City of Portland

RED LIGHT RUNNING CAMERA PROGRAM

BIENNIAL REPORT

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Submitted by:

Robert M. Burchfield, P.E.
City Traffic Engineer

City of Portland
1120 SW 5th Avenue Suite 800
Portland, OR 97204
(503) 823-5175
Robert.Burchfield@pdxtrans.org

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Program Information

Primary contact for this program is:

Robert M. Burchfield, P.E.
City Traffic Engineer
City of Portland
1120 SW 5th Avenue Suite 800
Portland, OR 97204
(503) 823-5175
Robert.Burchfield@pdxtrans.org

Date of implementation: October, 2001. *See Traffic Safety Benefits section for additional information.*

Number of intersections: 6.

Contractor Information:

ACS State and Local Solutions
Vincent K. Parke
Northwest Regional Program Manager
1220 SW Morrison, Suite 1000
Portland, OR 97205

Traffic Safety Benefits

Red Light Cameras were first installed on three locations in the City of Portland in October 2001. Subsequently, two more intersection approaches were added in January 2002. A sixth camera was installed in April of 2003. Portland's six red light cameras are currently installed at five intersections, enforcing the entering traffic as follows:

- E Burnside at Grand Avenue, northbound approach
- NE Sandy Blvd at 39th Avenue, westbound approach
- NE Sandy Blvd at 39th Avenue, northbound approach
- SE Grand Avenue at Madison Street, northbound approach
- W Burnside at 19th Avenue, eastbound approach
- NE Broadway at Grand Avenue, westbound approach

All data in the report represents a comparison of equivalent time periods before and after initial red light camera enforcement was initiated in the city. While this data sample is too small to reach statistically significant conclusions, additional data is clarifying emerging crash and violation trends that can be ascertained.

An analysis of several intersections in the city was conducted to determine red light camera placement. The intersections with red light camera enforcement were selected due to a relatively high rate of observed red light running behavior. The violation rate at these locations varied from 2.2 to 3.7 violations per hour prior to the installation of the cameras and signs. After cameras and signs were installed at these locations, and the public was alerted to their presence, the red light running behavior dropped significantly.

A key finding in this report is that injury crashes have been reduced for both the enforced approaches and for all approaches on intersections where red light cameras are operating. There were 26% fewer injuries for the enforced approaches for the four-year period after camera operation than there was for the four years prior. In addition, total injury crashes for all approaches at the intersections were reduced by 30% over the same time period. The crash data sample set remains too small to conclude the extent that the injury reductions are the result of the presence of red light cameras.

Figure 1 (*page 7)* depicts the change in red light running violation rate after the cameras began operating. Violation rates dropped below 1.75 violations per hour at all locations in the first month of operation. The violation rate at the five locations has now remained relatively constant at each location, with a range of 0.3 to 1.3 violations per hour. The overall change in violation rate from October 2001 to August 2002 at the five camera locations is shown in Table 1 (page 8). The observed drop in violation rate ranges from 60% to 87%. This reduction in violations represents a surprisingly consistent trend across the five locations and suggests that changes in driver behavior in response to the enforcement cameras were similar at all locations. The significance of the change in violation rate is demonstrated by the total number of red light violations that were avoided. For example, approximately 150,000 red light violations were avoided at the initial five enforced intersections during the first 10 months of operation. Between 2002 and 2006, red light running violations at the enforced locations maintained the initial violation decrease and decreased by an additional 12%

Many of the violations observed before the cameras were installed occurred during the all-red portion of the clearance interval. These violations are much less likely to contribute to a crash than violations that occur during the conflicting green phase. Figure 2 (page 9) shows a comparison of violations observed within 0.3 seconds of the start of the red indication at each location before and after the implementation of photo enforcement. At one location, the intersection of Grand and Madison, a portion of the reduction in violations may be attributed to driver's who are less aggressive during the change interval and therefore are not entering the intersection just after the end of the yellow clearance. However, this observation is not the case at the other four locations. At the intersection of W Burnside and 19th a disproportionate amount of the change appears to be attributable to drivers who were running the red light after 0.3 of the beginning of the red indication. The proportion of violations exceeding 1.0 seconds from the start of the red indication was also analyzed for a typical day and is shown in Figure 3 (page 10). The percentage of violations exceeding 1.0 seconds ranged from 11% to 19%. This data indicates that 80 to 90 percent of the violations are occurring within the first second of the red interval, and that the time distribution of violations within the red interval is not randomly distributed.

The total and disregard crash history at the six camera locations for the three-year period before installation of the cameras is shown in Table 2 (page 11). For the five intersections where red light cameras were installed, 252 total crashes occurred of which 78 (31%) were signal disregard crashes. For the six approaches the red light cameras enforce 136 total crashes (54% of all approaches) were attributed to drivers entering from that approach and of those 33 crashes were signal disregards (24% of enforced direction, 42% of all red light violations).

The total and disregard crash history at the six camera locations for the evaluation period since installation of the cameras is shown in Table 3 (page 12). For the six intersections where red light cameras were installed, 199 total crashes occurred of which 54 (27%) were signal disregard crashes. For the six approaches the red light cameras enforce 122 total crashes (61% of all approaches) were attributed to vehicles entering from that approach and of those crashes 29 were signal disregards (24% of enforced direction, 54% of all red light violations).

Crash data provides a strong understanding of where crashes occur, crash type, and crash severity. It is positive and significant that the data points to reductions in injury crashes, total crashes, angle and turning crashes, as well as violations. However, there remain limitations related to completeness of crash causality data. For example, at the sample intersections, there were a total of 116 crashes that were angle or turning type crashes. However, there were 54 crashes coded with a cause of signal disregard. There is an expectation that some angle and turning crashes at intersections will be caused by access, right-on-red movements, or other events. However, at a signalized intersection, it remains surprising that 47% of angle or turning crashes would be caused from disregarding the signal. The causality data limitation increases the challenges with attributing the proportion of the reduction in injury crashes that relate to the presence of red light cameras.

Table 4 (page 13) provides a comparison of the before and after total and disregard crash history for all approaches. This table illustrates that annual average total crashes per intersection have decreased (-2.8) and disregard crashes have decreased (-1.2) for all approaches. Notably, total injuries declined by 30% and injuries from crashes coded as signal disregard crashes decreased by 36% for the entire intersection.

Table 5 (page 14) provides a comparison of the before and after total and disregard crash history for the red light enforced approaches. Annual average total crashes decreased (-.6) and disregard crashes for the enforced approaches decreased (-.2). As with the entire intersection, the enforced approaches experienced significant reductions in injury crashes in the period after installation of red light cameras. For all enforced approaches, total injuries declined by 26% and injuries from signal disregard crashes decreased by 33% for the entire intersection.

Table 6 (*page 15*) provides a comparison of the severity of crashes for all approaches and the enforced approaches. The table shows how the decrease in average annual crashes is distributed between injury and property damage only crashes. The data shows that both injury (-30%) and property damage only crashes (-16%) have decreased at intersections with red light enforced.

Table 7 (*page 15)* provides a comparison of annual average crash types that have occurred for all approaches at the five intersections with enforcement. Angle and turning crashes have decreased (-1.1 and –1.9, respectively) while rear-end collisions (+0.4) have increased to a smaller degree. Such results are expected. Similar patterns appear when stop and signal control is introduced to an intersection. Photo enforcement of red light violations is an extension of such right-or-way control, so similar adjustments to crash patterns are to be expected.

Summary

Portland's experience with red light cameras has been positive. While there remain challenges with drawing specific conclusions about the direct impact of red light cameras, very positive trends are occurring at intersections with red light camera enforcement.

Annual average crashes are decreasing at the enforced approaches as well as the whole intersections. In addition, there have significant reductions in injury crashes, and minor reductions in pedestrian crashes.

Angle and turning crashes have decreased (-1.1 and –1.9, respectively) at the intersections while rear-end collisions (+0.4) and other crash types have increased at a significantly slower rate than the decrease in the typically more severe angle and turning crashes.

Red light cameras may have provided a safety benefit to Portland drivers in two ways. First measured reductions in injury crashes point to improved safety conditions. Second, the most severe type of crash, red light violations, have decreased at each intersection where cameras are installed.

Figure 1

City of Portland Red Light Photo Enforcement

Intersection Violation Rate

Changes During Initial Year of Operation

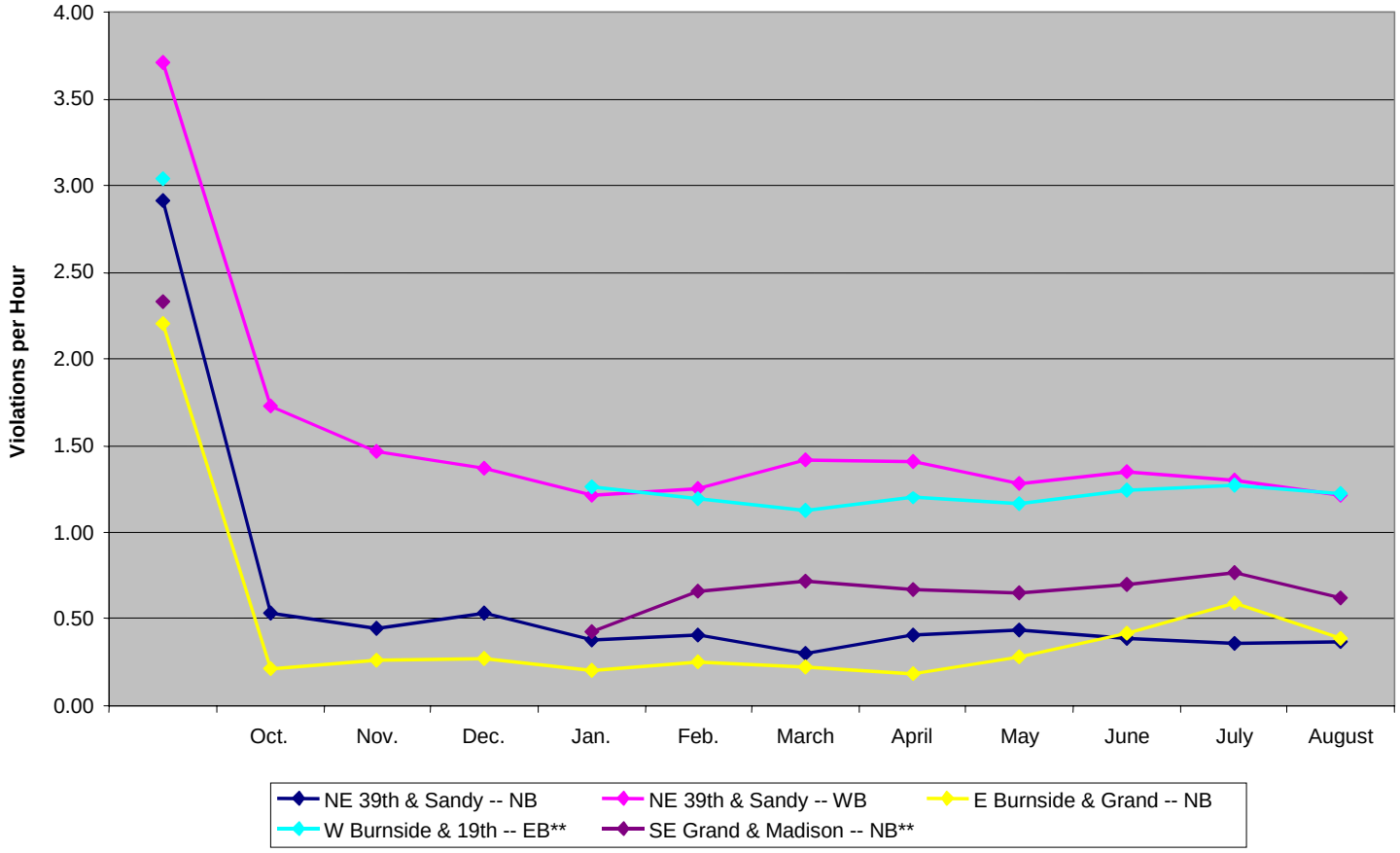

Table 1

Monthly Red Light Camera Analysis

City of Portland - Red Light Camera Summary

OCTOBER, 2001 – AUGUST, 2002

	Prior to Signs	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	August	First Month vs. August % Change	Prior to Signs vs. August % Change
NE 39th & Sandy -- NB														
Violations		100	210	259	172	148	116	173	181	149	135	184		
Violations per Hour	**2.92**	0.53	0.45	0.53	0.38	0.41	0.3	0.41	0.44	0.39	0.36	0.37	-30%	-87%
Issued Citations		39	85	78	81	60	53	89	79	76	58	88		
Issuance Rate		39%	40%	30%	47%	41%	46%	51%	44%	51%	43%	48%		
NE 39th & Sandy -- WB														
Violations		437	772	683	697	640	729	614	657	704	666	648		
Violations per Hour	**3.71**	1.73	1.47	1.37	1.21	1.25	1.42	1.41	1.28	1.35	1.3	1.21	-30%	-67%
Issued Citations		151	275	246	245	310	388	283	257	302	322	346		
Issuance Rate		35%	36%	36%	35%	48%	53%	46%	39%	43%	48%	53%		
E Burnside & Grand -- NB														
Violations		46	99	97	77	67	97	86	120	167	177	129		
Violations per Hour	**2.21**	0.21	0.26	0.27	0.2	0.25	0.22	0.18	0.28	0.42	0.59	0.39	86%	-82%
Issued Citations		8	20	34	27	20	40	30	47	74	68	52		
Issuance Rate		17%	20%	35%	35%	30%	41%	35%	39%	44%	38%	40%		
W Burnside & 19th -- EB*														
Violations					86	581	674	708	676	752	755	800		
Violations per Hour	**3.04**				1.26	1.19	1.13	1.2	1.17	1.24	1.27	1.22	-3%	-60%
Issued Citations					25	109	226	214	187	218	237	270		
Issuance Rate					29%	19%	34%	30%	28%	29%	31%	34%		
SE Grand & Madison -- NB*														
Violations					18	162	209	195	190	218	246	201		
Violations per Hour	**2.33**				0.43	0.66	0.72	0.67	0.65	0.7	0.77	0.62	44%	-73%
Issued Citations					8	67	98	69	68	98	125	93		
Issuance Rate					44%	41%	47%	35%	36%	45%	51%	46%		
Total Violations per month		**583**	**1081**	**1039**	**1050**	**1598**	**1825**	**1776**	**1824**	**1990**	**1979**	**1962**		
Total Citations per month		**198**	**380**	**358**	**386**	**566**	**805**	**685**	**638**	**768**	**810**	**849**		
Total Issuance Rate		**34%**	**35%**	**34%**	**37%**	**35%**	**44%**	**39%**	**35%**	**39%**	**41%**	**43%**		

Figure 2

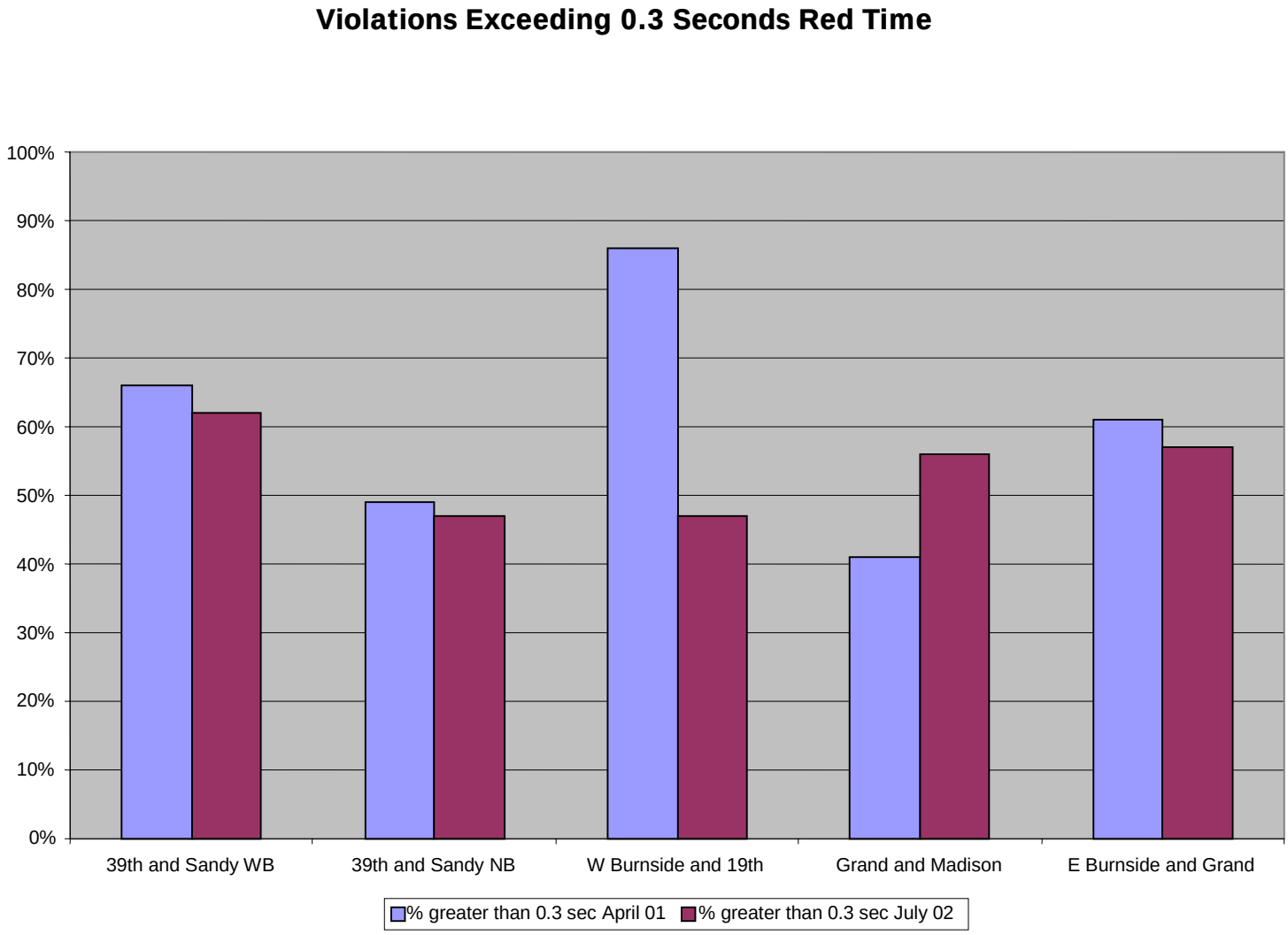
Violations Exceeding 0.3 Seconds Red Time
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
39th and Sandy WB
39th and Sandy NB
W Burnside and 19th
Grand and Madison
E Burnside and Grand
% greater than 0.3 sec April 01
% greater than 0.3 sec July 02

Figure 3

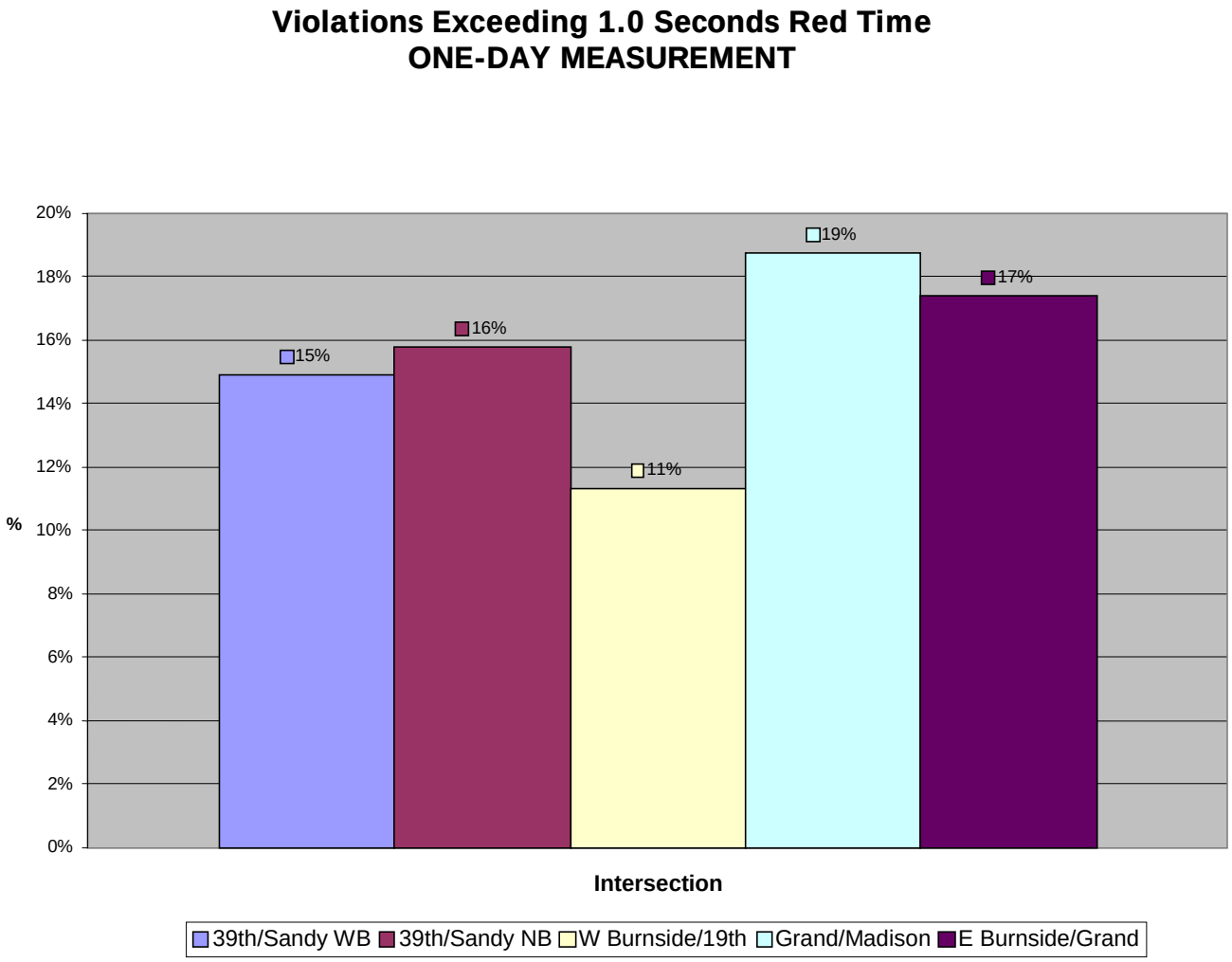
Violations Exceeding 1.0 Seconds Red Time
ONE-DAY MEASUREMENT
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
%
15%
16%
11%
19%
17%
Intersection
39th/Sandy WB
39th/Sandy NB
W Burnside/19th
Grand/Madison
E Burnside/Grand

Table 2

City of Portland Red Light Photo Enforcement

Crash History Summary, Total vs. Disregard Before Photo Enforcement

FOR THE 36 MONTHS BEFORE ACTIVATION OF ENFORCEMENT

					Enforced Direction			Intersection Total		
Intersection	**Note**	**Photo Enforced Direction**	**Activated** (See Notes)	**Analysis Period**	**Total Crashes**	**Disregard Crashes**	**Other Crashes**	**Total Crashes**	**Disregard Crashes**	**Other Crashes**
E Burnside St at Grand Ave		Northbound Grand Ave	A	10/1/1997 - 9/3/2001	28	5	23	70	25	45
NE Sandy Blvd at 39th Ave		Westbound Sandy Blvd	A	10/1/1997 - 9/30/2001	25	9	16	77	18	59
NE Sandy Blvd at 39th Ave		Northbound 39th Ave	A	10/1/1997 - 9/30/2001	41	3	38			
SE Grand Ave at Madison St		Northbound Grand Ave	B	1/1/1998 - 12/31/2001	20	9	11	27	12	15
W Burnside at 19th Ave		Eastbound W Burnside	B	1/1/1998 - 12/31/2001	9	3	6	33	17	16
NE Broadway at Grand Ave	1	Westbound Broadway	C	1/1/1999 - 12/31/2001	13	4	9	45	6	39
Total for Operating Intersections					136	33	103	252	78	174

Notes:
1. Three year before and after analysis periods

Table 3

City of Portland Red Light Photo Enforcement

CRASH HISTORY SUMMARY, TOTAL VS. DISREGARD AFTER PHOTO ENFORCEMENT

FOR THE 36 MONTHS AFTER ACTIVATION OF ENFORCEMENT

					Enforced Direction			Intersection Total		
Intersection	**Note**	**Photo Enforced Direction**	**Activated** (See Notes)	**Analysis Period**	**Total Crashes**	**Disregard Crashes**	**Other Crashes**	**Total Crashes**	**Disregard Crashes**	**Other Crashes**
E Burnside St at Grand Ave		Northbound Grand Ave	A	1/1/2002 - 12/31/2005	21	10	11	51	25	26
NE Sandy Blvd at 39th Ave		Westbound Sandy Blvd	A	1/1/2002 - 12/31/2005	28	3	25	81	14	67
NE Sandy Blvd at 39th Ave		Northbound 39th Ave	A	1/1/2002 - 12/31/2005	39	6	33			
SE Grand Ave at Madison St		Northbound Grand Ave	B	1/1/2002 - 12/31/2005	18	7	11	21	9	12
W Burnside at 19th Ave		Eastbound W Burnside	B	1/1/2002 - 12/31/2005	3	1	2	11	2	9
NE Broadway at Grand Ave	1	Westbound Broadway	C	1/1/2003- 1/1/2005	13	2	11	35	4	31
Total for Operating Intersections					122	29	93	199	54	145

Notes:

1. Three year before and after analysis periods

Table 4

City of Portland Red Light Photo Enforcement
Crash History Summary, Before vs. After Enforcement
for All Approaches

Average For Intersection			
	Before	**After**	**Change**
Total Crashes	50.40	39.80	-10.6
Annual Average Crashes per intersection	13.35	10.53	-2.8
Total Injury Crashes per intersection	17.20	12.00	-5.2
Total PDO Crashes per intersection	33.20	27.80	-5.4
Entering Volume per intersection	47032	46420	-1.3%
Total Crash Rate per intersection	0.84	0.62	-0.2
Disregard Crashes	15.60	10.80	-4.8
Disregard Annual Average Crashes per intersection	4.00	2.77	-1.2
Disregard Injury Crashes per intersection	6.60	4.20	-2.4
Disregard PDO Crashes per intersection	9.00	6.60	-2.4
Disregard Crash Rate per intersection	0.25	0.16	-0.1

Table 5

Red Light Photo Enforcement

Crash History Summary, Before vs. After Enforcement

for Enforced Approaches

Average For Enforced Approaches			
	Before	**After**	**Change**
Total Crashes	22.7	20.3	-2.3
Annual Average Crashes per enforced approach	5.8	5.3	-0.6
Total Injury Crashes per enforced approach	8.3	6.2	-2.2
Total PDO Crashes per enforced approach	14.3	14.2	-0.2
Entering Volume per enforced approach	21,745	22,112	1.7%
Total Crash Rate per enforced approach	0.9	0.7	-0.2
Disregard Crashes	5.5	4.8	-0.7
Disregard Annual Average Crashes per enforced approach	1.4	1.2	-0.2
Disregard Injury Crashes per enforced approach	2.5	1.7	-0.8
Disregard PDO Crashes per enforced approach	3.0	3.2	0.2
Disregard Crash Rate per enforced approach	0.2	0.2	-0.1

Table 6

City of Portland Red Light Photo Enforcement

Crash History Summary, Crash Severity, Before vs. After

	All Approaches			Enforced Approaches		
	Before	After	Change	Before	After	Change
Total Injury Crashes	17.2	12.0	-5.2	8.3	6.2	-2.2
Total PDO Crashes	33.2	27.8	-5.4	14.3	14.2	-0.2

Table 7

City of Portland Red Light Photo Enforcement

Crash History Summary, Crash Type, Before vs. After for All Approaches

Annual Average Crash Types All Approaches			
	Before	After	Change
Annual Average Total Crashes per intersection	12.6	10.0	-2.7
Angle	3.9	2.9	-1.1
Rear End	2.7	3.1	0.4
Turning	4.8	3.0	-1.9
Fixed Object	0.0	0.1	0.1
Pedestrian	0.2	0.2	-0.1
Other	1.1	0.9	-0.2

Program Administration

The administrative process for Photo Red Light enforcement includes citation processing and issuance, delivery, payment, and adjudication. It also includes the program's impact on police and court operations as well as fiscal accounting.

Citations are processed by the Contractor in accordance with a multi-step process that ensures that the violation photograph, violation data, and owner information are as accurate as possible. If any of this evidence does not meet stringent quality control standards, citations are not issued.

Citation Processing

The Contractor operates the cameras and retrieves film from the cameras for processing on a daily basis. They process the film and then screen the photographs and retrieve owner data for the vehicles observed in the violations. During 2006, 17,306 observed violations were processed that resulted in 9,678 issued citations. There were 8,892 observed violations that did not generate a citation. A variety of factors that relate to the quality of the photographs and the characteristics of the owner may result in the observed violation not being issued as a citation. The most common of the factors are shown in Table 8 (*below*).

Table 8

Factors Resulting in Non-Issuance of Citations

January 1, 2006 to December 31, 2006

Factor	# Citations Not Issued	% of Total Not Issued
No Plate	1,687	19%
Gender Match Failure	1,417	16%
Clarity of Driver	1,281	14%
Framing of Car	826	9%
Issuance Criteria Not Met	786	9%
DMV No Hit	471	5%
Emergency Vehicle	371	4%
Glare on Windshield	363	4%
Dark Interior	359	4%
Clarity of Plate	317	4%
Other	1,014	11%
Total	8892	100%

Citation Issuance

A challenge for vendors operating Photo Red Light programs in states with laws that require "Driver Responsibility" is to achieve a high issuance rate for violations issued vs. violations observed. The Driver Responsibility provisions require that good quality photographs of the driver and the vehicle license plate be captured by the camera. These photos are then screened to ensure a gender match for the registered owner of the vehicle. Any violations that lack good quality photographs or a gender match cannot be issued as citations.

The total issuance rate for 2002, the first year of operation, was 41%. During 2004, the issuance rate was 53%. No (front) Plate, Gender Match Failure, and Clarity of Driver were the most frequently causes cited for non-issuance of a citation.

Citation Delivery, Payment and Adjudication

Once a Red Light Camera violation has occurred, the film is developed and viewed by ACS (vendor with City contract). ACS gathers the registration information from the DMV database and puts the information on our secure web-site for viewing by a Portland Police Bureau Traffic Officer trained in Photo Enforcement. The officer views the evidence and determines whether or not to issue a citation.

If a citation is issued, the citation is mailed out to the current registered owner within 10 working days of the time the violation occurred. By law, the registered owner has 30 days to respond to the citation, but as a general rule, this usually results in close to 60 days from the time of the violation before they would have to appear in court. The violator has the same options available to him, as would the violator in any other type of traffic violation. However, there are two additional options available to violators that are unique to photo enforcement.

First, if the registered owner is a private citizen and they are not the person driving the vehicle at the time of the violation, they may fill out the Certificate of Innocence that has been provided and attest that they were not the driver of the vehicle. They also must copy the front and back of their driver's license and send it in. If the photo on the license does not match the violator's picture, the citation will be dismissed. If the photo does match the citation will be re-issued.

The second option available is an Affidavit of Non-Liability. This is the form that is sent out with the citation packet when the registered owner is a business or similar entity, other than a private citizen. The business has the option of either paying the citation, or identifying the driver. If the driver is identified, the citation is dismissed and another is re-issued to the actual driver.

Police and Court Operations

The city has issued 31,140 citations since the start of the program. A summary of how vehicle owners have responded to these citations is shown in the following table. A majority of the owners pay the fine and do not contest the violation.

Table 9

SUMMARY OF PHOTO RED LIGHT ENFORCEMENT CASES FROM OCTOBER 1, 2001 TO JANUARY 24, 2007 FOR 6 CAMERA LOCATIONS

Total Number of Cases Filed	50,742 (4.3 citations/day/camera)
Citations Paid	36,204 (3.1 citations paid/day/camera)
Certificates of Innocence and Affidavits of Non-Liability	10,383
Court Trials	1,463
Failed to Respond	611
Pending Cases	1,268

Problem Areas

Violator does not respond

Just like any other traffic citation, the violator will be found in default by the court. Eventually, their driver's license may be suspended until they fulfill their obligations under the default judgement. Sometimes a default may occur because the registered owner has received a photo enforcement citation before and purposely doesn't accept or chooses to ignore the citation letter. Another reason for a default judgement (clearly the most common) is that the registered owner has either sold the vehicle and did not notify DMV as required, or the owner has moved from the listed address and has failed to notify DMV.

Though the burden to notify DMV of these changes is clearly on all registered owners under Oregon law, the Portland Photo Enforcement Program has taken extra steps to avoid citations going to default. Every returned letter that has not been successfully delivered goes through a "Final Check" to attempt determination of the status of the violating vehicle's registration. One example of cases the "Final Check" does identify cases where the registered owner had moved at the time of the violation and had notified DMV of the address change, but the DMV system had not yet been updated when the initial citation was mailed. In this example, the "Final Check" resulted in non-dismissal of the citation due to minor address issues. For this reason, we created the "Final Check" to catch these late entries and avoid defaults. The citation is merely re-issued to the registered owner at their new address with a notation at the top that reads: "This is a re-issuance of a citation based on updated vehicle registration information."

If the person has not fulfilled their legal obligation to DMV to keep their registration information current, they may eventually be found in default by the court. These steps ensure that irresponsible drivers are not are allowed to avoid accountability.

Fiscal Accounting

Initial costs absorbed by the City included planning the project and installing detection and cameras at six locations. The capital costs for making these improvements was $35,000 per location for a total of $210,000. In addition to the capital costs incurred to install the cameras the City is also obligated to pay the Contractor a lease fee of $2,000 per camera per month and a processing fee of $27 per citation issued. Additionally, each time a red light camera results in a court trial, a police officer spends an average of 1.5 hours in court. This represents more than $110 in costs to the Police each time a case is brought to trial. A summary of the how the revenue from citations is distributed in shown in Table 10 (page 20).

The Table shows how revenue is distributed based on two scenarios. In the first case, the offender has no prior moving violations on record. In this case the court typically reduced the fine amount by $59 and the final balance to the City is $33. In the second case the violator has 3 or 4 prior moving violations and the reduction in the fine amount is $36. In this case the net revenue to the City is $44.50.

To calculate the lifetime operating subsidy for the program, it was assumed that 5,800 citations were paid each year. Further, the calculation includes statutory changes that increased fine amounts. The increased fine amounts moved the program from gross revenue of $47 per citation paid to gross revenue of $71.50 per citation paid. In the lifetime operations accounting, the fine amount increase is represented for citations paid in 2004.

The total lifetime operating revenue from the program was $289,620. This revenue is dedicated to a Community and School Traffic Safety Account that is exclusively utilized for traffic safety initiatives. An example of the city's investment in traffic safety is that the red light camera program will expand in 2007 to an additional 6 intersections. The capital costs the city will incur from this expansion will be $210,000.

PROGRAM COSTS 2002-2006		
Initial Capital Expense	6 cameras @ $35,000 each	$210,000
Lease Fees	$2,000/month/camera	$144,000
Citation Processing Expense	$27 per citation	$978,750
Police Court Expenses	$110 per court appearance	$160,930
Total Expenses		**$1,493,680**

PROGRAM REVENUE 2002-2006		
2002-03 gross rev	$47/citation	$545,200
2004-06	$71.50/citation	$1,244,100
Total Revenue		**$1,789,300**

Total Net Revenue 2002-2006	**$295,620**

Table 10

Sample Distribution of Revenue

from Red Light Running Citations

Red Light Citation		$237		$237
Typical Reduction by Judge	No Priors	($59)	3-4 Priors	($36)
Subtotal		$178		$201
Unitary Assessment		($37)		($37)
County Assessment		($20)		($20)
Victim Compensation		($1)		($1)
Subtotal		$120		$143
Final Allocation				
Court (50%)		$60		$71.50
City of Portland (50%)		$60		$71.50
Vendor Ticket Processing Cost		($27)		($27)
Final Portland Balance		$33		$44.50

Public Outreach and Media Releases

The City of Portland first initiated public outreach for photo enforcement as a part of efforts to educate the public about photo radar. In September of 1995, we commissioned a public opinion survey to assess potential public support for photo enforcement. The results of this survey indicated a high level of public support for the program, and the City proceeded with the implementation of the Photo Radar program in 1996. A follow-up survey taken a year after the program started found that both public awareness and support for the program had increased.

In 1996-97 the City participated in the federally sponsored "Stop! for Red Lights Campaign", a public information and education program designed to increase the community's awareness of the hazards associated with running red lights, and to deter red light running using education together with aggressive local police enforcement.

The campaign included:

- Public service announcements for local television and radio.
- A newsletter article for neighborhood newspapers.
- A resolution and pledge campaign for neighborhood associations.

Subsequent to this campaign, the City sought Legislative approval for the use of Red Light Cameras for enforcement. The legislature passed House Bill 2071 during the 1999 session and thereby authorized the City to operate a RLR Camera demonstration project. In the spring of 2001 the City entered a contract for services for Red Light Cameras.

Several reports on television, in newspapers, and on the radio announced the introduction of red light cameras and explained their function to the community. To complement the media introduction, the Portland Police Bureau initiated and has maintained information about red light cameras at http://www.portlandonline.com/police/index.cfm?c=dafjc (see appendix).

After the introduction to the community, red light camera education was incorporated into the larger Community and School Traffic Safety Partnership. This effort has included intensive outreach to neighborhood associations and other community groups about traffic safety. Updates about performance and management techniques have also been presented to Portland City Council and at numerous other public meetings.

Public Acceptance

Public approval of red light cameras in Portland remains high. As outlined below, a 2003 survey of Portland residents found that red light running is their second highest traffic safety concern.

Table 11

SUMMARY OF TRAFFIC SAFETY CONCERNS FROM AUGUST, 2003 DAVIS & HIBBITTS SURVEY

	% CONCERNED	% UNCONCERNED	MEAN
DRUNK DRIVING	93%	6%	3.62
RED LIGHT CAMERAS	88%	12%	3.43
SCHOOL CHILDREN SAFETY	86%	11%	3.41
SPEEDING	87%	13%	3.32
PEDESTRIAN AND BIKE SAFETY	87%	12%	3.31
LACK OF SIDEWALKS & BIKE LANES	70%	29%	2.90

Portland residents view red light cameras as an important part of the solution to red light running. In the same 2003 survey, 71% of Portland residents reported that they support additional red light camera locations being installed in the City of Portland.

Future Expansion

The City of Portland will implement 6 new red light cameras in 2007. All of the locations that we are evaluating for red light camera installation are high volume arterial City streets, and all have a history of a high number of crashes attributed to the disregard of a red light. The six locations currently in final evaluation for red light camera installation are:

- SE Foster @ 96th (53 red light crashes)
- SE Stark @ 102nd (44 red light crashes)
- NE Glisan @ I-205 Ramp (36 red light crashes)
- SE Washington @ 103rd (35 red light crashes)
- NE Broadway @ Vancouver (28 red light crashes)
- SE Stark @ 99th (19 red light crashes)

While our current program has cameras operating continuously at all locations, the city continues to be interested in the concept of operating a system where a limited number of cameras could be rotated amongst a larger number of enforcement locations. We expect the positive changes in driver behavior that result from implementation of RLR enforcement at an intersection will continue even if the cameras are not operating at all times.

We are currently limited to twelve camera locations. Active legislation in the 2007 session is currently being considered to increase the amount of red light camera enforcement that the City of Portland is allowed to operate to 24 cameras.

Appendix

Red Light Camera Program Page:
http://www.portlandonline.com/police/index.cfm?&c=dafjc%29

Portland Police Bureau
1111 S.W. 2nd Avenue, Portland, Oregon 97204

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Red Light Camera Study Information, Sample Violation, and Q&A

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Red Light Cameras
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Red Light Camera Program

The City of Portland Red Light Camera Program is based on a very successful partnership between the City Council, the Portland Police Bureau, the Portland Office of Transportation and the Citizens of Portland. The Program was born out of citizen demands for safer streets and it is constantly striving to improve its effectiveness in the community. The reductions in violations at our targeted intersections speak for themselves. The Red Light Program is out working 24 hours a day, 7 days a week.

As the budget allows, we hope to continue with the development of new locations to improve the outreach of the program and impact more neighborhoods. The goal of the Portland Red Light Program is to provide safer streets for all our citizens and guests. This program exists for the benefit of the Citizens of Portland and belongs to all of us. Please remember to drive defensively and obey all traffic laws. Be safe!

Sgt. Rod Lucich
Portland Police Bureau Traffic Division
Photo Enforcement Program

Red Light Cameras Q&A
Answers to Common Red Light Camera Questions.

Sample Red Light Violation Letter (PDF Document, 222kb)
This is what a Red Light Violation Letter looks like.

Red Light Camera Summary (PDF Document, 50kb)
The City of Portland Red Light Camera Program is based on a very successful partnership between the City Council, the Portland Police Bureau, the Portland Office of Transportation and the Citizens of Portland.

PDF Information
Some of the links on this page are to PDF documents. To open PDF files you will need Adobe Acrobat Reader installed on your computer, it is available for free from Adobe.com.

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Police Bureau - Get Involved - Resources - News - Employment - Maps & Statistics

Red Light Camera Q&A Page:
http://www.portlandonline.com/police/index.cfm?&a=33709&c=30592

Portland Police Bureau

1111 S.W. 2nd Avenue, Portland, Oregon 97204

Red Light Cameras Q&A (Printable Version)

Search

Red Light Cameras

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Red Light Cameras Q&A

Sample Red Light Violation Letter

Red Light Camera Summary

Red Light Camera Q & A

Q: Why did I get this citation?
A: A vehicle, *registered or leased to you*, was photographed by an automatic camera connected to a traffic signal, that is only active when the light is red. Vehicles crossing the stop bar after the light turns red are detected automatically and two photographs are taken. Superimposed on each photograph is the date, time, location and the time into the red signal when the violation occurred. Details of the violation appear on the Notice of Traffic Infraction. A Oregon Uniform Citation and Complaint has been filed in Multnomah Circuit Court.

Q: How can I find out information about this Citation?
A: Information about this violation is shown on the enclosed Citation mailed to you. There is also information on the data block at the top of violation image photo on the front of your violation letter.

Q: How could I see a photo of the violation?
A: If you would like to view the photograph or have any questions about your violation letter, please call 503-221-0415 (outside of the Portland Metropolitan Area, call 1-800-799-7082), between the hours of 9 a.m. and 5 p.m., Monday through Friday.

Q: What can I do if I was not driving?
A: If you were **not** driving the vehicle at the time of the violation, you may do one of the following:

1. Schedule an appointment with the Portland Police Bureau to establish that you were not the driver of the vehicle. To schedule and appointment to view the photo, call **503-221-0415** (outside the Portland Metropolitan area call 1-800-799-7082) between the hours of 9:00 AM and 5:00 PM, Monday through Friday. You will need to bring your drivers license or other photo identification to the appointment. If you were not the driver at the time the offense occurred, the citation against you will be dismissed.

2. Fill out the enclosed Certificate of Innocence that came in the mail with your violation letter. Using the enclosed envelope, send the Certificate and a legible photocopy of your drivers license (Front and Back), to Circuit Court, P.O. Box 114, Portland, OR 97207 by the court date to report that you were not the driver of the vehicle at the time of the violation. If you were not the driver at the time the offense occurred, the citation against you will be dismissed.

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Sample Red Light Violation Letter:
http://www.portlandonline.com/police/index.cfm?&a=33710

Date

Name of Violator
Address
City State Zip
Red light Citation #

Dear

In an effort to reduce the number of collisions and associated injuries and deaths due to red light violations, the City of Portland has implemented a red light traffic enforcement program. The system, combining a high-speed camera and sensor devices, records photographs of the violator, vehicle, and surroundings when a red light violation occurs.

A vehicle registered in your name was photographed violating Oregon's traffic control laws, specifically ORS 811.265. The photographs, shown on the right, state the date, time and location of the violation, and how many seconds the light had been red when your vehicle entered the intersection. A summary of the violation is listed below and details are on the enclosed citation.

Date/Time of Violation	**Location**	**License Plate**
09-14-01 12:14 pm	N/B SE Grand Av/ E. Burnside	ABC 123
State	**Make**	**Date Issued**
OR	FORD	09-19-01
Citation Number	**Court Date/Time**	**Base Fine**
RL 00001	11-13-01 @ 8:30am	$175
Issued By: OFFICER Name and Number and Digital Signature		

If you were the driver of the vehicle **please read the back of the citation** which describes the options you have for addressing the violation. If you were **not** driving the vehicle at the time of the violation, please read the reverse side of this letter regarding submission of a Certificate of Innocence.

Warning! You <u>must</u> respond by one of the procedures listed on the back of the citation by the court date indicated on the bottom of your citation or by submitting a Certificate of Innocence. If you do not respond to this citation, a judgment of conviction for the traffic violation may be entered against you, you may be fined and ultimately your driver's license may be suspended.

If you would like to view the photograph or have any questions about this letter, please call 503-221-0415 (outside of the Portland Metropolitan Area, call 1-800-799-7082), between the hours of 9 a.m. and 5 p.m., Monday through Friday.

Very truly yours,

Commander
Traffic Division, Portland Police Bureau

Q: Why did I get this citation?

A: A vehicle, *registered or leased to you*, was photographed by an automatic camera connected to a traffic signal, that is only active when the light is red. Vehicles crossing the stop bar after the light turns red are detected automatically and two photographs are taken. Superimposed on each photograph is the date, time, location and the time into the red signal when the violation occurred. A sample of the superimposed data box appears below. Details of the violation appear on the Notice of Traffic Infraction. A Oregon Uniform Citation and Complaint has been filed in Multnomah Circuit Court.

Q: How can I find out information about this Citation?

A: Information about this violation is shown on the enclosed Citation and on the data block at the top of violation image photo on the front of this letter.

Q: How could I see a photo of the violation?

A: If you would like to view the photograph or have any questions about this letter, please call 503-221-0415 (outside of the Portland Metropolitan Area, call 1-800-799-7082), between the hours of 9 a.m. and 5 p.m., Monday through Friday.

Q: What can I do if I was not driving?

A: If you were **not** driving the vehicle at the time of the violation, you may do one of the following:

1. Schedule an appointment with the Portland Police Bureau to establish that you were not the driver of the vehicle. To schedule and appointment to view the photo, call **503-221-0415** (outside the Portland Metropolitan area call 1-800-799-7082) between the hours of 9:00 AM and 5:00 PM, Monday through Friday. You will need to bring your drivers license or other photo identification to the appointment. If you were not the driver at the time the offense occurred, the citation against you will be dismissed.
2. Fill out the enclosed Certificate of Innocence. Using the enclosed envelope, send the Certificate and a legible photocopy of your drivers license (Front and Back), to Circuit Court, P.O. Box 114, Portland, OR 97207 by the court date to report that you were not the driver of the vehicle at the time of the violation. If you were not the driver at the time the offense occurred, the citation against you will be dismissed.

Q: What do the numbers on the violation photos mean?

A: Below is a SAMPLE DATA BLOCK with an explanation of each number.

NOTE: SEE YOUR VIOLATION PHOTO FOR THE INFORMATION ON YOUR RED LIGHT VIOLATION. THIS IS A SAMPLE ONLY!

Your violation photo data blocks are shown on the front of this letter.

Red Light Camera Violation Data Box

Data Box for 1st Photo

Data Box for 2nd Photo

Help us make Portland's streets and neighborhoods safe for everyone.
Please Drive Safely!