Automated Traffic Safety Camera Expansion Proposal

-Speed Safety Cameras-

Site Selection, Equity Impact Analysis, Enforcement, and Evaluation Plan | City of Lynnwood

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1. Executive Summary

The City of Lynnwood takes into consideration the **Safe System Approach (SSA)** for its transportation environment. The Safe System Approach was created by the U.S. Department of Transportation, Federal Highway Administrations (Attachment B, brochure). SSA provides guidance to reduce fatal and serious-injury crashes by recognizing that people make mistakes, that people are physically vulnerable, and that transportation systems should be designed so those mistakes do not result in death or life-altering injury. While the SSA does not prevent all crashes, its guidance helps to avoid fatal or life-altering consequences. Reducing serious collisions throughout the city and doing directed police emphasis patrols in high crash rate areas and vulnerable areas like schools is a primary focus. Reducing fatal and serious-injury crashes are priorities for the Lynnwood Police Department and it was necessary to evaluate additional speed-management tools alongside more traditional engineering, education, enforcement, and emergency-response strategies.

This report evaluates expansion of automated traffic safety cameras under **RCW 46.63.220(3)** to include speed safety cameras. This report focuses on and analyzes the following three areas: The Meadowdale Area, where an existing school-zone camera system operates; the Lynnwood Elementary Area, where another existing school-zone camera system operates; and the north end of 44th Avenue West between 168th Street SW and 164th Street SW, commonly referred to as the "S-Curves", where a new speed-zone camera system is being proposed. The analysis considers vulnerable road users, speeding evidence, collision rates, and the effectiveness or feasibility of other mitigation measures.

2. Introduction and Legal Framework

Purpose and scope

Improving traffic safety remains a top priority for the City of Lynnwood, which considers a Safe System Approach to meet its traffic safety goals. Over the course of the last three years, traffic fatalities have stayed consistent with no real reductions. The city generally averages 2 to 3 fatality collisions a year. As of September 2026, there have been eight (8) fatality collisions since 2024. One collision resulting in a fatality was specific to the Meadowdale Area, and one collision

resulting in two fatalities was specific to the S-Curves. No fatalities have occurred in the Lynnwood Elementary Area. Adding additional tools and resources such as the 24/7 speed safety camera system gives the city a new way to explore and address the long-standing problem in these concentrated areas.

Crash analysis of the three proposed areas shows both a clear need for the 24/7 speed safety cameras based on collision rates as well as collected speed data.

This report evaluates proposed locations for automated traffic safety cameras and outlines Washington State law requirements for expanding the program. It also provides details, data, and requirements for the proposed locations and expansion of the current system.

Statutory framework

RCW 46.63.220(3) requires a city considering automated traffic safety cameras to include equity considerations including the impact of the camera placement on **livability, accessibility, economics, education, and environmental health**. This report's equity analysis uses these five statutory factors as its organizing framework. The analysis must also include a demonstrated need for traffic cameras in the proposed camera locations based on such things as evidence of vehicles speeding, rates of collisions, the ineffectiveness of other mitigation measures, and so forth. The statute also establishes requirements concerning camera locations, signage, infraction processing, and the treatment of school-speed-zone and school-walk-zone violations.

RCW 46.63.250 establishes where speed safety cameras may be deployed. For this analysis we will apply two specific considerations: School Walk Zones as identified in RCW 46.63.250(2)(d) and defined in RCW 46.63.210; and areas where the city has *experienced higher crash risks due to excessive vehicle speeds* as described in RCW 46.63.250(3).

Washington State does not prescribe one analytical method for applying these considerations. Jurisdictions may use a community-appropriate approach that combines quantitative safety evidence, lived experience, roadway context, implementation feasibility, and transparent limitations. This report therefore presents facts that are currently available, identifies missing information, and avoids treating incomplete evidence as conclusive.

Analytical principles

The analysis prioritizes reducing the risk of fatal and serious injuries while recognizing the need for accessible streets, predictable rules, equitable administration, and public transparency. Findings are presented proportionally: observed speeding and collision patterns indicate a need to further expand automated speed safety cameras in the three proposed areas.

3. Site Selection Methodology

As of 2024, Washington State cities were permitted to expand the locations where automated traffic safety cameras can be placed. The new laws created several new statutes or amendments, which notably included RCW's 46.63.220, RCW 46.63.250, and RCW 46.63.210. The expanded locations include outside of hospitals; parks; along school routes where students travel to school by foot, bicycle, or other means of active transportation; as well as locations that experience higher crash risks due to excessive vehicle speeds. The site-selection process combines network screening, location-specific safety evidence, and community context. The following factors regarding site selection are identified below and information regarding these factors is noted throughout the report:

1. **High-Speeding Crash Network.** Identify corridors and intersections where speeding and reportable crashes overlap, emphasizing fatal and serious-injury risk.
2. **Speeding Risk Network.** Identify locations with sustained or repeated speed-limit exceedances, including direction, time of day, school status, and threshold severity.
3. **Collision history.** Review reportable collisions by year, injury/non-injury, and location. September 2026 YTD numbers are included.
4. **Speed studies.** Compare observed speeds with posted limits and preserve both the at-least-9-mph and at-least-14-mph thresholds used in the supplied studies.
5. **Pedestrian conditions.** Review sidewalks, crossings, sightlines, bicycle facilities, barriers, roadway width, grade, curve geometry, and pedestrian stress.
6. **Community context and equity screening.** Consider proximity to schools, parks, religious institutions, housing, commercial areas, income data, accessibility, diversion, and signage.

4. Proposed-Location Analyses

Zone Accident and Speed Analyses

The following series of maps, data, and accompanying summaries provide an overview of collision and speed activities across key corridors and school-area zones within the City of Lynnwood. Each section highlights concentrations of collision activity along with associated injury outcomes, offering insight into both the frequency and severity of collisions. The analysis also includes speed studies.

Meadowdale Area (168th Street SW from 46th Avenue West to Olympic View Drive)

The Meadowdale Area includes an existing school zone in which automated speed safety cameras have been functioning since 2009 and are operational at the beginning and end of each school day when the school zone lights are flashing. This school zone effectively serves Meadowdale High School, Meadowdale Middle School and Meadowdale Elementary. This school zone is also located with an identified *school walk zone* as defined by RCW 46.63.250(2), as well as identified walk zones established by the Edmonds School District for all three schools.

For purposes of this study the analysis extends from Olympic View Drive to the 4600 block of 168th Street SW. This stretch of roadway serves as a defined *school walk zone* for all three of the aforementioned schools, as well as Beverely Elementary per RCW 46.63.250(2)(d).

This particular section of 168th Street SW is an arterial composed of two eastbound lanes of travel, two westbound lanes of travel, a center two-way left turn lane, sidewalks with ADA access at intersections, pedestrian crosswalks at all major intersections and the neighboring schools, and consistent street lighting. This portion of 168th Street is an area that continues relatively straight for just over one full mile. This Area is largely located within a residential community, and within the area are two elementary schools, one middle school, one high school, a city park, two churches, and two large daycare centers. The roadway has been the focus of traditional speed enforcement and mitigation efforts by the police department for

decades with little demonstrable impact on collision rates and vehicle speeds. This location makes it a vulnerable area for pedestrians and a valid reason why 24/7 speed safety cameras are beneficial for vehicle and pedestrian safety.

Meadowdale Area Crash Analysis:

The following graphic (Figure 1) illustrates the primary concentrations of crash activity within the Meadowdale Area within the defined school walk zone. A total of 39 collisions were documented from 2024 through September 2026. Among these incidents, one resulted in a fatality and eight (8) involved non-fatal injuries. The majority of collisions, totaling 27, reported no injuries, while three additional incidents had an injury status reported as unknown. The pattern of collisions is largely spread throughout the school walk zone. Outside of this analysis several fatality collisions have occurred on this section of roadway with speed serving as a major contributing factor.

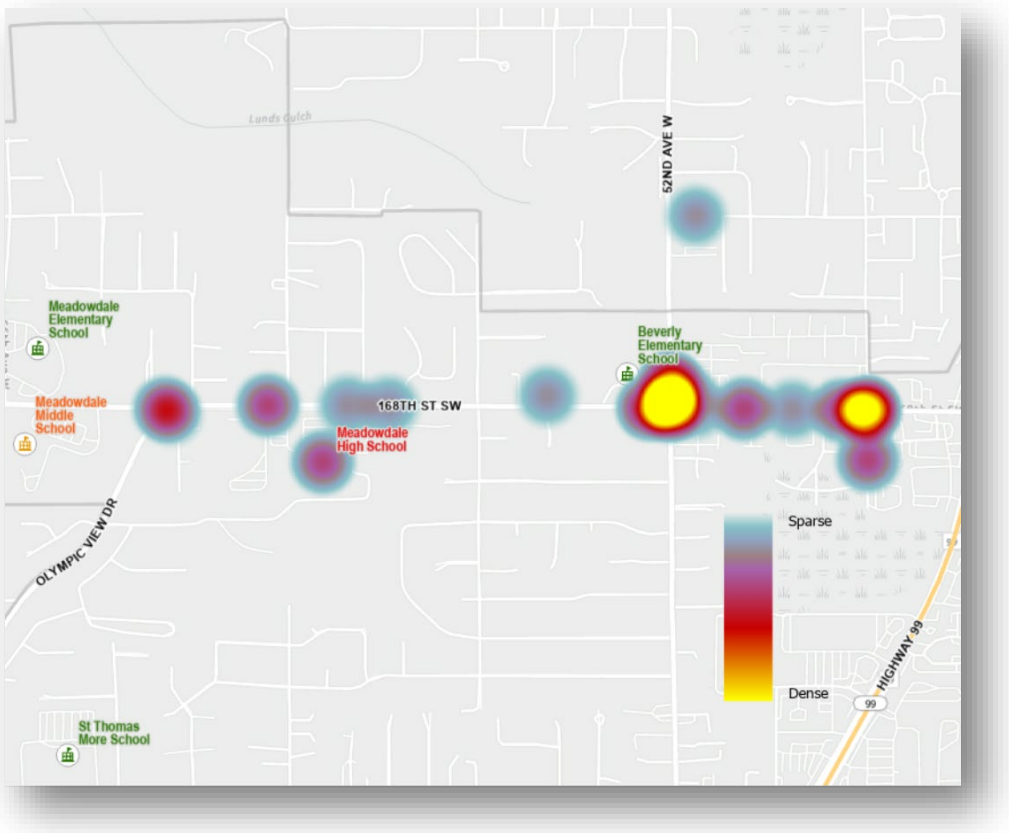


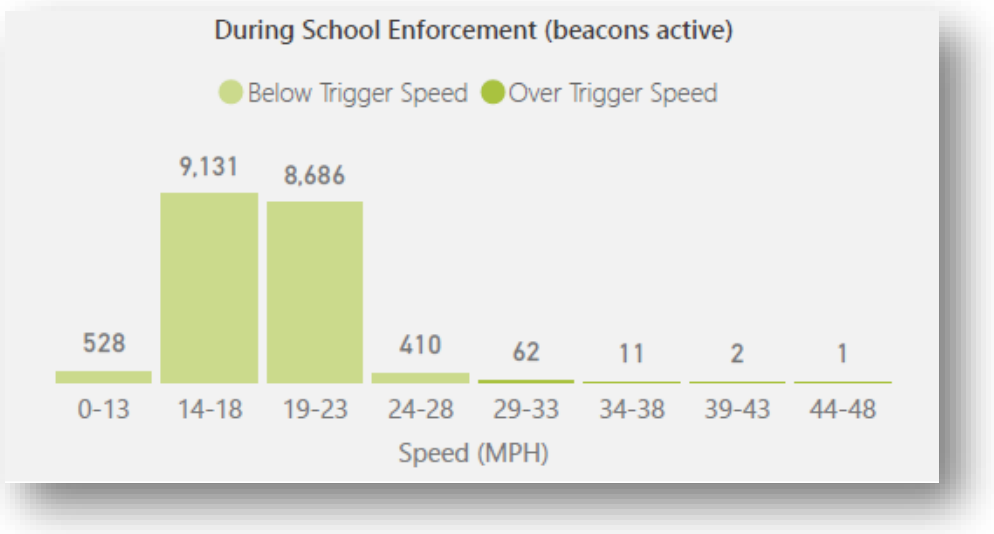
Figure 1: Crashes in the Meadowdale area from 2024- Sept. 2026

Meadowdale Area Speed Analysis:

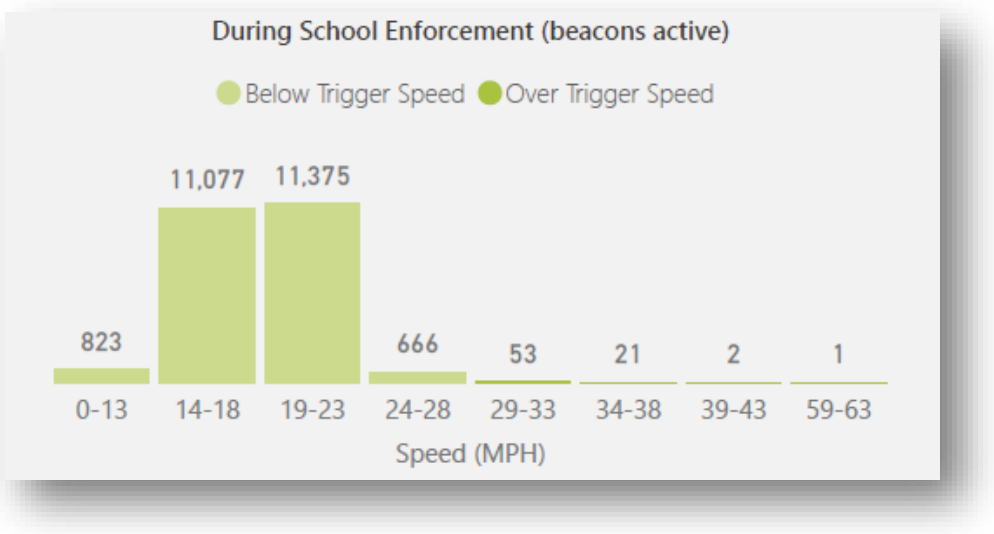
The Meadowdale Area has had a school-zone speed camera system in place since September of 2009. A speed analysis was performed in the Meadowdale Area during the school year. The October 2026 fifteen-day study showed a meaningful difference between school in-session and school not-in-session conditions:

When school was in session 153 drivers exceeded the **20-mph** limit by at least 9-mph, and 38 drivers exceeded it by at least 14-mph.

School in-session: Meadowdale Area – Westbound 168th Street SW

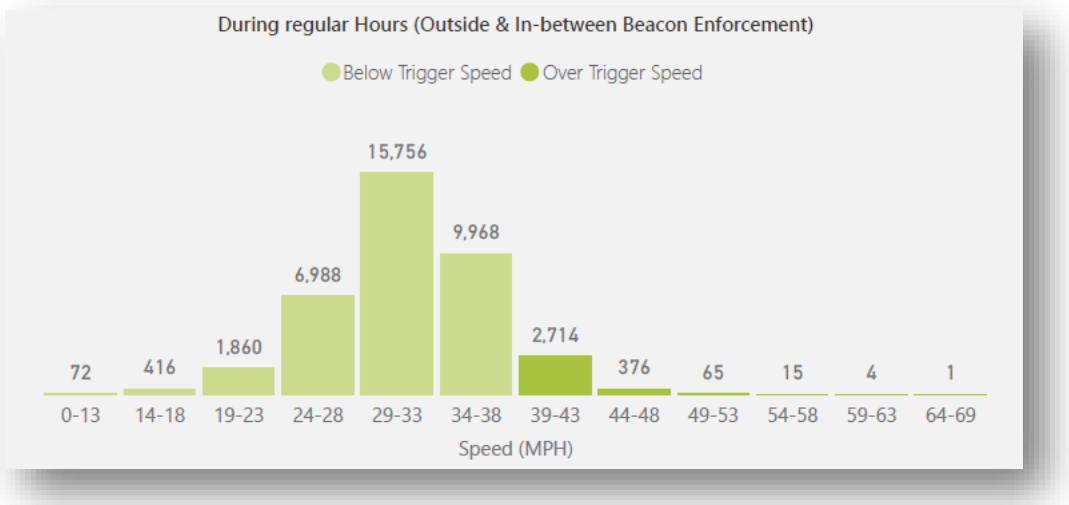


School in-session: Meadowdale Area – Eastbound 168th Street SW

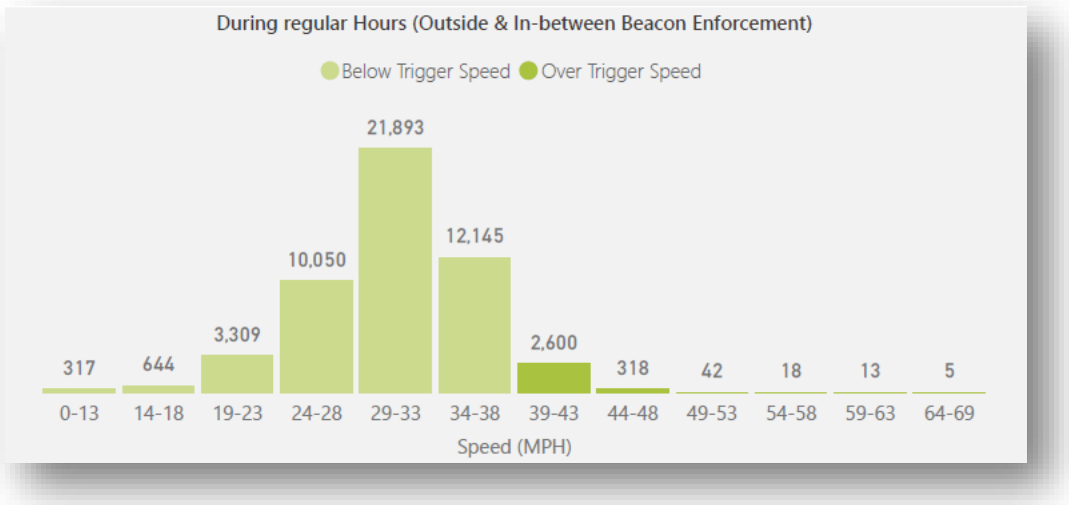


When school was not in session, eastbound and westbound cameras recorded a total of 6,171 drivers exceeding the **30-mph** speed limit by at least 9-mph, and 857 drivers exceeded it by at least 14-mph. Several drivers were traveling more than 60-mph.

School Not in-session: Meadowdale Area – Westbound 168th Street SW



School Not in-session: Meadowdale Area – Eastbound 168th Street SW



Lynnwood Elementary Area (44th Avenue West from Maple Road to 188th Street SW)

The Lynnwood Elementary Area includes an existing school zone in which automated speed safety cameras have been functioning since 2009 and are operational at the beginning and end of each school day when the school zone lights are flashing. This school zone specifically serves Lynnwood Elementary. This school zone is also located with an identified *school walk zone* as defined by RCW 46.63.250(2)(d), as well as an identified school walk zone by the Edmonds School District.

For purposes of this study the analysis extends from 180th Street SW to 188th Street SW on 44th Avenue West. This stretch of roadway serves as a *school walk zone* for both Lynnwood Elementary and Spruce Elementary per RCW 46.63.250(2)(d), as well as the Edmonds School District.

This particular section of 44th Avenue West is an arterial composed of one northbound lane of travel, one southbound lane of travel, a center two-way left turn lane, sidewalks with ADA access at intersections, pedestrian crosswalks at all major intersections and one at the school, and consistent street lighting. The Area consists of an elementary school, city park, and an adult family living home within blocks of each other, as well as the city's recreation center just south of the zone, where there is high pedestrian use and would support the need for this 24/7 speed safety camera model.

Lynnwood Elementary Area Crash Analysis:

The following graphic (Figure 2) illustrates the primary concentrations of crash activity within the Lynnwood Elementary Area. This analysis was conducted from 2024 through September 2026. A total of 58 accidents were documented in this area. Of these accidents, nine (9) involved non-fatal injuries. The majority of accidents, totaling 36, reported no injuries, and an additional 13 accidents had an injury status recorded as unknown.

The pattern of collisions is largely spread throughout the school walk zone. This is a narrow roadway area, which has several factors where the evidence supports instituting a 24/7 hybrid speed safety camera enforcement model. By combining school-zone with a broader speed-

zone enforcement system, this would have a consistent impact outside of school hours and the scholastic year.

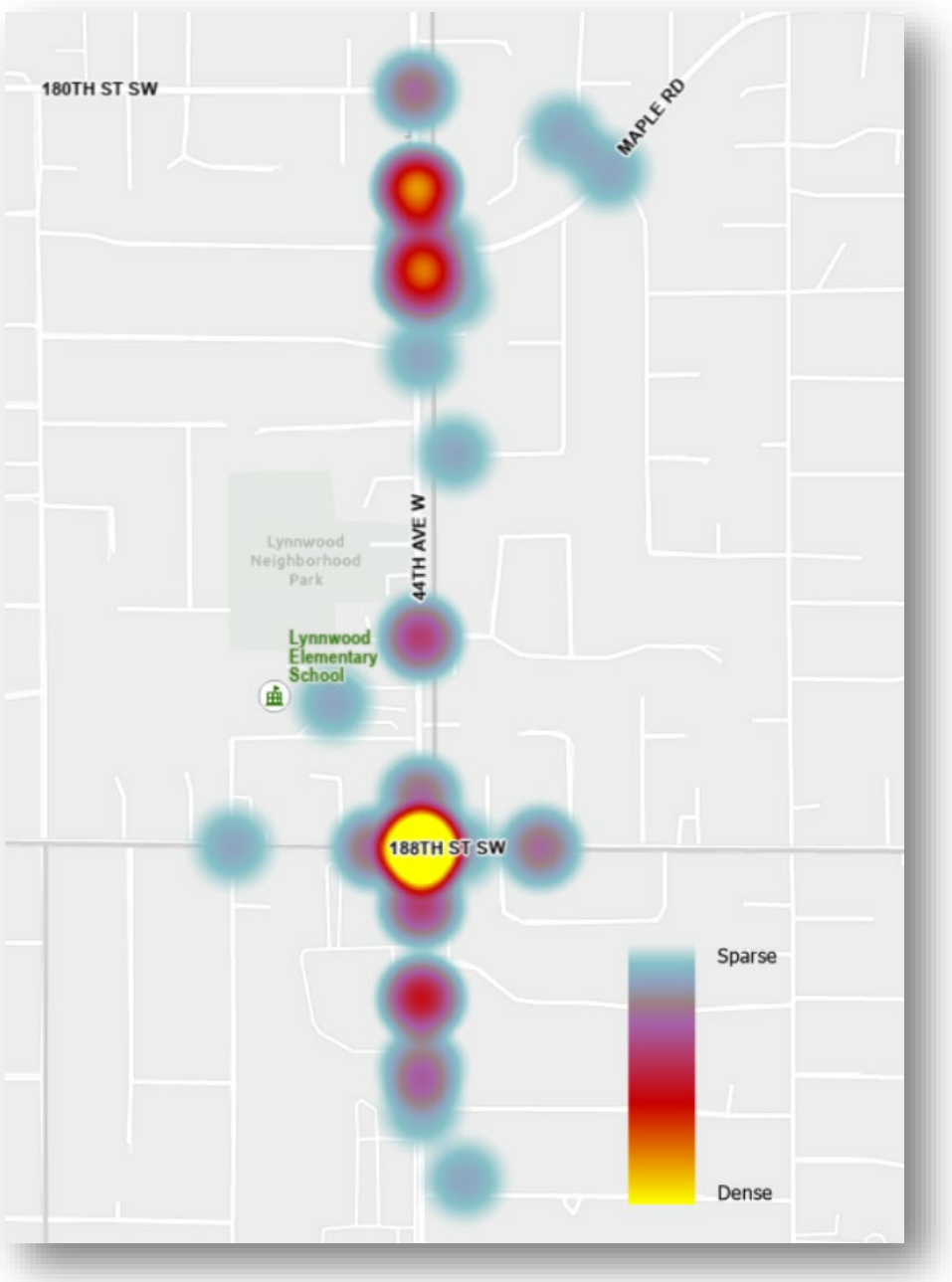


Figure 2: Crashes in the Lynnwood Elementary area from 2024- Sept. 2026

Lynnwood Elementary Area Speed Analysis:

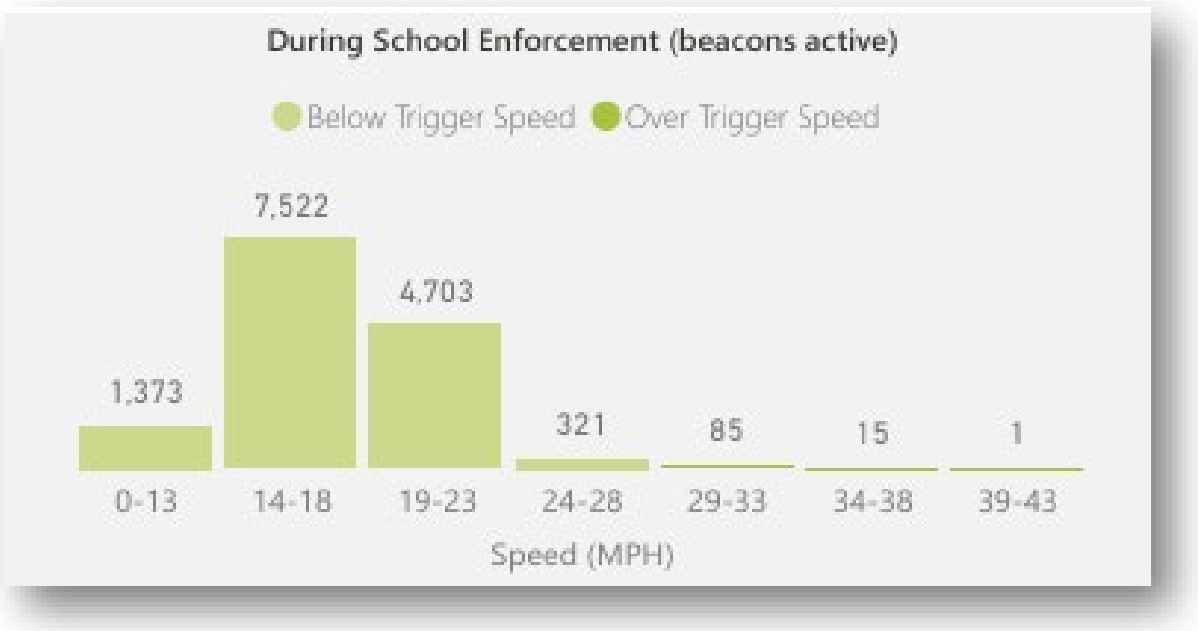
Lynnwood Elementary has also had a school-zone speed camera system in place since September of 2009. A speed analysis was performed in the Lynnwood Elementary Area. The October 2026 fifteen-day study showed a meaningful difference between school in-session and school not-in-session conditions:

When school was in-session, northbound and southbound cameras recorded a total of 260 drivers exceeding the **20-mph** speed limit by at least 9-mph, and 67 drivers exceeded it by at least 14-mph. Several drivers were traveling more than 50-mph.

School in-session: Lynnwood Elementary Northbound 44th Ave W.

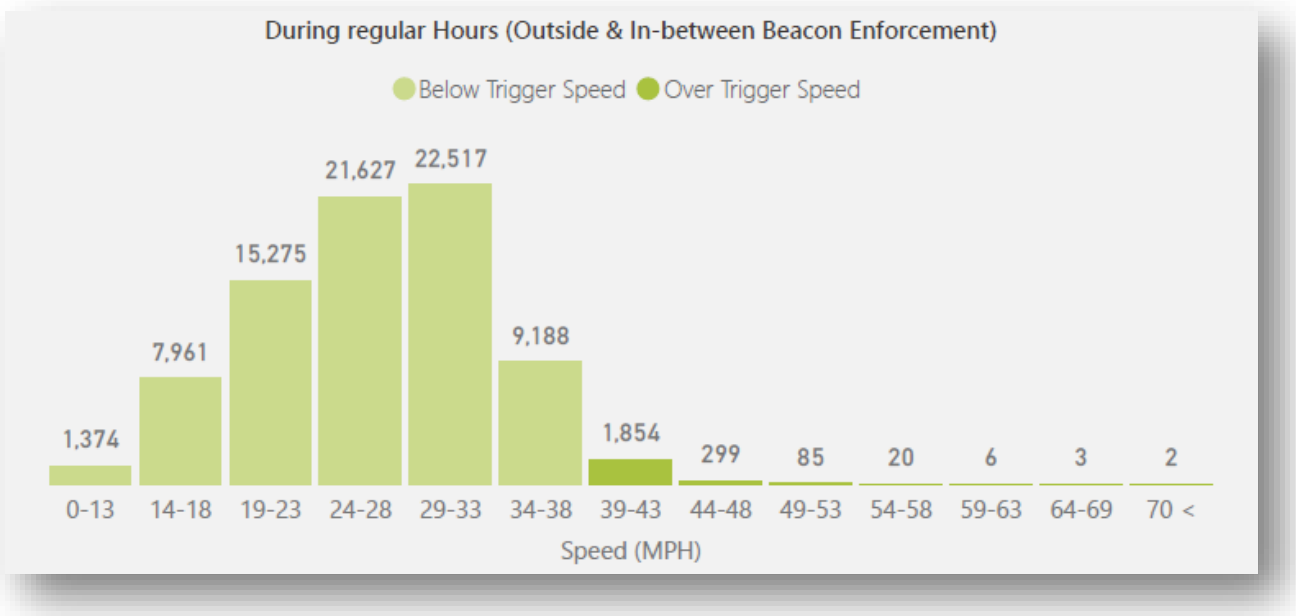


School in-session: Lynnwood Elementary Southbound 44th Ave W.

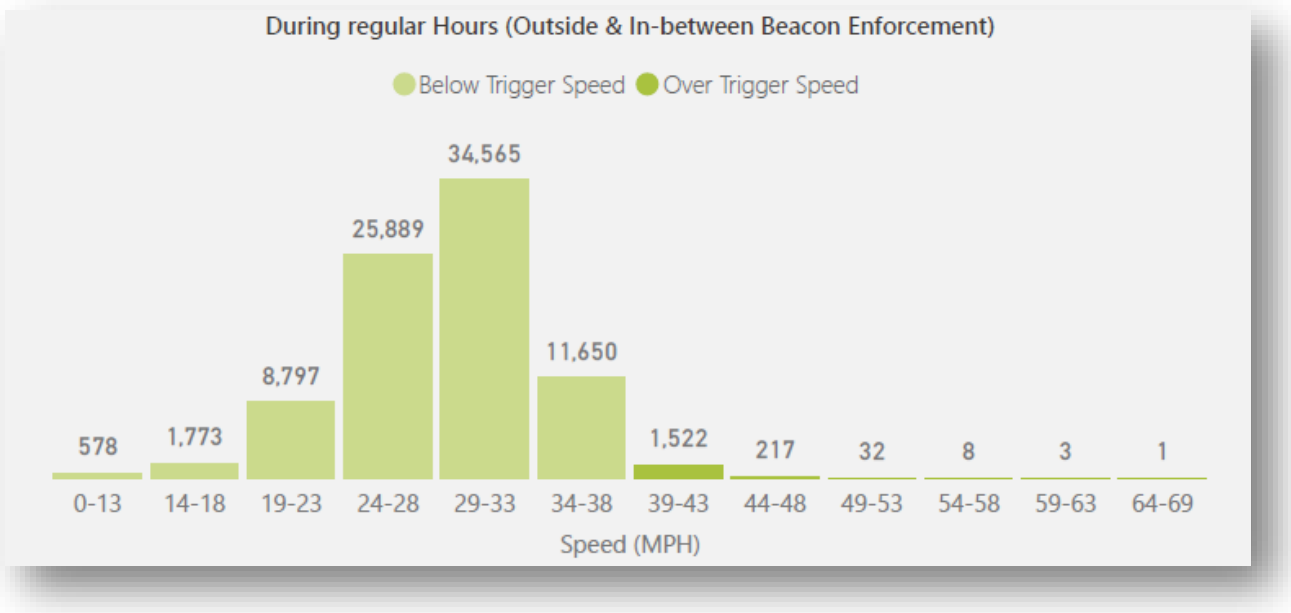


When school was not in session, northbound and southbound cameras recorded a total of 4,052 drivers exceeding the **30-mph** speed limit by at least 9-mph, and 676 drivers exceeded it by at least 14-mph. Several drivers were traveling more than 60, and even 70-mph.

School Not in-session: Lynnwood Elementary Northbound 44th Ave W.



School Not in-session: Lynnwood Elementary Northbound 44th Ave W.



S-Curves Area (44th Avenue West from 164th Street SW to 168th Street SW)

The S-Curves Area is primarily a northbound-southbound arterial on the north end of the city that transitions into 164th Street SW at its northern-most point. This particular section of 44th Avenue West is composed of two northbound lanes of travel and two southbound lanes of travel. It has narrow sidewalks on both sides of the roadway with ADA access at intersections, pedestrian crosswalks at all major intersections, and consistent street lighting. The Area is primarily residential with single family residences and one small multi-family complex . There are some smaller commercial businesses on the southwestern end of the zone near 168th Street SW that would be outside of the proposed speed safety camera system area. This section of the arterial serves as a primary corridor for vehicles traversing eastbound and westbound from the northern end of the city towards Interstate 5 and through a residential area.

This study analyzes the S-Curves from the statutory perspective of RCW 46.63.250(3). This statute authorizes the city to use speed safety cameras in locations that experience higher crash risks due to excessive vehicle speeds. For purposes of this study the analysis itself extends from the intersection of 164th Street SW/36th Avenue West to 168th Street SW/Highway 99. The S-Curves have been the focus of traditional speed enforcement and mitigation efforts by the police department for decades with little demonstrable impact on collision rates in the area and vehicle speeds.

S-Curves Area Crash Analysis:

The following graphic (Figure 3) illustrates the distribution of collision severity across the S-Curves Area. In total, 94 accidents were documented from 2024 through September 2026. Of these, two (2) resulted in **fatalities** and 28 involved non-fatal injuries. Most accidents, totaling 52, reported no injuries, and an additional 13 accidents had injury status reported as unknown. Three (3) accidents involved a pedestrian/pedacyclist.

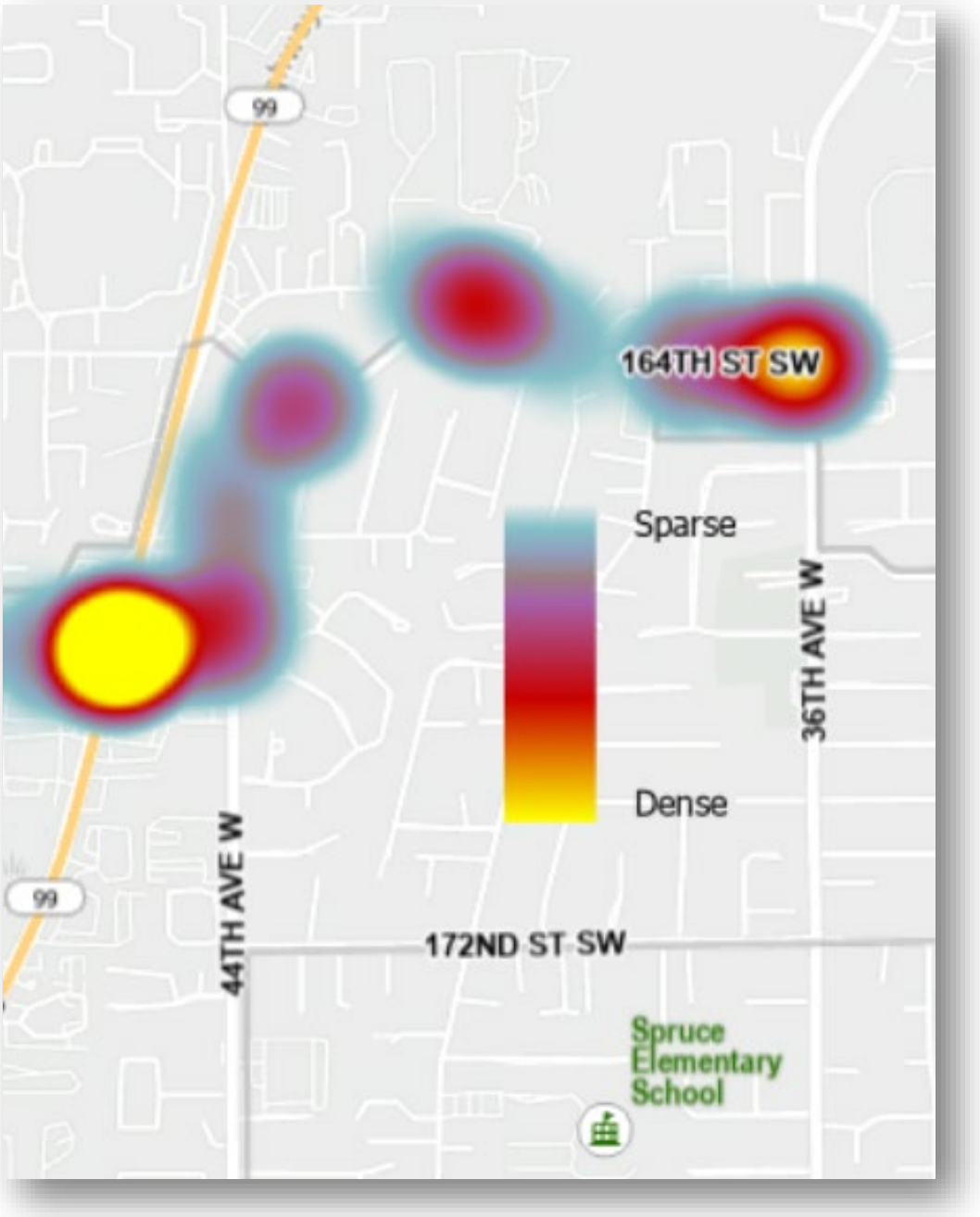
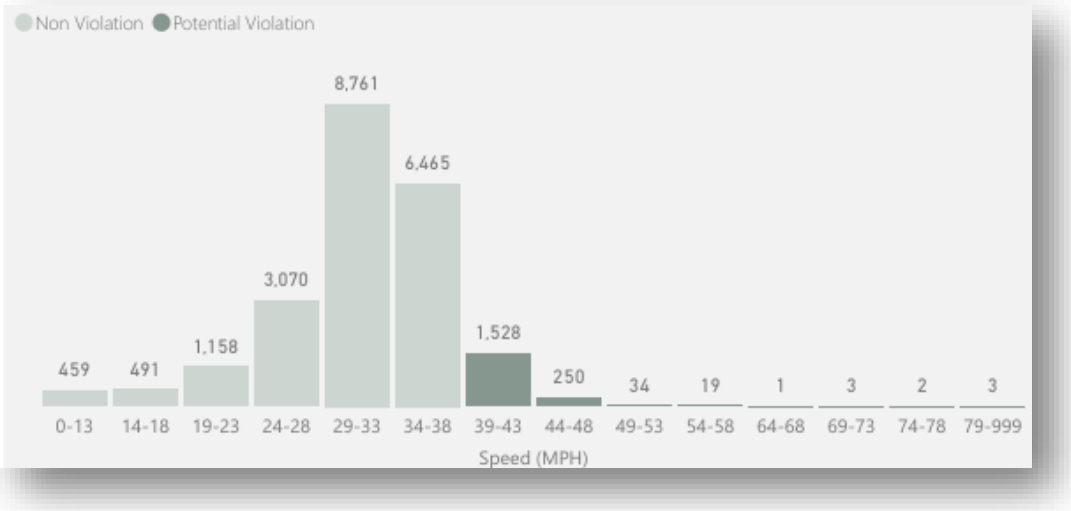


Figure 3: Crashes in the S Curves area from 2024- Sept. 2026

S-Curves Area Speed Analysis:

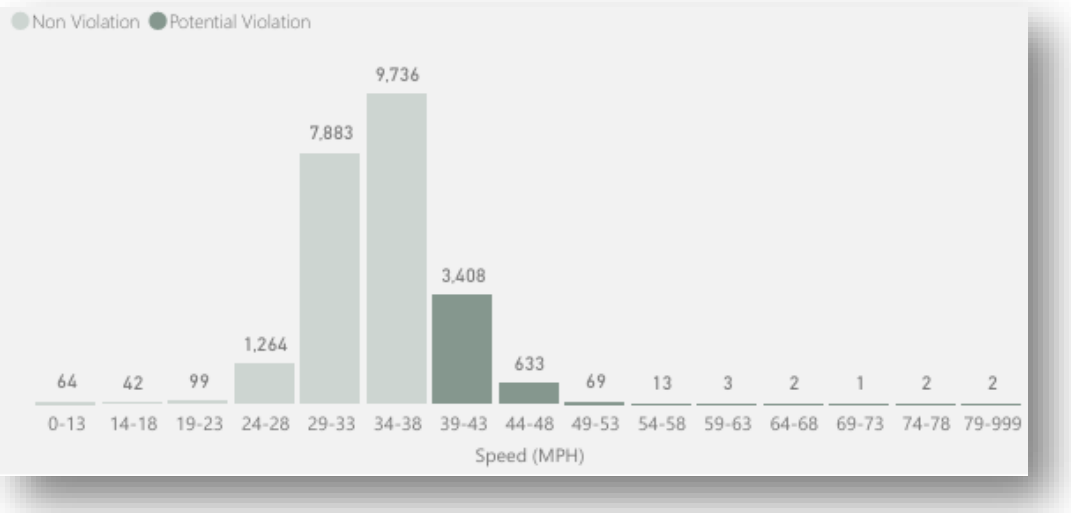
A speed analysis was performed in early 2026 within the S-Curves. The 3-day study recorded 1,840 Northbound drivers exceeding the **30-mph** speed limit by at least nine (9) mph, and 312 by at least 14-mph. Several vehicles were recorded exceeding 70 and even 80-mph.

Northbound:



Southbound recorded 4,133 drivers exceeding the **30-mph** speed limit by at least 9-mph, and 725 by at least 14-mph.

Southbound:



The S-Curves have the strongest supplied collision signal among the three proposed locations. The roadway's curve geometry and grade create a context in which speed management can be especially important because drivers have less recovery distance, and sightlines are affected by the roadway form.

In addition to the speed analysis, the police department has actively engaged in speed enforcement and other mitigation efforts for decades to reduce speeding with the S-Curves. From 2024 through September of 2026 the Traffic Section has written 270 speeding citations within this defined Area. The graph below (Figure 4) provides a breakdown of the speeds drivers were cited for during this enforcement period. 27% of drivers were cited for 12-mph over the limit, and 72.2% of the drivers were cited for speeding between 12 and 15-mph over the speed limit.

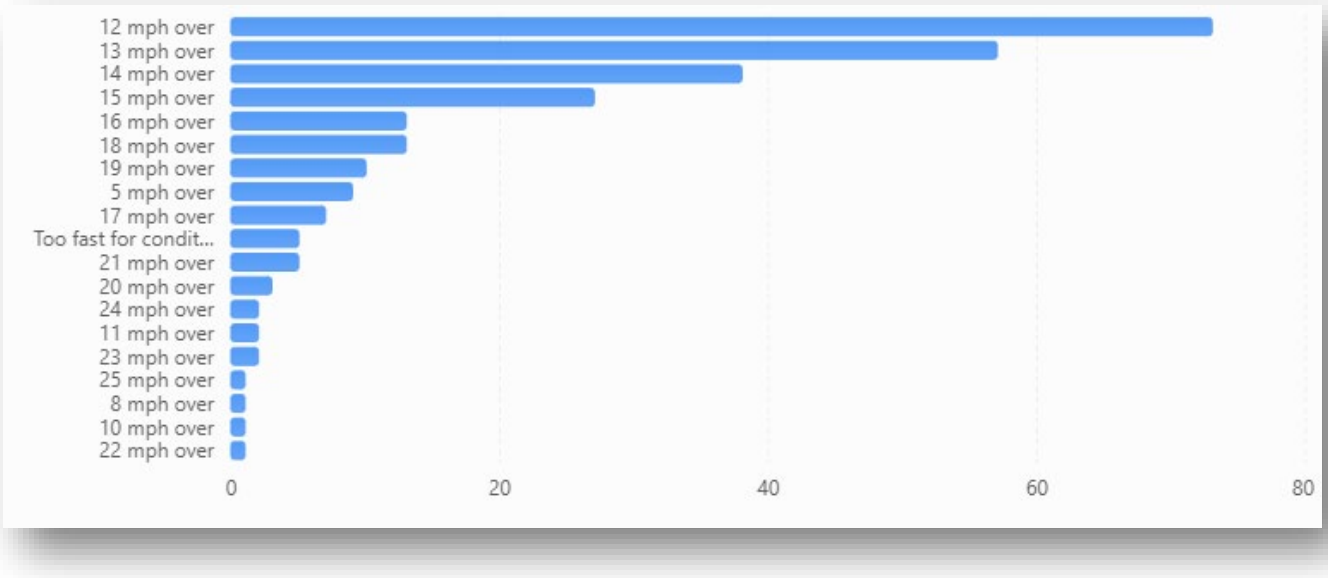


Figure 4: LPD Speeding Citations in S-Curves 2024 through September 2026

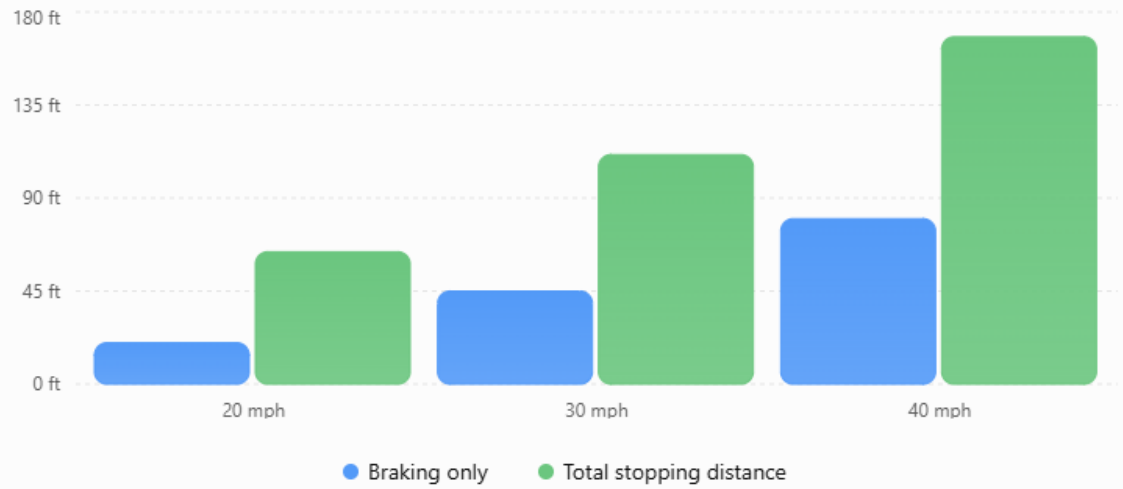
A breakdown of speed and stopping distance:

Car Stopping Distances

Estimated distances on a dry, level road, assuming a 1.5-second reaction time.

Distance in feet

Comparison of braking distance and total stopping distance.

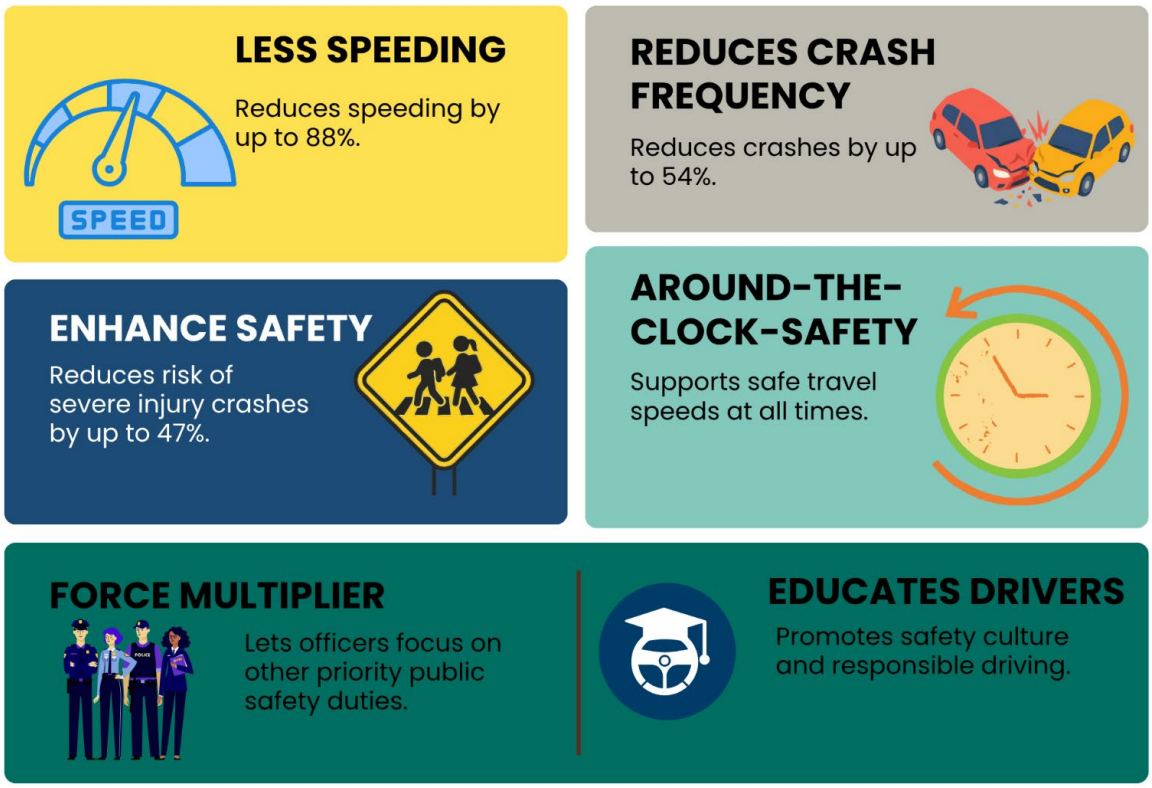


Speed	Braking only	Reaction distance	Total stopping distance
20 mph	20 ft	44 ft	**64 ft**
30 mph	45 ft	66 ft	**111 ft**
40 mph	80 ft	88 ft	**168 ft**

What this means:

- At **20 mph**, the car travels about 20 feet after the brakes are applied.
- At **30 mph**, it travels about 45 feet after the brakes are applied.
- At **40 mph**, it travels about 80 feet after the brakes are applied.

According to the U.S. Department of Transportation, Federal Highway Administration, the following are also benefits of Speed Safety Cameras:



U.S. DOT, Federal Highway Administration, Office of Safety, produced a report under Vision Zero regarding Speed Safety Cameras (SSC). SSC's are a core principle of the Safey System Approach and are an effective and reliable technology to supplement more traditional methods of enforcement, engineering methods, and education. The report identifies that SSC's used on urban principal arterials reduced crashes up to 54%, and injury crashes up to 48%, and are proven safety countermeasures (Attachment A).

5. Equity Impact Analysis

With the prior analyses and facts in mind, the following factors were identified to evaluate livability, accessibility, economics, education, and environmental health for the City of Lynnwood's Traffic Safety Camera expansion of speed safety cameras. .

*** It should be noted that two of the proposed sites already have Traffic Safety Camera systems in operation and thus do not require an evaluation, only the proposed S-Curves location.

Livability

This term is not specifically defined, but we have identified several factors that could affect the residential corridor if additional automated speed safety cameras are added.

1. The potential to reduce road noise through lower vehicle speeds.
2. The potential for traffic diversion to nearby streets that are not designed to accommodate additional volumes.

The City's Traffic Safety Camera Program supports the goal of reducing speeds, which helps lower overall road noise, especially in residential corridors. Two of the proposed 24/7 locations already have existing speed camera systems associated with school zones positioned on 30-mph roads within defined residential corridors. While these programs reduce speed during designated school-zone hours, the existing cameras do not monitor these areas during non-school hours, non-school days, or long stretches of summer break. Increasing the times in which speed cameras would operate within these two residential areas would not negatively affect livability related to road noise; it would actually improve it throughout the day.

The potential for traffic diversion would be limited, as an automated school camera has already been installed for over fifteen years in both the Meadowdale and Lynnwood Elementary Areas. These established camera systems are in close proximity to the school and have not affected traffic flow. Traffic is highly unlikely to stray from the main arterial to avoid the expanded camera period as there are very limited east-west traffic corridors on the northwest end of the city.

Placing speed cameras in the S-Curves could push limited traffic further north on Highway 99 and onto 164th Street SW, but this option yields a diminishing return for drivers. Drivers taking this route if proceeding eastbound would then be forced to wait at a controlled intersection for

traffic to clear from 44th Avenue West where it merges into 164th Street SW before being able to proceed; a route they otherwise could have taken. The only other option for northbound drivers on 44th Avenue West would be to take 172nd Street SW. This route was likely already an option if they were coming from the south, but it is a much more restricted roadway. 172nd Street SW is a two-lane road where a driver could either proceed to 36th Avenue West or take Spruce Road to get back to 164th Street SW. Both roads are smaller, typically have slower travel times due to traffic volume, and include traffic mitigation measures such as four-way stop signs and traffic circles. The likelihood of a major shift in traffic to these smaller roads is minimal because avoiding the camera system would create significant inconvenience and longer travel times. Road noise would be significantly reduced for residents in the S-Curves due to the overall reduction in vehicle speeds/noise. Years of complaints about racing and loud decelerating from vehicles would also be reduced by implementing speed safety cameras in this corridor.

Accessibility

Proximity to schools, parks, or hospitals within three hundred feet of the defined Area was used as a criterion for this study. Everything within this area was considered to have a positive accessibility impact. Because of the proposed camera site locations, some sites are farther from schools, parks, and hospitals. Therefore, they have been categorized as neutral in accessibility.

The camera distance for the S-Curves camera site would be approximately 2,030 feet from Open Door Baptist Church, which, as stated above, has a preschool and kindergarten program. Because of its distance from any school, hospital, or park, it would be considered neutral in accessibility impact.

Economics

The economic impacts assessed whether these automated traffic safety camera sites were located within or adjacent to census block groups with a high concentration of households below the federal poverty line. The goal is to ensure automated camera sites are not disproportionately concentrated in low-income areas.

Two of the proposed sites (Meadowdale and Lynnwood Elementary Areas) have already had school zone speed cameras in operation for more than 15 years. Both areas are located within

very established residential communities without any definable concentrations of households below the federal poverty line.

The camera location for the S-Curves speed safety camera system would fall within the Spruce Park area, which has a median home value of $850,000 to $890,000. Median household income in this area is $107,857 (2024 AC Survey, 5-Year Trend).

None of the three locations are located within, or adjacent to, the aforementioned census blocks.

Education

We evaluated educational impacts based on proximity to schools and neighborhood educational attainment. School proximity was considered because school system users walk, bike, and travel through the area. Reducing noise and distraction, as well as lowering speeds through these corridors, benefits the most vulnerable road users.

Data were reviewed to assess the proximity of households with lower educational attainment (high school diploma or less). The goal was not to disproportionately place automated camera sites in these areas.

The S-Curves speed camera location is not next to any schools, and is in a residential area. Current data shows that 50.8% of the residents have a Bachelor's Degree or higher, which exceeds the average county rate of 39.5%. The employment rate is 71.8%, which also exceeds the county rate of 64.2% (2024 AC Survey, 5-Year Trend).

Environmental health

Environmental health examines how transportation conditions affect community well-being, especially for people who walk or bike. The first factor considered was pedestrian traffic stress, which measures how comfortable pedestrians and other vulnerable sidewalk users feel using the walkways along a stretch of road. The ranking system uses a scale of one to four. A rating of one means pedestrians are most comfortable with the stretch of road, based on factors such as sidewalk width, environmental barriers, and the volume and speed of traffic next to the

sidewalk. A rating of four means pedestrians or other vulnerable sidewalk users are not comfortable with that stretch of sidewalk.

An additional factor in this category is high-speed streets. Using Street Vision, a program that uses specific traffic-related data, we can analyze vehicle speeds in a given corridor. All speed data in this category was analyzed using the 09/24/25-09/25/26 date range. Speed rankings are based on the 85th percentile speed. Areas with an 85th percentile speed of 40 mph or greater are considered positive because the risk of fatal or serious injury collisions increases significantly with higher speeds.

If the pedestrian scale is a three or four and the 85th percentile speed is over 40 mph, these locations are viewed as very positive for automated cameras.

The S-Curves has a pedestrian scale of three. This roadway has two sidewalks on the east and west, but the pathway is extremely narrow for bicycles or other modes of mobility other than walking. The sidewalk is directly next to the road with no barrier protecting vehicles or pedestrians. This road has no bike lanes, and sightlines are obstructed by several curves and a significant grade. The 85th percentile speed is 39.3 mph, which means 85% of drivers were under 39.3 mph in a posted 30 mph zone. This site location would be a good candidate for implementation.

6. Data Visualizations and Signage Compliance

Speed and collision data at a glance:

The following tables present the collected speed and collision data around the proposed camera areas. 2026 values are incomplete, and three-day speed studies should not be presented as annual totals.

Table 1. Reportable Collisions by Site and Year: 2024- 2026 YTD

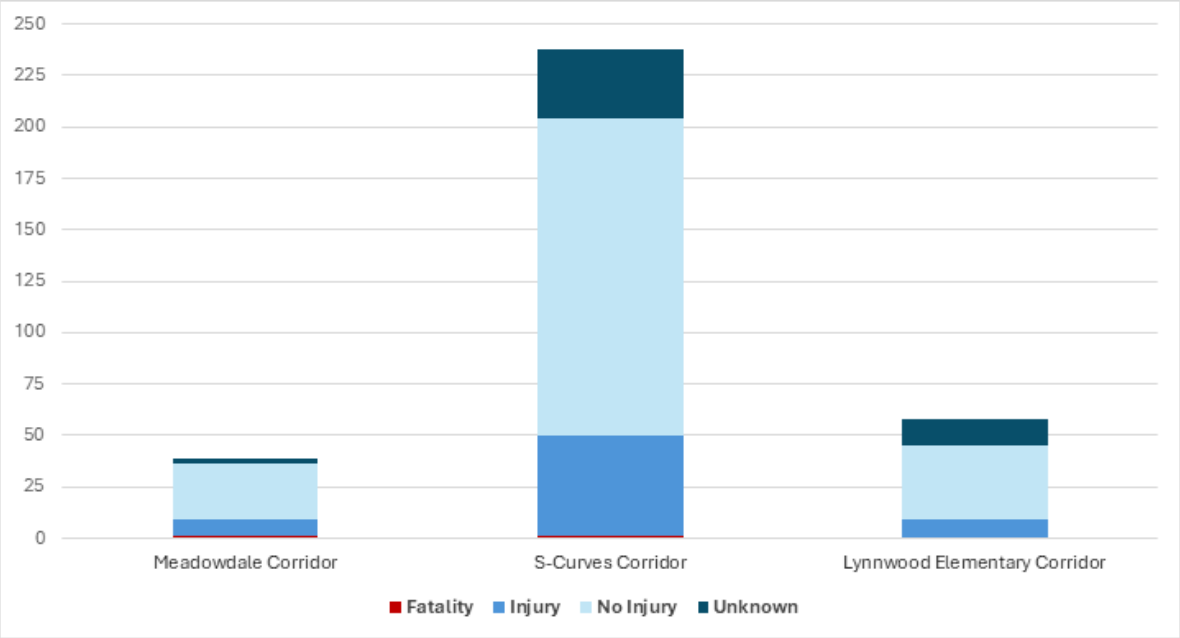


Table 2. Speed-Limit Exceedances by Session and Threshold:

Site	Direction/condition	Posted limit	At least 9 mph over	At least 14 mph over
Meadowdale (15-Day)	School in session	20 mph	153	38
Meadowdale (15-Day)	School not in session	30 mph	6,171	857
Lynnwood Elementary (15-Day)	School not in session	30 mph	4,052	676
Lynnwood Elementary (15-Day)	School in session	20 mph	260	67
S Curves (3-Day)	Northbound	30 mph	1,840	312
S Curves (3-Day)	Southbound	30 mph	4,133	725

Signage and compliance

Washington state law requires automated traffic safety cameras to have appropriate signage and follow the specifications and guidelines under the manual of uniform traffic control devices for streets and highways as adopted by the Department of Transportation under chapter RCW 47.36. Signs must be placed at least 30 days prior to activation of the cameras. The signs must clearly indicate that the driver is within an area where automated traffic safety cameras are authorized, and the driver is entering an area where violations are enforced by an automated traffic safety camera. Identifying video monitoring before drivers enter the zone is also a requirement.

Additional signage is required for the proposed S-Curves location. The current signage at our active school zone locations complies with state law and would be acceptable for the school zone, however supplemental signage would be added to the standard speed limit signs and depicted below. Examples of the signage are as follows:

Advance Signage:





Signage at existing posted Speed signs before zone:



7. Enforcement and Infractions

Statutory limits and policy rationale:

The automated-camera statute caps non-school-zone and non-work-zone speed-camera violations at $145, adjusted for inflation beginning January 1, 2029. It is our recommendation to use this amount. It also aligns with the fine amount for typical moving traffic violations. The statute permits doubling the amount for school-speed-zone or crash-prevention-zone infractions.

Setting the speed camera threshold at 9 mph or higher appears to be the least restrictive option compared with those of several neighboring cities with speed safety camera programs.

8. Conclusion and Evaluation Plan

Conclusion

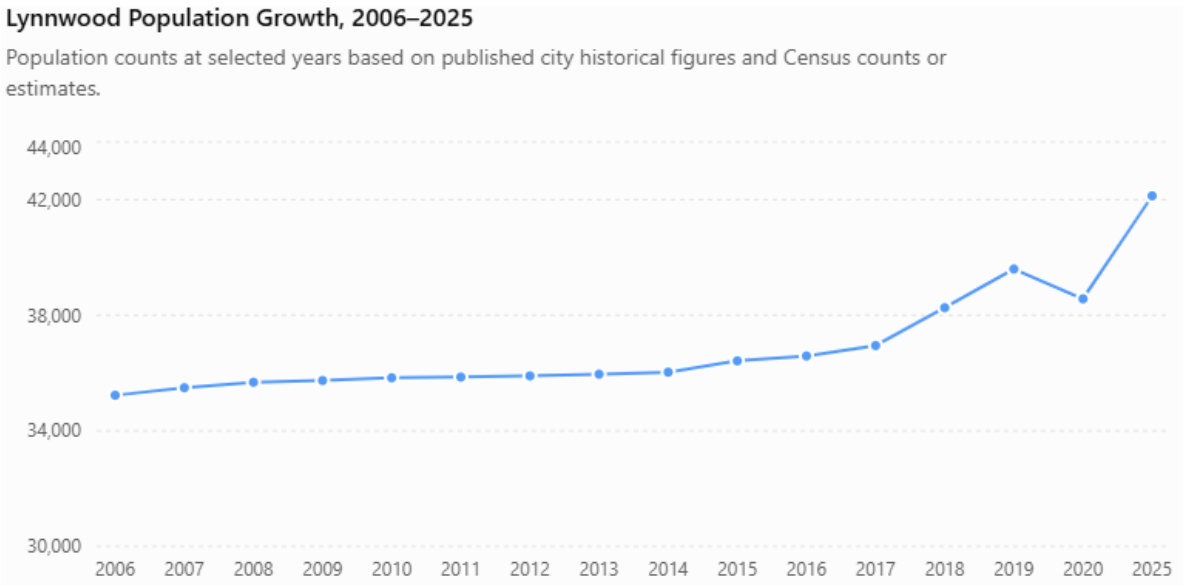
The purpose of this report was to provide a clear overview of the planning behind this proposed expansion. The city is committed to continually exploring and implementing strategies and tools that meet our community's safety needs. In traffic safety, we identified a vital need to expand our automated traffic safety camera program to support roadway safety enforcement and public education.

The three areas studied in this report, Meadowdale, Lynnwood Elementary and the S-Curves corridor, are locations of concern and have consistently shown elevated crash frequencies and repeated patterns of high-risk speeding, even while school was in session. These identified patterns of concern directly align with the Safe System Approach, which prioritizes reducing fatal and serious-injury outcomes.

The analysis within this report reaffirms that expanding the City of Lynnwood's automated traffic safety camera program through the implementation of 24/7 speed safety cameras is needed. With ongoing population growth, and increased roadway use by both vehicle and pedestrian traffic, the speed safety cameras provide another tool that can help ensure that the

transportation network of the city and helps reinforce a culture of roadway safety in these identified areas of concern.

The city is committed to transparency, required annual reporting, and data-driven evaluations to ensure the program remains accountable, equitable, and responsive to the community needs. Ultimately, expanding the speed safety cameras in these identified locations represents a proactive, responsible, and community aligned investment in reducing collisions and enhancing public safety for all who travel Lynnwood's streets.



Proposed evaluation framework

The following evaluation schedule is proposed for discussion and is not an adopted policy. This framework identifies the data, evaluation measures, and applicable reporting requirements under Washington State law (RCW 46.63.220) that may be used to assess the effectiveness and impacts of the proposed camera system expansion, if approved and implemented.

Some baseline data collection and evaluation activities have already occurred. Other measures will be reviewed and analyzed after the expansion is completed and the additional camera locations are operational.

1. **Baseline.** Confirm pre-implementation collision, speed, violation, equity, diversion, and signage measures.
2. **Six months.** Review early operating results, speed distributions, violations, traffic diversion, complaints, and signage compliance.
3. **Twelve months.** Compare collision frequency and severity, speed distributions, equity indicators, and enforcement administration with the baseline.
4. **Annually thereafter.** Publish a transparent annual report and recommend continuation, modification, expansion, or additional mitigation based on validated evidence. (This is required by WA State law).

Evaluation measures

The following evaluation measures may be used to evaluate program effectiveness, identify potential impacts, and inform future policy decisions.

- ☐ **Safety outcomes:** collision frequency, collision severity, fatal and serious-injury crashes, and near-collision evidence where available.
- ☐ **Speed outcomes:** speed distributions, 85th-percentile speed, threshold exceedances, and direction or time-of-day differences.
- ☐ **Operations:** violations, processing time, adjudication, fee reductions, revenue, signage compliance, and equipment availability.
- ☐ **Equity:** livability, accessibility, economics, education, environmental health, and distribution of impacts across affected communities.
- ☐ **Network effects:** traffic diversion, changes on 164th St SW and 172nd Street SW/Spruce Way, and effects on nearby smaller streets.
- ☐ **Accountability:** public feedback, complaint themes, community engagement, data-quality notes, and transparency reporting.

9. Attachments:

U.S. Department of Transportation
Federal Highway Administration

OFFICE OF SAFETY
Proven Safety Countermeasures



Speed Safety Cameras

Safe Speeds is a core principle of the Safe System Approach since humans are less likely to survive high-speed crashes. Enforcing safe speeds has been challenging; however, with more information and tools communities can make progress in reducing speeds. Agencies can use speed safety cameras (SSCs) as an effective and reliable technology to supplement more traditional methods of enforcement, engineering measures, and education to alter the social norms of speeding. SSCs use speed measurement devices to detect speeding and capture photographic or video evidence of vehicles that are violating a set speed threshold.

Safety Benefits:

Fixed units can reduce crashes on urban principal arterials up to:

54% for all crashes.[4]

48% for injury crashes.[4]

P2P units can reduce crashes on urban expressways, freeways, and principal arterials up to:

37% for fatal and injury crashes.[2]

Mobile units can reduce crashes on urban principal arterials up to:

20% for fatal and injury crashes.[5]

In New York City, fixed units reduced speeding in school zones up to 63% during school hours.[6]

For more information on this and other FHWA Proven Safety Countermeasures, please reference the: Speed Safety Camera Program Planning and Operations Guide.

The contents of this Fact Sheet do not have the force and effect of law and are not meant to bind the public in any way. This Fact Sheet is intended only to provide clarity regarding existing requirements under the law or agency policies.

FHWA-SA-21-070

Applications

Agencies should conduct a network analysis of speeding-related crashes to identify locations to implement SSCs. The analysis can include scope (e.g., widespread, localized), location types (e.g., urban/suburban/rural, work zones, residential, school zones), roadway types (e.g., expressways, arterials, local streets), times of day, and road users most affected by speed-related crashes (e.g., pedestrians, bicyclists).

SSCs can be deployed as:

- **Fixed units**—a single, stationary camera targeting one location.
- **Point-to-Point (P2P) units**—multiple cameras to capture average speed over a certain distance.
- **Mobile units**—a portable camera, generally in a vehicle or trailer.

The table below describes suitable circumstances for SSC deployment.[1]

Considerations

- SSCs can produce a crash reduction upstream and downstream, thus generating a spillover effect.[2]
- Public trust is essential for any type of enforcement. With proper controls in place, SSCs can offer fair and equitable enforcement of speeding, regardless of driver age, race, gender, or socio-economic status. SSCs should be planned with community input and equity impacts in mind.
- Using both overt (i.e., highly visible) and covert (i.e., hidden) enforcement may encourage drivers to comply with limits everywhere, not only at sites they are aware are enforced.
- Agencies should conduct evaluations regularly to determine if SSCs are accomplishing safety goals and whether changes in strategy, scheduling, communications, or public engagement are necessary.
- Agencies should conduct a legal and policy review to determine if SSCs are authorized within a jurisdiction and how the authorization and other traffic laws will affect a SSC program.
- Agencies should develop an SSC program plan with consideration of the USDOT SSC guidelines for planning, public involvement, stakeholder coordination, implementation, maintenance, evaluation, etc.[3]

Considerations for Selection	Fixed	P2P	Mobile
Problems are long-term and site-specific.	X	X	—
Problems are network-wide, and shift based on enforcement efforts.	—	—	X
Speeds at enforcement site vary largely from downstream sites.	—	X	X
Overt enforcement is legally required.	X	X	X
Sight distance for the enforcement unit is limited.	X	X	—
Enforcement sites are multilane facilities.	X	X	—

1 Speed Safety Camera Program Planning and Operations Guide. FHWA, (2023).
2 (CMF ID: 7718) Montella et al. "Effects on speed and safety of point-to-point speed enforcement systems". Accident Analysis and Prevention, Vol. 75, (2015). Note that this is an international study.
3 Speed Enforcement Camera Systems Operational Guidelines. NHTSA, (2008).
4 (CMF ID: 2915,2921) Shin et al. "Evaluation of the Scottsdale Loop 101 automated speed enforcement demonstration program." Accident Analysis and Prevention, Vol. 41, (2009).
5 (CMF ID: 7582) Li et al. "A Before-and-After Empirical Bayes Evaluation of Automated Mobile Speed Enforcement on Urban Arterial Roads." Presented at the 94th Annual Meeting of the Transportation Research Board, Paper No. 15-1563, Washington, D.C., (2015). Note that this is an international study.
6 Automated Speed Enforcement Program Report 2014-2017. New York City DOT, (2018).

ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE

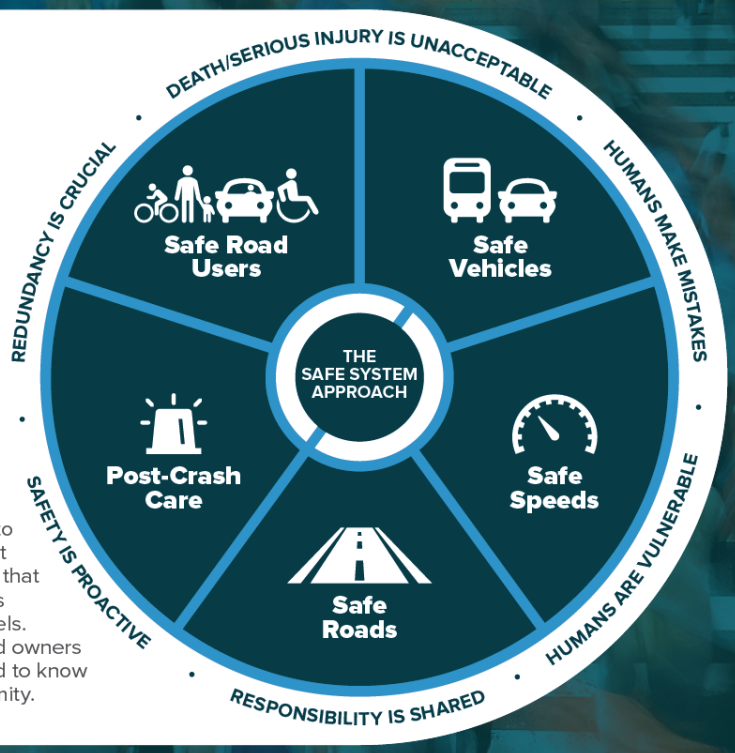
Attachement A

THE SAFE SYSTEM

APPROACH

Zero is our goal. A Safe System is how we will get there.

Imagine a world where nobody has to die from vehicle crashes. The Safe System approach aims to eliminate fatal & serious injuries for all road users. It does so through a holistic view of the road system that first anticipates human mistakes and second keeps impact energy on the human body at tolerable levels. Safety is an ethical imperative of the designers and owners of the transportation system. Here's what you need to know to bring the Safe System approach to your community.



SAFE SYSTEM PRINCIPLES

Death/Serious Injury is Unacceptable

While no crashes are desirable, the Safe System approach prioritizes crashes that result in death and serious injuries, since no one should experience either when using the transportation system.

Humans Make Mistakes

People will inevitably make mistakes that can lead to crashes, but the transportation system can be designed and operated to accommodate human mistakes and injury tolerances and avoid death and serious injuries.

Humans Are Vulnerable

People have limits for tolerating crash forces before death and serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates human vulnerabilities.

Responsibility is Shared

All stakeholders (transportation system users and managers, vehicle manufacturers, etc.) must ensure that crashes don't lead to fatal or serious injuries.

Safety is Proactive

Proactive tools should be used to identify and mitigate latent risks in the transportation system, rather than waiting for crashes to occur and reacting afterwards.

Redundancy is Crucial

Reducing risks requires that all parts of the transportation system are strengthened, so that if one part fails, the other parts still protect people.

U.S.Department of Transportation
Federal Highway Administration
FHWA-SA-20-015

Safe Roads for a Safer Future
Investment in roadway safety saves lives

Attachement B

SAFE SYSTEM ELEMENTS

Making a commitment to zero deaths means addressing every aspect of crash risks through the five elements of a Safe System, shown below. These layers of protection and shared responsibility promote a holistic approach to safety across the entire transportation system. The key focus of the Safe System approach is to reduce death and serious injuries through design that accommodates human mistakes and injury tolerances.

Safe Road Users

The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.

Safe Vehicles

Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.

Safe Speeds

Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.

Safe Roads

Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.

Post-Crash Care

When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.

THE SAFE SYSTEM APPROACH VS. TRADITIONAL ROAD SAFETY PRACTICES

Traditional		Safe System
Prevent crashes	→	Prevent deaths and serious injuries
Improve human behavior	→	Design for human mistakes/limitations
Control speeding	→	Reduce system kinetic energy
Individuals are responsible	→	Share responsibility
React based on crash history	→	Proactively identify and address risks

Whereas traditional road safety strives to modify human behavior and prevent all crashes, the Safe System approach also refocuses transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash severity and save lives.

WHERE ARE YOU ON THE SAFE SYSTEM JOURNEY?

Implementing the Safe System approach is our shared responsibility, and we all have a role. It requires shifting how we think about transportation safety and how we prioritize our transportation investments. Consider applying a Safe System lens to upcoming projects and plans in your community: put safety at the forefront and design to accommodate human mistakes and injury tolerances. Visit **safety.fhwa.dot.gov/zerodeaths** to learn more.

Attachment B