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: Name, phone #, email Mark Lear, 503-823-7604, Mark.Lear@portlandoregon.gov
- 3. Funding category (check one):
 Active Transportation
 Freight
 Both
- 4. Project name. Cully/Columbia Intersection Improvements
- 5. Describe the project purpose. What problems or issues is the project intended to address?

Columbia Blvd is a key link in Portland's regional freight network, connecting major freight destinations to the freeway system and the rest of the region. The intersections of Columbia Blvd at Alderwood Rd and Cully Blvd are seeing increased traffic and trucking demand from the USPS facility and airport in recent years, causing congestion that impacts freight reliability as well as contributing to dangerous conditions for all road users. This project aims to enhance freight mobility and access and ease congestion by making it easier and safer to make turns on

and off Columbia Blvd. This project was identified as a priority transportation need in the 2006 Freight Master Plan, 2010 Airport Futures Plan and the 2012 Columbia Multimodal Corridor Study, to accommodate anticipated traffic growth associated with PDX Airport.

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? \square Yes \square No

7. What is the RTP Project ID #?

This project would complete project 10336 (Columbia & Cully Intersection Improvements). It would also include some project elements in 11804 (Cully to Columbia Connector) and connects to funded project 11570 (Columbia/Alderwood Intersection Improvements), with construction planned in summer/fall of 2020.

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) Columbia Blvd

Bicycle: Regional Bikeway

Pedestrian: Regional Pedestrian Corridor

☑ Freight: Road Connector

□ Transit: Click here to enter text.

9. List the project beginning and ending points. What specific streets/intersections are included in the project area?

NE Cully Blvd. (~400' S of NE Columbia Blvd to the intersection at Columbia Blvd. A concurrent (funded) project will be widening Columbia between Cully and Alderwood and constructing a multi-use path on one side of Alderwood.

10. Is the project included in an adopted local transportation safety plan or audit? X Yes \Box No Please describe.

This project would fill a small gap in the Columbia Blvd Pedestrian Improvements project, which is included in the Vision Zero project list, Transportation System Plan project list (#30004), and RTP list (#10341)

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?)

Local match will be provided by system development charge revenue in amount of \$1,500,000 and ODOT Rail safety funding in the amount of \$150,000, for a total local match of \$1,650,000. The local match funding is Certain. The estimated total cost of this project is \$5,084,193 and this grant request is for \$3,434,193.

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

We are requesting RFFA funding for 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.

The typical schedule would be: 2022—Preliminary Design and Final Design, 2023—Right-of-Way, and 2024—Construction. However, given the close connection between the Alderwood/Columbia signal (funded through a previous round of RFFA) and this proposed project, we will likely ask for Advance Construction or early allocation of construction funds to be able to combine the projects, aiming for construction in 2020 or 2021. Combining the project will reduce the impact to the travelling public and allow for more time and cost-efficient 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 and Alternatives Identification and Evaluation stages and has a signed engineer cost estimate and a defined scope. We have not done any survey or preliminary engineering.

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?

The funded Alderwood project is acquiring right-of-way along the north and south sides of Columbia Blvd between Cully and Alderwood. The proposed Cully project will have to acquire right-of-way at the southwest corner of Cully & Columbia. Right of way acquisition will be completed by the City of Portland following all federal processes during the Right of Way phase. Coordination with ODOT rail and Union Pacific Railroad has already begun in anticipation of the improved railroad crossing across Cully.

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?

The Traffic Impact Analysis in the 2010 Airport Futures Plan identified this project as a required mitigation to address capacity needs in response to growth in annual passenger trips at PDX Airport. This project was again identified in the 2012 Columbia Multimodal Corridor Study as a key conflict point for safety and mobility needs along the broader Columbia Corridor. In addition, traffic counts and analysis have been conducted, resulting in concept designs for the Cully/Columbia intersection and completed 30% designs for Columbia/Alderwood. Crash analysis and signal warrants have also been conducted. The result of these analyses was the recommendation to upgrade signals at each intersection with separated turning phases to minimize crash risk, as well as leading pedestrian signal phases, to reduce conflict between people walking and using motor vehicles. All of this information is in digital format.

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?

This project intersects with a Union Pacific railroad line. Part of the scope of this project is to provide an updated railroad crossing where Cully Blvd intersects with the rail line. Coordination work has already begun with ODOT rail and Union Pacific Railroad, and ODOT Rail supports the project since it addresses a documented safety concern.

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

Environmental permitting is unlikely to be necessary, 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?

This project addresses safety, freight movement, and congestion issues expressed by community members by upgrading existing signals and pedestrian crossings, adding left turn pockets, and providing safe dedicated space for people walking and biking. Both the surrounding neighborhoods and freight community have expressed for many years now that the backups onto Alderwood, Cully, and Columbia at this major pinch point have become detrimental to their daily lives and freight operations.

21. Which community partners are involved?

This project has gained support from many impacted community partners including the Portland Freight Committee, Columbia Corridor Association, PDX Airport Community Advisory Committee, the Cully Association of Neighbors, Verde, Living Cully, and Hacienda CDC.

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

The project will improve access to many of the employment centers along the Columbia Corridor, including the Portland Airport, the new US Postal Service facility, and numerous industrial and traded sector jobs. The residential neighborhood just south of this intersection is an Equity Focus Area, housing higher than citywide average concentrations of people of color and people with limited English proficiency. This project will improve access to opportunities for people walking, biking, taking transit, and driving between the residential neighborhood to the south and the jobs and services to the north. The community groups indicated in the previous question are all generally supportive of this project and would like to see it constructed soon.

Interagency Connections

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

There are no current bus lines or other jurisdictions that would be impacted by this project. However, Columbia serves as a vital connection to both I-5 and I-205, which serve traffic to and from Vancouver, WA. The only impact on TriMet could be on dead-heading buses going to their new bus base at NE 42nd & Columbia—however, there are alternate routes available during construction. While a transit line does not currently run on Columbia Blvd, TriMet's Service Enhancement Plan includes a change to line 11 that would direct it through the project area in the future. Capacity increases through this corridor would benefit this future transit service. TriMet has been briefed on this project and is generally supportive.

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.

This project crosses Union Pacific Railroad and project scope includes an improved crossing of the rail line. ODOT Rail has been briefed on this project and is generally supportive of this grant application. They will coordinate with PBOT on project design and construction if the project is funded and has promised to fund a portion of the local match because this railroad crossing has been identified as a safety risk. However, while they offered to contribute local match and write a letter of support, ODOT Rail declined to sign the signature page with this application because their policy is not to sign anything related to a project that has not been designed and has not undergone the formal ODOT Rail approval process.

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 where it intersects with railroad facilities. PBOT has been coordinating with UP Railroad and ODOT Rail. ODOT Rail supports the project and will coordinate on implementation but has declined to sign the signature page because it is their policy not to sign anything at such an early project stage. Union Pacific Railroad has also declined to sign the signature page, because it is their policy not to sign anything at such an early project stage.

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? \square Yes \square 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.

iii. PBOT always uses Uniform Act's guidelines for RW acquisition and is well staffed with individuals familiar with the process.

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. Private utilities located in City right of way are required to relocate at their own expense

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? This project is likely to meet the requirements for a Categorical Exclusion. As such, documentation will be prepared during project design.

e. Schedule General Schedule: 22 Planning and PE 23 Right of way 24 Construction; However, we may ask for Advance Construction to combine with the already-funded Alderwood signal because it would be more efficient to construct together.

- 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.

Most of the project elements in this scope address safety issues that currently exist in the project area. This project, combined with the funded Alderwood/Columbia project, will provide new signals and left turn pockets at two intersections on a High Crash Corridor. These signals and dedicated left turn phases will reduce risk of collision, both between motor vehicles and between motor vehicles and people walking and biking along the corridor. Leading pedestrian intervals will reduce risk of collisions between turning vehicles and people walking. Sidewalks on Cully and the south side of Columbia and a multi-use path on Alderwood and the north side of Columbia will provide safe access through these intersections to the surrounding neighborhood for people who are currently forced to walk and bike in the roadway with high-speed traffic. A new crossing of the rail tracks will also improve safety for all modes in this location, which has been identified by the railroad company as a high safety risk crossing.

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)

New sidewalks and multiuse paths will allow greater separation between pedestrians, cyclists, and motor vehicles, all who currently unsafely share an outside travel lane. Two new signals will include pedestrian crosswalks with leading pedestrian intervals that separate vehicle turning phases from pedestrian walk phases, greatly reducing crash risk. By providing updated signals with leading pedestrian intervals and new curb ramps at these locations, a few previously closed crosswalks will be opened as well. Upgraded lighting at crosswalks and along the roadway will also increase visibility of people using all modes. An upgraded railroad crossing on Cully will also reduce conflicts between all modes and rail. See Appendix C checklist for design elements.

31. 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.

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? N/A

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? \boxtimes Yes \square No Please indicate which Focus Area.

The neighborhood south of NE Columbia Blvd is within People of Color and/or Limited English Proficiency area.

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

Cully Park, La Clinica de Buena Salud, Villa de Clara Vista apartments, Villa de Suenos apartments are within ¼ mile of the project. Rigler and Scott Elementary schools (Title I) are both roughly 1 mile from the project

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?

- Low-Income Population: 8959 (PBOT Equity Matrix, nearby areas scoring 4 or 5 with annual household incomes < 54,000)
- Households with Limited-English Proficiency: 373 (per PBOT Equity Matrix)
- Non-White Population: 4783 (2010 Percent Communities of Color Census Data, per the census blocks within 1 mile of the project area)
- Senior Population: 1876; Youth Population: 4358 (2017 ACS, per census blocks within 1 mile of the project area)
- Persons with Disabilities: 2716 (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?

Today, these intersections pose a safety threat to people walking and biking between the residential neighborhood to the south and the jobs and services to the north. There are no safe

facilities for walking or biking and crossing at the existing intersections is dangerous. Standstill congestion at these intersections also makes it difficult for those who need to drive to get where they are going in a timely manner, and greatly impacts the regional freight network. By installing separated bike and pedestrian facilities, improved safe crossings, and adding additional turning vehicle capacity via dedicated turn lanes and signalization, this major pinch point in Portland's pedestrian, bike, motor vehicle, and freight network will be drastically improved.

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: 0. Injurious Crashes: 8. (Per ODOT 2012-2016 Crash Data) Two fatal crashes (1 pedestrian, 1 in a motor vehicle) have occurred on Columbia within ¼ mile of the project area since 2007.

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

Most of the project elements in this scope address safety issues that currently exist in the project area. This project, combined with the funded Alderwood/Columbia project, will provide new signals and left turn pockets at two intersections on a High Crash Corridor. These signals and dedicated left turn phases will reduce risk of collision, both between motor vehicles and between motor vehicles and people walking and biking along the corridor. Leading pedestrian intervals will reduce risk of collisions between turning vehicles and people walking. Sidewalks on Cully and the south side of Columbia and a multi-use path on Alderwood and the north side of Columbia will provide safe access through these intersections to the surrounding neighborhood for people who are currently forced to walk and bike in the roadway with high-speed traffic. A new crossing of the rail tracks will also improve safety for all modes in this location, which has been identified by the railroad company as a high safety risk crossing.

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)

Separated biking and walking facilities will remove conflicts between motor vehicles and people walking and biking along each of these roadways. Dedicated turn lanes and signals with leading pedestrian intervals will also separate motor vehicle movements from conflicting pedestrian, bike and vehicle movements, increasing predictability and safety. A crossing of the railroad will ensure that interactions between roadway users and rail operations are minimized.

System Completion

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

Columbia, Alderwood, and Cully are all high priorities on Portland Metro's freight, bicycle, pedestrian, and transit networks and these intersections currently pose a major barrier for all modes, both from a safety and efficiency perspective. This project will alleviate congestion for freight and motor vehicle travel, particularly on Columbia Blvd and Alderwood Rd, which are regional intermodal connectors in an employment area and industrial center. The crossing of a main rail line on Cully will improve operations of the rail line and safety of those crossing it. The sidewalks and multi-use path on Columbia (part of the already funded project) will help it serve its function as Regional Pedestrian Corridor.

All these streets serve important functions on the City of Portland pedestrian network, and adding sidewalks and paths to Cully, Columbia, and Alderwood will fill critical gaps in the Pedestrian Priority Network. Cully from Killingsworth to Columbia, Columbia between Cully and Alderwood, and Alderwood between Columbia and Cornfoot are identified as regional bikeways and as gaps in the RTP network. Combined, these projects will close roughly 75% of this gap, with a Portland Parks and Recreation project closing the remaining gap on Alderwood north to Cornfoot. While a transit line does not currently run on Columbia Blvd, TriMet's Service Enhancement Plan includes a change to line 11 that would direct it through the project area in the future. Capacity increases through this corridor would benefit this future transit service.

42. How will access to active transportation be improved? What specific barriers in addition to the network gaps identified above will the project eliminate?

There currently exists no way for a person walking or biking to safely get from the pedestrian and bike facilities on Cully, across Columbia, and up to the sidewalks and bike lanes further north on Alderwood at Cornfoot. This project would provide much-needed connections for these modes, allowing access from the residential neighborhood to the jobs and services north of Columbia.

Multimodal Travel, Mode Share, and Congestion

43. How will the project reduce transit delay and improve transit reliability?

There are currently no transit routes that run along these corridors at this location. When the line 11 eventually comes through this corridor, improved signals with transit signal priority capability and increased capacity through these intersections will be a huge benefit.

44. How does the project improve connections to transit and employment or residential sites/areas?

There currently exists no way for a person walking or biking to safely get from the pedestrian and bike facilities on Cully, across Columbia, and up to the sidewalks and bike lanes further north on Alderwood at Cornfoot. This project would provide much-needed connections for these modes, allowing access from the residential neighborhood to the jobs and services north of Columbia. While no transit service currently exists in this area, improved pedestrian facilities will make it possible for future service to exist along these roadways. 45. How will the project reduce vehicle trips or VMT (other than freight-related trips)?

While primarily a freight-focused project, this project does provide crucial connections in the pedestrian and bicycle networks, allowing residents in the Cully neighborhood to safely access jobs and services north of and along Columbia Blvd that were previously inaccessible via this route.

46. How does the project reduce the need for throughway expansion?

This project gives traffic to and from the airport and industrial areas more options to get on and off Columbia Blvd or go north/south via Alderwood and Cully. This reduces pressure on Airport Way and I-205 interchange, by adding more connections to the network. This is the reason why this project was identified as a required capacity mitigation in the Airport Futures Plan based on the growth in number of passengers at PDX.

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 asphalt, 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.

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 pair of intersections is currently one of the biggest sources of congestion for freight movement in this area, both along Columbia and to and from the airport and new USPS facility on Alderwood. The funded Alderwood project will add two new through vehicle lanes on Columbia, dedicated left turn lanes traffic turning from Columbia onto Alderwood and Cully, and a dedicated right turn lane from Alderwood to Columbia westbound, easing east/west and north/south congestion. The Cully/Columbia project proposes a signal at Cully, as well as dedicated left and right turning lanes to flush traffic backed up at this intersection. The new signals will also have a significant impact on easing congestion and making freight operations work more smoothly along all three corridors.

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, however, is in the Freight Master Plan and the Portland Freight Committee has supported it many times throughout the years, including when the Alderwood/Columbia project was funded.

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?

Freight traffic using Cully to get on and off Columbia have to wait a very long time to find a gap to turn right or left, leading to a lack of reliability and increase in the risk of crashes, which also cause delay. This delay can be observed both in the morning and afternoon peak hours, with queues of vehicles lined up several hundred feet waiting to turn onto Columbia from both Alderwood and Cully. A new signal and turn lanes at Cully Blvd will flush this turning traffic and allow safer, more efficient movement for freight and other vehicles along the corridor.

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 primarily serves the Cully neighborhood and the Columbia Corridor employment area, including a major FedEx facility, the Air National Guard, the US Post Office Distribution Center, the Cascade Station retail district, and the PDX passenger terminal and air freight facilities.

Area Jobs in Target Industries:

- Athletic & Outdoor Jobs: 109
- Clean Tech Jobs: 414
- Computer & Electronics Jobs: 15
- Health Science & Technology Jobs: 33
- Metals & Machinery Jobs: 331
- Software & Media Jobs: 205
- Total: 1107

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

This project is in an area with many industrial clean tech employers. By improving the flow of general and freight traffic through this part of the city, this project will improve efficiency and resiliency for these industries.

Project Leverage

54. How does this project leverage other funding sources?

This project leverages local funding sources include system development charges (\$1.5M) and ODOT Rail safety funding (\$150k) to provide the local match, amounting to \$1,650,000. The project to widen Columbia Blvd and add capacity/a signal at Alderwood is already funded, slated for 2020 construction. If funded, our hope is to advance construct to be able to build both signals at the same time, bringing significant cost savings through economies of scale.

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?

Columbia Blvd is a regional priority for fiber communications infrastructure. The new signal at Cully would include modern detection and communication technology, advancing TSMO goals by providing the basic infrastructure to leverage future TSMO work (Columbia Blvd ITS project) and help this specific set of intersections work better to manage traffic. This technology could also include freight and transit signal priority, if desired in the future.

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

Yes, this project is partially on the Regional Emergency Transportation Network (along NE Columbia Blvd.) Improving vehicle flows through these intersections will increase emergency response time. New signals and infrastructure will also be more able to withstand any other natural disasters that may occur.

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 2018 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
- I. 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 signatu	ires:	
Project manager	Obji	~
Engineering	Cea B. Hustinger	-
Right of Way	UaB. Durtserger	
Environmental	Tea /5. Dunbuger	-
Other agency signatures (as re	equired):	
ODOT Highway		
ODOT Rail		
TriMet	Kerry ayos - Palenuk, Director, Plan	ing & Polic
SMART		U.
Utilities		
Railroads		
Other (please indicate)		