



Per the Illinois Compiled Statutes, 625 ILCS 5/11-208.6 Automated Traffic Law Enforcement System:

*(k-7) A municipality or county operating an automated traffic law enforcement system shall conduct a statistical analysis to assess the safety impact of each automated traffic law enforcement system at an intersection following installation of the system. The statistical analysis shall be based upon the best available crash traffic and other data, and shall cover a period of time before and after installation of the system sufficient to provide a statistically valid comparison of safety impact. The statistical analysis shall be consistent with professional judgment and acceptable industry practice. The statistical analysis also shall be consistent with the data required for valid comparisons of before and after conditions and shall be conducted within a reasonable period following the installation of the automated traffic law enforcement system. The statistical analysis required by this subsection (k-7) shall be made available to the public and shall be published on the website of the municipality or county. If the statistical analysis for the 36-month period following installation of the system indicates that there has been an increase in the rate of accidents at the approach to the intersection monitored by the system, the municipality or county shall undertake additional studies to determine the cause and severity of the accidents, and may take any action that it determines is necessary or appropriate to reduce the number or severity of the accidents at that intersection.*

A Red Light Running (RLR) Photo Enforcement System was installed at the intersection of Milwaukee Avenue & Palatine (Frontage) Road on September 19th, 2008, after finding limited success with other attempted measures to promote safer driving and improve compliance with traffic laws. The following statistical analysis was performed through 2015. Calendar year 2016 was not included as the Illinois Department of Transportation (IDOT) has not yet completed collecting all data. The statistical analysis will be updated annually, as collected data becomes available from IDOT.



## Milwaukee Avenue at Palatine (Frontage) Road Prospect Heights, IL

- RLR Photo Enforcement System monitors violations occurring on the eastbound approach of the intersection exiting the ramp from Palatine Road
- RLR Photo Enforcement System installed: September 19th, 2008





**Palatine (Frontage) Road Eastbound Approach**



**Milwaukee Avenue Northwest-bound Approach**





**Milwaukee Avenue Southeast-bound Approach**



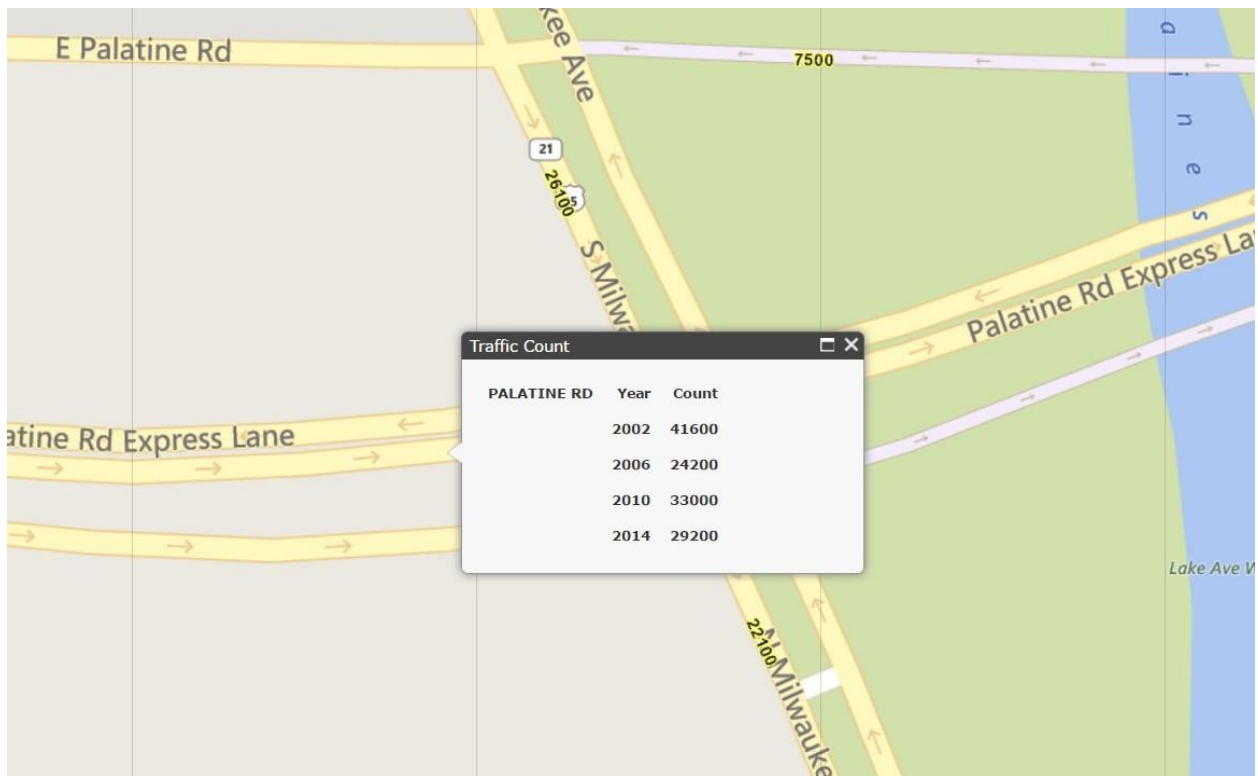


## Average Daily Traffic

Data was obtained from the Illinois Department of Transportation's website [www.gettingaroundillinois.com](http://www.gettingaroundillinois.com).

Palatine Road (Eastbound\*)

- 41,600 (2002)
- 24,200 (2006)
- 33,000 (2010)
- 29,200 (2014)



\*Palatine (Frontage) Road Eastbound Historic Average Daily Traffic was unavailable at time of reporting.

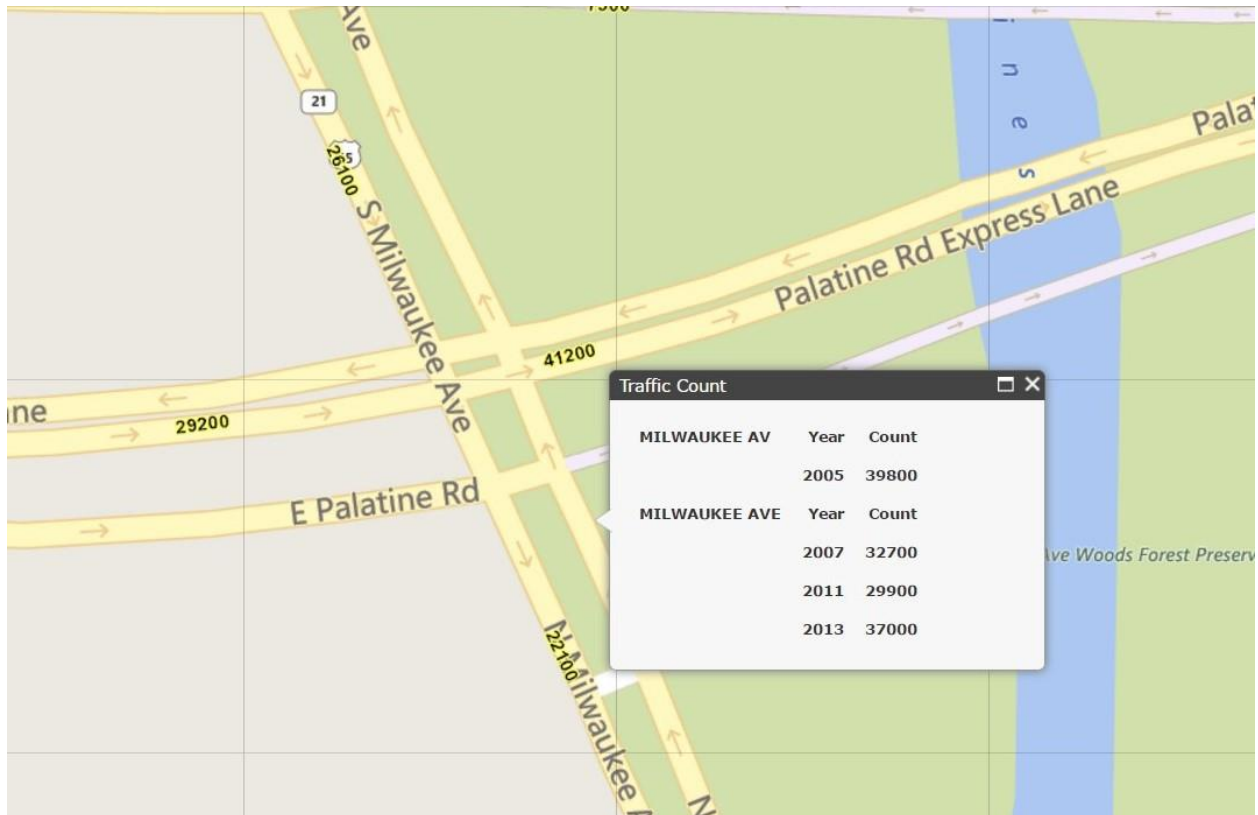


## **Average Daily Traffic (continued)**

Data was obtained from the Illinois Department of Transportation's website [www.gettingaroundillinois.com](http://www.gettingaroundillinois.com).

Milwaukee Avenue (Northwest-bound)

- 39,800 (2005)
- 32,700 (2007)
- 29,900 (2011)
- 37,000 (2013)



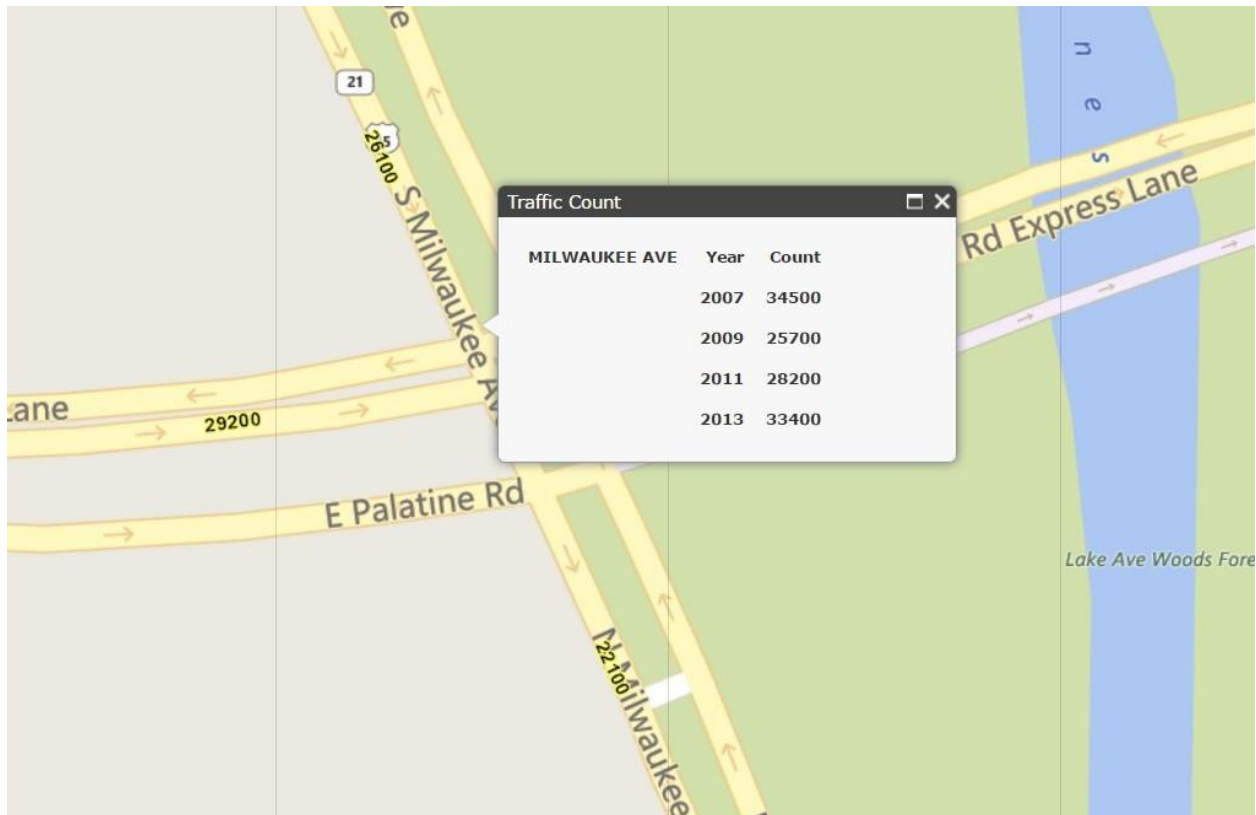


## **Average Daily Traffic (continued)**

Data was obtained from the Illinois Department of Transportation's website [www.gettingaroundillinois.com](http://www.gettingaroundillinois.com).

Milwaukee Avenue (Southeast-bound)

- 34,500 (2007)
- 25,700 (2009)
- 28,200 (2011)
- 33,400 (2013)





**Crash History and Analysis**

- Table 1 includes crash data obtained from the Illinois Department of Transportation, detailing angle, turning, rear-end, and other type crashes occurring at the intersection pre/post RLR Photo Enforcement System installation.

**ALL INTERSECTION APPROACHES**

	Crashes								
	Rear-End (% of Total)		Angle (% of Total)		Turning (% of Total)		Other (% of Total)		Total
2005	7	53.8%	3	23.1%	3	23.1%	0	0.00%	13
2006	3	37.5%	1	12.5%	2	25.0%	2	25.0%	8
2007	4	80.0%	1	20.0%	0	00.0%	0	00.0%	5
Total	14	53.9%	5	19.2%	5	19.2%	2	07.7%	26
2005-2007 Average	4.7		1.7		1.7		0.7		8.7

RLR Camera Installation 9/19/2008									
2008	3	75.0%	0	00.0%	1	25.0%	0	00.0%	4
2009	2	66.7%	0	00.0%	1	33.3%	0	00.0%	3
2010	3	37.5%	1	12.5%	4	50.0%	0	00.0%	8
2011	6	85.7%	0	00.0%	1	14.3%	0	00.0%	7
2012	5	62.5%	1	12.5%	1	12.5%	1	12.5%	8
2013	5	55.6%	1	11.1%	2	22.2%	1	11.1%	9
2014	4	80.0%	0	00.0%	1	20.0%	0	00.0%	5
2015	2	33.3%	1	16.7%	2	33.3%	1	16.7%	6
Total	27	58.7%	4	08.7%	12	26.1%	3	06.5%	46
2009-2015 Average	3.9		0.6		1.7		0.4		6.6

- Other indicates the following: Pedestrian, Pedal Cyclist, Fixed Object, Sideswipe, Head-On and Unknown

Table 1





**Crash History and Analysis (continued)**

- Table 2 includes crash data obtained from the Illinois Department of Transportation, detailing angle, turning, rear-end, and other-type crashes occurring at the intersection on the eastbound approach only, pre/post RLR Photo Enforcement System installation.

**EASTBOUND APPROACH ONLY  
 (PHOTO ENFORCED APPROACH)**

	Crashes								
	Rear-End (% of Total)		Angle (% of Total)		Turning (% of Total)		Other (% of Total)		Total
2005	2	28.6%	3	42.8%	2	28.6%	0	00.0%	7
2006	1	25.0%	1	25.0%	2	50.0%	0	00.0%	4
2007	0	00.0%	1	100.0%	0	00.0%	0	00.0%	1
Total	3	25.0%	5	41.7%	4	33.3%	0	00.0%	12
2005-2007 Average	1.0		1.7		1.3		0.0		4.0

RLR Camera Installation 9/19/2008									
2008	1	50.0%	0	00.0%	1	50.0%	0	00.0%	2
2009	2	66.7%	0	00.0%	1	33.3%	0	00.0%	3
2010	1	25.0%	1	25.0%	2	50.0%	0	00.0%	4
2011	2	66.7%	0	00.0%	1	33.3%	0	00.0%	3
2012	2	50.0%	1	25.0%	1	25.0%	0	00.0%	4
2013	0	00.0%	1	100.0%	0	00.0%	0	00.0%	1
2014	0	00.0%	0	00.0%	1	100.0%	0	00.0%	1
2015	0	00.0%	1	25.0%	2	50.0%	1	25.0%	4
Total	7	35.0%	4	20.0%	8	40.0%	1	05.0%	20
2009-2015 Average	1.0		0.6		1.1		0.1		2.9

- Other indicates the following: Pedestrian, Pedal Cyclist, Fixed Object, Sideswipe, Head-On and Unknown

Table 2



Comparison of annual averages shows the total number of crashes decreasing by 24% at the intersection for all approaches and by 28% on the eastbound (photo enforced) approach post-camera installation.

The US Department of Transportation Project Development and Design Manual states that turning, angel or head-on crashes have a number of probable crash causes, to include:

- Large volumes of left /right turns
- Large total intersection volume
- Excessive speed on approaches
- Inadequate traffic control devices
- Poor visibility of signals

While red light cameras cannot truly decrease the volume of cars entering the intersection, speed and proximity of vehicles entering an intersection or the amount of turning traffic volume, red light cameras and red light camera photo enforcement warning signs have the ability to reduce traffic crashes and improve compliance with traffic control devices.



## Adjudication Experience

RLR camera violations are contested and adjudicated through an administrative hearing conducted each month. Adjudication data for the City’s Automated Enforcement Program is shown below in Table 3.

<b>CITY OF PROSPECT HEIGHTS ADJUDICATION FOR AUTOMATED PHOTO ENFORCEMENT PROGRAM</b>		
<b>YEAR /TOTALS</b>	<b>LIABLE</b>	<b>NOT LIABLE</b>
2008	30	3
2009	172	32
2010	140	9
2011	84	11
2012	109	15
2013	229	28
2014	210	43
2015	111	36
2016	139	32
2017*	25	9
<b>TOTAL:</b>	<b>1,206</b>	<b>200</b>

*\*2017 adjudication data through March 2017.*

Table 3

The high quality video footage and photographic evidence produced by the enforcement system is a contributing factor in a majority of the contested RLR violations being upheld by the Hearing Officer. The police officers assigned to review and approve/reject potential violations are vigilant in applying the same officer discretion and criteria they would if issuing an in-person citation, resulting in only highly prosecutable violations being mailed out.