

Evaluation of 2015 Automated Traffic Enforcement Report

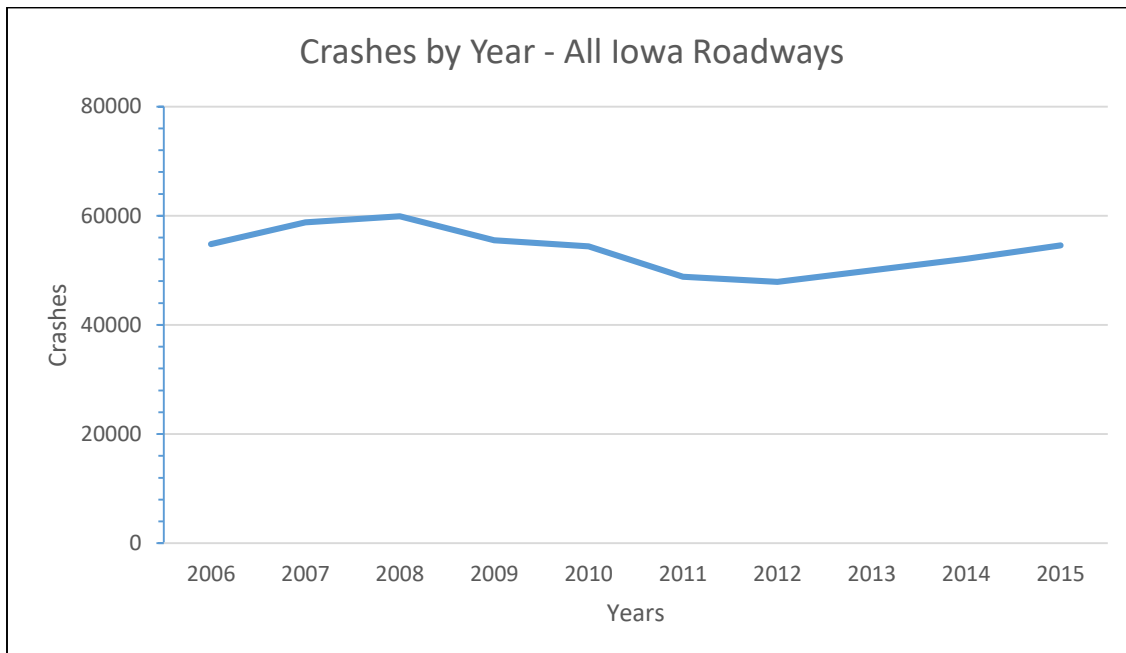
City of Council Bluffs

Introduction:

Automated traffic enforcement (ATE) is one of many safety countermeasures that can be used to enhance roadway safety. Automated enforcement may involve the enforcement of red-light running violations and speed limit violations. The city of Council Bluffs uses ATE systems to enforce red-light running violations at two signalized intersections on the primary highway system (in May 2016, the city of Council Bluffs assumed jurisdiction of portions of US 6 and Iowa 192 within the city limits, therefore eliminating DOT oversight on 5 intersections previously included in the DOT evaluation).

In 2012 Iowa State University developed a report titled, "Toolbox of Countermeasures to Reduce Red Light Running". The report documented that at signalized intersections, red-light running crashes make up 24.5% of all crashes and account for 31.7% of all fatal and major injury crashes. This toolbox is to aid practitioners in ways to identify and address red-light crashes at signalized intersections. The report focuses primarily on engineering and enforcement solutions. The report has two main parts; 1.) Guidelines to identify problem intersections and the causes of red-light running, and 2.) Roadway-based and enforcement countermeasures. This second part details 20 potential safety countermeasures that can be used at signalized intersections to address these types of crashes. Automated enforcement is one of those potential countermeasures.

The chart below shows the gradual changes in total crashes for the entire state of Iowa over the past 10 years.



Review of Council Bluffs Annual Report:

We have completed our review of your 2015 automated traffic enforcement (ATE) report as required in Iowa Administrative Code 761--144. The following documents were considered by the DOT in connection with this review:

- "2015 Annual Report, Automated Traffic Enforcement for the City of Council Bluffs"
- "The Effectiveness of Iowa's Automated Red Light Running Enforcement Programs, Final Report, 2007" by Center for Transportation Research and Education (CTRE) at Iowa State University;
- Intersection crash data obtained by the Iowa DOT using the Iowa crash database (includes all statewide reported crash reports)

Intersection red light cameras:

The city has red-light violation cameras at two intersections on the primary highway system. DOT's findings and resulting action for these locations are set forth below.

7th Street and Willow Ave

Findings:

- Camera activated 2005.
- Southbound approach subject to traffic camera enforcement.
- Crash data (city provided):
 - 1 in 2004
 - 1 in 2005– red light camera activated
 - 1 in 2006
 - 5 in 2007
 - 3 in 2008
 - 3 in 2009
 - 5 in 2010
 - 3 in 2011
 - 6 in 2012
 - 2 in 2013
 - 3 in 2014
 - 1 in 2015

- Crash data (DOT provided – includes all crashes using 75 feet radius):
 - 1 in 2004
 - 1 in 2005 – red light camera activated
 - 2 in 2006
 - 5 in 2007
 - 3 in 2008
 - 3 in 2009
 - 5 in 2010
 - 3 in 2011
 - 6 in 2012
 - 1 in 2013
 - 2 in 2014
 - 1 in 2015
- Total intersection crash data: 3.32 average crashes per year before activation (3 years of data); 2 average crashes per year after activation (1 year of data) – from CTRE/ISU study.

Resulting Action:

- Continue operation of red-light cameras at this location.

Harrison Street and East Kanesville Blvd

Findings:

- Cameras activated 2009.
- Eastbound and westbound approaches are subject to traffic camera enforcement.
- Crash data (city provided):
 - 9 in 2007
 - 12 in 2008
 - 5 in 2009 – red light camera activated
 - 8 in 2010
 - 7 in 2011
 - 5 in 2012
 - 11 in 2013
 - 6 in 2014
 - 17 in 2015

- Crash data (DOT provided – includes all crashes using 75 feet radius):
 - 2 in 2004
 - 3 in 2005
 - 4 in 2006
 - 10 in 2007
 - 12 in 2008
 - 5 in 2009 – red light camera activated
 - 8 in 2010
 - 7 in 2011
 - 5 in 2012
 - 11 in 2013
 - 12 in 2014
 - 16 in 2015

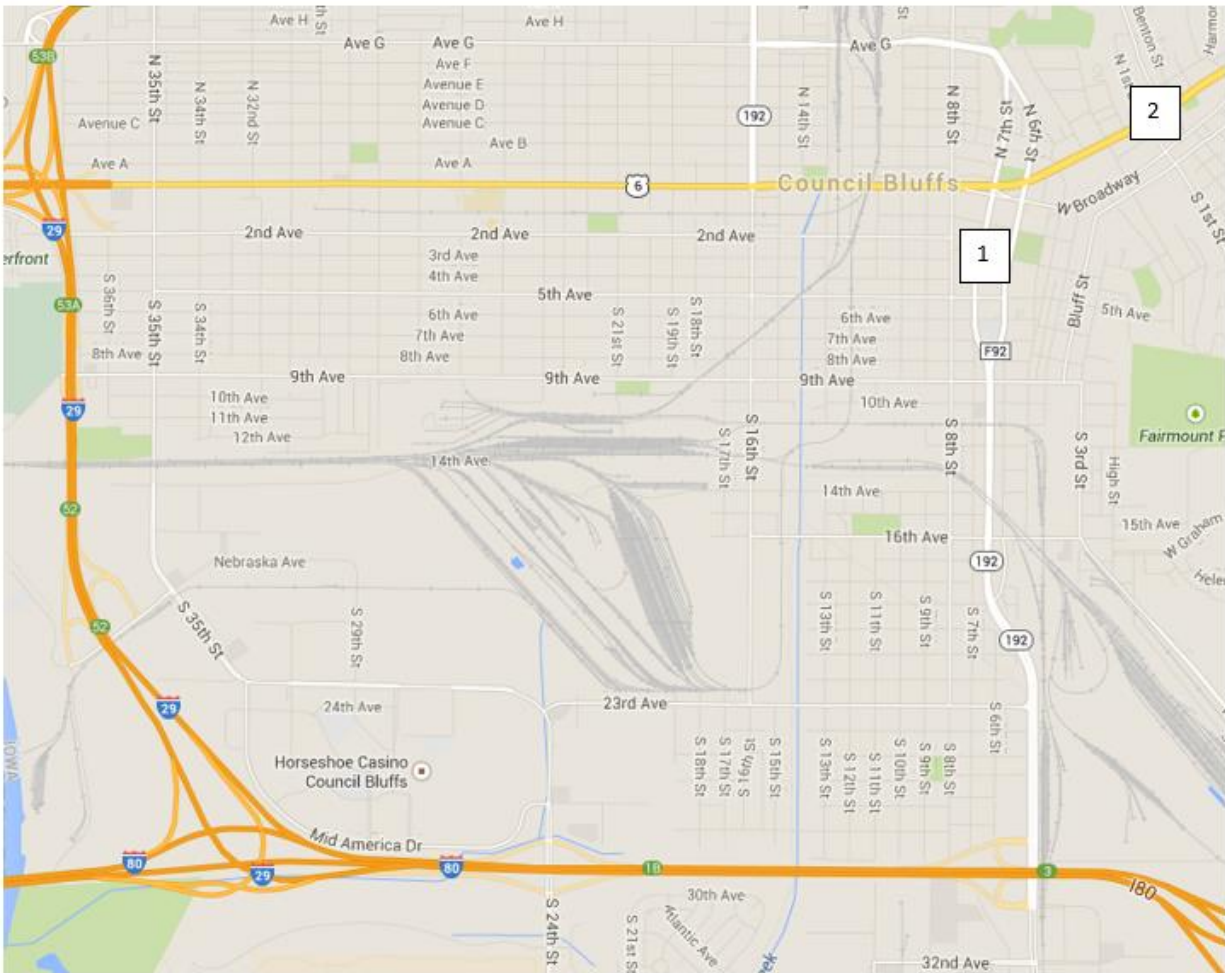
Resulting Action:

- Continue operation of red-light cameras at this location.

Summary:

Based on the results of this review, both of the automated traffic enforcement cameras may continue to be operated in accordance with Iowa Administrative Code 761—144. However, Harrison Street and East Kanesville Blvd does not appear to be showing a safety benefit in the most recent years. Because of the reconstruction of I-80/I-29 through Council Bluffs, the official routes of US 6 and Iowa 192 will be relocated and the City of Council Bluffs will take ownership of the existing roadways. Once this transfer-of-jurisdiction occurs, both of the intersections reviewed in this report will be off the primary highway system and therefore not subject to the requirements of Iowa Administrative Code 761—144. This planned transfer-of-jurisdiction was an important consideration when allowing the cameras to stay at the Harrison Street and East Kanesville Blvd intersection.

Map of Council Bluffs ATE systems on the primary highway system:



1. 7th St and Willow Ave
2. Harrison St and East Kanesville Blvd