

2nd Quarter 2018
April – June

Quarterly Traffic Crash Analysis



Lake Forest Police Department
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Quarterly Traffic Crash Analysis – 2nd Quarter 2018

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, city officials, police and elected representatives. This quarter’s report covers April through June, and includes comparisons with prior year’s quarterly data.

II. COMPARATIVE QUARTERLY CITY-WIDE CRASH DATA

A. CRASH DATA TOTALS (5 year chart)

2 nd QUARTER	2018	2017			
ALL CRASHES	176	187			
Roadway	135	152			
Private Property	41	35			
CRASH SEGMENTS					
All Injury Crashes (A,B,C)	16	28			
Serious Injury (A,B)	10	22			
Fatalities	0	0			
Roadway Injury	15	27			
Private Property Injury	1	1			
DUI crash	2	4			
Roadway Hit & Run	9	14			
Priv. Prop. Hit & Run	9	10			

Second quarter 2018 data reveals a -6% decrease in overall crashes when compared to 2017. This decline was primarily reflected in two measures: a decrease in roadway crashes of -11% with 17 fewer events and a more significant decrease of -43% in overall injury crashes revealing a decline of 12 incidents. Private property crashes saw a minor uptick of 17% in 2018 with 6 additional incidents and was the only category above displaying an increase over 2017 totals.

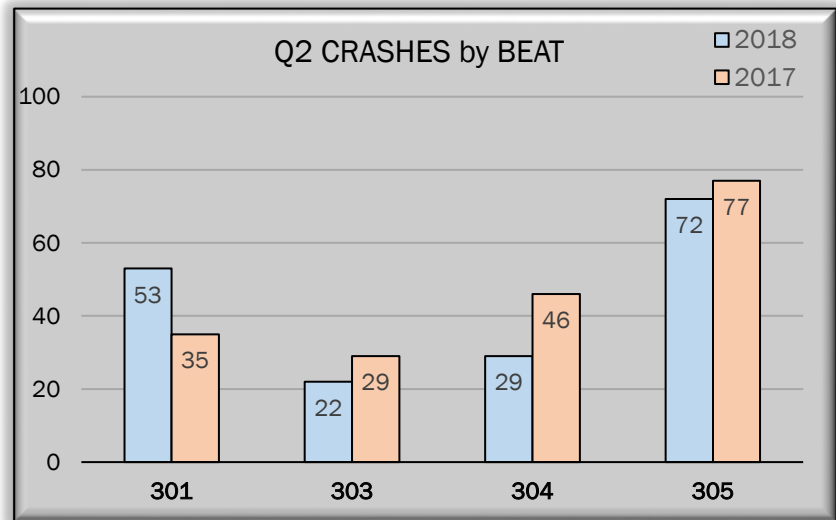
B. CRASHES by PATROL BEAT – (Map at Appendix A)

Beat 305 experienced the most crashes during the 2nd quarter across both years, generating 41% of the total volume of events for both 2018 and 2017.

Conversely, Beat 303 provided the lowest beat crash levels at 13% in 2018 and 16% in 2017.

Three of the four beats portrayed declines in traffic crashes for 2018, ranging from 5 to 17 fewer events each. Beat 301 crashes jumped 51% with an additional 18

incidents. Reviewing roadways in Beat 301, Deerpath provided the most noticeable increase with 8 of the additional 18 crashes at various locations along its delimitation.



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) during the 2nd quarter of 2018 or 2017. Overall injury crashes (Types A, B, C) decreased by 43% in 2018 dropping from 28 to 16 events. Reviewing specific injury codes, there were four fewer Type A and eight fewer Type B injury crashes during 2018, while Type C injuries remained the same.

ROADWAY & INJURY TYPES

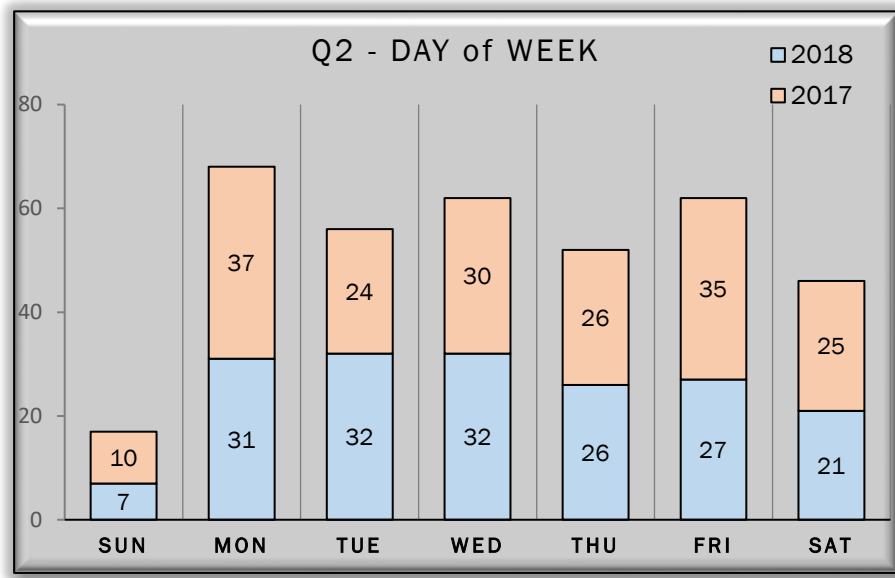
QUARTER 2	2018	2017
ROADWAY	135	152
A		5
B	9	16
C	6	6
O	120	125
PRIVATE PROP	41	35
A	1	
B		1
O	40	34
Grand Total	176	187

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

Serious injury crashes, encompassing only Type A and B codes, decreased by -55% from 22 to 10.

D. CRASHES BY DAY OF WEEK

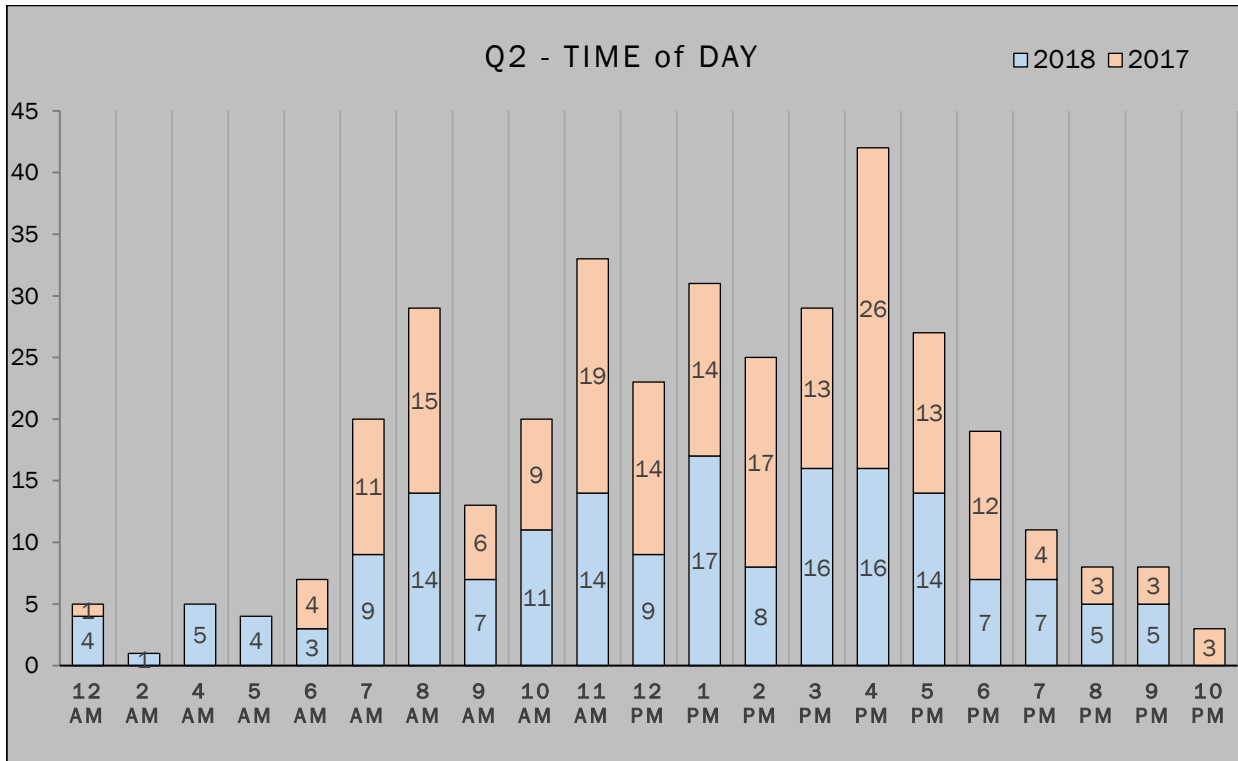
During 2018, Tuesday and Wednesday provided the highest number of crashes at 32 each, while Monday was the peak day at 37 events in 2017. Looking at cumulative day of the week totals inclusive of both second quarter time frames, on the high end Mondays (68) singly accounted for 19% of all crashes, while Sunday at the low end (17) provided only 5%.



For 2018 the largest increase for a single day of the week was Tuesday with eight additional crash events. The most significant decrease occurred on Fridays with eight fewer crashes.

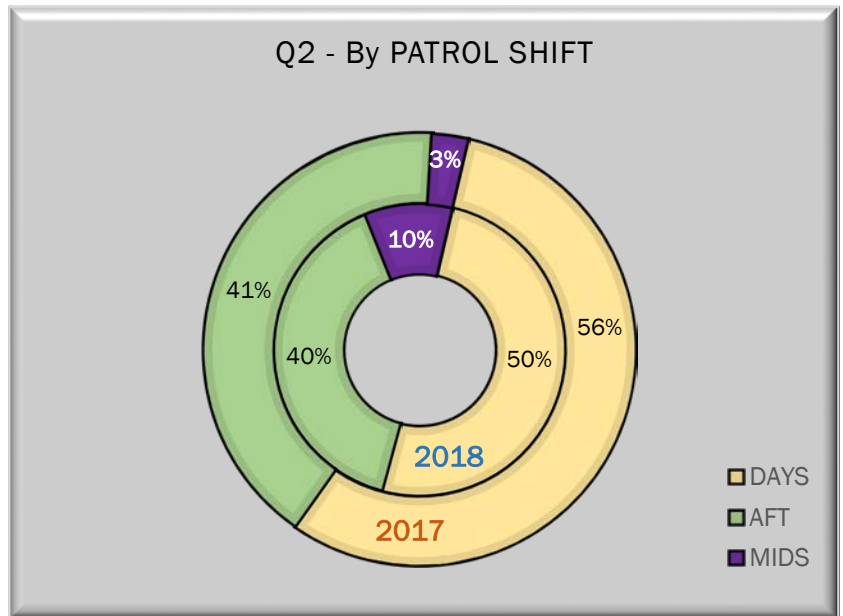
E. CRASHES BY TIME OF DAY

During 2018 the most prolific one hour time range for crashes was 1:00 – 1:59pm with 17 events during the quarter. The next busiest hourly ranges, with 16 crashes a piece, were the afternoon periods of 3:00 – 3:59pm and 4:00 – 4:59pm. The most significant hourly decrease revealed 10 fewer crashes during the 4:00 – 4:59pm range. Interestingly, across both quarters there were no crashes during the 11pm, 1am and 3am hourly time ranges. Combining both quarters, the four busiest hours in order, of 4pm, 11am, 1pm and 8am, supplied 36% of all crashes.



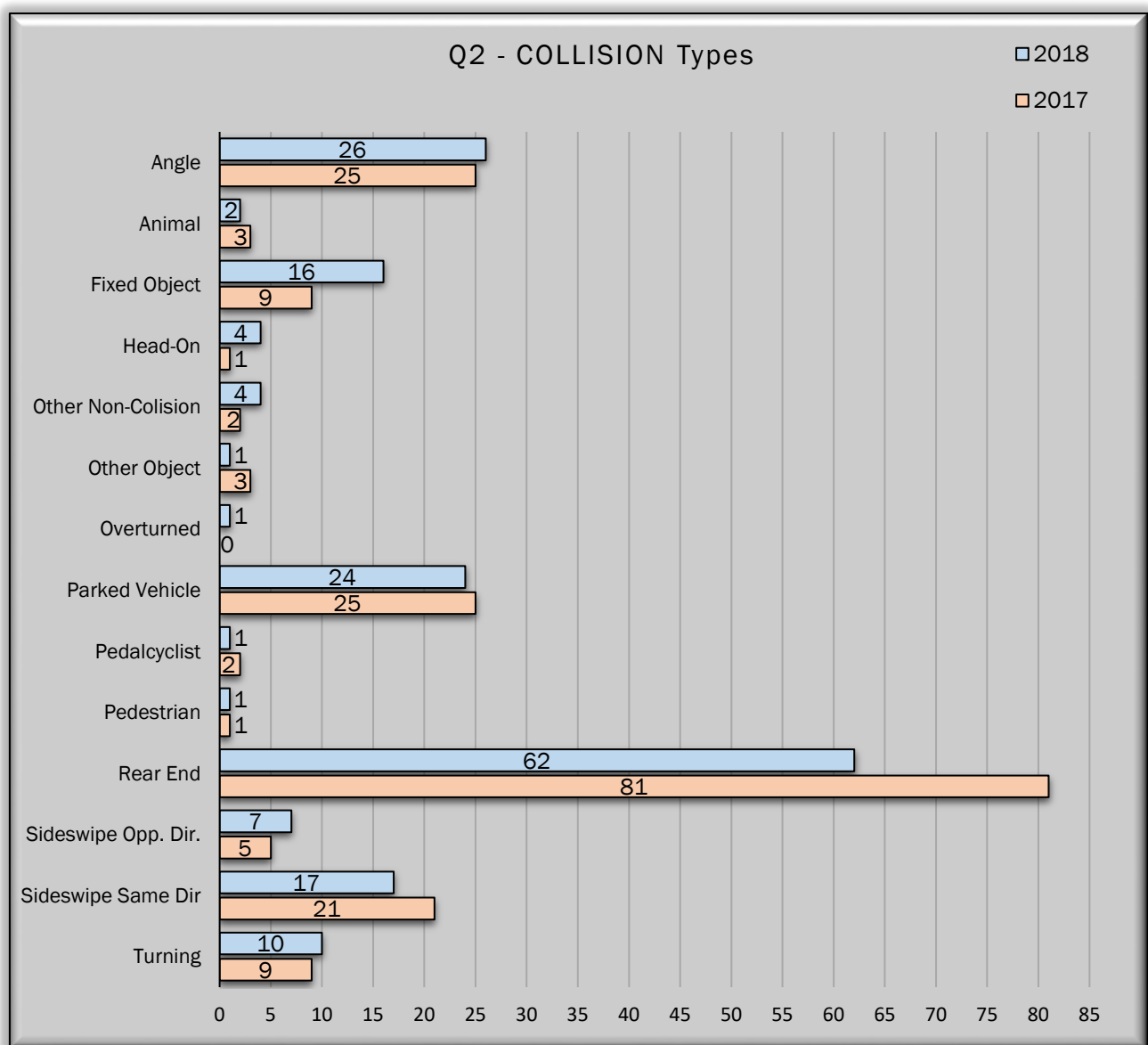
F. CRASHES BY SHIFT

During 2018, both Day Shift (7a – 3p) and Afternoon Shift (3p – 11p) experienced decreases in crash activity compared to 2017. Day shift incidents fell from 105 to 89 crashes and Afternoon shift dropped from 77 to 70 events. Midnight shift picked up 12 additional crashes reaching 17, jumping from 3% to 10% for crash levels during the 2nd quarter of 2018.



G. CRASHES BY COLLISION TYPE

The second quarter of 2018 revealed *rear end* crashes as the most prolific collision type within the City, accounting for 35% of all crashes. *Angle* (15%) and *parked vehicle* (14%) collisions came in second and third respectively. The top three collision types remained identical for 2018 and 2017 during the second quarter. The largest increase for 2018 occurred within *fixed object* crashes, which increased by seven events. The most significant decrease occurred in the *rear end* collision category, with a drop of 19 events between the quarters.



III. TOP FIVE CRASH LOCATIONS – Second Quarter 2018

In this section, the second quarter *Top Five Crash Locations* (TFCL) for 2018 are reviewed along with their ranking, number of crashes and injury statistics. Comparative data from the prior year’s quarter is also discussed, where applicable.

A. TOP FIVE CRASH LOCATIONS BY RANK AND VOLUME

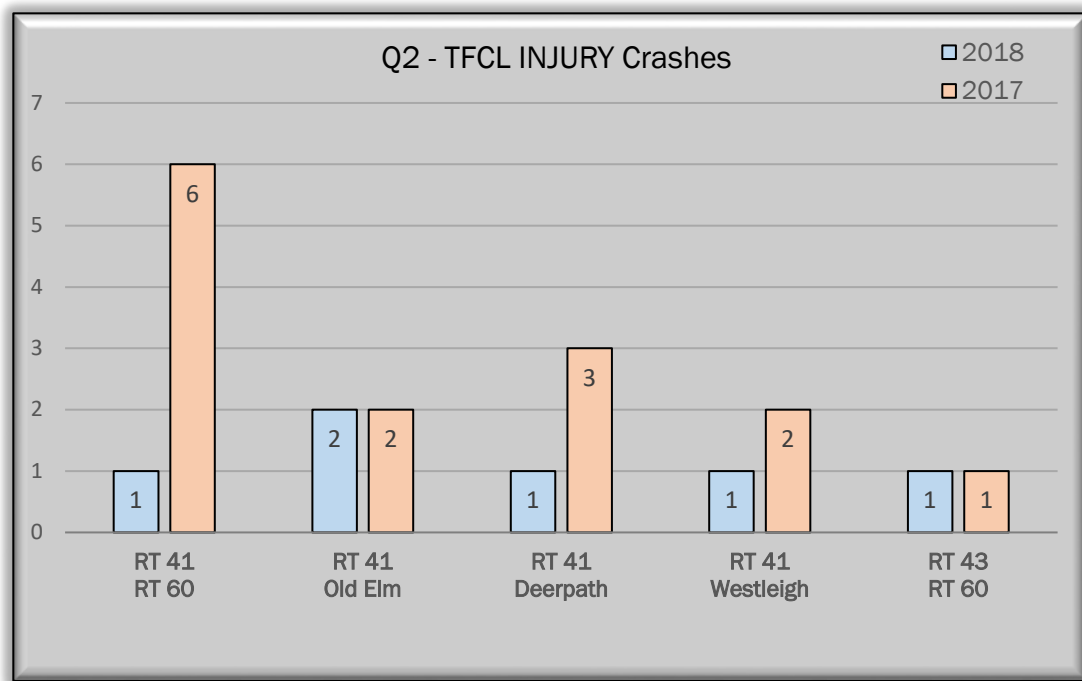
A comparative listing of the TFCL in rank order by number of crashes for the second quarters of 2018 and 2017 is depicted in this table. The ranking column is fixed, as the intersection data is separately applied to that ranking, so the names may change from quarter-to-quarter.

Q2 RANK	2018 INTERSECTION	Total Crashes	2017 INTERSECTION	Total Crashes
1	RT 41 / RT 60	18	RT 41 / RT 60	27
2	RT 41 / Old Elm	13	RT 41 / Old Elm	14
3	RT 41 / Deerpath	12	RT 41 / Deerpath	8
4	RT 41 / Westleigh	10	RT 43 / Everett	7
5	RT 43 / RT 60	7	RT 41 / Westleigh	6

- During 2018 the number one and two intersections retained the same ranking as the previous year; Route 41 @ Route 60 and Route 41 @ Old Elm.
- Route 41 @ Route 60 experienced a -33% decrease with 9 fewer crashes, providing the largest decline of any TFCL.
- The 2018 third and fourth ranked intersections of Route 41 @ Deerpath and Route 41 @ Westleigh displayed the largest increases with 4 additional crashes each. This increase caused Route 41 @ Westleigh to move up one ranking from fifth to fourth.
- The 2018 fifth ranked intersection of Route 43 @ Route 60 did not appear in the 2017 quarterly TFCL list.
- The TFCL’s combined accounted for, 34% of all crashes city-wide during the quarter in 2018 with 62 events, and 33% of the total with 60 crashes in 2017.

B. INJURY CRASHES AT THE TOP FIVE CRASH LOCATIONS

During 2018 there were a total of 15 roadway injury crashes, with 6 of them (40%) occurring at a TFCL. Contrast this with 27 roadway injury crashes in 2017, revealing 15 injury crashes (56%) across the TFCL's. A significant portion of the overall decline is depicted in the numbers for Route 41 @ Route 60, which declined from six injury crashes to one; an -83% decrease.



APPENDIX A – 2018 Second Quarter Crashes by Beat

