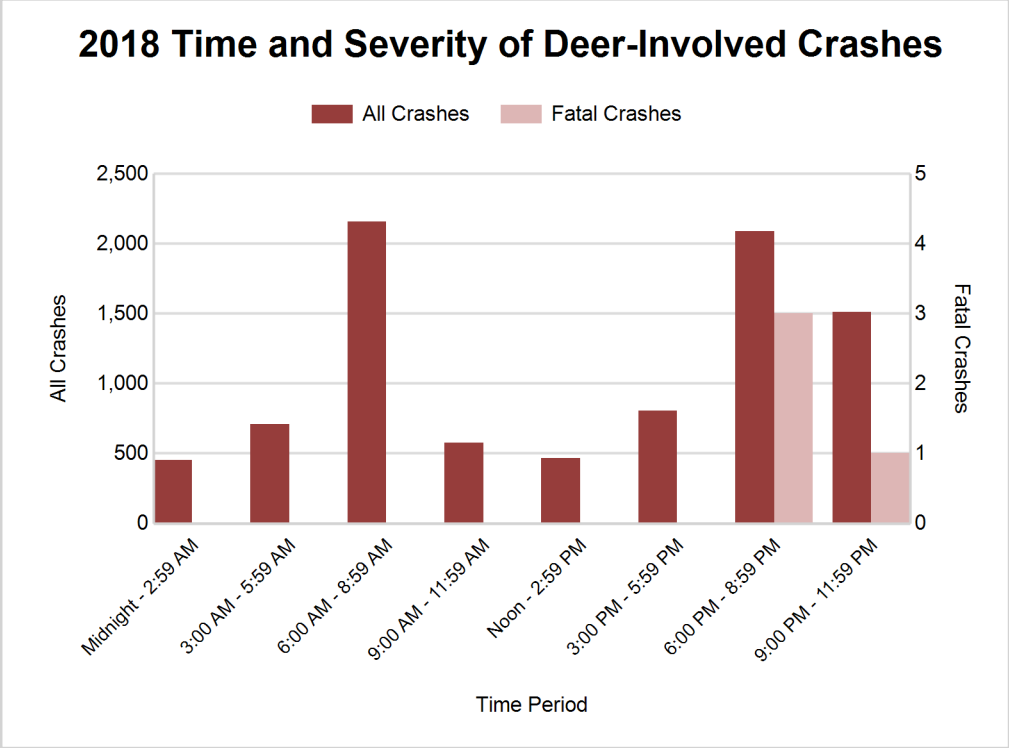
Time of Day	2014		2015		2016		2017		2018	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Midnight - 2:59 AM	500	0	381	0	369	1	383	0	450	0
3:00 AM - 5:59 AM	619	0	527	0	600	0	698	0	709	0
6:00 AM - 8:59 AM	1,633	0	1,755	1	1,714	0	2,099	0	2,158	0
9:00 AM - 11:59 AM	487	0	498	0	468	0	526	0	576	0
Noon - 2:59 PM	382	0	341	0	304	0	390	0	467	0
3:00 PM - 5:59 PM	682	0	621	0	580	0	808	0	804	0
6:00 PM - 8:59 PM	1,786	0	1,715	0	1,666	1	1,984	1	2,090	3
9:00 PM - 11:59 PM	1,456	0	1,353	0	1,287	1	1,488	1	1,512	1
Unknown	1	0	1	0	3	0	1	0	1	0
Total	**7,546**	**0**	**7,192**	**1**	**6,991**	**3**	**8,377**	**2**	**8,767**	**4**

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



	Midnight - 2:59 AM	3:00 AM - 5:59 AM	6:00 AM - 8:59 AM	9:00 AM - 11:59 AM	Noon - 2:59 PM	3:00 PM - 5:59 PM	6:00 PM - 8:59 PM	9:00 PM - 11:59 PM	Unknown	Total
2014	500	619	1,633	487	382	682	1,786	1,456	1	7,546
2015	381	527	1,755	498	341	621	1,715	1,353	1	7,192
2016	369	600	1,714	468	304	580	1,666	1,287	3	6,991
2017	383	698	2,099	526	390	808	1,984	1,488	1	8,377
2018	450	709	2,158	576	467	804	2,090	1,512	1	8,767
Average	417	631	1,872	511	377	699	1,848	1,419	1	7,775

MDOT Region - North (continued)



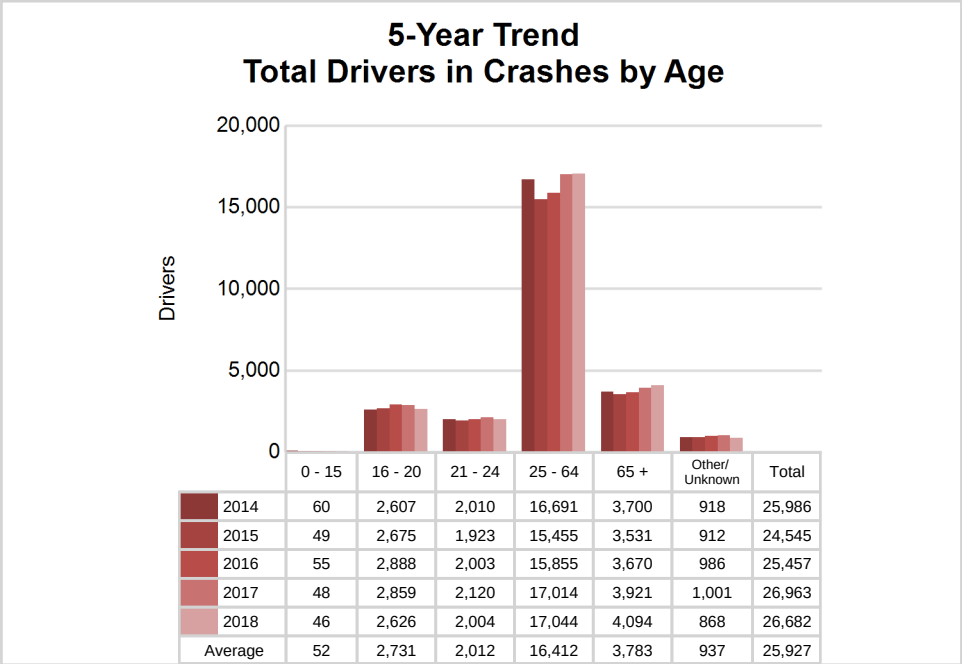
2018 - Reported Motor Vehicle Crashes by County

County	Crashes											Persons	
	Total	Fatal	Injury	Property Damage	Inter-state	US Route	State Route	Local Street	Alcohol-Involved	Drug-Involved	Deer-Involved	Fatalities	Injuries
Alcona	587	0	50	537	0	114	138	335	10	7	434	0	66
Alpena	857	1	113	743	0	196	199	461	36	18	367	1	133
Antrim	925	2	105	818	0	199	194	526	28	8	497	2	143
Benzie	645	3	62	580	0	174	117	352	34	14	327	4	85
Charlevoix	1,317	1	124	1,192	0	345	265	700	30	9	729	2	162
Cheboygan	1,081	1	129	951	248	58	262	507	22	3	579	1	164
Crawford	592	2	92	498	181	24	157	227	22	7	288	2	113
Emmet	1,533	3	179	1,351	3	512	155	859	61	16	625	4	238
Grand Traverse	3,665	6	583	3,076	0	1,046	469	2,147	119	33	752	6	844
Iosco	712	6	128	578	0	203	159	350	44	10	266	8	166
Kalkaska	620	5	83	532	0	136	171	313	21	6	280	5	106
Leelanau	680	3	77	600	0	0	334	346	38	8	338	4	103
Manistee	969	4	99	866	0	245	213	511	24	8	536	4	134
Missaukee	697	1	74	622	0	0	237	460	18	3	406	1	104
Montmorency	335	1	34	300	0	0	162	173	13	4	205	1	53
Ogemaw	775	4	86	685	120	0	237	413	19	9	411	4	141
Oscoda	245	2	30	213	0	0	136	108	7	2	133	2	48
Otsego	919	1	109	809	189	0	270	458	41	14	342	1	151
Presque Isle	659	1	41	617	0	122	230	306	15	3	507	1	56
Roscommon	799	3	141	655	125	90	228	352	31	5	310	3	223
Wexford	1,307	5	175	1,127	0	370	388	544	43	10	435	6	230
Total	**19,919**	**55**	**2,514**	**17,350**	**866**	**3,834**	**4,721**	**10,448**	**676**	**197**	**8,767**	**62**	**3,463**

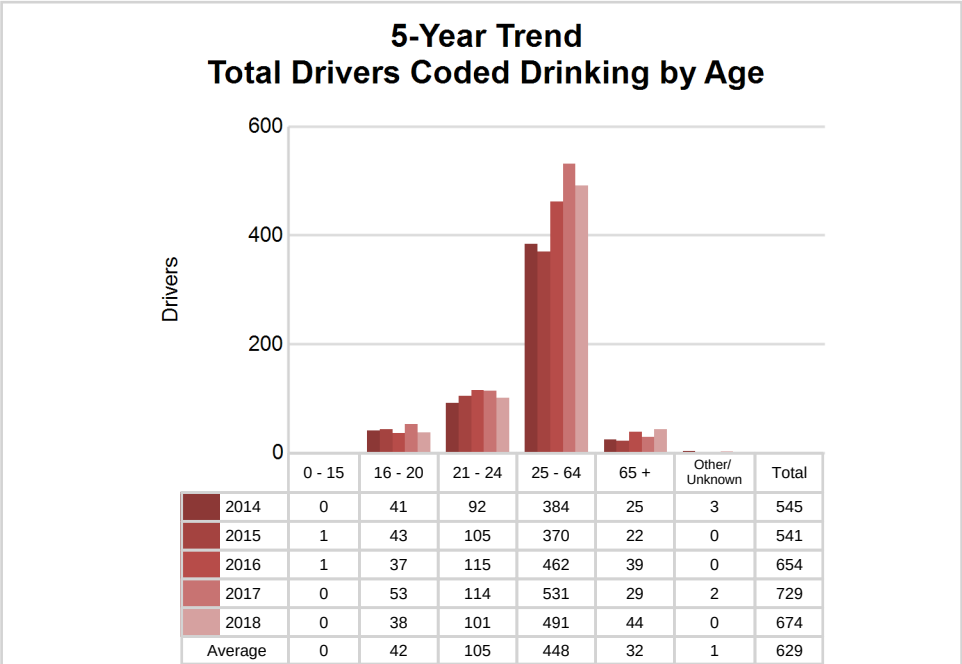
MDOT Region - North (continued)

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

Driver Age	2014		2015		2016		2017		2018	
	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	60	0	49	1	55	1	48	0	46	0
16 - 20	2,607	41	2,675	43	2,888	37	2,859	53	2,626	38
21 - 24	2,010	92	1,923	105	2,003	115	2,120	114	2,004	101
25 - 64	16,691	384	15,455	370	15,855	462	17,014	531	17,044	491
65 +	3,700	25	3,531	22	3,670	39	3,921	29	4,094	44
Unknown	918	3	912	0	986	0	1,001	2	868	0
Total	**25,986**	**545**	**24,545**	**541**	**25,457**	**654**	**26,963**	**729**	**26,682**	**674**



	0 - 15	16 - 20	21 - 24	25 - 64	65 +	Other/ Unknown	Total
2014	60	2,607	2,010	16,691	3,700	918	25,986
2015	49	2,675	1,923	15,455	3,531	912	24,545
2016	55	2,888	2,003	15,855	3,670	986	25,457
2017	48	2,859	2,120	17,014	3,921	1,001	26,963
2018	46	2,626	2,004	17,044	4,094	868	26,682
Average	52	2,731	2,012	16,412	3,783	937	25,927

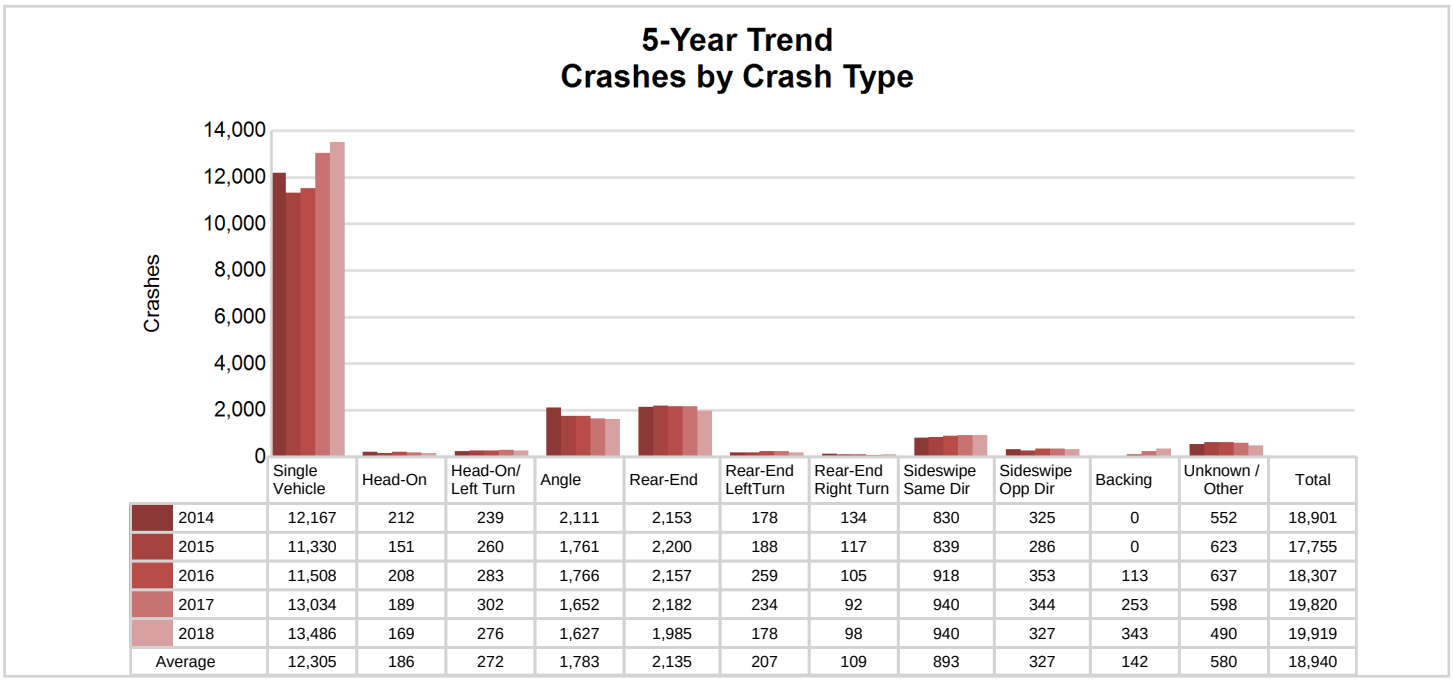


	0 - 15	16 - 20	21 - 24	25 - 64	65 +	Other/ Unknown	Total
2014	0	41	92	384	25	3	545
2015	1	43	105	370	22	0	541
2016	1	37	115	462	39	0	654
2017	0	53	114	531	29	2	729
2018	0	38	101	491	44	0	674
Average	0	42	105	448	32	1	629

MDOT Region - North (continued)

5-Year Trend - Crashes by Crash Type

Crash Type	2014		2015		2016		2017		2018	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Single motor vehicle	12,167	32	11,330	37	11,508	38	13,034	30	13,486	31
Head-on	212	12	151	13	208	15	189	9	169	8
Head-on / left turn	239	2	260	1	283	3	302	2	276	1
Angle	2,111	5	1,761	4	1,766	15	1,652	8	1,627	6
Rear-end	2,153	1	2,200	3	2,157	1	2,182	4	1,985	4
Rear-end left turn	178	0	188	1	259	3	234	1	178	0
Rear-end right turn	134	0	117	0	105	0	92	0	98	0
Sideswipe same direction	830	0	839	0	918	1	940	1	940	0
Sideswipe opposite direction	325	0	286	4	353	3	344	0	327	1
Backing	0	0	0	0	113	0	253	0	343	0
Other / Unknown	552	2	623	1	637	0	598	4	490	4
Uncoded and Errors	3	0	0	0	24	0	0	0	0	0
Total	**18,904**	**54**	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**



	Single Vehicle	Head-On	Head-On/ Left Turn	Angle	Rear-End	Rear-End LeftTurn	Rear-End Right Turn	Sideswipe Same Dir	Sideswipe Opp Dir	Backing	Unknown / Other	Total
2014	12,167	212	239	2,111	2,153	178	134	830	325	0	552	18,901
2015	11,330	151	260	1,761	2,200	188	117	839	286	0	623	17,755
2016	11,508	208	283	1,766	2,157	259	105	918	353	113	637	18,307
2017	13,034	189	302	1,652	2,182	234	92	940	344	253	598	19,820
2018	13,486	169	276	1,627	1,985	178	98	940	327	343	490	19,919
Average	12,305	186	272	1,783	2,135	207	109	893	327	142	580	18,940

MDOT Region - North (continued)

2018 - 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	3	0	0	0	0	0	0	0
16 - 20	53	50	33	38	0	10	10	12	6
21 - 24	115	104	78	101	0	6	32	22	41
25 - 64	593	537	396	491	2	46	117	127	199
65 +	72	72	43	44	0	12	14	6	12
Unknown	40	0	0	0	0	0	0	0	0
Total	**873**	**766**	**550**	**674**	**2**	**74**	**173**	**167**	**258**

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

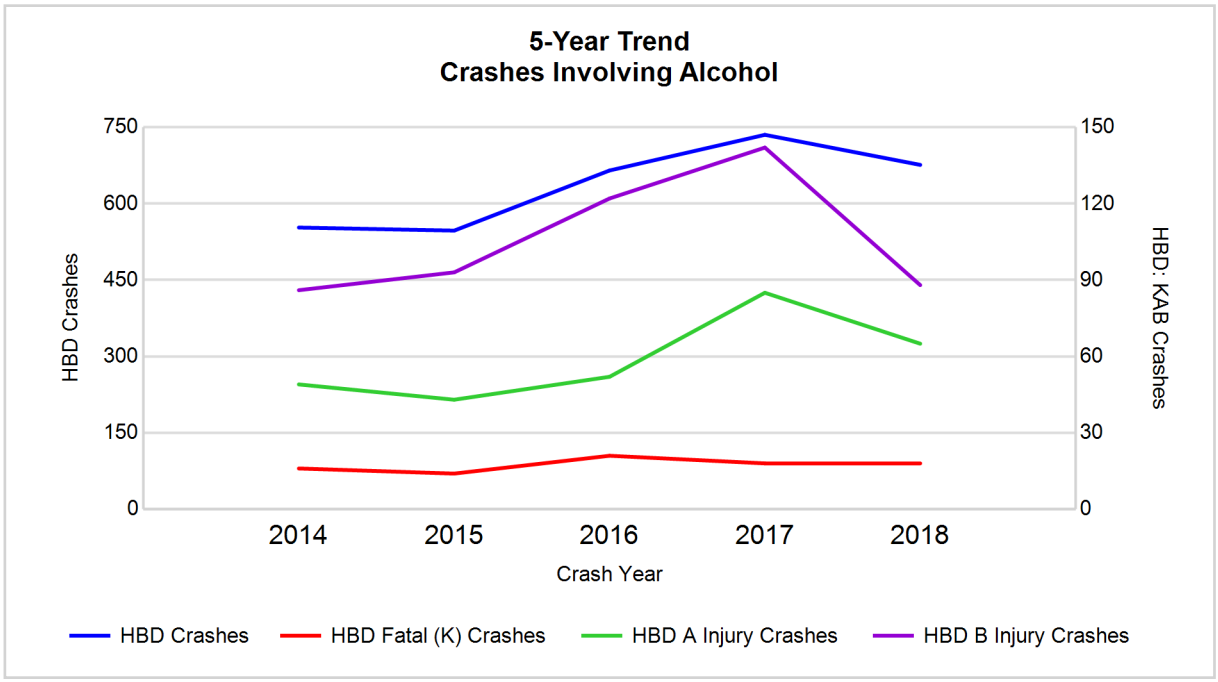
In 2018, there were 873 drivers in alcohol-involved crashes; 674 (77.2%) of those drivers were coded as had-been-drinking by the officer on the crash form.

- 340 (50.4%) of the 674 drivers had a blood alcohol concentration (BAC) of 0.08 g/dL (grams per deciliter) or greater, and 167 (49.1%) of the 340 drivers had a BAC at or above 0.17 g/dL.
- 550 (81.6%) of the 674 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
2014	18,904	553	2.9	54	16	29.6	291	49	16.8	679	86	12.7
2015	17,755	547	3.1	64	14	21.9	267	43	16.1	707	93	13.2
2016	18,331	665	3.6	79	21	26.6	324	52	16.0	829	122	14.7
2017	19,820	735	3.7	59	18	30.5	386	85	22.0	872	142	16.3
2018	19,919**	676	3.4	55	18	32.7**	349	65	18.6	812	88	10.8*

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



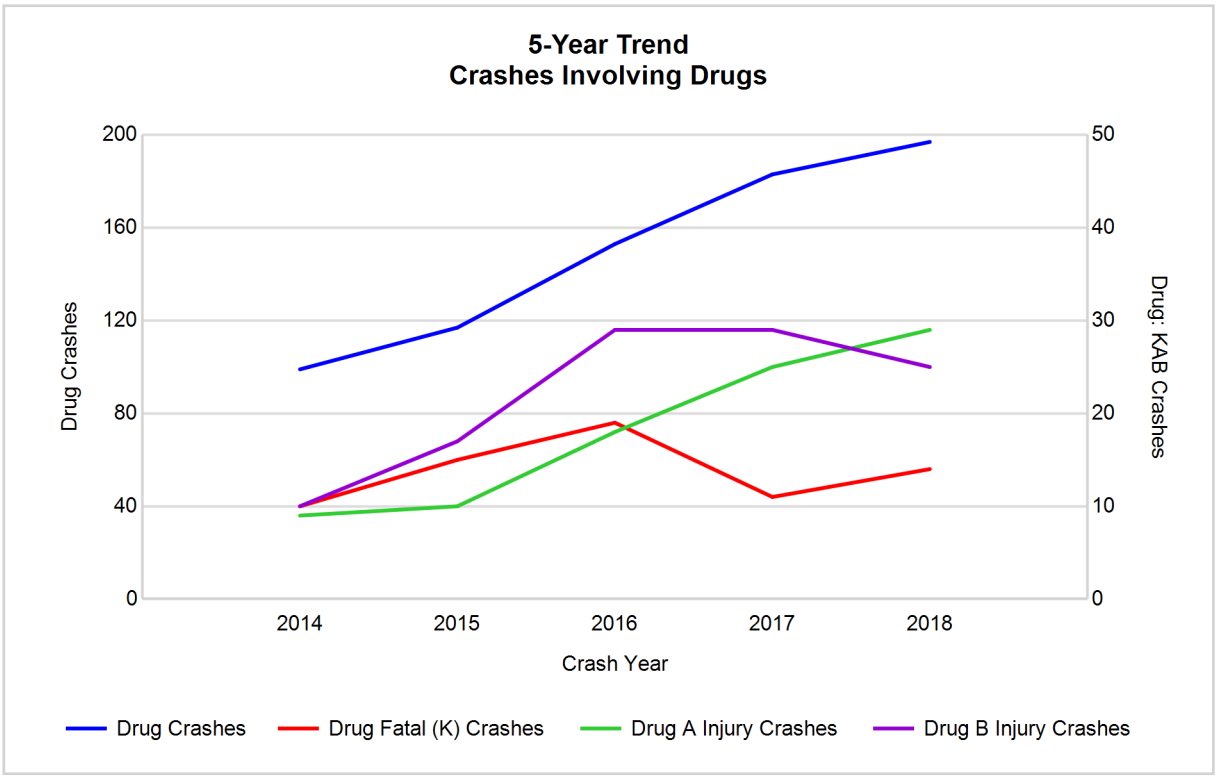
Note: Had-Been-Drinking (HBD)

MDOT Region - North (continued)

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
2014	18,904	99	0.5	54	10	18.5	291	9	3.1	679	10	1.5
2015	17,755	117	0.7	64	15	23.4	267	10	3.7	707	17	2.4
2016	18,331	153	0.8	79	19	24.1	324	18	5.6	829	29	3.5
2017	19,820	183	0.9	59	11	18.6	386	25	6.5	872	29	3.3
2018	19,919**	197**	1.0**	55	14	25.5**	349	29**	8.3**	812	25	3.1

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

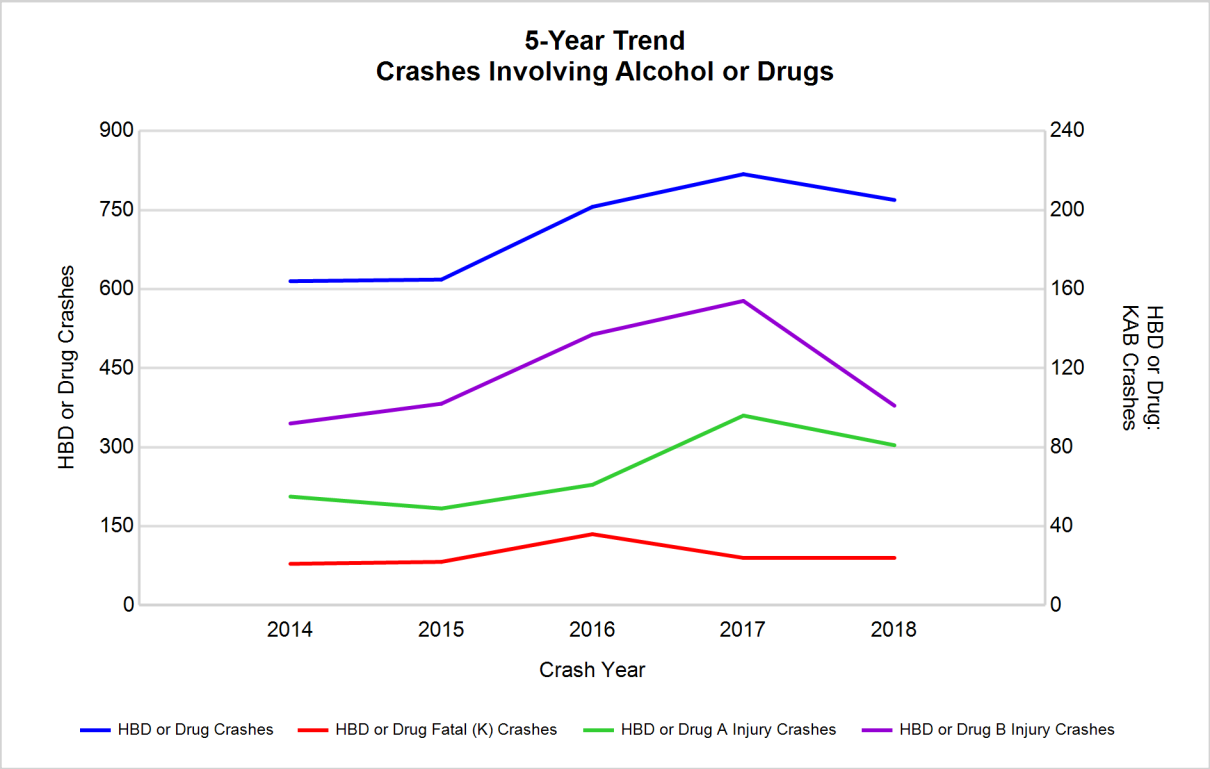


MDOT Region - North (continued)

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
2014	18,904	615	3.3	54	21	38.9	291	55	18.9	679	92	13.5
2015	17,755	618	3.5	64	22	34.4	267	49	18.4	707	102	14.4
2016	18,331	756	4.1	79	36	45.6	324	61	18.8	829	137	16.5
2017	19,820	818	4.1	59	24	40.7	386	96	24.9	872	154	17.7
2018	19,919**	769	3.9	55	24	43.6	349	81	23.2	812	101	12.4*

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)

MDOT Region - North (continued)

2018 - 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	20,270	19,166	94.6	42	24	57.1	248	205	82.7	673	615	91.4	1,494	1,434	96.0	17,264	16,852	97.6
Motor home	106	95	89.6	0	0	0.0	0	0	0.0	6	3	50.0	8	8	100.0	87	84	96.6
Pickup truck	5,665	5,287	93.3	7	1	14.3	70	45	64.3	177	144	81.4	318	300	94.3	4,947	4,787	96.8
Small truck under 10,000 lbs. GVWR	226	210	92.9	0	0	0.0	2	2	100.0	4	3	75.0	13	11	84.6	199	194	97.5
Motorcycle	218	153	70.2	7	5	71.4	64	41	64.1	73	58	79.5	32	22	68.8	41	27	65.9
Moped / goped	14	8	57.1	0	0	0.0	1	1	100.0	7	4	57.1	5	3	60.0	1	0	0.0
Go-cart / golf cart	5	1	20.0	0	0	0.0	1	0	0.0	1	0	0.0	0	0	0.0	2	1	50.0
Snowmobile	20	20	100.0	0	0	0.0	8	8	100.0	4	4	100.0	4	4	100.0	4	4	100.0
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	74	36	48.6	3	3	100.0	17	6	35.3	21	10	47.6	18	10	55.6	14	7	50.0
Other	98	69	70.4	0	0	0.0	0	0	0.0	2	1	50.0	5	2	40.0	83	66	79.5
Truck/bus over 10,000 lbs.	639	568	88.9	1	1	100.0	7	3	42.9	28	15	53.6	38	14	36.8	550	534	97.1
Unknown	226	2	0.9	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	8	1	12.5
Total	**27,561**	**25,615**	**92.9**	**60**	**34**	**56.7**	**418**	**311**	**74.4**	**996**	**857**	**86.0**	**1,935**	**1,808**	**93.4**	**23,200**	**22,557**	**97.2**

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.

2018 - 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	254	205	80.7	1	1	100.0	15	11	73.3	62	44	71.0	139	114	82.0	37	35	94.6
16 - 20	2,760	2,639	95.6	5	1	20.0	57	42	73.7	146	129	88.4	252	236	93.7	2,293	2,227	97.1
21 - 24	2,072	1,952	94.2	11	4	36.4	31	14	45.2	94	75	79.8	146	132	90.4	1,785	1,725	96.6
25 - 64	17,388	16,741	96.3	27	15	55.6	241	183	75.9	520	451	86.7	1,096	1,032	94.2	15,419	15,021	97.4
65 +	4,218	4,076	96.6	16	13	81.3	74	61	82.4	173	158	91.3	302	294	97.4	3,640	3,547	97.4
Unknown	869	2	0.2	0	0	0.0	0	0	0.0	1	0	0.0	0	0	0.0	26	2	7.7
Total	**27,561**	**25,615**	**92.9**	**60**	**34**	**56.7**	**418**	**311**	**74.4**	**996**	**857**	**86.0**	**1,935**	**1,808**	**93.4**	**23,200**	**22,557**	**97.2**

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.

MDOT Region - North (continued)

5-Year Trend - Restraint Use Among Drivers

Restraint Use	2014			2015			2016			2017			2018		
	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	202	0	22	120	1	18	92	0	17	83	1	30	48	1	4
Shoulder belt only used	39	0	9	45	0	11	84	0	11	129	0	13	124	1	17
Lap belt only used	86	0	5	79	0	5	71	0	13	57	0	3	48	2	6
Both lap & shoulder belts used	23,839	17	1,839	22,521	15	1,913	23,299	28	2,061	24,672	25	2,197	24,520	17	2,088
No belts used	202	5	75	182	15	81	198	12	92	213	10	90	189	15	86
Child restraint used	1	0	0	0	0	0	9	0	1	7	0	1	3	0	1
Child restraint not used, unavailable or improper use	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Restraint failure	7	1	1	4	0	0	11	0	2	9	0	2	6	0	2
Restraint use unknown	515	2	66	479	5	49	872	3	55	1,320	2	72	1,320	3	67
Helmet worn	257	7	192	216	8	150	244	6	185	217	6	151	191	8	145
Helmet not worn	65	1	48	91	3	68	84	9	58	84	6	57	70	2	56
Helmet use unknown	9	0	3	17	1	9	28	3	15	13	2	5	19	0	9
Uncoded & errors	763	0	2	790	0	2	465	0	3	159	0	0	144	0	0
Total	**25,986**	**33**	**2,262**	**24,545**	**48**	**2,307**	**25,457**	**61**	**2,513**	**26,963**	**52**	**2,621**	**26,682**	**49**	**2,481**

5-Year Trend - Restraint Use Among Drivers Coded Drinking

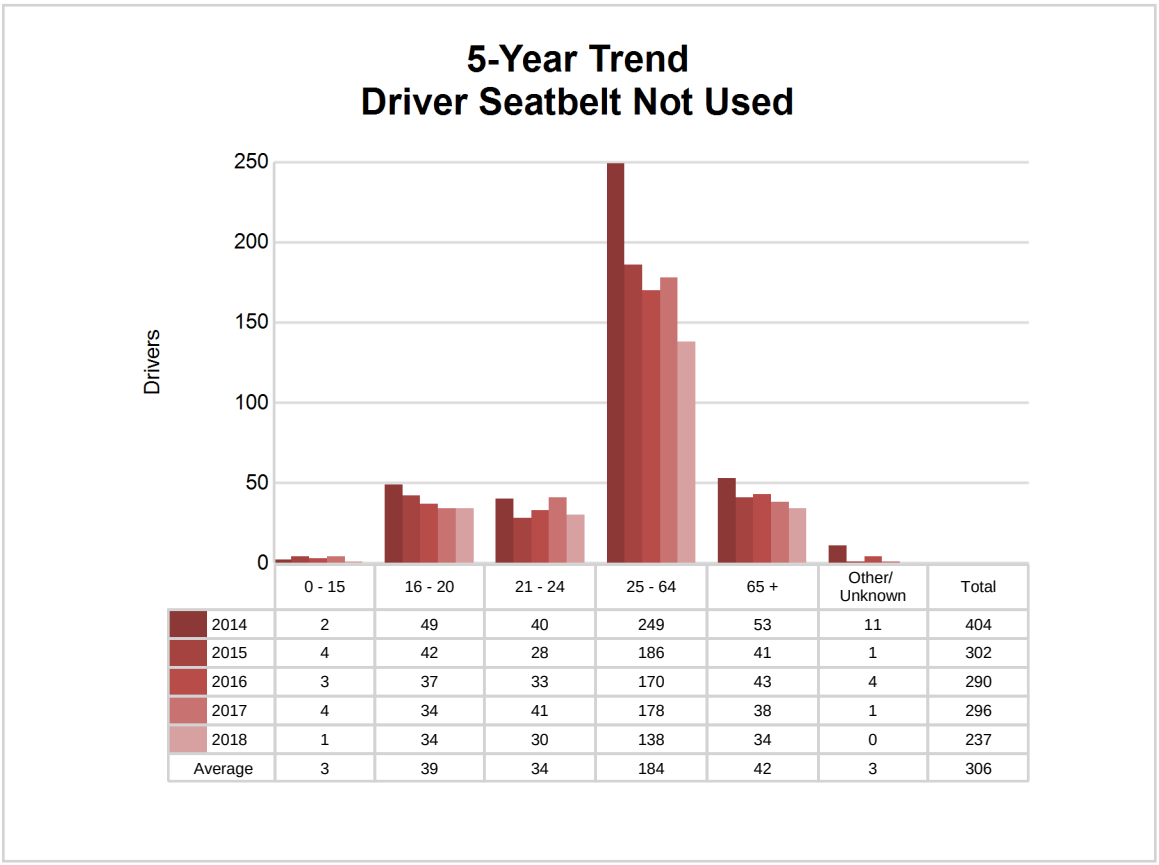
Restraint Use	2014			2015			2016			2017			2018		
	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers
No belts available	6	0	1	4	0	3	3	0	1	3	0	2	3	1	2
Shoulder belt only used	2	0	2	2	0	0	2	0	2	6	0	2	3	0	2
Lap belt only used	2	0	0	1	0	1	1	0	1	1	0	0	1	1	0
Both lap & shoulder belts used	375	3	100	392	2	120	479	4	141	506	2	144	460	3	119
No belts used	38	3	30	42	5	25	42	5	27	43	7	34	48	6	28
Child restraint used	0	0	0	0	0	0	1	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	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0
Restraint use unknown	87	1	31	74	1	24	89	0	28	133	1	36	125	1	28
Helmet worn	18	3	13	12	4	8	19	3	13	12	1	10	13	2	11
Helmet not worn	12	0	12	12	0	12	11	3	7	19	2	14	19	1	15
Helmet use unknown	1	0	0	1	0	1	3	1	2	4	2	1	1	0	1
Uncoded & errors	2	0	0	1	0	0	3	0	2	2	0	0	1	0	0
Total	**545**	**10**	**189**	**541**	**12**	**194**	**654**	**16**	**225**	**729**	**15**	**243**	**674**	**15**	**206**

MDOT Region - North (continued)

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

Age Group	2014			2015			2016			2017			2018		
	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	2	0	0	4	0	1	3	0	2	4	0	3	1	0	0
16 - 20	49	1	14	42	1	18	37	1	17	34	2	15	34	2	17
21 - 24	40	0	16	28	1	8	33	1	16	41	2	21	30	4	15
25 - 64	249	3	58	186	9	62	170	7	60	178	6	63	138	8	52
65 +	53	1	9	41	5	10	43	3	13	38	1	18	34	2	6
Unknown	11	0	0	1	0	0	4	0	1	1	0	0	0	0	0
Total	**404**	**5**	**97**	**302**	**16**	**99**	**290**	**12**	**109**	**296**	**11**	**120**	**237**	**16**	**90**

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



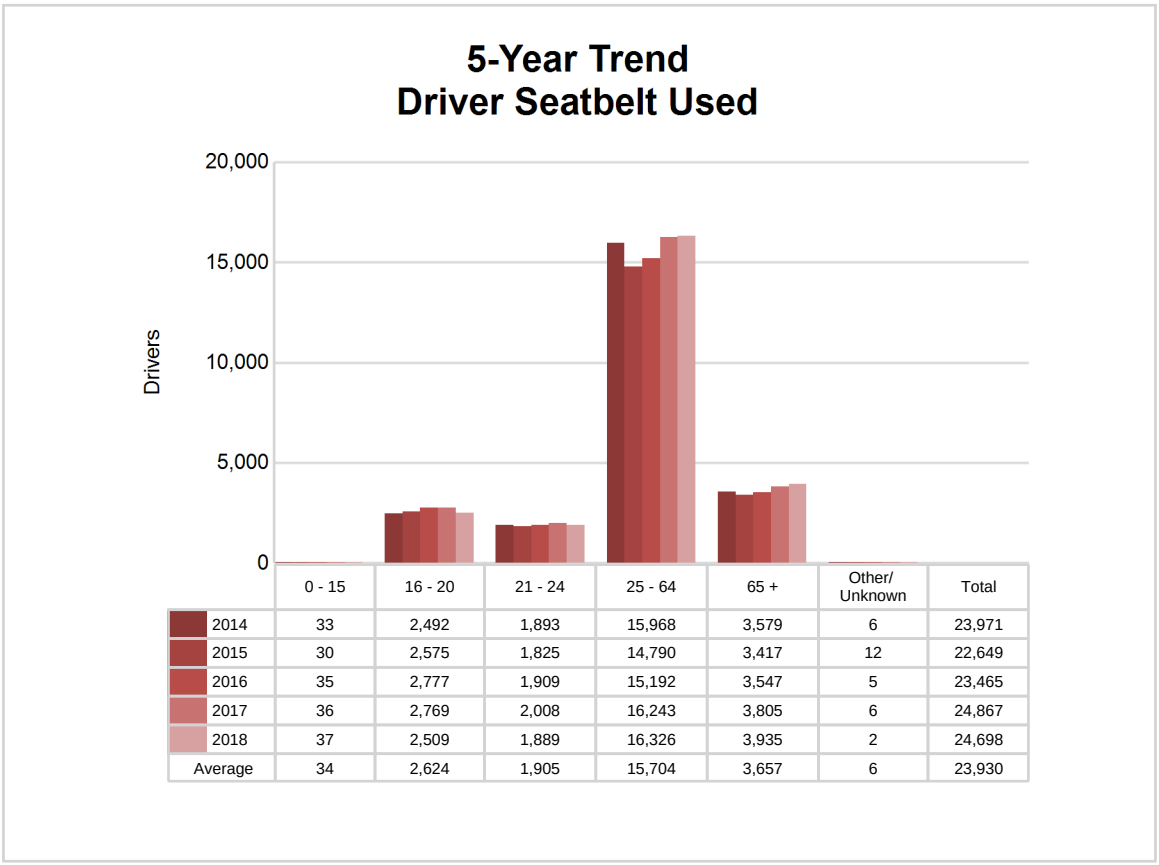
	0 - 15	16 - 20	21 - 24	25 - 64	65 +	Other/ Unknown	Total
2014	2	49	40	249	53	11	404
2015	4	42	28	186	41	1	302
2016	3	37	33	170	43	4	290
2017	4	34	41	178	38	1	296
2018	1	34	30	138	34	0	237
Average	3	39	34	184	42	3	306

MDOT Region - North (continued)

5-Year Trend - Seatbelt Used Among Drivers by Age

Age Group	2014			2015			2016			2017			2018		
	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	33	0	4	30	0	5	35	0	7	36	0	1	37	0	5
16 - 20	2,492	2	224	2,575	3	283	2,777	5	298	2,769	2	322	2,509	1	281
21 - 24	1,893	3	171	1,825	0	176	1,909	2	184	2,008	1	202	1,889	3	163
25 - 64	15,968	10	1,124	14,790	7	1,130	15,192	8	1,269	16,243	13	1,339	16,326	6	1,283
65 +	3,579	3	330	3,417	5	334	3,547	13	329	3,805	9	350	3,935	10	381
Unknown	6	0	1	12	0	1	5	0	0	6	0	1	2	0	0
Total	**23,971**	**18**	**1,854**	**22,649**	**15**	**1,929**	**23,465**	**28**	**2,087**	**24,867**	**25**	**2,215**	**24,698**	**20**	**2,113**

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



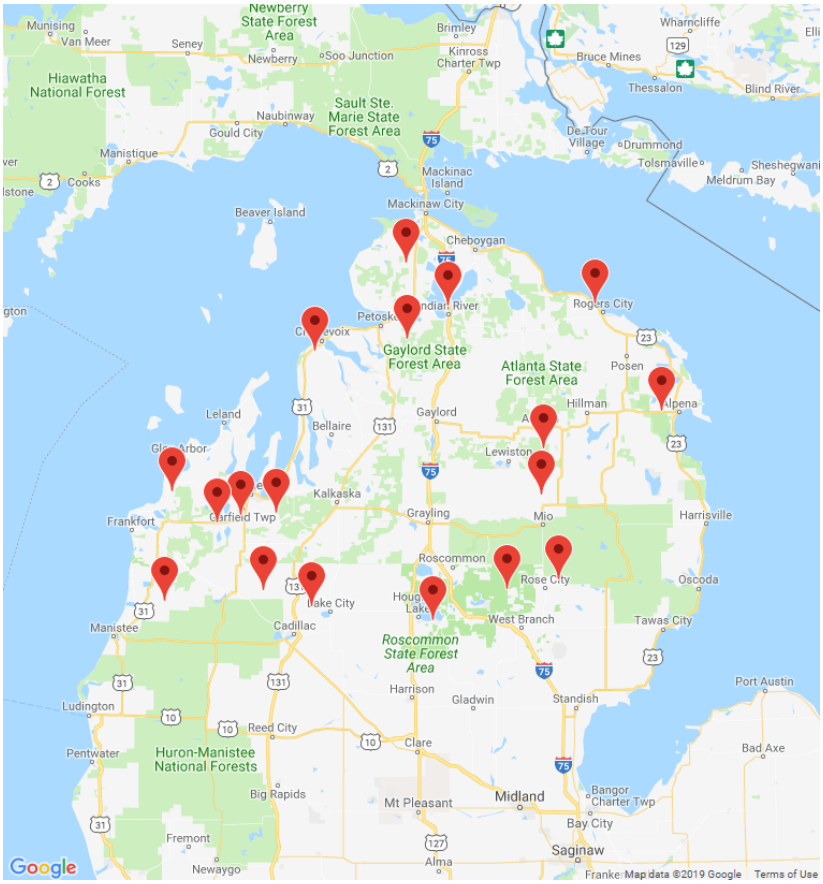
	0 - 15	16 - 20	21 - 24	25 - 64	65 +	Other/ Unknown	Total
2014	33	2,492	1,893	15,968	3,579	6	23,971
2015	30	2,575	1,825	14,790	3,417	12	22,649
2016	35	2,777	1,909	15,192	3,547	5	23,465
2017	36	2,769	2,008	16,243	3,805	6	24,867
2018	37	2,509	1,889	16,326	3,935	2	24,698
Average	34	2,624	1,905	15,704	3,657	6	23,930

MDOT Region - North (continued)

5-Year Trend - Drivers in Crashes by Hazardous Action

Hazardous Action	2014		2015		2016		2017		2018	
	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	15,291	29	14,721	31	14,762	45	16,142	37	16,314	32
Speed too fast	3,284	23	2,462	26	2,922	26	3,006	18	2,807	12
Speed too slow	33	0	28	0	24	0	23	0	12	0
Failed to yield	1,952	4	1,829	6	1,909	10	1,924	6	1,946	6
Disregard traffic control	288	3	270	0	258	5	253	2	255	3
Drove wrong way	13	0	12	0	15	0	8	1	8	0
Drove left of center	157	5	131	9	179	6	181	6	180	5
Improper passing	114	1	117	0	112	0	101	0	123	0
Improper lane use	245	2	266	0	291	3	298	0	293	1
Improper turn	163	0	146	0	166	1	158	0	177	0
Improper/no signal	54	0	34	0	26	0	17	0	25	0
Improper backing	405	0	385	0	370	0	361	0	375	0
Unable to stop in assured clear distance	2,136	1	2,194	3	2,184	1	2,155	3	2,026	1
Other	740	2	747	6	781	5	745	2	691	2
Unknown	373	3	386	6	589	12	688	9	608	13
Reckless driving	70	2	114	2	99	1	85	3	99	2
Careless/negligent driving	569	1	596	5	644	5	666	4	620	7
Uncoded & errors	99	0	107	0	126	3	152	0	123	1
Total	**25,986**	**76**	**24,545**	**94**	**25,457**	**123**	**26,963**	**91**	**26,682**	**85**

MDOT Region - North (continued)



The picture above represents all 2018 alcohol-involved fatal crashes in MDOT Region - North.

In 2018, there were 676 alcohol-involved crashes in MDOT Region - North:

18	K - Fatal Crashes
65	A - Suspected Serious Injury Crashes
88	B - Suspected Minor Injury Crashes
83	C - Possible Injury Crashes
422	O - Property Damage Only/No Injury Crashes

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