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North Portland Greenway Trail Strategic Plan

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NORTH PORTLAND GREENWAY TRAIL STRATEGIC PLAN

JUNE 2015



willamette

—planning studio—

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EXECUTIVE SUMMARY

**“ The trail would help to
build an identity for North
Portland and make it a
more peaceful place. ”**

Comment from North Portland resident



Studying and discussing the trail alignment during an engagement event at Green Zebra Grocery in North Portland.

EXECUTIVE SUMMARY

The North Portland Willamette Greenway Trail is a long planned multi-use trail with dedicated federal funding and a provisional completion date of 2032.

The North Portland Greenway Trail Strategic Plan aims to present a set of concrete actions that can quicken the pace of implementation, while considering the North Portland community's vision for a greenway trail along the Willamette River.

Grow Willamette Greenway was initiated through a partnership between npGreenway and Willamette Planning Studio, a group of six Portland State University graduate students in the Masters of Urban and Regional Planning program. Through a four month collaborative process of community engagement and analysis, including health impacts, economic development, and traffic demand modeling, a series of findings and recommendations were developed. The process built upon previous work undertaken by npGreenway, Metro, Portland Bureau of Transportation (PBOT), Portland Parks and Recreation (PP&R), and other government agencies and community organizations to present a strategic action plan for npGreenway to pursue that moves the greenway trail forward.

COMMUNITY VISION

The North Portland Willamette Greenway Trail (NPWGT) is a long envisioned trail meant to reconnect North Portland to the Willamette River waterfront and inner Portland. The Willamette River is a central element that defines Portland's character and as such, the trail is meant to celebrate the value inherent in the history, landscape, economy, and culture centered around the riverfront. Much of the waterfront has seen major changes in the last three decades, as industrial sites dependent on access to the Willamette River have become vacant brownfields. These brownfields are waiting for an opportunity for redevelopment and the new life and activity that will result. The community has continuously expressed a desire for these sites to be centers of activity, centers that assist in defining North Portland. The trail will play a key role in defining the future development of North Portland and the Willamette River waterfront. The mixing of this industrial history with open space, public access, and a reconnection to the Willamette River will establish a unique sense of place with the existing character of North Portland — as the Eastbank Esplanade created a vibrant sense of place, attracting people not just from Portland, but from all over the world, to the Willamette riverfront.

The trail, itself, is part of the larger Willamette Greenway that aims to protect, conserve, maintain, and enhance the lands along the Willamette River. The North Portland Willamette Greenway Trail was first conceived of in the 1987 Willamette Greenway Plan to provide public access to the riverfront and highlight the scenic beauty of the Willamette. The plan envisioned a corridor stretching from the Columbia River in the north to the Sellwood Bridge in the south, with the minimum goal of restoring the Willamette River and its banks.

Industrial creosoting facility during the height of Portland's industrial riverfront.

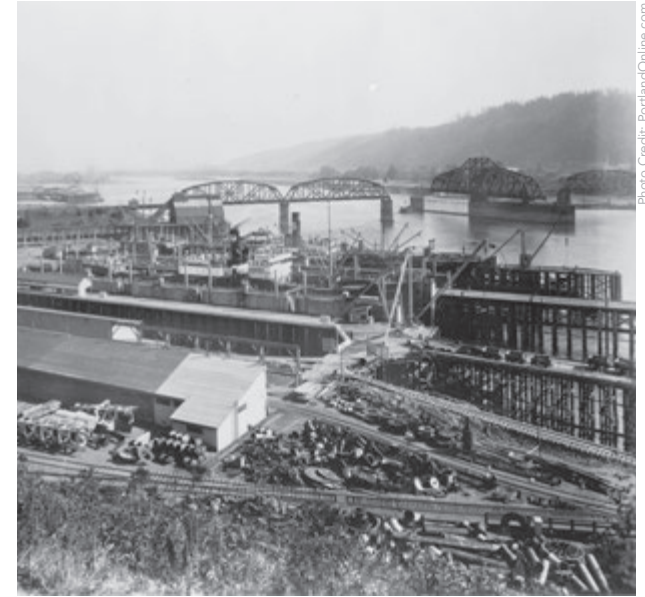


Photo Credit: PortlandOnline.com

PROBLEM STATEMENT

The North Portland Willamette Greenway Trail is an idea that stretches back almost three decades to the original 1987 Willamette Greenway Plan from Portland's Bureau of Planning. Short segments of the trail have been constructed over the last thirty years, but full implementation of the envisioned trail has yet to be reached. With a rough projected completion date of 2032, almost a full five decades will have passed from the initial conception to completion of the trail. The North Portland community does not want to wait two decades before gaining access to the economic, social, and health benefits that a trail along the Willamette River waterfront will provide. The overarching mission of the North Portland Greenway Trail Strategic Plan is to promote the vision to connect North Portland with the river and realize a regional trail corridor along the Willamette River before the projected 2032 completion date.

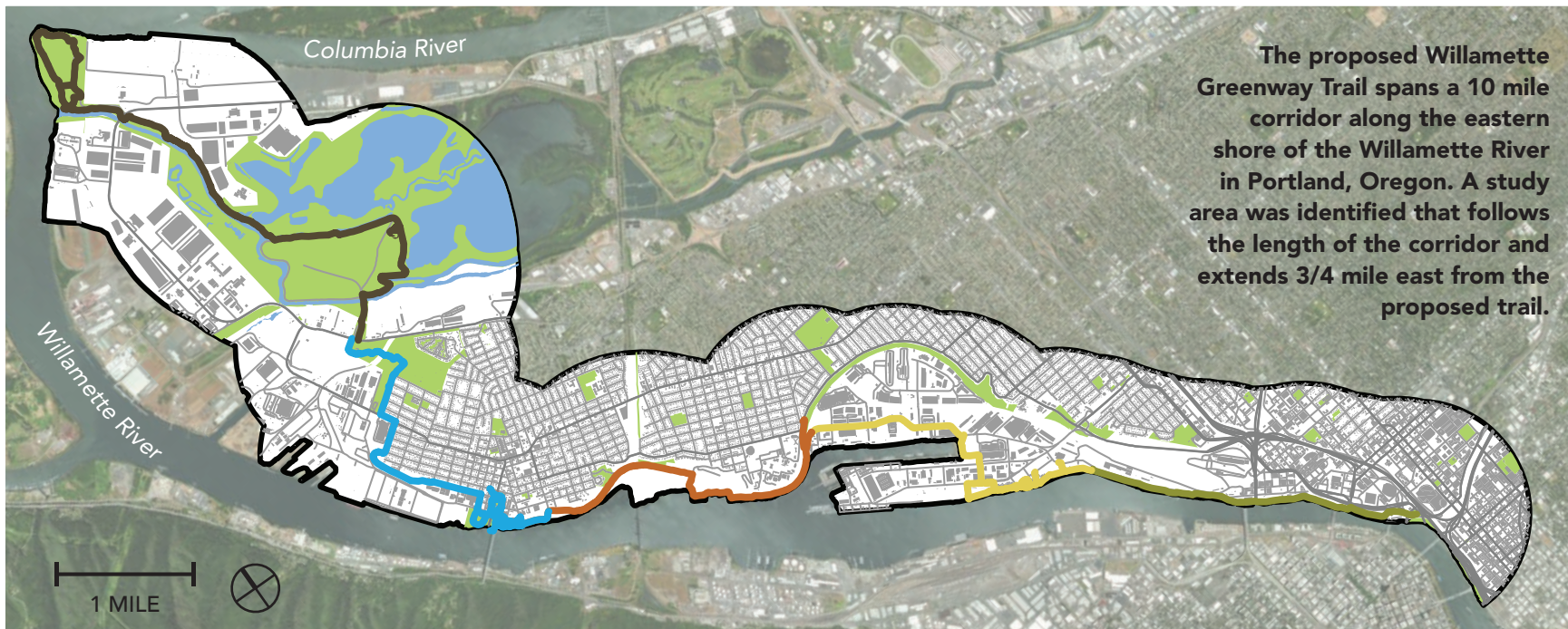
CONTEXT

North Portland is situated on a peninsula of land created by the confluence of the Willamette and Columbia Rivers. The area has a rich history of industrial entrepreneurship and working class neighborhoods with unique character.

The trail itself consists of a 10-mile alignment that will extend the Eastbank Esplanade from its current northern terminus at the Steel Bridge, north to Kelley Point Park. Along the alignment, the trail will connect people to recreational opportunities not only along the riverfront, but to already

existing parks and natural areas: bird watching in Smith & Bybee Wetlands Natural Area, baseball and skateboarding in Pier Park, scenic views of the St. John's Bridge at Cathedral Park, and beach access at Kelley Point Park.

Willamette Planning Studio conducted an in-depth existing conditions assessment of the trail alignment that can be found in this document.



PROBLEM STRATEGY

The North Portland Greenway Trail Strategic Plan is rooted in an understanding of the history of North Portland and the Willamette waterfront, in addition to the dreams and desires of the people who live and work along the alignment. To accomplish this, Willamette Planning Studio conducted a series of efforts to build a comprehensive strategy:

Research

The research phase of the planning process included a detailed review of past planning efforts as well as conducting an existing conditions assessment of the trail alignment and surrounding

neighborhoods, conducting bicycle and pedestrian counts, and researching case studies from across the country to distill best practice approaches for waterfront trail development.

Engagement

The engagement phase of the process involved a multi-pronged approach to engage the North Portland community and gather feedback. Pulling together feedback from intercept and online surveys, stakeholder interviews, and tabling events designed as mobile mini-charrettes, our team engaged with a broad range of North Portland residents.



Photo Credit: Lisa Harrison

A Union Pacific train travels through the Lampros Steel site during an early, phase 1 site visit.

Analysis

Willamette Planning Studio sought to build upon previous planning efforts and identified important forms of analysis that had not been previously completed. A Strengths, Weaknesses, Opportunities, and Challenges (SWOC) analysis was completed showcasing the issues surrounding the trail alignment. A Health Impact Assessment of the trail – along with economic and trail usage forecasts – show the importance of trail completion and can be used in future planning efforts, including grant applications.

Design

Previous planning efforts have concentrated on concept visioning, alignment, and easement constraints. Gathering feedback from the North Portland community on what features they would like to see along the trail, Willamette Planning Studio has created several trail design concept visualizations. These can be used in future outreach materials and planning efforts to give shape to North Portland residents' vision for the trail.



Photo Credit: Lewis Kelley

Engaging with North Portland residents and starting conversations about what they envision for their community was a large part of Phase 2.

KEY FINDINGS

Continued engagement: The North Portland community must be involved in and informed about progress towards trail completion. npGreenway can serve as both facilitator of North Portland input to the public agencies in charge of trail design and construction and as a conduit for information from public agencies to the wider community.

Collaborate with public partners and the community: There is a significant amount of work to be done before the trail can be completed. Collaborating with and making connections between public agencies, private interests, and North Portland residents is key to gaining support from the community.

Improve connections to the waterfront: There is an overwhelming desire for North Portland residents to have greater access to the Willamette waterfront. The waterfront is currently disconnected from North Portland by industrial brownfields and gated rights of way. Creating well spaced and well marked gateways that allow the trail greenway to interface with the surrounding neighborhoods is both a key desire of the North Portland community and a key to reinvigorating the waterfront.

Provide safe and family-friendly amenities: The greenway corridor should have an ample supply of diverse uses and amenities that can serve the entire North Portland community. The waterfront should be seen first and foremost as a public space that can bring people together around recreation and stitch neighborhoods together and more closely with Central Portland.

Enhance the character of North Portland: North Portland has its own unique and independent history from the rest of Portland. This history should be acknowledged and celebrated through development of the greenway trail corridor that reflects the character of North Portland.

Celebrate the history and ecology of the waterfront: The Willamette River is a crucial cultural and ecological asset that helps to shape and define the Portland region. The greenway trail corridor should preserve, protect, and enhance these assets.



Photo Credit: Kevin McGee



Photo Credit: Kevin McGee



Photo Credit: Lewis Kelley

PROJECT GOALS

Grow Willamette Greenway builds upon previous planning efforts over the last three decades to present a clear way of moving the North Portland Willamette Greenway Trail from concept to reality.

The overarching goal of npGreenway, and this plan, is to complete the trail's construction in a reasonable time to ensure that residents do not have to wait any longer to receive the benefits that the trail will provide.

To support the goal, five specific objectives are defined for the plan: *Accelerate*, *Advocate*, *Broaden*, *Grow*, and *Partner*.

These objectives are the result of community input, past planning documents, and collaboration with npGreenway members. They provide a framework to help define and organize the recommendations resulting from the Grow Willamette Greenway planning process.

Accelerate



Accelerate the implementation of NPWGT before the proposed 2032 timeline, as set forth in the 2014 Regional Transportation Plan, by implementing the recommended strategies, which focus on broadening and growing the support for the trail.

Advocate



Act as a voice for residents by advocating for family-friendly trail facilities that create a destination and sense of place – celebrating the history and culture of the surrounding area.

Broaden



Broaden community engagement and outreach to increase knowledge of, and support for, the NPWGT. Doing so will increase community pressure for trail completion.

Grow



Grow and leverage npGreenway resources to support implementation of the NPWGT. Registering as a non-profit, with the ability to seek out independent funding, is a major step toward making the vision a reality.

Partner



Act as a facilitator for collaboration between public and private organizations that have a similar interest in bettering the future of Portland. Working collectively will grow capacity and move the implementation of the NPWGT forward in a timely manner.

RECOMMENDATIONS

These recommended strategic actions are the result of analysis and public feedback gathered during the Grow Willamette Greenway planning process.

The Willamette Planning Studio strongly supports the implementation of each recommendation. The team also recognizes that npGreenway's organizational capacity will dictate if and how each of the recommendations are put into practice.

A brief overview of some of the key recommendations are highlighted here, with a full exploration found later in the plan.



ACCELERATE

- Seek grant funding for the trail
- Develop partnerships that can bring energy and funding to the trail
- Encourage temporary trail design and access to the greenway corridor

ADVOCATE

- Encourage family-friendly amenities and park facilities along the greenway trail
- Provide inclusive facilities that can accommodate all North Portland residents
- Advocate for an all off-street trail alignment
- Encourage a unique design for each segment that celebrates the culture and history of surrounding neighborhoods.

BROADEN

- Continue community outreach and tabling events
- Develop and expand marketing materials and communication channels that can help npGreenway spread information about the trail
- Coordinate activities and events that bring the community together around the trail
- Make it easy for people to get involved in the process and to contact their elected representatives



PARTNER

- Facilitate conversations between North Portland residents and public agencies
- Create relationships with private partners
- Expand relationships with existing coalitions with similar goals



GROW

- Become an incorporated nonprofit organization
- Seek grant funding that can expand npGreenway operations
- Expand npGreenway organizational capacity
- Develop members and volunteers that can support and take part in npGreenway's mission

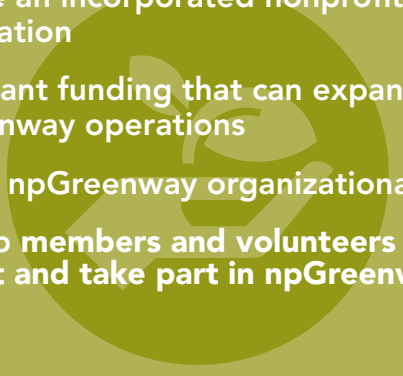


Photo Credit: Dan Dewan



COMMUNITY ENGAGEMENT

**“ This would be the
best thing to come
to North Portland. ”**

Comment from North Portland resident

STAKEHOLDER IDENTIFICATION

A multitude of stakeholders exist for the Willamette Greenway Trail and they were identified early in the scoping process. Understanding their needs and desires for what the trail will provide and positions within the framework of trail implementation and construction, is key to getting the trail funded and built.

Below is a brief summary and breakdown of the different stakeholder groups that will be impacted by the proposed trail project.

Trail Users

Anyone in the Portland region, from residents to tourists, are potential users of the trail and so making a trail that encompasses all users is important to the project's success. Amenities meant for a variety of recreational purposes will help to build a broad base of support that can push the trail forward. This stakeholder group will be mainly interested in the final outcome of the trail and how the trail can improve their lives through access to recreation and a direct transportation route to employment.

Neighbors

People living in close proximity to the trail will have the most access to the trail and potentially be affected the most by the trail's completion. Keeping neighbors informed about the process and implementation – as well as getting their feedback on design and intended trail connections, wayfinding, and usage will be key. An important vector for information will be North Portland Neighborhood Associations and the project website.

Businesses

The business community in North Portland is an important constituency key to supporting trail implementation. Business owners will be interested in how the trail can be leveraged to help to attract customers, provide employees access to their jobs, and generally improve the business climate in their neighborhood. Industrial businesses along the trail alignment are especially important to keep informed and must have their concerns heard and addressed. Concerns about how the trail might affect their daily operations or potential conflicts between trail users and business operations must be addressed. Business associations will be a key part of the outreach to this group of stakeholders.



Photo Credit: Atlanta Beltline



Photo Credit: Atlanta Beltline

Community Organizations

Many community organizations exist in North Portland that have similar goals as those that the Willamette Greenway Trail will help to address. Organizations promoting community development, recreational opportunities, active transportation, or organized around specific open spaces and natural areas are potential allies to the Willamette Greenway Trail. Community organizations should be consulted and coordinated with on how the trail can be mutually beneficial, as well as consulted with to show and gather support for the trail.

Property Owners

Property owners of parcels along the alignment are key partners in getting the trail built. If a property is not willing to talk and be cooperative, it can potentially delay the trail for years. Easements or purchasing of land will be required for the trail to be built, therefore working closely with parcel owners, keeping them informed, and jumping on opportunities when they present themselves will be crucial. Concerns of property owners should be carefully considered.

Government Agencies

There are a handful of local, state, and federal agencies that have a stake in the Willamette Greenway Trail. Agencies play the role of allocating funding for planning and construction, providing engineering and design standards, and signing-off on regulatory decisions as related to the brownfields cleanup. Keeping the trail on various agencies radar is key to keeping making progress on the project, as a shift in priorities among one or more agencies could delay completion of the trail.

WHAT WE DID

The Community Engagement Strategy for Grow Willamette Greenway encompassed tabling events, a survey, interviews with key stakeholders, and a web presence including a website and Facebook. The following are brief overviews of each of these outreach methods.

Survey: Willamette Planning Studio (WPS) created a survey, in Spanish and English, that asked community members about their trail uses and preferences. This survey was dispersed via personally handing out business cards with the link to the survey on it and through social media outlets including mailing lists and blogs.

The survey received 265 responses.

Interviews: Several interviews were conducted throughout the entire planning process in order to gain a greater understanding of the historical context of the trail and the community's sentiment towards it.

WPS conducted 13 interviews with stakeholders and technical advisors.

Web Presence: The website GrowWillametteGreenway.org was created for the project. This website provides general information about the project and team, downloadable pdf copies of Willamette Planning Studio's work products, contact information, a link to the survey, and additional resources. Additionally, a Facebook page for Grow Willamette Greenway was created.

As of May 13, 2015 there were 132 Facebook 'Likes' and 1,409 Grow Willamette Greenway website views.

Tabling Events: Grow Willamette Greenway held six tabling events throughout the community. These tabling events were an opportunity to provide input on the trail's design regarding factors like trail safety, viewpoints, ideal resting points, areas for neighborhood connectivity, and additional factors.

The tabling events reached over 160 community members and received feedback in five different languages.



Photo Credit: Lisa Harrison



Photo Credit: Gena Gastaldi

St. John's Public Library



Photo Credit: Gena Gastaldi

Input from children to retirees from the St. Johns neighborhood was gained at the St. Johns Public Library. Patrons of the library expressed their desire for safe family-friendly spaces along the trail with proper lighting and places to read.



Photo Credit: Lewis Kelley

Rosa Parks Elementary

Creative visionary ideas and comments were gathered from school children and their parents in five different languages from Rosa Parks Elementary, which is a Kindergarten through 5th grade school located in the New Columbia Neighborhood in North Portland. The children expressed excitement to have a voice in the design process and for using the trail in the future.

Water Pollution Lab



Photo Credit: Nick Stoll

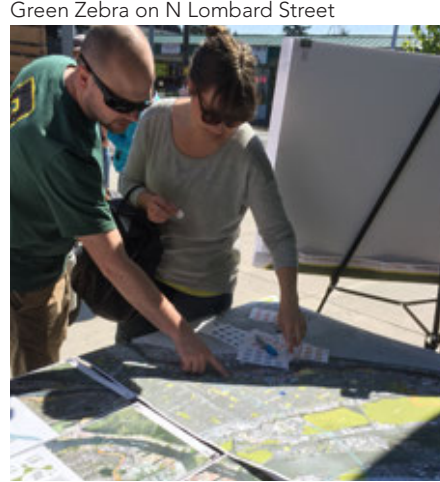
Feedback from work commuters and ecology experts was gained at the City of Portland Water Pollution Lab, located adjacent to Cathedral Park in St. Johns. This group has an intimate knowledge of the surrounding area and provided very detailed trail information regarding topics that ranged from flood plains to potholes.



Ex Novo Brewery

Bike commuters and beer lovers alike expressed their traffic concerns at Ex Novo Brewery – located in inner North Portland near N. Vancouver Ave (a busy bike commuting route). It was here where many cyclists discussed their frustration with fast moving traffic and trucking on existing paths.

Photo Credit: BikePortland.org



Green Zebra on N Lombard Street

Residents of, and those visiting, the N. Lombard St region provided feedback at Green Zebra Grocery – a grocery store focused on providing fresh local food. Connection points to the trail was a focus of discussion at this tabling event – due to the distance from N. Lombard to the trail’s proposed alignment.

Photo Credit: Lisa Harrison



Chimney Park

Community members from all different walks of life, along with their furry friends, provided feedback at Chimney Park, a dog park located in North Portland. Given that Chimney Park is a destination dog park, residents from all around the Portland region were present – expanding the geographical range of input. Suggestions from this location included adding food cart pods, bathrooms, and of course more dog parks!

Photo Credit: Lisa Harrison

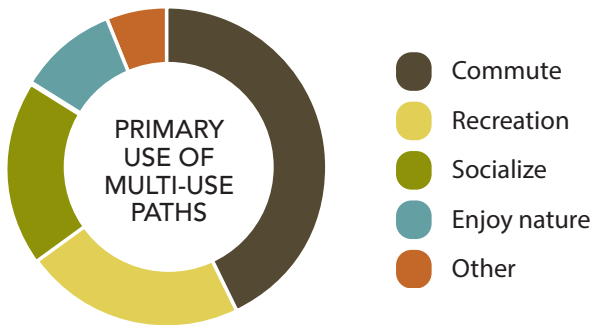
“This needs to happen sooner than the next 15 years!”

“I live in N Portland/ St Johns and hope the trail will hurry up and get done!!”

“Thanks and please keep pushing forward with this. I’d like to take my daughter on it, before she gets too old to hand out with her dad.”

WHAT WE FOUND

The community uses multi-use paths for a variety of purposes. According to the survey, of these purposes, commuting is by far the most popular (43%) followed by recreation (22%). Specifically, 92% of respondents use multi-use paths for biking, 65% for walking, and 37% for running. People also included uses like “sketching” and “blading”. There are a plethora of benefits that community members discussed that go beyond the obvious uses of the trail. One community member captured the diversity of benefits, stating: “I feel that a path like this would significantly reduce road congestion. It would also greatly improve the safety of bike commuters. In addition, it would connect North Portland to the SE, SW, and NW neighborhoods, which would be amazing.” It became apparent that the public desires a shorter date of completion than the expected 2032 deadline in order to receive these benefits as soon as possible.



“I’m really excited to see this project completed so I can get from St. Johns to Downtown where I work without having to ride on busy roads the whole way. I would feel a lot safer going to work on a path like this.”

“I would bike to Swan Island more if it weren’t so dangerous.”

Traffic Safety

Traffic safety is a top concern for the community when using trails. In fact, when asked “Improving which characteristics would lead to you using trails in Portland more?”, the top three chosen characteristics concerned traffic safety. These characteristics were: “Vulnerability to vehicle traffic”, “Unsafe street crossings”, and “Motor vehicle traffic.” Echoing these sentiments, the importance of trail safety was found to be 4.28 out of 5 (1 being “not important” and 5 being “very important”), from survey respondents – which was the highest rated out of the 10 survey amenity options.

Participants at tabling events discussed how the fear of being hit by a motor vehicle has deterred them from using existing paths in Portland for activities like commuting by bicycle or biking with their children recreationally. This is especially true in areas where cyclists are forced to interact with high-speed traffic, including trucking corridors. Many participants spoke of their excitement for the North Portland Willamette Greenway Trail to alleviate these concerns by providing an alternative option to the existing dangerous roadways.

survey respondents would use trails...



60%

to feel **less vulnerable** to vehicle traffic



60%

if they **improved unsafe street crossings**



to **avoid motor vehicle traffic**

Safety Spotlight: Interstate and Greeley

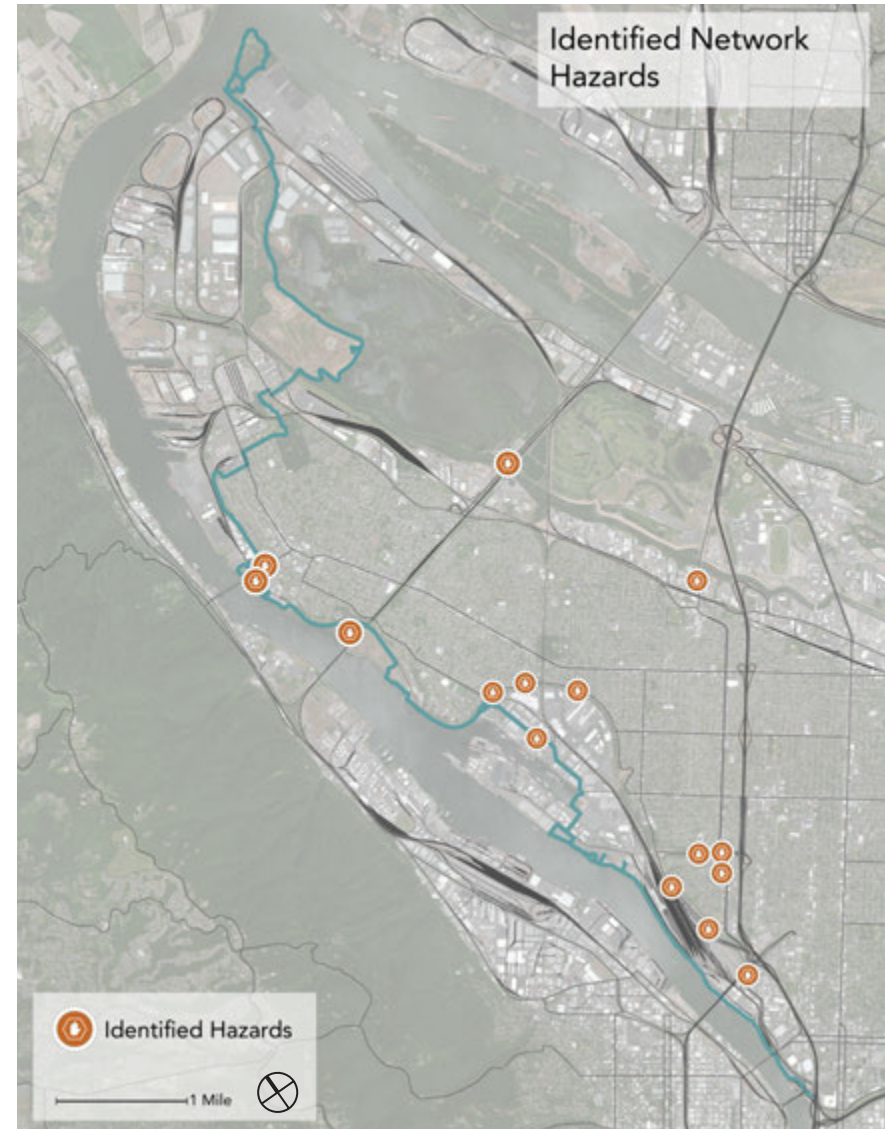
The roads N. Greeley and N. Interstate are streets frequently used when traveling from North Portland to the rest of the city. These streets were of the greatest concern and commented on very frequently in the survey, tabling events, and interviews. N. Greeley, in particular, is an area of high contention due to busy vehicle traffic that travels at high speeds. Furthermore, N. Greeley is a thoroughfare for trucking – causing concern to bikers who are afraid of being missed in blind spots or being around vehicles that cannot stop quickly. In fact, this concern is extreme enough that some community members stopped commuting entirely due to Greeley.

Traffic hazards on N. Greeley and N. Interstate were discussed frequently during the tabling events as well. All tabling responses related to Greeley and Interstate have been consolidated into a single map, shown here.

“I bike to work 2-3 times a week, and the only options are either Greeley or Interstate, which are not safe, or Vancouver, which is crowded and out of the way.”



Photo Credit: BikePortland.org



The Identified Network Hazards map showcases the specific locations that the community found to be hazardous. “Hazards” encompassed a variety of issues, but typically related to traffic safety or personal safety concerns. This information was found during the tabling events.

Separation from Road

The community desires an entirely separated from traffic, multi-use path that does not switch intermittently to the side of roadways -- as the current alignment has planned. Community members could not see themselves realistically doing many of the activities that they would use a trail for, if it were directly next to a roadway – like running or biking with children. These sentiments were especially clear from the survey and tabling events.

The importance of separation from the road was found to be 4.25 out of 5 (1 being “not important” and 5 being “very important”), from survey respondents. This was the second most important amenity, following trail safety.

“Most importantly, the trail should 100% connect without utilizing any vehicle roadways, if possible.”

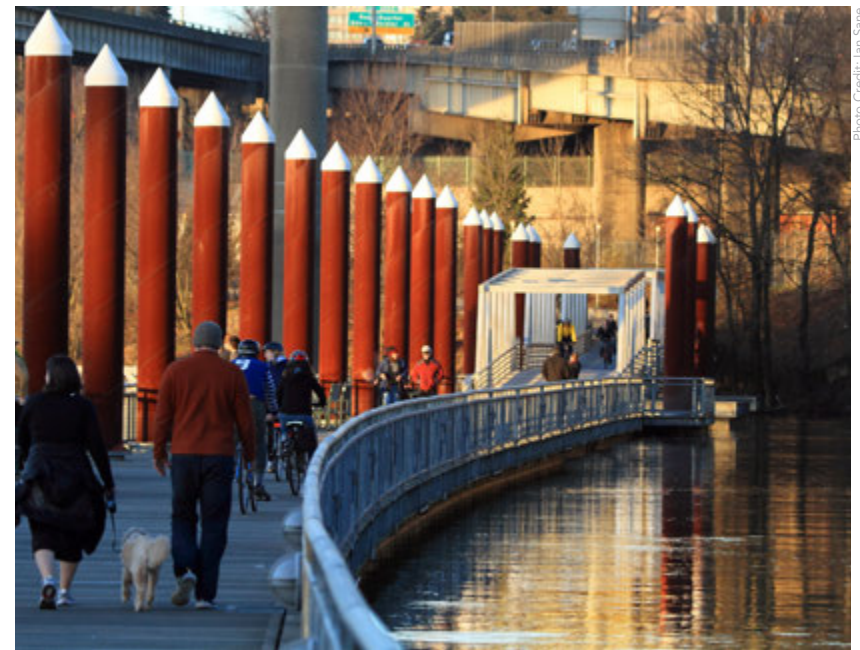
“A safe, separated path connecting to downtown is one of the most important issues to this neighborhood in my opinion.”

“I don’t want to cycle next to cars, separation is very important.”

“I would bike to Swan Island more if it weren’t so dangerous.”

“Have it be actual protection, not flex posts, not armadillos, something that will actually stop a vehicle from drifting into the bikeway.”

“I would love to commute by bicycle, but a multi-use trail at least most of the way is the only way I can actually imagine doing it.”



Cyclists and pedestrians enjoying the East Bank Esplanade

Connections to the Trail

Trail connections to the North Portland Willamette Greenway are of high importance to community members; they want to ensure that the trail is not built in isolation. Frequent connections guarantee that the public can easily access the trail when they are in close proximity regardless of their specific location. Doing so will maximize the community benefit of the trail for the community as a whole.

The importance of connections was found to be 3.95 out of 5, from survey respondents.

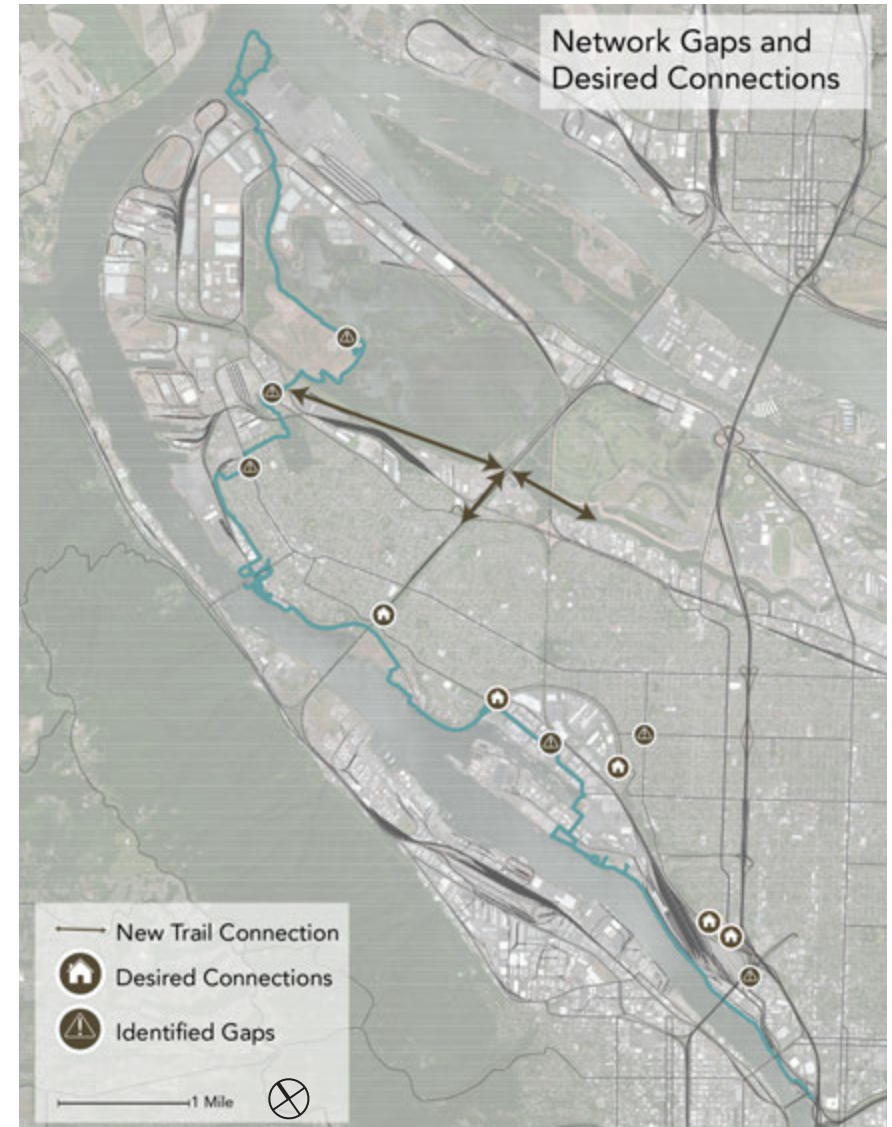
Some of the suggested connections points, gathered during tabling events, are shown on this map.

“My current bike commute takes me along Interstate and Greeley, both of which I hate riding on because I am riding close to high-speed traffic with no protection.”

“This trail would be fantastic! I never bike on Greeley anymore, very unsafe on a bike!”

“It will be MUCH safer and more pleasing to use a protected path than bike on the side of Greeley.”

“This should be designed to allow for convenient exiting and entering to the trail every mile, no more than 2 miles. [It would be a] great way to reduce bicycles on the roadways, while providing a great alternate way of getting around the city.”



The Network Gaps and Desired Connections map showcases the locations that the community would like a connecting path (from the identified location to the trail) to be built. This map also shows known gaps in the trail. This information was found during the tabling events.



The Desired Parks and Amenities map showcases the locations that the community would like various amenities to be located. Amenities” includes: view points, park space, water and restrooms, activity centers, and playgrounds. This information was found during the tabling events.



Photo Credit: Lewis Kelley



Photo Credit: Lewis Kelley

Wayfinding

Many survey respondents and participants at the tabling events expressed the importance of wayfinding. Wayfinding build awareness about the amenities provided near the trail, like proximity to a park or a restroom, connection points to other trails, and the best route to reach a particular destination. Wayfinding is not only beneficial for local residents, it is also very helpful for those visiting, or new to, Portland who may not be familiar with the region.

Water and Restrooms

Locations for water fountains and restrooms that are dedicated to trail users are highly desired so that users can stop without having to pay for something (like at a coffee shop), travel off trail, or carry heavy water bottles on their trip. During the tabling events, it was suggested that these locations be spread out evenly along the trail, as shown on the map to the left.

“ I like to run early in the morning and late at night, so lighting is a concern. Adequate lighting is important for me to feel safe running. ”

Lighting

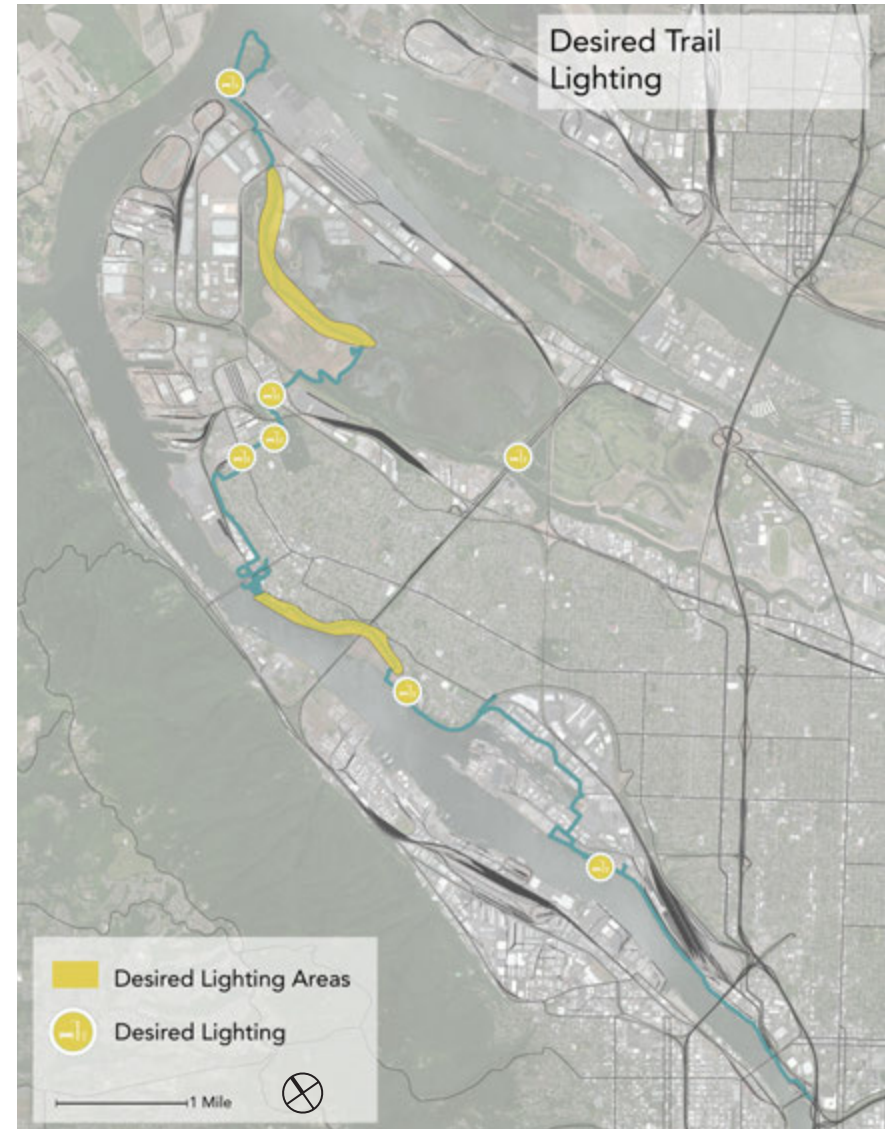
Lighting is an important amenity to those who would like to use the trail during the evening or early morning – primarily due to personal safety concerns. Some of the specific locations that were suggested for lighting include: Chimney Park, Pier Park, Lombard Street, Willamette Cove, and Swan Island. Without lighting provision, community members stated that they would only use the trail during the day, which minimizes the benefits of the trail investment.

The importance of lighting when deciding whether or not to use a trail was found to be 3.54 out of 5, from survey respondents.

Additional Comments:

The following are considerations gathered from the community that are important, but were not mentioned frequently.

Homelessness
Dog Parks
Gangs
Trash
Park Patrol
Flood Plains
Food Carts



The Desired Trail Lighting map showcases the specific locations that the community would like lighting to be placed – typically due to safety concerns. This information was found during the tabling events.



EXISTING
CONDITIONS

“ A safe, separated path connecting downtown is one of the most important issues to this neighborhood, in my opinion. ”

Comment from North Portland resident

INTRODUCTION

The Willamette Greenway was first conceived of in the 1987 Willamette Greenway Plan as a means for providing public access to the riverfront and highlighting the scenic beauty of the Willamette.

The plan envisioned a corridor stretching from Columbia River in the north and the Sellwood Bridge in the south, with the minimum goal of restoring the Willamette River and its banks. The Willamette Greenway Trail is an integral part of that vision, providing Portland residents a chance to reconnect with a restored and vibrant Willamette waterfront corridor. Today, that original idea is still central to the Willamette Greenway Trail but, with active transportation having taken off in the last several decades, the trail now has the potential to act as a transportation corridor, connecting people to their jobs in major employment centers along the Willamette River.

Trails built along the southern portion of the Willamette Greenway - the Springwater Corridor and Eastbank Esplanade - demonstrate the powerful transformation of place and space that trails can provide. Extending and completing this trail system from the current northern end of the Esplanade all the way to Kelley Point Park at the confluence of the Willamette and Columbia Rivers provides a great opportunity for the future of Portland's waterfront.

While this project focuses on a trail corridor, a study area was chosen that extends from the trail to the Willamette River on the west and from the trail to three quarters of mile on the east.

Additionally, the project creates a connection to North Portland and to a portion of the riverfront previously hidden behind the industrial land uses. The mixing of this industrial history with open space, public access, and a reconnection to the Willamette River will establish a unique sense of place with the existing character of North Portland, just as the Eastbank Esplanade created a vibrant sense of place that attracts people not just from Portland, but all over the world, to the Willamette riverfront.

COMMUNITY/PLANNING CONTEXT

A substantial amount of change has occurred in North Portland since 1987 when the original Willamette Greenway Plan set out the goal to protect, conserve, maintain, and enhance the scenic, natural, historical, economic, and recreational qualities of lands along the Willamette River. The area is seeing a level of investment, redevelopment, and infill comparable with much of Portland thanks to the area's livability, St. John's lively main street, and affordable, mixed-income neighborhoods. Ensuring that North Portland is connected to the Portland region and all the recreational, entertainment, and employment opportunities is more important than ever.

Today, the riverfront is a mix of industrial employment centers, former industrial brownfields, and open space with limited public access. Swan Island, Lower Albina, and the

Lloyd District are hubs of employment and economic activity that the trail will connect together. These areas are expected to see significant job growth in the coming years while the Lloyd District also plans to add substantial new housing units in the form of high density, transit oriented development.

A sustained effort has been made over several decades and will continue into the future to ready brownfield sites for redevelopment, providing both open space and new economic opportunities along the Willamette and the proposed trail. However, at the moment these sites (including the Steelhammer property, Triangle Park, Baxter and McCormick, and Willamette Cove) sit empty, idle, and potentially contaminated.



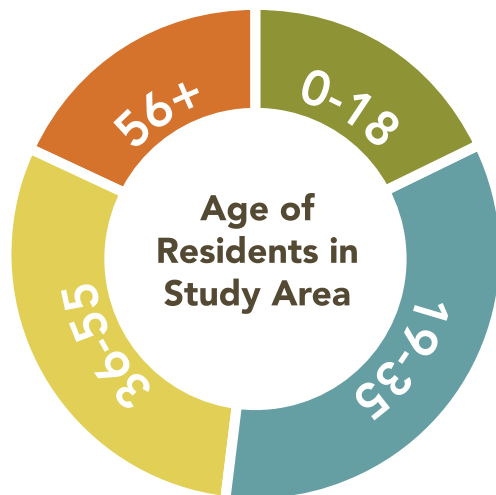
Photo Credit: Kevin McGee

Willamette Blvd is a popular bicycle and pedestrian corridor in the Overlook neighborhood of North Portland.

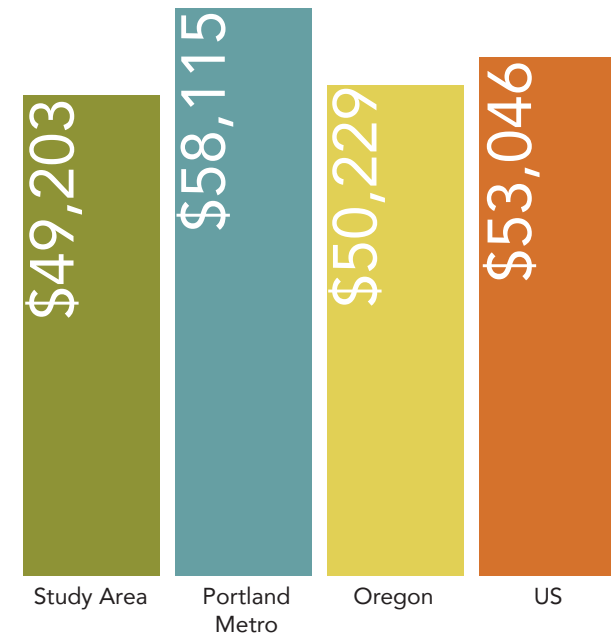
There are 66,397 people who live within 3/4 mile of the trail, which is 11% of the total population of the city of Portland.



The largest age group in the study area is 19-35, with 34% of the population in that group. There is a large population of young adults living within the study area, with 52% of residents under age 35.

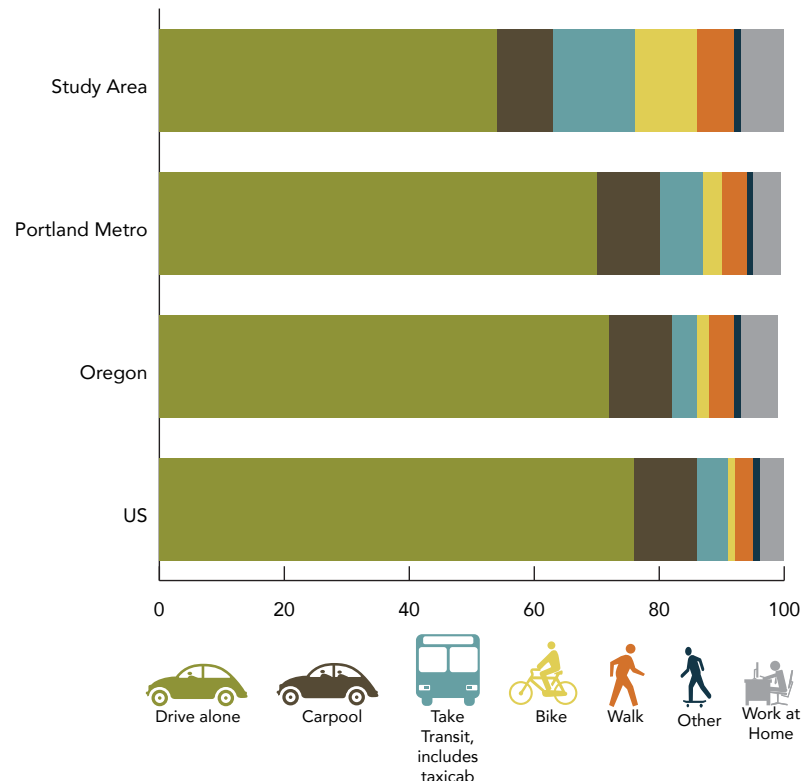


The median household income for the study area is \$49,203, which is the same as the state average and 15% lower than the Portland Metro average.

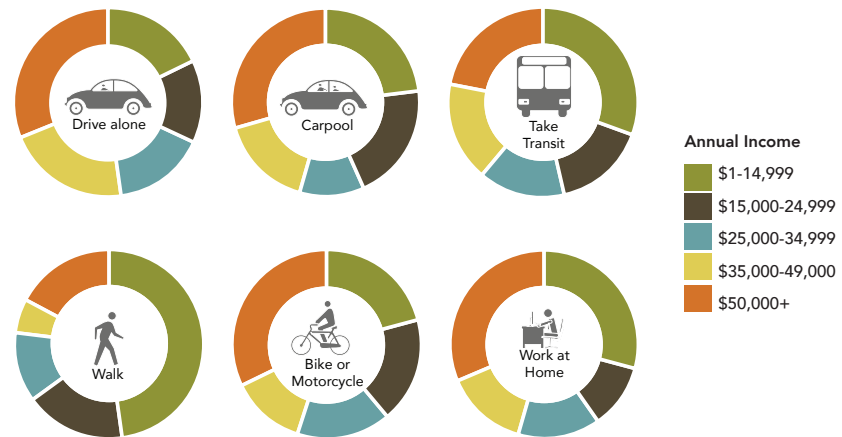


The distribution of the population varies by segment area. Segments 1 and 2 have the lowest population, with 5% and 9% respectively. Segment 3 has the largest amount of the study area's population, with 31%. Segments 4 and 5 have 24% and 30% of the population. While the gender makeup varies slightly amongst segments, the overall gender split is 50% male and 50% female.

The study area has a much lower rate of drive alone commute trips than the Portland Metro area, the State of Oregon and the United States as a whole. While 76% of commuters in the U.S. drive alone to work, only 54% do in the study area. Due to the low rate of drive alone trips, commuters in the study area utilize alternative modes of transportation more than workers in other areas. Thirteen percent of commute trips in the study area are made by public transportation, compared to 5% in the U.S. overall. While the Portland Metro area



is nationally recognized for its high bicycle commute rate of 3%, the study area has a three times higher rate, with 10% of all commute trips made by bike. Similarly, the walking commute rate is higher than the Metro region's average and twice that of the U.S. average.



The mode share by income illustrates how residents in the study area commute to work based on individual income. Of those who walk to work, 48% earn less than \$15,000 a year. Of those who bike to work, 39% earn less than \$25,000 a year.

For all workers 16 and over in the study area, 15% of workers do not have access to a vehicle and rely on alternative modes of transportation for their commute to work.



4,816

workers
within 3/4 mile of the proposed trail

don't have access to a car

TRAIL OVERVIEW

The Willamette Greenway Trail is envisioned to reconnect North Portland neighborhoods to the Willamette River and provide an attractive, quality landscape for recreation and stunning viewpoints of the natural and built environments found along the river. Public access and recreation is a major re-imagining of what has historically been an industrial waterfront along the Willamette River. Clean-up efforts of former brownfields have been ongoing along many stretches of the riverfront, laying the groundwork to open up the river to public access, with the Willamette Greenway Trail playing a major role in the riverfront's transformation. The trail will offer users access to both recreation along future open spaces and parks and simultaneously offer a link to important job centers such as Swan Island, Lower Albina, The Lloyd District, and downtown Portland.

The trail itself consists of a 10-mile alignment that will extend the Eastbank Esplanade from its current northern terminus at the Steel

Bridge, north to Kelley Point Park at the confluence of the Willamette and Columbia Rivers. Along the alignment, the trail will connect people to recreational opportunities not only along the riverfront, but to already existing parks and natural areas; bird watching in Smith & Bybee Wetlands Natural Area, baseball and skateboarding in Pier Park, scenic views of the St. John's Bridge at Cathedral Park, and beach access at Kelley Point Park.

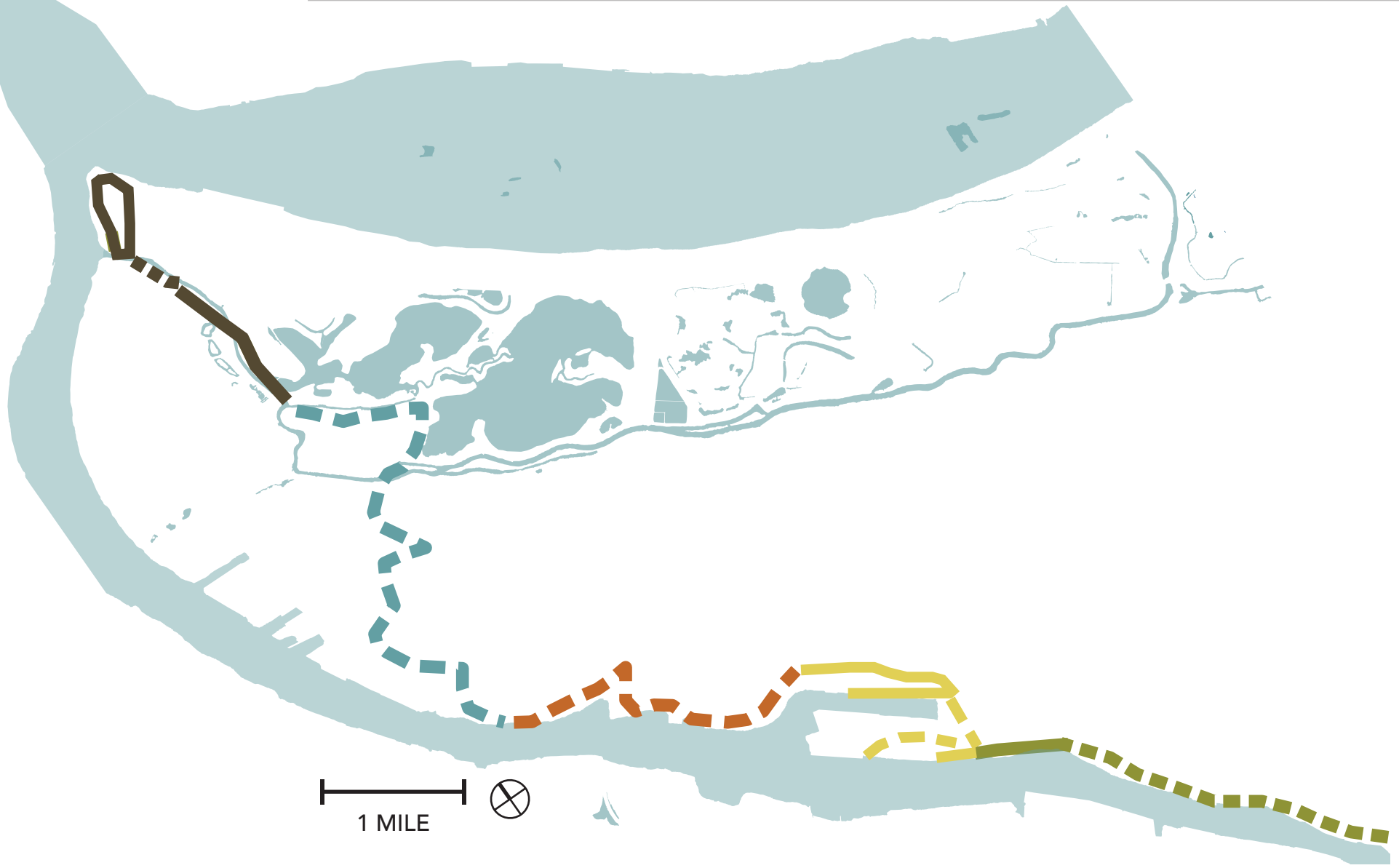
Besides recreation, the trail offers a new and direct connection for North Portland residents to access jobs. North Portland has somewhat limited transportation access when compared to more central locations in the Portland region. Transit and active transportation trips to the St. John's area can take up to an hour. By improving direct access to employment centers and main street business districts, the Willamette Greenway Trail will open up opportunities and help to reduce the burden of people's daily commute.










Photo Credit: Gena Gastaldi

River and neighborhood view to the south of St. John's Bridge.








SEGMENT SNAPSHOTS










SEGMENT ONE | KELLEY POINT PARK TO N COLUMBIA BOULEVARD

| | |
|--|--|
|  2.1 |  KELLEY POINT PARK, BYBEE WETLANDS |
|  \$7.3 |  COLUMBIA RIVER/ SAUVIE ISLAND & BYBEE WETLANDS |
|  2,869 |  AT GRADE CROSSING AT COLUMBIA BLVD |
|  1,199 | |








SEGMENT TWO | N COLUMBIA BOULEVARD TO N PITTSBURGH AVENUE

| | |
|--|---|
|  ~2.8 |  PIER PARK, CHIMNEY PARK, CATHEDRAL PARK |
|  \$1.6 |  WILLAMETTE RIVER, FOREST PARK |
|  10,348 |  POSSIBLE NEIGHBORHOOD BACKLASH |
|  4,054 | |








SEGMENT THREE | N PITTSBURGH AVENUE TO N BASIN AVENUE

| | |
|---|--|
|  2.7 |  SWAN ISLAND BLUFF |
|  \$11.4 |  TRIANGLE PARK, DOWNTOWN & WAUD BLUFF |
|  26,902 |  LAMPROS STEEL/ UP EASEMENT ACQUISITION |
|  9,319 | |

SEGMENT FOUR | N BASIN AVENUE TO N GOING STREET

| | |
|---|---|
|  1.9 |  McCARTHY PARK |
|  \$4.1 |  WILLAMETTE RIVER, DOWNTOWN, SWAN ISLAND |
|  16,400 |  HIGH TRAFFIC AREA |
|  6,991 | |

SEGMENT FIVE | N GOING STREET TO EASTBANK ESPLANADE

| | |
|---|---|
|  ~2.2 |  PEACE MEMORIAL PARK, EASTBANK ESPLANADE |
|  \$5.6 |  WILLAMETTE RIVER, DOWNTOWN |
|  22,419 |  UNION PACIFIC EASEMENT ACQUISITION |
|  10,607 | |

| | | | |
|---|---|---|---|
|  MILES OF PROPOSED TRAILS |  # OF RESIDENTS IN SEGMENT |  RECREATIONAL ACCESS |  CONSTRAINTS |
|  COST OF SEGMENT (IN MILLIONS) |  # OF HOUSEHOLDS |  VIEW POINTS | |



Photo Credit: Gema Gastaldi

SEGMENT SWOC

A SWOC analysis is a standard evaluation tool to assess strengths, weaknesses, opportunities and challenges. In this case, the SWOC approach is being applied to each of five trail segments of the North Portland Willamette Greenway Trail. The following section is a brief summary of the full analysis which can be found in Appendix B. With more than 10 miles of trail, the Willamette Greenway will meander through parts of Portland with many unique characteristics and distinct destinations. The trail has been split into five segments, each with their own strengths, weaknesses, and challenges to overcome. This SWOC analysis is intended to help guide and document the process of drafting and refining an implementation and action plan for the North Portland Willamette Greenway Trail, keeping in mind the goals of the Willamette Greenway Plan of connecting the people of North Portland to improved recreational and transportation opportunities.



Photo Credit: Kevin McGee

Kelley Point Park trail

Skateboard area in Pier Park



Photo Credit: Lisa Harrison



Photo Credit: Lisa Harrison

Baltimore Woods (St. John's Bridge to the south)

View of Cathedral Park neighborhood looking south from St. John's Bridge

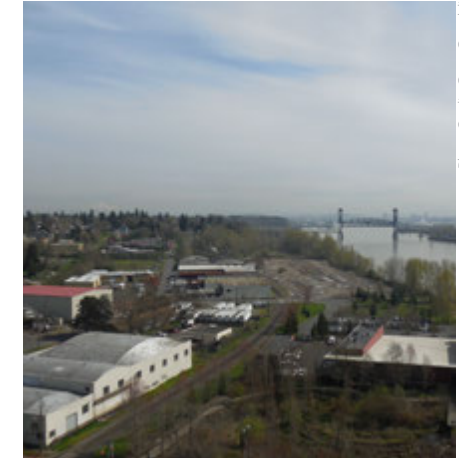


Photo Credit: Gena Gastaldi



Photo Credit: Kevin McGee

Southbound cyclist on N Willamette Blvd

Trail adjacent to Willamette Cove



Photo Credit: Lisa Harrison



Photo Credit: Lewis Kelley

Swan Island trail looking north

Cyclists in Lower Albina area

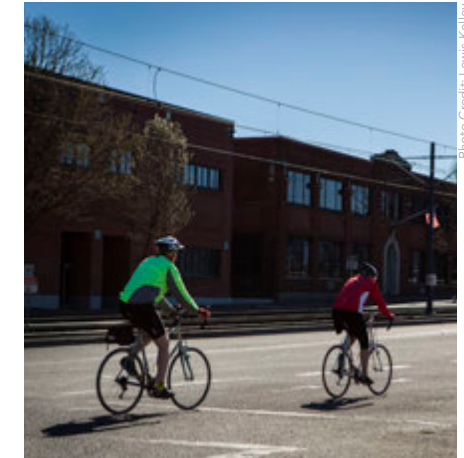


Photo Credit: Lewis Kelley



Site visit to Kelley Point Park during Phase 1.

SEGMENT ONE

KELLEY POINT PARK TO
N. COLUMBIA BLVD

Connecting Kelley Point Park along the Columbia Slough, this portion of the trail will offer views of Smith and Bybee Wetlands Natural Area and is perfect for wildlife viewing and bird enthusiasts. A trail already exists along the Columbia Slough connecting to the entrance of Kelley Point Park and the existing Marine Drive bike and pedestrian path. This portion of the trail will have limited connections to the surrounding urban environment due to the natural areas and provide limited job access.

STRENGTHS

- Views of natural areas.
- Interested community groups such as Friends of Smith & Bybee Lakes.
- Trail crosses many parcels already owned by government or institutional entities including Metro, City of Portland, Port of Portland.

WEAKNESSES

- Lacks real opportunity to connect people to jobs.
- Consistent flooding along the slough.
- Perception of safety issues, especially around lighting and possible homeless encampments.

OPPORTUNITIES

- Focus on access to a string of parks and natural areas that the trail would connect.

CHALLENGES

- Private property issues along the slough.
- Multiple easements that need to be negotiated.

SUMMARY

Segment One should take advantage of the natural area habitats that the trail passes through on its way from Columbia Blvd to Kelley Point Park. With limited interruptions or street crossings between Columbia Blvd and Marine Dr, the future completed trail is perfect for joggers, cyclists, and bird watchers wanting to escape the urban environment and have a quiet moment in nature. This strength should be capitalized upon to provide a place for relaxation and peacefulness.



Columbia Slough at
Kelley Point Park.

Photo Credit: Kevin McGee



A flower girl chases bubbles in Cathedral Park.

SEGMENT TWO

CHIMNEY PARK TO CATHEDRAL PARK

Connecting Chimney, Pier, and Cathedral Parks through portions of both on and off-street trails, Segment Two will provide St. John's and North Portland improved access to recreational opportunities. Portions of the trail through these parks already exist, while connections between the parks is initially proposed to be predominantly using on-street existing right of ways with limited separation.

STRENGTHS

- Many connections to neighborhoods, existing parks, and attractions.
- Much of the alignment uses existing ROW, some of which is underused public.
- Strong sense of community and many groups interested in enhancing the area.

WEAKNESSES

- Complications with heavy truck traffic on Lombard.
- Perception of safety issues, especially around lighting and possible homeless encampments.

OPPORTUNITIES

- Organization around Baltimore Woods.
- Unused Decatur Street ROW that can connect Cathedral Park to Baltimore Woods (opportunity for shared space design).

CHALLENGES

- Wayfinding along on-street segments.
- Creating a sense of place along on-street segments.
- Crossing of N. Columbia Blvd.

SUMMARY

Segment Two connects three regional parks, which are known to be activity centers, within the St. John's neighborhood. This connectivity is a major strength of segment two. Leveraging the public right of way into neighborhood greenways should be a priority, while still pushing public agencies to consider an all off-street trail alignment for this segment. The alignment along Decatur Street should be given particular attention and thought. The street's unique siting between residential neighborhoods, light industrial employment, and the adjacent Baltimore Woods creates a corridor that can provide a strong and vibrant trail corridor should Decatur be designed with multiple uses in mind.



Photo Credit: Lisa Harrison

Ballfield at Pier Park.
In the foreground
is an existing
trail through the
park that will be a
part of the North
Portland Willamette
Greenway Trail.

Photo Credit: Gena Castaldi



A family feeds geese and ducks along the Willamette riverfront at Cathedral Park.

SEGMENT THREE

CATHEDRAL PARK TO SWAN ISLAND

Connecting Cathedral Park to Swan Island, the majority of this segment runs parallel to the Willamette River and provides the potential for access to future open space at Willamette Cove and the eventual University of Portland's River Campus. Following the Union Pacific rail tracks offers a unique rails-with-trails design opportunity.

STRENGTHS

- Open space along river (Willamette Cove, McCormick & Baxter, Triangle Park).
- Previous cleanup investment means some the land is already partially prepared.

WEAKNESSES

- Limited current access.
- Lots of remediation/brownfield work still underway - may complicate/push back implementation of this segment and restrict allowed uses adjacent to the trail.
- Perception of safety issues: lighting and possible homeless encampments.

OPPORTUNITIES

- University of Portland buy-in, funding, and vision for an active riverfront campus.
- Bureau of Environmental Services ownership and restoration work and the potential natural/parks area on former brownfields.
- Planned redevelopment of the STEEL HAMMER PROPERTIES site.

CHALLENGES

- Trail placement on western side of railroad tracks limits access.
- Brownfield reclamation is complicated and extends construction timeline.
- Peninsula trail connection requires expensive solution and cooperation.

SUMMARY

Segment Three is dominated by large, industrial brownfields in various states of reclamation and planned redevelopment – including new urban mixed use centers and open space. Redevelopment along this segment means that segment three holds the greatest potential for transforming the waterfront and the surrounding neighborhoods. Public ownership along this segment should be leveraged to gain access to funds as well as start a conversation with the public that can help guide redevelopment along Segment Three and how it can enhance the surrounding neighborhood's livability. A mix of uses should be planned for along segment three, with uses being oriented towards the trail to enhance access and promote trail use and activity.



Photo Credit: Lisa Harrison

Open space between Swan Island to the south and Willamette Cove to the north.



The Waud Bluff Trail represents an important connection between Swan Island and the University Park neighborhood.

SEGMENT FOUR

WAUD BLUFF TRAIL TO ALBINA YARDS

Connecting through Swan Island, this segment of the proposed trail traverses a major regional employment center and heavily trafficked industrial area. A majority of the trail is on-street and follows public right of way along N. Basin Ave with an additional bluff top alignment along Willamette Blvd.

STRENGTHS

- Centralized Business Assoc/TMA can advocate for accelerated trail implementation.
- Wide ROW with lots of room to add separated/European style trails (Example Basin Avenue).
- Swan Island Beach access with views of downtown.

WEAKNESSES

- On-street sections create complicated transitions, crossings and design issues.
- Truck traffic: perceived high speeds, exhaust, and noise diminish trail experience.

OPPORTUNITIES

- Wide ROW for the trail along Basin Ave creates opportunity to separate uses.
- Views of a working shipyard creates an attraction.
- Port and an existing URA are a potential partners for funding.

CHALLENGES

- Very limited connectivity to and from Swan Island.
- Creating a pleasant trail experience along freight-dominated roads.

SUMMARY

The industrial nature of Segment Four through Swan Island acts as both a challenge and an opportunity. On-street trail design should focus on separation of active transportation modes from freight and vehicle traffic within the existing rights of way where possible. Coordination and outreach with current businesses along the trail alignment through Swan Island will be key to ensure understanding, buy-in, and to hear the concerns and accommodate the needs of industrial businesses. Improved street crossing facilities will be paramount to ensure safety of trail users at the multiple at-grade street crossing. Additionally, connections between Swan Island and the other segments and surrounding neighborhoods are important to provide connectivity and access to employment.



Photo Credit: Lewis Kelley

Existing trail adjacent to the Willamette River on Swan Island.

Photo Credit: Lewis Kelley



Lower Albina Yard looking north with Fremont Bridge ramp in the background.

SEGMENT FIVE

ALBINA YARDS TO STEEL BRIDGE

Connecting Swan Island to Lower Albina, the Rose Quarter, and the Eastbank Esplanade, this section of trail is perhaps the most constrained and complicated section of the Willamette Greenway Trail. However, Segment Five is key in connecting the more northern reaches of the trail with the existing and heavily used Eastbank Esplanade.

STRENGTHS

- Views of downtown.
- Connect people to their jobs.

WEAKNESSES

- Issues of ROW and/or easements.
- Transitioning between off/on-street trail alignment and design issues.
- Fairly limited neighborhood connections.

OPPORTUNITIES

- Possible connection up to Broadway Bridge.
- Urban Renewal Area (URA) funding via Interstate Corridor URA and Oregon Convention Center URA.
- Possible future redevelopment of riverfront between Steel and Broadway Bridges.

CHALLENGES

- Crossing multiple active industrial waterfront uses.
- Connecting back to the urban street grid/neighborhood.
- Easement access for the private "Cement Road".

SUMMARY

With two alignment options for Segment Five, the mix of issues dictating whether the Cement Road or Greeley alignment are built presents the NPWGT with the most complicated and uncertain future of the five trail segments. As such, Segment Five should continue to be studied and talks with the Union Pacific Railroad should proceed while progress and construction of other trail segments is undertaken. Both possible alignments have their advantages and drawbacks. Alternative designs and creative solutions to the right of way and design challenges should continue to be looked at and investigated rather than settling on the path of least resistance of placing a separated path along N. Greeley.



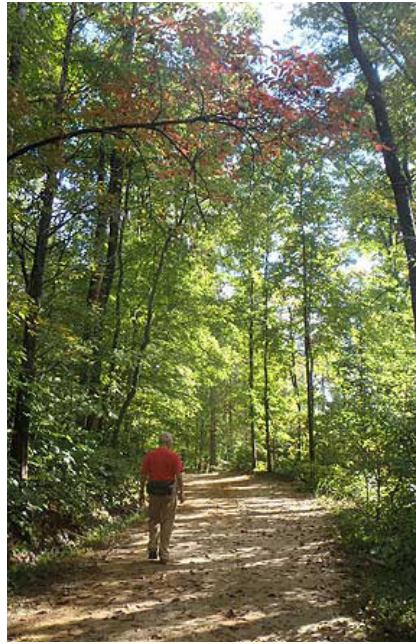
Photo Credit: Lewis Kelley

The Union Pacific rail line curves around a bend in the Willamette River just north of the Steel Bridge.



CASE STUDIES

In presenting the following case studies, our intent is to clearly illustrate the connection of research to strategy and execution within the context of our planning work for the implementation of the Willamette Greenway Trail.



Environment

Environmental concerns, such as proximity to industrial sites or wildlife habitats, can be seen as a challenge to the creation of greenways or an opportunity to provide unique character – depending on the approach taken. Special consideration is needed to ensure the safety of greenway users as well as the protection of nearby sensitive areas. Though additional efforts are needed when addressing environmental issues along greenways, the benefits are potentially bountiful.



Stakeholders

Greenways can cross numerous boundaries and involve many actors in their creation. The benefits of a greenway to one stakeholder may be a cause for concern to another and could prompt disputes during the planning of a trail alignment. Involvement with as many stakeholders as possible during the planning phase of a greenway trail can ensure the greatest possible benefit to everyone involved, as well as allowing issues of particular concern to be addressed.



Right of Way

The complex alignment of greenways often allows for the interaction with existing transportation systems as well as natural obstacles that need to be traversed. Inventive solutions to these right-of-way issues are often needed to provide a safe and efficient route for active transportation users. The unique strategies used to solve these issues often become memorable features of the greenways.



Partnerships

Fostering partnerships during the planning and creation of greenways allows for challenges to be tackled collaboratively. Whether its funding, advocacy, or trail design, having multiple partners with a common goal ensures greater support as well as encouraging a diverse range of interests.



Creative Funding

Funding greenways is often the most challenging phase during the planning process. With limited government funds, greenways must often rely on alternative approaches to ensure their implementation. Utilizing grants, volunteer work and corporate donations have all become effective tactics for financing greenways as well as their maintenance.



Urban Trails & Greenways

Urban trails and greenways have the ability to play multiple roles; they can act as a transportation corridor for a city's residents, create unique tourist destinations that attract visitors and foster economic opportunities, plus they shape beloved public spaces that are enjoyed by all. Many cities across the country have seen the benefits of investing in urban trails.

Looking northwest from the riverbank at Albina Yards provides a view of the industrial waterfront along the Willamette River and Forest Park stretching off into the distance.



ENVIRONMENT

Environmental conditions along the proposed Willamette Greenway Trail are one of the challenges to implementation. While the trail would pass along beautiful, scenic riverfront areas, many areas of the trail are either currently or historically industrial sites, with contaminated soils at various stages of mitigation.

One site of particular concern is Willamette Cove, a former industrial site that is on the federal Superfund list. The 22 acre Willamette Cove site was purchased by Metro as part of the Greenspace program, but high levels of lead contamination in the sand make the site currently unsafe for recreation. Additionally, the upland area is contaminated with relatively low-grade petroleum-based products and should also be avoided. Other sites along the alignment in need of various levels of mitigation include Lampros Steel and the Albina Yards. Other jurisdictions have been challenged by similar environmental concerns when planning and building trail projects, including Portland. Trail projects can create an opportunity to not only provide a place to bike and walk, but also can act as a catalyst for environmental restoration, conservation and stewardship.



Mt Vernon Trail, Alexandria, VA

The Mount Vernon Trail is a 17-mile long multi-use path used by over 1 million cyclists and pedestrians annually. A major obstacle for implementing a portion of the trail was the proximity to the GenOn/Mirant Power Plant (closed in 2012), a coal fired plant known to be spewing hazardous levels of fine particulate matter into the air and adjacent Potomac River. The construction of the trail, along with the closing of the plant, has renewed interest in the area and options for redevelopment are currently being explored. The city has expressed an interest in seeing a mixed-use development, with recreation, housing and commercial or offices on the 25 acre site that the Mt Vernon Trail passes through.



Frankford Creek Greenway, Philadelphia, PA

The Philadelphia Trail Master Plan (2013) lists a trail along the Frankford and Tacony Creeks as the highest priority for the city, creating opportunities for improving existing green space along the creeks. Constructing the trail addresses environmental concerns and brownfield mitigation, while improving the transportation options and neighborhood access at the same time. The first segment, called the Tacony Creek Trail, was completed in 2012, and efforts are underway to complete the entire greenway. Identified in the city's "Green City, Clean Water" plan, the project has been a collaborative effort spearheaded through the Tookany/Tacony-Frankford (TTF) Watershed Partnership, Inc.



Springwater Corridor, Portland, OR

The Springwater Corridor is a scenic rail to trail route that encompasses wetlands, buttes, agricultural fields and pastures while traversing residential and industrial neighborhoods in southeast Portland. The trail crosses over Johnson Creek, one of the last free-flowing streams in the urbanized Portland area, at numerous points along its 21-mile route. The trail spans the creek floodplain, with protected natural areas for flood storage and habitat for wildlife and connects with the inner southeast Eastbank Esplanade. Implementation of the trail created opportunities for various environmental interventions, including the conservation and repair of many riparian areas, invasive species removal, conservation of open space, and reintroduction of native flora and fauna.

Photo Credit: Gena Castaldi

A retired couple stroll along the trail in front of the headquarters for Daimler Trucks North America on Swan Island.



STAKEHOLDERS

Engaging with a diverse set of stakeholders can be a challenging, yet rewarding experience when planning for any trail project.

With over 65,000 people living within a short walk of the trail, plus the significant and varied employers, employees, and businesses, there are many groups with diverse concerns and views to interact with during the planning offer the Willamette Greenway Trail. Starting dialogue with stakeholders early on in the process can minimize potential conflicts down the road and help to build trust and partnerships. Stakeholders can become valuable resources in the planning process, as they provide an important local knowledge and can place political pressure on decision makers when prioritizing projects and are your future trail users.



Atlanta BeltLine, Atlanta, GA

The Atlanta BeltLine is a 22-mile urban trail corridor that utilizes an abandoned, historic railroad route. The new trail connects 45 neighborhoods with each other and downtown Atlanta, as well as parks, public transit and other nearby trails. Throughout the entire process, the non-profit Atlanta Beltline Partnership strived to be as transparent as possible, making frequent updates through social media and a robust website, which were used to inform viewers of every aspect of the project, as well as ongoing work and events. Community engagement was a huge part of this project, with 225 public meetings attended by over 5,000 participants. Public input was used for every aspect of the planning process, from design, prioritization and project refinement.



Silver Comet Trail, Northern Georgia

The Silver Comet Trail, a 61-mile long regional trail, is located in northern Georgia, and travels west through seven cities and three counties. Stakeholder involvement played a big role in the development of the Silver Comet Planning Study, including the state DOT, all jurisdictions the trail traversed, multiple Parks and Recreation departments, two land trust organizations, local bicycle shops, numerous Chambers of Commerce and more. Stakeholders provided input on trail connections, location and provision of trail user services, development of a wayfinding system, trail amenities such as bike rentals and also helped identify concerns and provided valuable input on possible solutions and recommendations.



Dinkytown Greenway, Minneapolis, MN

Although only one mile long, the Dinkytown Greenway provides an important link in the regional trail system. "It isn't the longest bike trail in the city, but it is probably one of the most important," said Minneapolis Mayor R.T. Rybak. The urban trail connects downtown Minneapolis and St. Paul via a bike and pedestrian bridge over the Mississippi River. Once on the east side of the river, it passes entirely through the University of Minnesota campus. Originally planned in 1994, it took years of work to get all stakeholders on board with the project. This included coordinating with the University of Minnesota, the Northern Santa Fe Railroad, the Twin Cities, the state DOT, and the parks and recreation departments.

Photo Credit: Lewis Kelley

The BNSF rail overcrossing of the Union Pacific tracks provides both an artistic outlet for local residents and an example of the complicated right of way picture the trail must overcome.



RIGHT OF WAY

Due to the location of the trail alignment being adjacent to both the Willamette River and an important rail line that serves industrial operations, right of way constraints are a major challenge to the project.

With the Willamette River creating a barrier to the west, the trail must traverse through a sometimes narrow strip of land while contending with elevation and grade challenges throughout the 10 mile corridor. However, there are many cases across the country of similar constrained corridors, where trails have been successfully constructed. One such project is right here in Portland, where a very large constraint, Interstate 5, was poised to stop the construction of the Eastbank Esplanade. While there may have to be some creative design work to make the trail conform to the constrained right of way, there are built precedents for such big moves.



Eastbank Esplanade, Portland, OR

The Eastbank Esplanade is a 1.5 mile trail that extends from the Hawthorne Bridge to the Steel Bridge in inner southeast Portland. Originally proposed by city planners in 1988 as part of a downtown urban renewal project, the project wasn't constructed until 1998, due to numerous constraints, including the right of way issues and engineering constraints. Constructed from 1998-2001, the project cost \$30 million and created a unique walking and biking experience in an urban environment. Due to its close proximity to the I-5 freeway to the east and the Willamette River to the west, a 1,200 foot floating walkway was constructed to complete the alignment. Because the Willamette River is a tidal river, that also rises and falls with seasonal fluctuations, the walkway must float on the water.



Mt Vernon Trail, Alexandria, VA

In order to construct the trail around the heavily contaminated GenOn/Mirant Power Plant, yet within the constrained parameters of the site, the riverbank and the river itself, the trail was elevated onto a cantilevered bridge that circumnavigates the power plant, then continues as an at-grade paved trail running parallel to the George Washington Memorial Parkway. This creative design solution ensured that the trail was able to be constructed within the tight right of way.



Dinkytown Greenway, Minneapolis, MN

The trail runs entirely through the University of Minnesota's East bank campus and connects to the west bank of the Mississippi River. Originally planned in 1994, the project never moved forward due to adjacent property owners. The Northern Santa Fe Railroad wouldn't allow for a rails with trails project on its property and this stalled the project for years. Trail advocates redesigned the original alignment to pass entirely through the UofM's campus, becoming a collaborative design and planning process between the city, advocates and the university. The right of way is so constrained in certain parts of the greenway, due to it running parallel to the railroad corridor on one side, that the paving goes right up to the walls of some of the university buildings on the other side.

Photo Credit: Gena Castaldi

Willamette Blvd near University of Portland currently acts as the trail's main on-street section. With gorgeous views of downtown and forest Park, Willamette Blvd is popular for both cyclists and joggers.



PARTNERSHIPS

Forming partnerships between trail advocates, private property owners and other interested institutions is an ongoing and important aspect of the work for this project.

Large private landowners include Union Pacific Railroad, Lampros Steel, the Port of Portland, University of Portland and BPA-St. Johns. While the conversation with private landowners is an ongoing and sometimes arduous one, it is encouraging to learn of trails across the country that have faced similar challenges and were able to progress to implementation.



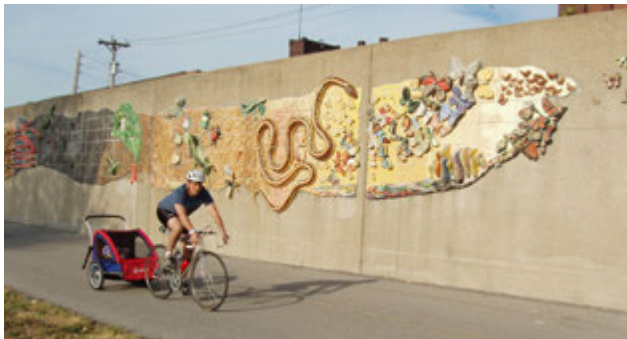
The 606, Chicago, IL

The 606 is an urban greenway that utilizes the old Bloomingdale rail line and is currently under construction. Over a decade in the making, this project really took off under Mayor Rahm Emanuel. To create the trail, a multitude of public and private partnerships were fostered, including parks and public land advocates and active transportation organizations. The Trust for Public Land, the nation's leading organization that works on creating urban parks, serves as the project's lead private partner, managing community engagement, fundraising, long-term planning, communications and other aspects of the project. Neighbors living around the trail established the Friends of the Bloomingdale Trail and worked to keep the project moving forward during the economic downturn.



Indianapolis Cultural Trail, Indianapolis, IN

Implementation of the Indianapolis Cultural Trail was only possible through collaborative partnerships between public and private entities all striving for the same thing; to get the trail built. Led by the Central Indiana Community Foundation and the City of Indianapolis, with various non-profit organizations, the groups worked together through the planning, design and construction process. The trail is managed by a nonprofit, Indianapolis Cultural Trail, Inc. (ICT Inc). ICT Inc. works to ensure all residents and visitors have access to the space through the careful management, maintenance and promotion of the trail. The non-profit also runs the Friends of our Trail program, where members receive deals and discounts at participating local businesses and attractions.



Great Rivers Greenway, St. Louis, MO

The Great Rivers Greenway in St. Louis demonstrates the effectiveness of partnerships to improve transportation options for all residents. The Great Rivers Greenway District, established in November 2000, encompasses 1200 square miles and includes more than 100 municipalities that are connected by a series of both proposed and constructed trails. The project required collaboration between Illinois Department of Transportation (IDOT), Missouri Department of Transportation (MoDOT), Metro and the City of St. Louis, as well as both park and public greenway districts. Four universities are also major partners in this project. The project is funded by a 1/10th of 1 cent sales tax raised in St. Louis City, St. Louis County and St. Charles County, generating \$10 million annually.

Kelley Point Park is a unique natural sanctuary that provides a sense of calm tucked into the urban landscape at the confluence of the Willamette and Columbia rivers.



CREATIVE FUNDING

Raising funds is one of the most challenging aspects of any trails project. With the total price tag on the Willamette Greenway Trail estimated to be \$30 million, securing funding is a critical step in getting the trail built.

While there are more conventional funding sources available, it is possible to think creatively about possible funding opportunities. This can include the more traditional federal and state funding pools, plus private sources. Private foundation grants, such as the Wal-Mart Foundation, Clif Bar Trail Preservation Grants and REI's Community Partnership grant, in addition to smaller private donors can provide significant momentum towards getting a trail built. Trail advocates have thought even more creatively about ways to save money, such as using volunteer labor from local armed service members. This may be an option for the Willamette Greenway Trail, as there is an Army Engineers station on Swan Island.



Indianapolis Cultural Trail, Indianapolis, IN

The Indianapolis Cultural Trail was funded entirely by private donations and federal grants. In 2007, the project received a generous private donation from the Glick family for \$15 million, which started construction on the trail. The project received over 40 private donations, ranging from \$20,000 - \$2 million. In 2010, the trail received \$20.5 million in Transportation Investment Generating Economic Recovery (TIGER) grants, which are federal grants that fund multi-modal, multi-jurisdictional projects not eligible for funding through traditional DOT programs. The total project cost was \$63 million. Private funding totaled \$27.5 million, public funding (federal transportation funding) totaled \$35.5 million. No local tax money was used for the trail's construction.



Razorback Regional Greenway, Arkansas

The Razorback Regional Greenway, a 36-mile off road trail in northern Arkansas, cost approximately \$38 million, with the majority coming from a federal transportation grant and a matching grant from the Walton family. The project received \$15 million in federal money from USDOT to support investments in transportation infrastructure through a TIGER II grant. The goal of the grant is to support economic recovery by supporting businesses and their employees. This project was able to prove that it provided regionally significant economic benefits, which was a valuable argument in the grant application process.



Bear Creek Greenway, Jackson County, OR

An 18-mile long trail that connects five southern Oregon cities, the Bear Creek Greenway is an interesting example of utilizing creative funding strategies. Business and civic organizations provided funding and guidance for students to prepare a formal landscape design, install irrigation systems, and plants along the trail. Private funds were raised to pay for materials and engineering consultants provided supervision for the local Naval Seabees, who provided the labor to build a footbridge. Since 1995 the Greenway Foundation has conducted a "yard sale," inviting individuals, businesses, and families to purchase a symbolic yard of the trail for \$40 per yard. With the construction of each trail segment, all donors are acknowledged on permanent trail head signs.

Looking at downtown from the waterfront in the Rose Quarter. Access to the riverbanks is locked away behind the Union Pacific rail line.



URBAN TRAILS & GREENWAYS

Portland has a well developed regional trail network consisting of 206 miles of trails within the Metro region.

The Eastbank Esplanade and the Springwater Trail are just two examples of trails in Portland that continue to transform their surrounding neighborhoods by attracting thousands of users a day. Portland benefits of investing in urban trails and plans to greatly expand the number of trail miles in the coming decades to provide the people of Portland better access to jobs, recreation, and regional destinations. The Willamette Greenway Trail is one such trail that has been prioritized.



Atlanta BeltLine, Atlanta, GA

The BeltLine passes through the heart of the City of Atlanta, connecting disparate neighborhoods together under one vision and working to transform these separate entities into one cohesive community, while celebrating the individual character of each neighborhood. The 22 mile former railroad corridor provides a connection between neighborhoods and provides access to public parks, other trails and the public transit system. The Atlanta BeltLine required a multitude of diverse public and private partnerships for its creation including economic development groups, public schools, trails advocates, and environmental organizations. The BeltLine's work is far from done, as they continue to work to ensure affordable housing is constructed near the trail.



Frankford Creek Greenway, Philadelphia, PA

Once the location of an industrial-age boom, Frankford Creek supported early development of neighborhoods along its banks. Over time, the creek experienced considerable environmental degradation. The proposed greenway links existing open space in Montgomery County Tookany Creek Park to Philadelphia County Tacony Creek Park. The Frankford Creek Greenway project's goal is to create a destination along the creek through a celebration of the water environment, a realization of economic opportunities, and an affirmation of community culture and history. The proposed greenway will act as a stream buffer, aiding fluvial geomorphological restoration by improving aquatic habitat, reducing the impact of urbanized flow and enhancing community quality of life.



Indianapolis Cultural Trail, Indianapolis, IN

The 8-mile urban trail connects world class museums, theatres, restaurants, and parks in downtown Indianapolis and provides a link between five of the city's cultural districts. In order to accommodate the new uses on existing streets, the city removed vehicle travel lanes and installed traffic calming measures to slow vehicle speeds. Public art, wayfinding and strategic branding have created an identity for the trail. Along the trail, users pass over the trail logo embedded in multi-colored pavers and signage reinforces a sense of place. One of the most impressive aspects of the trail is the economic development associated with its implementation. The estimated economic impact of the trail, due to increase tourism, job creation and downtown revitalization is \$865 million.

CONCLUSION

In order to fully implement the North Portland Willamette Greenway Trail, many factors need to be considered including the environment, stakeholders, the right of way, partnerships, creative funding, and urban trails and greenways. Case studies of completed trails around the country have proven that these considerations are not unique to the NPWGT.

The Mt. Vernon Trail, Frankfort Creek Greenway, and the Springwater Corridor are trails that exemplify the ability to overcome the environmental barriers that seem so daunting currently, including industrial sites and contaminated soils.

The importance of stakeholder input and collaboration to speed up the implementation process was shown in the Atlanta Beltline, Silver Comet Trail, and the Dinky Town Greenway planning processes. Each of these trails put community engagement at the forefront and benefited tremendously from doing so.

Constraining right-of-ways, like those that create difficulties for the NPWGT, have been overcome by trail projects that

thought creatively about trail alignment and elevation – building up and over where necessary.

The Chicago 606, Indianapolis Cultural Trail, and the Green Rivers Greenway showcase the importance of partnerships between trail advocates, private property owners and other interested institutions – all of which would not have been built without strong collaboration.

Creative funding was paramount for trail implementations in Indiana, Arkansas, and Oregon, which received large and small private donations from enthusiastic community members or organizations.

Finally, a network of urban trails and greenways have kick-started economic development and community pride throughout the United States, including the highly notable Indianapolis Cultural Trail.

These case studies have collaboratively proven one principal fact: the North Portland Willamette Greenway Trail can be built.

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HEALTH IMPACT ASSESSMENT

**“ A true conservationist is
a man who knows that
the world is not given by
his fathers, but borrowed
from his children. ”**

John James Audobon

HEALTH IMPACT ASSESSMENT

Health Impact Assessment (HIA) is an emerging tool that is used to evaluate the impact of specific policies and projects on health. As defined by the World Health Organization, HIA is “a combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population.”

HIA Assessment Process: The HIA process typically includes the steps of Screening, Scoping, Analysis, Reporting, and Monitoring:

- Screening involves deciding whether or not to conduct a Health Impact Assessment on a particular project. The screening process for this HIA took place in January 2015, when the student group Willamette Planning Studio partnered with the neighborhood advocacy group npGreenway.
- Scoping is when those involved in the HIA – public health officials, community members, planners, etc. – decide which health impacts to analyze and which methods to use for the analysis. The scoping for this project took place in February and March of 2015, with the objective to create a plan and timeline for conducting an HIA that identified priority issues, research questions, methods, and participant roles.

Key questions were identified through the scoping process, including:

- ▶ What are the existing levels of physical activity in the study area and how might the proposed trail increase those levels?
- ▶ What are possible opportunities and concerns that the community might feel?
- ▶ Is there community support for the trail and how would people use the trail?

- Analysis of Impacts uses existing data and both qualitative and quantitative research to estimate the potential effects on health status or determinants of health status. The analysis also looks at the geographic distribution of potential impacts.
- Reporting is the process of developing recommendations to reduce hazards and improve health.
- Evaluation and Monitoring is the process of examining the impact of HIA on influencing decision making and the effects of the policy on health determinants and health status. Evaluation of the HIA process is useful to answer why the HIA worked (or not).

To review the complete HIA for this project, see Appendix C.



“ [I] strongly support greenway/multiuse trail to connect NE parks, neighborhoods, and Swan Island for both recreation & commuting. Thank you! ”

Online Survey Response

HEALTH IMPACTS Physical Activity & Chronic Disease

According to the Centers for Disease Control and Prevention (CDC), regular physical activity helps improve overall health and fitness, and reduces the risk for many chronic diseases, including diabetes, asthma and obesity. Despite the importance of getting daily physical activity, most Americans do not get the recommended 30-60 minutes of physical activity daily. In fact, the CDC reports that less than half of adults in the US get the recommended minimum recommended level of 150 minutes of physical activity. Additionally, one-third of US adults are obese.

The Task Force on Community Preventive Services strongly recommends the creation of places to engage in physical activity, such as trails, as they are “an effective method for increasing physical activity.”¹ Trails create places where communities can be physically active and engage in outdoor activities. A 2006 study in the U.S. found that trails are commonly used for physical activity, with one quarter of adult survey respondents using a walking, hiking or bicycling trail at least once per week.² A literature review conducted by Price et. al. found “research shows that trails are a preferred activity setting, and that persons who use trails for

physical activity are more likely to meet the national physical activity recommendations than those who rarely or never use trails for physical activity.”³

Three health indicators were looked at for the study area: diabetes, obesity rates and asthma rates. These health indicators are directly related to physical activity, as “lifestyle factors such as physical inactivity are heavily correlated with the development of many chronic diseases.”⁴ Physical activity and exercise, combined with other healthy lifestyle choices, are extremely important in preventing the development of chronic disease.

The rate of diabetes is particularly high in the study area, with majority of the census tracts having rates of between 6.2% and 11.5%. The rates of overweight and obese people are higher in the study area than in the adjacent neighborhoods to the east and south, with the highest concentration in the north of the study and within Swan Island. Asthma rates within the study area range from 3% to 25%, with the highest rates found in the northern and southern portions of the study area.



50%

OF THE ADULT PORTLAND POPULATION IS OVERWEIGHT OR OBESE.⁵

ALONG WITH 26% OF 8TH GRADERS.⁶



50%

OF PORTLAND ADULTS DON'T REGULARLY EXERCISE.⁷

67,000

RESIDENTS

LIVE WITHIN A 10 MINUTE WALK OF THE TRAIL.

IF THE WILLAMETTE GREENWAY TRAIL IS BUILT



15,228

DAILY TRAIL USERS

BASED ON MODERATE USAGE ESTIMATES



\$1,949,177

IN ANNUAL HEALTHCARE COST SAVINGS

BASED ON A MODERATE ESTIMATE OF HEALTH BENEFITS OF THE TRAIL



“ I’m really excited to see this project completed so I can get from St. John’s to Downtown where I work without having to ride on busy roads the whole way. I would feel a lot safer going to work on a path like this. ”

Online Survey Response

HEALTH IMPACTS Safety

Cyclists and pedestrians, while making up a relatively small proportion of road users, are a particularly vulnerable group. While only 9.5% of all trips are made by biking and walking, 13% of all motor vehicle crash deaths are pedestrians and cyclists and the crash outcomes are especially severe. Trails can increase the safety of cycling and walking by creating a dedicated space separated from motor vehicles. AASHTO recommends constructing paths along railroad corridors, as they tend to have few intersections with roadways, therefore minimizing potential conflicts between trail users and vehicles.⁸ A literature review found evidence for a reduced risk of injury on off-road paths in comparison to roadways.⁹ A study conducted in 1994 found that for all cyclists, including both adults and children, there was a 90% higher risk of injury on streets than on off road bike paths or trails.¹⁰

While Portland has a lower traffic fatality average than other comparably sized cities, the number of cyclists and pedestrians killed annually has remained consistent. On average, there are 12 pedestrian deaths and 2 cyclist deaths every year on Portland streets.

A multi-use path like the proposed Willamette Greenway Trail can encourage more biking and walking by creating a designated and safe place for trail users. Currently, cyclists traveling between North Portland and inner North

and Northeast Portland must ride on roadways shared with vehicles. The Willamette Greenway Trail would be an alternative route to many on street bicycling facilities, including those on North Greeley Ave and North Willamette Blvd. It would also create an additional connection to the extremely popular Eastbank Esplanade, a multi-use path that currently connects cyclists to the Steel Bridge, Morrison Bridge and Hawthorne Bridge, all of which have separated bike/pedestrian facilities that create a safe connection to downtown Portland.

By investing in the Willamette Greenway Trail, the city would be showing its support for Vision Zero, a vision for safer city where no bicyclists or pedestrians are killed on the streets. Vision Zero is a policy adopted by Portland Bureau of Transportation (PBOT) that strives to make the city’s transportation system as safe as possible, with no traffic fatalities in the next 10 years. PBOT will focus on “designing streets that support the most vulnerable road users, because a system that works for vulnerable users is a system that works for everyone. Over the next 10 years, it is PBOT’s goal that 80% of Portlanders will live within 1/2 mile of a low stress bicycle facility. A multi-use path, like the Willamette Greenway Trail, can contribute to PBOT’s mission of creating a safe, reliable, efficient, and socially equitable transportation system.



OF ALL VEHICLE CRASH DEATHS ARE CYCLISTS/PEDESTRIANS, WHILE ONLY 9.5% OF ALL TRIPS ARE MADE BY THOSE MODES.¹¹



ARE DESIGNATED **FREIGHT ROUTES** THAT HAVE A HIGH CONCENTRATION OF BIKE/PEDESTRIAN AND VEHICLE COLLISIONS

200
PEDESTRIANS

100
CYCLISTS



INVOLVED IN COLLISIONS WITH VEHICLES THAT RESULTED IN AN INJURY BETWEEN 2011 AND 2013 IN THE STUDY AREA.¹²



5

CYCLIST FATALITIES IN STUDY AREA BETWEEN 2004 AND 2013.¹³



10

PEDESTRIAN FATALITIES IN STUDY AREA BETWEEN 2004 AND 2013.¹⁴



“ I would convert from commuting 99% by car to realistically 80-85% (and hopefully build up to 100%) by bike if there was a dedicated trail/multi-path to Swan Island. Please make this happen! ”

Online Survey Response

HEALTH IMPACTS Air Quality

Trails that connect households with employment areas and key destinations can be used as an active transportation corridor, reducing commuters' dependence on single occupancy vehicles, therefore reducing vehicle miles travelled (VMT) and the emissions associated with those trips. One of the major externalities associated with VMT is air pollution, a leading environmental threat to public health.

According to the Environmental Protection Agency, motor vehicles are responsible for 50% of smog-forming volatile organic compounds (VOCs), more than half of the nitrogen oxide (NOx) emissions, and 50% of the toxic air pollutant emissions in the United States. Motor vehicles account for 75% of carbon monoxide emissions nationwide.¹⁵ It is critical that cities and transportation networks are designed in a way that minimizes residents dependence on motor vehicle trips, as “reducing automobile trips by increasing mass transit use, carpooling, walking, and bicycling can help reduce air pollution, especially in urban areas.”¹⁶

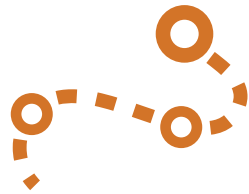
While bicycling and walking have many benefits, some consider the environmental implications to be the more important. “By far the greatest environmental benefit of bicycling and walking, however, is that they bypass the fossil fuel system to which the American economy has become

addicted. Bicycle-riding and walking do not contribute to the environmental damage inherent in extracting, transporting, processing, and burning petroleum or other fossil fuels.”¹⁷

The Oregon Legislature has required the Portland metropolitan area to reduce per capita greenhouse gas emissions from cars and small trucks by 2035.¹⁸ One strategy recommended in Metro's Climate Smart Communities Report is to increase active transportation.

The Willamette Greenway Trail would provide an opportunity to decrease single occupancy vehicle use and vehicle miles travelled by creating a corridor for active transportation. Through reducing VMT near the trail, there will be less vehicle emissions and improved air quality for all Portland residents. Based on an estimation tool used by the Metropolitan Area Planning Commission (MAPC) to assess reductions in VMT as a result of bicycle and pedestrian projects, the Willamette Greenway Trail will eliminate an estimated 26,012 VMT per day. Extrapolated to the whole year, the trail will reduce an estimated 1,391,661 VMT annually.

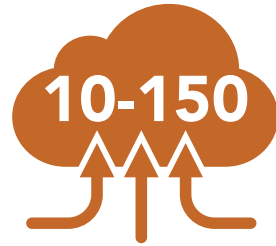
Note: For more information on the trail's air quality impacts, see the Modeling Report in Appendix D.



EVERY
10

MILE BIKE TRIP SAVES

1/2 A GALLON OF
GASOLINE



AIR POLLUTION IN THE STUDY AREA (MEASURED BASED ON AMBIENT AIR BENCHMARK CONCENTRATIONS) RANGE BETWEEN 10 AND 150 TIMES THE BENCHMARK.

IF THE WILLAMETTE GREENWAY TRAIL IS BUILT



26,012 VEHICLE MILES TRAVELLED DAILY
FEWER

THAT'S OVER
1.4 MILLION MILES EVERY YEAR!

ANNUAL POLLUTION SAVINGS:



3,200^{LBS}
VOC

2,124^{LBS}
NO_x

28,814^{LBS}
CO₁

1.1M^{LBS}
CO₂



“ The Willamette Greenway Trail would help to build an identity for North Portland. ”

Online Survey Response

HEALTH IMPACTS Social Cohesion

A healthy community as defined by the California Center for Healthy Cities and Communities “promotes a positive physical, social, and economic environment that supports the well-being of its members.”¹⁷ According to Portland based non-profit Coalition for Livable Future walkable neighborhoods “foster greater social cohesion and a sense of community”.

Due to the impact public spaces can have on residents, it is important for cities to design spaces where community members can gather, interact with each other and create opportunities to participate more often in civic life. However, a literature review conducted in 2012¹⁹ found very few studies that focus on the role of community trails in encouraging social cohesion and a sense of community. One study found that neighborhood green spaces “may actually draw people out of their homes into the outside where they have more opportunities for social interactions, fostering more social cohesion and better ties among neighbors.”²⁰

A study in Portland found that residents reported feeling more connected to their neighborhood and community and improved mental health after neighborhood beautification projects, such as painting murals, installing benches and

building planter boxes, were implemented. The study concludes, “this is particularly evident in public spaces, such as parks and plazas; increasing social capital corresponds with health improvements.”²¹

Trail activities such as walking and bicycling are relatively inexpensive, unorganized activities, providing accessible recreation opportunities to all and may have a positive impact on residents living nearby. “Greenways located close to one’s home are accessible to all income groups. Trails that can be used easily as a route to the corner store or to commute to work or school, will rapidly become part of community life.”²²

While it is difficult to assess social cohesion and capital, particularly in a short time frame, research show that community oriented outdoor spaces such as the Willamette Greenway Trail provide opportunities for neighbors and residents to socialize and create incentives for people living nearby to engage in their communities. The proposed trail would likely improve North Portland’s social environment, helping to build social capital and strengthening social cohesion among residents, while increasing neighborhood livability and connectivity.



OF NORTH PORTLAND RESIDENTS REPORT FEELING **SAFE OR VERY SAFE** AT NIGHT.



FEEL **SAFE OR VERY SAFE** IN A PARK AT NIGHT.

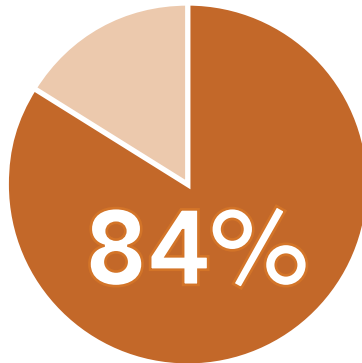


OF NORTH PORTLAND RESIDENTS VISIT A CITY PARK EVERY DAY

and



VISIT A CITY PARK ONCE A WEEK.



OF NORTH PORTLAND RESIDENTS REPORT FEELING **VERY GOOD (33%) OR GOOD (51%)** ABOUT

NEIGHBORHOOD LIVABILITY.



Factors that influence livability include access to parks, proximity to public transit, availability of on-street parking and access to services.²³



HEALTH IMPACTS Older Adults and Children

Vulnerable populations, including older adults, children, minority groups and low income households, bear a higher burden of chronic disease than other populations. This is particularly true for older adults and children, who are highly susceptible to air toxins and fine particulate matter. Studies show that “a lack of efficient alternatives to automobile travel disproportionately affects vulnerable populations such as the poor, the elderly, people who have disabilities, and children by limiting access to jobs, healthcare, social interaction, and healthy foods.”²⁴

It is very important to create safe places for older adults to engage in physical activity as they are the least active age group, with 35% of 65-74 year olds engaging in no physical activity. Additionally, 80% of older adults are afflicted with one chronic condition, and 50% have at least two. “Research has shown that seniors who have healthy lifestyles that include regular physical activity reduce their risk for chronic diseases and have half the rate of disability of those who do not.”²⁵

Safety concerns are the most disproportionate for the elderly and children. Older adults have slower walking speeds and increased reaction time, both of which puts this population at greater risk of pedestrian injury.²⁶ Several studies have found that older adults prefer walking over other physical

activities, demonstrating the importance of providing safe and comfortable places for people of all ages to walk²⁷, particularly a facility that is separated from potential interact with vehicles. An economic report for the Wolf River Greenway found “studies show that increased physical activity helps seniors stay mentally fit, reduces the risk of coronary heart disease, and even decreases the amount of insulin needed by people with Type I diabetes.”²⁸

Children perceive traffic must differently than adults, making them particularly vulnerable to biking and walking on any on-road facilities where they must interact with vehicle traffic.²⁹ The available data on children and bicycle safety shows a need for two safety strategies; the first is to provide children with places to cycle away from vehicles, and the second is to provide bicycle safety training in schools.

An off-road biking and walking facility provides a safe and comfortable place for all residents to enjoy the benefits of active transportation. An equitable system is one that all community members are able to benefit from, including children and seniors. The Willamette Greenway Trail would contribute to an equitable transportation system in the region by providing a place for residents of all ages and abilities to bike and walk.

“ I want to see people ride their bikes.

I like to see places that are fun and good to play.”

Student Comments from Tabling Event at Rosa Parks Elementary School



15,000
STUDENTS

and


36
SCHOOLS

ARE WITHIN A 10 MINUTE WALK OF THE TRAIL



41%

OF ELEMENTARY STUDENTS IN
PORTLAND **WALK OR BIKE**
TO SCHOOL³⁰



20%

OF THE STUDY AREA
POPULATION IS AGED **65+**



PROJECTED
INCREASE IN **65+**
POPULATIONS BETWEEN
2010 AND 2030



COMPARED TO A

INCREASE IN
THE REGION'S
OVERALL
POPULATION.³¹

CONCLUSION and RECOMMENDATIONS

Conclusion

Through the HIA process, the potential positive health impacts of the Willamette Greenway Trail and potential barriers to achieving these benefits were identified. The project presents a transportation and recreational opportunity that could be very beneficial to the health of residents who live near the proposed trail. The potential to increase physical activity, build social cohesion, encourage people to drive less, and create a riverfront natural space all could lead to improved health outcomes. These positive health impacts include but are not limited to:

- Increasing physical activity and reducing rates of inactivity.
- Reducing automobile dependence and vehicle miles travelled (VMT).
- Reducing rates of obesity, diabetes and cardiovascular disease.
- Reducing pedestrian and bicycle related injuries.
- Increasing social cohesion within the neighborhoods adjacent to the trail.

There are additional ways to encourage positive health outcomes of the Willamette Greenway Trail through the design and programming of the corridor and adjacent land.

Recommendations

Based on the literature review, community and stakeholder input, the analysis concludes that the proposed Willamette Greenway Trail would have positive health impacts for the North Portland area. The following are recommendations on how to maximize the potential health benefits of the trail, while addressing concerns expressed in the community engagement.

- Promote awareness and trail use among vulnerable and underserved populations, including specific age groups, ethnicities. A literature review found the need to “highlight an opportunity for efforts to promote trail use among females, racial minorities, and older adults,” to increase awareness and encourage those groups to use trails.
- Continue advocating for an entirely off-road alignment
- Address safety concerns, including lighting, police patrols and trash/litter.
- Partner with other advocacy groups who share a similar mission as npGreenway, like Neighbors for Clean Air.
- Utilize the City of Portland’s City Auditor survey to understand the aspects of social cohesion in the area, before and after the trail is built.

A full set of recommendations can be found in the Recommendations section starting on page 97.

ENDNOTES

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ECONOMIC DEVELOPMENT

“Retail businesses in walkable areas do better and attract patronage beyond the immediate trade area more than their suburban, driving-oriented counterpart.”

Robert Wood Johnson Foundation study

ECONOMIC DEVELOPMENT

Economic sustainability can be measured in a number of ways, but generally is defined as the ability of an economy to maintain a healthy level of activity and development for many generations.

Development of greenway trails offer extensive economic opportunities to bring significant positive change to communities.

Greenway trails provide intrinsic environmental, aesthetic, and recreation benefits to our cities. They are also a source of many positive economic benefits, such as:

- Potential property value benefit and net new property taxes.
- Potential retail sales from the spending of trail users.
- Potential retail space and employees supported by this spending.

The purpose of this section is to explore the extent of economic benefits that are associated with trails and greenways. These benefits can provide economic change that will foster a more livable and sustainable community for all.

In the wake of recent demographic and market shifts, cities are rediscovering the many lasting financial benefits of bikeable and walkable places. At the bottom line, greenways are a good financial investment for a community.

To review the additional economic development analysis for this project, see Appendix E.



“ Think about a delightful place and chances are it is a walkable place.”

Kaizer Rangwala, AICP, CEcD, CNU-A

PROPERTY VALUES

When looking at the economic value of greenways, property value benefits should be considered. The addition of active transportation infrastructure to an area has the potential to increase the value and development potential of properties.

The most common and effective way to measure walkability in areas is obtaining its walk score (walkscore.com). Neighborhood services closest to the address (within a five-minute walk) receive the highest score, while ones further away (to a maximum of 30 minutes) receive a lower score.

In addition to neighborhood amenities, walkscore.com analyzes the active transportation friendliness of an area by determining the population density, block length, and intersection density. A 2009 study showed that in 13 out of 15 markets, a one point increase in Walk Score was associated with between a \$700 and \$3,000 increase in home values.”¹

As increased active transportation infrastructure, such as greenways, are introduced to areas, improved walkability can directly and indirectly result in increased home values. The study further explains, “houses with the above-average

levels of walkability command premiums of about \$4,000 to \$34,000 over houses with just average levels of walkability in the typical metropolitan areas.”²

A common concern of residents near multi-use paths is that the homes closest to such facilities will experience declines in property values due to the high traffic of the trail. In reality, a property’s proximity to pedestrian and bicycle facilities has a positive effect on an adjacent property value. A study of the Indianapolis Cultural Trail found that homes closer to the trail sell for an average of 11% more than houses in similar locations.³ This shows that the neighborhoods nearest to the trail will experience increased monetary gains despite the increased volume of pedestrians and cyclists.

In addition to residential real estate, improving walkability benefits commercial real estate as well. A study in 2013 by Gary Pivo, University of Arizona, found that “greater walkability increases commercial real estate property values and their developers’ return on investment. He found that a 10% increase in walkability increased property values by 1 – 9%, depending on the type of property.”⁴



60%
of residents

**FAVOR WALKABLE
NEIGHBORHOOD⁵**

SPRINGWATER TRAIL
WALKABLE AREA HAD



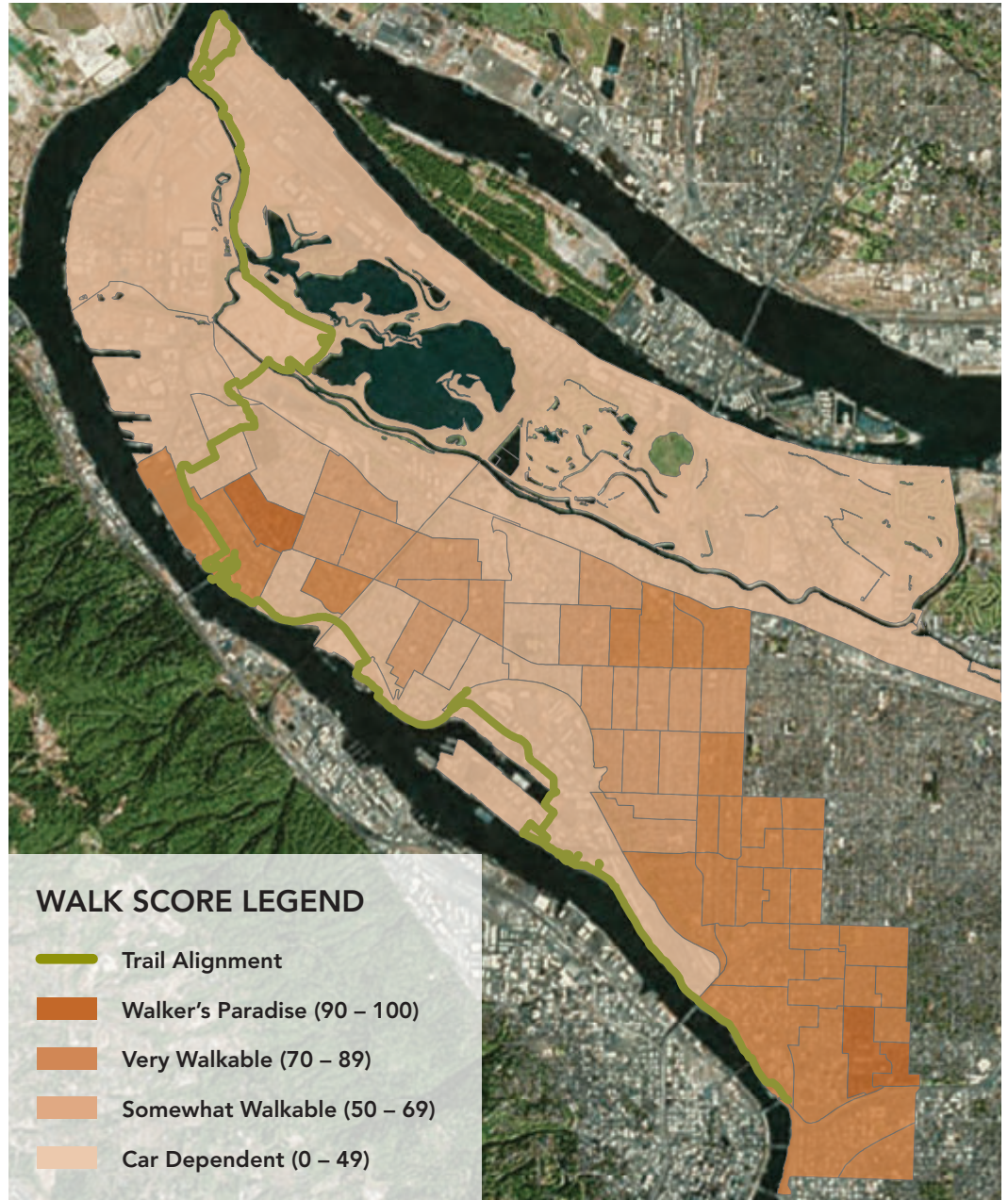
7.19%
increase in
PROPERTY VALUE

COMPARED TO



6.47%
**PORTLAND
METRO**
(1996-2010)⁶

“ **Baby Boomers (aged 50-68), are the biggest population wave of retirees and empty nesters. Having passed their child rearing days, they have no desire to maintain their houses’ large backyards and empty rooms... suburban homes are also socially isolating. They prefer flexible independent living in walkable areas.** ”



**RETAIL RENTS
IN WALKABLE AREAS ARE**



**27% TO
54%**

**HIGHER THAN
NON-WALKABLE AREAS⁸**

“Corporations are following talent to walkable areas. Across the country, venture capital and start-ups are choosing walkable urban centers over suburban office parks.”⁹

**OFFICE
AND RETAIL
SPACE
IN WALKABLE
AREAS HAVE**



per capita GDPs¹⁰

**OFFICE RENTS
IN WALKABLE AREAS**



74%

**HIGHER PREMIUM
per SQ FT**

OVER DRIVABLE SUBURBAN AREAS¹¹



REAL ESTATE DEVELOPMENT

Investments in public amenities, such as parks and greenways have major effects on development feasibility of properties. A study by Fregonese and Associates in Portland found that some of these investments, such as pedestrian facility improvements and bike infrastructure better allow land developers to realize a higher return on investments and help spur property redevelopment.¹²

As trails and greenways help fill in gaps in the active transportation network and improve regional connections, walkability will be increased significantly. These enhancements are anticipated to increase residential, commercial, rental, and retail property values in the Portland area.



LOCAL BUSINESSES

Bicycle and pedestrian investments have the ability to encourage increased business to the adjacent communities. One common misconception is that catering towards bicyclists and those walking by will provide little return to business; studies have shown this to be false. Having complete and desirable active transportation infrastructure allows greater regional connectivity, which can help local businesses thrive.

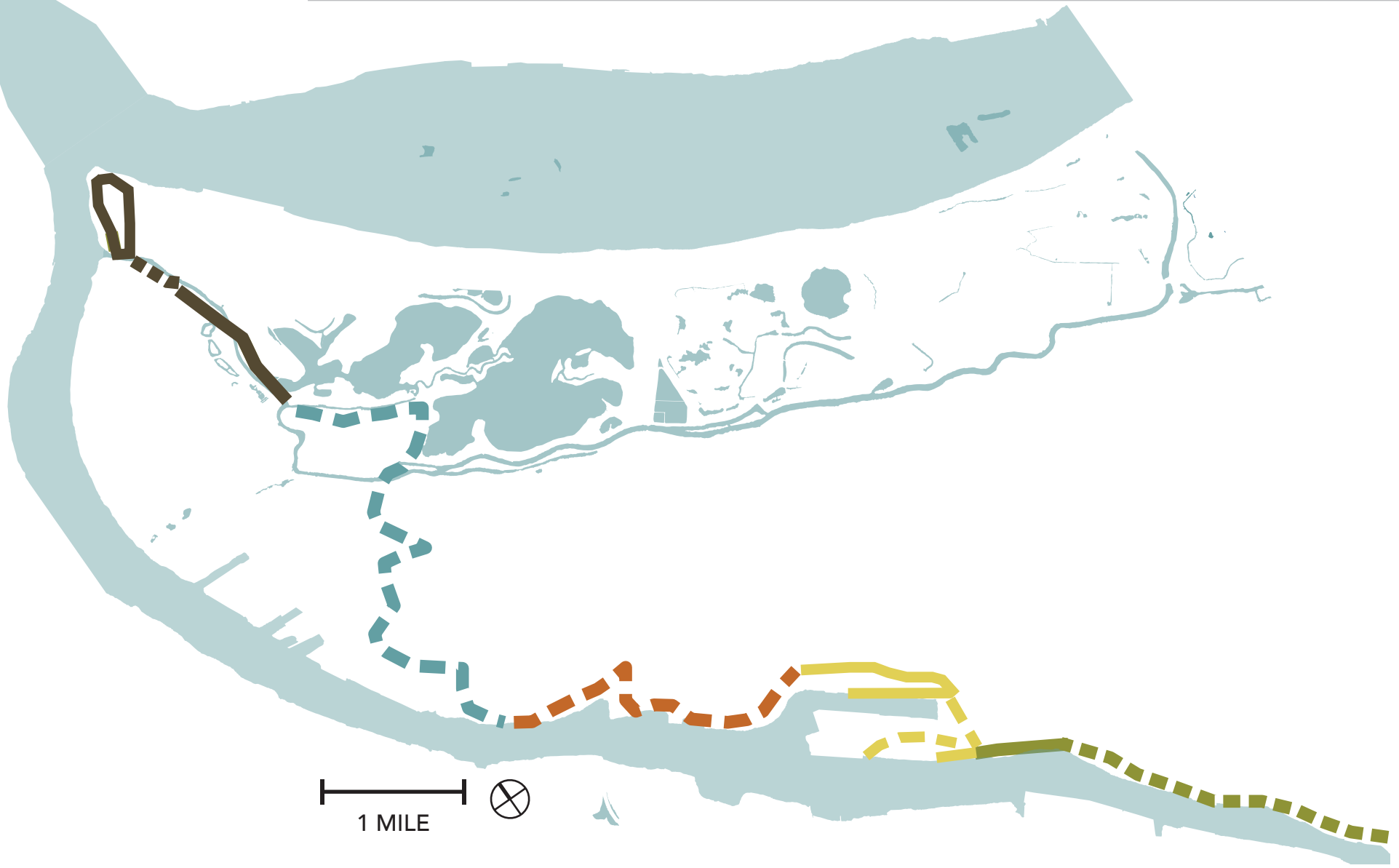
A transportation study completed by Professor Kelly Clifton at Portland State University concluded that bicyclists, pedestrians, and transit riders' economic activity was competitive to those who chose automobiles as their primary mode of transportation.¹³ The study found that when people of the same socioeconomic class were studied, the chosen transportation mode was not statistically significant in determining spending. It was also found that though these active transportation users did not spend as much in one trip, they frequented the community amenities more often and thus remained competitive with automobile users.¹⁴

People who choose bicycling and walking also are likely to spend more money locally than taking a lengthy trip to meet their needs. 40% of U.S. trips are less than two miles; when the proper infrastructure is in place, these trips can easily be done by bicycle or walking. This also allows people to discover new businesses that were easily missed when driving. Having a regional trail system in place allows these cyclists and pedestrians to more easily travel to more distant areas to shop.

People who choose not to drive often have more disposable income than automobile users because of the high cost of automobile ownership. A study in Toronto found that people who bike and walk to local businesses spend more money than those who drive.¹⁵

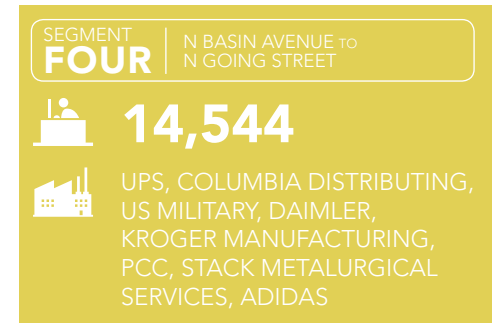
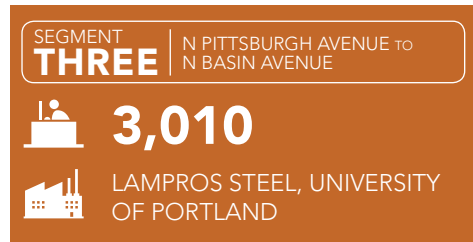
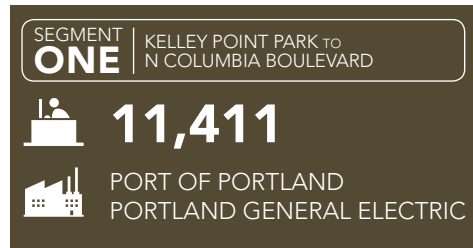
The resulting sales increases of businesses near improved active transportation infrastructure are often significant. The Fort Worth Magnolia St. restaurants saw sales go up nearly 200% after proper bicycling facilities were installed. Providing facilities for cyclists pays off.

SEGMENT EMPLOYMENT DATA



In addition to consumers, many employees have shown more interest in cycling or walking for their commute, rather than driving. Having sufficient bicycle and pedestrian infrastructure has been an effective tool when recruiting skilled employees. "A city that fosters a culture of walking and bicycling, including supporting it with infrastructure, is better at attracting the 'creative class.' Knowledge based workers, such as engineers, attorneys, and healthcare providers."¹⁶

Richard Florida, a professor of economics at University of Toronto found that the 'creative class' values a place based on its authenticity and uniqueness.¹⁷ This is a common trait of cities that cater to the local consumer. Cities that are able to provide the proper avenues for this local mentality have shown great return. The city of Asheville, NC has become successful in attracting the creative class because of its bicycling and walking facilities; Asheville has become recognized for being a great walking town and biking destination and received recent awards and accolades because of it.¹⁸



CONCLUSION and RECOMMENDATIONS

Conclusion

The potential positive economic impacts of the proposed Willamette Greenway Trail have been identified. There are significant economic opportunities locally as well as regionally, once the trail is implemented. Many of the benefits documented here are interconnected and lead to favorable outcomes throughout the community. These positive economic impacts are by no means exhaustive, but should help facilitate additional stakeholder buy-in to accelerate implementation of the trail, and include:

- Increase property values within the study area.
- Net new property tax revenue for city.
- New companies attracted to the area.
- Increase lease income for existing property owners.
- Support small business start-ups and increase employment opportunities within the community.
- Promote workforce and business attraction and retention.

People walking, bicycling, shopping or socializing are indicators of a community's health, wealth and overall happiness. Implementing a trail that connects the community is a sound investment that will produce increasing and lasting dividends.

Recommendations

Based on the literature review and stakeholder and technical advisor input, the economic development analysis determines that implementation of the proposed Willamette Greenway Trail would have positive economic impacts for the North Portland area. Recommendations to maximize the potential economic benefits from the trail are as follows:

- Create relationships with large employers in each segment to increase buy-in for the trail to be built.
- Engage with small businesses in the community through North Portland Business Association and St John's Main Street.
- Partner with other advocacy groups who share a similar mission, as Bicycle Transportation Alliance.
- Employ marketing materials at tabling events in the study area to educate and inspire the community to take action and push for an accelerated construction timeline.

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RECOMMENDATIONS

**“ A good idea is about
ten percent and
implementation, hard
work, and luck is 90
percent. ”**

Guy Kawasaki

RECOMMENDATIONS

Implementing the trail will be the most challenging task ahead. These recommendations aim to provide concrete actions towards overcoming that challenge.

The North Portland Greenway Trail Strategic Plan includes a series of short, medium, and long term strategies and actions. These actions are designed to help npGreenway broaden and grow their organization, build partnerships through a collaborative approach, support advocacy of community goals for the trail, and accelerate the delivery of a finished North Portland Willamette Greenway Trail (NPWGT). These recommendations serve to support creating a greenway trail corridor that delivers to the North Portland community a destination amenity.

The actions recommended in this section are categorized under the five objectives of the plan; Accelerate, Advocate, Broaden, Grow, and Partner. These recommended strategic actions are the result of analysis and public feedback gathered during the Grow Willamette Greenway planning process.

The Willamette Planning Studio strongly supports the implementation of each recommendation. The team also recognizes that npGreenway's organizational capacity will dictate if and how each of the recommendations are put into practice. A dedicated npGreenway staff person will add a lot of capacity to the organization and greatly increase the impact of putting these recommendations into practice.

Implementation of the actions is divided into short, medium, and long-term time frames. This is because many of the short-term actions can be seen as building blocks towards longer-term actions and goals. Without implementing the short term actions, it might not be feasible or practical to put into action some of the more long term actions.

BROADEN

Broaden community engagement to increase knowledge of, and support for, the NPWGT. Expanding support and pressure to complete the trail is key and this can only happen through continued outreach and engagement efforts to build momentum towards trail completion. Many North Portland residents are excited about the greenway trail, but that excitement is not currently leveraged to effectively create a push for quicker trail completion.





Broaden

| | Recommendation | Organization | Timeframe |
|------|--|------------------------------|-----------|
| 1.01 | Continue table events | npGreenway | 0-1 year |
| 1.02 | Adopt a marketing campaign | npGreenway | 0-1 year |
| 1.03 | Maintain npGreenway website | npGreenway | 0-1 year |
| 1.04 | Coordinate online outreach | npGreenway | 0-1 year |
| 1.05 | Initiate campaign to engage City Council | npGreenway | 0-1 year |
| 1.06 | Coordinate quarterly trail events | npGreenway | 0-1 year |
| 1.07 | Partner with public school to promote trail use | npGreenway, local schools | 0-1 year |
| 1.08 | Engage with public agencies and the community to promote clean-up around the trail | npGreenway | 5+ years |
| 1.09 | Coordinate with City of Portland | npGreenway, City of Portland | 5+ years |
| 1.10 | After the trail is built, work with PBOT to measure trail usage | npGreenway, PBOT, PP&R | 5+ years |
| 1.11 | After the trail is built, assess how safety has improved | npGreenway, PBOT, PP&R | 5+ years |



BROADEN

1.01 Tabling regularly at events gives npGreenway a chance to consistently talk with and educate North Portland residents about the ongoing work around the trail.

1.01 – Continue Table Events

Continue to staff a table at community events around North Portland, the city and the region. Venues may include Sunday Parkways, Farmers Markets, Earth Day events, etc.

1.02 – Adopt a marketing campaign with the “Grow Willamette Greenway”

Having a consistent brand image and message that is easy to understand quickly moment is important to capture people’s attention. Marketing materials, both online and physical, can help to achieve this through high-quality design.

1.03 – Update and maintain the npGreenway website.

Give the npGreenway website a fresh look with more easily accessible information and navigation along with more consistent updates and news regarding the trail.

1.04 – Coordinate online outreach between an updated website and social media.

Use social media tools (Facebooks, Twitter, Instagram, etc.) to provide quick updates and news and to build an audience for the npGreenway message.

1.05 – Start a letter/email writing campaign for residents to tell City and Metro council that they want the NPWGT built.

Make it easy for people to contact local politicians and city staff with a pre-written message of support for the trail. Allow for multiple avenues of communication, letters and emails addressed to metro councilors as well as hashtags that can build organized messaging campaigns on social media platforms.

1.06 – Coordinate monthly or quarterly events around the trail alignment.

Organize small group events, trail rides, history walks, and volunteer cleanups along portions of the alignment. Use these events as a venue to talk with and educate people about the trail as well as gain volunteers and support for npGreenway.

1.07 – Partner with local elementary schools to organize field trips that tour the greenway trail and waterfront focusing on historical, cultural, and ecological educational opportunities.

Field Trips to the waterfront greenway can be a great chance to not only educate school children, but to also engage them about the future of the trail and get them excited about the possibilities. This would be an opportunity to spread awareness about the trail and get parents of school children interested and involved in the trail.

1.08 – Encourage agencies to engage the public around the clean-up of city agency owned land - specifically between Cathedral Park and the University of Portland.

The Department of Environmental Quality cleanup activities along the riverfront are ongoing. Encourage public agencies to start early conversations, outreach, and workshops around the clean-ups and what can be accomplished with the sites after the cleanup is completed, including the possibility of these sites being transformed with attractive amenities for the North Portland community.

1.09 – Once the trail is built, plan npGreenway sponsored events along the trail corridor.

Events along a completed greenway trail corridor is a way to keep momentum alive, celebrate the accomplishment of finishing the trail, and provide activities that are fun and engaging for the community. These events depend on the final amenities built along the trail, but could take the form of picnics, kickball tournaments, fun runs, history walks, or evening film viewings along the riverfront.

1.10 – Once the trail is built, ensure that Portland Bureau of Transportation (PBOT)/ Portland Parks and Recreation (PP&R) conduct trail counts and intercept surveys to understand trail usage.

Continuing with the trail counts and intercept surveys started by Portland State University students will provide information on trail usage and assist the city on understanding who is using the trail and how.

1.11 – Once the trail is built, encourage PBOT/ PP&R look at safety and collision numbers to see how trail improved safety in the area.

Understanding how the trail improves safety will provide important information to city planners and the community.



1.07 Educational outreach is a great resource for involving local children and families in npGreenway and the future of the trail.

PARTNER

Partner with public and private organizations to facilitate trail implementation. npGreenway should act as a facilitator and gatherer of public and private resources, pulling together groups with similar interests and dedication to the future of Portland to create a coalition that can move the NPWGT forward in a timely manner.





Partner

| Recommendation | Organization | Timeframe |
|--|--|-----------|
| 2.01 Partner with organizations that share similar interests | npGreenway, Neighbors for Clean Air, BTA, 40 Mile Loop, Oregon Walks | 0-1 year |
| 2.02 Become a Portland Parks and Recreation Partner | npGreenway, PP&R | 0-1 year |
| 2.03 Pursue corporate sponsorships | npGreenway, Nike, Adidas, Clif Bar | 0-1 year |



2.01 North Portland and the region as a whole is a rich collection of nonprofits and community organizations that share many of the core values of npGreenway

PARTNER

2.01 – Partner with organizations with similar goals and objectives: highlight specific goals/objectives for the different partnerships and develop a unified message/materials to share among partners.

Organizations can include Neighbors for Clean Air, various “Friends Of” groups, the Bicycle Transportation Alliance, 40 Mile Loop, Oregon Walks, The Intertwine and many more. Partnering with these organizations can leverage existing constituencies and organizational resources to increase capacity and reach a broader audience. Strong partnerships can bring added energy, focus, and funds to completing the NPWGT.

2.02 – Become a Portland Parks and Recreation Partner (PP&R).

Becoming a registered partner as a “Friends Of” group is a simple administrative task that gives npGreenway resources through Portland Parks and Recreation. This would help to create a strong relationship between npGreenway and PP&R to collaborate on stewardship and consultation to support developed parks, natural areas, facilities, and arts programs along the greenway trail corridor. PP&R partners receive updates on bureau news, access to technical assistance support, and acknowledgment at recognition events.

2.03 – Pursue corporate partnerships and sponsorships.

Private corporations and foundations have access to resources, capacity, and knowledge that go beyond the reach of a local community organization. Private entities bring name recognition, expertise, and fundraising potential that can support the mission of npGreenway, both through support for npGreenway operations and capital fundraising efforts. Individuals from private entities should be sought out for board positions with npGreenway. Corporations may include Nike, Kaiser Permanente, Adidas, Clif Bar, REI, Vulcan, and The TrailBlazers.

GROW

Grow and leverage npGreenway resources and capacity to support implementation of the NPWGT. Building organizational capacity that can support the North Portland community's and npGreenway's shared vision for the trail is key to success. Registering as a non-profit with the capacity to seek out independent funding is a major step toward making the vision a reality.





Grow

| | Recommendation | Organization | Timeframe |
|------|---|--------------|-----------|
| 3.01 | Incorporate as a nonprofit | npGreenway | 0-1 year |
| 3.02 | Hire staff | npGreenway | 0-1 year |
| 3.03 | Pursue grant funding | npGreenway | 0-1 year |
| 3.04 | Organize fundraising events along trail | npGreenway | 0-1 year |
| 3.05 | Report annual progress and host events | npGreenway | 0-1 year |



GROW

3.04 Fundraising is an important part of growing npGreenway as an organization and is a way to leverage private funds to more quickly build the trail.

3.01 – Incorporate as a nonprofit organization with the goal of handling grant funds

Incorporating as a tax exempt nonprofit allows npGreenway to start developing a broader and deeper capacity as an organization that can better deploy resources strategically towards the goal of trail completion. The greatest benefit of incorporating is the ability to seek, administer, and deploy grant funding for capacity building within npGreenway itself and capital investment in the greenway trail. Having the ability to raise independent funds and bring them to the table with public agencies managing the implementation of the trail, gives npGreenway a bigger seat at the table and more leverage to achieve the community’s vision for the waterfront trail.

3.02 – Hire a full-time staff person who can implement work toward achieving the goals and recommendations of the North Portland Greenway Trail Strategic Plan.

Dedicated staff adds capacity to npGreenway that part-time, volunteer board members don’t have. Hiring a staff person should go hand-in-hand with incorporating as a nonprofit. This position can lead outreach and engagement efforts as well as be responsible for coordinating and communicating with project partners and public agencies.

3.03 – Seek grant funding and other non-traditional funding sources that support the npGreenway goals and can add capacity and resources for npGreenway operations for community outreach.

Grant funding that aims to add capacity to npGreenway can help to support staffing needs and the general mission of npGreenway through support for materials, outreach, and events. Seeking strategic grants should be a top priority for npGreenway.

3.04 – Organize a 5k/10k/half marathon fundraising event along portions of the proposed alignment.

A regular event that combines fun and fundraising gives npGreenway the opportunity to grow organizational resources independently from reliance on grant funding. An event such as a fun run that routes along portions of the proposed trail alignment serves multiple purposes towards reaching npGreenway goals..

3.05 – Report annually on progress and host an annual gala-like event that can act as both fundraiser, outreach, and convening of partners, public agencies, and the public.

Make a point of keeping progress towards trail completion updated through a brief report on annual efforts and accomplishments. This could be coordinated with an annual fundraising event that builds momentum and excitement for the trail.

ACCELERATE

Accelerate the implementation of NPWGT before the proposed 2032 timeline as set forth in the 2014 Regional Transportation Plan. This will be accomplished through a combination of recommended strategies around broadening, partnering, and growing support for the trail.





Accelerate

| | Recommendation | Organization | Timeframe |
|------|---|--------------|-----------|
| 4.01 | Organize a "Yard Sale" | npGreenway | 2-4 years |
| 4.02 | Organize a "Tree Sale" | npGreenway | 2-4 years |
| 4.03 | Seek grant funding for improved trail alignment | npGreenway | 5+ years |
| 4.04 | Encourage trail design through UP and Cathedral Park | npGreenway | 5+ years |
| 4.05 | Develop temporary wayfinding while the trail is being built | npGreenway | 5+ years |



4.01 Temporary access provides the public with recreational benefits at an earlier stage of project completion and at low cost to public agencies.

ACCELERATE

4.01 – Encourage temporary trail use through portions connecting University of Portland to Cathedral Park that can act as a temporary connection while final design and construction work is completed.

Final construction of many portions of the trail may take many years, but there is the possibility that temporary, lower cost facilities can be put in place that serve the dual purpose of opening public access to portions of the trail as well as promoting the future and final facilities.

4.02 – Encourage the development of temporary routing and wayfinding while all the trail sections are completed to raise awareness and supplement connectivity.

Along with temporary facilities, temporary signage and wayfinding materials should be produced that encourages people to use the temporary facilities as well as educates users on the ongoing planning and design process leading to trail completion.

4.03 – Seek grants that can be used for capital investments or that add character to the trail alignment. For example, grants for specific improvements or public art.

Charitable foundations and private entities often provide grant funding for projects that aim to improve community assets and amenities. Organizations such as the Robert Wood Johnson Foundation, Clif Bar Family Foundation, REI Trails Grants, and the Paul G. Allen Family Foundation invest in projects that better communities.

4.04 – Organize a “Yard Sale”, sell 1 yard lengths of the trail. Donors be honored with special gifts and recognition.

A regular event that combines fun and fundraising gives npGreenway the opportunity to grow organizational resources independently from reliance on grant funding. An event such as a fun run that routes along portions of the proposed trail alignment serves multiple purposes towards reaching npGreenway goals.

4.05 – Organize a “Tree Sale”, where people may buy trees to be planted along the trail.

Organize an annual event that aims to raise funds specifically for trail construction by selling trees that can be planted along the trail alignment. The nonprofit Friends of Trees is a potential partner for such an effort.

ADVOCATE

Through advocacy of the vision North Portland residents have for the trail, npGreenway can gain support for its mission and act as a voice for residents. Advocate trail facilities that create a destination and sense of place that acknowledges and celebrate the history and culture of the surrounding area. North Portland residents continuously mentioned the desire for a safe, family-friendly destination with amenities that make the trail a world-class recreational corridor.





Advocate

| | Recommendation | Organization | Timeframe |
|------|--|------------------------------|-----------|
| 5.01 | Encourage off-street trail portions to include dedicated bike/walk space | npGreenway, City of Portland | 2-4 years |
| 5.02 | Encourage PP&R to plan placemaking into the trail | npGreenway, PP&R | 5+ years |
| 5.03 | Encourage a family friendly waterfront | npGreenway | 5+ years |
| 5.04 | Encourage increased lighting as part of the trail design | npGreenway, PBOT, PP&R | 5+ years |
| 5.05 | Encourage inclusion of bathroom facilities | npGreenway, PP&R | 5+ years |
| 5.06 | Encourage connections to neighborhoods and employment centers | npGreenway | 5+ years |
| 5.07 | Encourage wayfinding and recognizable gateways to the trail | npGreenway | 5+ years |
| 5.08 | Encourage "branding" of different trail segments | npGreenway, local schools | 5+ years |
| 5.09 | Encourage the development of Overlay Zones for land near the trail | npGreenway, City of Portland | 5+ years |
| 5.10 | Advocate for entirely off-street alignment | npGreenway, PBOT, PP&R | 5+ years |



5.06 Wayfinding and branding can play a key role in building a recognizable identity for the trail

ADVOCATE

5.01 – Encourage off-street trail segments to have dedicated bike/walk space marked with a preferred 12-14 ft total width.

The greenway trail has the potential to attract a significant number of users, especially during summer months and during peak periods around the morning/evening commute. Large numbers of users should be planned and designed for by providing a wide trail that is clearly marked to separate trail users and promote safe passing.

5.02 – Encourage PP&R to plan placemaking into the trail corridor with adjacent amenities.

The greenway trail corridor shouldn't simply act as a bicycle and pedestrian connection, but also act as a destination for the North Portland community. Willamette Planning Studio heard continuously that residents want park like amenities along the riverfront trail including dog parks, playgrounds, river access, art installations, and community gardens.

5.03 – Encourage a family friendly waterfront environment.

North Portland is a growing community with many young families and first time homeowners. Amenities should be planned and designed that are family oriented spaces that will meet the needs of this growing demographic and make the waterfront trail corridor open and attractive to people year round.

5.04 – Encourage PBOT/PR&R to install lighting as part of the trail design.

Safety concerns are a major issue that should be addressed in the greenway corridor design. One such issue is that of lighting. During winter months especially, Portlanders don't have much daylight to enjoy. Lighting makes the trail more accessible during morning and evening hours and creates the perception of improved safety for trail users.

5.05 – Encourage PP&R to provide inclusive bathroom facilities and water amenities distributed evenly along trail, or where access is low.

Accessible bathroom and hydration stations are important for people doing recreational activities along the greenway trail corridor and were identified as being important numerous times during engagement efforts.

5.06 – Encourage agencies to provide numerous connections to the NPWGT to promote connectivity to both residential and employment centers.

Connectivity to the surrounding businesses and neighborhoods is important to provide residents easy access to the trail. Certain segments of the trail are understandably challenging because of topography or existing land use and road networks, but solutions should be sought to make these connections.

5.07 – Encourage agencies to provide recognizable gateway entrances to the NPWGT, wayfinding along the trail, and within adjacent neighborhoods.

Connectivity to the surrounding businesses and neighborhoods is important to provide residents easy access to the trail. Certain segments of the trail are understandably challenging because of topography or existing land use and road networks but solutions should be sought to make these connections.

5.08 – Encourage “branding” of different trail segments to call attention to the unique history of the surrounding neighborhoods and districts.

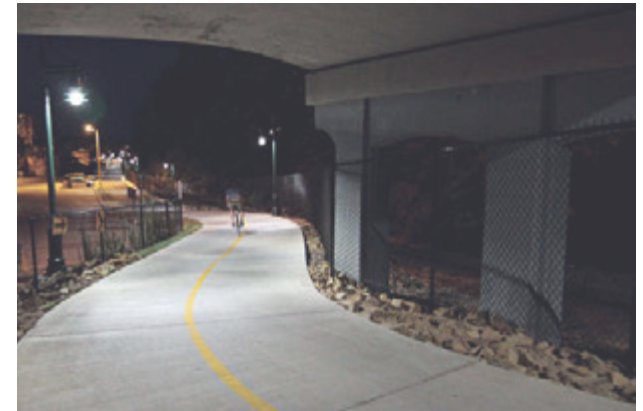
Signage and wayfinding that brands the trail should be easy to identify and understand and placed at key locations/regular intervals to help trail users navigate the trail, reach key destinations, and enhance the sense of place along the trail.

5.09 – Encourage the City of Portland to develop and adopt amendments to the Greenway Overlay Zoning, including orientation of new buildings towards the trail to provide and protect view corridors from the trail, and to allow access points and easements from public right of way to the river front trail.

New development along the Willamette riverfront and the trail, especially along segment three between Cathedral Park and Waud Bluff, have the opportunity to significantly transform the area. Already, a greenway zoning overlay exists that deals mostly with protecting the riverfront’s riparian habitat. The overlay should be updated and amended so that future development along the greenway trail corridor is respectful and oriented in such a way to encourage use and access.

5.10 – Push for Cement Road connection.

North Portland residents want access to the Willamette River as much as possible. Cement Road provides much better access to the riverfront while providing a smoother alignment that involves less slope and transitions between street sections over the Greeley alignment option. Therefore, npGreenway should continue to promote and advocate an alignment that uses Cement Road through the Albina Yards property.



5.03 Lighting will help to encourage use and add to the perception of safety.



DESIGN RECOMMENDATIONS

“ I like to run early in the morning and late at night, so lighting is a concern. Adequate lighting is important for me to feel safe running. ”

Comment from North Portland resident

DESIGN RECOMMENDATIONS

As part of the planning process, Willamette Planning Studio was tasked with creating aspirational photo renderings of the trail.

The goal of these renderings is to illustrate visually what the finished trail can be and offer an image that the North Portland community can unite around. These renderings can be used in future outreach materials, integrated into communications outreach strategies, and be brought to public agencies as examples of community originated and oriented design options. Input on trail design was gathered during the engagement phase of the process and incorporated, along with design guidelines from National Association of City Transportation Officials (NACTO) and PP&R to create the final design renderings.

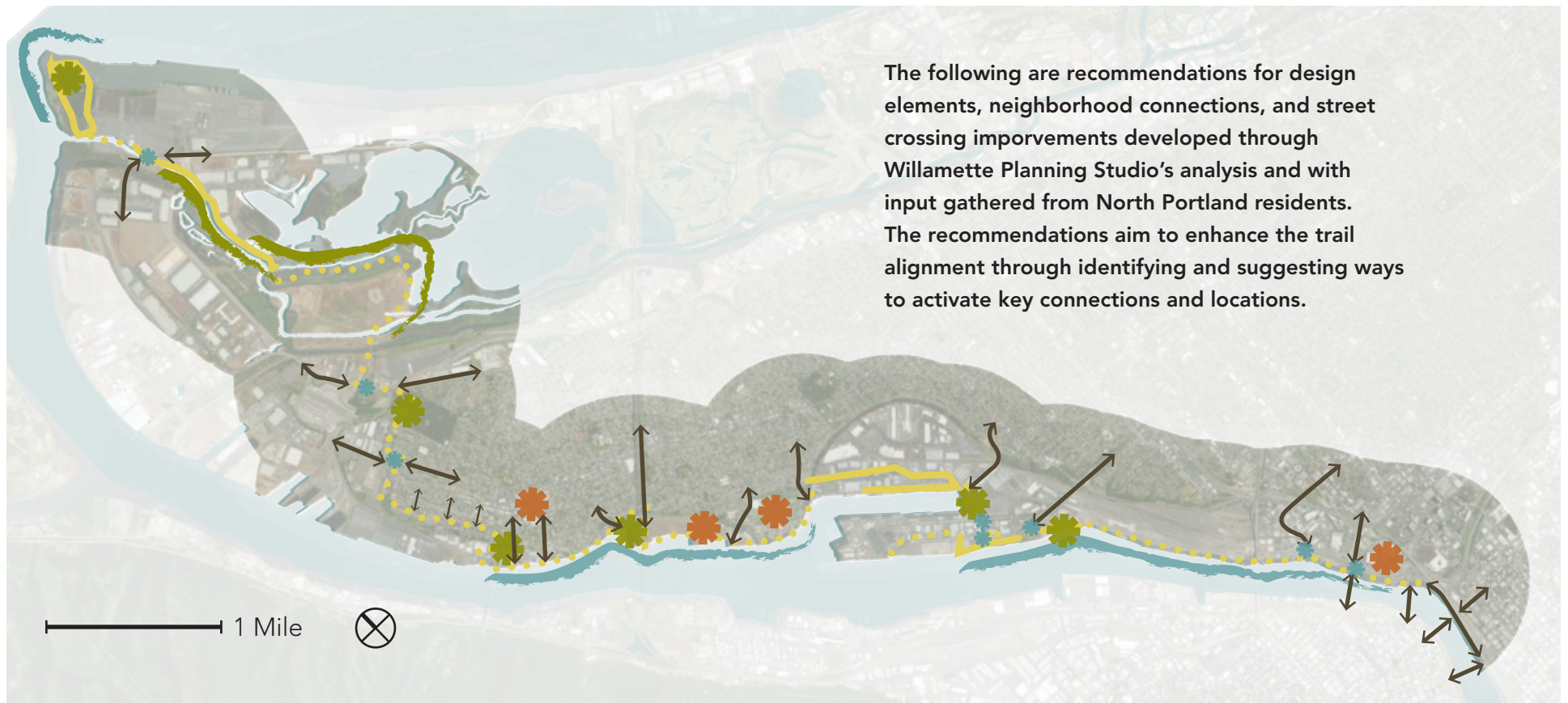
North Portland residents expressed many strong views about trail features and design elements. Key features included easy and recognizable connections to the surrounding neighborhoods, public art, lighting, playgrounds, and dog park facilities were just a few of the features people expressed a desire for. Lighting and separation of trail users from traffic were important safety features that were brought up consistently in engagement with North Portland residents.

Design Input

During outreach events, North Portland residents had an opportunity to interact with blank trail design sheets. Willamette Planning Studio produced a number of cut-outs that residents could move around on the trail to create their ideal trail. Elements included wayfinding, lighting, playground equipment, seating, and materials.



ALIGNMENT CONCEPT & SEGMENT RECOMMENDATIONS



SEGMENT **ONE** | KELLEY POINT PARK TO
N COLUMBIA BOULEVARD

- Encourage use only access.
- Encourage design that is natural/recreational focused with low-impact design consideration to the surrounding natural areas.
- Encourage trail seating facing the natural areas.
- Encourage signage and informational displays that highlight the wildlife found within the natural areas.

SEGMENT **TWO** | N COLUMBIA BOULEVARD TO
N PITTSBURGH AVENUE

- Encourage improvement of off-street trail section through Cathedral Park.
- Encourage shared-street design elements for Decatur St. through Baltimore Woods.
- Encourage temporary uses along Decatur to create a vibrant corridor.
- Reuse the warehouse frontage into micro work/live units including facade improvements.
- Encourage improved neighborhood connections to the trail section along Decatur St. through Baltimore Woods.

SEGMENT **THREE** | N PITTSBURGH AVENUE TO
N BASIN AVENUE

- Encourage capitalizing on the mixed use development that is likely to occur on the Lampros Steel site.
- Encourage development that acknowledges and orients in part to trail.
- Encourage University of Portland and agencies to develop UP Waud bluff viewpoints as destinations.
- Encourage installation of historical markers that tell the story of transformation of industrial brownfields from their active working days, through abandonment, to reclamation and rehabilitation.
- Encourage public agencies to undertake a public engagement process around the design of the trail and public facilities along segment three between Lampros Steel and the University of Portland.

SEGMENT **FOUR** | N BASIN AVENUE TO
N GOING STREET

- Encourage the siting and design of a public park adjacent to the Swan Island Boat Ramp with an active trail connection.
- Encourage the development of a bluff top park near N Willamette Blvd and N Jessup St, with an improved connection down to Swan Island and the NPWGT.

SEGMENT **FIVE** | N GOING STREET TO
EASTBANK ESPLANADE

- Advocate for entirely off street alignment.

KELLEY POINT PARK

5.05

5.07

5.03

Photo Rendering Credit: Gena Gastaldi



Segment 1: Kelley Point Park

The North Portland Willamette Greenway Trail will end in Kelley Point Park. Acting as both a beginning and end to the trail. Trail elements should be distinctive and acknowledge the journey trail users just finished or are about to embark upon. The trail will be sensitive to the surrounding natural areas, featuring design elements friendly to recreation and meant to blend with the natural surroundings. This means a natural gravel surface mellow on runners' knees and permeable to limit runoff.

5.03

CREATE A FAMILY-FRIENDLY ENVIRONMENT WITH PLACES TO SIT, PLAY AND RELAX.

5.05

INCLUSIVE RESTROOM FACILITIES FOR TRAIL VISITORS.

5.07

PROVIDE GATEWAYS TO THE TRAIL THAT CREATE A SENSE OF PLACE AND DESTINATION.

BALTIMORE WOODS

5.06

5.04

5.07

5.02

Photo Rendering Credit: Gena Gastaldi



Segment 2: Baltimore Woods

This portion of the trail traverses Baltimore Woods Natural Area through the St. Johns neighborhood. Featuring good views of the St. Johns Bridge and the Willamette River, this section of trail will feature lookouts, public art, and other design features that celebrate and enhance these views.

5.02

ENCOURAGE PORTLAND PARKS AND RECREATION TO PROVIDE SPACE FOR PLACEMAKING, INCLUDING PUBLIC ART AND AREAS TO REST.

5.04

INSTALL LIGHTING ALONG CERTAIN PORTIONS OF THE TRAIL.

5.06

INCLUDE CONNECTIONS TO NEIGHBORHOODS AND EMPLOYMENT CENTERS.

5.07

PROVIDE WAYFINDING AND SIGNAGE ALONG TRAIL, WITH DISTANCE & DIRECTIONAL INDICATORS TO KEY DESTINATIONS.

LOWER ALBINA

5.08

5.01

5.09



Photo Rendering Credit: Gena Gastaldi

Segment 5: River St. in Lower Albina

Aligned along adjacent industrial uses, the trail facilities here aim to acknowledge and enhance the substantial industrial character of the district. Trail features that add user separation and enhance safety will be paramount while adding interesting elements that provide personality through art pieces, and landscaped greenery.

5.02

INCLUDE DEDICATED SPACE ALONG THE TRAIL FOR BIKES AND FOR PEDESTRIANS, TO REDUCE BIKE/PEDESTRIAN COLLISIONS ON THE TRAIL.

5.08

ADD BRANDING TO SEGMENTS TO CREATE A UNIQUE IDENTITY THAT DRAWS INSPIRATION FROM LOCAL HISTORY AND CULTURE.

5.09

ADVOCATE FOR AN ENTIRELY OFF-STREET ALIGNMENT, INCLUDING A PROTECTED CYCLE TRACK WHEN A MULTI-USE TRAIL IS NOT POSSIBLE.



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