



Active Transportation & Complete Streets Projects

Name of Project Monroe Street Neighborhood Greenway

(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. Monroe Street
- Beginning facility or milepost. Trolley Trail (McLaughlin Blvd.)
- Ending facility or milepost. Linwood Avenue
- Provide a brief description of the project elements.

The project includes a range of traffic calming, placemaking and stormwater management features by the construction of roadway elements such as chicanes, traffic circles, diverters, curb extensions, refuge islands, and green street treatments to provide a road suitable for bicycles through a mixture of sharrows, dedicated bike lanes, and separated bicycle route. Pedestrians are provided for by the construction of a mixture sidewalks and a separated pervious path. In addition, the project will provide wayfinding, directional pavement markings, improved crossings, signalization, and enhanced lighting.

- City (ies). Milwaukie
- County(ies). Clackamas

Base project information

- Corresponding RTP project number(s) for the nominated project. 10099
- Attach a completed Public Engagement and Non-discrimination checklist (Appendix 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 Monroe Street Neighborhood Greenway provides an important regional Active Transportation connection in Milwaukie and northwest Clackamas County. Together with the Clackamas County portion, the combined project would link the I-205 multiuse path in the east with the Trolley Trail in the west. The proposed greenway improvements would

provide a safe, continuous way for bicycles and pedestrians to access both local and regional destinations.

At the western end of Monroe Street are Riverfront Park, downtown businesses, the Sunday Farmers Market, several schools, and residential areas designated for high density. The eastern portion of the Monroe Street route includes the Clackamas Town Center and other commercial areas along 82nd Avenue, passing another public park and an elementary school along the way. The route runs through four Milwaukie neighborhoods, including two that are identified in the City's Transportation System Plan (TSP) as transit disadvantaged (Hector Campbell and Linwood). In addition, the western half of the greenway route in Milwaukie (west of 42nd Avenue) is identified in 2010 Census Block Group data as having low to moderate income levels.

The City's TSP designates the Monroe Street Neighborhood Greenway as a high priority project. It includes key safety improvements for bicycles, pedestrians, and vehicles where Monroe Street crosses Highway 224 as well as at the intersection with Linwood Avenue. Pedestrian improvements to both of those crossing/intersections with Monroe Street are listed separately in the TSP and designated as high-priority projects. The changes proposed specifically for the Highway 224 crossing will not only improve the safety of that intersection but will also improve the function of the two adjacent highway intersections at Harrison Street and Washington/Oak Streets.

The Monroe Street Neighborhood Greenway provides an important connection between the new Orange line light-rail in downtown Milwaukie with the Green line light-rail along I-205. It would facilitate multiple modes of travel serving the employment areas in downtown Milwaukie and those in the 82nd Avenue and Clackamas Town Center areas. The provision of a 7-ft-wide asphalt path on the north side of Monroe Street between 42nd Avenue and Linwood Avenue and together with the on street bicycle facilities would close a significant gap in pedestrian and bicycle facilities for residents in the eastern neighborhoods of Milwaukie. Currently, pedestrians in that area walk in the street if they walk at all.

By providing safer facilities, with reduced vehicle volumes and lower vehicle speeds, the proposed greenway improvements will encourage bicyclists of all levels and abilities to use the Monroe Street route. Pedestrians will have facilities where there were none before, with safer crossings and calmer vehicle traffic to contend with. Increased trips by both types of users along the greenway route are anticipated.

The project will result in an engineered design that effectively makes the entire portion of the route in Milwaukie "shovel ready" for construction, putting the City in excellent position to capitalize on future funding opportunities. The design process will include an outreach component that engages local residents in determining the details of some of the specific elements of the design, providing opportunities for broader education about the benefits of active transportation.

- Attach a completed Active Transportation Design checklist (Appendix C).
- Description of post implementation measurement of project effectiveness (Metro staff is available to help design measurement methodologies for post-construction project criteria performance). To have a complete, shovel ready plan set that meets the needs and concerns of the neighborhoods while providing for the neighborhood greenway envisioned. This would be documented through enhance traffic modeling indicating revised traffic patterns and Council approval of the final design. Ultimately, the project success after construction will be documented by reduced traffic counts and an increase in pedestrian and bicycle trips.

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 of Milwaukie City Council has adopted a resolution approving this nomination (See Letters of Authorization). The project will be funded with City funds from the newly created Bicycle and Pedestrian Accessibility Program. The required City match is programed to be available for the 2019-2021 budget cycles and will be allocated if the City of Milwaukie is awarded the requested grant funds. The City is only requesting Preliminary Engineering and Right-of-Way acquisition as part of this grant application and is confident that these elements can be completed within the 2019-2021 timeframe. The City has budgeted for additional traffic studies and conceptual design during the 2017-2018 timeframe to prepare for implementation of the Monroe Street Neighborhood Greenway Concept Plan. This project is identified as a high priority by the City of Milwaukie City Council as well as Clackamas County (See letters of support). Other letters of support show that the project is supported by local and regional groups and organizations and the concept plan has been adopted by the Milwaukie City Council. An extensive public engagement process took place during the concept plan development and will continue through the Preliminary Engineering phase.

- Total project cost
(Include and describe any cost elements beyond those funded by the request + match):
\$12,720,000, includes and estimated construction cost of \$9,820,00 that is not part of this grant application.
- RFFA funding request by project phase:
(e.g. Project Development, P.E., Environmental, ROW acquisition, Construction)
P.E. \$1,816,000
ROW \$504,000
- Local match or other funds
(minimum match = 10.27% of funds requested + match):
City Funds \$580,000 (20%)

Map of project area

- Provide a map of the project consistent with GIS shapefile standards found in Appendix B of the Application. (See separate attached File).

Project sponsor agency

- Contact information (phone # & email) for:
 - Application lead staff
Charles Eaton, Engineering Director, 503-786-7605, eatonc@milwaukieoregon.gov
- Project Manager (or assigning manager)
Charles Eaton, Engineering Director, 503-786-7605, eatonc@milwaukieoregon.gov
- Project Engineer (or assigning manager)
Charles Eaton, Engineering Director, 503-786-7605, eatonc@milwaukieoregon.gov
- 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 Milwaukie has delivered several federal aid transportation projects, including the current 17th Ave Multi-use trail. Past budgetary issues have been evaluated and new budgeting practices have been implemented to account for the federal funding process. The City of Milwaukie is confident it can deliver the proposed project on time and within budget.
- 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 of Milwaukie has implemented new programs to develop secure and stable funding for Street, bicycle and pedestrian projects. The City currently has the budget capacity for the project as presented. The City of Milwaukie is currently exploring the possibility of becoming a certified agency and has the technical and administrative capacity to facilitate the project with City forces or through a certified design firm if necessary.

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 2010-2014 ACS data indicates that the Milwaukie Population is 20,291 with 9491 households that would be benefited by the project. The median household income is \$55,474 with 3,990 households at or below 80% of the median income with 2,576 (12.7%) households below the poverty level within the past twelve months. 791 individuals identify themselves as not speaking English well or not at all. 1,426 people identify themselves as Hispanic or Latino, 2,759 (13.6%) individuals identify themselves as minority, and 2,472 (12.1%) individuals experience a disability. 2232 individuals identify themselves as commuting to work via alternative modes of transportation.

The proposed project will provide a safe route for access by foot or bicycle to areas of employment, essential facilities and mass transit. The proposed project will connect with the Max Orange Line, downtown Milwaukie and the regional connections provided by the Trolley Trail and Springwater Corridors. Together with the Clackamas County project access is provided to the Max Green Line and the Clackamas Town Center area, including Sunnyside medical facility. These improvements will greatly reduce the dependency on automotive transportation and is vital to those with disabilities due to the fact that a majority of the Monroe Street corridor does not currently have safe, ADA accessible facilities.

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 conceptual design will reduce the average daily vehicular traffic from 2420 to less than 1500 and provide for safe, continuous east west pedestrian and bicycling facilities through the heart of Milwaukie. Although this corridor has been identified by both Metro and the City of Milwaukie as a high priority Active Transportation Route, use of the corridor by pedestrians and bicyclists has been very low due to lack of facilities and conflicts with vehicles that create safety concerns on the part of potential users. This project will create a safe, continuous walk and bike corridor from the Trolley Trail along the Willamette River to the City Limits of Milwaukie at Linwood Avenue. The safety issues for pedestrians and bicyclists in the corridor can best be described by the total lack of facilities east of 42nd, the extreme safety issues revolving around the Highway 224 crossing and UPRR crossing coupled with the high vehicular volumes in the area. The proposed project will provide for safer crossings by improving or adding pedestrian/bicycle signal activation, providing a continuous route for pedestrians while increase bicycle safety and providing alternatives in high volume areas.

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

The Monroe Neighborhood Greenway project provides access directly to employment and essential services in downtown Milwaukie, Central Milwaukie, including Providence Milwaukie Hospital and other medical facilities, the MAX Orange Line, the north Milwaukie industrial area, Milwaukie High School, and the regional Trolley trail on the west end. The projected when connected to the Clackamas County portion of the project will provide connection to employment and essential facilities in the Clackamas Regional Center, along the 82nd avenue corridor, the MAX Green Line and the I-205 Multi-use Path.

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

The proposed project supports the existing and expected development in the project area by providing active transportation facilities that connect to high employment areas, essential services and transit. This improvement will serve vital transportation needs and reduce household cost by reducing vehicle dependence.

The project area is currently developed with a mixture of housing types at low, moderate and high density. The largest employer in the project area is the Providence Milwaukie Hospital at the intersection of Harrison Street and 32nd Avenue. In addition, there are two large vacant properties accessed from the Monroe Street corridor. The vacant properties are zoned General Mixed Use which will allow a mixture of commercial and residential development critical to the Central Milwaukie area.

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).

The Monroe Street corridor is identified as a Principal Active Transportation route in the City of Milwaukie Transportation System Plan and in the Metro Regional Transportation Plan it is designated as “Greenway”. As of today, the Monroe Street Neighborhood Greenway does not exist in either Milwaukie or Clackamas County. The lack of the route is identified as a major gap in the regional active transportation network.

The proposed project improves the Regional Active Transportation Network by creating a vital east-west connection that is currently missing. The corridor connects the I-205 Multiuse Path with the Trolley Trail. It also provides an active transportation link between the MAX Green Line at Clackamas Town Center and the MAX Orange Line in downtown Milwaukie. Further improvements proposed within Clackamas County will connect the proposed project east to the I-205 Multi-use path and the MAX Green Line. When completed, this corridor will serve as a vital active transportation link in northern Clackamas County.

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?

The proposed project will provide for good user experience and an increased comfort level through the project limits, in an area without any active transportation facilities. The project provides this through traffic calming improvements such as curb chicanes, intersections improvements and crosswalks, bulb-outs, diverters and traffic circles as traffic calming measures. This portion of Monroe Street, from Linwood Avenue to 21st Street has a daily traffic volume in excess of 2,400 vpd and relatively high traffic speeds. As a result, the corridor can't be safely used by pedestrians, those with mobility devices such as wheelchairs, or less experienced bicyclist such as children, teens or inexperienced adult riders. Only experienced, high skill adult cyclists are comfortable on this section of Monroe Street. The proposed project will provide for a sidewalk along the entire Monroe Street segment from Linwood Avenue to 21st Street, creating a continuous active transportation facility. The project also will include bicycle amenities and improvements through bike lanes, sharrows and separated paths. These improvements will provide a comfortable active transportation route for all users and cross a major barriers created by UPRR and Highway 224, while connecting to the Trolley Trail and the MAX Orange Line.

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

The proposed Monroe Street Neighborhood Greenway project creates a 'last mile' connection between employment and transit in the Milwaukie Downtown, Central Milwaukie, North Milwaukie and Milwaukie Business and Industrial areas, along with the MAX Orange Line and populations in a transportation disadvantaged residential area. Those four employment areas are the location of transit stops on TriMet route #29, 32, 33 and 152 as well as the MAX Orange Line station in downtown Milwaukie. In addition, the project provides the "last mile" connection between a transportation disadvantage population and transit connections to employment in the east through connections provided by the county portion of the facility with connections to the Clackamas Regional Center, Sunnyside medical Center and the MAX Green Line.

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).

The City will develop a public engagement plan at the beginning of the preliminary engineering phase to complement the previous public engagement during the concept plan phase that was accomplished through a TGM grant (See Appendix A). The neighborhood associations have been actively involved throughout the process and will continue to be involved throughout the next phases. No demand management efforts are anticipated since there is no construction activities proposed with this application.

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

The project will be leveraged in the future with an additional \$9,820,000 of construction funds by providing a “shovel ready” project that can capitalize on other potential funding opportunities. The future funding would potentially include additional city funds from the Bicycle and Pedestrian Accessibility Program and the proposed Milwaukie Urban Renewal District.

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

The proposed project will allow those in the area to use active transportation modes that are not currently available due to a lack of active transportation facilities. The residents of the Monroe Street neighborhoods have no choice but to drive for all transportation purposes. These trips inevitably use Monroe Street to connect to Highway 224 or McLoughlin Avenue, or use Linwood Avenue to connect to King Road or Johnson Creek Blvd to access 82nd Avenue or I-205. These trips impact 82nd Avenue and McLoughlin, two of the most congested corridors in Clackamas County as well as surrounding collector and minor arterials streets and the At-grade rail crossings of Oak, Monroe, Washington and Harrison. The proposed Monroe Street Neighborhood Greenway project will provide facilities and cross major barriers to provide direct bike and pedestrian access to the McLoughlin corridor and the MAX Orange line as well as 82nd Avenue and the I-205 Multi-use path when combined with the Clackamas County portion of the project. This will reduce traffic congestion on 82nd Avenue, McLoughlin Boulevard and traffic impacts in the surrounding residential neighborhoods.

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)

In 2007, during the process of updating the City's Transportation System Plan (TSP), a Bicycle workshop with community members identified four Neighborhood Greenway routes across the city, where safer facilities for pedestrians and bicycles would improve transportation options. During a 2013 update of the TSP that involved open public meetings and solicitation of public comment, Monroe Street was prioritized as the first of the greenway routes that should be implemented. Monroe Street provides an important east-west connection between downtown Milwaukie and the commercial areas along 82nd Avenue in unincorporated Clackamas County, passing through a number of residential neighborhoods along the way.

The Milwaukie City Council added implementation of the Monroe Street Neighborhood Greenway to its list of Council goals in 2013. In 2014, the City received a Transportation and Growth Management (TGM) program grant from the Oregon Department of Transportation (ODOT) to develop a Concept Plan for the Monroe Street Neighborhood Greenway. The City then conducted a year-long public process, led by a Project Advisory Committee (PAC) of community stakeholders and technical advisors and collecting input from several public workshops. In December 2015, the City Council adopted the Concept Plan by resolution, with a directive to seek funding for implementation.

- 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.

As noted above, the Concept Plan was developed under the auspices of a TGM grant, with project oversight by ODOT. The ODOT liaison was actively engaged throughout the project, participating in PAC discussions and public workshops, confirming key concepts with other ODOT divisions, and advocating for the Concept Plan at the adoption hearing before City Council.

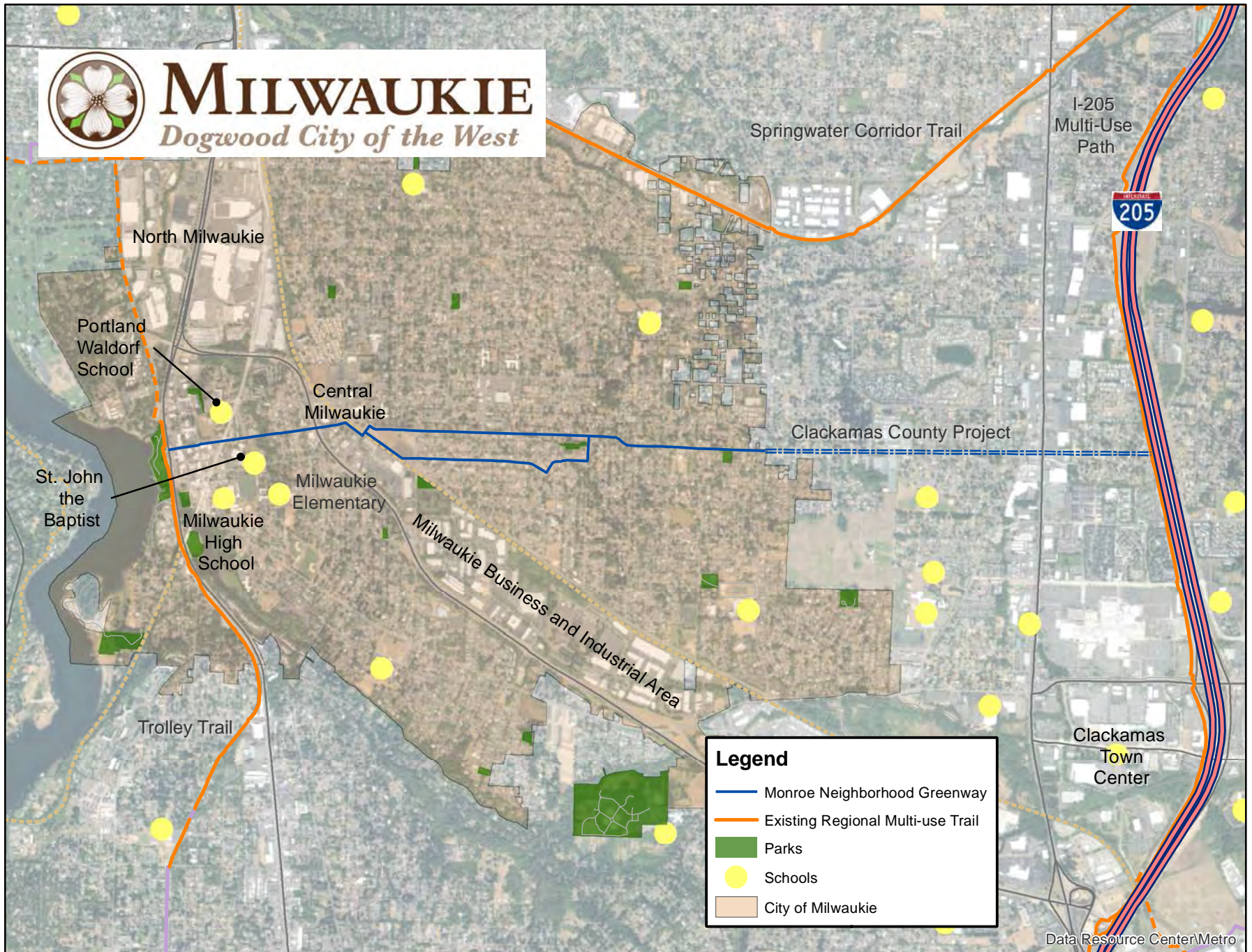
In 2012-13, the City updated its TSP in conjunction with Metro's effort to ensure compliance with the 2035 Regional Transportation Plan (RTP). That process included a review of the project list in the City's TSP and designation of the Monroe Street Neighborhood Greenway as a high priority project.

Maps



MILWAUKIE

Dogwood City of the West












MILWAUKIE

Dogwood City of the West



- PROPOSED GREENWAY SECTIONS**
-  Trolley Trail Connection - McLoughlin Blvd to 21st Ave
 -  Section A - 21st Ave to Hwy 224
 -  Section B - Hwy 224 to Campbell St
 -  Section C - Includes Campbell St and Oak St
 -  Section D - Oak St to 42nd Ave
 -  Washington St Bicycle Route - Oak St to 42nd Ave
 -  Section E - 42nd Ave to Linwood Ave

Letters of Authorization



CITY OF MILWAUKIE
"Dogwood City of the West"

Resolution No. 98-2016

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILWAUKIE, OREGON, AUTHORIZING THE NOMINATION OF THE MONROE STREET NEIGHBORHOOD GREENWAY PROJECT FOR THE METRO REGIONAL FLEXIBLE FUND ALLOCATION PROGRAM.

WHEREAS, Metro is soliciting projects for the 2019-2021 Regional flexible Fund Allocation program; and

WHEREAS, The City of Milwaukie City Council directed staff to pursue grants for the Monroe Street Neighborhood Greenway; and

WHEREAS, Monroe Street Neighborhood Greenway project is eligible for the Regional Flexible Funds Allocation program; and

WHEREAS, The City of Milwaukie desires to participate in the program and will commit to provide the indicated match should the grant funds be awarded; and

Now, Therefore, be it Resolved that the City Council approves the Monroe Street Neighborhood Greenway project for nomination to the 2019-2021 Metro Regional Flexible Funds Allocation program and authorizes the Engineering Director to submit the application.

Introduced and adopted by the City Council on 8/16/16.

This resolution is effective on 8/16/16.



Mark Gamba, Mayor

ATTEST:

APPROVED AS TO FORM:
Jordan Ramis PC



Pat DuVal, City Recorder

City Attorney



CITY OF MILWAUKIE

"Dogwood City of the West"

Resolution No. 107-2015

A resolution of the City Council of the City of Milwaukie, Oregon, adopting a Concept Plan for the Monroe Street Neighborhood Greenway.

WHEREAS, neighborhood greenways are low-volume, low-speed streets that provide safe, quiet routes for motorists, pedestrians, and bicyclists; and

WHEREAS, the City's Transportation System Plan (TSP) identifies Monroe Street as one of several neighborhood greenways; and

WHEREAS, Monroe Street provides an important regional connection, linking the Willamette River, Trolley Trail, and downtown Milwaukie with Milwaukie's eastern neighborhoods, the I-205 multiuse path, and the Clackamas Town Center; and

WHEREAS, the Oregon Department of Transportation (ODOT) awarded the City a grant from the Transportation and Growth Management (TGM) program to engage consultant expertise in developing a conceptual plan for the improvements that will make Monroe Street a functional neighborhood greenway; and

WHEREAS, the City formed a Project Advisory Committee (PAC) to inform and shape the work of the design team, with the PAC comprised of community stakeholders and technical advisors; and

WHEREAS, the City hosted several public meetings between October 2014 and July 2015 to inform local residents and property owners along the greenway corridor about the planning effort, engage them in discussion about key components, and solicit their feedback and comments; and

WHEREAS, input from the PAC and the larger public has been integrated into the proposed Concept Plan; and

WHEREAS, the proposed Concept Plan provides a clear vision of the general nature of the recommended improvements that will make Monroe Street a functional neighborhood greenway, with room for the City to finalize the details as additional data and information become available; and

WHEREAS, Clackamas County is currently engaged in a similar planning effort to develop a greenway concept plan for the Monroe Street corridor between Linwood Avenue and the I-205 multiuse path, which provides an important opportunity for coordination between the City and the County;

NOW, THEREFORE, BE IT RESOLVED that:

- 1) The City Council adopts the Monroe Street Neighborhood Greenway Concept Plan as a framework for implementing the neighborhood greenway concept outlined in the TSP;
- 2) The Council directs City staff to take steps to implement the Concept Plan, including pursuing grants to fund further design and construction;
- 3) The Council directs City staff to seek Council authorization prior to entering any construction phase or engineering design project related to the Monroe Street

neighborhood greenway, including obtaining any required approvals or permits;
and

- 4) The Council directs City staff to conduct additional modeling of traffic data and then coordinate with other agencies as needed and, where possible, test the diverters proposed in the Concept Plan.

Introduced and adopted by the City Council on 12/1/15.

This resolution is effective on 12/1/15.



Mark Gamba, Mayor

ATTEST:

APPROVED AS TO FORM:
Jordan Ramis PC



Pat DuVal, City Recorder



City Attorney

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

As attested by:


(signature)

CHARLES EATON
ENGINEERING DIRECTOR
(name and title)

8/26/16
(date)

Appendix A – Environmental Justice Compliance

2. Summary of non-discriminatory engagement

Key elements of public engagement process

2007 TSP Update (2006-07)

(major revisions to original 1997 document, including initial identification of neighborhood greenway routes)

- 4 Community Briefings = 2-hour meetings to introduce the TSP and the update project, invite future participation, solicit public input on existing conditions and key issues, and inform the public about how to stay updated; briefings were advertised in the City's Milwaukie Pilot monthly newsletter, with flyers hand-delivered to downtown businesses, in local newspaper stories, and by direct contact with parent-teacher groups, local churches, and other interested individuals
- Advisory Committee = 6 meetings of 25-member group representing citizens, businesses, and agencies (formed both by appointed representatives and through an open application process); focused on developing the City's transportation goals, identifying new or revised policies, reviewing and consolidating recommendations from working groups, and guiding project prioritization
- Working Groups and Workshops = Subgroups created to focus on specific elements of the TSP, open to anyone interested in participating; working groups focused on downtown parking, freight, street design, traffic and street network, and transit; workshops focused on bicycles and pedestrians; 2 to 4 meetings of each group; over 100 total participants
- Web Survey = 12-question self-selected survey posted to City website for 3 weeks during project; aimed at informing the community about the TSP update process and soliciting comments/feedback about community issues and concerns; nearly 160 participants
- Open House event to present all recommendations of various Working Groups and Workshops

2013 TSP Update (2012-13)

(minor revisions for compliance with Metro's 2035 RTP, including high prioritization of Monroe Street Neighborhood Greenway)

- 3 open public meetings to present information and solicit comments/feedback (April, June, and Sept 2013)
- Direct presentations to neighborhood district associations
- Project webpage on City website (maintained throughout project)
- Regular updates in the City's Milwaukie Pilot monthly newsletter

Monroe Street Neighborhood Greenway (2014-15)

(TGM-funded development of Concept Plan)

- Project webpage on City website (maintained throughout project)
- Project Advisory Committee (PAC) formed at outset of project, comprised of community stakeholders (representatives of neighborhood associations, local bike advocacy group, Public Safety Advisory Committee, County advisory committee on pedestrians & bikeways) and technical advisors (from local fire district, County planning office, City departments of engineering and streets/stormwater, ODOT)
- 4 open public workshops or informational meetings (Dec 2014, March 2015, June 2015, July 2015)

- Public comment and survey efforts connected with each public workshop (comments collected and documented, posted to project website)
- E-mail updates to interested persons
- Project announcements posted in City's monthly Milwaukie Pilot newsletter
- Direct mailings to property owners and residents along (and within about 300 ft of) the proposed route
- Flyer-reminders distributed to doorsteps of properties along the proposed route in advance of key public workshops
- Neighborhood representatives on PAC acted as liaisons to their respective neighborhood district associations, conveying information and feedback in both directions (i.e., between neighbors and project team)

Appendix 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)
The majority of the route has no pedestrian facilities. The project will provide both pedestrian facilities and vertical delineation through the use of curbs and/or vegetated swales/landscape strips/parking bays. Where existing facilities exist, pedestrian improvements will consist of increased width of sidewalk and installation of landscape buffers and street trees and/or parking bays.
- 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
The project will provide for a total width of between 11 feet and 15 feet throughout the project length. Current conditions provide from zero to 5 foot buffers for a total width of 5 feet to 10 feet.
- Sidewalk clear zone of 6 feet or more
All walkways will be constructed to provide a minimum width of 6 feet throughout the length of the project. Existing conditions range from none to a five foot maximum width.
- Remove obstructions from the primary pedestrian-way or add missing curb ramps
All pedestrian ways will be upgraded to current ADA standard including all barriers such as driveways, mailboxes and utilities. In addition all intersections will be upgrades as necessary to include curb ramps.
- Add pedestrian crossing at appropriate location
Pedestrian crossings will be added at all intersections in accordance with ADA standards with additional enhancements as appropriate, including markings, RRFB's, HAWK and improved signalization.
- Re-open closed crosswalks

- Raised pedestrian refuge median or raised crossing, required if project is on a roadway with 4 or more lanes

The intersection of Monroe and Highway 224, which is five lanes, will be enhanced with a center protected median and traffic diverter to restrict through movements to only bicycle and pedestrians thereby reducing conflict points and shorting the crossing distances.
- Reduced pedestrian crossing distance

Crossing distances will be reduced throughout the project through the use of bulb outs and medians to provide for the minimum crossing distance possible. Currently all crossings are unrestricted, vehicular centric, providing for closer to the maximum crossing distances possible
- Narrowed travel lanes

Currently the lanes are unrestricted width due to the lack of curbs. Bicyclists and pedestrians are forced to utilize the existing roadway or gravel shoulders. The project will provide for better vehicular channelization as well as various traffic calming features including chicanes, bulb-outs, pinch points and diverters to reduce traffic volumes and speed.
- Reduced corner radii (e.g. truck apron)

The majority of the existing intersections are unrestricted and lack curb returns or pedestrian protection of any kind. The project will provide for curb returns at all intersections with the goal of providing both traffic calming and pedestrian safety throughout the project.
- Curb extensions

Currently no curb extensions are utilized and will be provided throughout the project.
- Rectangular Rapid Flashing Beacon (RRFB) or pedestrian signal

The project includes proposed new RRFB's and HAWK signal installation at the intersections of Oak and Campbell; 37th and Washington; and Linwood and Monroe.
- Lighting, especially at crosswalks – pedestrian scale (10-15 feet), preferably poised over sidewalk

Currently no pedestrian centric lighting exists. The project will provide both crosswalk lighting at major intersections as well as pedestrian scale lighting along proposed multi-use walks and paths.
- Add countdown heads at signals

The project will update all existing signals to new ADA standards with both countdown and APS elements where none exist today. All new facilities will be provided with both countdown and APS elements as appropriate.
- Shorten signal cycle lengths of 90 seconds or less – pedestrian friendly signal timing, lead pedestrian intervals

Currently signals are vehicular centric. The project will look to ways to provide for increased pedestrian and bicycle enhancements including lead pedestrian intervals.
- Access management: minimize number and spacing of driveways
- Arterial traffic calming: Textured intersections, gateway treatments, raised medians, road diets, roundabouts

The project crosses a major arterial (Highway 224) which consists of five lanes without any bicycle or pedestrian enhancements other than the existing traffic signal. The project will provide for traffic diversion, protected median and signal enhancements including bicycle activation provisions.

- Wayfinding

Wayfinding is currently present intermittently along the length of Monroe Street. The project would apply them with greater frequency and consistency throughout the corridor. There would also be bicycle specific wayfinding signs places at certain intersections with key destinations, distances and estimated journey times.
- Benches
- Transit stop amenities or bus stop pads

The project would construct bus stop improvements at the intersection of Monroe and Linwood.
- Add crosswalk at transit stop

Currently no marked crosswalks exist at transit stops. The project will provide for markings and bicycle/pedestrian activated signal at the Monroe/Linwood intersection serving line 34 and provide improved access to lines 29, 32, 33, 152 and the Orange Max line.
- 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

A small section is along Oak street, a major vehicle connection and the crossing point of the UPRR mainline. Current conditions include a sidewalk on one side and an asphalt path on the other with bicycles on the roadway where volumes approach 8000 vehicles per day. The project will construct two separated multi-use paths on each side of Oak to provide connections for both bicycles and pedestrians to the greenway east and west of the pinch point as well as the Washington street bicycle route.
- Separated multi-use trail parallel to roadway

The project include a small portion of a separated multiuse pat to connect Oak street to Washington street to provide a safer alternative to the portion of the project with higher vehicular volumes.
- Bike priority treatments at intersections and crossings (i.e. advance stop lines, bike boxes, signals, high-intensity activated crosswalk (HAWK) signals, user-activated signals

Currently no bicycle priority treatments exist. The project will add signalization with bicycle activation as well as enhance/replace existing signals with bicycle activation and pedestrian features. In addition, several RRFB's/HAWK signals are proposed to further facilitate safe bicycle and pedestrian movements at key intersections.
- Medians and crossing treatments

The existing conditions include no medians and limited crossing treatments. The project will add protected medians and crossing treatment throughout.
- Wayfinding, street markings

The project will add to and enhance all the existing street markings and wayfinding

- Lighting at intersections
Existing lighting varies from nonexistent to adequate. The project will provide for both improved pedestrian lighting at intersections but also includes specific lighting along portions of improvements that are off roadway.
- Bicycle boulevard treatment where ADT is less than 3,000 per day: Buffered bicycle lane, 6 foot bike lane, 3 foot buffer
The project converts a local collector into a neighborhood greenway through the use of traffic calming and diverters.

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
The existing conditions have significant areas of unimproved ROW with aggregate parking. The project will delineate the roadway and add separation between pedestrians and motorists through the use of vegetated buffers, curbs and green features which will include the addition of street trees throughout.
- 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

Connection To The Trolley Trail

As noted earlier in this report, the original Monroe Street Greenway proposed in the 2007 TSP begins at 21st Avenue, two blocks to the east of OR 99E and the Trolley Trail. Construction of the trail in the intervening years, however, has created a need to better connect the trail to Monroe Street. While this connection was not scoped as part of the Monroe Street Neighborhood Greenway concept design, it will be important to link the neighborhood greenway with a variety of regional connections via the Trolley Trail and future path along SE 17th Avenue.

Today, pedestrian access from the Trolley Trail to Monroe Street is relatively comfortable and straight forward – but in light of expectations for increased pedestrian and bicycle traffic on this facility, it is recommended that the existing sidewalk on the westside of 99E be upgraded in the future to multi-use path standards.

In addition, current bicycle access between the trail and Monroe Street today does not meet best practices for bicycle intersection design, and is not intuitive for less experienced riders. To improve the intersection for bicycle and pedestrian comfort and safety, the curb radius at the intersection of Monroe and OR 99E should be narrowed to reduce crossing distances and lower turning speeds. The stop bar at the east leg of the intersection could be pulled back 10 feet and a bicycle box installed, with restrictions placed on right turns on red. The western approach would benefit from new curb ramps designed specifically for bicycle traffic. This would help reduce conflicts with pedestrians at the existing entry ramps.

For signal upgrades, a leading pedestrian interval of 5 seconds would give pedestrians and bicyclists a head start through the intersection. Alternatively, bicycle signal heads could be installed in both directions, and an exclusive 10-second green phase could be given to east-west bicycle movement, while all other signals are red. Either improvement would help reduce conflicts with motorists turning at the intersection. Finally, wayfinding signage and sharrows on the two-block stretch of Monroe through downtown would create a stronger connection between the trolley trail and the neighborhood greenway.



Trolley Trail



Riverfront Park and Trolley Trail

Note: dashed red lines represent existing "no parking" zones. Solid red lines denote new "no parking" locations.



Monroe Street Greenway Concept Design

Section A - 21st Avenue to OR 224

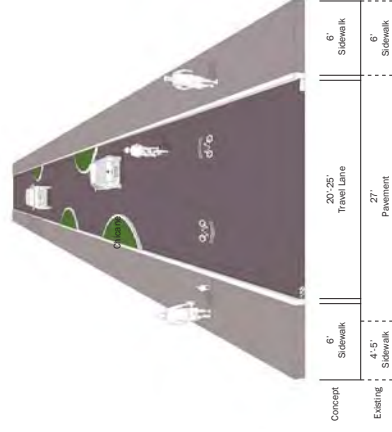
This is the oldest section of Monroe Street, with constrained right-of-way and sidewalks that are functionally obsolete. At its narrowest, this section is 27 feet wide, with curb-tight 5 foot sidewalks and private properties abutting the sidewalk. There is no parking between 21st Avenue and the TriMet MAX crossing. To avoid private property impacts, the concept plan expands these sidewalks into the street for a total of 6 feet to comply with the City's sidewalk design standards. East of 29th Avenue, existing sidewalks are expanded into the landscape strip. New ADA-compliant curb ramps with tactile warning strips are shown at all required intersections.

Several traffic calming features are placed to reduce speeds in this section. These include chicanes, which are grouped to minimize the temptation to speed. Curb extensions at 21st Avenue, 25th Avenue, 28th Avenue and 29th Avenue narrow the street opening, focus driver attention on the intersection and provide a shorter pedestrian crossing. Curb extensions and chicanes incorporate stormwater treatment features.

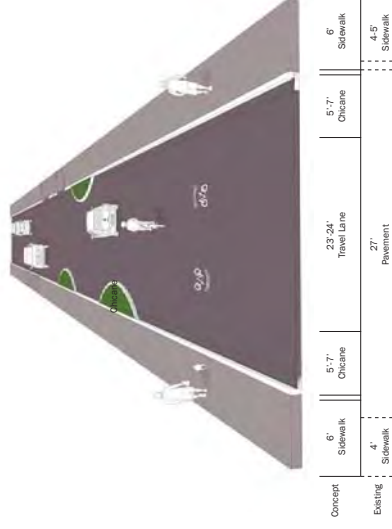
The 21st Avenue intersection is also suitable for a gateway feature (such as decorative signage or planters) to make it readily apparent that this is a neighborhood street rather than a thoroughfare. New planter strips near the 21st Avenue intersection help retain stormwater and reduce runoff while reducing the street width and providing an entry into the neighborhood greenway.

On-street parking utilization is high in this section, and the design concept avoids parking impacts except at intersections and proposed chicane locations. While the curb extensions are relatively fixed, chicanes can be moved as needed to preserve key parking spots. Existing traffic islands are retained, including the MAX project splitter islands.

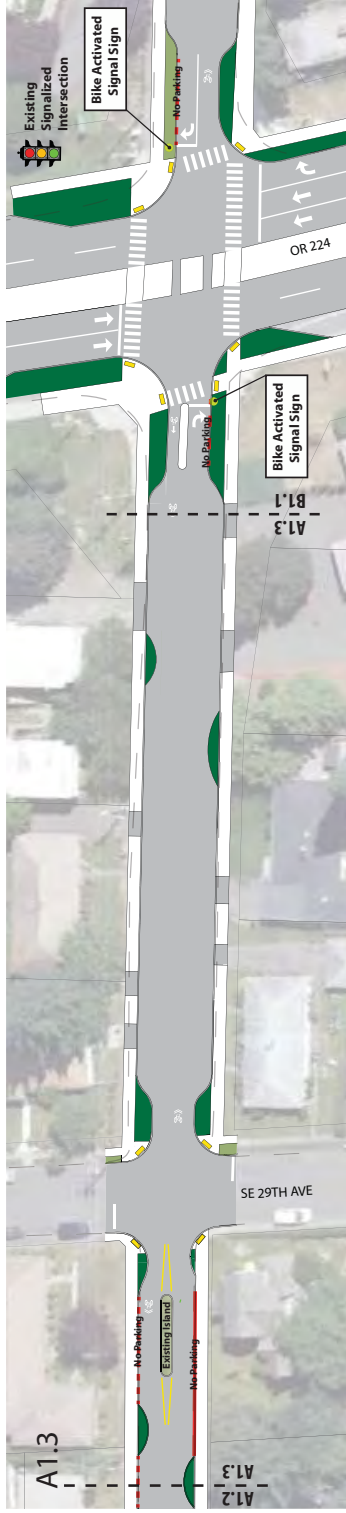
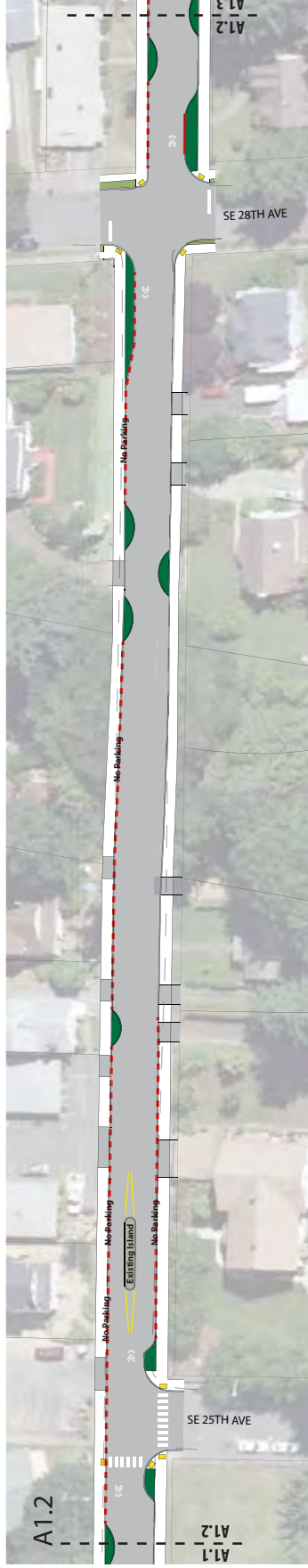
A connection to the Trolley Trail on the west side of 99E is not included in the concept design, as it was beyond the scope of this project. However, suggestions for improving that connection are included on page 27 of this report.



Section A: SE 21st Avenue to MAX Crossing



Section A: MAX Crossing to OR 224



Legend

- Proposed Sidewalk
- Proposed PerVIOUS Asphalt Walk
- Proposed PerVIOUS Pavement
- Existing Landscape
- New Landscape Strip
- Potential BIKELANEN Area
- Curbed Churne
- Shared Path
- Bike Sharow
- Existing Fire Hydrant
- ADA
- Activated Signal
- Signal
- Existing No Parking
- Existing No Parking
- New Parking
- Existing Edge of Pavement
- Existing Edge of Pavement





Photo: Michael McKisson



Potential intersection approaches at OR 224
 Top: Left-hand bicycle lane
 Bottom: Bicycle box



Photo: Greg Roussman

Section B – OR 224 to Campbell Street

This section includes a median diverter at the OR 224 intersection that prevents any through vehicle movement across OR 224, except for bicycles. The diverter prohibits all left turns from Monroe Street onto OR 224 and from OR 224 onto Monroe Street. Right-in/right-out movements are allowed at the east leg of the intersection. Traffic on eastbound OR 224 intending to access local medical offices in this area will use either use Harrison Street or Oak Street eastbound to access Campbell Street. The median diverter serves as a refuge island for pedestrians in the middle of the intersection, occupying space formerly used for left-turn lanes. Refuge areas include user-activated push button signals for pedestrians who need more time to cross the highway.

A partial closure diverter is shown at the west leg of the intersection, preventing any motor vehicles from making right turns from southbound OR 224 onto Monroe Street westbound toward downtown, while also allowing for a new curb extension to replace the existing southbound right turn lane.

The plan shows a bicycle activated signal for the OR 224 crossing. This signal could be activated by a push button and/or by new detector loops in the pavement. Options for intersection treatment include the two shown at right. Installing a painted "bicycle box" would allow bicyclists to move into the protected space ahead of waiting automobiles, requiring a "no right turn on red" restriction. Another option would provide a narrow through lane for bicycle riders to the left of the auto right turn lane. With this configuration, right turns on red would be permissible.

East of OR 224, sidewalks are widened into the street for a total of 6 feet to meet city design standards. Where required, new ADA-compliant curb ramps with tactile warning strips are shown.

Future coordination with ODOT will be needed at the time of design to determine acceptable design details for the OR 224 crossing, including signalization. Appendix D lists these and other ODOT coordination requirements.

The concept design shows curb extensions throughout this section. The curb extension at Penzance Street decrease the severity of the angle at the intersection, improving sightlines for all modes. Chicanes can be placed as needed to narrow the width of the street, and a traffic circle is shown to reduce speeds. The intersection of Monroe and Campbell Street is also realigned by placement of curb extensions to create a better defined intersection with clearly defined pedestrian crossings and access. At Campbell Street, the greenway shifts southeast and continues along Campbell Street after Monroe "T"s" into Campbell.



Median diverter where a neighborhood greenway intersects a major arterial

Photo: Steven Vance

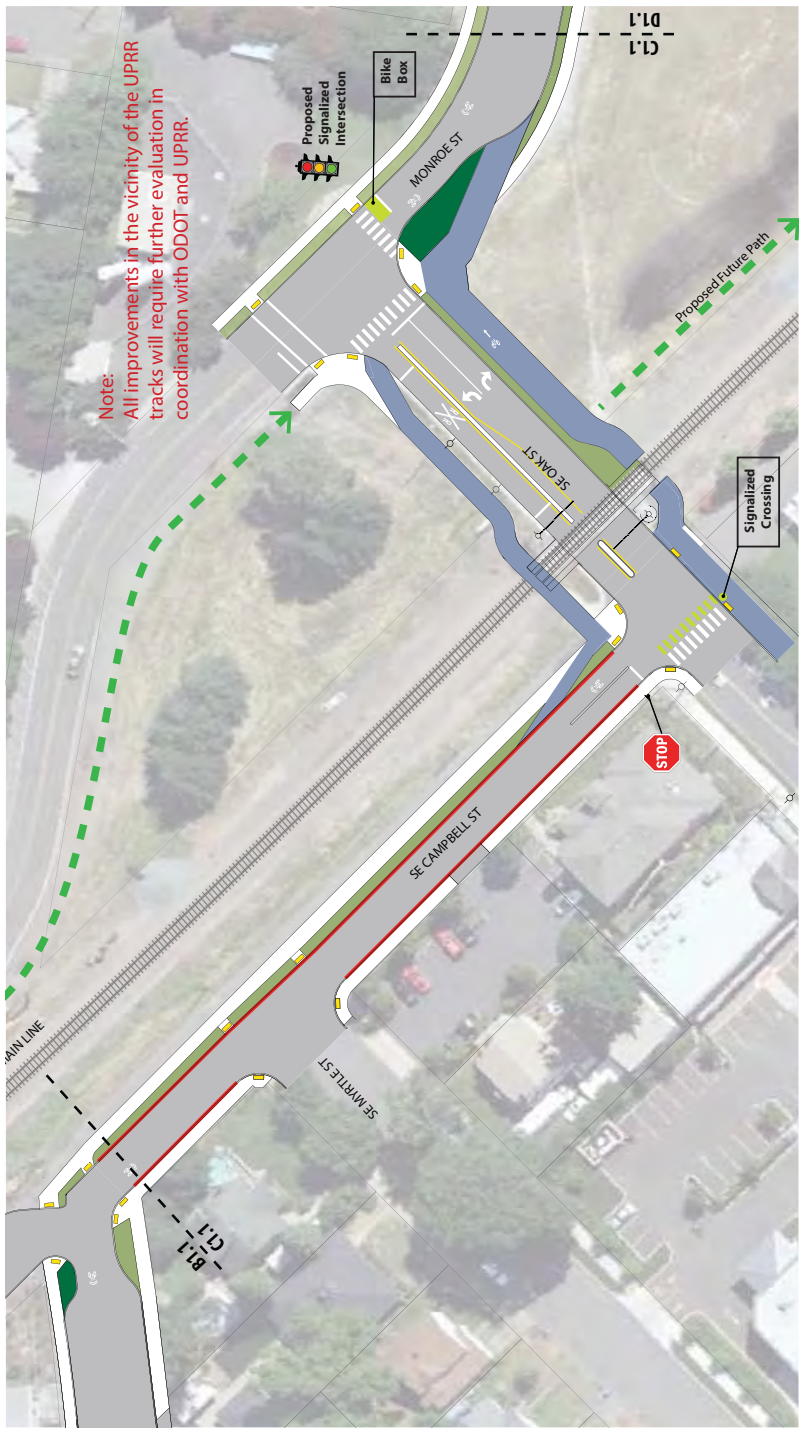


Section B: OR 224 to Campbell Street

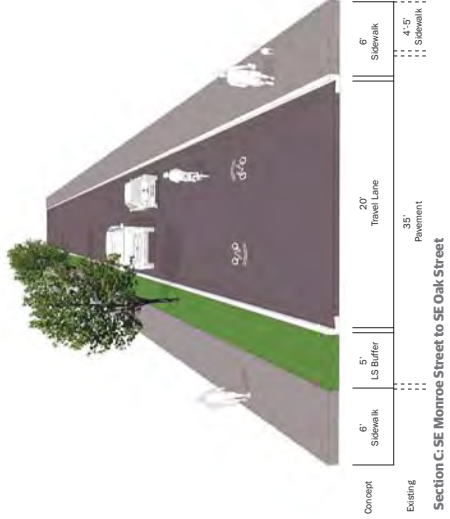
Legend

- Proposed Sidewalk
- Proposed Paved Asphalt Walk
- Proposed Previous Pavement
- Existing Landscape
- New Landscape Strip
- Potential Bicyclist Area
- Curbed Chicanes
- Shared Path
- Bike Sharrows
- Existing Fire Hydrant
- Activated Signal
- Signal Pole Box
- Existing No Parking
- New Parking
- Concrete Curb
- Existing Edge of Pavement





Note: All improvements in the vicinity of the UPRR tracks will require further evaluation in coordination with ODOT and UPRR.



Section C: SE Monroe Street to SE Oak Street

Section C - Campbell Street to Railroad Avenue/Oak Street

Here the neighborhood greenway continues along Campbell Street to the southeast. A new sidewalk and planting strip is shown along the east side of Campbell Street directly adjacent to the UPRR tracks, and on-street parking would be prohibited between Monroe Street and Oak Street. Crossing improvements at the intersection of Campbell and Oak Streets include new signage and some form of signalization to help bicycles and pedestrians cross Oak Street. While a pedestrian-activated rapid flash beacon or hybrid beacon may be suitable here, the intersection's proximity to the UPRR crossing could require a full signal if mandated by ODOT's Rail Division. Coordination with UPRR and ODOT Rail will be necessary.

In addition to a marked high-visibility crosswalk for pedestrians, green "crossbiker" pavement markings help guide bicycle riders across Oak Street.

Oak Street in this section is a heavily trafficked roadway, with volumes approaching 8,000 vehicles per day at the UPRR crossing. The roadway width is constrained in this section and the concept design shows expanding the current sidewalks on Oak Street to multi-use path standards to allow bicycle riders and pedestrians to safely cross the rail tracks separately from heavy traffic.

At the railroad crossing, the 12-15 foot wide sidepaths are designed for one-way bicycle traffic: riders heading west cross on the north side of the tracks while those heading east cross on the south side. Pedestrians can use either sidepath in both directions and continue on existing sidewalks after crossing the tracks.

The concept design shows a new signal at the T-intersection of Oak Street/Railroad Avenue and Monroe Street to create safer conditions

for pedestrians and bicyclist riders. Currently, traffic heading east on Oak Street is not stop controlled and is able to turn left or right without stopping, which makes for difficult and dangerous pedestrian and bicycle crossings. A stop treatment is needed (either a four-way stop or a signal that can be timed in conjunction with the train crossing signal); this will require coordination with UPRR and ODOT Rail. New high-visibility crosswalks are installed at this intersection, and a large curb extension at the southeast corner of the intersection reduces turning speeds and shortens the crossing distance for pedestrians. This feature also incorporates bioretention basins to improve stormwater management. For westbound cyclists on Monroe Street, a new bicycle box would allow riders to filter to the front of the intersection and give them a head start once the light turns green.

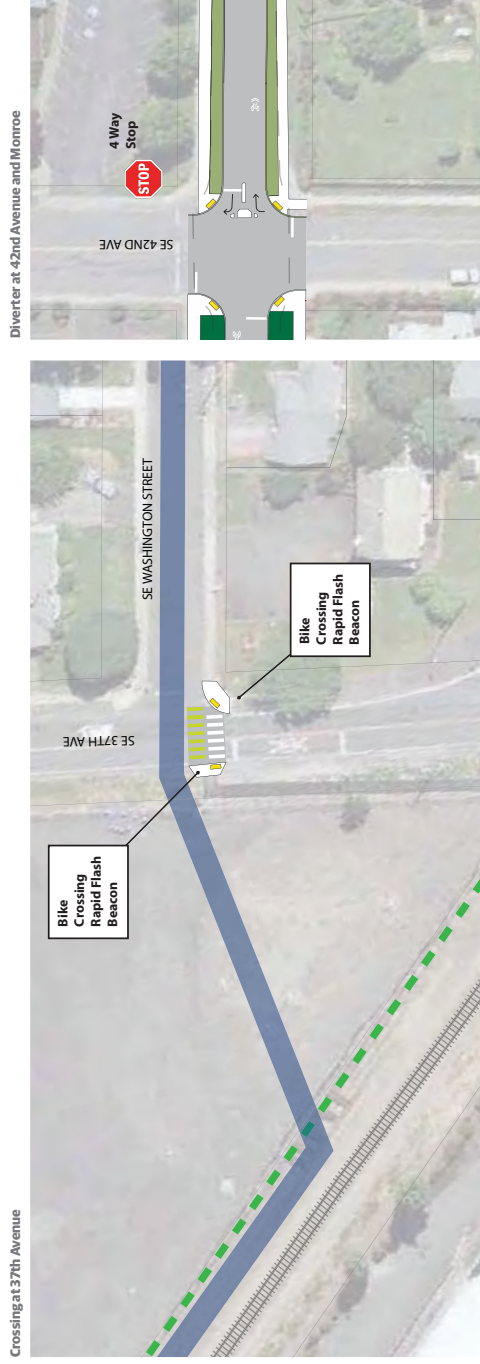
The Moving Forward Milwaukee plan includes a proposed multi-use path on the east side of the tracks (shown in the concept plan as a dashed green line). Further discussions are needed between the City of Milwaukee and ODOT Rail to finalize the location of this path crossing.

Washington Street Bicycle Route

The Washington Street bicycle route came about as a result of community input late in the planning process, so was not included as part of the original concept design.

In this route (represented here on the map below), an off-street path paralleling the railroad tracks through the undeveloped McFarland site connects Oak Street to Washington Street at 37th. Bicyclists would follow this route onto Washington Street, a low-speed and low-volume street that parallels Monroe. They would then return to Monroe Street on Garrett Drive or Home Avenue. A diverter is placed on Monroe Street at 42nd Avenue to deter cut-through auto traffic on Monroe between 42nd and Linwood. Through traffic would shift to Harrison Street/King Road via 37th or 42nd Avenue.

A flashing beacon at 37th and Washington would allow for safe pedestrian and bicycle crossing. Sharrow and signage would mark the route on Washington and Garrett or Home, but major changes or improvements are not anticipated on these streets. Further design - and public input - will be needed to ensure that the route does not encourage additional motor vehicle traffic to use the route to bypass Monroe Street. This plan provides an overview of the Washington Street bicycle route, but does not provide detailed conceptual design of the section between Oak Street and Garrett Drive or Home Avenue.



Washington Street Bicycle Route Map



This figure is for route illustration purposes only. Additional design will be needed to identify traffic control and greenway design elements

Washington Street Bicycle Route, Section C – Campbell Street to Railroad Avenue/Oak Street

Section C includes a new shared-use path that would be constructed along the UPRR line through the 7-acre McFarland property slated for new residential or mixed use development. The Monroe-Washington Street alignment would improve the crossing where Campbell Street intersects Oak Street, either on the north or south side of the existing train crossing. Details of the exact configuration will require coordination between the City, ODOT Rail, and UPRR in future engineering phases.

Washington Street Bicycle Route, Section D – Railroad Avenue/Oak Street to 42nd Avenue

Continuing from Section C, the proposed new path travels through the McFarland site and then connects with Washington Street at 37th Avenue. This new crossing includes high-visibility crosswalks, new signage and a pedestrian-activated rapid flash beacon. While vehicle counts have not been conducted on Washington Street, it is generally a low-volume local neighborhood street requiring minimal improvements to serve as a shared-space bikeway. Wayfinding signage and sharrows are needed, and stop signs at 40th Avenue should be turned to give Washington Street traffic the right-of-way, as is often done to facilitate bicycle travel on neighborhood greenways. In addition, the current two-way stop at 42nd Avenue should be converted to an all-way stop to enhance bicycle and pedestrian safety at the intersection.

In this alignment, Monroe Street between Oak Street and 42nd Avenue includes widened sidewalks, rebuilt curb ramps and some traffic calming and stormwater improvements. The existing eastbound uphill bicycle lane is preserved to protect cyclists who choose to stay on Monroe instead of taking the less stressful but longer route on Washington Street. Heading westbound, more sharrows are added to aid downhill cyclists.

Washington Street Bicycle Route, Section E – 42nd Avenue to Linwood Avenue

The Washington Street bicycle route alignment continues east past 42nd Avenue and rejoins the Monroe Street corridor, using either Garrett Drive or Home Avenue Via Ada Lane. Both of these routes are suitably low-volume, but there are two slight advantages to using Home Avenue: first, the street already intersects Monroe Street at four-way stop which is safer for bicycle riders using the Monroe-Washington alignment. Second, Home Avenue more directly serves the playground at Homewood Park. If Garrett Drive is ultimately chosen as part of the Monroe-Washington alignment, an all-way stop is recommended to increase the safety of users transitioning from Garrett Drive to Monroe Street.

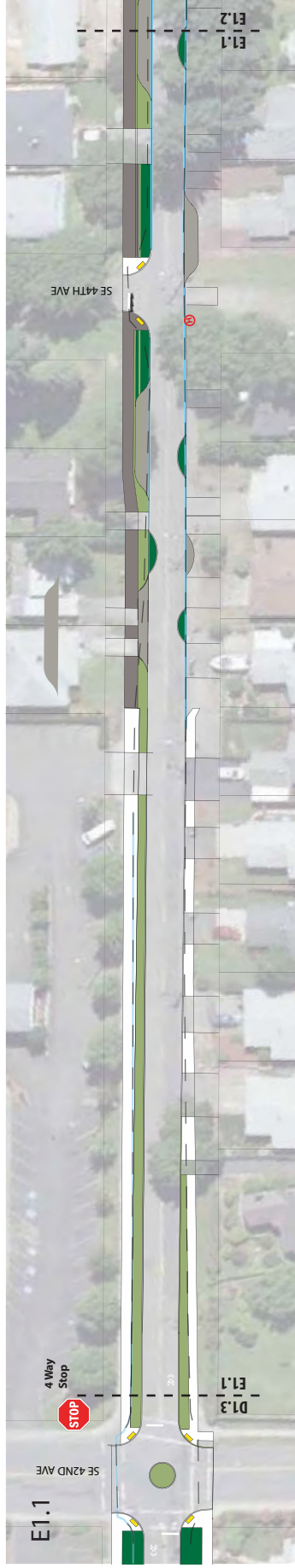
Photo: Thatcher Imboden



Example of a right-in/right-out diverter



Washington Street is a local residential street with relatively low traffic and speeds



Section E - 42nd Avenue to Linwood Avenue

In order to provide a safe place to walk and better define the street, the concept design includes a 7-foot permeable pavement walking path on the north side of Monroe Street. This path is buffered from the roadway by a landscape strip, chicanes, and dedicated on-street parking designation where appropriate. The layout formalizes on-street parking somewhat, compared to the existing ad-hoc condition along the gravel shoulder. The south side of Monroe Street contains periodic chicanes as well as curb extensions at intersections. These features include stormwater drainage to help reduce the likelihood of flooding.

Where the roadway curves at 52nd Avenue, new speed cushions are shown to slow vehicle speeds while still accommodating emergency vehicle access. (It may be necessary to adjust the curvature of the roadway to accommodate these safety improvements right-of-way impacts.) The northwest corner of this intersection is currently within public right-of-way and is a suitable location for a new park or other similar public gathering space.

Early in the concept design development process, the project team considered a full urban build-out of Monroe Street with sidewalks, curbs, and drainage on both sides of the street. This would be an extremely high cost approach, and was not well-supported by the PAC or the public. It would change the rural, forested character of Monroe Street and have significant impacts on existing landscaping and vegetation.

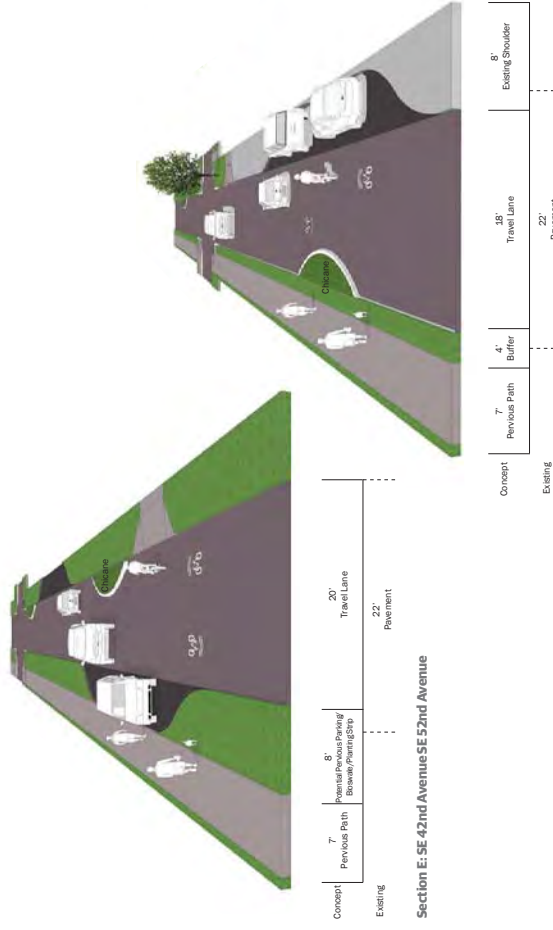
As a more cost-effective measure, the concept design proposes new curbs in limited locations only. These include 47th Avenue/Garrett Drive, Home Avenue, and 55th Avenue. Traffic circles are shown at these locations, along with rebuilt intersection corners that include ADA-compliant curb ramps that incorporate stormwater management

features. New curbs are especially important at the intersection with Home Avenue to better define access points into the convenience store parking lot at the southeast corner and clearly delineate between public and private right-of-way. A raised crosswalk at Wichita Park enhances safe access to the park from the pedestrian path on the north side of the street.

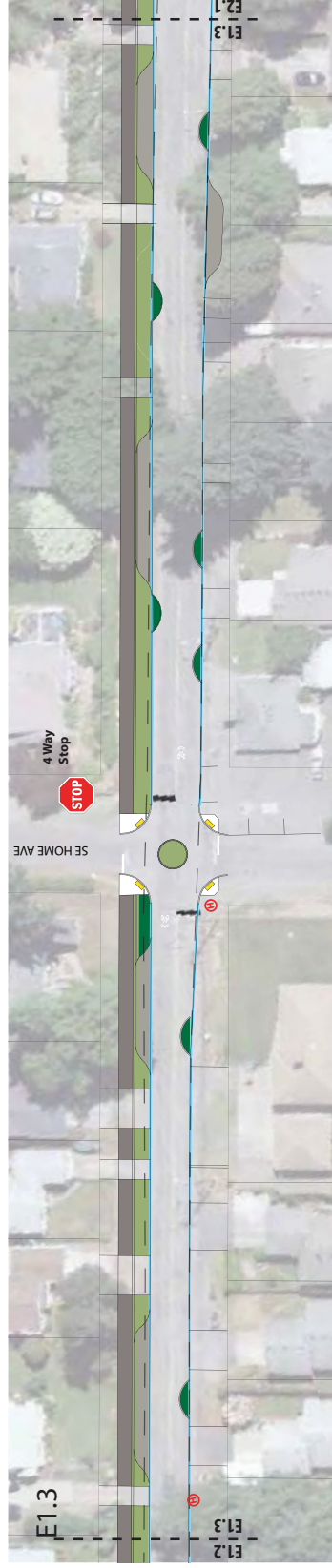
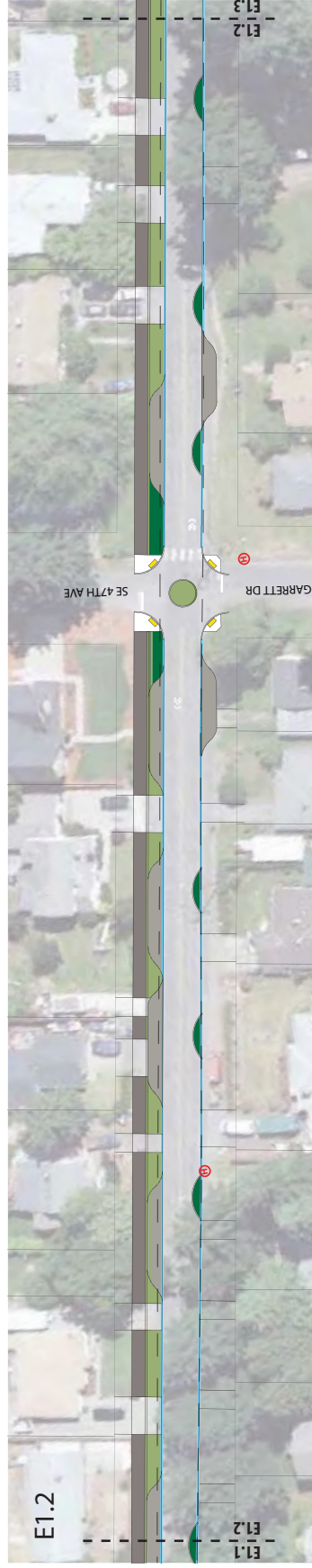
The Monroe Street right-of-way is 40 feet wide through most of this section. The concept design does not require any property acquisition for the new pedestrian path; however, several private properties have fences, gardens or other fixtures that may be impacted by path construction. All proposed concept design elements are within the public right of way.

Several improvements are shown for the Linwood Avenue intersection. A large curb extension with bioretention features is located on the southwest corner to decrease the curb radius and encourage slower turning. This also reduces the length of the crosswalk across Linwood Avenue. A median diverter and refuge island allows for right-in/right-out motor vehicle access onto Monroe Street while preventing through travel across Linwood, except for bicycles and pedestrians. Motorists are prevented from turning left onto Linwood Avenue, to discourage cut-through traffic from using Monroe to access the Linwood/King intersection. Left turns would be prohibited from Linwood Avenue to Monroe Street in either direction. The refuge islands, along with improved crosswalks, curb extensions, and a pedestrian-activated hybrid beacon, will greatly improve crossing safety at this intersection.

¹Speed cushions are speed bumps with wheel cutouts for emergency and other large vehicles to pass unaffected.



Section E: SE 52nd Avenue to SE Linwood Avenue





Legend

- Proposed Sidewalk
- Proposed Porous Asphalt Walk
- Proposed Porous Pavement
- Existing Landscaping
- New Landscaping Strip
- Potential Bifurcation Area
- Curbed Chikane
- Shared Path
- Bike Sharow
- Existing Fire Hydrant
- ADA Ramp
- Street Signal
- New No Parking
- Existing No Parking
- Concrete Curb
- High Curb
- Existing Strip of Pavement



Appendix E

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

Project Information:

Funding year:	PE	2019
	ROW	2020
	Const	2021

Project name:	Monroe Street Neighborhood Greenway
Corridor and endpoints:	Monroe Street (McLoughlin Avenue to Linwood Avenue)
Project description:	Preliminary Engineering and R/W acquisition
Local plan project #:	D18
RTP project #:	10099
Submitting agency:	City of Milwaukie
Agency contact:	Charles Eaton, PE
Contact phone:	503-786-7605
Contact e-mail:	eatonc@milwaukieoregon.gov

These cells are shaded light blue, which means they should be filled in.

Proceed to Sheet 1 when the above is completed.

Unit costs year:

2015

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)

<p>1. Construction</p> <p>Sections A through E must be completed. Complete Sections F and/or G if applicable.</p> <p>Projects will not include all elements below, but most will include elements from multiple sections.</p> <p>Enter quantities only for elements actually included in your project.</p>	<p>Monroe Street Neighborhood Greenway Monroe Street (McLoughlin Avenue to Linwood Avenue) City of Milwaukie</p>
---	--

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					For documentation of assumptions used.
Section 1.A Subtotal				\$0	

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	0.0	\$4	\$0	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	
◦ Specify length and width of bridge					For documentation of assumptions used.
Street trees with tree grates	LF	0.0	\$40	\$0	Per side.
Irrigation system	LF	0.0	\$2	\$0	For irrigation of medians and bulbouts. Specific estimate required if used (describe in Section 1.G).
Signing/markings	SF	0.0	\$0.06	\$0	Use when new pavement markings are to be installed (per line).
Clearing	CY	0.0	\$17.50	\$0	Provide an estimate of grading and describe assumptions in Section 1.G.
Retaining walls (by wall area)	SF	0.0	\$55	\$0	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				\$0	

1.C - Addition of Pedestrian Elements to Existing Roadway

Item	Unit	Quantity	Unit cost	Total	Description
Sidewalk, no curb	SF	0.0	\$10	\$0	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				\$0	

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:			
Railroad impacts			Summarize impacts Describe potential impacts to railroads in project area.
Summary:			
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	0.0	\$80	\$0	Install street lighting at 100' spacing per side.
Section 1.E Subtotal				\$0	

1.F - Associated Costs

Item	Basis	Total	Description
Mobilization, staging, traffic control	15%	\$0	
Erosion control - enter value to override fixed 1.5%	1.5%	\$0	Use 1.5% of construction costs, or provide a cost estimate and describe assumptions.
No Description Required:			
Section 1.F Subtotal		\$0	

1.G - Additional Information

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

Construction cost estimate from concept plan in 2015 dollars.

Other Expected Costs	Provide estimate	→	\$4,115,860
Section 1.G Subtotal			\$4,115,860

SUMMARY

Total of sections A through G **\$4,115,860** Section 1 Total

2. Environmental Impact and Mitigation Sections A and B must be completed. Complete Section C if applicable. Contact Metro if information for 2.B is needed.	Monroe Street Neighborhood Greenway Monroe Street (McLoughlin Avenue to Linwood Avenue) City of Milwaukie
--	---

[2.A - Status and Information](#)

Please place an 'X' in the appropriate box.

EA not completed; an EIS IS expected.	<input type="checkbox"/>
EA not completed; an EIS is NOT expected.	<input checked="" type="checkbox"/>
EA not completed; unknown whether EIS is expected.	<input type="checkbox"/>
EA has been completed; an EIS IS required.	<input type="checkbox"/>
EA has been completed; an EIS is NOT required.	<input type="checkbox"/>
Both an EA and an EIS have been completed.	<input type="checkbox"/>

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	<input style="width: 50px;" type="text" value="0.38"/>	\$150,000	<input style="width: 50px;" type="text" value="\$56,818"/>	
Section 2.B Subtotal				\$56,818	

[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 Provide estimate →

Section 2.C Subtotal

[SUMMARY](#)

Total estimate for environmental mitigation **\$56,818** Section 2 Total

<p>3. Right-of-Way Cost Estimation</p> <p>Use either Method 'A' or Method 'B'. Method 'A' is preferred. Complete Section C if applicable.</p> <p>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.</p>	<p>Monroe Street Neighborhood Greenway Monroe Street (McLoughlin Avenue to Linwood Avenue) City of Milwaukee</p>
--	--

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	300.0	\$20	\$6,000	Use in other established neighborhoods.
Estimate square-feet of undeveloped ROW taking	SF	16500.0	\$15	\$247,500	Use in undeveloped areas.
Describe assumptions used in calculating area:					
Estimated total cost of taking				\$253,500	Estimated area multiplied by estimated unit cost.
Number of affected parcels:	EA	9	\$10,000	\$90,000	Reflects administrative costs of property acquisition.
Section 3.B Subtotal				\$343,500	

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)	\$0	Section 3 Total (moderate confidence)
Method 'B' Right-of-Way estimate (low confidence)	\$343,500	Section 3 Total (low confidence)

4. Design and Administration Costs	Monroe Street Neighborhood Greenway
Complete input cells in Sections A and B if applicable. Default markup values can be overridden.	Monroe Street (McLoughlin Avenue to Linwood Avenue)
	City of Milwaukee

[4.A - Design](#)

Construction Costs (from Section 1):

\$4,115,860

Environmental Impact Costs (from Section 2):

\$56,818

Item

Surveying, design, coordination

Base Cost	Markup	Total
\$4,172,678	30%	\$1,251,803

Description

(Default 30%) Typically included in the professional engineering contract

Construction Engineering

\$4,172,678	20%	\$834,536
-------------	-----	-----------

(Default 20%) Engineering services during construction

Other Expected Costs

Provide estimate →

Description of other expected costs:

--

Section 4.A Subtotal

\$2,086,339

[4.B - Administration](#)

Project Administration will be applied throughout project.

Administration

\$4,172,678	35%	\$1,460,437	(Default 35%) Project overhead
-------------	-----	-------------	--------------------------------

Section 4.B Subtotal

\$1,460,437

[4.C - Additional Information](#)

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

--

[SUMMARY](#)

Total of all above items

\$3,546,776 Section 4 Total

<p>5. Contingency and Risk Complete input cells in Section A if applicable. Default markups can be overridden. Section B must be completed.</p>	Monroe Street Neighborhood Greenway Monroe Street (McLoughlin Avenue to Linwood Avenue) City of Milwaukee
---	---

[5.A - Contingency](#)

Item	Section Total	Markup	Contingency \$	Description
Section 1 - Construction	\$4,115,860	20%	\$823,172	(Default 20%)
Section 2 - Environmental	\$56,818	20%	\$11,364	(Default 20%)
Section 3.A - Right-of-Way (moderate confidence)	\$0	40%	\$0	(Default 40%)
Section 3.B - Right-of-Way (low confidence)	\$343,500	50%	\$171,750	(Default 50%)
Section 4.A - Design	\$2,086,339	20%	\$417,268	(Default 20%)
Section 4.B - Administration	\$1,460,437	No contingency on Administration		
Other Expected Costs		Provide estimate →		

Description of other expected costs:

Section 5.A Subtotal **\$1,423,553**

[5.B - Risk](#)

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

- | | |
|--|--|
| <ul style="list-style-type: none"> • environmental issues • nearby historic or cultural resources • railroad or utility work • bridge work | <ul style="list-style-type: none"> • 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.

6. Project Summary Sheet

Monroe Street Neighborhood Greenway
 Monroe Street (McLoughlin Avenue to Linwood Avenue)
 Preliminary Engineering and R/W acquisition
 City of Milwaukee

6.A - Cost Summary in 2015\$

	Item Total	Phase Total
<u>Preliminary Engineering (PE)</u>		\$1,940,295
Surveying, design, coordination	\$1,251,803	
Contingency at 20%	\$250,361	
Administration at 35%	\$438,131	
<u>Right-of-Way (ROW)</u>		\$515,250
Right-of-Way (moderate confidence)	\$0	
Contingency at 40%	\$0	
Right-of-Way (low confidence)	\$343,500	
Contingency at 50%	\$171,750	
<u>Construction (Const)</u>		\$7,761,181
Construction (Section 1)	\$4,115,860	
Contingency at 20%	\$823,172	
Environmental (Section 2)	\$56,818	
Contingency at 20%	\$11,364	
Construction Engineering	\$834,536	
Contingency at 20%	\$166,907	
Administration at 35%	\$1,752,525	
	Total	\$10,216,727

6.B - Funding Summary by Year of Expenditure

Phase		2015 Dollars	YOE Year	Escalation	YOE Cost		
Preliminary Engineering	PE	\$ 1,940,295	2019	16.99%	\$ 2,269,871		20%
Right-of-Way	ROW	\$ 515,250	2020	21.67%	\$ 626,880	\$ 2,896,752	\$ 579,350
Construction	Const	\$ 7,761,181	2021	26.53%	\$ 9,820,370		
Total		\$ 10,216,727			\$ 12,717,122		

Letters of Support



M. BARBARA CARTMILL
DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

August 25, 2016

Metro
600 NE Grand Avenue
Portland, OR 97232

RE: City of Milwaukie Monroe Street Neighborhood Greenway RFFA Application

Dear Metro Councilors:

Clackamas County is pleased to support the City of Milwaukie's 2019-2021 Regional Flexible Funds Allocation (RFFA) grant application for design and right-of-way acquisition for the Monroe Street Neighborhood Greenway. This project will expand bicycle and pedestrian travel opportunities for residents and visitors to this area of our region.

Stretching east from the Willamette River through Milwaukie and unincorporated Clackamas County to the I-205 Multiuse Path, Monroe Street is a key active transportation link in the area, connecting the Clackamas Town Center area, MAX Green Line station, and Springwater Corridor trail to downtown Milwaukie and the Milwaukie Orange Line station. Monroe Street is identified as a key east-west pedestrian and bicycle connection in both Milwaukie's and the County's transportation system plans, and as a Principal Active Transportation Route in the County's Active Transportation Plan. In addition, Metro's Active Transportation Plan classifies Monroe Street as a Bicycle Parkway, that plan's highest bicycle classification.

This project is sorely needed in an area of the region with little active transportation infrastructure. Creating a continuous east-west active transportation corridor connecting Milwaukie with the Clackamas Town Center will provide a safe, comfortable transportation option for a multitude of users. The combination of the city's Monroe Street Neighborhood Greenway and the county's Monroe Street Active Transportation Project will be a much needed addition to the region's active transportation network.

Thank you for considering the City of Milwaukie's Monroe Street project in this round of Regional Flexible Fund Allocation. We encourage you to fund this project to make our region safer and healthier.

Respectfully,

Barbara Cartmill
Director – Department of Transportation and Development

618
NORTHWEST
GLISAN
SUITE 401
PORTLAND
OREGON
97209
BTAOREGON.ORG
T503
226
0676
F503
226
0498

August 18, 2016

Pamela Blackhorse
Metro Regional Center
600 NE Grand Ave.
Portland, OR 97232-2736

Dear Pamela Blackhorse,

Please accept this letter in support of The City of Milwaukie's application for Regional Flexible Funds to develop Monroe Street as the city's first Neighborhood Greenway.


The City of Milwaukie's Transportation System Plan (TSP; City of Milwaukie, 2013) identifies Monroe Street as the city's first Neighborhood Greenway, with the primary objective of creating shared travel space that is safe for pedestrians and bicyclists by reducing motor vehicle speeds and volumes.

Today, Monroe Street is characterized by motor vehicle speeds and volumes that are generally not compatible with the character of a successful neighborhood greenway. Monroe Street is parallel to busy SE King Street in Milwaukie and connects with 82nd Ave, MAX, and the I-205 path. With neighborhood greenway treatments, Monroe could become the much needed east-west route for families and less-experienced bicycle riders. Connecting residential Milwaukie to the businesses, schools, trails and trains of downtown Milwaukie is a common sense transportation solution for a growing community.

The Bicycle Transportation Alliance is strongly in support of the City of Milwaukie as they conduct further modeling and analysis of impacts as a result of diverting automobile traffic to make Monroe a safer place to walk and bike. BTA will continue to support Milwaukie as they move forward and we look forward to a fully funded and built project in the next couple years.

We hope you will award the City of Milwaukie with the requested funding to advance this project to its next stage, getting us closer to a new safe place to walk and bike.

Sincerely,



Gerik Kransky
Advocacy Director





**PROTECTING YOUR
RIGHT TO ROAM**

To: Metro Councilors
600 NE Grand Ave
Portland, OR 97232

August 23, 2016

Dear Metro Councilors,

Oregon Walks is the statewide pedestrian advocacy organization working to making walking a safe, convenient, and accessible transportation option for every community in the state of Oregon. Improving conditions for walking in communities small and large is a remarkably cost-efficient investment that helps address a variety of statewide goals; including improved public health, cleaner air, climate resiliency, local economic development, mitigation of congestion, urban affordability, an aging demographic, and quality of life.

We are writing today to offer our support for the City of Milwaukie's Regional Flexible Fund Allocation proposal for the engineering and ROW acquisition for the Monroe St Greenway project. We strongly support completing this important regional connector in the area, especially given the other efforts to make walking and bicycling and transit more accessible and convenient along the corridor, including Clackamas County's *Monroe Neighborhood Street Design Plan* and the new MAX orange line.

This project is sorely needed in an area with very little in the way of pedestrian infrastructure, this is one of the only contiguous streets that connect the City of Milwaukie to the I-205 multi-use path in the area, and this project will be a game changer in helping people choose walking and transit as a transportation option. This project is also a high priority in the Clackamas County TSP.

By funding this project you are leveraging local funds in helping make this corner of the region and Clackamas County significantly healthier. The neighborhood has a very high need for bicycle and pedestrian improvements due to a very high percentage of lower income households, people with disabilities, minority residents, and households with limited vehicle availability.

Thank you for considering this project in this round of Regional Flexible Fund Allocation, we hope you choose to fund this important project to make our region healthier and safer.

Sincerely,

Kathryn Doherty-Chapman
Oregon Walks Projects and Plans Committee

8.24.2016

To whom it may concern,

We are writing to express our support for the City of Milwaukie's grant application for the Monroe Street Neighborhood Greenway project, which proposes implementation of the greenway (engineering design, right-of-way acquisition, and some construction) on Monroe Street from The Trolley Trail at McLoughlin Boulevard to Linwood Avenue.

The City recently completed a planning process to develop a concept plan for the Monroe Street Neighborhood Greenway. The goal of the project was to develop a conceptual design that improves conditions and safety for all modes of travel (walking, bicycling, and driving), with a special emphasis on pedestrians and cyclists. This supports the City's goal of creating a healthy, active community. The plan was developed with guidance and input from the neighborhood, general public, direct stakeholders, affected regional jurisdictions, and local businesses.

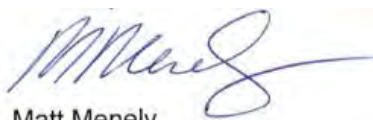
Monroe Street connects downtown Milwaukie with northwest Clackamas County and the Clackamas Town Center. The street is an important link for all types of users and provides a connection between the Orange light rail line in downtown Milwaukie and Oak Grove, and the MAX Green line at Clackamas Town Center. The Metro, City of Milwaukie, and Clackamas County Active Transportation Plans identify Monroe Street as a key route to connect communities and destinations in the County – and adding bikeways, pedestrian facilities, and traffic calming to Monroe has been a high priority project in Milwaukie's Transportation System Plan (TSP) since 2007.

The main reasons for selecting Monroe Street as a project for the Regional Flexible Fund Allocation include:

- The City project complements a similar adjacent project in the County.
- The Community has been engaged for much of 2015-16 in the development of the Monroe Street Neighborhood Greenway Concept Plan.
- It is an important regional active transportation / bikeway connection.
- The neighborhood has a very high need for bicycle and pedestrian improvements due to a very high percentage of lower income households, people with disabilities, minority residents, and households with limited vehicle availability.

We hope that you will consider the City's application for the Regional Flexible Fund Allocation.

Sincerely,



Matt Menely



Greg Baartz-Bowman

Bike Milwaukie, Co- Founders and Organizers

August 24, 2016

To: Joint Policy Advisory Committee on Transportation (JPACT)
Metro Councilors

Linwood Neighborhood District Association (NDA) highly supports City of Milwaukie's Monroe Greenway Project and any funding to move the project forward to completion. We, as Linwood NDA, have provided input, feedback, and had representatives from our neighborhood active in the planning process. Linwood NDA is looking forward to seeing the project become a viable, useable path as an alternative to driving for both pedestrians and cyclists.

Linwood NDA is located on the East side of Milwaukie. Our NDA has the lowest score of walkability rating in the City of Milwaukie with the second highest population. The major reason is the lack of infrastructure dedicated to cyclists and pedestrians. We, as an NDA, value our ability to ride and walk one of our artillery streets not only to visit our neighbors, but to safely access local businesses, schools, and Milwaukie Downtown in a safe and direct route without using a motorized vehicle. Monroe Greenway Project accomplishes this by connecting the Milwaukie Downtown to our NDA with calming traffic methods, creating sidewalks, creating bicycle lanes, and creating a clear concise path to follow.

Once again, Linwood Neighborhood District Association of Milwaukie is in support of City of Milwaukie's Monroe Greenway Project as it would improve active transportation within our community and make it a safer for people of all ages to access essential neighborhood resources by reducing the total vehicle load and speed along this safety corridor. Please feel free to contact our NDA with any questions at linwoodzp@gmail.com.

Thank you,

Zac Perry



Chair – Linwood Neighborhood District Association of Milwaukie

Jason Start
5802 SE Monroe St
Milwaukie, OR 97222

August 24, 2016

Pamela Blackhorse
Metro Regional Center
600 NE Grand Ave
Portland, OR 97232-2736

Re: Milwaukie grant application for Monroe Street Neighborhood Greenway

Dear Ms. Blackhorse,

I am writing to recommend the City of Milwaukie's grant application for Regional Flexible Funding Allocation, for implementation of its Monroe Street Neighborhood Greenway Concept Plan.

My family has owned property on Monroe Street in Milwaukie, Oregon for approximately 40 years. Milwaukie is a wonderful mid-sized city. Linwood is a wonderful neighborhood. Monroe Street is, and has been for decades, a miserable public street. It has suffered from speeding, flooding, and a lack of maintenance and pedestrian amenities. Many streets in our region fit this profile, but Monroe is unique in that it suffers from an overload of thru-traffic. Neighborhoods in unincorporated Milwaukie, Clackamas, and Happy Valley have turned a street built through small suburban farmland into a commuting artery leading to inner Portland. The result is/was a mess.

When the City initiated a process to develop a concept plan for the Monroe Street Neighborhood Greenway in 2014, I was presented with an opportunity to participate as one of my neighborhood district association's (NDA) representatives for the Project Advisory Committee (PAC) – and I immediately volunteered. Who knew that I'd end up participating in a three-year PAC process, between my role on the Milwaukie PAC for my NDA and on the PAC for Clackamas County's greenway design project as a representative for the Milwaukie neighborhoods? It was a process of compromise, change, and enthusiasm for the rehabilitation of an inadequately designed public asset, and I was pleased to see the City and County coordinate to ensure continuity of the route across the jurisdictional boundary.

The City's greenway concept plan has a number of significant attributes. 1) It provides massive improvements for pedestrians and disabled citizens – transforming a street where children and the disabled would literally be forced into traffic to access their nearest grocery store. 2) It calms traffic and diverts commuters to the high-volume arterials that can accommodate a high number of trips. 3) It seamlessly feeds into pedestrian and cycling multi-use paths leading into commercial and retail areas. 4) It creates a strong template that the City of Milwaukie can use to develop neighborhood-friendly multimodal streets. 5) It wasn't imposed upon the people of Milwaukie; in fact, citizens had as strong a voice in design as any engineer or planner. This results in a plan – while not universally loved in the community (none ever is) – that can have its concept embraced and articulated by members of the community.

I cannot thank project staff, the City Council of Milwaukie, and my fellow Milwaukians enough for their enthusiastic participation in this meaningful project. And I hope that Metro will recognize the regional importance of the Monroe Street Neighborhood Greenway and fund the City's and County's mutual efforts to make it a reality.

Thank you,

Jason Start

