



City of Salem Photo Red Light Program 2021 Legislative Report

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INTRODUCTION AND BACKGROUND

Introduction:

The City of Salem implemented a Photo Red Light Camera Enforcement Program in March 2008 to improve traffic safety at selected intersections in the city. In Q4 of 2019 the City of Salem added one fixed Speed on Green Photo Enforcement in at one of the existing Photo Red Light Camera intersections. Furthermore, in Q3 of 2020 the City of Salem added three more Photo Red Light cameras at three new intersections. With the addition of speed enforcement, the program is now called the Electronic Traffic Enforcement Program.

While red light and fixed speed enforcement cameras are not the end all solution for intersection safety problems, the use of Electronic Traffic Enforcement cameras has been shown to reduce the number of red-light and speeding violations, which in turn reduces red-light and speed related crashes. Red-light running and speeding are a precursor to angle, turning and rear-end crashes, which result in more severe injuries than other types of crashes. The Electronic Traffic Enforcement cameras will enhance traffic safety and will be a part of the City of Salem's overall approach which includes education, enforcement and engineering.

In response to what appeared to be a growing disregard for traffic laws in general and intersection red-lights in particular, the Oregon Legislature enacted a law in 1999, with subsequent expansions and revisions in 2001 and 2003, to help Oregon communities like Salem effectively enforce and reduce red-light running. The addition of speed enforcement at these fixed locations was added by the Oregon Legislature several years later.

The City of Salem has determined that the running of red-lights and speeding is an issue of public safety for our community and one that presents unique enforcement challenges. Cars that run red-lights and speed place themselves and others in peril. For law enforcement to catch these types of violations often requires a police car to proceed through the intersection against the same red-light, as well as violate the speed limit thus increasing the danger.

This situation is mitigated to some degree with the use of police motorcycles because they can position themselves better than a police car, but even with a police motorcycle the ability to observe and then pursue those that run red-lights is a challenge to the City of Salem Police.

Background:

The City of Salem operates red-light Electronic Traffic Enforcement Cameras at the following intersections;

Original Intersections:

1. Silverton Rd NE at Fisher Rd NE.
2. Commercial St NE at Marion St NE.
3. Mission St (Hwy 22E) at 25th St.

Speed on Green Enforcement added Q4 2019:

1. Silverton Rd NE at Fisher Rd NE.

New Intersections Added in Q3 2020:

4. Commercial St SE at Madrona Av SE
5. Kuebler Blvd SE at Commercial St SE
6. Center St SE at Hawthorne Av SE

The intersections were selected based on crash data as obtained from sources such as internal Records Management Systems, the Oregon Department of Transportation and on observed violations.

These intersections are located within the corporate city limits of Salem and two of these intersections have a state highway approach that is controlled by the Oregon Department of Transportation, which approved the program and the use and placement of the cameras.

The City of Salem encompasses 48.45 square miles in both Marion and Polk County and has an estimated population of 174,365 as of 2019 (US Census Bureau).

A significant issue facing the City of Salem is traffic management. There are four major factors that have a significant impact on the traffic volume in the area;

1. The City of Salem's resident population has grown by an estimated 37,441 people since 2000
2. There is a significant commuting traffic increase during normal business hours from Monday to Friday.
3. Mission St (Hwy 22E) is a major east-west thoroughfare for motorists, which connects to Hwy 22W for travelers trying to get to the Oregon coast.
4. Motorists also use Commercial St as a major north-south thoroughfare to connect from I5 to Hwy 22W.

As a result of these factors, the community feels the impact of an increase in both local and regional traffic. With the increase in traffic volume, there has been an increase in intersection related traffic crashes.

Redflex, the company which manages the electronic traffic enforcement cameras tracks information regarding to traffic volume flowing through the six intersections.

In 2012, the traffic volume at the three original intersections was recorded to be 7,936,482 per year. In 2019 the traffic volume at the original three intersections was recorded to be 22,168,630, which indicates a traffic volume increase of 65% compared to 2012. In 2020 the traffic volume at the original three intersections was recorded to be 18,996,690, which indicates a traffic volume increase of 59% compared to 2012. It should be noted the decrease in traffic volume in 2020 is likely due to a large reduction in traffic due to COVID restrictions throughout the year.

PUBLIC INFORMATION CAMPAIGN

The City of Salem conducted an extensive and thorough public information campaign regarding the proposed use of red-light camera enforcement, before the final decision was made to utilize photo red light and long before any cameras wherever installed. The campaign included presenting and providing information through the local media.

In 2019, the City of Salem conducted a similar public information campaign prior to adding the new intersections and the fixed Speed on Green enforcement.

Since the start of the Electronic Traffic Enforcement Program, the City of Salem has maintained public information through their legislative reports. The Police Department also fields calls periodically about the system and process for capturing violations and the secondary process involved for issuing citations.

PROCESS AND OUTCOME EVALUATION

Effects on Traffic Safety:

The City of Salem's Electronic Traffic Enforcement Program formally began when the cameras went operational in March 2008. For the first thirty (30) days, the system issued only warnings to those drivers who violated a red light. The system began issuing citations in April 2008. In 2019 and 2020 the City of Salem used a similar format when the speed on green enforcement and three new photo red light camera intersections were added

The charts below demonstrate the effectiveness of the red-light cameras in reducing red-light and speeding violations, since the photo red-light program has been in operation. It should be noted that comparing total numbers from year to year is somewhat difficult since the addition of the new intersections changes the total traffic volume, total of red-light violations and there is no comparison for speed violations as of this point.

Traffic Violations – Original Intersections:

For the three original intersections, if we compare total citations issued in 2009/10 to total citations issued in 2019/20, it appears there has been only a minor decrease in notices issued. However, if we compare total citations issued by traffic volume, it shows there has been a 51% decrease in the number of notices issued as compared to 2012/13.

Even with COVID travel restrictions and stay at home orders traffic volume is still up 57% since 2012/13. Current notices issued, relative to the traffic volume rate, indicates the rate was 1.89% in 2019/20 compared to 3.85% in 2012/13, which is a **51% reduction** overall.

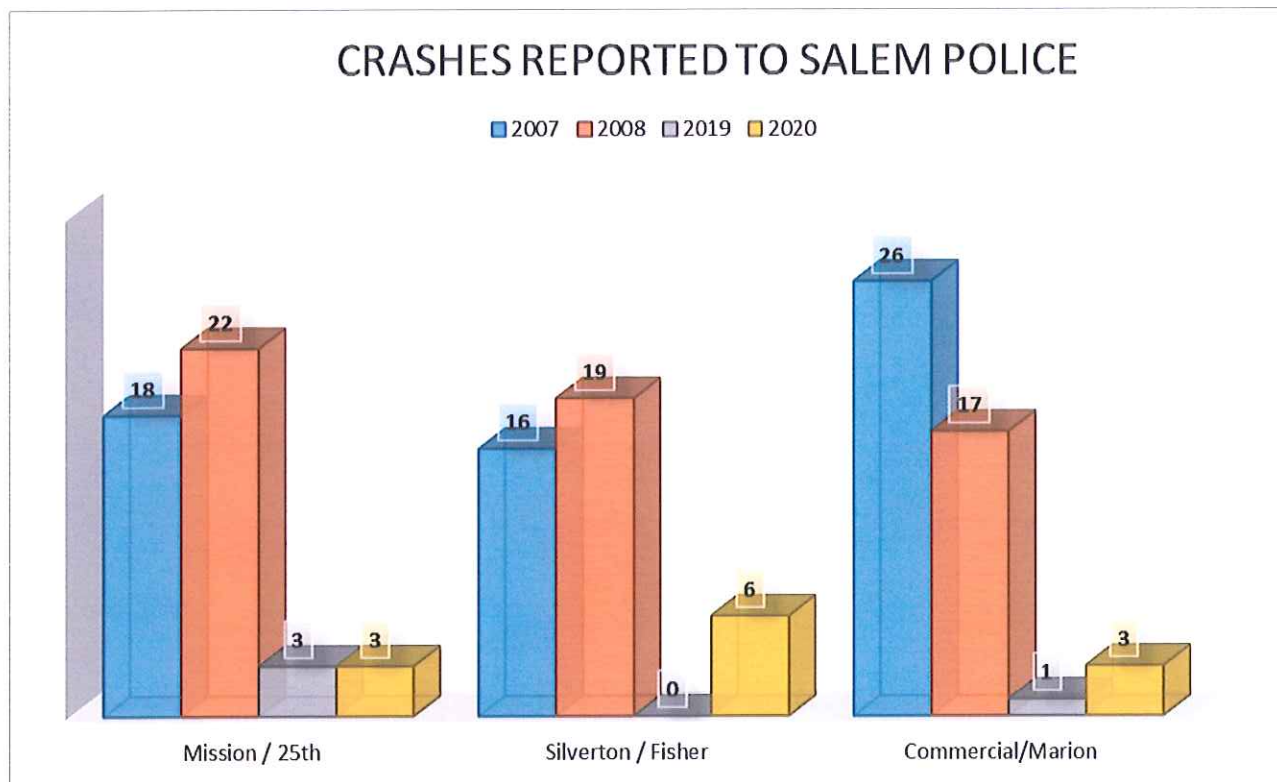
RED LIGHT NOTICES ISSUED VS. TRAFFIC VOLUME – ORIGINAL INTERSECTIONS			
YEAR	TOTAL VEHICLES	CITATIONS ISSUED	% TO VOLUME
2009	Unknown	4,333	Unknown
2010	Unknown	4,095	Unknown
2009/10 TOTAL	Unknown	8,428	Unknown
2012	7,936,482	3,543	4.5%
2013	9,964,471	3,280	3.2%
2012/13 TOTAL	17,900,953	6,823	3.85% Avg
2019	22,168,630	3,753	1.7%
2020	18,996,690	4,048	2.13%
2019/20 TOTAL	41,165,320	7,801	1.89% Avg
TOTAL CHANGE	57% Increase from 2012/13	7% Decrease from 2009/10	51% Decrease from 2012/13

Source: Redflex PRL Customer Management Report

Traffic Crashes:

Since the implementation of the PRL program, The City of Salem has had an overall **reduction** of traffic collisions at the original intersections by **87%**. Again, it should be noted that a significant increase in traffic volume has been seen through these intersections over the past several years, and yet there is still a reduction in intersection related crashes.

The chart below shows the number of crashes reported to the Salem Police Department at each intersection from 2007-2008 as compared to 2019-2020. This chart graphically represents the decrease in crashes at these intersections since photo red light was implemented.



Traffic Violations – New Intersections:

The three new photo red-light intersections have only been installed for six months as it pertains to this report. For these locations the red-light enforcement data is new and this report will serve as a historical benchmark for those locations. Currently, there is insufficient data to see if there has been an effective change in driving behavior through the number of citations issued.

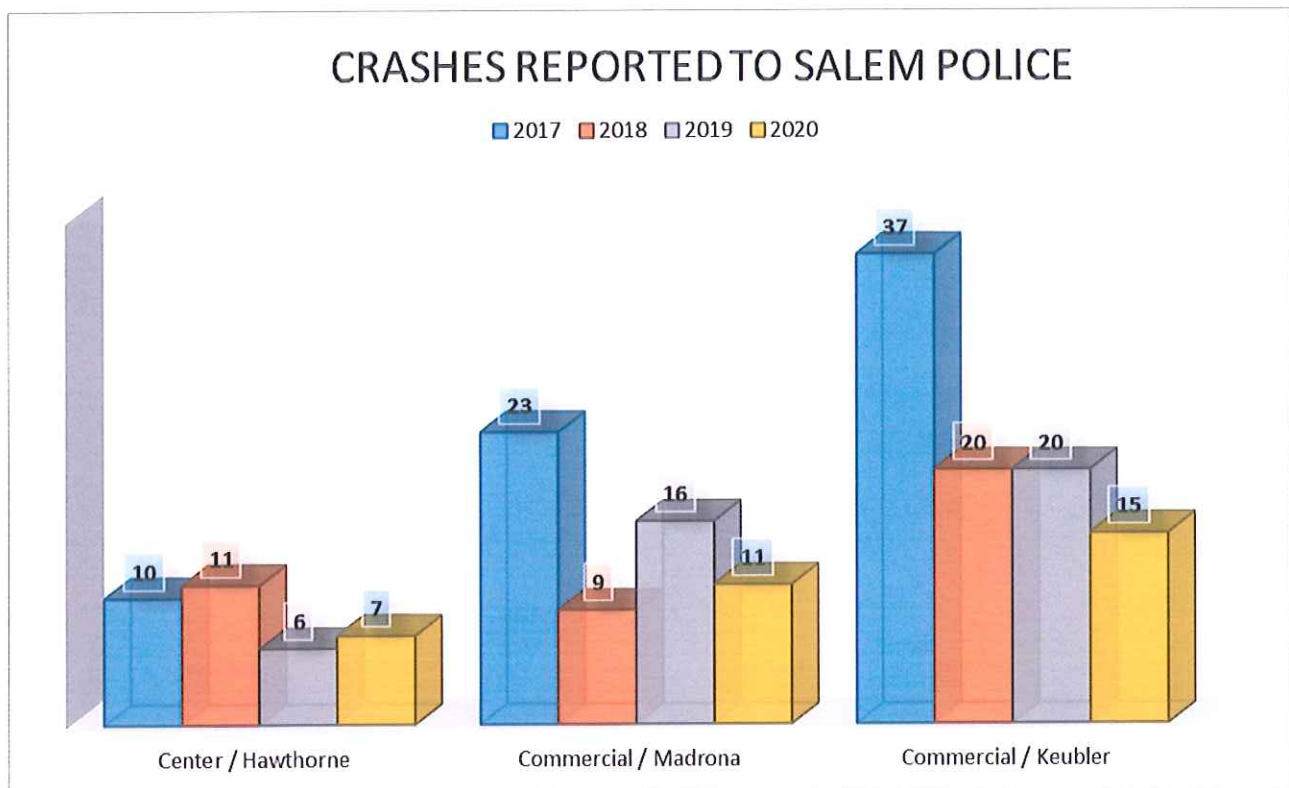
As such, the data shown in the chart below compares the first three months of red-light citations issued to the second three months of the project at these new intersections. Overall, there has been a minimal increase (3%) in the number of citations issued. It should be noted, however, that we are still in the early stages of the project. It is expected that there will be a change in driving behavior by the next biennial report.

RED LIGHT NOTICES ISSUED COMPARISON – NEW INTERSECTIONS			
YEAR	AVAIL FOR PROSECUTION	CITATIONS ISSUED	% TO VOLUME
07.2020-09.2020	1,877	1,674	89% Cites Issued
10.2020-12.2020	1,896	1,751	92% Cites Issued
2019/20 TOTAL	3,773	3,425	89% Cites Issued
TOTAL CHANGE	2% Increase from 1 st 3 Mo	5% Increase from 1 st 3 Mo	3% Increase from 1 st 3 Mo

Traffic Crashes – New Intersections:

As mentioned previously the three new intersections have only been active for six months. Considering that, the overall reduction of traffic crashes does not appear as great as the original intersections. Since the implementation of the three new red-light electronic enforcement intersections, the City of Salem has had an overall **reduction** of traffic collisions at the involved intersections by **32%**.

The chart below shows the number of crashes reported to the Salem Police Department at each intersection from 2017-2018 as compared to 2019-2020. This chart graphically represents the decrease in crashes at these intersections since photo red-light electronic enforcement was implemented.



Source: ODOT and Salem Police Records

Traffic Violations – Speed on Green:

The one new speed on green intersection has been installed for 16 months as it pertains to this report. For this location, the speed on green enforcement data is new and this report will serve as a historical benchmark for this location. For the purposes of this report we will compare citations issued in the first eight-months to the second eight-months of the program.

In the first eight-months of the speed cameras being installed there were **2,913** citations issued for speeding. In the second eight months there were **2,433** citations issued for speeding. This shows a **17%** reduction in the number of citations issued. It is believed this downward trend will continue as time goes on and with the implementation of speed on green traffic enforcement at other fixed electronic traffic enforcement locations.

SPEEDING NOTICES ISSUED COMPARISON – NEW INTERSECTIONS			
YEAR	AVAIL FOR PROSECUTION	CITATIONS ISSUED	% TO VOLUME
09.2019-04.2020	2983	2913	97% Cites Issued
05.2020-12.2020	2525	2433	96% Cites Issued
2019/20 TOTAL	5508	5436	96.5% Cites Issued
TOTAL CHANGE	16% Decrease from 1st 8 Mo	17% Decrease from 1st 8 Mo	1% Decrease from 1st 8 Mo

The Degree of Public Acceptance:

While there has not been any formal survey conducted recently, informal results obtained throughout the Public Information Campaign and during the early period of the program indicate consistent public acceptance of the Photo Red Light and Speed on Green Program. Public opinion polls have appeared through local media outlets in the past and routinely indicate a belief that the cameras were improving roadway safety in Salem.

Citizen groups that have engaged the Police Department in the past about Photo Red Light have been supportive and some communities have made requests and recommendations for expansion of the program. The Salem Police Traffic Team regularly receives questions from citizens regarding electronic traffic enforcement and how they could have more locations added at other intersections within the city.

As with any enforcement-based traffic safety initiative, there have been some detractors. The City of Salem Police Department investigates all formal complaints which it receives. The City of Salem Police Department has not received any formal complaints regarding the Electronic Traffic Enforcement Program to date.

The Electronic Traffic Enforcement Program's Administrative Process:

The administrative process of the Electronic Traffic Enforcement Program includes many steps. The process includes;

- violation detection, meaning a car must travel across the intersection stop line against a solid red-light, or speed at 11mph or greater over the posted speed limit on a green-light
- quality control checks, which are internal checks made by the vendor (Redflex) to ensure the system was functioning properly at the time the violation was captured,
- violation processing, meaning every violation is reviewed to ensure the violation is valid,
- police officer review, which is the final review of each violation by a City of Salem Police Officer who issues and signs the citation.

Throughout this process the City of Salem complies with all applicable statutes, including ORS 810.434 and 810.436. All citations are issued into the jurisdiction of the City of Salem Municipal Court and are handled the same as all other citations.

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This report is provided in accordance with ORS 810.434 (3, b), (4), and ORS 192.245.

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