Grand Valley Metropolitan Council

Traffic Crash Facts 2020

September 2021

Introduction

The Grand Valley Metro Council (GVMC) is the designated MPO for Grand Rapids Metro area and is responsible for the traffic safety planning in this area. The crash data assembled by GVMC staff can provide information to the MPO stakeholder and public for the future safety planning and selection of future road projects.

This report includes statistics of crash data for the Grand Rapids Metropolitan Area such as crash facts in 2019, top 50 crash intersections, and top 50 crash segments.

Definition

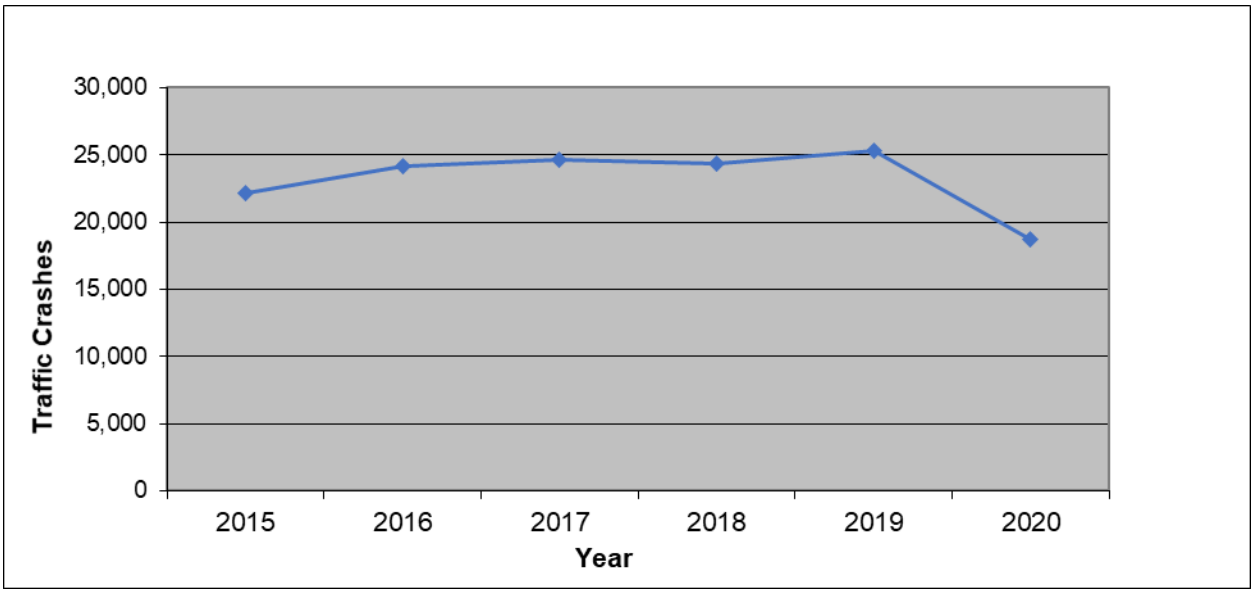
The terms defined in this report as applied to the crash facts are as follows,

PDO: Number of crashes involving Property Damage Only
Injury: Number of crashes involving injuries, not the number of injuries
A-Type: Number of crashes involving incapacitating injuries
B-Type: Number of crashes involving non-incapacitating injuries
C-Type: Number of crashes involving possible injuries
Fatal: Number of crashes involving fatalities, not the number of fatalities

All Traffic Crashes

In 2020, there are 18,717 traffic crashes reported in GVMC area. This is a decrease of 30.1 percent from 2019. Figure 1 below shows total traffic crashes from 2015 to 2020.

Figure 1 **Traffic Crashes, 2015-2020**



Source: www.michigantrafficcrashfacts.org

Traffic Crashes by Jurisdiction

Table 1 shows the number of total crashes by jurisdiction in GVMC area from 2015-2020.

Local Governments	2015	2016	2017	2018	2019	2020
Ada	333	339	314	332	350	238
Algoma	269	291	285	363	296	227
Allendale	389	403	386	387	444	332
Alpine	287	292	323	313	367	297
Blendon	132	192	164	192	216	154
Bowne	73	69	87	64	88	64
Byron	619	633	746	742	814	565
Caledonia	362	378	354	383	430	314
Cannon	196	218	226	209	193	168
Cascade	698	765	795	763	839	582
Casnovia	6	3	2	7	4	1
Cedar Springs	90	95	77	82	82	70
Chester	40	61	54	52	61	49
Courtland	179	176	220	196	168	166
East Grand Rapids	170	176	163	156	199	96
Gaines	508	509	526	550	612	453
Georgetown	815	948	931	955	1020	737
City of Grand Rapids	7952	8477	8907	8559	8936	6602
Grand Rapids Township	559	627	579	607	604	401
Grandville	761	877	870	808	782	575
Grattan	86	105	106	126	97	87
Hudsonville	168	206	195	215	246	133
Jamestown	166	197	220	211	243	200
Kent City	16	28	25	30	27	13
Kentwood	1243	1315	1354	1356	1433	1069
Lowell	313	312	352	360	100	64
Nelson	90	110	136	136	124	111
Oakfield	128	142	130	131	125	106
Plainfield	955	1085	1075	1086	1127	711
Polkton	234	214	217	203	254	176
Rockford	132	162	144	152	152	102
Sand Lake	8	2	5	11	11	9
Solon	171	212	247	238	201	174
Sparta	223	180	145	191	208	30
Spencer	64	69	67	86	67	85
Tallmadge	207	243	239	239	314	259
Tyrone	100	116	114	105	99	100
Vergennes	125	110	109	128	130	91
Walker	1247	1600	1465	1447	1559	1066
Wright	185	238	263	240	274	194
Wyoming	2382	2616	2655	2478	2611	2037

Traffic Crashes by Severity

Of the 18,717 traffic crashes in GVMC area in 2020, there are 3,520 crashes causing fatalities or injuries. A total of 59 fatal crashes resulted in 163 deaths, and a total of 3,461 injury crashes resulted in some degree of injuries of 8,790 people. Figure 2 shows traffic crashes distribution by injury severity in 2020. Table 2 shows the number of each severity and the number of fatalities and injuries caused by the crashes.

Figure 2 **Traffic Crash Severities in 2020**

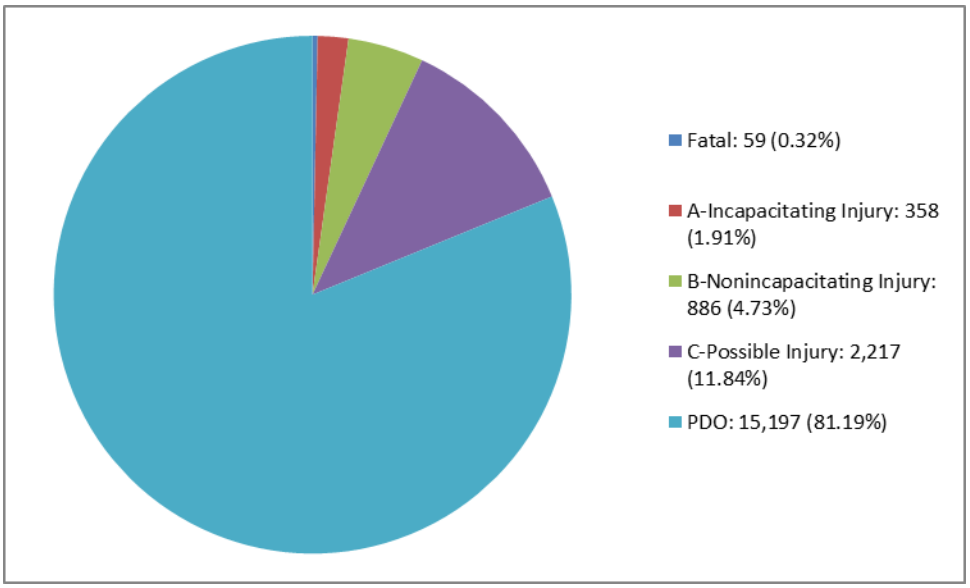


Table 2 **Traffic Crash Severity in 2020**

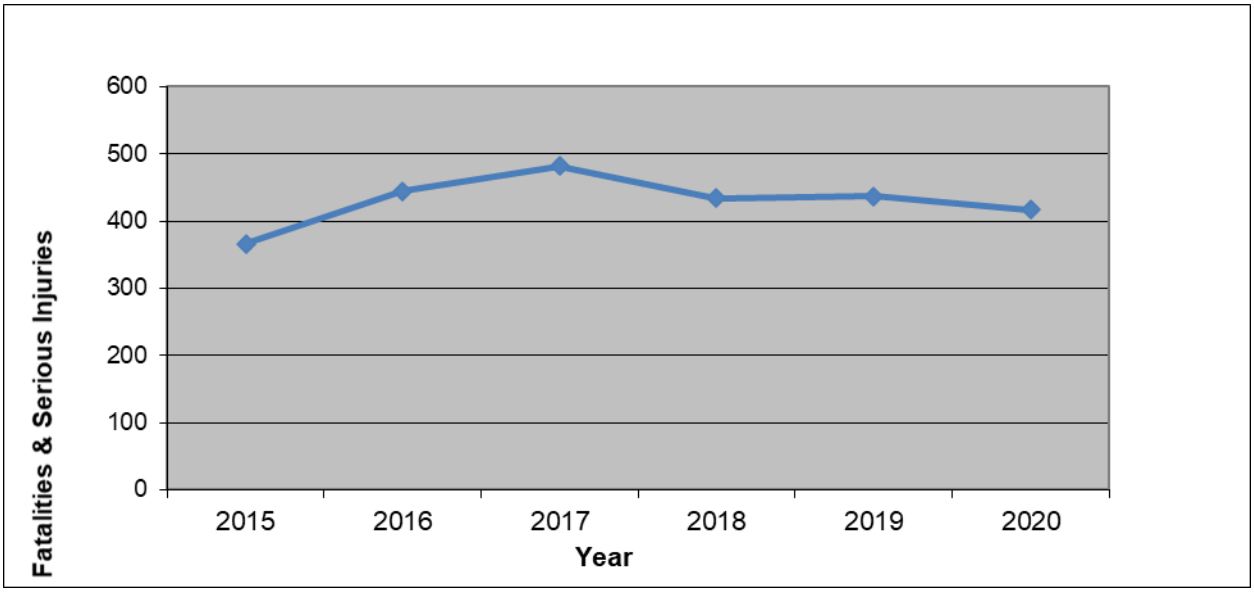
Crash Severity	Number of Traffic Crashes	Number of Injuries
Fatal	59	163
A-Type Injury	358	898
B-Type Injury	886	2,265
C-Type Injury	2,217	5,627
Injury and Fatality subtotal	3,520	8,953
PDO	15,197	
Total	18,717	

Source: www.michigantrafficcrashfacts.org

All Fatalities and Serious Injuries

Fatalities and serious injuries are defined as a crash that causes death within 30 days of the crash or incapacitating injuries as defined in Michigan Traffic Crash Facts' Data Query Tool. Figure 2a below shows fatalities and serious injury crashes in GVMC area. These crashes increased 13.0 percent from 2015 to 2020.

Figure 2a **Fatalities and Serious Injuries, 2015-2020**

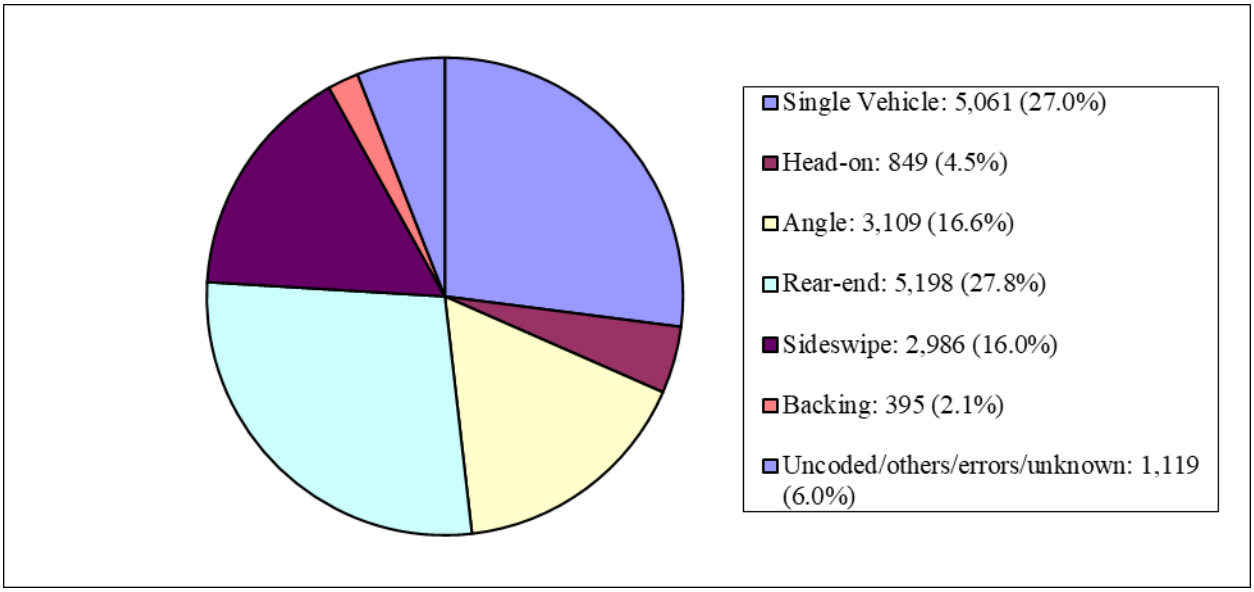


Source: www.michigantrafficcrashfacts.org

Traffic Crashes by Crash Type

Figure 3 shows traffic crash distribution by crash type in 2020. As shown in the figure, the most common type of crash was rear end crash, which accounted for 27.8 of all traffic crashes, and the least common type of crash was backing, which accounted for 2.1%.

Figure 3 **Traffic Crashes by Crash Type in 2020**

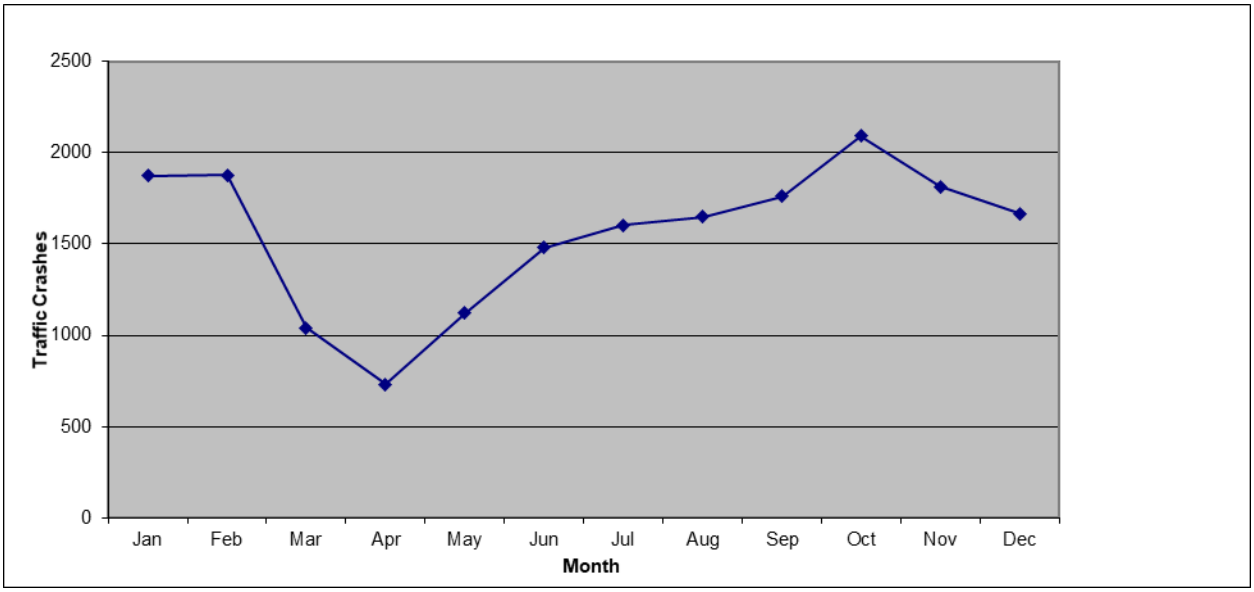


Source: www.michigantrafficcrashfacts.org

Traffic Crashes by Month, Day, and Hour

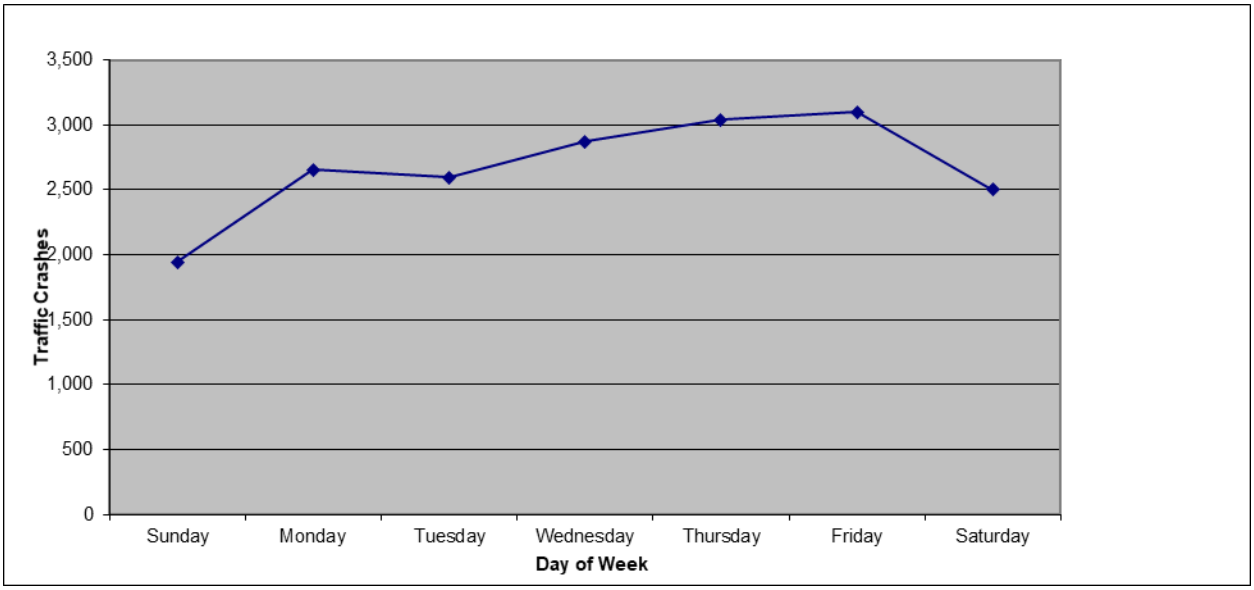
Figure 4-6 show traffic crashes distribution by month, day, and hour, respectively. As shown in Figure 4, there were more traffic crashes in October than any other month (2,093). April had the fewest crashes (732) in 2020. Figure 5 shows that more traffic crashes occurred on Fridays than any other day of the week (3,099) in 2020, and Sunday had the fewest traffic crashes (1,946). Figure 6 shows that more traffic crashes occurred between 3 pm and 4 pm than any other hour interval (1,476), and the time of day with the fewest crashes was between 4 am and 5 am (226 crashes).

Figure 4 **Traffic Crashes by Month in 2020**



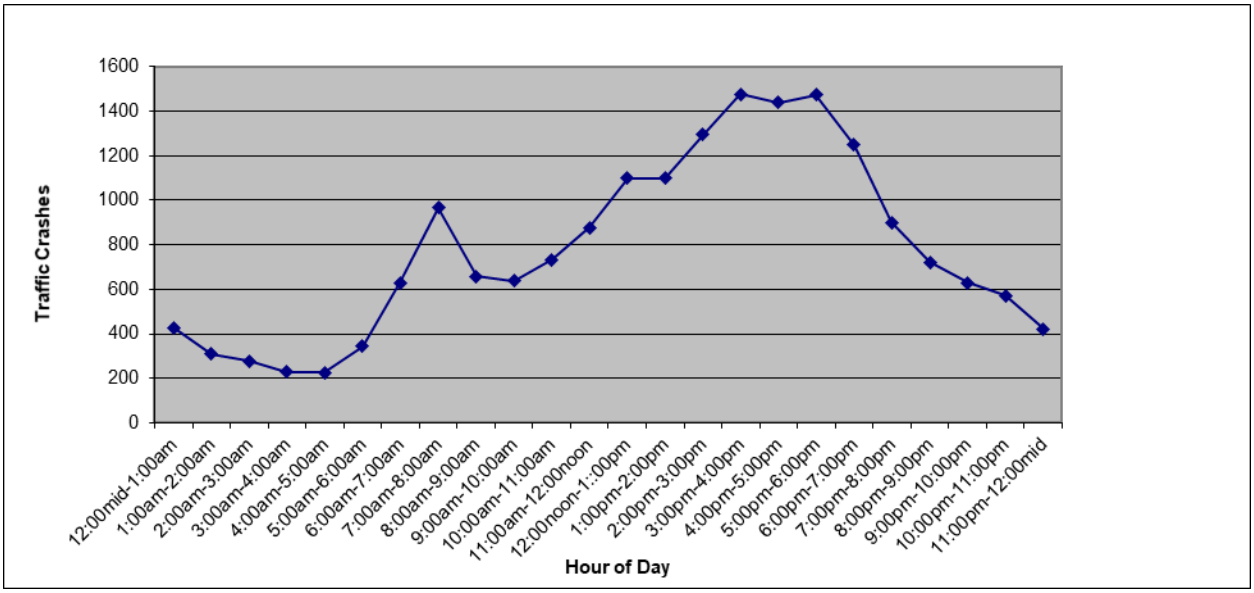
Source: www.michigantrafficcrashfacts.org

Figure 5 **Traffic Crashes by Day of Week in 2020**



Source: www.michigantrafficcrashfacts.org

Figure 6 **Traffic Crashes by Hour of Day in 2020**

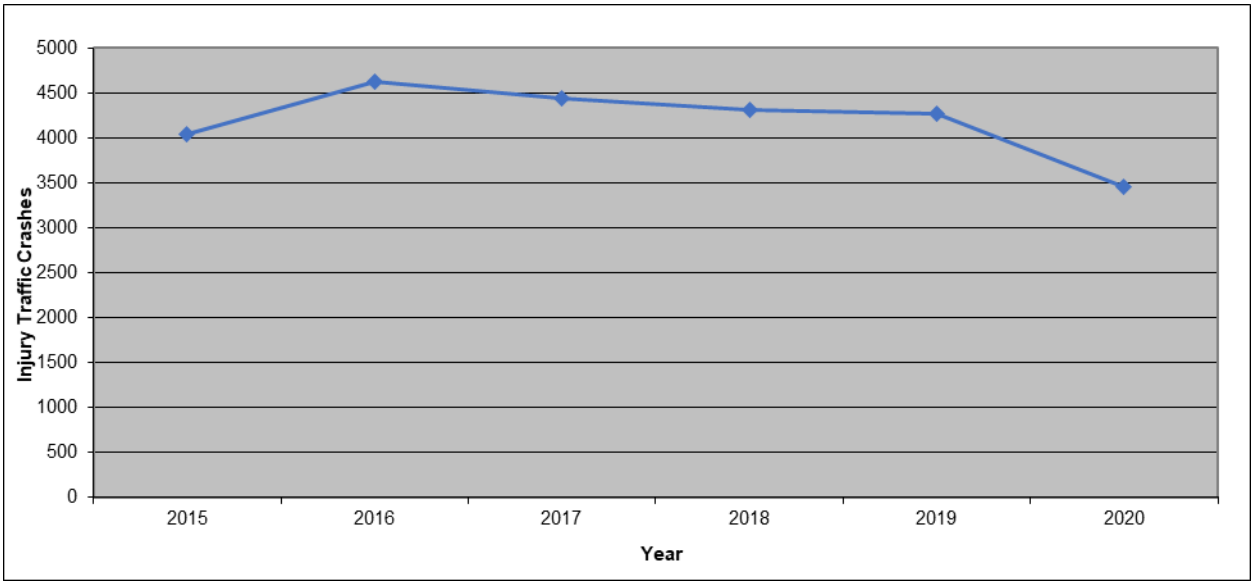


Source: www.michigantrafficcrashfacts.org

Injury Traffic Crashes

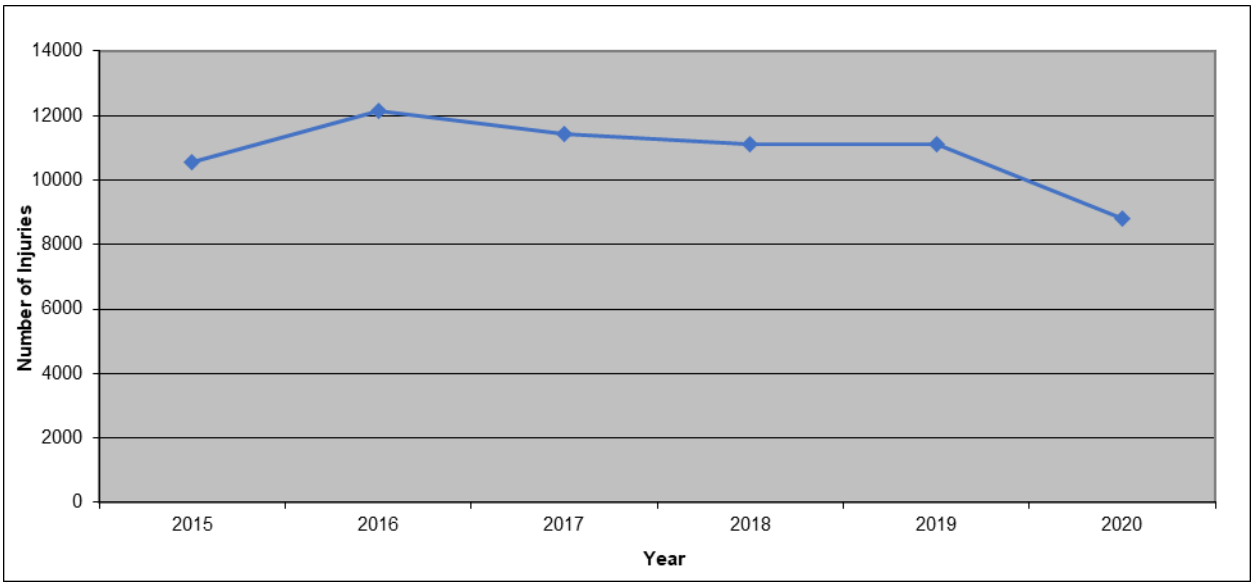
Injury traffic crash is defined as a crash resulting in an injury, but not a fatality. Figure 7 below shows injury traffic crash in GVMC area. Injury traffic crashes decreased 15.6 percent from 2015 to 2020, and Figure 8 shows an 18.4 percent decrease in number of injuries from 2015 to 2020.

Figure 7 **Injury Traffic Crashes, 2015-2020**



Source: www.michigantrafficcrashfacts.org

Figure 8 **Numbers of Injuries, 2015-2020**



Source: www.michigantrafficcrashfacts.org

Injury Traffic Crashes by Jurisdiction

Table 3 shows the number of injury traffic crashes by jurisdiction in GVMC area from 2015-2020.

Local Governments	2015	2016	2017	2018	2019	2020
Ada	54	70	49	38	53	40
Algoma	44	53	59	62	43	41
Allendale	48	56	71	60	53	53
Alpine	49	65	68	75	75	61
Blendon	17	31	19	21	18	18
Bowne	11	16	18	13	10	15
Byron	117	130	129	131	148	98
Caledonia	81	74	65	66	74	53
Cannon	31	52	33	27	39	27
Cascade	117	106	127	110	113	83
Casnovia	1	1	1	2	2	0
Cedar Springs	15	20	7	16	17	14
Chester	7	6	8	7	9	9
Courtland	32	33	37	35	39	30
East Grand Rapids	19	20	17	24	25	11
Gaines	102	100	124	114	118	94
Georgetown	149	197	151	153	146	146
City of Grand Rapids	1421	1520	1476	1418	1403	1192
Grand Rapids Township	95	98	99	89	93	68
Grandville	149	171	161	166	132	121
Grattan	26	16	22	24	16	16
Hudsonville	26	31	30	17	12	12
Jamestown	38	36	47	28	45	45
Kent City	4	6	4	5	6	6
Kentwood	247	313	301	351	300	248
Lowell	55	52	42	36	34	31
Nelson	13	29	17	23	22	17
Oakfield	28	38	31	30	32	14
Plainfield	184	209	201	199	172	106
Polkton	30	32	36	34	20	20
Rockford	17	29	17	21	9	14
Sand Lake	0	1	1	3	3	1
Solon	33	36	35	40	42	26
Sparta	31	42	37	39	34	43
Spencer	8	15	7	20	16	19
Tallmadge	29	40	48	33	43	43
Tyrone	23	22	22	26	22	21
Vergennes	22	18	17	19	18	17
Walker	238	296	271	276	242	188
Wright	29	41	45	38	44	44
Wyoming	514	595	569	493	512	430

Injury Traffic Crashes by Crash Type

Figure 9 shows that angle crashes were the most common type of injury crashes (26.4%) in 2020.

Table 4 shows head-on crashes are more likely to cause injury than any other type of crashes, with 41.9% head-on crashes resulting in injury. Only 3.8% of backing crashes caused injury in 2020.

Figure 9 **Injury Traffic Crashes by Crash Type in 2020**

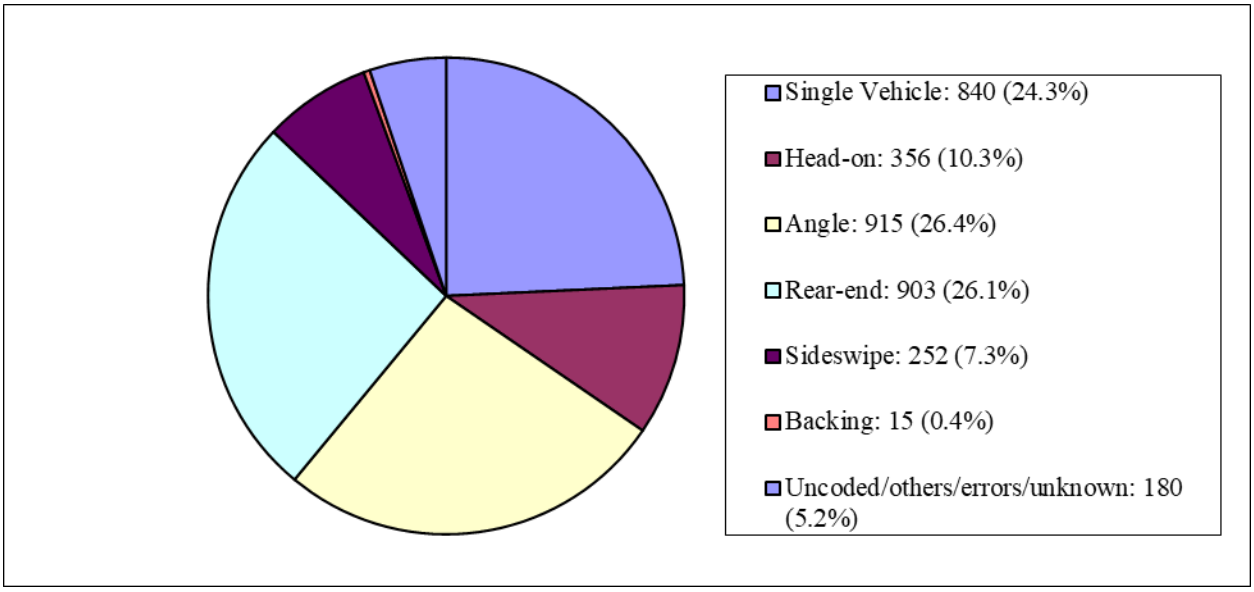


Table 4 **Traffic Crash Type by Percent Resulting in Injury in 2020**

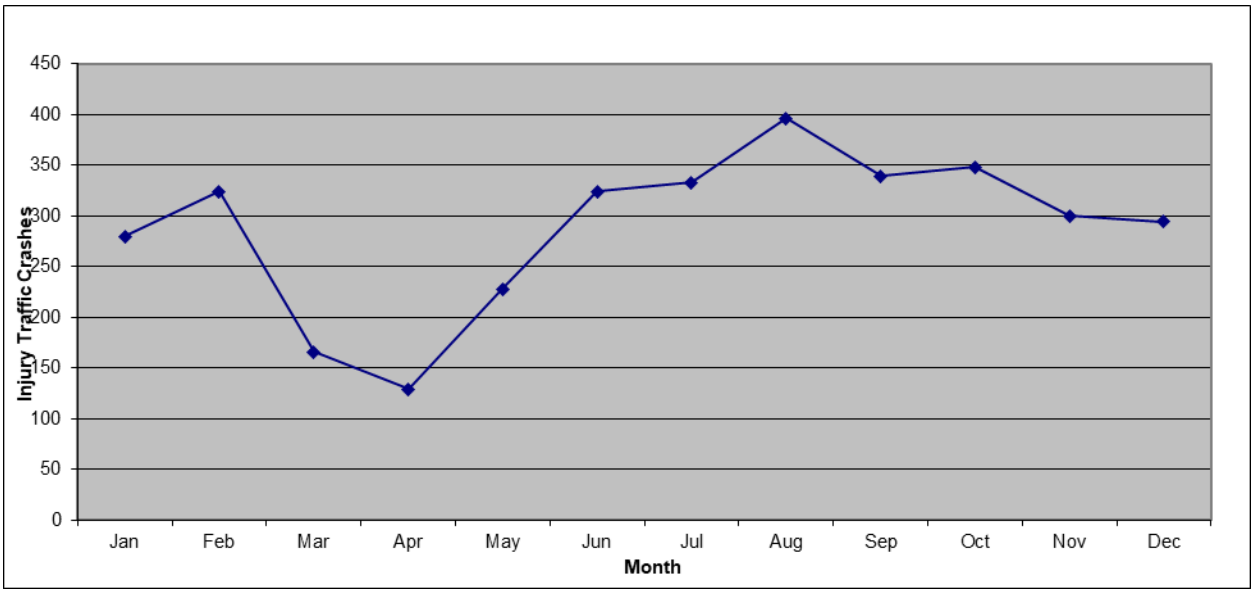
Crash Type	**Injury Crashes**	**All Crashes**	**Percent Resulting in Injury**
Head-on	356	849	41.9%
Angle	915	3,109	29.4%
Rear-End	903	5,198	17.4%
Single-Vehicle	840	5,061	16.6%
Sideswipe	252	2,986	8.4%
Backing	15	395	3.8%
Uncoded/others/errors/unknown	180	1,119	16.1%
Total	**3,461**	**18,717**	**18.5%**

Source: www.michigantrafficcrashfacts.org

Injury Traffic Crashes by Month, Day, and Hour

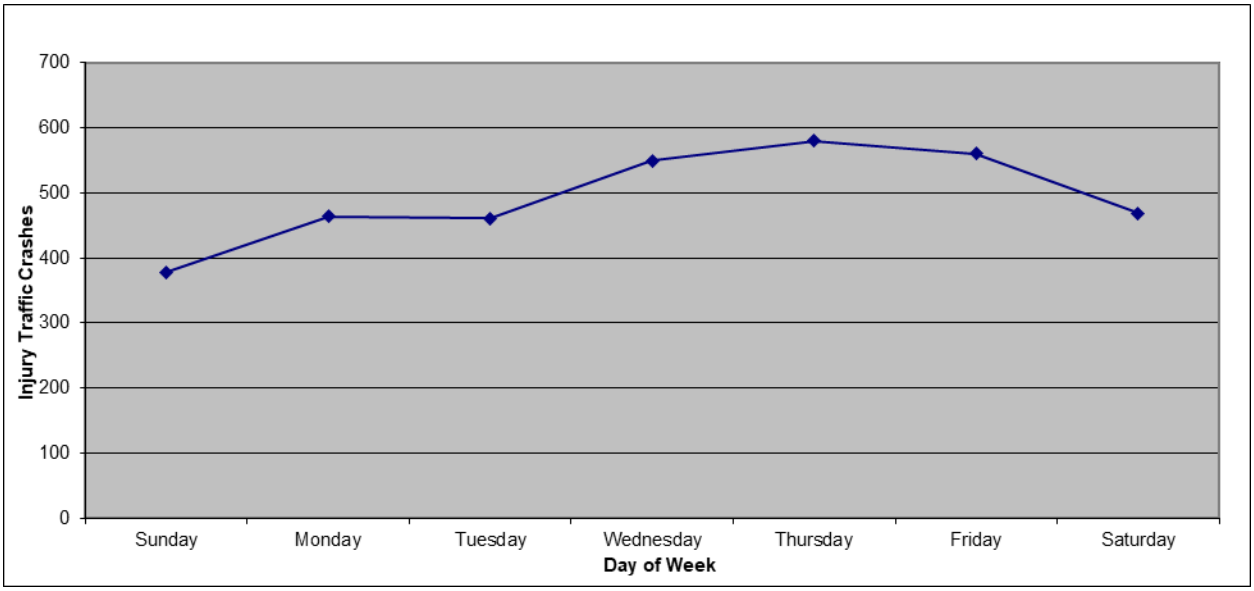
Figure 10 shows more injury traffic crashes occurred in August than any other months in 2020, with 396 injury traffic crash, and Figure 11 shows that Thursday was the day of week with the most injury traffic crashes (580).

Figure 10 **Injury Traffic Crashes by Month in 2020**



Source: www.michigantrafficcrashfacts.org

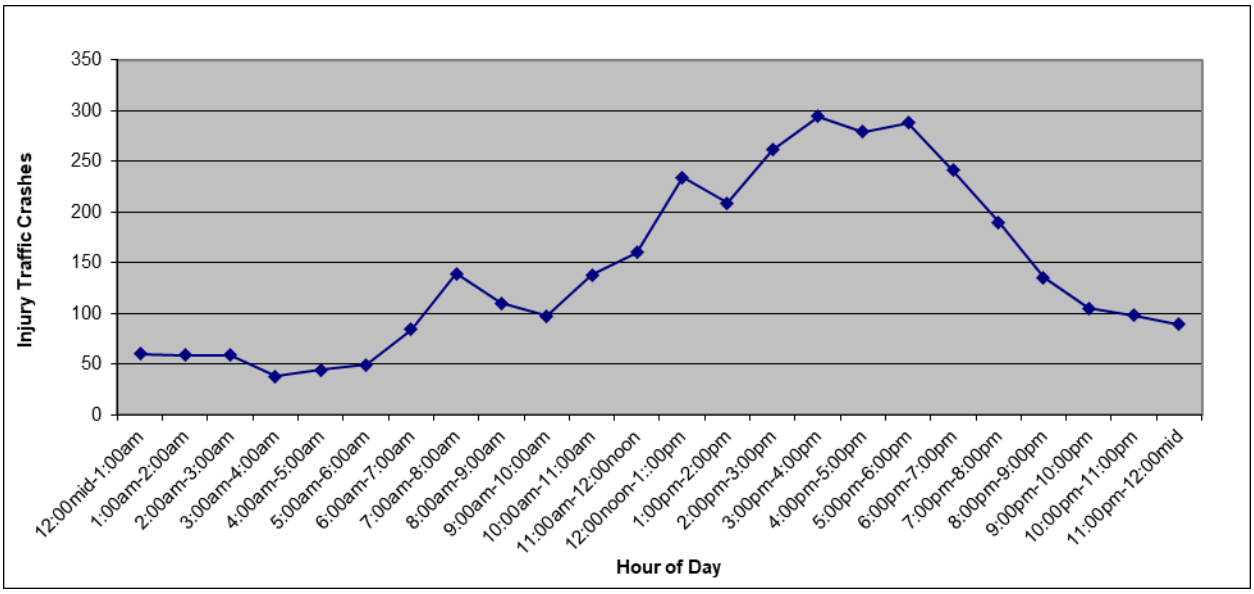
Figure 11 **Injury Traffic Crashes by Day of Week in 2020**



Source: www.michigantrafficcrashfacts.org

Figure 12 indicates that most injury traffic crashes occurred between 3 pm to 4 pm during each hour interval, with 294 injury crashes.

Figure 12 **Injury Traffic Crashes by Hour of Day in 2020**



Source: www.michigantrafficcrashfacts.org

Fatal Traffic Crashes

Fatal crash is defined as a crash that causes death within 30 days of the crash. There were 59 fatal crashes in GVMC area in 2020, a 10.7% increase from 2019, which had 53 fatal crashes. Figure 13 and Figure 14 show the number fatal crashes and the number of fatalities caused by traffic crashes from 2015 to 2020.

Figure 13 **Fatal Traffic Crashes, 2015-2020**

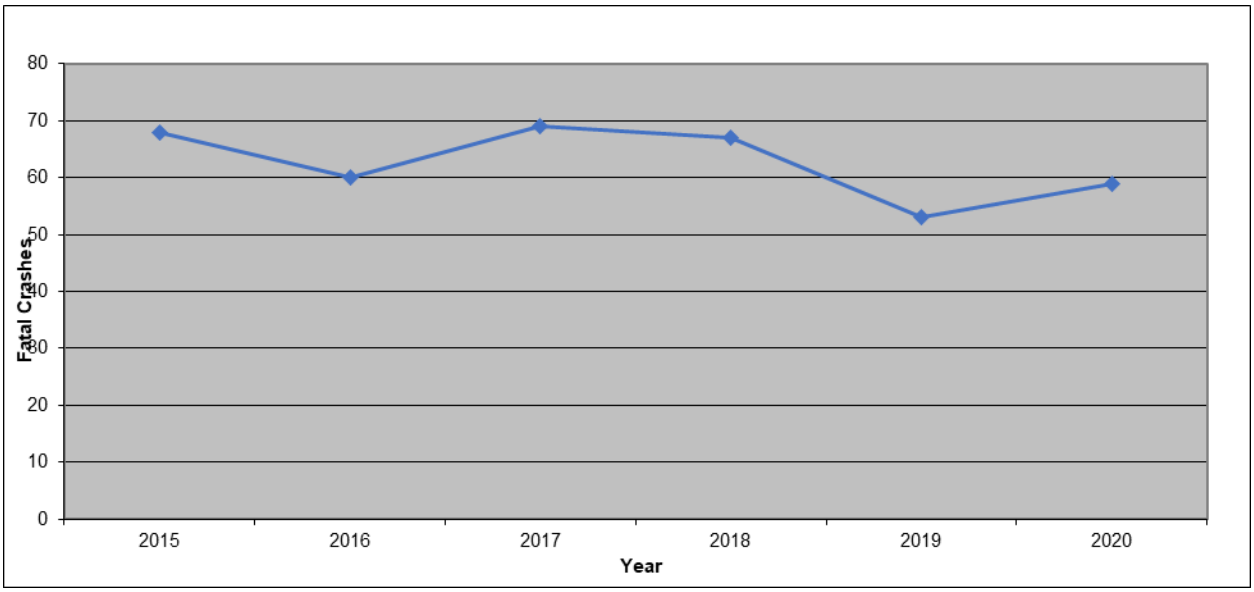
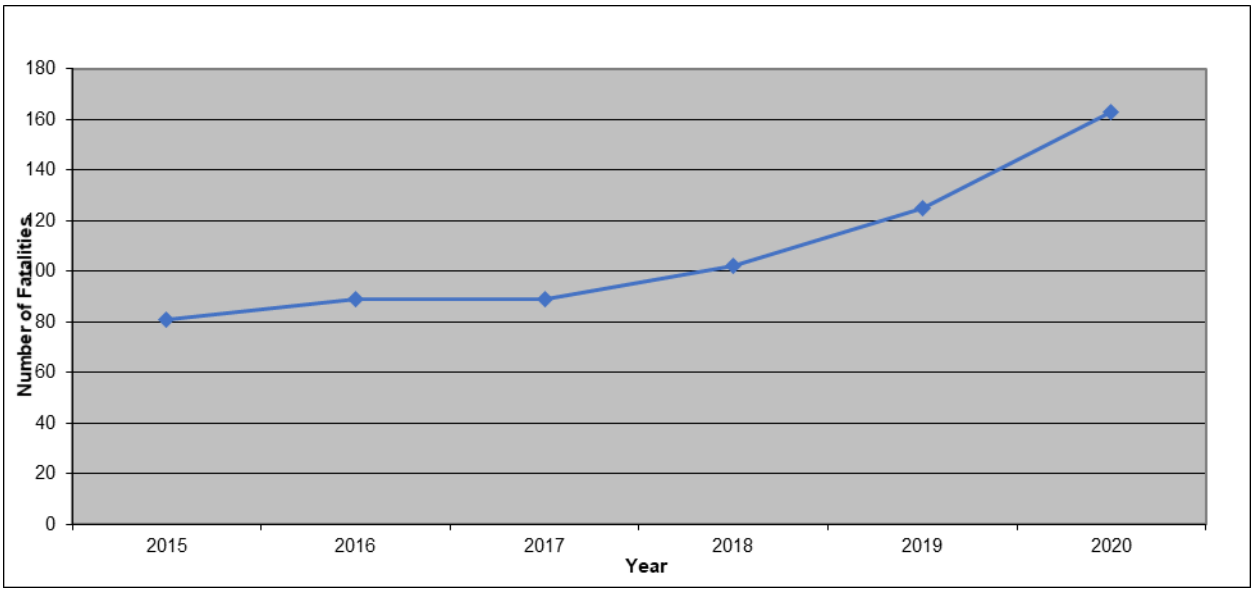


Figure 14 **Traffic Crash Fatalities, 2015-2020**



Source: www.michigantrafficcrashfacts.org

Fatal Traffic Crashes by Crash Type

Figure 15 shows that the most common type of crash causing fatalities in 2020 was single vehicle crash, which accounts for 40.3 percent of all fatal crashes. But Head-on crashes were more likely to result in a fatality, with 1.3% of Head-on crashes causing fatality.

Figure 15 **Fatal Traffic Crashes by Crash Type in 2020**

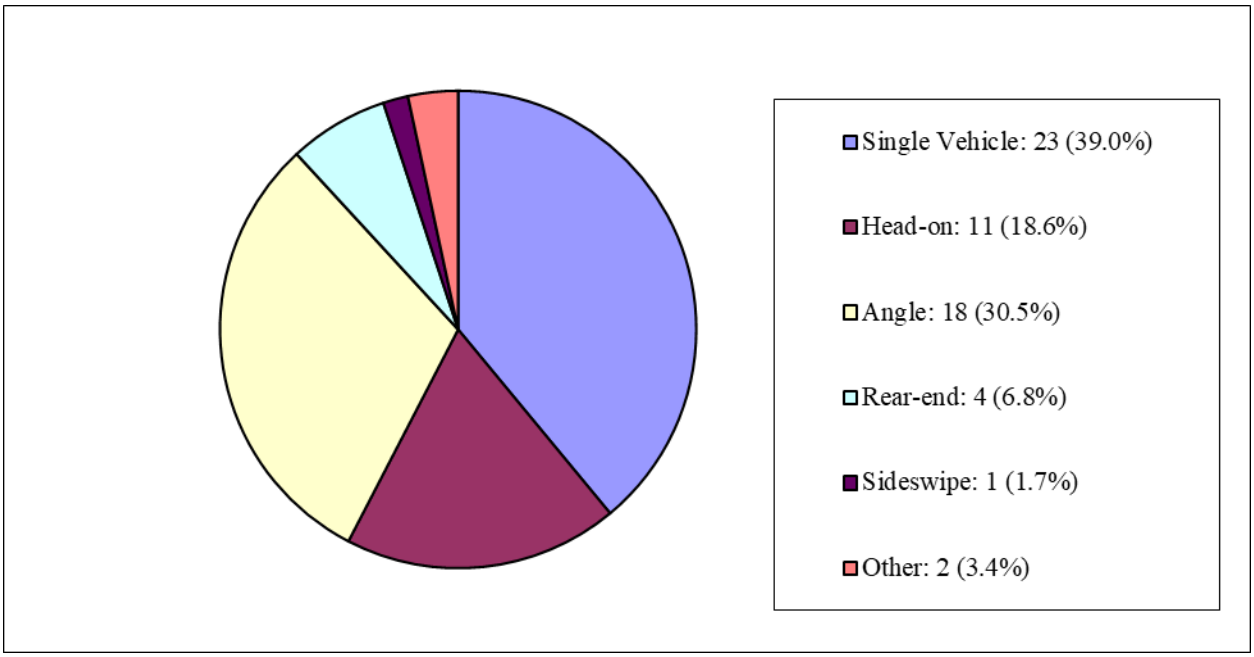


Table 5 **Crash Type by Percent Resulting in Fatality in 2020**

Crash Type	**Fatal Crashes**	**All Crashes**	**Percent Resulting in Fatality**
Head-on	11	849	1.3%
Single-Vehicle	23	5,061	0.5%
Angle	18	3,109	0.6%
Sideswipe	1	2,986	0.0003%
Rear-End	4	5,198	0.0008%
Other	2	1,119	0.2%
Total	**59**	**18,717**	**0.32%**

Source: www.michigantrafficcrashfacts.org

Fatal Traffic Crashes by Month, Day, and Hour

Figures 17 and 18 show the distribution of fatal traffic crashes by month and day of week in GVMC area in 2020.

Figure 16 **Fatal Traffic Crashes by Month in 2020**

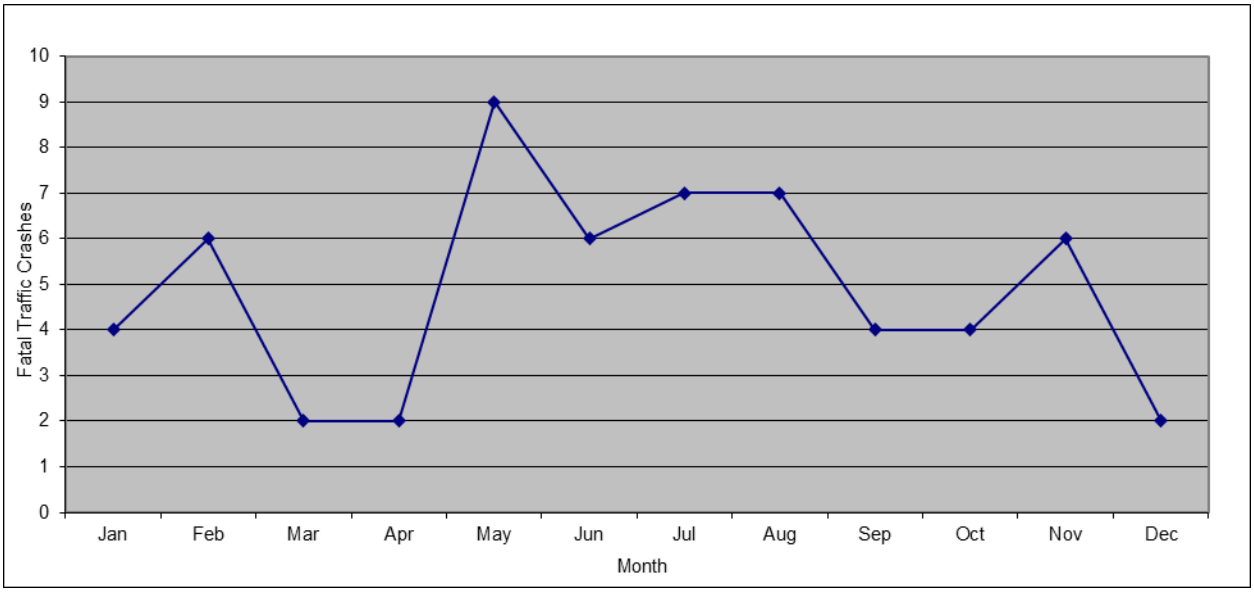
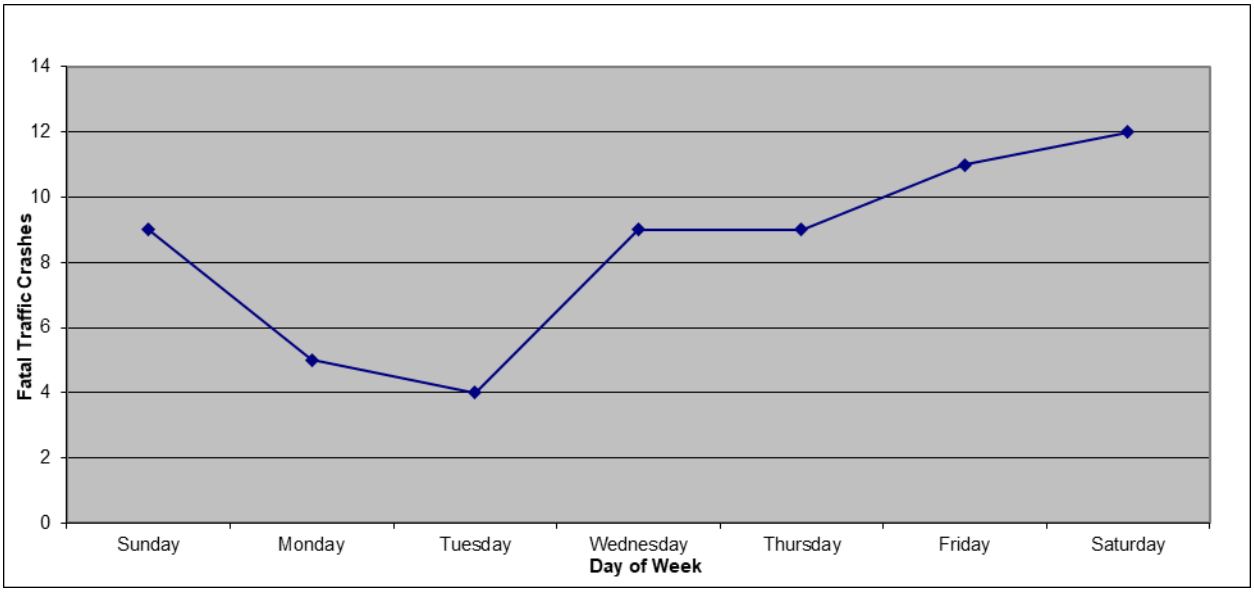


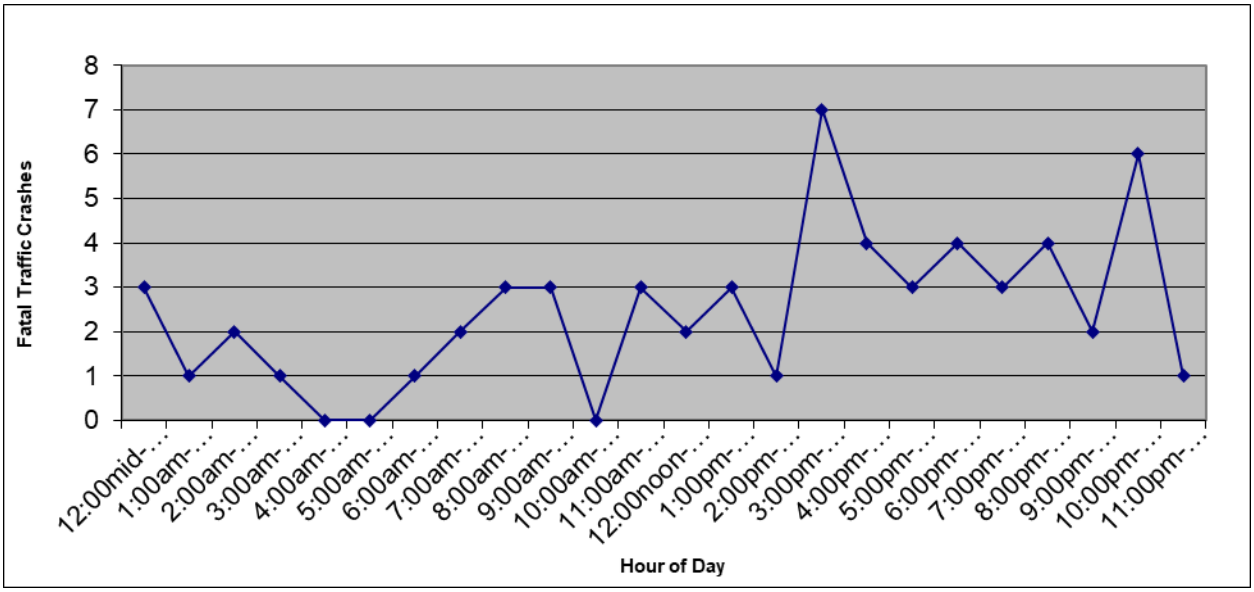
Figure 17 **Fatal Traffic Crashes by Day of Week in 2020**



Source: www.michigantrafficcrashfacts.org

Figure 18 below shows the distribution of fatal traffic crashes in GVMC area in 2020.

Figure 18 **Fatal Traffic Crashes by Hour of Day in 2020**



Source: www.michigantrafficcrashfacts.org

Alcohol-Involved Traffic Crashes

An alcohol-involved crash is defined as a crash in which a driver, pedestrian or bicyclist had any measurable alcohol in their system. Figure 19 shows the alcohol-involved traffic crashes in GVMC area from 865 in 2015 to 795 in 2020. Figure 20 shows the percentages of alcohol-involved crashes in GVMC area from 2015 to 2020.

Figure 19 **Alcohol-Involved Traffic Crashes, 2015-2020**

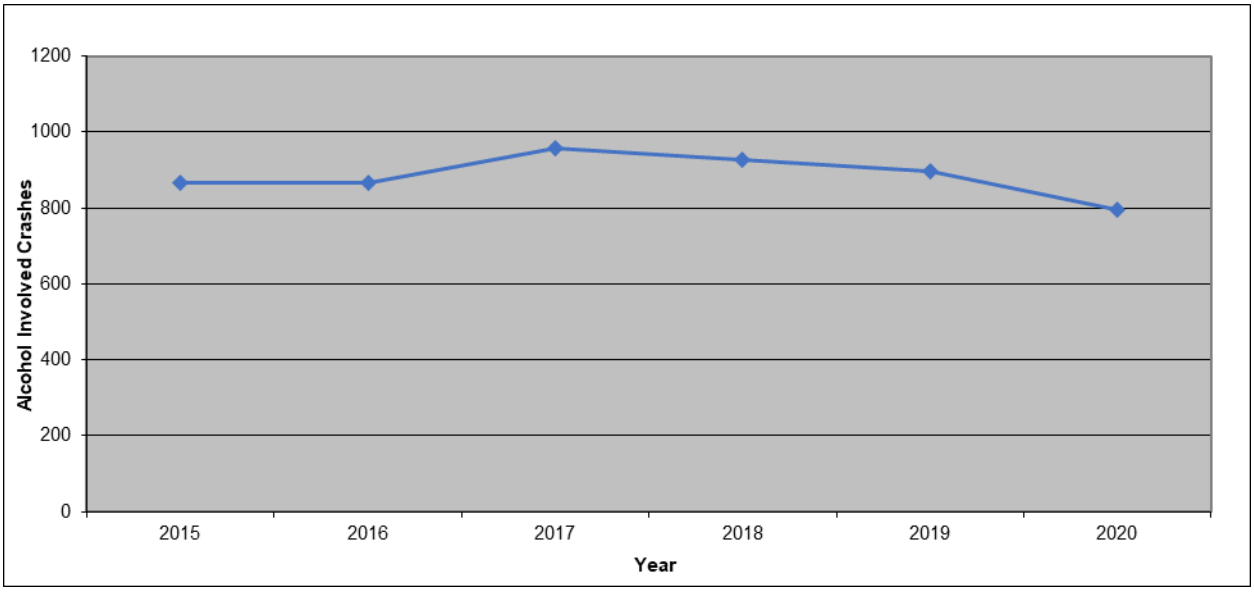


Figure 20 **Percentages of Alcohol-Involved Traffic Crashes, 2015-2020**

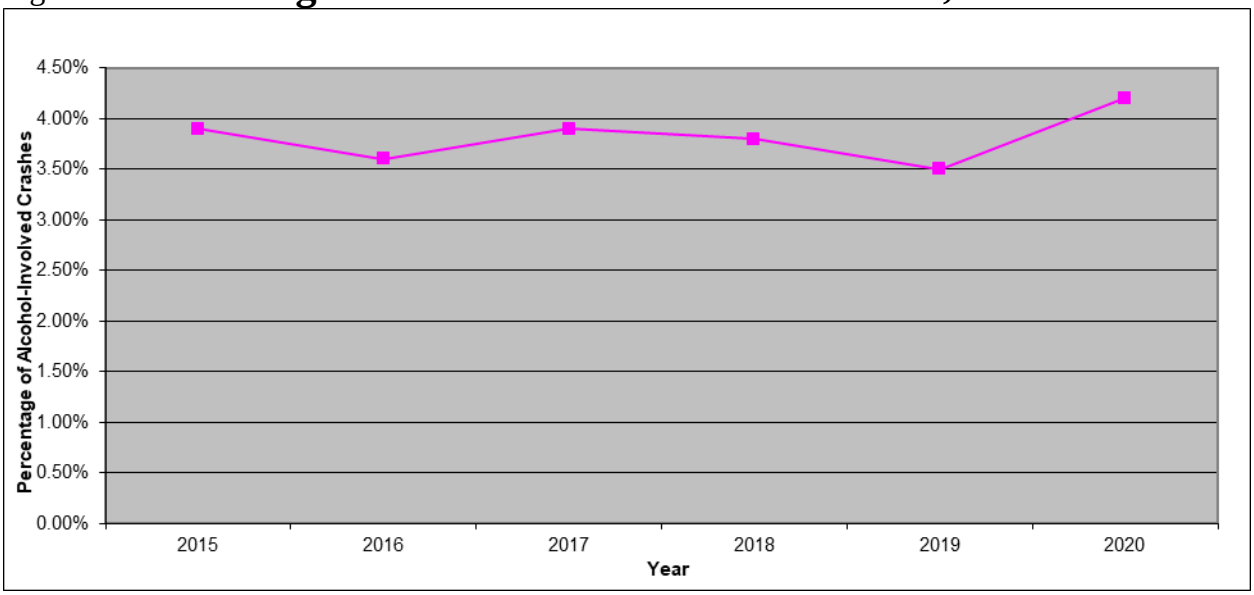


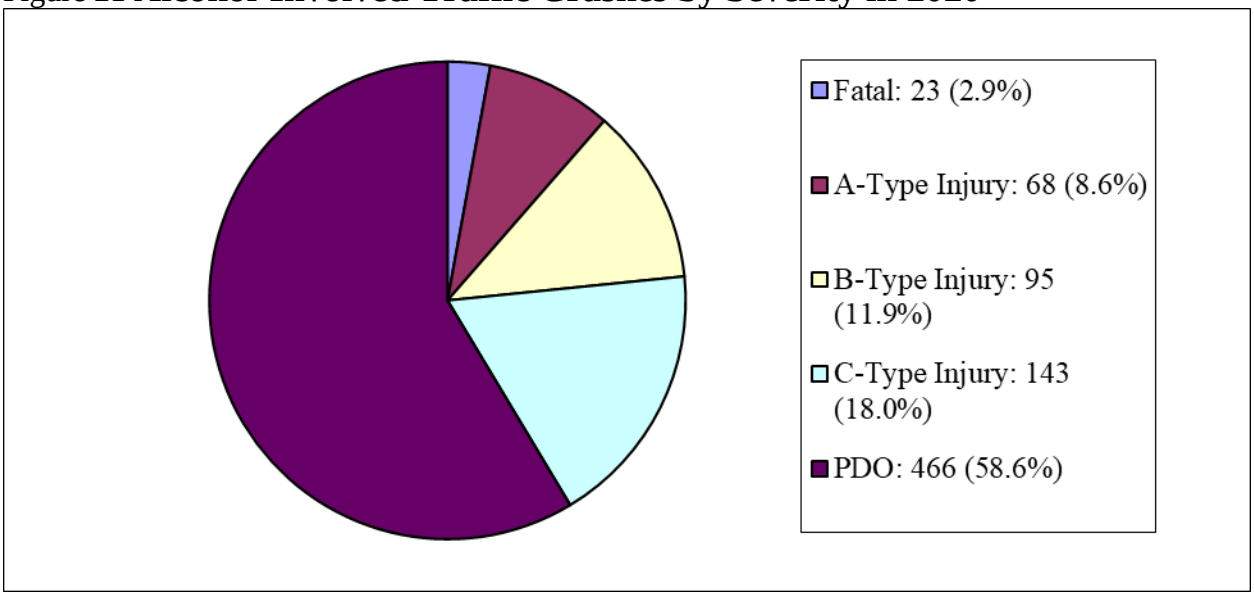
Table 6 below shows the number of Alcohol-Involved traffic crashes by jurisdiction in GVMC area from 2015-2020.

Local Governments	2015	2016	2017	2018	2019	2020
Ada	12	16	14	12	13	9
Algoma	15	11	21	17	15	12
Allendale	11	10	15	24	14	13
Alpine	20	17	6	15	19	18
Blendon	7	8	5	5	6	6
Bowne	3	3	2	2	4	4
Byron	24	24	24	22	35	19
Caledonia	15	13	14	12	9	7
Cannon	6	16	6	6	10	3
Cascade	19	19	23	16	20	17
Casnovia	0	2	0	1	1	0
Cedar Springs	1	3	0	3	3	1
Chester	3	3	3	3	1	1
Courtland	14	7	6	5	9	3
East Grand Rapids	8	6	4	7	5	3
Gaines	23	16	18	21	23	19
Georgetown	16	28	32	27	22	25
City of Grand Rapids	339	318	389	370	384	348
Grand Rapids Township	13	18	20	8	22	12
Grandville	12	18	20	14	14	10
Grattan	4	4	5	7	4	4
Hudsonville	1	1	8	3	0	3
Jamestown	7	6	4	6	7	6
Kent City	2	1	0	0	1	4
Kentwood	39	23	33	48	44	40
Lowell	10	7	16	12	6	5
Nelson	4	10	4	6	5	3
Oakfield	4	15	7	8	6	9
Plainfield	41	44	40	36	32	19
Polkton	8	5	8	7	13	9
Rockford	6	4	1	5	3	0
Sand Lake	1	0	1	0	2	2
Solon	7	7	13	12	7	10
Sparta	17	7	13	10	1	13
Spencer	2	6	5	11	9	9
Tallmadge	13	16	13	11	13	15
Tyrone	8	9	8	8	8	4
Vergennes	6	3	5	4	2	1
Walker	35	49	44	51	36	25
Wright	8	11	11	10	16	13
Wyoming	107	110	116	103	87	94

Alcohol-Involved Traffic Crashes by Severity

Although alcohol-involved traffic crashes only accounts for 4.3 percent of all traffic crashes in 2020, there were 39.0 percent fatal crashes related to alcohol, and 19.0 percent of all A-Type injuries involved alcohol. As shown in the table below, alcohol-involved crashes are more likely to cause death or serious injuries compared to other non-alcohol-involved crashes.

Figure 21 **Alcohol-Involved Traffic Crashes by Severity in 2020**



Source: www.michigantrafficcrashfacts.org

Table 7 **Alcohol-Involved Traffic Crash by Severity in 2020**

Crash Severity	**Alcohol-Involved Traffic Crashes**	**All Traffic Crashes**	**Alcohol-Involved Percentage**
Fatal	23	59	39.0%
A-Type Injury	68	358	19.0%
B-Type Injury	95	886	10.7%
C-Type Injury	143	2,217	6.5%
PDO	466	15,197	3.1%
Total	**795**	**18,717**	**4.3%**

Source: www.michigantrafficcrashfacts.org

Alcohol-Involved Traffic Crashes by Crash Type

Figure 22 shows that the most common type of alcohol-involved crashes were single vehicle crashes, accounting for 48.3 percent of all alcohol-involved crashes. Table 8 shows the percentage of alcohol-involved crashes in all traffic crashes.

Figure 22 **Alcohol-Involved Traffic Crashes by Type in 2020**

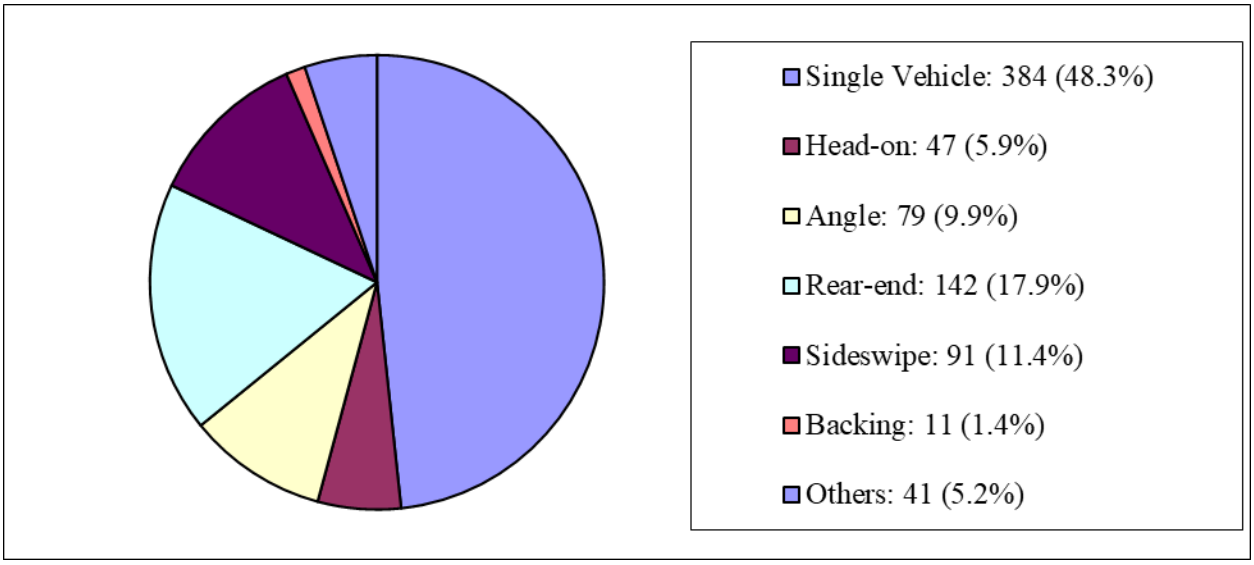


Table 8 **Percentage of Alcohol-Involved Traffic Crashes**

Crash Type	**Alcohol-Involved Traffic Crashes**	**All Crashes**	**Percentage of Alcohol-Involved Crash**
Single-Vehicle	384	5,061	7.6%
Head-on	47	849	5.5%
Angle	79	3,109	2.5%
Rear-End	142	5,198	2.7%
Sideswipe	91	2,986	3.1%
Backing	11	395	2.8%
Others	41	1,119	3.7%
Total	**795**	**18,717**	**4.3%**

Source: www.michigantrafficcrashfacts.org

Alcohol-Involved Traffic Crashes by Month, Day and Hour

Figure 23 shows that most alcohol-involved crashes occurred in August with 91 crashes and the fewest took place in April with 44 crashes each. Figure 24 indicates Saturdays had the most alcohol-involved traffic crashes (186) compared to any other days of week, while Tuesdays had the fewest alcohol-involved crashes (64) in 2020.

Figure 23 **Alcohol-Involved Traffic Crashes by Month in 2020**

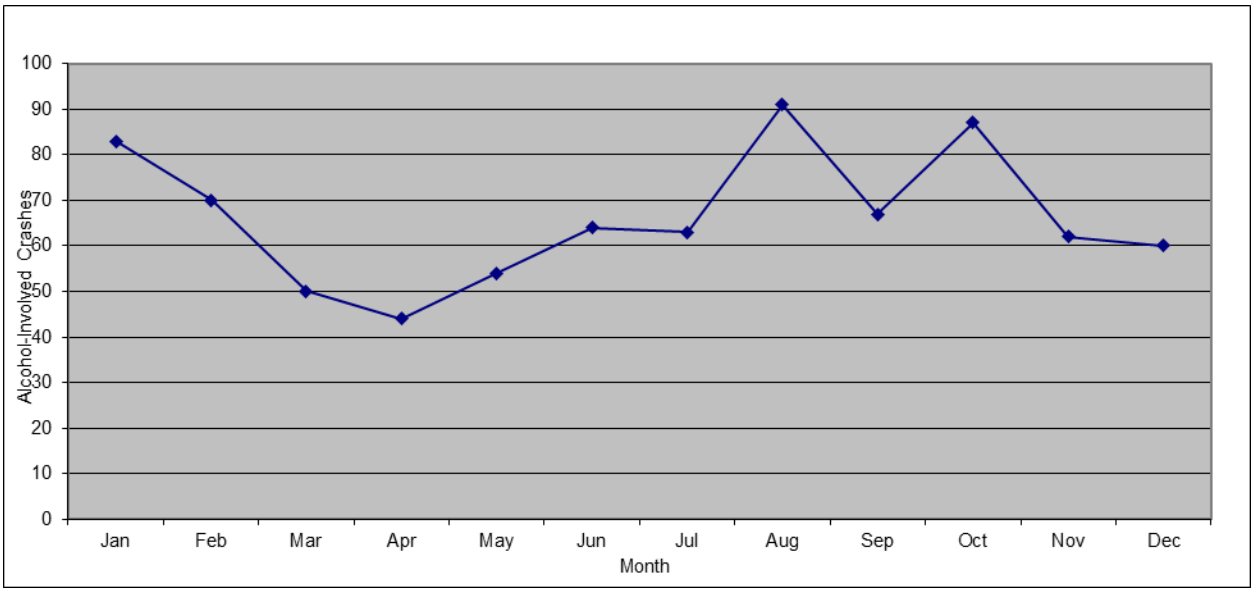
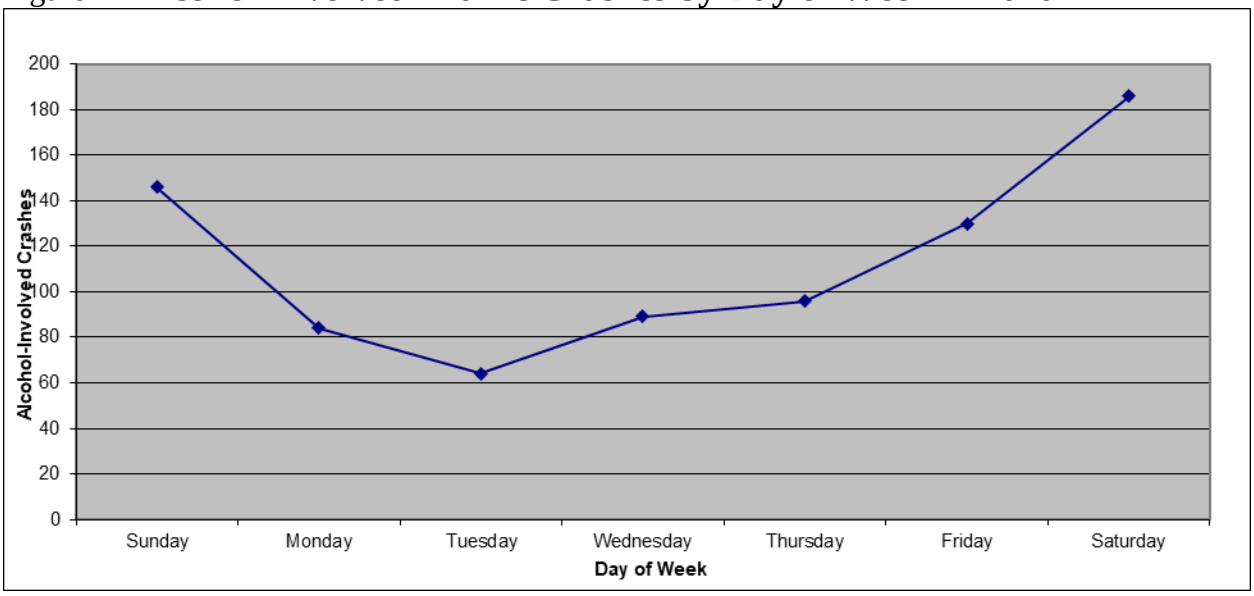


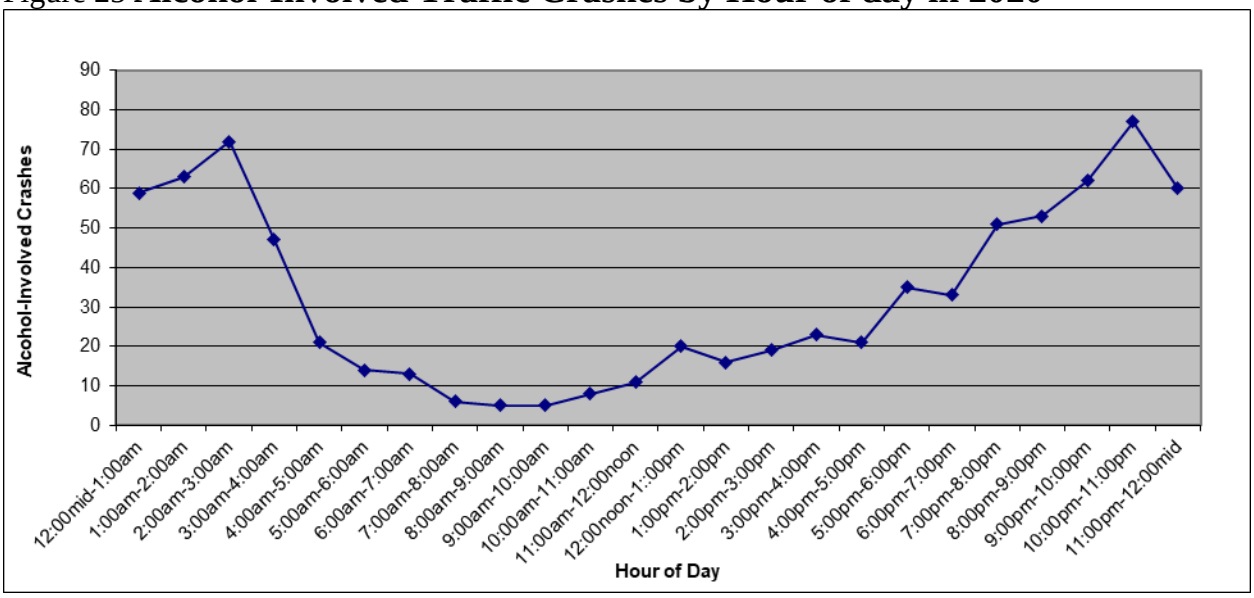
Figure 24 **Alcohol-Involved Traffic Crashes by Day of Week in 2020**



Source: www.michigantrafficcrashfacts.org

As shown in Figure 25, most alcohol-involved crashes occurred between 10 p.m. to 11 p.m. with 77 crashes in 2020.

Figure 25 **Alcohol-Involved Traffic Crashes by Hour of day in 2020**



Source: www.michigantrafficcrashfacts.org

Vehicle-Deer Traffic Crashes

There were 2,063 traffic crashes between vehicle and deer in GVMC area in 2020, a 15.4 percent increase from 2015. As shown in Figure 27, the percentage of vehicle-deer crash in GVMC area increased from 8.0 percent in 2015 to 11.0 percent in 2020.

Figure 26 **Vehicle-Deer Traffic Crashes, 2015-2020**

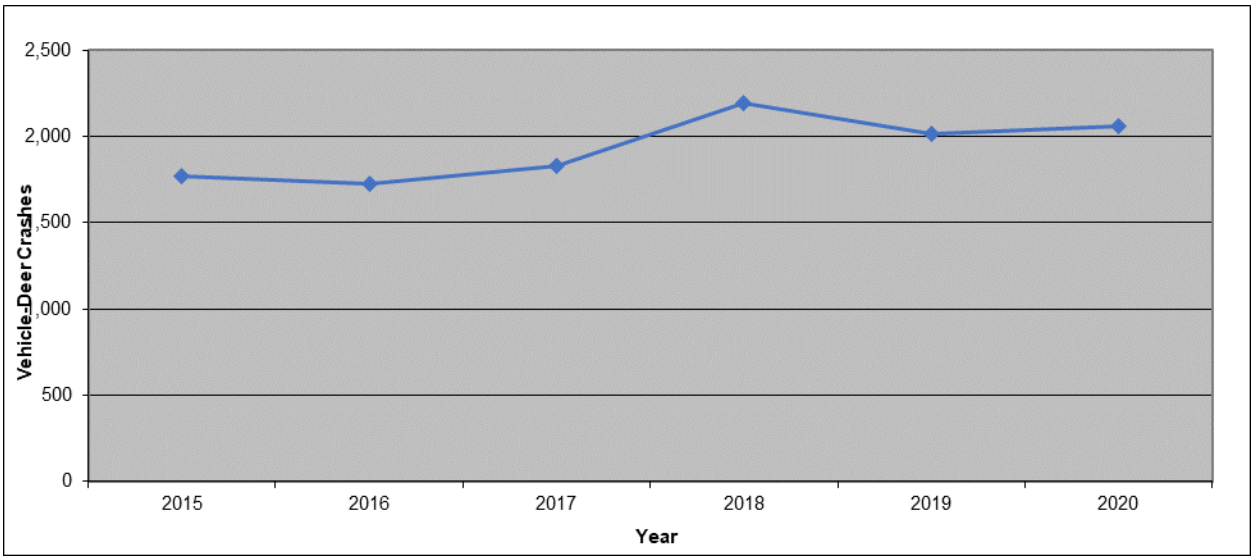
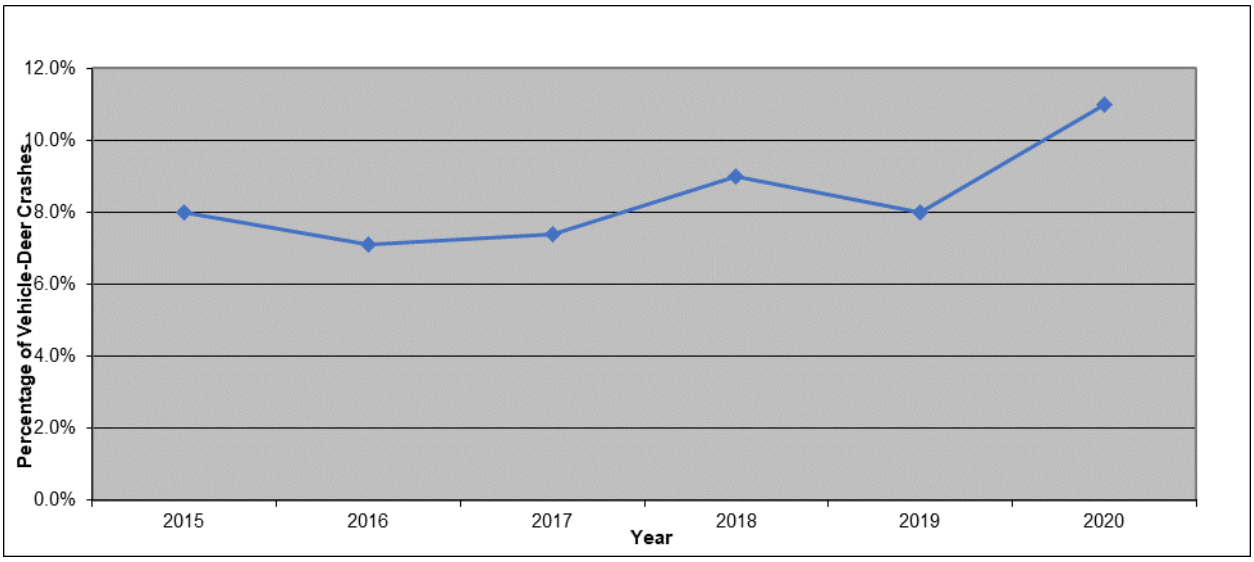


Figure 27 **Percentages of Vehicle-Deer Crashes in 2020**



Source: www.michigantrafficcrashfacts.org

Vehicle-Deer Traffic Crashes by Severity

As shown in Figure 28 and Table 9, most vehicle-deer crashes only caused property damage in GVMC area in 2020, which accounted for 81.2% of all vehicle-Deer crashes and 13.0% of all PDO crashes.

Figure 28 **Vehicle-Deer Traffic Crashes by Type in 2020**

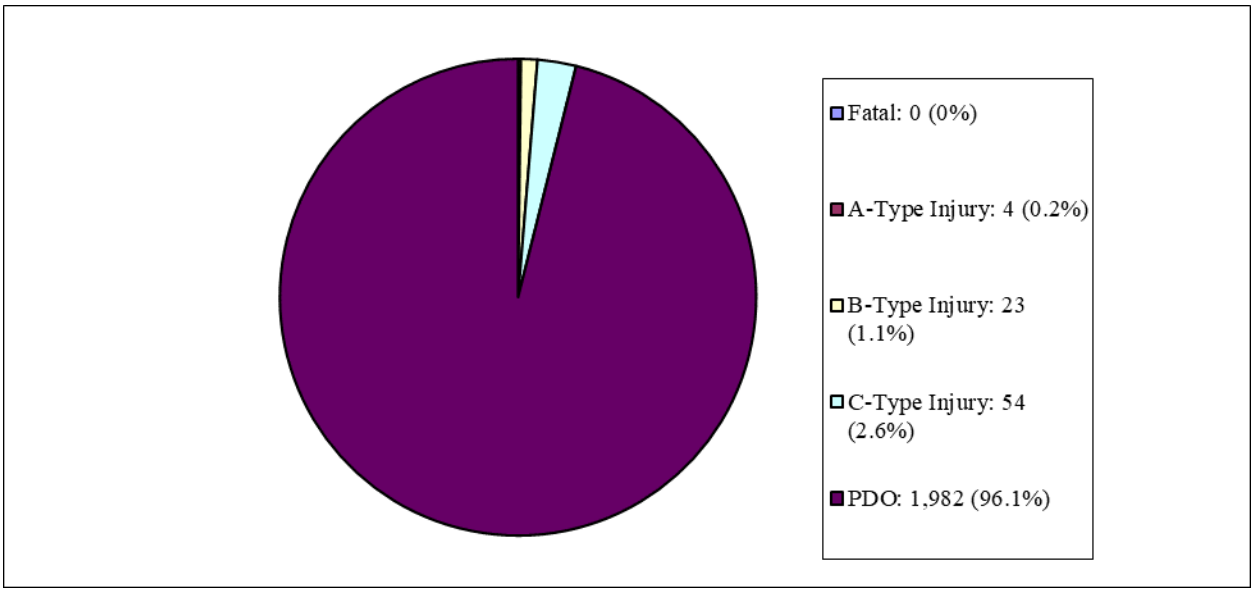


Table **9 Vehicle-Deer Traffic Crashes by Severity in 2020**

Crash Severity	**Vehicle-Deer Traffic Crashes**	**All Traffic Crashes**	**Vehicle-Deer Percentage**
Fatal	0	59	0%
A-Type Injury	4	358	1.1%
B-Type Injury	23	886	2.6%
C-Type Injury	54	2,217	2.4%
PDO	1,982	15,197	13.0%
Total	**2,063**	**18,717**	**11.0%**

Source: www.michigantrafficcrashfacts.org

Vehicle-Deer Traffic Crashes by Month, Day, and Hour in 2020

Figure 29 shows that November had the most vehicle-deer crashes at 472, and August had the fewest vehicle-deer crashes at 62.

Figure 29 **Vehicle-Deer Traffic Crashes by Month in 2020**

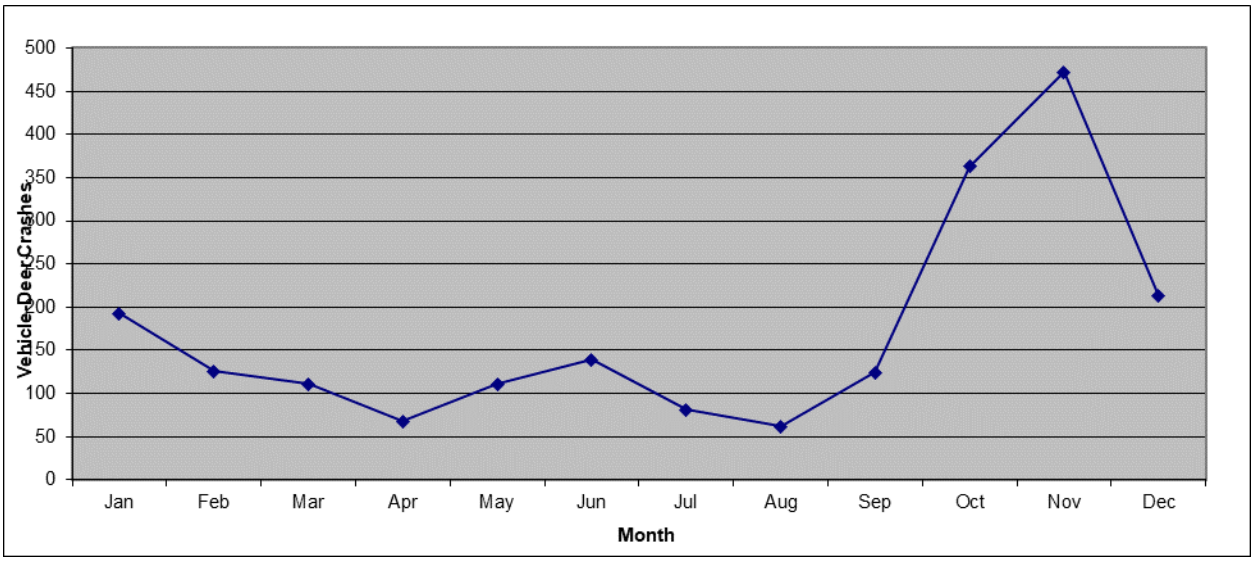
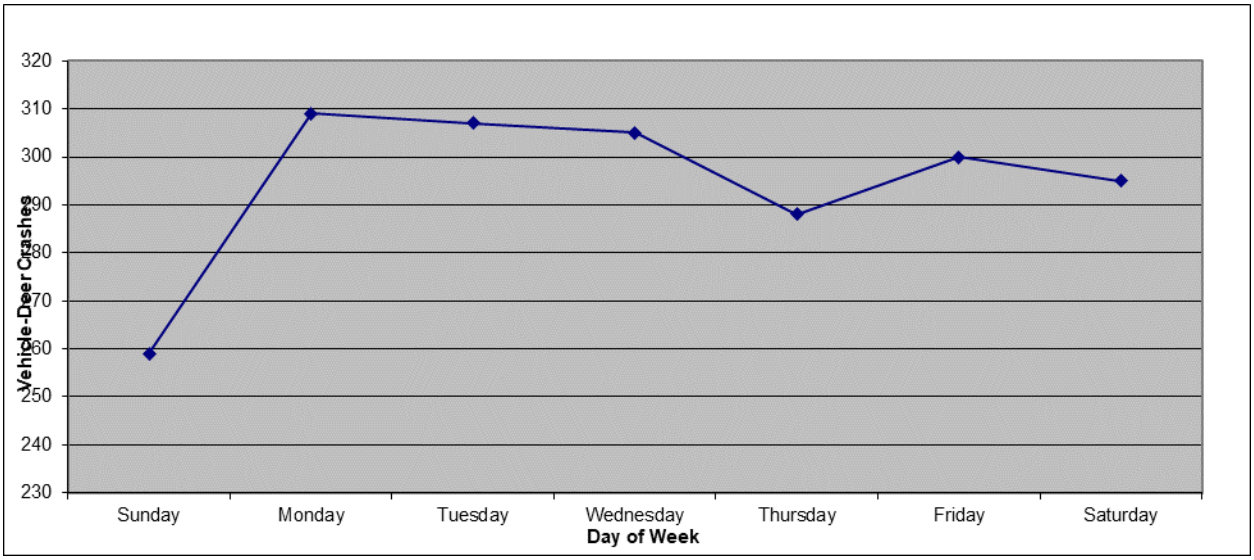


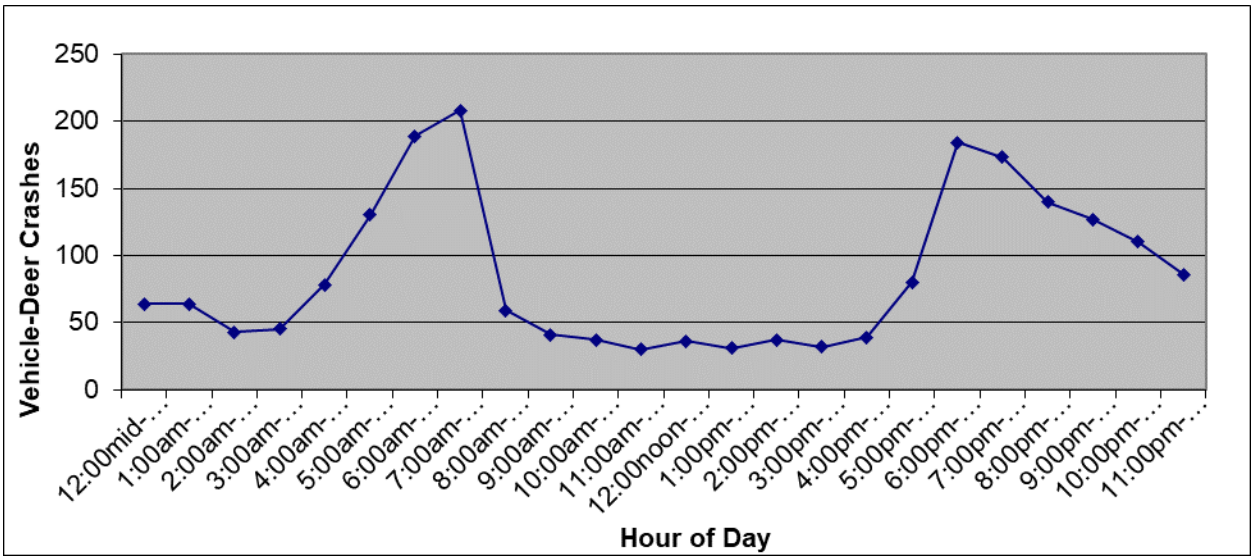
Figure 30 **Vehicle-Deer Traffic Crashes by Day of Week in 2020**



Source: www.michigantrafficcrashfacts.org

Figure 31 shows that deer crashes were most likely to occur during early mornings and early evenings with less deer crashes occurring between 9 am and 5 pm.

Figure 31 **Vehicle-Deer Traffic Crashes by Hour of Day in 2020**

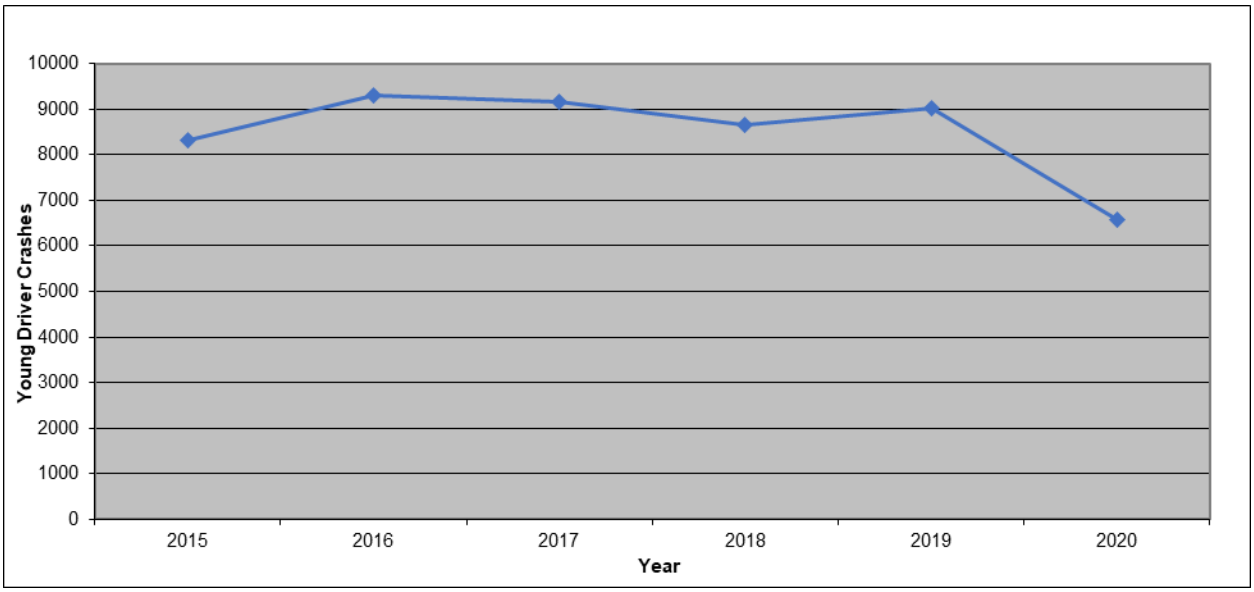


Source: www.michigantrafficcrashfacts.org

Young-Driver Traffic Crashes

A young driver is defined as a driver whose age is 24 and younger. Figure 32 shows the young-driver crashes from 2015 to 2020 in GVMC area, up from 8,307 in 2015 to 6,582 in 2020. Table 10 shows the percentage of young-driver traffic crashes for 2015-2020.

Figure 32 **Young-Driver Traffic Crashes, 2015-2020**



Source: www.michigantrafficcrashfacts.org

Table 10 **Percentages of Young-Driver Traffic Crashes, 2015-2020**

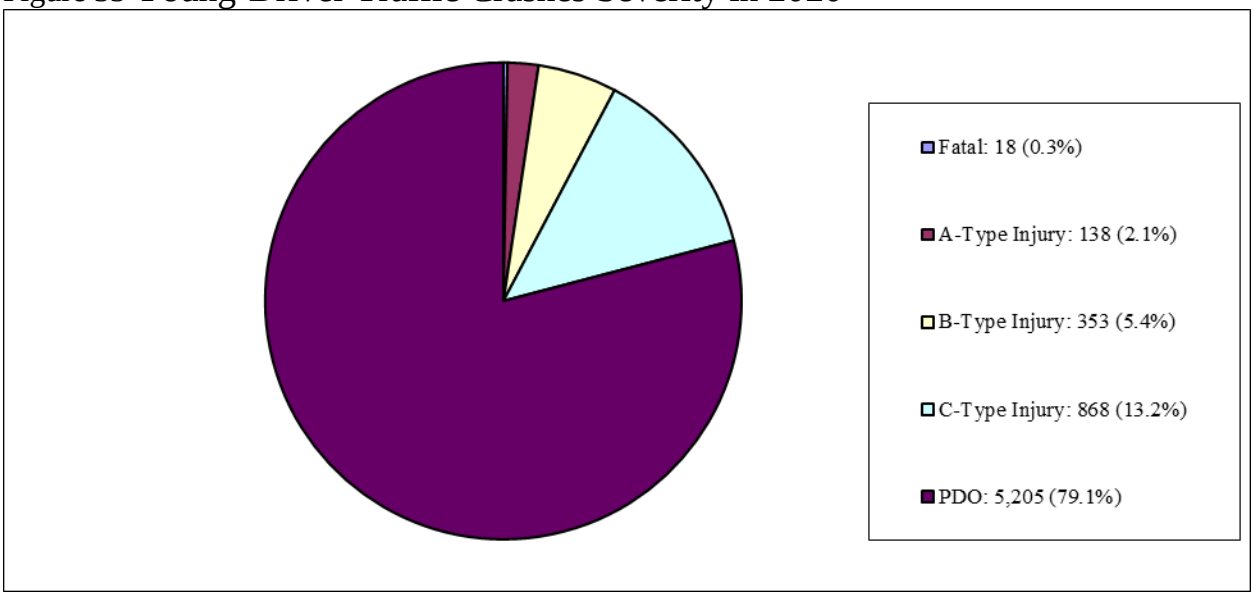
Year	Young-Driver Traffic Crashes	All Traffic Crashes	Percentage of Young-Driver Traffic Crashes
2015	8,307	22,139	37.5%
2016	9,302	24,180	38.5%
2017	9,173	24,683	37.2%
2018	8,651	24,314	35.6%
2019	9,013	25,358	35.5%
2020	6,582	18,717	35.2%

Source: www.michigantrafficcrashfacts.org

Young-Driver Traffic Crashes by Severity

Figure 33 shows the distribution of traffic crashes severity involving young driver in 2020. Table 11 indicates young driver traffic crashes accounted for a significantly large portion of fatal and injured crashes.

Figure 33 Young-Driver Traffic Crashes Severity in 2020



Source: www.michigantrafficcrashfacts.org

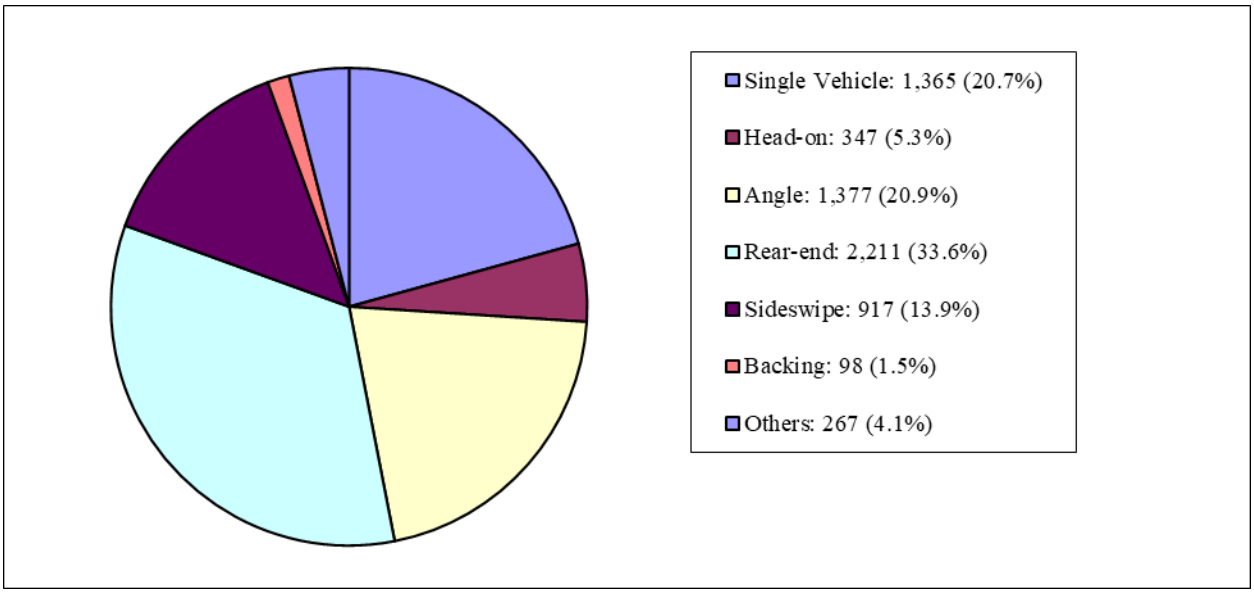
Table 11 **Young-Driver Traffic Crash by Severity in 2020**

Crash Severity	**Young-Driver Traffic Crashes**	**All Traffic Crashes**	**Young-Driver Percentage**
Fatal	18	59	30.5%
A-Type Injury	138	358	38.6%
B-Type Injury	353	886	39.8%
C-Type Injury	868	2,217	39.2%
PDO	5,205	15,197	34.3%
Total	**6,582**	**18,717**	**35.2%**

Source: www.michigantrafficcrashfacts.org

Figure 34 below shows that young drivers were more likely to have rear-end, single vehicle and angel crashes, and less likely to have backing and head-on crashes.

Figure 34 **Young-Driver Traffic Crashes by Crash Type in 2020**



Source: www.michigantrafficcrashfacts.org

Young-Driver Traffic Crashes by Month, Day, and Hour

As shown in Figure 35, the number of young-driver crashes was the highest in October in 2020.

Figure 35 Young-Driver Traffic Crashes by Month in 2020

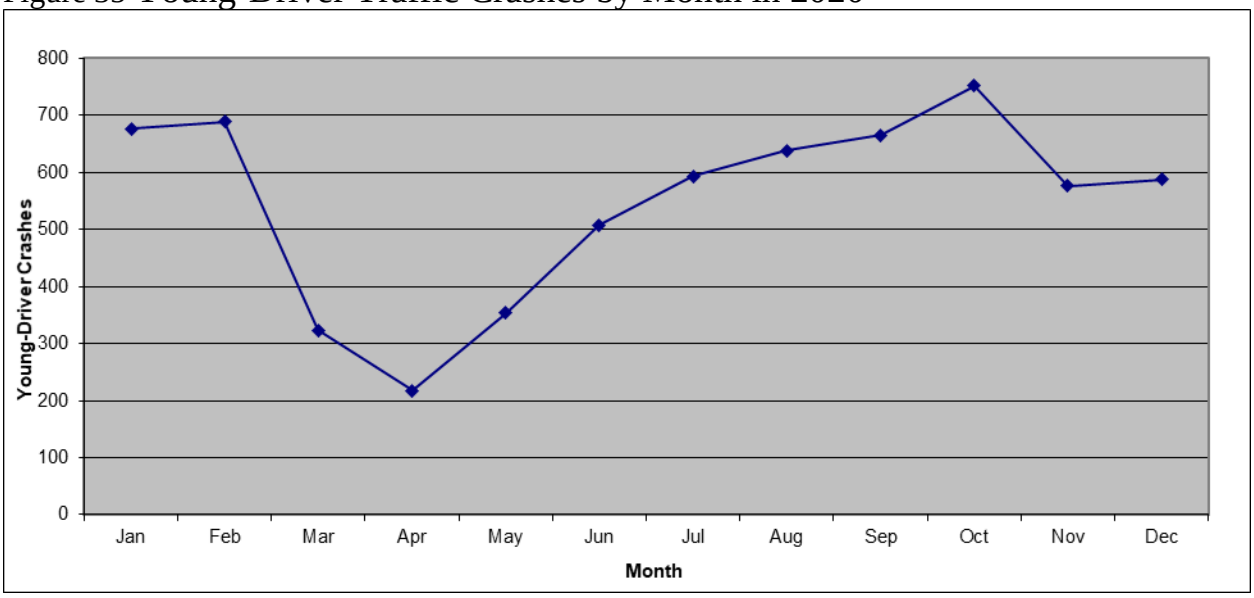
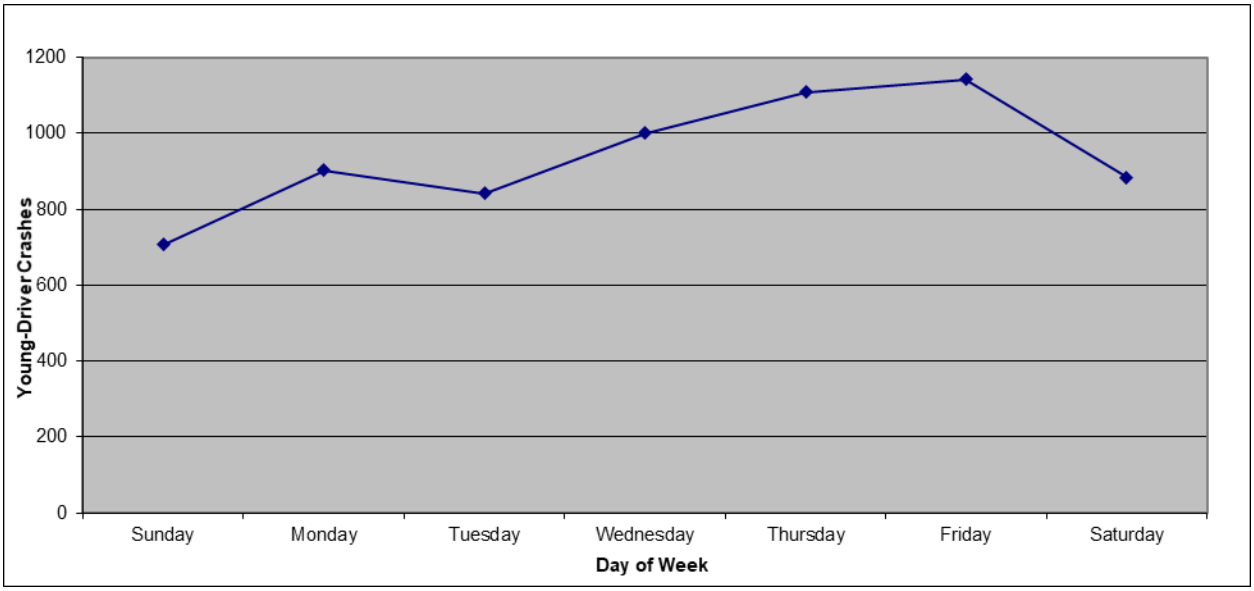


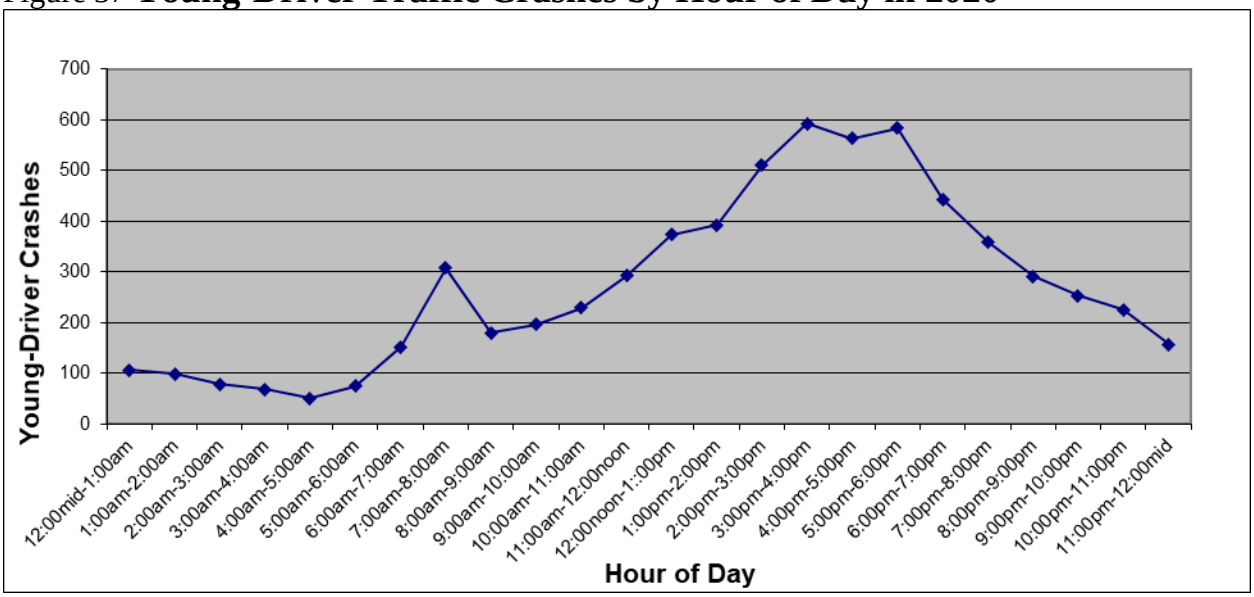
Figure 36 shows that Fridays had the most young-driver traffic crashes, and Sundays had the least crashes in 2020. Figure 37 shows that young–driver crashes were more likely to occur during afternoon and early evening and were less likely to occur during late morning.

Figure 36 **Young-Driver Traffic Crashes by Day of Week in 2019**



Source: www.michigantrafficcrashfacts.org

Figure 37 **Young-Driver Traffic Crashes by Hour of Day in 2020**

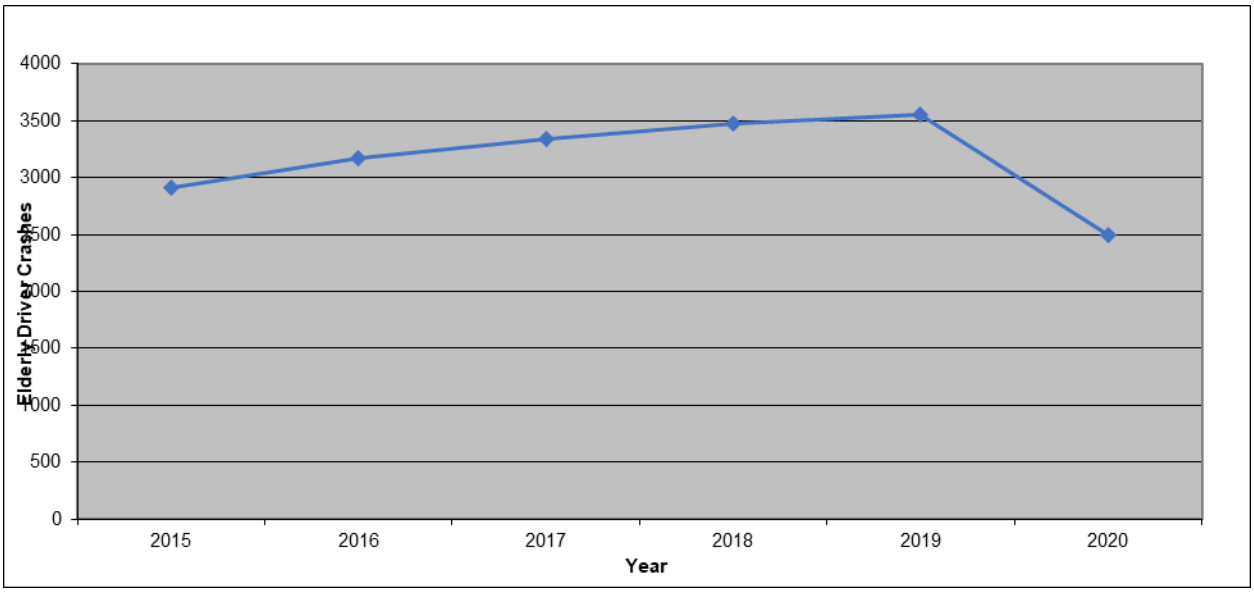


Source: www.michigantrafficcrashfacts.org

Elderly Driver Traffic Crashes

Elderly Driver is defined as a driver aging 65 or over. Figure 38 shows the increasing trend in elderly driver traffic crashes between 2014 and 2019, decreasing in 2020. Table 12 shows the percentages of elderly driver crashes from 2015 to 2020.

Figure 38 **Elderly Driver Traffic Crashes, 2015-2020**



Source: www.michigantrafficcrashfacts.org

Table 12 **Percentages of Elderly Driver Traffic Crashes, 2015-2020**

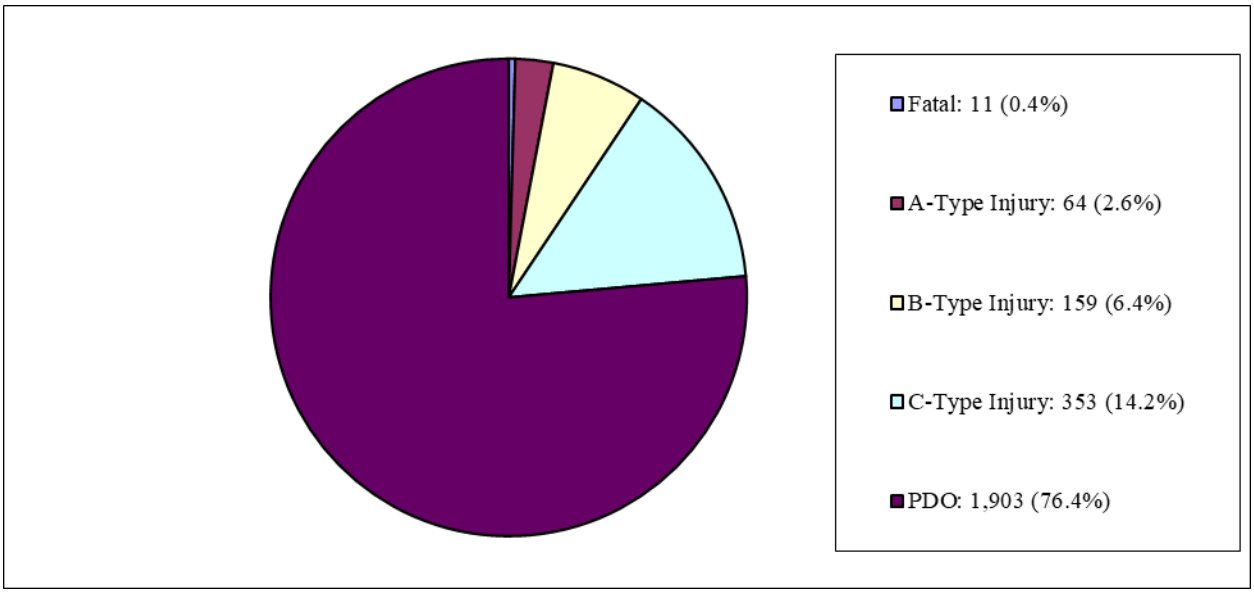
Year	Elderly Driver Traffic Crashes	All Traffic Crashes	Percentage of Elderly Driver Traffic Crashes
2015	2,914	22,139	13.2%
2016	3,171	24,180	13.1%
2017	3,340	24,683	13.5%
2018	3,469	24,314	14.3%
2019	3,550	25,358	14.0%
2020	2,490	18,717	13.3%

Source: www.michigantrafficcrashfacts.org

Elderly Driver Traffic Crashes by Severity

Figure 39 shows the distribution of traffic crash severity involving elderly driver in 2020. As shown in Table 13, fatal crashes caused by elderly driver accounted for 18.6 percent in all fatal traffic crashes in 2020.

Figure 39 **Elderly Driver Traffic Crashes Severity in 2020**



Source: www.michigantrafficcrashfacts.org

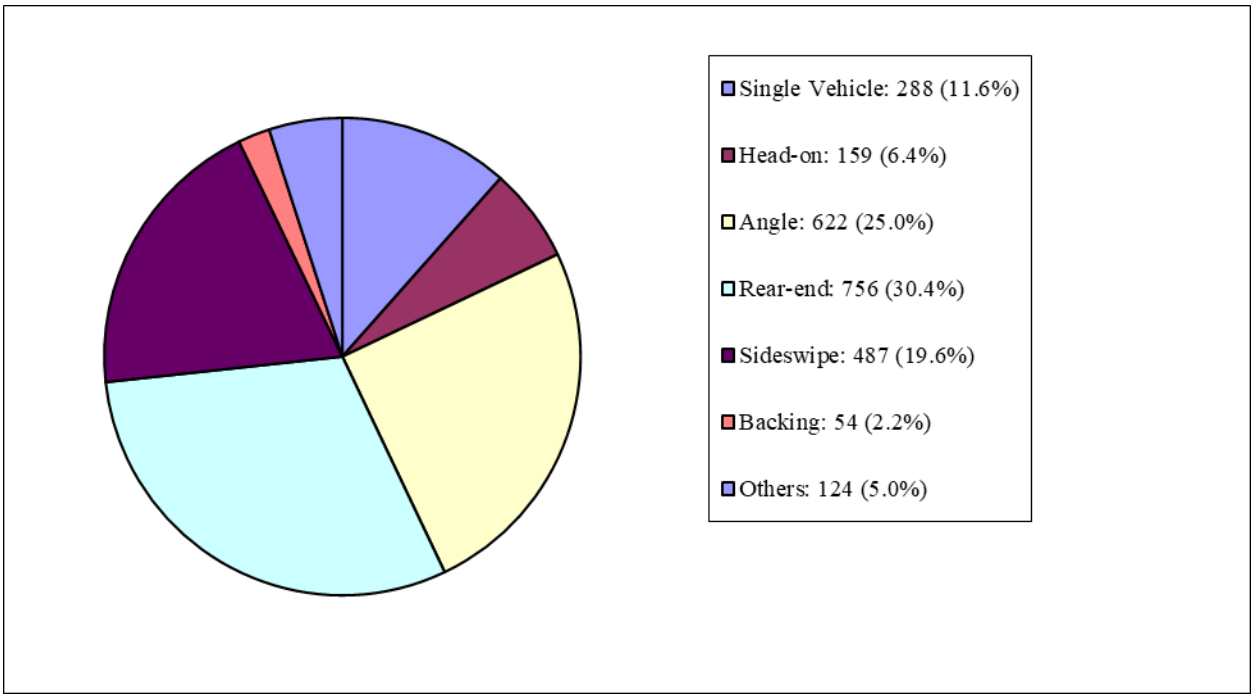
Table 13 **Elderly Driver Traffic Crash by Severity in 2020**

Crash Severity	**Elderly-Driver Traffic Crashes**	**All Traffic Crashes**	**Elderly-Driver Percentage**
Fatal	11	59	18.6%
A-Type Injury	64	357	17.9%
B-Type Injury	159	886	18.0%
C-Type Injury	353	2,217	15.9%
PDO	1,903	15,197	12.5%
Total	**2,490**	**18,717**	**13.3%**

Source: www.michigantrafficcrashfacts.org

Figure 40 shows that elderly driver where most likely to have rear-end crashes and were least likely to have backing crashes.

Figure 40 **Elderly Driver Traffic Crashes by Crash Type in 2020**

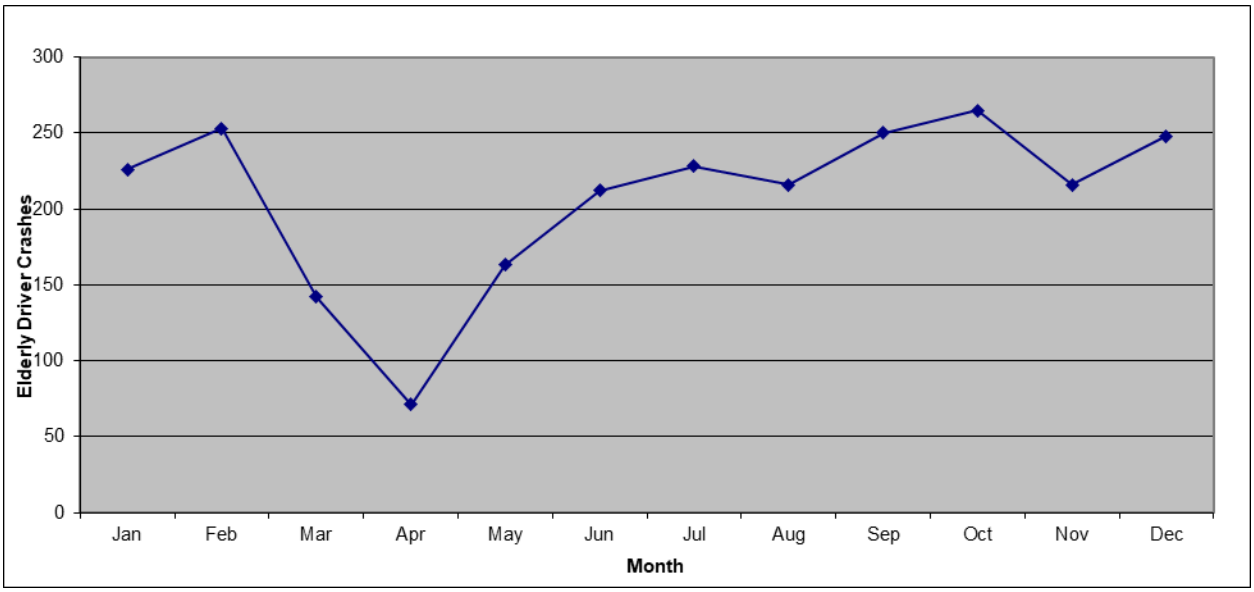


Source: www.michigantrafficcrashfacts.org

Elderly Driver Traffic Crashes by Month, Day and Hour

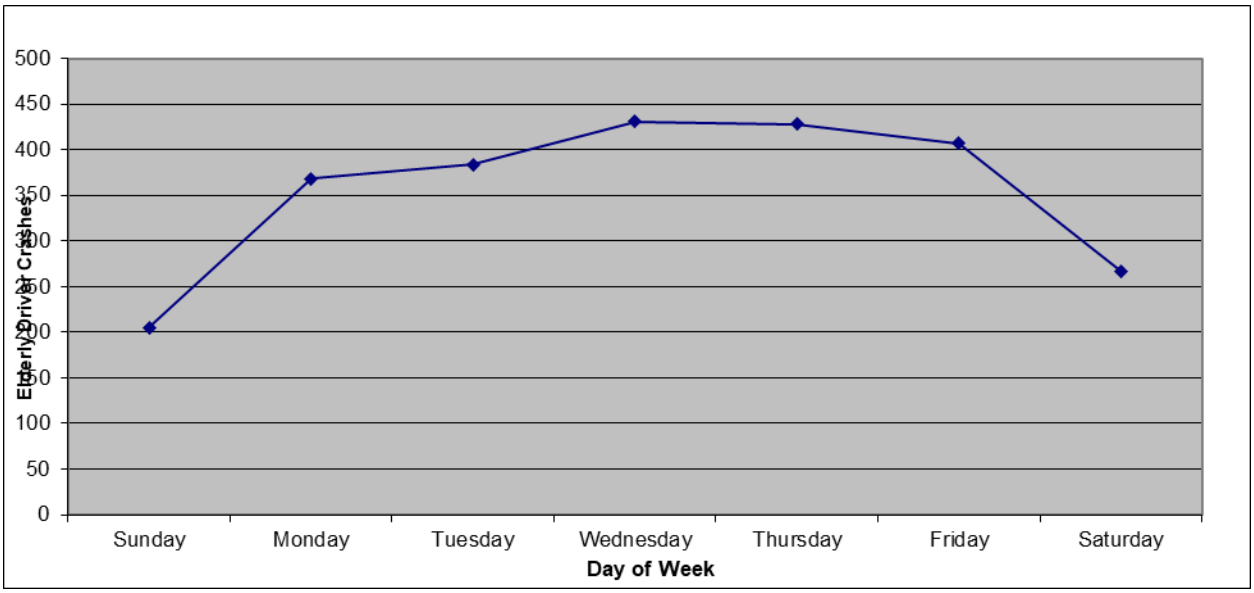
Figure 41, 42 and Figure 43 show Elderly driver traffic crashes by Month, Day of Week, and by Hour of Day, respectively.

Figure 41 **Elderly Driver Traffic Crashes by Month in 2020**



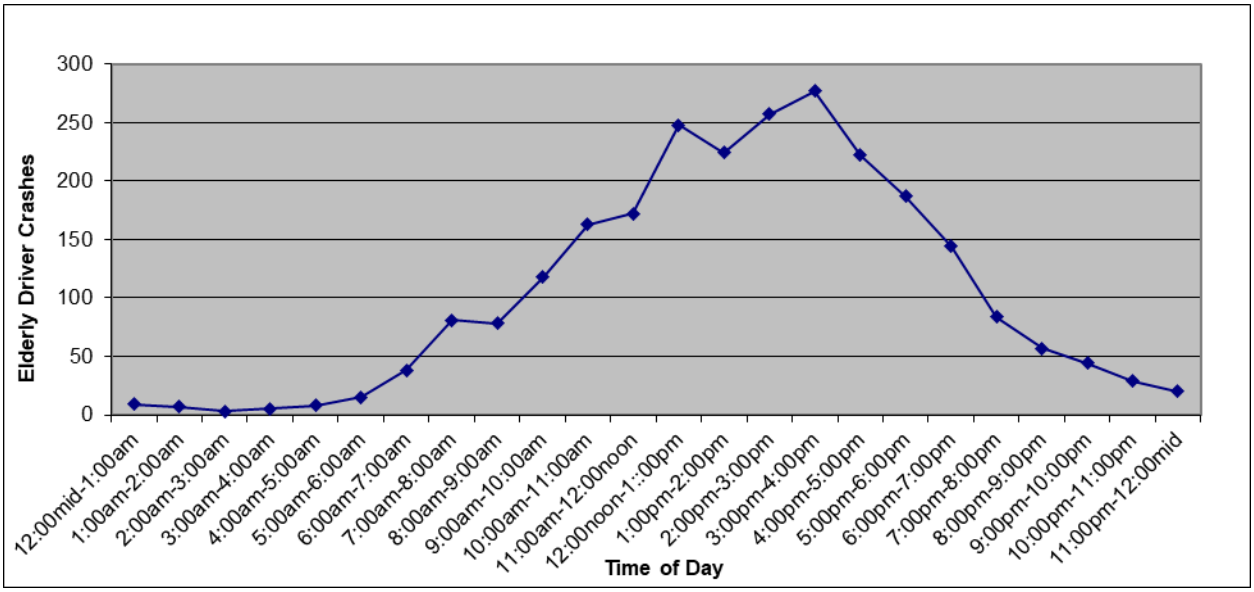
Source: www.michigantrafficcrashfacts.org

Figure 42 **Elderly Driver Traffic Crashes by Day of Week in 2020**



Source: www.michigantrafficcrashfacts.org

Figure 43 **Elderly Driver Traffic Crashes by Hour of Day in 2020**

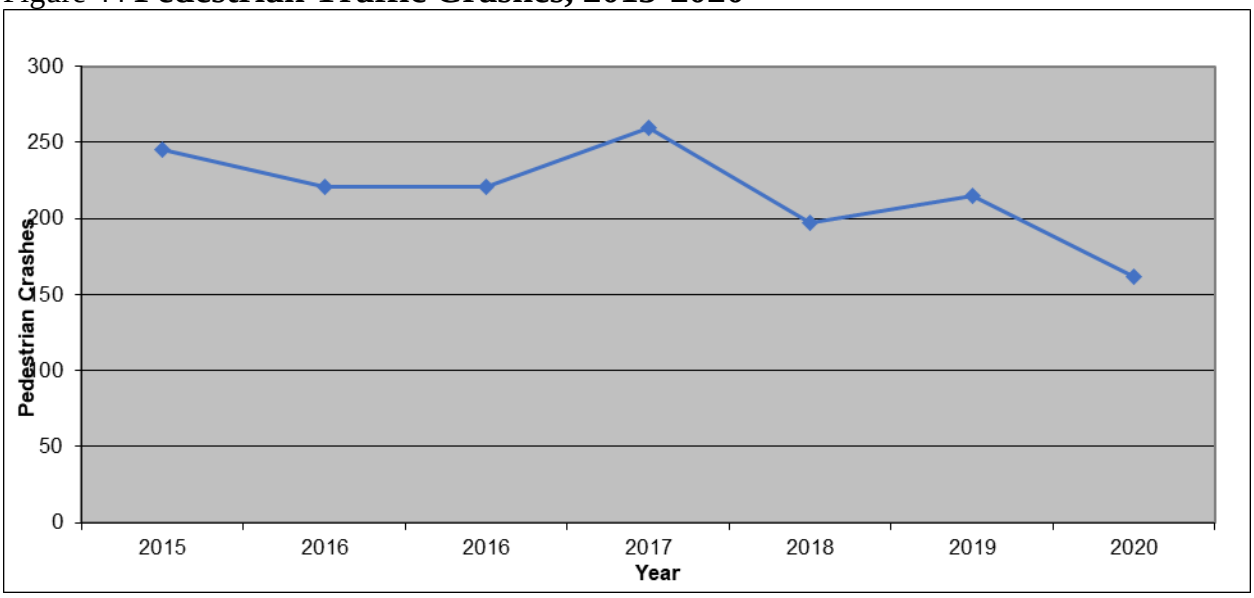


Source: www.michigantrafficcrashfacts.org

Pedestrian Traffic Crashes

As shown in Figure 44, the pedestrian traffic crashes moved up and down between 2015 and 2020 in the GVMC area. There were 162 pedestrian crashes in 2020. Figure 45 and Table 13 show pedestrian traffic crashes by severity in 2020.

Figure 44 **Pedestrian Traffic Crashes, 2015-2020**



Source: www.michigantrafficcrashfacts.org

Pedestrian Traffic Crashes by Severity

Figure 45 **Pedestrian Traffic Crashes by Severity in 2020**

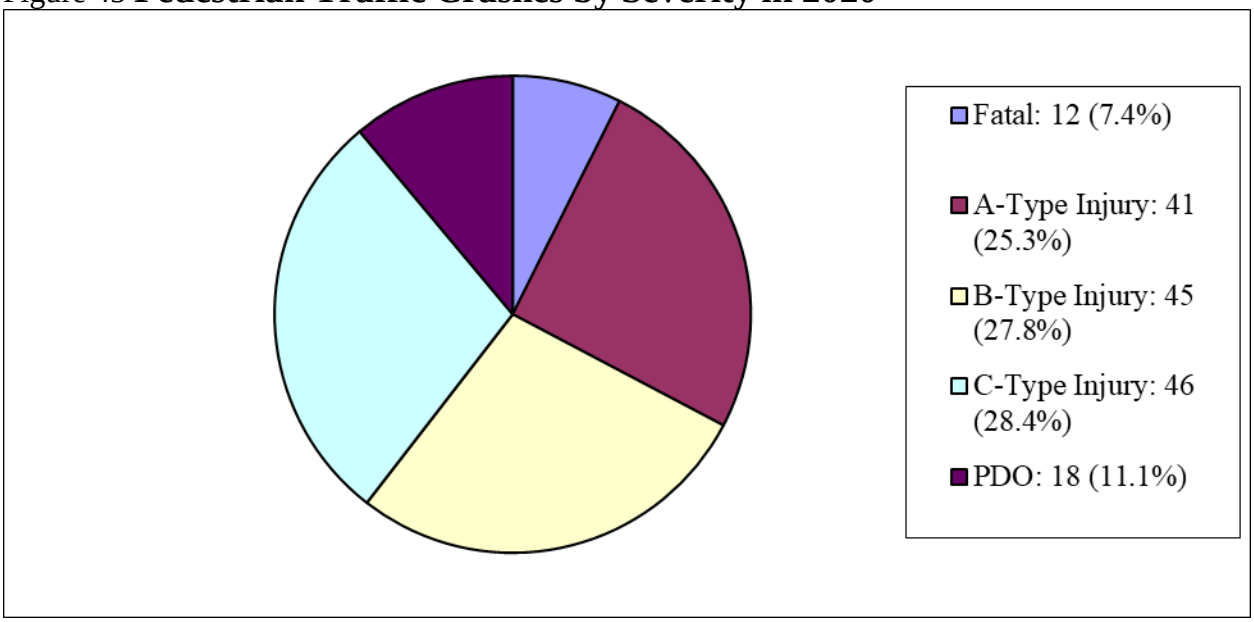


Table 13 **Pedestrian Traffic Crash by Severity in 2020**

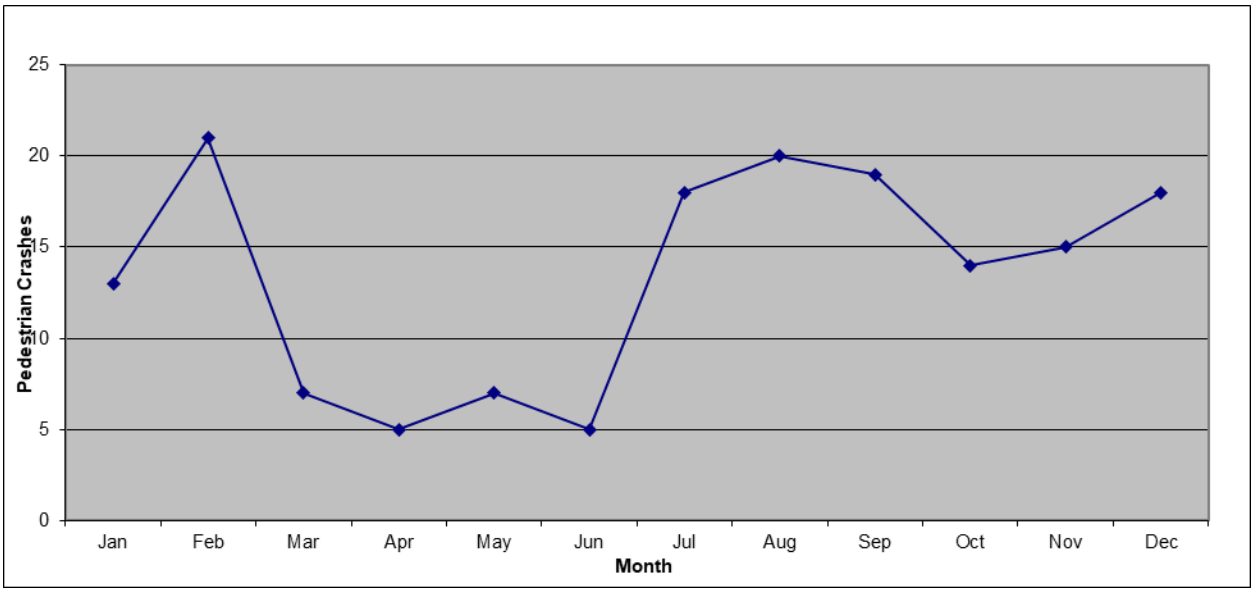
Crash Severity	Pedestrian Traffic Crashes	All Traffic Crashes	Pedestrian Crashes Percentage
Fatal	12	59	20.3%
A-Type Injury	41	358	11.5%
B-Type Injury	45	886	5.1%
C-Type Injury	46	2,217	2.1%
PDO	18	15,197	0.12%
Total	**162**	**18,717**	**0.9%**

Source: www.michigantrafficcrashfacts.org

Pedestrian Traffic Crashes by Month, Day, and Hour

Figure 46 shows pedestrian traffic crashes in the GVMC area in 2020.

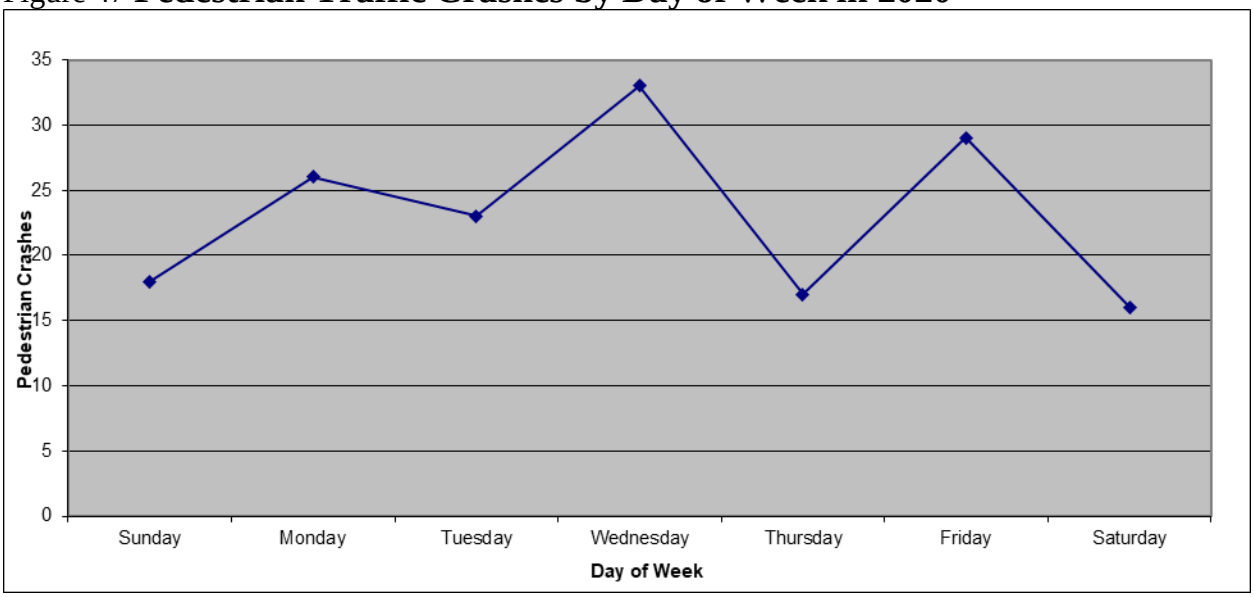
Figure 46 **Pedestrian Traffic Crashes by Month in 2020**



Source: www.michigantrafficcrashfacts.org

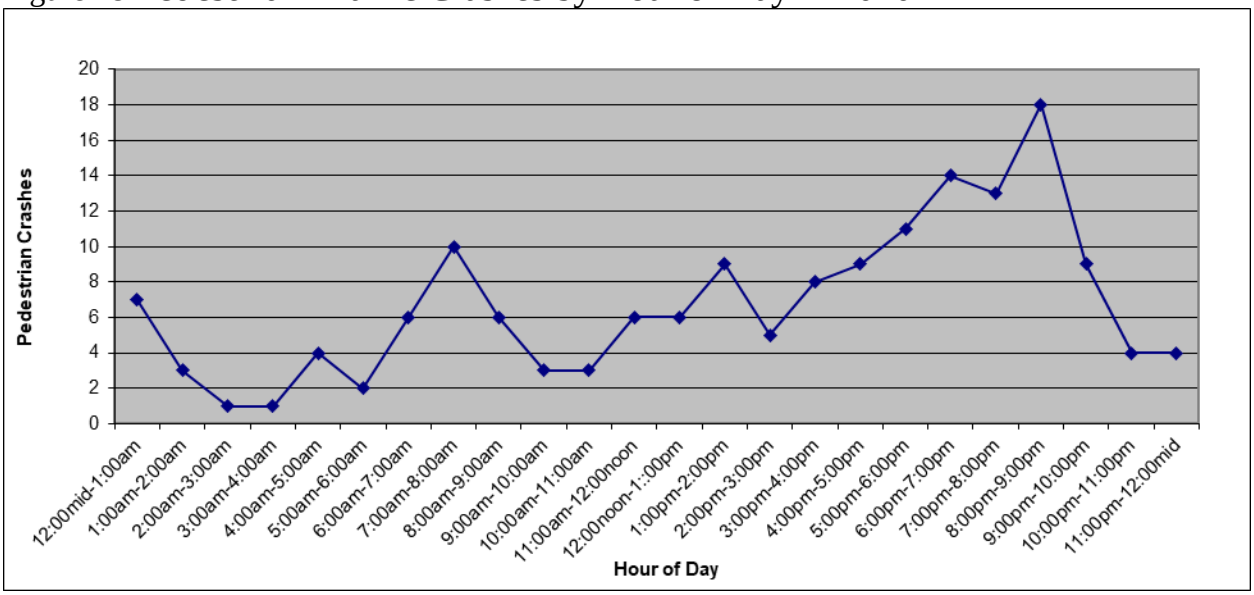
It can be seen from Figure 47 that Wednesdays had the most pedestrian crashes and Saturdays the fewest. As shown in Figure 48, pedestrian crashes were most likely to occur between 8 and 9pm.

Figure 47 **Pedestrian Traffic Crashes by Day of Week in 2020**



Source: www.michigantrafficcrashfacts.org

Figure 48 **Pedestrian** Traffic Crashes by Hour of Day in 2020

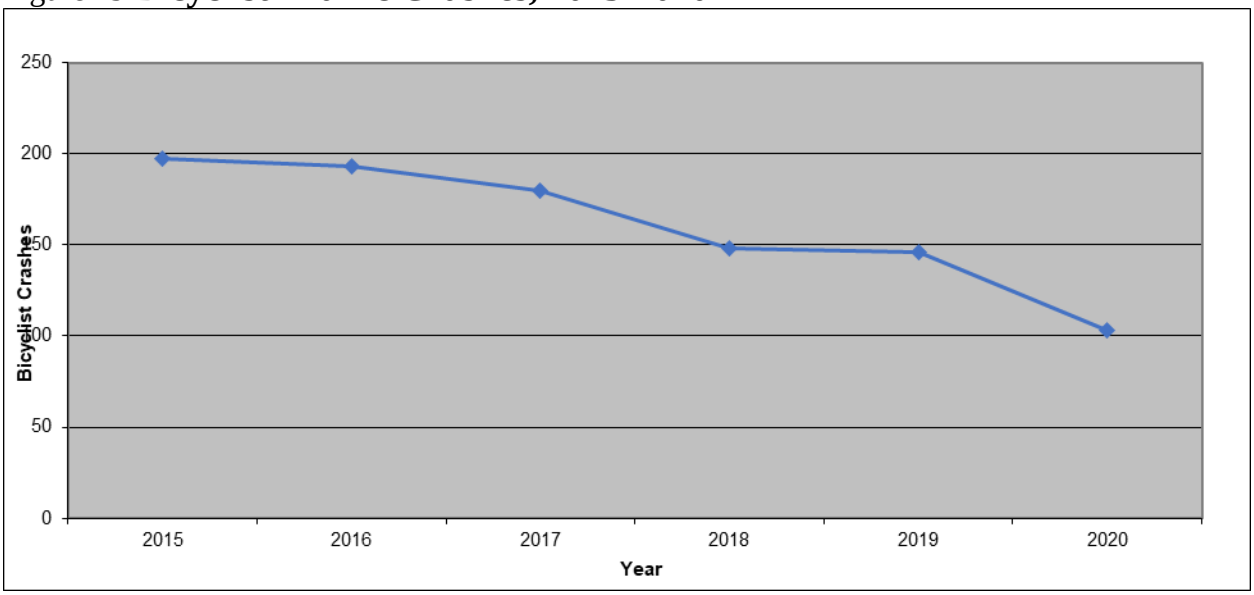


Source: www.michigantrafficcrashfacts.org

Bicyclist Traffic Crashes

Figure 49 shows bicyclist traffic crashes between 2015 and 2020. There was 62.7 percent decrease of bicyclist traffic crashes in 2020 compared to 2015.

Figure 49 **Bicyclist Traffic Crashes, 2015-2020**

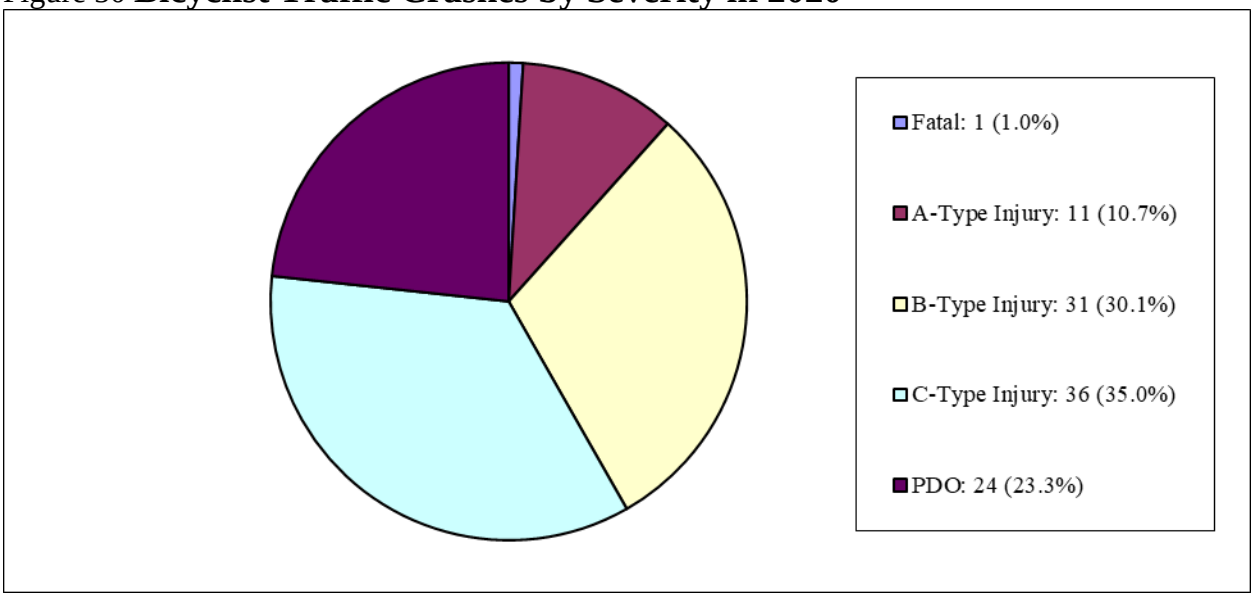


Source: www.michigantrafficcrashfacts.org

Bicyclist Traffic Crashes by Severity

Figure 50 indicates that bicyclists are easily to be injured when involved in traffic crashes, since PDO only accounted for 23.3 percent of all bicyclist traffic crashes. Table 14 shows the distribution of bicyclist severity in 2020.

Figure 50 **Bicyclist Traffic Crashes by Severity in 2020**



Source: www.michigantrafficcrashfacts.org

Table 14 **Bicyclist Traffic Crash by Severity in 2020**

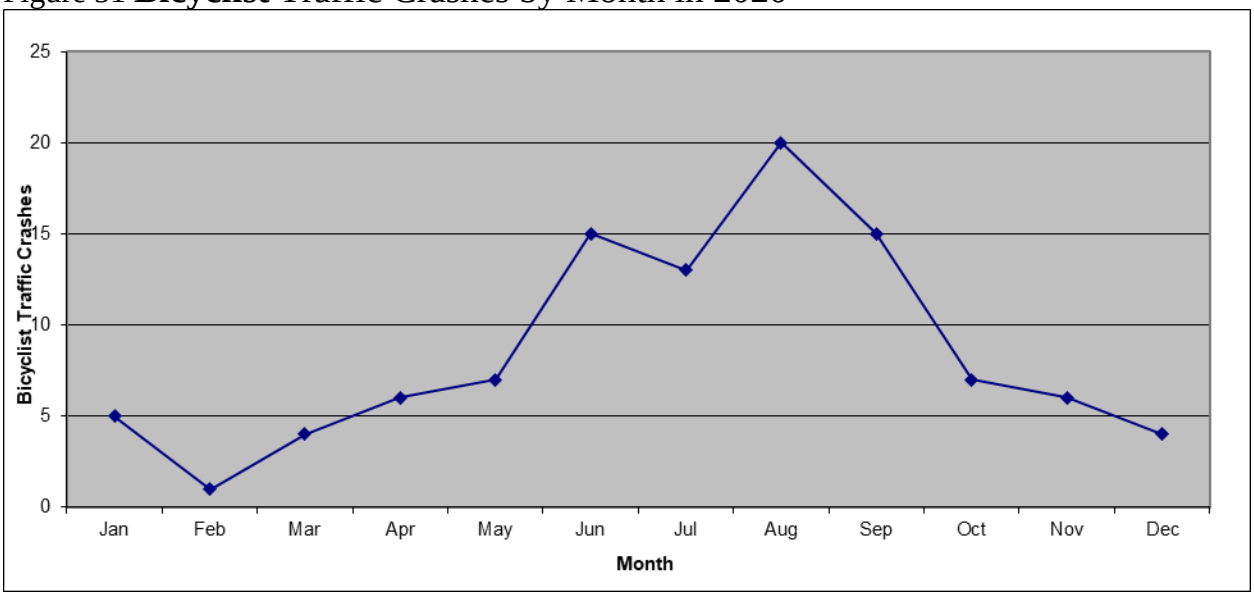
Crash Severity	**Bicyclist Traffic Crashes**	**All Traffic Crashes**	**Bicyclist Crashes Percentage**
Fatal	1	59	1.7%
A-Type Injury	11	358	3.1%
B-Type Injury	31	886	3.5%
C-Type Injury	36	2,217	1.6%
PDO	24	15,197	0.2%
Total	**103**	**18,717**	**0.6%**

Source: www.michigantrafficcrashfacts.org

Bicyclist Traffic Crashes by Month, Day, and Hour

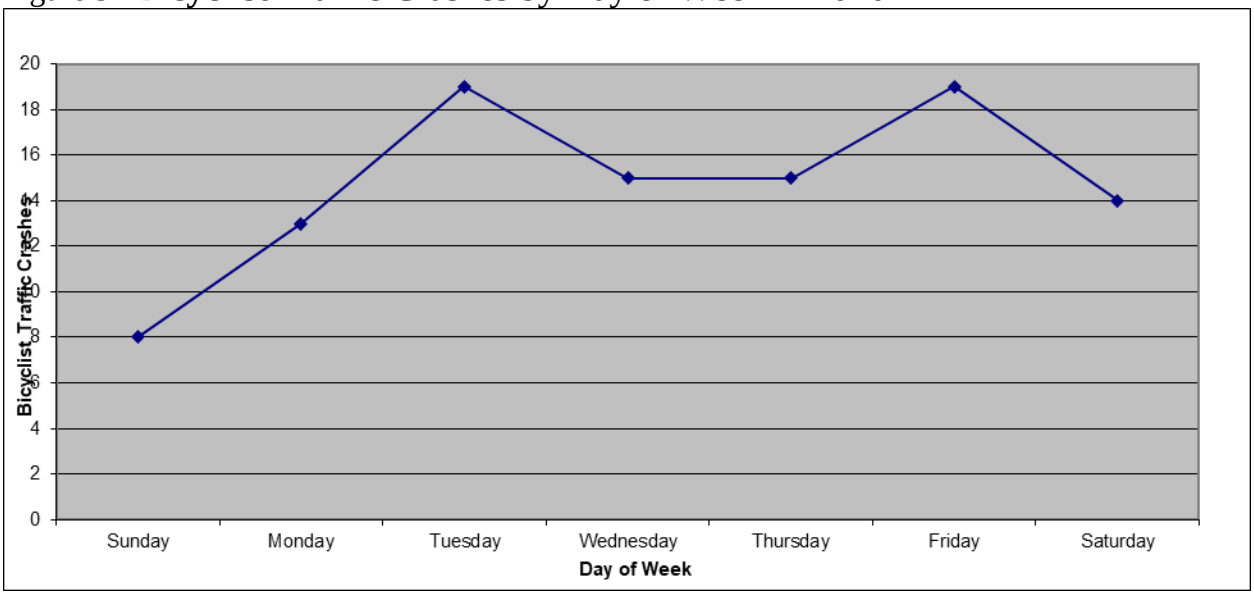
As shown in Figure 51, bicyclist traffic crashes were more likely to occur during summer and least likely to occur during winter season due to the harsh weather condition.

Figure 51 **Bicyclist** Traffic Crashes by Month in 2020



Source: www.michigantrafficcrashfacts.org

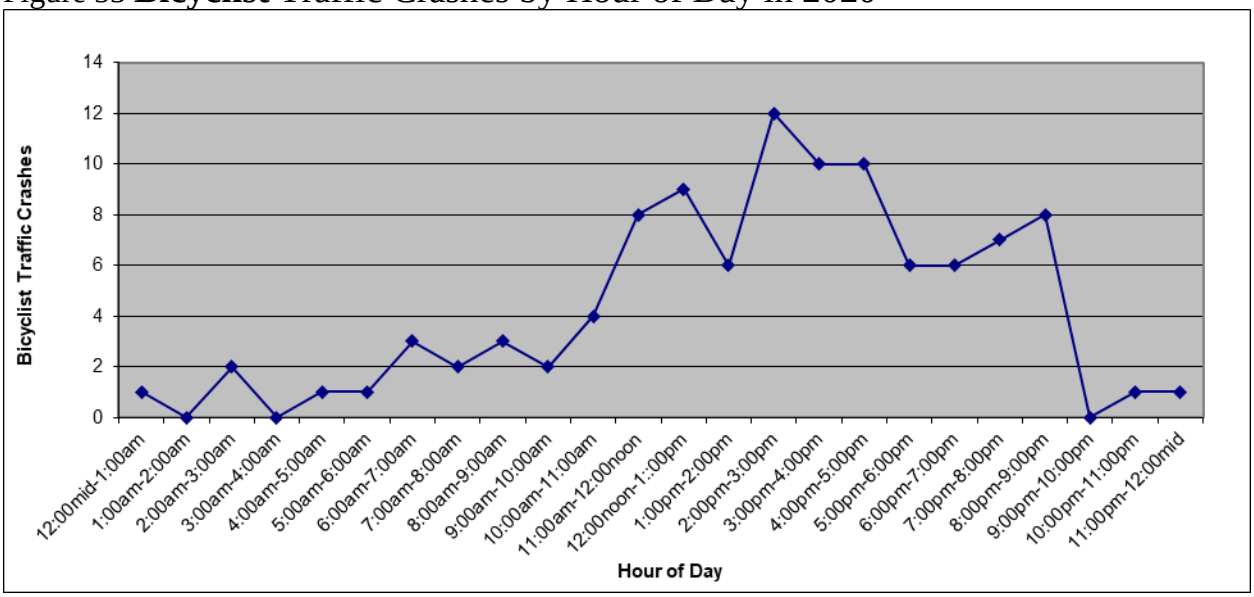
Figure 52 **Bicyclist** Traffic Crashes by Day of Week in 2020



Source: www.michigantrafficcrashfacts.org

It can be seen from Figure 53 that bicyclist traffic crashes were more likely to take place during afternoon.

Figure 53 **Bicyclist** Traffic Crashes by Hour of Day in 2020

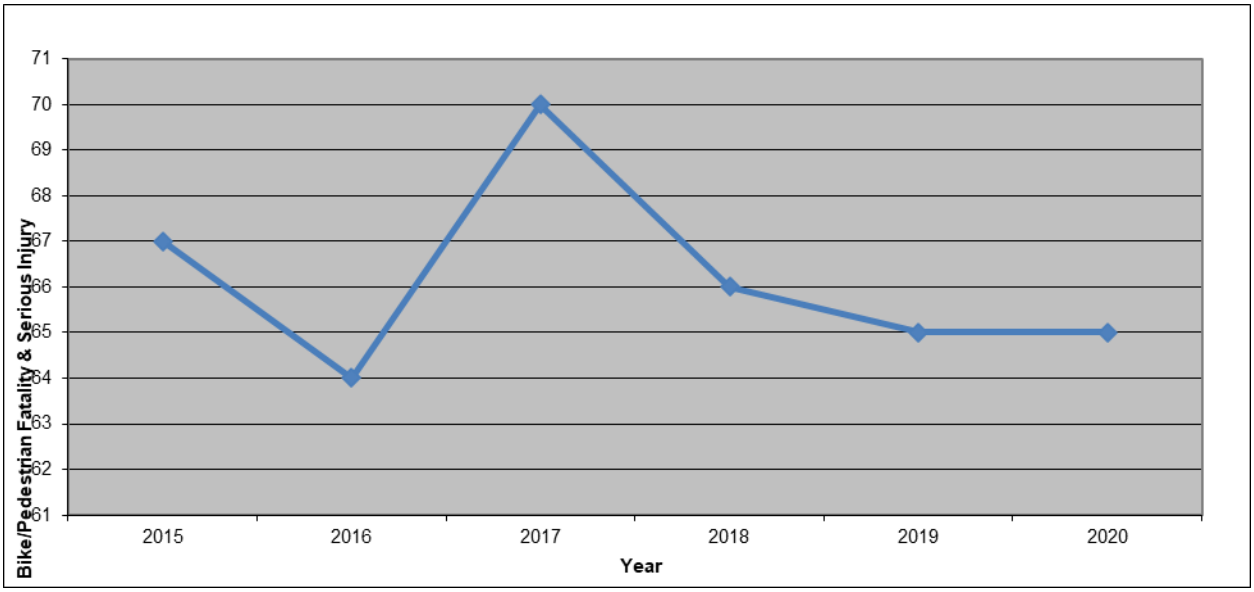


Source: www.michigantrafficcrashfacts.org

Bicycle & Pedestrian Fatalities and Serious Injuries

Bicycle and pedestrian fatalities and serious injuries are defined as a crash that causes death within 30 days of the crash or incapacitating injuries as defined in Michigan Traffic Crash Facts' Data Query Tool involving a bicyclist or pedestrian. Figure 53a below shows fatalities and serious injury crashes in GVMC area. These crashes decreased 3.0 percent from 2015 to 2020.

Figure 53a **Bicycle & Pedestrian Fatalities and Serious Injuries, 2015-2020**

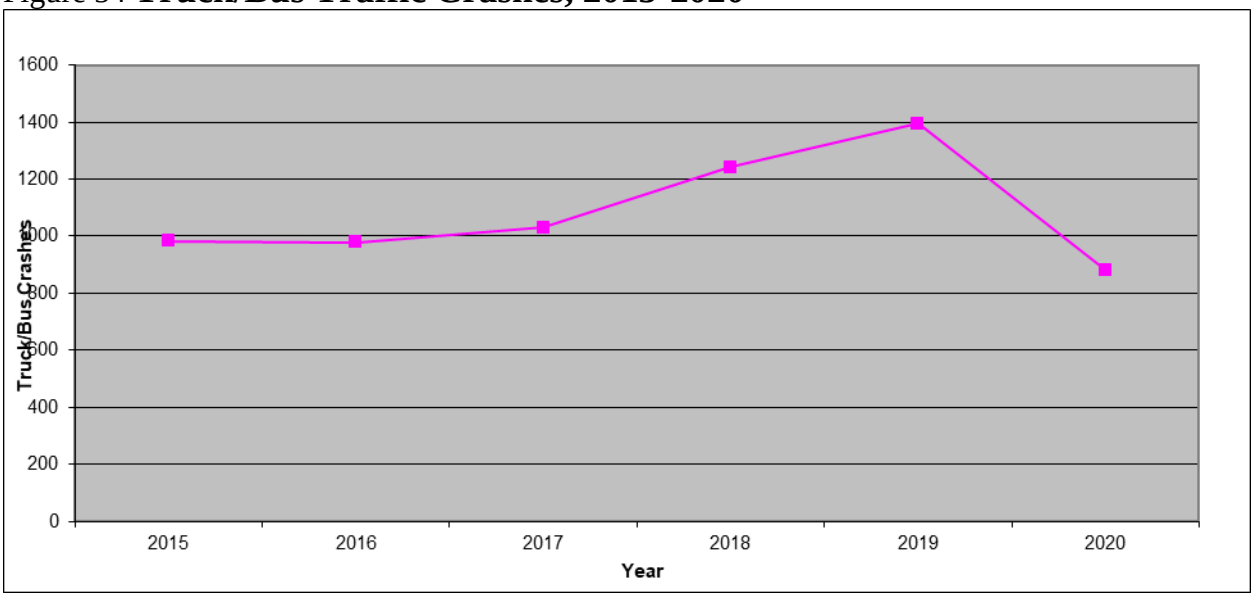


Source: www.michigantrafficcrashfacts.org

Truck/Bus Traffic Crashes

Figure 54 shows the trend of truck/bus crashes from 2015 to 2020 in GVMC area.

Figure 54 **Truck/Bus Traffic Crashes, 2015-2020**

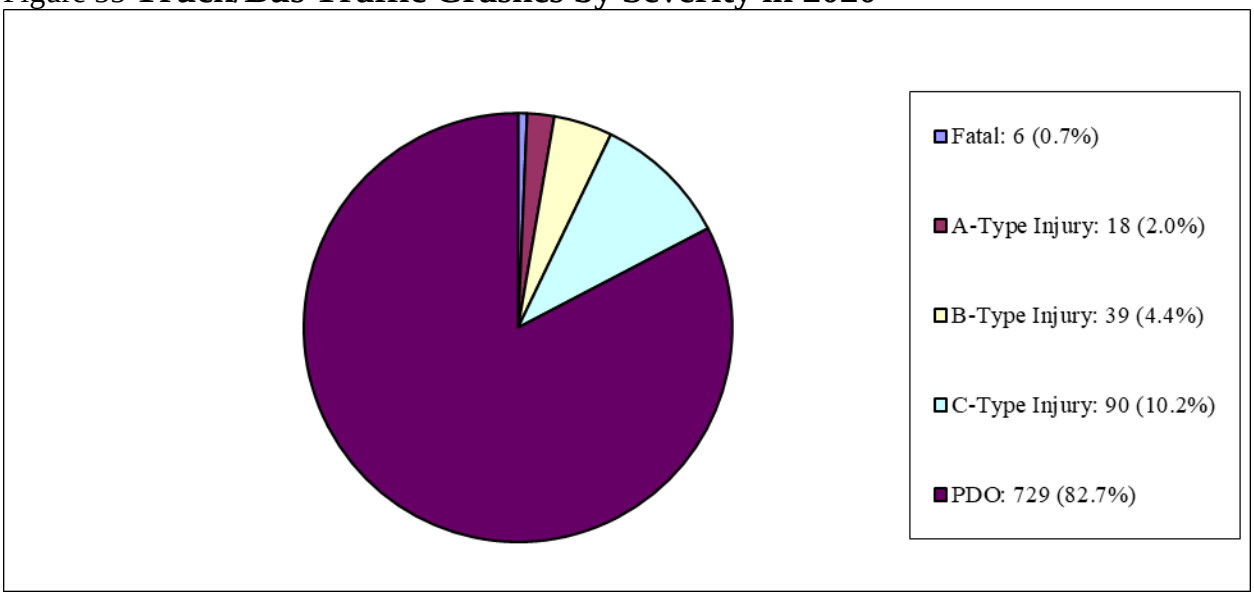


Source: www.michigantrafficcrashfacts.org

Truck/Bus Traffic Crashes by Severity

Figure 55 shows truck/bus traffic crashes by severity in 2020. Most of the crashes were PDO crash (82.7%). As shown in Table 15, fatalities and A-type injuries in truck/bus crashes accounted for 15.2% of all traffic fatal crashes and 5.0% of all traffic A-Type injuries, respectively.

Figure 55 **Truck/Bus Traffic Crashes by Severity in 2020**



Source: www.michigantrafficcrashfacts.org

Table 15 **Truck/Bus Traffic Crash by Severity in 2020**

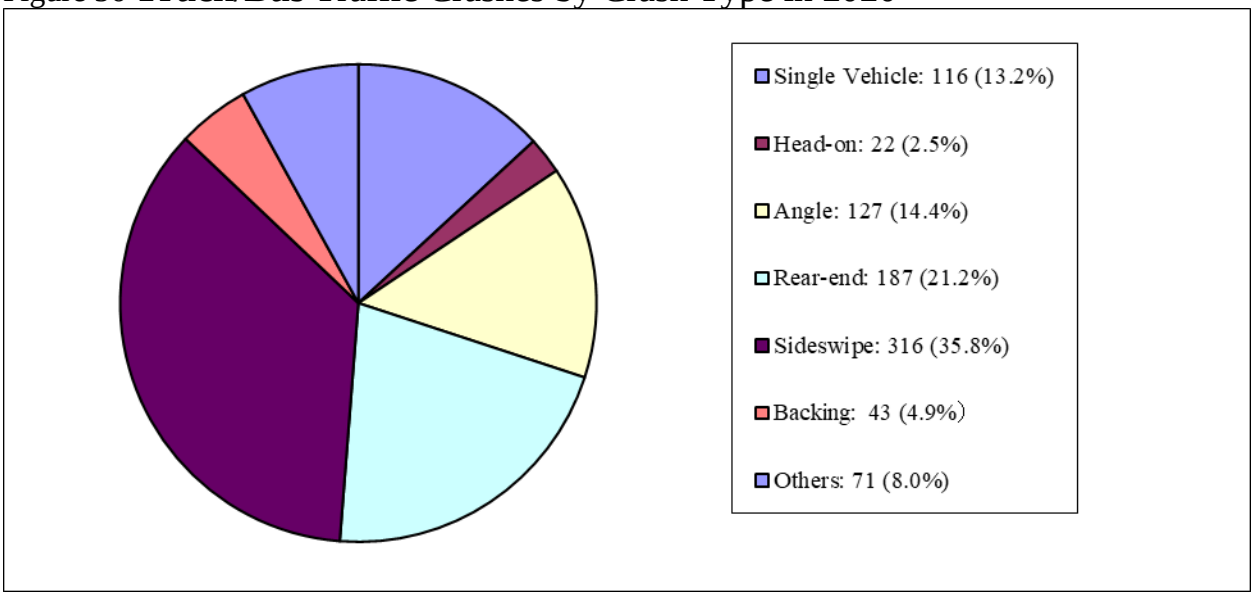
Crash Severity	**Truck/Bus Traffic Crashes**	**All Traffic Crashes**	**Truck/Bus Crashes Percentage**
Fatal	6	59	10.2%
A-Type Injury	18	358	5.0%
B-Type Injury	39	886	4.4%
C-Type Injury	90	2,217	4.1%
PDO	729	15,197	4.8%
Total	**882**	**18,717**	**4.7%**

Source: www.michigantrafficcrashfacts.org

Truck/Bus Traffic Crashes by Crash Type

Figure 56 shows the crash type distribution of truck/bus crashes. There were more sideswipe truck/bus crashes (35.8%) than any other crash type in 2020.

Figure 56 **Truck/Bus** Traffic Crashes by Crash Type in 2020

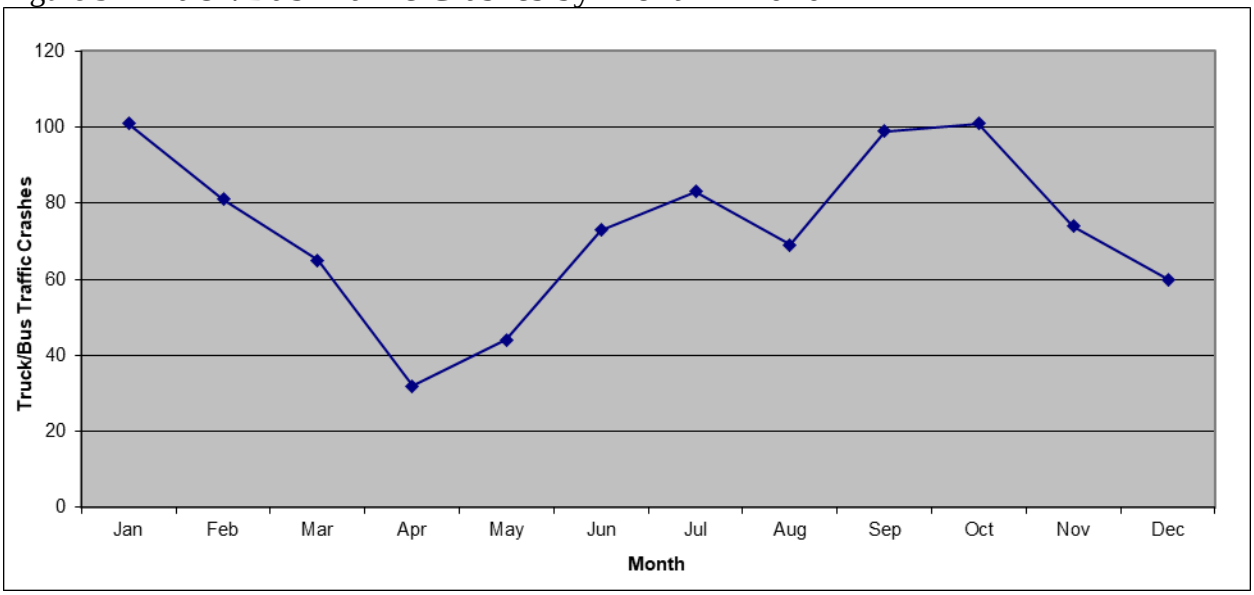


Source: www.michigantrafficcrashfacts.org

Truck/Bus Traffic Crashes by Month, Day, and Hour

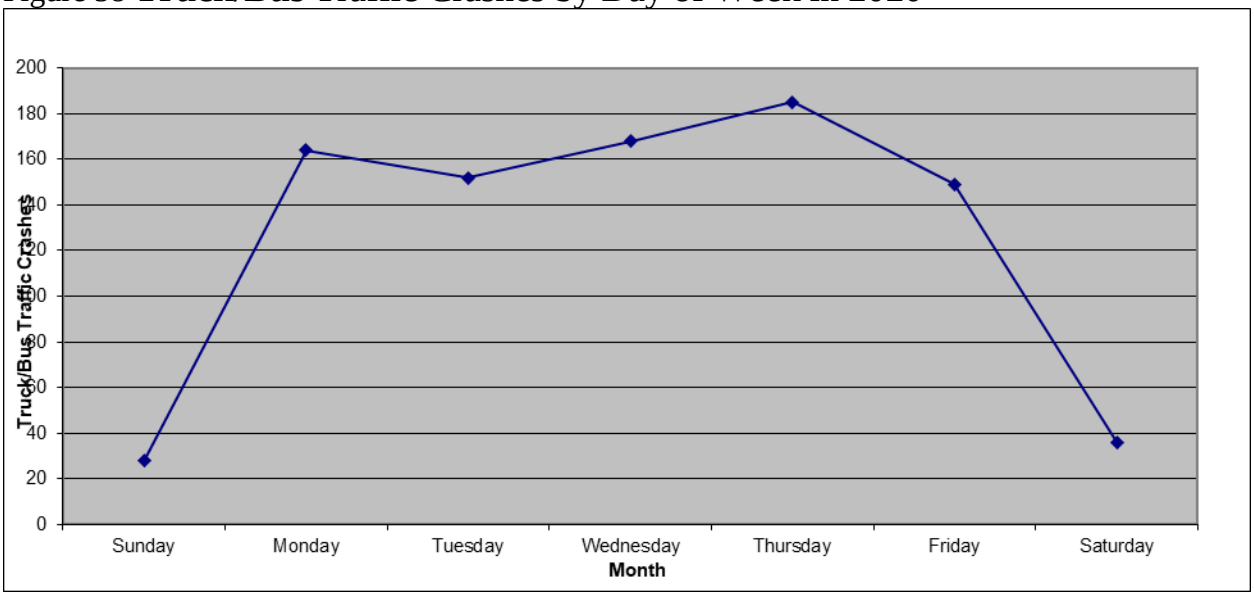
Figure 57 shows that truck/bus crashes were more likely to take place in January, and least likely to occur in April in 2020.

Figure 57 **Truck/Bus** Traffic Crashes by Month in 2020



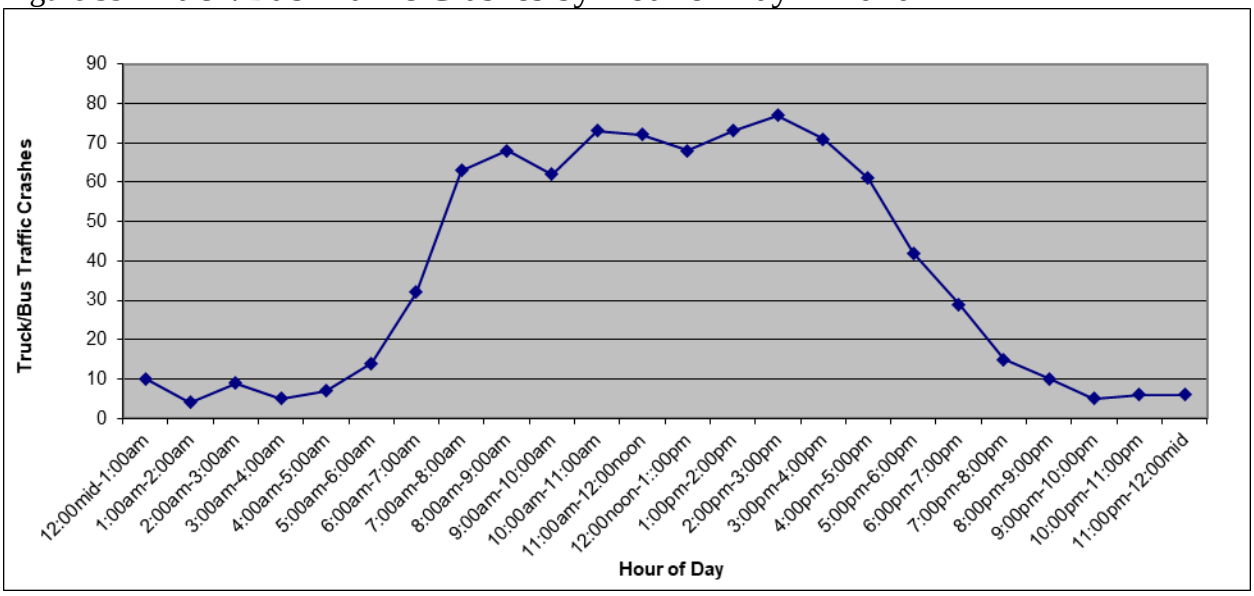
Source: www.michigantrafficcrashfacts.org

Figure 58 **Truck/Bus** Traffic Crashes by Day of Week in 2020



Source: www.michigantrafficcrashfacts.org

Figure 59 **Truck/Bus** Traffic Crashes by Hour of Day in 2020



Source: www.michigantrafficcrashfacts.org

Appendix: 2018-2020 Top 50 Crash intersections and Segments

Table 15 2018-2020 Top 50 Crash Intersections

Rank	Street	Cross Street	Total Crashes	Fatal	Type-A Crash	Crash/MEV
1	28th St	Division Ave	171	1	5	3.020
2	28th St	Broadmoor Ave	160	0	0	2.132
3	28th St	Breton Rd	148	0	2	2.401
4	28th St	Kalamazoo Ave	133	0	0	2.125
5	Fuller Ave	Michigan St	129	0	1	3.005
6	28th St	Clyde Park Ave	129	1	2	3.144
7	28th St	Eastern Ave	127	0	1	2.278
8	28th St	E Paris Ave	126	0	2	2.531
9	S US-131	Wealthy St	120	0	2	
10	28th St	Burlingame Ave	116	0	3	2.640
11	54th St	Division Ave	115	0	3	3.274
12	E Beltline Ave	Lake Eastbrook Blvd	109	0	0	
13	Alpine Ave	N I-296/Alpine Ramp	109	0	1	
14	Alpine Ave	4 Mile Rd	104	0	0	2.106
15	Leonard St	Scribner Ave	102	0	0	2.296
16	Lake Michigan Dr	Wilson Ave	100	0	0	2.038
17	28th St	Byron Center Ave	100	0	2	2.525
18	Alpine Ave	N Center Dr	99	0	4	
19	Alpine Ave	Alpenhorn Dr	98	0	1	
20	Fuller Ave	Leonard St	91	0	3	2.099
21	N US-131	Wealthy St	91	0	2	
22	28th St	Patterson Ave	90	0	1	1.751
23	54th St	Clyde Park Ave	90	0	0	2.873
24	Baldwin St	Cottonwood Dr	89	0	2	1.888
25	Hall St	Division Ave	87	0	3	2.540

Table 15 2018-2020 Top 50 Crash Intersections (Continued)

Rank	Street	Cross Street	Total Crashes	Fatal	Type-A Crash	Crash/MEV
26	28th St	Buchanan Ave	87	1	0	1.565
27	Alpine Ave	Center Dr	87	0	1	1.372
28	44th St	Canal Ave	86	1	2	2.428
29	44th St	8th Ave	84	0	3	2.987
30	Leonard St	Turner Ave	83	0	0	2.108
31	28th St	Dehoop Ave	80	0	2	2.600
32	N US-131	Leonard St	79	0	1	
33	28th St	E I-96/E 28th Ramp	79	0	0	
34	Franklin St	N US-131	78	0	0	
35	3 Mile Rd	Alpine Ave	76	0	1	
36	28th St	Radcliff Ave	76	1	0	
37	52nd St	Eastern Ave	76	0	2	2.283
38	Burton St	Division Ave	74	2	3	2.245
39	Northland Dr	Cannonsburg Rd	73	0	1	
40	Alpine Ave	Coventry Dr	73	0	0	
41	Lake Michigan Dr	Collindale Ave	73	0	1	
42	E Beltline Ave	Burton St	72	0	0	1.620
43	28th St	Madison Ave	70	0	1	1.501
44	College Ave	Michigan St	69	0	2	1.993
45	N US-131/ Wealthy Ramp	Wealthy/N US-131	68	0	0	
46	Franklin St	Division Ave	68	0	2	2.280
47	52nd St	Kalamazoo Ave	68	0	0	1.795
48	60th St	Kalamazoo Ave	68	0	1	1.635
49	Burton St	Clyde Park Ave	67	0	1	2.067
50	44th/W I-196 Ramp	44th St	66	1	0	

Table 16 2018-2020 Top 50 Crash Segments

Rank	Segment Name	From	To	Length	Crashes	Fatal	Type-A Crash	Crash/ MVM
1	Alpine Ave	Center Dr	Coventry Dr	0.125	123	0	1	17.726
2	N US-131	Franklin Ramp	Franklin St	0.130	106	0	2	
3	Alpine Ave	Center Dr	Kingsbury St	0.102	96	0	1	21.197
4	28th St	Birchcrest Dr	Breton Rd	0.113	87	0	1	17.059
5	N US-131	Wealthy Ramp	Wealthy St	0.119	80	1	3	
6	28th St	Plaza Dr	Broadmoor Ave	0.124	80	0	0	15.215
7	Alpine Ave	Kingsbury St	4 Mile Rd	0.126	79	0	0	14.120
8	Fuller Ave	Crescent St	Michigan St	0.063	76	0	1	52.925
9	S US-131	Wealthy Ramp	Ottawa Ave	0.065	68	0	4	
10	Alpine Ave	Alpine/ I-96 Ramp	Center Dr	0.092	68	0	1	13.315
11	28th St	Tennyson Dr	Clyde Park Ave	0.061	64	1	2	77.764
12	28th St	Clyde Park Ave	Mckee Ave	0.062	59	0	1	25.980
13	28th St	Mckee Ave	Woodward Ave	0.063	58	0	0	25.130
14	E Beltline Ave	Lake Eastbrook Blvd	Woodland Dr	0.036	56	0	0	34.547
15	Beacon Blvd	7th St	Jackson Ave	0.073	55	0	0	
16	28th St	Byron Center Ave	Forest Grove Ave	0.061	54	0	1	31.377
17	Leonard St	Front Ave	Scribner Ave	0.051	53	0	0	33.866
18	S US-131/44th Ramp	44th St	S US-131	0.042	46	0	0	
19	E M-6/M-37 Ramp	Broadmoor Ave	E M-6/M-37 Ramp	0.043	38	0	0	
20	Division Ave	Zeno St	Hall St	0.044	38	0	1	45.131
21	Division Ave	Honeoye St	28th St	0.057	36	0	1	39.648
22	Leonard St	S US-131	Turner Ave	0.019	31	0	0	52.811
23	Wealthy St	Division/S US-131 Ramp	N US-131/ Wealthy Ramp	0.009	27	0	0	86.538
24	Leonard St	Scribner Ave	N US-131	0.028	26	0	0	30.058
25	Kalamazoo Ave	Ken-O-Sha Dr	32nd St	0.041	26	0	1	27.601

Table 16 2018-2020 Top 50 Crash Segments (Continued)

Rank	Segment Name	From	To	Length	Crashes	Fatal	Type-A Crash	Crash/ MVM
26	Fuller Ave	Race St	E I-196/ Fuller Ramp	0.040	25	0	0	23.430
27	Plainfield Ave	Fuller Ave	Fuller Ave	0.035	23	0	0	31.464
29	E Beltline Ave	E Beltline Ave	Michigan St	0.012	22	0	0	35.088
30	Michigan St	Ionia Ave	Division Ave	0.019	22	0	0	36.184
31	Burton St	N US-131	Burton/N US-131 Ramp	0.018	21	0	1	58.659
32	28th St	Highgate Ave	Charlesgate Ave	0.033	21	0	1	17.370
33	Rivertown Pkwy	44th St	Canal Ave	0.008	18	1	1	135.34
34	Wilson Ave	Remembrance Rd	Remembrance Rd	0.021	17	0	0	70.248
35	E Beltline Ave	E I-96/ Beltline Ramp	Deposit Dr	0.007	16	0	0	43.716
36	Burton St	E Beltline Ave	E Beltline Ave	0.018	16	0	0	50.157
37	Hall St	N US-131	Hall/N US-131 Ramp	0.019	16	0	0	45.584
38	E Beltline Ave	E I-96	W I-96	0.022	16	0	0	13.913
39	Cascade Rd	City/Twp Line	E Beltline Ave	0.022	16	0	1	66.390
40	28th St	Charlesgate Ave	Charlesgate Ave	0.009	15	0	0	45.455
41	Eastern Ave	44th St	City/Twp Line	0.005	14	0	0	168.68
42	Wilson Ave	Unknown	28th/W I-196 Ramp	0.017	14	0	0	33.735
43	40th Ave	Chicago Dr	City/Twp Line	0.017	14	0	0	132.08
44	N US-131	N US-131/ Division Ramp	N US-131/ Wealthy Ramp	0.018	14	0	0	
45	Pearl St	N US-131/ Pearl Ramp	Scribner Ave	0.004	13	0	0	265.31
46	Wilson Ave	Indian Mounds Dr	W I-196	0.018	12	0	0	27.273
47	Patterson Ave	John J Oostema Blvd	44th St	0.003	11	0	1	192.99
48	Plainfield Ave	W I-96/ Plainfield Ramp	W I-96/ Plainfield Ramp	0.007	11	0	0	41.667
49	Lake Michigan Dr	E I-196	E I-196/W Lake Michigan Ramp	0.014	11	0	0	22.449
50	Lake Michigan/ Campus Turn	Lake Michigan Dr	Campus Dr	0.016	11	0	0	