

2022-2024 Regional Flexible Funds Project Application

INTRODUCTION

This application is organized to consider, assess, screen, and select Regional Flexible Fund Allocation (RFFA) projects. The assessment is focused on first determining a candidate project's applicability to the RFFA program and their technical feasibility. Upon that assessment, promising projects will be assessed on the merits of their intended project outcomes that will be used for project scoring.

To be applicable to the RFFA program, a project must be at least one of the following project types:

- Active Transportation and Complete Streets, or
- Freight and Economic Development Initiatives

Each project should demonstrably support the four 2018 Regional Transportation Plan (RTP) investment priorities:

- Advancing Equity
- Improving Safety
- Implementing the region's Climate Smart Strategy
- Managing Congestion

Although information from the entire application may be used to inform project scoring, the questions presented in the section, "Project Outcomes" are directly related to scoring and evaluation criteria and the answers to these questions will directly inform the project scoring.

After all relevant questions are completed, please secure the required signatures as indicated at the end of this application form, and email it, along with other required information and supporting documentation to rffa@oregonmetro.gov. Applications MUST be received by 4:00 p.m. on Friday, June 21, 2019 in order to be considered.

APPLICANT INFORMATION

1. Jurisdiction name: City of Portland
2. Contact info: Mark Lear, 503-823-7604, Mark.Lear@portlandoregon.gov
3. Funding category (check one): Active Transportation Freight Both
4. Project name: Stark/Washington Corridor Safety Improvement Project
5. Describe the project purpose. What problems or issues is the project intended to address?

Stark and Washington are both on the high crash network and currently have substandard bicycle and pedestrian infrastructure, and excess motor vehicle capacity. This project improves safety for all modes by implementing strategies to reduce vehicle speeds, provides physically protected space for people biking, and makes it easier and safer to cross the street. The project includes protected bike lanes, protected signal phasing for peds and bikes, transit islands to

improve transit operations and comfort, ped islands to shorten crossing distance, and signal controller upgrades to better manage speeds and traffic flow.

PROJECT READINESS

The following questions intend to gather information about how developed the project is and the steps that will still be required to complete the project. This section will be used for screening project feasibility.

Project Detail

6. Is this project on the 2018 RTP Constrained list? Yes No
7. What is the RTP Project ID #? 10319
8. In which RTP network and policy map(s) is the project included? Check all that apply, indicate specific functional classification.
 - High Injury Corridor (or ODOT ARTS Hotspot map) This is a Metro High Injury Corridor
 - Bicycle: Regional Bikeway
 - Pedestrian: Pedestrian Parkway
 - Freight Click here to enter text.
 - Transit: Frequent Bus (except SE 99th-102nd)
9. List the project beginning and ending points. What specific streets/intersections are included in the project area?

Protected bike lanes and lane reconfiguration on SE Stark St & SE Washington St: SE 92nd Ave-SE 108th Ave. Transit islands on Stark St just east of 92nd, Stark St near 106th, and Washington St near 106th. Pedestrian islands at 100th and 105th to reduce crossing distance. Right turn signal phasing added to separate vehicle right turns from peds and bikes at Stark & 103rd, Stark & I-205 on-ramp, Washington & I-205 on-ramp, Washington & 99th, Washington & 102nd, and Washington & 106th. Protected intersection design at Stark & 99th to reduce vehicle right turn speeds across bike lane, and pedestrian crosswalk restored at west leg. Signal controller upgrades along the corridor to improve signal timing operation.
10. Is the project included in an adopted local transportation safety plan or audit? Yes No
Please describe.

This project is part of PBOT's Vision Zero project list, included under the Transportation System Plan (TSP) as project #80018.
11. Describe the non-RFFA funding sources available and amounts necessary for the project to be completed. How secured is the funding for each funding source (Certain, Probable, or Competitive?)

The total project cost estimate is \$6,532,000. Local match in the amount of \$1,200,000 will be provided by system development charge revenue and/or other discretionary local funding

sources. The local match funding is Certain. The RFFA grant request is for the remaining \$5,332,000.

12. Which Project Development Stages are to be considered for RFFA funding?

We are requesting RFFA funding for Alternatives Identification and Evaluation, Preliminary Design, Final Design, Right of Way, Utilities, and Construction

13. If your project is found to not be as far along as indicated or has specific challenges that need to be (re)addressed to improved technical feasibility, are you interested in RFFA funding for project development activities? Yes No

14. Attach or describe the project schedule and include information about important schedule considerations or drivers.

Early 2022—Alternatives Identification and Evaluation; Late 2022--Preliminary Design and Final Design; 2023—Right-of-Way; 2024--Construction

Project Completeness

15. At what stage of the project development process is the project, and what is the status of each project stage (refer to Defining Project Development Stages above)?

This project has gone through the Planning stage and has undergone enough project development to have a signed engineer cost estimate and a defined scope. However, we anticipate the need for a short Alternatives Identification and Evaluation phase to verify the scope prior to starting Preliminary Engineering, particularly in regard to the interaction with ODOT facilities. ODOT will require extensive data collection, traffic analysis, and potentially design exceptions, and will require these processes to occur after we have funding and closer to the construction year.

16. Is right of way (ROW) acquisition likely? Will the project need any unique ROW requirements such as temporary easements, special coordination with other agencies? What is the status of the ROW acquisition task of the project?

This project will require temporary construction easements. Significant acquisitions are not likely to be necessary. Right of way acquisition will be completed by the City of Portland following all federal processes during the Right of Way phase for each project.

17. What project development (project study reports, transportation safety plan, safety audit, feasibility studies) has been completed? How recent are these reports or this project development, and are they still relevant? Are they in digital format for possible transfer?

In July 2017, the Growing Transit Communities plan was adopted by Portland City Council. This planning effort included the Stark/Washington project area and investigated corridor safety and recommended improvements to address these concerns. The plan is available in PDF format. Based on this planning effort and the report's recommended project list, PBOT Traffic, Civil, and Signals engineers collaborated to develop a horizontal alignment of proposed improvements on

both Stark and Washington (completed May 2019). These engineering designs are digitally available in computer-aided design (CAD) format and PDF. This will serve as the foundation of design engineering as the project advances.

18. Does the project area intersect with Title 13 resource areas, wetlands, cemeteries, railroad tracks, Native American burial grounds, protected species habitat, or any other qualifiers that would require permitting?

The project is wholly contained within the public right of way with no anticipated Title 13 resource area impacts or other areas needing special permitting.

19. To what extent has environmental permitting been scoped or completed?

Environmental permitting for the project is unlikely as the project does not impact an environmental resource area.

Community Support

20. What needs expressed by community members (e.g., unsafe crossing; egregiously long red lights) does the project address?

During the Growing Transit Communities Plan process, PBOT focused a great deal of attention on the Stark/Washington couplet through Gateway, working with the community to identify needs that if addressed would support a greater transit orientation for the area to support increased frequencies for TriMet bus service. PBOT conducted a full needs assessment, with opportunities for community input. We heard many concerns about this corridor, including high traffic speeds, difficulty crossing the three- and four-lane streets, narrow and unprotected bike lanes being unsafe and stressful, poor-quality bus stops, unsafe signalized intersections (especially turning conflicts), and transit delays. This project will address these concerns by adding protected bike lanes, reducing the number of lanes and crossing distance, improving safety at signals through signal phasing, and addressing transit stop and delay needs using transit islands and lane striping.

21. Which community partners are involved?

The Growing Transit Communities Plan involved a wide range of community partners, including the project stakeholder advisory committee, the East Portland Action Plan, East Portland Neighborhood Office, Gateway Area Business Association, Oregon Walks, OPAL, Street Trust, and Floyd Light Middle School. These community partners and others will be involved in further project development and design if this project is funded.

22. Describe the agency and community support (and any opposition) for the project. Discuss the focus on equity and stakeholder engagement process.

This project has high agency and community support because it is addressing safety needs on a high crash corridor and a PedPDX priority corridor. It is also addressing needs in the adopted Growing Transit Communities Plan. The Gateway area has been a focus of investment recently, but most of that investment has been in the northern end on the Halsey/Weidler couplet. PBOT, Prosper Portland, and the Gateway community support investment in the Stark/Washington

couplet to make it a safer place for other modes beside driving, and to hopefully spur redevelopment in a very auto-oriented area. The Growing Transit Communities Plan followed best practices for equitable stakeholder engagement process, including targeted outreach to low-income and people of color communities and language-specific outreach. This approach will be used in future project phases if funded.

Interagency Connections

23. Are TriMet, SMART, or adjacent or overlapping jurisdictions (counties, cities) involved in and supportive of the project?

TriMet has been briefed on this project and is generally supportive. They will coordinate with PBOT on project design and construction if the project is funded. PBOT has agreed to include in project design and construction the costs associated with necessary transit stop improvements.

24. Is the project on or does it connect with a separate agency facility? Indicate all potentially involved agencies' awareness of and cooperation with the project. Potential agencies include Oregon Department of Transportation (ODOT) (Highway, Rail divisions and others as required), railroads, utilities, Bonneville Power Administration, or Port of Portland.

ODOT has been briefed on this project and has no objections to this grant application. They will coordinate with PBOT on project design and construction if the project is funded. Any changes in the area around the freeway interchange are subject to the approval of the State Traffic Roadway Engineer.

25. Will utilities need to be relocated? Who owns the utilities and what is their level of awareness and support for the utility relocation?

Utilities in the City of Portland located within the right of way are subject to the franchise agreements which require the utility to move at their own expense on a timeline dictated by the project. The City of Portland has an established utility relocation process to notify utilities of relocation requirements. City owned utilities will be relocated during the utility phase through an agreement with the ODOT Utilities section.

26. Do you have design control consistently across the project area? If other agencies are affected by this project, do you have the necessary documentation of agreement regarding design elements reflected within this project? (Please obtain signatures as indicated on the Signature Page of this application.)

PBOT has design control over this project, except in the interchange influence area around I-205, particularly the ODOT-owned traffic signals at the interchange. Any changes in the area around the freeway interchange are subject to the approval of the State Traffic Roadway Engineer. We are unable to obtain such approval until we get funding for the project and can do the data collection and analysis required by ODOT. However, ODOT has signed the page included with this application and has pledged to coordinate with us on project design.

PROJECT RISKS

The following questions intend to identify potential risks to project completion.

27. Has a person(s) with the proper authority reviewed and agreed to the project design, and signed off on this application? Yes No

28. Are there any anticipated risks for the following:

a. Right of way (ROW)

i. Are ROW acquisition costs included in the cost estimate? Right of way costs are included.

ii. Were the federal Right of Way Uniform Act's acquisition and negotiation processes performed during the ROW acquisition stage or considered in the schedule and budget, for those projects which have not yet performed ROW acquisition? Yes.

b. Utility Relocation

i. Are utility relocation costs included in the cost estimate? Utility relocation costs for eligible utilities are included in the cost estimate.

c. Stormwater considerations

i. Water quantity Preliminary costs for stormwater disposal and treatment are included in the estimate.

ii. Water quality Preliminary costs for stormwater disposal and treatment are included in the estimate.

d. Environmental and Permitting

i. Have potential State environmental (SEPA)/ National Environmental Policy Act (NEPA) impacts been identified? All projects are likely to meet the requirements for a Categorical Exclusion, documentation will be prepared during project design.

e. Schedule Applicant General Schedule: 22 Project Development and PE 23 Right of way 24 Construction

f. Budget We have included large contingencies at several levels in the cost estimate.

g. Staff availability

i. Does the agency have sufficient and qualified staffing resources to lead, manage, and deliver the project? Please describe. The agency has a robust project management staff with extensive experience managing federally funded capital projects.

PROJECT DESIGN

Project designs will be scored on the level of safety and environmental improvements they can provide. A project that includes as many safety and environmental mitigation elements as feasible will more completely meet the criteria.

29. Describe the project elements and countermeasures that address safety.

The Stark/Washington Corridor Improvements Project includes multimodal safety and access to transit improvements in the Gateway neighborhood. Project elements include lane reconfigurations (removing one motor vehicle lane in each direction), adding protected bike lanes (parking protected and/or vertically delineated where feasible), transit islands and other transit priority treatments. Pedestrian refuge islands, Americans with Disabilities Act (ADA) ramps, and curb extensions are also included in the project scope. Safety at signalized intersections (where most crashes occur) will be improved through signal-separating heavy vehicle right turns from pedestrians and bikes, or through an island that slows down right-turning vehicles in one case. We are also restoring a currently-closed pedestrian crosswalk at one location. This corridor is on the Portland High Crash Network for all modes, is on the Metro High Injury Corridor map, and it has a high concentration of top 5% SPIS sites in the 2014-2016 time frame.

30. What countermeasures are included that reduce conflicts between modes (vehicles, pedestrians, bicycles, railroad crossings) and improve safety? (Use Appendix C design checklist, check all that apply)

This project improves safety by implementing a number of proven safety countermeasures, including the following:

- a. Add sidewalk width and/or buffer for a total width of 17 feet or more (recommended), 10 feet minimum (over 30 mph, ADT over 6,000). Buffer may be provided by parking, protected bike lane, furnishing zone, street trees/planting strip. Greater width overall is desired in high activity areas, greater buffer separation is desired on streets with higher motor vehicle speeds and or volumes.
- b. Remove obstructions from the primary pedestrian-way or add missing curb ramps
- c. Add enhanced pedestrian crossing(s) at appropriate locations
- d. Re-open closed crosswalks
- e. Raised pedestrian refuge median or raised crossing, required if project is on a roadway with 4 or more lanes
- f. Reduced pedestrian crossing distance
- g. Narrowed travel lanes (reduces pedestrian crossing distance)
- h. Curb extensions and/or in-lane transit boarding
- i. Lighting, especially at crosswalks – pedestrian scale (10-15 feet), preferably poised over sidewalk
- j. Add countdown heads at signals

- k. Arterial traffic calming: Textured intersections, gateway treatments, raised medians, road diets, roundabouts
- l. On streets with traffic speeds and volumes over 30 mph, ADT over 6,000: Protected bicycle lane with vertical separation, minimum width 6 feet with minimum 2 foot buffer (refer to table below for recommended widths based on projected used)
- m. Bike priority treatments at intersections and crossings, including advance stop lines, bike boxes, bicycle priority signals, high-intensity activated crosswalk (HAWK) signals, user-activated signals
- n. Raised pedestrian refuge median or raised crossing with bicycle crossing treatments, required if project is on a roadway with 4 or more lanes
- o. Other bicycle priority design elements (detailed in project scope map and estimate report)
- p. Transit priority treatments (e.g. queue jumps, transit signal priority)
- q. Street trees and/or landscaping
- r. Stormwater treatments

31. What specific project design elements are aimed at reducing environmental impacts (street trees, bioswales, etc.)? See question 48.

32. Are there additional design elements or countermeasures not on the checklist that are included in the project design that will improve safety and environmental outcomes?

The full scope of the project is detailed below:

Description:

- Reconfigure travel lanes on SE Washington St/SE Stark St couplet from SE 92nd Ave to SE 106th Ave to improve corridor safety.
- Reallocate one travel lane in each direction (or narrow travel lanes in some sections) to add striped, designated on street parking, designated turn pockets and protected bike lanes.
- Construct pedestrian refuge islands between bike lane and travel lanes.
- Stripe pedestrian crossing locations and bike crossing locations along the couplet.
- Construct traffic signal modifications at the I-205 on-ramp, SE 99th Ave, and SE 103rd Dr on SE Stark St.
- Construct traffic signal modifications at the I-205 on-ramp, SE 99th Ave, SE 102nd Ave, and SE 106th Ave on SE Washington St.
- Install bike signals at the I-205 on-ramp and SE 103rd Dr on SE Stark St.

- Install bike signals at the I-205 on-ramp, SE 99th Ave, SE 102nd Ave and SE 106th Ave on SE Washington St.
- Install pedestrian signal improvements at SE 99th Ave and SE 103rd Dr on SE Stark St.
- Install pedestrian signal improvements at the I-205 on-ramp, SE 99th Ave, SE 102nd Ave and SE 106th Ave on SE Washington St.

Current Cross-Section:

- SE Washington St from SE 92nd Ave to SE 94th Ave – 40' wide pavement in 50' of ROW
- SE Washington St from SE 94th Ave to SE 96th Ave – I-205 overpass, 54' wide pavement
- SE Washington St from SE 96th Ave to SE 106th Ave – 48' wide pavement in varying ROW width from 62' to 66'
- SE Stark St from SE 92nd Ave to SE 94th Ave – 66' wide pavement in 80' of ROW
- SE Stark St from SE 94th Ave to SE 96th Ave – I-205 overpass, 42' wide pavement
- SE Stark St from SE 96th Ave to SE 106th Ave – 66' wide pavement in 80' of ROW

Proposed Cross-Section:

- SE Washington St from SE 92nd Ave to SE 94th Ave – no change to current cross-section, added designated right turn only lane
- SE Washington St from SE 94th Ave to SE 96th Ave – no change to current cross-section, lane widths narrow to 10' to accommodate 6' protected bike lane. Added bus only lane.
- SE Washington St from SE 96th Ave to SE 106th Ave – no change to current cross-section, lane widths narrow to 10' and one thru lane is dropped to accommodate 6' protected bike lane, designated on-street parking, designated right turn only lanes and bus only lanes.
- SE Stark St from SE 92nd Ave to SE 94th Ave – no change to current cross-section, lane widths narrow to 10'-11' to accommodate 6' protected bike lane and designated on-street parking.
- SE Stark St from SE 94th Ave to SE 96th Ave – no change to current cross-section, lane widths narrow to 10' to accommodate 6' protected bike lane. Added designated left turn only lane.
- SE Stark St from SE 96th Ave to SE 106th Ave – no change to current cross-section, one through lane is dropped to accommodate 6' protected bike lane, designated turn lanes, designated on-street parking and bus only lanes.

PROJECT OUTCOMES

Projects will be scored in terms of their ability to create positive outcomes that align with RFFA priorities and regional goals. The following questions aim to gather details directly related to those potential

outcomes. Please provide all relevant data to support your response, using Metro-provided data or additional sources. Metro staff will provide data to the scoring committee to confirm

Affordability/Equity

33. Is the project in an Equity Focus Area? Yes No Please indicate which Focus Area.

People of Color and/or Limited English Proficiency

34. List the community places, affordable housing, and Title 1 schools within ¼ mile of project.

East Portland Community Center, Floyd Light City Park, Berrydale Park, Stark Street Island green space, Mall 205, Oregon DMV, Post Office, Unitus Community Credit Union, OnPoint Community Credit Union, Wells Fargo Bank, Riverview Community Bank, Floyd Light Apartments, Park Vista apartments, Pioneer Abodes

35. What are the estimated totals of low-income, low-English proficiency, non-white, seniors and youth, and persons with disabilities who will benefit from this project? Click here to enter text.

- a. Low-Income Population: 28940 (PBOT Equity Matrix, nearby areas scoring 4 or 5 with annual household incomes < 54,000)
- b. Households with Limited-English Proficiency: 1050 (per PBOT Equity Matrix)
- c. Non-White Population: 11406 (2010 Percent Communities of Color Census Data, per the census blocks within 1 mile of the project area)
- d. Senior Population: 8042; Youth Population: 12439 (2017 ACS, per census blocks within 1 mile of the project area)
- e. Persons with Disabilities: 12213 (2017 ACS, per census tracts within 1 mile of the project area)

36. What are the barriers faced by these communities that the project addresses or overcomes, and how will these populations benefit from this project?

Lower-income households spend a higher percentage of income on daily transportation needs than higher-income households, in part due to the high cost of automobile ownership and fewer low-cost transportation options such as walking, bicycling, and transit. We also know that these communities are disproportionately impacted by unsafe streets because they have less choice over where to live and have historically not received the same level of investment as more affluent areas. The Stark/Washington project combines a package of pedestrian, bicycle, and transit improvements to make active transportation the mode of choice in the couplet area, and to make the streets safer for all users.

Additionally, investments that improve pedestrian and bicycle networks in the areas around a transit line allow transit to be used by a wider population. These investments will also help corridors meet TriMet's criteria for frequent service expansion, allowing the City to invest in bike and pedestrian access improvement to support increased transit service hours.

37. What contracting opportunities are available to Office for Business Inclusion and Diversity (COBID) firms through this project? What is your agency's policy, history, or removing of barriers to hire and advance COBID firms in infrastructure projects?

The City of Portland's Certification Agreement stipulates that all projects follow the requirements of the ODOT Office of Civil rights for federally funded projects.

Safety

38. How many fatal or serious injury crashes have occurred in the project area in the last 5 years (or most recent 5 years of available crash data)?

Fatal Crashes: 1. Injurious Crashes (all types): 86. (Per ODOT 2012-2016 Crash Data)

39. How does the project aim to reduce the number of fatal or serious injury crashes?

High traffic speeds are a major cause of serious injury and fatal crashes. Several proven safety countermeasures, including reducing lanes widths and overall vehicle driving space, signal separation, physical protection for bike lanes, more and better pedestrian crossings, reduced crossing distances, and more (see Appendix C and scoping maps for additional details) are scoped into this project.

40. How does the project remove or mitigate conflicts, with (including) active transportation, railroad crossings, turning movements, and others? (Use Appendix C design checklist, indicate all that apply) Click here to enter text.

Bicyclists are further removed from motor vehicle travel lanes by keeping the bike lanes against the curb, and also protected by a mix of parked cars, wide buffers with concrete traffic separators and/or vertical delineators, and pedestrian refuge islands. Approaching major intersections, bicyclists will be further protected with separate signal phasing from right turning cars. Conflict markings will also be utilized to indicate the presence of bicyclists.

For pedestrians, some crossings will be shortened using curb extensions and refuge islands. The project also includes reopening a closed crosswalk at SE 99th Avenue and SE Stark Street.

People driving will also be safer. A combination of narrower travel lanes and less driving space curb to curb due to the repurposed travel lane will help reduce vehicle speeds and crash severity.

System Completion

41. What network gap(s) will be completed by this project? How will system connectivity or network deficiencies be improved?

Stark and Washington are both designated as Regional Bikeways in the RTP, but both are deficient because the bike lanes are narrow, unprotected, and stressful. The project will add physical protection and additional space for people biking, removing the network deficiencies on Stark and Washington between SE 92nd and SE 106th. The pedestrian network will be improved by adding more, and safer, crossings of both Stark and Washington, enhancing north-south connectivity in the surrounding area.

In addition, PBOT has funded projects to fill the gaps on Washington west of 92nd and Stark east of 108th, so this project would address deficiencies in what will ultimately be a continuous bikeway from Mt. Tabor to the Historic Columbia River Highway.

The portion of this project that provides protected bike lanes and right-turn signal phasing on Stark and Washington through the I-205 interchange also addresses a 99th percentile high-priority combined ped/bike need in the ODOT Active Transportation Needs Inventory.

42. How will access to active transportation be improved? What specific barriers in addition to the network gaps identified above will the project eliminate? [Click here to enter text.](#)

Without a physical barrier separating bike lanes from motor vehicle travel lanes, many people do not feel safe or comfortable enough to use existing bike facilities. This project uses physical barriers between the bike facility and travel lanes to improve safety and comfort. Traffic signals will also be upgraded to separate turning vehicles from bicyclists in time. This project will also connect to a currently under construction project, East Portland Access to Employment and Education (EPAEE), which is improving the 106th and Stark intersection and extending the 100s Neighborhood Greenway.

Multimodal Travel, Mode Share, and Congestion

43. How will the project reduce transit delay and improve transit reliability? [Click here to enter text.](#)

Scoped into the Stark/Washington Corridor Improvements project are traffic signal controller upgrades, which will make all of the signals on Stark and Washington ready for next generation traffic signal priority (TSP). As the region upgrades TSP systems, this corridor will have a head start and will be able to easily accept the new technology as it rolls out.

In addition, moving the bike lane to the curb means that transit operators will have fewer conflicts and delays waiting for a gap to pull into and out of transit stops. Finally, on Stark leading to 103rd, there will be a short BUS ONLY lane to help skip queues as the busses turn right onto 103rd.

44. How does the project improve connections to transit and employment or residential sites/areas? [Click here to enter text.](#)

Narrowing and repurposing travel lanes, in conjunction with shortening crossing distances, helps improve access to transit by reducing barriers to crossing the street to transit stops or to change bus lines. In addition, building better biking and walking facilities can extend the reach of existing transit lines by allowing more people in residential and employment areas to reach transit stops.

Mall 205, which is inside the project area, will likely redevelop in the coming years into a higher-density neighborhood with additional mixed-use development, housing, and jobs. Much of the surface parking will be converted into new buildings (per early assistance meetings with the property owner). Completing the Stark/Washington Corridor Improvement Project ahead of this redevelopment will help ensure that the increase in population will have safe active transportation options, reducing the stress on existing street infrastructure.

45. How will the project reduce vehicle trips or VMT (other than freight-related trips)? Click here to enter text.

Without a physical barrier separating bike lanes from motor vehicle travel lanes, many people do not feel safe or comfortable enough to use existing bike facilities. This project uses physical barriers between the bike facility and travel lanes to improve safety and comfort, and to reduce the dependence on single occupancy vehicles. Improving the pedestrian network with more comfortable crossings will also make walking and transit more attractive options in the project area.

46. How does the project reduce the need for throughway expansion? Click here to enter text.

Active transportation is more space efficient than single-occupancy vehicle travel. By providing more attractive active transportation options, the footprint of existing right of way becomes more efficient at moving people, reducing the need for throughway expansion. The project will be coupled with a transportation-demand management (TDM) phase post construction to help encourage road users to consider active transportation modes.

Climate Change and Environmental Impact

47. Describe the measures included to specifically mitigate the project's greenhouse gas emissions and environmental impact.

PBOT endeavors to limit and mitigate the environmental impact of all our projects. Measures we take include erosion control plans, control of discharge, responsible excess materials disposal, limited footprint of construction staging, powering down vehicles and equipment when not in use, use of warm mix instead of hot mix, compliance with forestry requirements, traffic control plans to reduce air quality impact from congestion, enforcement of permit requirements, dust control, noise prohibitions, and electronic submittals and payment processing of contractor submittals. In addition to these measures to reduce environmental impact, the project will reduce greenhouse gas emissions overall by encouraging greater use of non-motorized modes (walking, biking) as well as more efficient motorized modes (transit service).

48. What specific project design elements are aimed at reducing environmental impacts (street trees, bioswales, etc.)?

Street trees are included in the project to conform to the Portland Tree Code, or in some cases where trees are infeasible the City may pay a fee to plant trees in other areas. Bioswales are included to manage stormwater in cases where the Bureau of Environment Services finds that they would provide a clear benefit to the stormwater system.

Freight Related Impact

49. How does the project address freight travel time reliability and reoccurring or nonrecurring congestion affecting freight goods movement?

This project is not on a regional freight route and is not expected to negatively impact freight travel times or reliability.

50. Is this project on a “Reduction Review Route” (defined and stipulated by statute; OAR 731-012 and ORS 366.215) and to what extent has coordination occurred with the freight industry?

This project is not on a Reduction Review Route, per ODOT TransGIS.

This project was presented to the City’s Freight Committee and there were no major concerns.

51. If there is freight delay along the corridor, when does this delay occur, to what extent is there delay, and how does this project address that delay?

The scope of this project does not include specific mitigations to reduce freight delay. However, traffic studies show that vehicle travel times will be within acceptable thresholds after the project is completed.

Employment/Economic Development

52. Describe the employment area(s) served by this project. What is the number of current and projected jobs in traded sectors?

This project serves the Montavilla and Russellville neighborhoods, and the Gateway Regional Center.

Area Jobs in Target Industries:

- Athletic & Outdoor Jobs: 49
- Clean Tech Jobs: 116
- Computer & Electronics Jobs: 0
- Health Science & Technology Jobs: 14
- Metals & Machinery Jobs: 4
- Software & Media Jobs: 59
- Total: 242

53. Describe how the project supports and catalyzes low-carbon and resource efficient economic sectors.

The project will support 116 Clean Tech jobs.

Project Leverage

54. How does this project leverage other funding sources?

This project leverages local funding sources include system development charges and general transportation revenue to provide the local match.

55. Will the receipt of RFFA funding position the region to take advantage of federal and state funding opportunities as they arise? If so, explain.

Yes, in the case that RFFA funds are used for project development, this funding will advance these projects to the point where they would be more competitive for state and federal funding opportunities.

56. Will this help advance any Transportation Systems Management and Operations (TSMO) goals and strategies?

Yes, this project upgrades traffic signals and traffic signal controllers throughout the project area, getting this infrastructure ready for next-generation transit signal prioritization and communications.

New controllers and upgraded detection make the signals capable of more sophisticated signal timing plans, such as time of day plans, special event plans, emergency plans, demand-responsive timing, etc. Modern communication also means the signals can be monitored controlled and updated remotely when incidents occur rather than having to go out into the field to reprogram the controller if something needs to be changed. These upgrades also make the signals ready for next-generation transit signal priority as well as truck priority systems. An additional benefit is that at times in which PBOT makes significant changes to roadways with many traffic signals, the signals outside of the project area upstream and downstream are also typically re-timed to ensure that the projects benefits are maximized. Every time we do this, it's an opportunity to adjust the timing for current conditions, achieve better platooning and traffic flow.

57. Is this project on the Regional Emergency Transportation Network? Will this project help improve resiliency of the transportation network? If so, describe how.

This project is on the Regional Emergency Transportation Network, along SE Stark St.

PBOT will be able to reduce its maintenance backlog used to fix outdated traffic signals, and these upgraded traffic signals will be more resilient. A high-quality bike network is also recognized as being a key part of any recovery from a natural disaster, as fuel supplies will be limited and many roads will be impassable.

PROJECT COST ESTIMATE

58. What is the source of the project cost estimate?

Conceptual: These cost estimates are used where a significant need has been identified but a detailed project scope has not been developed. These cost estimates have the potential to change significantly as the project scope becomes more defined.

Planning level: These cost estimates are based on a generally defined scope. Cost estimates are usually based on limited field-work and general cost assumptions. No actual design work has been done prior to the development of these cost estimates. The cost estimate could still change significantly as design work begins, but the estimate is more reliable than the conceptual estimates. (e.g., comprehensive plan, TSP, Metro cost estimate worksheet, corridor plan).

Engineering level: These cost estimates are based on actual preliminary design work. If done for all facets of the project and there are no further additions to the project scope, these

estimates should represent a fairly accurate cost for the project. (e.g. detailed planning report, preliminary engineering, final design, NEPA documentation, etc.)

59. During what project development stage (refer to page 9 of the RFFA application guidebook) was the cost estimate created?

- Planning
- Alternatives Identification and Evaluation
- Preliminary Design
- Final Design

60. What year was the cost estimate created? Does it include any escalation factors and to what year?

The cost estimate was created in 2019 and is signed by a senior civil engineer. The estimate includes five years of construction and personnel escalation, and large contingencies for unexpected increases in costs.

61. To what extent were the following considered during cost estimating? All impacts are included in estimate if necessary at a planning level.

- a. Right of way (ROW) Included
- b. Utility relocation or underground Only included for city owned utilities
- c. Stormwater considerations included
- d. Environmental mitigation strategies included if necessary
- e. Bridge, railroad, or major facility impacts included if necessary
- f. Retaining walls included if necessary, planning level
- g. Clearing and grading included as lump sum percentage
- h. Removal of current pavement or facilities included using preliminary quantities
- i. Signing and pavement markings included using preliminary quantities
- j. Sidewalk and street furniture Included using preliminary quantities
- k. Street trees, landscaping, irrigation Included using preliminary quantities
- l. Mobilization, staging, and traffic control Including using lump sum.
- m. Staff availability or need for outside services included

62. Please attach your cost estimate. Verify that it includes the following items:

- a. Unit cost assumptions See attached.
- b. Contingency assumptions. See attached.

SIGNATURE PAGE

All relevant applicant agency and other agency staff with authority must attest to the design and cost estimates of the project, and that proper coordination and cooperation exists between all parties. Please attach additional signature pages as warranted.

Applicant agency staff signatures:

Project manager *Ofici*
Engineering *Ea B. Hentsinger*
Right of Way *Ea B. Hentsinger*
Environmental *Ea B. Hentsinger*

Other agency signatures (as required):

ODOT Highway *Mandy Puhney* *4/19/19*

ODOT Rail _____

TriMet *Kerry Agos-Palenuk, Director, Planning & Policy*

SMART _____

Utilities _____

Railroads _____

Other (please indicate) _____