SAFE STREETS AND ROADS FOR ALL (SS4A)

Grant Proposal





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PROJECT OVERVIEW

In 2015, the City of Seattle launched a Vision Zero program and published its Vision Zero Action Plan: a commitment to end traffic deaths and serious injuries on city streets by 2030. Since then, Seattle has followed up with 2017 and 2019 updates to the 2015 action plan. In the places where we've focused and invested, we've seen significant improvements. However, overall trends are headed in the wrong direction. Since 2015, more than 1,200 people have been seriously injured and 181 people have been killed. The most vulnerable travelers (people walking,

rolling, and biking) and the most marginalized community members (Black residents and our neighbors experiencing homelessness) are disproportionately affected. High speeds and failure to yield to pedestrians are two of the top contributing factors to fatal crashes in Seattle.

Given these factors, our Safe Streets for All (SS4A) proposal focuses on implementing a variety of proven countermeasures that are heavily concentrated in our most disadvantaged and disinvested communities (SS4A Underserved





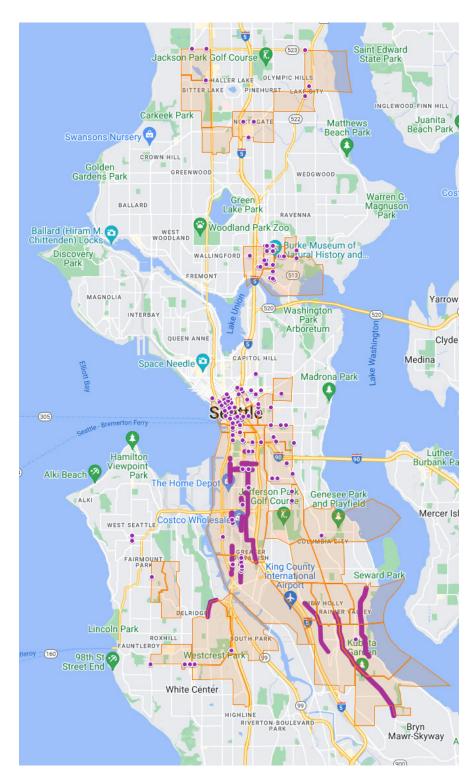
Communities census tracts). The proposed scope implements community-supported work directly from our local Vision Zero Action Plan and its supporting plans and documents, including our Pedestrian Master Plan, Bicycle Master Plan, and Bicycle and Pedestrian Safety Analysis (risk factor analysis). This proposal's vision is also solidly founded on our recently published Transportation Equity Framework, an innovative and forwardthinking tool that allows us to actualize our vision of racial and social justice. This proposal focuses on deploying a full package of low-cost, high-impact strategies primarily in Underserved Communities, with a particular emphasis on the most vulnerable travelers – people walking, rolling, and biking. Applying standard evidence-based interventions such as protected bicycle lanes, sidewalks,

leading pedestrian intervals, marked crosswalks, and traffic calming tools like speed cushions, in the areas of highest need improves safety for all travelers across broad regions of the city.

It is important to highlight that safety and social justice work also includes disability rights. Pedestrian interactions with motor vehicles bring safety risks, which are amplified for persons with disabilities, including those who use mobility devices, have low or no vision, or are Deaf-Blind. The boundary between the sidewalk and roadway is a physical barrier for people using mobility devices and can present additional safety issues for persons who cannot see where to safely cross the street.

PROJECT LOCATION

Locations for spot and corridor projects were primarily selected from within **Underserved Communities** and prioritized within existing SDOT Action Plans. The projects focus on safe pedestrian access (sidewalks, accessible pedestrian push buttons, ADA ramps), safe pedestrian crossings (leading pedestrian intervals, curb extensions, pedestrian refuge islands, rectangular rapid flashing beacons), safe bicycling access (protected bike lanes), and vehicular speed management (arterial traffic calming).



Purple: Planned project locations for SS4A

Orange: SS4A Underserved Communities census tracts

SELECTION CRITERIA

SAFETY IMPACT

Pedestrians are Seattle's most vulnerable travelers for fatal and serious injury collisions. People walking or rolling (using a wheelchair or mobility assistive device) are involved in 4% of total crashes, yet account for 53% of people killed between 2016 and 2020. In Seattle, 93% of pedestrian fatalities occur on arterial streets. the vast majority (80%) of which are multilane arterials with the fastest speeds and greater exposure risk to people walking and rolling along or across the street. The top contributing factors to pedestrian crashes are high speeds and failure to yield to pedestrians, both of which relate to street design.

Southeast Seattle and the SODO (south of downtown) neighborhood contain the highest concentration of Underserved Community census tracts as well as the most miles of multilane arterial streets and the highest concentration of pedestrian fatalities in the city. This area is collectively identified as Council District 2 (D2), and since it spans industrial areas as well as many nearby and downwind residential communities, the correlation with crash rates is not coincidental. The roads in our SODO manufacturing/industrial center were designed generations ago to maximize throughput of heavy trucks while de-emphasizing or even actively discouraging pedestrian and bicycle access. The nearby communities have suffered from a predictable cycle of declining property values, redlining, and on-going, multi-generational underinvestment.

From 2016 to 2020, 10 people have been killed while biking in Seattle. More than 70% of people killed in Seattle while biking were on a street where no bike facility was provided, and nearly two-thirds of people killed while biking were riding in southeast Seattle or the SODO neighborhood.

The Bicycle and Pedestrian Safety Analysis (BPSA) is Seattle's proactive tool used to indicate exposure risk at the intersection level for people walking, rolling, and biking. This tool highlights multiple risk factors, noting that intersection size (including the number of lanes and number of legs) is positively associated with pedestrian crashes. In addition, functional classification, particularly major and minor arterials, as well as high speeds, also have a significant and strong association with pedestrian crashes. Findings from the BPSA underscore the need to focus on safety improvements that promote predictability of all travelers, increase time and physical separation between modes, and provide more protection and accessibility for people crossing the street where high-risk factors exist.

In addition, people with accessibility needs have greater challenges navigating the pedestrian traveled way. Constructing accessible curb ramps with detectable warning surfaces provide the necessary accessible route for all users to cross streets in a predictable space, while accessible pedestrian signals (APS) notify persons with visual impairments when they have the walk signal to cross at a signalized intersection. It is especially important to add APS to intersections where leading pedestrian intervals (LPIs) exist in order to provide auditory cues in the absence of moving vehicle traffic. It is critical to address this need to further reduce burdens, especially within Underserved Communities, to create a fully inclusive public right-of-way.

Table 1 provides a summary of SS4A planned safety project treatment types to address known systemic crash patterns. All planned projects are on arterial streets where we see the most severe and highest number of serious injury and fatal collisions. Proposed treatments are described below, and the estimated effectiveness of each treatment is derived from FHWA's Crash Modification Clearinghouse.

TABLE 1: SAFETY TREATMENTS

Treatment type	Targeting
111 signalized intersection treatments, including APS and LPI	40% of pedestrian serious injury and fatal collisions occur at signalized intersections
6 unsignalized intersection treatments	20% of pedestrian serious injury and fatal pedestrian collisions occur at unsignalized intersection
4.0 miles of protected bike lanes	70% of bicyclist fatal collisions occur where no bike facility is present
1.5 miles of new sidewalks	35% of pedestrian serious injury and fatal pedestrian collisions
4.5 miles of arterial traffic calming treatments	occur midblock along arterial streets

Signalized Intersections

40% of serious injury and fatal pedestrian collisions occur at signalized intersections. This increases to 75% for people who utilize mobility devices and may be less visible to turning drivers at traffic signals. Additionally, signalized intersections account for 95% of high-risk factor priority locations as identified in the Bicycle and Pedestrian Safety Analysis (see map in Appendix B).

We have identified the following countermeasures to address pedestrian safety at signalized intersections (111 locations identified):

- Leading pedestrian intervals are an FHWAproven safety countermeasure with a 13% typical reduction in pedestrian crashes. Local data at 150 existing LPI locations show a 20% reduction in pedestrian crashes and 35% reduction in serious injury and fatal collisions with people walking. 45 locations identified for SS4A funding fall within the top 10% of citywide intersections for pedestrian risk factors, and 3 additional locations fall within the top 15%.
- Accessible pedestrian signals and ADAcompliant curb ramps are vital to providing people with disabilities, especially persons with vision impairments, the ability to navigate city streets and cross safely at intersections. Whereas sighted people can discern when an intersection is safe to cross, persons with visual impairments,

especially people who are Deaf-Blind, rely on the vibrotactile features within the APS to notify them when a roadway is safe to cross. Among the locations identified for treatment, 107 fall within the top 10% of citywide intersections for high pedestrian risk factors, 3 locations fall within the top 15%, and 110 locations identified are rated either severely deficient or completely deficient for accessible pedestrian signals and ADA ramps (no audible or vibrotactile signals, no curbs ramps meet current ADA standards). 62 of these locations address signalized intersections where Leading Pedestrian Intervals already exist but that are APS deficient.

 Enhanced accessible wayfinding treatments such as detectable crosswalks and tactile intersection maps have been identified at 1 location. These treatments support persons with visual impairments to navigate the public right-of-way at a skewed and complicated intersection near a service center for blind individuals.

Unsignalized Intersections

20% of serious injury and fatal pedestrian collisions occur at unsignalized intersections. All locations targeted fall within the top 5% of citywide intersections for pedestrian risk factors in the BPSA. We identified the following countermeasures to address pedestrian safety at unsignalized intersections (6 locations identified):

- Marked crosswalks are an FHWA-proven safety countermeasure and can reduce pedestrian collisions by 40%.
- Rapid rectangular flashing beacons are an FHWA-proven safety countermeasure and can reduce pedestrian collisions by 47%.
- Curb extensions reduce vehicle through and turning speeds and improve the visibility of pedestrians at crosswalks.

Bicycle facilities

Two-thirds of citywide bicyclist fatalities have occurred in southeast Seattle and the SODO neighborhood. The areas targeted for SS4A bike projects lack comfortable and safe bicycle connections to the greater Seattle bike network. We identified the following countermeasures within Underserved Communities and along the high injury network to address bicyclist safety along arterial streets (4.0 miles of critical bike connections):

• **Protected bike lanes** can reduce bicyclist collisions by up to 92%.

Sidewalks and arterial traffic calming

35% of serious injury and fatal pedestrian collisions occur along arterial streets between intersections. High speed is the leading contributing factor to arterial pedestrian collisions. We have identified the following countermeasures to address pedestrian safety along arterial streets that have high speeds and high pedestrian risk factors (6 miles total):

- Sidewalks are a proven safety countermeasure and can reduce collisions by 65%-89%; 1.5 miles of missing sidewalks have been identified that are within Underserved Communities, along high-speed multi-lane arterials, and on the high injury network.
- Arterial traffic calming treatments have been identified along 4.5 miles of arterial streets that have 85th percentile speeds
 5-15 mph above the speed limit. 100% of the proposed SS4A traffic calming locations

are in Underserved Communities and are and on the high injury network.

- Speed humps slow vehicle speeds and reduce all crashes by 40-50%.
- Curb extensions reduce vehicle through/turning speeds, improve the visibility of pedestrians at crosswalks, and reduce pedestrian exposure.
- Raised medians can reduce all crashes by up to 39%.
- Raised crosswalks can slow vehicles and reduce pedestrian collisions by 46%.

EQUITY, ENGAGEMENT, AND COLLABORATION

Equitable safety investment in underserved communities

We primarily are focusing investment locations in Underserved Communities (approximately 97% of funding for this SS4A grant) and that corresponds to the majority of fatal and serious injury collisions in the City of Seattle. Sites that will be improved outside these Underserved Communities address key connectors or nearby destinations that serve the focus communities. The City utilizes a Race & Social Equity Index tool that specifically prioritizes increased investment within historically disadvantaged communities. It uses similar metrics to SS4A Underserved Communities related to race/ origins, socioeconomic status, and health. Most safety treatments proposed in this application are focused in areas that currently experience some of the highest rates of socioeconomic inequality and that also have the highest proportions of people of color and immigrants in Seattle. Many safety treatment locations identified in this SS4A application have been unfunded but previously targeted for future safety dollars by Vision Zero staff using the Race & Social Equity Index prioritization.

Transportation Equity Framework (TEF) – Community engagement

Seattle's 2019 Vision Zero Update Report references a plan to more intentionally lead with equity and embed it as a core value into Vision Zero efforts. Staff from across SDOT (including Vision Zero staff) worked hand in hand with a community Transportation Equity Workgroup over the past three years to develop Seattle's Transportation Equity Framework (TEF), published in 2022. The Workgroup is composed of financially compensated Black, Indigenous, and people of color (BIPOC) community members and leaders, representing community-based organizations and service providers with deep connections to communities of color across Seattle. The TEF framework was developed directly by the community workgroup, with City staff providing information and refinement to encompasses eight strategy areas (including Safety and Transportation Justice) and 220 specific tactics to advance racial equity within transportation. A number of specific tactics pertain to this proposal and our efforts to equitably advance Vision Zero in Seattle:

- Tactic 37.1 Collaborate with and fairly compensate community-based organizations serving BIPOC and vulnerable communities to collect stories and narratives related to mental and physical safety; use stories as part of decision-making processes.
- Tactic 38.3 Identify new and less regressive federal, state and City funding and advocate to invest in pedestrian safety, including crosswalks, sidewalks, traffic calming, lighting, signal operations, etc.; include analysis from the Pedestrian Racial Equity Toolkit into this process.
- Tactic 40.2 Identify locations for new or upgraded pedestrian crossing opportunities to support access to transit.
- Tactic 42.1 Co-develop a working definition for "safety" with Transportation Equity Workgroup Members, as well as other BIPOC and vulnerable community members which then SDOT can use for the entire department.
- Tactic 43.4 Review SDOT policies, practices, standards, and funding allocation strategies to elevate / give priority to access and use of right-of-way (ROW) for people of all ages and abilities - people recreating, shopping, walking, rolling, riding bikes and transit.

• Tactic 44.1 Identify programmatic and policy opportunities from the findings of the racial equity toolkit on automated enforcement programs to address unintended consequences and work towards creating non-financial, restorative-based alternatives.

Projects awarded SS4A funding will continue to undergo review and input from the Transportation Equity Workgroup for further refinement and collaboration with community stakeholders.

Partnerships and engagement in underserved communities

In addition to engaging with the Transportation Equity Workgroup to develop and advance specific TEF tactics, Vision Zero staff are working in paid partnership with a local BIPOC-led working group called Whose Streets? Our Streets! (WSOS) on issues related to enforcement and policing in transportation. In the spring and summer of 2022, WSOS members are leading outreach to BIPOC community members to gather stories, lived experiences, and ideas related to transportation safety and the role of enforcement. This information will inform SDOT's future enforcement practices, which connects deeply to Vision Zero and a traditional reliance on in-person policing and automated enforcement. This level of partnership and engagement has pushed staff and leadership to think beyond traditional practices and offers direct connections to relying more on design interventions and the Safe System approach. It has been because of this partnership and TEF Tactic 44.1 that we are currently reviewing unintended burdens of automated enforcement tools and why speed cameras (proven safety countermeasure) are not included in this SS4A application.

EFFECTIVE PRACTICES AND STRATEGIES

Create a safer community

This proposal focuses on deploying a full package of low-cost, high-impact strategies primarily in Underserved Communities, with a particular emphasis on the most vulnerable travelers -

people walking, rolling, and biking. Applying standard evidence-based interventions such as protected bicycle lanes, sidewalks, leading pedestrian intervals, marked crosswalks, and traffic calming tools in the areas of highest need improves safety for all travelers across broad regions of the city. 32 of the 37 Underserved Community census tracts within Seattle (85%) have been prioritized for SS4A safety projects.

The locations identified for SS4A funding heavily invest in Seattle's most deficient intersections for Public Right Of Way Accessibility Guideline (PROWAG) elements (accessible pedestrian signals and ADA-compliant curb ramps) within Underserved Communities, furthering Seattle's equity and social justice goals to reduce barriers and support Seattle's commitment to accessibility. One SS4A location has been identified for advanced accessible tactile and wayfinding treatments to further pilot treatments that go beyond existing ADA standards. If successful, this would lay the groundwork for future expansion of treatments for persons with vision impairments, improving their access to navigate city streets and cross safely at critical intersections. The earlier Safety Impacts section highlights an emphasis on applying FHWA proven countermeasures and treatments with high crash reduction rates as found in the Crash Modification Factor Clearinghouse.

Safe System Approach

In alignment with the National Roadway Safety Strategy, Seattle embraces the Safe System approach. Seattle's Vision Zero program website highlights the approach, including 3 key grounding principles that guide our work and this proposal:

- Traffic deaths and injuries are preventable
- Humans make mistakes and are fragile
- Success does not hinge on individual behavior, but on the design of a safe system

Slow speeds: The proposed SS4A treatments build on previous systemic and proactive safety work in Seattle such as reducing citywide speed limits to 25 mph. For example, the arterial traffic calming locations selected for SS4A funding are

outliers with high speeds that require additional treatments to slow speeds along those corridors.

Safer streets: Proposed SS4A treatments such as LPIs, protected bike lanes, and sidewalks separate different users in time and space and are proven to reduce collisions by providing greater tolerances for people to make mistakes.

With focused attention on the Safe Roads and Safe Speeds elements, our proposal spotlights street design changes that slow vehicle speeds, reduce conflict points, and minimize exposure for the most vulnerable travelers in the most disadvantaged and disinvested communities.

CLIMATE CHANGE, SUSTAINABILITY, AND ECONOMIC COMPETITIVENESS

Many of these treatments will provide additional access for multimodal travel and modal shifts to reduce drive-alone vehicle use and greenhouse gases. New bike lanes and sidewalks will provide new, safe, and comfortable spaces for those who wish to walk, roll, and bike. The SS4A locations specifically focus on closing gaps within the pedestrian, bicycle, and ADA networks. These projects are focused heavily within the SODO neighborhood, which is primarily an industrial district with a diverse business community of retail and freight and lacking basic infrastructure. In addition, the proposed bike lane and sidewalk corridors will connect directly to the two major sports stadiums within SODO. These treatments will further increase access to SODO employment centers and increase multimodal access to people traveling to SODO destinations.

ADA curb ramp improvements and new accessible pedestrian signals will provide new alternative travel options for those with challenges navigating the public right-of-way by removing barriers and making it easier and more comfortable to navigate some of Seattle's most dangerous spaces (e.g., signalized intersections). These can provide options for non-motorized or transit-based trips and reduce the need to rely on paratransit services or other car share options.

PROJECT READINESS

PROJECT DELIVERABILITY AND RISK

Projects identified within this application are generally spot improvements with low complexity. They utilize standard treatments similar to others implemented within Seattle. These types of treatments allow for quick implementation. All projects are intended to fall within normal roadway standards without any need for exceptions to local, state, or federal roadway standards. In addition, no project falls within state jurisdiction roadways, and all locations are solely within City of Seattle right-of-way. No property acquisition is expected to implement all identified projects.

As we prepare to deliver this package of projects with federal aid, we've identified several primary risk factors and mitigation strategies to ensure timely project delivery:

1. Sub-projects determined to be infeasible: In our experience delivering large bundles of spot improvements across the city, including some packages with federal aid, it is common that certain locations are later determined infeasible or unnecessary. We've occasionally encountered situations where private development builds one of our sub-projects before our project begins, and other cases where geometric design challenges make our planned treatment technically infeasible. However, these cases are rare (typically 1-2% of the planned sites), and we are easily able to fulfill our

- grant commitment by substituting other comparable locations nearby.
- 2. National Environmental Policy Act (NEPA) documentation: Diverse worksites across a wide area can present complications with NEPA. From similar projects, we've learned that these complications can delay NEPA approval by 2 to 4 months. We've incorporated this risk into our project schedule.
- 3. **Cost escalation:** As we begin engineering design work on this package of projects, we're aware that actual costs could increase beyond our current estimates. Fortunately, the treatments in this package are standardized, and their costs can be estimated with reasonable consistency. Finally, if cost escalation is an issue, our City Council and Levy Oversight Committee have consistently prioritized safety investments in our city and even requested us to divert new or additional revenues there. Additional local funds will be readily available for these projects if needed.

PROJECT BUDGET

Table 3 in appendix E illustrates our intended use of federal and local funds to complete all project deliverables. \$7.5 million in local funds are available to match the \$30 million federal fund request and will remain unencumbered until the period of performance for this federal grant.

FUNDS TO UNDERSERVED COMMUNITIES

OVERVIEW

Projects identified for this application were intentionally targeted within underserved communities. 32 of the 37 underserved community census tracts within Seattle (85%) have been prioritized for SS4A safety projects and 97% of the total budget is proposed within underserved communities.

TABLE 2: BUDGET PROPOSED IN UNDERSERVED COMMUNITIES

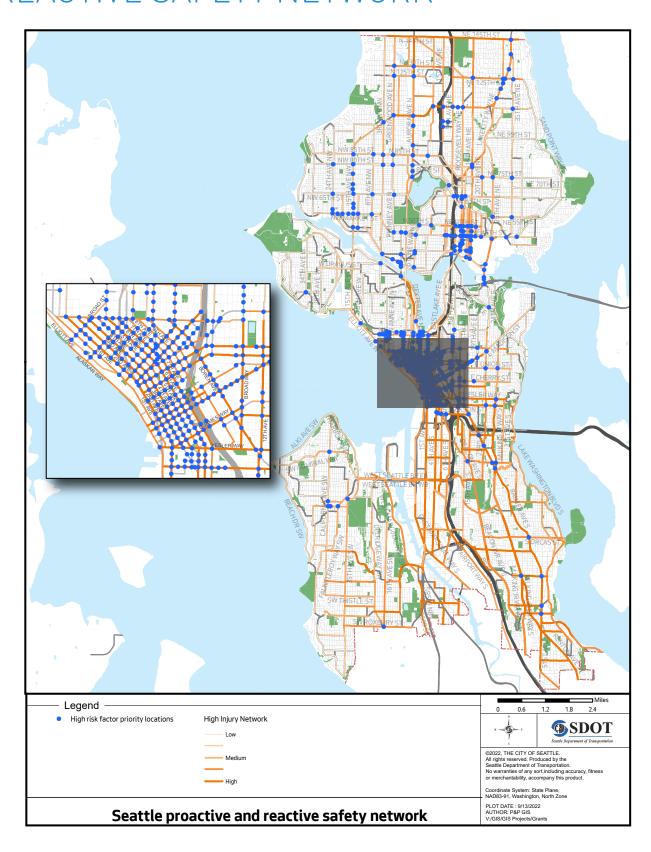
Project Type	Estimated Budget	Budget in Underserved Communities
Signalized intersection treatments (LPI, APS, ADA ramps/wayfinding)	\$15,200,000	\$14,980,000
Protected bike lanes	\$16,800,000	\$16,800,000
New sidewalks	\$2,800,000	\$2,800,000
Arterial traffic calming (speed humps, medians, etc)	\$1,500,000	\$1,500,000
Unsignalized pedestrian crossings (crosswalks, RRFB, refuge islands)	\$1,200,000	\$400,000
Total:	\$37,500,000	\$36,480,000
% of funds going	97%	



APPENDIX A. KEY INFORMATION TABLE

Application Name	Seattle Safe Streets
Lead Applicant	City of Seattle
If Multijurisdictional, additional eligible entities jointly applying	NA
Roadway safety responsibility	Ownership and/or maintenance responsibilities over a roadway network
Population in Underserved Communities	27%
States(s) in which activities are located	Washington
Costs by State (if project spans more than one State)	NA
Funds to Underserved Communities	\$36,480,000
Cost total for eligible activity (A) supplemental action plan activities in support of an existing Action Plan	\$0
Cost total for eligible activity (B) conducting planning, design, and development activities for projects and strategies identified in an Action Plan	\$5,625,000
Cost total for eligible activity (C) carrying out projects and strategies identified in an Action Plan	\$31,875,000
Action Plan or Established Plan Link	2017 and 2019 updates to 2015 Action Plan
	www.seattle.gov/documents/Departments/SDOT/VisionZero/2019_VZ_Update_Report.pdf
	www.seattle.gov/documents/Departments/beSuperSafe/VZ_2017_Progress_Report.pdf

APPENDIX B. SEATTLE PROACTIVE AND REACTIVE SAFETY NETWORK



APPENDIX C. TABLE OF LOCATIONS AND TREATMENTS

Project location	Limit 1	Limit 2	In historically disadvantaged community? (%)	General scope
ROOSEVELT WAY NE AND NE 43RD N ST			100%	Unsignalized intersection: New ADA ramps, marked crosswalks, RRFB's
8TH AVE NE AND NE 42ND ST			100%	Unsignalized intersection: New ADA ramps, marked crosswalks, bumpouts, RRFB, daylighting
HARVARD AVE E AND E OLIVE WAY			0%	Unsignalized intersection: New ADA ramps, marked crosswalks, bumpouts, RRFB (or ped refuge island)
BELMONT AVE AND E PIKE ST			0%	Unsignalized intersection: New ADA ramps, bumpouts, RRFB
HARVARD AVE AND SENECA ST			0%	Unsignalized intersection: Bumpouts, ped refuge islands, marked crosswalks, RRFB's
10TH AVE AND E PIKE ST			0%	Unsignalized intersection: ADA ramps, ped refuge island, RRFB's
RENTON AVE S	M L KING JR WAY S	CITY LIMITS	100%	Traffic calming: Curb extensions, speed humps, raised medians, raised crosswalks
SEWARD PARK AVE S	S MORGAN ST	RAINIER AVE S	100%	Traffic calming: Curb extensions, speed humps, raised medians, raised crosswalks
23RD AVE S AND RAINIER AVE S			100%	Tactile wayfinding crossing treatment and tactile signs
AIRPORT WAY S/6TH AVE S	S LUCILE ST	S FOREST ST	100%	Protected bike lane: In-street directional protected bike lanes
HIGHLAND PARK WAY SW	WEST MARGINAL WAY SW	SW HOLDEN ST	100%	Protected bike lane: East side 2-way seperated bike lane
BEACON AVE S	S MYRTLE ST	39TH AVE S	100%	Protected bike lane: Center running 2-way seperated bike lane

Project location	Limit 1	Limit 2	In historically disadvantaged community? (%)	General scope
1ST AVE S	S SPOKANE ST	S DAKOTA ST	100%	New sidewalk
1ST AVE S	1ST AVE S UP RR BRIDGE (SOUTH END)	E MARGINAL WAY	100%	New sidewalk
4TH AVE S	WEST SEATTLE BRIDGE EB OFF RAMP @ 4TH AVE S	S INDUSTRIAL WAY	100%	New sidewalk
4TH AVE S	S LUCILE ST	S MICHIGAN ST	100%	New sidewalk
S HOLGATE ST	1ST AVE S	8TH AVE S	100%	New sidewalk
11TH AVE NE AND NE 42ND ST			100%	Accessible push buttons, ADA ramps, and LPI
11TH AVE NE AND NE 43RD ST			100%	Accessible push buttons, ADA ramps, and LPI
14TH AVE AND E CHERRY ST			100%	Accessible push buttons, ADA ramps, and LPI
15TH AVE S AND S COLLEGE ST			100%	Accessible push buttons, ADA ramps, and LPI
17TH AVE S AND S COLLEGE ST			100%	Accessible push buttons, ADA ramps, and LPI
18TH AVE AND E UNION ST			100%	Accessible push buttons, ADA ramps, and LPI
1ST AVE NE AND NE NORTHGATE WAY			100%	Accessible push buttons, ADA ramps, and LPI
1ST AVE S AND OLSON PL SW			100%	Accessible push buttons, ADA ramps, and LPI
1ST AVE S AND S JACKSON ST			100%	Accessible push buttons, ADA ramps, and LPI
1ST AVE S AND S KING ST			100%	Accessible push buttons, ADA ramps, and LPI
1ST AVE S AND S WASHINGTON ST			100%	Accessible push buttons, ADA ramps, and LPI
20TH AVE AND E YESLER WAY			100%	Accessible push buttons, ADA ramps, and LPI
20TH AVE SW AND SW ROXBURY ST			100%	Accessible push buttons, ADA ramps, and LPI
23RD AVE S AND S DEARBORN ST			100%	Accessible push buttons, ADA ramps, and LPI
23RD AVE S AND S MCCLELLAN ST			100%	Accessible push buttons, ADA ramps, and LPI
2ND AVE AND CHERRY ST			100%	Accessible push buttons, ADA ramps, and LPI
30TH AVE NE AND LAKE CITY N WAY NE			100%	Accessible push buttons, ADA ramps, and LPI

Project location	Limit 1	Limit 2	In historically disadvantaged community? (%)	General scope
30TH AVE NE AND NE 145TH ST	Limit	Lillit 2	100%	Accessible push buttons, ADA ramps, and LPI
3RD AVE S AND S JACKSON ST			100%	Accessible push buttons, ADA ramps, and LPI
4TH AVE AND PIKE ST			100%	Accessible push buttons, ADA ramps, and LPI
4TH AVE S AND S DAWSON ST			100%	Accessible push buttons, ADA ramps, and LPI
4TH AVE S AND S FIDALGO ST			100%	Accessible push buttons, ADA ramps, and LPI
4TH AVE S AND S LUCILE ST			100%	Accessible push buttons, ADA ramps, and LPI
4TH AVE S AND SEATTLE BLVD S			100%	Accessible push buttons, ADA ramps, and LPI
5TH AVE AND CHERRY ST			100%	Accessible push buttons, ADA ramps, and LPI
5TH AVE AND COLUMBIA ST			100%	Accessible push buttons, ADA ramps, and LPI
5TH AVE AND OLIVE WAY			100%	Accessible push buttons, ADA ramps, and LPI
5TH AVE AND PIKE ST			100%	Accessible push buttons, ADA ramps, and LPI
5TH AVE AND PINE ST			100%	Accessible push buttons, ADA ramps, and LPI
5TH AVE AND UNION ST			100%	Accessible push buttons, ADA ramps, and LPI
6TH AVE AND CHERRY ST			100%	Accessible push buttons, ADA ramps, and LPI
6TH AVE S AND S HOLGATE ST			100%	Accessible push buttons, ADA ramps, and LPI
6TH AVE S AND S LANDER ST			100%	Accessible push buttons, ADA ramps, and LPI
6TH AVE S AND S ROYAL BROUGHAM WAY			100%	Accessible push buttons, ADA ramps, and LPI
7TH AVE NE AND NE 42ND ST			100%	Accessible push buttons, ADA ramps, and LPI
7TH AVE S AND S DEARBORN ST			100%	Accessible push buttons, ADA ramps, and LPI
AIRPORT WAY S AND S ROYAL BROUGHAM WAY			100%	Accessible push buttons, ADA ramps, and LPI
BOREN AVE AND PINE ST			100%	Accessible push buttons, ADA ramps, and LPI
DEARBORN ST OFF RP AND S DEARBORN ST			100%	Accessible push buttons, ADA ramps, and LPI
DIAGONAL AVE S AND EAST MARGINAL WAY S			100%	Accessible push buttons, ADA ramps, and LPI

Project location	Limit 1	Limit 2	In historically disadvantaged community? (%)	General scope
GREENWOOD AVE N AND N 145TH ST		22	100%	Accessible push buttons, ADA ramps, and LPI
LINDEN AVE N AND N 130TH ST			100%	Accessible push buttons, ADA ramps, and LPI
LINDEN AVE N AND N 145TH ST			100%	Accessible push buttons, ADA ramps, and LPI
OLIVE WAY AND TERRY AVE			100%	Accessible push buttons, ADA ramps, and LPI
RAINIER AVE S AND S OREGON ST			100%	Accessible push buttons, ADA ramps, and LPI
RAINIER AVE S AND S WELLER ST			100%	Accessible push buttons, ADA ramps, and LPI
ROOSEVELT WAY NE AND NE 50TH ST			100%	Accessible push buttons, ADA ramps, and LPI
SEATTLE BLVD S AND S DEARBORN ST			100%	Accessible push buttons, ADA ramps, and LPI
SPRING ST AND WESTERN AVE			100%	Accessible push buttons, ADA ramps, and LPI
UNIVERSITY WAY NE AND NE 42ND ST			100%	Accessible push buttons, ADA ramps, and LPI
UNIVERSITY WAY NE AND NE 47TH ST			100%	Accessible push buttons, ADA ramps, and LPI
UNIVERSITY WAY NE AND NE 50TH ST			100%	Accessible push buttons, ADA ramps, and LPI
11TH AVE NE AND NE 47TH ST			100%	Accessible push buttons and ADA ramps
11TH AVE NE AND NE 50TH ST			100%	Accessible push buttons and ADA ramps
14TH AVE AND E YESLER WAY			100%	Accessible push buttons and ADA ramps
15TH AVE NE AND NE PACIFIC ST			100%	Accessible push buttons and ADA ramps
15TH AVE SW AND SW ROXBURY ST			100%	Accessible push buttons and ADA ramps
17TH AVE SW AND SW ROXBURY ST			100%	Accessible push buttons and ADA ramps
17TH SB AVE NE AND NE 45TH ST			100%	Accessible push buttons and ADA ramps
18TH AVE AND E YESLER WAY			100%	Accessible push buttons and ADA ramps
18TH AVE NE AND NE 45TH ST			100%	Accessible push buttons and ADA ramps
19TH AVE NE AND NE 45TH ST			100%	Accessible push buttons and ADA ramps
1ST AVE AND CHERRY ST			100%	Accessible push buttons and ADA ramps

			In historically	
Project location	Limit 1	Limit 2	disadvantaged community? (%)	General scope
1ST AVE AND MARION ST			100%	Accessible push buttons and ADA ramps
1ST AVE AND PIKE ST			100%	Accessible push buttons and ADA ramps
1ST AVE AND PINE ST			100%	Accessible push buttons and ADA ramps
1ST AVE AND STEWART ST			100%	Accessible push buttons and ADA ramps
1ST AVE AND UNION ST			100%	Accessible push buttons and ADA ramps
1ST AVE AND UNIVERSITY ST			100%	Accessible push buttons and ADA ramps
1ST AVE S AND RAILROAD N WAY S			100%	Accessible push buttons and ADA ramps
1ST AVE S AND S MAIN ST			100%	Accessible push buttons and ADA ramps
23RD AVE S AND S HANFORD ST			100%	Accessible push buttons and ADA ramps
25TH AVE NE AND NE 44TH ST			100%	Accessible push buttons and ADA ramps
25TH AVE NE AND NE 47TH ST			100%	Accessible push buttons and ADA ramps
35TH AVE SW AND SW RAYMOND ST			100%	Accessible push buttons and ADA ramps
35TH AVE SW AND SW ROXBURY ST			100%	Accessible push buttons and ADA ramps
3RD AVE AND COLUMBIA ST			100%	Accessible push buttons and ADA ramps
3RD AVE AND JAMES ST			100%	Accessible push buttons and ADA ramps
3RD AVE AND PIKE ST			100%	Accessible push buttons and ADA ramps
3RD AVE AND PINE ST			100%	Accessible push buttons and ADA ramps
3RD AVE AND SENECA ST			100%	Accessible push buttons and ADA ramps
3RD AVE AND SPRING ST			100%	Accessible push buttons and ADA ramps
3RD AVE AND UNION ST			100%	Accessible push buttons and ADA ramps
3RD AVE AND UNIVERSITY ST			100%	Accessible push buttons and ADA ramps
3RD AVE AND YESLER WAY			100%	Accessible push buttons and ADA ramps
3RD AVE NE AND NE 103RD ST			100%	Accessible push buttons and ADA ramps
4TH AVE AND COLUMBIA ST			100%	Accessible push buttons and ADA ramps

			In historically disadvantaged	
Project location	Limit 1	Limit 2	community? (%)	General scope
5TH AVE AND JAMES ST			100%	Accessible push buttons and ADA ramps
5TH AVE AND SENECA ST			100%	Accessible push buttons and ADA ramps
5TH AVE NE AND NE NORTHGATE WAY			100%	Accessible push buttons and ADA ramps
8TH AVE AND JAMES ST			100%	Accessible push buttons and ADA ramps
BOREN AVE AND PIKE ST			100%	Accessible push buttons and ADA ramps
BOREN AVE AND SENECA ST			100%	Accessible push buttons and ADA ramps
BROADWAY AND CHERRY ST			100%	Accessible push buttons and ADA ramps
BROADWAY AND E COLUMBIA ST			100%	Accessible push buttons and ADA ramps
BROADWAY AND JEFFERSON ST			100%	Accessible push buttons and ADA ramps
BROOKLYN AVE NE AND NE 50TH ST			100%	Accessible push buttons and ADA ramps
BROOKLYN AVE NE AND NE PACIFIC ST			100%	Accessible push buttons and ADA ramps
CALIFORNIA AVE SW AND SW ALASKA ST			0%	Accessible push buttons and ADA ramps
CALIFORNIA AVE SW AND SW OREGON ST			0%	Accessible push buttons and ADA ramps
DELRIDGE WAY SW AND SW ROXBURY ST			100%	Accessible push buttons and ADA ramps
LAKE CITY WAY NE AND NE 127TH ST			100%	Accessible push buttons and ADA ramps
LATONA AVE NE AND NE 45TH ST			100%	Accessible push buttons and ADA ramps
LENORA ST AND WESTERN AVE			100%	Accessible push buttons and ADA ramps
PIKE ST AND CONVENTION PL			100%	Accessible push buttons and ADA ramps
RAINIER AVE S AND S CLOVERDALE ST			100%	Accessible push buttons and ADA ramps
RAINIER AVE S AND S DEARBORN ST			100%	Accessible push buttons and ADA ramps
RAINIER AVE S AND S MASSACHUSETTS ST			100%	Accessible push buttons and ADA ramps
UNIVERSITY WAY NE AND NE CAMPUS EB PY			100%	Accessible push buttons and ADA ramps
UNIVERSITY WAY NE AND NE PACIFIC ST			100%	Accessible push buttons and ADA ramps

APPENDIX D. SELF CERTIFICATION WORKSHEET

Instructions: This content is from Table 2 in the NOFO. The purpose of the worksheet is to determine whether or not an applicant's existing plan(s) is substantially similar to an Action Plan.

For each question below, answer "yes" or "no." If "yes," cite the specific page in your existing Action Plan or other plan(s) that corroborate your response, or cite and provide other supporting documentation separately.

An applicant is eligible to apply for an Action Plan Grant that funds supplemental action plan activities, or an

Implementation Grant, only if the following two conditions are met:

- Answer "yes" to Questions 3, 7, 9
- Answer "yes" to at least four of the six remaining Questions 1, 2, 4, 5, 6, 8

1. Are both of the following true?

- Did a high-ranking official and/or governing body in the jurisdiction publicly commit to an eventual goal of zero roadway fatalities and serious injuries?
- Did the commitment include either setting a target date to reach zero, OR setting one or more targets to achieve significant declines in roadway fatalities and serious injuries by a specific date?

Response: YES

In February 2015, Seattle's Mayor made a public commitment to end traffic deaths and serious injuries on city streets by 2030. A number of media outlets covered this public announcement, including: www.bloomberg.com/news/articles/2015-02-20/seattle-joins-a-growing-list-of-u-s-cities-to-adopt-thevision-zero-approach-to-reducing-traffic-deaths

2. To develop the Action Plan, was a committee, task force, implementation group, or similar body established and charged with the plan's development, implementation, and monitoring?

Response: NO

3. Does the Action Plan include all of the following

- Analysis of existing conditions and historical trends to baseline the level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region;
- Analysis of the location where there are crashes, the severity, as well as contributing factors and crash types;

- Analysis of systemic and specific safety needs is also performed, as needed (e.g., high risk road features, specific safety needs of relevant road users; and,
- A geospatial identification (geographic or locational data using maps) of higher risk locations.

Response: YES

Our 2017 and 2019 Vision Zero reports (updates to the 2015 Vision Zero Action Plan) highlight existing conditions and historical trends related to serious and fatal crashes. Seattle's Bicycle and Pedestrian Analysis (BPSA) provides extensive analysis of system safety needs and risk factors for the most vulnerable travelers, including geographic identification of higher risk locations.

- Vision Zero 2017 Progress Report, pages 5 7; www.seattle.gov/documents/Departments/ beSuperSafe/VZ 2017 Progress Report.pdf
- Vision Zero 2019 Update Report, page 1; www.seattle.gov/documents/Departments/SD0T/ VisionZero/2019_VZ_Update_Report.pdf
- Bicycle and Pedestrian Safety Analysis, pages 20 21 (maps of highest priority locations by City Council District); www.seattle.gov/documents/Departments/SD0T/VisionZero/SD0T_Bike%20and%20 Ped%20Safety%20Analysis Ph2 2420%280%29.pdf

4. Did the Action Plan development include all the following activities?

- Engagement with the public and relevant stakeholders, including the private sector and community groups;
- Incorporation of information received from the engagement and collaboration into the plan; and
- Coordination that included inter- and intra-governmental cooperation and collaboration, as appropriate.

Response: YES

Following the February 2015 initial launch of Vision Zero, SDOT convened a community coalition comprised of traffic safety and active transportation advocates (Cascade Bicycle Club, Seattle Neighborhood Greenways), as well as staff from Seattle Police Department. This occurred in December 2015 and into 2016, helping to inform the 2017 progress report update document. This group, in partnership with a number of SDOT staff and regular engagement with SPD and partners at Public Health – Seattle & King County was integral to informing Seattle's Vision Zero efforts.

5. Did the Action Plan development include all of the following?

- Considerations of equity using inclusive and representative processes?
- The identification of underserved communities through data; and
- Equity analysis, in collaboration with appropriate partners, focused on initial equity impact assessments of the proposed projects and strategies, and population characteristics?

Response: YES

Seattle's 2017 and 2019 Vision Zero reports include information regarding a Racial Equity Toolkit analysis done in partnership with Seattle Police Department on Vision Zero enforcement efforts (page 25 of 2017 report; www.seattle.gov/documents/Departments/beSuperSafe/VZ_2017_Progress_Report.pdf)

The 2019 Vision Zero Update Report references coordination efforts with SDOT's Race and Social Justice Team as well as the then newly formed Transportation Equity Program (see page 2; www.seattle.gov/ documents/Departments/SDOT/VisionZero/2019 VZ Update Report.pdf).

Since those reports have been published, the Vision Zero team has been an integral part of Seattle's Transportation Equity Framework development (www.seattle.gov/transportation/projects-and-programs/ programs/transportation-equity-program/equity-workgroup), working closely with a BIPOC community working group to identify and implement tactics related to improving safety for vulnerable travelers and reducing reliance on punitive practices such as in-person enforcement to advance transportation safety and mobility justice.

6. Are both the following true?

- The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety; and
- The plan discusses implementation through adoption of revised or new policies, guidelines, and/ or standards

Response: YES

Our 2019 Vision Zero Update Report references policy changes that have occurred through our Vision Zero program, primarily related to speed limit setting and the implementation of leading pedestrian intervals (see page 3). These new policies have led to the systemic deployment of LPIs and the citywide lowering of speed limits. www.seattle.gov/documents/Departments/SD0T/VisionZero/2019_VZ_Update_Report.pdf

7. Does the plan identify a comprehensive set of projects and strategies to address the safety problems in the Action Plan, time ranges when projects and strategies will be deployed, and explain project prioritization criteria?

Response: YES

The 2017 Vision Zero Progress report identifies specific strategies and projects as well as implementation timeframes. A list of safety corridors for implementation over the 2017 - 2024 timeframe is on page 17, followed by a map of high crash on page 18, indicating the top 100 arterial corridor segments with the highest history of fatal and serious injury crashes. Page 19 includes a list of projects particularly enhancing safety for the most vulnerable travelers. Projects related to education and engagement strategies are found on pages 20 – 24, with an emphasis and explanation of prioritization based on highest-need areas and historically underrepresented and underserved populations.

The 2019 Vision Zero Update report identifies specific high injury corridors of focus as well as efforts related to education and enforcement on pages 3-5.

www.seattle.gov/documents/Departments/SDOT/VisionZero/2019 VZ Update Report.pdf

The Bicycle and Pedestrian Safety Analysis report identifies high priority, high risk locations and (see pages 20 – 21 for specific locations) and includes discussion of promising systemic countermeasures such as leading pedestrian intervals (see page 19). Page 19 also includes an explanation of "higher priority" as indicating locations that exhibit one or more characteristics found to be significantly associated with bicyclist or pedestrian crashes and/or have a crash history.

www.seattle.gov/documents/Departments/SD0T/VisionZero/SD0T_Bike%20and%20Ped%20Safety%20 Analysis Ph2 2420%280%29.pdf

8. Does the plan include all of the following?

- A description of how progress will be measured over time that includes, at a minimum, outcome
- The plan is posted publicly online.

Response: YES

In our initial 2015 Action Plan, we committed to providing progress report updates approximately every two years. Since then, we have published two additional reports that we have referenced heavily in the responses above. All of these documents are posted publicly online at https://www.seattle.gov/transportation/projectsand-programs/safety-first/vision-zero/resources.

In addition, the Seattle Department of Transportation has an online levy dashboard where the public can track progress on a number of projects, including Safety Corridors (tying directly to Vision Zero investments). This dashboard is available at https://public.tableau.com/app/profile/city.of.seattle.transportation/viz/Levy Dashboard 16141242942520/SafeRoutes.

9. Was the plan finalized and/or last updated between 2017 and 2022?

Response: YES

The 2015 Vision Zero Action Plan was updated in 2017, with a follow up document published in 2019. The Bicycle and Pedestrian Safety Analysis was most recently published in early 2020. All documents can be found at www.seattle.gov/transportation/projects-and-programs/safety-first/vision-zero/resources.

APPENDIX E. TABLE 3: SUPPLEMENTAL ESTIMATED BUDGET

Table 3: Supplemental Estimated Budget	Local Funds	Federal Funds	Total Budget
Subtotal Budget for (A) supplemental action plan activities;	\$0.00	\$0.00	\$0.00
Itemized Estimated Costs of the (A) supplement	al action plan activ	vities	
No supplemental action plan activities	\$0.00	\$0.00	\$0.00
Subtotal Budget for (B) conducting planning, design, and development activities	\$1,125,000.00	\$4,500,000.00	\$5,625,000.00
Itemized Estimated Costs of the (B) planning, de	sign, and develop	ment activities	
Signalized intersection treatments	\$456,000.00	\$1,824,000.00	\$2,280,000.00
Unsignalized intersection treatments	\$36,000.00	\$144,000.00	\$180,000.00
Protected bike lanes	\$504,000.00	\$2,016,000.00	\$2,520,000.00
New sidewalks	\$84,000.00	\$336,000.00	\$420,000.00
Arterial traffic calming	\$45,000.00	\$180,000.00	\$225,000.00
Subtotal Budget for (C) carrying out projects and strategies	\$6,375,000.00	\$25,500,000.00	\$31,875,000.00
Itemized Estimated Costs of the (C) proposed pro	ojects and strateg	ies	
Signalized intersection treatments	\$2,584,000.00	\$10,336,000.00	\$12,920,000.00
Unsignalized intersection treatments	\$204,000.00	\$816,000.00	\$1,020,000.00
Protected bike lanes	\$2,856,000.00	\$11,424,000.00	\$14,280,000.00
New sidewalks	\$476,000.00	\$1,904,000.00	\$2,380,000.00
Arterial traffic calming	\$255,000.00	\$1,020,000.00	\$1,275,000.00
Total budget for A, B, and C	\$7,500,000.00	\$30,000,000.00	\$37,500,000.00
Subtotal f	\$36,480,000.00		
Percent of total f	97%		

Total federal funds requested: \$30,000,000

Local match available: \$7,500,000

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