



Metro



↑ Eastbank Esplanade. Source: Metro/Lake McGighe

# Metro Active Transportation Return On Investment Study

April 2022 | Bikeway Case Studies





## Year Completed

2013



## Project Summary

The Trolley Trail is a 6-mile multi-use trail that allows for walking, bicycling, and rolling with areas of both paved and gravel surfaces. It runs along the old Portland Traction Company streetcar line, connecting several cities – Milwaukie, Oak Grove, Jennings Lodge, and Gladstone. Milwaukie has built up additional amenities along the trail since its construction, with additions to the trail-adjacent Milwaukie Bay Park, including a scenic overlook, a new boat launch facility, parking for cars and boat trailers, restroom facilities, and improved river access.



## Project Goals

To provide a safe, easy-to-maintain, environmentally-friendly trail to connect key destinations while accommodating all types of non-motorized users, including having a bicycle repair station and additional bike parking installed along the trail in downtown Oak Grove.

# Clackamas County: Trolley Trail

*Multi-use trail and increased connectivity*

## What people are saying

♦ **Safe and accessible passage for bicyclists and pedestrians:** The trail has provided the community with a safe, non-motorized route connecting Portland to the smaller cities south along the Willamette River.

“ I now have a safe and reliable way to ride south from my home in Portland. – Westmoreland resident

“ This has been an incredible game-changer. I now feel safe biking between my home in SE Portland and my workplace in Oregon City. – Southeast Portland resident

♦ **Expands trail connection:** The Trolley Trail is a major multi-use regional trail connecting neighborhoods, parks, schools, business districts, and retirement communities.

“ It is a positively vital and irreplaceable part of my family's life. We use the Trolley Trail for transit to get to the city, to get to the MAX Station, for recreation, for vital 'fresh air' during the pandemic, etc. It's a huge part of what makes my property as desirable a place to live as it does. – Oak Grove resident

“ It increased my awareness of these communities because they became accessible to me by bike. Before, I never went to that area of town, but now, it's an enjoyable area to travel to. – SW Portland resident

“ You can now ride from Oregon City or Gladstone all the way to downtown Portland and out to Boring. ALL ON TRAIL! – Trail user







↑ Photo shared by Heather Koch, NCPRD



↑ Photo shared by Heather Koch, NCPRD









## Year Completed

2017



## Project Summary

The project connected two other multi-use regional trails, the Trolley Trail and the Springwater Corridor. The multi-use path is on the west side of SE 17th Ave, between McLoughlin Boulevard and Ochoco Street.



## Project Goals

To provide a safe trail for bikes and pedestrians that connected Milwaukie to Portland.

# Milwaukie: 17th Avenue Path

## Accessible trails and user safety

### What people are saying

- ♦ **Accessible and user-friendly trails:** The SE 17th Ave project has improved the area by providing an accessible and comfortable path for people on bikes and pedestrians.

“ Much improved bike safety!!! I used to bike this before the bike lane, and it was quite dangerous. The north end could still use some work so that bicyclists can safely enter the northbound lane of traffic during busy times (flashing light or something), but it is way better than before!! – Lower Alameda resident

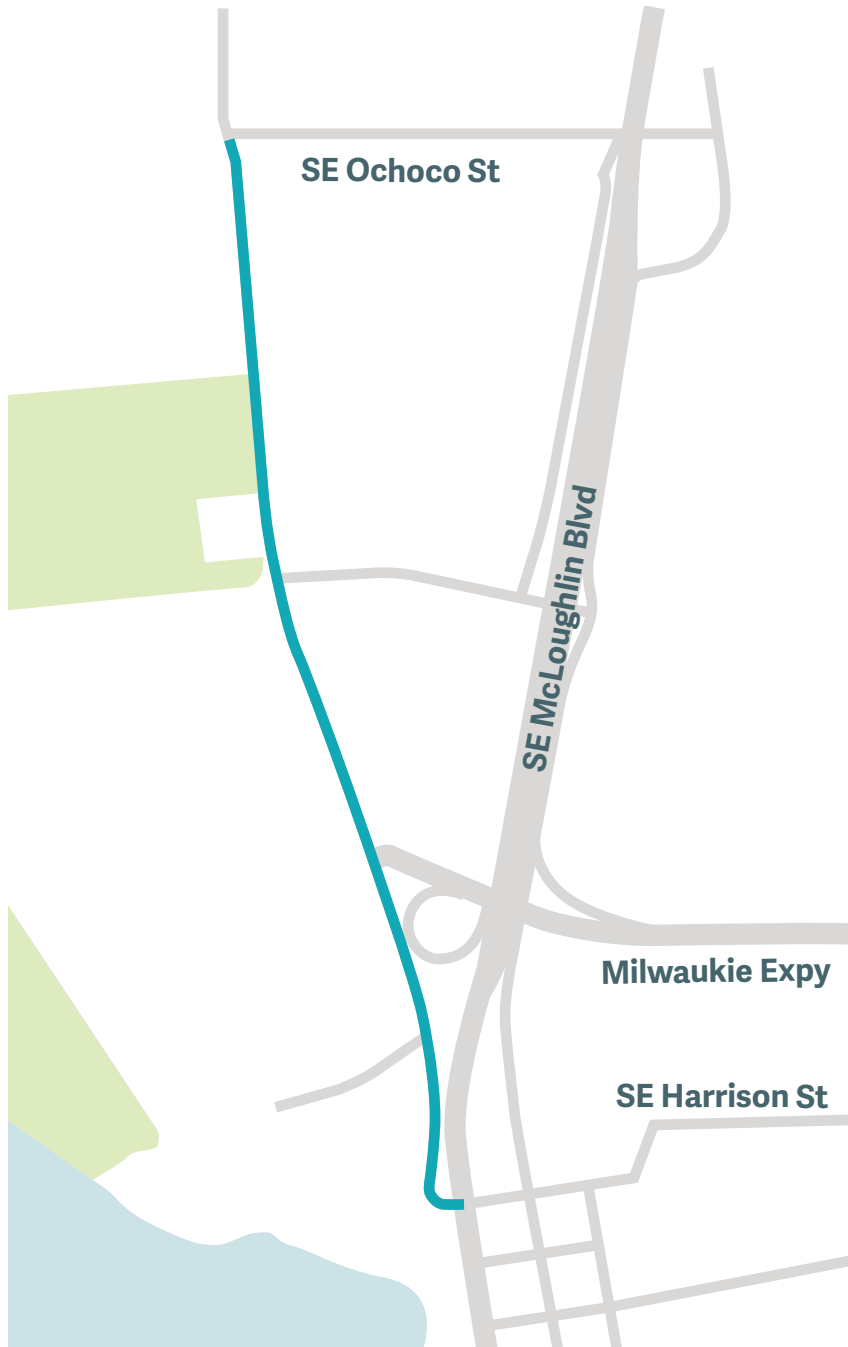
“ The path is a major improvement and provides the only usable active transportation connection between Sellwood and Milwaukie. – Westmoreland resident

- ♦ **Remaining traffic concerns.** While the improvements have made a difference, trail users still raised safety concerns about safety and the experience along the route.

“ [It] feels very safe for a connection on a busy street. Not my favorite place to ride because of the traffic, but the path is an excellent improvement. – Westmoreland resident

“ Much better than before the path was installed... but the intersections are dicey. There is nothing to prevent drivers from hitting people when they are turning off 17th. – Sellwood resident









↑ SE 17th path south of SE Ochoco St facing North. Source: Lacey Friedly







## Year Completed

2011



## Project Summary

This project extended the Gresham-Fairview Trail nearly two miles from E Burnside Street to the Springwater Corridor Trail. Completed in 2011, it provides safe passage over the busy automobile thoroughfare Powell Boulevard via a 177-foot pedestrian bridge. Trees and shrubs are planted along the trail through the residential neighborhoods in the northwest part of Gresham.



## Project Goals

The trail was envisioned to close a gap in the region's multi-use trail system by connecting the Springwater Corridor Trail on the south to the 40-Mile Loop along Marine Drive and the Columbia River to the north.

# Gresham: Gresham-Fairview Trail

*Trail extensions and enhanced user safety*

## What people are saying

- ♦ **Safer trail connections between the springwater corridor and burnside:** The Gresham-Fairview trail connects the City's industrial area to the surrounding trails, forming a new route for recreational and commuting users alike.

- “ We have cyclists who will ride it up to the industrial area for jobs. If you look at the grid, the trail does a great job of providing that connectivity where there aren't streets – Jay Higgins, City of Gresham Transportation Planner
- “ I love having this as an option as a place to run or ride that connects to the Springwater Corridor. The bridges and crossings are convenient – Mt. Scott neighborhood resident







↑ Before. Powell crossing. Source: Google 2009



↑ Before. Burnside Entrance at Birdsdale Ave (202nd). Source: Google 2007



↑ After. Powell crossing. Source: Google 2019



↑ After. Burnside Entrance at Birdsdale Ave (202nd). Source: Google 2019













## Year Completed

2017



## Project Summary

This 9.1-mile bicycle route connects NE Lombard Street to the Springwater Corridor. The improvements included speed humps, shared lane markings, and signage along the low-traffic residential streets. As well as improved crossings with crosswalks, curb extensions, median refuge islands, and/or signals at major intersections.



## Project Goals

To provide a low-stress bicycle route through a north-south network of streets to avoid obstacles.

# Portland: 20s Bikeway

*Improved street crossings and bicycle thoroughfares*

## What people are saying

- ♦ **Improved crossings:** This project improved 17 pedestrian crossings located along the busier arterial streets, including updating the crossing of SE Powell Blvd at 28th with median islands and a bike-only traffic signal.

“ The crossings make a difference, especially for children and others who take longer to cross. – Garlynn Woodsong, Land Use and Transportation Committee Chair for the Concordia Neighborhood Association & NE Coalition Neighborhoods

“ Powell Blvd used to be a lot harder to cross on a bike or as a pedestrian. This increases mobility mentally and physically – SW Portland resident

- ♦ **Important north-south connection:** The north-south orientation of this bikeway added needed connections to an active transportation network with comparatively more east-west thoroughfares.

“ It's much easier to move north and south through the area. Particularly places like NE Broadway, NE Sandy, and SE Powell are much easier to get across. – Kenton Neighborhood resident

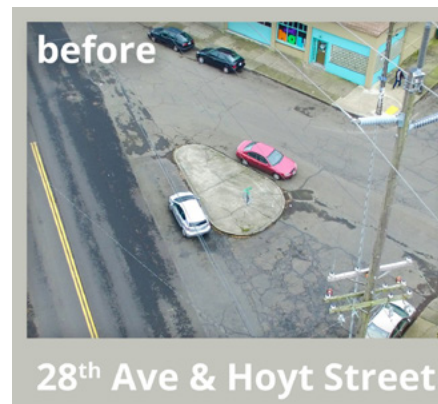
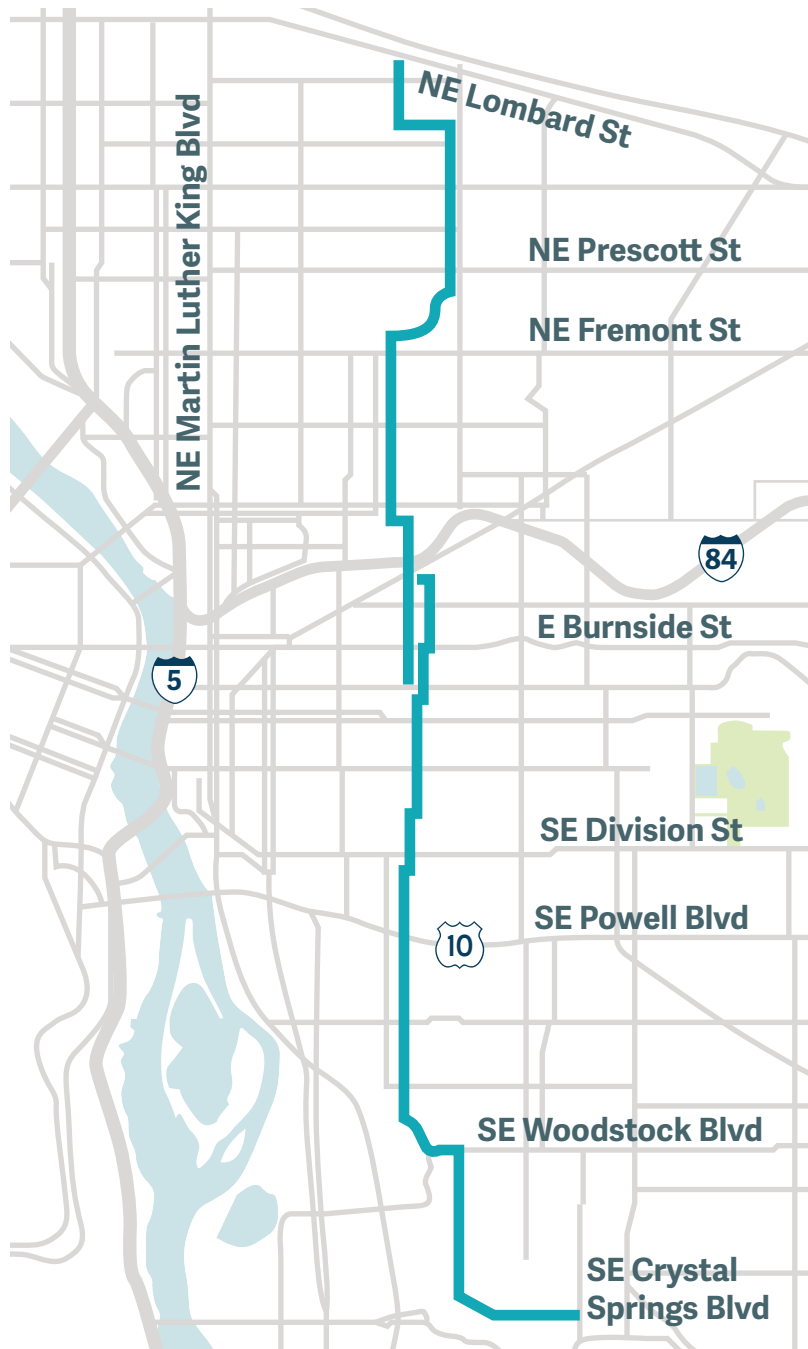
“ Now I use this north-south highway multiple times a week to be able to get groceries, go to restaurants, stores, etc. I would have driven my car if this didn't exist. – Concordia neighborhood resident

- ♦ **Concerns over directness and wayfinding:** Some users indicated that the route moves so much that it can be confusing to follow and recommended better wayfinding guidance.

“ There are a couple of improvements that should be made, particularly around way-finding because you have to zig-zag across so many different streets. – North Portland resident

“ I can't speak to the comfort of the designated route because it wasn't designated enough for me to actually follow it. – Richmond neighborhood resident

















## Year Completed

2014



## Project Summary

The 50s Bikeway was a 4.3-mile neighborhood greenway connecting eight eastside neighborhoods, from Rose City Park to Woodstock. It starts near the intersection of NE Thompson Street and NE 53rd Ave and follows 53rd Ave south to SE Taylor Street. It then branches over to SE 52nd Ave before ending at SE Woodstock Blvd. The improvements included eight major arterial crossings to increase safety, along with traffic calming infrastructure, diverters, curb extensions, crosswalks, and signage.



## Project Goals

To provide a safer, interconnected network that could be developed as a greenway and contribute to the overall plan of solidifying bicycling as a central component in Portland's transportation system.

# Portland: 50s Bikeway

*Enhanced connectivity, bicycle boulevards, and reduced traffic*

## What people are saying

- ♦ **Reduced speed and volume of automobile traffic:** The 50s Bikeway accommodates large groups of cyclists by reducing vehicular speeds and volumes, along with bike lanes on busier streets.

“ *Slowing streets has been huge for the community to get out during the pandemic.* – Hannah Day Kapell, Sunnyside Neighborhood Association, Citizens Advisory Committee, Alta Planning Principal

- ♦ **Important north-south connection:** The area is now more family-friendly and welcoming to people on bikes.

“ *Primarily, what I've done along these streets is walking/running and taking the bus. I do think the improvements here helped a lot, especially to provide safe walking access along and across the arterial streets, and privileging buses over single-person vehicles at some of the intersections.* – Community Member

“ *Excellent project for North-South biking transportation. One of the best on the eastside in recent years.* – Richmond neighborhood resident

“ *I can now bike to places like Mount Tabor or Portland Nursery, which used to require a car trip.* – North Tabor community member

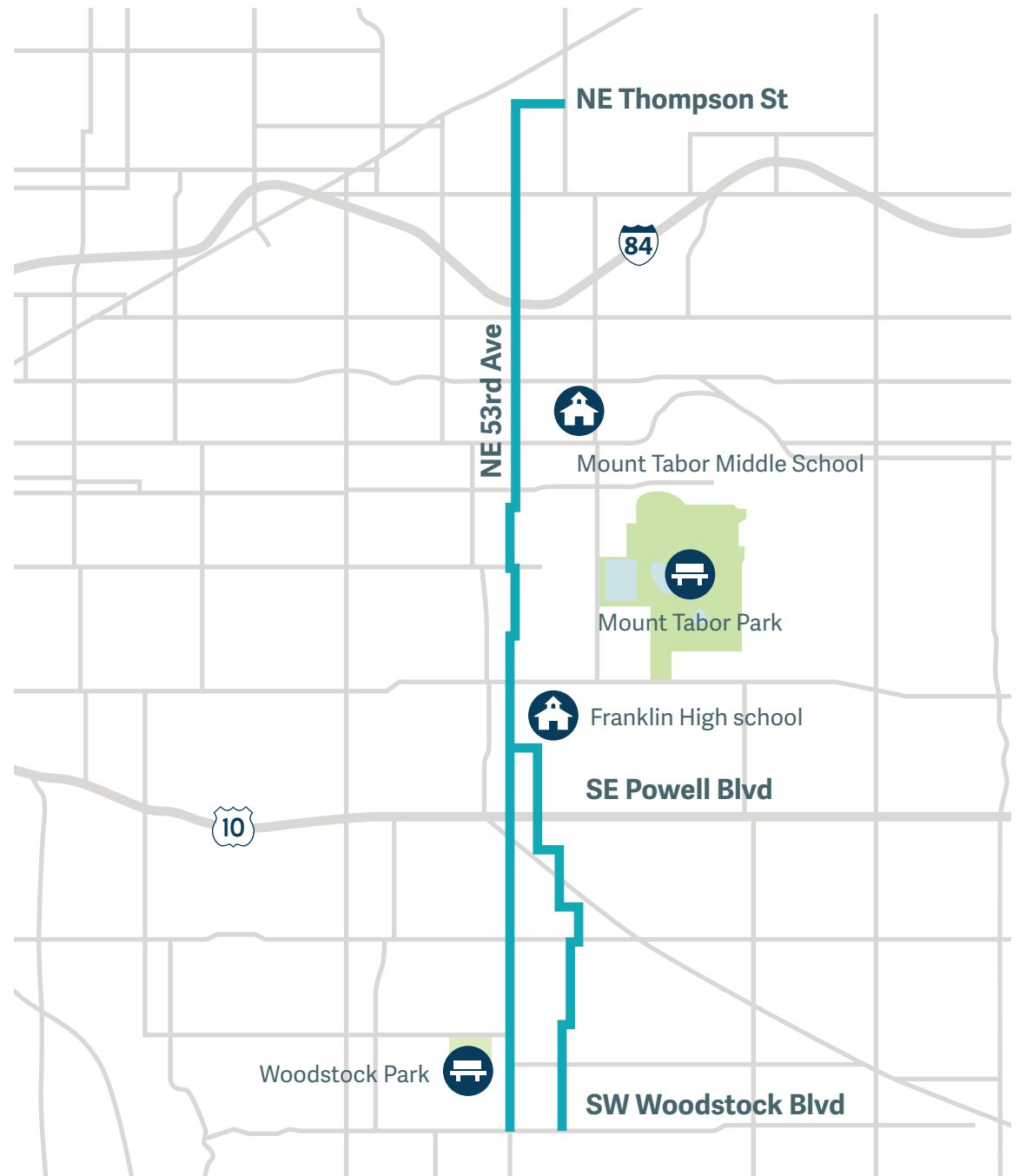
“ *I bike with my 5-year-old, and I feel more comfortable. From a community perspective, people use it a lot.* – Hannah Day-Kapell, Sunnyside Neighborhood Association, Citizens Advisory Committee, Alta Planning Principal



- ♦ **Traffic speeds are a concern:** Safety from traffic was described as a place for improvement

“ The section of NE 53rd from NE Halsey to Glisan gets a lot of speeding traffic, even with the traffic circles. – Rose City Park Neighborhood Association

“ I love being able to ride my bike on 52nd. Cars still drive too fast, though. Protected lanes would help, and lowering the speed limit. – Lents neighborhood resident







↑ SE 53rd and Belmont, 2014. Source: Google



↑ SE 53rd and SE Division, 2012. Source: Google



↑ SE 53rd and Belmont, 2021. Source: Jennifer Dill



↑ SE 53rd and SE Division, 2021. Source: Jennifer Dill, PSU









## Year Completed

2011



## Project Summary

As part of the Cully Boulevard Green Street Project, the City added an exclusive bikeway located on a 0.6-mile segment of Cully Boulevard in NE Portland. The Cully Blvd protected bike lane (PBL) runs from NE Prescott St to NE Killingsworth St. The redesigned Cully Street also included 11-foot vehicle travel lanes and two 6 feet wide sidewalks and new ADA ramps connected to the side streets; these connect to existing sidewalks on Cully Blvd south of Prescott Street.



## Project Goals

The goal was to separate pedestrians, cyclists, and vehicles from each other.

# Portland: NE Cully Boulevard Protected Bike Lane

*Enhanced sidewalks, bike facilities, and accessible transportation*

## What people are saying

- ♦ **Accessible transportation options:**

The active transportation infrastructure has had a positive impact on the neighborhood, providing better transportation access for people with limited mobility options.

“ *I do see it being used by vulnerable users, folks with disabilities, strollers, and family bike rides.*  
– Cameron Herrington, Living Cully Program Manager

“ *The bike trail is awesome; people use it all the time. I see dads with the tandems with their kids on the back. It's great to see families getting out.*  
– Kasey Park, Owner of Cully Central

- ♦ **Increased business development:**

Cully residents had to leave the neighborhood to meet their daily needs. The "Cully Commercial Corridor and Local Street" plan was adopted by the City Council, including rezoning to allow more local businesses to serve the neighborhood.

“ *It has helped to invest in the community more. This is now a stretch of Cully where people feel safe to walk.* – Eron Riddle, District Manager of the Cully Blvd





♦ **Safer streets and thoroughfares:**

These improvements separated pedestrians, cyclists, and vehicles from each other's right-of-way for increased safety.

“ It gives me a feeling of safety when I'm biking on Cully Blvd. I like being physically separated from vehicles and pedestrians. – Cully neighborhood resident

“ Now I can walk safely to the grocery store. I can take pride in my neighborhood's safe streets. – Cully neighborhood resident







↑ Cully Cycle Track. Source: Jennifer Dill, PSU









## Year Completed

2001



## Project Summary

The Vera Katz Eastbank Esplanade stretches 1.5 miles along Portland's east waterfront, from SE Caruthers St at the Tilikum Crossing up to the Steel Bridge, with a connection across the Willamette River to Tom McCall Waterfront Park. This project provided riverbank restoration and the construction of a multi-use trail. The majority of the trail is paved, with one 1,200-foot section constructed as a floating walkway. Connected to the floating walkway near the Hawthorne Bridge is a public dock that provides swimming and boating access to the river. The Esplanade itself serves as a demonstration riverbank restoration project.



## Project Goals

To maintain a clean, healthy Willamette river while also creating a welcoming waterfront space for people, and an important active transportation corridor.

# Portland: Eastbank Esplanade

*Riverbank restoration and a premier multi-use trail*

## What people are saying

### ♦ Created a welcoming environment:

It has become one of the most popular routes in the region, attracting daily commuters, recreational riders, tourists, families with children visiting OMSI located near the Tilikum Crossing, and people just out enjoying the town.

“ Nice area to walk or ride a bicycle. Most of all, it has beautiful views, and it's a lovely spot to take photos of the city's skyline, particularly at night. – Google Review

### ♦ Business development: The project has boosted business development in the area.

“ It's been very positive... It's interesting to see more businesses have started, nearer to the Esplanade – on Water Avenue; there's a lot of businesses because of the access point there. – Kate Merrill, Executive Director, Central Eastside Industrial Council

### ♦ Concerns over camping: The increase in the number of people experiencing houselessness on the trail is a part of a growing regional problem. Many people turn to camping and create makeshift shelters along the esplanade. Aside from the obvious problem of these people not having shelter, this issue also impacts people's comfort using the trail.

“ It's one of the gems of Portland's trails, but I've avoided it lately due to the Pandemic as well as homeless camps along the trail. I'm concerned about my safety. – Google Review

“ Beautiful and amazing views of Portland. But kind of scary. I saw a lot of tents and trash along the path. – Google Review









↑ Source: Jennifer Dill, PSU





↑ Source: Jennifer Dill, PSU





## Year Completed

2002



## Project Summary

This project included pedestrian improvements on NW Lovejoy Street from 12th Avenue to the Broadway Bridge. The 0.3-mile project significantly improved pedestrian connectivity and infrastructure. The City of Portland was interested in increasing density in the downtown core. PBOT hoped that the redesigned Lovejoy ramp could connect more people to jobs in the downtown area.



## Project Goals

To expand downtown Portland and open up more land for development.

# Portland: Lovejoy Ramp Reconstruction

*Enhanced infrastructure, development, and active transportation*

## What people are saying

### ♦ The emergence of the Pearl District:

Many observers have pointed to the removal of the Lovejoy Ramp as the catalyst that helped the Pearl District develop as it has.

“ You have to imagine an elevated road that bisected it in the east-west axis. Two neighborhoods that were not connected, and the goal was to make it a seamless neighborhood... It all started with the ramp. I don't think people can imagine how it would be without it. – Patty Gardner, Former President of the Pearl District

### ♦ A shift from driving to walking and biking: the area has become safer and more supportive of multimodal transportation.

“ Big improvement. I was skeptical years ago as I used to bike the old ramp, but the new one is much safer and works well. – Alameda resident

“ Generally, I feel pretty safe here on most modes because the blocks are small, there are lots of people and bikes, preventing cars from driving fast. – Kerns resident

### ♦ Desire for improved bike facilities:

some survey respondents reported that they would like to see more bike-specific improvements on Lovejoy.

“ Walking is nice with protection from traffic... Biking is still too stressful. – SW Portland Community Member

“ Biking is really tough. There should be full separation between modes here. – Sabin resident

“ It's not safe to ride a bike on Lovejoy specifically. The ramp should have a separated bike lane from traffic. – Eliot resident









↑ Lovejoy at 10th. Source: Jennifer Dill, PSU









## Year Completed

2016



## Project Summary

This project completed a ¾-mile-long gap in a 4.6-mile section of the Tualatin River Greenway. This new segment provides a smooth, wide path next to the river, with wayfinding signs to guide people to and along the trail. Interpretive elements to the trail also educate users about the area's natural and cultural history. The Tualatin River Greenway is located on the north and south sides of the Tualatin River, running through Tualatin, Durham, and Tigard. It connects four major parks and crosses the Tualatin River at the Ki-a-Kuts Bicycle and Pedestrian Bridge at the north end of Tualatin Community Park.



## Project Goals

To provide a safe bike and pedestrian alternative to driving while improving connectivity between residential and commercial areas with public facilities, such as parks and the library, and fill in missing gaps in the city's bicycle and pedestrian network.

# Tualatin River Greenway Trail

*Enhanced accessibility and trail connectivity*

## What people are saying

- ♦ **Regional connectivity:** The trail promotes active, healthy living in the region by improving the area's transportation options and providing more connections to adjoining cities. It also connects people with nature, residential areas, jobs, services, retail, and public facilities.
- “ We didn't visit it at all prior to the improvements in 2016, and now we love to walk there as a family and are eager to see it connected to Brown's Ferry park so we can extend our adventures. – Norwood Heights resident
- “ Creates longer, safe routes. Keeping me off the roadways. Love how it connects to the trails in Tualatin Community Park and also provides a safe route to get from one side of I-5 to the other. – Tualatin resident
- ♦ **Enhanced travel options:** With this segment complete, the Tualatin River Greenway Trail runs east-west along the Tualatin River and connects to the Westside Trail, which runs north-south.
- “ Often crowded, but spacious enough for everyone--and a GREAT alternative to sharing streets with automobiles, esp. with the bridge over the river! Well maintained and lovely. – Lake Oswego resident



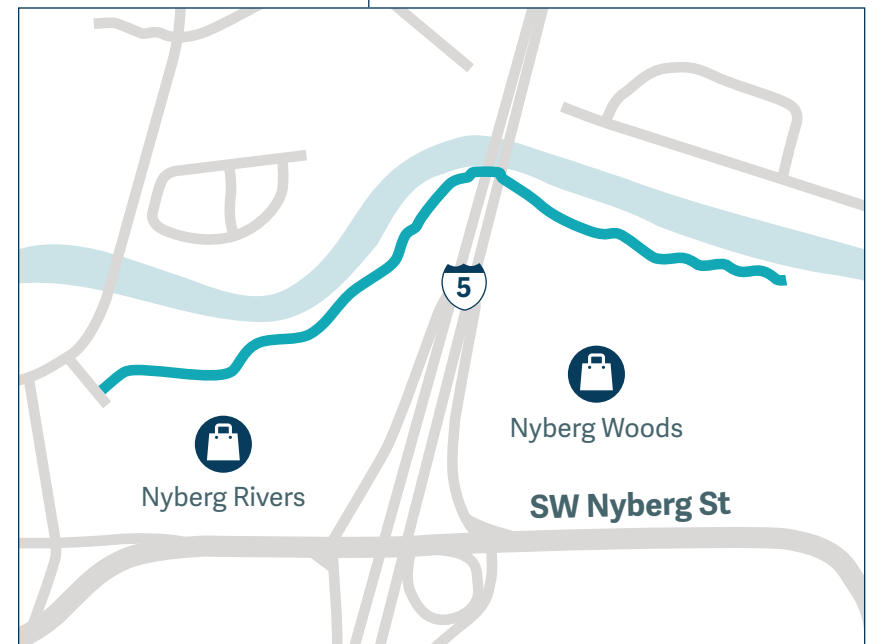
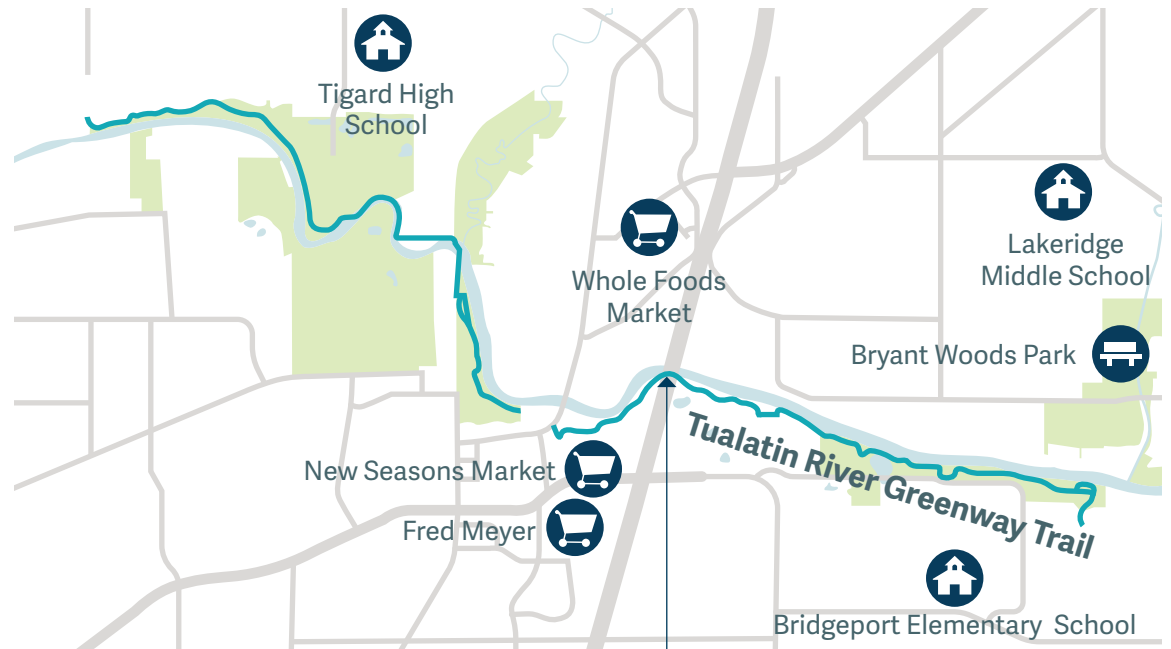
↑ Source: Metro



- ◆ **Concerns over camping:** The increase in the number of people experiencing houselessness on the trail is a part of a growing regional problem. Many people turn to camping and create makeshift shelters along the esplanade. Aside from the obvious problem of these people not having shelter, this issue also impacts people's comfort using the trail.

“ It's one of the gems of Portland's trails, but I've avoided it lately due to the Pandemic as well as homeless camps along the trail. I'm concerned about my safety. – Google Review

“ Beautiful and amazing views of Portland. But kind of scary. I saw a lot of tents and trash along the path. – Google Review







↑ Shared Use Path at The River Lofts, looking west. Source: Natalie Knowles









## Year Completed

2009 and 2014



## Project Summary

Metro and its partners envisioned a 25-mile Westside Trail (WST) that would connect the Tualatin River to the Willamette River through a multi-use trail. The project uses otherwise unused easements created for power lines that bisect the Westside Portland region, referred to as the powerline corridor. The trail stretches from King City and the Tualatin River in the south to Forest Park and Highway 30, overlooking the Willamette River in the north. The north segment runs from the Merlo Road MAX light rail station, through Schuepbach Park to Davis Road at the base of Mt. Williams. The second segment continues south from Davis Road, up to the top of Mt. Williams, and then continues to Burntwood Way.



## Project Goals

Protecting open space and ecosystems related to environmental sustainability, transportation, and health while furthering people's access to outdoor recreation and creating more active commuting options.

# Washington County: Westside Trail, Merlo Road Light Rail Station to Burntwood Way

*Enhanced livability and trail connectivity*

## What people are saying

### ♦ A more enjoyable community

**environment:** Before the improvements, no one could use the powerline corridor purposefully. Now the improvements made this much more viable as a transportation option. Residents have increased use and provided the area with more recreational opportunities.

“ Walking this trail has changed my life. I committed to walking regularly about 7 years ago, and now I walk parts of this trail every day. [I] always have felt safe – a huge benefit to the neighborhood. The connection from Davis to Hart has been huge. Opened up so much access.  
– Beaverton resident

### ♦ Desire for future bike improvements:

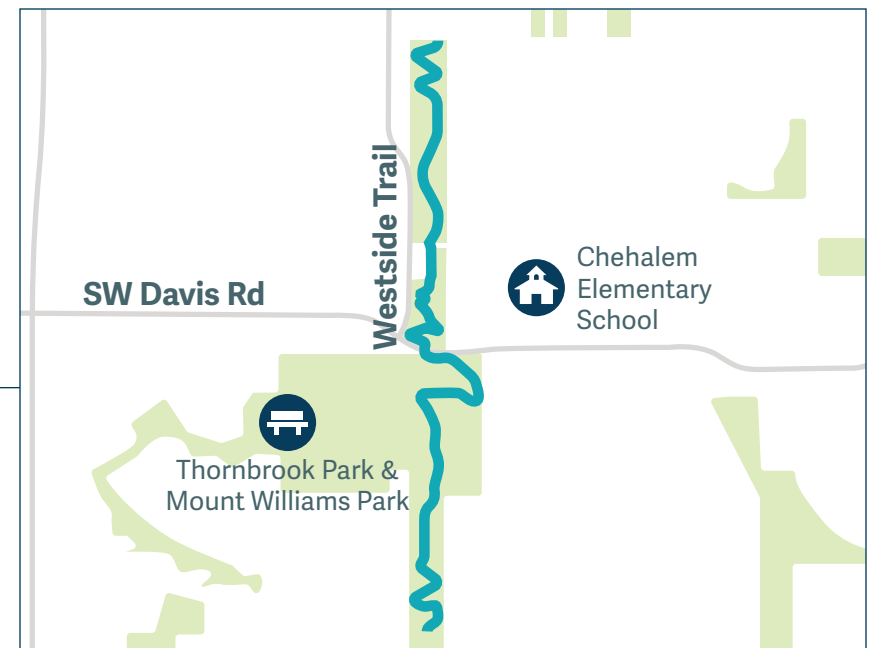
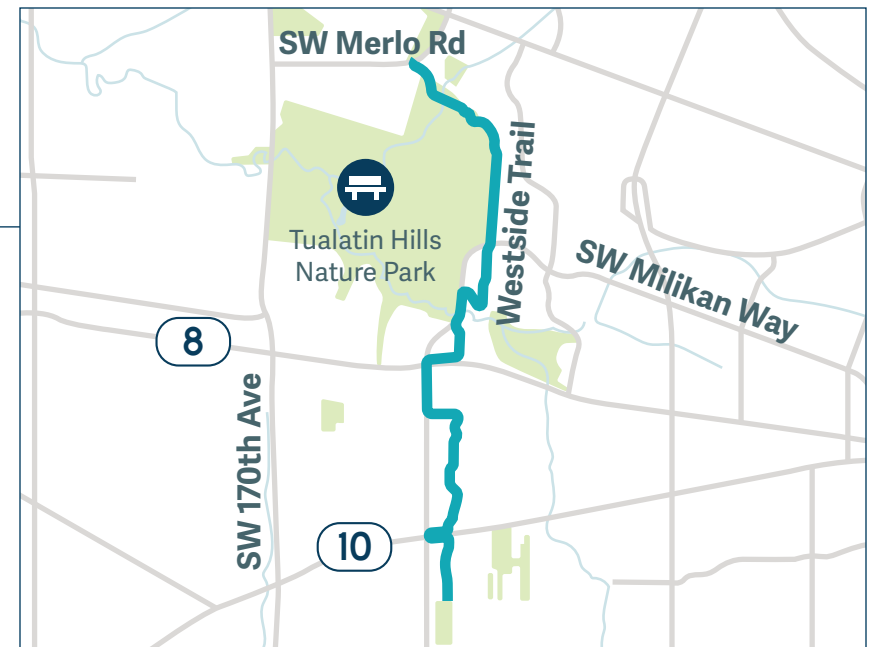
Some users expressed safety concerns about places where the trail crosses major streets, particularly at SW Tualatin Valley Highway and Millikan Way.

“ I wish there were a bike lane on Millikan from the Nature Park to Murray - as it stands now, cars move too fast along that stretch to feel safe sharing a lane with them.  
– Aloha resident

“ I think the route on bikes has some dangerous parts, and having a crosswalk at Nike railroad crossing (Millikan) with a traffic signal would help. – Washington County resident

“ I like to road bike, but I wish the transition over Highway 8 felt safer... More isolated from cars/not on streets. If it were, I would likely train on my road bike here. – Cedar Hills resident









↑ Family stroll north of Division Car stopping for pedestrians crossing SW Tualatin Valley Highway while walking the WST, 2020. Source: Marisa Zapata



↑ Family stroll north of Division, 2020. Source: Marisa Zapata

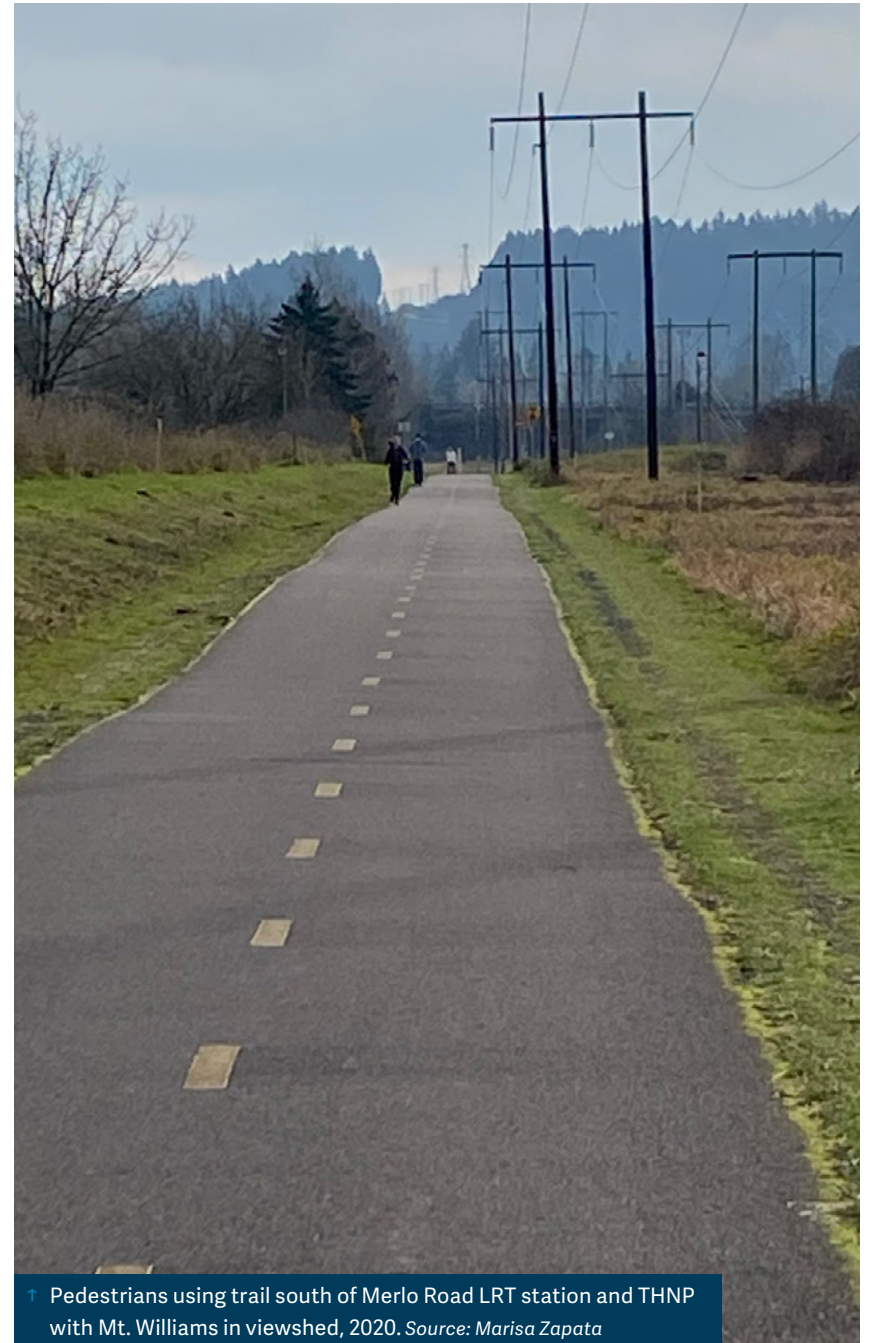


↑ Pedestrian using signed crosswalks, 2020. Source: Marisa Zapata



↑ Pet owners walking from Division towards Mt. Williams, 2020. Source: Marisa Zapata









## Year Completed

2019



## Project Summary

This trail crosses between residential areas and wetlands, running from Kaiser Road – just before crossing Bronson Creek – to about one mile north to Rock Creek, connecting with Kaiser Woods Park. The trail includes elevated boardwalks and provides users opportunities to watch nature.



## Project Goals

Protecting open space and ecosystems related to environmental sustainability, transportation, and health while furthering people's access to outdoor recreation and creating more active commuting options.

# Washington County: Westside Trail, Bronson Creek to Rock Creek Trail

*Enhanced livability and trail connectivity*

## What People are Saying

### ♦ Made the community more livable:

Users of the Westside Trail can now travel from the Rock Creek Trail to Bronson Creek via non-motorized modes without diverting onto roads used by automobile traffic.

“ The crossings have yellow flashing lights you can activate, which make it so safe...This trail was a huge part of why we bought our home in Bethany because we wanted a well-planned trail system.  
– Bethany resident

“ It's been a tremendous asset to the community. We use the trail daily for family walks and jogs. It's a convenient and safe alternative, and I'm thankful for the investment.  
– Bethany resident

♦ **Increased trail safety:** Users indicated that they appreciated the trail as a safe travel option for their children to use and having an opportunity to exercise outdoors without being around crowds during the COVID-19 pandemic.

“ Fantastic addition to the community. Love it. Awesome for kids to get to other neighborhoods safely - allows them to be more independent. – Portland/Bronson Creek Resident

“ It is one of the better trails around here. Wide enough for bigger groups, especially during this pandemic, beautiful enough to pause people at the wetland spots, natural enough for our wild creatures to go on with their lives like before, and convenient enough for humans to use it on a daily basis. I am there daily or every other day. – Bethany resident



“ Good to be away from traffic and also have a safe option to cross streets when needed. Good for kids going to school too. – Portland/ Kaiser Woods resident

“ The trail is wonderful! It feels safe and is used by all age groups. I use it mostly for fitness and recreation. It has been a godsend during the time of Covid for fitness and the mental health benefits of getting into nature. It has changed my access tremendously. – Claremont resident

- ♦ **Additional crossing enhancements desired:** Several users did indicate that they still felt unsafe crossing Kaiser Road.

“ This trail is nice instead of being on a busy road. [It] needs a crosswalk and light where the path would cross over Kaiser road in a curve that the path is yet to connect. [There is a] dangerous curve where the paved path ends crossing over Kaiser before hitting West Union. – Oak Hills neighborhood resident











↑ Source: Jennifer Dill, PSU



↑ Source: Jennifer Dill, PSU



