Legislative Report OUTCOME EVALUATION: Fixed Photo Radar System City of Portland 2015-2017





This report prepared by:

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Conforme con el Título VI de la Ley de Derechos Civiles y Título II de ADA, es la política de la ciudad de Portland que ninguna persona quede excluida de participar, se le nieguen los beneficios o sea objeto de discriminación en cualquiera de los programas, servicios o actividades de la ciudad por razón de raza, color, origen nacional o discapacidad. Para asegurar la igualdad de acceso a los programas, los servicios y actividades de la ciudad, la ciudad de Portland proveerá de manera razonable: servicios de traducción e interpretación para personas con dominio limitado del inglés, modificará políticas y procedimientos y ofrecerá asistencia auxiliar, servicios y formatos alternativos para personas discapacitadas. Para solicitar adaptaciones, modificaciones, servicios de traducción e interpretación, presentar una queja o para recibir información adicional o realizar preguntas sobre el Título VI de la Ley de Derechos Civiles (protección según raza, color o nacionalidad) y asuntos relacionados (no discriminación en los programas, servicios y actividades públicas de la ciudad) con el Título II de la ADA (protección para personas discapacitadas) comuníquese con Program Specialist al 503.823.5185, o use el servicio TTY 503-823-6868 o el Servicio de Retransmisión de Oregon.

В соответствии с разделом VI Закона о гражданских правах и разделом II Закона о правах граждан с ограниченными возможностями, городские власти Портленда действуют согласно руководящим принципам, которые гласят о том, что ни один гражданин не может быть исключен от участия, не может получить отказ или подвергнуться дискриминации в отношении городской программы, услуги и деятельности на основании национальной или расовой принадлежности, цвета кожи или инвалидности. Для того, чтобы следить за доступом к городским программам, услугам и деятельности, город Портленд на разумных основаниях: предоставляет услуги письменного и устного перевода для лиц с ограниченным знанием английского языка; видоизменяет принципы и процедуры и предоставляет дополнительную помощь, услуги и/или альтернативные варианты для лиц с ограниченными возможностями. Если Вы хотите запросить размещение, внести корректировку, запросить услуги письменного или устного перевода, подать жалобу, получить дополнительную информацию или задать вопрос касательно раздела VI о гражданских правах (защита на основании национального или расового

происхождения или цвета кожи) и по разделу II ЗПОВ (защита лиц с ограниченными возможностями) (политика недискриминации в рамках городских программ, услуг и деятельности): обращайтесь к Program Specialist по телефону: 503. 823.5185, телетайпу: 503.823.6868 или в службу коммутируемых сообщений штата Орегон по тел.: 711.

Conform prevederilor Titlului VI al Actului Drepturilor Civile (Title VI of the Civil Rights Act) și Titlului II al Actului Americanilor cu Dizabilități (Title II of the Americans with Disabilities Act), protocolul Orașului Portland precizeaza că nici o persoană nu va fi exclusă de la participare, nu va fi privată de la beneficii, sau nu va fi supusă la discriminare în niciun program, serviciu sau activitate a Orașului pe criteriu de rasă, culoare, origine națională, sau dizabilitate. Pentru a asista în asigurarea accesului la programele, serviciile și activitățile sale, Orașul Portland, în mod rezonabil: oferă servicii de traducere și interpretare pentru persoanele cu nivel limitat de cunoastere a limbii engleze; modifică protocolurile și procedurile; și oferă ajutoare auxiliare, servicii și/sau aranjamente alternative pentru persoanele cu dizabilități. Pentru a solicita o acomodare, modificare, traducere, interpretare sau un serviciu legat de limbă; pentru a depune o reclamație; sau pentru informații sau întrebări suplimentare referitoare la subiecte legate de Drepturi Civile Titlul VI (protecțiile legate de rasă, culoare, origine națională) și ADA Titlul II (protecții pentru persoanele cu dizabilități) anti-discriminarea în cadrul programelor, serviciilor sau activităților publice ale Orașului): contactați Program Specialist prin telefon la: 503. 823.5185, TTY la: 503.823.6868, sau Oregon Relay Service (Serviciul de Releu Oregon) la: 711.

为遵从民权法案标题 6 及美国残疾人法案标题 2 的规定 · 波特兰市的政策规定任何人不得因其种族、肤色、国籍或残疾而不被允许参与市政府管辖下的计划、服务或活动 · 不得拒绝其获得福利的权利 · 或不得因此而遭受歧视 · 为协助确保市政府的计划、服务及活动可被使用 · 波特兰市会在合理情况下:为英语能力有限的个人提供语言翻译及传译服务;修改政策及程序;以及为残疾人士提供辅助性的援助、服务及 / 或可替代格式的材料 · 如需要便利设施、修改政策及程序、翻译、传译或语言服务;提出申诉;或对民权法案标题 6 (种族、肤色、国籍保障)及 ADA 标题 2 (残疾人士保障)的相关事宜(市政府计划、服务、活动中无歧视)有问题或需要额外信息的话 · 请您通过电话 503.823.5185, 电传打字机(TTY)503.823.6868 · 或俄勒冈州中继服务 711 与 Program Specialist 联系。

Відповідно до законів про захист громадянських прав міська адміністрація Портленда наголошує, що в рамках реалізації міських програм і проведення заходів жодну особу не можна відсторонити від участі, обмежити в отриманні відповідних послуг або благ чи дискримінувати в інший спосіб на підставі расової чи національної належності, кольору шкіри або інвалідності. Для забезпечення рівного доступу до міських програм, послуг і заходів адміністрація Портленда в розумних межах: забезпечує письмовий і усний переклад; вносить зміни в правила та процедури; надає додаткову допомогу, послуги та (або) інформацію в альтернативному форматі. Для отримання цих послуг чи додаткової інформації, а також для подання скарг слід звертатися до: 503.823.5185, (телетайп: 503-823-6868, або номер в Орегонській службі комутованих повідомлень: 711).

Sida wafaaqsanaanta Qodobka VI ee Xeerka Xuquuqda Rayidka iyo Qodobka II ee Xeerka Curyaannimada Ameerikaanka, waa xeerka Magaalada Portland ee ah in qofna aan laga reebi karin ka qeybqaadashada, loo diiday faa'idooyinka ama loogu geystay takoor ee barnaamij walba oo Magaalada ah, adeega, ama hawlaha ku saleysan qowmiyad, midab, asal dhalasho, ama curyaannimo. Si loo xaqiijiyo helitaanka barnaamijyada Magaalada, adeegyada iyo hawlaha, Magaalada Portland waxay si macquul ah: ubixisaa turjumida luuqada iyo fasiiraadda ee loogu talagalay shaqsiyaad aan ku hadlin Ingiriis; bedellada xeerarka iyo nidaamyada; iyo, waxay bixisaa gargaar dheeraad ah, adeegyada iyo/ama qaababka kale ee dadka curyaanka ah. Si aad u codsatid hoy, bedellada, turjumida, fasiraadda ama adeega luuqada; si aad u gudbiso cabbasho; ama macluumaad dheeraad ah ama su'aalaha la xariira Xaquuqda Rayidka Cinwaanka VI (qowmiyad, midab, ilaalada asalka dhalashada) iyo Qodobka ADA II (difaaacida dadka curyaanka ah) arimaha (takoor la'aanta barnamijyada dadweynaha Magaalada, adeegyada, hawlaha): kulla xiriir Program Specialist taleefon ahaan 503. 823.5185, TTY ee 503.823.6868, ama adeega isku wareejinta Oregon ee 711.

التزاماً بالفصل السادس من قانون الحقوق المدنية والفصل الثاني من قانون الأمريكيين ذوي الإعاقة، تتبنى مدينة بورتلاند سياسة يحظر بموجبها حرمان أي شخص من المشاركة في أي برنامج أو خدمة أو نشاط تابع للمدينة أو أن يمنع الاستفادة من مزاياها أو أن يتعرض للتمييز خلالها علي أساس العرق أو اللون أو الأصل أو الإعاقة. من أجل ضمان توافر أتاحة فرص المشاركة في برامج المدينة وخدمات الترجمة الشفهية والتحريرية لغير المتمكنين من اللغة برامج المدينة قدر المستطاع: خدمات الترجمة الشفهية والتحريرية لغير المتمكنين من اللغة الإنجليزية وتنعهد باجراء تعديلات في السياسات والإجراءات والمساعدات والخدمات الإضافية وأساليب العرض البديلة للأسخاص ذوي الإعاقة. للغير المتمكنين من اللغة الإنجليزية وتتعهد باجراء تعديلات في السياسات والإجراءات والمساعدات والخدمات الإضافية وأساليب العرض البديلة للأشخاص ذوي الإعاقة. لطلب ترتيبات خاصة أو تعديلات أو ترجمة تحريرية أو شفهية أو غير هما من الخدمات اللغوية، أو المشخاص ذوي الإعاقة. لطلب ترتيبات خاصة أو تعديلات أو ترجمة تحريرية أو شفهية أو غير هما من الخدمات اللغوية، أو المشخاص ذوي الإعاقة. لطلب ترتيبات خاصة أو تعديلات أو ترجمة تحريرية أو شفهية أو غير هما من الخدمات اللغوية، أو التقديم الشخاص ذوي الإعاقة. لطلب ترتيبات خاصة أو تعديلات أو ترجمة تحريرية أو شفهية أو غير هما من الخدمات اللغوية، أو المدنية التقديم الشكاوى أو الحمين المائل المتعلقة بالفصل السادس من قانون الحقوق المدنية (الحماية من التماييز على أساس العرق أو اللون او الأصل) وبالفصل الثاني من قانون الأمريكيين ذوي الإعاقة (حماية المدنية (الحماية من قانون الحقوق المدنية العامة وخدماتها وأنشطتها تفضلوا بالتواصل مع معلومات إضافية أو طرح أسئلة حول المسائل المتعلقة بالفصل السادس من قانون الحقوق المدنية (الحماية وعلى أساس العرق أو اللون او الأصل) وبالفصل الثاني من قانون الأمريكيين ذوي الإعاقة (حماية المدنية (المدنية (الحماية والمان وي الإصل) وبالفصل الثاني من قانون الحقوق المدنية (الحماية من الثمريكيين ذوي الإعاقة) وعدماتها المدنية (الحماية وو الماي وو الأصل) وبالفصل الثاني من قانون الأمريكيين ذوي الإعاقة (حماية المدنية المام وو ولماية وأول أول والمان ووي الإعاقة) وعدماتها وو المال وو الو مل ومل وو المال وو وو الولماي ومريم والمايمة وو ماما ملوما موويما وويالي م

Để tuân thủ với Khoản IV của Đạo Luật Nhân Quyền và Khoản II của Đạo Luật về Người Mỹ Khuyết Tật, Thành Phố Portland có chính sách rằng sẽ không có một người nào bị ngăn chặn không cho tham gia, bị từ chối phúc lợi, hoặc bị phân biệt đối xử trong bất cứ chương trình, dịch vụ hay hoạt động nào của Thành Phố vì lý do chủng tộc, mầu da, nguồn gốc quốc gia, hay khuyết tật. Để giúp đảm bảo sự tiếp cận công bằng với các chương trình, dịch vụ và hoạt động của Thành Phố, Thành Phố Portland trong điều kiện cho phép: cung cấp chuyển ngữ và phiên dịch cho các cá nhân có trình độ Anh Ngữ hạn chế; thay đổi các chính sách và thủ tục; và cung cấp dụng cụ và dịch vụ trợ giúp và/hoặc các phương thức lựa chọn khác cho người khuyết tật. Để yêu cầu trợ giúp thực tiễn, thay đổi, chuyển ngữ, phiên dịch hay dịch vụ ngôn ngữ; để nộp đơn khiếu nại; hoặc có thêm thông tin hay thắc mắc về Nhân Quyền Khoản IV (bảo vệ về chủng tộc, mầu da, nguồn gốc quốc gia) và các vấn để (không phân biệt đối xử trong các chương trình, dịch vụ, hoạt động của Thành Phố) về ADA Khoản II (bảo vệ người khuyết tật): xin liên lạc Program Specialist qua điện thoại tại số 503. 823.5185, TTY tại số 503.823.6868, hoặc Oregon Relay Service tại số 711

ສອດຄ່ອງກັບຫົວຂໍ້ VI ຂອງກົດໝາຍສິດທິພົນລະເມືອງ ແລະ ຫົວຂໍ້ II ຂອງກົດໝາຍຄົນພິການອາເມລິກາ, ເຊິ່ງແມ່ນນະໂຍບາຍຂອງຕົວເມືອງ Portland ທີ່ບໍ່ໄດ້ຫ້າມບຸກຄົນໃດບໍ່ໃຫ້ເຂົ້າຮ່ວມ, ປະຕິເສດສະຫວັດດີການ ຫຼື ກ່ຽວຂ້ອງກັບການເລືອກປະຕິບັດໃນແຜນການ, ການບໍລິການ ຫຼື ກິດຈະກຳຂອງເມືອງ ຍ້ອນເຊື້ອຊາດ, ສີຜິວ, ສັນຊາດດັ້ງເດີມ ຫຼື ຄວາມພິການ. ເພື່ອຊ່ວຍຮັບປະກັນການເຂົ້າເຖິງແຜນການ, ການບໍລິການ ແລະ ກິດຈະກຳຕ່າງໆຂອງເມືອງ Portland ຢ່າງສົມເຫດສົມຜົນ: ສະໜອງການແປພາສາ ແລະ ການອະທິບາຍໃຫ້ແກ່ບຸກຄົນທີ່ມີຂໍ້ຈຳກັດທາງພາສາອັງກິດ; ດັດແປງນະໂຍບາຍ ແລະ ຂັ້ນຕອນຕ່າງໆ; ແລະ ສະໜອງການຊ່ວຍເຫຼືອ, ການບໍລິການ ແລະ/ຫຼື ຮູບແບບຕົວເລືອກແກ່ຄົນພິການ. ເພື່ອຮຽກຮ້ອງທີ່ພັກອາໄສ, ການດັດແປງ, ການແປພາສາ, ການອະທິບາຍ ຫຼື ການບໍລິການທາງພາສາ; ເພື່ອຍື່ນໃບຮ້ອງຮຽນ; ຫຼື ສຳລັບຂໍ້ມູນເພີ່ມເຕີມ ຫຼື ຄຳຖາມກ່ຽວກັບສິດທິພົນລະເມືອງຫົວຂໍ້ VI (ການປ້ອງກັນເຊື້ອຊາດ, ສີຜິວ, ສັນຊາດດັ້ງເດີມ) ແລະ ADA

ຫົວຂໍ້ II (ປ້ອງກັນຄົນພຶການ) ບັນຫາ (ແຜນການ, ການບໍລິການ, ກິດຈະກຳສາທາລະນະທີ່ບໍ່ເລືອກປະຕິບັດໃນຕົວເມືອງ): ຕິດຕໍ່ Program Specialist ທາງໂທລະສັບໄດ້ທີ່

503. 823.5185, TTY ທີ່ 503.823.6868, ຫຼື Oregon Relay Service ທີ່ 711.

#### **Questions?**

To request a copy of this report, e-mail fixedspeedsafetycamera@portlandoregon.gov.

For questions (or to share comments) about the City's Fixed Speed Safety Camera Program or this report, please contact the Program Specialist, Traffic Safety Education and Enforcement, Portland Bureau of Transportation at 503-823-5821 or e-mail fixedspeedsafetycamera@portlandoregon.gov.

For technical issues related to the camera operations or a violation notice processed via photo radar in the City of Portland, contact the City's vendor's Photo Enforcement Hotline at 503-221-0415 or 1-800-799-7082.

For questions related to the City's Vision Zero Action Plan, e-mail VisionZero@portlandoregon.gov

## **Portland Bureau of Transportation**

Dan Saltzman, Commissioner-in-charge Leah Treat, Director Art Pearce, Manager Policy Planning and Projects Margi Bradway, Manager Active Transportation and Safety Dana Dickman, Manager Traffic Safety Providance Nagy, Traffic Safety Education and Enforcement Program Specialist

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# **Executive Summary**

The City of Portland has been a leader in utilizing automated enforcement tools to improve safety since 1995 when it gained pilot authority to launch a mobile van speed enforcement program and four years later to operate red light running cameras. In 2015, the Oregon Legislature granted the City of Portland the authority to implement photo radar (otherwise known as HB 2621). Portland Bureau of Transportation (PBOT) and Portland Police Bureau (PPB) collaborated on the development of the Fixed Speed Safety Camera Program, and worked with the Multnomah County Circuit Court to efficiently process the citations that are filed.

Because speeding and dangerous behaviors are contributing factors to deadly crashes across the Portland region, the City of Portland's Vision Zero Action Plan includes automated enforcement as part of its actions to mitigate dangerous behaviors and speeding. A two-year Vision Zero action includes a pilot to implement fixed speed safety cameras (i.e., fixed photo radar) on "urban high crash corridors" that are also part of City's High Crash Network. Fixed speed safety camera systems face each direction of travel along four corridors in the City of Portland: SE 122nd Avenue, SE Division Street, Beaverton-Hillsdale Highway and NE Marine Drive. The fixed speed safety cameras complement the City's suite of automated enforcement options. The City's eleven red light cameras are located at intersections with a significant crash history attributed to a disregard of traffic signal; nine of the intersections are on Portland's High Crash Network. The photo radar vans are deployed to school zones, residential streets, work zones and other streets with a high number of crashes or speeding complaints.

SW Beaverton-Hillsdale camera system in Southwest Portland is Portland's first Fixed Speed Safety Camera. Citations commenced on September 24, 2016 after a 30-day warning period. The second and third camera systems on SE 122<sup>nd</sup> Avenue and SE Division Street were introduced simultaneously to East Portland in March 2017 with citations commencing on April 5, 2017 following a 30-day warning period. Comparing before and after speed count data, top-end speeding and speeding generally decreased. The fourth fixed speed safety camera system along NE Marine Drive is planned to be installed before Fall of this year.

The fixed speed safety camera pilot will be evaluated in late 2018 as part of the City's Vision Zero Action Plan at which time the program's outcome will be more narrowly understood. However, comparison of before and after speed counts near the fixed speed safety camera systems are early indicators of positively influencing speed reduction through automated enforcement thereby having a positive effect on traffic safety. PBOT appreciates the positive working relationship among its partners, PPB and Multnomah County Circuit Court, to more holistically administer Portland's Fixed Speed Safety Camera Program.

# **Reporting Mandate**

Chapter 721, 2015 Oregon Revise Statutes (ORS) specifies the use and reporting requirements of the City of Portland's fixed photo radar system, referred to by the Portland Bureau of Transportation (PBOT) as fixed speed safety cameras. The City shall provide an outcome evaluation once each odd-numbered year to the Legislative Assembly. This report shall include the following sections:

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

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

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

While used to great effect in other cities throughout the country, readers are cautioned that this report captures this program in its nascent stages of operation. PBOT has recently launched most of its camera systems as part of its pilot. Moreover, it is premature to evaluate the crash data, preliminary or otherwise, since the camera systems have been operating for less than one year. However, comparison of before and after speed counts near the fixed photo radar system are early indicators of positively influencing speed reduction through automated enforcement.

# Portland's Transportation System: A comprehensive approach to safety

The City's Comprehensive Plan sets out the goals and policies. Its transportation element seeks to increase the focus on complete multimodal transportation systems. The City's <u>first</u> goal is safety<sup>1</sup> that states:

The City achieves the standard of zero traffic-related fatalities and serious injuries. Transportation safety impacts the livability of a city and the comfort and security of those using City streets. Comprehensive efforts to improve transportation safety through equity, engineering, education, enforcement and evaluation will be used to eliminate traffic-related fatalities and serious injuries from Portland's transportation system.

The Transportation System Plan (TSP), the 20-year plan to guide transportation investments in Portland, is adopted concurrently with the Comprehensive Plan but is published under a separate cover. The "Transportation System Plan Update: Stage 3 – Discussion Draft" (May 19, 2017) currently under review at the time of this report's publication includes suggested language for adoption that affects the definitions of the traffic classifications by including new safety language<sup>2</sup> that reflects recently-adopted Vision Zero policies.<sup>3</sup>

Furthermore, the City has identified a High Crash Network (HCN) that consists of 30 high crash intersections and 30 high crash streets. The City's High Crash Network reflects the City's most dangerous streets and intersections for people driving, walking and bicycling. Streets on the HCN represent 8 percent of Portland streets, yet account for 57 percent of deadly crashes<sup>4</sup>. Vision Zero prioritizes<sup>5</sup> its actions on the HCN illustrated in Figure (1).

https://www.portlandmaps.com/bps/mapapp/maps.html#mapTheme=tspTrafficthat

 $<sup>^{1}</sup>$  2035 Comprehensive Plan (December 2016), City of Portland, pp. GP9-6 and GP9-7 at

https://www.portlandoregon.gov/bps/2035-comp-plan.pdf (accessed June 29, 2017)

<sup>&</sup>lt;sup>2</sup> For example, stage 3 TSP Update (May 2017) to add the following "safety" language to "Neighborhood Collectors": "Safety should be the highest priority on Neighborhood Collectors. Safety countermeasures should be implemented on Neighborhood Collectors to address identified safety risks." (p.4-15) Suggested safety language for a "district collector street" is: "Safety should be the highest priority on District Collectors. Safety countermeasures should be prioritized on District Collectors to address identified safety risks with a focus on eliminating fatal and serious injury crashes." (p.4-15) To see traffic classifications, visit the PBOT Map App at

<sup>&</sup>lt;sup>3</sup> Transportation System Plan Update: Stage 3 – Discussion Draft, p. 4-12 at

https://www.portlandoregon.gov/transportation/article/640080 (accessed June 30, 2017)

<sup>&</sup>lt;sup>4</sup> Portland's High Crash Network, Portland Bureau of Transportation (PBOT), see High Crash Network Streets, PBOT website https://www.portlandoregon.gov/transportation/59277 (accessed June 1, 2017)

<sup>&</sup>lt;sup>5</sup> Where will Vision Zero Focus? PBOT website https://www.portlandoregon.gov/transportation/71734 (accessed June 7, 2017)

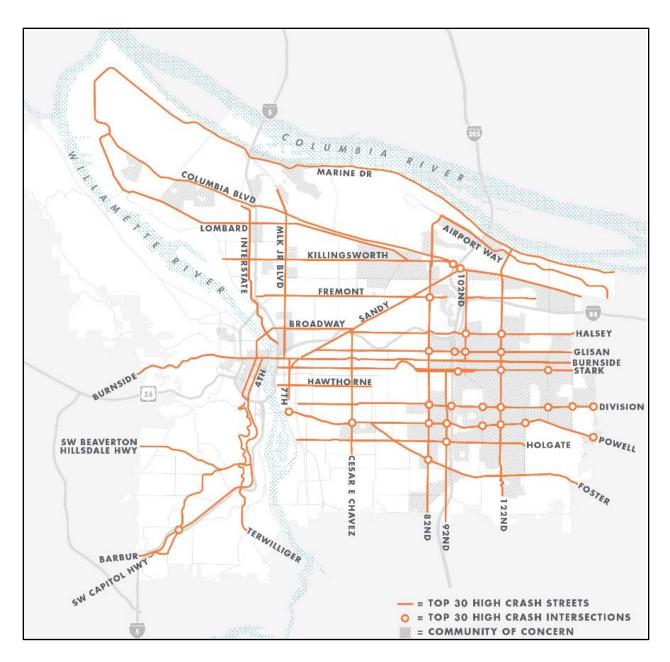


Figure 1. The High Crash Network (HCN) and Communities of Concern, City of Portland <sup>6</sup>

Most High Crash Network corridors are high-volume, multi-lane arterials, which suffer a serious crash rate greater than the freeway system.<sup>7</sup>

 <sup>6</sup> Portland's High Crash Network, Portland Bureau of Transportation (PBOT) website https://www.portlandoregon.gov/transportation/54892 (accessed June 1, 2017)
 <sup>7</sup> Portland's High Crash Network, Portland Bureau of Transportation (PBOT) website at

https://www.portlandoregon.gov/transportation/article/585144 (accessed June 1, 2017)

# Authority to use Fixed Speed Safety Cameras

City Council identified authorizing the use of fixed speed safety cameras on urban high crash corridors as one of the City's six priority legislative initiatives on January 7, 2015. PBOT and the Office of Government Relations worked extensively on House Bill 2621, sponsored by Oregon Representative Reardon, and on July 20, 2015 Governor Kate Brown signed it into law, making it Chapter 721 of the 2015 Oregon Laws. House Bill 2621 also received tremendous local support.<sup>8</sup> Support for HB 2621 and the local ordinances played a key role to effectuate the fixed speed safety camera program in 2016.

## **Overview of HB 2621**

HB 2621, now Chapter 721 (Oregon Laws 2015), is built upon Oregon's previous automated enforcement legislation. Notable provisions include:

- Citations issued by the Fixed Speed Camera program will be no different in penalty than those issued by the existing Mobile Van program or by those issued in person by a uniformed officer.
- As with the existing programs, Portland Police Bureau (PPB) is responsible for having a police officer review the photographic evidence and sign off on each citation.
- As with the existing programs, over 70% of revenues generated by the program will go to the State of Oregon's Criminal Fine Account.
- Section 3 of the statute dedicates any remaining revenue paid to the City of Portland, beyond the costs of operating and maintaining the FSC program, to improving traffic safety for all modes.
- Sections 5 & 6 of the statute appropriate \$1.25 million to the Judicial Department plus an additional \$1 million to the Emergency Board for the biennium beginning July 1, 2015 which may be expended by the Court to offset costs related to processing Fixed Speed Camera citations.
- City may operate a fixed speed camera on urban high crash corridors.

<sup>&</sup>lt;sup>8</sup> Supporters of HB 2621 (legislation allowing Portland to pilot fixed speed cameras on our High Crash Corridors): Metro Council, The Jade District, Asian Pacific American Network of Oregon (APANO), SW Trails, Community School Traffic Safety, Coordinating Council, Oregon Walks, 82nd Avenue Improvement Coalition, Foster United, Friends of Barbur, Elders in Action, Portland Bicycle Advisory Committee, Portland Pedestrian Advisory Committee, Bicycle Transportation Alliance.

## **High Crash Network Streets**

The City has identified 30 high crash streets among its high crash network. The high crash network is a composite<sup>9</sup> of the (a) top 20 high crash streets for driving; (b) the top 20 high crash streets for bicycling; and (c) the top 20 high crash streets for walking. Fixed speed safety cameras, however, may be located on the "urban high crash corridor" defined under Section 1, Chapter 721, Oregon Laws:

a segment of highway that has an incidence rate of reported traffic crashes resulting in fatalities or serious injuries that is at least 25 percent higher than the rate for highways with the same speed limit or designated speed within the jurisdiction on average between January 1, 2006, and January 1, 2016, and for which the governing body of the city makes a finding that speeding has had a negative impact on traffic safety.

On May 4, 2016 City Council approved ten urban high crash corridors<sup>10</sup> eligible for locating fixed speed safety cameras: Foster Road, 82nd Avenue, Barbur Boulevard, E/W Burnside Street, Powell Boulevard, Sandy Boulevard, 122nd Avenue, SE Division Street, Beaverton-Hillsdale Highway and NE Marine Drive. These ten corridors are among the City of Portland's 30 high crash network streets. Fixed speed safety camera systems face each direction of travel along four corridors in the City of Portland: SE 122nd Avenue, SE Division Street, Beaverton-Hillsdale Highway and NE Marine Drive.

## Vision Zero: Portland is committed

In June 2015, the Portland City Council unanimously passed a resolution committing Portland to Vision Zero. The City of Portland's *Vision Zero Action Plan, Saving Lives with Safe Streets*, developed by community and agency leaders, was unanimously approved by the Vision Zero Task Force and adopted, as amended, by City Council on December 1, 2016. The plan is facilitated by a Vision Zero Task Force that is committed to serve a two-year term from January 2017 to December 2018 to provide direction to the City and partners, act as a liaison and engage member organizations or agencies as appropriate.

The plan is equitable, data-driven, and accountable as highlighted in its vision statement: "Working together, we will take equitable and data-driven actions that will eliminate deaths and serious injuries for all who share Portland Streets by 2025."<sup>11</sup> There are 32 Vision Zero actions to be implemented in the next two and five years; and one of those actions addresses the role speed plays in crash severity.

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> See Memorandum (March 30, 2016), subject "Urban High Crash Corridors and Chapter 721 of the 2015 Oregon Laws", Exhibit C, Ordinance 187727, City of Portland e-files "187727 Xerox State and Local Solutions, Inc. Photo Radar Systems expand services and find ten roadways as urban high crash corridors eligible for fixed speed safety cameras amend contract 31000129 exhibit", http://efiles.portlandoregon.gov/Record/9121110/ (accessed May 31, 2017) <sup>11</sup> Vision Zero Action Plan: Saving Lives with Safe Streets, The City of Portland, December 2016, p. 1.

The Vision Zero Action Plan includes an action, paired with education and outreach activities, to "pilot speed safety cameras on four high crash corridors in the first two years and to expand the program to additional high crash corridors following the pilot."<sup>12</sup> By understanding the consequences of speed, Vision Zero aims to create a culture that is less tolerant of the risks engendered by speed. The Plan reminds Portlanders that speed safety cameras are not intended to become a revenue collection mechanism but, most importantly, to reduce speed.<sup>13</sup>

## **Vision Zero Action: Speed**

Portland's High Crash Network has posted speed limits ranging from 25 mph to 45 mph. Traveling at excessive speeds has been consistently linked to higher crash risks. A person struck by someone driving over 40 mph – an example speeding violation on a residential street that is posted 30 mph -- has an 80% likelihood of death or severe injury.

Because speeding and dangerous behaviors are contributing factors to deadly crashes across the Portland region, the Vision Zero Action Plan includes automated enforcement as part of its actions to mitigate dangerous behaviors and speeding. The Vision Zero Action Plan includes an action to "pilot speed safety cameras on four high crash corridors in the first two years and to expand the program to additional high crash corridors following the pilot."<sup>14</sup> The action leads are PBOT and PPB. Its annual action-specific performance measures are twofold: number of speeding-related citations issued near speed safety cameras compared to baseline; and percentage decrease of autos traveling 5+ mph over posted speed after speed safety cameras were installed. <sup>15</sup>

#### Photo Radar: A cornerstone to reduce speed

The City had entered into the Photo Radar System contract on April 1, 2010. This photo radar contract consists of the Portland Police Bureau's Mobile Speed Van program. However, the Photo Radar contract allowed for a four-year extension. On March 25, 2015, the Photo Radar contract was extended noting that "the program is a cornerstone of the City's efforts to reduce speed."<sup>16</sup> The contract was later amended by emergency ordinance in May 2016 to include the addition of eight (8) fixed speed camera systems (i.e., two systems in either direction along four high crash corridors).<sup>17</sup>

<sup>&</sup>lt;sup>12</sup> Ibid., p. 30

<sup>&</sup>lt;sup>13</sup> Ibid., p. 24

<sup>&</sup>lt;sup>14</sup> Ibid., p. 24.

<sup>&</sup>lt;sup>15</sup> Ibid., p. 30

<sup>&</sup>lt;sup>16</sup> Impact Statement for Requested Council Action, Ordinance 187059, Xerox State and Local Solutions, Inc. Photo Radar System amend contract 31000129 additional documents at http://efiles.portlandoregon.gov/Record/7351087/
<sup>17</sup> Agenda Item 467, Agenda No. 5353, Portland City Council Agenda, City Hall, 1221 SW Fourth Avenue, Wednesday, 9:30 AM, MAY 4, 2016. See also Contract No. 31000129, Amendment No. Five (5), Exhibit A, Ordinance 187727, City of Portland e-files "187727 Xerox State and Local Solutions, Inc. Photo Radar Systems expand services and find ten roadways as urban high crash corridors eligible for fixed speed safety cameras amend contract 31000129 exhibit", http://efiles.portlandoregon.gov/Record/9121110/ (accessed May 31, 2017)

# Impact on traffic safety

Portland is home to about 15% of the state's population but suffers from 22% of the state's crashes.<sup>18</sup> The number of Oregonian's killed on Portland roadways has remained stubbornly flat over the past 20 years.<sup>19</sup> In 2013, 36 people died in traffic crashes in Portland, more than double the number of homicides in the city.<sup>20</sup> The City's Vision Zero includes an action to address the role that speed plays in crash severity. Piloting speed safety cameras is among those action items.

## Pilot: Two years, four high crash corridors, eight cameras

As part of its pilot project, the City has installed or will install Fixed Speed Safety Cameras on four high crash corridors.<sup>21</sup> Portlanders struck by drivers speeding on these streets are unlikely to survive:

- <u>SE 122<sup>nd</sup> Avenue</u>: The incidence of pedestrian crashes on SE 122<sup>nd</sup> Avenue is about 50% higher than the citywide average.
- <u>SE Division Street</u>: Analysis of a decade's worth of crash data found that more Portlanders were seriously injured or killed while driving on SE Division than on any other street.
- <u>Beaverton-Hillsdale Highway</u>: People walking along or crossing SW Beaverton-Hillsdale Highway on foot are twice as likely to be struck by a car than on the average city street.
- <u>Marine Drive</u>: Someone involved in a traffic crash on Marine Drive is eight times more likely to die than on the average city street.

Since August 2016, PBOT installed three of the four camera system locations operating a total of six camera systems as of March 2017. Table (1) shows the warning period and citation start dates as well as a description where the cameras are located. Figure (3) also depicts the general locations of the fixed speed safety cameras.

By the end of 2017, Portland will have installed cameras on all four corridors, which is also specified in City of Portland's contract with its vendor, Conduent (formerly Xerox).<sup>22</sup> A camera system faces a direction of travel such as eastbound or westbound along SW Beaverton Hillsdale

Legislative Report OUTCOME EVALUATION (2015-2017): Fixed Photo Radar System

<sup>&</sup>lt;sup>18</sup> Oregon Department of Motor Vehicles crash data, 2009-2013

 <sup>&</sup>lt;sup>19</sup> http://www.cdc.gov/motorvehiclesafety/local/b/includes/ mvcfatalitiesmap/mvcfatalitiesmap.html
 <sup>20</sup> Why Vision Zero, Bureau of Transportation, City of Portland (2016),

https://www.portlandoregon.gov/transportation/article/591925 (accessed June 28, 2017)

<sup>&</sup>lt;sup>21</sup> As noted in the previous section, these four streets are among the "urban high crash corridors" as defined in Chapter 721 (ORS 2015).

<sup>&</sup>lt;sup>22</sup> See Contract No. 31000129, Amendment No, Five (5), Exhibit A, Ordinance 187727, City of Portland e-files "187727 Xerox State and Local Solutions, Inc. Photo Radar Systems expand services and find ten roadways as urban high crash corridors eligible for fixed speed safety cameras amend contract 31000129 exhibit", http://efiles.portlandoregon.gov/Record/9121110/ (accessed May 31, 2017)

Highway or SE Division Street, or northbound or southbound along SE 122nd Avenue. Each camera system has a speed reader board assembly in advance of the camera's location informing drivers of their speed as they enter the corridor. Figure (3) shows a speed reader board assembly in advance of a fixed speed safety camera along SW Beaverton Hillsdale Highway in Southwest Portland, the City's inaugural fixed speed safety cameras.

WARNING BEGIN	CITATION BEGIN	NO. OF	CORRIDOR
DATE	DATE	SYSTEMS	(location)
August 25, 2016	September 24, 2016	2	SW Beaverton-Hillsdale Hwy
			(near SW 39th Avenue and SW Dosch
			Road between Hillsdale Town Center
			and SW Shattuck Road)
March 6, 2017	April 5, 2017	2	SE 122 Avenue
			(south of Powell, north of Foster
			between SE Reedway and SE Steele)
March 6, 2017	April 5, 2017	2	SE Division Street
			(between SE 148th Ave and SE 154th
			Ave near SE 151 <sup>st</sup> Ave)
ТВА	ТВА	2	NE Marine Drive
			(eastbound near NE 33rd Drive; and a
			westbound location to be determined)

Table 1. Warning and Citation Schedule.

The pilot has three of its four locations in operation. Each location consists of two camera systems: a camera for each direction of travel. The first two fixed speed safety camera systems were installed along SW Beaverton-Hillsdale Highway (eastbound and westbound) and were operational on August 25, 2016. An additional four cameras were installed along SE 122<sup>nd</sup> Avenue (northbound and southbound) and SE Division Street (eastbound and westbound) and both were operational on March 6, 2017. All violations are warnings during the first 30 days of operation.

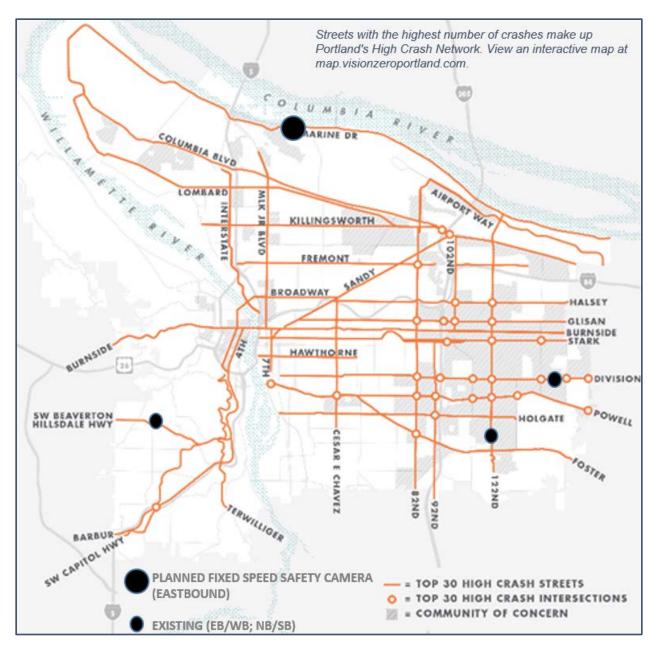


Figure 2. General locations of fixed speed safety camera systems, City if Portland

The pilot fixed speed safety cameras are located on the City's High Crash Network.<sup>23</sup>

<sup>&</sup>lt;sup>23</sup> Portland's High Crash Network, https://www.portlandoregon.gov/transportation/54892 (accessed May 31, 2017)



Figure 3. Speed reader board assembly, SE Beaverton-Hillsdale Highway, City of Portland Photo by Gabe Graff (PBOT)

## How fixed speed safety camera systems work

Fixed Speed Safety Cameras are mounted on poles and placed in a specific location with one camera unit on each side of the street. Warning signs announcing "TRAFFIC LAWS PHOTO ENFORCED", the posted speed limit, and a speed reader board displaying the vehicle's current speed are placed in advance of the speed safety camera. The warning signage gives drivers ample information and opportunity to slow down, obey the law, and avoid a citation.

When people driving past the cameras exceed the posted speed limit, the camera system captures photos (front and rear of vehicle) and video for review by Portland Police. Figure (4) shows examples of the speed reader board assembly and the fixed speed camera system used in the City of Portland.



Figure 4.

Speed reader board and camera.

On left, a technician tests the speed reader board assembly during installation. Photo courtesy of vendor (Conduent). On right, image of the fixed speed system located in Portland, Oregon. Photo by Providance Nagy (PBOT). The camera systems are placed on "urban high crash corridors" that are also part of the City's High Crash Network. All locations to date consist of a pair of cameras. Each camera system is assigned to one traffic approach. The front facing camera takes photos of the front plate and driver while likewise filming footage; and the rear facing camera takes a still photo of the rear license plate.

#### Speed: Before and after installation

The fixed speed safety camera program is in its early stages but speed counts may be an early indication of the effect of the operation of the fixed speed safety camera systems on traffic safety. Data comparisons before and after installation of the SW Beaverton-Hillsdale, SE 122 Avenue and SE Division Street camera systems and speed reader boards showed a reduction in top-end speeders (i.e., exceeding 10 mph above posted or legal speed limit). Table (2) shows the percentage decrease in both speeding and the top-end speeding. As seen in Table (3), the 85th percentile<sup>24</sup> also decreased.

<sup>&</sup>lt;sup>24</sup> Manual on Uniform Traffic Control Devices (MUTCD, 2009) defines the 85th percentile as "the speed at or below which 85 percent of the motor vehicles travel."

CHANC	GE IN SPEEDS	
BOTH DIRECTIONS	SPEEDING	TOP END SPEEDING
SE DIVISION STREET	47% DECREASE	71% DECREASE
SE 122ND AVENUE	68% DECREASE	91% DECREASE
SW BEAVERTON HILLSDALE HWY	61% DECREASE	92% DECREASE

Table 2. Percentage speeding decrease before and after speed count

Pneumatic tube counts before and after catalogued speed count data. The results showed an overall reduction in both speeding and top-end speeding near the fixed speed safety cameras.

	BEFORE	
85TH Percentile	(MPH)	(MPH)
DIVISION EASTBOUND	42	34
DIVISION WESTBOUND	41	32
122 SOUTHBOUND	41	36
122 NORTHBOUND	42	36
BH HWY EASTBOUND	48	42
BH HWY WESTBOUND	46	42

Table 3. Reduction in 85th percentile, before and after speed counts

The 85<sup>th</sup> percentiles also dropped for all directions of travel after the fixed speed safety camera systems and speed reader boards were installed.

Comparison of before and after speed counts near the fixed speed safety camera system may be early indicators of positively influencing speed reduction through automated enforcement thereby having a positive effect on traffic safety.

# **Public Process**

While the City has not yet conducted formal public polls to gauge public opinion of the fixed speed safety camera since installation and operation, the success and acceptance of the Portland Police Bureau's Red Light<sup>25</sup> and Mobile Speed Van programs helped pave the way for photo radar as an automated enforcement tool that can be leveraged to enhance roadway safety. During the past two years, the City's Vision Zero Action Plan inclusive of the plan's actions to address speed, have been adopted with a sense of urgency.

PBOT had engaged Portlanders who "played an important role in creating the goals, principles, and actions in the Plan." The Vision Zero engagement effort included an online survey made available in four languages. The survey received 895 responses. When asked "do you support using automated cameras to ticket people who speed while driving?", 29% of respondents answered "no" while 71% of respondents said "yes".<sup>26</sup>

## **Communication and Outreach**

The City has done and will continue outreach to notify and inform community members about the Fixed Speed Safety Cameras.<sup>27</sup> Materials available for distribution include, but are not limited to: postcards in English and ten other languages<sup>28</sup>, Fixed Speed Camera Frequently Asked Questions (FAQ) info sheet, and map of city-wide safety project scheduled for construction this year. Figure (5) illustrates the postcard used to inform the public of the camera systems and Vision Zero.

<sup>&</sup>lt;sup>25</sup> The City of Portland currently utilizes 11 red light cameras at 10 intersections to enforce laws against red-light running and to improve safety. Red light cameras are installed at ten (10) intersections: NE Grand Ave. and E. Burnside St.; NE Sandy Blvd. and NE CE Chavez Blvd.; NE CE Chavez Blvd. and NE Sandy Blvd.; W Burnside St. and 19th Ave.; NE Broadway St. and NE Grand Ave.; SE Foster Rd. and SE 96th Ave.; SE Stark St. and SE 102nd Ave.; SE Stark St. and SE 99th Ave.; SE Washington St. and SE 103rd Ave.; SE Grand Ave. and SE Madison St.; and SW 4th Ave. and SW Jefferson St. See City of Portland Photo Enforcement Report 2013-2014, Portland Police Bureau Traffic Division: pp. 18 and 19. https://www.portlandoregon.gov/police/article/521181 (accessed June 1, 2017); and RED LIGHT CAMERAS: City can fine tune some program aspects and solidify plans for future (Office of the City Auditor, City of Portland): p.4 https://www.portlandoregon.gov/auditservices/article/538290 (accessed June 1, 2017)

<sup>&</sup>lt;sup>27</sup> Traffic Safety Program Specialist, Sharon White, and Irene Schwoeffermann, PBOT Public Involvement Coordinator, contributed significantly to the outreach efforts of the first three camera locations.

<sup>&</sup>lt;sup>28</sup> Those ten languages are: Spanish (Español), Vietnamese (Tiếng Việt), Chinese (中文), Russian (Русский), Romanian (Română), Ukrainian (Україньска), Japanese (日本語), Somali (Soomaali), Arabic (عربي), and Laotian (גינים).

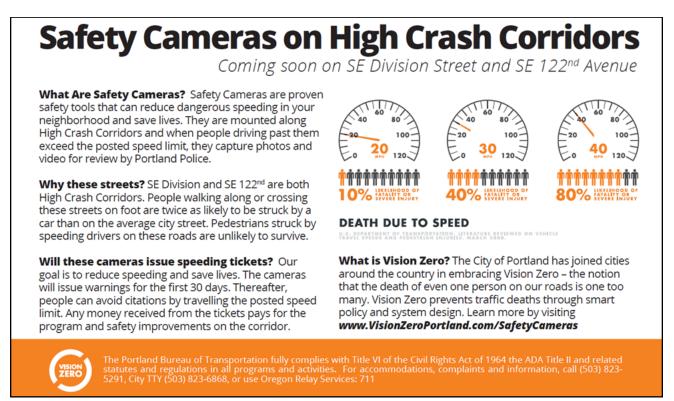


Figure 5. Outreach postcard

Postcard mailed to residences within ten blocks of each camera system. Postcards were also hand delivered to local businesses and community organizations in vicinity of the camera. The postcard is available in English and ten other languages<sup>29</sup>.

In addition to mailing out the postcard, PBOT staff walked to businesses in vicinity of the cameras in advance of activation and the initial 30-day warning period. The face-to-face outreach allowed the sharing of information of not only the fixed speed safety cameras but also other safety projects planned along the corridor demonstrating that enforcement does not perform in a vacuum. Education and engineering (i.e., design) are critical components to any safety action plan.

As part of the outreach, postcards were provided to the East Portland Neighborhood Office (EPNO)<sup>30</sup> and Asian Pacific American Network of Oregon (APANO). A quarter page advertisement in *The East Portland Neighborhood Association News* reached 7,000 households. The outreach area for schools<sup>31</sup> for the SE Division Fixed Speed Safety Cameras includes the area

<sup>&</sup>lt;sup>29</sup> Those ten languages are: Spanish (Español), Vietnamese (Tiếng Việt), Chinese (中文), Russian (Русский), Romanian (Română), Ukrainian (Україньска), Japanese (日本語), Somali (Soomaali), Arabic (ユミン), and Laotian (גסס). <sup>30</sup> Neighborhood Associations include: Lents, Powellhurst Gilbert, Pleasant Valley, Centennial, Mill Park, and Hazelwood.

<sup>&</sup>lt;sup>31</sup> Division schools include: West Powellhurst Elementary School, Franciscan Montessori Earth School, Lynchwood Elementary School, Lynch View Elementary School, Parklane Primary School, Oliver Elementary School, Serendipity, Four Corner Elementary School, Lincoln Park Elementary School, David Douglas High School, David Douglas Arthur

from SE 122nd to SE 170th and E Burnside to SE Powell. The outreach area for schools for the 122nd Ave Fixed Speed Safety Cameras include the area from I-205 to SE 145 and SE Powell to SE Favel. In 2016, parents may have learned about the City's first cameras along SW Beaverton-Hillsdale Highway in PBOT's Safe Routes to School newsletter; Figure (6) shows the section of the newsletter featuring the announcement.

PBOT public venues also offered opportunities to disseminate information about the fixed speed safety cameras. For example, "PBOT East Portland Transportation Town Hall and Open House" took place in October 2016 and the East Portland Action Plan (EPAP) group welcomed the topic on its January 25, 2017 agenda. During the Portland Freight Committee (meeting 167) on May 4, 2017, staff provided a brief overview of the fixed speed cameras planned along NE Marine Drive (eastbound).

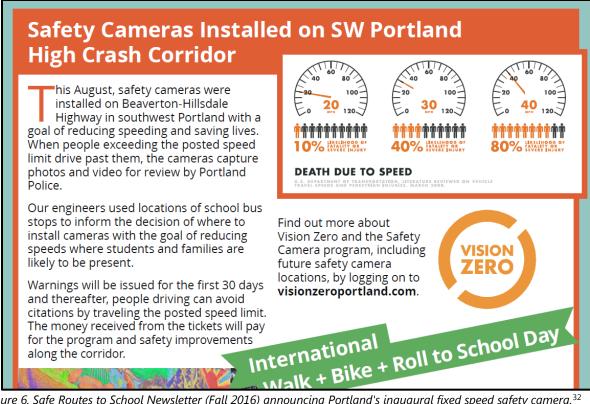


Figure 6. Safe Routes to School Newsletter (Fall 2016) announcing Portland's inaugural fixed speed safety camera.<sup>32</sup>

Academy. SE 122 schools include: Alice Ott Middle School, Gilbert Park Elementary School, Gilbert Heights Elementary School, Earl Boyles School, Ron Russell Middle School, and Lent Elementary School. <sup>32</sup> Safe Routes to School Newsletter, Fall Issue (2016), bureau of Transportation, City of Portland, at https://www.portlandoregon.gov/transportation/article/592058 (accessed July 5, 2017)

Social and media coverage has been extensive. The PBOT Twitter account, @PBOTInfo, has almost 20,000 followers and nearly 3,627 Facebook<sup>33</sup> followers. PBOT regularly mentions ongoing Vision Zero events, projects and programs using #VisionZero.<sup>34</sup> Press releases placed on the PBOT website have been likewise shared on Facebook and tweeted on Twitter. Figure (7) show Twitter tweets broadcasting the start of the East Portland fixed speed safety cameras' warning period; and figure (8) highlights the start of the PBOT-fostered media events and coverage by other outlets.



Figure 7. #VisionZero Twitter post covering the launch of the fixed speed safety cameras in East Portland<sup>35</sup>

<sup>&</sup>lt;sup>33</sup> The PBOT Facebook page is at https://www.facebook.com/PBOTInfo

 <sup>&</sup>lt;sup>34</sup> See, for example, https://twitter.com/search?l=&q=%23visionzero%20from%3Apbotinfo&src=typd&lang=en
 <sup>35</sup> https://twitter.com/search?l=&q=%23visionzero%20from%3Apbotinfo&src=typd&lang=en (accessed July 7, 2017)



Figure 8. #VisionZero Twitter post covering the launch of the City's first fixed speed safety cameras in Southwest Portland<sup>36</sup>

<sup>36</sup> Ibid.

Legislative Report OUTCOME EVALUATION (2015-2017): Fixed Photo Radar System

# **Program Administration**

PBOT appreciates the positive working relationship among its professional partners, PPB and Multnomah County Circuit Court, to holistically administer the fixed photo radar system. The vendor, City staff and Courts play important roles striving to ensure quality assurance, objectivity and timely processing. This section provides an overview of the administrative framework, violation processing and program costs.

## **Administrative framework**

PBOT administers the fixed speed camera program; a Memorandum of Understanding (MOU)<sup>37</sup> among PBOT, the PPB and Multnomah County Circuit Court clarified related roles and responsibilities. On May 4, 2016 City Council amended the City's existing automated enforcement contract<sup>38</sup> with Xerox State and Local Solutions (now Conduent) to include Fixed Speed Safety Cameras and to declare Portland High Crash Corridors as eligible for fixed speed enforcement.

Most of the fine revenue generated by the cameras goes to the State of Oregon's General Fund (approximately 70%). The fines are disposed as follows. Section 153.633 (1) states that \$60 (or the amount of the fine if the fine is less than \$60) is initially payable to the state prior to any other distribution of the fine. Section 153.640 (2)(a) further directs that the \$60 (or less) amount be deposited in the Criminal Fine Account. Of the remaining fine amount, Section 153.640(2)(b) and (c) states that 50% is payable to the local government and 50% is payable to the state. Remaining funds (i.e., the 50% payable to the local government) are used to pay for operation and maintenance of the program. Any additional revenue beyond system costs is dedicated by statute to traffic safety<sup>39</sup>; 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.<sup>40</sup>

<sup>&</sup>lt;sup>37</sup> Memorandum of Understanding between the Portland Police Bureau, The Portland Bureau of Transportation, and the Multnomah County Circuit Court Regarding Automated Enforcement Programs in the City of Portland, Exhibit B, Ordinance 187727, City of Portland e-files "187727 Xerox State and Local Solutions, Inc. Photo Radar Systems expand services and find ten roadways as urban high crash corridors eligible for fixed speed safety cameras amend contract 31000129 exhibit", http://efiles.portlandoregon.gov/Record/9121110/ (accessed May 31, 2017)

<sup>&</sup>lt;sup>38</sup> See Contract No. 31000129, Amendment No. Five (5), Exhibit A, Ordinance 187727, City of Portland e-files "187727 Xerox State and Local Solutions, Inc. Photo Radar Systems expand services and find ten roadways as urban high crash corridors eligible for fixed speed safety cameras amend contract 31000129 exhibit",

http://efiles.portlandoregon.gov/Record/9121110/ (accessed May 31, 2017)

<sup>&</sup>lt;sup>39</sup> Of those remaining amounts paid, Section 3, Chapter 721 (ORS 2015) states it "may be used only for costs of operating and maintaining fixed photo radar units in urban high crash corridors...and for improving traffic safety for all modes of transportation."

<sup>&</sup>lt;sup>40</sup> Memorandum of Understanding between the Portland Police Bureau, The Portland Bureau of Transportation, and the Multnomah County Circuit Court Regarding Automated Enforcement Programs in the City of Portland, Exhibit B, Ordinance 187727, p. 5.

When a new camera is installed and operationalized, there is an initial 30-day warning period during which public outreach intensifies and speeding drivers receive warning letters. The media is notified by press release and is invited to the launch of the fixed speed safety camera system. The 30-day warning period strives to increase public awareness that the fixed speed safety camera system is intended to reduce speeding as part of the City's Vision Zero safety effort. After the initial 30-day warning period, a speeding driver receives a citation in the mail within two weeks after the speeding event is documented. The typical fine is \$160.<sup>41</sup> The City is working to develop a diversion program for community members that may be inordinately impacted by a citation or fine.

PBOT, PPB, and Multnomah County Circuit Court meet quarterly and continue to collaborate as outlined in its Fixed Speed Safety Camera MOU to best meet the increase in citation volume stemming from the new Fixed Speed Safety Camera program.

#### **Violation processing**

The administrative process of fixed photo radar enforcement includes citation processing and issuance, delivery, payment and adjudication. The vendor, Conduent, captures and processes the violations through a multi-step process that can take several days. Figure (9) illustrates the steps to process and issue a citation on the basis of the fixed speed safety camera (i.e., fixed photo radar).

The vendor calibrates<sup>42</sup>, maintains and operates the camera systems and speed reader boards. Digital data is retrieved each business day. The vendor ensures that the image and correlating data meet quality control standards and criteria. After screening, a request is sent to the Law Enforcement Telecommunication System (NLETS) if a license plate can be identified (front and/or rear license plate). In return, the vendor receives the registered owner and vehicle information. Review criteria includes, but is not necessarily limited to, gender match, clarity of plate, glare on windshield, car obstruction, vehicle match failure or obstruction of either vehicle or driver. Evidence of violations that do not withstand this test are not issued as citations.

<sup>&</sup>lt;sup>41</sup> A "Class C" violation has a presumptive fine of \$160; a minimum fine of \$80; and a maximum fine (individuals) of \$500. Schedule of fines on violations can be found at http://www.courts.oregon.gov/Pages/fees.aspx (accessed June 28, 2017)

<sup>&</sup>lt;sup>42</sup> Fixed speed safety camera system testing entails several parts. The vendor's technician calibrates the speed reader boards once every 48 hours (every other day) using a tuning fork (i.e., frequency helps verify the calibration of the device). The fixed speed camera self-tests daily; and the vendor's operator verifies daily operation using a checklist and the computerized maintenance management system (CMMS). Lastly, there is an annual system test of the radar antenna. A third party conducts an antenna frequency test and a speed simulator test. If the readings demonstrate performance in accordance with the manufacture's specification, a recertification is issued. If the antenna fails its performance, an atypical occurrence, it is sent to the manufacturer for further testing and/or repair or replacement.

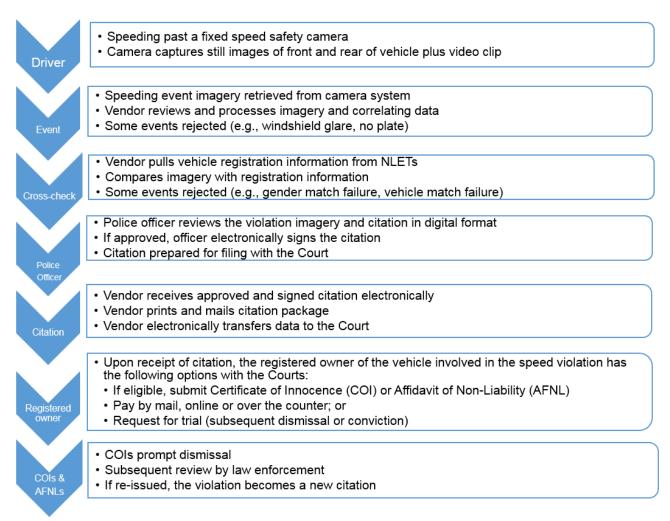


Figure 9. General overview of the steps to process and issue a citation for speeding violation using the fixed speed safety cameras.

Once screened by the vendor, the violation is submitted in citation format for police officer review. A Portland Police Officer certified in automated enforcement/photo radar reviews the video and photos for accuracy. If the citation passes police officer review, and it is determined that a violation has occurred, the officer digitally signs the citation. The vendor then prepares the citations for mailing.

The mailings include a cover letter sign by the PBOT Director. If the violation occurred during the 30-day warning period, no citation is included. Instead, a warning letter signed by the PBOT Director is mailed; and the registered owner who receives a warning letter requires no further action. Appendix B shows an example template of the warning letter.

The citation cover letter and warning letter both include a photo and log-on details to access the vendor's *Citeweb* database where the owner may view the video clip and high resolution images. An actual citation packet will also include the issued citation and a Certificate of Innocence (or Affidavit of Non-Liability if a business or government agency). Citations are mailed in accordance with sound business practice. Table (4) shows the number of speeding events before screening and review compared to the number of actual violations mailed after review and digital signature.

Fix	ed Speed Safe	ty Camera Eve	nts & Violatior	1S
	SW Beaverton- EASTB	-Hillsdale Hwy OUND	SW Beaverton- WESTB	-
Month		Violation		Violation
(2016/17)	Total Events	Notices Mailed	Total Events	Notices Mailed
Sept (2016)	1754	1015	630	376
Oct	1242	861	368	248
Nov	1088	784	323	209
Dec	752	507	189	109
Jan (2017)	665	480	195	125
Feb	968	706	268	159
March	1224	870	362	235
April	1039	691	255	151
May	165	103	53	24
	SE Divisio EASTB		SE Divisio WESTB	
Month		Violation		Violation
(2017)	Total Events	Notices Mailed	Total Events	Notices Mailed
March 7 to 31	3319	2172	3394	2295
April	3451	2244	3217	2053
May	3393	2087	3412	2021
		Avenue	SE 122nd SOUTHI	Avenue
Month (2017)	Total Events	Violation Notices Mailed	Total Events	Violation Notices Mailed
March 7 to 31	601	336	776	421
April	573	364	859	473
May	696	375	723	351

Table 4. Summation of events and violation notices mailed

Summary of "events" denotes the number of actual speeding incidents compared with "violation notices mailed". Events are actual speeding events that exist before the violations are vetted and approved. During the initial 30 days of a fixed speed safety camera operations, the violations mailed are warning letters. Thereafter, these mailings contain citations.

The registered owner has 60 days to respond to a photo radar citation and is afforded the same rights as any defendant with a traffic violation. The citation is processed by the Multnomah County Circuit Court which is part of the Oregon court system. As such, the registered owner who has received a citation has several options to dispose the citation:

- 1. Payment
  - a. By mail,
  - b. Over the counter, or
  - c. Online;
- 2. Request for trial, and subsequent dismissal;
- 3. Request for trial, and subsequent conviction;
- 4. Violation Bureau Reduction over the counter (administrative reductions administered by the Clerk);
- 5. Certificate of Innocence (private party); or
- 6. Affidavit of Non-Liability (government, business).

If the registered owner was not driving the vehicle when the violation occurred, the owner may file a Certificate of Innocence (a government agency or business may file an Affidavit of Nonliability) with the Multnomah County Circuit Court. The Court dismisses the citation but a Portland police officer subsequently reviews the Certificates of Innocence (or Affidavits of Nonliability) for accuracy.

When law enforcement receives the Certificates of Innocence and receives a certificate refuting fault, PPB looks at the violation photo and compares it to the Oregon Department of Motor Vehicles (DMV) driver license photo of the registered owner. The officer's decision is based on comparing photos. If it appears the driver in the violation is one of the registered owners, PPB will reissue the citation. When there is any doubt pertaining to whether a driver is the registered owner, or issues of clarity persist, the reviewing officer will dismiss the ticket.

#### **Program Costs**

Program costs associated with the administration and operation of the fixed speed safety camera program includes vendor fees and City administrative costs. Table (6) reflects the vendor's fixed and variable costs. When payment has been collected by the Court, the vendor will charge a fee per citation. As seen in Table (6), the fee per payment is a variable fee which decreases as the citation quantities increase. However, there is a monthly flat-rate lease of \$3,195 per camera (i.e., per direction).

System	Fixed Monthly Fee	Payments Collected in one month	Fee per Payment
Fixed Speed	\$3,195/mo. Per	1-800	\$25.65
Safety Camera System	approach <sup>43</sup>	801-1,200	\$20.90
(a system consists of a		1,201-1,600	\$19.00
front facing and rear facing camera)		1,601-2,400	\$10.00
		2,401+	\$5.00

Table 5. Vendor fee schedule, Fixed Speed Safety Camera, City of Portland

All locations to date consist of a pair of cameras. Each camera system is assigned to one traffic approach. For purposes of an example, if 1,100 payments are collected for a citation month for a violation captured by an eastbound camera, the variable monthly fee per payment would be computed as follows:  $(800 \times $25.65) + (300 \times $20.90) = $26,790$  (plus the applicable fixed monthly fees since the systems are leased by the City).

There is latency between citation issuance and any payment that may cover the costs of the program. A number of citations will be dismissed when the registered owner submits a certificate of innocence. Table (6) compares the actual citation month with the invoicing month. Of the 5,575 citations mailed from September through March using the two fixed speed safety cameras on SW Beaverton-Hillsdale Highway, 3,037 citations were paid. On Wednesday, April 5, 2017, the City commenced issuing citations with its newest camera systems: the two cameras located on SE Division Street and the two cameras located on SE 122<sup>nd</sup> Avenue. With a total of six cameras in operation, April and May saw 10,163 citations mailed. Of those 10,163 citations, 1,190 were paid. It should be noted that the fine amount paid may vary; but the vendor's fee schedule is based on the quantity of payments. Figure (10) illustrates the latency between issuance of a citation and any payment.

<sup>&</sup>lt;sup>43</sup> Per approach means the direction of travel -- eastbound, westbound, southbound, or northbound -- that the camera faces and is focused on aiding in enforcement.

Number of cameras in operation	Citation Month				In	voice M	onth						
		Qty Mailed	October 2016	November 2016	December 2016	January 2016	February 2016	March 2016	April 2016	May 2016	Total Paid	Dismissed	Total Processed
	September 2016	282	61	26	38	29	19	11	6	6	196	45	241
2 cameras	October 2016	1,109	97	207	89	161	64	68	30	19	735	143	878
(SW Beaverton-Hillsdale	November 2016	993		77	191	66	144	76	55	17	626	151	777
Hwy)	December 2016	616		2	48	95	37	96	47	32	357	92	449
	January 2017	605			2	28	116	55	61	62	324	80	404
	February 2017	865					56	181	53	114	404	65	469
	March 2017	1,105						110	193	92	395		395
6 cameras	April 2017	5,202							200	793	993		993
(SW BH, SE 122, SE Div)	May 2017	4,961								197	197		197
(011 011,02 122,02 011)		15,738	158	312	368	379	436	597	645	1,332	4,227	576	4,803

Table 6. Citations mailed and paid<sup>44</sup>

This table reflects the number of (a) violations mailed as citations and (b) fines paid through May 2017. Those "dismissed" are due to certificates of innocence. April 2017 saw an increase in citations since four additional cameras were installed and operating.

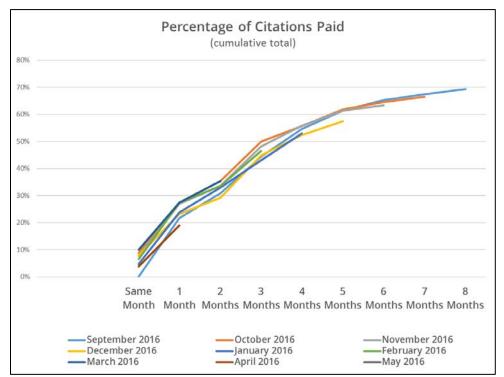


Figure 10. Line graph of percentage of citations paid (cumulative total)<sup>45</sup>

This chart illustrates how fine payments arrive over the course of several months under the Fixed Speed Safety Camera program. Of the September issued citations, for example, 69% have been paid as fines eight months after the citation was mailed. (This chart does not reflect how the remainder of citations may have been adjudicated such as request for trial and subsequent dismissal.)

 <sup>&</sup>lt;sup>44</sup> Data source: Vendor (Conduent) mailing and payment data through May 31, 2016
 <sup>45</sup> Ibid.

Table (7) reflects the current program costs. As noted earlier in Table (7), the City received a deposit of \$4,560 from the Court in November 2016. The deposits have steadily increased with April's deposit amounting to \$19,955 and May's deposit reflecting \$37,985. As of May 2017, the total deposits of \$110,755 has not yet offset the costs of operating and administering the program since its inception. As of May 31, 2017, program's remaining costs totals \$232,977. This is expected to change as the program matures.

FIXED SPEED SAFETY CAMERA PROGRAM Costs and Revenue	AMOUNT (USD)
Vendor fixed costs - camera system each direction	95,232
Vendor variable costs - based on citations paid	107,402
Subtotal vendor costs (thru May 31, 2017)	202,634
PPB work effort	50,687
PBOT work effort	79,257
Project administration and outreach costs - copy/print/bind/mail	11,154
services, translation services, speed studies, permits	
Subtotal PBOT program administration costs	141,098
Total costs from July 1, 2016 thru May 31, 2017	343,732
Revenue (credit)	110,755
Program Costs Remaining (thru May 31, 2017)	232,977

Table 7. Costs and revenue, Fixed Speed Safety Camera Program<sup>46</sup>

<sup>&</sup>lt;sup>46</sup> The Program costs associated with administrating and operating the fixed speed safety camera program in Portland, Oregon. This table represents the majority of revenues and expenditures. There may be minor adjustments to the year-end closing. Throughout July, the City makes final entries made in preparation of the comprehensive annual financial report (CAFR) which typically closes in August.

# **Looking Ahead**

The fixed speed safety camera program continues to mature while strengthened by a positive working relationships with PPB and Multnomah Courts. The fixed speed safety camera pilot will be evaluated in late 2018 as part of the City's Vision Zero Action Plan. The 2018 program evaluation will, in turn, address the statutory outcome evaluation requirements with greater detail.

The Photo Radar contract, amended to include all of Portland's automated speed enforcement programs (Mobile Speed Van and Fixed Speed Safety Camera), is effective until March 31, 2019. PBOT will explore options to expand the Fixed Speed Safety Camera program to additional high crash network streets upon conclusion of the two-year pilot and to the extent to which the authority, budget and agency partner capacity allows. Therefore, a future request for proposal will include any expansion of the Fixed Speed Safety Camera system.

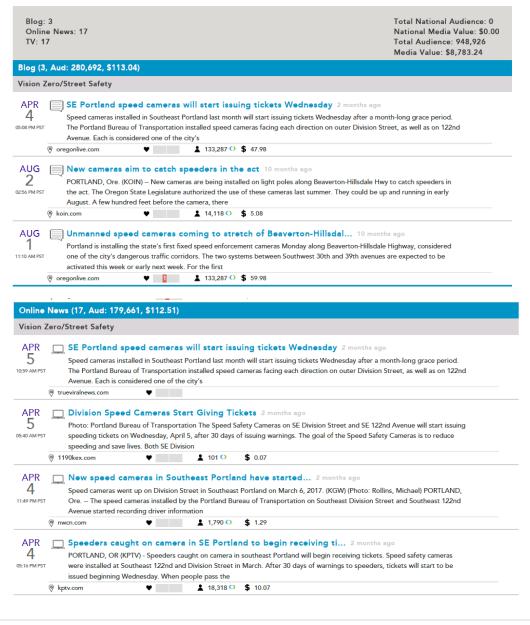
The fixed speed safety cameras are not and never will be a revenue collection mechanism. The City is working to develop a diversion program. The singular intent of the City's fixed photo radar program is to reduce speeding, because the City of Portland is dedicated to achieving a goal of eliminating all traffic deaths and serious injuries by 2025.

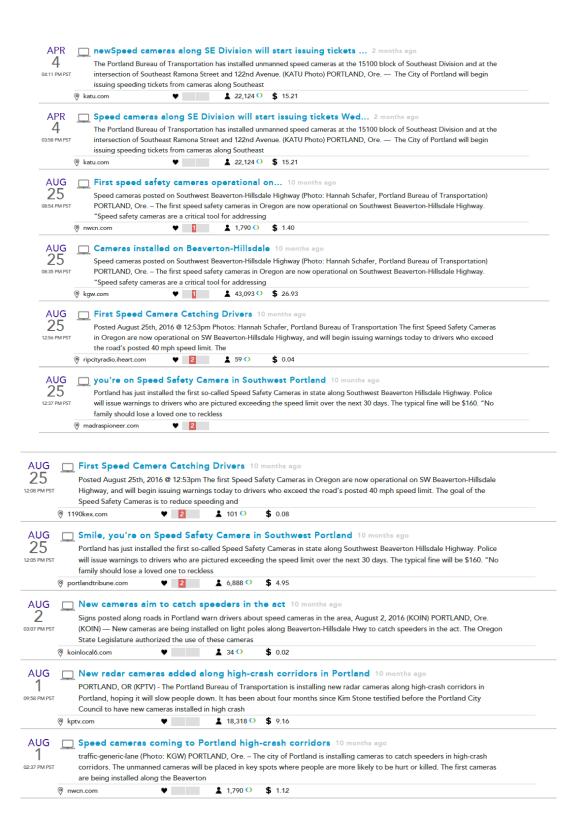
## **Appendices**

#### Appendix A – PIO Media Roll-up



Speed Safety Camera Related Media





AUG 1 02:36 PM PST	Speed cameras coming to Portland 10 months ago     traffic-generic-lane (Photo: KGW) PORTLAND, Ore. – The city of Portland is installing cameras to catch speeders in high-cra     corridors. The unmanned cameras will be placed in key spots where people are more likely to be hurt or killed. The first car     are being installed along the Beaverton	
aug 1	Speed Cameras Coming To An Oregon Highway Near You 10 months ago The City of Portland is about to install a speed camera at SW Beaverton Hillsdale Highway and SW 35th. Kristian Foden-	
06:15 AM PS	<ul> <li>Vencil/OPB Speed cameras will go up this week along Beaverton Hillsdale Highway — in a first for Oregon. Up to now, spe cameras have only been allowed at dangerous stop lights</li> </ul>	ed
	Prews.opb.org     Prew	
	, Aud: 488,573, \$8,557.69)	
Vision	Zero/Street Safety	
MAR 6	WARNING DRIVERS OF THE PHOTO- ENFORCEMENT AHEAD. IT'S ALL BECAUSE THE CITY SAYS THIS IS THE MOST DANGEROUS	
	Portland, OR  \$ 966.77 (A)	
MAR 6	SPEED CAMERAS ALONG SOUTHEAST DIVISION AND 122ND AVENUE. SOMETHING KRISTI FINNEY DUNN HAS BEEN PUSHING FOR. >> I FEEL	
	Portland, OR	
AUG 29 05:00 PM PST	KOIN 6 News at 5 10 months ago PROGRAM. TREVOR: A YEAR AFTER GETTING APPROVAL FROM THE STATE, PORTLAND HAS FINISHED THE INSTALLATION OF ITS FIRST SPEED SAFETY CAMERAS. >> IN OUR REQUESTS TO THE STATE LEGISLATURE LAST YEAR. THIS WAS AT THE TOP OF OUR LEGISLATIVE AGENDA. TREVOR: WITH THE PASSING OF HOUSE BILL 26-21, THE CITY CAN INSTALL	<b>B</b> E
	Portland, OR	
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AUG 29 04:00 PM PST	KOIN 6 News @ 4 10 months ago WALKING ALONG THE ROAD ARE TWICE AS LIKELY TO BE HIT BY A CAR, COMPARED TO OTHER CITY STREETS. THESE ARE THE FIRST OF MANY SPEED SAFETY CAMERAS THAT WILL GO UP ACROSS THE CITY. >> THIS IS ALL ABOUT SAFETY, THIS IS ALL ABOUT REDUCING THE NUMBER OF CRASHES AND FATALITIES AND SERIOUS INJURIES WE HAVE ON	
	Portland, OR	
AUG 27 07:00 AM PST	KGW News at Sunrise         10 months ago           INSTALLED NEW SPEED SAFETY CAMERAS ALONG BEAVERTON- HILLSDALE HIGHWAY, THAT IS GETTING MIXED REVIEWS. THAT WAS THE TOP STORY THURSDAY. >> Reporter: LOOKS LIKE R 2 D 2. BUT THIS IS REAL LIFE. THE SPEED SAFETY CAMERAS WATCHING EVERY MOVE. >> HONESTLY, I DON'T SEE PEOPLE SPEEDING TOO MUCH	
AUG	III High-School Football 10 months ago	
26 05:00 PM PST	TONIGHT ON NBC5 NEWS AT 6 WHY POLICE SAY IT'S AN ISSUE THAT'S ESPECIALLY IMPORTANT TO THEM RIGHT NOW. AROUND THE REGION THE FIRST SPEED SAFETY CAMERAS IN OREGON ARE NOW UP AND RUNNING. THOSE CAMERAS ARE IN THE PORTLAND AREA. THEY'RE LIKE RED LIGHT CAMERAS	
	Medford-Klamath Falls Figure 10, 100 (E)	
AUG 26 05:00 AM PST	KGW News at Sunrise at 5 AM 10 months ago >>> WE HAVE A TRAFFIC ALERT IN SOUTHWEST PORTLAND. NEW SPEED SAFETY CAMERAS ARE UP AND WORKING ALONG A BUSY STRETCH OF BEAVERTON HILLSBORO HIGHWAY. CAMERAS MOUNTED ON UTILITY POLES BETWEEN CAPITAL HIGHWAY AND SHOALES FERRY. THIS STRETCH OF ROAD IS DESIGNATE AS A HIGH CRASH CORRIDOR. MEANING	
	Portland, OR 8,773 108.84 (E)	
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	Po	ortland, OR	¥		\$ 60,159	<b>\$</b> 1,841.53 (E)	
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2 AUG 2 XO AM PST	Por	INVESTIGATORS. KEN ALONG THE BEAVER' STATE TO ADD NEW SESS UPWARDS OF rtland, OR Early Today 10 m >>> HEADS UP FOR I EVENTUALLY GET A T RAFANELLI LIVE. THE INSTALLATION rtland, OR Ch 2 News @ 11 >> Deb: THE CITY IS I KATU'S REED ANDRE GOING UP. REED, HC OF rtland, OR Ch 2 News @ 6 TODAY PORTLAND B HIGH-CRASH CORRID	I: THIS M FON, HILI WAYS TO IONTHIS AS ORIVERS. ICKET. TI CAMERA IO month ALKING WS IS LIV W MUCH IO month JREAU O ORS. THI TWEEN	ORNING, LSDALE F MONITO IF YOU S HE CITY I AS AREN" Ths ago UP THESI TE ON TH H WILL TH WILL TH S ago F TRANSI EY INCLU	WE ARE DIGG HIGHWAY. IT'S OR HIGH-CRA' CONTRACTION BEA INSTALLED SP T ACTIVE YET. 4,255 E NEW CAMEI E BEAVERTON HE FINE BE? > 60,099 PORTATION F JDE SECTIONS	SAFTER THE CITY OF PORTLAND GOT PERMISSION FROM THE SH CORRIDORS. BEAVERTON HILLSDALE HIGHWAY ALONE	

## **Appendix B – Warning letter template**

The cover letter template used during the warning period. Those receiving this letter do not need to take any further action. In contrast, the citation packet includes a cover letter, the citation and a certificate of innocence. In either instance, the registered owner may use the provided PIN to access the vendor's database to view imagery associated with the citation.

CITY OF PORTLAND, OREGON		
www.VisionZeroPortland.com		
Notice of Speed Law Violation THIS IS A WARNING NO RESPONSE REQUIRED	FACE IMAGE	
<mm dd="" yyyy=""> <citation #=""> <name> <address> <city, state="" zip=""></city,></address></name></citation></mm>		
Dear <name>:</name>	You can view full color versions of the images by visiting: http://www.public.cite-web.com	
	Citation Number	Pin Number
In June of 2015, the City of Portland adopted Vision Zero, an effort to end serious and fatal crashes on our roads. Fixed speed safety cameras are a proven tool to reduce serious and fatal crashes. The Portland Bureau of Transportation is installing these cameras on our most dangerous roads in an effort to improve safety. The fixed speed safety camera system monitors vehicle speeds with high definition cameras and radar. In the case of a violation, the safety camera system records the driver, the vehicle and surroundings. It also records the observed speed, date, and time of the violation. Please visit www.VisionZeroPortland.com/SafetyCameras to learn more. A vehicle registered in your name was noted to be in violation of Oregon's speed laws. Above is the photograph taken of your vehicle at the time of the violation. The warning citation was issued after review by a sworn officer and can be viewed by accessing the Public Inquiry Portal at www.public.cite-web.com using the citation and PIN numbers above. THIS IS A WARNING ONLY AND NOT AN ACTUAL NOTICE OF VIOLATION. YOU ARE NOT REQUIRED TO RESPOND TO THIS NOTICE.		
Speeding is a top contributing factor to deadly crashes in Portland. Traffic fines for speeding are expensive. The typical speeding citation in Oregon is a Class C violation (11 to 20 mph in excess of the speed limit) resulting in a \$160 fine. By driving the posted speed limit you can avoid speeding tickets and make our roads safer for everyone.		
If you have any questions about this warning, please call the Photo Enforcement Violation Hotline at 503-221-0415 or 1-800-799-7082. Please drive safely!		
Respectfully, <b>Director</b> , Portland Bureau of Transportation		
The Portland Bureau of Transportation fully complies with Title VI of the Civil Rights Act of 1964, the ADA Title II, and related statutes and regulations in all programs and activities. For accommodations, complaints and information, call (503) 823-5185, City TTY (503) 823-6868, or use Oregon Relay Service: 711.		