



Memo

TO: Chief Smith
FROM: Earl Tuckman
DATE: Tuesday, September 1, 2020
SUBJECT: 3 Year Follow-up Evaluation Report:
Washington St / Hunt Club Road

Chief Smith,

Per the Lake County Division of Transportation policy on Red Light Running Camera Systems (RLR), we are required to present an evaluation report one year after operation of a photo enforced intersection(s) and every three years thereafter.

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 & HUNT CLUB ROAD

RED LIGHT PHOTO ENFORCEMENT 3 YEAR FOLLOW-UP REPORT

September 2020

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 Hunt Club Road one year after the installation of a Red Light Running Camera System (RLR) and every three years thereafter.

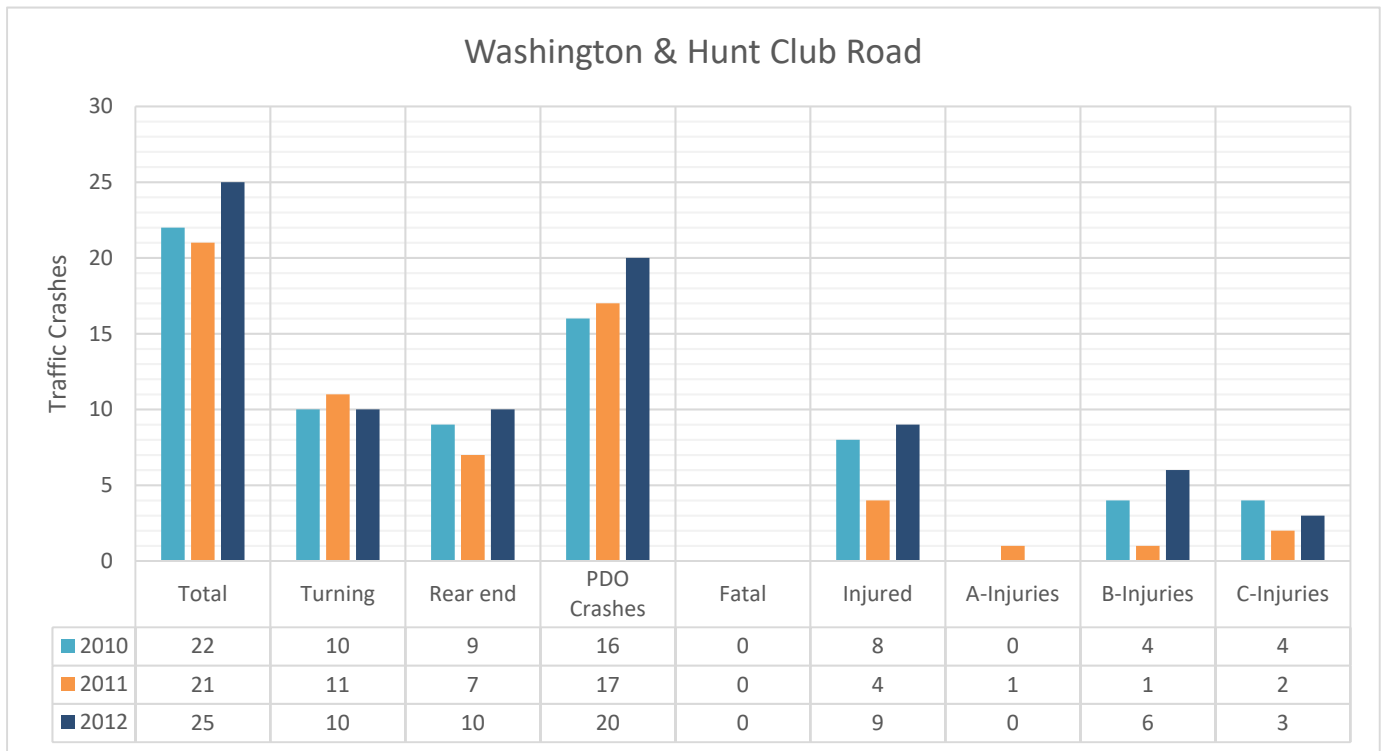
On December 3, 2007, the Village of Gurnee entered into agreement with Redflex Traffic Systems Inc. to install Red Light Running Camera Systems at several intersections throughout the Village. Once the testing and warning phase was completed the RLR Systems went fully operational with citations being issued on:

Washington Street and Hunt Club Road - eastbound 08/12/2012
 Washington Street and Hunt Club Road - westbound 02/17/2018

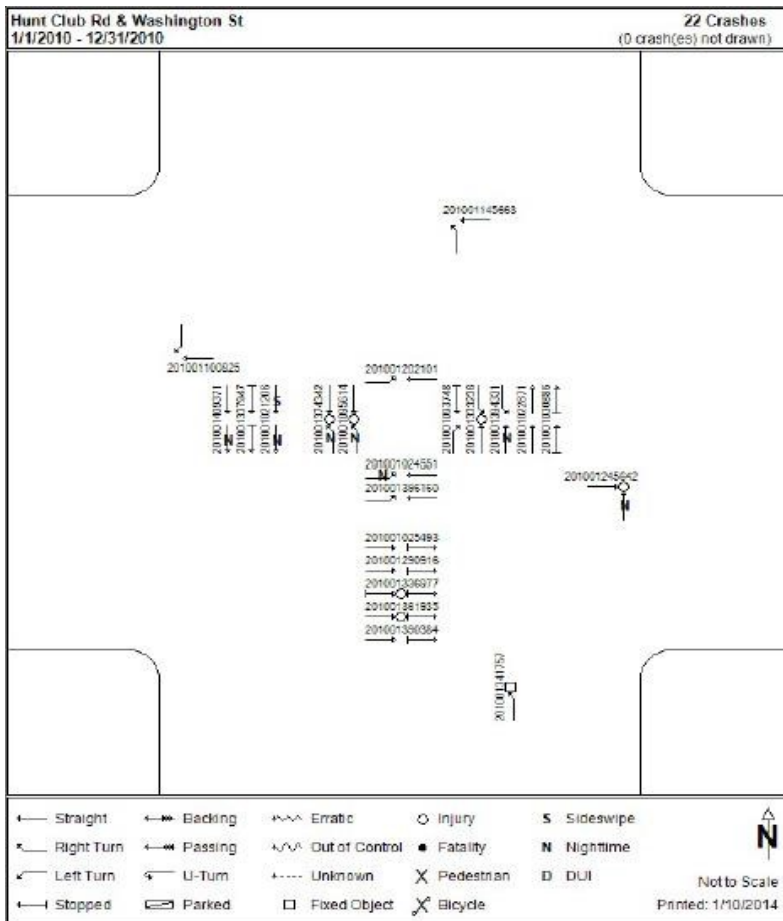
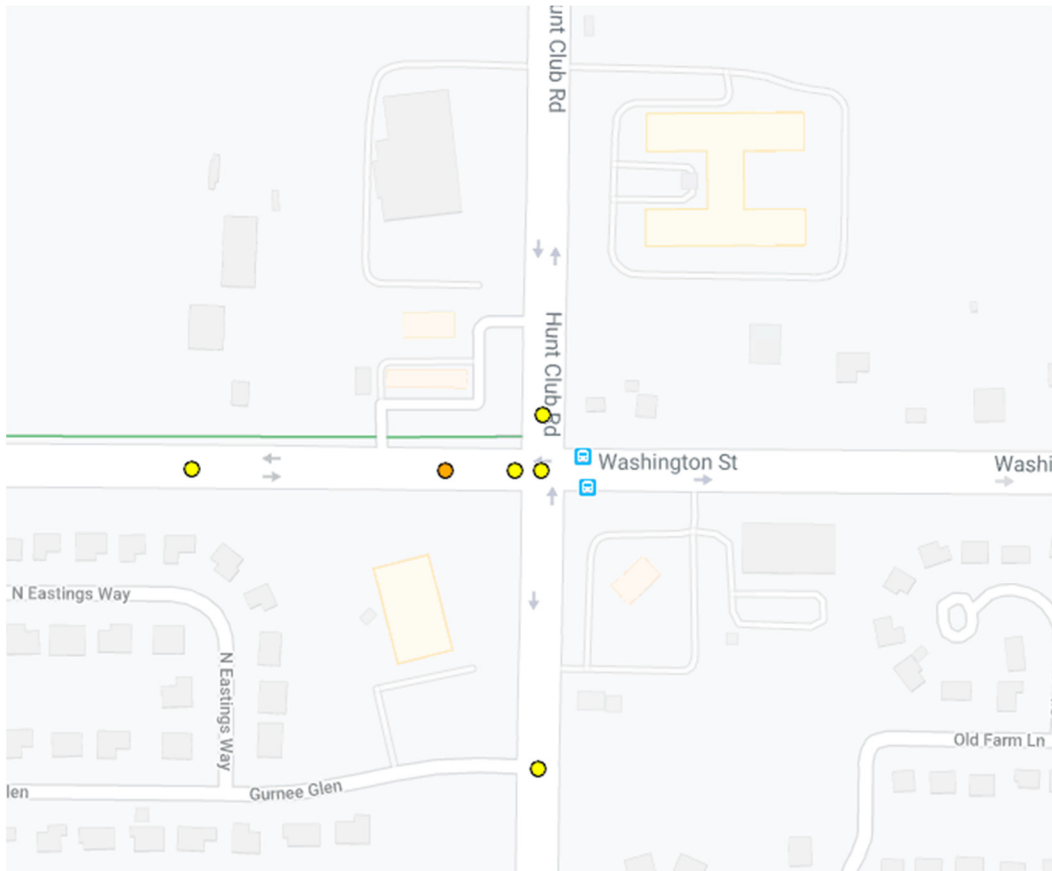
Crash Data

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).

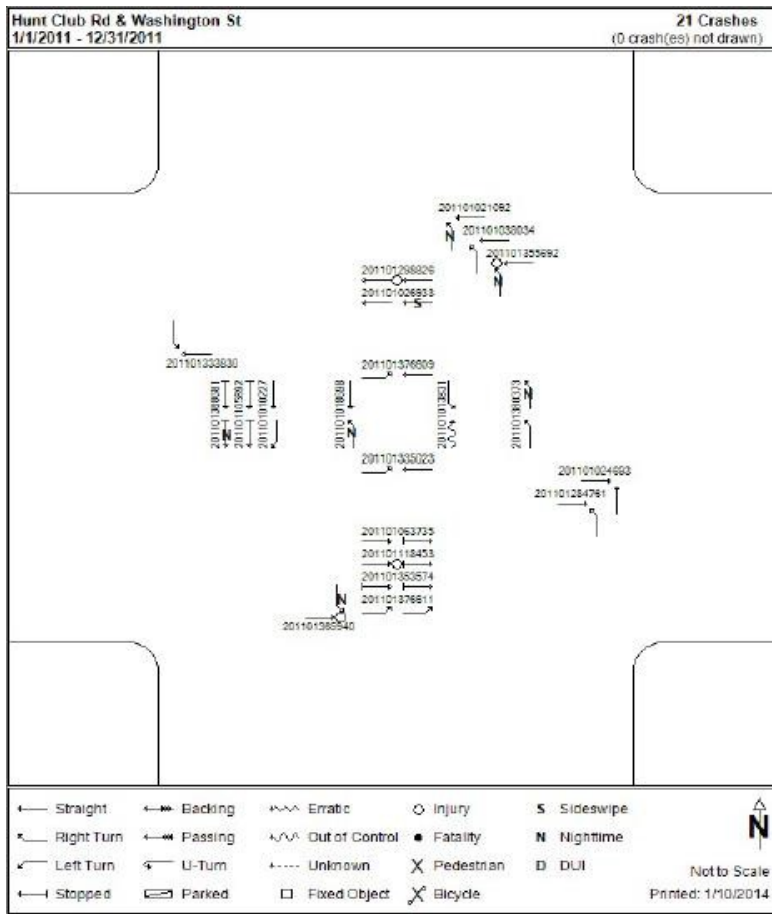
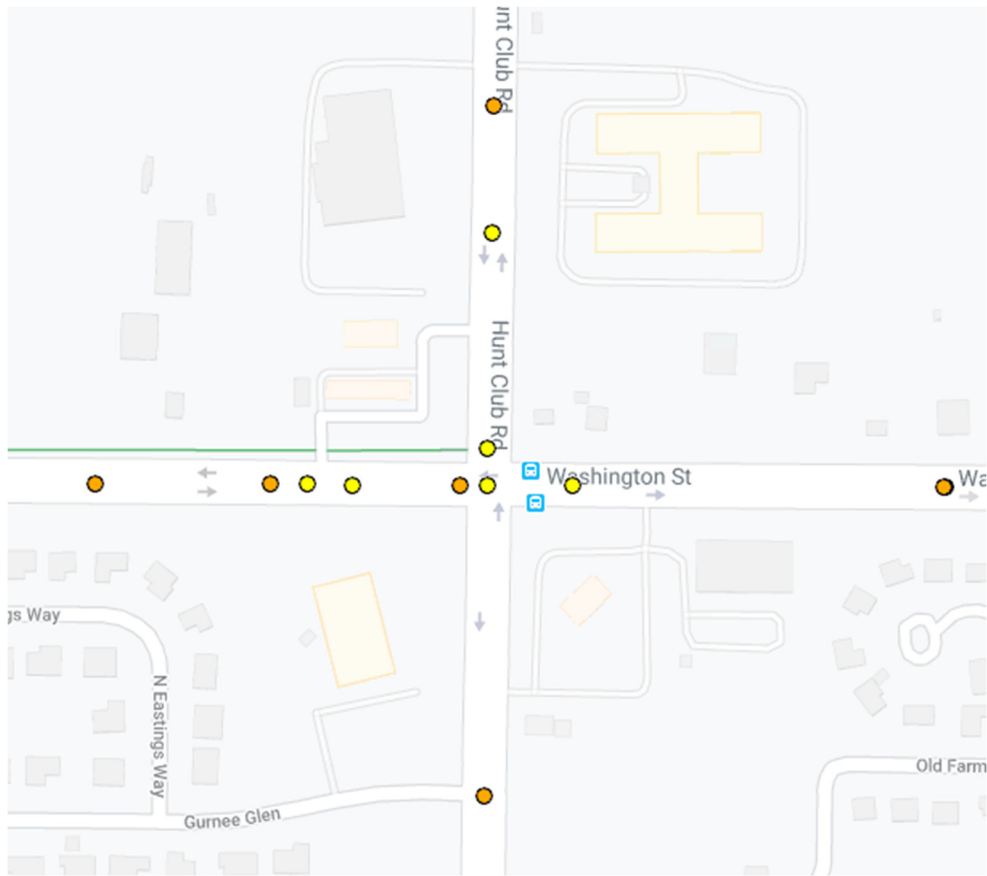
Exhibit 1



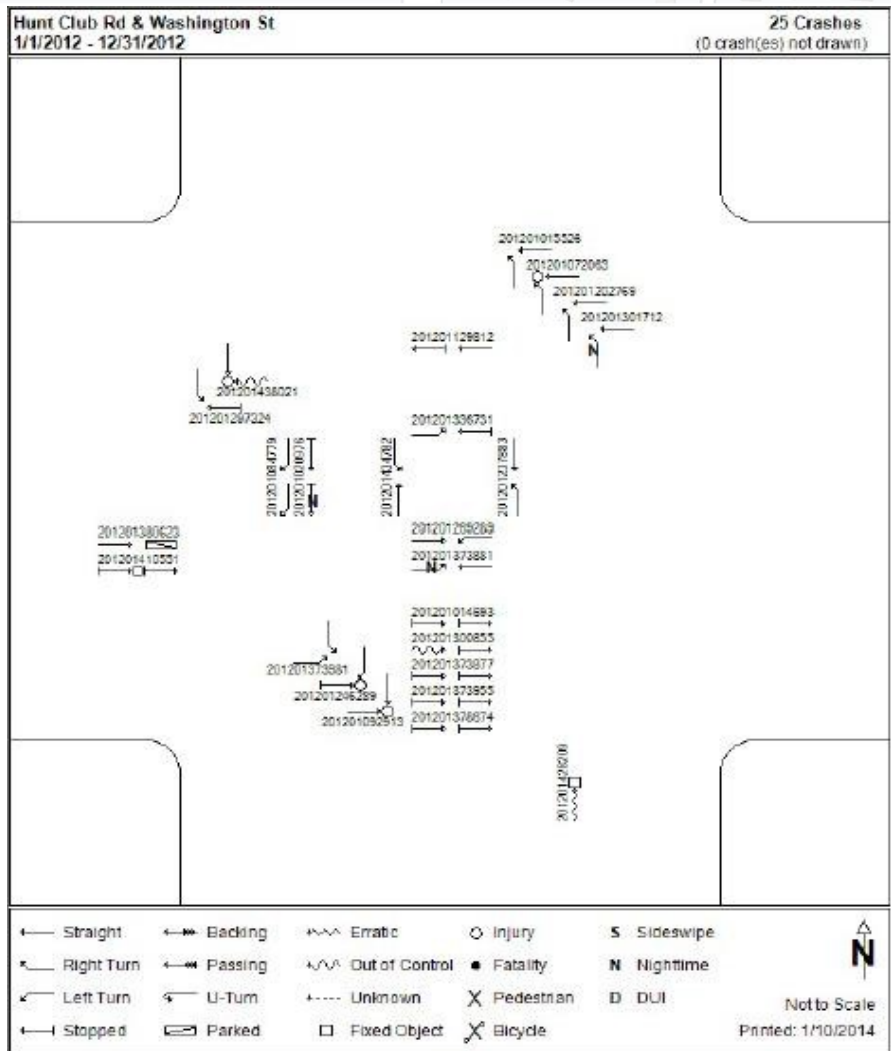
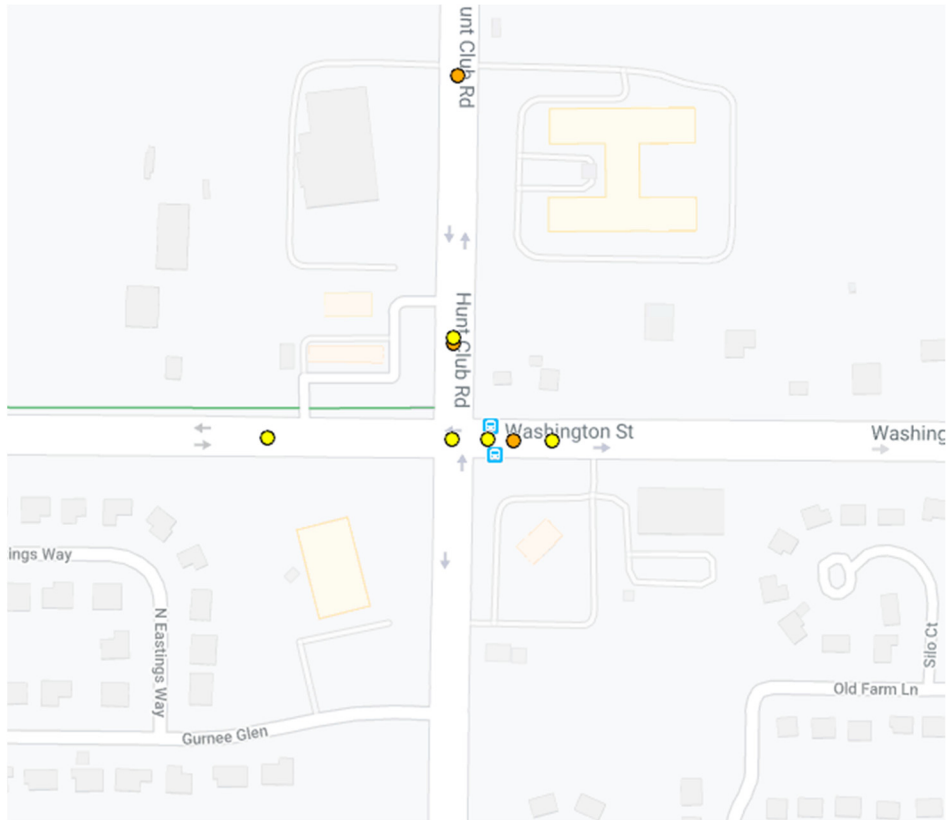
2010 Traffic Crash Map & Collision Diagram (Data located on Exhibit #1)
 Washington Street & Hunt Club Road



2011 Traffic Crash Map & Collision Diagram (Data located on Exhibit #1)
 Washington Street & Hunt Club Road



2012 Traffic Crash Map & Collision Diagram (Data located on Exhibit #1)
 Washington Street & Hunt Club Road



2010-2012 Traffic Crash Map (Data located on Exhibit #1)
Washington Street & Hunt Club Road

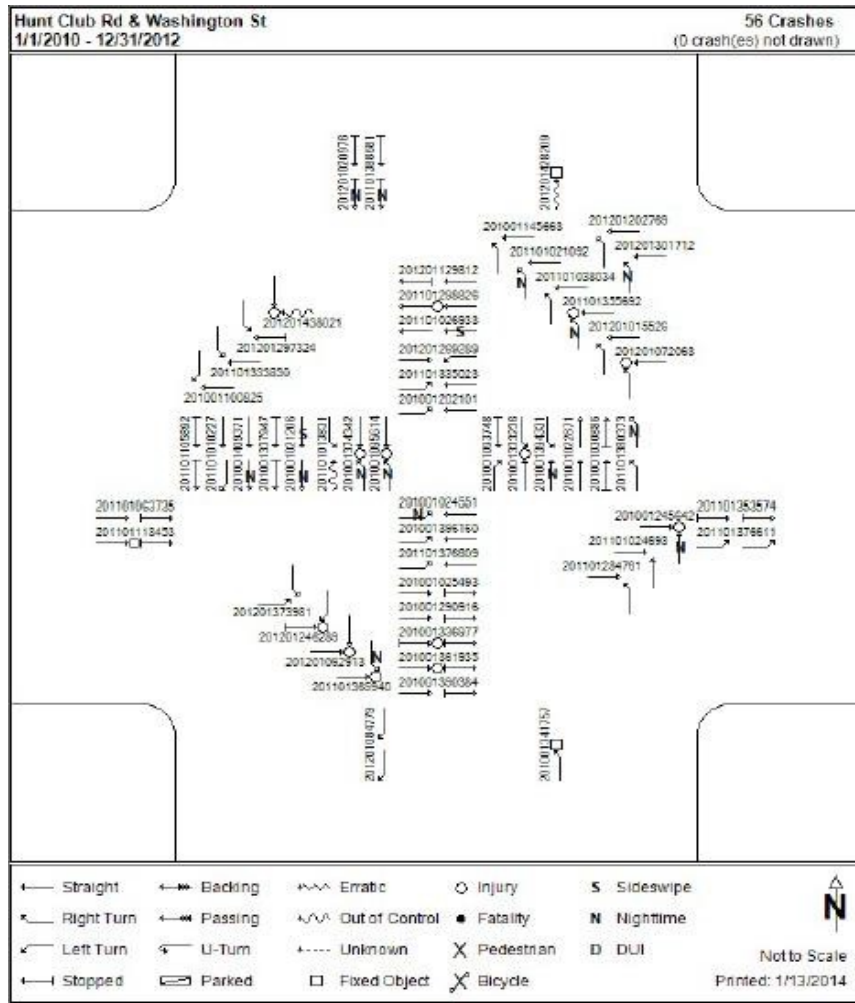
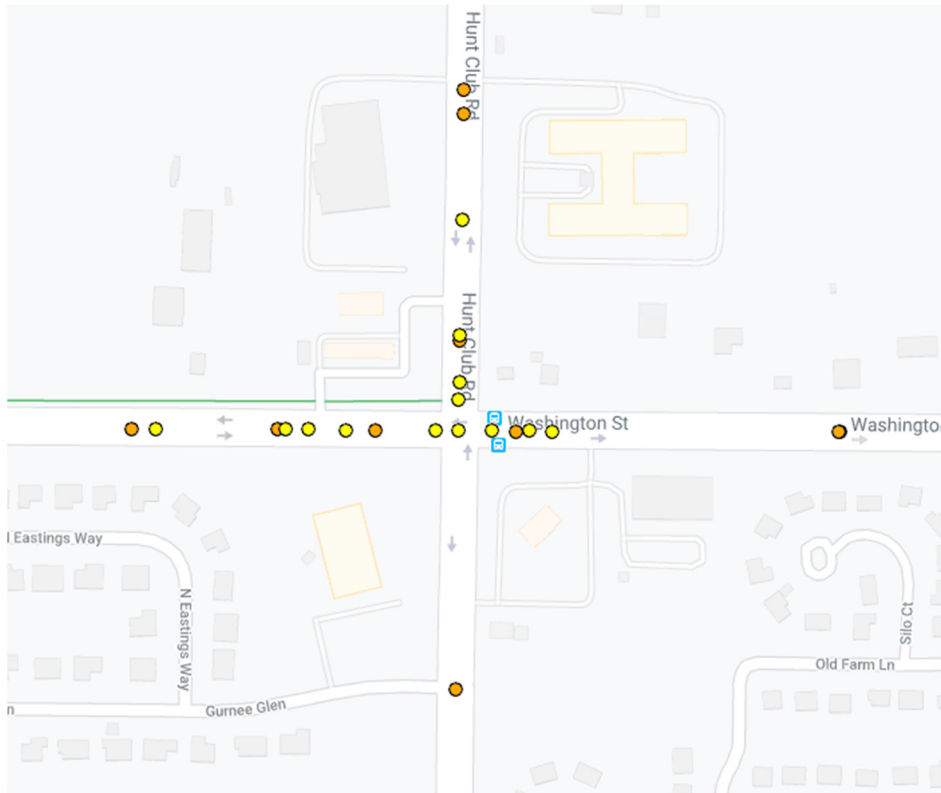
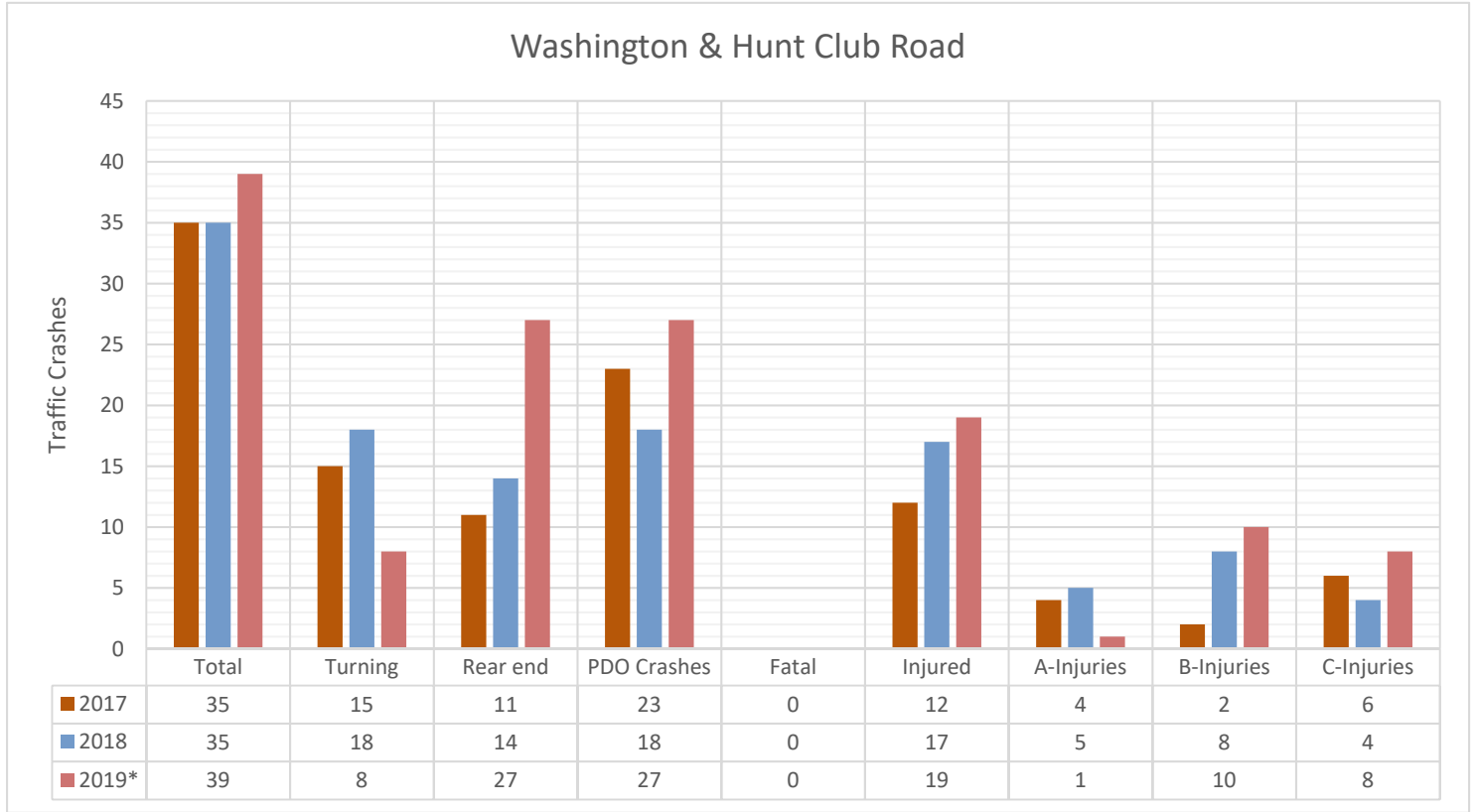
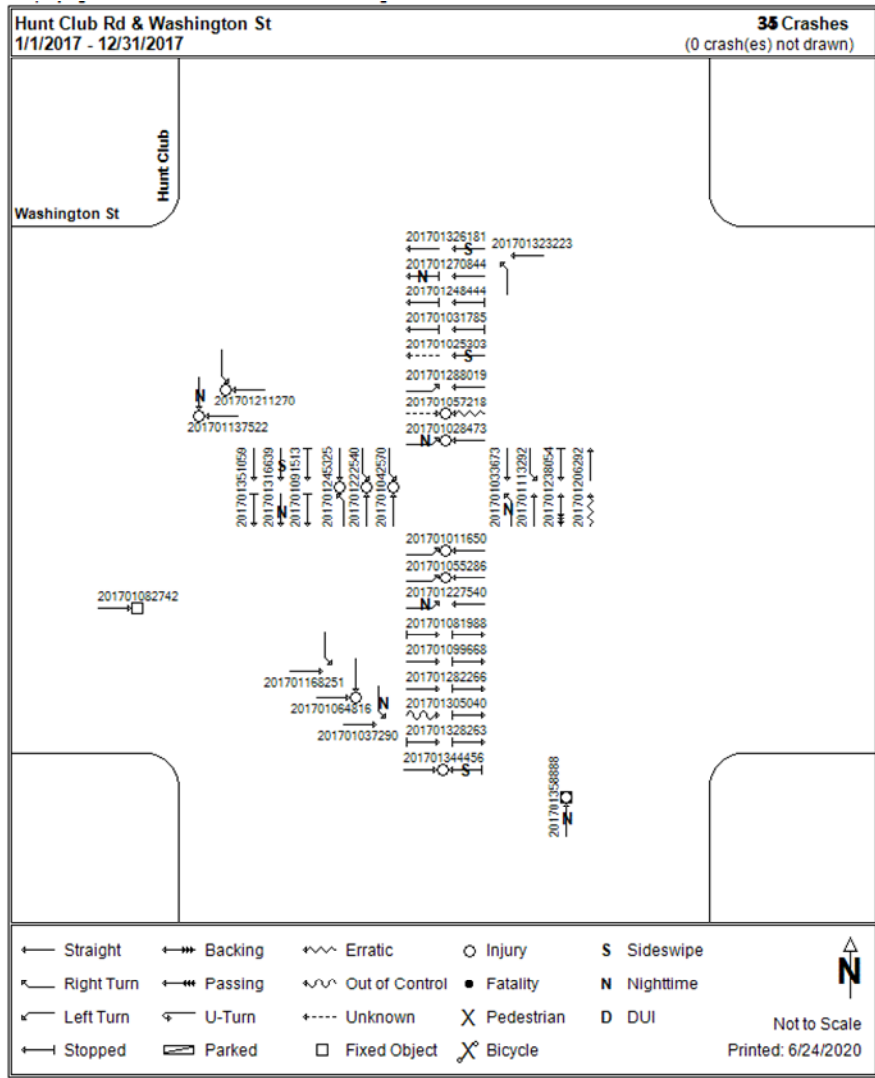
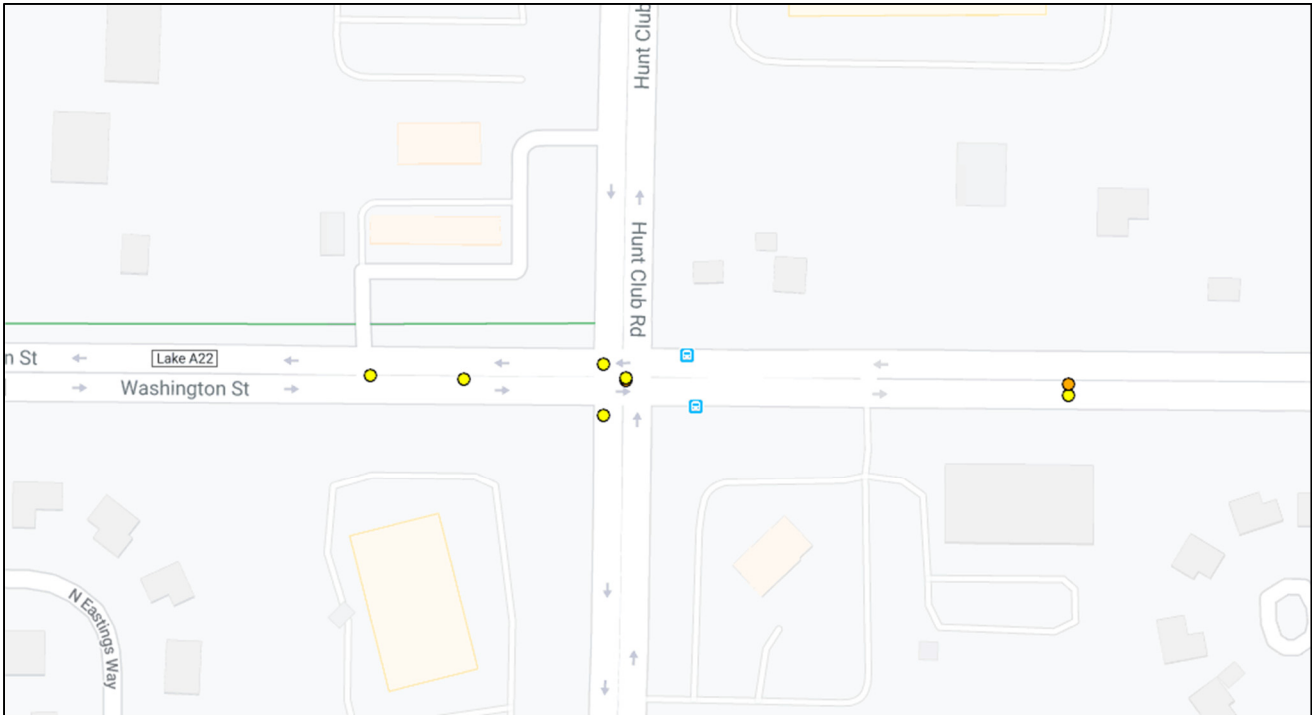


Exhibit 2

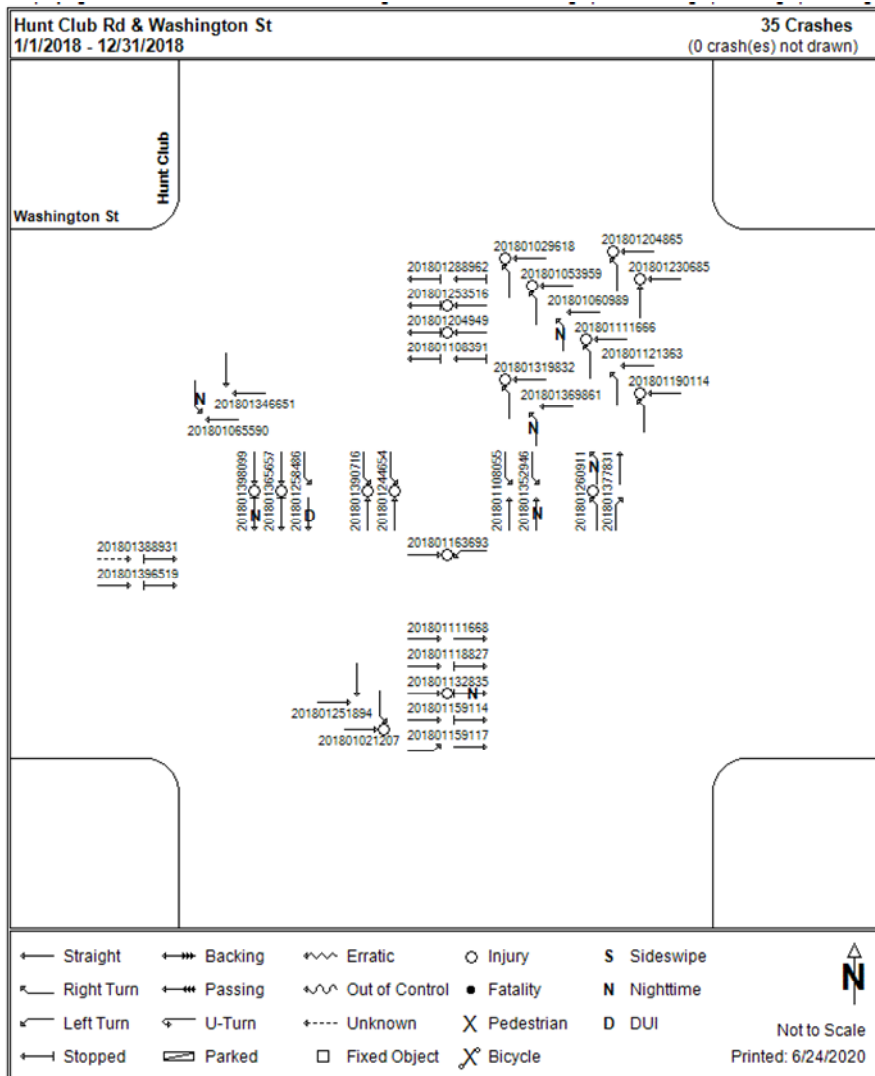
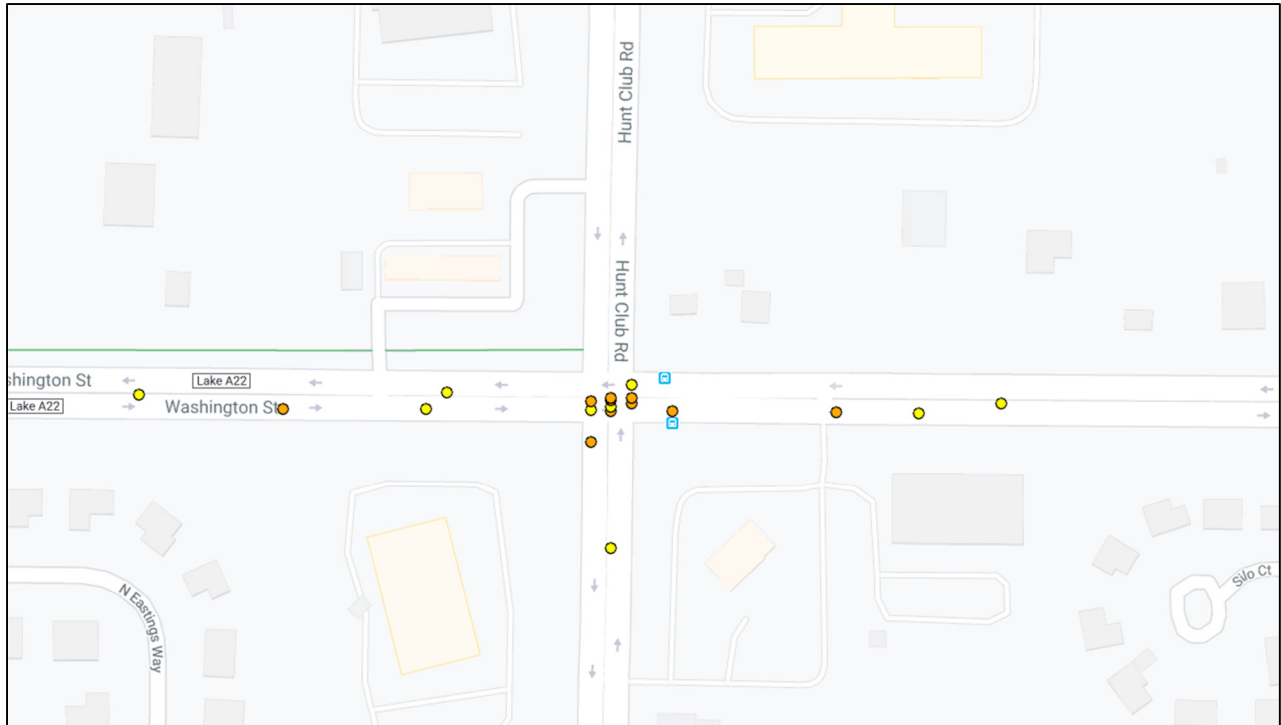


*2019 data not yet available through LCDOT. Data is preliminary agency data

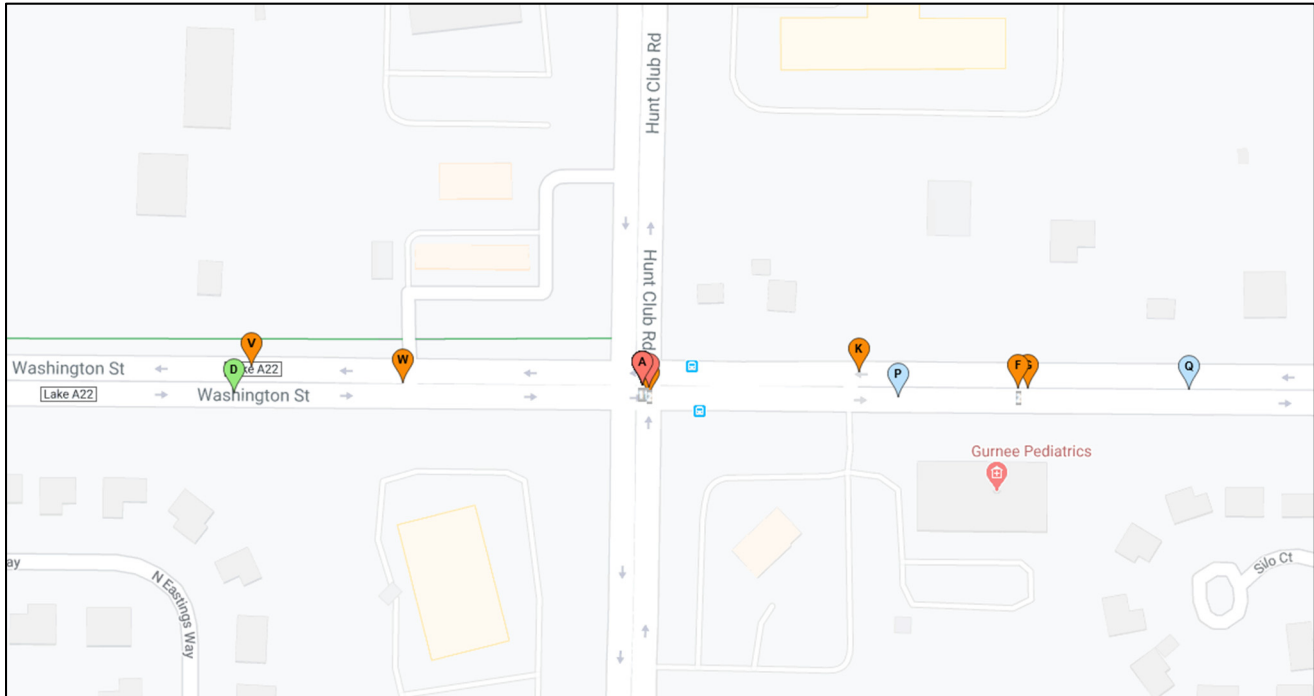
2017 Traffic Crash Map & Collision Diagram (Data located on Exhibit #2)
 Washington St and Hunt Club



2018 Traffic Crash Map & Collision Diagram (Data located on Exhibit #2)
 Washington St and Hunt Club



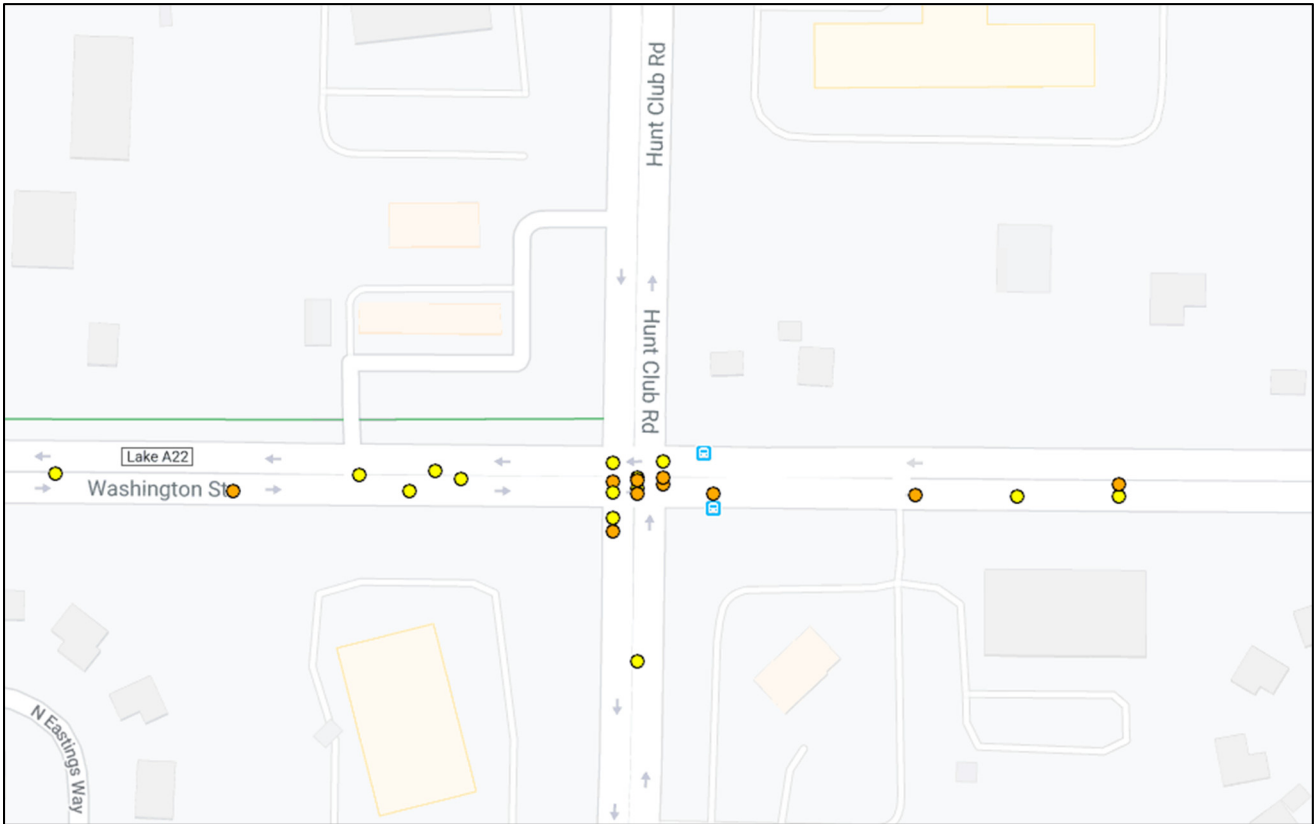
2019 Traffic Crash Map & Collision Diagram (Data located on Exhibit #2)
Washington St and Hunt Club



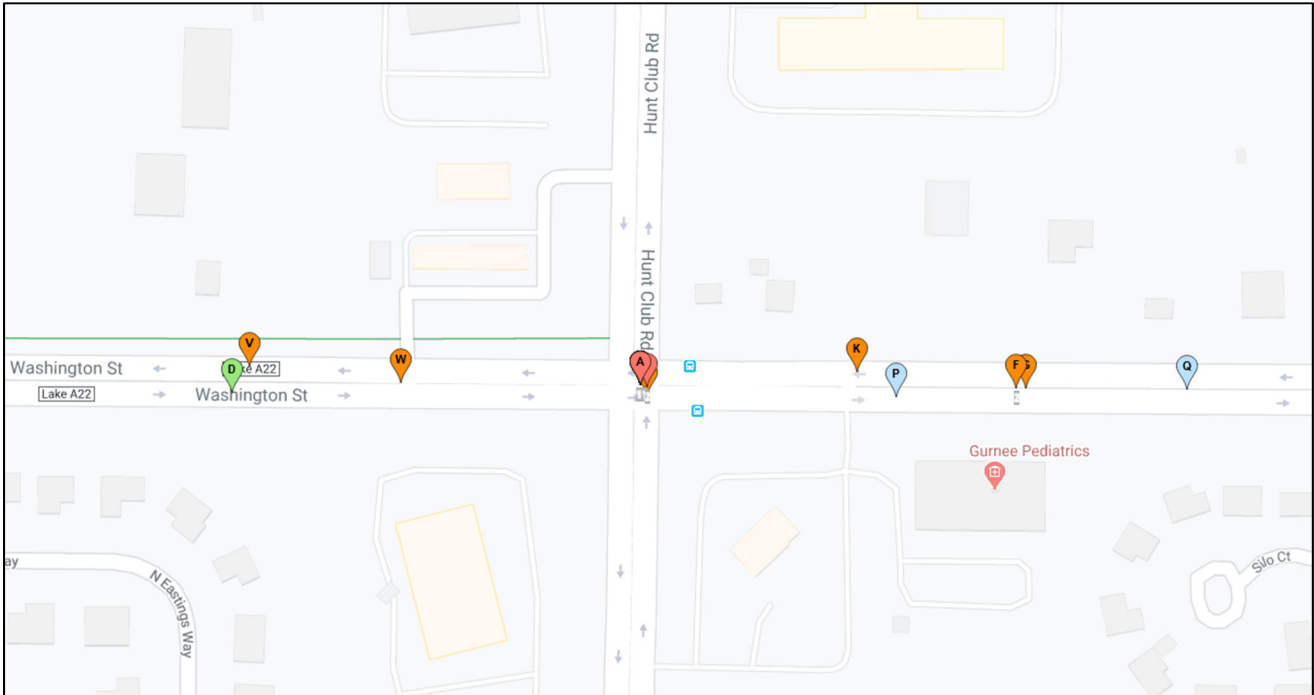
****2019 Collision Diagram Not Available**

2017-2019 Traffic Crash Map (Data located on Exhibit #2)
Washington St and Hunt Club

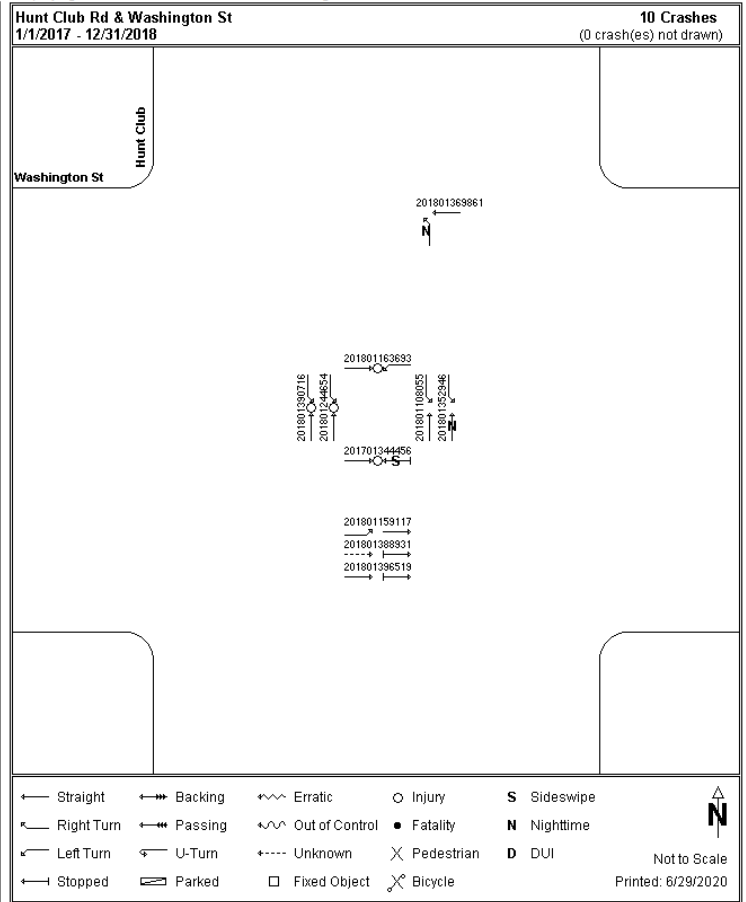
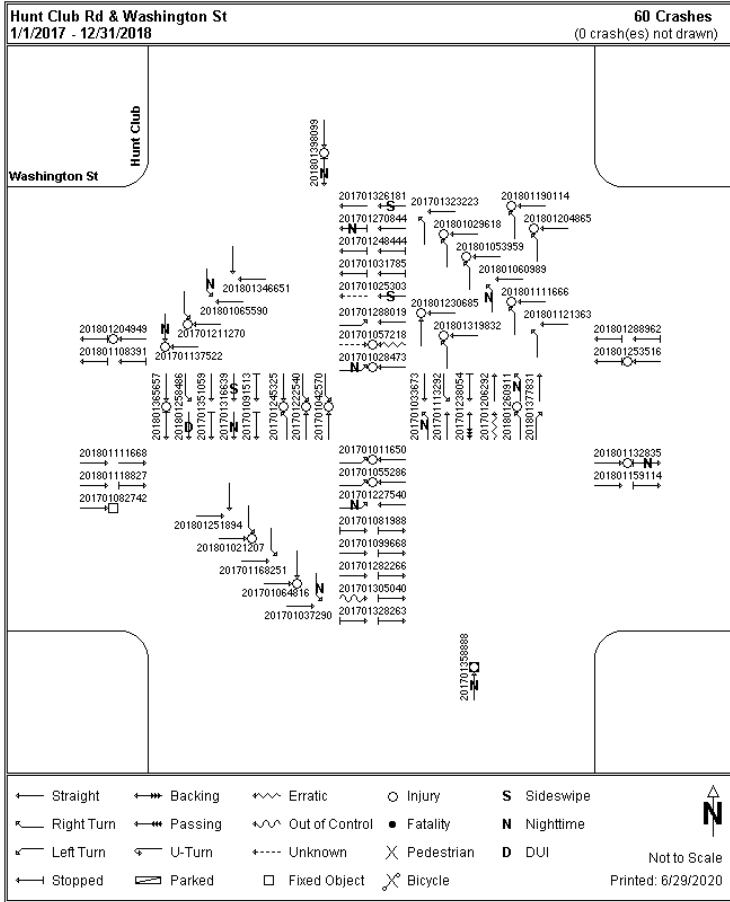
2017-2018



2019



2017-2019 Collision Diagram (Data located on Exhibit #2) Route 132 & Route 21



**2019 Collision Diagram Not Available

Crash Data Analysis

The total number of crashes for this period (109) increased by approximately 60% compared to the 3 year traffic data in Exhibit #1 (68). An examination of crashes for the current period was conducted with the following notes:

- *Rear end* crashes (35) accounted for 60% of all crashes on **Washington Street**. A primary cause of failing to reduce speed and following too closely (28 total) accounted for 65% of these crashes.
- *Turning* crashes (27) accounted for 53% of all crashes on **Hunt Club Road**. A primary cause of failing to yield right of way (23) accounted for 85% of these crashes.
- The average daily traffic count (with the exception of southbound Hunt Club Road) has seen an approximate 20% increase in volume from the 3 year prior data (see *traffic volumes* later in this report).
- In 2019 Route 132 / Hunt Club Road underwent a long-term traffic safety reconstruction project along with US 120 having long-term reconstruction work underway during this same time. These two projects shifted traffic onto Washington Street as an alternative route, an addition to the increased normal daily traffic volume.

Increasing daily traffic volumes combined with displaced traffic from other roadways during area construction means more traffic through this intersection and may account for the increase in overall crashes. Even with an increase in the total number of overall crashes in the current period, the percentage of turning and rear end accidents has remained consistent compared to the 3 year prior period.

| % of Rear End Crashes – Washington Street | |
|---|----------------|
| 3 Years Prior (2010-2012) | Current Period |
| 56% | 60% |

| % of Turning Crashes – Hunt Club Road | |
|---------------------------------------|----------------|
| 3 Years Prior (2010-2012) | Current Period |
| 58% | 53% |

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

3-Years Prior (2010-2012)

Washington Street westbound - 21,800 Washington Street eastbound - 19,800

Hunt Club Road northbound - 17,500 Hunt Club Road southbound - 21,300

3-Year Post Camera Installation (Most recent available)

Washington Street westbound – 26,300 Washington Street eastbound – 24,200

Hunt Club Road northbound – 20,700 Hunt Club Road southbound – 13,600

Recommendations

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

This intersection is scheduled in the near future for traffic safety reconstruction improvements including the addition of more lanes and protected left turns for all approaches. This would have been a first recommendation and we support this upcoming improvement. From 2006-2019 turning related crashes accounted for approximately 40% of all crashes at this location. The addition of protected left turns is a significant step towards potentially reducing a large percentage of accidents and severity of injuries at this intersection.

Second; we recommend keeping both the eastbound and westbound photo enforcement approaches operational and to continue to analyze the intersection crash data over the next three years.

Adjudication Process

Provide a summary of adjudication experience and results.

The Village of Gurnee administrative adjudication system does not segregate enforcement approaches. As such, we are unable to provide data specific to each intersection.

During the examined time period we conducted 891 administrative hearings related to photo enforcement citations issued system-wide. Of those hearings,

707 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 this intersection from 2017 through 2019 was 2,629. The system-wide total of fines collected was \$3,329,833.03. Costs for the same period of time totaled \$1,562,879.00. The net revenue to the village during this period was \$1,767,004.03.