City of Muscatine
Automated Traffic Enforcement
Report

The following report has been created in response to a public records request of the Iowa Department of Transportation Primary Highway System ATE guidelines, for the 2013 calendar year.

Background

In 2010, the City of Muscatine awarded the contract for our Automated Traffic Enforcement (ATE) initiative to Gatso USA. Through accident data as well as speed and red light violation surveys we decided that eight (8) approaches at five intersections would receive the equipment. The system was set up to monitor red light violations as well as speed violations at all five (5) intersections. The intersections selected for the ATE equipment were:

- Washington St at Park Ave (north and south approaches)
- Cleveland St at Park Ave (north and south approaches)
- Cedar St at Houser St (east and west approaches)
- University Dr at US Hwy 61 (westbound approach)
- Mulberry Ave at US Hwy 61 (westbound approach)

The ATE equipment was built and installed by Gatso USA at no cost to the City of Muscatine. The City and Gatso USA submitted engineered construction plans and worked closely with the Iowa Department of Transportation to ensure that the entire construction and sign placements were completed to their requirements. Winter weather delayed the construction process during December and January. Each intersection has speed limit signs and red light signs that clearly advise that photo enforcement equipment is used at those intersections. In addition to those signs, the City elected to put up “traffic laws photo enforced” signs on every corporate limit signs posts on roadways entering Muscatine.

The City developed with Gatso Business Rules. These rules set in writing how all different kinds of violation events should be handled by Gatso. Some examples were: what if an emergency vehicle commits a violation without their flashing lights turned on, and what if a city vehicle commits a violation. The camera/radar system detects violators and passes the violation information to a Gatso employee who applies the Business Rules and verifies that a violation appears to have occurred and then they create a violation package that includes location information, violation information and vehicle information. This event package is
then sent to our department for review. A police officer who attended an organized training class on the system reviews the data and determines if a violation of the city ordinance has actually occurred and if the violation, location and vehicle information matches what is viewed in the photos and video. If everything matches up and a violation has actually occurred then the officer will issue a citation. The officer’s approval is transmitted back to Gatso who then prints and mails the paper violation.

The ATE equipment not only detects and documents red light and speed violations but also has other capabilities. The system can be set for license plate recognition for Amber Alerts or other major crimes that occur close to these intersections. The video that the system archives has been used multiple times as evidence in court for citation issued due to traffic crashes in the area of the ATE equipment. The system also provides a live video view. This feature allows a city authorized person to look through the camera at the intersection whenever they may need to.

The paper citation the citizen received at their home contains color images of the violation and their license plate. Also contained are easy to read instructions explaining why they received the citations and how to pay it or request a hearing. The paper citation also contains information on a website where the citizen can view the still photos printed on the paper citations and also a video of the violation. There is also information about paying the citation on-line or requesting a hearing.

Prior to the implementation of the ATE equipment, public hearings and meetings were held during City Council meetings for at least a year prior to implementation, posters were put up at many locations across the city, informational pamphlets were distributed to the public and information was disseminated via email and the internet.

On March 11, 2011, the Automated Traffic Enforcement equipment was activated at the intersection of Cedar St and Houzer St. On March 18, 2011, the Automated Traffic Enforcement equipment was activated at the intersections of US Hwy 61 and Mulberry Ave, US Hwy 61 and University Ave and Park Ave and Cleveland St. Because of property questions and construction delays, the intersection of Washington St and Park Ave wasn’t active until May 21, 2011. Each intersection had a warning period of 30 days.

**Current Citation and Crash Statistics**

2013 was the second full calendar year with all of the intersections active and recording violations. During 2013 there were a total of 13,369 citations issued. 2580 citations were issued for red light violations and 10822 citations were issued
for speed violations. Comparing this data to the violations issued in 2012, there was a 14% (2,093) decrease in citations issued for calendar year 2013.

During 2012 (first full calendar year) there were a total of 15,462 citations issued. 2,677 citations were issued for red light violations and 12,785 citations were issued for speed violations. That equates to a 14% decline in violations from 2012 to 2013. For further comparison, if one were to compare 2013 to 2011, there has been a decline of 33% in the number of violations. Remember too, that in 2011 the automated traffic enforcement system were only operational for 10 months and not all were operational for that long.

The department continues to conduct calibration compliance checks for each radar head for the through lanes where the ATE equipment is set up. These checks are conducted by department officers in patrol cars equipped with speed measuring equipment. These calibration checks were conducted in January, April, July, October and December of 2013.

During the 2013 calendar year there were nineteen (19) motor vehicle crashes at the intersections monitored by the automated traffic enforcement equipment. Breaking this down further, there were fifteen (15) property damage crashes and four (4) injury crashes. In comparison, 2012 saw twenty six (26) motor vehicle crashes at these intersections with twenty (20) property damage crashes and six (6)
injury crashes. That equates to a twenty-seven percent (27%) decline in crashes from the previous year.

For further comparison one would look at 2010 which was the year prior to any ATE equipment being operational. In 2010 there were thirty-four (34) motor vehicle crashes at these same intersections with nine (9) of those classified as injury crashes and twenty-five (25) property damage.

The traffic cameras are having a positive impact on the traffic safety issues that the City has targeted as there have been significant reductions in motor vehicle crashes over the last three years. In addition, there has been a substantial reduction in speed and red light running violations at the intersections monitored by the automated traffic enforcement equipment.