



Memo

TO: Chief Smith
FROM: TST Tuckman
DATE: 05/17/2019
SUBJECT: Follow-up Evaluation Report – Washington St / Rte. 21

Chief Smith,

Per the Lake County Division of Transportation photo enforcement policy, we are required to present an evaluation report after one year of operation of a photo enforced intersection. The intersection at Washington Street and Rte. 21 has been operational for one year and an operational report is due.

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

- Intersection Location(s).
- Date of implementation.
- RLR Camera System manufacturer and contractor name.
- Crash data specific to the RLR location(s) for the 3-year period prior to and for the period post RLR Camera installation. The crash data shall include yearly collision diagrams of the intersection(s).
- An analysis of the crash data, including a summary of any increases or decreases in crash types.
- Signal timings and other settings before and after RLR Camera installation.
- Traffic volumes before and after RLR Camera System installation. The traffic volumes shall include both Average Daily and Peak Period traffic.
- Recommendations to further reduce red light violations, severe crashes and to improve the operation of the intersection(s).
- Summary of adjudication experience and results.
- Financial Report identifying the number citations issued, cost associated with the RLR Camera System, and fees collected.

The report is attached



WASHINGTON STREET / ROUTE 21

RED LIGHT PHOTO ENFORCEMENT
1 YEAR FOLLOW-UP REPORT

Overview

The Village of Gurnee is required to submit a Follow-Up Evaluation report to the Lake County Division of Transportation for the intersection of Washington Street and Rte. 21 one year after the installation of a Red Light Running Camera System (RLR). After the first year evaluation report is completed the Village is required to submit evaluation reports every three years to the Illinois Department of Transportation.

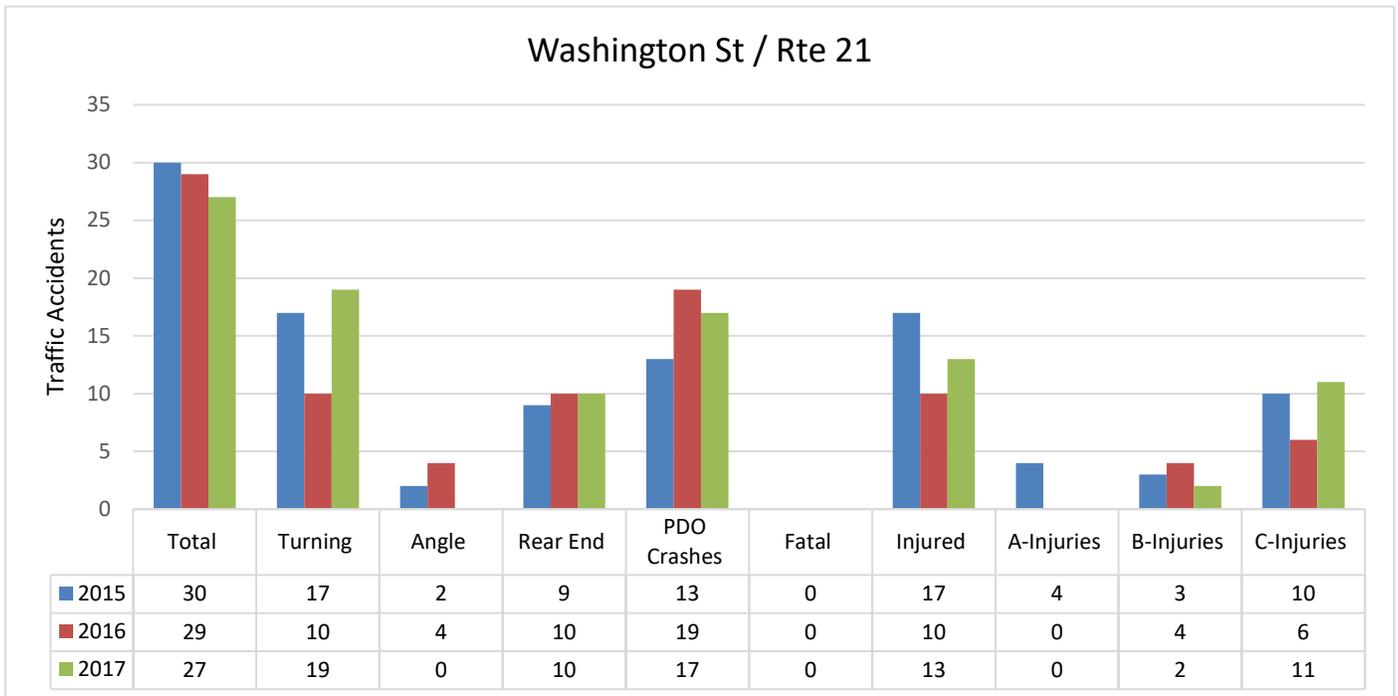
On December 3, 2007, the Village of Gurnee entered into agreement with Redflex Traffic Systems Inc. to install Red Light Running Camera Systems at several intersections throughout the Village.

The RLR was installed for both the eastbound and westbound approach on Washington Street at Rte. 21. On May 1, 2018 the intersection testing and warning phase was completed and it went fully operational with citations being issued.

Accident Data

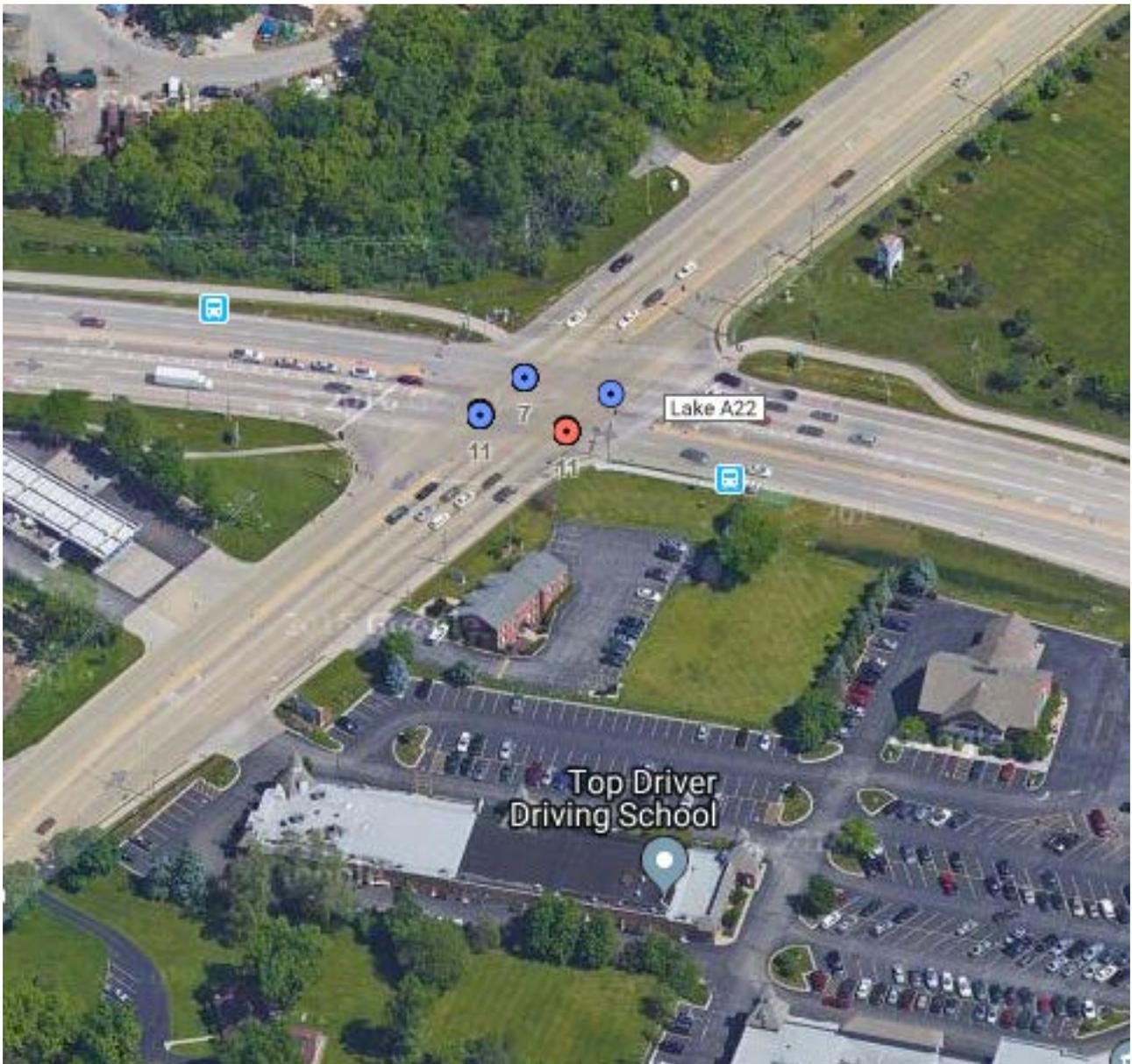
The crash data specific to the RLR location(s) for the 3-year period (Exhibit #1) prior to and for the period post (Exhibit #2) RLR installation. The crash data shall include yearly collision diagrams of the intersection(s).

Exhibit #1

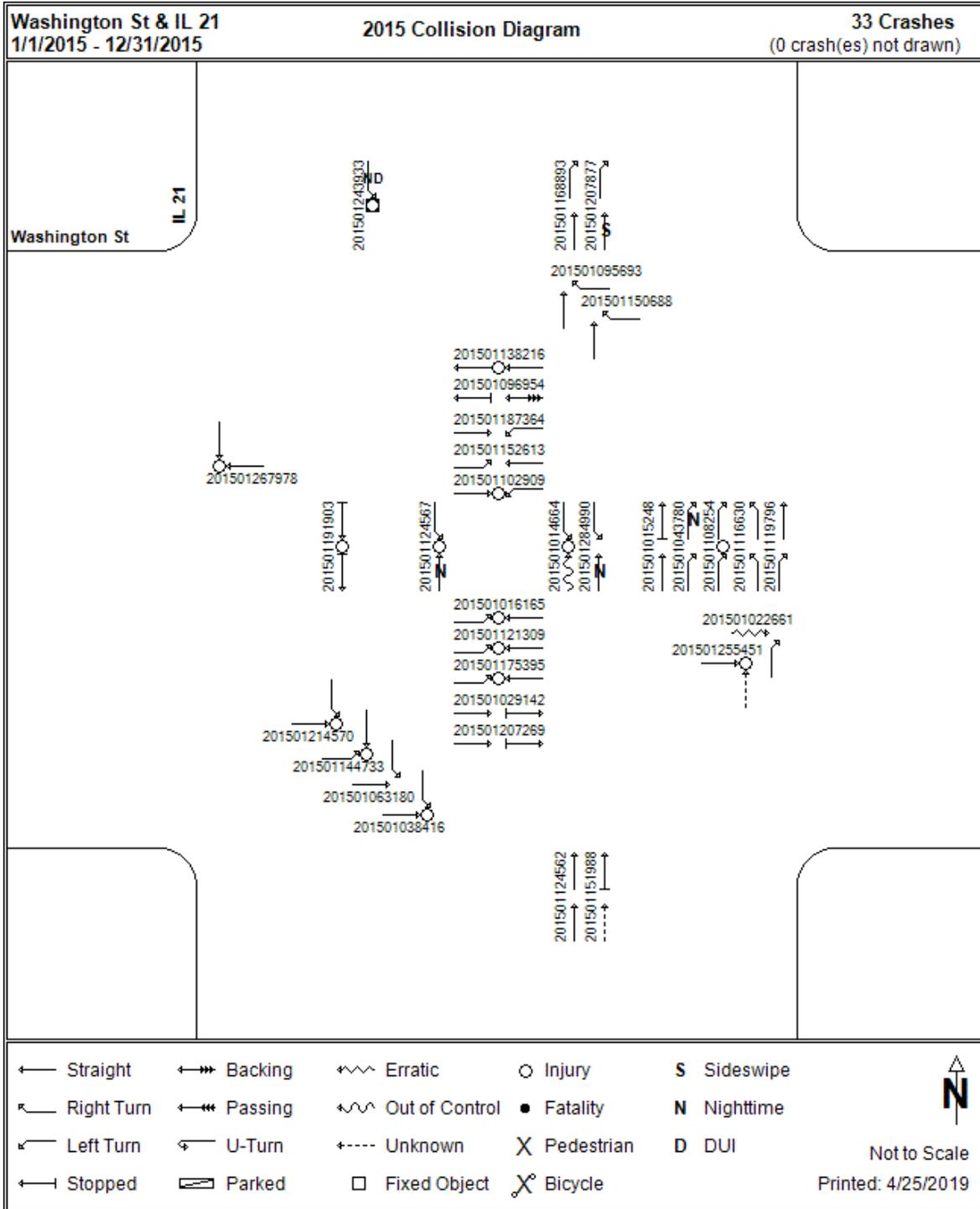


**The above chart data is by calendar year running January through December

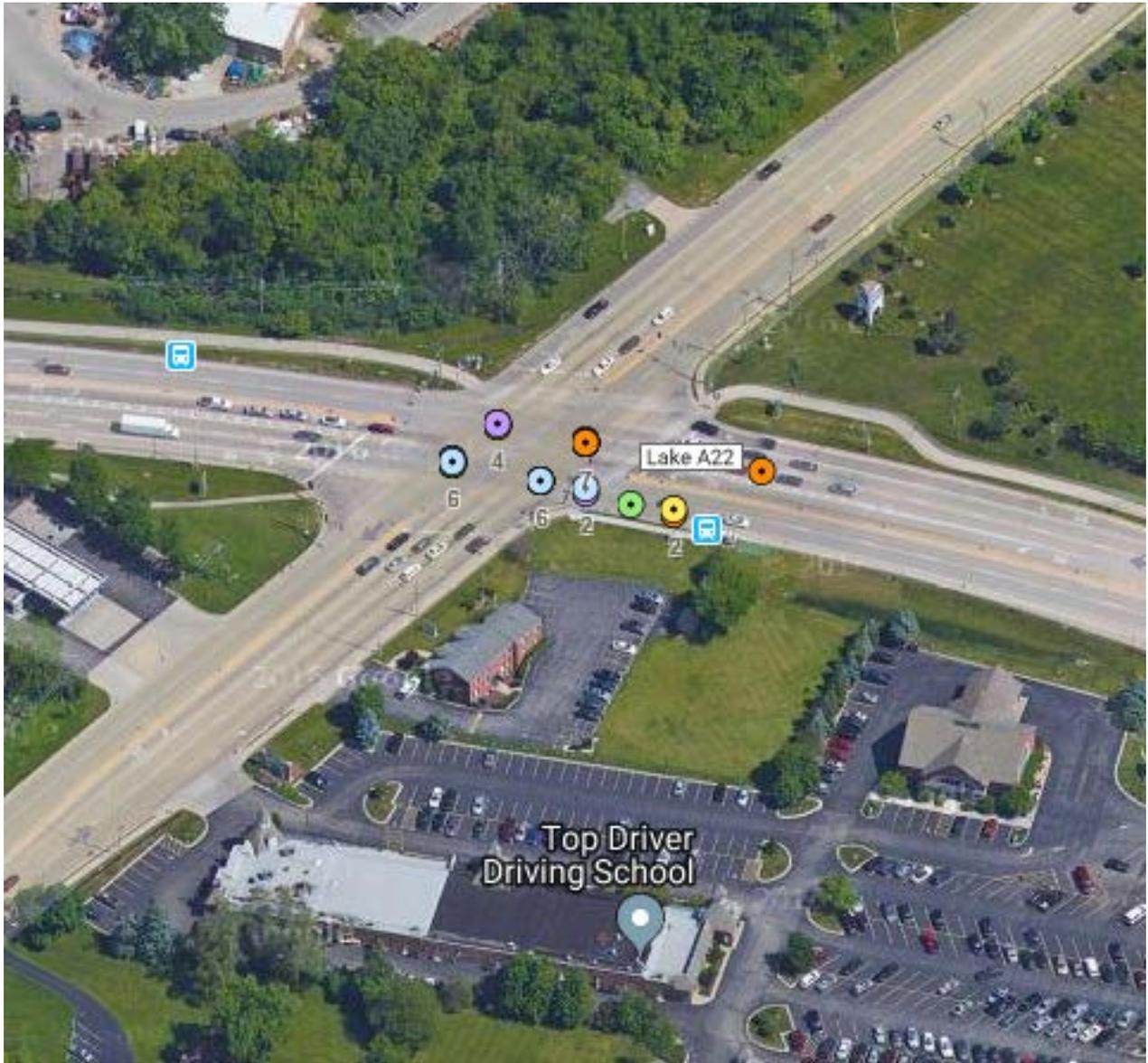
2015 Traffic Accident Map (Data located on Exhibit #1)



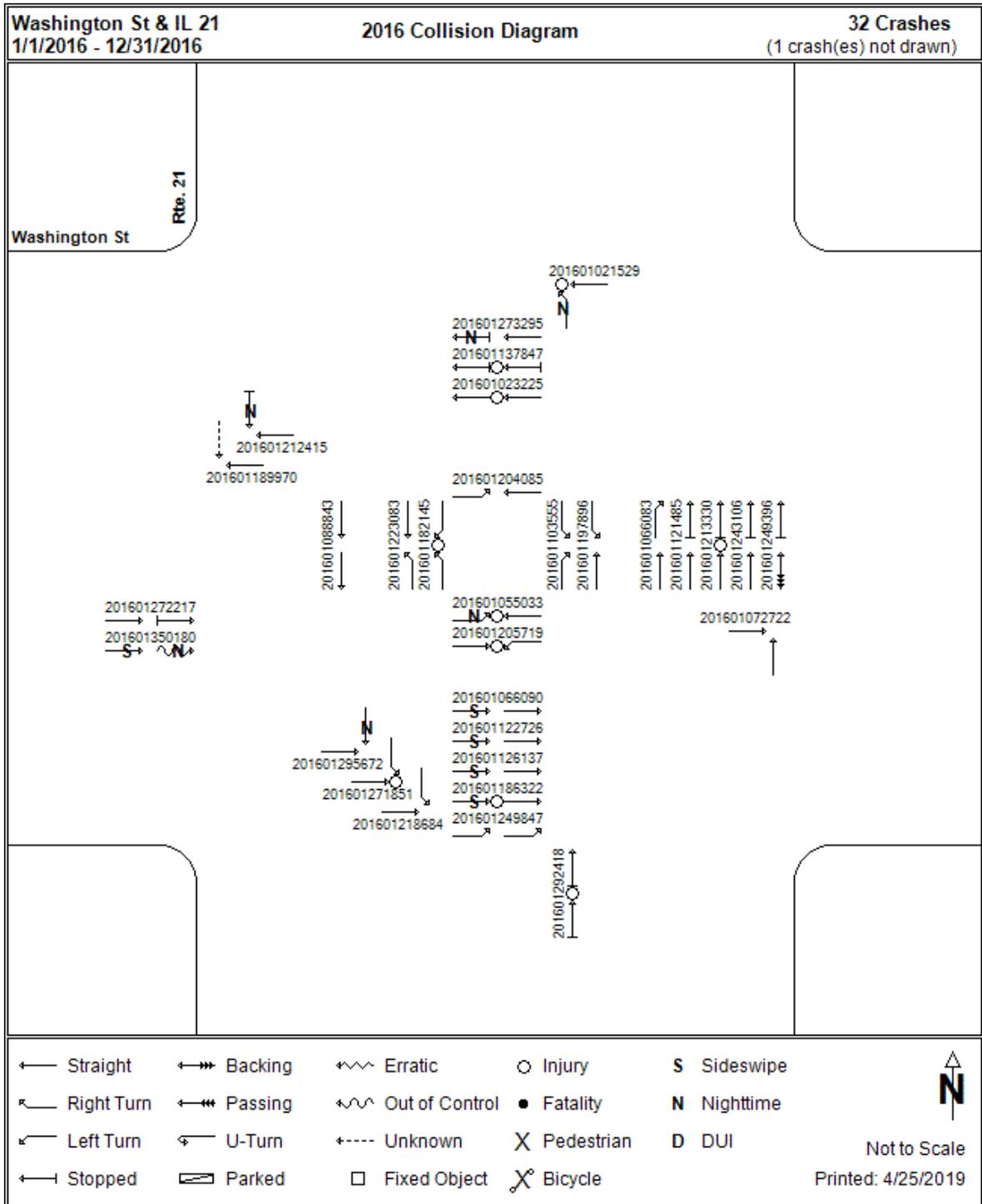
2015 Collision Diagram (Data located on Exhibit #1)



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



2016 Collision Diagram (Data located on Exhibit #1)



2017 Traffic Accident Map (Data located on Exhibit #1)



2017 Collision Diagram (Data located on Exhibit #1)

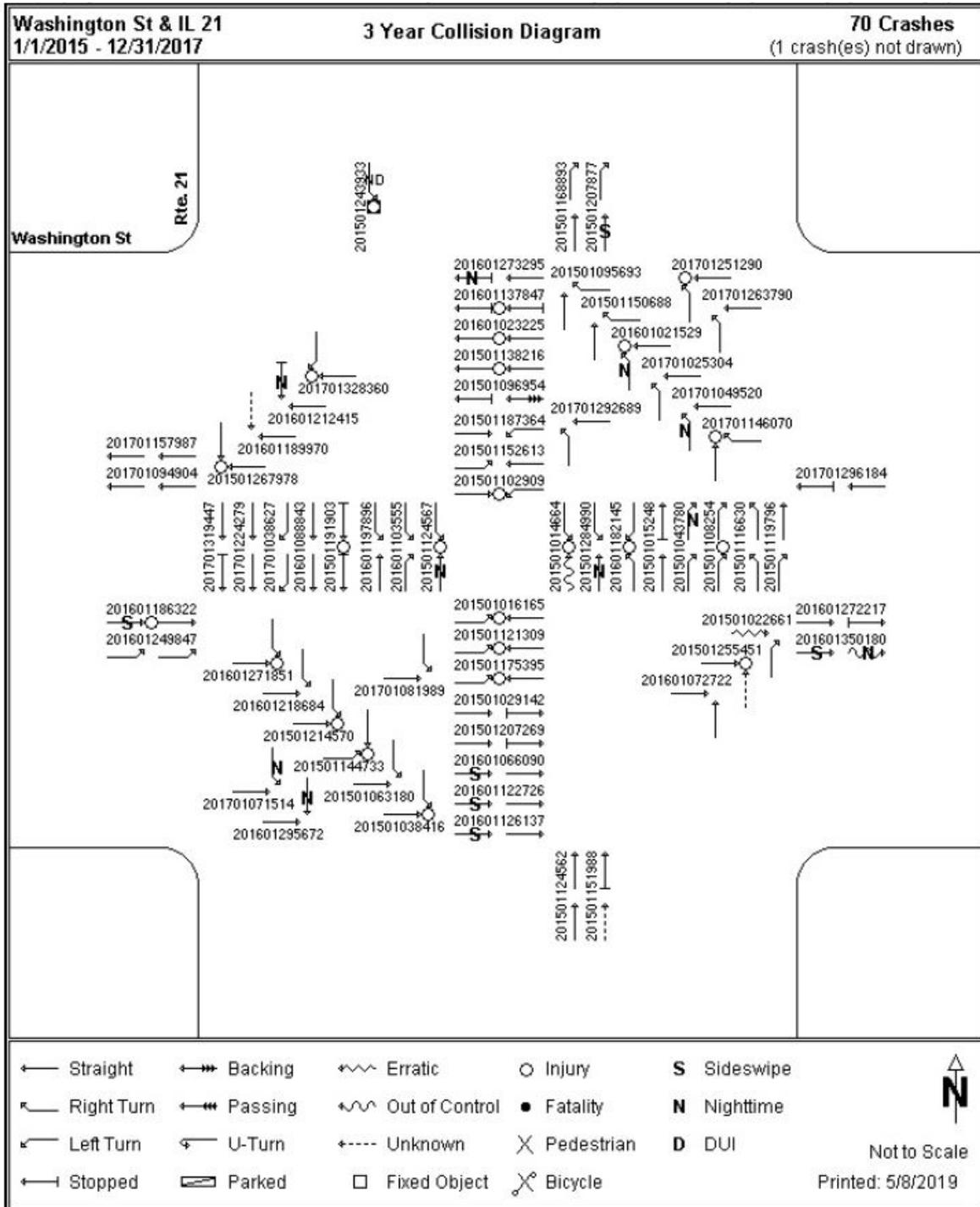


3 Year Traffic Accident Map (Data Located on Exhibit #1)



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

1 of 3 Part Diagram



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

2 of 3 Part Diagram



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

3 of 3 Part Diagram

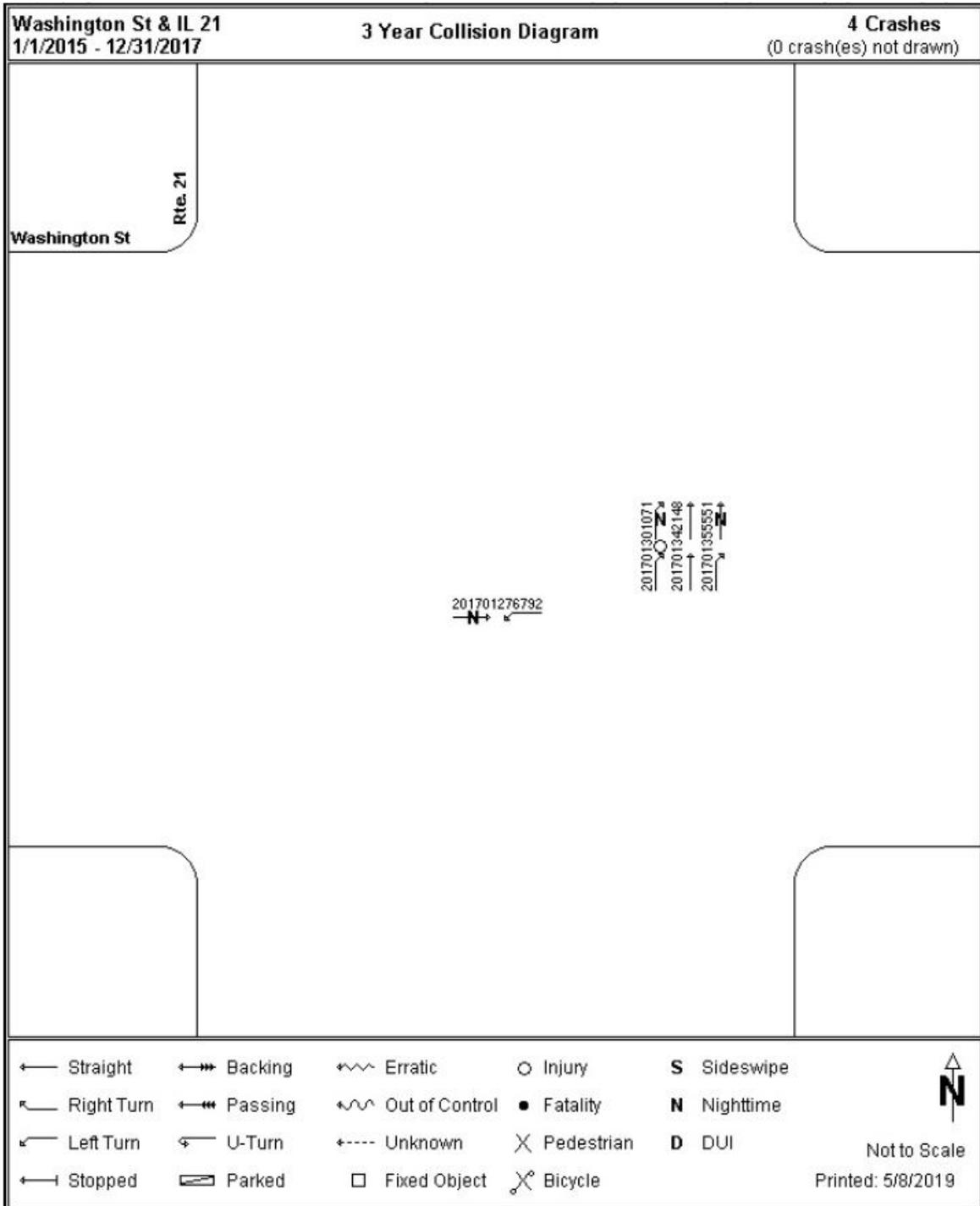
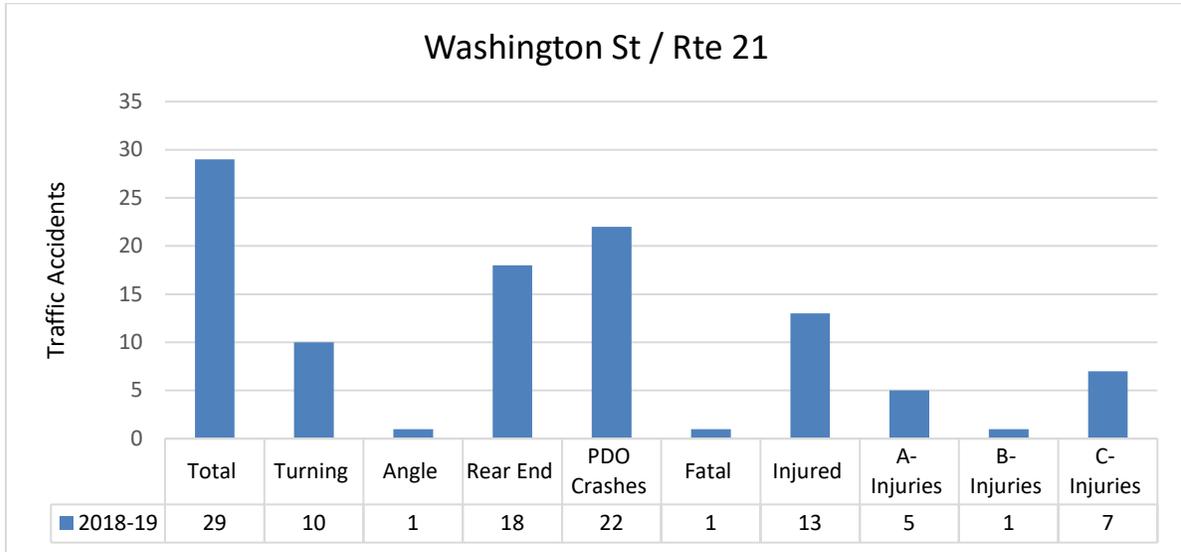


Exhibit #2



**This chart data covers a 12 month period running 05/01/2018 – 04/30/2019. 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

The 3 year traffic accident data (Exhibit #1) shows the total accidents for this period was consistent with the post RLR camera system installation. The post camera system accident data (Exhibit #2) does not give enough long-term data to draw a conclusion on the effectiveness of the RLR camera system. While total traffic accidents remained consistent, there was one (1) fatal accident at this location as well as an increase in Type-A injuries. These two increases are related to two (2) serious turn-related accidents in 2018. While Type-A accidents did increase, overall injury accidents (7) post RLR did decrease from the 3 year average (12) by approximately 41%.

There was a noted increase in rear end collisions. Of the 18 rear end collisions, only 2 were attributed to hard braking for a red traffic signal. The remaining 16 rear end collisions were attributed to inattentive drivers.

Signal Timings

Signal timings and other settings before and after RLR camera installation.

The traffic signal timings are not under control of the Village of Gurnee. As such, we do not possess this information.

Traffic Volumes

Traffic volumes before and after RLR Camera System installation. The traffic volumes shall include both Average Daily and Peak Period traffic.

The average daily traffic counts for each approach were obtained from the Lake County Division of Transportation and Illinois Department of Transportation at:

<http://lake.ms2soft.com>

<http://www.gettingaroundillinois.com/gai.htm?mt=aadt>.

The traffic counts below reflect the available 3-years prior and the post camera installation traffic counts

Prior Years Average

(The latest available data was recorded in 2009, 2011 & 2013)

Washington Street westbound - 24,000

Washington Street eastbound - 27,900

Rte. 21 northbound – 18,066

Rte. 21 southbound – 18,066

Post Camera Installation

Washington Street westbound – No current counts available since 2015

Washington Street eastbound – No current counts available since 2015

Rte. 21 northbound – 18,800 (2017 Data)

Rte. 21 southbound – 18,800 (2017 Data)

Recommendations

Recommendations to further reduce red light violations and severe crashes and to improve the operation of the intersection(s).

The recommendation is to keep both the eastbound and westbound photo enforcement approaches operational and to continue to analyze the intersection crash data over the next three years. This will give us a better sampling of post photo enforcement data.

Approximately 33% of all accidents at this intersection involved turning vehicles and resulted in one death and all of our Type-A injuries. As such, it is further recommended to provide a protected left turn at this intersection. A protected left turn would potentially reduce accidents and reduce severity of injuries.

Adjudication Process

Provide a summary of adjudication experience and results.

Our administrative adjudication system does not segregate enforcement approaches. As such, we are unable to provide data specific to Washington Street and Rte. 21.

During the examined time period we conducted 322 administrative hearings related to photo enforcement citations issued system-wide. Of those hearings, 253 of those were found to be Liable including those who failed to appear at their scheduled hearing.

Financial Report

Financial Report identifying the number citations issued, cost associated with the RLR Camera System and fees collected.

The combined total number of citations issued for both eastbound and westbound Washington Street at Rte. 21 intersection from May 1, 2018 through April 30, 2019 was 2942. The total of fines collected was \$155,706.34. Lease payments for the same period of time totaled \$114,000. The net revenue to the village during this period was \$41,706.34.