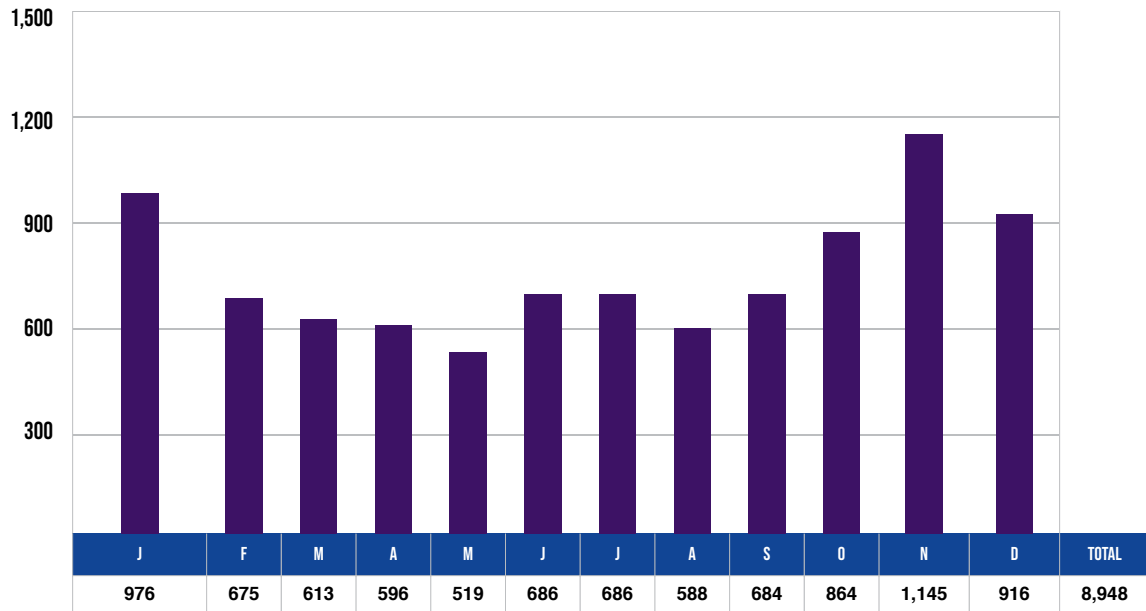
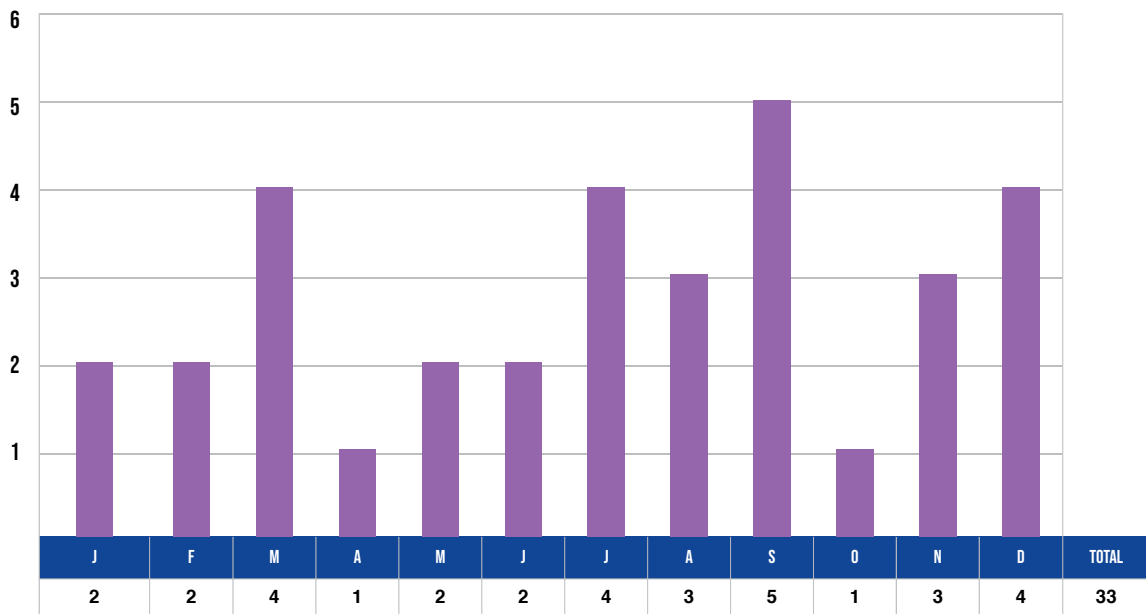


UPPER PENINSULA ALL CRASHES INJURY SEVERITY BY MONTH

TOTAL CRASHES

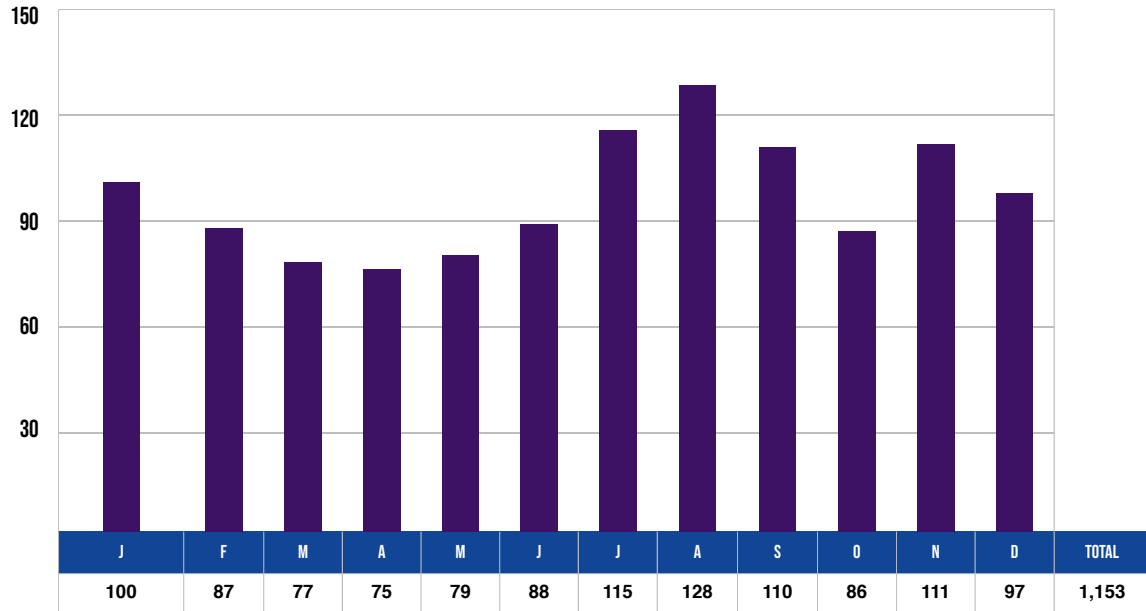


FATAL CRASHES

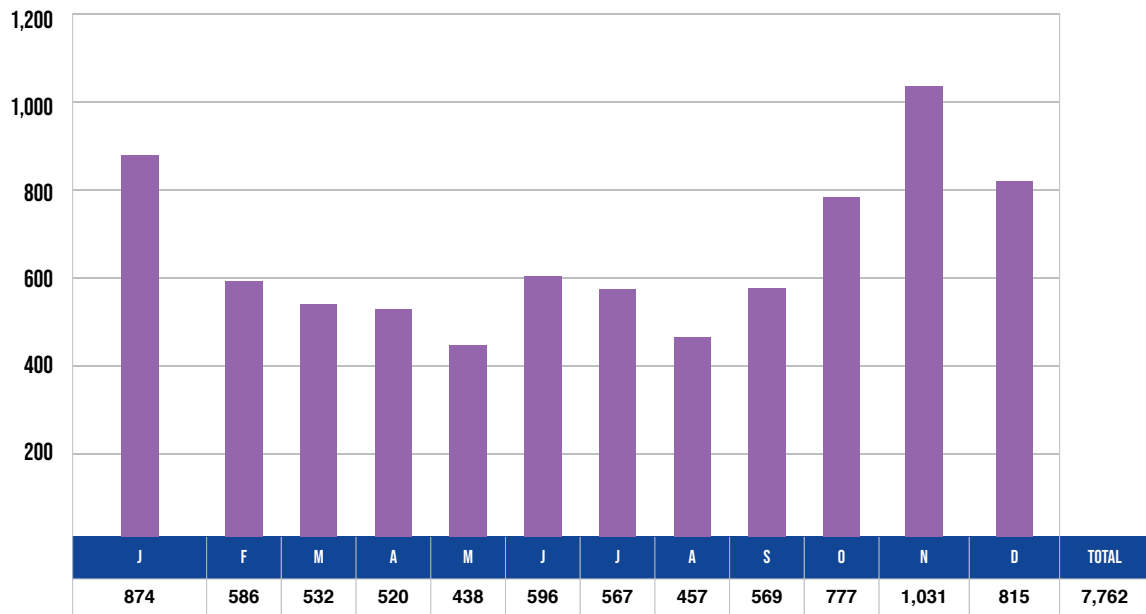


UPPER PENINSULA ALL CRASHES INJURY SEVERITY BY MONTH (CONTINUED)

INJURY CRASHES



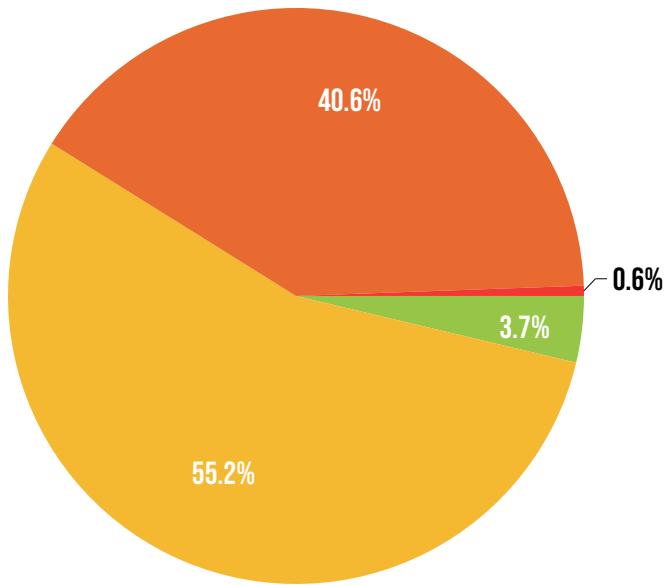
PROPERTY DAMAGE ONLY CRASHES



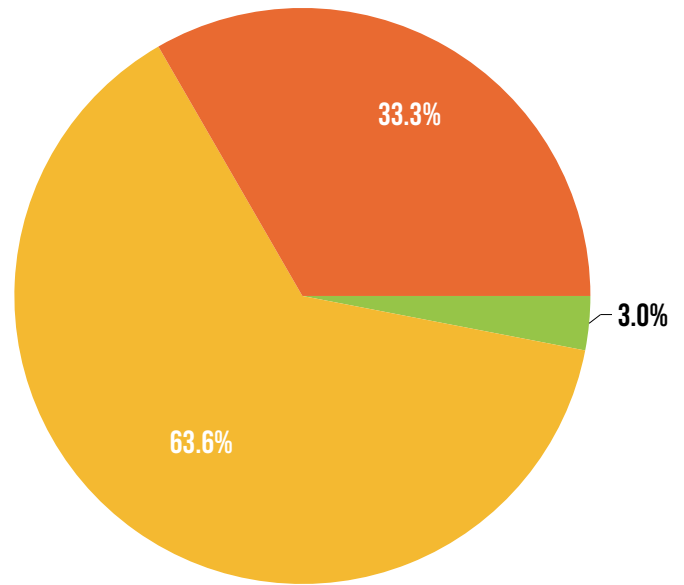
UPPER PENINSULA CRASH EXPERIENCE BY HIGHWAY CLASS

HIGHWAY CLASS	ALL CRASHES	FATAL CRASHES	INJURY CRASHES	PROPERTY DAMAGE ONLY
Interstate Routes	333	1	55	277
U.S. & Michigan Roads	4,935	21	600	4,314
County & City Roads	3,629	11	487	3,131
Uncoded & Errors	51	0	11	40

■ INTERSTATE ROUTES
 ■ U.S. & MICHIGAN ROADS
 ■ COUNTY & CITY ROADS
 ■ UNCODED & ERRORS



ALL CRASHES



FATAL CRASHES

The highest percentage of all crashes (55.2%), fatal crashes (63.6%), injury crashes (52.0%), and property damage only crashes (55.6%) occurred on U.S. and Michigan roads.

UPPER PENINSULA CRASH EXPERIENCE BY CRASH TYPE

CRASH TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Single Vehicle	5,649	63.1	11	33.3	103	177	251	5,107
Head On	105	1.2	9	27.3	11	16	15	54
Head On – Left Turn	106	1.2	2	6.1	8	10	25	61
Angle	903	10.1	6	18.2	28	59	120	690
Rear End	873	9.8	2	6.1	9	38	142	682
Rear End – Left Turn	84	0.9	0	0.0	2	4	17	61
Rear End – Right Turn	50	0.6	0	0.0	0	2	8	40
Sideswipe – Same Direction	411	4.6	0	0.0	2	6	12	391
Sideswipe – Opposite Direction	154	1.7	1	3.0	5	6	13	129
Backing	227	2.5	0	0.0	0	0	2	225
Other/Unknown	386	4.3	2	6.1	14	20	28	322
TOTAL	8,948	100.0	33	100.0	182	338	633	7,762

RELATIONSHIP TO ROADWAY

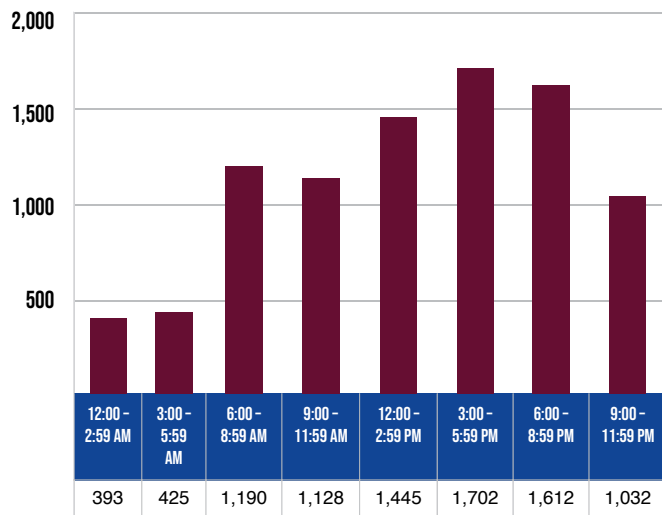
LOCATION OF FIRST IMPACT	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
On Road	7,409	82.8	26	78.8	130	243	473	6,537
Median	36	0.4	0	0.0	0	1	2	33
Shoulder	496	5.5	1	3.0	18	26	44	407
Outside of Shoulder/Curb	774	8.6	5	15.2	32	60	102	575
Gore	35	0.4	1	3.0	1	4	3	26
On-Street Parking	151	1.7	0	0.0	0	2	1	148
Off the Roadway	4	0.0	0	0.0	0	0	0	4
On the Sidewalk	11	0.1	0	0.0	1	1	1	8
In the Bicycle Lane	1	0.0	0	0.0	0	0	1	0
Other/Unknown	31	0.3	0	0.0	0	1	6	24
TOTAL	8,948	100.0	33	100.0	182	338	633	7,762

In the Upper Peninsula, only 8.6 percent of crashes occur outside of the shoulder/curb of the road, but these crashes account for 15.2 percent of the fatal crashes.

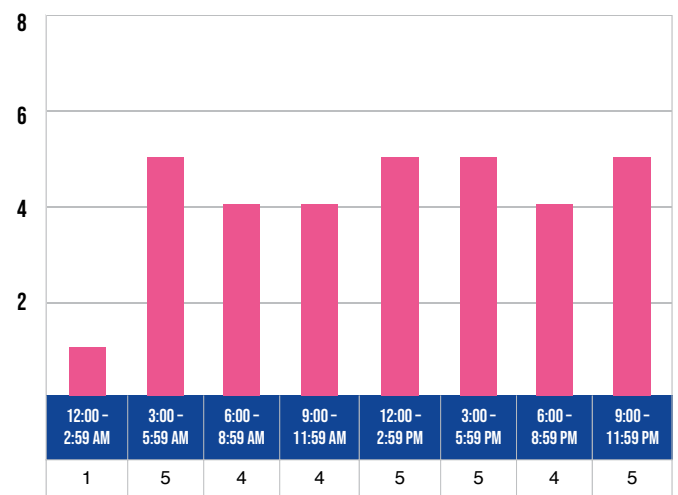
UPPER PENINSULA TIME AND SEVERITY

TIME OF DAY	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
12:00 AM – 2:59 AM	393	4.4	1	3.0	11	21	25	335
3:00 AM – 5:59 AM	425	4.7	5	15.2	9	15	17	379
6:00 AM – 8:59 AM	1,190	13.3	4	12.1	14	32	70	1,070
9:00 AM – 11:59 AM	1,128	12.6	4	12.1	30	40	102	952
12:00 PM – 2:59 PM	1,445	16.1	5	15.2	35	62	137	1,206
3:00 PM – 5:59 PM	1,702	19.0	5	15.2	43	84	154	1,416
6:00 PM – 8:59 PM	1,612	18.0	4	12.1	21	55	78	1,454
9:00 PM – 11:59 PM	1,032	11.5	5	15.2	19	29	50	929
Unknown	21	0.2	0	0.0	0	0	0	21
TOTAL	8,948	100.0	33	100.0	182	338	633	7,762

**ALL CRASHES
BY TIME OF DAY**



**FATAL CRASHES
BY TIME OF DAY**

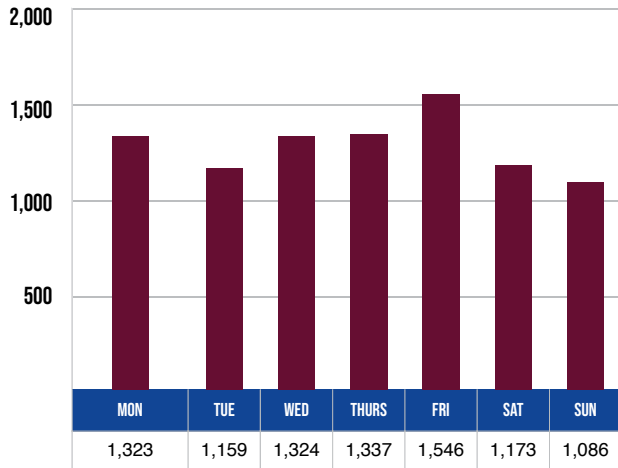


In the Upper Peninsula, crash frequencies peak in the early evening, then drop off until 6:00 AM (the morning rush hour). In 2018, fatal crashes were fairly evenly distributed across the hours of the day, except for the 12:00 AM to 2:59 AM time period when only one fatal crash occurred.

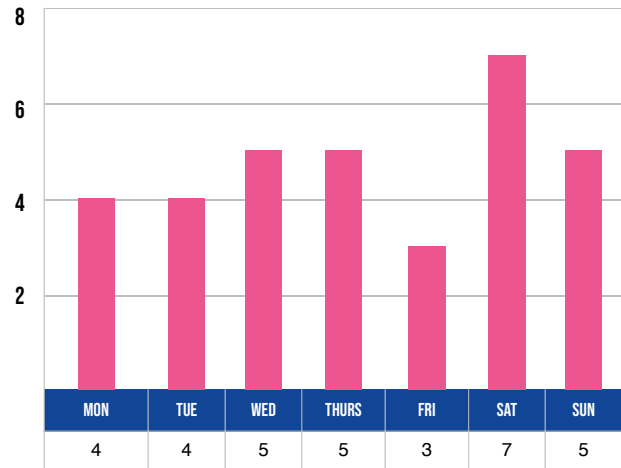
UPPER PENINSULA DAY OF WEEK

DAY OF WEEK	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Monday	1,323	14.8	4	12.1	26	53	101	1,139
Tuesday	1,159	13.0	4	12.1	10	34	81	1,030
Wednesday	1,324	14.8	5	15.2	26	59	89	1,145
Thursday	1,337	14.9	5	15.2	26	53	102	1,151
Friday	1,546	17.3	3	9.1	32	54	127	1,330
Saturday	1,173	13.1	7	21.2	30	45	69	1,022
Sunday	1,086	12.1	5	15.2	32	40	64	945
TOTAL	8,948	100.0	33	100.0	182	338	633	7,762

**ALL CRASHES
BY DAY OF WEEK**



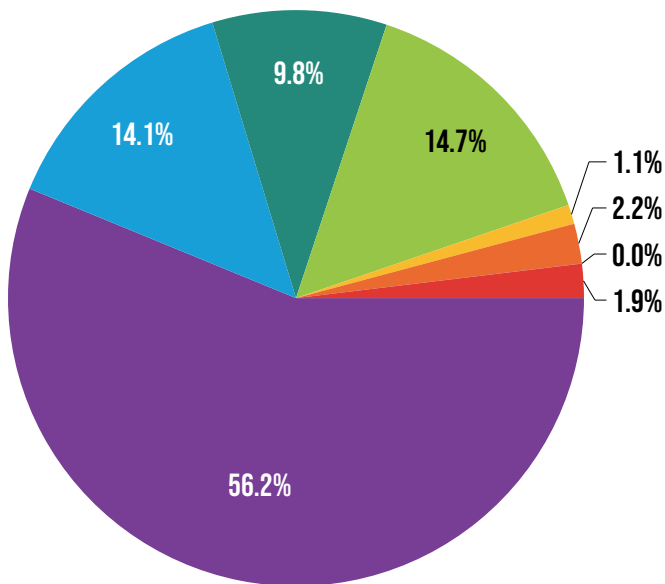
**FATAL CRASHES
BY DAY OF WEEK**



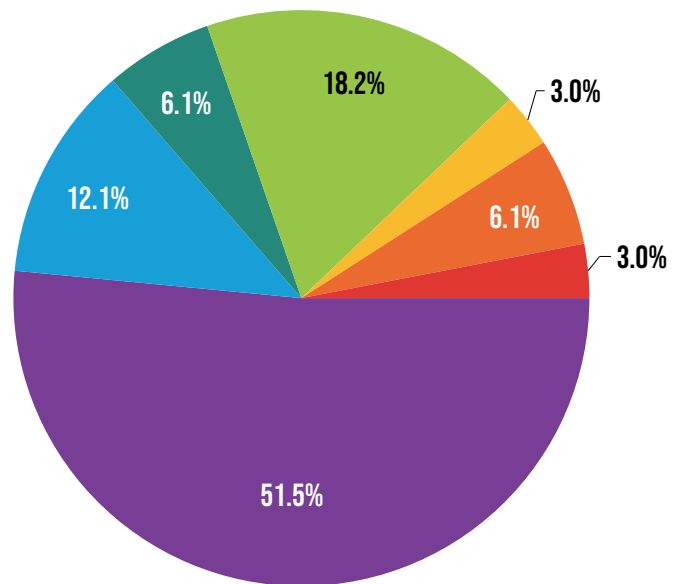
In the Upper Peninsula, overall crash frequencies are the highest on Friday (1,546), but Saturday has the highest number of fatal crashes (seven).

UPPER PENINSULA ROAD CONDITION

ROAD SURFACE CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Dry	5,029	56.2	17	51.5	112	196	363	4,341
Wet	1,259	14.1	4	12.1	15	48	91	1,101
Ice	876	9.8	2	6.1	17	34	67	756
Snow	1,312	14.7	6	18.2	15	37	71	1,183
Mud, Dirt, Gravel	84	0.9	1	3.0	13	11	10	49
Slush	200	2.2	2	6.1	5	9	23	161
Debris	0	0.0	0	0.0	0	0	0	0
Water (Standing/Flowing)	3	0.0	0	0.0	1	0	0	2
Sand	13	0.1	0	0.0	4	1	2	6
Oily	1	0.0	0	0.0	0	1	0	0
Other/Unknown	171	1.9	1	3.0	0	1	6	163
TOTAL	8,948	100.0	33	100.0	182	338	633	7,762



ALL CRASHES

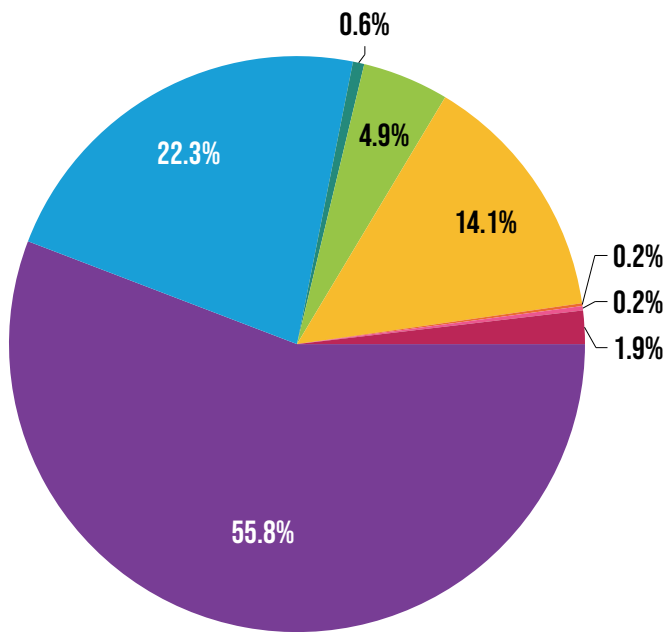


FATAL CRASHES

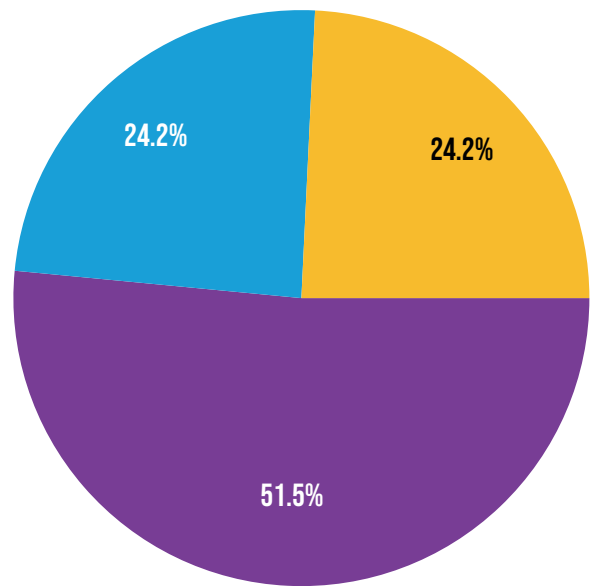
In the Upper Peninsula, the highest percentage of all crashes (56.2%), fatal crashes (51.5%), injury crashes (58.2%), and property damage only crashes (55.9%) occur on dry roads.

UPPER PENINSULA WEATHER CONDITION

WEATHER CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Clear	4,994	55.8	17	51.5	112	192	350	4,323
Cloudy	1,996	22.3	8	24.2	38	79	136	1,735
Fog	55	0.6	0	0.0	1	2	2	50
Rain	434	4.9	0	0.0	10	19	43	362
Snow	1,110	12.4	8	24.2	19	39	80	964
Severe Crosswinds	14	0.2	0	0.0	0	2	0	12
Sleet/Hail	22	0.2	0	0.0	0	0	0	22
Blowing Snow	154	1.7	0	0.0	2	4	16	132
Blowing Sand, Soil, Dirt	0	0.0	0	0.0	0	0	0	0
Smoke	2	0.0	0	0.0	0	0	0	2
Other/Unknown	167	1.9	0	0.0	0	1	6	160
TOTAL	8,948	100.0	33	100.0	182	338	633	7,762



ALL CRASHES

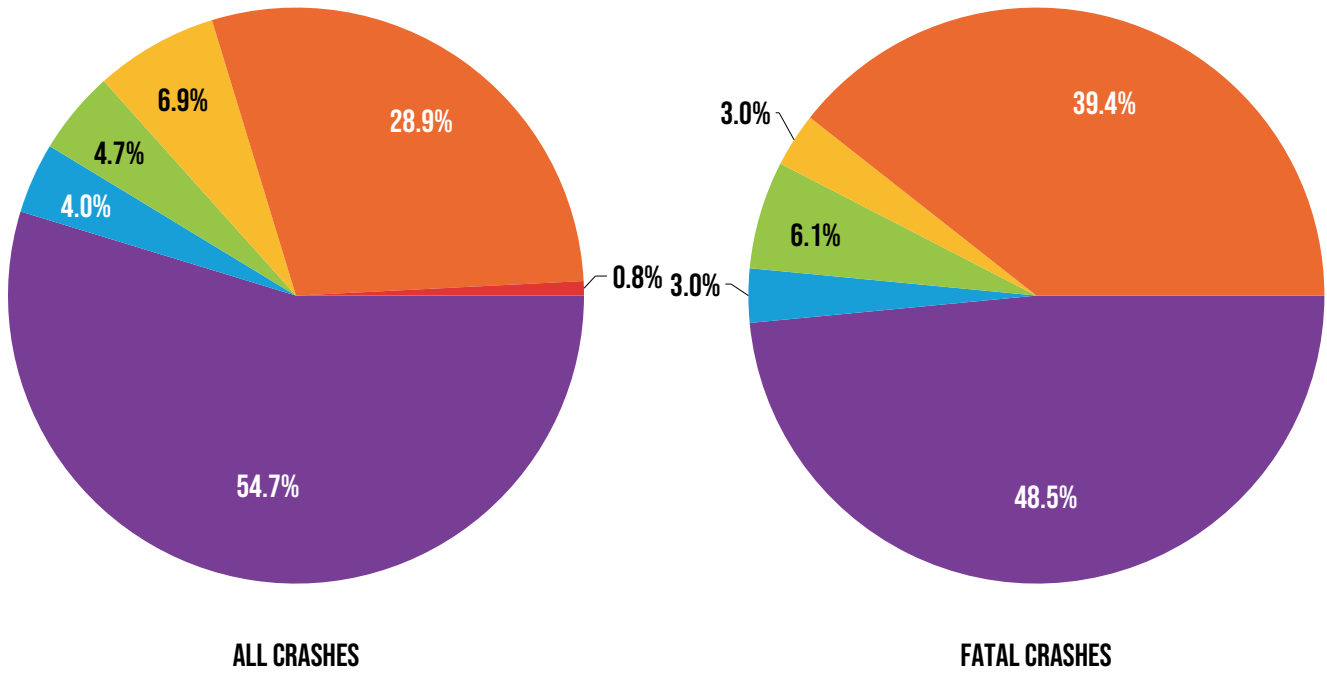


FATAL CRASHES

In the Upper Peninsula, the highest percentage of all crashes (55.8%), fatal crashes (51.5%), injury crashes (56.7%), and property damage only crashes (55.7%) occur during clear weather conditions.

UPPER PENINSULA LIGHT CONDITION

LIGHT CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Daylight	4,896	54.7	16	48.5	126	216	444	4,094
Dawn	355	4.0	1	3.0	5	8	17	324
Dusk	420	4.7	2	6.1	7	12	16	383
Dark – Lighted	618	6.9	1	3.0	10	31	50	526
Dark – Unlighted	2,587	28.9	13	39.4	34	71	104	2,365
Other/Unknown	72	0.8	0	0.0	0	0	2	70
TOTAL	8,948	100.0	33	100.0	182	338	633	7,762

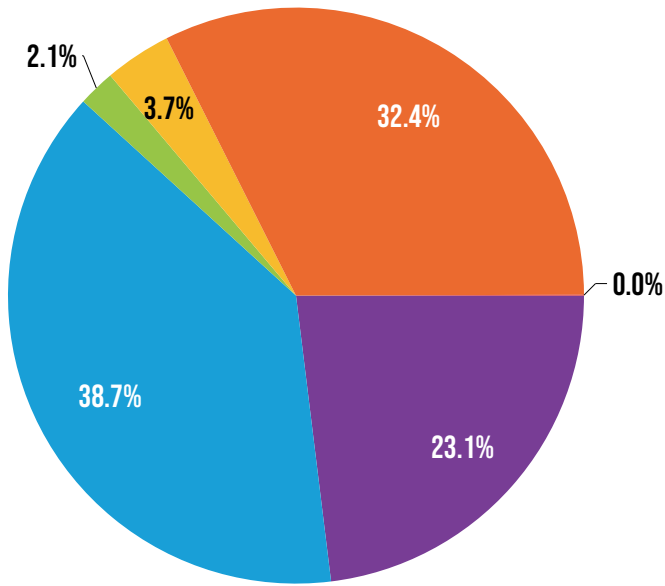


In the Upper Peninsula, the highest percentage of all crashes (54.7%), fatal crashes (48.5%), injury crashes (68.2%), and property damage only crashes (52.7%) occur during daylight hours.

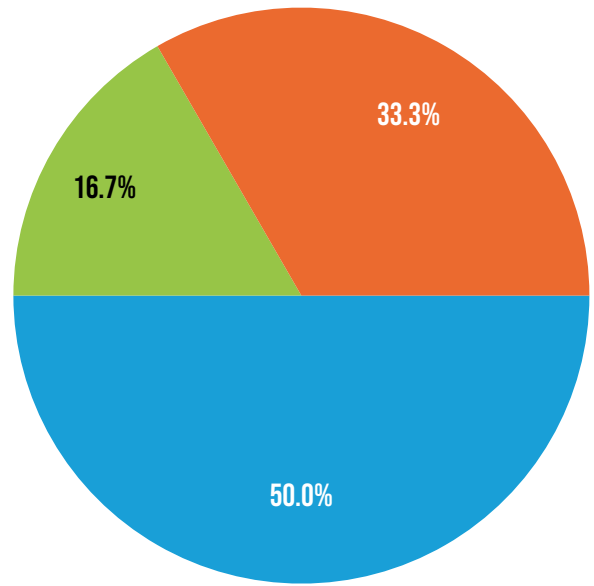
UPPER PENINSULA INTERSECTION CRASHES BY TRAFFIC CONTROL TYPE

TRAFFIC CONTROL TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Signal	468	23.1	0	0.0	7	25	83	353
Stop Sign	786	38.7	3	50.0	21	47	95	620
Stop with Flashing Beacon	42	2.1	1	16.7	0	2	9	30
Yield Sign	76	3.7	0	0.0	2	2	6	66
None	657	32.4	2	33.3	19	29	72	535
Unknown	1	0.0	0	0.0	0	0	1	0
TOTAL	2,030	100.0	6	100.0	49	105	266	1,604

■ SIGNAL
 ■ STOP SIGN
 ■ STOP WITH FLASHING BEACON
 ■ YIELD SIGN
 ■ NONE
 ■ UNKNOWN



ALL CRASHES

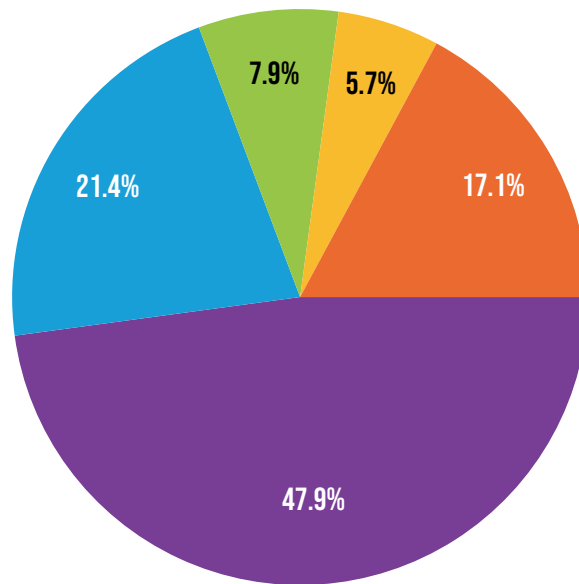


FATAL CRASHES

Compared to other intersection crashes, Upper Peninsula intersections with stop signs have the highest percentage of all crashes (38.7%) and fatal crashes (50.0%).

UPPER PENINSULA CONSTRUCTION ZONE CRASHES

CONSTRUCTION ZONE TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
CONSTRUCTION/MAINTENANCE	<i>Indicates roadway construction, maintenance, or repair. The building, maintenance, or repair of the road itself and roadway-related features (e.g., overhead signs, signals).</i>							
Lane Closure	67	47.9	1	100.0	2	3	7	54
Lane Shift/Crossover	30	21.4	0	0.0	1	0	3	26
Work on Shoulder/Median	11	7.9	0	0.0	2	0	1	8
Intermittent/Moving Work	8	5.7	0	0.0	0	1	1	6
Other	24	17.1	0	0.0	1	2	3	18
Unknown	0	0.0	0	0.0	0	0	0	0
TOTAL	140	100.0	1	100.0	6	6	15	112



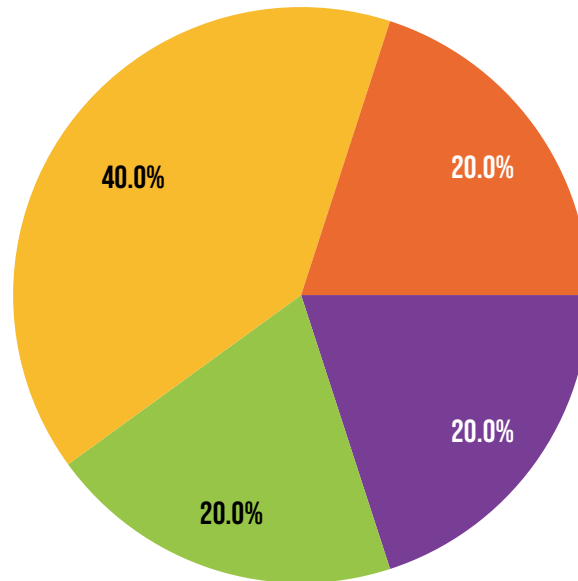
ALL CRASHES

For crashes taking place in construction/maintenance zones, the highest percentage of all crashes (47.9%), injury crashes (44.4%), and property damage only crashes (48.2%) occur in closed lanes.

UPPER PENINSULA CONSTRUCTION ZONE CRASHES

CONSTRUCTION ZONE TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
UTILITY	<i>Indicates work on facilities other than the roadway such as telephone, electrical, cable television, water, or sewer.</i>							
Lane Closure	1	20.0	0	0.0	0	0	0	1
Lane Shift/Crossover	0	0.0	0	0.0	0	0	0	0
Work on Shoulder/Median	1	20.0	0	0.0	0	0	0	1
Intermittent/Moving Work	2	40.0	0	0.0	0	0	0	2
Other	1	20.0	0	0.0	0	1	0	0
Unknown	0	0.0	0	0.0	0	0	0	0
TOTAL	5	100.0	0	0.0	0	1	0	4

■ LANE CLOSURE
 ■ LANE SHIFT/CROSSOVER
 ■ WORK ON SHOULDER/MEDIAN
 ■ INTERMITTENT/MOVING WORK
 ■ OTHER
 ■ UNKNOWN



ALL CRASHES

Five crashes occurred in a utility construction zone in the Upper Peninsula in 2018. Four of these were property damage only, two of which involved intermittent/moving work.