

Active Transportation & Complete Streets Projects

Name of Project Designing W Highland Drive/SW Pleasant View Drive/SE 190th Avenue: Powell Boulevard to Cheldelin Road

(project name will be adjusted to comply with ODOT naming convention if necessary)

Project application

The project application provides in depth process, location and project definition details and serves as the nomination form for project funding consideration. **Project applications should be kept to 12 pages total per project.** The application form is available electronically at: http://www.oregonmetro.gov/rffa. Please complete the following:

Project Definition

Project Description

- Facility or area: street(s), intersection(s), path or area. W Highland Drive/SW Pleasant View Drive/SE 190th Avenue
- Beginning facility or milepost. Powell Boulevard/Highway 26
- Ending facility or milepost. Cheldelin Road
- Provide a brief description of the project elements: This project will complete project development for a vital north/south arterial between the Pleasant Valley Plan Area and Powell Boulevard/Highway 26.
- City (ies). City of Gresham
- County(ies). Multnomah County

Base project information

Corresponding RTP project number(s) for the nominated project.

RTP Project Numbers:

- 1. 10431: Highland/190th Road from 200' south of SW 11th and ending at the intersection of Pleasant View Dr./SE 190th and Butler. Reconstruct and widen street to five lanes with sidewalks and bike lanes. Widen and determine the appropriate cross-section for Highland Drive and Pleasant View Drive from Powell Boulevard to 190th Ave to support the employment area.
- 2. 10533: 190th from 30th to Cheldelin, improve existing road to major arterial standards and signals at Giese, Butler, Richey and Cheldelin to support the Pleasant Valley Town Center.
 - Staff has included project development to Powell Boulevard to ensure consistent design from Powell Boulevard south to Cheldelin Road.
- Attach a completed Public Engagement and Non-discrimination checklist (Appendix A).

Public Engagement and Non-Discrimination checklist is attached as Attachment A.

Purpose and need statement (The purpose and need statement should address the criteria as
they apply to the project, for example: increase non-auto trip access to essential services in the
X town center, particularly for the high concentration of Y and Z populations in the project area).

This project will complete project development for W Highland Drive/SW Pleasant View Drive/SE 190th Avenue: Powell Boulevard to Cheldelin Road. This is a critical north/south corridor for East Multnomah County between Highway 212 and I-84. It is needed to support development of the Pleasant Valley Plan Area, Happy Valley and Damascus and goals to provide safe, multimodal transportation options.

Attach a completed Active Transportation Design checklist (Appendix C).

Active Transportation Design checklist is included as Attachment B.

 Description of post implementation measurement of project effectiveness (Metro staff is available to help design measurement methodologies for post-construction project criteria performance).

The City of Gresham will apply for funding to acquire needed right-of-way and construct the design upon completion. Project effectiveness will be measured by award of funding and successful project build-out.

Project Cost and Funding Request Summary

Attach a completed Cost Methodology workbook (Appendix E) or alternative cost methodology.
Describe how the project cost estimate was determined, including details on project readiness
and ability for project funding to be obligated within the 2019-21 timeframe. Reference
availability of local match funds, status of project development relative to the requirements of
federal-aid projects, and indicators of political and community support

Cost Methodology Workbook is included as Attachment C.

The project cost estimate was determined utilizing the Cost Methodology workbook. Costs are based on 2016 dollars. The City is ready for obligation of funds and project development during the 2019-2021 timeframe. Local match funds of 25% will be sourced from City of Gresham Transportation System Development Charge revenues. City Council is supportive of this project and advanced it as a priority for the MTIP/Flexible Funds program during its June 7, 2016 Council meeting.

Total project cost

\$11,316,072 for project development – the scope of this grant application

Current estimate of total project cost, including right-of-way and construction, is \$66,364,675.

RFFA funding request by project phase:

Project Development \$8,487,054

Local match or other funds

25 percent match (\$2,829,018) provided by Gresham System Development Charges

Map of project area

• Provide a map of the project consistent with GIS shapefile standards found in Appendix B

A map of the project consistent with the GIS shapefile standards is included as Attachment D.

Project sponsor agency

- Contact information for: Katherine Kelly; 503-618-2110; Katherine.Kelly@GreshamOregon.gov
- Application lead staff: Katherine Kelly
- Project Manager (or assigning manager): Jeff Shelley, PE
- Project Engineer (or assigning manager): Jeff Shelley, PE
- Describe the agencies record in delivering federal aid transportation projects on time and budget or whether the lead agency has failed to deliver a federal aid transportation project and if so, why.

The City of Gresham has delivered several federal-aid projects in recent years, providing project design, consultant selection, advertisement bid & award, construction surveying, construction inspection, and other construction administration functions. Recently completed projects include:

- Hood Ave: This project included construction of curb extensions, stormwater treatment facilities and pedestrian scale lighting in downtown Gresham.
- NE 172nd Avenue/HB Lee Middle School: This project constructed sidewalk and ADA improvements around HB Lee Middle School as part of the Safe Routes to School program.
- 190th Avenue: This project constructed additional travel lanes, turn lanes and bike lanes, a new traffic signal and storm water pre-treatment facilities on Pleasant View Drive (190th Ave) between Highland Drive to Willow Parkway
- Wy'East Way Path (aka "Max Path"): This project, constructed a bicycle/pedestrian path parallel to the light rail line between the Ruby Junction Station and Cleveland Station light rail stations.

Each of these projects was delivered within their respective budgets.

In addition to these projects, the following projects are either upcoming or in various stages of development and are on track and within budget:

- Cleveland Avenue (Powell to Stark) Phase 1: This project including project design from Stark to Powell and complete street construction between Burnside and Powell
- East Metro Connections ITS: Update traffic signal hardware and communications; install changeable message sign

- Sandy Boulevard Improvement Project: Construction of multimodal, freight access and mobility facilities, NE 181st Avenue to East Gresham City Limit
- Hogan Road: Operational improvements, signal upgrades, bicycle and pedestrian improvements, NE Burnside to East Powell Boulevard
- Describe how the agency currently has the technical, administrative and budget capacity to deliver the project, with an emphasis on accounting for the process and requirements of federal aid transportation projects.

Through the Oregon Department of Transportation, Active Transportation Section, the City of Gresham has received Local Agency Certification in the Advertise, Bid and Award phase of project delivery. Currently, the City is seeking full certification from ODOT in the following additional project delivery areas:

- Design
- Construction Contract Administration

Through this process, the City has developed a detailed set of project delivery guides, QA/QC guidelines, and boilerplate contract documents to ensure effective delivery of federal aid transportation projects. Technically, these documents are intended to guide current staff and educate future staff regarding federal aid project delivery and compliance.

In its efforts to become fully certified to own and manage federal projects, the City of Gresham is currently going through a process with ODOT to review City of Gresham's processes and procedures to verify compliance with federal and state laws and rules. Under conditional certification, City of Gresham is operating as a certified agency, but with increased oversight by ODOT to ensure compliance with all agreements and standards.

The City has engineering, planning and administrative staff qualified and experienced in delivering federal aid projects including project design, public involvement and contract management.

Gresham has a full-service finance department and regularly undergoes both internal and external audits. The City's budget capacity includes all required staff.

Highest priority criteria

1. What communities will the proposed project serve? What are the estimated totals of low-income, low-English proficiency, non-white, elderly and young, and persons with disabilities populations that will benefit from this project, and how will they benefit?

This project will serve communities with higher than average low-English proficiency and young when compared to the Citywide and regional population. More specifically, per the Regional Equity Atlas and TriMet ridership data, the percentages of equity communities this project will serve are:

	W Highland Drive/SW Pleasant View Drive/SE 190th Avenue Average	Gresham Average	Region Average
Low Income	8.07%	12.96%	8.90%
Low English Proficiency	1.10%	0.80%	0.83%
Non-White	14.60%	27%	15.30%
Elderly	6.80%	6.40%	6.60%
Young	25.10%	23.30%	13%
Persons With Disabilities	22	99	168

Of the 6 communities identified within the equity criteria, 2 are higher in numbers than average when compared to the region.

W Highland Drive/SW Pleasant View Drive/SE 190th Avenue and transitions to 182nd/181st Avenue to the north and 172nd Avenue to the south is an important north/south arterial, connecting the Pleasant Valley Plan Area and Happy Valley/Damascus/Clackamas County to I-84. It is planned as a Standard Arterial and a critical transportation corridor for East Multnomah and Clackamas Counties but currently is a two- to three-lane road between Powell Boulevard and Cheldelin Road. The Regional Active Transportation Plan designates W Highland Drive/SW Pleasant View Drive/SE 190th Avenue as a Regional Bikeway and Regional Pedestrian Corridor and identifies existing bicycle and pedestrian network gaps the majority of this corridor. This critical gap in the active transportation network lacks both continuous, accessible bicycle and pedestrian facilities and alternative routes. Travel as a pedestrian or bicyclist within this rurally built road is not within a safe environment. As such, W Highland Drive/SW Pleasant View Drive/SE 190th Avenue acts as a barrier for the area it serves as communities with higher than average numbers of low-English proficiency and young face a barrier to travel north/south. This project addresses that barrier by designing continuous obstruction-free and buffered sidewalks, bike lanes and ADA compliant curb ramps from Powell Boulevard to Cheldelin Road. Having a design in-place will ensure the project build-out follows planning guidance from the Active Transportation Plan.

2. What safety problem does the proposed project address in an area(s) with higher-than-average levels of fatal and severe crashes? How does the proposed project make people feel safer in an area with high walking and bicycling demand by removing vehicle conflicts?

The Regional Active Transportation Plan designates W Highland Drive/SW Pleasant View Drive/SE 190th Avenue as a Regional Bikeway and Regional Pedestrian Corridor and identifies existing bicycle and pedestrian network gaps the majority of this corridor.

Currently, W Highland Drive/SW Pleasant View Drive/SE 190th Avenue between Powell Boulevard and Cheldelin Road is a two- to three-lane road and lacks continuous, accessible sidewalks and bicycle lanes and the amenities to create an inviting bicycle and pedestrian corridor. This corridor

experienced 108 non-fatal crashes, all modes included, between 2010 and 2014. Of these crashes 5 included crashes with a bicyclist or pedestrian. The East Metro Connections Plan identifies widening and construction of curbs, gutters, sidewalks and bike lanes as a Phase II priority. This cannot be achieved without project development. Designing full build-out of W Highland Drive/SW Pleasant View Drive/SE 190th Avenue will create a shovel ready project and move this critical corridor closer to better serving the region and local residents. The design will define users' space as a pedestrian, bicyclist and vehicle/freight driver as well as remove vehicle conflicts and ensure people of all ages and abilities have access to a safe and accessible travel environment.

Furthermore, W Highland Drive/SW Pleasant View Drive/SE 190th Avenue is also designated as a Road Connector on the Regional Freight Network and a critical north/south connector serving access and mobility by the East Metro Connections Plan. The East Metro Connections Plan states, "Leveraging Clackamas County's 172nd/190th Corridor Project, targeted improvements to the road network in Pleasant Valley along Highland/190th will create opportunity for economic and residential development." The SE 172nd Avenue/190th Drive Corridor Management Plan cites population growth within the Pleasant Valley Plan Area, Damascus and the western Clackamas County sub-region of over 15,000 new households and 9,800 jobs by 2035, "which cannot be achieved without improvement to transportation facilities in the corridor and connection of SE 172nd Avenue with SE 190th Drive. Thoughtful project design of the northern portion of this corridor, W Highland Drive/SW Pleasant View Drive/SE 190th Avenue, at this phase of burgeoning development in Pleasant Valley is an opportunity to achieve ultimate build-out of a corridor that is proactively designed to safely accommodate and encourage active transportation modes.

3. What priority destinations will the proposed project will serve? How will the proposed project improve access to these destinations?

This 2.2 mile corridor will connect jobs and housing. It is the main arterial through the Pleasant Valley Plan area and links directly with 172nd Avenue in Happy Valley. Both Pleasant Valley and Happy Valley serve as key residential areas mid-point between Gresham's Rockwood Area and northern industrial area and the Clackamas County Sunnyside Road employment area. The East Metro Connections Plan identifies this corridor as a critical access and mobility investment package. W Highland Drive/SW Pleasant View Drive/SE 190th Avenue extends south beyond the Multnomah County boundary into Clackamas County and is planned as a five lane arterial between Sunnyside Road and I-5, reinforcing the regional significance of this road.

4. How will the proposed project support the existing and planned housing/employment densities in the project area?

This project will support existing and planned housing and employment densities of the Pleasant Valley Plan Area and greater Happy Valley, Damascus and Gresham areas. Pleasant Valley is planned as a new, urban community with the goal of creating a "create a quality living environment, with a sense of place that is unique to Pleasant Valley. To achieve this goal, the Plan District will implement compact mixed-use neighborhoods, a town center, neighborhood edges and centers, a variety of housing options, transportation alternatives, pedestrian friendly urban design

and the integration of the natural environment into the design of the community." The 1,532 acre area is planned for an estimated housing capacity of 5,000 dwellings and employment capacity of 5,000 jobs. More regionally, the Pleasant Valley Plan Area, Damascus and the western Clackamas County sub-region is anticipated to contain over 15,000 new households and 9,800 jobs by 2035. This project will support this regional growth within the context of a safe and inviting transportation corridor.

Higher priority criteria

5. How does the proposed project complete a gap or improve a deficiency in the Regional Active Transportation network? (See Appendix 1 of the Regional ATP: Network Completion, Gaps and Deficiencies).

This project designs a solution to a major Regional Active Transportation Plan gap and eventual build-out will remove a major barrier to people walking, biking and taking transit along this spine in the active transportation network. This corridor is identified in the ATP as a Regional Bikeway and Regional Pedestrian Corridor. The ATP also identifies existing bicycle and pedestrian network gaps along the majority of this corridor.

The proposed project fills this gap as recognized by the Metro Active Transportation Plan:

Routes with existing facilities and gaps are shown on the Existing Regional Bicycle Network Map at the end of this chapter. However, some existing facilities need to be improved to accommodate higher volumes of bicycle riders or to increase safety and level of comfort to attract more bicycle riders and prevent crashes with autos. (ATP chapter 7)

Routes with existing facilities and gaps are shown on the Existing Regional Pedestrian Network Map at the end of this chapter. However, some existing facilities, such as narrow sidewalks, sidewalks without curb ramps, inadequate or missing lighting, or unprotected crossings should be improved to increase safety and level of comfort of pedestrians and prevent crashes with autos. (ATP Chapter 8)

This project will design a safe and inviting transportation corridor for the spine of the transportation network within the Pleasant Valley Area and will provide bicycle and pedestrian connections to the Springwater Corridor Trail.

The design to W Highland Drive/SW Pleasant View Drive/SE 190th Avenue proposed with this project will ensure ultimate build-out of a quality transportation corridor that fills in this major gap in the active transportation network.

Its build-out as a complete street and locally will connect the Pleasant Valley Plan Area with the Springwater Corridor trail and will connect south into east Clackamas County and north into the Gresham commercial district at Highland Drive/182nd Avenue and Powell Boulevard and, further north, the Rockwood area and I-84. This project meets the vision of the Active Transportation Plan by 1) filling a 2.2 mile gap in the active transportation network, 2) accommodating higher volumes of bicycle riders, 3) increasing the safety and level of comfort to attract more bicycle riders and

prevent crashes with autos, and 4) increasing safety and level of comfort of pedestrians and prevents crashes with autos.

Furthermore, the SE 190th Avenue project is identified on Gresham's 2035 Transportation System Plan (TSP) and the Metro Regional Transportation Plan (RTP). The TSP identifies projects #85 as SE 190th Drive (Pleasant View Drive and Highland Drive) – 11th Street to Cheldelin Road, construct to minor arterial cross section, as a 20-year project. This grant application notes a typo in the City's TSP. The City's functional classification map designates W Highland Drive/SW Pleasant View Drive/SE 190th Avenue as a "standard arterial," not a "minor arterial" as indicated in the TSP project list text. The project extents for this grant application are from Powell Boulevard to Cheldelin Road in order to ensure design consistency along this corridor.

The RTP identifies two projects, #10431 and #10533 for this corridor as listed above.

6. What design elements of the proposed project will lead to increased use of Active Transportation modes by providing a good user experience/increasing user comfort? What barriers will be eliminated or mitigated?

This proposed project to design a complete street will include the active transportation elements needed to create a good user experience and increase user comfort and, as a result, encourage active transportation modes. This project will provide the design to complete a critical gap in the active transportation network. This project promotes a healthy community by creating a safer and accessible bicycle and pedestrian environment along an auto-centric and substandard arterial.

More specifically, this project includes 17 design elements listed in the "Active Transportation Design Guidelines" (checklist is included in this application packet as Attachment B). The design elements featured are numerous since the project intent is to bring a rural road to urban major arterial standards. This project offers the opportunity to design a major transportation corridor with the active transportation modes at the forefront.

7. How does the proposed project complete a so-called 'last-mile' connection between a transit stop/station and an employment area(s)?

This project has significant potential to work towards completing a 'last-mile' connection between transit stops at Highland Drive/Powell Boulevard as well as stops along Highland Drive and SW 14th Drive with the Pleasant Valley Plan Area, a future destination for 5,000 jobs and 5,000 households. Transit routes 9 and 87 are currently on Powell Boulevard, Highland Drive and SW 14th Drive. Heading south on W Highland Drive/SW Pleasant View Drive/SE 190th Avenue as a bicyclist or pedestrian currently requires conflicts of roadbed space with vehicles since bike lanes and sidewalks are not continuously in place. Multimodal access to the Pleasant Valley Plan Area will be critical as this area develops and timing of this project funding is ideal to complete project design as this area is experiencing significant recent development and increase in traffic volumes.

Priority criteria

8. How the public will be engaged relative to the proposed project? Include description of engagement during project development and construction, as well as demand management efforts to increase public awareness and utilization of the project post-construction. (Metro Regional Travel Options staff is available to help design an effective and appropriate level of education and marketing for your project nomination).

This project has been identified as a critical corridor that needs to be designed and built through three planning efforts that included robust community engagement: 1) development of the Pleasant Valley Concept Plan, 2) East Metro Connections Plan and 3) update of the City's Transportation System Plan. Additionally, City Council confirmed this project as a critical project for RFFA funding at their June 7th public meeting.

The City of Gresham adheres to the following principles, adopted by City Council, when engaging the public:

- Value active citizen involvement as essential to the future of our community.
- Respect and consider all citizen input.
- Encourage effective outreach efforts that reflect the city's rich diversity.
- Promote communications and processes that encourage citizen participation and produce results.
- Involve citizens early in policy development and planning projects.
- Respond in a timely manner to citizens' input and respect all perspectives and insights.
- Coordinate City outreach and involvement activities to make the best use of citizens' time and efforts.

When this project enters into project development, Gresham staff will engage the public, particularly area residents, businesses and jurisdictional partners in accordance with these principles to garner feedback on the design and area needs/concerns regarding transportation along the corridor. Engagement will include public meetings, site visits, conversations with business owners and residents and a project webpage. No land use approval processes are required.

Gresham is actively engaged in Metro's Regional Travel Options marketing subcommittee and has both proven experience and success in conducting outreach regarding the use of non-auto modes. Gresham will utilize this experience and success to increase public awareness and use of the project once this project turns into a built reality. Monitoring of travel mode change is supported through work with Metro.

9. What additional sources of funding, and the amounts, will be leveraged by an investment of regional flexible funds in the proposed project?

The City of Gresham will match \$2,829,018 towards funding this project. Additionally, this project leverages STIP Key #15601, 190th Dr: Pleasant View/Highland – Willow Parkway. The STIP project added a turn lane and bike lanes on 190th Avenue between SW Pleasant View Drive and Willow Parkway. The funding source is MTIP and total amount is \$1,485,734 and total project cost is \$1,320,650.

10. How will the proposed project provide people with improved options to driving in a congested corridor?

The Atlas of Mobility Corridors identifies the Fairview/Wood Village/ Troutdale to Damascus mobility corridor (Corridor 24). More specifically, it states:

The Fairview/Wood Village/ Troutdale to Damascus mobility corridor encompasses the arterial and collector streets that provide connections to I-84 and US 26, as well as transit service and bicycle routes that support movement in and through the corridor. SE 223rd, SE 238th/242nd/Hogan and SE 257th/Kane provide intra- and interregional travel between Gresham and central Oregon. Although the corridor has a well-connected arterial and collector street grid, the local street network is generally discontinuous with many cul-desac and dead-end streets.

While this corridor is located outside of the "Corridor Analysis Zone," the East Metro Connections Plan (EMCP) was the first mobility corridor refinement plan to come out of the 2035 Regional Transportation Plan (EMCP). The intent of EMCP was to study and develop a plan for travel between Highway 26/Powell Boulevard and I-84 in recognition of the importance of this corridor for freight, commercial, commute and recreation travel and its plan area boundary included W Highland Drive/SW Pleasant View Drive/SE 190th Avenue. EMCP adopted proposed investments that, "emerged through prioritization of over 200 transportation projects evaluated and target enhancements with a focus on: 1. North/south Connections; 2. Downtowns and employment areas; 3. Regional mobility." W Highland Drive/SW Pleasant View Drive/SE 190th Avenue from Powell Boulevard to Cheldelin is identified as "182nd/190th Connections to Clackamas County" Access and Mobility Investment Package. The EMCP project list includes the following as a Phase II project, "Complete arterial improvements along Highland/190th and Pleasant View to Clackamas County line; coordination with 172/190th Corridor Plan." More specifically, per EMCP, "Leveraging Clackamas County's 172nd/190th Corridor Project, targeted improvements to the road network in Pleasant Valley along Highland/190th will create opportunity for economic and residential development. CATALYST PROJECTS: Widening of Highland/190th." Per findings from the SE 172nd Avenue/190th Drive Corridor Management Plan:

- The lack of a local street network, enhanced transit facilities and services, and a fully interconnected network of pedestrian and bicycle facilities within the SE 172nd Avenue/190th Drive Corridor prohibits the density, form, and character of development anticipated in regional and local plans.
- Without a continuous north-south sub-regional corridor to connect OR 212/224 with I-84, north-south travel demand will continue to depend on the I-205 as well as other north-south arterial corridors in the east Portland region. The Metro travel demand model indicates that a continuous SE 172nd Avenue/SE 190th Drive corridor will attract approximately 22,000 daily trips in 2035.
- The existing SE 172nd Avenue/SE Foster Road, SE Tillstrom Road/SE Foster Road, and SE 190th Drive/SE Tillstrom Road intersections have inadequate capacity to accommodate projected 2035 peak period travel demands.

- Development along and between the SE 172nd Avenue and SE 190th Drive corridors is imminent. Identification of the future footprint of these two roadways and their potential connection is necessary to preserve and obtain right-of-way and avoid the preclusion of this connection in the future.
- There is a need to develop a well-connected, multimodal transportation system that meets the land use needs that arise from planned growth in Damascus, Happy Valley, the Pleasant Valley Plan Area and Gresham, and growth of other sub-regional north-south travel demands between I-205 and US 26 to the year 2035.

Current traffic volumes along this corridor are:

- SW Highland Drive, segment from Powell to 11th, is 15,022 AADT (2010)
- SE 190th Drive, segment from Butler to Richey, is 6,847 AADT (2010)
- SW Pleasant View Drive, segment from Highland to Butler, is 10,847 AADT (2014)

This corridor is not currently constructed to manage high traffic volumes and congestion will occur if it is not built-out to its planned five-lane cross-section. This project will provide an alternative within a corridor that currently depends on I-205 and other congested corridors within east Portland. Additionally, this project will ensure targeted improvements to the W Highland Drive/SW Pleasant View Drive/SE 190th Avenue corridor build-out this 2.2 mile corridor consistently and to a standard that meets design guidelines within the Active Transportation Plan.

Process

 Describe the planning process that led to the identification of this project and the process used to identify the project to be put forward for funding consideration. (Answer should demonstrate that the process met minimum public involvement requirements for project applications per Appendix A)

The W Highland Drive/SW Pleasant View Drive/SE 190th Avenue project has been identified as a priority project since Gresham adopted the Pleasant Valley Plan Area Concept Plan in 2002 with a goal to "Provide Transportation Choices." The 2002 Concept Plan was developed through a public process that included stakeholder interviews, a steering committee, an advisory group, a Pleasant Valley mailing list, community forums, early notice flyer, newsletters, press releases, website, speaking engagements, Planning Commission meetings, focus sessions, area tours and a portable display and publicly noticed public hearings before the City's Planning Commission and Council. Gresham's 2035 TSP, which updated the City's 2002 TSP through a robust public engagement effort, includes the Pleasant Valley Plan Area and its transportation projects and identifies the W Highland Drive/SW Pleasant View Drive/SE 190th Avenue improvements as a 20-year project.

Furthermore, City Council advanced this project as a priority for the MTIP/Flexible Funds program during its June 7, 2016 Council meeting. That public meeting had public notice and comment opportunities per the requirements of Appendix A. Continued public involvement will meet the requirements of Appendix A.

Describe how you coordinated with regional or other transportation agencies (e.g. Transit, Port,
ODOT, Metro, Freight Rail operators, ODOT Region 1, Regional Safety Workgroup, and Utilities if
critical to use of right-of-way) and how it impacted the project location and design.

Gresham staff coordinated with the East Multnomah County jurisdictional partners and Metro throughout the development of the East Metro Connections Plan. That planning effort resulted in the prioritization of W Highland Drive/SW Pleasant View Drive/SE 190th Avenue as a critical north/south corridor for access and mobility. Gresham staff will continue to coordinate with jurisdictional partners, ODOT and Metro throughout the design of this critical project.

ATTACHMENT A Public Engagement and Non-discrimination checklist

Public engagement and non-discrimination certification Regional flexible funds 2019 -21

Background and purpose

Use of this checklist is intended to ensure project applicants have offered an adequate opportunity for public engagement, including identifying and engaging historically underrepresented populations. Applications for project implementation are expected to have analyzed the distribution of benefits and burdens for people of color, people with limited English proficiency and people with low income compared to those for other residents.

The completed checklist will aid Metro in its review and evaluation of projects.

Instructions

Applicants must complete this certification, including a summary of non-discriminatory engagement (see Section B), for projects submitted to Metro for consideration for 2019 -21 regional flexible funding.

Project sponsors should keep referenced records on file in case of a dispute. Retained records do not have to be submitted unless requested by Metro.

Please forward questions regarding the public involvement checklist to regional flexible funds allocation project manager Dan Kaempff at daniel.kaempff@oregonmetro.gov or 503-813-559.

1. Checklist

Transportation or service plan development

	☐ At the beginning of the agency's transportation or service plan, a public engagement plan was developed to encourage broad-based, early and continuing for public involvement trained records: public engagement plan and/or procedures
	sponse: Gresham staff prepared a public involvement plan at the beginning of its
Tro	ansportation System Plan (TSP) update in September 2010. The plan was developed in
aci	cordance with the City's citizen engagement plan and included a variety of engagement
	rategies throughout every phase of the TSP update.

limited English proficient and low-income populations, disabled, seniors and youth in order to include them in engagement opportunities.

Retained records: summary of or maps illustrating jurisdiction-wide demographic analysis **Response:** Chapter 2, Section 4 of Gresham's TSP contains the environmental justice analysis done for the TSP update.

- ✓ □ Public notices included a statement of non-discrimination (Metro can provide a sample).
 Retained records: public engagement reports including/or dated copies of notices
 Response: All public notices included a statement of non-discrimination.
 ✓ □ Throughout the process, timely and accessible forums for public input were provided.
 Retained records: public engagement reports including/or descriptions of opportunities for ongoing engagement, descriptions of opportunities for input at key milestones, public meeting records, online or community survey results
 Response: Each phase of the TSP update included substantial opportunities for public involvement utilizing a variety of involvement strategies.
- ✓ ☐ Throughout the process, appropriate interested and affected groups were identified and contact information was maintained in order to share project information, updates were provided for key decision points, and opportunities to engage and comment were provided. Retained records: public engagement reports including/or list of interested and affected parties, dated copies of communications and notices sent, descriptions of efforts to engage the public, including strategies used to attract interest and obtain initial input, summary of key findings; for announcements sent by mail or email, documented number of persons/groups on mailing list Response: Staff maintained contact information of interested persons/groups and notified them as key decision points and opportunities to engage/comment arose.
- ✓ ☐ Throughout the process, focused efforts were made to engage underrepresented populations such as communities of color, limited English proficient and low-income populations, disabled, seniors and youth. Meetings or events were held in accessible locations with access to transit. Language assistance was provided, as needed, which may include translation of key materials, using a telephone language line service to respond to questions or take input in different languages and providing interpretation at meetings or events.

Retained records: public engagement reports including/or list of community organizations and/or diverse community members with whom coordination occurred; description of language assistance resources and how they were used, dated copies of communications and notices, copies of translated materials, summary of key findings

Response: The City was a partner in Multnomah County's "Communities Putting Prevention to Work" grant, awarded by the Center for Disease Control and Prevention, at the same time as the TSP update. This grant provided additional resources and community partners for a more focused effort to engage underrepresented populations.

✓ □ Public comments were considered throughout the process, and comments received on the staff recommendation were compiled, summarized and responded to, as appropriate. Retained records: public engagement reports or staff reports including/or summary of comments, key findings and final staff recommendation, including changes made to reflect public comments Response: Staff prioritized responses to public comment throughout the TSP update.
 ✓ □ Adequate notification was provided regarding final adoption of the plan or program, at least 15 days in advance of adoption, if feasible, and follow-up notice was distributed prior to the adoption to provide more detailed information. Notice included information and instructions for how to testify, if applicable. Retained records: public engagement reports or final staff reports including/or dated copies of the notices; for announcements sent by mail or email document number of persons/groups on mailing list Response: Adequate notification was provided as described.
Project development This part of the checklist is provided in past tense for applications for project implementation funding. Parenthetical notes in future tense are provided for applicants that have not completed project development to attest to ongoing and future activities.
 ✓ □ At the beginning of project development, a public engagement plan was (is budgeted to be) developed to encourage broad -based, early and continuing opportunity for public involvement. Retained records: public engagement plan and/or procedures
✓ ☐ At the beginning of project development, a demographic analysis was (is budgeted to be) completed for the area potentially affected by the project to understand the location of RFFA communities of color, limited English proficient and low-income populations, disabled, seniors and youth in order to include them in engagement opportunities. **Retained records: summary of or maps illustrating demographic analysis**
✓ □ Throughout project development, project initiation and requests for input were (will be) sent at least 15 days in advance of the project start, engagement activity or input opportunity. Retained records: public engagement reports including/or dated copies of notices
 ✓ □ Throughout project development, public notices included (will include) a statement of non-discrimination. Retained records: public engagement reports including/or dated copies of notices

✓	☐ Throughout project development, timely and accessible forums for public input were (will be) provided.
ong	tained records: public engagement reports including/or descriptions of opportunities for going engagement, descriptions of opportunities for input at key milestones, public meeting ords, online or community survey results
dat inc	Throughout project development, appropriate interested and affected groups were (will be) identified and contact information was (will be) maintained in order to share project information, updates were (will be) provided for key decision points, and opportunities to engage and comment were (will be) provided. *tained records: public engagement reports including/or list of interested and affected parties ted copies of communications and notices sent, descriptions of efforts to engage the public, luding strategies used to attract interest and obtain initial input, summary of key findings; for nouncements sent by mail or email, documented number of persons/groups on mailing list
	Throughout and with an analysis at the end of project development, consideration was (will be) given to the benefits and burdens of the project for people of color, people with limited English proficiency and people with low income compared to those for other residents, as identified through engagement activities. *tained records:* staff reports including/or description of identified populations and ormation about benefits and burdens of the project for them in relation to other residents;
pe Sui	There was a finding of inequitable distribution of benefits and burdens for people of color, ople with limited English proficiency and people with low income bmitted records: for a finding of inequitable distribution of benefits and burdens, attach alysis, finding and documentation justifying the project and showing there is no less criminatory alternative.
coi	Public comments were (will be) considered throughout project development, and comments received on the staff recommendation were (will be) compiled, summarized and responded to, as appropriate. tained records: public engagement reports or staff reports including/or summary of mments, key findings and final staff recommendation, including changes made to reflect blic comments
Re	Adequate notification was (will be) provided regarding final adoption of the plan, at least 15 days in advance of adoption, if feasible, and follow-up notice was distributed prior to the adoption to provide more detailed information. Notice included (will include) information and instructions for how to testify, if applicable. *tained records: public engagement reports or final staff reports including/or dated copies of a notices; for announcements sent by mail or email document number of persons/groups on alling list

2. Summary of non-discriminatory engagement

Attach a summary (1-2 pages) of the key elements of the public engagement process, including outreach to communities of color, limited English and low-income populations, for this project or transportation or service plan.

A summary of non-discriminatory engagement is attached.

2	Cortifi	cation	statem	ont
5.	certifi	cation	staten	ient

City of Gresham adherence to engagement and non participation and comply with fede	n-discrimination procedures developed to enhance public
As attested by: Yally fall fully (signature)	Katherine Kelly, Comprehensive Planning Managur (name and title)
8-25-2016 (date)	

Document1

Last Saved: August 25, 2016

2. Summary of non-discriminatory engagement

Attach a summary (1-2 pages) of the key elements of the public engagement process, including outreach to communities of color, limited English and low-income populations, for this project or transportation or service plan.

The City adheres to its Title VI program and is committed to assuring no person shall be discriminated against or denied benefits of any program or activity, on the basis of race, color, national origin, limited English proficiency, sex, income, age or disability.

All outreach for future projects will be executed in accordance with the City's "Community Engagement Handbook" and its guiding principles:

- Value active citizen involvement as essential to the future of our community
- Respect and consider all citizen input
- Encourage effective outreach efforts that reflect the city's rich diversity
- Promote communications and processes that encourage citizen participation and produce results
- Involve citizens early in policy development and planning projects
- Respond in a timely manner to citizens' input and respect all perspectives and insights
- Coordinate City outreach and involvement activities to make the best use of citizens' time and efforts

The City of Gresham's 2035 Transportation System Plan was updated through a robust community engagement process. The key elements of the engagement process are listed below. While all outreach events and opportunities were open to everyone, specific outreach to communities of color, limited English and low-income populations was accomplished primarily through coordination with the City's Urban Design and Planning project to implement Healthy Eating Active Living (HEAL) policies. The City was a partner in Multnomah County's "Communities Putting Prevention to Work" grant, awarded by the Center for Disease Control and Prevention, at the same time as the TSP update and HEAL project. This grant provided additional resources and community partners for a more focused effort to engage underrepresented populations. Open houses were held in the Rockwood neighborhood and included translation services.

- City Council: 10/14/2010, 6/14/2011, 9/13/2011, 10/4/2011, 09/03/2012, 6/11/2013
- Planning Commission: 3/14/2011, 7/11/2011, 8/13/2012, 6/10/2013, 10/28/2013
- Transportation Subcommittee: 10/2010 Current (Monthly)
- Neighborhood Coalition: 7/12/2011, 11/9/2011, 3/13/2012, 6/11/2013
- Neighborhood Associations:
 - Wilkes East NA: 10/24/2011
 - o Rockwood NA: 11/21/2011
 - North Central NA: 9/1/2011, 3/1/2012, 4/5/2012

- o Centennial NA: 11/1/2011
- o Northwest NA: 11/29/2010, 2/6/2011
- o Gresham Downtown Development Assn.: 10/24/2011
- o Historic Gresham Downtown Business Assn.: 11/1/2011
- Powell Valley NA: 10/7/2010, 10/13/2011
- ASERT NA: Roberts Ave. Community Mtg.: 7/18/2011
- o Mt. Hood NA: 10/20/2011
- o Kelly Creek NA: 10/26/2011, 1/25/2012
- Southwest NA: 1/19/2012, Info Fair: 7/21/2011
- o Gresham Butte NA: 3/12/2012, 4/9/2012
- o Southeast Gresham NA Information Fair: 5/25/2011, 6/6/2012, 5/22/2013
- Open House with City's Urban Design and Planning project Healthy Eating, Active Living: 4/6/2011, 6/28/2011, 10/3/2011
- TSP Community Forums: 7/26/2011, 7/11/2013
- Persimmon Homeowners Association: 3/14/2011
- Active Transportation Stakeholder Team: 3/31/2011, 5/19/2011, 8/2/2011, 12/5/2011
- Multnomah County Bicycle and Pedestrian Committee: 3/9/2011
- Freight Stakeholders: Oregon Truck Driving Championship: 6/18/2011
- Freight Expert Panel: 8/1/2011
- School Expert Panel: 8/9/2011
- Gresham Transportation Fair: 9/24/2011
- Online Transportation Survey: 7/21/2011 9/2012
- TSP Webpage & Neighborhood Connections Announcements: 9/2010 through Adoption

ATTACHMENT B – ACTIVE TRANSPORTATION DESIGN GUIDELINES CHECKLIST

The following checklist items are street design elements that are appropriate and desirable in regional mobility corridors. Trail projects should use the Off-Street and Trail Facilities checklist (item D) at the end of this list. All other projects should use items A – C.

Use of federal transportation funds on separated pathways are intended for projects that primarily serve a transportation function. Pathways for recreation are not eligible for federal transportation funding through the regional flexible fund process. Federal funds are available from other sources for recreational trails. To allow for comfortable mixing of persons on foot, bicycle and mobility devices at volumes expected to be a priority for funding in the metropolitan region, a 12-foot hard surface with shoulders is a base design width acceptable to FHWA Oregon. Exceptions to this width for limited segments is acceptable to respond to surrounding context, with widths less than 10-feet subject to a design exception process. Wider surfaces are desirable in high volume locations.

A. Pedestrian Project design elements - check all that apply Design elements emphasize separating pedestrians from auto traffic with buffers, increasing the visibility of pedestrians, especially when crossing roadways, and make it easier and more comfortable for people walking to access destinations.

	For	r every element checked describe existing conditions and proposed features:
#1	- 🔽	Add sidewalks or improve vertical delineation of pedestrian right-of-way (i.e. missing curb)
#2	- 🔽	Add sidewalk width and/or buffer for a total width of 17 feet (recommended), 10 feet
		minimum; buffer may be provided by parking on streets with higher traffic volumes and speeds
		(over 35 mph, ADT over 6,000)
		Add sidewalk width and/or buffer for a total width of 10 feet (recommended), 8 feet minimum
		on streets with lower traffic volumes and speeds (ADT less than 6,000 and 30 mph or less);
		Buffer may be provided by parking, protected bike lane, furnishing zone, street trees/planting
	_	strip
		Sidewalk clear zone of 6 feet or more
#4	- 🔽	Remove obstructions from the primary pedestrian-way or add missing curb ramps
#5		Add pedestrian crossing at appropriate location
		Re-open closed crosswalks
#6	- 🗹	Raised pedestrian refuge median or raised crossing, required if project is on a roadway with 4
		or more lanes
		Reduced pedestrian crossing distance
		Narrowed travel lanes
.,		Reduced corner radii (e.g. truck apron)
#7	- 🗹	Curb extensions
#8	-	Rectangular Rapid Flashing Beacon (RRFB) or pedestrian signal
#9	- 🔽	Lighting, especially at crosswalks – pedestrian scale (10-15 feet), preferably poised over
		sidewalk
#10		Add countdown heads at signals
	Ц	Shorten signal cycle lengths of 90 seconds or less – pedestrian friendly signal timing, lead
		pedestrian intervals
<i>,</i> ,,,		Access management: minimize number and spacing of driveways
# 11	- 🛂	Arterial traffic calming: Textured intersections, gateway treatments, raised medians, road diets,
#		roundabouts
#12		Wayfinding
		Benches

		Transit stop amenities or bus stop pads Add crosswalk at transit stop Pedestrian priority street treatment (e.g. woonerf) on very low traffic/low volume street
	В.	Bicycle Projects design elements Design elements emphasize separating bicycle and auto traffic, increasing visibility of bicyclists, making it easier and more comfortable for people traveling by bicycle to access routes and destinations.
#13		On streets with higher traffic volumes and speeds (over 35 mph, ADT over 6,000): Buffered bicycle lane, 6 foot bike lane, 3 foot buffer; Protected bikeway with physical separation (e.g. planters, parking); Raised bikeway
#44		Separated multi-use trail parallel to roadway Bike priority treatments at intersections and crossings (i.e. advance stop lines, bike boxes, signals, high-intensity activated crosswalk (HAWK) signals, user-activated signals
#15	- V	Medians and crossing treatments Wayfinding, street markings Lighting at intersections Bicycle boulevard treatment where ADT is less than 3,000 per day: Buffered bicycle lane, 6 foot bike lane, 3 foot buffer
		Other Complete Street Features
		r every element checked describe existing conditions and proposed features:
		Turning radius improvements (freight route only)
#17		Gateway feature Street trees
11 17		ITS elements (i.e. signal timing and speed detection)
	D.	Off-Street and Trail Facilities
		r every element checked describe existing conditions and proposed features: Minimum 12' trail width (plus 2' graded area each side) Always maintains minimum 5' separation when adjacent to street or never adjacent to street All on-street segments include improvements beyond bike lanes (item C, above) or no on-street
		segments All street crossings include an appropriate high-visibility crosswalk treatment All 4-lane street crossings include appropriate refuge island or no 4-lane street crossings Frequent access points (generally every ¼-mile) All crosswalks and underpasses include lighting Trail lighting throughout Trailhead improvements Rest areas with benches and wheelchair spaces Wayfinding or interpretive signage
		Signs regulating bike/pedestrian interaction (e.g. bikes yield to pedestrians)

Active transportation design checklist for SW Highland Drive/SW Pleasant View Drive/SE 190thAvenue:

The following Active Transportation Design Checklist SW Highland Drive/SW Pleasant View Drive/SE 190thAvenue: Powell Boulevard to Cheldelin Road project development grant application.

- There are many gaps in sidewalks along this corridor. This project will design continuous sidewalks, landscape strips and curbs to create a horizontally and vertically delineated pedestrian right-of-way.
- 2. Current sidewalk width is generally 5' feet wide or not existent and the entire corridor lacks landscape strips. This project will result in the corridor design with an anticipated 6' foot sidewalk and 8' foot planting strip with street trees. Total sidewalk and buffer will be 14 feet wide.
- 3. This corridor currently lacks a 6 foot sidewalk clear zone. The project design will include a sidewalk clear zone of at least 6 feet along the entire project length.
- 4. This corridor lacks a primary pedestrian-way and curb ramps. The project design will include a primary pedestrian-way and curb ramps.
- 5. This corridor lacks pedestrian crossings. The project design will include pedestrian crossings at Butler, SW 41st Street, and Cheldelin, providing pedestrian access to major destinations across this Standard Arterial.
- 6. SW Highland Drive/SW Pleasant View Drive/SE 190thAvenue, along this segment, is currently a two to three lane road. The project design will include a five lane cross-section with raised pedestrian refuge medians in appropriate locations.
- 7. This corridor does not currently have curb extensions. The project design will include curb extensions as appropriate.
- 8. This corridor does not currently have RRFB's or pedestrian signals. The project design will include RRFB's and/or pedestrian signals as appropriate.
- 9. This corridor does not currently have adequate lighting. The project design will include pedestrian scaled lighting, especially at crosswalks.
- 10. This corridor does not currently have countdown heads at signals, with the exception of a recently installed signal at the intersection of Highland and Pleasant View Drive. The project design will include countdown heads at signals, as appropriate.
- 11. This corridor does not currently have arterial traffic calming. The project design will include arterial traffic calming, as appropriate.
- 12. This corridor does not currently have pedestrian wayfinding. The project design will include wayfinding, as appropriate.

- 13. This corridor does not currently have continuous bike lanes. The project design will include bicycle lanes and will consider protected bicycle lanes.
- 14. This corridor does not currently have adequate medians or crossing treatments. The project design will include medians and crossing treatments as appropriate.
- 15. This corridor does not currently have bicycle wayfinding. The project design will include wayfinding, as appropriate.
- 16. This corridor does not currently have adequate lighting at intersections. The project design will include adequate lighting at intersections as appropriate.
- 17. This corridor does not currently have street trees. The project design will include street trees as appropriate.

Metro Cost Estimation Workbook Page 1 of 8

Instructions for Using This Workbook

Password for locking/unlocking this sheet is 'metro'. All other sheets have no password.

Purpose:

This workbook provides a methodology for planning-level cost estimating for transportation infrastructure projects. Alternative methodology of similar or better detail is acceptable.

Where agencies propose cost methodology significantly different from this methodology, documentation should be provided.

This includes unit costs which vary significantly from that specified here. Consistency of such costs between projects is desirable in that it allows for equitable comparison of projects.

Instructions

This workbook or a comparable cost estimate must be completed for each project submitted.

Complete the project information below and in Sheets 1 through 5. Worksheets are accessed by tabs at the bottom of the window. Sheet 6 summarizes total estimated cost of the project.

Input cells are shaded light blue, and should be filled in by the user (where applicable). Other cells are locked and should not be changed.

<sample> Appearance of input cells used throughout this workbook.

Locked cells can be unlocked by selecting Review > Unprotect Sheet. This is not recommended in most cases. Password is 'metro'.

Questions about completing the workbook should be directed to Anthony Buczek, Transportation Engineer with Metro.

Feedback and comments about this workbook are encouraged, and will help to improve it for future updates.

phone: 503-797-1674 e-mail: anthony.buczek@oregonmetro.gov These cells are shaded light blue, which means they should be filled in. **Project Information:** Funding year: PE 2019 ROW 2020 Const 2021 Project name: 190th: Powell Boulevard to Cheldeline (South City Limits) Corridor and endpoints: Powell Boulevard to Cheldelin Project description: Construct to standard arterial Local plan project #: 85 RTP project #: 10533 and 10431 Submitting agency: City of Gresham Agency contact: Kate Dreyfus Contact phone: (503) 618-2294 Contact e-mail: Kate.Dreyfus@e

Proceed to Sheet 1 when the above is completed.

Unit costs year: 2007
Escalation rate Used in Calcul

ation rate	Used in Calculations	Default	Override
2007 - 2008	100.38%	100.38%	
2008 - 2009	84.72%	84.72%	
2009 - 2010	96.78%	96.78%	
2010 - 2011	101.04%	101.04%	
2011 - 2012	105.05%	105.05%	
2012 - 2013	97.86%	97.86%	
2013 - 2014	100.79%	100.79%	
2014 - 2015	100.71%	100.71%	
2015 - 2016	104.00%	104.00%	
2016 - 2017	104.00%	104.00%	
2017 - 2018	104.00%	104.00%	
2018 - 2019	104.00%	104.00%	
2019 - 2020	104.00%	104.00%	
2020 - 2021	104.00%	104.00%	

Escalation Lookup Table

Lookup Table															
v From \ To >	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2007	100.00%	100.38%	85.04%	82.30%	83.16%	87.36%	85.49%	86.16%	86.78%	90.25%	93.86%	97.61%	#####	#####	#####
2008		100.00%	84.72%	81.99%	82.84%	87.03%	85.17%	85.84%	86.45%	89.91%	93.50%	97.24%	#####	#####	#####
2009			100.00%	96.78%	97.79%	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
2010				#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
2011					#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
2012						#####	97.86%	98.63%	99.33%	#####	#####	#####	#####	#####	#####
2013							#####	#####	#####	#####	#####	#####	#####	#####	#####
2014								#####	#####	#####	#####	#####	#####	#####	#####
2015									#####	#####	#####	#####	#####	#####	#####
2016										#####	#####	#####	#####	#####	#####
2017					-	-					#####	#####	#####	#####	#####
2018												#####	#####	#####	#####
2019													#####	#####	#####
2020					-	-								#####	#####
2021															#####

Do not override these unless better escalation factors are identified.

2007 - 2015 based on FHWA NHCCI

Workbook revision date: June 27, 2016 (metro)

Metro Cost Estimation Workbook

1. Construction

Sections A through E must be completed. Complete Sections F and/or G if applicable.

Powell Boulevard to Cheldelin

190th: Powell Boulevard to Cheldeline (South City Limits)

Projects will not include all elements below, but most will include elements from multiple sections.

City of Gresham

Enter quantities only for elements actually included in your project.

1.A - Road Construction, Reconstruction, or Resurfacing

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1	•	·	•	۲	

Road - new/reconstruct (incl. curb, sidewalk, drainage)
Road - resurface

Specify length and typical width of project

Section 1.A Subtotal

Unit	Quantity	Unit cost	Total
SF	688,590.0	\$15	\$10,328,850
SF	0.0	\$4	\$0
	length 10,800', wid	dth 96'	
			\$40.220.0E0

Links and a

Description

Dagarintian

Specify SF of pavement, not including sidewalks and curbs (these are assumed in unit cost).

For documentation of assumptions used.

\$10,328,850

1.B - Addition of Roadway Elements to Existing Roadway

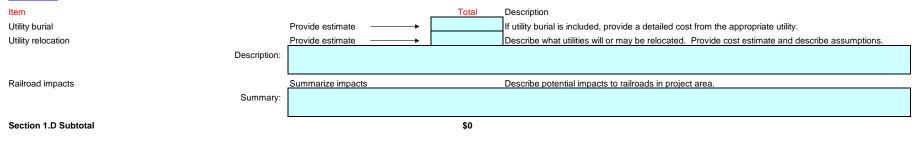
Item	Unit	Quantity	Unit cost	lotal	Description
Minor widening, no curbs	SF	0.0	\$15	\$0	Used for bike lanes, other minor widening. Does not include curbs, sidewalks, or drainage.
Remove pavement	SF	309,600.0	\$0.75	\$232,200	
Curb only	LF	21,600.0	\$16	\$345,600	For new curb installation. Does not include drainage.
Remove curb	LF	0.0	\$6	\$0	
Median in existing lane no drainage	LF	0.0	\$86.50	\$0	Includes pavement removal, curbs, landscaping for a 12' median in 14' lane. No drainage included.
Landscaping only - medians and bulbouts	SF	172,800.0	\$4	\$691,200	Install 18" topsoil plus plants
Drainage system - both sides	LF	8,640.0	\$115	\$993,600	For new installatations. Length is overall project length where drainage is added.
Bridge - new or replace	SF	20,000.0	\$250	\$5,000,000	
 Specify length and width of bridge 		200 linear feet, 10	0' wide)		For documentation of assumptions used.
Street trees with tree grates	LF	5,500.0	\$40	\$220,000	Per side.
Irrigation system		Provide estimate			For irrigation of medians and bulbouts. Specific estimate required if used (describe in Section 1.G).
Signing/marking	LF	108,000.0	\$2	\$216,000	Use when new pavement markings are to be installed (per line).
Clearing	SF	432,000.0	\$0.06	\$25,920	Used for new alignments.
Grading	CY	51,600.0	\$17.50	\$903,000	Provide an estimate of grading and describe assumptions in Section 1.G.
5		44 000 0	\$55	\$638,000	Use SF of walls if known. If not, estimate length of walls and describe assumptions in Section 1.G.
Retaining walls (by wall area)	SF	11,600.0	ΨΟΟ	ψ030,000	036 of of walls if known. If not, estimate length of walls and describe assumptions in occitor 1.5.
Retaining walls (by wall area) Retaining walls (by length)	SF LF	0.0	\$250	\$0	See of the walls if known. If not, estimate longing of walls and describe assumptions in Section 1.5.

1.C - Addition of Pedestrian Elements to Existing Roadway

Item	Unit	Quantity	Unit cost	Total	_Description
Sidewalk, no curb	SF	129,600.0	\$10	\$1,296,000	Includes curb ramps.
Remove sidewalk	SF	0.0	\$1.25	\$0	
Shared-use path	SF	0.0	\$5	\$0	Includes curb ramps.
Street furniture - bench	EA	0	\$2,275	\$0	
Street furniture - bike rack	EA	0	\$330	\$0	_
Street furniture - trash can	EA	0	\$1,350	\$0	
Section 1.C Subtotal				\$1,296,000	

Metro Cost Estimation Workbook

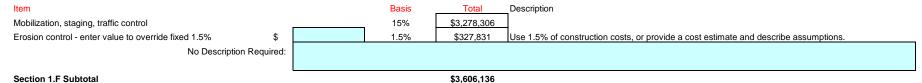
1.D - Utilities



1.E - Traffic Signals and Lighting

Item	Unit	Quantity	Unit cost	Total	Description
Traffic signals (4-lanes or more)	EA	4	\$150,000	\$525,000	Use where at least one roadway is 4 lanes or more.
Traffic signals (less than 4-lanes)	EA	0	\$105,000	\$0	Use where both roadways are 3 lanes or less.
Street lighting - per side	LF	5500.0	\$80	\$440,000	Install street lighting at 100' spacing per side.
Section 1.E Subtotal				\$965,000	

1.F - Associated Costs



1.G - Additional Information

Use the space below to provide additional information, including items not listed above, or to expand on assumptions used.

Raingarden: 58,880 SF at \$35 per SF = \$2,060,800

Other Expected Costs

Provide estimate

\$2,060,800

Section 1.G Subtotal

\$2,060,800

SUMMARY

Total of sections A through G \$27,522,306 Section 1 Total

190th-Cost Estimate Workbook for 2019-21 - 1-Constr. Printed on 8/26/2016 at 9:52 AM

Metro Cost Estimation Workbook Page 4 of 8

2. Environmental Impact and Mitigation				190th: Powell Boulevard to Cheldeline (South City Limits)
Sections A and B must be completed. Complete Section C if applicable. Contact Metro if	information for 2.B	is needed.		Powell Boulevard to Cheldelin
				City of Gresham
2.A - Status and Information				
Please place an 'X' in the appropriate box.				
EA not completed; an EIS IS expected.				
EA not completed; an EIS is NOT expected. X				
EA not completed; unknown whether EIS is expected.				
EA has been completed; an EIS IS required.				
EA has been completed; an EIS is NOT required.				
Both an EA and an EIS have been completed.				
Describe expected environmental impacts, assumptions, and unknowns.				
Description:				
2.B - Environmental Impacts and Mitigation				
Item Unit Quantity	Unit cost	Total	Description	
Estimate acreage of impact/mitigation ACRE 1.38	\$150,000	\$206,610		
Section 2.B Subtotal	`	\$206,610		
2.C - Additional Information				
Use the space below to provide additional information, including items not listed above, or t	to expand on assu	mptions used.		
Environmental impacts based on 150' of impact area, each side of bridge, 200' lerngth = 60	0,000 SF			
Other Expected Costs Provide estimate				
Section 2.C Subtotal		\$0	_	
SUMMARY				
Total estimate for environmental mitigation		\$206,610	Section 2 Total	

190th-Cost Estimate Workbook for 2019-21 - 2-Environ. Printed on 8/26/2016 at 9:52 AM

Metro Cost Estimation Workbook
Page 5 of 8

3. Right-of-Way Cost Estimation 190th: Powell Boulevard to Cheldeline (South City Limits) Use either Method 'A' or Method 'B'. Method 'A' is preferred. Complete Section C if applicable. Powell Boulevard to Cheldelin City of Gresham Where the exact SF of ROW is unknown, an estimate must be made. At the most simplistic level, this estimate can be made by calculating the difference between the proposed cross-section width and the existing ROW width, multiplied by the project length. Where ROW width cannot be determined, it should be assumed to be the width of the existing roadway including sidewalks. 3.A - Method 'A' (moderate confidence) Item Unit Unit cost Total Description SF Estimate area (SF) of ROW taking Describe assumptions used in calculating area: Estimate unit cost (per SF) of taking Describe assumptions used in calculating unit cost(s): Estimated total cost of taking \$0 Estimated area multiplied by estimated unit cost. EΑ \$10,000 \$0 Number of affected parcels: Reflects administrative costs of property acquisition. Section 3.A Subtotal \$0 3.B - Method 'B' (low confidence) Item Unit Quantity Unit cost Total Description SF \$30 \$0 Estimate square-feet of high-value ROW taking Use in urban areas and moderate to high-priced neighborhoods. SF \$3.636.000 Estimate square-feet of developed ROW taking 181800.0 \$20 Use in other established neighborhoods. SF \$0 Estimate square-feet of undeveloped ROW taking \$15 Use in undeveloped areas. Describe assumptions used in calculating area: Estimated total cost of taking \$3,636,000 Estimated area multiplied by estimated unit cost. Number of affected parcels: EΑ 21 \$10,000 \$210,000 Reflects administrative costs of property acquisition. \$3.846.000 Section 3.B Subtotal 3.C - Additional Information Use the space below to provide additional information, including items not listed above, or to expand on assumptions used. SUMMARY Method 'A' Right-of-Way estimate (moderate confidence) Section 3 Total (moderate confidence) \$0

190th-Cost Estimate Workbook for 2019-21 - 3-ROW Printed on 8/26/2016 at 9:52 AM

\$3,846,000

Section 3 Total (low confidence)

Method 'B' Right-of-Way estimate (low confidence)

Metro Cost Estimation Workbook

4. Design and Administration Costs

190th: Powell Boulevard to Cheldeline (South City Limits)

Complete input cells in Sections A and B if applicable. Default markup values can be overridden.

Powell Boulevard to Cheldelin

City of Gresham

4.A - Design

Construction Costs (from Section 1):

Environmental Impact Costs (from Section 2):

\$27,522,306 \$206,610

Item

Surveying, design, coordination

Construction Engineering

Other Expected Costs

Base Cost Markup Total Description

\$27,728,916 \$8,318,675 (Default 30%) Typically included in the professional engineering contract

\$27,728,916 20% \$5,545,783 (Default 20%) Engineering services during constuction

Provide estimate

Description of other expected costs:

Section 4.A Subtotal \$13,864,458

4.B - Administration

Project Administration will be applied throughout project.

Administration

\$27,728,916 14% \$3,882,048 (Default 35%) Project overhead

Section 4.B Subtotal \$3,882,048

4.C - Additional Information

Use the space below to provide additional information, including items not listed above, or to expand on assumptions used.

Administration has been changed to 14% which is aligned with Gresham's historical project adminstration costs on similar projects.

SUMMARY

Total of all above items \$17,746,506 Section 4 Total

Metro Cost Estimation Workbook

5. Contingency and Risk 190th: Powell Boulevard to Cheldeline (South City Limits) Powell Boulevard to Cheldelin Complete input cells in Section A if applicable. Default markups can be overriden. Section B must be completed. City of Gresham 5.A - Contingency Section Total Markup Item Contingency \$ Description Section 1 - Construction \$27,522,306 20% \$5,504,461 (Default 20%) \$41,322 (Default 20%) Section 2 - Environmental \$206,610 20% (Default 40%) Section 3.A - Right-of-Way (moderate confidence) \$0 40% \$0 \$3,846,000 50% \$1,923,000 (Default 50%) Section 3.B - Right-of-Way (low confidence)

\$2,772,892

(Default 20%)

Section 4.B - Administration
Other Expected Costs

Description of other expected costs:

Section 5.A Subtotal \$10,241,675

5.B - Risk

Describe project components, impacts, or unknowns that are uncertain in scope at this point. Items might include:

• environmental issues

Section 4.A - Design

agency approvals

• nearby historic or cultural resources

• existing deficient infrastructure

\$13,864,458

\$3,882,048

Provide estimate

20%

No contingency on Administration

• railroad or utility work

• complex or untested components

bridge work

other unique elements

Description of these items is not intended to affect project selection, but rather to identify and document key issues that need refinement.

190th-Cost Estimate Workbook for 2019-21 - 5-Risk Printed on 8/26/2016 at 9:52 AM

Metro Cost Estimation Workbook
Page 8 of 8

6. Project Summary Sheet

190th: Powell Boulevard to Cheldeline (South City Limits)

Powell Boulevard to Cheldelin

Construct to standard arterial

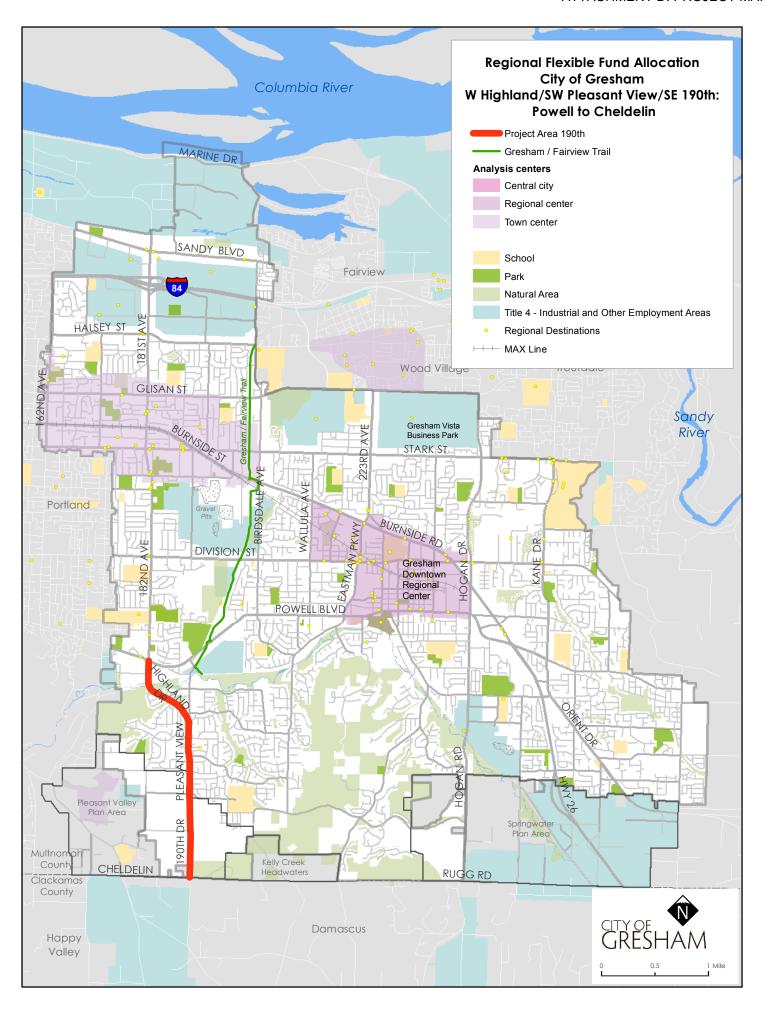
City of Gresham

6.A - Cost Summary in 2007\$	Item Total	Phase Total
Preliminary Engineering (PE)		\$11,147,024
Surveying, design, coordination	\$8,318,675	
Contingency at 20%	\$1,663,735	
Administration at 14%	\$1,164,614	
Right-of-Way (ROW)		\$5,769,000
Right-of-Way (moderate confidence)	\$0	
Contingency at 40%	\$0	
Right-of-Way (low confidence)	\$3,846,000	
Contingency at 50%	\$1,923,000	
Construction (Const)		\$44,588,097
Construction (Section 1)	\$27,522,306	
Contingency at 20%	\$5,504,461	
Environmental (Section 2)	\$206,610	
Contingency at 20%	\$41,322	
Construction Engineering	\$5,545,783	
Contingency at 20%	\$1,109,157	
Administration at 14%	\$4,658,458	
		Total
		\$61,504,121

6.B - Funding Summary by Year of Expenditure

Phase
Preliminary Engineering
Right-of-Way
Construction

	2007 Dollars		YOE Year	Escalation	YOE Cost	
PE	\$	11,147,024	2019	1.52%	\$	11,316,072
ROW	\$	5,769,000	2020	5.58%	\$	6,090,748
Const	\$	44,588,097	2021	9.80%	\$	48,957,854
Total	\$	61,504,121			\$	66,364,675



August 22, 2016

Metro 600 NE Grand Avenue Portland, OR 97232

Re: 2019-2021 Regional Flexible Funds Allocation - Project Development for W Highland Drive/SW Pleasant View Drive/SE 190th Avenue: Powell Boulevard to Cheldelin Road

Dear Selection Committee,

The City of Gresham's Transportation Subcommittee wholeheartedly supports the City's application to fund project development of the W Highland Drive/SW Pleasant View Drive/SE 190th Avenue, Powell Boulevard to Cheldelin Road, as an active transportation project.

This corridor of W Highland Drive/SW Pleasant View Drive/SE 190th Avenue extends over two miles between Powell Boulevard and Cheldelin Road and is designated in Gresham's Transportation System Plan as a standard arterial. It is a critical link in supporting the Pleasant Valley Plan area development and the plan area vision to create a quality living environment. It is also critical to serve future growth of Happy Valley, Damascus and western Clackamas County in accordance with the SE 172nd Avenue/190th Drive Corridor Management Plan. Active transportation travel is a key component to these plans and a quality project design of this corridor will ensure active modes are thoughtfully planned for and built.

Gresham's Transportation Subcommittee strongly urges funding to enter into project development to advance this critically important transportation facility toward construction.

Sincerely

Greg Olson, Chair

Gresham Transportation Subcommittee

cc: Katherine Kelly, City of Gresham