



Active Transportation & Complete Streets Projects

Name of Project *City of Sherwood, Highway 99W Sidewalk Safety Improvements*
(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. *The north and south sides of State Highway 99W, from the intersection of SW Meinecke Road to intersection of SW 12th Street.*
- Beginning facility or milepost. *MP 447+50.00*
- Ending facility or milepost. *MP 473+40.00*
- Provide a brief description of the project elements.

The Highway 99W sidewalk safety improvements project will include the following items:

- Constructing a 10-foot wide multi-use sidewalk along the north and south sides of Highway 99W between SW Meinecke Road and SW 12th Street.*
 - Construction of retaining wall necessary for multi-use sidewalk to cross steep fill slopes of highway as it crosses wetland and stream corridor (Cedar Creek).*
 - Installation of landscaping and low level vegetation screening to provide separation from vehicular traffic on Hwy 99W.*
- City (ies). *City of Sherwood*
 - County(ies). *Washington*

Base project information

- Corresponding RTP project number(s) for the nominated project: *10706 99W Pedestrian Improvements*
- Attach a completed Public Engagement and Non-discrimination checklist (Appendix A).
(Attached as Exhibit 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).

The proposed sidewalk improvements project will create a safe pedestrian and bicycle corridor between existing sidewalks on both sides of Hwy 99W, providing connectivity for residents to businesses, shopping and medical facilities in Sherwood's Town Center, as well as to schools and transit. Existing high-density housing adjacent to Hwy 99W is continuing to expand and pedestrian traffic increasing making this improvement a safety imperative.

Additionally, the City will be constructing a segment of the Ice Age Tonquin Trail regional trail system which will connect to these improvements. These improvements will provide pedestrians and bicyclists safe access to a multi-modal commuter system, reducing the need for residents to drive to local destinations, and thereby reducing the number of cars utilizing Hwy 99W.

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

(Attached as Exhibit C)

- Description of post implementation measurement of project effectiveness:

The post implementation measurement of the project effectiveness will be compared to the pre-implementation level of usage. Currently, approximately 2% of local residents within 1,000 feet of the proposed improvement project utilize the existing roadside as a pedestrian corridor. This equates to approximately 16 pedestrian and bicyclist trips per day.

Post implementation information will come from pedestrian and bicycle counts taken on a standard weekday. This would represent the typical day commuter and residential travel patterns and exclude recreational travel patterns. The traffic counts would take place after the Cedar Creek Trail project is constructed to account for regional bicycle commuter travel patterns.

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.

The City has applied for and received approval for Washington County Major Street Transportation Improvement Project (MSTIP) Opportunity Funds in the amount of \$250,000, which is 10.27% of the estimated project design, construction and management costs. This project is of such importance to the city that the City of Sherwood will also be allocating an additional \$100,000 of local transportation system development charge (SDC) funds to bring the leveraging amount up to nearly 14.22% of the total estimated project design, construction and management costs.

In addition, this project ties into the Cedar Creek Trail project which is Sherwood's portion of the Ice Age Tonquin Trail. The Cedar Creek Trail received regional flexible funds to design and construct the trail which runs perpendicular to, and crosses Hwy 99W at Meinecke Road.

The proximity and shared use of these two projects by local pedestrians and bicyclists (including commuters) would benefit greatly by sharing the same project design and construction resources and scheduling.

- Total project cost
(Include and describe any cost elements beyond those funded by the request + match):

\$2,518,000
- RFFA funding request by project phase:
(e.g. Project Development, P.E., Environmental, ROW acquisition, Construction) \$2,168,000
- Local match or other funds
(minimum match = 10.27% of funds requested + match):

\$350,000

Map of project area

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

Project sponsor agency

- Contact information (phone # & email) for: *Bob Galati*
Phone: 503-259-2303
Email: galatib@sherwoodoregon.gov
- Application lead staff: *Julia Hajduk, Community Development Director, City of Sherwood*
- Project Manager (or assigning manager): *Bob Galati PE, City Engineer, City of Sherwood*
- Project Engineer (or assigning manager) *Bob Galati PE, City Engineer, City of Sherwood*
- 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 is currently working on the Cedar Creek trail which is funded through regional flexible funds. That project is on time and on budget. The City also has a long history, with both state and federal grants, of performing the required tasks within the budget and timeframe specified. Sherwood has not, the best of our knowledge, ever failed to deliver on a project that has received federal or state funding.
- 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.

The City has staff resources available to perform the necessary project management functions. The following staff will be assigned to the project:

Julia Hajduk, Community Development Director: 20+ years professional level planning and project management experience. Developing land-use planning policies, procedures and methods. Project funding sources include County, State and Federal allocations.

Bob Galati PE, City Engineer: 20+ years of professional level civil engineering and project management experience. Designed and managed development of numerous types of CIP's which included various sources of funding, including County, State and Federal allocations.

Brad Kilby AICP, City Planning Manager: 20+ years of professional level planning and project management experience. Developing land-use planning policies, procedures and methods. Project funding sources include County, State and Federal allocations.

Jo Guediri, Permit Specialist: 9+ years of project documentation and management experience. Responsible for maintaining project documentation requirements related to various funding source requirements include County, State and Federal programs.

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?

The Oregon Transportation Plan (OTP) under Policy 4.3 states that it is the intent of the State to increase access to goods and services and promote health by development of compact communities and neighborhoods that integrate residential, commercial and employment land uses to help make shorter trips, promote transit, walking and bicycling. OTP Strategy 4.3.2 promotes safe and convenient bicycling and walking networks in communities by filling in missing gaps in sidewalk and bikeway networks, especially to community destination such as schools, shopping areas, parks, medical facilities, and transit facilities. OTP Strategy 4.3.5 promotes reduction of transportation barriers to daily activities for those who rely on walking, biking, rideshare, car-sharing and public transportation.

The proposed sidewalk project as presented, completely complies with the policies and strategies of the OTP as described above. In addition, the project has the capability of increasing physical activities of the community in general and increasing transportation options by removal of a barrier to pedestrian and bicycle transit.

Transportation disadvantaged people living in the developments along or within easy walking distance of Hwy 99W on the southwest side of the Cedar Creek corridor cannot currently conveniently access the nearest transit stop. This project will provide a safe and direct route for people to access transit and increase transportation choices.

The proposed project promotes economic development in the City and region by providing workers access to jobs from their homes and outlying communities. Workers who reside in the west side of the Cedar Creek corridor and north of Hwy 99W do not have safe and readily available access to Sherwood Town Center businesses and regional transit options. Crossing this corridor requires workers to drive their cars. Crossing this corridor requires workers to drive their cars. While the closest transit stop is only 950 feet away from the nearest residential area, workers must take their cars even to take transit so that they can get to the nearest park and ride.

With almost 15% of the workers in the vicinity of the proposed improvement making less than \$15,000 per year, the requirement to have and use a car or take their life in their hands and travel along Hwy 99W without sidewalk, is a tremendous cost burden. There simply is not a viable option for residents along the Hwy 99W corridor to take alternative modes of transportation.

Sherwood exports 6,726 jobs out of the community; this means that there are 6,726 workers that leave Sherwood to work in other jurisdictions including Portland, Tualatin, Tigard, Beaverton, Wilsonville, and Hillsboro. With limited options other than using a car, workers without safe access to transit spend a higher proportion of their income on commuting, and adding congestion on the local and regional highway system.

As an added economic development benefit, providing safe and convenient access for residents to walk or bicycle to businesses will support the local economy. If someone has to use their car to obtain a service, they will drive more often and further, even out of the local community to obtain services. By providing the ability to walk or bicycle to a location within the community to obtain services, more businesses will develop locally or remain local in order to provide that service. This reinforces keeping local dollars within the local community.

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 existing condition of the Hwy 99W corridor does not provide a usable or safe pedestrian or bicyclist travel area within the right-of-way of the project alignment. Pedestrians and bicyclists must utilize the 8-foot wide emergency lane of Hwy 99W to traverse the gap between the existing sidewalk facilities, and are sandwiched between the outside travel lane and the guardrail. With traffic speed set at 45 mph along this section of Hwy 99W, the likelihood of a pedestrian or bicyclist surviving an accident with a vehicle is very low.

In addition, Hwy 99W is identified by the State as having a freight corridor classification. With semi-truck and trailer traffic traveling from the Portland metropolitan area to the Willamette Valley and Oregon coast, it is dangerous for pedestrian and bicyclists to be in close proximity with these vehicles let alone sharing a lane.

Construction of this project will relocate pedestrian and bicyclists away from the travel lanes of Hwy 99W and onto the nearby safe corridor (sidewalk) that aligns with Hwy 99W.

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

The sidewalks will connect to existing adjacent residential and commercial/retail businesses within the Town Center and allow residents to walk and bike to schools, businesses, shopping and medical facilities instead of driving. This reduces the volume and traffic impacts on Hwy 99W, which is classified by the State as a freight corridor. In addition, the connectivity will allow resident pedestrian and commuter bicyclist's access to regional transit systems.

Currently, pedestrians and bicyclists must either; a) walk next to the Hwy 99W travel lanes to cross the gap, b) travel significant indirect distances on local streets to reach destinations located across the gap, or c) travel by car for the short distance to reach their destination. These improvements will allow safe multi-modal options to traverse the Hwy 99W gap, increase local connectivity to regional transit facilities, businesses, shopping, schools, and medical facilities, and will reduce vehicular impacts to the State freight route by removing unnecessary local vehicle trips.

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

There are approximately 1,470 residents within ¼ mile of Hwy 99W that cannot safely access the City's Town Center due to the gap along Hwy 99W. This number of residents is expected to increase significantly with the completion of a nearby high-density residential development (135 units), and a smaller subdivision (18 lots).

These residents are located approximately 1,800 feet from the nearest medical and shopping facility if measured directly along the Hwy 99W corridor, but over 7,800 feet if measured along the shortest local street route. That's nearly 4.5 times the distance to reach the most common facilities City resident's need.

Higher priority criteria

4. 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).

The proposed project is identified as RTP ID # D27 in the Regional ATP Appendix 1.

The sidewalk improvement project will infill a missing link and address an existing pedestrian deficiency by providing a safe and direct connection between existing residential developed areas and transit, the City's Town Center, commercial, business, school, and medical destinations. The construction of these sidewalks will provide local residents and bicyclists a way to safely travel from the adjacent residential areas of Sherwood to its Town Center, and connection to the regional trail system for distance commuting between adjacent cities.

Construction of these improvements will provide residents with a preferred alternative to using motor vehicles to conduct short trips within the City, allow regional travel via bicycles, and remove additional local transportation trips from a State classified freight corridor.

5. 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?

Simply having a safe place to walk will significantly improve the user experience for those people that walk this section of roadway. In addition, in conjunction with the sidewalk, a planter strip will be installed between the sidewalk and the Hwy 99W emergency lane. This planter strip will provide a safety factor by creating a physical buffer from vehicular traffic on Hwy 99W. Pedestrian and bicyclists will also feel more comfortable using the sidewalk since there is a significant physical separation between them and the vehicular traffic.

Planting will soften the visual aspect of the area while meeting ODOT safety requirements. The intent is that if a vehicle does leave the roadway, the plantings will provide some physical barrier to help slowdown the speed of the vehicle, and give a warning and some time for pedestrians and bicyclists to take evasive action, and without causing life threatening injuries to the driver and passengers due to hitting an immovable object such as a tree.

The proposed sidewalks on both sides of Hwy 99W will cross the Cedar Creek vegetated and stream corridor. The ability to pause and view natural habitat from a safe and secure distance is most appealing and the sidewalks may become a significant viewpoint.

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

The project provides safe and complete connectivity between residential areas and regional transit stops, and city core area businesses and jobs.

Priority criteria

7. 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).

The public will be provided multiple opportunities to comment on the community needs and any proposed design. These opportunities may include public open house meetings, City Council and Planning Commission work sessions and general meeting presentations with the opportunity for public input

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

The City has received approval for Washington County Major Street Transportation Improvement Project (MSTIP) Opportunity Funds in the amount of \$250,000, which is 10.27% of the estimated project design, construction and management costs. This project is of such importance to the city that the City of Sherwood will also be allocating an additional \$100,000 of local transportation system development charge (SDC) funds to bring the leveraging amount up to nearly 14.22% of the total estimated project design, construction and management costs.

In addition, this project ties into the Cedar Creek Trail project which is Sherwood's portion of the Ice Age Tonquin Trail. The Cedar Creek Trail received regional flexible funds to design and construct the trail which runs perpendicular to, and crosses Hwy 99W at Meinecke Road.

The proximity and shared use of these two projects by local pedestrians and bicyclists (including commuters) would benefit greatly by sharing the same project design and construction resources and scheduling.

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

The sidewalk improvement project will infill a missing link and address an existing pedestrian deficiency by providing a safe and direct connection between existing residential developed areas and transit, the City's Town Center, commercial, business, school, and medical destinations. The construction of these sidewalks will provide local residents and bicyclists a way to safely travel from the adjacent residential areas of Sherwood to its Town Center, and connection to the regional trail system for distance commuting between adjacent cities.

Construction of these improvements will provide residents with a preferred alternative to using motor vehicles to conduct short trips within the City, allow regional travel via bicycles, and remove additional local transportation trips from a State classified freight corridor.

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 City recently updated and adopted its Transportation System Plan (June 17, 2014). The TSP development, review and adoption process included a Citizens Advisory Committee (CAC) and Technical Advisory Committee (TAC). The CAC was comprised of 15 citizens who volunteered to become committee members, and were vetted by City staff and appointed by the City Council. The TAC was comprised of locally impacted and adjacent jurisdictional agencies whose technical expertise was greatly appreciated in the development of a final TSP document.

As part of the overall CAC process, formal presentations before citizens in an open house forum occurred. Comments were recorded and entered into the records from the open house activities. In addition, the City operated a project webpage where citizen comments on the various aspects of the TSP process and results could be entered into the records.

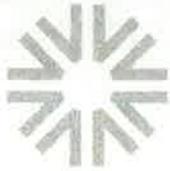
Within the adopted TSP, pedestrian system gaps and connectivity projects were identified as eligible Capital Improvement Projects (CIP). Pedestrian project number P3 identified the Hwy 99W sidewalk project as a critical project to the City in that the project represents a major component to correcting a pedestrian transportation gap and connectivity issue.

While this project is on an ODOT facility, it is critical to the community to have safe sidewalks and access to the Town Center, businesses, services and schools. This is why the City previously submitted this project for funding through the ODOT Enhance process. Unfortunately, funding was limited and this project was not selected for funding. The City continues to see this project as critical to the community and, therefore, has determined to continue to seek out opportunities for funding.

- 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.

The project has been presented to ODOT Region 1, Metro and Washington County regarding this project in the past as part of an Enhance grant application. As part of the input at the time, the project was modified slightly based on ODOT input to provide pedestrian lighting along the Cedar Creek crossing corridor for safety reasons. The project being put forward with this request, is the same that was put forward for the Enhance funding. Although the project received support, it was

ranked lower on the selection listing for funded projects. The project schematic level presentation has received positive feedback from ODOT and Metro, and these comments will be incorporated into the design and construction process for the sidewalk project.



**Westside
Transportation
Alliance**

August 22, 2016

**JPACT and Metro Council
Metro
600 NE Grand Ave
Portland, OR 97232-2736**

RE: Sherwood Regional Flexible fund request

Dear JPACT members and Metro Council,

As the Interim Executive Director of the Westside Transportation Alliance, I am writing on behalf of my organization to support Sherwood's Highway 99W Sidewalk Improvement project. This project will eliminate a 1,700 foot long gap in the sidewalk on both the north and south side of 99W, connecting residents to jobs, shopping, medical facilities, professional services and transit.

The Westside Transportation Alliance works with its partners and Washington County employers to reduce single-occupant-vehicle trips, reduce greenhouse gas emissions, foster economic vitality, improve health, and enhance the efficiency of our regional transportation network. As the sole Transportation Management Association in Washington County the WTA has offered workplace services and programs that help employees commute to work by transit, carpool, vanpool, walking and biking since 1997.

This project will provide safe access to transit for many residents in Sherwood and the opportunity to walk or bicycle safely to access jobs and services in the Sherwood Town Center rather than taking a single occupancy vehicle. This, in turn, will help increase ridership numbers, decrease single occupancy vehicle use and free the highway system for freight movement.

On behalf of the WTA board and membership, I urge you to give this project your highest consideration.

Sincerely,

**Tracy Love-Silver
Interim Executive Director**



August 19, 2016

Ms. Julia Hajduk
Community Development Director
City of Sherwood
22560 SW Pine St.
Sherwood, OR 97140

Re: Support for 2019-21 Regional Flexible Funds Allocation application for Highway 99W Sidewalk Project

Dear Ms. Hajduk,

TriMet is pleased to support Sherwood's application for a 2019-21 Regional Flexible Funds Allocation grant to construct sidewalks along Highway 99W between Meinecke Rd. and 12th St./Edy Rd.

Currently, there is no sidewalk along this segment of Highway 99, making it difficult for pedestrians and bicyclist to access transit in the Sherwood Town Center. The construction of new sidewalks in this corridor would allow for access to bus lines 93-Tigard/Sherwood, 94/Pacific Hwy./Sherwood, and Line 97-Tualatin/Sherwood Rd.

This project would also support TriMet's plans to increase transit service to Sherwood via the Southwest Service Enhancement Plan. Additionally, the project would significantly enhance safety along the highway for pedestrians and bicyclists, especially after dark.

TriMet is committed to working with local partners to improve walking and bicycling facilities because every transit rider is a pedestrian first. Therefore, TriMet supports this opportunity to remedy an important gap in the pedestrian/bicycle access to transit infrastructure, while also enhancing safety along the highway.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Mills". The signature is fluid and cursive, written over a light blue horizontal line.

Thomas Mills
Senior Planner

EXHIBIT A

APPENDIX A – ENVIRONMENTAL JUSTICE COMPLIANCE

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 503-813-7559.

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.
Retained records: *public engagement plan and/or procedures*
- At the beginning of the agency's transportation or service plan, a jurisdiction-wide demographic analysis was completed to understand the location of 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 jurisdiction-wide demographic analysis*
- Public notices included a statement of non-discrimination (Metro can provide a sample).
Retained records: *public engagement reports including/or dated copies of notices*
- 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*

- 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*

- 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*

- 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*

- 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*

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

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.

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*

- 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.

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*

- 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.

Retained records: *staff reports including/or description of identified populations and information about benefits and burdens of the project for them in relation to other residents;*

- There was a finding of inequitable distribution of benefits and burdens for people of color, people with limited English proficiency and people with low income

Submitted records: *for a finding of inequitable distribution of benefits and burdens, attach analysis, finding and documentation justifying the project and showing there is no less discriminatory alternative.*

- 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.

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

- 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.

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

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.

3. Certification statement

CITY OF SHERWOOD (agency) certifies adherence to engagement and non-discrimination procedures developed to enhance public participation and comply with federal civil rights guidance.

As attested by:

Bob Galati
(signature)

BOB GALATI PE, CITY ENGINEER
(name and title)

8.26.16
(date)



CITY OF SHERWOOD

METRO REGIONAL FLEXIBLE FUND ALLOCATION
HIGHWAY 99W SIDEWALK
SAFETY IMPROVEMENT PROJECT

AUGUST 26TH, 2016

CITY OF SHERWOOD

Highway 99W Sidewalk Project

Safety Issue with pedestrians not having a safe corridor to traverse from residence to business areas and schools.

Proposed sidewalks provide connection to Sherwood Town Center and proposed Cedar Creek Trail.

Proposal is to construct 10-foot wide sidewalks along the north and south side right-of-way lines of Highway 99W between existing sidewalk terminus.

Where sidewalks cross stream corridor, additional structural support will be required (i.e. retaining walls).

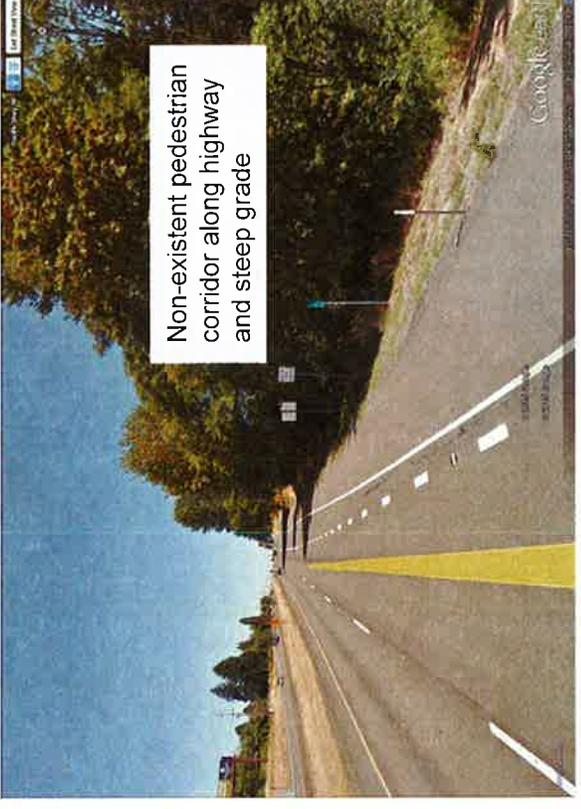
Separation from traffic is the main focus of the sidewalk location. Highway 99W speed limit is 45 mph within the limits of the proposed sidewalk locations.

City applying for Metro RFFA Funds, and will use MSTIP Opportunity Funds (\$250,000) and City transportation SDC funds (\$100,000) as the funding match.





Highway 99W North Side Looking North



Highway 99W South Side Looking North



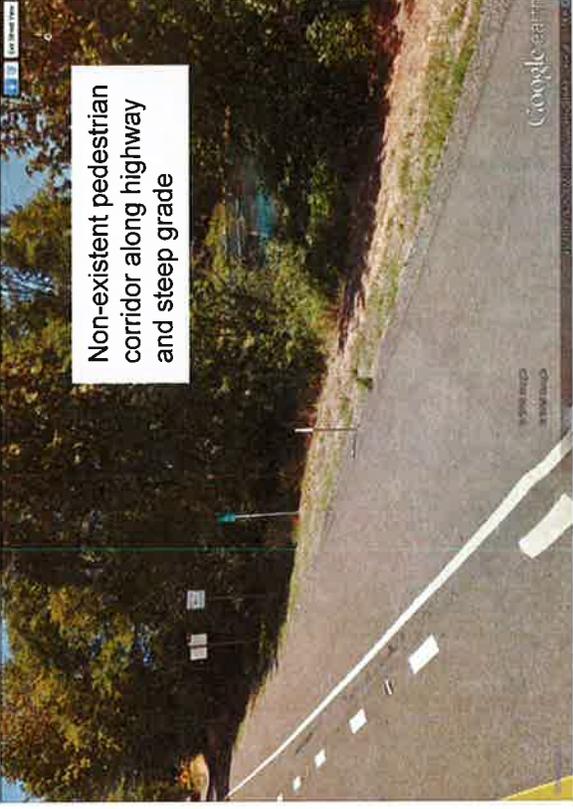
Highway 99W North Side Looking South



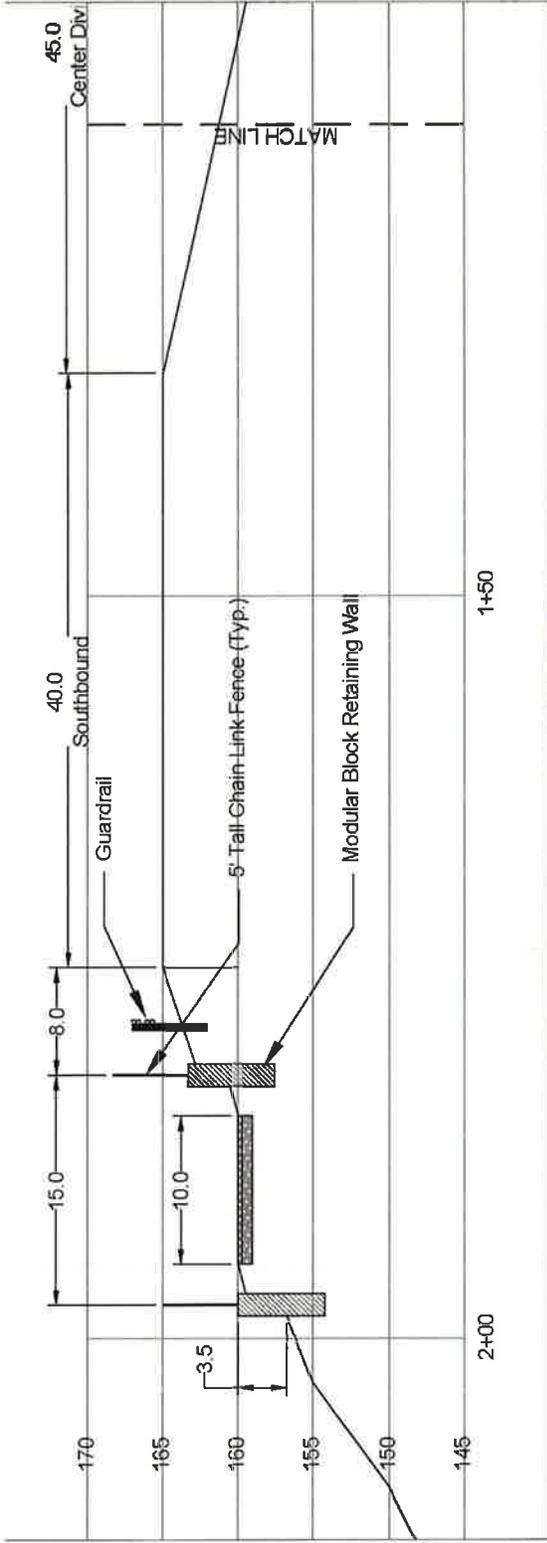
Highway 99W South Side Looking South



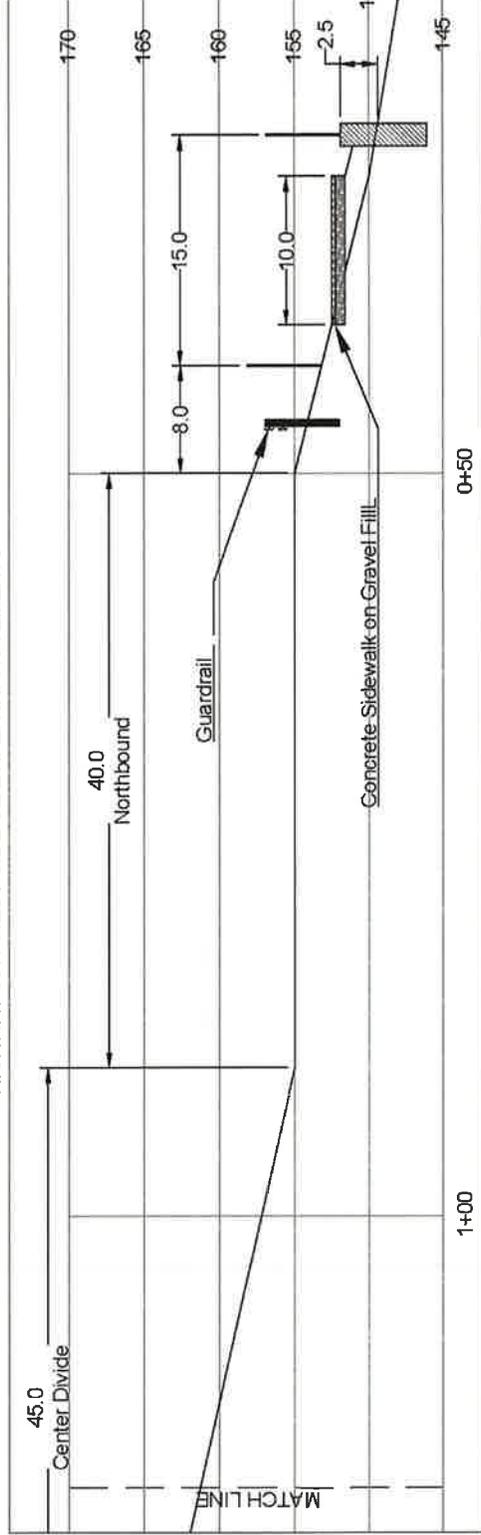
Highway 99W North Side Culvert Outfall



Highway 99W North Side Culvert Inlet



HIGHWAY 99W WEST SIDE SIDEWALK IMPROVEMENTS



HIGHWAY 99W EAST SIDE SIDEWALK IMPROVEMENTS

EXHIBIT C

APPENDIX C – ACTIVE TRANSPORTATION DESIGN GUIDELINES

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 every element checked describe existing conditions and proposed features:

- Add sidewalks or improve vertical delineation of pedestrian right-of-way (i.e. missing curb)
- 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
- Remove obstructions from the primary pedestrian-way or add missing curb ramps
- Add pedestrian crossing at appropriate location
- Re-open closed crosswalks
- 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)
- Curb extensions
- Rectangular Rapid Flashing Beacon (RRFB) or pedestrian signal
- Lighting, especially at crosswalks – pedestrian scale (10-15 feet), preferably poised over sidewalk
- Add countdown heads at signals
- Shorten signal cycle lengths of 90 seconds or less – pedestrian friendly signal timing, lead pedestrian intervals
- Access management: minimize number and spacing of driveways
- Arterial traffic calming: Textured intersections, gateway treatments, raised medians, road diets, roundabouts
- 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

B. 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.

For every element checked describe existing conditions and proposed features:

- 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
- 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)
- 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

C. Other Complete Street Features

For every element checked describe existing conditions and proposed features:

- Turning radius improvements (freight route only)
- Gateway feature
- Street trees
- ITS elements (i.e. signal timing and speed detection)

D. Off-Street and Trail Facilities

For 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)
- Trail priority at all local street/driveway crossings

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.

← 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:	City of Sherwood, Highway 99W Sidewalk Safety Improvements	
Corridor and endpoints:	Hwy 99W, EB Begin Sta 456+10.00 to End Sta 473+70.00, WB Begin Sta 447+58.00 to End Sta 465+05.00	
Project description:	Construct multi-modal sidewalk along both sides of Hwy 99W corridor, filling pedestrian and bicycle corridor connectivity gap between exi	
Local plan project #:	(Unassigned)	
RTP project #:	N/A - Not referenced on any RTP project description	
Submitting agency:	City of Sherwood	
Agency contact:	Bob Galati P. E., City Engineer	
Contact phone:	503-925-2303	
Contact e-mail:	galatib@sherwoodoregon.gov	

Proceed to Sheet 1 when the above is completed.

Unit costs year:

2007

Escalation 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%	

Do not override these unless better escalation factors are identified.
2007 - 2015 based on FHWA NHCCI
2016 - 2021 based on ODOT inflation assumptions

Escalation 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	---	---	---	---	---	---	---	---	---	---	---	---	---	---	###

Workbook revision date: June 27, 2016 (metro)

1. Construction
Sections A through E must be completed. Complete Sections F and/or G if applicable.
Projects will not include all elements below, but most will include elements from multiple sections.
Enter quantities only for elements actually included in your project.

1.A - Road Construction, Reconstruction, or Resurfacing

Item	Unit	Quantity	Unit cost	Total	Description
Road - new/reconstruct (incl. curb, sidewalk, drainage)	SF	0.0	\$15	\$0	Specify SF of pavement, not including sidewalks and curbs (these are assumed in unit cost).
Road - resurface	SF	0.0	\$4	\$0	
* Specify length and typical width of project					
Section 1.A Subtotal				\$0	For documentation of assumptions used.

1.B - Addition of Roadway Elements to Existing Roadway

Item	Unit	Quantity	Unit cost	Total	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	0.0	\$0.75	\$0	
Curb only	LF	0.0	\$16	\$0	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	15,000.0	\$4	\$60,000	Install 18" topsoil plus plants
Drainage system - both sides	LF	0.0	\$115	\$0	For new installations. Length is overall project length where drainage is added.
Bridge - new or replace	SF	0.0	\$250	\$0	For documentation of assumptions used.
* Specify length and width of bridge					
Street trees with tree grates	LF	0.0	\$40	\$0	Per side.
Irrigation system					For irrigation of medians and bulbouts. Specific estimate required if used (describe in Section 1.G).
Signing/markings	LF	0.0	\$2	\$0	Use when new pavement markings are to be installed (per line).
Clearing	SF	26,728.0	\$0.06	\$1,604	Used for new alignments.
Grading	CY	825.0	\$17.50	\$14,438	Provide an estimate of grading and describe assumptions in Section 1.G.
Retaining walls (by wall area)	SF	5,844.0	\$55	\$321,420	Use SF of walls if known. If not, estimate length of walls and describe assumptions in Section 1.G.
Retaining walls (by length)	LF	0.0	\$250	\$0	
Section 1.B Subtotal				\$397,461	

1.C - Addition of Pedestrian Elements to Existing Roadway

Item	Unit	Quantity	Unit cost	Total	Description
Sidewalk, no curb	SF		\$10	\$0	Includes curb ramps.
Remove sidewalk	SF	0.0	\$1.25	\$0	
Shared-use path	SF	26,728.0	\$5	\$133,640	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				\$133,640	

1.D - Utilities

Item	Provide estimate	Total	Description
Utility burial	→		If utility burial is included, provide a detailed cost from the appropriate utility.
Utility relocation	→		Describe what utilities will or may be relocated. Provide cost estimate and describe assumptions.
Description: Non anticipated			
Summarize impacts			
Railroad impacts			
Describe potential impacts to railroads in project area.			
Summary: None			
Section 1.D Subtotal			
\$0			

1.E - Traffic Signals and Lighting

Item	Unit	Quantity	Unit cost	Total	Description
Traffic signals (4-lanes or more)	EA	0	\$150,000	\$0	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	1700.0	\$80	\$136,000	Install street lighting at 100' spacing per side.
Section 1.E Subtotal					
\$136,000					

Item	Unit	Basis	Total	Description
Mobilization, staging, traffic control		15%	\$100,065	
Erosion control - enter value to override fixed 1.5%	\$	1.5%	\$10,007	Use 1.5% of construction costs, or provide a cost estimate and describe assumptions.
No Description Required:				
Section 1.F Subtotal				
\$110,072				

1.G - Additional Information

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

Chain link fencing will be used where sidewalks cross Cedar Creek corridor to prevent fall hazard from path being elevated by retaining walls, and to prevent access to wetlands and vegetated corridor.

Other Expected Costs	→	\$0
Section 1.G Subtotal		
\$0		

SUMMARY

Total of sections A through G **Section 1 Total** **\$777,173**

2. Environmental Impact and Mitigation City of Sherwood, Highway 99W Sidewalk Safety Improvements
 Sections A and B must be completed. Complete Section C if applicable. Contact Metro if information for 2.B is needed. Hwy 99W, EB Begin Sta 456+10.00 to End Sta 473+70.00, WB Begin Sta 447+58.00 to End Sta 465+05.00
 City of Sherwood

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.	
EA not completed; unknown whether EIS is expected.	X
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: will be completely within ODOT right-of-way, there may be some unanticipated impacts to the adjoining vegetated corridor that will need mitigation.

2.B - Environmental Impacts and Mitigation

Item	Unit	Quantity	Unit cost	Total	Description
Estimate acreage of impact/mitigation	ACRE	1.50	\$150,000	\$225,000	
Section 2.B Subtotal				\$225,000	

2.C - Additional Information

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

Other Expected Costs
 Section 2.C Subtotal

Provide estimate → \$0

SUMMARY

Total estimate for environmental mitigation

\$225,000 Section 2 Total

3. Right-of-Way Cost Estimation

Use either Method 'A' or Method 'B'. Method 'A' is preferred. Complete Section C, if applicable.

City of Sherwood, Highway 99W Sidewalk Safety Improvements
 Hwy 99W, EB Begin Sta 456+10.00 to End Sta 473+70.00, WB Begin Sta 447+58.00 to End Sta 465+05.00
 City of Sherwood

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	Quantity	Unit cost	Total	Description
Estimate area (SF) of ROW taking	SF				
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.
Number of affected parcels:	EA		\$10,000	\$0	Reflects administrative costs of property acquisition.
Section 3.A Subtotal				\$0	

3.B - Method 'B' (low confidence)

Item	Unit	Quantity	Unit cost	Total	Description
Estimate square-feet of high-value ROW taking	SF		\$30	\$0	Use in urban areas and moderate to high-priced neighborhoods.
Estimate square-feet of developed ROW taking	SF		\$20	\$0	Use in other established neighborhoods.
Estimate square-feet of undeveloped ROW taking	SF		\$15	\$0	Use in undeveloped areas.
Describe assumptions used in calculating area:					
Estimated total cost of taking				\$0	Estimated area multiplied by estimated unit cost.
Number of affected parcels:	EA		\$10,000	\$0	Reflects administrative costs of property acquisition.
Section 3.B Subtotal				\$0	

3.C - Additional Information

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

All construction will occur within existing ODOT right-of-way and project will not require any 6 right-of-way acquisition to complete.

SUMMARY

Method 'A' Right-of-Way estimate (moderate confidence) **\$0** Section 3 Total (moderate confidence)

Method 'B' Right-of-Way estimate (low confidence) **\$0** Section 3 Total (low confidence)

4. Design and Administration Costs City of Sherwood, Highway 99W Sidewalk Safety Improvements
 Complete input cells in Sections A and B if applicable. Default markup values can be overridden. Hwy 99W, EB Begin Sta 456+10.00 to End Sta 473+70.00, WB Begin Sta 447+58.00 to End Sta 465+05.00
 City of Sherwood

4.A - Design

Construction Costs (from Section 1):
 Environmental Impact Costs (from Section 2):

\$777,173
\$225,000

Item
 Surveying, design, coordination
 Construction Engineering
 Other Expected Costs

Base Cost	Markup	Total	Description
\$1,002,173	30%	\$300,652	(Default 30%) Typically included in the professional engineering contract
\$1,002,173	20%	\$200,435	(Default 20%) Engineering services during construction
Provide estimate →			

Description of other expected costs:

\$501,086

Section 4.A Subtotal

4.B - Administration

Project Administration will be applied throughout project.
 Administration

\$1,002,173	35%	\$350,761	(Default 35%) Project overhead
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Section 4.B Subtotal

\$350,761

4.C - Additional Information

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

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SUMMARY

Total of all above items

\$851,847 Section 4 Total

5. Contingency and Risk
 Complete input cells in Section A if applicable. Default markups can be overridden. Section B must be completed. Hwy 99W, EB Begin Sta 456+10.00 to End Sta 473+70.00, WB Begin Sta 447+58.00 to End Sta 465+05.00
 City of Sherwood, Highway 99W Sidewalk Safety Improvements
 City of Sherwood

5.A - Contingency

Item	Section Total	Markup	Contingency \$	Description
Section 1 - Construction	\$777,173	20%	\$155,435	(Default 20%)
Section 2 - Environmental	\$225,000	20%	\$45,000	(Default 20%)
Section 3.A - Right-of-Way (moderate confidence)	\$0	40%	\$0	(Default 40%)
Section 3.B - Right-of-Way (low confidence)	\$0	50%	\$0	(Default 50%)
Section 4.A - Design	\$501,086	20%	\$100,217	(Default 20%)
Section 4.B - Administration	\$350,761	No contingency on Administration		
Other Expected Costs	Provide estimate			

Description of other expected costs:

\$300,652

Section 5.A Subtotal

5.B - Risk

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

- environmental issues
- nearby historic or cultural resources
- railroad or utility work
- bridge work
- agency approvals
- existing deficient infrastructure
- complex or untested components
- 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.

Environmental Assessment of the project impacts may be necessary, but if required are anticipated to be small.

6. Project Summary Sheet

City of Sherwood, Highway 99W Sidewalk Safety Improvements

Hwy 99W, EB Begin Sta 456+10.00 to End Sta 473+70.00, WB Begin Sta 447+58.00 to End Sta 465+05.00

Construct multi-modal sidewalk along both sides of Hwy 99W corridor, filling pedestrian and bicycle corridor connectivity gap between existing sidewalk end points.
City of Sherwood

6.A - Cost Summary in 2007\$

Preliminary Engineering (PE)

Surveying, design, coordination

Contingency at 20%

Administration at 35%

Item Total	Phase Total
\$300,652	\$466,010
\$60,130	
\$105,228	

Right-of-Way (ROW)

Right-of-Way (moderate confidence)

Contingency at 40%

Right-of-Way (low confidence)

Contingency at 50%

\$0	\$0
\$0	
\$0	
\$0	

Construction (Const)

Construction (Section 1)

Contingency at 20%

Environmental (Section 2)

Contingency at 20%

Construction Engineering

Contingency at 20%

Administration at 35%

\$777,173	\$1,864,042
\$155,435	
\$225,000	
\$45,000	
\$200,435	
\$40,087	
\$420,913	

Total

\$2,330,052

6.B - Funding Summary by Year of Expenditure

Phase	2007 Dollars	YOE Year	Escalation	YOE Cost
Preliminary Engineering	\$ 466,010	2019	1.52%	\$ 473,078
Right-of-Way	\$ -	2020	5.58%	\$ -
Construction	\$ 1,864,042	2021	9.80%	\$ 2,046,723
Total	\$ 2,330,052			\$ 2,519,800