



127th St and Pulaski Rd
<Westbound>

Village of Alsip



Initial Analysis
with 24hr Video Traffic Study
Aug 2017

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I. Overview

One (1) intersection totaling one (1) approach in the **Village of Alsip** has been inspected and reviewed.

1. 127th St and Pulaski Rd (W)

This report includes:

- A. Aerial photo of each intersection (Google Map)
- B. Average Daily Traffic Count (ADTC) of each intersection (IDOT)
- C. Detailed description of each approach with 24hr Video Traffic Study
- D. 3 years' crash data from IDOT

In order to secure IDOT permission to install a Red Light Running (RLR) Camera System, it must be shown that the intersection for which the application is being made has a red light running problem. As a part of the IDOT permit process, the first and longest phase is the “Justification” Phase. During this phase the community must submit a “Justification Report” that details why there needs to be a Red Light Camera at the intersection for which the permit is being requested. Some of the key requirements for justification are high traffic volume and crash data indicating a problem as well as a current RLR traffic study.

Analysis Summary

1. 127th St and Pulaski Rd (W)

- High traffic volume – 127th St has an average daily traffic count (ADTC) of over 22,000 cars and Pulaski Rd has over 31,800.
- High crash data (2013 -> 17, 2014 -> 14, 2015 -> 20).
- RLR Camera exists.



II. 127th St and Pulaski Rd (W)

A. Aerial Photo





Close-up of Westbound



B. Average Daily Traffic Count

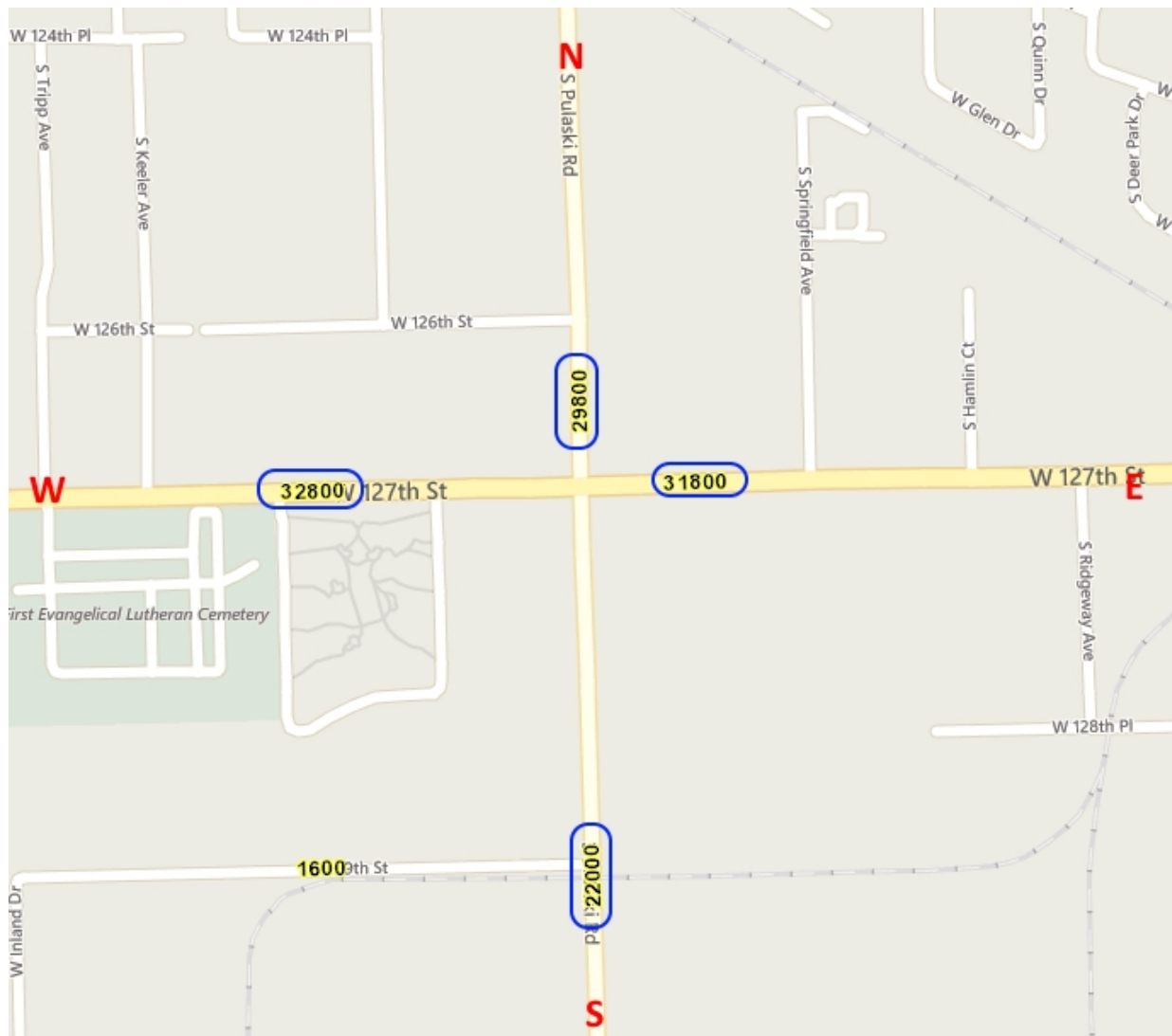
The following information was obtained via the Illinois Department of Transportation website per the RLR Guideline document published by IDOT. Only ADTC values were available, peak numbers were not provided.

Pulaski Rd ADTC

- North - 29,800
- South - 22,000

127th St ADTC

- East - 31,800
- West - 32,800



C. Approaches

Westbound 127th St and Pulaski Rd

- Traffic controller box is installed at Southeast corner
- Bus Stop (10')
- No Cross walk
- 3 lanes
- Dedicated left turn lane
- No Sidewalk
- 4 traffic lights
- Speed Limit: 40 mph
- Possible Location: ~60ft from the Stop bar (where the existing RLR camera is located)



Traffic Study

Westbound 127th St and Pulaski Rd

Summary

A 24-hour study was conducted from 10:00 AM Friday, Aug 18, 2017 through 10:00 AM on Saturday, Aug 19, 2017. The video system recorded 71 red light violations during this time period. All captured violations were reviewed by a quality assurance analyst for accuracy. The tables which follow depict the information gathered during the study on an hourly basis in addition to the detailed violations reported.

Red Light Violation Summary

Date and Time	Left Turn	Straight	Right Turn	Total Violations
10:00- 11:00	0	0	5	5
11:00-12:00	2	0	5	7
12:00-13:00	0	0	2	2
13:00-14:00	0	0	2	2
14:00-15:00	0	0	2	2
15:00-16:00	0	1	2	3
16:00-17:00	0	0	5	5
17:00-18:00	0	0	7	7
18:00-19:00	0	0	1	1
19:00-20:00	0	0	3	3
20:00-21:00	0	0	6	6
21:00-22:00	0	0	1	1
22:00-23:00	0	0	3	3
23:00-00:00	0	1	2	3
00:00-1:00	0	0	0	0
1:00-2:00	0	0	2	2
2:00-3:00	0	0	6	6
3:00-4:00	0	1	1	2
4:00-5:00	0	0	2	2
5:00-6:00	0	0	2	2
6:00-7:00	1	0	3	4
7:00-8:00	0	0	1	1
8:00-9:00	0	0	1	1
9:00-10:00	1	0	0	1
Grand Totals:	4	3	64	71

Redlight Violation Detail

Violations Time	Violations Type
10:16:46	Right Turn on Red
10:20:36	Right Turn on Red
10:26:39	Right Turn on Red
10:42:48	Right Turn on Red
10:52:42	Right Turn on Red
11:20:46	Right Turn on Red
11:23:36	Left Turn on Red
11:24:30	Right Turn on Red
11:39:16	Right Turn on Red
11:46:31	Left Turn on Red
11:54:43	Right Turn on Red
11:54:50	Right Turn on Red
12:04:40	Right Turn on Red
12:14:34	Right Turn on Red
13:24:18	Right Turn on Red
13:26:35	Right Turn on Red
14:06:35	Right Turn on Red
14:24:37	Right Turn on Red
15:20:20	Right Turn on Red
15:20:25	Right Turn on Red
15:21:24	Straight Through
16:06:51	Right Turn on Red
16:09:11	Right Turn on Red
16:32:37	Right Turn on Red
16:53:33	Right Turn on Red
16:55:51	Right Turn on Red
17:07:33	Right Turn on Red
17:07:37	Right Turn on Red
17:33:16	Right Turn on Red
17:33:25	Right Turn on Red
17:33:30	Right Turn on Red
17:33:33	Right Turn on Red
17:58:59	Right Turn on Red
18:36:18	Right Turn on Red
19:28:36	Right Turn on Red
19:51:19	Right Turn on Red
19:51:25	Right Turn on Red
20:29:16	Right Turn on Red
20:34:57	Right Turn on Red
20:38:38	Right Turn on Red
20:40:27	Right Turn on Red
20:42:41	Right Turn on Red
20:54:28	Right Turn on Red

Violation Time	Violation Type
21:12:26	Right Turn on Red
22:20:56	Right Turn on Red
22:22:41	Right Turn on Red
22:43:17	Right Turn on Red
23:12:31	Right Turn on Red
23:41:18	Straight Through
23:57:20	Right Turn on Red
1:03:58	Right Turn on Red
1:54:06	Right Turn on Red
2:13:18	Right Turn on Red
2:13:19	Right Turn on Red
2:13:23	Right Turn on Red
2:58:18	Right Turn on Red
2:58:22	Right Turn on Red
2:58:25	Right Turn on Red
3:44:06	Right Turn on Red
3:48:01	Straight Through
4:25:26	Right Turn on Red
4:26:16	Right Turn on Red
5:10:14	Right Turn on Red
5:41:29	Right Turn on Red
6:06:46	Right Turn on Red
6:25:27	Right Turn on Red
6:39:19	Left Turn on Red
6:59:26	Right Turn on Red
7:00:24	Right Turn on Red
8:46:33	Right Turn on Red
9:06:29	Left Turn on Red



D. Crash Data

DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

Report No : SDM-RC001
 Sorted by : Mile / Date / ICR



Report Produced : 8/18/2017 8:55 AM
 By: CENTRALVADAMSCII
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Coordinate Collision Diagram Report

1/1/2015 to 12/31/2015

For XCoordinate 2965353.36671526 : YCoordinate 1828898.26561306 | Foot Tolerance : 100 | County : Cook | Intersection Related: Intersections | *See Notes at End of Report.

TOTAL CRASHES	FATAL CRASHES	A INJURY CRASHES	B INJURY CRASHES	C INJURY CRASHES	PROPERTY DAMAGE CRASHES	TOTAL KILLED	TOTAL INJURED	A INJURIES	B INJURIES	C INJURIES
20	0	0	2	2	16	0	8	0	5	3

Type of Crash	Total	%	Day of Week	Total	%	Hour of Day	Total	%	Vehicle Type	Total	%
Angle	3	15.0%	Monday	2	10.0%	02 AM	1	5.0%	Other	2	4.4%
Rear End	10	50.0%	Tuesday	5	25.0%	08 AM	1	5.0%	Passenger	25	55.0%
Side Swipe Opposite Direction	1	5.0%	Wednesday	2	10.0%	07 AM	1	5.0%	Pickup	3	6.7%
Side Swipe Same Direction	1	5.0%	Thursday	1	5.0%	10 AM	2	10.0%	SUV	3	17.3%
Turning	5	25.0%	Friday	4	20.0%	11 AM	2	10.0%	Taxi/White School Trailer	1	2.2%
TOTAL:	20		Saturday	2	10.0%	Noon	1	5.0%	Truck	1	2.2%
			Sunday	4	20.0%	1 PM	3	15.0%	Van/Minivan	5	11.1%
			TOTAL:	20		2 PM	1	5.0%	TOTAL:	45	
						3 PM	1	5.0%			
						4 PM	1	5.0%			
						5 PM	1	5.0%			
						6 PM	1	5.0%			
						7 PM	2	10.0%			
						8 PM	1	5.0%			
						9 PM	1	5.0%			
						10 PM	1	5.0%			
						TOTAL:	20				
Weather Cond	Total	%	Light Cond	Total	%	Road Surface	Total	%	DIRP	Total	%
Clear	17	85.0%	Darkness - Lighted Road	3	40.0%	Dry	13	90.0%	Car	11	24.4%

Report No : SDM-RC001
 Sorted by : Mile / Date / ICR



Report Produced : 8/18/2017 8:54 AM
 By: CENTRALVADAMSC11
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Coordinate Collision Diagram Report

1/1/2014 to 12/31/2014

For XCoordinate 2965353.36671526 : YCoordinate 1828898.26561306 | Foot Tolerance : 100 | County : Cook | Intersection Related: Intersections | *See Notes at End of Report.

TOTAL CRASHES	FATAL CRASHES	A INJURY CRASHES	B INJURY CRASHES	C INJURY CRASHES	PROPERTY DAMAGE CRASHES	TOTAL KILLED	TOTAL INJURED	A INJURIES	B INJURIES	C INJURIES
14	0	0	1	4	9	0	5	0	1	4

Type of Crash	Total	%	Day of WK	Total	%	Hour of Day	Total	%	Vehicle Type	Total	%
Rear End	9	64.3%	Monday	1	7.1%	Midnight	1	7.1%	Passenger	10	64.3%
Turning	5	35.7%	Tuesday	3	21.4%	08 AM	1	7.1%	Pickup	3	10.7%
TOTAL:	14		Wednesday	4	28.6%	09 AM	3	21.4%	SUV	5	17.9%
			Thursday	2	14.3%	09 AM	1	7.1%	Taxi/With Sign Trailer	1	3.6%
			Friday	3	21.4%	10 AM	1	7.1%	Van/Minivan	1	3.6%
			Sunday	1	7.1%	11 AM	1	7.1%	TOTAL:	28	
			TOTAL:	14		2 PM	1	7.1%			
						3 PM	1	7.1%			
						8 PM	1	7.1%			
						9 PM	1	7.1%			
						10 PM	1	7.1%			
						11 PM	1	7.1%			
						TOTAL:	14				

Weather Cond	Total	%	Light Cond	Total	%	Road Surface	Total	%	DIRP	Total	%
Clear	12	85.7%	Darkness - Lighted Road	4	28.6%	Dry	12	85.7%	Car	12	42.9%
Cloudy/Overcast	1	7.1%	Dark	1	7.1%	Snow or Slush	1	7.1%	Sedan	5	17.9%
Other	1	7.1%	Daylight	3	21.4%	Wet	1	7.1%	Suvs/Trucks	3	10.7%
TOTAL:	14					TOTAL:	14				

Report No: SDM-RC001
 Sorted by: Mile / Date / ICR



Report Produced: 8/18/2017 8:53 AM
 By: CENTRALVADAMSC11
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Coordinate Collision Diagram Report

1/1/2013 to 12/31/2013

For XCoordinate 2965353.36671526 : YCoordinate 1828898.26561306 | Foot Tolerance : 100 | County : Cook | Intersection Related: Intersections | *See Notes at End of Report.

TOTAL CRASHES	FATAL CRASHES	A INJURY CRASHES	B INJURY CRASHES	C INJURY CRASHES	PROPERTY DAMAGE CRASHES	TOTAL KILLED	TOTAL INJURED	A INJURIES	B INJURIES	C INJURIES
17	0	1	1	1	14	0	6	1	1	2

Type of Crash	Total	%	Day of Week	Total	%	Hour of Day	Total	%	Vehicle Type	Total	%
Rear End	9	32.9%	Monday	1	5.9%	07 AM	1	5.9%	Bus/Over 15 Passengers	1	2.9%
Side/Swipe Same Direction	3	17.6%	Tuesday	2	11.3%	08 AM	1	5.9%	Bus/Over 15 Passengers	1	2.9%
Turning	5	29.4%	Wednesday	4	23.5%	09 AM	4	23.5%	Passenger	19	32.3%
TOTAL:	17		Thursday	5	29.4%	10 AM	2	11.3%	Pickup	2	5.6%
			Friday	2	11.3%	11 AM	1	5.9%	SUV	4	11.1%
			Saturday	2	11.3%	Noon	1	5.9%	Taxi/With Sign Trailer	1	2.9%
			Sunday	1	5.9%	1 PM	1	5.9%	Truck Single Unit	3	8.3%
			TOTAL:	17		2 PM	2	11.3%	Truck	1	2.9%
						3 PM	1	5.9%	Van/Minivan	4	11.1%
						4 PM	1	5.9%	TOTAL:	38	
						5 PM	2	11.3%			
						TOTAL:	17				

Weather Cond	Total	%	Light Cond	Total	%	Road Surface	Total	%	DIRP	Total	%
Clear	11	64.7%	Darkness - Lighted Road	2	11.3%	Dry	15	89.2%	Car	9	25.0%
Cloudy/Overcast	3	17.6%	Daylight	16	92.4%	Unknown	1	5.9%	None	11	30.8%
Rain	2	11.3%	Unknown	1	5.9%	Wet	1	5.9%	None	2	5.6%
Unknown	1	5.9%	TOTAL:	17		TOTAL:	17		None	1	2.9%
TOTAL:	17								Sign	3	8.3%

III. Moving Forward

SafeSpeed, LLC, recommends going forward with the vendor transfer process on the following approach(es):

- 1. 127th St and Pulaski Rd (Westbound)**

The next page shows the general RLR permit process flow chart provided by IDOT.

Illinois Department of Transportation Red Light Running Process Flow Chart

