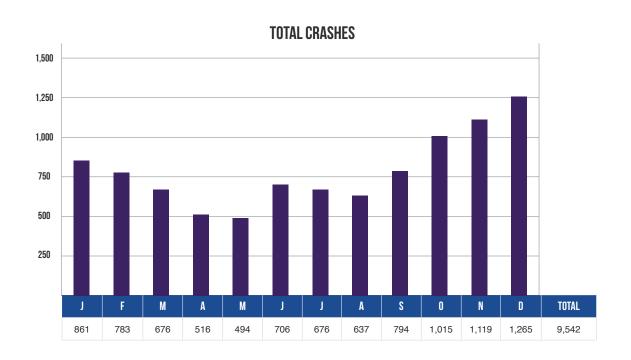
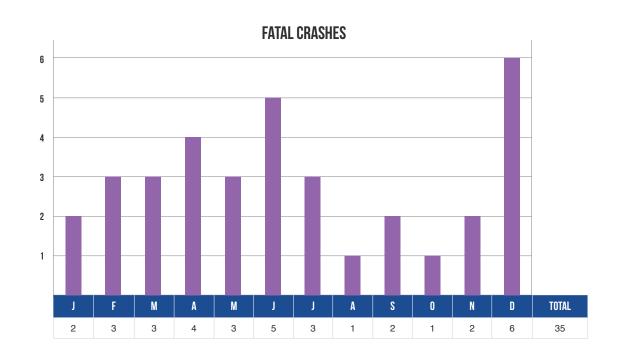
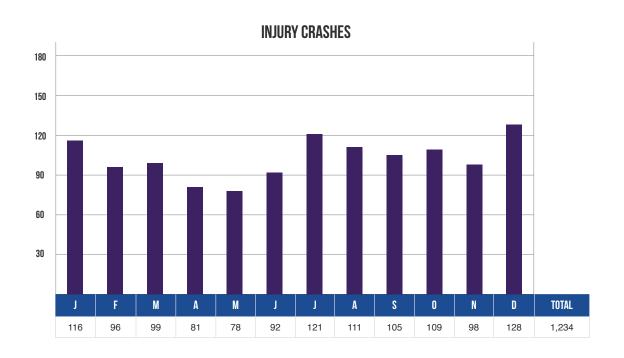
UPPER PENINSULA ALL CRASHES INJURY SEVERITY BY MONTH

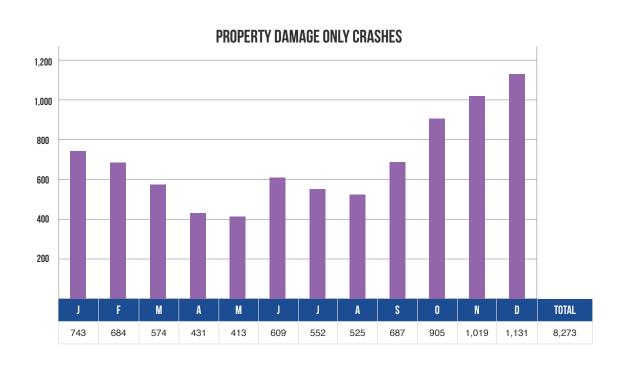






UPPER PENINSULA ALL CRASHES INJURY SEVERITY BY MONTH (CONTINUED)

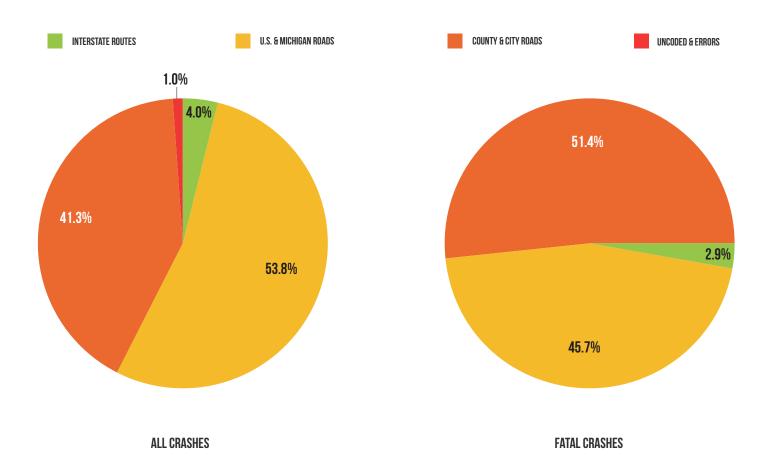






UPPER PENINSULA CRASH EXPERIENCE BY HIGHWAY CLASS

HIGHWAY CLASS	ALL CRASHES	FATAL CRASHES	INJURY CRASHES	PROPERTY Damage Only
Interstate Routes	380	1	58	321
U.S. & Michigan Roads	5,130	16	617	4,497
County & City Roads	3,941	18	537	3,386
Uncoded & Errors	91	0	22	69



The highest percentage of all crashes (53.8%), injury crashes (50.0%), and property damage only crashes (54.4%) occurred on U.S. and Michigan roads. The highest percentage of fatal crashes (51.4%) occurred on county and city roads.



UPPER PENINSULA CRASH EXPERIENCE BY CRASH TYPE

CRASH TYPE	ALL CRASHES		FATAL (FATAL CRASHES		INJURY CRASHES	5	PROPERTY Damage
	Number	% of Total	Number	% of Total	А	В	С	ONLY
Single Vehicle	6,151	64.5	18	51.4	120	190	293	5,530
Head On	86	0.9	3	8.6	15	8	9	51
Head On - Left Turn	128	1.3	0	0.0	5	13	25	85
Angle	897	9.4	6	17.1	22	42	138	689
Rear End	964	10.1	5	14.3	12	31	155	761
Rear End - Left Turn	98	1.0	0	0.0	2	8	12	76
Rear End - Right Turn	44	0.5	0	0.0	0	1	5	38
Sideswipe - Same Direction	426	4.5	0	0.0	3	8	20	395
Sideswipe - Opposite Direction	145	1.5	0	0.0	7	5	20	113
Backing	159	1.7	0	0.0	1	0	1	157
Other/Unknown	444	4.7	3	8.6	8	27	28	378
TOTAL	9,542	100.0	35	100.0	195	333	706	8,273

RELATIONSHIP TO ROADWAY

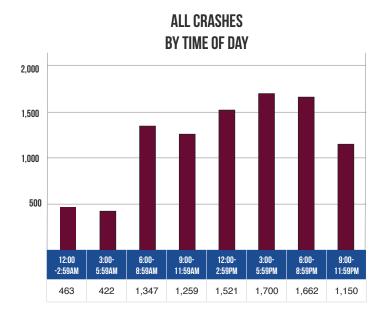
LOCATION OF	ALL CR	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			
FIRST IMPACT	Number	% of Total	Number	% of Total	А	В	С	DAMAGE Only	
On Road	7,718	80.9	22	62.9	119	228	508	6,841	
Median	49	0.5	0	0.0	1	4	5	39	
Shoulder	563	5.9	5	14.3	28	33	52	445	
Outside of Shoulder/Curb	940	9.9	8	22.9	42	59	125	706	
Gore	32	0.3	0	0.0	1	2	4	25	
On-Street Parking	172	1.8	0	0.0	1	2	6	163	
Off the Roadway	6	0.1	0	0.0	1	1	0	4	
On the Sidewalk	15	0.2	0	0.0	1	0	1	13	
In the Bicycle Lane	2	0.0	0	0.0	0	0	0	2	
Other/Unknown	45	0.5	0	0.0	1	4	5	35	
TOTAL	9,542	100.0	35	100.0	195	333	706	8,273	

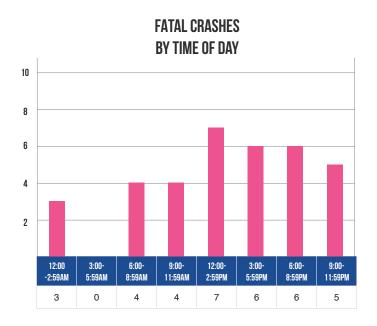
In the Upper Peninsula, only 9.9 percent of crashes occur outside of the shoulder/curb of the road, but these crashes account for 22.9 percent of the fatal crashes.



UPPER PENINSULA TIME AND SEVERITY

TIME OF DAY	ALL CR	ALL CRASHES		CRASHES		PROPERTY Damage		
	Number	% of Total	Number	% of Total	А	В	С	ONLY
12:00 AM - 2:59 AM	463	4.9	3	8.6	14	26	29	391
3:00 AM - 5:59 AM	422	4.4	0	0.0	10	9	19	384
6:00 AM - 8:59 AM	1,347	14.1	4	11.4	18	30	73	1,222
9:00 AM - 11:59 AM	1,259	13.2	4	11.4	27	44	121	1,063
12:00 PM - 2:59 PM	1,521	15.9	7	20.0	33	82	172	1,227
3:00 PM - 5:59 PM	1,700	17.8	6	17.1	38	67	162	1,427
6:00 PM - 8:59 PM	1,662	17.4	6	17.1	40	49	83	1,484
9:00 PM - 11:59 PM	1,150	12.1	5	14.3	15	26	46	1,058
Unknown	18	0.2	0	0.0	0	0	1	17
TOTAL	9,542	100.0	35	100.0	195	333	706	8,273



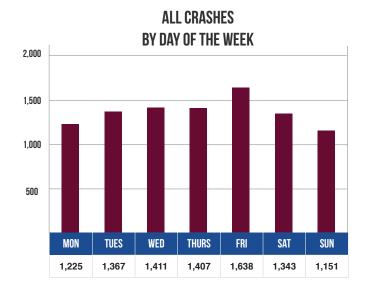


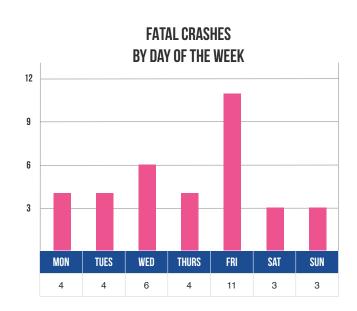
In the Upper Peninsula, crash frequencies peak in the early evening, then drop off until 6:00 AM (the morning rush hour). In 2017, the highest percentage of fatal crashes occurs during the 12:00 PM to 2:59 PM time period (20.0%).



UPPER PENINSULA DAY OF WEEK

DAY OF WEEK	DAY OF WEEK ALL CRASHES		FATAL (CRASHES		PROPERTY Damage		
	Number	% of Total	Number	% of Total	А	В	С	ONLY
Monday	1,225	12.8	4	11.4	17	36	92	1,076
Tuesday	1,367	14.3	4	11.4	23	45	106	1,189
Wednesday	1,411	14.8	6	17.1	25	55	100	1,225
Thursday	1,407	14.7	4	11.4	23	38	99	1,243
Friday	1,638	17.2	11	31.4	32	45	139	1,411
Saturday	1,343	14.1	3	8.6	39	69	99	1,133
Sunday	1,151	12.1	3	8.6	36	45	71	996
TOTAL	9,542	100.0	35	100.0	195	333	706	8,273



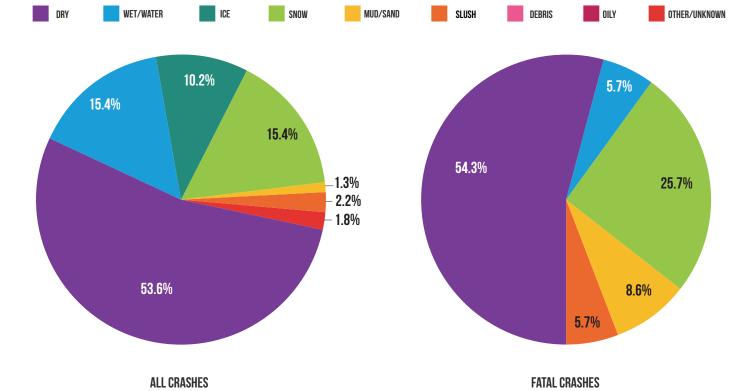


In the Upper Peninsula, crash frequencies are the highest on Friday (1,638). Friday also has the highest number of fatal crashes (11).



UPPER PENINSULA ROAD CONDITION

ROAD SURFACE CONDITION	ALL CRASHES		FATAL (FATAL CRASHES		INJURY CRASHES	S	PROPERTY Damage
	Number	% of Total	Number	% of Total	А	В	С	ONLY
Dry	5,116	53.6	19	54.3	94	189	334	4,480
Wet	1,468	15.4	2	5.7	29	43	118	1,276
Ice	975	10.2	0	0.0	21	29	101	824
Snow	1,470	15.4	9	25.7	25	36	108	1,292
Mud, Dirt, Gravel	116	1.2	3	8.6	18	18	12	65
Slush	209	2.2	2	5.7	3	12	26	166
Debris	4	0.0	0	0.0	0	0	1	3
Water (Standing/Moving)	3	0.0	0	0.0	0	0	0	3
Sand	6	0.1	0	0.0	2	4	0	0
Oily	3	0.0	0	0.0	0	0	0	3
Other/Unknown	172	1.8	0	0.0	3	2	6	161
TOTAL	9,542	100.0	35	100.0	195	333	706	8,273

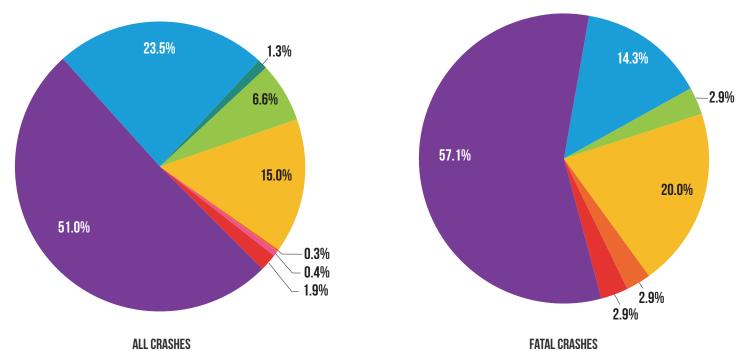


In the Upper Peninsula, the highest percentage of all crashes (53.6%), fatal crashes (54.3%), injury crashes (50.0%), and property damage only crashes (54.2%) occur on dry roads.



UPPER PENINSULA WEATHER CONDITION

WEATHER CONDITION	ALL CF	ALL CRASHES		CRASHES		INJURY CRASHE	s	PROPERTY Damage
	Number	% of Total	Number	% of Total	А	В	С	ONLY
Clear	4,865	51.0	20	57.1	105	196	331	4,213
Cloudy	2,244	23.5	5	14.3	35	58	190	1,956
Fog	124	1.3	0	0.0	4	6	6	108
Rain	634	6.6	1	2.9	17	29	57	530
Snow	1,183	12.4	6	17.1	18	33	89	1,037
Severe Wind	24	0.3	1	2.9	0	1	2	20
Sleet/Hail	38	0.4	0	0.0	2	0	6	30
Blowing Snow	248	2.6	1	2.9	9	10	22	206
Blowing Sand	2	0.0	0	0.0	0	0	0	2
Smoke	2	0.0	0	0.0	0	0	0	2
Other/Unknown	178	1.9	1	2.9	5	0	3	169
TOTAL	9,542	100.0	35	100.0	195	333	706	8,273
CLEAR CLOUDY	FOG/SMOKE	RAIN	SNOW/BI	LOWING SNOW	SEVERE WIND/	BLOWING SAND	SLEET/HAIL	OTHER/U
	23.5%	1.	3 %				14.3	%
		6.6%						-2.
					57.1 %			

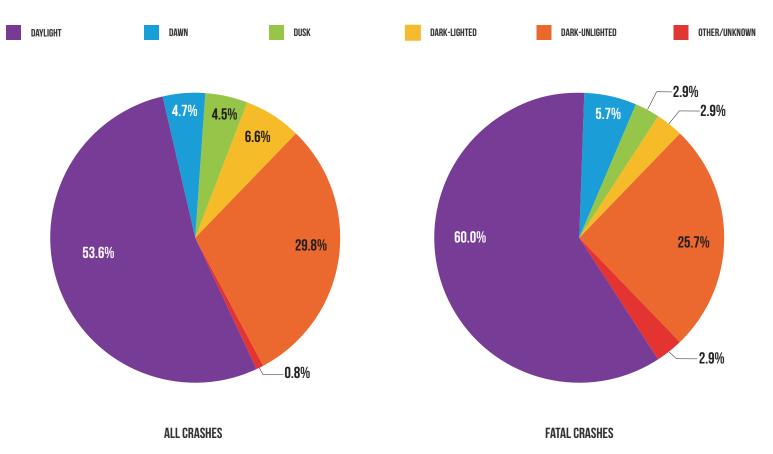


In the Upper Peninsula, the highest percentage of all crashes (51.0%), fatal crashes (57.1%), injury crashes (51.2%), and property damage only crashes (50.9%) occur during clear weather conditions.



UPPER PENINSULA LIGHT CONDITION

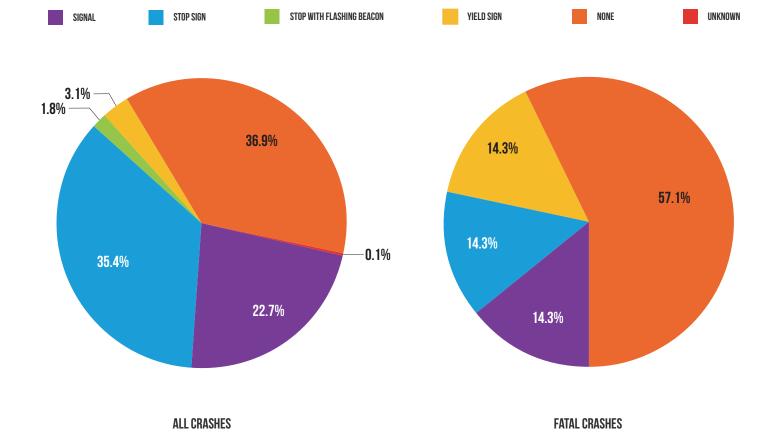
LIGHT CONDITION	ALL CRASHES		FATAL (CRASHES		PROPERTY Damage		
	Number	% of Total	Number	% of Total	А	В	С	ONLY
Daylight	5,117	53.6	21	60.0	128	235	514	4,219
Dawn	445	4.7	2	5.7	5	5	21	412
Dusk	434	4.5	1	2.9	5	7	18	403
Dark – Lighted	633	6.6	1	2.9	10	20	43	559
Dark - Unlighted	2,840	29.8	9	25.7	46	66	110	2,609
Other/Unknown	73	0.8	1	2.9	1	0	0	71
TOTAL	9,542	100.0	35	100.0	195	333	706	8,273



In the Upper Peninsula, the highest percentage of all crashes (53.6%), fatal crashes (60.0%), injury crashes (71.1%), and property damage only crashes (51.0%) occur during daylight hours.

UPPER PENINSULA INTERSECTION CRASHES BY TRAFFIC CONTROL TYPE

TRAFFIC CONTROL TYPE	ALL CRASHES		FATAL (FATAL CRASHES		INJURY CRASHES			
	Number	% of Total	Number	% of Total	А	В	С	DAMAGE Only	
Signal	507	22.7	1	14.3	8	26	83	389	
Stop Sign	788	35.4	1	14.3	21	36	104	626	
Stop with Flashing Beacon	41	1.8	0	0.0	1	1	6	33	
Yield Sign	69	3.1	1	14.3	0	0	13	55	
None of These	822	36.9	4	57.1	27	48	89	654	
Unknown	2	0.1	0	0.0	0	0	1	1	
TOTAL	2,229	100.0	7	100.0	57	111	296	1,758	



Compared to other intersection crashes, Upper Peninsula intersections with no traffic control signals have the highest percentage of all crashes (36.9%) and fatal crashes (57.1%).

UPPER PENINSULA CONSTRUCTION ZONE CRASHES

LANE SHIFT/CROSSOVER

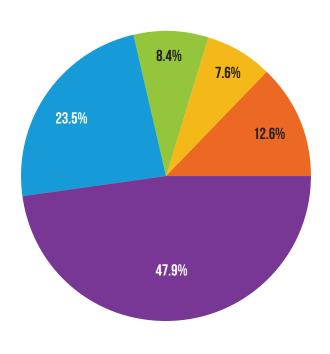
CONSTRUCTION ZONE TYPE	ALL CRASHES		FATAL C	RASHES		PROPERTY Damage			
	Number	% of Total	Number	% of Total	A	В	С	ONLY	
CONSTRUCTION/MAINTENANCE		cates roadway construction, maintenance, or repair. The building, maintenance, or repair of the road itself and ted features (e.g., overhead signs, signals).							
Lane Closure	57	47.9	1	100.0	0	4	9	43	
Lane Shift/Crossover	28	23.5	0	0.0	0	1	3	24	
Work on Shoulder/Median	10	8.4	0	0.0	0	2	1	7	
Intermittent/Moving Work	9	7.6	0	0.0	0	0	1	8	
Other	15	12.6	0	0.0	1	1	1	12	
Unknown	0	0.0	0	0.0	0	0	0	0	
TOTAL	119	100.0	1	100.0	1	8	15	94	

WORK ON SHOULDER/MEDIAN

INTERMITTENT/MOVING WORK

OTHER

UNKNOWN



For crashes taking place in construction/maintenance zones, the highest percentage of all crashes (47.9%), injury crashes (54.2%), and property damage only crashes (45.7%) in construction zones occur in closed lanes.

ALL CRASHES

LANE CLOSURE

UPPER PENINSULA CONSTRUCTION ZONE CRASHES

CONSTRUCTION ZONE TYPE	ALL CR	ASHES	FATAL C	FATAL CRASHES		INJURY CRASHES			
	Number	% of Total	Number	% of Total	A	В	С	DAMAGE Only	
UTILITY	Indicates work	cates work on facilities other than the roadway such as telephone, electrical, cable television, water, or sewe							
Lane Closure	0	0.0	0	0.0	0	0	0	0	
Lane Shift/Crossover	0	0.0	0	0.0	0	0	0	0	
Work on Shoulder/Median	1	100.0	0	0.0	0	0	0	1	
Intermittent/Moving Work	0	0.0	0	0.0	0	0	0	0	
Other	0	0.0	0	0.0	0	0	0	0	
Unknown	0	0.0	0	0.0	0	0	0	0	
TOTAL	1	100.0	0	0.0	0	0	0	1	

The only crash that occured in a utility construction zone in the Upper Penninsula in 2017 was a property damage only crash that occured when work was being done on the shoulder/median.