July 2020
Revised 8/24/2020

MICHIGAN
Office of Highway Safety Planning
2019

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.

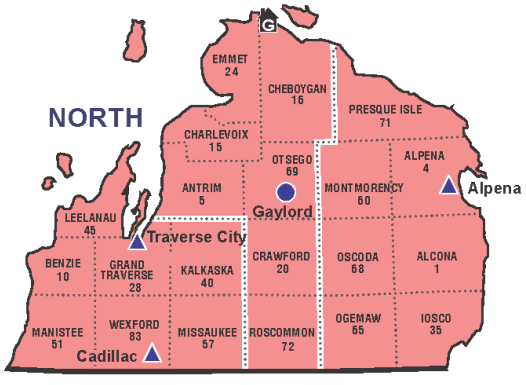
KABCO Injury Indicator:
K = Killed
A = Suspected Serious Injury
B = Suspected Minor Injury
C = Possible Injury
O = No Injury
Property Damage Only (PDO)

UMTRI
University of Michigan
Transportation Research Institute

MDOT Region - North

2019 Traffic Crash Data & 2015-2019 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 2019:

There were 26,845 drivers involved in 19,727 motor vehicle crashes in MDOT Region North. Of those crashes, 62 were classified as fatal, resulting in 67 fatalities. An additional 3,322 persons were injured.

MDOT Region North experienced the highest number of motor vehicle crashes (2,498) in November, the highest number of fatal crashes (8) in June, July, and October, and the highest number of persons killed (9) in July, September, and October.

Michigan driver statistics indicate 5.3 percent of licensed drivers in MDOT Region North were age 16-20, and 9.6 percent of drivers in crashes were also in that age group.

2019 - Crashes and Injuries by Month

Month	Crashes				Persons	
	Total	Fatal	Injury	Property Damage Only (PDO)	Fatalities	Injuries
January	1,983	5	222	1,756	5	286
February	1,561	2	196	1,363	2	261
March	1,455	1	138	1,316	1	177
April	1,244	2	135	1,107	2	178
May	1,198	4	167	1,027	4	224
June	1,616	8	221	1,387	8	303
July	1,551	8	288	1,255	9	414
August	1,418	5	246	1,167	5	366
September	1,288	7	183	1,098	9	266
October	1,807	8	201	1,598	9	270
November	2,498	5	240	2,253	5	306
December	2,108	7	201	1,900	8	271
Total	**19,727**	**62**	**2,438**	**17,227**	**67**	**3,322**

2019 - Driver Statistics

Age Group	MDOT Region - North			Driver Rates	
	2019 Population	Licensed Drivers	Drivers in Crashes	Per 10k Population	Per 10k Licensed
0 - 15	82,814	2,740	48	5.8	175.2
16 - 20	25,830	22,053	2,574	996.5	1,167.2
21 - 24	19,904	19,352	2,033	1,021.4	1,050.5
25 - 64	252,390	244,804	17,175	680.5	701.6
65 +	128,991	124,600	4,127	319.9	331.2
Unknown	0	0	888	- -	- -
Total	**509,929**	**413,549**	**26,845**	**526.4**	**649.1**

2019 - 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	19,566	72.9	62	61.4	2,718	16,786
Motor home	81	0.3	0	0.0	15	66
Pickup truck	5,688	21.2	21	20.8	757	4,910
Small truck under 10,000 lbs. GVWR	177	0.7	0	0.0	24	153
Motorcycle	168	0.6	9	8.9	118	41
Moped / goped	21	0.1	0	0.0	20	1
Go-cart / golf cart	0	0.0	0	0.0	0	0
Snowmobile	49	0.2	1	1.0	35	13
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	72	0.3	2	2.0	56	14
Other	93	0.3	0	0.0	12	81
Truck/bus over 10,000 lbs.	658	2.5	6	5.9	103	549
Unknown	272	1.0	0	0.0	17	255
Total	**26,845**	**100.0**	**101**	**100.0**	**3,875**	**22,869**

MDOT Region - North (continued)

5-Year Trend - Crashes by Month

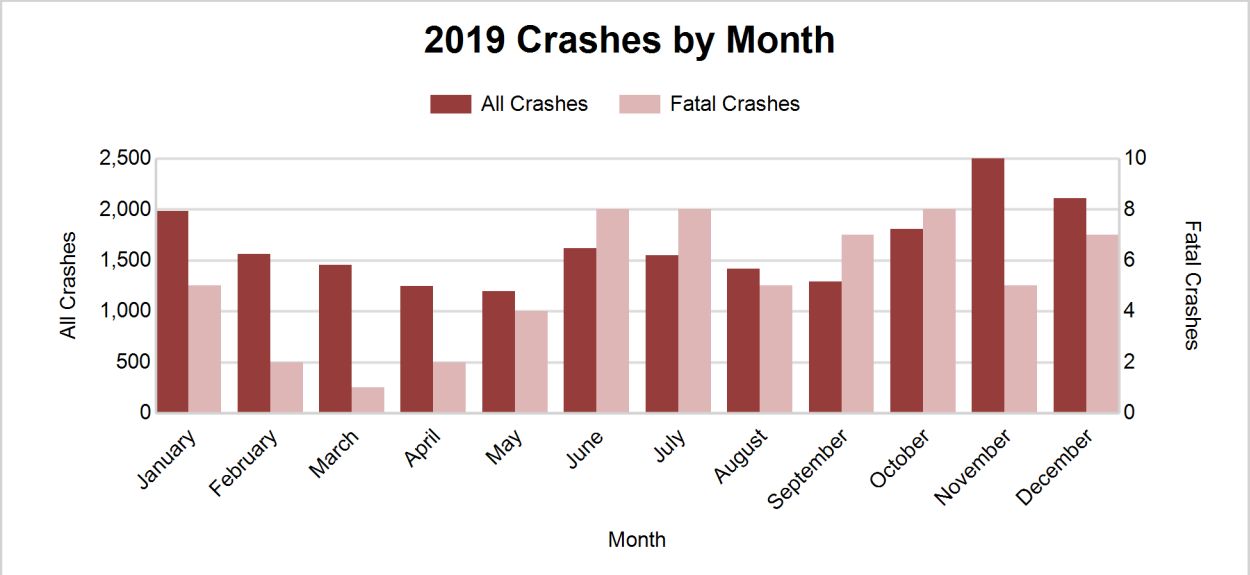
Month	2015		2016		2017		2018		2019	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
January	1,797	5	1,633	5	1,759	4	1,843	1	1,983	5
February	1,538	4	1,459	4	1,482	2	1,506	4	1,561	2
March	1,125	2	1,152	2	1,323	5	1,479	4	1,455	1
April	1,074	2	1,163	4	943	3	1,469	3	1,244	2
May	1,173	7	1,241	7	1,286	3	1,266	6	1,198	4
June	1,606	4	1,514	6	1,491	5	1,622	7	1,616	8
July	1,505	9	1,572	9	1,557	9	1,603	4	1,551	8
August	1,363	9	1,395	11	1,467	4	1,390	3	1,418	5
September	1,264	8	1,366	11	1,621	8	1,292	5	1,288	7
October	1,684	2	1,546	8	2,014	5	1,782	8	1,807	8
November	2,187	7	2,129	6	2,353	5	2,576	7	2,498	5
December	1,439	5	2,161	6	2,524	6	2,091	3	2,108	7
Total	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**	**19,727**	**62**

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	2015		2016		2017		2018		2019	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Monday	2,469	7	2,573	9	2,740	8	2,859	9	2,818	7
Tuesday	2,462	9	2,571	12	2,816	6	3,109	8	2,844	9
Wednesday	2,688	15	2,824	8	2,918	5	2,825	6	3,139	4
Thursday	2,698	8	2,746	13	3,054	10	2,974	6	2,989	7
Friday	2,890 †	13	3,055 †	12	3,245 †	6	3,383 †	9	3,278 †	11
Saturday	2,437	7	2,408	14	2,736	15	2,547	10	2,497	14
Sunday	2,111	5	2,154	11	2,311	9	2,222	7	2,162	10
Total	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**	**19,727**	**62**

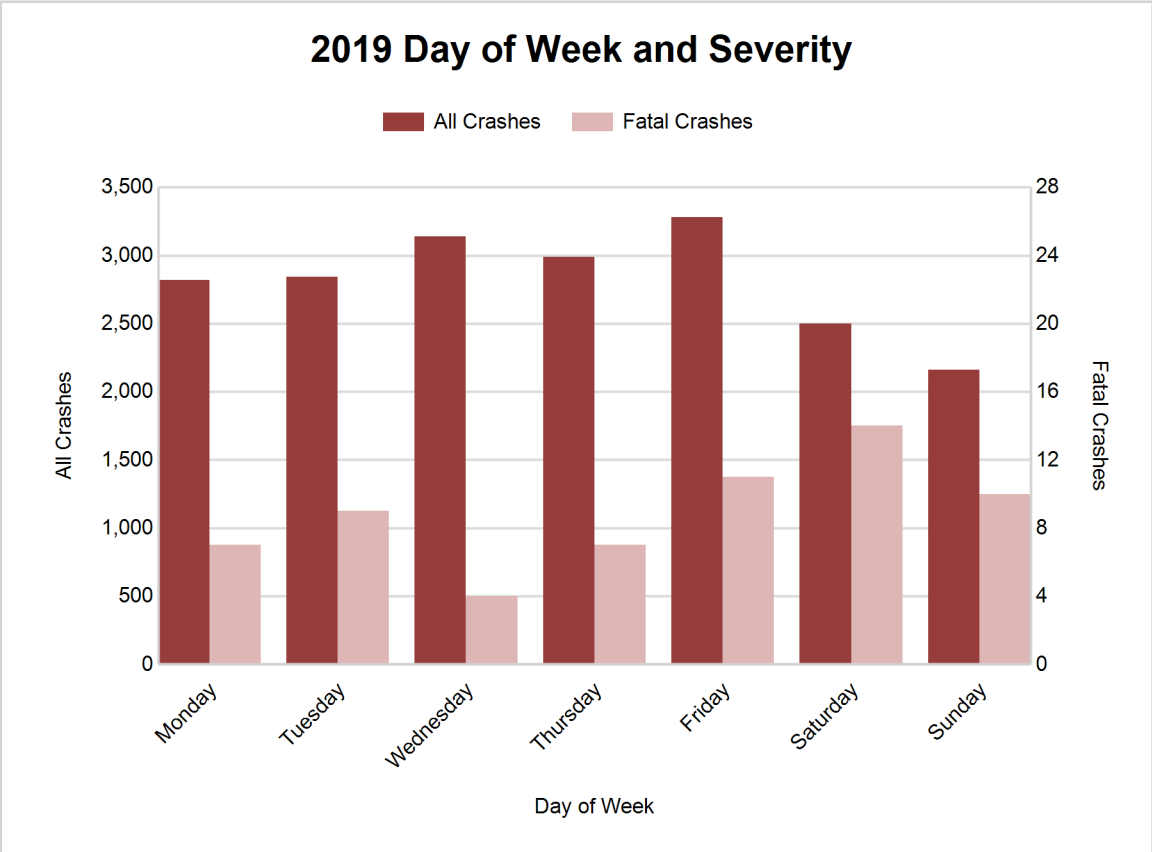
Note: † Indicates that the highest number of total crashes reported in the 5-year period occurred on the same day of the week



MDOT Region - North (continued)

2019 - Crashes by Day of Week

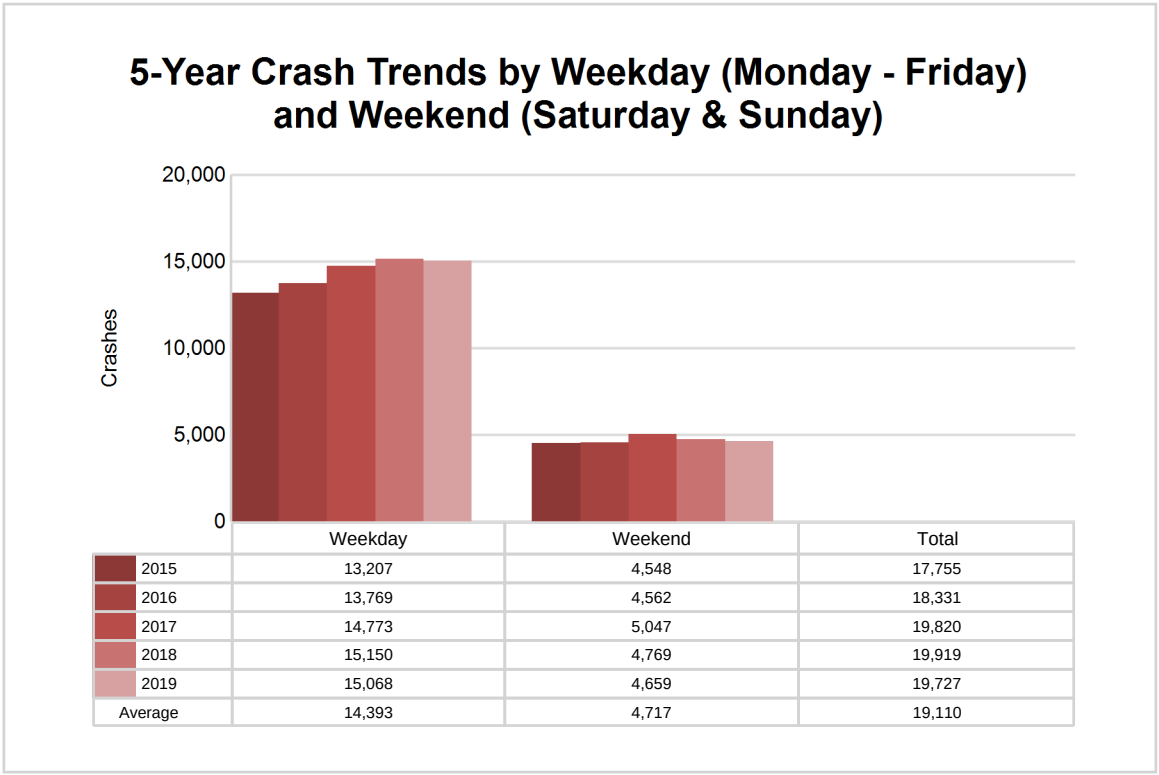
Day	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	Number
Monday	2,818	14.3	7	11.3	40	97	179	2,495
Tuesday	2,844	14.4	9	14.5	42	94	187	2,512
Wednesday	3,139	15.9	4	6.5	39	111	245	2,740
Thursday	2,989	15.2	7	11.3	40	112	214	2,616
Friday	3,278	16.6	11	17.7	64	117	220	2,866
Saturday	2,497	12.7	14	22.6	67	144	150	2,122
Sunday	2,162	11.0	10	16.1	43	95	138	1,876
Total	**19,727**	**100.0**	**62**	**100.0**	**335**	**770**	**1,333**	**17,227**



MDOT Region - North (continued)

5-Year Trend - Crashes by Weekday and Weekend

Portion of Week	2015		2016		2017		2018		2019	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Weekday	13,207	52	13,769	54	14,773	35	15,150	38	15,068	38
Weekend	4,548	12	4,562	25	5,047	24	4,769	17	4,659	24
Total	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**	**19,727**	**62**



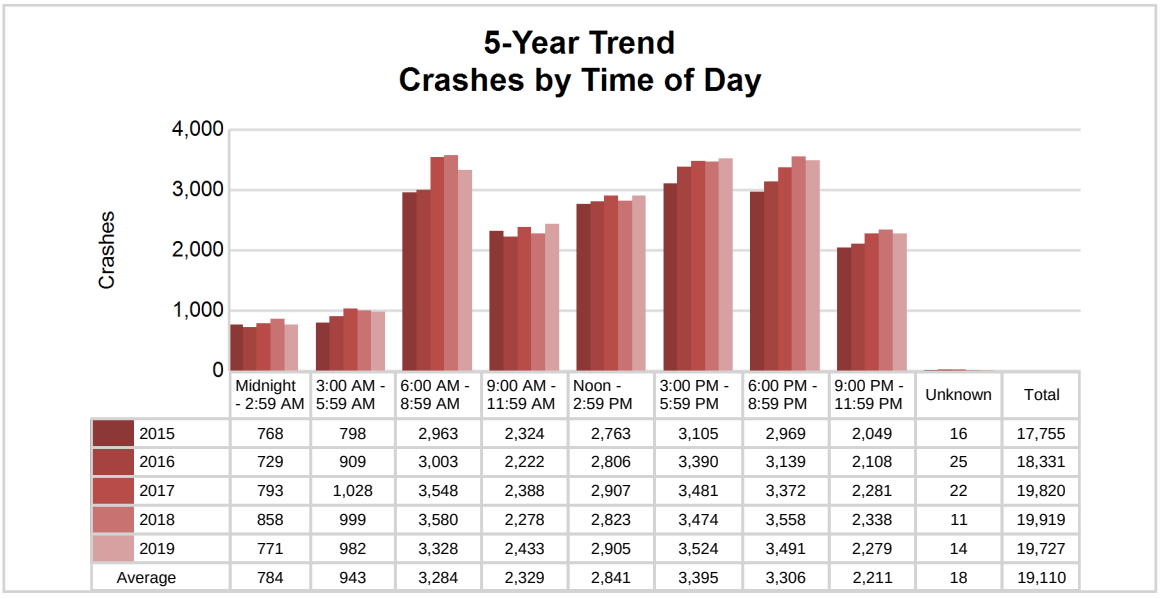
	Weekday	Weekend	Total
2015	13,207	4,548	17,755
2016	13,769	4,562	18,331
2017	14,773	5,047	19,820
2018	15,150	4,769	19,919
2019	15,068	4,659	19,727
Average	14,393	4,717	19,110

MDOT Region - North (continued)

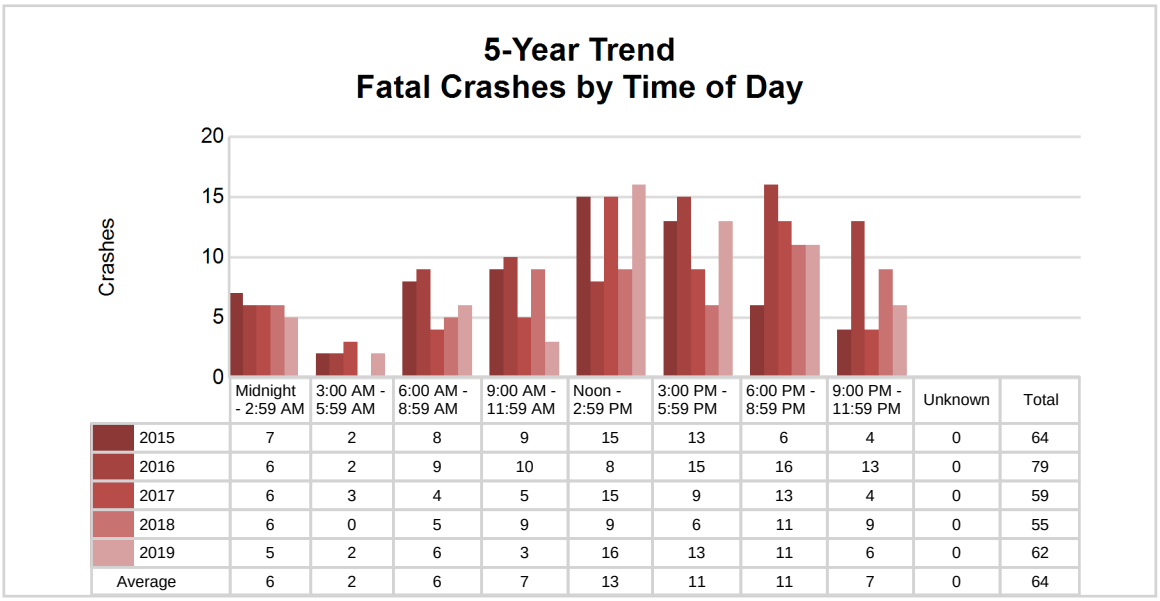
5-Year Trend - Crashes by Time of Day

Time of Day	2015		2016		2017		2018		2019	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Midnight - 2:59 AM	768	7	729	6	793	6	858	6	771	5
3:00 AM - 5:59 AM	798	2	909	2	1,028	3	999	0	982	2
6:00 AM - 8:59 AM	2,963	8	3,003	9	3,548	4	3,580	5	3,328	6
9:00 AM - 11:59 AM	2,324	9	2,222	10	2,388	5	2,278	9	2,433	3
Noon - 2:59 PM	2,763	15	2,806	8	2,907	15	2,823	9	2,905	16
3:00 PM - 5:59 PM	3,105	13	3,390	15	3,481	9	3,474	6	3,524	13
6:00 PM - 8:59 PM	2,969	6	3,139	16	3,372	13	3,558	11	3,491	11
9:00 PM - 11:59 PM	2,049	4	2,108	13	2,281	4	2,338	9	2,279	6
Unknown	16	0	25	0	22	0	11	0	14	0
Total	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**	**19,727**	**62**

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
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
2019	771	982	3,328	2,433	2,905	3,524	3,491	2,279	14	19,727
Average	784	943	3,284	2,329	2,841	3,395	3,306	2,211	18	19,110

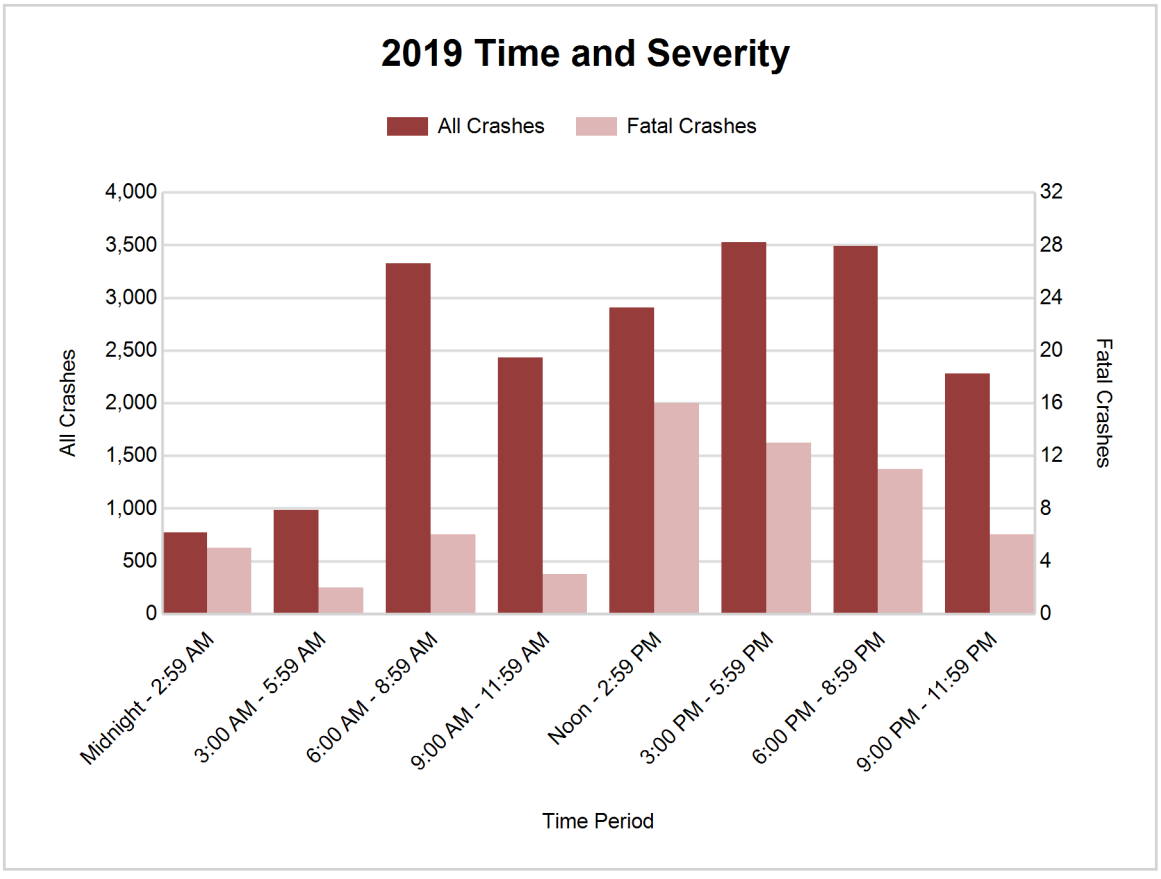


	Midnight - 2:59 AM	3:00 AM - 5:59 AM	6:00 AM - 8:59 AM	9:00 AM - 11:59 AM	Noon - 2:59 PM	3:00 PM - 5:59 PM	6:00 PM - 8:59 PM	9:00 PM - 11:59 PM	Unknown	Total
2015	7	2	8	9	15	13	6	4	0	64
2016	6	2	9	10	8	15	16	13	0	79
2017	6	3	4	5	15	9	13	4	0	59
2018	6	0	5	9	9	6	11	9	0	55
2019	5	2	6	3	16	13	11	6	0	62
Average	6	2	6	7	13	11	11	7	0	64

MDOT Region - North (continued)

2019 - 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	771	3.9	5	8.1	24	43	39	660
3:00 AM - 5:59 AM	982	5.0	2	3.2	11	26	44	899
6:00 AM - 8:59 AM	3,328	16.9	6	9.7	24	83	150	3,065
9:00 AM - 11:59 AM	2,433	12.3	3	4.8	31	101	224	2,074
Noon - 2:59 PM	2,905	14.7	16	25.8	61	148	269	2,411
3:00 PM - 5:59 PM	3,524	17.9	13	21.0	97	176	317	2,921
6:00 PM - 8:59 PM	3,491	17.7	11	17.7	59	103	184	3,134
9:00 PM - 11:59 PM	2,279	11.6	6	9.7	28	90	105	2,050
Unknown	14	0.1	0	0.0	0	0	1	13
Total	**19,727**	**100.0**	**62**	**100.0**	**335**	**770**	**1,333**	**17,227**

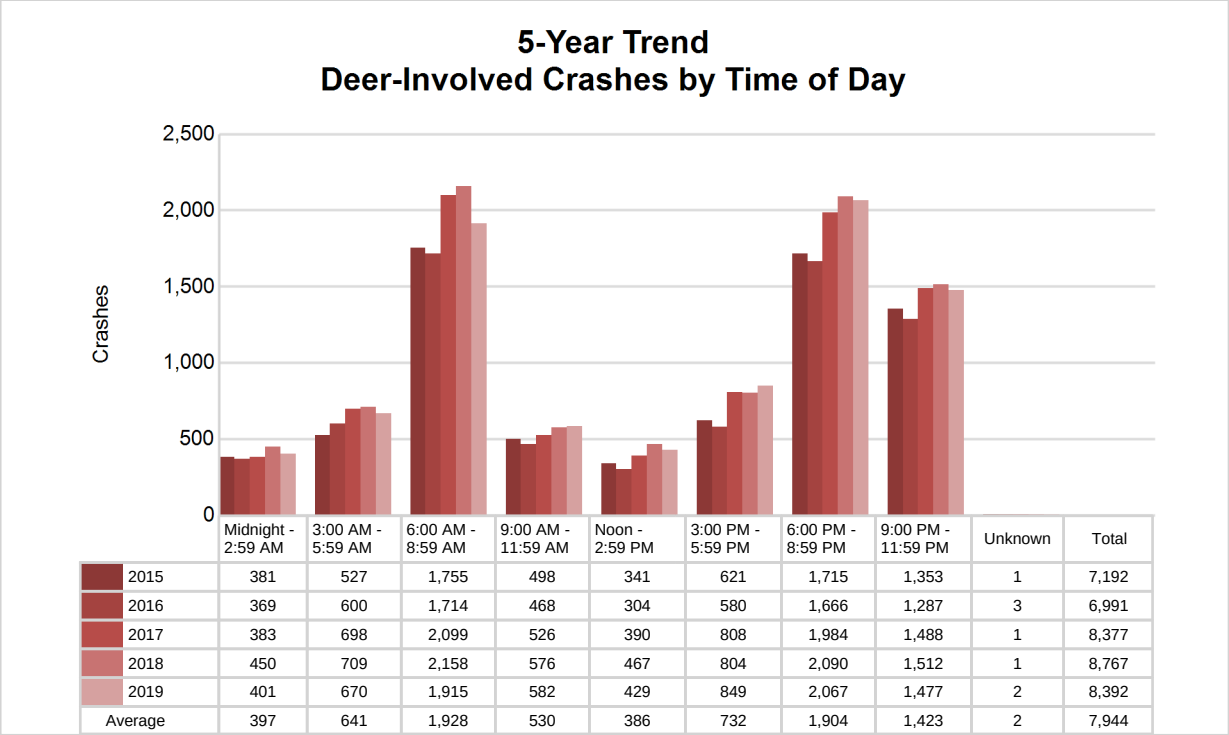


MDOT Region - North (continued)

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

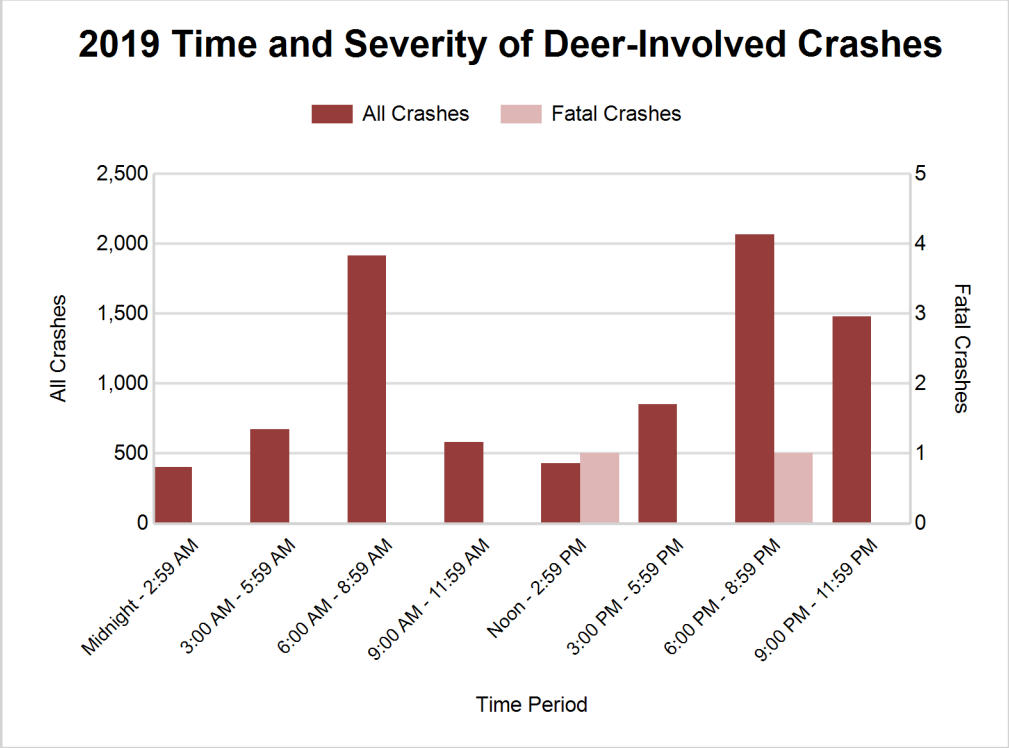
Time of Day	2015		2016		2017		2018		2019	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Midnight - 2:59 AM	381	0	369	1	383	0	450	0	401	0
3:00 AM - 5:59 AM	527	0	600	0	698	0	709	0	670	0
6:00 AM - 8:59 AM	1,755	1	1,714	0	2,099	0	2,158	0	1,915	0
9:00 AM - 11:59 AM	498	0	468	0	526	0	576	0	582	0
Noon - 2:59 PM	341	0	304	0	390	0	467	0	429	1
3:00 PM - 5:59 PM	621	0	580	0	808	0	804	0	849	0
6:00 PM - 8:59 PM	1,715	0	1,666	1	1,984	1	2,090	3	2,067	1
9:00 PM - 11:59 PM	1,353	0	1,287	1	1,488	1	1,512	1	1,477	0
Unknown	1	0	3	0	1	0	1	0	2	0
Total	**7,192**	**1**	**6,991**	**3**	**8,377**	**2**	**8,767**	**4**	**8,392**	**2**

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
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
2019	401	670	1,915	582	429	849	2,067	1,477	2	8,392
Average	397	641	1,928	530	386	732	1,904	1,423	2	7,944

MDOT Region - North (continued)



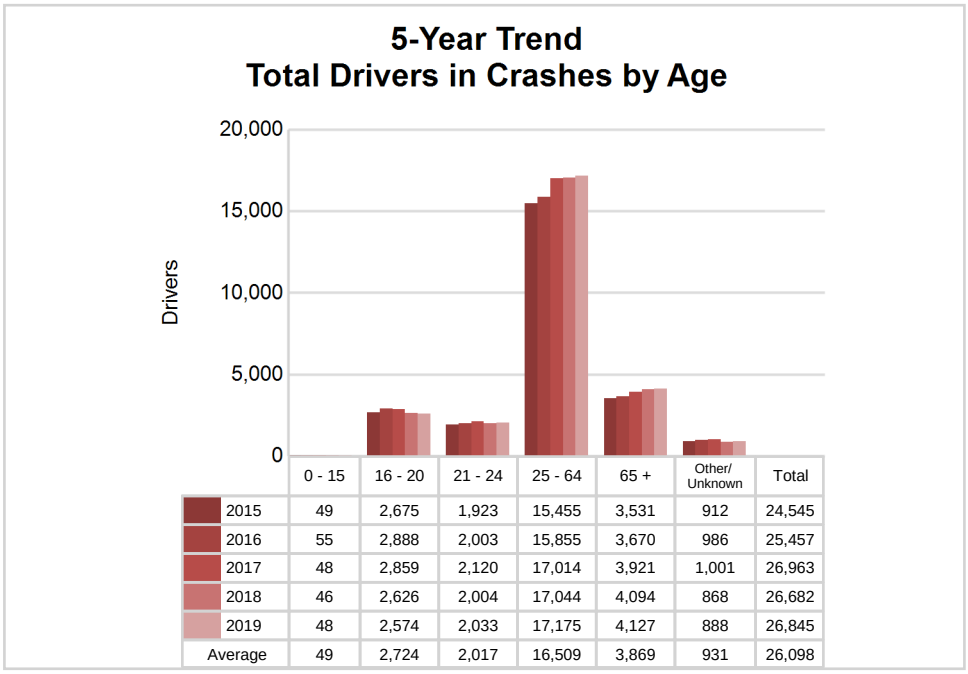
2019 - Reported Motor Vehicle Crashes by County

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	617	3	40	574	0	101	159	357	10	2	480	3	63
Alpena	840	1	102	737	0	174	231	432	31	11	367	1	135
Antrim	994	3	114	877	0	206	209	572	24	7	509	3	152
Benzie	553	6	60	487	0	153	103	294	24	6	236	7	82
Charlevoix	1,066	4	96	966	0	276	204	581	29	6	573	4	134
Cheboygan	1,009	4	129	876	215	70	272	446	29	8	510	4	166
Crawford	672	1	98	573	209	28	199	229	23	6	317	1	133
Emmet	1,365	3	158	1,204	8	495	131	728	53	17	509	3	205
Grand Traverse	3,731	8	529	3,194	0	1,068	496	2,163	138	34	666	8	725
Iosco	702	5	107	590	0	155	201	343	41	10	319	6	156
Kalkaska	636	2	83	551	0	140	173	320	19	4	263	2	121
Leelanau	661	4	66	591	0	0	320	340	37	8	309	5	108
Manistee	997	1	106	890	0	278	202	515	30	7	521	1	140
Missaukee	632	1	55	576	0	0	206	420	23	6	413	1	75
Montmorency	380	0	35	345	0	0	196	184	12	4	214	0	40
Ogemaw	838	2	124	712	145	0	249	443	17	8	447	2	176
Oscoda	297	1	39	257	0	0	157	136	12	1	162	1	48
Otsego	993	3	159	831	259	0	282	447	38	12	296	4	204
Presque Isle	664	2	45	617	0	134	240	289	8	2	513	3	55
Roscommon	827	5	125	697	122	107	228	364	46	13	366	5	182
Wexford	1,253	3	168	1,082	0	382	383	488	35	3	402	3	222
Total	**19,727**	**62**	**2,438**	**17,227**	**958**	**3,767**	**4,841**	**10,091**	**679**	**175**	**8,392**	**67**	**3,322**

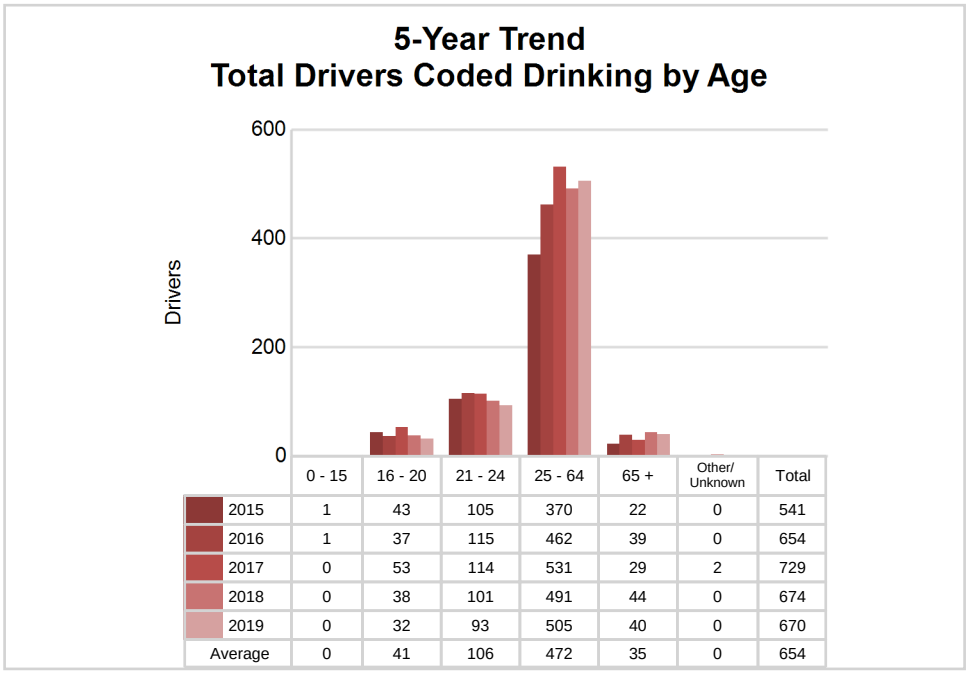
MDOT Region - North (continued)

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

Driver Age	2015		2016		2017		2018		2019	
	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	49	1	55	1	48	0	46	0	48	0
16 - 20	2,675	43	2,888	37	2,859	53	2,626	38	2,574	32
21 - 24	1,923	105	2,003	115	2,120	114	2,004	101	2,033	93
25 - 64	15,455	370	15,855	462	17,014	531	17,044	491	17,175	505
65 +	3,531	22	3,670	39	3,921	29	4,094	44	4,127	40
Unknown	912	0	986	0	1,001	2	868	0	888	0
Total	**24,545**	**541**	**25,457**	**654**	**26,963**	**729**	**26,682**	**674**	**26,845**	**670**



	0 - 15	16 - 20	21 - 24	25 - 64	65 +	Other/ Unknown	Total
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
2019	48	2,574	2,033	17,175	4,127	888	26,845
Average	49	2,724	2,017	16,509	3,869	931	26,098

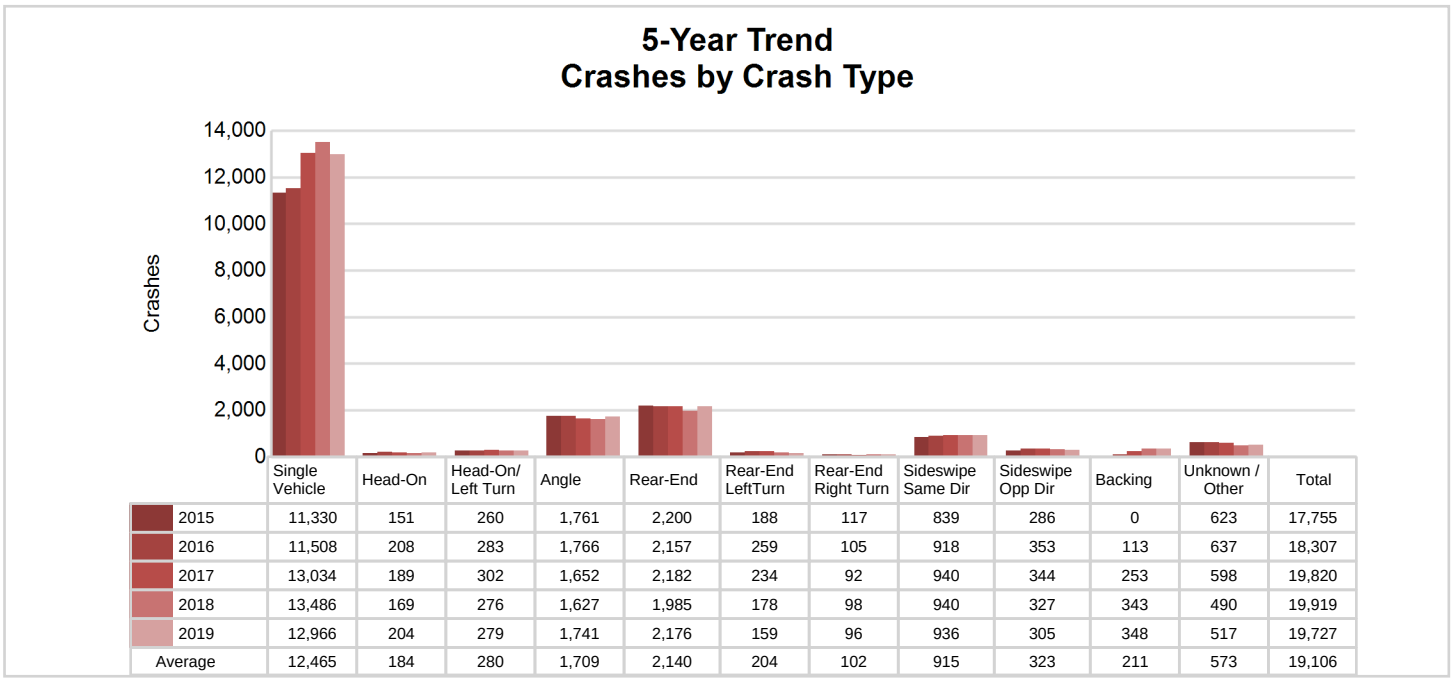


	0 - 15	16 - 20	21 - 24	25 - 64	65 +	Other/ Unknown	Total
2015	1	43	105	370	22	0	541
2016	1	37	115	462	39	0	654
2017	0	53	114	531	29	2	729
2018	0	38	101	491	44	0	674
2019	0	32	93	505	40	0	670
Average	0	41	106	472	35	0	654

MDOT Region - North (continued)

5-Year Trend - Crashes by Crash Type

Crash Type	2015		2016		2017		2018		2019	
	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes	Total Crashes	Fatal Crashes
Single motor vehicle	11,330	37	11,508	38	13,034	30	13,486	31	12,966	26
Head-on	151	13	208	15	189	9	169	8	204	11
Head-on / left turn	260	1	283	3	302	2	276	1	279	3
Angle	1,761	4	1,766	15	1,652	8	1,627	6	1,741	11
Rear-end	2,200	3	2,157	1	2,182	4	1,985	4	2,176	6
Rear-end left turn	188	1	259	3	234	1	178	0	159	1
Rear-end right turn	117	0	105	0	92	0	98	0	96	0
Sideswipe same direction	839	0	918	1	940	1	940	0	936	1
Sideswipe opposite direction	286	4	353	3	344	0	327	1	305	0
Backing	0	0	113	0	253	0	343	0	348	0
Other / Unknown	623	1	637	0	598	4	490	4	517	3
Uncoded and Errors	0	0	24	0	0	0	0	0	0	0
Total	**17,755**	**64**	**18,331**	**79**	**19,820**	**59**	**19,919**	**55**	**19,727**	**62**



	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
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
2019	12,966	204	279	1,741	2,176	159	96	936	305	348	517	19,727
Average	12,465	184	280	1,709	2,140	204	102	915	323	211	573	19,106

MDOT Region - North (continued)

2019 - 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	52	45	22	32	0	7	10	2	13
21 - 24	103	99	83	93	0	7	33	33	20
25 - 64	623	572	407	505	1	55	129	153	167
65 +	68	72	37	40	0	10	10	6	14
Unknown	47	0	0	0	0	0	0	0	0
Total	**893**	**788**	**549**	**670**	**1**	**79**	**182**	**194**	**214**

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

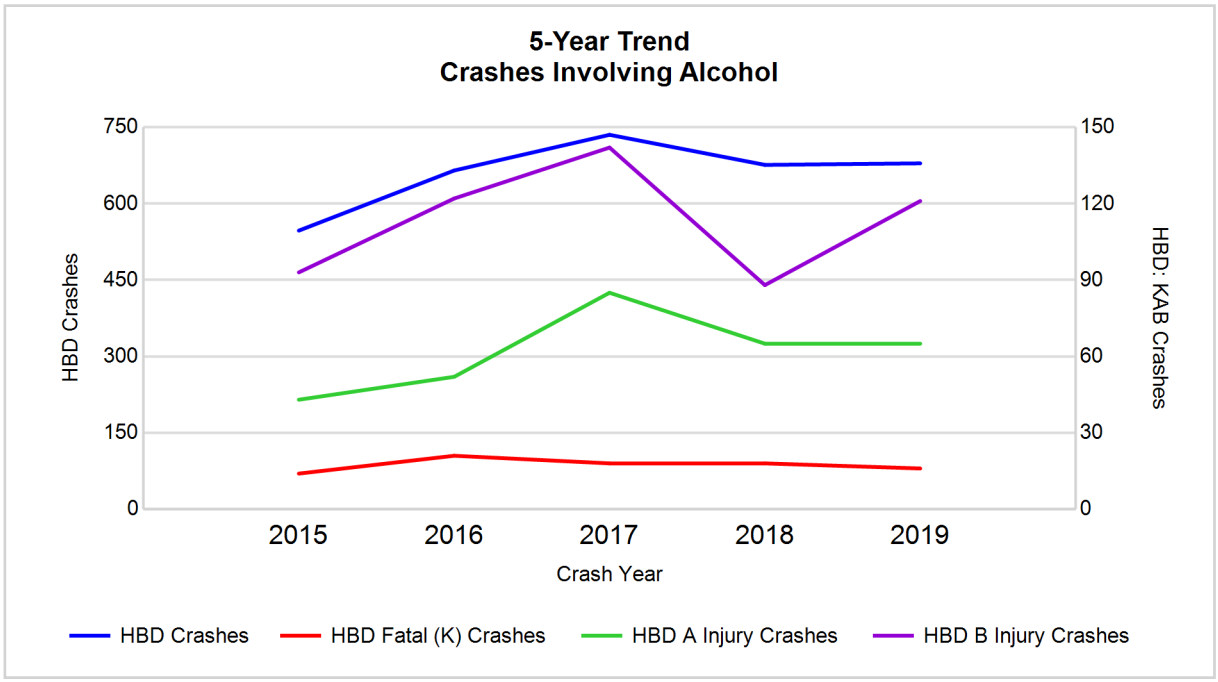
In 2019, there were 893 drivers in alcohol-involved crashes; 670 (75.0%) of those drivers were coded as had-been-drinking by the officer on the crash form.

- 376 (56.1%) of the 670 drivers had a blood alcohol concentration (BAC) of 0.08 g/dL (grams per deciliter) or greater, and 194 (51.6%) of the 376 drivers had a BAC at or above 0.17 g/dL.
- 549 (81.9%) of the 670 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
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
2019	19,727	679	3.4	62	16	25.8	335	65	19.4	770	121	15.7

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



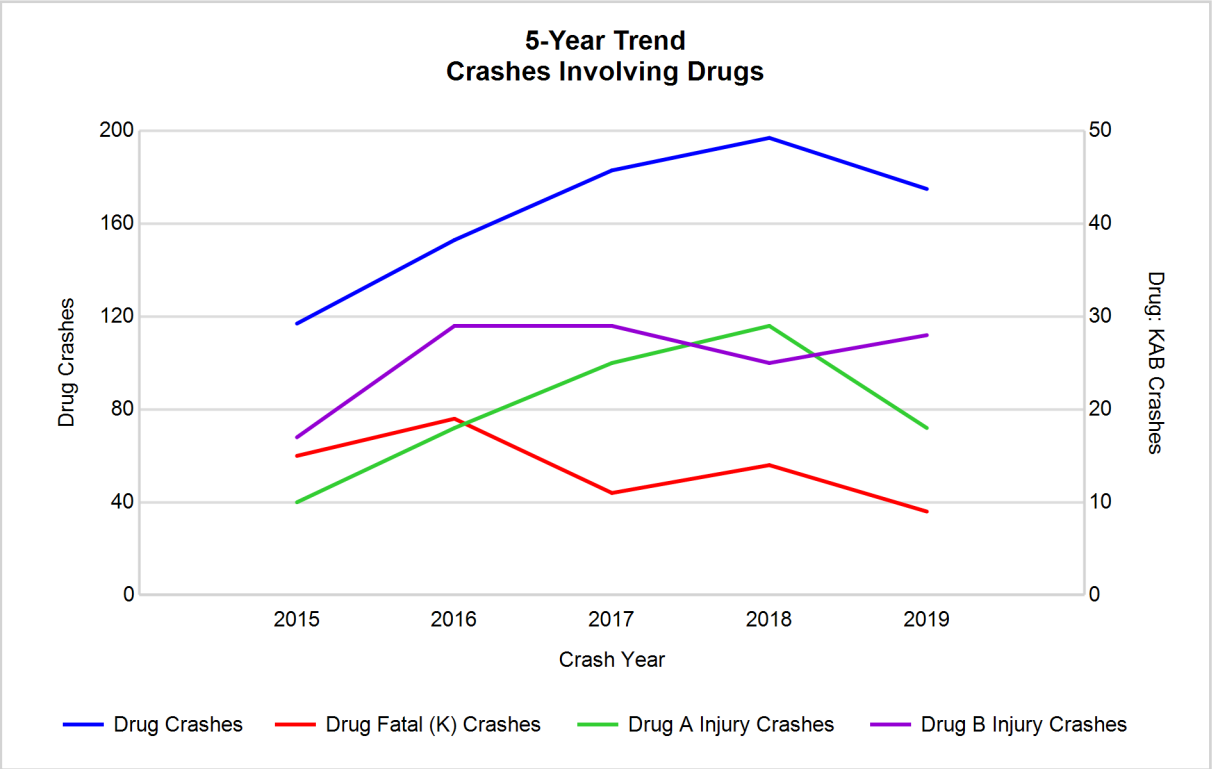
Note: Had-Been-Drinking (HBD)

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
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
2019	19,727	175	0.9	62	9*	14.5*	335	18	5.4	770	28	3.6**

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

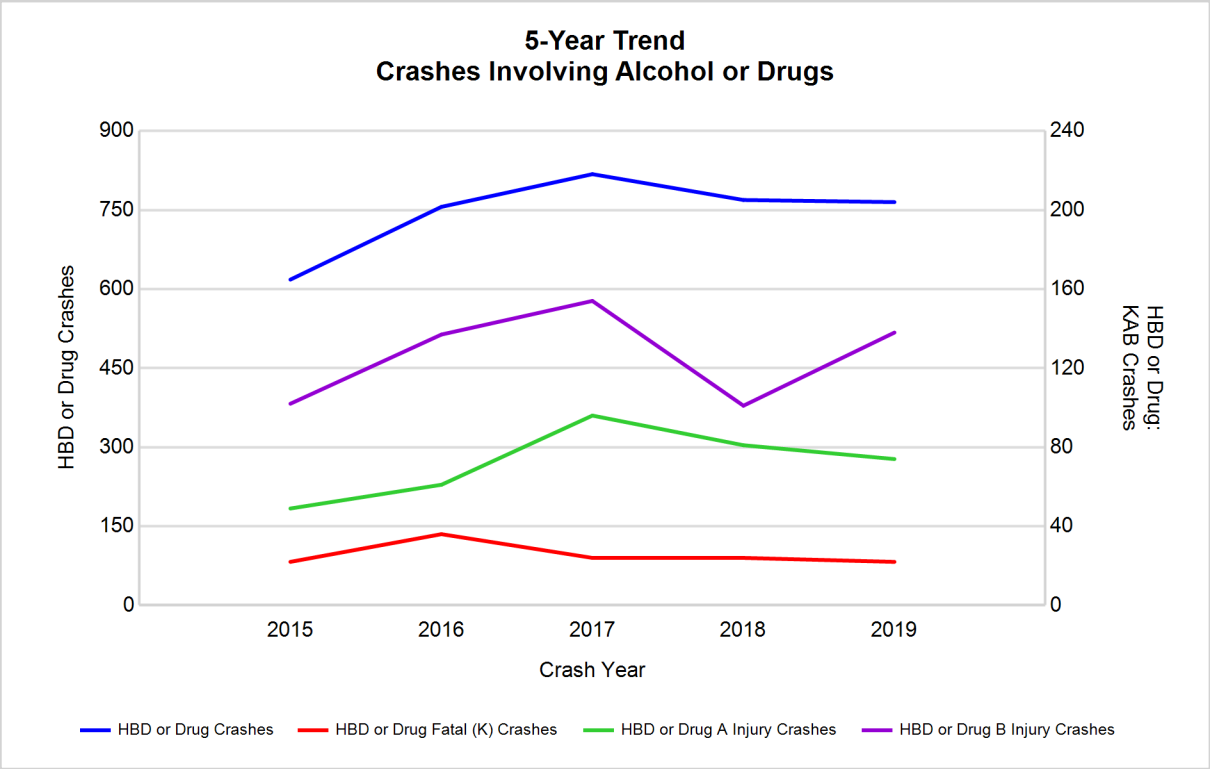


MDOT Region - North (continued)

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
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
2019	19,727	765	3.9	62	22	35.5	335	74	22.1	770	138	17.9**

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)

MDOT Region - North (continued)

2019 - 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	20,242	19,220	95.0	37	20	54.1	226	191	84.5	663	602	90.8	1,477	1,418	96.0	17,390	16,989	97.7
Motor home	87	80	92.0	0	0	0.0	1	0	0.0	3	1	33.3	11	10	90.9	71	69	97.2
Pickup truck	5,828	5,484	94.1	11	6	54.5	58	35	60.3	179	153	85.5	312	298	95.5	5,123	4,992	97.4
Small truck under 10,000 lbs. GVWR	180	165	91.7	0	0	0.0	1	0	0.0	8	5	62.5	8	8	100.0	160	152	95.0
Motorcycle	180	126	70.0	10	8	80.0	47	31	66.0	48	33	68.8	29	21	72.4	42	33	78.6
Moped / goped	21	9	42.9	0	0	0.0	2	1	50.0	12	4	33.3	6	4	66.7	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	51	43	84.3	1	1	100.0	18	16	88.9	12	11	91.7	4	2	50.0	16	13	81.3
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	84	36	42.9	2	0	0.0	25	15	60.0	26	13	50.0	10	4	40.0	20	4	20.0
Other	95	72	75.8	0	0	0.0	0	0	0.0	3	0	0.0	2	1	50.0	85	71	83.5
Truck/bus over 10,000 lbs.	667	625	93.7	0	0	0.0	2	2	100.0	12	11	91.7	25	18	72.0	611	594	97.2
Unknown	272	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	5	0	0.0
Total	**27,707**	**25,860**	**93.3**	**61**	**35**	**57.4**	**380**	**291**	**76.6**	**966**	**833**	**86.2**	**1,884**	**1,784**	**94.7**	**23,524**	**22,917**	**97.4**

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.

2019 - 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	248	215	86.7	2	0	0.0	14	8	57.1	64	53	82.8	132	121	91.7	36	33	91.7
16 - 20	2,705	2,626	97.1	3	2	66.7	39	30	76.9	127	112	88.2	245	231	94.3	2,289	2,251	98.3
21 - 24	2,082	2,005	96.3	3	1	33.3	30	25	83.3	82	67	81.7	137	128	93.4	1,826	1,784	97.7
25 - 64	17,532	16,875	96.3	31	16	51.6	221	166	75.1	553	467	84.4	1,075	1,017	94.6	15,620	15,209	97.4
65 +	4,251	4,136	97.3	22	16	72.7	76	62	81.6	140	134	95.7	294	286	97.3	3,715	3,638	97.9
Unknown	889	3	0.3	0	0	0.0	0	0	0.0	0	0	0.0	1	1	100.0	38	2	5.3
Total	**27,707**	**25,860**	**93.3**	**61**	**35**	**57.4**	**380**	**291**	**76.6**	**966**	**833**	**86.2**	**1,884**	**1,784**	**94.7**	**23,524**	**22,917**	**97.4**

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	2015			2016			2017			2018			2019		
	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	120	1	18	92	0	17	83	1	30	48	1	4	47	0	6
Shoulder belt only used	45	0	11	84	0	11	129	0	13	124	1	17	122	0	13
Lap belt only used	79	0	5	71	0	13	57	0	3	48	2	6	33	1	3
Both lap & shoulder belts used	22,521	15	1,913	23,299	28	2,061	24,672	25	2,197	24,520	17	2,088	24,749	15	2,012
No belts used	182	15	81	198	12	92	213	10	90	189	15	86	152	14	65
Child restraint used	0	0	0	9	0	1	7	0	1	3	0	1	1	0	0
Child restraint not used, unavailable or improper use	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Restraint failure	4	0	0	11	0	2	9	0	2	6	0	2	8	0	2
Restraint use unknown	479	5	49	872	3	55	1,320	2	72	1,320	3	67	1,350	3	71
Helmet worn	216	8	150	244	6	185	217	6	151	191	8	145	203	8	145
Helmet not worn	91	3	68	84	9	58	84	6	57	70	2	56	77	2	60
Helmet use unknown	17	1	9	28	3	15	13	2	5	19	0	9	21	1	8
Uncoded & errors	790	0	2	465	0	3	159	0	0	144	0	0	82	0	0
Total	**24,545**	**48**	**2,307**	**25,457**	**61**	**2,513**	**26,963**	**52**	**2,621**	**26,682**	**49**	**2,481**	**26,845**	**44**	**2,385**

5-Year Trend - Restraint Use Among Drivers Coded Drinking

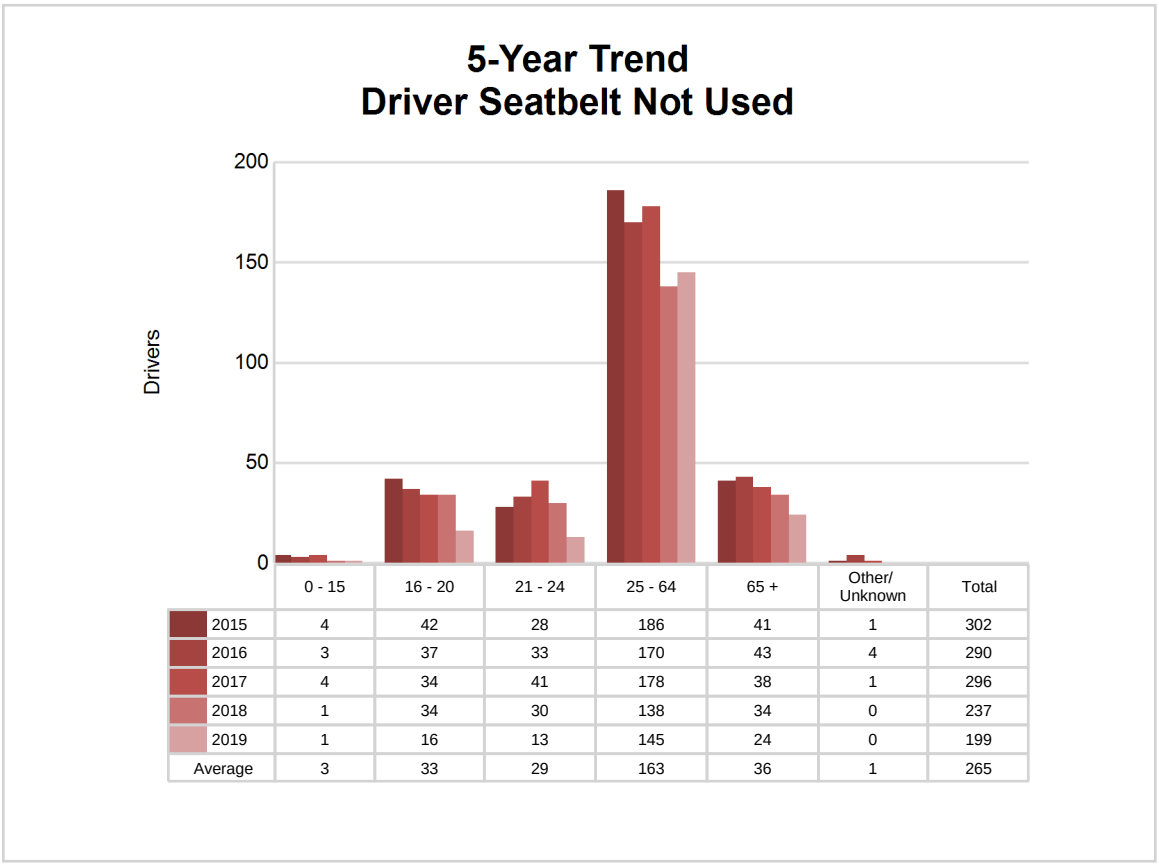
Restraint Use	2015			2016			2017			2018			2019		
	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers	Drivers	Fatal Drivers	Injured Drivers
No belts available	4	0	3	3	0	1	3	0	2	3	1	2	1	0	0
Shoulder belt only used	2	0	0	2	0	2	6	0	2	3	0	2	4	0	1
Lap belt only used	1	0	1	1	0	1	1	0	0	1	1	0	2	0	1
Both lap & shoulder belts used	392	2	120	479	4	141	506	2	144	460	3	119	455	1	142
No belts used	42	5	25	42	5	27	43	7	34	48	6	28	40	6	23
Child restraint used	0	0	0	1	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	1	0	1	0	0	0	0	0	0	0	0	0
Restraint use unknown	74	1	24	89	0	28	133	1	36	125	1	28	133	0	39
Helmet worn	12	4	8	19	3	13	12	1	10	13	2	11	14	1	13
Helmet not worn	12	0	12	11	3	7	19	2	14	19	1	15	17	1	14
Helmet use unknown	1	0	1	3	1	2	4	2	1	1	0	1	4	0	2
Uncoded & errors	1	0	0	3	0	2	2	0	0	1	0	0	0	0	0
Total	**541**	**12**	**194**	**654**	**16**	**225**	**729**	**15**	**243**	**674**	**15**	**206**	**670**	**9**	**235**

MDOT Region - North (continued)

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

Age Group	2015			2016			2017			2018			2019		
	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	4	0	1	3	0	2	4	0	3	1	0	0	1	0	1
16 - 20	42	1	18	37	1	17	34	2	15	34	2	17	16	1	7
21 - 24	28	1	8	33	1	16	41	2	21	30	4	15	13	1	4
25 - 64	186	9	62	170	7	60	178	6	63	138	8	52	145	10	51
65 +	41	5	10	43	3	13	38	1	18	34	2	6	24	2	8
Unknown	1	0	0	4	0	1	1	0	0	0	0	0	0	0	0
Total	**302**	**16**	**99**	**290**	**12**	**109**	**296**	**11**	**120**	**237**	**16**	**90**	**199**	**14**	**71**

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



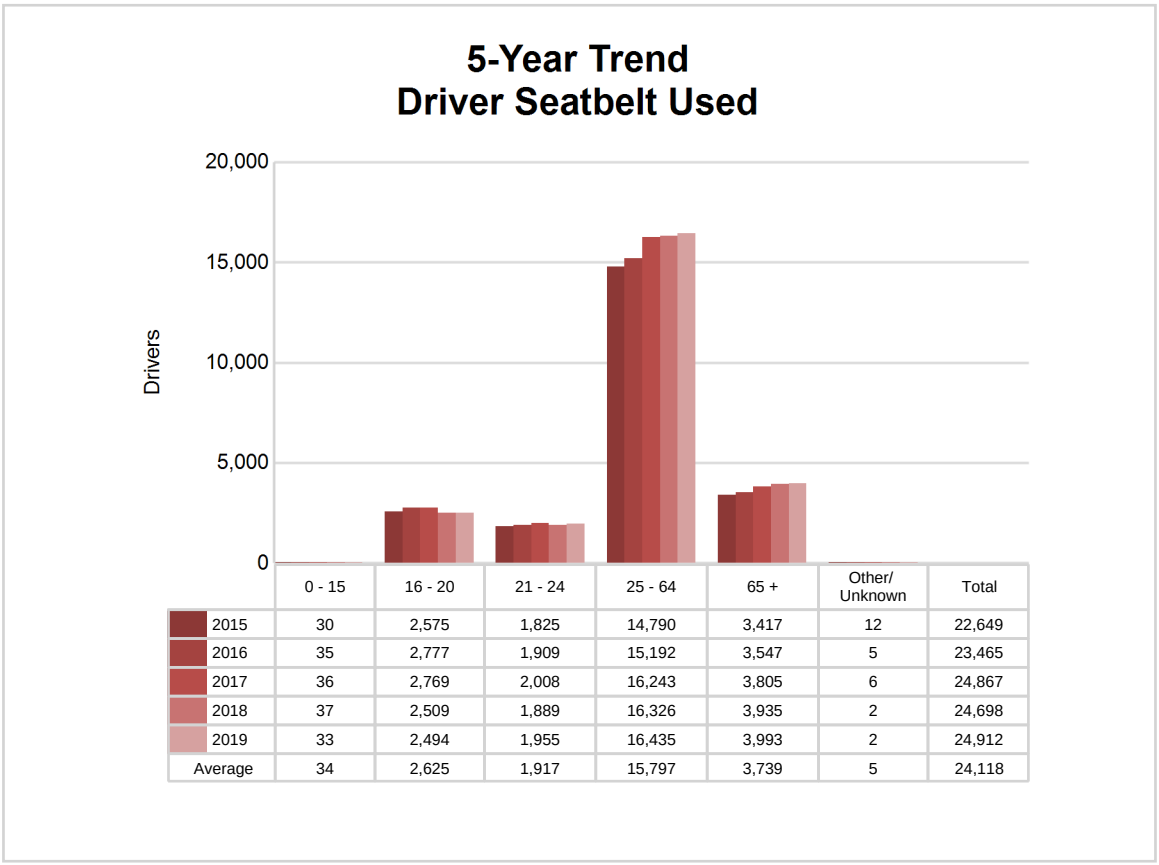
	0 - 15	16 - 20	21 - 24	25 - 64	65 +	Other/ Unknown	Total
2015	4	42	28	186	41	1	302
2016	3	37	33	170	43	4	290
2017	4	34	41	178	38	1	296
2018	1	34	30	138	34	0	237
2019	1	16	13	145	24	0	199
Average	3	33	29	163	36	1	265

MDOT Region - North (continued)

5-Year Trend - Seatbelt Used Among Drivers by Age

Age Group	2015			2016			2017			2018			2019		
	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	30	0	5	35	0	7	36	0	1	37	0	5	33	0	2
16 - 20	2,575	3	283	2,777	5	298	2,769	2	322	2,509	1	281	2,494	1	246
21 - 24	1,825	0	176	1,909	2	184	2,008	1	202	1,889	3	163	1,955	1	171
25 - 64	14,790	7	1,130	15,192	8	1,269	16,243	13	1,339	16,326	6	1,283	16,435	6	1,259
65 +	3,417	5	334	3,547	13	329	3,805	9	350	3,935	10	381	3,993	8	352
Unknown	12	0	1	5	0	0	6	0	1	2	0	0	2	0	0
Total	**22,649**	**15**	**1,929**	**23,465**	**28**	**2,087**	**24,867**	**25**	**2,215**	**24,698**	**20**	**2,113**	**24,912**	**16**	**2,030**

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



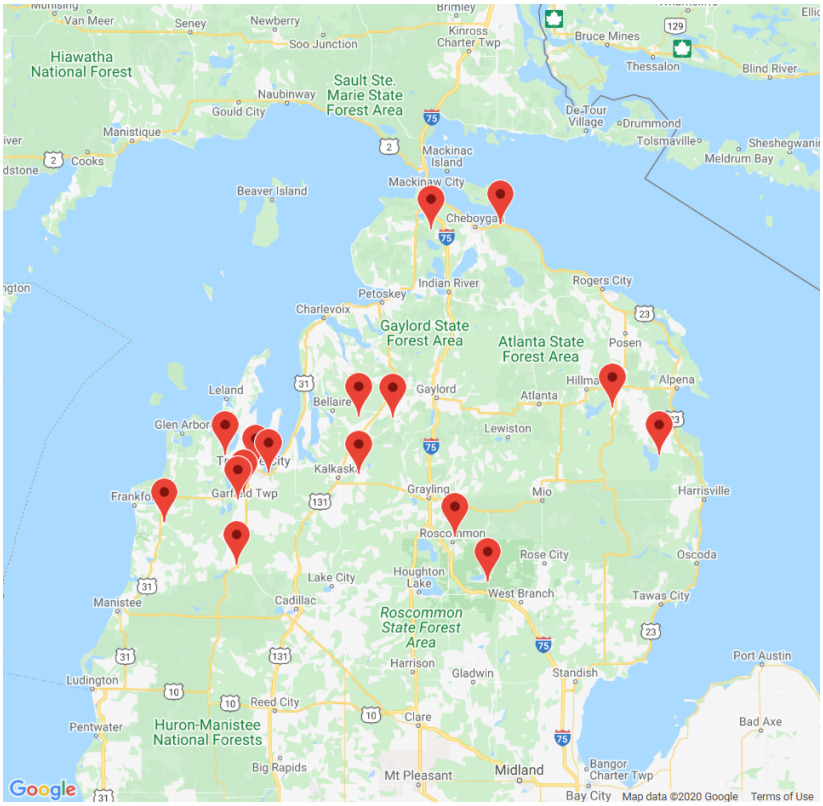
	0 - 15	16 - 20	21 - 24	25 - 64	65 +	Other/ Unknown	Total
2015	30	2,575	1,825	14,790	3,417	12	22,649
2016	35	2,777	1,909	15,192	3,547	5	23,465
2017	36	2,769	2,008	16,243	3,805	6	24,867
2018	37	2,509	1,889	16,326	3,935	2	24,698
2019	33	2,494	1,955	16,435	3,993	2	24,912
Average	34	2,625	1,917	15,797	3,739	5	24,118

MDOT Region - North (continued)

5-Year Trend - Drivers in Crashes by Hazardous Action

Hazardous Action	2015		2016		2017		2018		2019	
	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	14,721	31	14,762	45	16,142	37	16,314	32	16,271	47
Speed too fast	2,462	26	2,922	26	3,006	18	2,807	12	2,935	17
Speed too slow	28	0	24	0	23	0	12	0	13	0
Failed to yield	1,829	6	1,909	10	1,924	6	1,946	6	2,032	9
Disregard traffic control	270	0	258	5	253	2	255	3	243	3
Drove wrong way	12	0	15	0	8	1	8	0	8	1
Drove left of center	131	9	179	6	181	6	180	5	170	1
Improper passing	117	0	112	0	101	0	123	0	103	2
Improper lane use	266	0	291	3	298	0	293	1	286	1
Improper turn	146	0	166	1	158	0	177	0	177	0
Improper/no signal	34	0	26	0	17	0	25	0	28	0
Improper backing	385	0	370	0	361	0	375	0	343	0
Unable to stop in assured clear distance	2,194	3	2,184	1	2,155	3	2,026	1	2,209	5
Other	747	6	781	5	745	2	691	2	636	0
Unknown	386	6	589	12	688	9	608	13	673	8
Reckless driving	114	2	99	1	85	3	99	2	84	1
Careless/negligent driving	596	5	644	5	666	4	620	7	565	6
Uncoded & errors	107	0	126	3	152	0	123	1	69	0
Total	**24,545**	**94**	**25,457**	**123**	**26,963**	**91**	**26,682**	**85**	**26,845**	**101**

MDOT Region - North (continued)



The picture above represents all 2019 alcohol-involved fatal crashes in MDOT Region - North.

In 2019, there were 679 alcohol-involved crashes in MDOT Region - North:

16	K - Fatal Crashes
65	A - Suspected Serious Injury Crashes
121	B - Suspected Minor Injury Crashes
93	C - Possible Injury Crashes
384	O - Property Damage Only/No Injury Crashes

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