



Memo

TO: Chief Smith
FROM: TST Tuckman
DATE: 05/29/2019
SUBJECT: Follow-up Evaluation Report – Rte. 41 / Delany Road

Chief Smith,

Per the Illinois Department of Transportation photo enforcement policy, we are required to prepare an evaluation report two years after resuming operation of a photo enforced intersection that was deactivated due to traffic safety improvements. The intersection at Rte. 41 and Delany Road has been operational on an interim basis for two years and an operational report is due.

In accordance with their policy the following information is needed for the evaluation report:

- Intersection Location.
- Date of implementation.
- The number of red light running violations pre and post intersection safety improvements.
- Crash data specific to the RLR location(s) for the same period prior to and for the period post RLR Camera installation.
- An analysis of the crash data, including a summary of any increases or decreases in crash types.

The report is attached

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US ROUTE 41 / DELANY ROAD

RED LIGHT PHOTO ENFORCEMENT 2 YEAR FOLLOW-UP REPORT

POST-INTERSECTION IMPROVEMENTS

Overview

The Village of Gurnee is required to submit a Follow-Up Evaluation report to the Illinois Department of Transportation for the intersection of Rte. 41 at Delany Road two years after the re-installation of a Red Light Running Camera System (RLR). After this follow up report is completed the Village is required to submit evaluation reports every three years to the Illinois Department of Transportation.

On December 3, 2007, the Village of Gurnee entered into agreement with Redflex Traffic Systems Inc. to install Red Light Running Camera Systems at several intersections throughout the Village.

The RLR was installed for both the eastbound and westbound approach on Rte. 41 at Delany Road. On June 20, 2009 the intersection testing and warning phase was completed and it went fully operational with citations being issued. The RLR was removed in July 2015 for intersection improvements and was re-activated on an interim basis March 1, 2017.

Red Light Running Violations

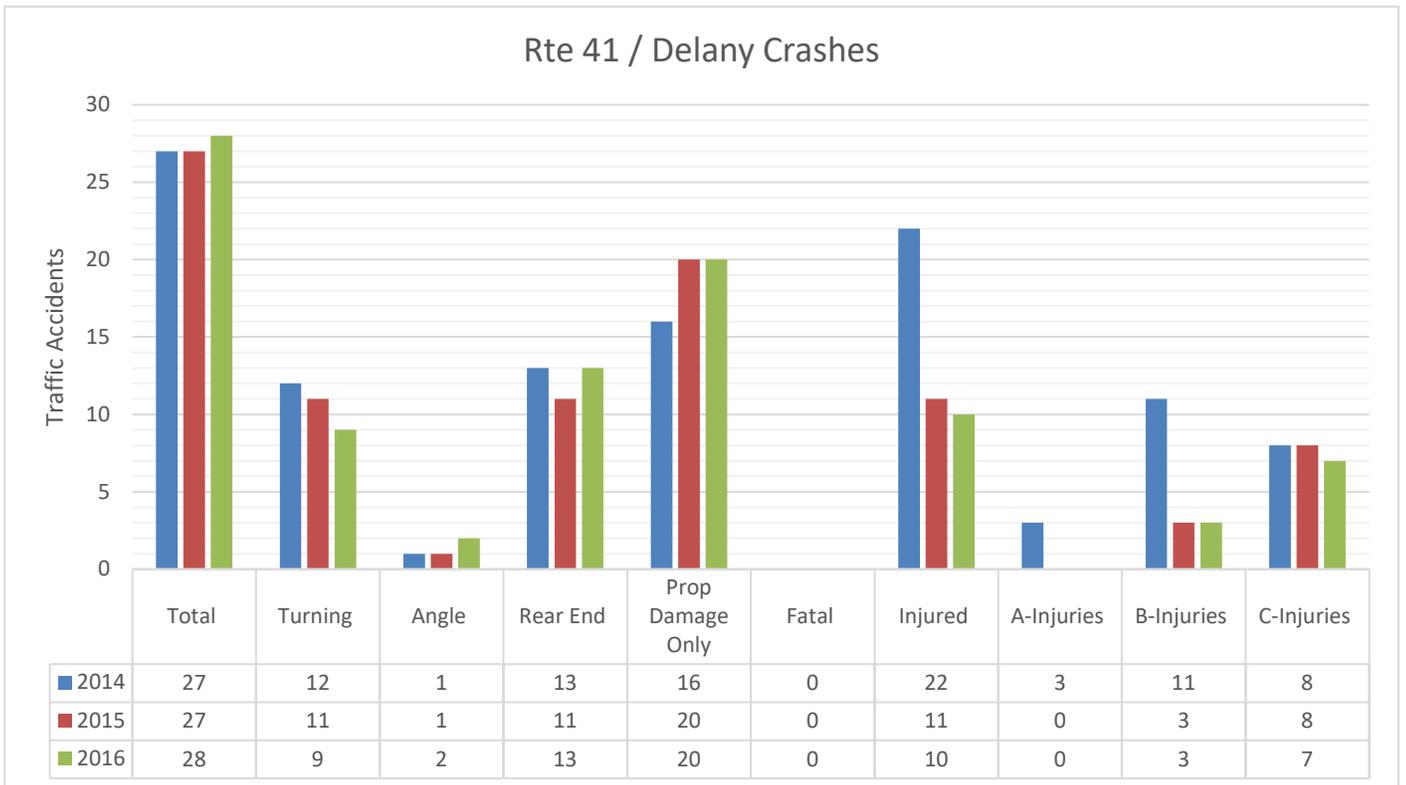
- The number of red light running violations pre and post intersection safety improvements.

Calendar Year	Total Red Light Photo Citations Issued Rte. 21 / Delany Road
2013	3654
2014	4004
2015	2453 (Camera taken offline, July 2015)
2016	0
2017	4778 (Camera back online, March 2017)
2018	4958
2019	1438 (Partial year: 01/01/19-04/30/19)

Accident Data

- The crash data specific to the RLR location(s) for a 3-year period (Exhibit #1) prior to and for the period post (Exhibit #2) RLR installation.

Exhibit #1

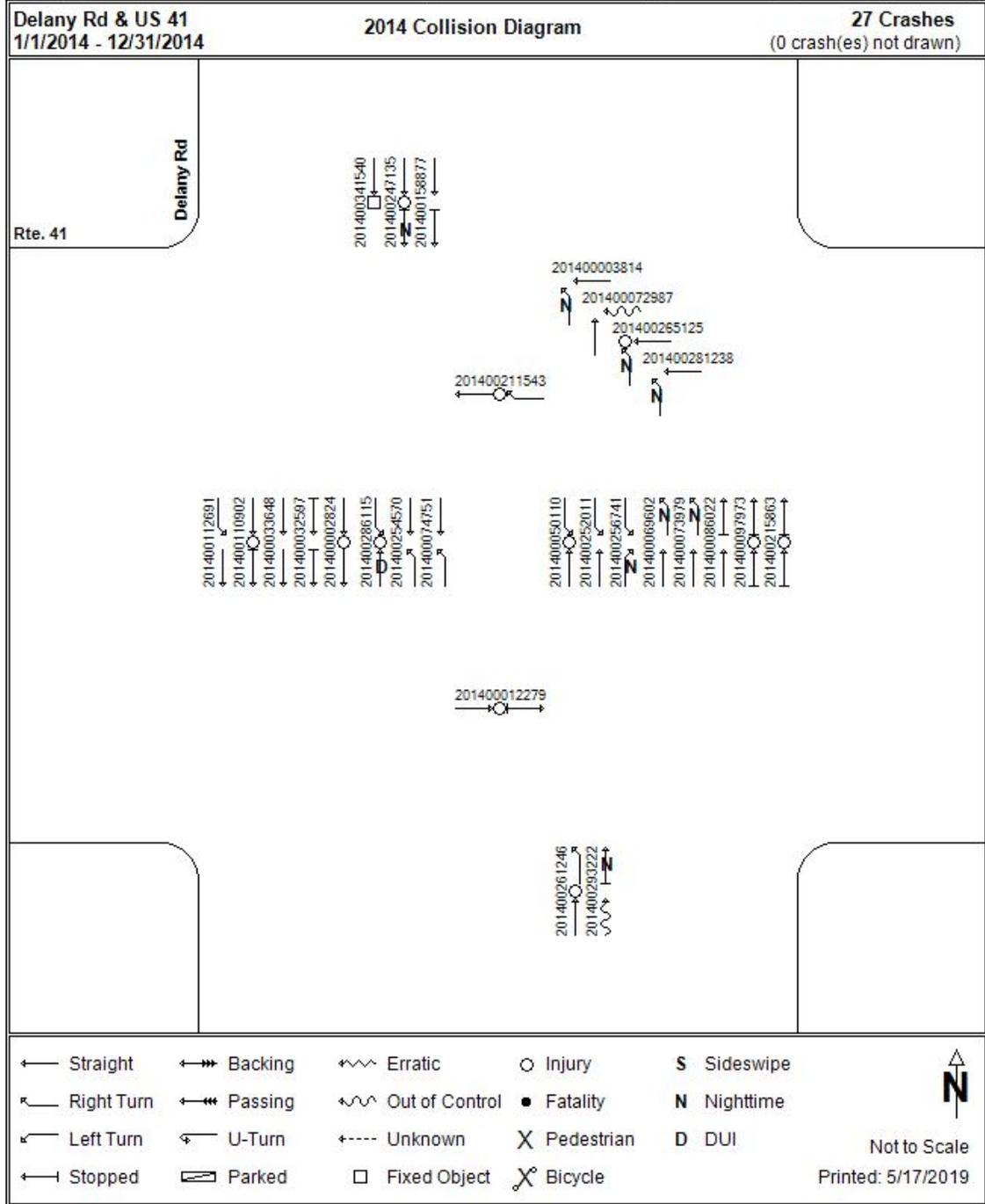


**The above chart data is by calendar year - running January through December

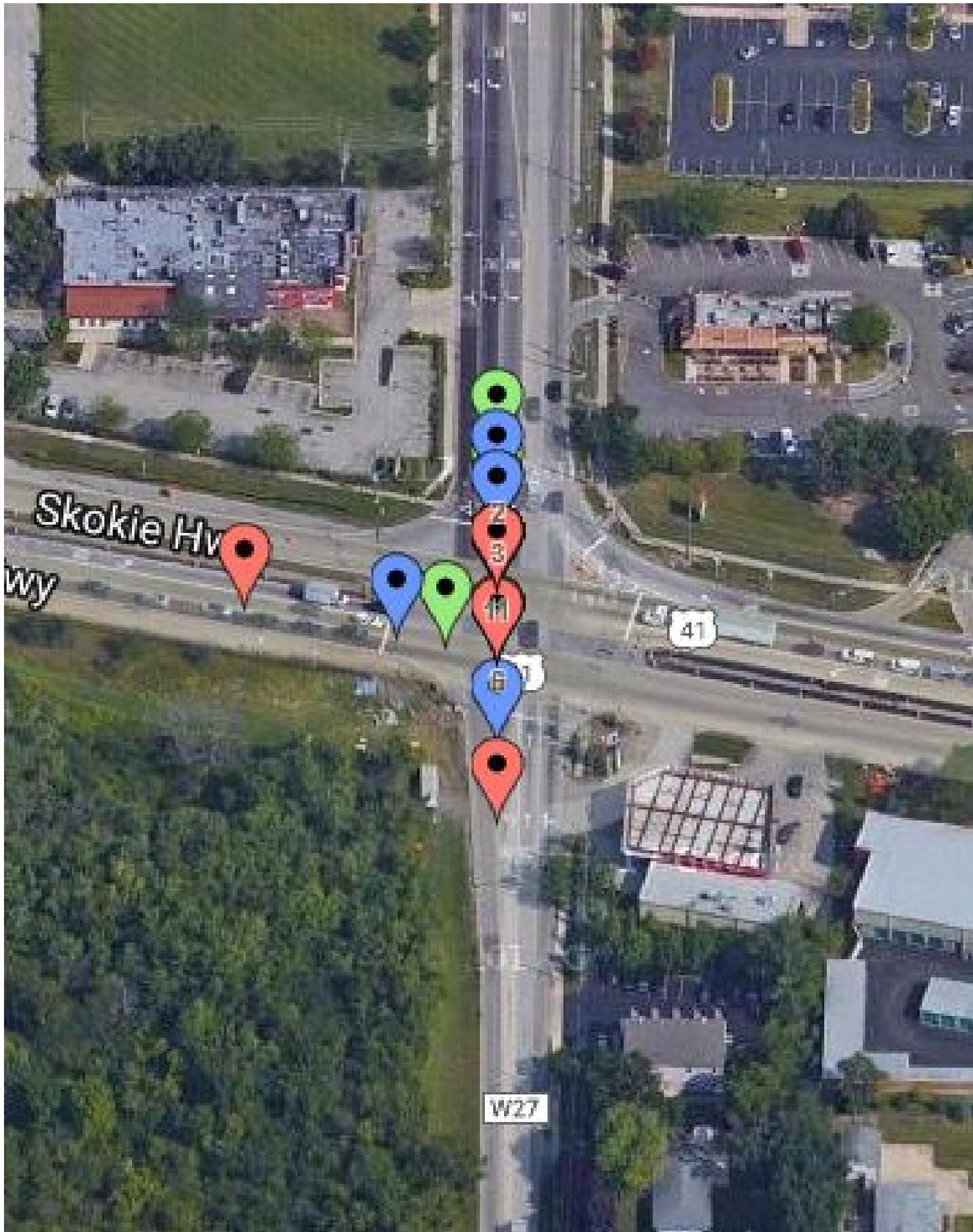
2014 Traffic Accident Map (Data located on Exhibit #1)



2014 Collision Diagram (Data located on Exhibit #1)



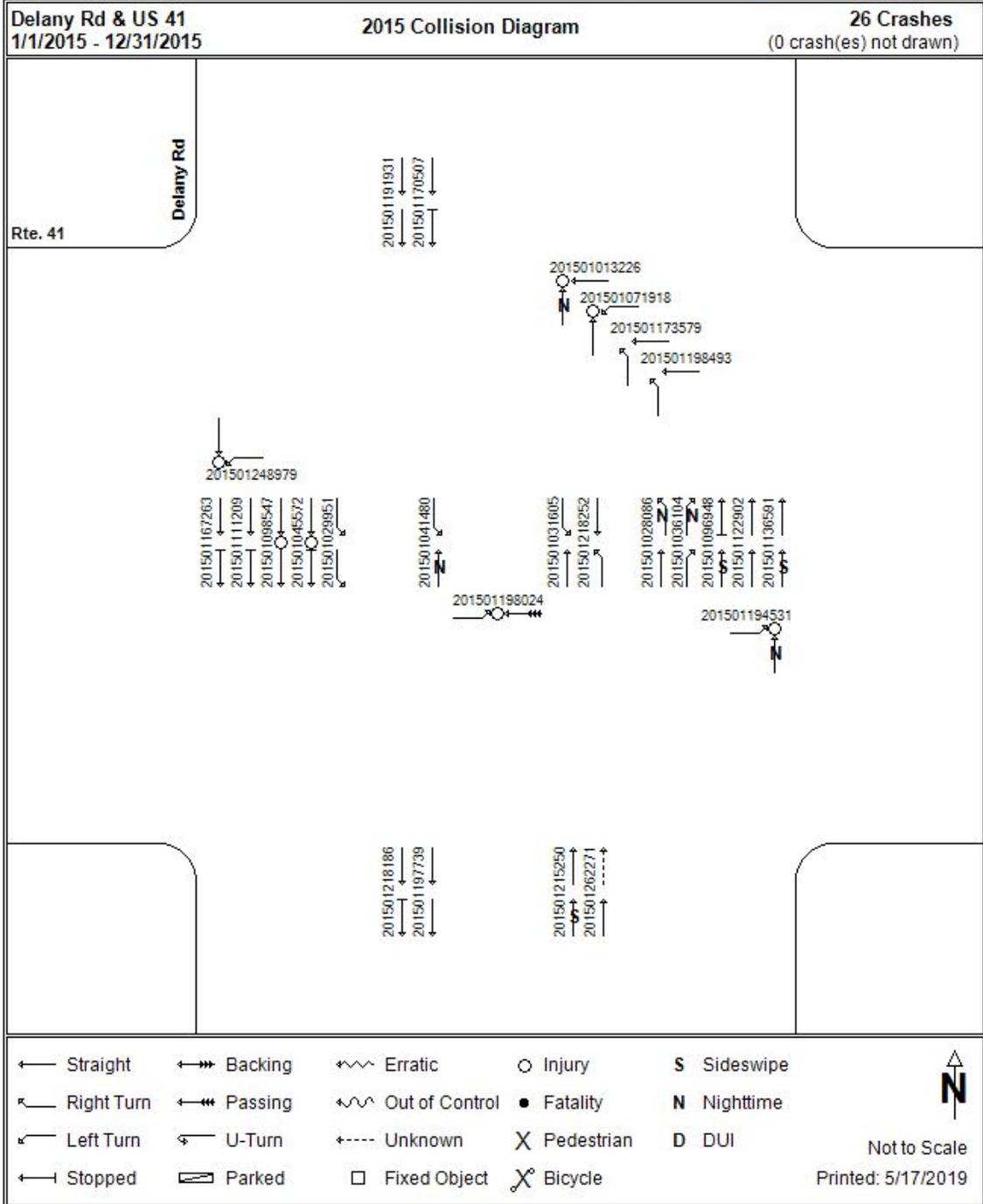
2015 Traffic Accident Map (Data located on Exhibit #1)



2015 Collision Diagram (Data located on Exhibit #1)

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2016 Traffic Accident Map (Data located on Exhibit #1)

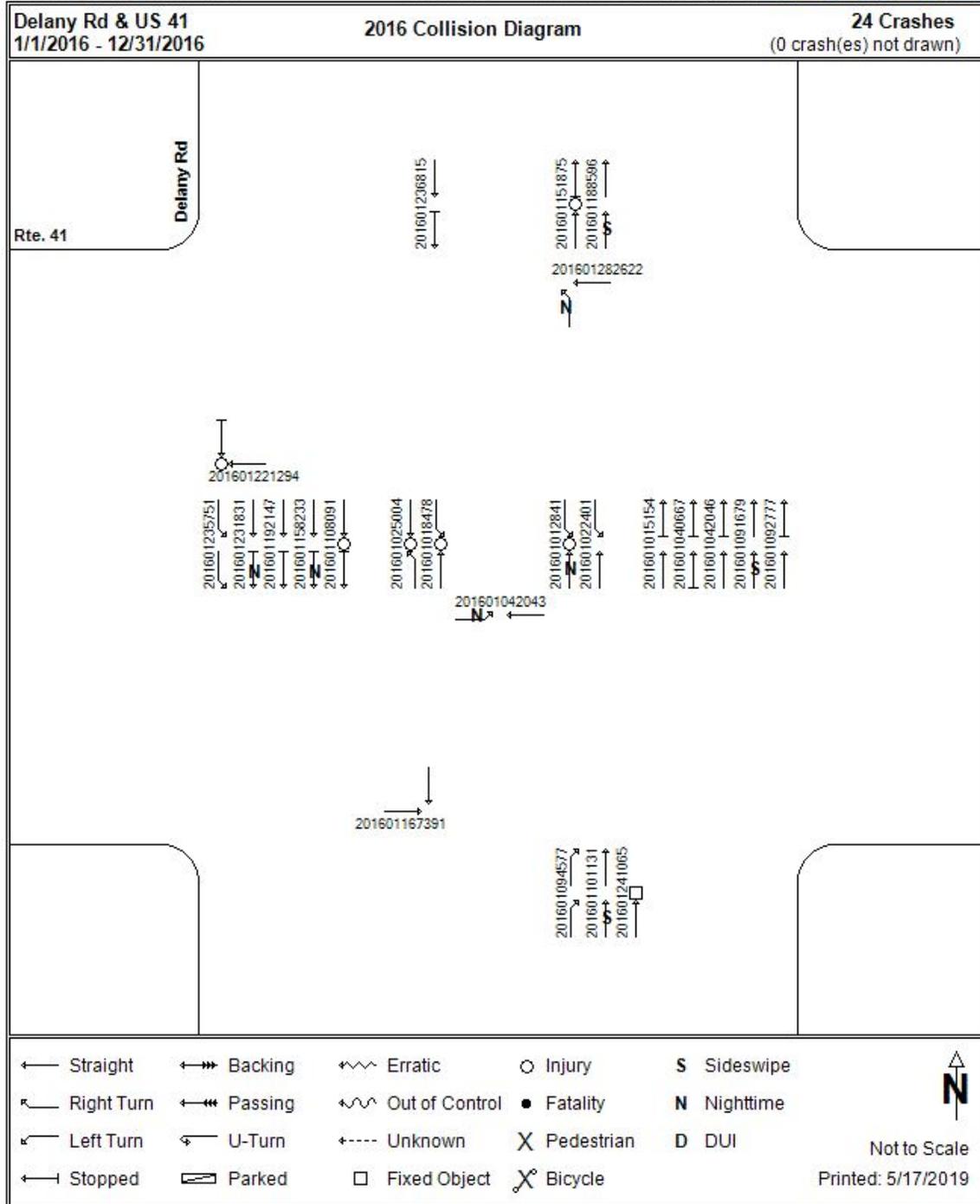


2016 Collision Diagram (Data located on Exhibit #1)

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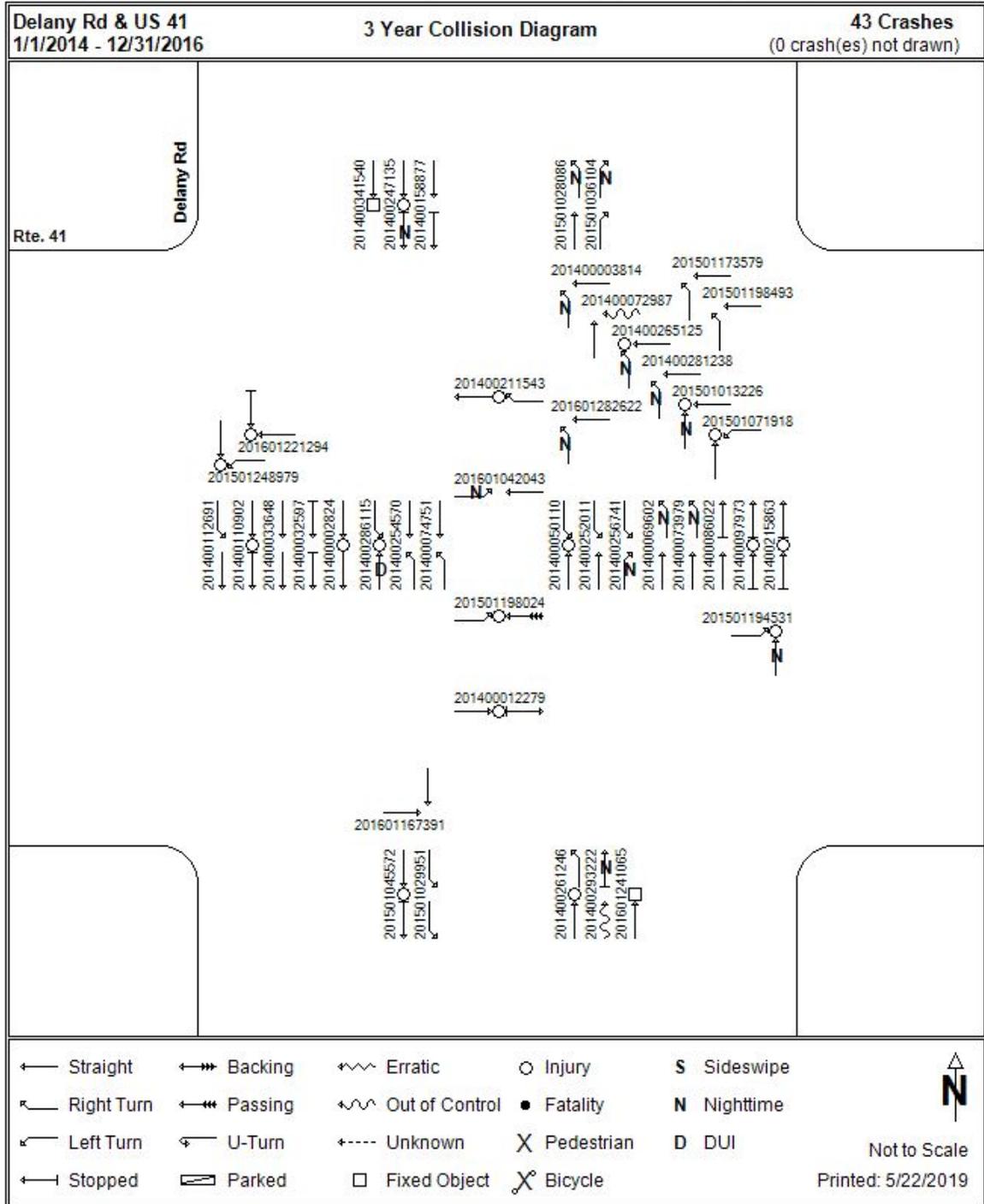
3 Year Collision Diagram (Data Located on Exhibit #1)

1 of 3 Part Diagram

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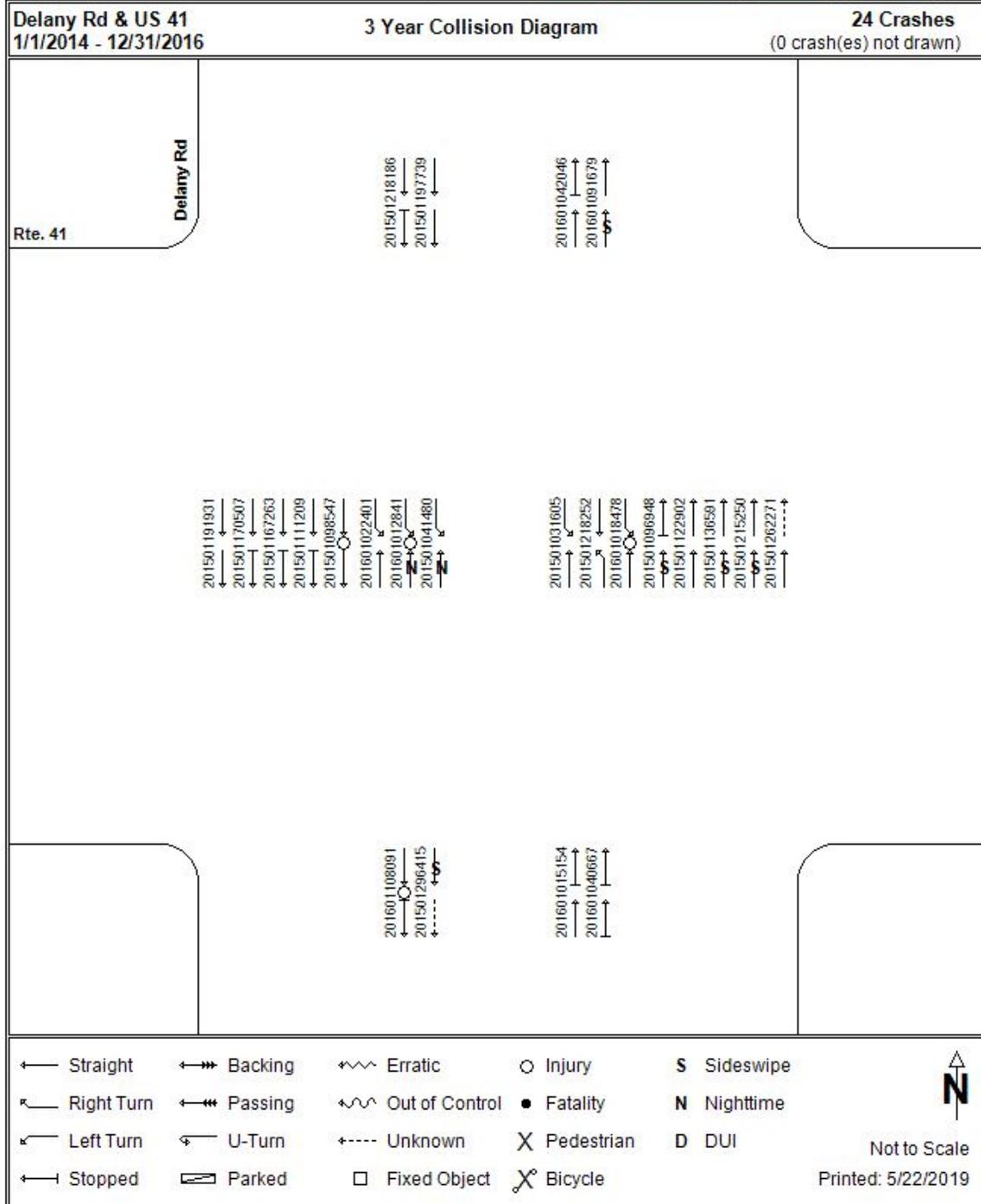
3 Year Collision Diagram (Data Located on Exhibit #1)

2 of 3 Part Diagram

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3 Year Collision Diagram (Data Located on Exhibit #1)

3 of 3 Part Diagram

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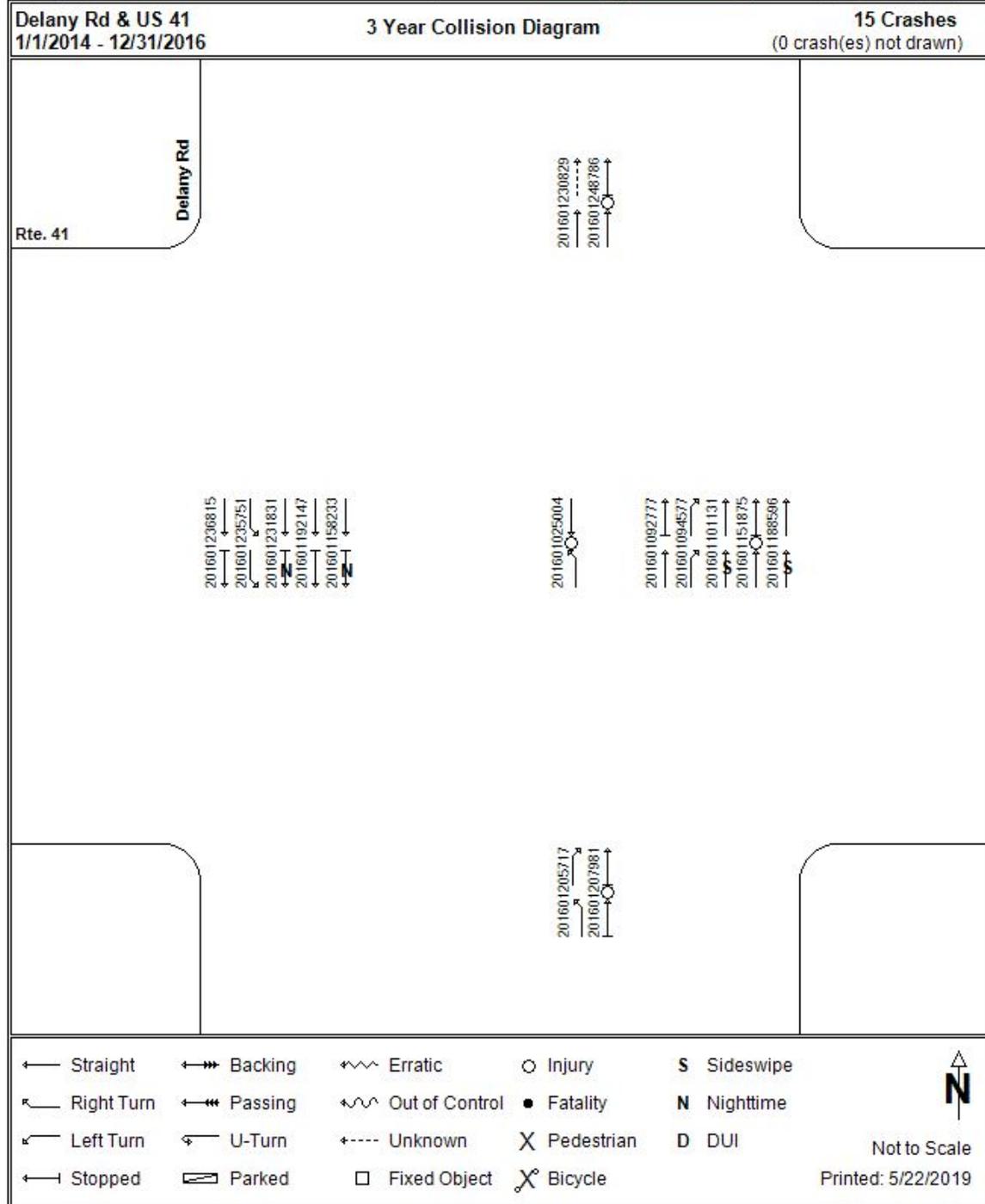
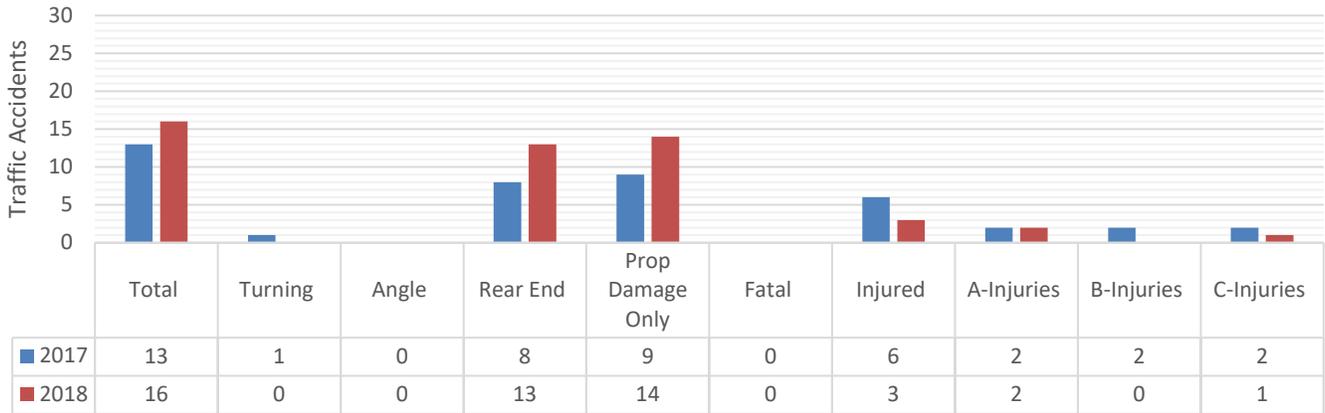


Exhibit #2

Rte 41 / Delany Crashes



**This chart data covers a 24 month period running 03/01/2017 – 02/28/2019. 2018 data for this chart is from the Gurnee Police Department and it has not been reconciled with the Illinois Department of Transportation

Crash Data Analysis

An examination of traffic accident data shows the total accidents post intersection improvements (14.5 avg) were approximately 47% lower than the average of the previous 3 years (27.3).

Turn related accidents post intersection improvements (.5 avg) was 95% lower than the average of the previous 3 years (10.7). Prior to the intersection improvements, turn related accidents accounted for approximately 39% of all accidents.

Total injury accidents post intersection improvements (3 avg) was approximately 65% lower than the average of the previous 3 years (8.7).

Intersection improvements at this location included the addition of protected left turns which accounts for the drop in overall crashes and reduction in the number of overall injuries.

Rear end collisions (10.5 avg) dropped by approximately 15% over the average of the previous 3 years (12.3). Of the 21 rear end collisions that occurred post intersection improvement, only 3 were found to be attributed to hard braking for a red traffic signal. The remaining 18 rear end collisions were attributed to inattentive drivers.

The post camera system accident data (Exhibit #2) shows that the traffic safety improvements implemented at this intersection have reduced the number of injuries due to turning and angle crashes over the last two years, but does not provide enough long-term data to draw a conclusion on the effectiveness of the RLR camera system.