

Automated Traffic Safety Camera Statement of Legislative Intent Response

Transportation and Seattle Public Utilities Committee
8/1/2023



Our Vision, Mission, Values, & Goals

Seattle is a thriving equitable community powered by dependable transportation. We're on a mission to deliver a transportation system that provides safe and affordable access to places and opportunities.

Core Values & Goals:

Equity, Safety, Mobility, Sustainability, Livability, and Excellence.

SLI Request Summary

Request 1:

An implementation plan for the doubling of the School Zone Camera program, race and social justice analysis, and anticipated budget changes to administer.

Request 2:

An evaluation of the costs and benefits for expanding other automated traffic safety camera programs and



Automated Camera Enforcement in Seattle

Seattle has used automated traffic safety cameras for:

- Red-Light enforcement at 23 locations.
- Fixed School Zone enforcement at 19 locations.
- Lower Spokane St Bridge lane restriction (deactivated).
- Block-the-Box enforcement at 4 locations (ongoing pilot).
- Transit Lane enforcement at 5 locations (ongoing pilot).



School Speed Zone Enforcement Today

- School speed zones with 85th percentile speeds over 30 MPH prioritized.
- Flashing beacons installed prior to deployment of cameras.
- Cameras considered if speeds still above 30 MPH.
- SDOT coordinates with SPD and its vendor for camera deployment.

Impact of School Speed Zone Camera Program

SINCE START OF SCHOOL SPEED ZONE SAFETY CAMERA PROGRAM



↓ 64%

The average number of traffic violations per camera *per day* has decreased by 64%



↓ 4%

Average speeds have decreased by 4%



90%

90% of people who receive a speeding citation and pay it, do not pay for another citation

COLLISIONS ARE DOWN

↓ 50%

50% drop in total collisions, pedestrian, and bicycle collisions, all times of the day

↓ 71%

71% drop in total collisions during the camera activation hours

Ø

No pedestrian/bicycle collisions in the after period during camera activation times

School Zone Cameras effectively reduce speeding and enhance safety for Seattle students.

3-Step Methodology to Identify Potential School Zone Enforcement Locations

1. Identify areas of need

- School zones with high arrival and dismissal 85th percentile speeds.

2. Install beacons and evaluate effectiveness

- Where beacons have not been effective, consider automated enforcement cameras.

3. Apply equity lens

- Use City's Composite Racial and Social Equity Index (RSEI).
- Include TEW recommendation to equitably distribute cameras.
- Exclude new cameras in high-speed school zones in the most disadvantaged areas and focus on other speed reduction treatments.



Distribution of Potential School Zone Enforcement Locations

RSEI Category	Number of Existing Locations	Number of Potential Locations	Existing + Potential
Lowest Disadvantage	1	7	8
Second Lowest	2	6	8
Middle	3	3	6
Second Highest	5	3*	8
Highest Disadvantage	8	0*	8
TOTAL	19	19	38

*10 locations within the highest disadvantage category and 4 locations within the second highest disadvantage category were referred to the SRTS Program for programming other speed mitigation engineering treatments.

Distribution of Potential School Zone Locations

Council District	Number of Existing Locations	Number of Potential Locations	Existing + Potential
1	5	2	7
2	4	1	5
3	5	1	6
4	1	5	6
5	3	6	9
6	1	4	5
7	0	0*	0*
TOTAL	19	19	38

*One school zone in Council District 7 may qualify for automated enforcement but does not currently have flashing beacons. Beacons alone may effectively reduce speeds. The location was referred to the SDOT Safe Routes to School program for prioritization.

Schedule

- Council Budget Action requested completion of expansion by beginning of the 2024/2025 School Year.
- If directed to proceed, ~14mos. for design and construction.
- Significant risk in delays beyond beginning of 2024/2025 School Year.
- Expansion more feasible by beginning of 2025/2026 School Year.

	Milestone	Duration	Start	Finish
1	SDOT & Vendor – Field Surveys and Location Confirmation	1 Month	Aug 2023	Sep 2023
2	SPD – Task Order Issuance	1 Month	Aug 2023	Aug 2023
3	Vendor/SDOT – Design/Support	4 Months	Sep 2023	Dec 2023
4	SDOT - Street Use Permitting	3 Months	Jan 2024	Mar 2024
5	SCL – Plan Review and Permitting	3 Months	Jan 2024	Mar 2024
6	Vendor/SDOT - Construction	4 Months	Apr 2024	Jul 2024
7	SCL – Service Activation	2 Months	Jun 2024	Aug 2024
8	SDOT – Crew Sign Installation	1 Month	July 2024	Aug 2024
9	Vendor – Final Testing	1 Month	Aug 2024	Sep 2024
10	SPD/Vendor – Activate Cameras - Warning Period	1 Month	Sep 2024	Oct 2024

School Speed Zone Program Budget Impacts

- SDOT requires about \$400K and SPD requires about \$100K to support doubling the program in upfront costs.
- After implementation, SDOT, SPD and SMC will require about \$2.5M annually to operate the new enforcement locations.
- **School Safety Traffic and Pedestrian (SSTPI)** may require further budget action to support potential expansion

SPD and SMC Staffing Constraints

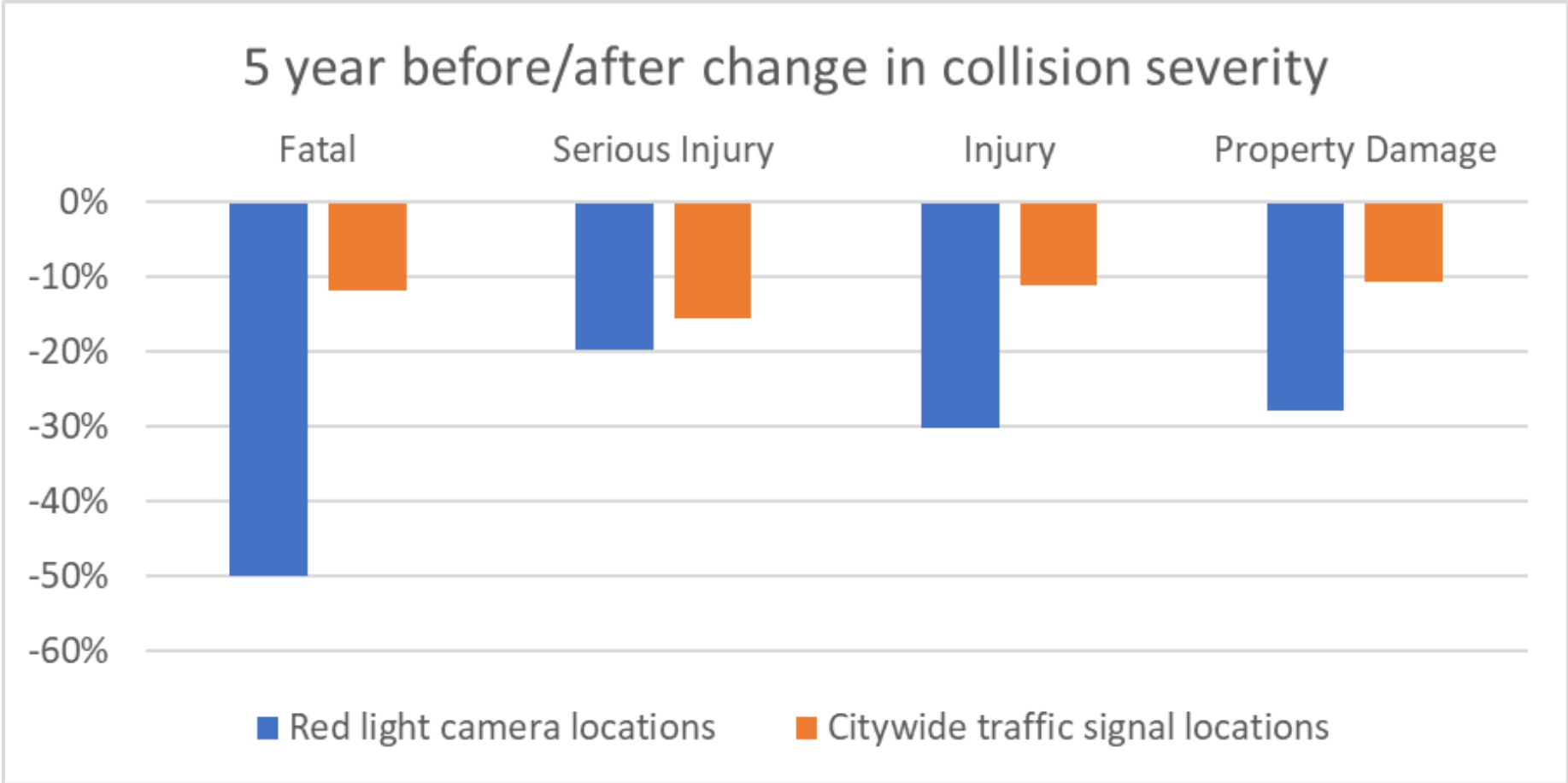
- SPD does not currently have any dedicated officers conducting reviews.
 - Light-duty Officers
 - Overtime when needed/possible
- SPD would need 4-5 additional officers dedicated to review to support existing operations and potential expansion.
- SMC would also need additional staffing resources to meet increased demand associated with expansion.

Other Automated Traffic Safety Camera Programs

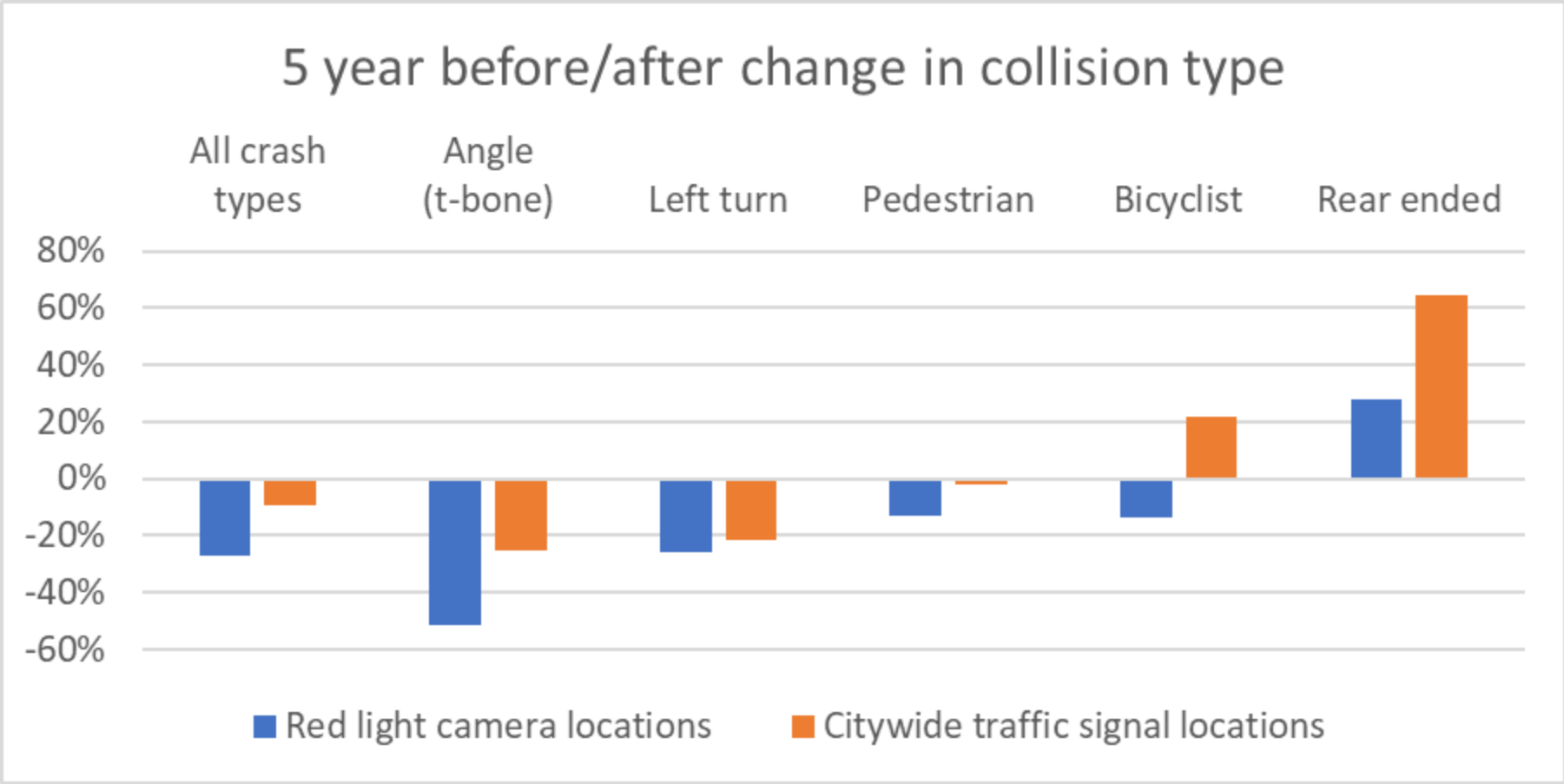
Red-Light Automated Enforcement Program

- Piloted in 2006.
- 23 locations in operation today.
- Selected based on collision frequency and severity, observations and distribution.
- Reduced collision severity and incidence.

Benefits of Red-Light Program



Benefits of Red-Light Program



Estimated Annual Operating Cost of Red-Light Enforcement Program

Type of Cost	Annual Operating Costs / Camera*
Vendor fee/camera - \$3,650/month	\$43,800
SDOT annual administrative costs	\$2,000
SPD annual administrative costs	\$2,600
SPD cost - ~\$2.33/violation	\$7,000*
SMC cost - ~\$1.53/violation	\$4,600*
TOTAL	\$60,000

*This cost does not include upfront costs to install a camera, which could be about \$15,000.

Pilot Automated Enforcement Program

- Authorized for use until Jun 30, 2025.
- Washington State Legislature would need to authorize any use beyond pilot period.
- Pilot program is incurring higher upfront administrative costs.
- Annual operating costs similar to other forms of enforcement.
- Final report on program effectiveness by Jan 1, 2025.

Other Types of Automated Enforcement

The following types of automated enforcement are authorized by state law but are not used in Seattle:

1. Railroad crossings (also authorized by Seattle Municipal Code)
2. School walk areas
3. Public park speed zones
4. Hospital speed zones
5. Additional speed zones – one automated speed detection camera plus one additional automated speed detection camera for every 10,000 residents in locations that meet any of the following criteria cited in [RCW 46.63.170](#):
 - a. priority locations identified in a local road safety plan submitted to WSDOT and where other speed reduction measures are not feasible or have not been sufficiently effective at reducing travel speed; or
 - b. locations with a significantly higher rate of collisions than the city average over at least 3 years before installation, where other speed reduction measures are not feasible or have not been sufficiently effective at reducing travel speed; or
 - c. locations within the City limits designated by local ordinance as a zone subject to specified restrictions and penalties on racing and race attendance (racing zone)
6. State highway work zones (beginning July 1, 2024)



Recommendations

1. **Extend School Zone Camera Expansion Schedule**
2. **Identify Solution to SPD & SMC Staffing Constraints**
3. **Legislative Action to Allow New Forms of Enforcement**
4. **Conduct Community Outreach and Education**
5. **Develop a holistic Automated Enforcement Policies**

