

Hanover Park Police Department

RLR FOLLOW-UP EVALUATION REPORT

Permit Number: 1-T-09-0090	
Reference Number: 016-44484	Date: 01/01/2014
Location: Hanover Park	Firm: GATSO

Intersection Location & RLR Camera Approaches	IL US RT 20/Lake St at Barrington Rd
Date of RLR Camera Implementation	July 1, 2009
Crash Data – Including 3 years prior to RLR Camera Installation with Post Period Crash Data	<u>See Attached</u>
Analysis of Crash Data	<u>See Attached</u>
Signal Timing Changes	No Changes have been made
Traffic Volumes before and after RLR Cameras	<u>See Attached</u>
Recommendations	<u>See Attached</u>
Summary of Adjudication Experience & Results.	<p align="center">**Program Totals**</p> <ul style="list-style-type: none"> ➤ Adjudications – 396 ➤ In Person – 280 ➤ Contest by Mail – 116 ➤ Liable – 354 ➤ Not Liable – 43

Total Tickets Issued as of June 30, 2013

10,564 Red Light Violations / Citations Issued (July 1, 2009 thru June 30, 2013)

Crash Data Including 3 years prior to RLR Camera Installation:

<i>January 1, 2006 – December 31, 2006</i>	<i>Within the Boundaries of the Intersection</i>	<i>Within 100' of the Intersection on the Approach</i>	<i>Total Crashes</i>
<i>Rear End</i>	2	11	13
<i>Angle</i>	4	0	4
<i>Turning</i>	6	0	6
<i>Side Swipe Same Direction</i>	0	3	3
<i>Head On</i>	0	0	0
<i>Fixed Object</i>	0	4	4
<i>Other Object</i>	0	0	0
<i>Other Non-Collision</i>	0	1	1
<i>Pedacyclist</i>	0	0	0
<i>Total</i>	12	19	31

**Prior to RLR Camera Installation*

<i>January 1, 2007 – December 31, 2007</i>	<i>Within the Boundaries of the Intersection</i>	<i>Within 100' of the Intersection on the Approach</i>	<i>Total Crashes</i>
<i>Rear End</i>	2	26	28
<i>Angle</i>	11	1	12
<i>Turning</i>	8	0	8
<i>Side Swipe Same Direction</i>	0	4	4
<i>Head On</i>	1	0	1
<i>Fixed Object</i>	0	0	0
<i>Other Object</i>	0	2	2
<i>Other Non-Collision</i>	0	1	1
<i>Pedacyclist</i>	0	0	0
<i>Total</i>	22	34	56

**Prior to RLR Camera Installation*

<i>January 1, 2008 – December 31, 2008</i>	<i>Within the Boundaries of the Intersection</i>	<i>Within 100' of the Intersection on the Approach</i>	<i>Total Crashes</i>
<i>Rear End</i>	<i>1</i>	<i>24</i>	<i>25</i>
<i>Angle</i>	<i>5</i>	<i>0</i>	<i>5</i>
<i>Turning</i>	<i>9</i>	<i>2</i>	<i>11</i>
<i>Side Swipe Same Direction</i>	<i>1</i>	<i>6</i>	<i>7</i>
<i>Head On</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Fixed Object</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Other Object</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Other Non-Collision</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Pedacyclist</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Total</i>	<i>16</i>	<i>32</i>	<i>48</i>

**Prior to RLR Camera Installation*

<i>January 1, 2009 – June 30, 2009</i>	<i>Within the Boundaries of the Intersection</i>	<i>Within 100' of the Intersection on the Approach</i>	<i>Total Crashes</i>
<i>Rear End</i>	<i>1</i>	<i>15</i>	<i>16</i>
<i>Turning</i>	<i>4</i>	<i>1</i>	<i>5</i>
<i>Angle</i>	<i>2</i>	<i>0</i>	<i>2</i>
<i>Side Swipe Same Direction</i>	<i>0</i>	<i>1</i>	<i>1</i>
<i>Head On</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Fixed Object</i>	<i>0</i>	<i>1</i>	<i>1</i>
<i>Other Object</i>	<i>0</i>	<i>1</i>	<i>1</i>
<i>Other Non-Collision</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Pedacyclist</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Total</i>	<i>7</i>	<i>19</i>	<i>26</i>

**Prior to RLR Camera Installation*

<i>July 1, 2009 – June 30, 2010</i>	<i>Within the Boundaries of the Intersection</i>	<i>Within 100' of the Intersection on the Approach</i>	<i>Total Crashes</i>
<i>Rear End</i>	0	44	44
<i>Turning</i>	3	0	3
<i>Angle</i>	3	0	3
<i>Side Swipe Same Direction</i>	1	5	6
<i>Head On</i>	0	0	0
<i>Fixed Object</i>	0	1	1
<i>Other Object</i>	0	1	1
<i>Other Non-Collision</i>	0	0	0
<i>Pedacyclist</i>	0	0	0
<i>Total</i>	7	51	58

<i>July 1, 2010 – June 30, 2011</i>	<i>Within the Boundaries of the Intersection</i>	<i>Within 100' of the Intersection on the Approach</i>	<i>Total Crashes</i>
<i>Rear End</i>	1	45	46
<i>Angle</i>	4	0	4
<i>Turning</i>	5	0	5
<i>Side Swipe Same Direction</i>	0	5	5
<i>Head On</i>	0	0	0
<i>Fixed Object</i>	0	0	0
<i>Other Object</i>	0	1	1
<i>Other Non-Collision</i>	0	0	0
<i>Pedacyclist</i>	0	0	0
<i>Total</i>	10	51	61

<i>July 1, 2011 – June 30, 2012</i>	<i>Within the Boundaries of the Intersection</i>	<i>Within 100' of the Intersection on the Approach</i>	<i>Total Crashes</i>
<i>Rear End</i>	0	23	23
<i>Angle</i>	4	0	4
<i>Turning</i>	7	0	7
<i>Side Swipe Same Direction</i>	0	2	2
<i>Head On</i>	0	0	0
<i>Fixed Object</i>	0	0	0
<i>Other Object</i>	0	0	0
<i>Other Non-Collision</i>	0	0	0
<i>Pedacyclist</i>	1	0	1
<i>Total</i>	12	25	37

<i>July 1, 2012 – June 30, 2013</i>	<i>Within the Boundaries of the Intersection</i>	<i>Within 100' of the Intersection on the Approach</i>	<i>Total Crashes</i>
<i>Rear End</i>	1	30	31
<i>Angle</i>	0	0	0
<i>Turning</i>	5	0	5
<i>Side Swipe Same Direction</i>	1	3	4
<i>Head On</i>	0	0	0
<i>Fixed Object</i>	0	0	0
<i>Other Object</i>	0	0	0
<i>Other Non-Collision</i>	0	0	0
<i>Pedacyclist</i>	0	0	0
<i>Total</i>	7	33	40

Analysis of Crash Data:

The following is an analysis of the crash data from January 1, 2006 to June 30, 2013 at the intersection of Barrington and Lake. Traffic crashes are reported by specific categories, (i.e. Head on, Rear end, Angle, Side Swipe Same Direction, Turning, and Side Swipe Opposite Direction).

A review of traffic crashes at the intersection prior to the implementation of the red light camera was conducted. Between July 1, 2006 and June 30, 2009 there were between 38-56 crashes per year at that location. Of those total crashes per year, 14-21 crashes occurred within the boundaries of the intersection, and 22-36 crashes occurred within 100 feet on the approach to the intersection.

The RLR cameras were installed in 2009. The cameras were placed into operation on June 16, 2009 and only issued warning tickets to violators for a 30-day period. Beginning July 16, 2009 the cameras began issuing actual monetary tickets.

July 1, 2009 thru June 30, 2010: There were a total of 58 crashes of which 7 were within the intersection and 51 were within 100' feet on the approach to the intersection. Although there was an increase in the total number of crashes at the intersection, the number of crashes that occurred within the boundaries of the intersection was half of the lowest numbers recorded in the three years prior to the installation of the red light cameras.

July 1, 2010 thru June 30, 2011: There were a total of 61 crashes of which 10 were within the intersection and 51 were within 100' feet on the approach to the intersection. Although there was an increase in total number of crashes at the intersection, the number of crashes that occurred within the boundaries of the intersection lower than any of the three years prior to the installation of the red light cameras.

July 1, 2011 thru June 30, 2012: There were a total of 37 crashes of which 12 were within the intersection and 25 were within 100' feet on the approach to the intersection. Although there was an increase in total number of crashes at the intersection, the crash totals were on the lower end of the crash totals observed prior to the installation of the cameras. The number of crashes that occurred within the boundaries of the intersection was lower than any of the three years prior to the installation of the red light cameras.

July 1, 2012 thru June 30, 2013: There were a total of 40 crashes of which 7 were within the intersection and 33 were within 100' feet on the approach to the intersection. Although there was a slight increase in the total number of crashes at the intersection, the crash totals were on the lower end of the crash totals observed prior to the installation of the cameras. The number of crashes that occurred within the boundaries of the intersection was half of the lowest numbers recorded in the three years prior to the installation of the red light cameras.

When looking at the accidents that occurred within the boundaries of the intersection, a majority were turning and angle collisions. Side swipe same direction is generally the same each year, and is essentially nonexistent. Rear-end collisions are relatively low in number and are consistent in each of the years studied. There were only 1 head on collisions that occurred in 2007.

When looking at the accidents that occurred within 100' of the intersection on the approach, a majority were rear-end collisions followed by side swipe in the same direction.

Traffic Volumes Before & After RLR:

The Illinois Department of Transportation only tracks the average daily traffic counts for state roadways every other year. County roads they only collect counts approximately every four years.

AVERAGE DAILY TRAFFIC COUNTS		
INTERSECTION	2006-2009	2010-2012
U.S Route 20 Lake & Barrington N/B	18,200	19,400
U.S Route 20 Lake & Barrington E/B	36,200	38,500
U.S Route 20 Lake & Barrington W/B	60,700	56,400
U.S Route 20 Lake & Barrington S/B	28,300	30,700

Summary of Adjudication Experience and Results:

The following is a summary of the adjudication process from July 1, 2009 to June 30, 2013. The table reflects the RLR location of Barrington and U.S 20/Lake Street, which is the only RLR system installed in the village at this time. This summary further reflects the amount of fines paid by violators; fees paid to GATSO for their services and the outcome of the violations.

Early in the process there were a higher number of citations issued at this intersection and a higher number of hearings requested. This was part of the education process for the motorist, and it was expected that the numbers would be higher in the beginning.

Date	Citations	RT Turn	Paid Violation	GATSO	Hearings	Liabe	Not Liabe	Mail
Jul-09	433	29	9600	11790	0	0	0	0
Aug-09	282	20	26300	6240	12	11	1	2
Sep-09	444	87	24800	12630	8	8	0	3
Oct-09	334	47	34900	8280	18	18	0	3
Nov-09	300	50	27140	8760	12	11	1	4
Dec-09	276	27	23520	8700	17	15	2	4
Jan-10	180	19	22520	5400	13	10	3	3
Feb-10	135	9	17400	2400	22	22	0	3
Mar-10	175	4	15200	4590	7	6	1	2
Apr-10	255	0	10920	7050	9	9	0	2

Date	Citations	RT Turn	Paid Violation	GATSO	Hearings	Liable	Not Liable	Mail
May-10	331	34	20520	9960	3	3	0	1
Jun-10	240	24	27720	5610	12	12	0	1
Jul-10	159	25	18800	4260	16	14	2	4
Aug-10	165	18	16320	4920	7	4	3	1
Sep-10	309	22	17400	7710	7	1	6	0
Oct-10	296	26	26700	9780	7	7	0	3
Nov-10	216	25	18320	7920	8	7	1	2
Dec-10	202	6	22100	3000	10	10	0	3
Jan-11	172	2	17500	7740	15	15	0	4
Feb-11	138	4	13500	4710	21	20	1	9
Mar-11	193	12	15200	3930	9	9	0	4
Apr-11	200	4	17000	7500	4	4	0	3
May-11	184	10	13300	5130	6	6	0	2
Jun-11	191	5	14300	5910	5	5	0	0
Jul-11	293	9	17300	9270	3	3	0	2
Aug-11	197	8	22100	5400	9	9	0	0
Sep-11	220	25	15100	5310	7	7	0	3
Oct-11	202	17	19100	6210	3	3	0	1
Nov-11	143	25	18300	4680	3	2	1	1
Dec-11	170	34	12200	5640	8	5	3	3
Jan-12	190	24	15700	5790	6	6	0	1
Feb-12	178	24	14200	5070	8	7	1	3
Mar-12	200	30	13500	5970	5	5	0	3
Apr-12	217	27	20600	6270	3	3	0	2
May-12	350	33	17900	9660	6	2	4	3
Jun-12	309	27	24600	9840	11	10	1	6
Jul-12	389	28	29800	7620	10	8	2	2
Aug-12	386	36	29400	16500	13	12	1	5
Sep-12	275	37	30620	7320	14	12	2	5
Oct-12	224	15	25320	7560	3	3	0	1
Nov-12	145	5	18000	5310	9	7	2	5
Dec-12	92	1	10100	2880	7	4	3	2
Jan-13	91	2	10400	2670	7	6	1	0
Feb-13	58	1	7600	1860	4	4	0	3
Mar-13	47	23	18000	900	10	10	0	1
Apr-13	130	24	4650	3480	3	3	0	1
May-13	235	24	1050	4950	1	1	0	1
Jun-13	237	29	17000	4920	5	4	1	1
TOTALS	10,564	993	868,820	303,030	396	354	43	116

RECOMMENDATIONS:

Upon reviewing the analysis of the traffic crash data, RLR violations and adjudication results, it is the recommendation of the Hanover Park Police Department to continue our current enforcement efforts and education at this location. At this time there are no improvements that can be made of any significance that would increase the safety at this intersection.

CONCLUSION:

Accidents within the intersection seem to be declining overall. This is likely weather related with winter weather.

With continued enforcement efforts along with the installation of the RLR program, Hanover Park has taken the necessary steps to reduce the risks of "serious" traffic crashes at the intersection of U.S Route 20/Lake St and Barrington Rd. Hanover Park will continue to monitor the location and continue with traffic studies to identify any potential risks or hazards.

Should you have any questions or need additional information please contact me at 630-823-5509.

Regards,

Lieutenant Joseph Ciancio
Hanover Park Police Department