

Lake Forest Police
Department

Quarterly Traffic Crash Analysis

1st Quarter 2018



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I. INTRODUCTION

Each quarter all traffic crashes occurring in Lake Forest are analyzed to extract informational and actionable data resulting in the “Quarterly Traffic Crash Analysis” report. This study seeks to support patrol operations strategies as well as provide an overview of crash events for residents, police, city and elected officials. This quarter’s report covers January through March, and includes comparisons with prior year’s data.

II. CITY-WIDE CRASH DATA

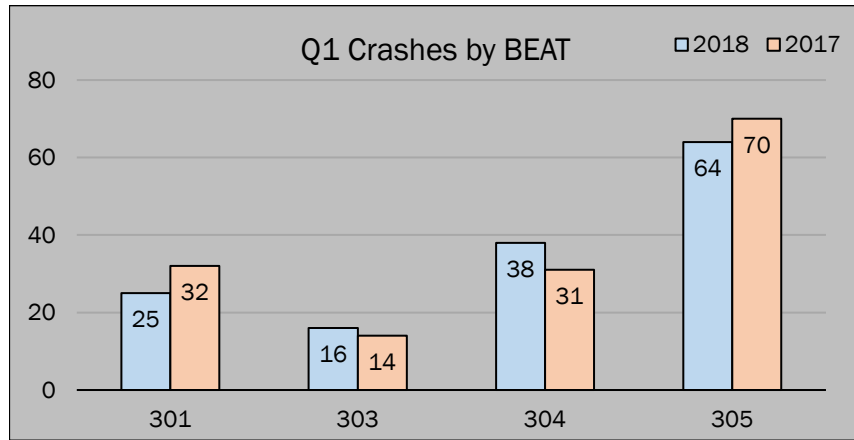
A. CRASH DATA TOTALS (5 year totals)

Q1	2018	2017			
ALL CRASHES	143	147			
Roadway	109	128			
Priv. Property	34	19			
Injury Crashes	14	20			
Serious Injury (A,B)	9	7			
Fatalities	0	0			
CRASH SEGMENTS					
Roadway Injury	14	19			
Priv. Prop Injury	0	1			
DUI crash	1	4			
Roadway Hit & Run	2	4			
Priv. Prop. Hit & Run	3	4			

First quarter 2018 data reveals a -3% decrease in overall crashes when compared to 2017. This minor decline was primarily prompted by a decrease in roadway crashes of -15%, with 19 fewer events. However, private property crashes increased 79% in 2018 with 15 more incidents than the prior year. Private property crashes were one of two 2018 categories listed above which depicted an increase over 2017, with serious injury crashes being the second. Injury crashes are further discussed in Section C.

B. CRASHES BY PATROL BEAT

Beat 305 was consistently the busiest during the 1st quarter across both years, generating 45% of the total volume of crashes in 2018 and 48% in 2017. Conversely but similarly, Beat 303 provided the lowest crash levels at 11% in 2018 and 10% in 2017. Beats 303 and 304 showed minor increases in 2018, while Beats 301 and 305 revealed slight decreases. The number and percentage of crashes per beat stayed relatively steady, with none of the beats varying by more than 7 crashes or 5% across the two time frames.



C. ROADWAY & INJURY TYPES

There are generally two types of locations for crashes to occur: private property and roadways. Additionally, the Illinois Department of Transportation provides five types of injury codes for crash reports (see legend at right).

There were no reported fatalities (Type K) for the 1st quarter during 2018 or 2017. Overall injury crashes (Types A, B, C) decreased by 30% in 2018 dropping from 20 to 14 events. Reviewing specific injury codes, there were three fewer Type A and eight fewer Type C injury crashes during 2018, but Type B injuries recorded an increase of five events.

During 2018 serious injury crashes, which encompasses only Type A and B codes, increased by two incidents from 7 to 9 across the two time frames, but all were Type B injuries.

ROADWAY & INJURY TYPES

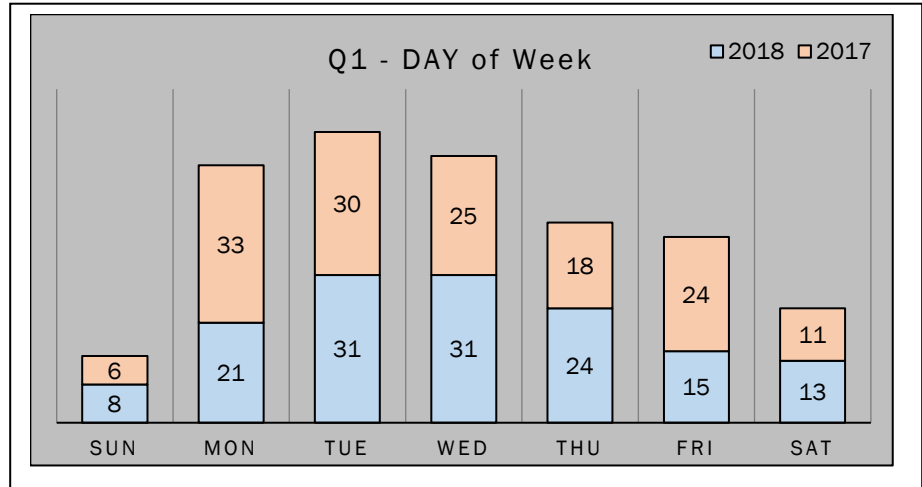
Q1	2018	2017
ROAD	109	128
A		3
B	9	4
C	5	12
O	95	109
PRIV	34	19
C		1
O	34	18
Grand Total	143	147

INJ. TYPE	IDOT DESCRIPTION LEGEND
K	Fatality (Killed)
A	Incapacitating injury
B	Non-Incapacitating injury
C	Reported injury, not evident
O	None / No injury indication

D. CRASHES BY DAY OF WEEK

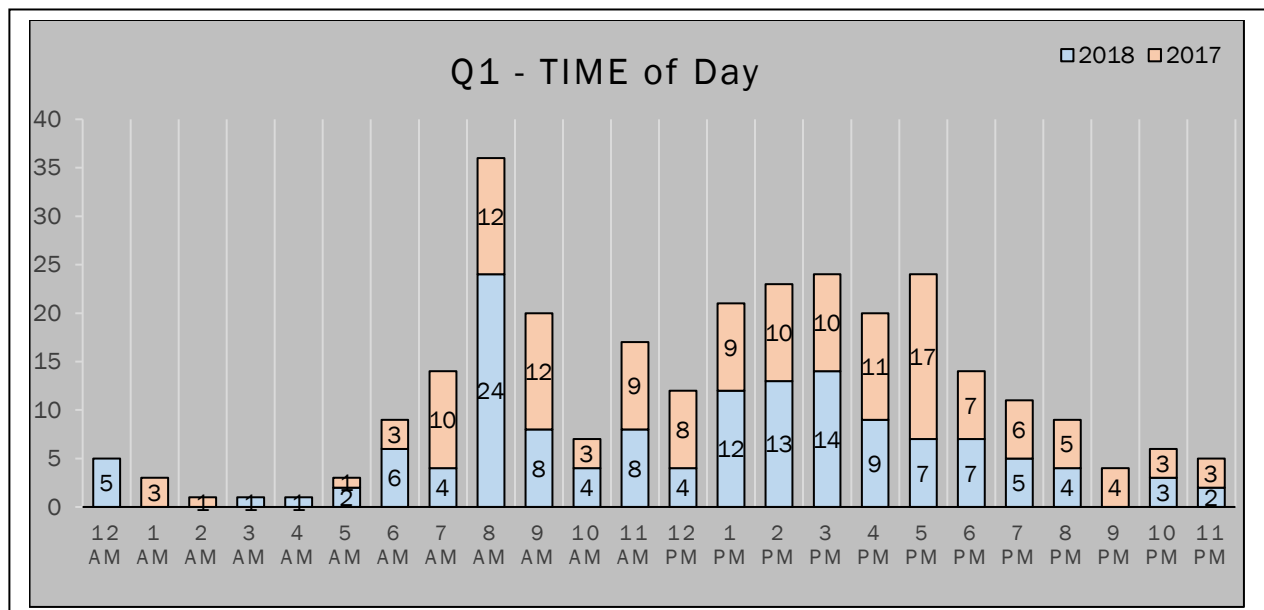
During 2018, Tuesday and Wednesday provided the highest number of crashes at 31 each. Monday was the peak total for 2017 at 33 events. Looking at combined day of the week totals inclusive of both time frames, on the high end Tuesday (61) singly accounted for 21% of all crashes, while Sunday at the low end (14) provided only 5% of all crashes.

The largest 2018 raw number increase was six additional crash events which occurred for both Wednesday and Thursday. The most significant decrease occurred on Monday with 12 fewer crashes. Thursday and Sunday revealed the largest percentage upturn with a 33% increase in crash activity, while Friday illustrated a 38% decline from 2017 to 2018.



E. CRASHES BY TIME OF DAY

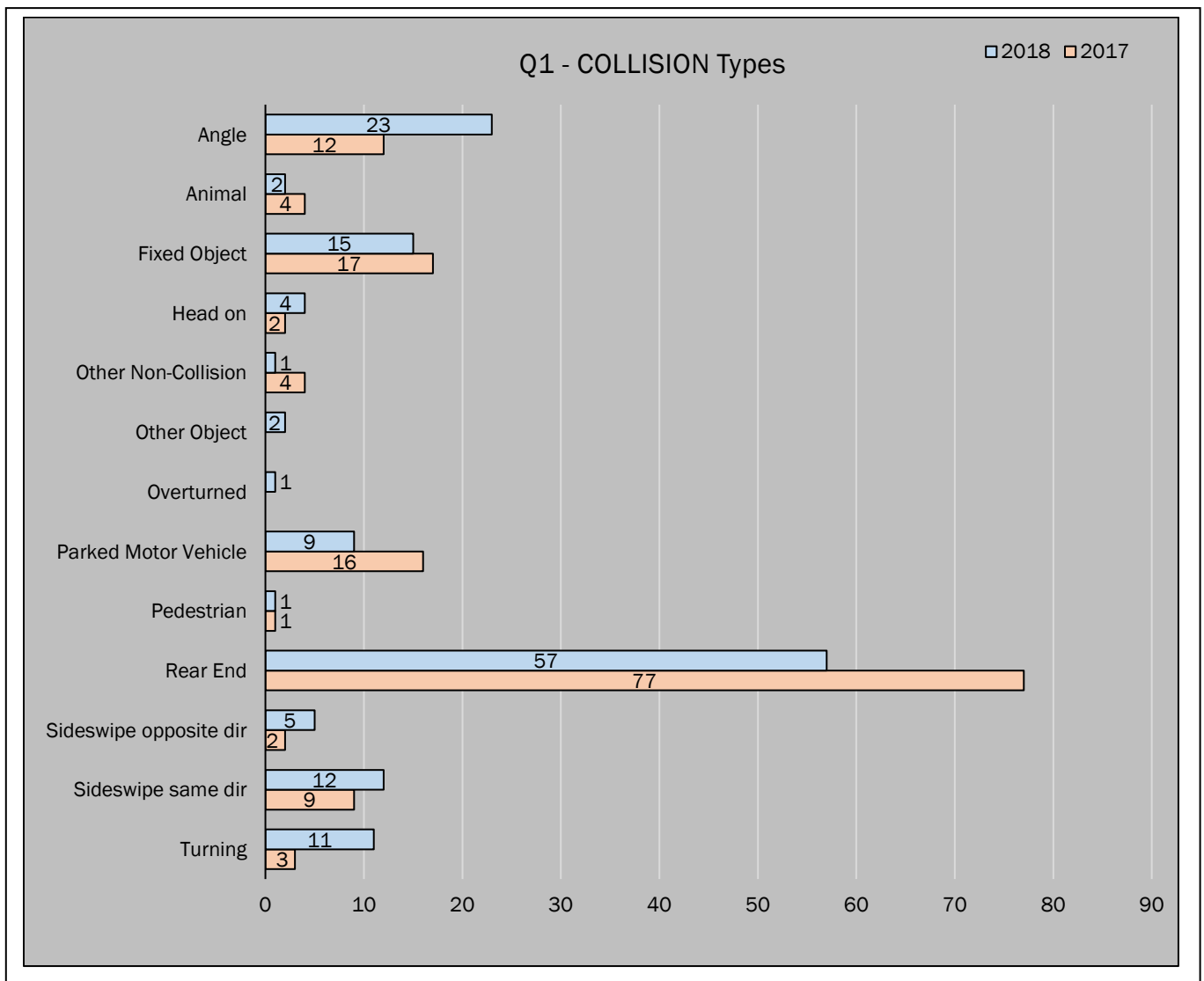
During 2018 the most prolific one hour time range for crashes was 8:00 – 8:59am with 24 events during the quarter. The next busiest time ranges were grouped around the afternoon hours



of 1:00 – 3:59pm. The most significant hourly increase between 2017 and 2018 revealed 12 additional crashes between 8:00 – 8:59am, doubling the prior quarter’s total. The most substantial decrease between the two quarters occurred across the 5:00 – 5:59pm range with 10 fewer crashes.

F. CRASHES BY COLLISION TYPE

Across both quarters *rear end* crashes were the most prolific collision type within the City, accounting for 52% of all crashes in 2017 and 40% in 2018. *Angle* and *fixed object* crashes came in second and third respectively during 2018. For the first quarter of 2017 *fixed object* and *parked motor vehicle* came in second and third.



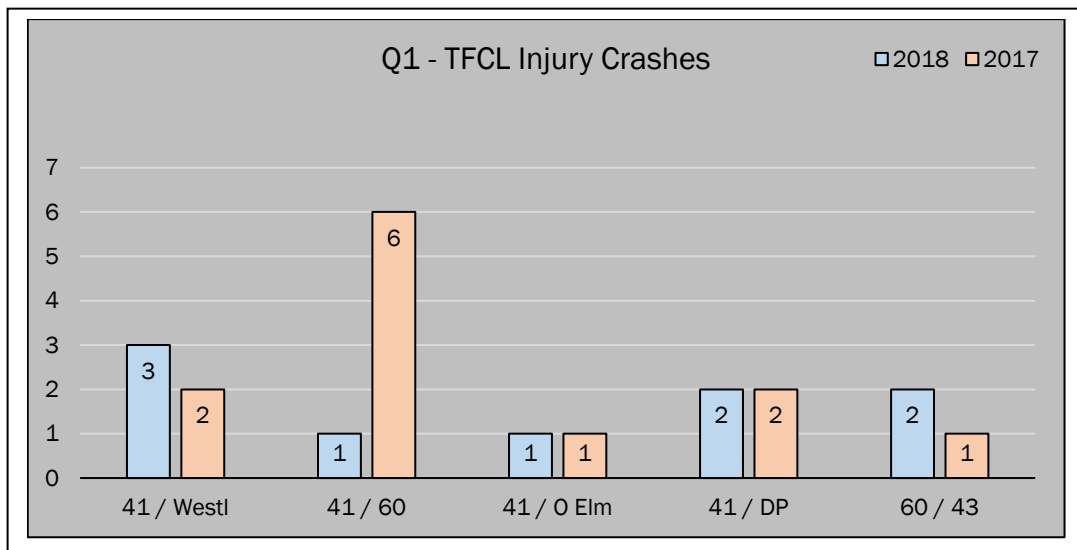
III. TOP FIVE CRASH LOCATIONS – 1st Quarter 2018

In the table below we see the *Top Five Crash Locations (TFCL)* within the City listed in rank order by number of crashes. The first three columns are used to denote the ranking of the *TFCL* during the first quarter of 2018, along with the number of crashes for each intersection. The fourth column depicts the number of crashes along with the 2017 ranking.

Q1	TOP FIVE CRASH LOCATIONS	2018	2017
1	Route 41 @ Westleigh	15	4 – 5 th
2	Route 41 @ Route 60	11	26 – 1 st
3	Route 41 @ Old Elm	8	16 – 2 nd
4	Route 41 @ Deerpath	6	6 – 4 th
5	Route 60 @ Route 43	5	7 – 3 rd

The *TFCL* combined accounted for 31% of all traffic crashes during the quarter in 2018 and 40% in 2017. The intersection of Route 41 @ Westleigh jumped from 5th to 1st across the two time frames. This increase in crashes during the first quarter of 2018 is attributed to three intermittent, transient variables; surrounding roadway closures which forced drivers onto or off of Route 41 at Westleigh, an ice storm and minor roadwork projects in the area. For 2018 the intersection of Route 41 @ Westleigh showed the largest increase at 275% with 11 additional crashes, while Route 41 @ Route 60 showed the largest decline at -58% with 15 fewer events.

Injury crashes (Types A,B,C) across the *TFCL*'s remained relatively consistent, with the one exception being the substantial drop for Route 41 @ Route 60, which declined from six injury crashes to one.



Five of the nine (55%) serious injury Type B crashes for 2018 occurred at a *TFCL*.