SAFE SYSTEMS ON 122ND AVENUE: A MODEL FOR HUMANIZING ARTERIAL STREETS





Key Information Table	
Application Name	Safe Systems on 122nd Avenue: A model for humanizing arterial streets
Lead Applicant	City of Portland Bureau of Transportation (PBOT)
If multijurisdictional, additional eligible entities jointly applying	N/A
Roadway safety responsibility	Ownership and maintenance responsibilities over a roadway network
Population in Underserved Communities	37.3%
State(s) in which activities are located	Oregon
Costs by State	\$25 million (\$5 million local, \$20 million federal)
Funds to Underserved Communities	\$24,069,377
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	\$8,264,936
Cost total for eligible activity (C) carrying out projects and strategies identified in an Action Plan.	\$16,735,064
	Vision Zero Action Plan (2016): https://www.portland.gov/sites/default/ files/2020-04/vision-zero-action-plan.pdf
Action Plan or Established Plan Link	Vision Zero Action Plan amendment (2017): https://efiles.portlandoregon.gov/ Record/11111660/
	Vision Zero Action Plan Two-Year Update (2019): https://www.portland.gov/sites/default/ files/2020-05/portland-vision-zero-2-year-update. pdf

SAFE SYSTEMS ON 122ND AVENUE: A model for humanizing arterial streets

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1. Overview

The City of Portland proposes that U.S. DOT fund the "Safe Systems on 122nd Avenue: A model for humanizing arterial streets" ("SS122A") project to advance Portland's Vision Zero Action Plan and make systemic and focused safety investments (\$25 million project, with \$20 million federal share and \$5 million local match) on one of the city's most dangerous streets. Utilizing a Safe System approach to injury prevention – investing in safe speeds, safe streets and safe people – will transform a critical 5.5-mile stretch of 122nd Avenue. This busy five-lane arterial under the jurisdiction of Portland is in the top 5% of the metropolitan area's most deadly and injurious streets¹ and serves the city's most racially and ethnically diverse neighborhoods (37% to 53% communities of color population shares compared to 24% citywide)² making it a regional safety and equity priority.

The proposed project implements Portland's *Vision Zero Action Plan*,³ adopted by City Council in 2016,⁴ amended in 2017^{5,6} and updated in 2019^{7,8} (see Attachment A, Self-Certification Eligibility Worksheet). It also addresses safety needs identified and prioritized by the community in the recently complete *122nd* Avenue Plan.⁹ Portland's Vision Zero Action Plan identified 122nd Avenue as among Portland's 30 most dangerous streets with six of the city's 30 most dangerous intersections. The complete High Crash Network¹⁰ is shown in Figure 1.

76-feet wide curb-to-curb, 122nd Avenue currently has five lanes for motor vehicles, two lanes in each direction with a center turn lane, and additional turn lanes at intersections. five-foot bicycle lanes run most of the corridor, but often end at major intersections to allow right-turn lanes. Sidewalks exist on both sides of most of the corridor but are typically six feet and curb tight with utility conflicts and accessibility deficiencies. Lighting exists on only one side of the street. Vehicle volumes range from 11,000 to 25,000 average daily trips (ADT) with the highest volumes near the Interstate 84 interchange.¹¹

Figure 1: City of Portland Context Map



Adjacent land uses along 122nd Avenue vary from low- to medium-density residential homes to business areas fronted by large parking lots. The regional MAX light rail system intersects 122nd Avenue, and regional transit operator TriMet provides frequent bus service along 122nd Avenue, meaning buses come at least once every 15 minutes. The speed limit on the corridor is 30mph, reduced in 2021 from 35mph. Despite this change, the 85th percentile speeds still range from 36 to 40mph, with off-peak hour speeds much higher.

This application highlights the critical safety issues along 122nd Avenue, and how the proposed project will address these issues, transform the street and serve as a model for other arterial corridors in Portland and the region.

2. Location

The "SS122A" project focuses on a 5.5-mile segment of 122nd Avenue between NE Sandy Boulevard and SE Foster Road in Portland, Oregon. The City of Portland owns and manages 122nd Avenue.

122nd Avenue is on the city's High Crash Network. As Figure 2 illustrates, clusters of fatal and serious injury crashes occur throughout the corridor but are most predominantly concentrated at major intersections. Pedestrian crashes cluster in two central locations, Glisan to Stark streets and Division to Holgate streets, and bicyclist crashes cluster in the north central segment between Halsey and Stark streets. Serious and fatal crashes for people in vehicles cluster around the intersections of Stark and Division, and between San Rafael and Interstate 84.

The proposed project will employ low-cost, high-benefit treatments including filling gaps in street lighting, converting existing parking to protected bike lanes, adding pedestrian crossings, adding median refuge islands and street trees, reducing vehicle lanes south of Powell, adding bus stop curb extensions, and adding speed reader boards. Targeted intersection interventions include a roundabout, raised bike lanes, curb extensions, signal separation and timers for people walking and biking, signal timing optimization for safe speeds and retro-reflective backplates.

These project elements are illustrated in Figure 5 on page 6 and have been thoroughly vetted and prioritized through traffic crash data analysis, proven safety countermeasure crash reduction factors, public engagement as part of the *122nd Avenue Plan* over the past four years, and existing, funded projects. The city's traffic engineers have developed concept designs and identified locations for each project and strategy in the SS122A proposal.

3. Response to Selection Criteria #1: Safety Impact

Description of the Safety Problem

East Portland has 25% of Portland's population but more than 50% of the city's traffic deaths. The 2019 Vision Zero Action Plan Update named 122nd Avenue one of the Portland Bureau of Transportation's (PBOT's) priorities.¹² 122nd Avenue is in the top 5% of the Portland metropolitan area's most deadly and injurious streets.¹³ Five crashes occur on 122nd Avenue in a typical week, and three of every 100 crashes result in a death or serious injury. Historical crash data since 2001 indicate safety continues to worsen.¹⁴

Figure 2: Crashes along 122nd Avenue. 2016-2020



The most recent five-year period with complete data available (2016-2020) shows nine people have been killed and 44 people seriously injured in crashes in the project area.¹⁵ Five primary **factors** contribute to the most serious crashes on 122nd Avenue.

- I. Open two-way left-turn lane: 19% of vehicle crashes on 122nd Avenue involve a left-turn movement or an angle impact crash occurring away from signalized intersections. 9 of these crashes resulted in a death or serious injury. The prevalence of these crash types indicates the open two-way left-turn lane on 122nd Avenue is contributing to severe crashes by allowing for high-risk turning movements.
- II. Substandard street lighting: While 30% of crashes in the project area occurred in dark conditions, they resulted in 77% of deaths. Portland's own analysis shows street lighting on 122nd Avenue fails to meet internal guidelines for adequate illumination.
- III. Long distances between safe pedestrian crossings: 47% of pedestrians were crossing 122nd Avenue when hit by a person driving. Of these 32 pedestrians, approximately half were crossing outside of a crosswalk. These data infer a lack of convenient access to safe crossings along 122nd Avenue.
- IV. Speed: Median and 85th percentile travel speeds along 122nd Avenue exceed 30 mph, the posted speed limit and the maximum speed considered appropriate for urban areas by the World Health Organization.¹⁶ Speed was likely a factor in 44% of the deadly crashes and 20% of all serious injuries on 122nd Avenue.¹⁷
- V. Wide intersections without protection for pedestrians or people biking: Nearly half of traffic deaths and a third of serious injuries occurred at or near the nine signalized intersections. 122nd/Stark is the city's highest crash

intersection, with three deaths, four serious injuries and two additional pedestrian injuries in five years. The intersections at Division, Powell, Glisan, Burnside and Halsey are ranked as the 2nd, 9th, 11th, 22nd and 23rd highest crash intersections in Portland, respectively.

Crash risks faced by people on 122nd Avenue vary based on how they travel, with certain crash types occurring more often for each of the following travel **modes**:

- I. Pedestrians: Crosswalks represent the single most common location for pedestrian crashes along 122nd Avenue, with 46% of pedestrians hit while in a designated crossing (31 out of 67 total pedestrian crashes). 12% of pedestrians were hit on sidewalks. The remaining 42% of pedestrians were hit outside crosswalks, on the shoulder, at a median, or at an unconfirmed location. 46% of pedestrian crashes occurred in dark conditions.
- II. People biking: 63% of the 19 total bike crashes occurred at intersections, with 66% of those crashes taking place at intersections with signals. Crashes away from intersections account for 37% of all bike crashes but were likely to be more severe than intersectionrelated bike crashes, resulting in the only serious injury among all bike crashes and 56% of the "moderate" injury bike crashes.
- III. People in vehicles: Crashes at signalized intersections make up 60% of all vehicle crashes. Four of these crashes resulted in deaths and 14 led to serious injuries. In addition, left turn and angle crashes away from intersections accounted for 19% of vehicle crashes. Four of these crashes resulted in serious injuries.
- **IV. People on motorcycles:** The single person killed on a motorcycle, and four of the six people who were seriously injured, were traveling in dark

conditions. Speed was likely a factor in four of the six total motorcycle crashes resulting in serious injuries on 122nd Avenue. Most motorcycle crashes (18 out of 27) occurred outside signalized intersections.

122nd Avenue is a non-interstate arterial, the functional class with the highest fatality rate as noted by the National Roadway Safety Strategy.¹⁸ The street's design traits reflect this classification with frequent driveways, an open two-way left-turn lane, two motor vehicle travel lanes in each direction, long distances between traffic signals and safe pedestrian crossings, narrow curb-tight sidewalks, narrow unprotected bike lanes, auto-oriented land uses, and a low vehicle-to-capacity ratio at night that facilitates extreme speeding and street racing.¹⁹

To assess safety risks on Portland streets PBOT adapted the Oregon Department of Transportation's Bicycle and Pedestrian Safety Implementation Plan risk analysis.²⁰ All non-local streets were assessed as one-mile segments for five risk factors: 1) number of traffic signals, 2) number of travel lanes, 3) speed limit, 4) bicycle facility and 5) average sidewalk width. Each segment was scored for the 5 risk factors. The 20% of segments with

Figure 3: Portland's High-Risk Network

the highest-risk scores created Portland's High-Risk Network shown in Figure 3. 122nd Avenue is the only street in Portland with every segment of street tagged as high-risk.

Safety Impact Assessment

The projects and strategies in this "SS122A" proposal aim to respond to the safety problems described above, providing systemic safety solutions throughout the corridor and also targeting specific safety hot spots. While the project components vary in proven effectiveness, with crash reduction factors ranging from 10% for street trees to 78% for roundabouts,²¹ collectively they create redundancies along the corridor that permanently reduce roadway fatalities and serious injuries.

Figure 4 on the next page shows the crash reduction factor (CRF) for each project component and the safety issue or mode it would address; for example, street lighting is associated with a 37% reduction in crashes, and it addresses substandard street lighting, which can negatively impact all travel modes. See Attachment B for a complete list of project components and strategies, including engagement and project evaluation.



Figure 4: Project Elements and Safety Problems Addressed

Project Element	Safety Issue Addressed
Corridor-wide project elements	
Protected bike lanes: 59% CRF (ODOT) ²³ , 4 miles (Sandy-Powell)	Mode II bikes
Pedestrian crossings: 55% CRF (CMC), 7 crossings (Powell-Foster)	Mode I peds
Raised center median for two-travel lanes: 39% CRF (CMC), along 1.5 miles (Powell-Foster)	Factor I left-turn lane
Street Lighting: 37% CRF (CMC) ²² , 1.5 miles (Sandy-San Rafael)	Factor II lighting
Raised center median for four-travel lanes: 22% CRF (CMC), 11 medians approaching 7 major intersections (Sandy-Powell)	Factor I left-turn lane
Road reorganization (five- to three-lane): 28% CRF ²⁴ , 1.5 miles (Powell-Foster)	Factors: I left-turn lane, III ped crossings, IV speed
Speed reader boards: 10% CRF (ODOT), 6 boards throughout the corridor	Factor IV speed; Modes: III vehicles, IV motorcycles
Street trees: 10% CRF (ODOT), 5.5 miles throughout corridor	Factor IV speed
Bus stop curb extensions: N/A CRF for bus stop curb extensions ²⁵ ; 59% CRF protected bike lane (ODOT), 9 extensions (Burnside-Foster)	Mode II bikes; Factor IV speed
Intersection-focused project elements	
Roundabout: 78% CRF (CMC), roundabout at Harold St	Factor V intersections; Modes: III vehicles, IV motorcycles
Intersection design changes for extra pedestrian and bicyclist separation: N/A CRF, 4 major intersections (Halsey, Glisan, Burnside and Powell)	Factors: IV speed, V intersections; Modes: I peds, II bikes
Pedestrian countdown timers: 70% CRF (CMC), 32 countdown timers at 6 intersections	Mode I peds
Signal separation for pedestrians and people biking: 39% CRF (CMC), 11 intersections	Modes: I peds, II bikes
Adaptive signal timing optimization: 17% CRF (CMC), 13 intersections	Factor IV speed; Modes: III vehicles, IV motorcycles
Retroreflective backplates: 15% CRF (CMC), 6 intersections	Modes: III vehicles, IV motorcycles

Note: See Attachment B for a complete list of project components and strategies, including engagement and project evaluation.

Figure 5 shows the approximate location of "SS122A" engineering investments in the project area. This figure also shows safety investments that have already been secured.

Figure 5: Proposed Elements



Implementation Costs

The proposed \$25 million project, with \$20 million federal share and \$5 million local match, would transform 122nd Avenue and make it a model for humanizing arterial streets in the Portland region.

\$25 million – Total SS4A project costs

- \$446,800 Behavioral
- \$2,616,127 Operational
- \$21,937,073 Infrastructure

Itemized project and strategy costs are detailed in Attachment C: Budget, including the supplemental estimated budget and the final project budget. Additionally, given the high priority safety needs on 122nd Avenue, PBOT and partners are already investing \$15 million in complementary safety projects as described in Attachment B.²⁸

4. Response to Selection Criteria #2 Equity, Engagement, & Collaboration

The proposed project is a result of the city's Vision Zero Action Plan, which recommended investment where communities of color. low-income communities, and the High Crash Network overlap. The project area contains more than double the regional or state proportions of BIPOC/Latinx residents, with 44.1% of residents identifying as BIPOC/Latinx. Residents in the project area are more likely to live with a disability, be youth or seniors, be foreign born, be less likely to have a bachelor's degree or higher, and to spend 30% or more of income on housing than the City as a whole.²⁹ Eleven of 12 adjacent census tracts are designated by USDOT as underserved communities; the one undesignated tract still has three "disadvantage indicators," and 122nd Avenue still borders a designated tract for its length on the other side.³⁰ 96.3% of the project investments will be made in underserved communities, dramatically exceeding the U.S. Department of Transportation's Justice40 Initiative's 40% goal.31

Since 2018, PBOT has worked with the community on the 122nd Avenue Plan, using equity-centered, culturally specific outreach,

along with data analysis to identify prioritized safety recommendations supported by residents.³² These recommendations utilize PBOT's data-driven strategic commitments to Vision Zero through evidence-based interventions while integrating community priorities.³³ "SS122A" will increase access to safe multimodal transportation options, including reliable access to social services, jobs and other key destinations for underserved communities living in the project area.³⁴ The project will also increase tree canopy, reducing the known heat island effect in the area. If awarded, equity-centered engagement will continue. This proposal dedicates \$400,000 to equity-focused outreach and marketing, capitalizing on existing relationships with community partners to develop targeted messaging.³⁵ The project will leverage concurrent engagement occurring for equitable initiatives called Beyond Traffic Safety and Portland's Anti-Displacement Action Plan.³⁶ Marketing efforts will also be coordinated with existing and proven barrier-reducing local campaigns and programs operating and expanding in the project area, including the nationally recognized BIKETOWN for All bikeshare fare reduction program and the Transportation Wallet pass package for residents of affordable housing.³⁷

"122nd must provide safety and convenience to the diverse population that it serves."

- Getting There Together Coalition

PBOT will partner with TriMet (the tri-county transit provider) to increase amenities at bus stops improved through the SS122A project. Additionally, PBOT will partner with Portland State University (PSU), dedicating \$250,000 to analyze equitable safety benefits through consideration of impacts on underserved communities, findings from which will inform future safety projects in Portland. The City is also coordinating with Metro (the area's Metropolitan Planning Organization) on this project. The Getting There Together Coalition

representing more than 50 community organizations supports this application.³⁸ Support letters from all four organizations are included in Attachment D.

5. Response to Selection Criteria #3 Effective Practices and Strategies

Safe System Approach

The proposed project uses a Safe System Approach to advance Portland's Vision Zero goal of eliminating traffic deaths and serious injuries. The project encompasses three of the five safety elements in the National Roadway Safety Strategy: Safer People, Safer Roads, and Safer Speeds. Project elements acknowledge and account for human mistakes, and use evidence-based, data-driven design features that are human-centric, limit kinetic energy, and reflect the physical limits of people's crash tolerances. While individual project components may sometimes fail to prevent a serious crash, collectively they create a system of redundancies that will dramatically lower the risk of death or serious injury faced by people using 122nd Avenue regardless of how they travel.

Supporting Safer People

Most serious and fatal crashes involve at least one human behavioral issue as a contributing factor. The proposed project will encourage safe, responsible behavior by road users on 122nd Avenue using messaging, enforcement, and design features. The project will develop an advertising and messaging campaign that will build on PBOT's previous safety campaigns, while focusing on high-risk demographic groups and behaviors on 122nd Avenue. ³⁹ Speed reader boards will educate drivers of the speed limit and their travel speed. These context-sensitive messages will raise awareness of the dangers and encourage safer choices.

Portland's ongoing investments in automated enforcement on 122nd Avenue will complement the project's Safer People element by limiting speeding and red light running. Portland is committed to deploying and managing automated enforcement cameras equitably and allows non-repeat offenders to take a safety class in lieu of a citation to reduce the burden of a ticket. The proposed SS122A project will further reduce the financial burden of the cameras' citations by adding "selfenforcing" street design features that provide drivers contextual cues to drive an appropriate speed, including more pedestrian crossings, protected bike lanes, bus stop curb extensions, street trees, speed reader boards, a road reorganization and improved accessibility.⁴⁰

The messaging and street design changes of the proposed project, in combination with the existing automated enforcement on 122nd Avenue, will help people use the roadway in a safer manner on any given trip. When mistakes or lapses in judgment do occur, the proposed project supports Safer Roads and Safer Speeds to provide redundancies that can still prevent serious injuries or deaths.

Delivering a Safer Road

The proposed project uses 17 context-sensitive street design elements that give travelers on 122nd Avenue layers of protection.⁴¹ Each element addresses risks faced by road users on 122nd Avenue, including high speeds, dangerous turns, poor visibility in dark conditions, and inadequate crosswalks. These risks are especially high for people who are traveling outside vehicles and unprotected from the physical impact of crashes.

The proposed street design elements help mitigate human mistakes. For example, enhanced lighting improves pedestrian visibility in dark conditions even if people wear non-reflective clothing. Similarly, improved lighting will make people driving and on bikes easier to see even without headlights. Replacing a traditional four-leg intersection on 122nd Avenue with a roundabout will mitigate mistakes by dramatically limiting kinetic energy at that location and reducing the likelihood that crashes exceed people's crash tolerances. The raised center median proposed by the project will provide pedestrians with a relatively safe refuge even outside a crosswalk. Adding bus stop curb extensions provide safer transit access and

maintain bike lane protection. The street design features in the proposed project have been shown to be effective with crash reduction factors providing a strong indication that the project will improve safety for travelers.⁴² The proposed project assumes that human mistakes will continue to occur and uses street design elements to provide redundant layers of protection.

Providing Safer Speeds

Safe speeds are a core part of the proposed project. While Portland reduced the speed limit from 35 to 30 mph on 122nd Avenue in 2021, more than half of people still exceed the reduced speed limit, indicating the need for additional measures. The combination of street design features, enforcement, and messaging will significantly reduce the risks associated with speed for people using 122nd Avenue.

Street design features to support safer speeds include speed reader boards, a road reorganization removing vehicle lanes, medians and street trees, and bus stop curb extensions, which can moderate traffic speeds by allowing buses to stop in lane rather than off to the side.43 These features are context sensitive; for example, the road reorganization will be implemented only on a segment of 122nd Avenue with low vehicle-to-capacity ratios that facilitate extreme speeding. The project will enhance existing automated enforcement cameras on 122nd Avenue by adding speed reader boards that display speeds. It will also create and deliver context-sensitive messaging that resonates with the individuals who may be most likely to travel at unsafe speeds.

The SS122A project advances features associated with a self-enforcing street as noted in the National Roadway Safety Strategy. Although street trees, protected bike lanes, additional crosswalks, and other features associated with self-enforcing streets may have only a relatively small impact on vehicle speeds individually, there is evidence that these features can together create visual cues that signal drivers to slow down relative to roads that are wider and uncluttered.

6. Response to Selection Criteria #4 Climate Change and Sustainability, and Economic Competitiveness

The "SS122A" project aligns with FHWA's strategic goals on climate change, fiscal responsibility, economic opportunities, and community benefits in the following ways:

Greenhouse gas reduction and improved safety: Portland's City Council has committed to a 40% reduction in carbon emissions by 2030 from 1990 levels, and a 100% reduction by 2040. PBOT is directed to ensure that all work conducted by the bureau focus on this goal.⁴⁴ This project will increase access to, and safety of, the least carbon-intensive modes of travel, increase the reliability of transit and more efficiently use road space to reduce greenhouse gas emissions and air pollution.⁴⁵

Lower-carbon pavement and construction materials: Beginning in January 2023, Portland will require concrete mixes with maximum Embodied Carbon Thresholds for all City construction projects.⁴⁶ Additionally, the project will depave a significant section of road to add trees, green space, and stormwater collection enabling increased carbon absorption along the southern end of the corridor.

Responsible land use and transportation efficient design: A stated goal of the *122nd Avenue Plan* is to support the transformation of the street into a Civic Corridor from its current suburban/residential land use. The City of Portland's 2035 Comprehensive Plan designates 122nd a Civic Corridor, intended to be key mobility corridors with increasing numbers of people living, working, and doing business.⁴⁷ The proposed transportation improvements will complement and support compact land development along 122nd Avenue.

Storm water management and other climate resilience measures: The City of Portland requires stormwater from new and redeveloped impervious areas, including roads and sidewalks, be managed onsite. For projects in the public right-of-way that redevelop more than 500 square feet of impervious areas, stormwater management is required where the work is not considered maintenance and where facilities like sidewalks are added or widened.⁴⁸ These management practices will vary based on the improvements in the specific project area, but may include lined vegetated facilities, additional tree canopy, or sumps. Stormwater management will be improved as redevelopment occurs and simultaneously with tree plantings in the project area.

Increased economic activity and connections to jobs/opportunities: As an emerging setting for high-density housing and business development, the street is zoned in anticipation of increased economic and business activity. This project will support people-oriented development and the vitality of businesses and increased economic activity. Easier access to the Line 73 bus along 122nd Avenue and regional MAX light rail will improve connections to employment opportunities in the Columbia Corridor, Central City, and other regional centers.⁴⁹ The project will also improve pedestrian and bicycle networks, increasing mobility and connectivity for residents-particularly those without access to personal automobiles.

Improving multimodal transportation: The proposed project will make it easier and more affordable to walk, roll, and/or take transit. It will provide a key backbone to the bicycle network in East Portland on a corridor with high BIKETOWN and scooter ridership, add transit priority interventions while preparing the corridor for future Bus Rapid Transit, and provide safer linkages between these modes and interregional travel by MAX light rail.⁵⁰

Advancing quality jobs and workforce programs: The City of Portland's Office of Equity and Human Rights facilitates equity and inclusion initiatives, and PBOT's Equity and Inclusion Program has a manager devoted to increase workplace inclusion and reduce disparities.⁵¹ Additionally, 70% of City of Portland employees are represented by unions.⁵² The State of Oregon also has Prevailing Wage Rate (PWR) and pay equity requirements, which guarantee public fund expenditures incorporate strong labor standards and equitable pay.⁵³ Finally, Portland has goals and objectives to increase the participation of underrepresented groups. These include: a Community Benefits Agreement (CBA) and Community Equity and Inclusion Plan (CEIP) to increase minority/female participation in construction trades; a certification for business inclusion and diversity which allows direct contracting without competitive solicitation; subcontractor equity requirements; and a workforce training and hiring program.⁵⁴

7. Project Readiness

The Portland Bureau of Transportation (PBOT) is certified by the State of Oregon in federal aid project delivery, is currently in the process of implementing 30 federal aid projects and 139 total capital projects and has the ability and capacity to substantially execute and complete the full scope of work in this proposal within five years of grant execution. Project readiness is high as this project has undergone project development and scoping, including conceptual layouts, cost estimates, and public involvement. The corridor is under the maintenance and operational control of PBOT, with staff able to move forward with engineering and design, right-of-way acquisition, construction contracting, and construction management.55

PBOT will design the project using City of Portland standard specifications that align with AASHTO standards. PBOT staff will lead design of the project but may choose to contract with qualified engineering consultants for some specialties and would do so in compliance with the contracting requirements of the grant. PBOT's partner bureaus review and assist in non-transportation asset management and protection.⁵⁶

The project is expected to receive Project Categorical Exclusion (PCE) status because of its built-out location and negligible impact on natural, cultural, recreational, and historical impacts.⁵⁷ No other environmental reviews or requirements are anticipated. As the proposed improvements modify a fully built-out rightof-way, natural resources and stormwater management are largely unaffected or enhanced. The project is in the City of Portland Transportation System Plan and Regional Transportation Plan.⁵⁸ If awarded this grant, the project would be added to the Metropolitan Transportation Improvement Program (MTIP) and Oregon's Statewide Transportation Improvement Program (STIP).

Attachment E shows a detailed project schedule. As illustrated, project development for non-grant-funded items will continue while awaiting Notice of Award. Formal design engineering would commence in 2023, consisting of iterative 30%, 60%, 95%, and final construction plan milestones over a 30-month period. Right-of-way acquisition would commence after the 60% engineering milestone in late 2024.⁵⁹ Construction would begin in late 2025, with completion in September 2027 at the latest, less than five years after the award.

8. Funds to Underserved Communities

It is anticipated that 96.3% of project funds (more than \$24 million) will be spent in, and provide safety benefits to, locations in census tracts designated as "Underserved Communities" as defined by USDOT. Of the 12 census tracts bordering 122nd, 11 meet the designation. The one undesignated tract, Census Tract 79, qualifies for three indicators and is surrounded by other underserved communities tracts. It is also identified as a local equity priority area by PBOT's Equity Matrix due to its proportion of BIPOC/ Latinx population, its median household income compared to the city as a whole, and its relatively high concentration of limited English proficiency households.⁶⁰ As outlined in Criteria Section 2, the investments provided through this project will specifically benefit underserved communities as defined both by USDOT and PBOT.

Endnotes

- 1 Metro, the Portland region's metropolitan planning organization, created the "Regional High Injury Network Map." 122nd Avenue is highlighted when the "percentile rank" is adjusted to "5" in the map tool. <u>https://experience.arcgis.com/</u> <u>experience/6b5ae16aad814e6e81546bcc4ffdf964</u>
- 2 City of Portland Neighborhood Profile Maps (2022), <u>https://www.portland.gov/civic/myneighborhood/neighborhood-profile-maps#toc-about-neighborhood-profile-maps;</u> American Community Survey (ACS) 5-year Estimates (2016-2020), Table B02001: Race for Portland city, Oregon
- 3 Vision Zero Action Plan (2016), <u>https://www.portland.gov/sites/default/files/2020-04/vision-zero-action-plan.pdf</u>
- 4 City Council Vision Zero Action Plan adoption (2016), <u>https://efiles.portlandoregon.gov/</u> <u>Record/10316255/</u>
- 5 Vision Zero Action Plan amendment City Council resolution (2017), <u>https://efiles.</u> portlandoregon.gov/Record/11111659/
- 6 Vision Zero Action Plan amendment Project list (2017), <u>https://efiles.portlandoregon.gov/</u> <u>Record/11111660/</u>
- 7 Vision Zero Action Plan update (2019), <u>https://www.portland.gov/sites/default/files/2020-05/</u> portland-vision-zero-2-year-update.pdf
- 8 City Council Vision Zero Action Plan update acceptance (2019), <u>https://efiles.portlandoregon.gov/Record/13065510/</u>
- 9 122nd Avenue Safety Plan, <u>https://www.portland.gov/sites/default/files/2022/122nd-plan_public-review-draft_june-2022_reduced-size.pdf</u>
- 10 High Crash Network map, details and methodology available at <u>https://www.portland.gov/</u> <u>transportation/vision-zero/high-crash-network</u>
- 11 Portland Traffic Counts: <u>https://pdx.maps.arcgis.com/apps/webappviewer/index.</u> <u>html?id=7ce8d1f5053141f1bc0f5bd7905351e6</u>
- 12 Portland's Vision Zero 2-Year Update, page 16: <u>https://www.portland.gov/sites/default/</u><u>files/2020-05/portland-vision-zero-2-year-update.pdf.</u>
- 13 "Regional High Injury Network Map" with "percentile rank" adjusted to "5," <u>https://</u> experience.arcgis.com/experience/6b5ae16aad814e6e81546bcc4ffdf964
- 14 From 2001 through 2010, 59 fatal and serious injury crashes occurred on 122nd Avenue compared to 70 from 2011 through 2020.
- 15 Unless otherwise noted, crash data refer to the period from 2016 through 2020.
- 16 The World Health Organization considers "urban speed limits" of no greater than 50 km/h (approximately 30 mph) to be a "best practice" for traffic safety. See Global Status Report on Road Safety 2018 available at <u>https://www.who.int/publications/i/item/9789241565684</u>.

- 17 Crash data are an imperfect measure of the role of speed in crashes due in part to crash investigators' focus on the role of speeding rather than speed in their analysis. To help account for this, "speed-related crashes" include crashes formally flagged as involving speeding as well as all lane departure crashes and crashes into fixed objects.
- 18 National Roadway Safety Strategy, page 19, <u>https://www.transportation.gov/sites/dot.gov/</u> <u>files/2022-02/USDOT-National-Roadway-Safety-Strategy.pdf</u>.
- 19 A recent national analysis of U.S. roadways linked many of these design and land use characteristics to high rates of pedestrian fatality crashes, often in areas with relatively high numbers of lower-income individuals and people of color. United States fatal pedestrian crash hot spot locations and characteristics. Journal of Transport and Land Use, 14(1), 1–23. <u>https://jtlu.org/index.php/jtlu/article/view/1825.</u>
- 20 The Oregon Department of Transportation's Bicycle and Pedestrian Safety Implementation Plan risk analysis is built on the NCHRP Research Report 893: Systemic Pedestrian Safety Analysis. Visit <u>https://www.oregon.gov/odot/Engineering/Docs_TrafficEng/Bike-Ped-Safety-Implementation-Plan-Appendix.pdf</u>, and view page 10, "Step 3: Determining Risk Factors."
- 21 Street tree crash reduction factor refers to Oregon Department of Transportation's Highway Safety Improvement Countermeasures and Crash Reduction Factors at <u>https://www.oregon.</u> <u>gov/odot/Engineering/ARTS/CRF-Appendix.pdf</u>. Roundabout crash reduction factor refers to Crash Modification Clearinghouse at <u>https://www.cmfclearinghouse.org</u>.
- 22 CRF refers to Crash Reduction Factor, the expected effect of a countermeasure in terms of the percentage decrease in crashes; CMC refers to the Crash Modification Clearinghouse at https://www.cmfclearinghouse.org
- 23 ODOT refers to Oregon Department of Transportation's Highway Safety Improvement Countermeasures and Crash Reduction Factors at <u>https://www.oregon.gov/odot/Engineering/</u><u>ARTS/CRF-Appendix.pdf</u>.
- 24 Figure refers to a Portland Bureau of Transportation internal analysis indicating a 28% reduction in fatal and serious injury crashes on 5-to-3 lane conversions on three streets in Portland.
- 25 Bus stop curb extensions allow the bicycle facility to remain protected rather than requiring bicyclists to merge with a motor vehicle lane to go around a stopped bus. Additionally, it maintains a protected bicycle facility up-to, at, and after the stop. If the bus were required to pull to the curb, it would require a significant gap in bike lane protection. Finally, it allows for bus loading and unloading within the travel lane, as opposed to off to the side, which may moderate vehicle and motorcycle speeds and reduce crashes on 122nd Avenue associated with high-risk speeds.
- 26 The World Health Organization states that traffic safety campaigns can be effective in creating "shared social norms for safety" and can "help to bring about a climate of concern and develop sympathetic attitudes towards effective interventions." <u>https://www.who.int/</u> <u>publications/i/item/world-report-on-road-traffic-injury-prevention</u>
- 27 FHWA states that, "Effectiveness information gained through the process of evaluating the performance of implemented countermeasures provides input to agencies that is useful for modifying and evolving their safety programs to prevent and reduce more severe crashes." https://safety.fhwa.dot.gov/systemic/fhwasa13019/element3.cfm

- 28 Projects that will be built with the existing \$15 million of funding include federally funded pedestrian crossings at NE Beech Street, NE Sacramento Street, NE Broadway, NE Multnomah Street; locally funded crossings at NE Davis Street and SE Clinton Street; major intersection improvements to SE Stark Street and SE Division Street; repaving between NE Halsey Street and NE Glisan Street; street lighting infill between NE San Rafael Street and SE Powell Boulevard; funding from TriMet for transit stop improvements; and funding for trees throughout the corridor.
- 29 These figures are sourced from the American Community Survey (ACS) 5-Year Estimates, 2016-2020 for census tracts touching the project corridor.
- 30 Designations and indicator scores can be found on USDOT's SS4A Underserved Communities Census Tracts map, <u>https://usdot.maps.arcgis.com/apps/</u> dashboards/99f9268777ff4218867ceedfabe58a3a.
- 31 The White House, "Justice 40: A Whole-of-Government Initiative," <u>https://www.whitehouse.gov/environmentaljustice/justice40/</u>.
- 32 The 122nd Avenue Plan Existing Conditions Atlas analyzed existing conditions on the corridor and can be found here: <u>https://www.portland.gov/sites/default/files/2020-06/122nd-existingconditions_18_09_06.pdf.</u> A crash analysis was also developed and can be found here: <u>https:// www.portland.gov/sites/default/files/2020-06/122nd-avenue-crashes-2018-v2_march2018.</u> pdf. Community survey summaries can be found here <u>https://www.portland.gov/sites/default/</u> files/2020-06/122nd-ave-draft-community-survey-report-091018.pdf and here: <u>https://</u> www.portland.gov/sites/default/files/2020-06/122ndave_surveyreport_2019_0222_print. pdf. The draft 122nd Avenue Plan can be found here: <u>https://www.portland.gov/sites/default/</u> files/2022/122nd-plan_public-review-draft_june-2022_reduced-size.pdf. The final plan is currently being prepared for presentation to City Council in Fall 2022.
- 33 See Portland's Vision Zero Strategic Commitments: <u>https://www.portland.gov/transportation/vision-zero/making-streets-safe</u>.
- 34 For example, there are over 800 units of regulated affordable housing in the immediate vicinity of 122nd Avenue, and initial estimates indicate that both the average household living in poverty and BIPOC residents will be able to reach more than 100 jobs or key destinations within 45 minutes from the transit priority treatments alone. These numbers are available on the Rose Lane Project webpage for Line 73 down 122nd Avenue: <u>https://www.portland.gov/transportation/rose-lanes/line-73</u>.
- 35 Partners may include the Research Justice institute of the Coalition of Communities of Color, Unite Oregon (whose office is on 122nd), The Street Trust, Oregon Walks, OPAL Environmental Justice Oregon, Home Forward, Rose Community Development and Asian Pacific American Network of Oregon.
- 36 See the City of Portland's Anti-Displacement Action Plan webpage: <u>https://www.portland.</u> <u>gov/bps/planning/adap/about</u> and the Anti-Displacement Action Plan Foundation Report: <u>https://www.portland.gov/sites/default/files/2021/final_foundationreport_main.pdf</u>. The Anti-Displacement Investment Typology is scheduled to be ready in 2023.
- 37 BIKETOWN for All is available at <u>https://biketownpdx.com/pricing/biketown-for-all</u>. The Transportation Wallet for Affordable Housing Pilot: <u>https://www.portland.gov/transportation/wallet/transportation-wallet-affordable-housing-pilot</u>.

- 38 Getting There Together coalition: <u>http://www.gettingtheretogether.org/coalition/</u>
- 39 PBOT will build from experience creating engaging messaging, including the "Struck" campaign in 2018 that highlighted the risks associated with high speeds (<u>https://www.portland.gov/transportation/vision-zero/struck</u>), "20 is Plenty" marketing of Portland's updated residential street speed (<u>https://www.portland.gov/transportation/vision-zero/news/2020/12/1/analysis-indicates-20-mph-speed-limit-reduced-driving</u>), and the "Slow the Flock Down" tongue-and-cheek message calling for safe driving speeds (<u>https://www.portland.gov/transportation/vision-zero/flock</u>).
- 40 Many project features improve safety for all users in line with Public-Rights-of-Way Accessibility Guidelines. These include new transit platforms to support level boarding, rebuilt curb ramps that comply with current accessibility standards, and intersection improvements at signals that provide additional guidance and protections for people traveling outside vehicles.
- 41 For a complete list, refer to Attachment B, "122nd Safe Systems Issues and Strategies."
- 42 Many of the tools are also relatively inexpensive; for example, lighting and protected bike lanes are corridor-wide tools with crash reduction factors greater than 50 percent but account for just 11 percent of the total project budget.
- 43 Bus stop curb extensions may moderate traffic speeds by allowing buses to stop in lane rather than off to the side.
- 44 PBOT's two fundamental goals 1) to advance equity and address structural racism and 2) to reduce carbon emissions are described on page 2 of PBOT's Strategic Plan, <u>Moving to Our</u> <u>Future</u>.
- 45 Increasing safety of non-auto modes is in alignment with citywide policy to prioritize vulnerable road users City Policy 9.6: Transportation strategy for people movement in Portland's <u>Transportation System Plan</u>, pg. GP9-1.
- 46 The requirements are detailed in this memo.
- 47 Metro regional 2040 Growth Concept Map: <u>https://www.oregonmetro.gov/sites/default/</u> <u>files/2021/04/21/Concept2040_09042020.pdf</u>
- 48 Triggers for the City's 2020 Stormwater Management Manual are available here.
- 49 This includes, by moving through the Parkrose/Sumner Transit Center, jobs at the Portland International Airport/Port of Portland and the Columbia Corridor, which combined employ over 60,000 people with more middle wage jobs than anywhere else in the state. See "Columbia Corridor Association": <u>https://www.columbiacorridor.org/#about-cca</u> and the Port of Portland: <u>https://www.portofportland.com/About</u>
- ⁵⁰ In just the past six months more than 1,300 scooter trips began along 122nd Avenue and recently BIKETOWN e-bike share service was expanded to include most of 122nd Avenue (internal data from Ride Report, 2/15/2022-8/15/2022). The regional MAX light rail system intersects 122nd Avenue, and regional transit operator TriMet provides frequent bus service along 122nd Avenue, meaning buses come at least once every 15 minutes.

- 51 This includes fairness in hiring, ending disparities in government, and increasing diversity of hires with a focus on retention through support and belonging. To learn more visit the Office of Equity and Human Rights webpage: <u>https://www.portland.gov/officeofequity/about</u>. The PBOT Equity and Inclusion Program webpage is available at <u>https://www.portland.gov/</u><u>transportation/justice</u>.
- 52 Most recent figures are for January 2021. The City of Portland Government Workforce Demographics Dashboard: <u>https://www.portlandoregon.gov/oehr/article/595121</u>
- 53 The state's Prevailing Wage Rate requirements are available at <u>https://www.oregon.gov/boli/employers/pages/prevailing-wage.aspx</u>. The City of Portland conducts regular pay equity studies to ensure compliance with the state's requirements. The 2021 Pay Equity Study can be viewed at <u>https://www.portlandoregon.gov/bhr/81531</u>.
- 54 These are overviewed at <u>https://www.portland.gov/businessopportunities/equity-</u> contracting#toc-workforce-training-hiring-program-wthp-
- 55 This work would be done under the authority of the City Engineer, City Traffic Engineer, PBOT Director, Chief Procurement Officer, Mayor, and Commissioner-in-Charge. With these levels of authority in an area not affected by State or Federal regulated resources, PBOT can lawfully design and construct roadway improvements without additional permit requirements.
- 56 This includes ensuring stormwater management consistent with the City of Portland 2020 Stormwater Management Manual; protecting and/or relocating city and franchise utilities such as water, sewer, gas, and telecommunications lines; and protecting and enhancing tree canopy.
- 57 Although the project is expected to receive Project Categorical Exclusion (PCE) status, PBOT contracts with qualified consultants and other agency partners to perform Level 1 environmental reports for federal aid projects, and to review historic, archaeological, cultural, scenic, and recreational assets that could be affected by the project.
- 58 Portland Transportation System Plan, Project 50049 "122nd Ave Corridor Improvements," <u>https://www.portland-tsp.com/#/projects/TP04-0000589</u>. Regional Transportation Plan, Project 10198 "122nd Ave Corridor ITS Improvements" and Project 11868 "122nd Ave Enhanced Transit Corridor," <u>https://www.oregonmetro.gov/regional-transportation-plan</u>. Additionally, Metro Council adopted a set of regional projects in Get Moving 2020, a transportation levy that voters did not pass but that still reflects top regional transportation priorities, including 122nd Avenue safety, <u>https://www.oregonmetro.gov/get-moving-2020</u>.
- 59 Right-of-way acquisition is expected to consist primarily of temporary construction easements and would be concurrent with an alternative contracting procurement process such as Construction Manager / General Contractor (CM/GC) or Best Value Request for Proposals (RFP).
- 60 PBOT's Equity Matrix: <u>https://pdx.maps.arcgis.com/apps/MapSeries/index.</u> <u>html?appid=ba500ae0b9554fc68104a2ff016e25fc</u>

Attachment A - Self Certification Eligibility Worksheet







<u>S | S</u> 4 | A

Lead Applicant:

Safe Streets and Roads for All

Self-Certification Eligibility Worksheet

This worksheet is not meant to replace the NOFO. Applicants should follow the instructions in the NOFO to correctly apply for a grant. See the SS4A website for more information: <u>https://www.transportation.gov/SS4A</u>

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

UEI:

If both conditions are *not met*, an applicant is still eligible to apply for an Action Plan Grant that funds creation of a new action plan.

 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? 	YES NO
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?	YES 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, 	YES NO

• A geospatial identification (geographic or locational data using maps) of higher risk locations.



Safe Streets and Roads for All

Self-Certification Eligibility Worksheet

 Oid the Action Plan development include all of 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. 	YES NO If yes, provide documentation:
 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. 	YES NO If yes, provide documentation:
 Are both of 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 the adoption of revised or new policies, guidelines, and/or standards. 	YES NO If yes, provide documentation:
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?	YES NO If yes, provide documentation:
 Boes the plan include all of the following? A description of how progress will be measured over time that includes, at a minimum, outcome data. The plan is posted publicly online. 	YES NO If yes, provide documentation:
9 Was the plan finalized and/or last updated between 2017 and 2022?	YES NO If yes, provide documentation:

Attachment B - 122nd Safe Systems Issues & Strategies







Attachment B: 122nd Safe Systems Issues & Strategies

Project Element	Project Element CRF Safety Issue S		Strategy				
Corridor-wide e	lements ¹						
Street lighting		Pedestrian crashes in dark	Fill gaps in lighting to meet new local lighting guidelines.				
	$\left \begin{array}{c} 37\% \\ (CMC)^2 \end{array} \right $	conditions – 77% of pedestrian fatalities on 122nd occurred	PBOT is infilling 4 miles of lighting from San Rafael to Foster in 2023.				
		in dark conditions (Factor II lighting)	SS4A funding would infill 1.5 miles, from San Rafael to Sandy, to complete the corridor.				
		Bike crashes away from intersections and driveways –	Convert parking to protected bike lanes north of Powell Boulevard.				
Protected bike lanes	59% (ODOT) ³	over half of moderate and serious bike injuries on 122nd occurred	the corridor, including to add improved bike lanes.				
		away from intersections (Mode II bicycles)	SS4A funding would extend the protected bike lanes north an additional four miles to complete the entire corridor.				
	55% (CMC)		Add pedestrian crossings to fill in existing crossing gaps.				
New pedestrian		Pedestrians hit in roadway – one-quarter of pedestrian crashes involved a person crossing 122nd	PBOT has secured other local and federal funds to build six new signalized crosswalks on 122nd Avenue at high-priority locations.				
crossings		Avenue outside of a marked crosswalk (Mode I pedestrians)	SS4A funding would allow PBOT to build up to an additional 7 crosswalks, eliminating the crosswalk spacing gap in the southern portion of the corridor and reducing it along the rest of the corridor.				
Speed reader boards	10% (ODOT)	High-risk vehicle and motorcycle speeds – 44% of deadly crashes on 122nd involve high speeds (Factor IV speed; Modes: III vehicles and IV motorcycles)	Add speed reader boards to encourage complying with the 30mph speed limit and supplement the two automated enforcement cameras already along the corridor.				

Project Element	CRF	Safety Issue	Strategy
Corridor-wide e	lements (conti	nued)	
Raised center median	39% (CMC) for 2-travel lanes; 22% (CMC) for 4-travel lanes	Angle and turning vehicle and motorcycle crashes – nearly 20% of vehicle crashes on 122nd Avenue that involve a left-turn movement or an angle impact crash occurring away from signalized intersections (Factor I left-turn lane)	Add raised, planted median along 1.5 miles from Powell to Foster. Add planted medians at 11 approaches to 7 major intersections from Sandy to Powell to manage access and address turning crashes.PBOT to leverage a locally funded paving south of Powell to build back a safer street.SS4A funding would support a raised center median in that section, as well as at key intersections north of Powell.
Road reorganization (5- to 3-lane)	28%4	High-risk vehicle and motorcycle speeds, turning and angle crashes – address two-way left turn lane, pedestrian crossing gaps, and speed crash factors noted above (Factors: I left-turn lane, III pedestrian crossings, and IV speed)	PBOT to leverage a locally funded paving south of Powell to build back a safer street. SS4A funding would support a raised center median in that section, as well as at key intersections north of Powell.
Street trees	10% (ODOT)	High-risk vehicle and motorcycle speeds (Factor IV speed)	Add street trees in the medians identified above and at locations adjacent to the curb to narrow the driver's field of vision and slow driving speeds.
Bus stop curb extension	N/A for bus stop curb extension ⁵ 59% protected bike lane (ODOT)	Bike crashes away from intersections and driveways (Mode II bicycles), and high-risk vehicle and motorcycle speeds (Factor IV speed)	Cyclists remain in a protected bicycle facility while passing stopped buses; they would otherwise need to pass by merging into a vehicle travel lane. This maximizes protection between the bike lane and motor vehicle lane with fewer openings in the protection for buses to merge across the bike lane to the curb. Buses stopping in lane helps manage speeds. Additionally, the strategy will move up to 5 bus stops to align with enhanced crossings to increase pedestrian safety while accessing transit (primary factor III, category of road user I). PBOT and transit agency partner, TriMet, have secured funding to move and enhance up to 7 bus stops along 122nd Avenue. SS4A funding would build transit stop curb extensions at up to 9 additional high priority locations.

Project Element	CRF	Safety Issue	Strategy
Intersection-focu	ised elements		
Roundabout	78% (CMC)	Angle, turning, and head- on vehicle and motorcycle crashes – 60% of motor vehicle crashes on 122nd occur at signalized intersections (Factor V intersections; Modes: III vehicles and IV motorcycles)	Replace the Harold Street signal with a roundabout, providing a model for Portland to retrofit high crash intersections with roundabout designs, and transform this intersection into one of Portland's safest.
Intersection design changes for extra pedestrian and bicyclist separation Pedestrian count-down timers	anges h list	Pedestrians and people biking	6 of Portland's highest crash intersections are in the project area. Design changes will increase protection and reduce exposure for people walking and bicycling.
		hit by turning vehicles at major intersections (Factor V intersections; Modes I	PBOT has funded protected intersections at Portland's two highest crash intersections in the city, 122nd/Stark and 122nd/ Division.
		pedestrians and II bicycles), high-risk vehicle and motorcycle speeds (Factor IV speed)	SS4A funds would build significant safety improvements at the other four identified high crash intersections – Halsey, Glisan, Burnside and Powell – including but not limited to, pedestrian and bicycle separation, access management, elevated bike lanes, center medians and street trees.
		Pedestrians hit by vehicles at	Upgrade remaining pedestrian heads to countdown timers, addressing pedestrian crashes at signalized intersections by reducing exposure to moving vehicles.
	70% (CMC)	signalized intersections (Mode I pedestrians)	PBOT has retrofitted 12 intersections on 122nd with pedestrian countdown timers.
			SS4A funds would add them to an additional 8 intersections, which would complete the corridor.

	CDE	C C L X	
Project Element		Safety Issue	Strategy
Intersection-focu	used elements	(continued)	
Signal		Pedestrians and people biking hit by turning vehicles at major	Separate pedestrians and bicyclists at intersections through both spatial design and signal modifications/timing.
separation for	39% (CMC)	intersections – address the high clusters of pedestrian and bike	PBOT has added leading pedestrian intervals at 7 intersections.
pedestrians and people biking		crashes at intersections on 122nd (Modes: I pedestrians and II bicyclists)	SS4A funds would add LPIs at up to an additional 12 intersections (completing eligible intersections on 122nd), as well as bike signals and detection at about 5 key bike crossings.
Adaptive signal timing optimization	17% (CMC)	High-risk vehicle and motorcycle speeds; angle and turning crashes (Factor IV speed; Modes: III vehicles and IV motorcycles)	Optimize and upgrade signals to provide safe speeds timing optimization and advance radar detection to increase safety and visibility at intersections. SS4A funds would provide safe speed signal timing optimization along the entire corridor at up to 14 intersections.
Retro-reflective backplates	15% (CMC)	Signalized intersection crashes, particularly angle and turning crashes related to red light running (Modes: III vehicles and IV motorcycles)	Add 3-inch yellow retroreflective sheeting to signal backplates to enhance the visibility of the signal during daytime and nighttime conditions. PBOT has added treatment at 8 signalized intersections. SS4A funds would add treatment to up to 10 locations, to complete 122nd.
Community eng	agement and p	project evaluation	
Engagement & marketing campaign	N/A ⁶	High-risk vehicle and motorcycle speeds, turning movements, and failure to look for pedestrians	Equity-focused engagement utilizing existing relationships with community partners to support targeted education and programming of the 122nd project elements. Pair engagement with a messaging campaign focused on demographic groups and behaviors most closely associated with high-risk behaviors on 122nd Avenue. Build off of PBOT's previous citywide speed safety campaigns: Struck (2018, 2019) ⁷ , 20 is Plenty (2018) ⁸ , Slow the Flock Down (2022) ⁹
Evaluation	N/A ¹⁰	Evaluating effectiveness can evolve safety programs to prevent and reduce serious injuries overall	The project will partner with Portland State University on a before/after study of the safety impacts of these systemic and hotspot improvements, building off of two recent before/after speed limit reduction studies with PSU.

Five primary **factors** contribute to the most serious crashes on 122nd Avenue.

- I. Open 2-way left-turn lane: 19% of vehicle crashes on 122nd Avenue involve a left-turn movement or an angle impact crash occurring away from signalized intersections. 9 of these crashes resulted in a death or serious injury. The prevalence of these crash types indicates the open 2-way left-turn lane on 122nd Avenue is contributing to severe crashes by allowing for high-risk turning movements.
- **II. Substandard street lighting:** While 30% of crashes in the project area occurred in dark conditions, they resulted in 77% of deaths. Portland's own analysis shows street lighting on 122nd Avenue fails to meet internal guidelines for adequate illumination.
- **III. Long distances between safe pedestrian crossings:** 47% of pedestrians were crossing 122nd Avenue when hit by a person driving. Of these 32 pedestrians, approximately half were crossing outside of a crosswalk. These data infer a lack of convenient access to safe crossings along 122nd Avenue.
- **IV. Speed:** Median and 85th percentile travel speeds along 122nd Avenue exceed 30 mph, the posted speed limit and the maximum speed considered appropriate for urban areas by the World Health Organization.xvi Speed was likely a factor in 44% of the deadly crashes and 20% of all serious injuries on 122nd Avenue.
- V. Wide intersections without protection for pedestrians or people biking: Nearly half of traffic deaths and a third of serious injuries occurred at or near the 9 signalized intersections. 122nd/Stark is the city's highest crash intersection, with 3 deaths, 4 serious injuries and 2 additional pedestrian injuries in 5 years. The intersections at Division, Powell, Glisan, Burnside and Halsey are ranked as the 2nd, 9th, 11th, 22nd and 23rd highest crash intersections in Portland, respectively.

Crash risks faced by people on 122nd Avenue vary based on how they travel, with certain crash types occurring more often for each of the following travel **modes**:

- I. Pedestrians: Crosswalks represent the single most common location for pedestrian crashes along 122nd Avenue, with 46% of pedestrians hit while in a designated crossing (31 out of 67 total pedestrian crashes). 12% of pedestrians were hit on sidewalks. The remaining 42% of pedestrians were hit outside crosswalks, on the shoulder, at a median, or at an unconfirmed location. 46% of pedestrian crashes occurred in dark conditions.
- **II. People biking:** 63% of the 19 total bike crashes occurred at intersections, with 66% of those crashes taking place at intersections with signals. Crashes away from intersections account for 37% of all bike crashes but were likely to be more severe than intersection-related bike crashes, resulting in the only serious injury among all bike crashes and 56% of the "moderate" injury bike crashes.
- **III.** People in vehicles: Crashes at signalized intersections make up 60% of all vehicle crashes. 4 of these crashes resulted in deaths and 14 led to serious injuries. In addition, left turn and angle crashes away from intersections accounted for 19% of vehicle crashes. 4 of these crashes resulted in serious injuries.
- **IV. People on motorcycles:** The single person killed on a motorcycle, and 4 of the 6 people who were seriously injured, were traveling in dark conditions. Speed was likely a factor in 4 of the 6 total motorcycle crashes resulting in serious injuries on 122nd Avenue. Most motorcycle crashes (18 out of 27) occurred outside signalized intersections.

Endnotes

- 1 Enhanced lighting, raised center medians, and a road reorganization are proven tools that will dramatically improve safety along much of the corridor yet make up less than a third of the total project cost. These tools are distinguished by their safety benefits for travelers regardless of mode. For example, while enhanced lighting will be most beneficial for pedestrians crossing 122nd Avenue—including pedestrians who may be wearing dark clothing—it will also help people in vehicles or on motorcycles see and judge the speed of oncoming traffic when turning in dark conditions, including in situations where people fail to turn on their headlights. Similarly, raised center medians will benefit people in vehicles or on motorcycles by reducing high-risk turns while also providing a refuge for pedestrians crossing outside of a crosswalk. A road reorganization will effectively remove passing lanes and moderate vehicle and motorcycle speeds in ways that benefit the safety of everyone using 122nd Avenue.
- 2 CMC refers to the Crash Modification Clearinghouse at <u>https://www.cmfclearinghouse.org</u>
- 3 ODOT refers to Oregon Department of Transportation's Highway Safety Improvement Countermeasures and Crash Reduction Factors at <u>https://www.oregon.gov/odot/</u> <u>Engineering/ARTS/CRF-Appendix.pdf</u>.
- 4 Figure refers to a Portland Bureau of Transportation internal analysis indicating a 28% reduction in fatal and serious injury crashes on 5-to-3 lane conversions on three streets in Portland.
- 5 Transit stop curb extensions allow the bicycle facility to remain protected rather than requiring bicyclists to merge with a motor vehicle lane to go around a stopped bus. Additionally, it maintains a protected bicycle facility up-to, at, and after the stop. If the bus were required to pull to the curb, it would

require a significant gap in bike lane protection. Finally, it allows for bus loading and unloading within the travel lane, as opposed to off to the side, which may moderate vehicle and motorcycle speeds and reduce crashes on 122nd Avenue associated with high-risk speeds.

- 6 The World Health Organization states that traffic safety campaigns can be effective in creating "shared social norms for safety" and can "help to bring about a climate of concern and develop sympathetic attitudes towards effective interventions." <u>https://www.who.int/publications/i/item/</u> world-report-on-road-traffic-injury-prevention
- 7 PBOT "Struck" speed education campaign: <u>https://www.</u> portland.gov/transportation/vision-zero/struck
- 8 PBOT "20 is Plenty" speed education campaign news release: <u>https://www.portlandoregon.gov/transportation/</u> <u>article/672178</u>
- 9 PBOT "Slow the Flock Down" speed education campaign: <u>https://www.portland.gov/transportation/</u><u>vision-zero/flock#:~:text=A%20colorful%2C%20</u> <u>tongue%2Din%2D,Department%20of%20Transportation%20</u> (SDOT)
- 10 FHWA states that, "Effectiveness information gained through the process of evaluating the performance of implemented countermeasures provides input to agencies that is useful for modifying and evolving their safety programs to prevent and reduce more severe crashes." <u>https://safety.fhwa.dot.gov/</u> systemic/fhwasa13019/element3.cfm

Attachment C - Budget







Attachment C: Budget Supplemental Estimated Budget

The Supplemental Estimated Budget details the infrastructure, behavioral and operational costs included in the "SS122A" proposal. The overall project budget is \$25M, with \$20M federal share and \$5M local match. Most of the funds, 67% (\$16,735,064), will be spent as part of eligible activity area (C) carrying out projects and strategies identified in an Action Plan. A smaller portion of the funds, 33% (\$8,264,936) will be spent as part of eligible activity area (B) conducting planning, design and development activities. No funds will be spent on eligible activity area (A) supplemental action plan activities.

Additionally, 88% of the funds (\$21,937,073), will go toward infrastructure, with 10% (\$2,616,127) allocated to operational and 2% (\$446,800) allocated to behavioral projects. Infrastructure funds should, however, also be considered behavioral investments as street designs provide critical cues about appropriate travel behaviors.

	(A) supplemental action plan activities	(B) conducting planning, design	(C) carrying out projects & strategies
Subtotal Budget	None	\$8,264,936	\$16,735,064
Itemized Estimated Costs of the (B) and (C) proposed projects and strates	gies		
5- to 3-lane road reorganization (1.5 miles): raised median, paving, 7 marked crossings, trees, signal modifications <i>(Infrastructure)</i>		\$2,930,270	\$5,541,734
Safety design changes at 4 major intersections (Infrastructure)		\$1,229,722	\$2,338,808
Street Lighting (Infrastructure)		\$150,000	\$600,000
11 median islands approaching major intersections (Infrastructure)		\$925,982	\$1,415,473
Signal optimization at 14 signalized intersections (Operational)		\$703,070	\$1,663,057
Bus stop curb extensions at 9 locations (Infrastructure)		\$955,870	\$1,862,212
Roundabout at Harold/122nd (Infrastructure)		\$654,211	\$1,241,410
Protected bike lanes Sandy to Powell (Infrastructure)		\$705,011	\$1,386,370
6 speed reader boards (Behavioral)		\$10,800	\$36,000
Equity outreach and marketing campaign (Behavioral)			\$400,000
Portland State University safety research (Operational)			\$250,000

Final Project Budget

The Final Project Budget details cost estimates for the cost classifications (as listed in form SF-424C) of each proposed project and strategy.

Project Elements	Road reorganization (Powell-Foster): median, paving, trees/landscaping, 1 signal modification, 7 pedestrian crossings	Major intersection safety (4 locations): civil, striping, signal modifications	Street lighting (Sandy-San Rafael)	Median islands (11 locations, Sandy-Powell)	Signal optimization (14 locations)	Bus stop curb extensions (9 locations)	Speed reader boards (6 locations)	Roundabout (at Harold St)	Protected bike lanes (Sandy-Powell)	Engagement & marketing campaign, equity-focus	Evaluation w/ PSU	Cost Classification Sub-totals
1. Administrative & legal expenses						Not used.						
2. Land, structures, rights-of-way, appraisals, etc. (Assumed min 10k where sidewalk/corner build/rebuild is needed)	\$25,000	\$25,000		\$25,000		\$25,000		\$25,000				\$125,000
3. Relocation expenses & payments				1		No relocation	S					
4. Architectural & engineering fees (Typically assumed as 34% of total consistent with template outputs)	\$2,930,270	\$1,229,722	\$150,000	\$925,982	\$703,070	\$955,870	\$10,800	\$654,211	\$705,011			\$8,264,936
5. Other architectural & engineering fees						Not used.						
6. Project inspection fees					Include	ed within cons	truction.					
7. Site work					Include	ed within cons	truction.					
8. Demolition & removal					Include	ed within cons	truction.					
9. Construction (Subtotal minus items 2-3-11)	\$4,683,175	\$1,935,750	\$600,000	\$1,388,973	\$1,418,747	\$1,415,418		\$1,054,019	\$1,084,043			\$13,580,125
10. Equipment (<i>Included within onstruction</i>)							\$36,000					\$36,000
11. Miscellaneous (Bureau of Labor and Industry (BOLI) payments)	\$3,753	\$1,318		\$1,500	\$1,085	\$1,800		\$721	\$250	\$400,000	\$250,000	\$660,427

	Project Elements Road reorganization (Powell-Foster): median, paving, trees/landscaping, 1 signal modification, 7 pedestrian crossings	Major intersection safety (4 locations): civil, striping, signal modifications	Street lighting (Sandy-San Rafael)	Median islands (11 locations, Sandy-Powell)	Signal optimization (14 locations)	Bus stop curb extensions (9 locations)	Speed reader boards (6 locations)	Roundabout (at Harold St)	Protected bike lanes (Sandy-Powell)	Engagement & marketing campaign, equity-focus	Evaluation w/ PSU	Cost Classification Sub-totals
12. SUBTOTAL (sum of lines 1-11, Template estimate minus template contingencies)	\$7,642,198	\$3,191,790	\$750,000	\$2,341,455	\$2,122,902	\$2,398,088	\$46,800	\$1,733,951	\$1,789,304	\$400,000	\$250,000	
13. Contingencies (Contract + construction + program contingencies from template estimate)	\$829,806	\$376,740			\$243,225	\$419,994		\$161,670	\$302,077			\$2,333,512
14. SUBTOTAL	\$8,472,004	\$3,568,530	\$750,000	\$2,341,455	\$2,366,127	\$2,818,082	\$46,800	\$1,895,621	\$2,091,382	\$400,000	\$250,000	\$25,000,000
15. Project (program) income												
16. TOTAL PROJECT COSTS (subtract #15 from #14)	\$8,472,004	\$3,568,530	\$750,000	\$2,341,455	\$2,366,127	\$2,818,082	\$46,800	\$1,895,621	\$2,091,382	\$400,000	\$250,000	\$25,000,000
17. Federal assistance requested, calculate as follows:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	
18. Resulting Federal share	\$6,777,603	\$2,854,824	\$600,000	\$1,873,164	\$1,892,901	\$2,254,465	\$37,440	\$1,516,497	\$1,673,105	\$320,000	\$200,000	\$20,000,000
Notes	Includes medians from Foster- Powell, paving Foster-Steele, Holgate signal modifications, and marked crosswalks.	Assumes restriping, access management, elevated bike lanes, median trees, & protected right turn phasing at Halsey, Glisan, Powell.		Assumes 11 islands. Total of 1050 LF (10 are 100' and 1 is 50'); \$2,230/LF.								

Attachment D - Letters of Support

- Getting There Together Coalition
- Oregon Metro
- Portland State University
- TriMet







FROM The Getting There Together Coalition, GTT



DATE: September 6th, 2022

RE: USDOT Safe Streets and Roads for All (SS4A) 2022 Grant Application: NE/SE 122nd Avenue, Portland, OR

Dear Safe Streets for All Review Team:

I am writing with strong support for the City of Portland's Bureau of Transportation (PBOT) Safe Streets and Roads for All (SS4A) Implementation Grant application that will enable safety improvements on NE/SE 122nd Avenue. Currently, high travel speeds, a mix of transportation modes, and auto-oriented design on this wide arterial street contribute to traffic safety issues that disproportionality impact vulnerable road users.

The street is one of the busiest and most important corridors in East Portland. Over six miles in length, 122nd Avenue serves as a critical backbone for many neighborhood centers in district. It provides important travel connections to essential jobs, services, and other community destinations. Additionally, many underserved communities live and work nearby, as the street intersects one of the most racially and ethnically diverse areas in the city and the state.

122nd Avenue is designated as a "high crash corridor" for pedestrians and people biking or driving, meaning it is on the top-30 list of corridors in Portland with the highest number of severe crashes. Many intersections also have high crash rates. Substandard infrastructure for non-auto modes—like narrow bike lanes that conflict with turn lanes at major signalized intersections, narrow and substandard sidewalks, and pedestrian crossings that are too far apart—creates a difficult and stressful environment for people walking, biking, rolling, or accessing transit.

Specifically, we see that many transit stops do not have benches or other amenities, which makes 122nd less usable/comfortable/functional for those that use transit, bike, or roll in the avenue. It is crucial to invest in improving transit stops to attract more people to utilize public transit. In addition to the maintenance and upkeep of stops, the trip to set spaces must feel comfortable for pedestrians. 122nd is less attractive to pedestrians because there is limited vegetation and trees. Moreover, the distinct lack of shade is worsened by the size of the pedestrian boundaries. The average distance between pedestrian crossing improvements, i.e., signals or pedestrian islands, on 122nd is 935 feet (about 4 blocks) and it sustains a car-centered and hostile environment. Between 2015-2021, 16 people lost their lives to

transportation violence on 122nd. Six were pedestrians, one person was biking, and nine were people driving. 122nd must provide safety and convenience to the diverse population that it serves.

GTT fully supports the proposed safety improvements that will improve conditions for pedestrians, and people biking and taking the bus, and that will reduce high vehicle speeds. The improvements will help to address the current issues on 122nd Avenue and increase safety for all modes, especially vulnerable road users in a high-equity area of Portland.

For these reasons, I ask that you approve this application.

Sincerely,

Ariadna Falcon Gonzalez, on behalf of the Getting There Together Coalition



September 12, 2022

U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590

RE: COMMITMENT OF COORDINATION AND PARTNERSHIP TO DEVELOP AND IMPLEMENT SAFE SYSTEM STRATIGIES IN THE GREATER PORTLAND REGION TO ACHIEVE EQUITY AND ZERO TRAFFIC DEATHS

To the Safe Streets and Roads for All (SS4A) Grant Review Team:

Public agencies, community advocates, community and business leaders and the public in the greater Portland region have a documented history of working together to create livable, equitable, sustainable, walkable and bikeable communities. For example, the regional Joint Policy Advisory Committee on Transportation (JPACT) is comprised of 17 members that serve as elected officials or representatives of transportation agencies across the region, including members of the County Coordinating Committees for Transportation and the City of Portland's Commissioner for Transportation. This committee approves transportation funding for safety projects. These strong partnerships, efficient coordination, and collaboration serve as a foundation for developing and implementing a region-wide safe system approach to achieve zero deaths and serious injuries on our region's roadways and advancing transportation equity.

This statement acknowledges our commitment to a coordinated and collaborative approach to seeking and implementing the US DOT's Safe Streets and Roads for All (SS4A) grants. The SS4A grants provide our region with an historical opportunity to advance roadway safety quickly, equitably and effectively. Metro and the cities and counties seeking funding in this first grant cycle have coordinated to identify **action plans, supplemental planning activities and capital projects that respond to the diverse needs** COMMITMENT OF COORDINATION AND PARTNERSHIP TO DEVELOP AND IMPLEMENT SAFE SYSTEM STRATIGIES IN THE GREATER PORTLAND REGION TO ACHIEVE EQUITY AND ZERO TRAFFIC DEATHS

of our communities while remaining coordinated, will provide a foundational set of action plans, and will address safety issues on two of the region's highest injury corridors.

Coordinated SS4A grant proposals for the greater Portland region

- 1. **Metro** *Getting to Vision Zero 2035- Advancing equity outcomes and pedestrian safety in the greater Portland metropolitan region with new data tools to better prioritize low-cost, high impact strategies*
- 2. City of Portland Safe Systems on 122nd Avenue: A model for humanizing arterial streets
- 3. East Multnomah County and Cities of East Multnomah County Gresham, Fairview, Troutdale, Wood Village Safety Action Plan - Creating a regional plan to prioritize safety improvements across the four cities in East Multnomah County with a focus on equitable community engagement and agency collaboration
- 4. Washington County Safe Travels! Washington County Transportation Safety Action Plan
- 5. City of Tigard Vision Zero Action Plan
- 6. City of Forest Grove East Forest Grove Safety Plan
- 7. Clackamas County Rural Safe Systems in Clackamas County, Oregon

If funded, the seven grant proposals developed by the cities, counties and Metro, the region's MPO, will accomplish local and regional safety goals and strategies. Each of these proposals represent a piece of our safe system puzzle and each is important to advancing our equity and safety goals.

- 1. Metro's proposal for supplemental planning activities implements actions identified in the adopted 2018 Regional Transportation Safety Strategy. Developing enhanced data tools and analysis will support local safety action planning efforts and regional project prioritization. Each of the proposals to develop local Safety Action Plans builds on years of local safety planning and implements Action 6.7 of the 2018 Regional Transportation Safety Action Plans and Vision Zero targets." City and County Safety Action Plans are essential to the implementation of the regional safety strategy. Moving beyond planning, Metro supports the implementation grants from the City of Portland, Forest Grove and Clackamas County. These projects will address documented safety issues with a safe system approach.
- 2. The Portland Bureau of Transportation's safe systems implementation project on 122nd Avenue will transform this regional priority arterial, which is designated in the top 5% of the region's most dangerous streets and traverses communities (adjacent census tracts) with more than double the regional proportion of Black, Indigenous and People of Color residents. Responding to existing crash trends and high-risk analysis, this build-ready project proposes data-driven, systemic countermeasures to address safety, equity and climate needs in this Historically Disadvantaged Community. The project will serve as a pilot for other high injury corridors in the region. Regional partners, including Metro, TriMet and Multnomah County will collaborate with PBOT to ensure successful project delivery.

COMMITMENT OF COORDINATION AND PARTNERSHIP TO DEVELOP AND IMPLEMENT SAFE SYSTEM STRATIGIES IN THE GREATER PORTLAND REGION TO ACHIEVE EQUITY AND ZERO TRAFFIC DEATHS

- 3. **Multnomah County and the cities of Gresham, Fairview, Troutdale and Wood Village** are working together through the East Multnomah County Transportation Committee to propose develop a Safety Action Plan for the urban area of East Multnomah County. This plan will be the next step in implementing the Committee's adopted policy priorities of equity and safety. Additional regional partners, such as Metro, TriMet, Port of Portland, and the City of Portland, will be at the table to support the Committee's planning efforts. The Safety Action Plan will focus on the safety inequities in East County and engage the largely disadvantaged community in developing strategies.
- 4. Washington County's proposal for a new Transportation Safety Action Plan will address increasing transportation safety needs in both its urban and rural areas. The County will coordinate with the City of Tigard, other jurisdictional partners and community members in a collaborative process to identify strategies and projects to move toward zero roadway fatalities and serious injuries.
- 5. **Tigard's** Vision Zero Action Plan will formalize Tigard's commitment to preventing roadway deaths and serious injuries by guiding strategic capital and programmatic investments in coordination with jurisdictional partners. The City will engage the community in a conversation around transportation safety to develop a comprehensive Vision Zero Safety Action Plan to guide capital and programmatic investments to reduce and eliminate serious injury and fatalities on our community's roadways.
- 6. **Forest Grove**, in partnership with Washington County, Metro, and ODOT, will develop the East Forest Grove Safety Plan to address a portion of a dangerous section of TV Highway by improving the pedestrian experience through closing sidewalk gaps, adding protected bike lanes, providing mid-block pedestrian crossings to access transit, and completing safety improvements at the Yew and Adair intersection near Cornelius. The project includes a strong equity element, as this section of TV Highway runs through an area of the highest percentage of low income and historically disadvantaged residents. TV Highway is one of the region's highest injury corridors.
- 7. **Clackamas County's** project will invest traffic safety funds to reduce serious and fatal crashes on Stafford Road as part of a Safe System approach that will demonstrate how a multifaceted approach to road safety can work to significantly reduce serious and fatal crashes and change driver behavior on a rural road facing the stresses of urban development. The project will include systemic infrastructure improvements and an anti-speeding campaign.

Implementation of the SS4A grants will benefit from the equity focused community engagement and organizing of Oregon Walks and The Street Trust. Oregon Walks is dedicated to promoting walking and making the conditions for walking safe, convenient and attractive throughout Oregon. The Street Trust advocates for multimodal transportation options that prioritize safety, accessibility, equity, and climate justice in the greater Portland region. Over the years, their partnership with transportation agencies in the region has resulted in safer travel for people walking and bicycling; both organizations and their dedicated memberships will be important partners in implementing the SS4A grants.

COMMITMENT OF COORDINATION AND PARTNERSHIP TO DEVELOP AND IMPLEMENT SAFE SYSTEM STRATIGIES IN THE GREATER PORTLAND REGION TO ACHIEVE EQUITY AND ZERO TRAFFIC DEATHS

Metro

Margi Bradway, Deputy Director Planning, Research and Development

East Multnomah County and the cities of East Multnomah County -Gresham, Wood Village, Fairview, and Troutdale Commissioner Lori Stegmann, Chair East Multnomah County Transportation Committee **City of Portland** Chris Warner, Director Portland Bureau of Transportation

Washington County Stephen Roberts, Director Land Use and Transportation

City of Tigard Emily Tritsch, Assistant City Manager Infrastructure and Investment **City of Forest Grove** Jesse VanderZanden, City Manager

Clackamas County Dan Johnson, Director Clackamas County Department of Transportation

The Street Trust Sarah lannarone, Executive Director

and Development

Oregon Walks Ashton Simpson, Executive Director



Transportation Research and Education Center (TREC)

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 asktrec@pdx.edu

asktrec@|

August 18, 2022

U.S. Department of Transportation 1200 New Jersey Ave, SE Washington, DC 20590

RE: USDOT Safe Streets and Roads for All (SS4A) 2022 Grant Application, Letter of Commitment for the Safe Systems on 122nd Avenue: A Model for Humanizing Arterial Streets

Dear USDOT Reviewers:

The Transportation Research and Education Center (TREC) at Portland State University (PSU) is pleased to partner with the Portland Bureau of Transportation on the "*Safe Systems on 122nd Avenue: A Model for Humanizing Arterial Streets*" project. As identified in the project proposal, TREC's role will be to conduct state-of-the-art safety evaluations of many of the novel aspects of the project. Potential evaluation focus areas include protected intersections, right turn on red restrictions, speed management, and novel signal timing strategies such as rest on red and exclusive pedestrian and bicycle phases. The results of these evaluations will be used to understand how well these treatments advance the objectives of the safe system approach and guide their use on other projects.

TREC is an interdisciplinary research center that combines expertise from a wide range of backgrounds and supports collaborative research and education for vibrant communities. As home to the U.S. DOT-funded National Institute for Transportation and Communities (NITC), this project closely aligns with our center's mission to improve transportation mobility options by increasing safety. We have a long history of partnering with PBOT on a wide variety of research and faculty with significant expertise in this area. This program will provide an exciting opportunity to continue and strengthen that partnership

We offer the fullest support for PBOT's efforts to secure this grant and believe this project will demonstrate how a jurisdiction can apply the principles of the safe system to transform our roadways for all users.

Sincerely,

foil

Jennifer Dill, Ph.D. Director, TREC and National Institute for Transportation & Communities jdill@pdx.edu

DATE: September 6, 2022

RE: USDOT Safe Streets and Roads for All (SS4A) 2022 Grant Application: NE/SE 122nd Avenue, Portland, OR

Dear Safe Streets for All Review Team:

I am writing with strong support for the City of Portland's Bureau of Transportation (PBOT) Safe Streets and Roads for All (SS4A) Implementation Grant application that will enable safety improvements on NE/SE 122nd Avenue. Currently, high travel speeds and auto-oriented design on this wide arterial street contribute to traffic safety issues that disproportionality impact vulnerable road users.

The street is one of the busiest and most important corridors in East Portland. Over six miles in length, 122nd Avenue serves as a critical backbone for many neighborhood centers in our district. It provides important travel connections to essential jobs, services, and other community destinations. Additionally, many underserved communities live and work nearby, as the street intersects one of the most racially and ethnically diverse areas in the city and the state.

122nd Avenue is designated as a "high crash corridor" for pedestrians and people biking or driving, meaning it is on the top-30 list of corridors in Portland with the highest number of severe crashes. Substandard infrastructure—like narrow and substandard sidewalks and pedestrian crossings that are too far apart—creates a difficult and stressful environment for people accessing transit.

TriMet has been proud to partner with PBOT to improve transit service and access on 122nd Avenue. As PBOT has made improvements to sidewalks and crossings, TriMet has made significant investments in service, upgrading Line 73 on 122nd Avenue to Frequent Service with buses arriving every 15 minutes or better, most of the day, every day.

We look forward to continuing to partner with PBOT on the proposed safety improvements that will improve conditions for pedestrians, people taking the bus, and reduce high vehicle speeds. With safety and sidewalk improvements, TriMet will be able to add new and expanded shelters and benches at our highest ridership bus stops, responding to long-standing community requests. These will be especially important as we launch our high-capacity bus service FX2-Division this fall, which provides a crucial connection with transit riders on 122nd Avenue.

Together we believe that these improvements will help to address the current issues on 122nd Avenue and increase safety for all modes, especially vulnerable road users in a high equity area of Portland.

For these reasons, I ask that you approve this application.

Sincerely,

Jour Wills

Tom Mills Director Mobility Planning and Policy

Attachment E - Project Schedule







Attachment E: Project Schedule

	2022 2023				2024				2025				2026				2027				
	JUL OCT	JAN	APR	JUL	OCT	JAN	APR	JUL	OCT	JAN	APR	JUL	OCT	JAN	APR	JUL	OCT	JAN	APR	JUL	OCT
Grant Submittal, NOA																					
STIP Adoption, PE Phase Obligation																					
Complete Project Development																					
30% Engineering																					
60% Engineering																					
95% Engineering																					
Final Plans, Specs & Estimate																					
Environmental Reports & Review																					
Right-of-Way Acqusition																					
Utility Relocation																					
CM/GC RFP & Evaluations																					
CM/GC Pre-Construction Services																					
CM/GC Development & Approval																					
Construction Phase Obligation																					
Construction																					
Public Involvement																					