

CITY OF OAKLAND

AGENDA REPORT


TO: Jestin D. Johnson
City Administrator

FROM: Josh Rowan
Director, Department of
Transportation

SUBJECT: Speed Safety Cameras
Implementation Update

DATE: July 10, 2024

City Administrator Approval


Jestin Johnson (Jul 11, 2024 20:04 PDT)

Date: Jul 11, 2024

RECOMMENDATION

Staff Recommends That The City Council Receive An Informational Report Regarding Implementation Of Speed Safety Cameras Under Authorization From Assembly Bill 645.

EXECUTIVE SUMMARY

Assembly Bill (AB) 645, a state law passed in October 2023, authorizes Oakland and five other California cities – San Francisco, San Jose, Los Angeles, Long Beach, and Glendale – to implement and oversee a five-year pilot of automated speed safety cameras. Oakland has identified 18 candidate locations for camera placement and anticipates beginning camera operation in the second half of 2025. This informational report outlines key provisions of AB 645 and the next steps for implementation.

BACKGROUND / LEGISLATIVE HISTORY

The [Safe Oakland Streets \(SOS\) Initiative](#) aims to prevent severe and fatal traffic crashes, eliminate injury inequities, and carefully assess and mitigate equity impacts resulting from safety measures. Speeding is a leading cause of serious injuries and fatalities in Oakland. Every week, two Oaklanders, on average, are killed or seriously injured by traffic violence, and these crashes disproportionately impact Black, Indigenous and people of color (BIPOC), seniors, children, and people with disabilities. Speeding is a primary factor in approximately 1 in 4 traffic collisions that kill or seriously injure Oaklanders. Pedestrians are especially vulnerable to speeding vehicles – while a pedestrian hit by a car traveling 20 miles per hour (MPH) is 90% likely to survive, a pedestrian hit by a car traveling 40 MPH is only 10% likely to survive.

Public Works & Transportation Committee
July 23, 2024

Speed safety cameras, or SSC, have proven [highly effective](#) at preventing traffic deaths and injuries in cities across the United States and around the world.¹ Some examples include significant reductions of vehicles traveling more than 10 MPH over the posted speed limit in Portland, OR, Washington, DC and Montgomery County, MD.² SSC have also shown significant injury reductions in New York City and Chicago.³ Both the National Transportation Safety Board and the California State Transportation Agency have acknowledged the effectiveness of SSC in reducing speeding and enhancing road safety. SSC are also an important supplement to traditional traffic enforcement because they operate 24 hours a day, reduce the potential for harmful interactions between officers and members of the public, and free limited law enforcement resources for other purposes.

Oakland's leadership has supported the multi-year effort to implement speed cameras through changes to state law. The Mayor and City Council adopted a supportive position for proposed legislation in 2021 (AB 550, Chiu), and the Mayor, Bicycle and Pedestrian Advisory Commission (BPAC) adopted support positions in 2022 (AB 2336, Friedman and Ting). In 2023, automated speed enforcement was included on the city's state and federal legislative agenda and supported by the Bicyclist and Pedestrian Advisory Commission at their April 20, 2023 meeting. In addition, Mayor Sheng Thao submitted a letter supporting AB 645, and the Privacy Advisory Commission PAC adopted a motion on May 4, 2023, declaring that it did not find significant privacy intrusion sufficient to oppose AB 645. The full text of AB 645 is included as Attachment 3 of this memo.

¹ See <https://www.nts.gov/safety/safety-studies/Documents/SS1701.pdf> for a survey of automated speed enforcement in the United States. SSC discussion begins on page 34 (PDF page 46).

² Portland – 94% reduction of vehicles traveling 11 mph or more over the speed limit based on four corridors where PBOT had speed safety cameras installed.

https://www.portland.gov/transportation/news/2023/10/5/pbot-begins-installing-new-safety-cameras-across-portland-milestone?utm_medium=email&utm_source=govdelivery.

Washington DC, 82% decrease as observed at seven sites selected randomly from 60 targeted enforcement zones in Washington DC, <https://journals.sagepub.com/doi/abs/10.3141/1830-05?journalCode=trra>

Montgomery County, 64% decrease of vehicles traveling >10MPH over the speed limit.

<https://doi.org/10.1080/15389588.2016.1189076>

³ NYC – 17% reduction in total injuries. **USDOT, ITS Joint Program Office. See

<https://www.itskrs.its.dot.gov/2021-b01580>

Chicago – over a two-year period, 36 fewer fatal and severe-injury crashes, 68 fewer moderate injury crashes, and 100 fewer minor-injury crashes over a two-year period. See

https://www.chicago.gov/content/dam/city/depts/cdot/Red%20Light%20Cameras/2022/Sutton+Tilahun_C_hicago-Camera-Ticket_Exec%20Summary-Final-Jan10.pdf

ANALYSIS AND POLICY ALTERNATIVES

Below are some of the key provisions of Assembly Bill 645 as they pertain to Oakland.

AB 645:

- Authorizes a city of Oakland’s population size (between 300,000 and 800,000) to install a maximum of 18 speed safety systems;
- Authorizes OakDOT as the city’s department of transportation to operate, maintain, and oversee the program (not OPD);
- Establishes that citations are issued to vehicle owners, not the driver, at the time of citation;
- Directs excess revenue beyond the cost of program operations to be reinvested into traffic calming and spent within three years of collection.

AB 645 has several provisions related to equity, including:

- A 60-day no-fee warning period once the cameras are turned on;
- Ticket fee reductions between 50% and 80% for low-income populations, based on state definitions, as well as a diversion program;
- Defines penalties under AB-645 as civil penalties, not moving violations (i.e., there is no impact to insurance or points on license);
- Establishes a fine violation structure that accounts for income starting at 11MPH (1-10MPH doesn’t get a ticket), as detailed in the table below.

Figure 1. Citation structure under AB-645

Speed Violation AB 645	Fine	Indigent⁴	200% above poverty level
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⁴ An applicant who is receiving public benefits under one or more of the following programs:
 (1) Supplemental Security Income (SSI) and State Supplementary Payment (SSP) (Article 5 (commencing with Section 12200) of Chapter 3 of Part 3 of Division 9 of the Welfare and Institutions Code).
 (2) California Work Opportunity and Responsibility to Kids Act (CalWORKs) (Chapter 2 (commencing with Section 11200) of Part 3 of Division 9 of the Welfare and Institutions Code) or a federal Tribal Temporary Assistance for Needy Families (Tribal TANF) grant program (Section 10553.25 of the Welfare and Institutions Code).
 (3) Supplemental Nutrition Assistance Program (Chapter 51 (commencing with Section 2011) of Title 7 of the United States Code) or the California Food Assistance Program (Chapter 10.1 (commencing with Section 18930) of Part 6 of Division 9 of the Welfare and Institutions Code).
 (4) County Relief, General Relief (GR), or General Assistance (GA) (Part 5 (commencing with Section 17000) of Division 9 of the Welfare and Institutions Code).
 (5) Cash Assistance Program for Aged, Blind, and Disabled Legal Immigrants (CAPI) (Chapter 10.3 (commencing with Section 18937) of Part 6 of Division 9 of the Welfare and Institutions Code).
 (6) In-Home Supportive Services (IHSS) (Article 7 (commencing with Section 12300) of Chapter 3 of Part 3 of Division 9 of the Welfare and Institutions Code).
 (7) Medi-Cal (Chapter 7 (commencing with Section 14000) of Part 3 of Division 9 of the Welfare and Institutions Code). OR:

0-10 mph	\$0	\$0	\$0
11-15 mph	\$50	\$10	\$25
16-25 mph	\$100	\$20	\$50
26 mph and over	\$200	\$40	\$100
Speed greater than 100 mph	\$500	\$100	\$250

Prior to implementing speed cameras, AB 645 requires that cities adopt a Speed Camera Impact Report (Attachment 1) and Speed Camera System Use Policy (Attachment 2). The Speed Camera Impact Report defines the purpose of the system, how it functions, how it will be paid for, and how the program affects civil liberties . The System Use Policy outlines what data is collected and other key provisions around data security and retention. Both policies are attached in draft form as appendices to this report and will be reviewed in detail by Oakland’s Privacy Advisory Commission at their August meeting. Each policy must also be formally adopted by the Oakland City Council prior to speed cameras commencing operation. DOT staff will request formal adoption through a subsequent Council action in 2025.

Figure 2. Speed Camera Impact Report Summary

State Law Specification	OakDOT’s Response
What is the purpose of the system?	To enforce speed limits 24/7 at 18 locations to slow vehicle speeds
How does the system work?	Fixed camera system with radar to detect speeding violations, mailed notices of violation with messaging and fines
How much will this cost, and where is the money coming from?	OakDOT’s Operating Budget will fund the program, and the cost of staff labor and contract could be up to \$1.75 million annually (see Fiscal Impact section for additional detail)

b) An applicant whose monthly income is 125 percent or less of the current poverty guidelines updated periodically in the Federal Register by the United States Department of Health and Human Services under the authority of paragraph (2) of Section 9902 of Title 42 of the United States Code.

<p>How will this program affect civil rights, and how will those rights be safeguarded?</p>	<p>Minimal (or positive) impacts to civil rights: Unbiased enforcement reduces exposure to discrimination; focus on license plate number minimizes the collection of personally identifiable information</p>
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Figure 3. Privacy Provisions & System Use Policy Summary

State Law Specification	OakDOT's Response
<p>What data is collected?</p>	<p>Rear license plate images for speeding vehicles only. No video or facial recognition is allowed.</p>
<p>Who can access the data?</p>	<p>Individuals in authorized City of Oakland job classifications and those specifically authorized by the vendor to provide technical support. All data collected is confidential and will be maintained in compliance with applicable laws, including but not limited to AB-645 and the Oakland Municipal Code.</p>
<p>Who is the data shared with?</p>	<p>No one outside of OakDOT (without a court order). System security and data compliance will be monitored by internal safeguards and vendor-maintained industry standard practices for data management.</p>
<p>Where is the data stored?</p>	<p>Locally & on the Software As a Service (SAAS) platform</p>

Site Selection

OakDOT based its speed camera site selection off the specifications in AB 645. The chart below explains the agency's response to the bill's criteria.

Figure 4. Speed camera site selection

State Law Specification	OakDOT's Response
<p>Cameras shall be located on a high-injury street, a school zone street, or a street with documented speed racing</p>	<p>All proposed camera locations are on the high-injury network; additionally, several proposed locations are adjacent to schools and in locations with speed-related collisions</p>
<p>Cameras cannot be located on state highways, freeways, or expressways</p>	<p>All cameras will be located on city-owned streets. This restriction primarily excludes freeways and segments of International and San Pablo Blvd owned by Caltrans.</p>

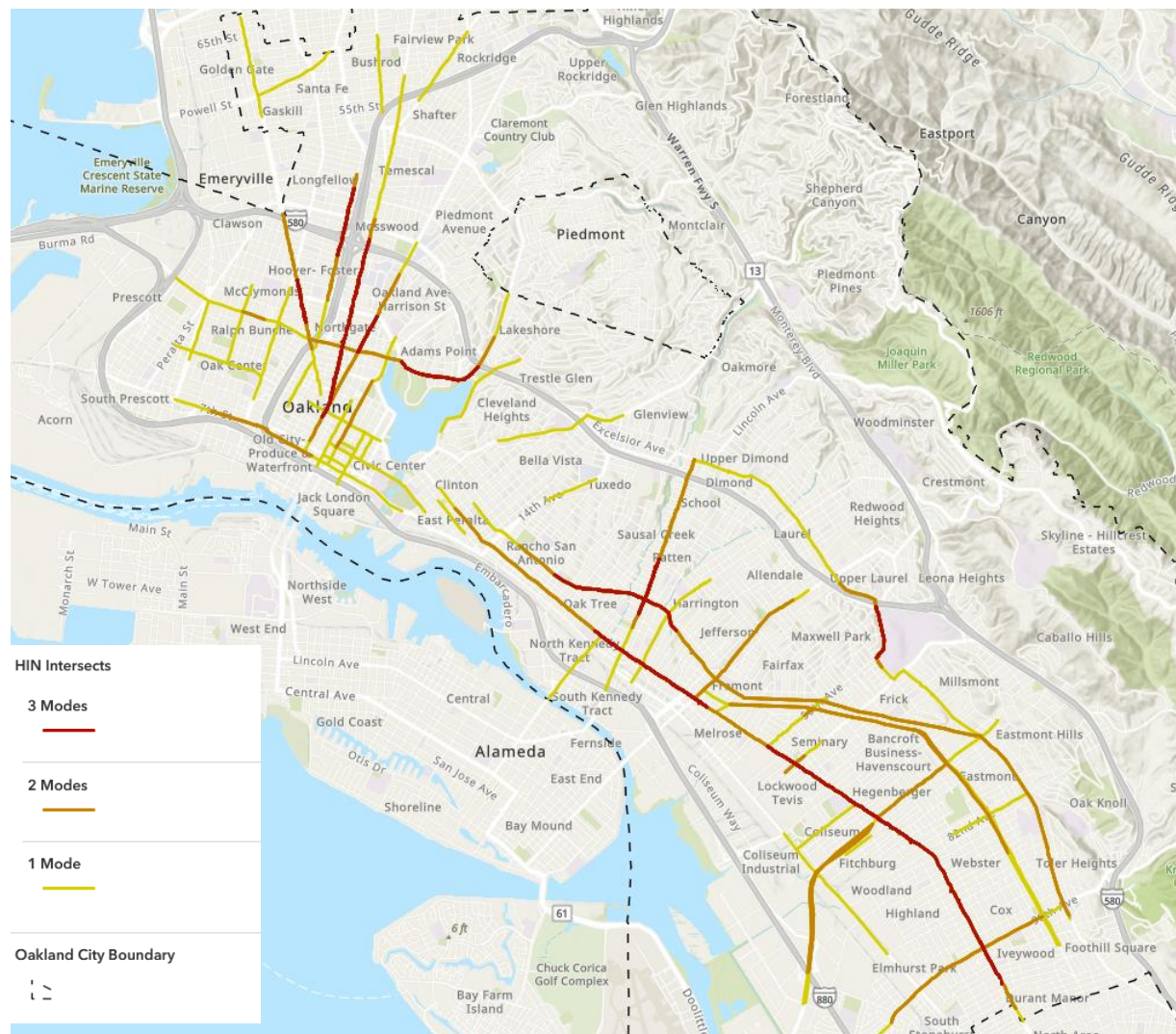
Cameras should be located in areas that are “geographically and socioeconomically diverse”	Camera locations will be spread throughout Oakland , with at least 1 camera per City Council district
To keep a camera location after 18 months, there must be measurable reductions in speeding behavior	Proposed camera locations are prioritized in locations with vehicle speeds exceeding 10 MPH over the speed limit

Building off state law as specified above, OakDOT initiated its site selection process with the [2024 High Injury Network](#) (HIN), or street segments in Oakland with the highest density of fatal and severe collisions. The HIN is determined based on three separate mode-specific HINs: pedestrian, bicyclist, and motor vehicle. Creating separate HINs allows the pedestrian and bicyclist crash networks to be analyzed distinct from the motorist network, which might otherwise dominate the map. For speed camera site selection, the agency prioritized camera placement on streets with two or three overlapping modes. As another prioritization factor, OakDOT also identified street segments with high concentrations of serious and fatal injuries, with speed as a primary factor.

Following this analysis, OakDOT collected data at 43 potential locations for speed cameras in the form of 72-hour tube counts to collect traffic speeds and volumes. These 43 locations were narrowed down to 18 proposed locations based on the following criteria:

- Number and percentage of daily vehicles traveling greater than 10 MPH over the speed limit
- Proximity to sensitive land uses (i.e. schools, senior centers, parks, commercial districts, uncontrolled crosswalks)
- Geography (i.e. avoiding concentrating too many cameras in one neighborhood as per AB 645 requirements)
- Planned capital projects
- Initial technical review for installation feasibility

Figure 5. OakDOT 2024 High Injury Network Weighted By Mode



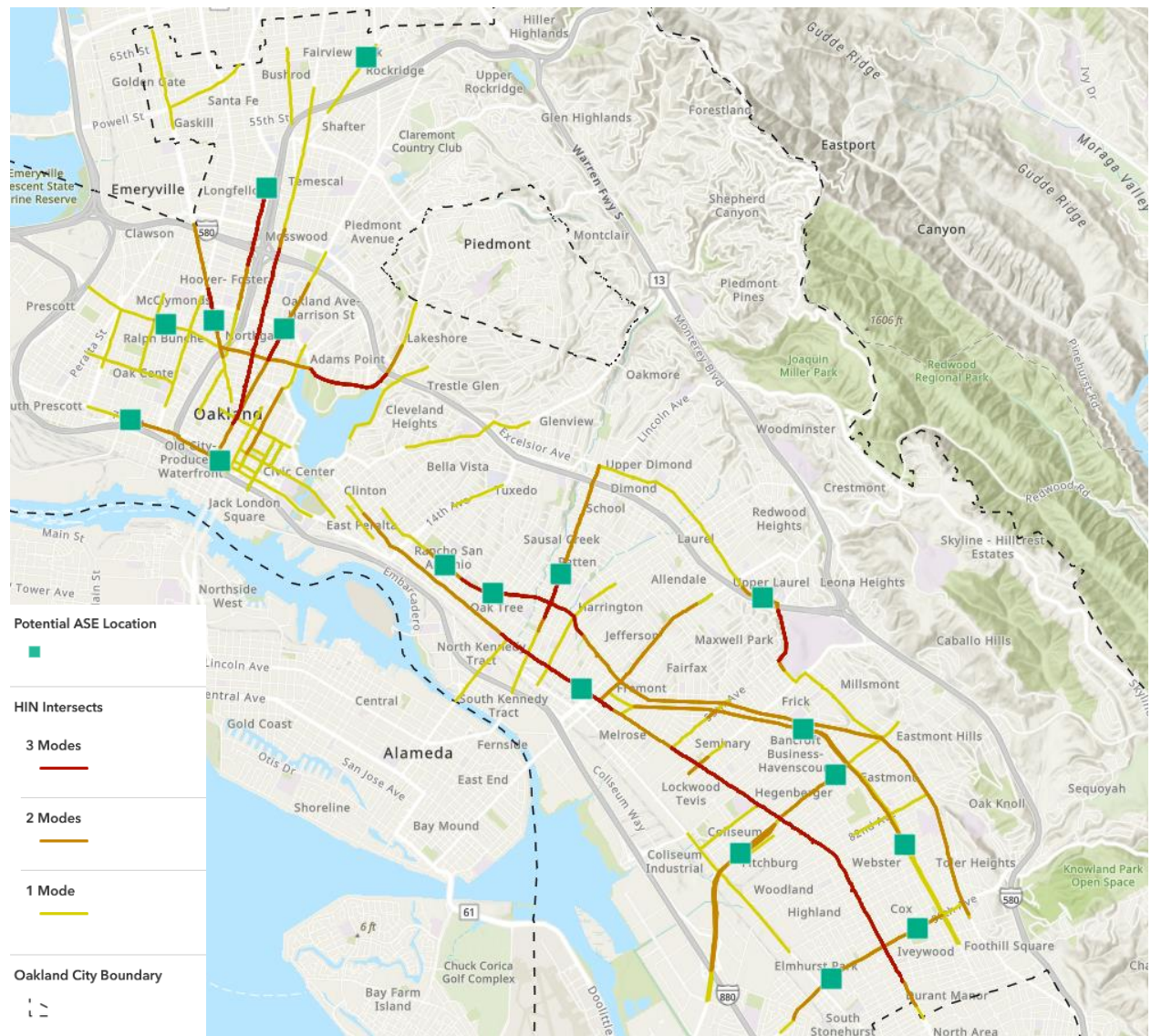
The proposed list of 18 potential speed camera locations and justification for SSC is outlined below. Additional study and detailed site review will be needed prior to implementation to ensure all locations are technically feasible. After installation, OakDOT will continuously monitor number of citations issued and the speed and number of vehicles traveling more than 10 MPH over the speed limit. In addition, under AB 645, there must be measurable reductions in speeding behavior to keep a camera location after 18 months. OakDOT is also required to issue a racial and economic justice evaluation at the end of the five-year operations period.

Figure 6. List of potential automated speed enforcement locations

Location (Main Street)	Location (Cross Streets)	Speed Limit	85th Percentile Speed	Number of Daily Vehicles >10 MPH Over Posted Limit	% of Daily Vehicles > 10 MPH Over Posted Limit	Additional Reasoning for SSC
73rd Avenue	Between Fresno and Krause	35 MPH	41 MPH	1,514	6.2%	High observed speed from vehicles adjacent to Markham Elementary and Eastmont Transit Center
7th St.	Between Adeline St and Linden St	30 MPH	39 MPH	1,760	14.6%	Speeding from vehicles traveling to and from freeways; uncontrolled crossings; proximity to As-Salam Mosque
7th St.	Between Broadway and Franklin Streets	20 MPH	27 MPH	662	5.2%	Concentration of seniors, children, and pedestrians in Chinatown
98th Avenue	Between Blake Drive and Gould Street	30 MPH	37 MPH	1,340	6.6%	Proximity to speed related injury collisions; speeding observed from vehicles traveling to and from I-880
98th Avenue	Between Cherry and Birch	30 MPH	34 MPH	469	3.10%	Adjacent to Elmhurst United Middle School; proximity to speed related injury collisions
Bancroft Ave	Between 86th Ave and Auseon Ave	30 MPH	38 MPH	1,247	8.10%	Uncontrolled crosswalks; proximity to schools, churches
Bancroft Ave	Between 65th and 66th	30 MPH	34 MPH	266	2.90%	Uncontrolled crosswalks; proximity to schools, churches
Broadway	Between 26th and 27th St	20 MPH	27 MPH	1,136	9.20%	Concentration of speed related injury collisions; concentration of pedestrians on Broadway commercial corridor
Claremont Avenue	Hillegass Avenue and College Avenue	20 MPH	37 MPH	636	5.8%	Vehicles speeding to and from SR 24; new addition (2024) to High Injury Network
Foothill Blvd	Between Irving and 24th	25 MPH	29 MPH	252	2.87%	Proximity to speed related collisions; uncontrolled crosswalks
Foothill Blvd.	Between 19th and 20th	30 MPH	33 MPH	203	2.8%	Proximity to speed related collisions; uncontrolled crosswalks; proximity to San Antonio Recreation Area
Fruitvale Avenue	Between Galindo Street and Logan Street	25 MPH	30 MPH	458	3.60%	Uncontrolled crosswalks; proximity to schools, churches
Hegenberger Road	Between Spencer and Hawley	40 MPH	57 MPH	10,029	43%	Freeway-like segment with four travel lanes in each direction; proximity to speed-related injury collisions
International Blvd	Between 40th and 41 st	25 MPH	29 MPH	767	4.9%	High observed speeding from vehicles illegally using the transit lane; concentration of speed-related injury collisions

Location (Main Street)	Location (Cross Streets)	Speed Limit	85th Percentile Speed	Number of Daily Vehicles >10 MPH Over Posted Limit	% of Daily Vehicles > 10 MPH Over Posted Limit	Additional Reasoning for SSC
MacArthur Blvd.	Between Green Acre Road and Enos Ave	30 MPH	38 MPH	667	8.0%	High observed speeds from vehicles traveling to and from I-580, long section of MacArthur without a traffic signal
MLK Jr. Way	Between 42nd and 43rd	30 MPH	37 MPH	540	7.43%	High observed speeds with two travel lanes in each direction, uncontrolled crosswalks
San Pablo Avenue	Between Athens and Sycamore	25 MPH	32 MPH	585	6.72%	Concentration of speed related injury collisions; uncontrolled crosswalks
West Grand	Between Chestnut and Linden	30 MPH	39 MPH	1,538	11.7%	High observed speeds from vehicles traveling to and from freeways; preschool on block

Figure 7. Map of potential automated speed enforcement locations



Project Schedule

The next steps towards implementing speed safety cameras are as follows:

- Present Impact Report and Use Policy to the Privacy Advisory Commission (August 2024)
- Release a request for proposals (RFP) for a speed safety camera vendor and citation processing support (July/August)
- Conduct community outreach through various public and one-on-one meetings (July-October)

- Return to Council to award a vendor contract, adopt the impact report and use policy, and take other necessary actions (2025)
- Initiate a wider public outreach campaign in advance of program start (2025)
- Begin camera operation with a 60-day warning period (2025)

Speed cameras also support the following citywide priorities:

Holistic community safety: SSC have improved transportation safety for users of all modes (walking, rolling, biking, driving, etc.) where implemented in other cities, and are likely to have similar impacts in Oakland.

Vibrant, sustainable infrastructure: By slowing traffic on Oakland streets, SSC may encourage more people to use sustainable modes such as walking and biking.

Responsive, trustworthy government: SSC respond to a well-documented need for improved traffic safety on Oakland streets. They also provide a method of traffic enforcement that minimizes interaction with law enforcement personnel.

FISCAL IMPACT

Speed camera systems are typically billed by camera vendors to municipalities on a monthly, flat fee basis. This flat fee includes installation, maintenance, and citation processing costs, regardless of how many citations are issued. Based on an estimate of 35 cameras (one per direction of travel on 18 streets, except for one one-way segment on 7th Street), at an average cost of \$4,000 per camera per month, the hardware and software for 35 cameras will cost approximately \$1.7M annually. Additional costs for program management and citation processing will be incorporated into OakDOT's operating budget through the biennial budget process.

OakDOT identified an initial \$700,000 to support capital and startup costs in the mid-cycle budget (Project to be determined, Organization 35241, Fund 2219). The agency plans to seek additional funding from external sources, in particular a potential \$2M grant from the Alameda CTC Comprehensive Investment Program (CIP), in fall 2024. Monthly payments will not commence until the program formally begins in 2025.

OakDOT anticipates that a percentage of the costs described above will be recouped by camera revenue, which will be allocated to a dedicated fund. This percentage will be unknown until cameras begin operation and is likely to fluctuate over time. As per AB 645, any excess revenue beyond the cost of program operations must be dedicated exclusively to traffic calming. Prior to receiving revenue from the cameras, OakDOT will fund camera operation through the biennial budget process, most likely in Funds 2218 and 2219.

PUBLIC OUTREACH / INTEREST

The development of AB 645 and prior bills related to automated speed enforcement included extensive public outreach and engagement with the public and stakeholders concerned with

traffic violence throughout California. Oakland specific outreach included consultation with the Bicyclist and Pedestrian Advisory Commission, the Privacy Advisory Commission, and various advocacy groups.

To meet the provisions of AB 645, Oakland is required to “consult and work collaboratively with relevant local stakeholder organizations, including racial equity, privacy protection, and economic justice groups.” Throughout the remainder of 2024, OakDOT staff will engage groups meeting these criteria through one-on-one meetings. Staff also plan to present at publicly noticed meetings such as the Privacy Advisory Commission, the Bicyclist and Pedestrian Advisory Commission, Commissions on Aging and Disability, etc.

OakDOT is also required to implement a public information campaign about SSC a minimum of 60-days prior to program rollout. The City will be jointly developing marketing materials with other AB-645 pilot cities, focusing on those in the Bay Area (i.e.; San Francisco and San Jose). Finally, OakDOT is required to complete several steps prior to March 1 of the fifth year in which the system has been implemented, including data on program implementation, a summary of costs and revenues, and a racial and economic equity impact analysis developed in collaboration with local stakeholder groups. This analysis will inform the potential continuation and/or expansion of the program beyond the fifth year.

COORDINATION

OakDOT is actively coordinating the rollout of speed safety cameras with internal and external stakeholders, including:

- The Parking and Mobility Division within OakDOT on a combined Request for Proposals for parking citation management and speed safety cameras to be released this summer;
- The Safe Streets Division within OakDOT to identify parallel investments that can increase the impact of speed cameras (e.g., citywide signage, signal retiming on other corridors, etc.);
- The Safe Oakland Streets (SOS) core team, including the Department of Race and Equity (DRE), the Oakland Police Department (OPD) and the City Administrator’s Office (CAO);
- The Oakland Public Library and Department of Public Works on potential fine diversion programs (e.g., community service); and
- AB 645 pilot cities – San Francisco, San Jose, Los Angeles, Glendale, and Long Beach through monthly calls and frequent check-ins.

SUSTAINABLE OPPORTUNITIES

Economic: Speed-related collisions have tremendous economic costs at the individual and societal levels. Reducing collisions helps to minimize the burdens on individuals (car repair, healthcare costs) and the city (lawsuits).

Environmental: Speeding vehicles disincentivize people from using non-motorized modes, such as walking and biking, due to perceptions around safety. Speeding and the energy

required to accelerate/decelerate from higher speeds are also typically less environmentally efficient than traveling at slower speeds.

Race & Equity: AB-645 contains several provisions that address race and equity, including a 60-day no-fee warning period once the cameras are turned on; ticket fee reductions between 50% and 80% for low-income populations, as well as a diversion program; civil rather than criminal penalties; a fine violation structure starting at 11MPH (1-10MPH doesn't get a ticket; and requirements to consult with racial and economic justice groups both prior to and after implementation.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Speed cameras are not considered to be a "project" under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b). A formal CEQA determination will be adopted in a future resolution.

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends That The City Council Staff Recommends That The City Council Receive An Informational Report Regarding Implementation Of Speed Safety Cameras Under Authorization From Assembly Bill 645.

For questions regarding this report, please contact Craig Raphael, Speed Safety Program Manager, at 510-238-7229.

Respectfully submitted,


Josh Rowan (Jul 10, 2024 16:09 PDT)

JOSH ROWAN
Director, Department of Transportation

Reviewed by:
Jamie Parks, Assistant Director
Megan Wier, Assistant Director

Prepared by:
Craig Raphael, Speed Safety Program
Manager
Administration and Strategic Planning Division

Attachments (4):

Attachment 1: Draft Surveillance Impact Report: Automated Speed Safety System

Attachment 2: Draft Surveillance Technology Use Policy: Automated Speed Safety System

Attachment 3: Assembly Bill 645 text

Attachment 4: Proposed Speed Camera Locations and 2024 High Injury Network by Mode