

VISION ZERO SUCCESS STORY — BEHAVIORAL

# Traffic Safety Camera Program — Portland, Oregon

FHWA is pleased to present this vision zero success story. While behavioral initiatives don't typically fall under FHWA's purview, they play a critical role in reaching our goal of zero deaths, and our part of our shared responsibility to reduce fatal or serious injuries. For more information on safe driving behaviors, please visit our partner agency, the National Highway Safety Administration (NHTSA) at: <https://www.nhtsa.gov/road-safety>.

## Key Successes

Portland conducted speed studies to determine the effect of the traffic safety cameras on operating speed. They found:

**57% -decrease** in the number of vehicles traveling over the posted speed limit.

**85% -decrease** in the number of vehicles traveling more than 10 mph above the posted speed limit.

The City is navigating away from expressing speed in terms of 85th percentile and is instead recognizing the role speed reduction plays in a context sensitive approach.<sup>1</sup>

The 85th-percentile speeds are also lower compared to the before study.<sup>2</sup>



MPH

## Background

The Portland Bureau of Transportation (PBOT) implemented the traffic safety camera program in 2016 to reduce speeding in neighborhoods and save lives. The traffic safety cameras were installed along corridors in the City's High Crash Network. The High Crash Network included 30 streets; a composite of the top 20 high crash streets for driving, the top 20 for bicycling, and the top 20 for walking. The City identified four corridors for the traffic safety cameras:

- SW Beaverton-Hillsdale Highway.
- SE Division Street.
- SE 122nd Avenue.
- NE Marine Drive.

By early 2018, PBOT installed eight (8) systems along the four (4) high crash corridors enforcing each direction of travel. In advance of each traffic safety camera, a speed reader board (SRB) (figure 1) displayed a driver's speed. When drivers exceeded the posted speed limit, the traffic safety camera system (figure 2) engaged and photographed the driver and the front and rear of the vehicle.

## Implementation

After traffic safety camera installation, the City instituted a 30-day warning period with warning letters mailed to those who violated the speed limit at those locations. After the 30-day warning period, the City issued citations for speed violators. When speed limits were reduced, the City implemented an interim 2-week warning period.

<sup>1</sup> Federal Highway Administration. (2020). "Context Sensitive Solutions and Design." <https://www.fhwa.dot.gov/planning/css/>

<sup>2</sup> 85th-percentile speed is the speed at which 85 percent of free-flowing traffic is traveling at or below.





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Figure 1. Graphic. Speed feedback sign with warning for traffic safety camera in operation.

The citation was filed with the Multnomah County Circuit Court. The registered owner of the vehicle had 60 days to respond to the citation and was afforded the same right as any defendant with a traffic violation.

## Outcomes

In 2018 the City of Portland conducted a telephone survey asking Portlanders about speeding along the subject corridors and the acceptance of the implementation of photo enforcement. The survey results showed positive feedback for photo enforcement of speeds on the high crash network.

- Majority of individuals surveyed were familiar with photo enforcement (93-percent aware of red-light running; 84-percent aware of the mobile speed van; 63-percent aware of fixed speed).
- 75 percent of the individuals surveyed supported using traffic safety cameras on streets with high crash rates.

- ▶ Over 50 percent who supported photo enforcement cited safety reasons or believed it reduced speeding or crashes.
- ▶ Nearly 50 percent of the individuals who surveyed believed photo enforcement is fair (over a third of whom responded because it is unbiased).

In addition to the public acceptance surveys, the City conducted speed studies to determine the effect of the traffic safety cameras on operating speed. The City conducted an initial before speed study and compared these with subsequent speed studies. The City considered the volume of drivers speeding and those speeding at least 10 mph or greater. Depending on the location, there was a 40-percent to 75-percent reduction in the number of drivers speeding. Drivers speeding in excess of 10 mph, ranged from a 65-percent to 96-percent reduction.

The City of Portland is required to deliver an outcome evaluation once every odd-numbered year to the Oregon Legislative Assembly on the effectiveness of the traffic safety cameras on traffic safety, degree of acceptance, and the administration process.

## Funding

Fines and fees collected from the traffic safety camera citations must be used to operate and maintain the traffic safety cameras on the high crash corridors. Statute mandates any additional revenue beyond systemic costs be dedicated to traffic safety. The City will reinvest in safety projects for all modes on High Crash Corridors such as installation of safety infrastructure, safety education and outreach, and evaluation. The operational costs of the traffic safety camera program include:

- **Fixed fee** – a monthly rate per traffic safety camera per direction enforced.
- **Variable fee** – fee per violation paid as fines through the court or as fees paid for the traffic safety.
- **Law Enforcement work effort** – review and approval of violations, and court appearances.
- **Portland Bureau of Transportation staff time** – engineer reviews, geographic information, speed studies, and system support.
- **Permits** – street opening permit.
- **Additional expenses** – survey, and post card mailings.



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Figure 2. Graphic. Traffic safety camera installation.



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Figure 3. Graphic. Speed feedback sign with warning for traffic safety camera in operation.

POINT OF CONTACT  
**PROVIDANCE NAGY**  
PORTLAND BUREAU OF TRANSPORTATION  
503.823.5821 |  
[FIXEDSPEEDSAFETYCAMERA@PORTLANDOREGON.GOV](mailto:FIXEDSPEEDSAFETYCAMERA@PORTLANDOREGON.GOV)