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CITY OF BEAVERTON



Photo Radar Speed Enforcement Report to the Legislature Process and Outcome Evaluation

February 2009

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Table of Contents

I. Background – Legislative Report Requirements.....	1
II. Effect of the Use of Photo Radar on Traffic Safety.....	2
<i>ORS 810.438 (3)(a)</i>	
A. Background.....	2
B. Photo Radar Deployment Criteria.....	2
C. Improvements in Traffic Safety.....	2
D. Residence of Beaverton Photo Radar Violators.....	4
III. Degree of Public Acceptance of the Use of Photo Radar.....	5
<i>ORS 810.438 (3)(b)</i>	
IV. Process of Administration of the Use of Photo Radar.....	6
<i>ORS 810.438 (3)(c)</i>	
A. Violation Detection.....	6
B. Violation Processing.....	6
C. Municipal Court Processing of Photo Radar.....	7

I. Background – Legislative Report Requirements

Oregon Revised Statute (ORS) 810.438 was amended in 2005 to require cities using photo radar equipment to conduct a process and outcome evaluation for the legislature once each biennium. The law reads as follows:

(3) A city that operates a photo radar system under this section shall, once each biennium, conduct a process and outcome evaluation for the purposes of subsection (4) of this section that includes:

(a) The effect of the use of the photo radar system on traffic safety;

(b) The degree of public acceptance of the use of the photo radar system; and

(c) The process of administration of the use of the photo radar system.

(4) By March 1 of the year of each regular session of the Legislative Assembly:

(a) The Department of Transportation shall provide to the Legislative Assembly an executive summary of the process and outcome evaluations conducted under subsection (3) of this section; and

(b) Each city that operates a photo radar system under this section shall present to the Legislative Assembly the process and outcome evaluation conducted by the city under subsection (3) of this section.

[1995 c.579 §1; 1997 c.280 §1; 1999 c.1071 §1; 2005 c.686 §3; 2007 c.634 §1]

II. Effect of the Use of Photo Radar on Traffic Safety

ORS 810.438 (3)(a)

A. Background

Photo radar is a speed enforcement tool operated by trained police officers in a marked police vehicle. When radar detects a speeding vehicle, a camera takes a photograph of the driver and the vehicle license plate. A reader board mounted on the photo speed van displays the vehicle's speed to the driver. A citation is then mailed to the registered owner of the vehicle.

The City of Beaverton along with the City of Portland received authority from the 1995 Oregon State Legislature to conduct a two-year test of photo radar. After the successful test phase, the Legislature extended the use of photo radar. The City is now in its fourteenth fiscal year of operation with the program, and it has become a cornerstone of Beaverton's efforts to reduce speeding throughout the City.

B. Photo Radar Deployment Criteria

The Beaverton City Council directs the Police Department to spend 20% of their operating time in school zones, 35% in neighborhoods, and 45% of their time on major streets determined by the City Council to have been negatively impacted by speeding. Locations are selected using the following criteria: history of excessive speeding, risk for accidents, source of citizen complaints, mixed use of the roadway (pedestrians, bicyclists, automobiles), special circumstances such as construction zones, and use by emergency vehicles.

C. Improvements in Traffic Safety

The program has been very successful in reducing speeds in Beaverton neighborhoods. When the program was first introduced in the City, Beaverton conducted traffic safety studies to determine its effectiveness. Traffic engineers collected speed data on select streets prior to the City's use of photo radar (1995). This data was compared to speed data after the introduction of photo radar (1996) on the same streets. Traffic engineers were careful to look both at streets where the speed van technology was used and not used and to compare the differences. The comparison results demonstrated:

- The percentage of vehicles exceeding 30 mph (more than five mph over the posted speed limit) declined by 28 percent on streets with photo radar and increased by 16 percent on the streets without photo radar.
- Average speeds decreased on the streets with photo radar by 1.6 percent and increased by 2.7 percent on the streets without photo radar.

In the second study conducted in April 1996, Beaverton engineers collected speed data on streets using photo radar and from the other streets using no photo radar on the same day. The engineers collected the speed data from the same streets one week later when photo radar was not deployed on any of the streets. The study results showed that photo radar reduced speeds significantly.

- Thirty-nine percent fewer vehicles exceeded 30 mph on the streets with photo radar than on the streets without photo radar during week one. Forty-five percent fewer vehicles exceeded 30 mph on the streets with photo radar than on the streets without photo radar during week two.
- Average speeds on the streets with photo radar were 4.6 percent lower than on streets without photo radar in week one and 5.4 percent lower in week two.

Today the photo radar program has proven itself to be consistent and reliable. The table below highlights program numbers from 2003 through 2008. In late 2004 the City expanded the program by adding a second speed van.

Photo Radar Speed Enforcement Program Statistics 2003 -2008

	2003	2004*	2005	2006	2007	2008
Hours of Enforcement	3,712	4,020	6,504	6,865	6,333	5,969
Vehicles Monitored	777,990	1,006,666	1,684,558	1,786,538	1,522,253	1,385,720
Violations Captured	11,212	15,647	12,597	12,542	9,855	11,296
Citations Issued	5,523	8,788	7,075	7,176	5,555	6,481
Average Amount OVER Posted Speed Limit	12.4	12.6	12.4	12.4	12.3	12.2

**Note: The photo radar program expanded from one speed van to two speed vans in mid-October 2004.*

D. Residence of Beaverton Photo Radar Violators

The majority of speeders detected by Beaverton's photo radar vans do not live in the City of Beaverton. The City has tracked this number over the years and it remains consistent. *Seventy one percent (71%) of speeders detected by the City's photo radar vans, do not live in Beaverton.* Similar to the City's experience with the photo red light program, it is a constant challenge to attempt to modify driving behavior when so many drivers pass through our City.

III. The Degree of Public Acceptance of the Use of Photo Radar

ORS 810.438 (3)(b)

The City of Beaverton has conducted several different public opinion surveys over the years, both prior to using photo speed enforcement and after its introduction. The City hired Davis & Hibbits, Inc. to conduct the surveys. The results have been very consistent and demonstrate that Beaverton’s photo radar program is strongly favored by Beaverton residents.

In September of 1995, Beaverton residents were surveyed to gauge their support for photo radar speed enforcement and their preferences for its use. The following outlines support for the use of photo radar prior to the City’s use of the technology.

Question: How acceptable is the use of photo radar in the following?

Response: Very or somewhat acceptable.

- On residential streets in neighborhoods.....67%
- In school zones.....80%
- In business districts.....62%
- On freeways.....55%
- On ANY city street.....68%

Over the years, the City has asked citizens for their views on how the photo radar program is working. The majority of residents believe the program is doing a good job addressing the problem of speeding.

Question: In your opinion, has photo radar worked very well, fairly well, not very well, or not at all well?

Response: Very well or fairly well.

- March 2001.....64%
- June 2000.....62%
- September 1999.....62%
- March 1999.....56%

IV. The Process of Administration of the Use of Photo Radar

ORS 810.438 (3)(c)

The administrative process for the use of photo radar speed enforcement encompasses many components. The steps for issuing a citation consist of: violation detection, violation processing, quality control checks, review and approval by the photo radar police officer, and finally citation creation and mailing. Intertwined in these steps are the city's compliance with legislative requirements dictated in ORS 810.438 and 810.439. After citations are issued they fall under the jurisdiction of Beaverton's Municipal Court.

A. Violation Detection

Beaverton has a well established photo radar program with 14 fiscal years of operating experience. An officer operates the photo radar van when violations are detected. The police officer maintains an observation log at each deployment and takes notes of each violation. The police officer also maintains a check list for each deployment to document that they are following all of the technical procedures. Four photographs are captured for each incident: the vehicle approaching the photo radar van, the vehicle passing the van, a close-up of the driver's face, and a close-up of the vehicle's license plate. In addition, the vehicle's speed is displayed on a reader board mounted on the van, so the driver has an immediate notification of their speed.

B. Violation Processing

Violations captured with the photo radar van are transmitted via the Internet to the City's vendor. Redflex looks at the images, identifies a violator's plate number and sends a request to the Oregon Department of Motor Vehicles (DMV) for the registered owner information. The DMV electronically sends back the registered owner's information to Redflex. The violation information containing details from the violation (such as location, date, time, direction of travel, speed, etc.) are reviewed by the operator along with the registered owner information. The operating police officer also cross-checks the data with their own observational notes from the deployment. The police officer is able to review the information over a web site and decide whether or not a citation should be created. If the officer approves the violation to become a citation, Redflex then mails the citation along with the photographs to the

registered owner. This process from violation to citation mailing occurs within six business days in compliance with Oregon law.

The registered owner then has at least 30 days to respond to the citation. They are afforded all of the same rights as a defendant would have with any traffic violation. Once the citation has been created and mailed, the defendant now enters our justice system and their photo radar speeding citation is processed through the City's Municipal Court.

C. Municipal Court Processing of Photo Radar

The City of Beaverton has the first paperless Municipal Court in the nation. This accomplishment has streamlined the City's citation processing and increased the court's overall efficiency. A violator receiving a photo radar citation has all of the same rights and options as anyone with a traffic violation issued from an officer stop, with the addition of the Certificate of Innocence/Certificate of Non-Liability form.

An important component of Oregon's photo radar statute is that the citation is issued to the *registered owner* of the vehicle. Oregon law requires drivers to maintain their updated address information with the DMV. The presumption in Oregon on photo radar citations, as with parking tickets, is that the registered owner of the vehicle is the driver at the time of the violation. The onus is on the registered owner to provide evidence if they were not the driver at the time of the violation, through the process of completing a Certificate of Innocence or Certificate of Non-Liability form.

The majority of people who receive photo radar citations plead guilty or no contest and are convicted. Approximately one in five of the violations result in a dismissal due to completion of a Certificate of Innocence/Non-Liability form. The following chart highlights the outcomes of photo radar citations issued in Beaverton from January 2003 - December 2008.

Outcome of Citation	Number	Percent of Total
Convicted	26,178	74.8%
Dismissed – Certificate of Innocence	7,750	22.1%
Dismissed	1,078	3.1%
Pending	12	0.0%
TOTAL	35,018	100%