



# Memo

**TO:** Chief Smith

**FROM:** TST Tuckman

**DATE:** Tuesday, August 23, 2022

**SUBJECT:** 3 Year Follow-up Evaluation Report:

Washington St / Route 21

### 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.





# **WASHINGTON STREET / ROUTE 21**

# RED LIGHT PHOTO ENFORCEMENT 3 YEAR FOLLOW-UP REPORT

2019-2021

August 2022

#### **Overview**

The Village of Gurnee is required to summit 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.

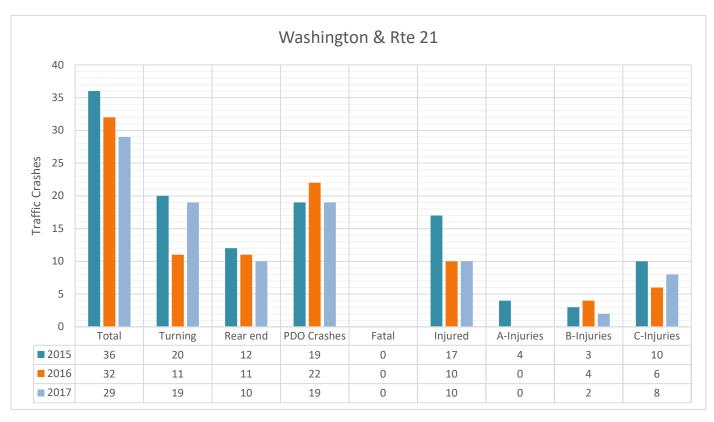
On December 3, 2007, the Village of Gurnee entered into agreement with Redflex Traffic Systems Inc. (now Verra Mobility) to install Red Light Running Camera Systems at several intersections throughout the Village. Once the testing and warning phase was completed the RLR Systems went fully operational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

Washington Street and Route 21 - eastbound 05/01/2018 Washington Street and Route 21 - westbound 05/01/2018

### **Crash Data**

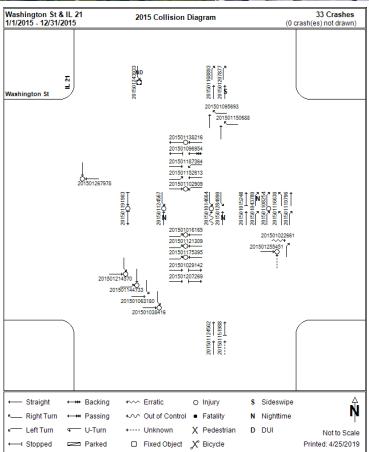
The crash data specific to the RLR location(s) for the 3-year period (Exhibit #1) prior to and for the period post (Exhibit #2) RLR installation. The crash data shall include yearly collision diagrams of the intersection(s).

#### Exhibit 1



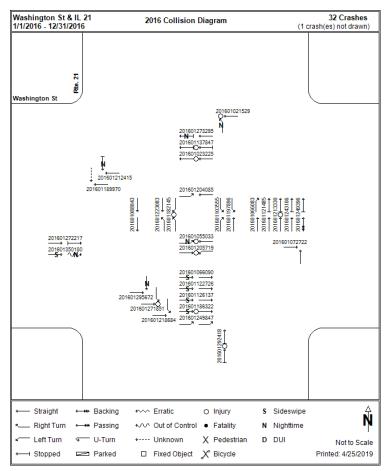
# 2015 Traffic Crash Map & Collision Diagram (Data located on Exhibit #1) Washington Street & Route 21





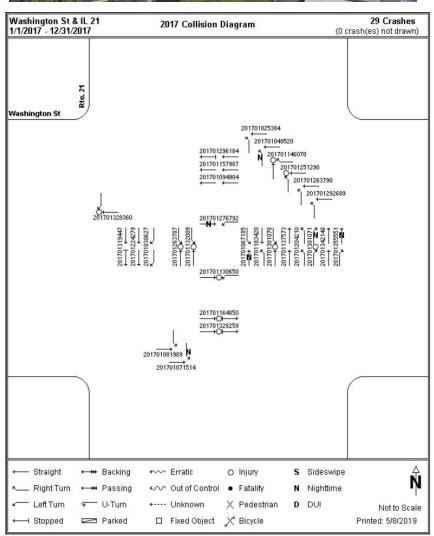
# 2016 Traffic Crash Map & Collision Diagram (Data located on Exhibit #1) Washington Street & Route 21





# 2017 Traffic Crash Map & Collision Diagram (Data located on Exhibit #1) Washington Street & Route 21



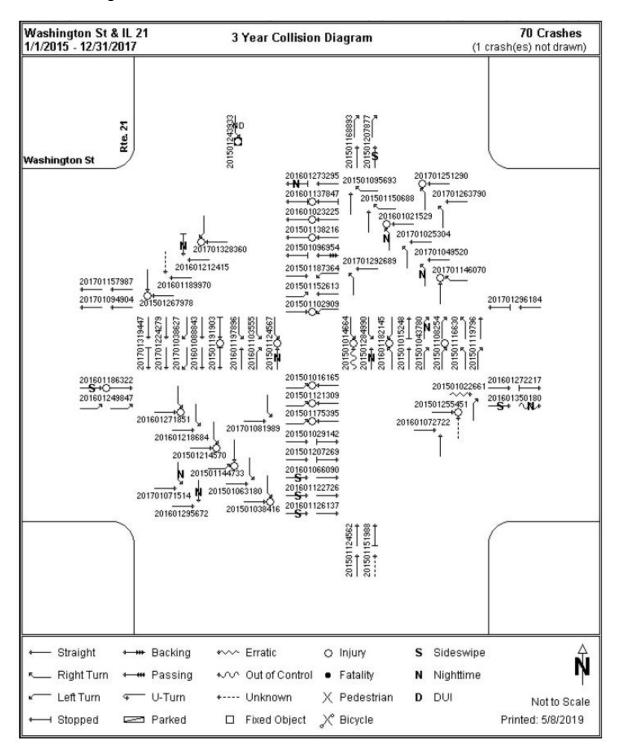


# 2015-2017 Traffic Crash Map (Data located on Exhibit #1) Washington Street & Route 21



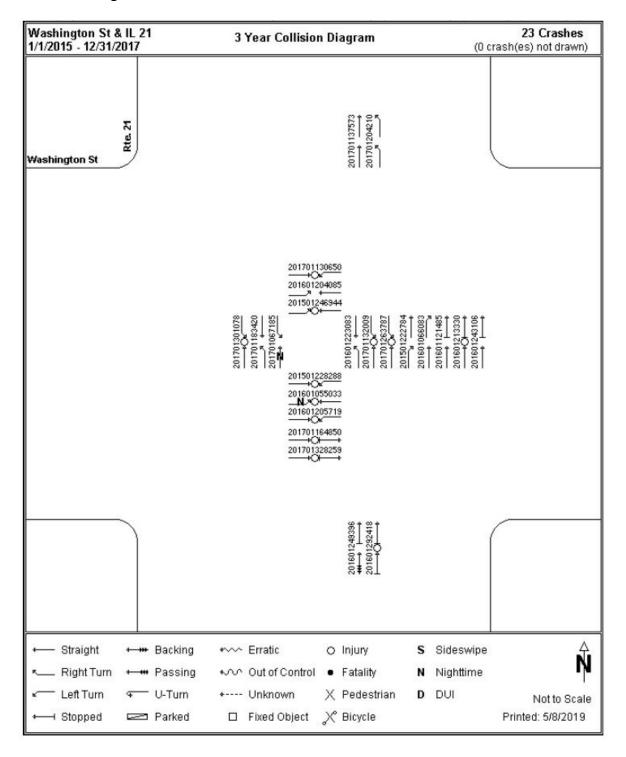
# 2015-2017 Collision Diagram (Data located on Exhibit #1) Washington Street & Route 21

#### 1 of 3 Part Diagram



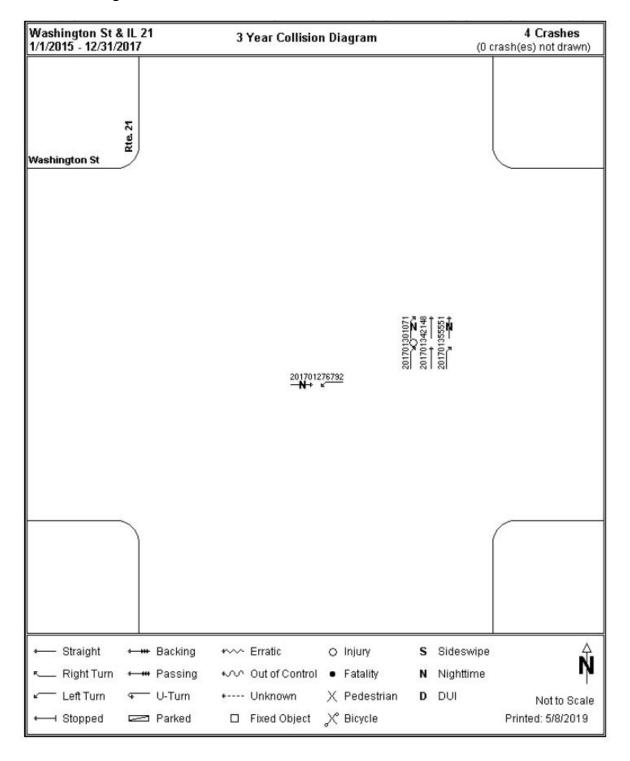
# 2015-2017 Collision Diagram (Data located on Exhibit #1) Washington Street & Route 21

### 2 of 3 Part Diagram

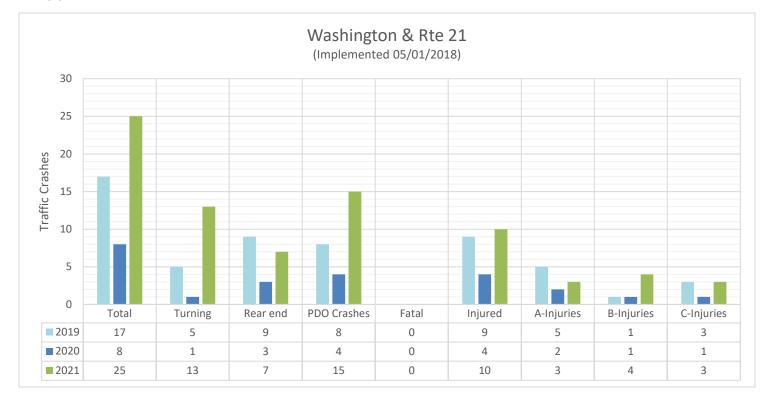


# 2015-2017 Collision Diagram (Data located on Exhibit #1) Washington Street & Route 21

### 3 of 3 Part Diagram



### Exhibit 2

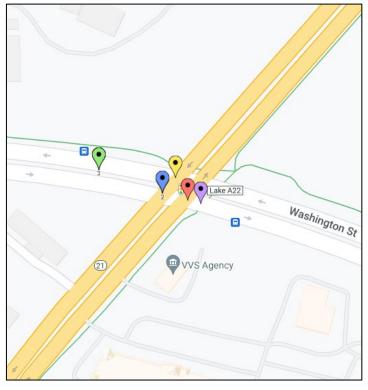


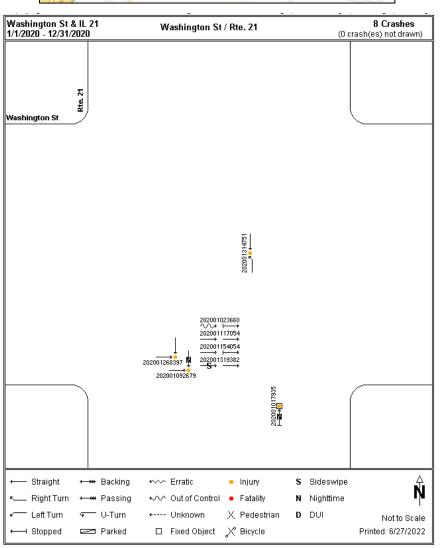
# 2019 Traffic Crash Map & Collision Diagram (Data located on Exhibit #2) Washington St and Route 21



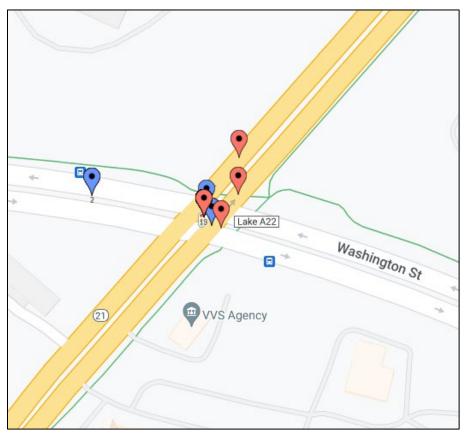


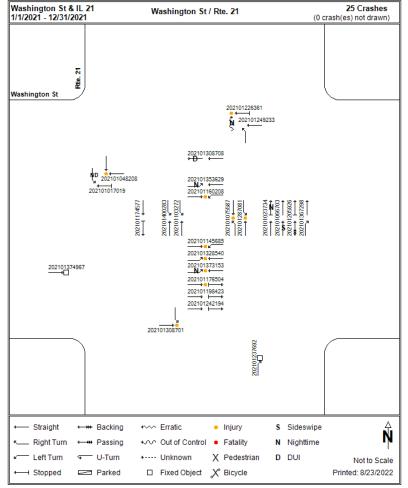
2020 Traffic Crash Map & Collision Diagram (Data located on Exhibit #2) Washington St and Route 21



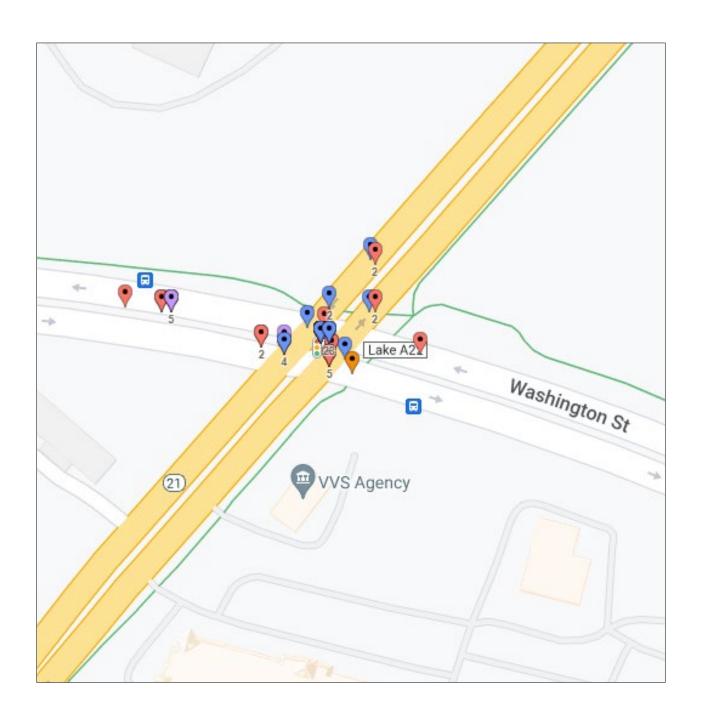


# 2021 Traffic Crash Map & Collision Diagram (Data located on Exhibit #2) Washington St and Route 21

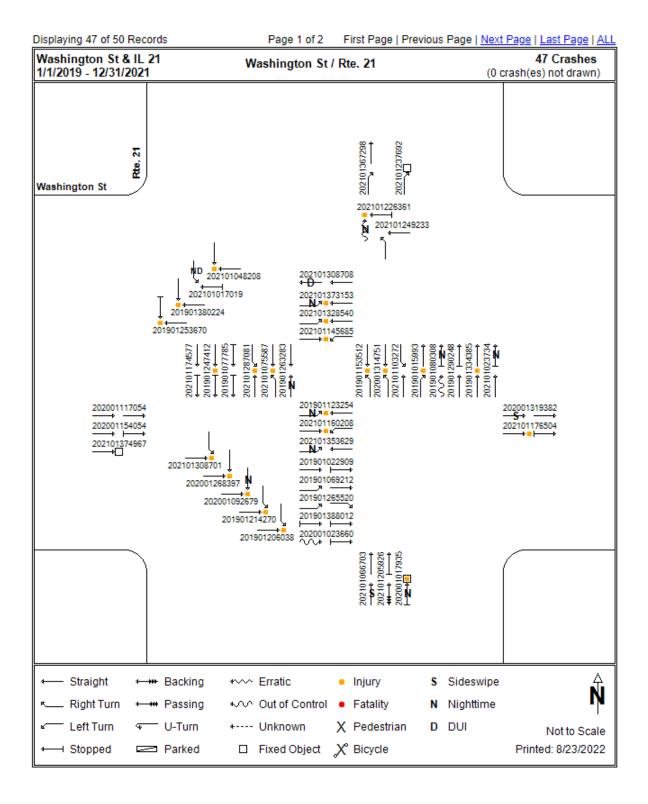




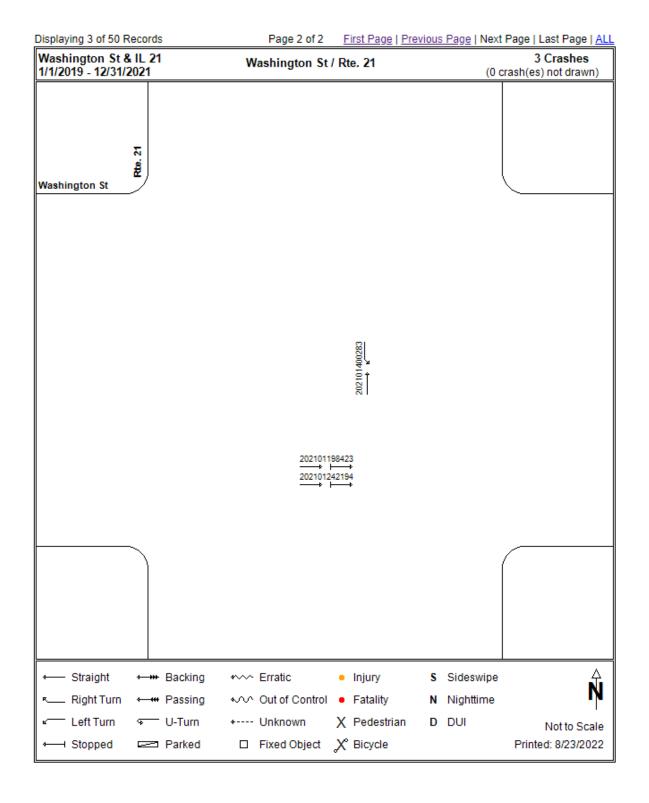
## 2019-2021 Collision Map (Data located on Exhibit #1) Washington Street & Route 21



### 2019-2021 Collision Diagram (Data located on Exhibit #2) Route 132 & Route 21



### 2019-2021 Collision Diagram (Data located on Exhibit #2) Route 132 & Route 21



	-16	-10	-5	-11	0	-5	2	-1	-6
Washington / Rte 21	-48%	-62%	<b>-42</b> %	-55%	0%	-38%	150%	-33%	-71%
Average	16.7	6.3	6.3	9.0	0.0	7.7	3.3	2.0	2.3
2021	25	13	7	15	0	10	3	4	3
2020	8	1	3	4	0	4	2	1	1
2019	17	5	9	8	0	9	5	1	3
Year	Total	Turning	Rear end	PDO Crashes	Fatal	Injured	A-Injuries	B-Injuries	C-Injuries
Average	32.3	16.7	11.0	20.0	0.0	12.3	1.3	3.0	8.0
2017	29	19	10	19	0	10	0	2	8
2016	32	11	11	22	0	10	0	4	6
2015	36	20	12	19	0	17	4	3	10
Year	Total	Turning	Rear end	PDO Crashes	Fatal	Injured	A-Injuries	B-Injuries	C-Injuries
Washington / F	Rte 21								

### **Crash Data Analysis**

Total traffic accidents for this period (50) dropped approximately 48% compared to the previous period total (97).

Overall injuries this period (23) dropped approximately 38% compared to the previous period (37). Type A injury types did increase, but 75% of these are attributed to turn-related crashes and 1 red light violation, several of which involve multiple injuries.

### **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 Route 21 northbound - 18,066 Route 21 southbound - 18,066

#### Post Camera Installation

Washington Street westbound – 25,200 Washington Street eastbound – 31,200 Route 21 northbound – 12,700 Route 21 southbound – 12,700

#### Recommendations

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

It is our belief photo enforcement at this location contributes to improved traffic safety. The recommendation is to keep both the eastbound and westbound photo enforcement approaches operational as part of our traffic safety program which incorporates public education, enforcement and engineering.

During the current period, 55% of all injuries were due to turn related crashes. As such, it is further recommended to update this intersection to provide protected left turns. A protected left turn would potentially reduce accidents and reduce severity of injures.

### **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 Route 21.

During the examined time period we conducted 700 administrative hearings related to photo enforcement citations issued system-wide. Of those hearings, 503 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 Route 21 intersection from January 1, 2019 through December 31, 2021 was 4898. The total of fines collected was \$372,374.14. When you subtract the lease payments, bank and various fees for the system during the same time period, the net revenue collected was approximately \$80,184.70.