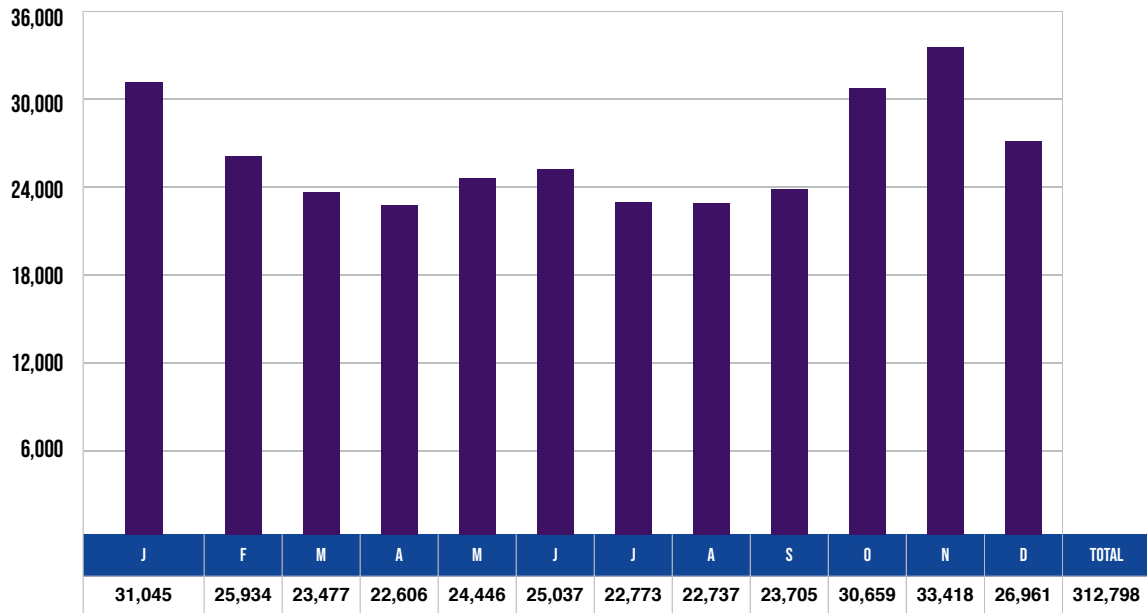
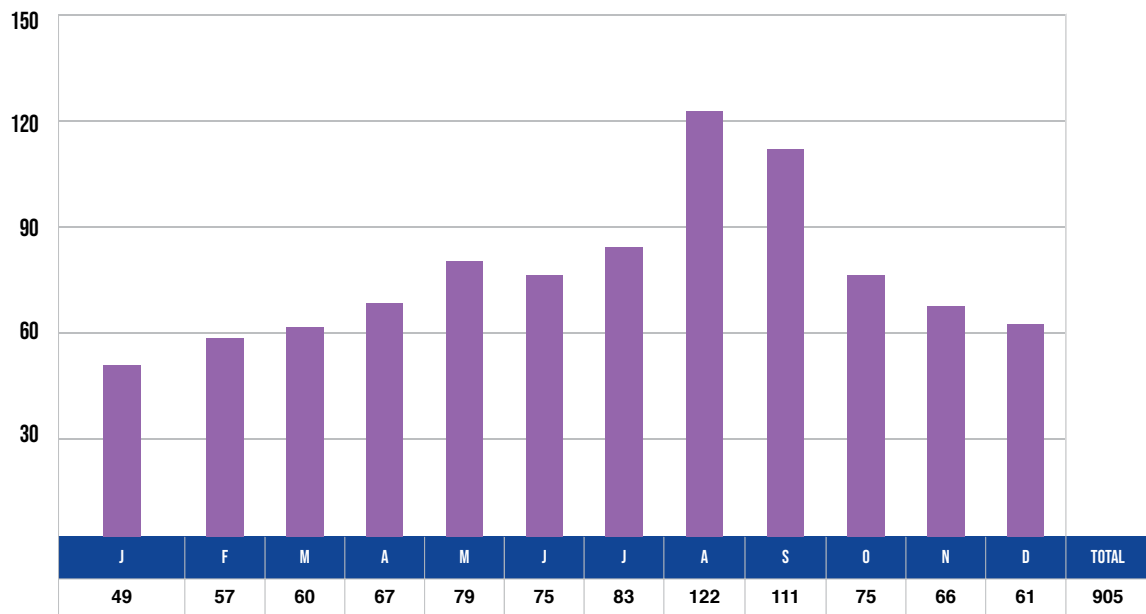


ALL CRASHES INJURY SEVERITY BY MONTH

TOTAL CRASHES

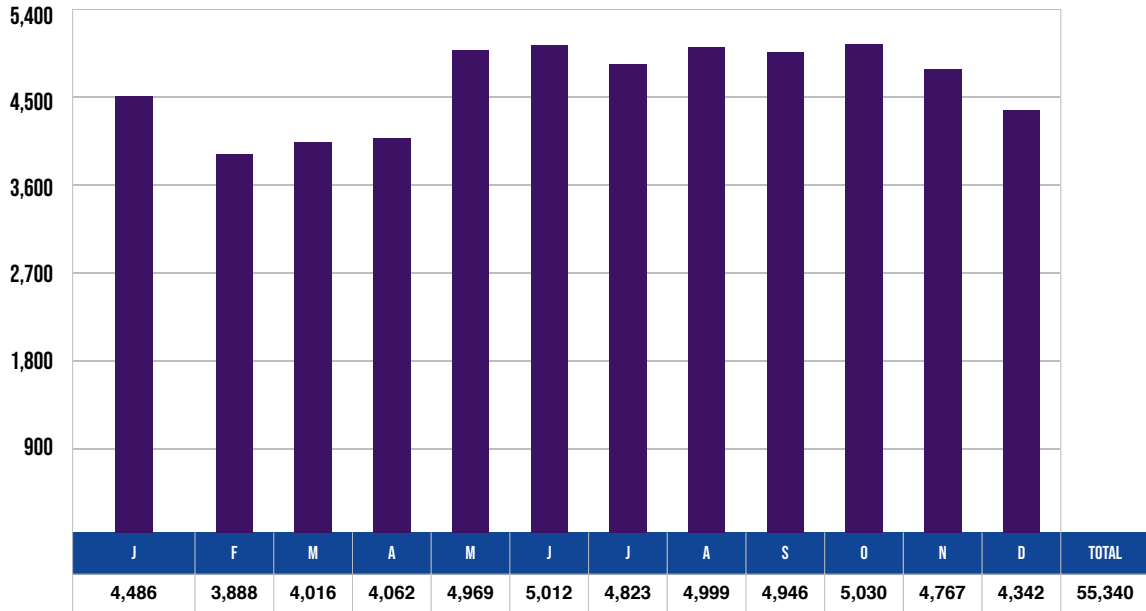


FATAL CRASHES

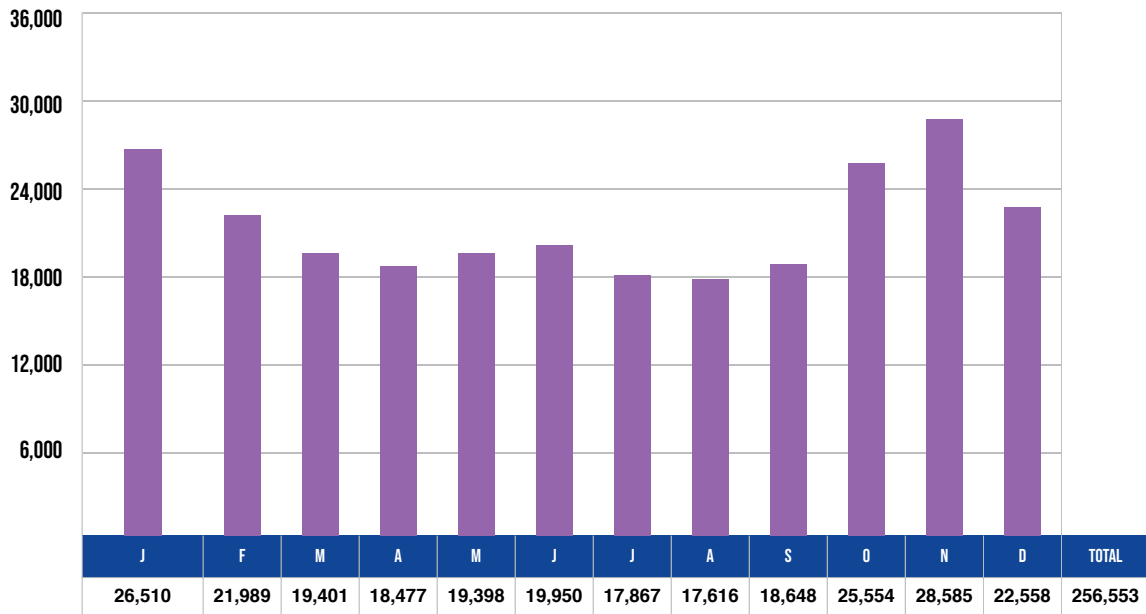


ALL CRASHES INJURY SEVERITY BY MONTH (CONTINUED)

INJURY CRASHES

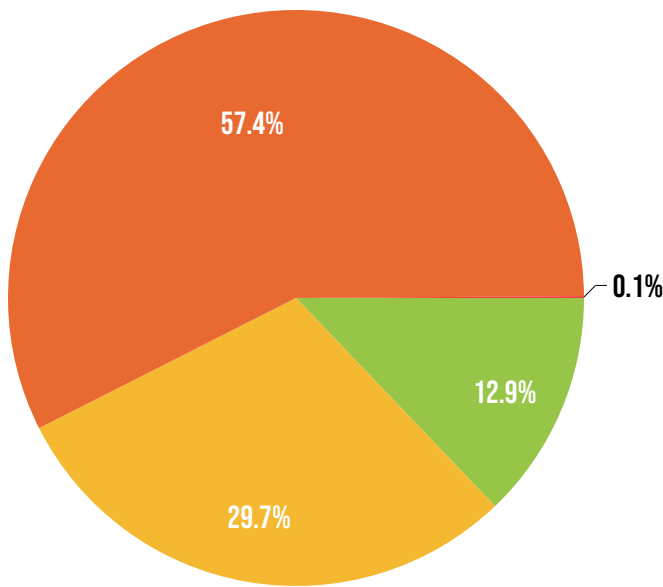


PROPERTY DAMAGE ONLY CRASHES

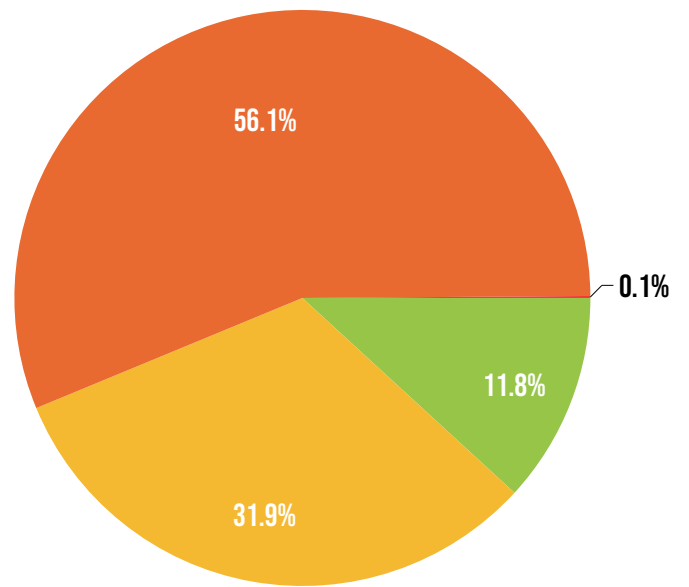


HIGHWAY CLASS

HIGHWAY CLASS	ALL CRASHES	FATAL CRASHES	INJURY CRASHES	PROPERTY DAMAGE ONLY
Interstate Routes	40,209	107	7,357	32,745
U.S. & Michigan Roads	92,834	289	16,458	76,087
County & City Roads	179,438	508	31,465	147,465
Uncoded & Errors	317	1	60	256



ALL CRASHES



FATAL CRASHES

The highest percentage of all crashes (57.4%), fatal crashes (56.1%), injury crashes (56.9%), and property damage only crashes (57.5%) occur on county and city roads.

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	107,843	34.5	420	46.4	1,985	5,328	7,257	92,853
Head On	3,383	1.1	99	10.9	270	499	652	1,863
Head On – Left Turn	7,262	2.3	34	3.8	246	1,002	1,685	4,295
Angle	45,272	14.5	156	17.2	957	3,664	8,084	32,411
Rear End	79,014	25.3	82	9.1	501	3,113	11,947	63,371
Rear End – Left Turn	2,587	0.8	8	0.9	36	138	420	1,985
Rear End – Right Turn	2,471	0.8	1	0.1	8	67	244	2,151
Sideswipe – Same Direction	36,827	11.8	15	1.7	159	661	2,056	33,936
Sideswipe – Opposite Direction	5,464	1.7	11	1.2	68	244	518	4,623
Backing	7,325	2.3	2	0.2	5	40	119	7,159
Other/Unknown	15,350	4.9	77	8.5	425	1,089	1,853	11,906
TOTAL	312,798	100.0	905	100.0	4,660	15,845	34,835	256,553

RELATIONSHIP TO ROADWAY

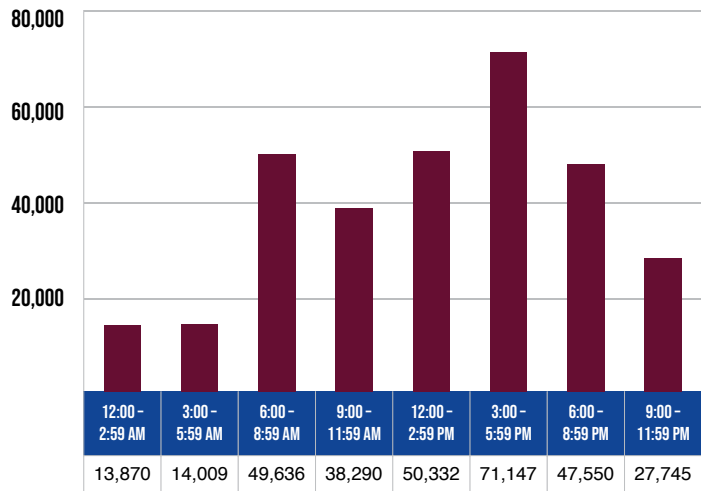
LOCATION OF FIRST IMPACT	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
On Road	275,152	88.0	684	75.6	3,662	12,933	30,655	227,218
Median	2,626	0.8	12	1.3	62	167	312	2,073
Shoulder	10,050	3.2	58	6.4	248	721	1,110	7,913
Outside of Shoulder/Curb	19,589	6.3	139	15.4	636	1,810	2,398	14,606
Gore	641	0.2	5	0.6	21	62	85	468
On-Street Parking	3,347	1.1	0	0.0	11	45	92	3,199
Off the Roadway	45	0.0	0	0.0	2	3	3	37
On the Sidewalk	349	0.1	4	0.4	5	50	73	217
In the Bicycle Lane	54	0.0	0	0.0	1	7	17	29
Other/Unknown	945	0.3	3	0.3	12	47	90	793
TOTAL	312,798	100.0	905	100.0	4,660	15,845	34,835	256,553

Only 6.3 percent of crashes occur outside the shoulder of the road, but these crashes account for 15.4 percent of the fatal crashes.

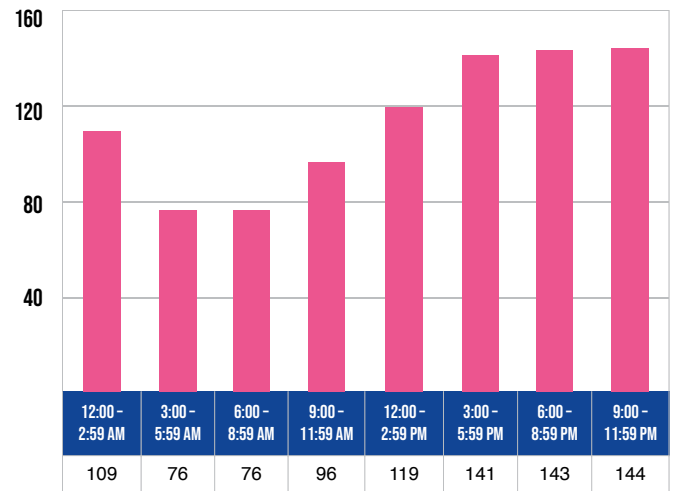
TIME AND SEVERITY

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	13,870	4.4	109	12.0	358	897	1,456	11,050
3:00 AM – 5:59 AM	14,009	4.5	76	8.4	281	694	1,080	11,878
6:00 AM – 8:59 AM	49,636	15.9	76	8.4	492	1,842	4,670	42,556
9:00 AM – 11:59 AM	38,290	12.2	96	10.6	538	1,911	4,492	31,253
12:00 PM – 2:59 PM	50,332	16.1	119	13.1	730	2,872	6,595	40,016
3:00 PM – 5:59 PM	71,147	22.7	141	15.6	954	3,805	9,093	57,154
6:00 PM – 8:59 PM	47,550	15.2	143	15.8	712	2,412	4,770	39,513
9:00 PM – 11:59 PM	27,745	8.9	144	15.9	592	1,407	2,671	22,931
Unknown	219	0.1	1	0.1	3	5	8	202
TOTAL	312,798	100.0	905	100.0	4,660	15,845	34,835	256,553

**ALL CRASHES
BY TIME OF DAY**



**FATAL CRASHES
BY TIME OF DAY**

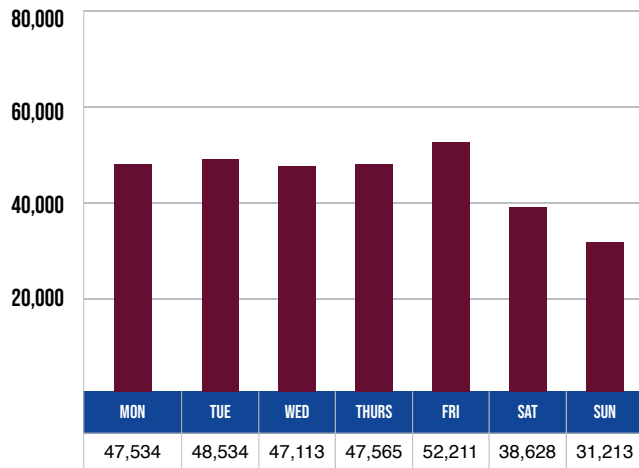


Crash frequencies peak in the late afternoon, then drop off steadily until 6:00 AM (the morning rush hour). Fatal crash frequencies rise with the frequency of other crashes, but continue at a high rate well into the early morning hours. In 2018, the highest percentage of fatal crashes occurred during the 9:00 PM to 11:59 PM time period (15.9%).

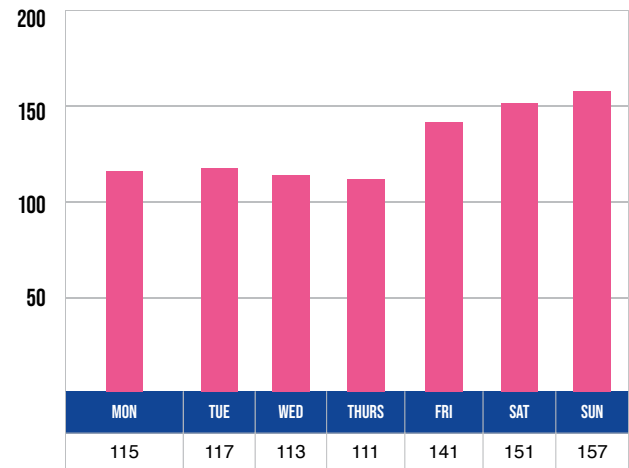
DAY OF WEEK

DAY OF WEEK	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Monday	47,534	15.2	115	12.7	670	2,301	5,355	39,093
Tuesday	48,534	15.5	117	12.9	648	2,391	5,476	39,902
Wednesday	47,113	15.1	113	12.5	616	2,302	5,064	39,018
Thursday	47,565	15.2	111	12.3	645	2,329	5,339	39,141
Friday	52,211	16.7	141	15.6	698	2,622	5,887	42,863
Saturday	38,628	12.3	151	16.7	710	2,098	4,334	31,335
Sunday	31,213	10.0	157	17.3	673	1,802	3,380	25,201
TOTAL	312,798	100.0	905	100.0	4,660	15,845	34,835	256,553

**ALL CRASHES
BY DAY OF WEEK**



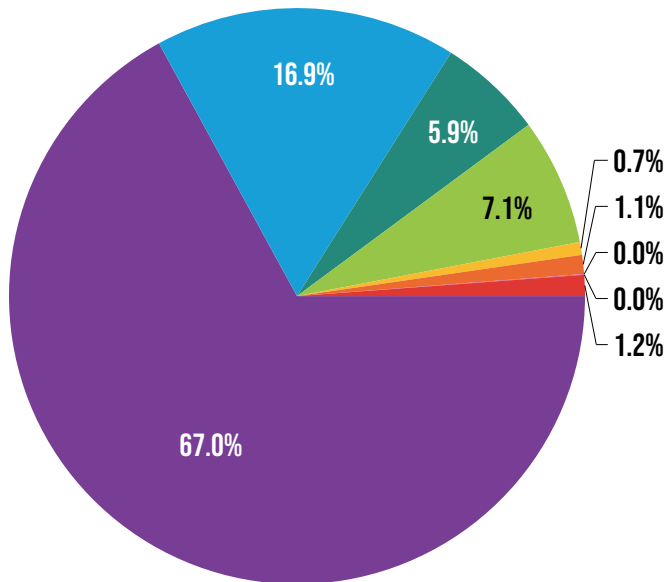
**FATAL CRASHES
BY DAY OF WEEK**



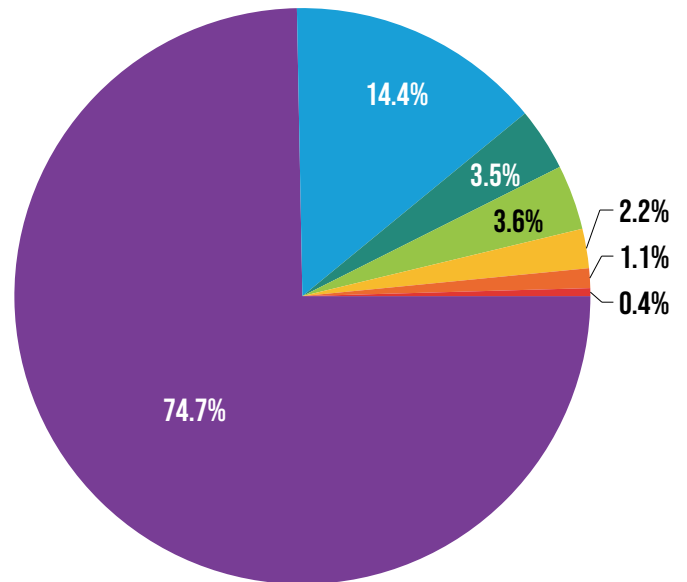
Crash frequencies are higher Monday through Friday than on the weekend. Sunday (157) and Saturday (151) have the highest number of fatal crashes.

ROAD CONDITION

ROAD SURFACE CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Dry	209,712	67.0	676	74.7	3,351	11,344	23,877	170,464
Wet	52,759	16.9	129	14.3	694	2,542	6,453	42,941
Ice	18,411	5.9	32	3.5	244	804	1,941	15,390
Snow	22,275	7.1	33	3.6	184	689	1,825	19,544
Mud, Dirt, Gravel	2,198	0.7	19	2.1	111	234	203	1,631
Slush	3,322	1.1	10	1.1	47	156	359	2,750
Debris	104	0.0	0	0.0	2	4	6	92
Water (Standing/Flowing)	214	0.1	1	0.1	3	8	20	182
Sand	67	0.0	1	0.1	6	6	10	44
Oily	51	0.0	0	0.0	2	7	6	36
Other/Unknown	3,685	1.2	4	0.4	16	51	135	3,479
TOTAL	312,798	100.0	905	100.0	4,660	15,845	34,835	256,553



ALL CRASHES

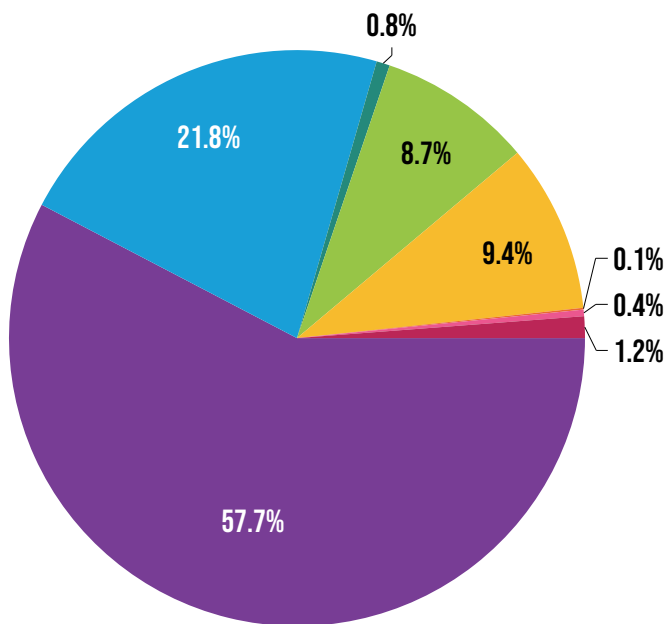


FATAL CRASHES

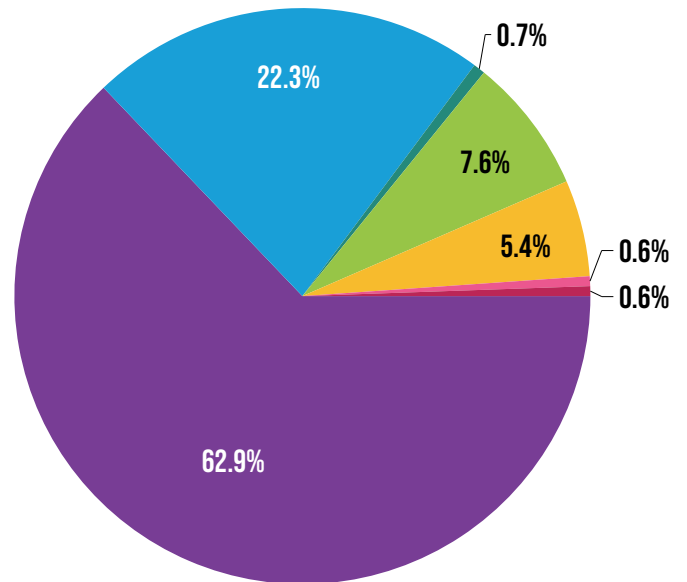
The highest percentage of all crashes (67.0%), fatal crashes (74.7%), injury crashes (69.7%), and property damage only crashes (66.4%) occur on dry roads.

WEATHER CONDITION

WEATHER CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Clear	180,365	57.7	569	62.9	2,942	9,868	20,085	146,901
Cloudy	68,201	21.8	202	22.3	953	3,276	7,903	55,867
Fog	2,309	0.7	6	0.7	47	145	210	1,901
Rain	27,084	8.7	69	7.6	376	1,338	3,491	21,810
Snow	27,552	8.8	43	4.8	279	992	2,664	23,574
Severe Crosswinds	297	0.1	0	0.0	3	12	19	263
Sleet/Hail	1,144	0.4	5	0.6	23	68	141	907
Blowing Snow	1,996	0.6	6	0.7	25	87	196	1,682
Blowing Sand, Soil, Dirt	17	0.0	0	0.0	0	1	1	15
Smoke	38	0.0	0	0.0	1	3	3	31
Other/Unknown	3,795	1.2	5	0.6	11	55	122	3,602
TOTAL	312,798	100.0	905	100.0	4,660	15,845	34,835	256,553



ALL CRASHES



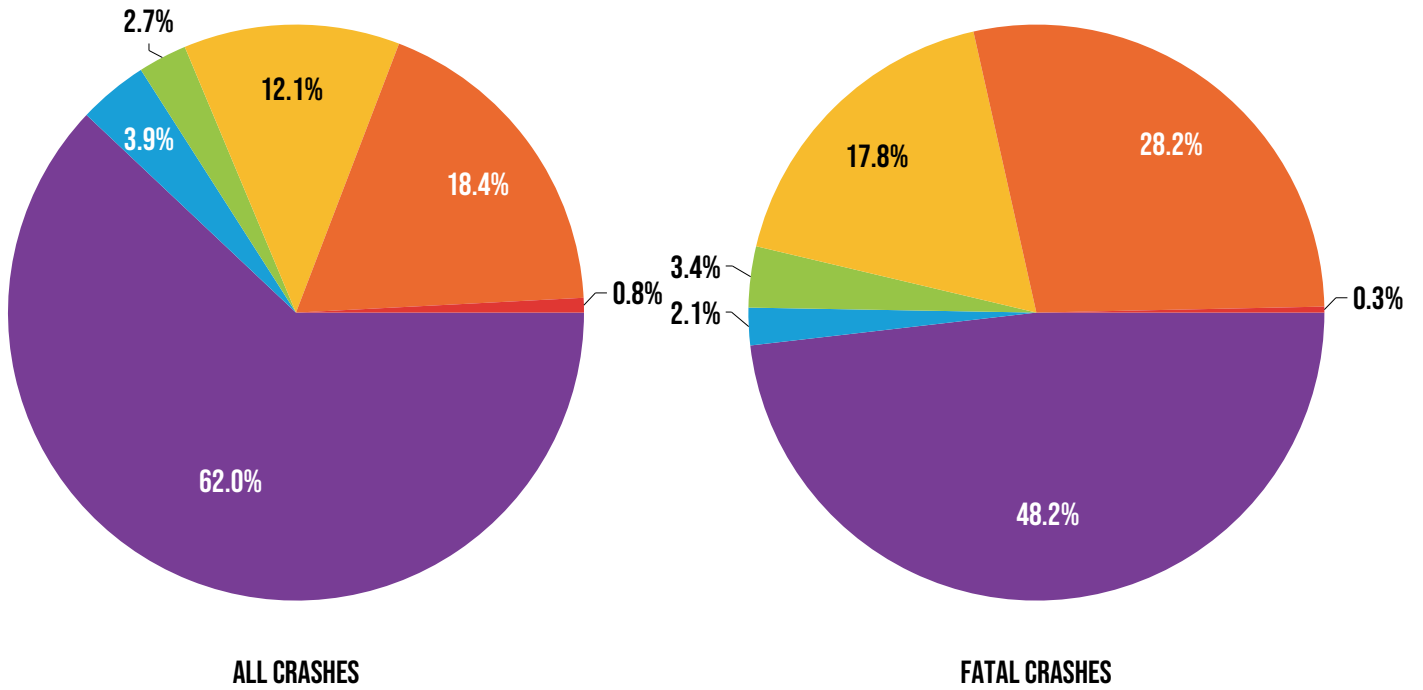
FATAL CRASHES

The highest percentage of all crashes (57.7%), fatal crashes (62.9%), injury crashes (59.4%), and property damage only crashes (57.3%) occur during clear weather conditions.

LIGHT CONDITION

LIGHT CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Daylight	194,047	62.0	436	48.2	2,789	10,670	24,394	155,758
Dawn	12,241	3.9	19	2.1	107	375	902	10,838
Dusk	8,571	2.7	31	3.4	139	394	853	7,154
Dark – Lighted	37,960	12.1	161	17.8	759	2,264	5,085	29,691
Dark – Unlighted	57,416	18.4	255	28.2	860	2,107	3,524	50,670
Other/Unknown	2,563	0.8	3	0.3	6	35	77	2,442
TOTAL	312,798	100.0	905	100.0	4,660	15,845	34,835	256,553

■ DAYLIGHT
 ■ DAWN
 ■ DUSK
 ■ DARK - LIGHTED
 ■ DARK - UNLIGHTED
 ■ OTHER/UNKNOWN

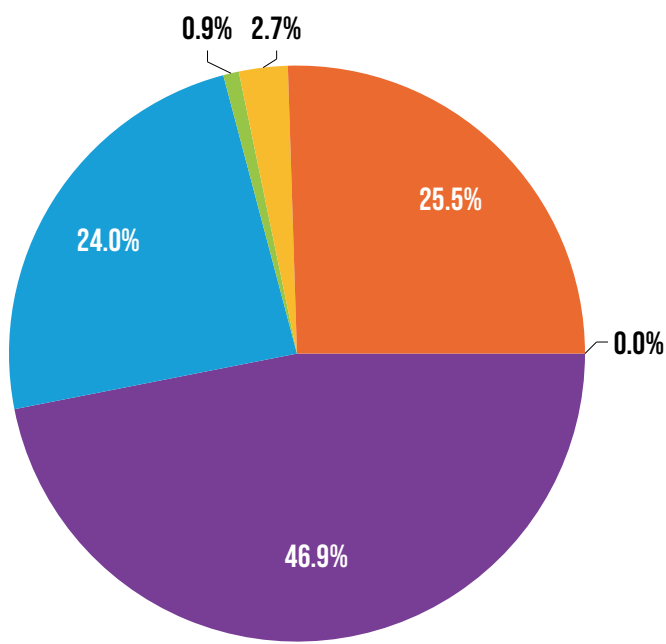


The highest percentage of all crashes (62.0%) , fatal crashes (48.2%), injury crashes (68.4%), and property damage only crashes (60.7%) occur during daylight hours.

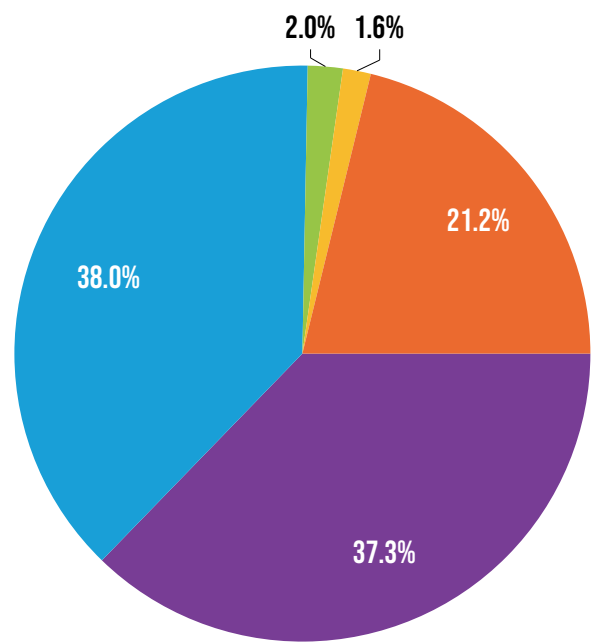
INTERSECTION CRASHES BY TRAFFIC CONTROL TYPE

TRAFFIC CONTROL TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Signal	46,452	46.9	95	37.3	666	2,939	7,709	35,043
Stop Sign	23,738	24.0	97	38.0	520	1,703	3,744	17,674
Stop with Flashing Beacon	870	0.9	5	2.0	29	91	144	601
Yield Sign	2,710	2.7	4	1.6	44	119	323	2,220
None	25,253	25.5	54	21.2	419	1,533	3,250	19,997
Unknown	4	0.0	0	0.0	0	0	2	2
TOTAL	99,027	100.0	255	100.0	1,678	6,385	15,172	75,537

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



ALL CRASHES

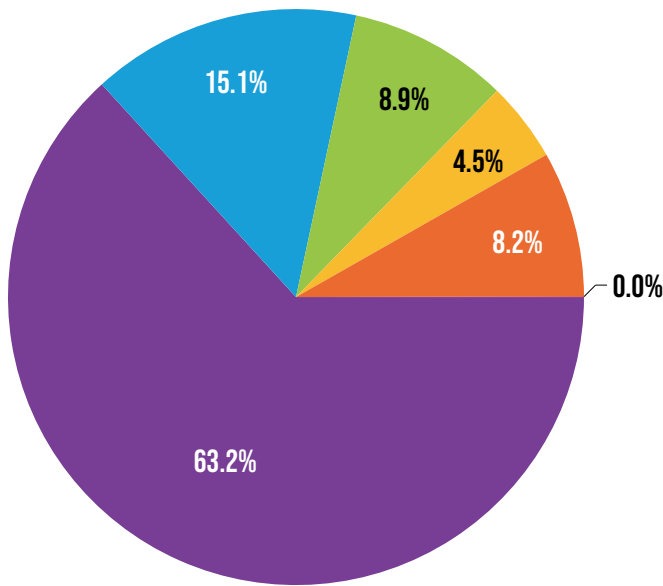


FATAL CRASHES

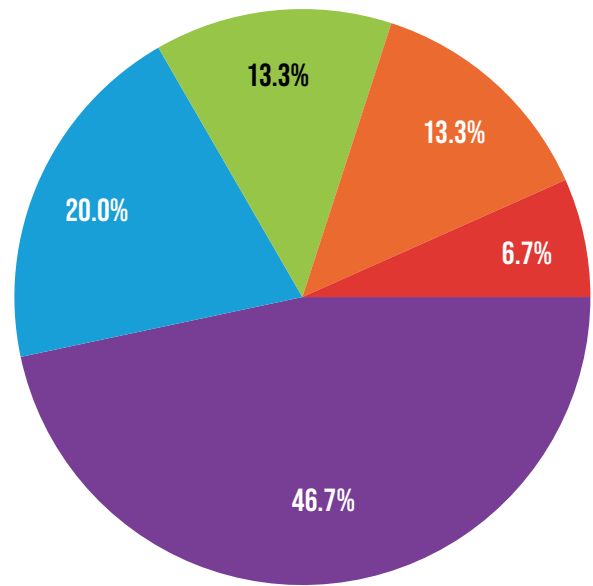
Compared to other intersection crashes, intersections with signals have the highest percentage of all crashes (46.9%), injury crashes (48.7%), and property damage only crashes (46.4%). Intersections with stop signs have the highest percentage of fatal crashes (38.0%).

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	2,936	63.2	7	46.7	21	128	429	2,351
Lane Shift/Crossover	703	15.1	3	20.0	7	27	92	574
Work on Shoulder/Median	415	8.9	2	13.3	7	15	55	336
Intermittent/Moving Work	208	4.5	0	0.0	2	16	20	170
Other	380	8.2	2	13.3	7	28	36	307
Unknown	2	0.0	1	6.7	0	0	0	1
TOTAL	4,644	100.0	15	100.0	44	214	632	3,739



ALL CRASHES

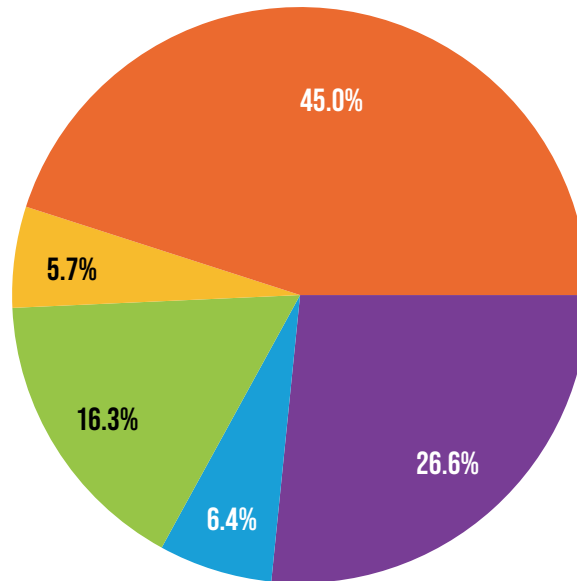


FATAL CRASHES

The highest percentage of all crashes (63.2%), injury crashes (64.9%), and property damage only crashes (62.9%) occur in closed lanes in construction/maintenance zones.

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	75	26.6	0	0.0	1	2	4	68
Lane Shift/Crossover	18	6.4	0	0.0	0	0	2	16
Work on Shoulder/Median	46	16.3	0	0.0	0	4	8	34
Intermittent/Moving Work	16	5.7	0	0.0	1	0	2	13
Other	127	45.0	0	0.0	4	5	20	98
Unknown	0	0.0	0	0.0	0	0	0	0
TOTAL	282	100.0	0	0.0	6	11	36	229



ALL CRASHES

The highest percentage of all crashes (45.0%), injury crashes (54.7%), and property damage crashes (42.8%) in utility construction zones occurred in other situations.