ACKNOWLEDGMENTS

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NEIGHBORHOOD ASSOCIATIONS
Overlook Neighborhood Association
Arbor Lodge Neighborhood Association
University Park Neighborhood Association
Cathedral Park Neighborhood Association
St. Johns Neighborhood Association

KEY STAKEHOLDERS
Community Cycling Center
Portland African American Leadership Forum
New Columbia
Oregon Walks
Roosevelt High School
St. Johns Center for Opportunity
University of Portland

PUBLIC PARTICIPANTS
Thank you to over 700 participants who engaged in the development of this plan through an online survey, public meetings, interviews, focus groups, stakeholder meetings, and one-on-one conversations.
CLIENT

THE WILLAMETTE CORRIDOR MOBILITY COALITION (WCMC) is a group of members from multiple North Portland Neighborhood Associations seeking transportation solutions in the North Portland peninsula.

PARTNERS

THE PORTLAND BUREAU OF TRANSPORTATION (PBOT) is a community partner in shaping a livable city. It plans, builds, manages, and maintains an effective and safe transportation system that provides people and businesses access and mobility to keep Portland moving.

NORTH PORTLAND NEIGHBORHOOD SERVICES (NPNS) is a coalition of neighborhoods that works to engage community members, build community assets, and foster community partnerships in North and Northeast Portland.
LEEOR SCHWEITZER
Recognizing the bicycle as a tool for mobility, access, and freedom, Leeor sees active transportation as a way of filling the gaps left in a transportation system that does not adequately serve Communities of Color, people with fewer financial resources, and women. He is passionate about exploring solutions that support and are responsive to the existing habits of disenfranchised communities, and about creating transportation patterns that increase public interaction and community connections.

HÉCTOR RODRÍGUEZ RUIZ
Héctor’s area of interest is in community development through conceptual design for sustainable and affordable housing. He believes that stable homes and a sustainable environment are essential for the health and wellbeing of strong communities. A proud Boricua, he holds a BS in Biology with specialties in business and arts from the Universidad Interamericana de Puerto Rico. His daily work addresses barriers to education, immigration, and linguistic and cultural accessibility.

TAYLOR CAMPI
Taylor completed her BA in Sociology at Indiana University in Bloomington. Her focus in planning is on housing access and equitable land use. Taylor hopes to employ the skills she's gained in the MURP program to promote social equity at community, city, and regional levels via responsive public engagement and just land use planning and policy.

MOHAMMAD N HOTAK
Mohammad attended Kabul University where he received his B.Sc in Architecture. He came to the US as an Afghan Fulbright scholar to pursue a MURP degree with a specialization in transportation. His vision is to transform streets into public spaces and make neighborhoods more pedestrian and bicycle friendly for people of all ages and abilities.

MIKE SERRITELLA
With a background in education and advocacy, Mike has spent the past decade working in communities throughout the US. Mike believes that the built environment can have profound impacts on health, well-being, and happiness of residents. With a dual focus in urban design and transportation, he hopes to leverage his skills to address inequities in public health and environmental justice, and to advocate for more equitable access to opportunities for all residents in Greater Portland.

PACE Planning (People, Access, Community, Equity) is a Portland State University Master of Urban and Regional Planning (MURP) workshop team committed to improving access to active transportation and promoting equitable public process and impact.
EXECUTIVE SUMMARY

A quick overview of North PDX Connected, conditions in North Portland, key outreach findings, and final recommendations.
North PDX Connected is an active transportation improvement plan for North Portland focusing on the N Willamette Blvd corridor. The plan uses input from the community to recommend improvements to safety and comfort for people walking, biking, and taking transit along the corridor and to ensure equitable engagement and impact.

WHAT IS ACTIVE TRANSPORTATION?

Active transportation is human-powered transportation, most commonly walking, biking, and accessing transit. Improving active transportation provides health, environmental, and safety benefits while reducing cost and increasing mobility choices.
PACE Planning recognizes that certain groups have been underrepresented in planning processes throughout history and still today. The team applied an equity lens to inform project scoping, community engagement, and final recommendations.

The team chose to focus on three priority groups who are commonly excluded from public decision-making processes: People of Color, people with low incomes, and youth.

Focus groups and interviews with community-based organizations helped the team gather perspectives from these communities. Final recommendations include policy and programming tools to promote social equity in Portland.

**WHAT IS EQUITY?**

Equity is the just and fair inclusion and distribution of resources such that all members of society have equitable opportunity to participate in public processes as well as equitable access to the resources and amenities necessary not only to survive, but to prosper.
EXISTING CONDITIONS:
NORTH PORTLAND & N WILLAMETTE BLVD BACKGROUND

HISTORY OF NORTH PORTLAND:
North Portland has historically had a large working-class population because of the port and various manufacturing areas along the Willamette River. The Vanport flood displaced many people into North Portland, including large Communities of Color that were not welcome elsewhere in Portland. North Portland residents often mention that, as the “fifth quadrant,” they have been forgotten and neglected by the City of Portland and planning efforts.

N WILLAMETTE BLVD CONTEXT:
N Willamette Blvd has been a focal point as the best candidate for active transportation in and through North Portland for several decades. It is the only through corridor that does not prioritize freight. Bike lanes have been added over the years, but some improvements stalled in response to neighborhood opposition to removing on-street parking. A restriping project in November 2017 that removed parking created significant controversy.

DEMOGRAPHICS:
North Portland is more racially diverse, has lower incomes, and has more youth than the city as a whole. Communities of Color and with lower incomes are more heavily concentrated in Kenton, Portsmouth, and St. Johns. The share of people who own vehicles and drive to work in these neighborhoods is higher than in the rest of the city, which contradicts national trends and suggests infrastructure or geographic barriers to alternative modes of transportation. The population in North Portland is growing rapidly alongside housing costs. Portsmouth and St. Johns are identified as at risk of gentrification and vulnerable residents are at high risk of displacement.

POLICY BACKGROUND:
PedPDX, the 2030 Bike Plan, and the Transportation System Plan highlight all parts of N Willamette Blvd as a priority for walking and biking, and classify some portions as a priority for transit. The current street conditions on N Willamette Blvd do not match the expectations for these street classifications.

EXISTING STREET CONDITIONS:
N Willamette Blvd has very few marked crossings, as there are only six along the entire four mile corridor. High speeds and volumes along most of the corridor create dangerous conditions for active transportation users. At its busiest section, N Willamette Blvd carries almost 20,000 vehicles a day, and cars travel at nearly 40 MPH. Substandard bicycle facilities for these conditions produce high levels of traffic stress for most of the corridor. The conditions also pose major safety issues. There have been 36 pedestrian and bicycle crashes from 2006-2015, including one fatality.

BETWEEN 2006 AN 2015, 36 PEOPLE WERE SERIOUSLY INJURED OR KILLED WHILE WALKING OR BIKING ON N WILLAMETTE BLVD

SOURCE: OREGON DEPARTMENT OF TRANSPORTATION
EXECUTIVE SUMMARY

COMMUNITY ENGAGEMENT: WHAT WE HEARD

A variety of outreach methods helped inform the plan’s final recommendations. PACE Planning established explicit equity goals and designed outreach to hear from People of Color, youth, and low-income people, who are often underrepresented in planning processes.

Outreach methods included stakeholder interviews, mapping workshops, an online survey, and focus groups.

STAKEHOLDER INTERVIEWS:
Interviews provided strategies and a foundation of knowledge about community needs and interests. They helped inform specific outreach methods.

MAPPING WORKSHOPS:
Workshops were conducted at the Overlook, Arbor Lodge, University Park, Cathedral Park, and St. Johns Neighborhood Association meetings. Workshops were also held at Roosevelt High School and in front of Rosa Parks Elementary School. They allowed participants to indicate specific locations on the corridor and in North Portland, and describe their concerns and ideas.

FINDINGS:
The outreach events revealed that people were very concerned about the speed and volume of cars. Participants shared there are too few safe spaces to cross N Willamette Blvd, that biking in current conditions and facilities is unsafe and uncomfortable, and that neighborhood through traffic endangered residents. People were also concerned about access to transit, lighting along the corridor, and parking. The focus groups also provided important feedback about how to improve community engagement and better serve priority groups, who shared about how their experiences with gentrification, displacement, and racial harassment in their community and from TriMet bus operators create barriers to using active transportation.

ONLINE SURVEY:
The survey gathered nearly 500 responses, predominantly from neighborhood residents. The survey prompted respondents to identify barriers to walking and biking as well as opportunities to make walking and biking easier. It also provided space for respondents to voice other concerns.

FOCUS GROUPS:
Focus groups were conducted to hear more in-depth perspectives from priority groups. Three focus groups allowed participants to talk with each other and share nuanced information with PACE about the barriers they face in their neighborhoods and opportunities for solutions.

COMMUNITY ENGAGEMENT:
WHAT WE HEARD

6 INTERVIEWS
7 WORKSHOPS
203 COMMENTS
ONLINE SURVEY
466 RESPONSES
23 PARTICIPANTS
RECOMMENDATIONS:
KEEP PEOPLE MOVING ON N WILLAMETTE BLVD

North PDX Connected recommends a number of infrastructure improvements and policy changes to remove barriers to using active transportation along the corridor and to create more equitable public engagement and investment. Infrastructure recommendations were informed by outreach findings and evaluated based on how much they promote equity, improve safety and comfort, address community input, and cost. Policy and process recommendations were informed by case studies of efforts in both Portland and other cities, and by concerns raised by the priority groups.

Infrastructure recommendations include new and improved crossings, street reconfigurations to add and enhance bicycle facilities, diverters to address neighborhood through traffic, intersection simplification to reduce crossing distances, and other amenities that improve people’s ability to access the corridor by foot, bike, or transit.

CROSSINGS:
The lack of safe crossings was one of the most commonly mentioned concerns during community outreach. Recommendations include over a dozen new crossings along N Willamette Blvd and a few more crossings on the St. Johns alignments. Most crossing recommendations are for marked crosswalks, following PBOT guidelines. At a few intersections, pedestrian refuge islands are recommended because of high speeds and volumes or because of significant community input.

IN ROADWAY:
Most of N Willamette Blvd is currently a high stress facility for people biking, making it unwelcoming to inexperienced riders. Recommendations include a two-way protected bike lane along the bluff and near University of Portland, with a pedestrian lane to support access to transit. The recommendations also include new bike lanes on the section of N Willamette Blvd in Cathedral Park. Adding high quality bike lanes will require removing some parking. The recommendations include some suggestions to preserve curbside activity and access to houses.

THROUGH TRAFFIC DIVERSION:
Residents in Arbor Lodge and Cathedral Park were vocal about safety concerns related to neighborhood through traffic (commuters using neighborhood streets instead of collectors or arterials). The recommendations include a diverter on N Willamette Blvd near Dog Bowl Park, and two diverters near the St. Johns Bridge to deter this behavior. Diverters should be launched as pilots to allow for further analysis and feedback.

INTERSECTION SIMPLIFICATION:
There are a few intersections around the bluff and in Cathedral Park where N Willamette Blvd meets cross streets at an angle, creating crossings that are over 120 feet wide. The recommendations include sidewalk islands and extensions that will shrink these down to standard size crossings.

OTHER AMENITIES:
Other recommendations in North PDX Connected include better pedestrian lighting along the corridor, enhanced transit stops, upgrading ADA ramps, and sidewalk infill along N Ida Ave.
Policy and program recommendations focus on promoting social equity through equitable engagement, equitable investment, and training and hiring practices within City bureaus.

LOOKING TO THE FUTURE:

N Willamette Blvd is the only multimodal corridor in the North Portland peninsula, creating a connection between neighborhoods and to the rest of the city. The corridor is currently unsafe and uncomfortable for many people wishing to walk, bike, and take transit.

With the implementation of North PDX Connected, N Willamette Blvd can become an enjoyable and thriving connection for children, elderly folks, families, people in wheelchairs or with other mobility needs, and any other users who wish to walk, bike, or access transit while enjoying the natural scenery of the bluff and North Portland’s neighborhood charm.

Commitment and action from City bureaus will ensure that implementation is led by communities through equitable and inclusive engagement processes. New investments must be vetted to mitigate against displacement so that the communities living here today will be able to enjoy the improvements in their neighborhoods for years to come.

EQUITABLE ENGAGEMENT:
Outreach participants repeatedly mentioned that they do not feel heard and often do not know how to engage with City planning efforts. Recommendations include leveraging community connections, supporting better inclusion in existing community structures such as Neighborhood Associations, making materials more accessible, and measuring and evaluating engagement efforts for equity and inclusion.

EQUITABLE INVESTMENT:
Public investments can have a significant impact on housing pricing and on who chooses to live in the neighborhood. Focus group participants voiced concerns about gentrification and displacement related to new development. Recommendations include a North Portland in Motion implementation strategy to gather community input on new transportation investments, evaluating displacement risk around potential new investments, and measuring the impacts of investment.

TRAINING AND HIRING:
City employees must be aware of equity issues, culturally responsive, and competent in interracial interaction in order for City bureaus to be inclusive and welcoming of priority groups. Having more members of underrepresented groups, specifically People of Color, working in City bureaus is critical for ensuring that public investments reflect and address the needs of all communities. Recommendations include equity training for City managers, employees, and specifically TriMet bus operators. They also call for hiring and advancing People of Color within City bureaus, and creating spaces for bureau-based equity efforts to align with organizations and members of marginalized groups.
An introduction to *North PDX Connected*, the importance of active transportation, the centrality of N Willamette Blvd as a multimodal corridor, centering the voices of underrepresented communities, and considering the impacts on vulnerable communities.
WHAT IS NORTH PDX CONNECTED?

North PDX Connected is an active transportation improvement plan for North Portland focusing on the N Willamette Blvd corridor. Based in community input, the plan seeks to improve safety and comfort for people walking, biking, and taking transit along the corridor and to ensure equitable engagement and distribution of impacts. The enhanced corridor will help connect neighborhoods in North Portland to each other and to the rest of the city.

WHAT IS ACTIVE TRANSPORTATION?

Active transportation is the act of getting around by human power. It includes walking, biking, and using other devices such as wheelchairs, skateboards, scooters, etc. Transit almost always includes an active transportation trip to get to and from the transit stop. Therefore, accessing transit is also included in active transportation.

THE NEED FOR AN ACTIVE TRANSPORTATION PLAN

Active transportation provides a lot of benefits for individuals using it and for the community at large. People who use active transportation are healthier, have lower transportation costs, and report lower levels of stress.

There are many people who do not have the option of using a private vehicle. This could be because they cannot afford to own a car, are too young to drive, cannot legally get a driver’s license, or are unable to drive because of age or disability. Active transportation and transit offer the only opportunities for independent mobility for these groups, increasing choice and access to destinations for many vulnerable communities.

When people switch from travelling by car to other modes, the whole neighborhood benefits. Fewer cars on the road means cleaner air, fewer crashes, and less congestion for buses, emergency vehicles, and people who need to drive cars. Expanding active transportation choices improves travel options for all people, even those who usually drive.
INTRODUCTION | MISSION & GOALS

NORTH PDX CONNECTED | PROJECT MISSION

Working in partnership with interested community stakeholders and historically underrepresented groups, PACE Planning aims to create an active transportation plan for N Willamette Blvd that provides a safe and comfortable connection for people walking, biking, and rolling throughout the peninsula. Recommendations promote the equitable distribution of impacts among all North Portlanders.

PROJECT GOALS

GOAL 1 | PROCESS
Engage community members to collect opinions, concerns, hopes, and ideas for the corridor, with additional focus on priority groups who have historically been excluded from planning processes, such as People of Color, youth, and people with low incomes.

GOAL 2 | PRODUCT
Develop recommendations that improve safety and comfort for people walking, biking, and accessing transit on N Willamette Blvd between the Killingsworth MAX station and the St. Johns Bridge.

GOAL 3 | IMPACT
Assess the potential benefits and burdens caused by active transportation investment and offer recommendations to promote an equitable distribution among all North Portlanders.
WHAT DOES EQUITY MEAN FOR PACE PLANNING?

A variety of definitions exist for the concept of social equity. PACE Planning finds it important to establish the definition by which the team operates. For PACE, equity means just and fair inclusion and distribution of resources such that all members of society have equitable opportunity to participate in public processes as well as equitable access to the resources and amenities necessary not only to survive, but to prosper. Equity efforts should not only seek to resolve present or future disparities but also to recognize and rectify historic injustices. With equity as a central focus for PACE Planning, the team seeks to promote a just and fair process and product, and to provide recommendations for other agencies to do the same.
An effective active transportation corridor offers an opportunity to walk, bike, and take transit in a safe and comfortable way, but also on a direct and efficient path.

The North Portland peninsula is relatively narrow. As such, there are only three streets that extend throughout: N Columbia Blvd, N Lombard St, and N Willamette Blvd. Compared with N Lombard St and N Columbia Blvd, N Willamette Blvd is intended for more biking and walking, and for less freight and motor vehicles.

WHY N WILLAMETTE BLVD?

N Willamette Blvd also has fewer vehicle lanes and has existing bike lanes and sidewalks along most of the corridor. The corridor runs along residential areas, a university, and a scenic bluff, which prompt less traffic and variety of activities than the commercial focus of N Lombard St and the industrial uses around N Columbia Blvd. N Willamette Blvd’s many turns and angles, its limited size, and the unique topographical features create a variety of challenges but also many opportunities.

All together, it is the only corridor that spans the North Portland peninsula which could offer safe and comfortable active transportation opportunities without completely restructuring motor vehicle travel.
Several initiatives concerning transportation issues around N Willamette Blvd were emerging in the Fall of 2017. The Willamette Corridor Mobility Coalition (WCMC), then the North Portland Transportation Committee, formed as a collection of transportation representatives from North Portland Neighborhood Associations. WCMC first focused on transportation issues along N Willamette Blvd, neighborhood through traffic near N Willamette Blvd, and congestion on N Greeley Ave. At the same time, the advocacy group Friends of Willamette Blvd formed to promote safer biking, walking, and access to natural areas along the bluff adjacent to N Willamette Blvd. Friends of Willamette Blvd proposed an improvement project for the corridor at a pedestrian and bicycle planning class at Portland State University that three PACE Planning members were enrolled in.

In January 2018, the full PACE team assembled as part of Planning Workshop, the capstone project requirement for the Master of Urban and Regional Planning program at Portland State University. The PACE team met with WCMC to come to a mutual agreement on a project for N Willamette Blvd and establish the scope for North PDX Connected. Scoping discussions established the focus on developing a low-stress active transportation corridor and on centering equity in the outreach and recommendations of the plan.

During February and March, PACE Planning continued refining the project scope and developing the details of the equity strategy. The team also used this time to develop the outreach strategy, contact key stakeholders, and make initial contacts and arrangements for outreach events.

The survey was launched in late March, around the same time that PACE Planning held the first neighborhood mapping workshop. The PACE team continued to advertise the survey, hold mapping workshops, and communicate with key stakeholders throughout April, culminating the public engagement phase with three focus groups in early May.

PACE Planning began analyzing engagement responses in late April and spent May completing analysis and assembling the plan. The first draft of the plan was submitted to WCMC and Workshop faculty advisors for comment in mid May. PACE presented methodology and findings at several presentations and used feedback and comments to refine the document for the final submission on June 11.
PROJECT LIMITATIONS

Developing improvements for a low stress active transportation corridor along the four mile stretch of N Willamette Blvd is an ambitious undertaking. Ensuring sufficient and equitable outreach and recommendations requires significant time, resources, and networking. PACE Planning strove to develop a comprehensive, community responsive, and equitable plan. However, North PDX Connected remains with a number of key limitations.

The timeline for this project provided about five months for team formation, scoping, outreach, and drafting. The PACE team consists of five students with other school and work responsibilities. The team brought a wealth of knowledge to the project collectively, but none of the members had experience creating a plan from start to finish. Finally, PACE team members had limited community connections in the project area.

The condensed timeline and limited capacity constricted outreach. Two or three rounds of outreach would have allowed the team to collect concerns and ideas as well as receive feedback on preliminary recommendations. Without multiple rounds of engagement, the PACE team often had to infer community preferences from relatively non-specific feedback. Additional feedback from the community on the recommendations presented in this plan is highly recommended.

PACE Planning was concerned that surveys and Neighborhood Association events would not sufficiently capture the voices of historically underrepresented groups, so the team developed an equity strategy to attempt to compensate. Limited capacity and a lack of neighborhood connections restricted the alternative outreach strategies designed by PACE Planning, so the voices of priority groups may still be underrepresented in the findings and recommendations.
3 EXISTING CONDITIONS

A brief history of North Portland and former plans and projects on N Willamette Blvd. An in-depth examination of demographics, commuting habits in North Portland, and street conditions along N Willamette Blvd.
HISTORY OF THE PENINSULA

The North Portland peninsula distinguishes itself from other areas of Portland in a number of ways. The peninsula is sometimes called the fifth quadrant, highlighting its peculiar geographic stance in Portland’s layout.

The peninsula shape is not very conducive to a grid system. Residents often have to travel the length of the peninsula to access other parts of the city. Until the St. Johns Bridge was built in 1931, the only route to the rest of the city was via trolley lines into NE Portland.

St. Johns is a main commercial center on the North Portland peninsula. The neighborhood was its own city from 1902-1915, and the St. Johns commercial center is often referred to as “downtown.” St. Johns has historically been home to working class communities living close to the many industrial opportunities on Swan Island and Rivergate.

The population and demographics in North Portland are heavily affected by the history of Vanport. Vanport was a wartime workers town in the 1940s that swelled to become the second largest city in Oregon. It was located in North Portland in the areas that currently make up northern Kenton and East Columbia. Vanport flooded and was completely destroyed in 1948. Many of the residents settled in North Portland, especially the large African American population from Vanport that was not allowed to settle in most other parts of the city.

Many of the African American residents moved to the Albina area, which exists along North and Northeast Portland, but does not extend past N Interstate Ave onto the peninsula. Many others settled in Kenton and Portsmouth. Portsmouth included a housing project, also from the wartime, called Columbia Villa. The project was originally built in 1942-43 to house defense workers. After the war, the development was converted into permanent low-income housing. Columbia Villa was at first considered respectable and desirable, but gained a negative reputation as government subsidized housing lost popularity in the 1970s and when the crack-cocaine epidemic ripped through it in the 1980s. The development became safer for residents in the 1990s but maintained its negative reputation. By the early 2000s, Columbia Villa was one of the oldest housing developments in the state. The Housing Authority of Portland used HOPE VI funding to redevelop it from 2003-2005, renaming it New Columbia. It is now one of the largest mixed income housing projects in the state and accounts for the most racially diverse census block in Portland.

St. Johns is a main commercial center on the North Portland peninsula. The neighborhood was its own city from 1902-1915, and the St. Johns commercial center is often referred to as “downtown.” St. Johns has historically been home to working class communities living close to the many industrial opportunities on Swan Island and Rivergate.

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The Albina Community Plan of 1993 called for significant reinvestment in the Albina area. One of the projects included a MAX light rail line running up N Interstate Ave. The reinvestment and the significant increase in transit access was a key factor leading to gentrification and population increase in the area. Many new residents moved into Albina and into the North Portland peninsula, and the resulting increase in housing costs drove many of the existing residents away.

This history of disparity has led some residents to mistrust with the central city and government efforts. Along with North Portland’s relative geographical isolation, residents often comment on feeling neglected, unheard, or forgotten.

Understanding the peninsula’s rich history and common perceptions of the City’s planning practices bolsters the argument for in-depth, diverse engagement that captures ideas and concerns about N Willamette Blvd.

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AERIAL IMAGE OF N WILLAMETTE BLVD AND SURROUNDING NORTH PORTLAND NEIGHBORHOODS [1935]

SOURCE: CITY OF PORTLAND ARCHIVES
SUMMARY OF PAST PLANS AND PROJECTS

N Willamette Blvd has been a target for active transportation improvements for decades. In particular, the section of the road that runs through Arbor Lodge offers the only biking and walking path south of N Lombard St, as there are no parallel residential streets to offer alternative east-west routes.

ARBOR LODGE NEIGHBORHOOD PLAN

The 1993 Arbor Lodge Neighborhood Plan called for bicycle facilities along N Willamette Blvd, a recreational trail on the bluff side, and a traffic management plan. The suggestions intended to improve access, reduce automobile usage, and increase livability and recreation along the bluff. Only portions of that plan were implemented.

2011 BICYCLE IMPROVEMENT STUDY

Bike lanes were added to parts of N Willamette Blvd but they were too narrow and met neither Portland’s nor national standards. Prompted by the 2030 Bike Plan, PBOT tried to install wider buffered bike lanes in 2011. The plan included removing on-street parking for additional road space, as a report by Kittleson\(^2\) indicated that most on-street parking spots were not used. Public engagement revealed that neighbors were concerned about removing parking, leading PBOT to halt the plan.

N WILLAMETTE BLVD RESTRIPING PROJECT

Friends of Willamette Blvd, an advocacy group supporting better bicycle facilities along N Willamette Blvd, began pressuring PBOT again in 2017. N Willamette Blvd was repaved in the fall. PBOT decided to use the opportunity to restripe the section of N Willamette Blvd from N Rosa Parks Blvd to N Woolsey Ave with wider bike lanes, an on-street pedestrian path, and no on-street parking.

Other portions of N Willamette Blvd have also changed. These changes include new pedestrian crossings, especially close to the University of Portland, and bike lanes from Columbia Park Annex to the bridge over the railroad tracks. There have not been any larger corridor projects addressing other parts of N Willamette Blvd recently.

There were a number of changes made on N Rosa Parks Way and N Greeley Ave in late April and May of 2018. Some of these changes addressed specific concerns that PACE Planning heard during engagement efforts. Others affect traffic flow in the area and therefore encourage different recommendations. Because of the timing of these projects, PACE Planning was not able to collect any feedback on recommendations that respond to these new changes.

**N GREELEY CROSSING**

PBOT built a crossing with a pedestrian and bicycle refuge island for people crossing N Greeley Ave on N Willamette Blvd. The island also prevents left turns at this intersection, which eliminates northbound neighborhood through traffic. This project affects recommendations related to diversion in this area. A crossing at N Greeley Ave was on the original North PDX Connected list of recommendations.

**N ROSA PARKS BIKE LANES**

As part of a recent restriping project, the bike lanes on N Rosa Parks Way were upgraded from painted bike lanes to parking protected bike lanes. This may impact the connection point between N Willamette Blvd and N Rosa Parks Way.

**NO RIGHT TURN AT N ROSA PARKS INTERSECTION**

As part of the N Rosa Parks Way repaving project, PBOT is installing a physical barrier to deter the illegal right turn at N Willamette Blvd and N Rosa Parks Way. Many residents commented that although it is prohibited, many cars make this turn anyway. A physical barrier to deter this illegal turn had been on the original North PDX Connected recommendation list.
WHY DEMOGRAPHICS MATTER FOR ACTIVE TRANSPORTATION

It is important that active transportation projects collect and consider demographic information because some groups of people walk or bike more than others. For example, according to US census data, men are more likely to walk or bike to work than women, and low-income individuals are more likely to walk and bike than those with higher incomes. Hispanic and Latino* people use active transportation to get to work more than Whites do, while African Americans walk and bike less often. The use of active transportation to commute to work also declines with age (although walking rate increase again past age 55).³

Knowing these trends and collecting data for a project area can help establish whether there is need or urgency for an active transportation project. Certain parts of North Portland have a younger population, lower incomes, and larger Latino populations than Portland as a whole. These are all traits that would suggest higher rates of active transportation, yet walking and biking are less common in these areas than in Portland overall, suggesting the existence of barriers.

Demographic analysis also allows for more equitable recommendations and implementation practices. Access to active transportation is crucial for youth, aging populations, and others who may not be able to use a car. Many people with lower incomes are unable to afford a car and therefore rely exclusively on active transportation. Furthermore, it is important that City projects direct investment toward communities that have historically been underserved, such as Communities of Color, to account for the disparate distribution of resources that has occurred both nationally and locally over the past decades.


*The US Census considers “Hispanic and Latino” as one ethnicity, although the terms have different meanings in other contexts. “Hispanic and Latino” ethnicity may include people of all races.
PEOPLE OF COLOR

One in three North Portland residents identify as a Person of Color, making the peninsula more racially diverse than the city as a whole.

Racial diversity varies throughout the peninsula with higher concentrations of People of Color living north of N Lombard St. The area in and around the New Columbia housing development, located in the Portsmouth neighborhood, is one of the most racially diverse areas of the entire Portland region and is the only census tract in North Portland with a majority of residents identifying as a Person of Color.

HOUSING INCOME

Annual median household income in some
neighborhoods is two-thirds that of the
city as a whole, encouraging alternatives
to a private car.

Overall, household incomes along the
peninsula are roughly similar to the city
as a whole but vary widely throughout
North Portland. Lower-income individuals
tend to walk and bike to work more often.
Lower-income households tend to have a
higher need for alternatives to a personal
vehicle for transportation because owning
and maintaining a car is expensive.

YOUTH POPULATION

Many young people are not able to drive and require alternative transportation options.

The share of the population under 18 years old is higher along the peninsula than in the city as a whole, especially in the areas north of N Lombard St. Young individuals tend to walk and bike to work more often. Youth under the age of 18 have a greater need for alternatives to a car because of expense or because they may not be allowed to drive.

People in North Portland are less likely to walk to work, despite national demographic trends. Overall, a smaller share of the population walks to work in North Portland than the city as a whole. This is inconsistent with the national trend for an area with lower incomes and a greater proportion of youth, suggesting that there may be barriers that discourage walking to work.

PEOPLE BIKING

Many people in North Portland bike to work, but biking is less popular west of the railroad tracks.

The share of people who bike to work is higher along the peninsula than the city as a whole, but decreases drastically further west. Because incomes also decrease further west along the peninsula, this is inconsistent with national trends. This suggests the existence of barriers that discourage biking to work.

VEHICLE OWNERSHIP

Roughly one in nine households in North Portland do not have access to a private vehicle. A larger proportion of people own a car in North Portland than in the rest of the city. This higher rate of vehicle ownership contradicts what would be expected based on the area's higher concentration of lower-income households. Vehicle ownership can be costly, especially for those with fewer financial resources. Creating alternatives and cheaper options for getting around such as walking, biking, or taking transit can reduce the overall cost of transportation for North Portland residents.

TRANSIT RIDERSHIP

The share of people who use public transportation to get to work in North Portland is roughly similar to the city of Portland overall. However, the share of people taking transit varies widely between North Portland census tracts. Areas along the MAX train have higher rates of public transit use, while areas further into the peninsula have significantly lower rates. Expanding high capacity transit options is outside of the scope of this plan, but providing additional access and connections to existing transit could benefit residents further west.

ACTIVE TRANSPORTATION + TRANSIT COMBINED

The City of Portland has set a goal of roughly doubling walking, biking, and transit mode share by 2035, such that more than half of commute trips will be done via active transportation. North Portland will require significant investment in walking, biking, and transit if a larger portion of the population is to use those modes to get around. N Willamette Blvd will be a key corridor for these investments.
PEOPLE DRIVING

People drive more in the northern and western parts of the peninsula, although those areas have lower incomes.

The share of people who drive alone to work in North Portland is roughly the same as the city as a whole but is much higher in areas further northwest into the peninsula. Because the areas further into the peninsula have lower incomes, this contradicts the national trend, suggesting limited alternative options in these areas, or geographical remoteness. Dependency on a personal vehicle because of a lack of alternatives can be onerous for low-income households because of the high cost of driving.

RENTERS AND OWNERS

A large portion of North Portland’s residents rent their homes. People who rent are at greater risk of displacement when housing prices rise. North Portland is already experiencing severe increases in housing costs, along with the rest of the city. Building out more infrastructure or making other improvements that make an area more attractive may accelerate this trend. On the other hand, active transportation enhancements can offer alternatives to owning a vehicle which can reduce transportation costs. Public actors must consider impacts on displacement and potential mitigation strategies.

HOUSING PRICE CHANGE

A sharp increase in median rent prices is causing displacement in North Portland and making it more difficult for low-income people to move into the neighborhood. The trend is driven by rent increases on existing residents as well construction of many new high-end rental units. The rising costs of renting or buying a house makes it more difficult for people with low incomes to settle in North Portland. Moreover, people who are forced to move or who are transitioning from renting to homeownership struggle to remain in their neighborhood.

POPULATION CHANGE

A significant population increase in this area results in denser living. As more people gather in the same area, traffic congestion will continue to increase unless road space is used more efficiently. Personal vehicles are the least efficient use of road space. A denser North Portland will require better access to transportation alternatives such as walking, biking, and taking transit.

St. Johns and Portsmouth are at risk of gentrification and displacement.

The 2013 Gentrification and Displacement study by Dr. Lisa Bates expanded the field by studying the risk of displacement and gentrification to guide policy and investment before the neighborhood changes. The study looks at the percentage of vulnerable communities: renters, People of Color, people without college degrees, and people with low-incomes, as well as demographic and housing market changes, to classify census tracts.

With regard to gentrification, tracts are considered to be susceptible, in early stages 1 or 2, dynamic, or in a late stage or stage of continued loss. St. Johns is already experiencing noticeable changes, placing it in the dynamic and early stage 2 of gentrification. Portsmouth is not yet gentrifying but is susceptible. The risk of gentrification in these neighborhoods increases the need for intentional investment and mitigation strategies.

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**PedPDX**

PedPDX is a comprehensive city-wide pedestrian plan currently being developed by PBOT. It is an update to the 1998 Pedestrian Master Plan. The plan outlines a pedestrian network for the city and prioritizes sidewalks and crossings. Between N Burlington Ave and N Rosa Parks Way, N Willamette Blvd is listed as a Major City Walkway, which is the highest classification within the pedestrian network. This prioritizes this section for future pedestrian improvements. According to the plan, Major City Walkways require a marked crossing at least every 800 feet.

**2030 Bike Plan**

The 2030 Bike Plan sets a vision of bicycles as a fundamental transportation tool and supports a network that allows people of all ages and abilities to bike to numerous destinations. It was approved by City Council in 2010 as an update to the 1996 Bicycle Master Plan. The 2030 Bike plan identifies N Willamette Blvd as a major bike connection into North Portland. It supports a neighborhood greenway from N Interstate Ave to N Rosa Parks Way and separated in roadway facilities for the rest of the corridor.
N Willamette Blvd is also designated as a Major Emergency Response street between N Richmond Ave and N Portsmouth Ave. This classification prioritizes movement for emergency vehicles and contains limits on traffic calming. In the segment between N Portsmouth Ave and N Greeley Ave, the classification changes to a Minor Emergency Response street which allows some traffic calming elements such as speed cushions.

In the sections from N Rosa Parks Way to N Richmond Ave, where the 44 Trimet bus runs along N Willamette Blvd, the street is classified as a Transit Access street, which includes provisions to access transit via biking and walking.

**SOURCE:** PEDPDX, 2030 BIKE PLAN, TRANSPORTATION SYSTEM PLAN 3, PBOT
WALKING CONDITIONS

There are only a few marked crosswalks along N Willamette Blvd, most of which are clustered around the University of Portland campus. West of N Portsmouth Ave there are no marked crosswalks or controlled intersections until N Richmond Ave, a distance of nearly one and a half miles. The absence of marked crossings presents a safety and connectivity challenge for residents trying access transit or residences across N Willamette Blvd. Along the bluff, there are no marked crossings at between N Olin Ave and N Wabash Ave, a distance of 4,700 feet.

In the **three mile** distance between N Rosa Parks Way & N Richmond Ave there are only **4 marked crossings.**

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CROSSING TYPE

- Signal Controlled Intersection
- Stop Sign Controlled Intersection
- RRFB Pedestrian Signal
- Marked Crosswalk

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SOURCE: PORTLAND BUREAU OF TRANSPORTATION
BIKING CONDITIONS

Research suggests that there are four basic approaches to cycling. About 2/3 of the population does not ride a bike regularly but is interested in doing so. “Interested but concerned” people will only ride if they have the opportunity to use facilities that feel safe and are low stress.5

The Level of Traffic Stress (LTS) is a way of measuring the experience of people biking based on the type of biking infrastructure and the volume and speed of automobiles.6 High vehicle speeds and volumes along much of N Willamette Blvd make biking stressful for riders who are less confident or more risk-averse. Lower vehicle speeds or more protection between people biking and vehicle traffic can help to lower LTS.

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**BUS STOP ACTIVITY**

The TriMet 44 Bus runs along N Willamette Blvd between N Richmond Ave and N Rosa Parks Way. Bus stop activity varies along the line, with high rates of people getting on and off the bus at stops near the University of Portland and just west of the bridge over the railroad cut. The bus stops along the bluff section of N Willamette Blvd have very low usage, among the lowest of the entire route. TriMet has recently expressed interest in stop consolidation to improve bus speed and reliability on a number of lines including the 44.

**#44 BUS DAILY BOARDINGS BY STATION PAIR**

**HIGHEST ACTIVITY BUS STOPS**
- UNIVERSITY OF PORTLAND
- N PORTSMOUTH AVE
- N ALMA AVE

**LOWEST ACTIVITY BUS STOPS**
- N CHAUTAUQUA/HURST AVE
- N WASHBURNE AVE
- N CAREY AVE

**SOURCE:** TRIMET, FALL 2017 RIDERSHIP DATA

**44 BUS RIDERSHIP**

**SOURCE:** TRIMET, FALL 2017 RIDERSHIP DATA
VEHICLE SPEEDS & VOLUMES

Vehicle volumes along N Willamette Blvd are highest along the bluff section, decreasing gradually as the corridor moves northwest into Cathedral Park. In the section between N Richmond Ave and N Burlington Ave, N Willamette Blvd is classified as a local street. However, this section witnesses over 4,500 daily trips, far exceeding the carrying capacity of the narrow street. Observed vehicle speeds are higher than the 30 MPH marked speed limit, ranging from 35 MPH to 38 MPH along the bluff. Vehicle speed is closely linked with crash severity for people walking and biking.

SOURCE: PORTLAND BUREAU OF TRANSPORTATION
PEDESTRIAN AND BIKE CRASHES IN STUDY AREA

Between 2006 and 2015, there were 36 crashes involving a person walking or biking on North PDX Connected project area alignments. One person was killed while biking near the University of Portland. Crashes involving people biking were more frequent between N Rosa Parks Way and N Portsmouth Ave. Ten people were hit by a vehicle at N Ida Ave and N Lombard St, which is the third most dangerous intersection for pedestrians in North Portland. N Lombard St, N Columbia Blvd, and N Interstate Ave are all designated as part of the city’s High Crash Network, which outlines the most dangerous streets in Portland.

SOURCE: OREGON DEPARTMENT OF TRANSPORTATION
MOBILITY CORRIDORS IN NORTH PORTLAND

There are only three corridors that run the length of the North Portland peninsula. N Columbia Blvd has a wide right of way, limited access, and is designed to primarily serve vehicle and freight movement. N Lombard St serves as a major arterial for vehicles, has a high density of commercial uses and is a frequent service transit corridor. Both of these corridors lack consistent bicycle and pedestrian infrastructure and are identified on the High Crash Network. Of the three, N Willamette Blvd is best positioned to serve multimodal movement in terms of infrastructure and classification. There is policy support for significant walking, biking, and transit on N Willamette Blvd, and it is not recognized as a freight route. N Willamette Blvd is a neighborhood collector, and therefore is meant to carry far fewer vehicles than the other two larger arterials. Bicycle and pedestrian infrastructure already exists on N Willamette Blvd and would only have to be expanded to meet the classification standards. Finally, the street is owned by PBOT, removing jurisdictional barriers, and has undergone many attempts and transformations to improve active transportation opportunities.

VISION ZERO

Safety is one of the core planning principles guiding the Portland Bureau of Transportation. The City of Portland adopted Vision Zero in 2016, committing to eliminate all crashes resulting in fatalities and serious injuries by 2025. In order to achieve this goal, PBOT has outlined a series of actions related to reducing vehicle speed, improving crossings, increasing protection for people biking, and other safety improvements. The Vision Zero Action Plan outlines a range of strategies to improve safety, including public education campaigns, street design, and enforcement to discourage dangerous behaviors.
4 COMMUNITY ENGAGEMENT

An overview of what PACE Planning heard while conducting interviews, mapping workshops, an online survey, and focus groups, with a summary of key lessons learned.
Community engagement allows a plan to be responsive to a community’s needs and to minimize potential negative consequences of investment. Equitable representation in public processes leads to more equitable outcomes from those decisions. Jurisdictions that meaningfully engage the communities they serve may also build more buy-in and offer more durable results when people feel heard. Moreover, community engagement is an opportunity for cities and organizations to educate members of the community about the planning process and technical concepts, building further capacity within communities to engage meaningfully.

“If [the City] wants our input, they need to come to us.”

- Roosevelt HS Student
OUTREACH PRIORITIES

DEVELOP a nuanced and context sensitive understanding of North Portland.

UNDERSTAND community hopes, concerns, and aspirations regarding active transportation.

GATHER feedback to guide final recommendations.

LEARN from historically underrepresented populations like communities of color, people with lower incomes, and youth, and amplify these voices when generating recommendations.
**ENGAGEMENT METHODS**

**INTERVIEWS**
The team contacted stakeholders and community organizations or groups that were relevant to the project’s goals in order to gain insight about issues affecting the study area, advice on conducting community outreach, and resources that would help inform recommendations.

**COMMUNITY MAPPING WORKSHOPS**
Seven mapping workshops allowed participants to connect their concerns and ideas about active transportation to specific locations along the corridor using sticky dots and corresponding comment cards. The events were held at Neighborhood Association meetings, Roosevelt High School lunch, and Rosa Parks Elementary dismissal. It was an exciting alternative to traditional public meetings that gathered in-depth and spatially-specific feedback through a visual and tactile process.

**ONLINE SURVEY**
Input from nearly 500 participants revealed barriers to active transportation, improvements that would encourage walking and biking, and other transportation-related issues. Surveys were distributed via neighborhood association mailing lists and advertised on flyers posted around North Portland.

**FOCUS GROUPS**
The team sought more nuanced input from People of Color, people with low incomes, and youth through small-group conversations. The first focus group engaged Students of Color at Roosevelt High School, the second engaged Spanish-speaking Women of Color whose children attend Roosevelt High School, and the third engaged residents that live on or near the corridor (including youth, People of Color, and low-income backgrounds.)
During the scoping and initial outreach phases of the project, PACE Planning reached out to several organizations, community representatives, and stakeholders to gain insight on engagement strategies, issues present in their communities, resources that could support the project, and advice on bringing an equity focus to each part of the process.

PACE team members spoke with representatives from the Portland African American Leadership Forum (PAALF), the St. Johns Center for Opportunity, Oregon Walks, the University of Portland, the Community Cycling Center, and PBOT. The following pieces of wisdom from these conversations helped to inform the project scope, process, and resulting recommendations:

- Active transportation infrastructure improvements may not ultimately promote equity in areas that are experiencing a housing crisis due to the potential to exacerbate gentrification and displacement pressures.
- Transportation, though important, is not the most pressing concern for low-income communities. Housing affordability and job opportunities are higher priority.
- PBOT’s previous failures to engage the public before implementing changes has created distrust.
- Go to the community you hope to engage. Accommodate with meals and childcare.
- Avoid assigning White male facilitators when engaging underrepresented communities.
- Do not use academic or technical language.
- Make engagement activities interactive, heavy on visuals and light on text; incorporate storytelling.
METHODOLOGY

Between late March and late April, the PACE team held seven mapping workshops throughout North Portland. These events were intended to share information about the project with the public, identify key areas of concern to be addressed in the plan, and illuminate opportunities for improvements throughout the corridor. Events were held at each of the five Neighborhood Association general meetings along the project corridor (Overlook, Arbor Lodge, University Park, Cathedral Park, and St. Johns.) To better represent voices and perspectives not always present in these spaces, two additional outreach events were held at Roosevelt High School and at Rosa Parks Elementary School.

Participants were given numbered dots that they could place on a corridor-wide map and a neighborhood-specific map. Each dot was tied to a comment card that prompted residents to identify a concern and offer an idea for an improvement. A low-technology approach was used to keep participation simple for users of all ages and abilities, as well as to facilitate replicability and easy transitions between events.

Over two hundred written comments tied to specific locations were collected at the mapping workshops. The comments were analyzed both to find common concerns in the community and to identify key locations for further analysis.

To gain better context about the mobility issues facing the neighborhood, two informal meetings with neighbors in the area were held - one in Cathedral Park and one in Arbor Lodge. These conversations helped PACE Planning develop initial draft concepts that were shared at the workshops for initial input and feedback.

In addition to the spatial and qualitative information gained at these workshops, the PACE team was able to use these engagement opportunities to converse with residents and build relationships with individuals who were highly interested in the project.

The information gathered from these events was broadly categorized into six categories, each of which is explored in further detail on the following pages. These major themes include: 1) crossings and sidewalks; 2) bike safety; 3) vehicle volume and speed; 4) curb activity; 5) access to transit; and 6) other concerns.
Clockwise from top left: Small group mapping workshop at Arbor Lodge Coffee; Cathedral Park Neighborhood Association mapping workshop; Mapping workshop with Rosa Parks Elementary Students; Overlook Neighborhood Association mapping workshop; Roosevelt High School mapping workshop; St. Johns Neighborhood Association mapping workshop. | PHOTOS: PACE
Pedestrian safety issues were the most frequent type of comment in the mapping workshops. Participants noted multiple locations where current crossing locations are difficult. Concerns cluster around N Greeley Ave, N Rosa Parks Way, N Woolsey Ave, N Wall Ave, N Ida Ave, N Richmond Ave, and N Burlington Ave. Concerns around the distance between marked crossings was a common theme as well. Residents of Cathedral Park and Arbor Lodge noted ideas for improvement at irregular intersections along the bluff and at N Burlington Ave. The in roadway pedestrian path along the bluff was brought up multiple times. Some participants want to extend it further west, but others shared that using it was uncomfortable.

**Quotes from Workshops:**

“I think that this area lacks appropriate crosswalk areas making it difficult to safely cross intersections. There are not stop signs either, which is concerning to cross the street”
- St. Johns Resident

“Busy intersection can be difficult to ped cross, more so in the past 5 years with infill and density beginning. Only going to get worse”
- Arbor Lodge Resident

“Put in those flashing walk signs or put a yield sign that says to wait/watch for pedestrians”
- Roosevelt High School Student
Comments around bike safety centered on two major themes - protection from vehicles and the ability to safely cross the street while biking. Multiple participants expressed a desire for a two-way bike lane along the bluff section with physical protection between people biking and nearby vehicles. Many residents complained about the bike lanes disappearing in the section of N Willamette Blvd west of N Alma Ave. The intersections of N Rosa Parks Way and N Ida Ave were called out as difficult places to cross while biking.

**QUOTES FROM WORKSHOPS:**

“Buffered or two-way bike lanes on the bluff side. Bluff side is very nice because there are no intersections so no car can pull out in front of cyclists.”

- University Park Resident

“[This] intersection is dangerous for bikes to turn from Ida onto Willamette. Cars come around the corner fast. A light would allow me to make the turn safer - or even a crosswalk with a light would help.”

- Roosevelt High School Student
Concerns about vehicle speeds and volumes clustered at the west and east ends of the project corridor. There was a large cluster of comments about neighborhood through traffic in the triangular area bounded by N Greeley Ave, N Rosa Parks Way, and N Willamette Blvd. These residents expressed support for diverting neighborhood through traffic, but also noted concerns about spillover onto adjacent streets. Another major cluster of comments centered on the area near the St. Johns bridge, where residents identified multiple diversion strategies centered on N Burlington Ave and N Richmond Ave. Many comments expressed concern over high vehicle speeds and a desire for speed reduction. Concerns about infill development and increased traffic volume also surfaced during outreach, especially in the University Park neighborhood.

QUOTES FROM WORKSHOPS:

“This curve always has cars speeding around it. Especially during rush hour. Cars aren’t supposed to cut through here but they do. I wonder what’s possible to divert cars from cutting through here and how to slow cars down?”
- Overlook Resident

“Cars come zooming off the bridge and turn right down Burlington. We have to run to cross the street!”
- Cathedral Park Resident

- Cathedral Park Resident
Many different types of activity happen at the curb. It is a place where people load and unload items from their cars, step into the street to cross, and store their private vehicles. With all of these competing uses, trade-offs are required to balance the needs of different users. Multiple participants recommended pulling parking away from intersections to improve the visibility of people trying to cross the street. Along the bluff, some residents expressed concerns about accessing their homes in areas where parking was removed. Others called for more parking removal in this section to allow for buffered bike lanes. Multiple participants noted the importance of consulting residents before removing parking to better understand access needs.

QUOTES FROM WORKSHOPS:

“I live off Macrum and use Willamette Blvd daily. When cars are parked on Willamette Blvd right up to Macrum, it is impossible to see oncoming traffic. Trying to access Willamette Blvd is dangerous because visibility is restricted by the parked cars. There should be at least a 10’ setback for parking on Willamette Blvd at all intersections.”
- University Park Resident

“Don’t be taking away on-street parking - especially without asking residents beforehand!”
- Overlook Resident
Access to transit came up less frequently than other types of comments, but was common among students at Roosevelt High School. In particular, a cluster of comments centered on the crossing of N Willamette Blvd at the bus stops near N Ida Ave. A shelter providing protection from inclement weather at this location was a common recommendation. A second major theme was a need for crosswalks and ADA-compliant curb ramps at bus stops. These comments were more dispersed along the entire corridor and on other bus routes along the peninsula.

**QUOTES FROM WORKSHOPS:**

“Make the 44 a frequent service line and put a crosswalk or a stop sign near the stop” // “Bus stop with shelter so when it rains we stay dry.”
- Roosevelt High School Students

“Can’t access the transit station, no curb ramp. Pave and add curb ramp.”
- Overlook Resident
OTHER IDEAS & CONCERNS

A number of comments came up that did not fit into any of the previously detailed categories, but are still important to consider when thinking about transportation and streetscape needs. Multiple respondents called for public space amenities along the corridor, especially benches to enjoy the view along the bluff. Lighting came up a couple of times to increase the visibility of people walking and biking. Participants were especially concerned about visibility on rainy nights. Ecological opportunities include green stormwater management, tree infill, and canopy restoration. A few participants noted a lack of ADA and bike access at the stairs on the Waud Bluff trail to Swan Island. This area is off of the corridor but offers an important connection to employment opportunities from N Willamette Blvd.

QUOTES FROM WORKSHOPS:

“Impossible to see cyclists on Willamette in rain. New LED streetlights have limited range, lots of shadows and do not illuminate pedestrians and cyclists enough. We need better and more uniform lighting”
- University Park Resident

“Plant more Madrona trees to keep the bluff strong as well as improve roadway for cyclists and pedestrians.”
- St. Johns Resident
KEY TAKEAWAYS

The neighborhood workshops provided the PACE team with local knowledge about key concerns and opportunities for improvement. Experiencing these streets and public spaces on a daily basis allowed residents to provide detailed local perspectives. Some residents had suggestions that applied to the entire corridor, but most of the comments were concentrated around the participating neighborhood or location of the engagement activity. Face-to-face conversation brought out personal stories that helped to contextualize certain concerns and ideas.

Walking and crossing conditions emerged as a central concern for the project. There is also strong support for improved conditions for biking. Vehicle speeds and neighborhood through traffic are highly localized issues. Diverter placement can address these issues, but it is essential to work with individual residents to understand access impacts.

Building trust through face-to-face engagement is essential for smooth project implementation. Many participants expected to comment on an existing proposal and were thankful and excited to contribute ideas and concerns that would help shape the final outcome. Beyond providing information for the team, the workshops helped community members feel heard and have a sense of ownership in the planning process.

Meeting people at places that are familiar and convenient for them can help engage people who are often left out of the planning process. The two equity-centered events were some of the only spaces where large number of lower-income, People of Color, and youth participants could share input. Their concerns had significant overlap with the Neighborhood Association members, but also revealed larger issues throughout the peninsula. Using low-tech, tactile methods allowed for flexibility, so that the workshop could be in a cafeteria or outdoors as well as in standard meeting rooms. Participants as young as eight or nine and others with low English proficiency were able to offer their feedback using these methods.

LIMITATIONS

Most of the mapping workshops were held as part of Neighborhood Association meetings. Neighborhood Associations tend to attract people who are already connected and involved in public processes. They often have higher attendance from demographics with more social power: White, home-owners, older, and middle-to-upper income. The PACE team did not collect demographic information at mapping workshops, but casual observation suggests this participation bias existed at most of the Neighborhood Association workshops. The Roosevelt High School and Rosa Parks Elementary School workshops were successful in hearing from these priority groups. However, the final findings still do not fully represent the perspectives from these groups.

Some workshops were over an hour long, and some were as short as ten minutes. There were introductory presentations providing context for some workshops, while others encouraged people passing by to participate. Participants had different levels of background knowledge informing their comments.
ONLINE SURVEY

METHODOLOGY

The project team distributed surveys online from March 2018 - May 2018, advertising via Neighborhood Associations in North Portland and posting flyers in establishments, public boards, schools, and bus stops in the peninsula. The survey was available in both English and Spanish. The team chose to distribute the survey online because it allowed participants to choose when and where to respond, was more cost effective than printing and distributing surveys by hand, and provided automatic data entry. The surveys were not distributed to a representative sample.

The survey sought to better understand transportation behaviors in North Portland, identify barriers to walking and biking on the corridor, receive input on desired outcomes, and gather demographic information for analysis. It consisted of 17 questions, was anonymous, and offered multiple opportunities for participants to give open-ended responses. A total of 466 survey responses were recorded.
RESPONDENT DEMOGRAPHICS

RACE
The vast majority of survey respondents identified as White or Caucasian, more than the proportional share in North Portland. A handful of respondents identified as Asian or Pacific Islander, and a few others identified as some other race. Survey responses have almost no input from People of Color, one of the project’s priority groups.

AGE
Over half of survey respondents were in their 20s or 30s. Almost all other respondents were 45 to 80 years old. There were almost no responses from youth under 18, one of the priority groups.

GENDER
A little over half of respondents were female and a little over a third were male. The rest identified as non-binary or chose not to answer.

INCOME
About 1 in 12 respondents are low income. This is the highest representation of one of the priority groups in this survey.

ABILITY
About 6% of respondents live with disabilities. People with disabilities often have particular perspectives on transportation, either because they are unable to drive a car, or because they are heavily dependent on a car.
FINDINGS: HOUSING & TRANSPORTATION

RELATION TO THE CORRIDOR
The largest number of responses came from the Arbor Lodge neighborhood, with significant representation from University Park, Cathedral Park, St. Johns, Portsmouth, and Kenton. The Overlook neighborhood was erroneously omitted from the list of possible responses during the first two weeks after the survey was launched. Many of the responses coming from “Other North or Northeast Portland” neighborhoods are likely from Overlook.

HOUSING
About nine out of ten respondents own their home, a much greater proportion than the average in North Portland. Homeowners are at a lower risk of displacement than renters, and likely have different impact concerns.

TRAVEL BEHAVIOR
Walking and driving are by far the most common ways survey respondents get around North Portland. Most respondents reported that they drive most days of the week, and half of respondents also reported getting around by foot most days of the week. Biking and using transit are also highly utilized modes of travel.

VEHICLE ACCESS
Over 90% of respondents own a motorized vehicle and nearly 99% have access to one. The survey does not represent the perspective of people who lack access to a personal motorized vehicle. Without a motorized vehicle, active transportation and transit options are all the more important for getting around a city or region.
## BARRIERS TO WALKING

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<td>Not Safe from Cars</td>
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<td>Noise/Pollution</td>
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## WHAT WOULD ENCOURAGE WALKING?

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<td>Slower Traffic</td>
<td>59%</td>
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<tr>
<td>Better Lighting</td>
<td>53%</td>
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</table>
NEARLY 2 OUT OF 3
RESPONDENTS SAID THEY WOULD BE MORE LIKELY TO RIDE THEIR BIKE IF THERE WERE PROTECTED BIKE LAKES.
The survey identified a number of concerns affecting people who use N Willamette Blvd, as well as hopes and ideas that community members have about future improvements to support active transportation.

Respondents were most worried about cars travelling too fast, drifting or turning into the bike lanes, and failing to stop for people crossing the street.

Solutions that most respondents supported include building more frequent crossings with better visibility, slowing vehicle traffic, and creating physical separation or protection between active transportation lanes and cars. Many respondents were also interested in lowering the speed limit or increasing enforcement to get vehicle speeds down.

Open ended responses allowed respondents to offer additional information. They informed PACE Planning about how highly nearby residents value on-street parking and curb side access and the extra concern parents felt about the safety of their young children. It also revealed concerns the team had not been aware of such as deficiencies in bike lane maintenance.

Limitations

It was not possible for the PACE team to distribute surveys to a representative sample of the population that uses N Willamette Blvd. Many of the survey respondents heard about the project from their Neighborhood Association, skewing representation. Almost all responses came from homeowners who live very near to the corridor, and a vast majority of the respondents were White. The survey does not capture a representative number of responses from renters or People of Color.

The survey was only distributed online. This may have limited responses from people who cannot afford a computer or smartphone or have difficulty using one. As a result the survey may lack the perspectives of people with low incomes or disabilities.

Participants also had several options to write open-ended responses to survey questions. The top concerns among these respondents were about lacking bike infrastructure, safety for children, insufficient ADA access, and a lack of transit options.
PACE Planning chose to hold focus groups because they can be especially helpful for gaining the perspective of social groups that experience conditions or pressures that differ from the majority. These small-group discussions often allow members of the same social group to discuss their experiences without fear of judgment by members outside of their social group. This can be especially important for marginalized populations, such as people of color, immigrants, or people with disabilities. The PACE team held three focus group discussions with the goal of providing a safe and relaxed environment in which participants could discuss their perspectives, with particular interest in hearing from People of Color, youth, and people with low incomes.

The discussions were designed to gather input on multiple issues related to active transportation and social equity. First, participants discussed how they get around and what concerns they have with walking, biking, transit, and transportation in general. They also shared wishes and ideas about transportation improvements that would help their communities. The latter part of these discussions focused on concerns and opportunities regarding community engagement and social equity. Participants shared thoughts on public engagement in Portland, concerns about larger issues affecting their communities, and comments on the equity implications of these issues.

One discussion convened eight Students of Color at Roosevelt High School, and one was with mothers of Roosevelt High School students who attend English as a Second Language (ESL) classes at the school during lunch time. Another gathered five people who live on or near N Willamette Blvd and who contacted PACE Planning about participating in a discussion. Participants received refreshments and gift cards to Fred Meyer for sharing their time and perspective with the team.

These conversations allowed PACE Planning to identify concerns as well as gain clarity and nuance on the numerous and complex issues that affect North Portland communities.
FOCUS GROUP | ROOSEVELT STUDENTS

GROUP DESCRIPTION
A group of eight Roosevelt High School students met with two PACE Planning team members in the high school commons area after dismissal. The participants learned about the focus group from one of the team’s mapping workshops that occurred at the school a few weeks prior. All of the students were youth of color between the ages of 16 and 18 who live in the St. Johns area. Though English was not the native language of some participants, the conversation was facilitated in English, and every student was able to participate.

WHAT WE HEARD

TRANSIT AND YOUTH PASS
The students in this group depend almost entirely on active transportation and transit to get around. A couple of them are driven to school but use active transportation and transit for other trips. All students in this group use the Youth Pass, a free transit pass available to high school students. Participants appreciate the free transit program and make frequent use of it. They talked about how these free passes alleviate the transportation cost burden to themselves and their families and improve their ability to get around town. They agreed that the program should be expanded to middle schoolers.

POOR BIKING CONDITIONS
Most of the students in this group do not ride their bikes regularly. They cited poor road conditions and safety concerns. All of the students get around by walking often, and discussed difficulty crossing at intersections, especially to get to the bus. They fear for their safety while walking or biking near car traffic, as well as in poorly-lit areas.

RACIAL HOSTILITY
The group discussed negative interactions with bus drivers. They stated that drivers often pass students waiting at bus stops and sometimes do not stop when students request to get off the bus. On occasion, drivers have yelled angrily at students for various reasons, including taking too long to get their wallets out. Participants feel racially targeted by bus drivers. They suggested that bus drivers should receive better anti-racism training.

GENTRIFICATION
This group commented on the rapid changes occurring in their communities due to new development and other investments happening in their area. They cited gentrification and displacement as major concerns for them and their families, noticing that people in their communities are being displaced due to rising rents. They claimed new investments were focused on White and wealthy newcomers, and observed that the incoming freshman class at Roosevelt is noticeably Whiter than previous classes. The participants shared about their experiences organizing events at their school in response to issues of gentrification, displacement, and racial inequality. They have never participated in public engagement processes with the City and wish for more engagement and opportunities to give input at their school.

“Who are they making all these changes for? For the rich White freshman students? We never saw any improvements for us, they even covered our old mural.”

- Roosevelt High School Student
FOCUS GROUP | ROOSEVELT PARENTS

GROUP DESCRIPTION
Another focus group convened six mothers whose children attend Roosevelt High School. The participants were Latinas with low English proficiency who knew each other from ESL classes offered at the school. Two additional women, the ESL class coordinator and a Somali mother who also takes classes, joined the conversation but did not participate fully. Most have lived in North Portland for more than 15 years. Every participant was a woman of color whose first language was not English. A bilingual PACE team member facilitated the discussion in Spanish.

WHAT WE HEARD
Participants shared a number of concerns in their neighborhood, some directly related to transportation, while others were tangential.

ACTIVE TRANSPORTATION DEPENDENCY
Most participants depend on walking and biking to get around because it is the most affordable option. Some can not afford to use transit daily and rely on walking most places. They mentioned that the free transit pass for high school students is helpful, but they wish that this option were available for middle school students too.

SAFETY
People driving and biking often break traffic rules and do not respect pedestrians. Drivers speed and race along residential streets, and people driving as well as biking roll through intersections without stopping for pedestrians trying to cross. These behaviors are worst during peak hours when children are walking to or from school.

Participants also noted that some people bike on the sidewalk rather than the street, pushing pedestrians to walk on the street or on unpaved areas.

AFFORDABILITY
New businesses and public investments in North Portland are unaffordable and do not reflect their community or its needs. The group discussed difficulty affording groceries at the stores available to them, the cost of commuting by transit or car, and difficulty managing the rapid rise in their rent. The parents in this group have children in elementary, middle, and high school, and shared that having one or even two jobs often does not cover the cost of child care.

A NEED FOR MORE ENGAGEMENT
Participants talked about confusion and misinformation regarding recent laws or policies, calling for more notification and better translation and interpretation services. Participants mentioned particular concern about marijuana legalization, with some worried that their children will be profiled and punished by police if they are found in the vicinity of someone else using marijuana. Questions about tenant rights and resources also surfaced. Participants shared that many of their friends and relatives have been displaced from the area due to rent increases, some of more than 100%, and in many cases without proper notification. Members of this group had not participated in focus groups or similar engagement activities before this event. They were not aware of the neighborhood associations in their area nor other avenues available for participation in public processes. They would like to see better communication from the City on navigating existing programs.
RACIAL TENSIONS
When asked about other issues affecting their communities, some participants brought up the sentiment that their neighborhoods have been changing in problematic ways. Aside from affordability and displacement concerns, they no longer feel welcome in the area that was once their community. They talked about racially charged altercations and threats from neighbors making them feel unsafe while running errands or commuting by foot.

“Mis vecinos eran mi familia. Los conocí cuando me mude a esta área, eramos muy poco latino y fue bueno tener tu comunidad cerca. Pero ya casi todos se han mudado, porque la renta es muy alta.”

“My neighbors were my family. I met them when I moved to this area, we were very few Latinos and it was good to have your community nearby. But almost everyone has moved, because the rent is very high.”

- Latina Mother
FOCUS GROUP | CORRIDOR RESIDENTS

GROUP DESCRIPTION

The small group of five residents that live on or near the corridor consisted of two youth under 18, one accompanied by her mother, and two other adults. Two of the project’s three priority groups (People of Color and youth) were represented in this discussion, with one adult bringing the perspective of a low-income upbringing. Each of the adults owned their home.

WHAT WE HEARD

SAFETY, CROSSINGS, AND TRANSIT

Difficulty crossing N Willamette Blvd was a major concern that participants brought up, specifically that cars rarely stop for pedestrians or cyclists trying to cross the street. The lack of crossings is particularly problematic for people who take transit because they cannot easily get to bus stops. One youth participant shared that he has missed the bus because he could not cross. Bus stops are also problematic because they lack lighting and have poor visibility, causing buses to drive by people waiting. Safety from cars was a concern both for pedestrians and cyclists. Some group members would prefer to be able to bike on side streets to avoid traffic on N Willamette Blvd. There are no alternate route options east of Columbia Annex Park. Concerns about safety from cars became especially acute for one participant after having children.

ON-STREET PARKING

Some participants expressed disappointment in the recent restriping on N Willamette Blvd. Losing on-street parking was a major concern. One participant shared that her elderly visitors now have a hard time accessing her house, as they must park around the corner and walk a block or two, which is physically difficult for them. Participants made many mentions of uses for on-street parking spaces other than parking a car. These include deliveries, loading space, and pulling in and out of driveways. Some reported that losing the auxiliary space for these activities has caused hostile conflicts, especially with people riding bikes. Because of these issues, there was major interest among the group in auxiliary space for loading and unloading, including building spaces into the planting strip between the sidewalk and street.

Participants also expressed frustration that the new striping did not feel much better or safer for people walking and biking but came at a steep cost to them. Some residents expressed support for the restriping while also sharing concerns about some safety issues that have occurred as a result. One participant mentioned that few people seem to use the new pedestrian lane, but another participant responded that they have used it regularly.

LACK OF ENGAGEMENT

A final frustration that surfaced regarding the restriping was the lack of opportunity for residents to engage in the process before changes occurred. They feel that PBOT should have consulted with them before making such drastic changes, and that more engagement would make them more accepting. One participant stated that even if the ultimate outcome were the same, she would have felt much better about the changes if she knew that they were a result of her neighbors’ wishes rather than a top-down decision making process.

“We want to use the St. Johns Community Center more, and Willamette would be the best way to get to St. Johns, but it’s not safe enough to bike with the kids.”

- Corridor Resident
KEY TAKEAWAYS

All three focus group discussions revealed concern about safety from cars. Vehicles drive too quickly and aggressively, posing danger to people walking on parts of the street that do not have sidewalks. Cars fail to stop for pedestrians or cyclists trying to cross the street, and there are not enough crosswalks nor lighting for pedestrians to feel safe crossing the street. These issues create particular worry about children’s safety.

Participants are also frustrated that there has not been more public engagement regarding transportation and other issues affecting North Portland communities. Many weren’t aware of available avenues for them to engage, while others felt that the avenues available did not result in meaningful engagement or being heard by the City.

The two conversations at Roosevelt High School brought up additional issues affecting their mobility and communities in general. The cost burden of taking transit was a major concern for both of these groups. Some of the mothers reported that they depend entirely on walking to get around, and both groups think that the free transit pass that high schooler students receive should also be available for middle school students.

Both of these groups also cited racial tensions as a common issue affecting the way they travel. Students feel racially targeted by some bus drivers, and parents experience racially charged harassment while walking or biking to run errands or commute. They also shared frustration about the gentrification of their neighborhoods and the subsequent displacement of their communities. Both groups have neighbors, friends, and family members who have had to move away from their communities due to sharp increases in rent. They appreciate that the City wants to improve their neighborhoods with investment in new infrastructure, but they also ask who these investments are really for if residents like them will eventually be forced to move.

LIMITATIONS

Focus groups attempt to unearth deeper and often more personal stories from participants. The presence of a White facilitator and a male facilitator may have made some participants uncomfortable or hesitant to share the full extent of their experience, especially with regard to racial tensions and sexual harassment. A number of participants mentioned distrust of public institutions because of previous negative experiences. Distrust may have also served as a barrier and discouraged participants from sharing their full experience.

By concentrating on personal experiences of individuals, focus groups do not reveal a representative opinion of an area. Focus groups for North PDX Connected were mostly recruited at Roosevelt High School and were self-selected. The findings from the focus groups may represent edge or outlier opinions.
PACE Planning’s engagement process revealed findings about issues and preferences outside of the project scope. These findings brought out other transportation and engagement issues, the effects of a long history of disinvestment, and the unbalanced allocation of funding, resources and services in the area. These findings on unmet community needs have important equity implications and may serve as a starting point for steps Portland City bureaus could take in the future.

“I feel [the City] springs things on us, but only when something is already getting done. We didn’t get to say anything. Especially for the low-income community, ask the users what they need to get around the city.” - Corridor Resident

TRANSPORTATION
Neighborhood through traffic on around N Greeley Ave creates problems for all modes. Poorly timed traffic lights on N Greeley Ave cause unnecessary congestion and disrupt bus schedules. Outreach participants also report difficulty crossing and needing sidewalk improvements on N Lombard St. Participants called for better transit options (specifically, improvements to the 75-bus line,) and better connections to N Willamette Blvd from the north. N Lombard St is owned by ODOT, making it difficult for PBOT to address urgent issues without interagency collaboration.

ACCESS
Poor access to resources and services creates additional burdens for low-income households and Communities of Color in North Portland. Participants expressed that many of the resources they wish to access are concentrated in wealthier areas far from their homes. They also expressed feeling unwelcome to use said facilities due to instances of discrimination.
AFFORDABILITY
Low-income households are concerned about their ability to afford living in the North Portland area much longer. As the area becomes more desirable for investors and new residents, prices for basic goods and services are also increasing. Long commutes, inaccessible childcare, and a lack of job opportunities for these households also worsen concerns about making ends meet.

GENTRIFICATION & DISPLACEMENT
Many participants question the intentions behind the City's investments in their schools and neighborhoods now that the demographics are changing with gentrification. Underrepresented community groups in North Portland such as people of color, people with low incomes, and youth, are incurring disproportionate burdens associated with gentrification. The rising cost of housing is pushing people out of their neighborhoods and away from their schools and communities toward farther-out, more affordable areas out of the city. The impacts of displacement are not only financial, but also social, mental, and physical.

RACIAL TENSIONS AND SENSE OF BELONGING
Participants shared concerns about increasing animosities against racial and ethnic groups in their area. They noted altercations when using amenities as parks, sidewalks and streets in residential areas, and public transit. Police presence has also increased in the area, something that participants appreciated and previously requested. Now, however, they worry about racial profiling and harassment of People of Color in the streets. Participants expressed that they no longer feel safe in their neighborhood, not only because of discrimination, but also because also they don’t know where to seek help. They call for better public information about policy and programming changes the City makes. They would like the City to expand their public communication methods and to receive information translated into their native language.
OUTREACH FINDINGS

Many engagement participants commented that there are not enough crossings along the corridor and that some of the existing crossings are unsafe. For the corridor to effectively serve people walking, biking and taking transit, it needs multiple new marked crossings. Crossings require safety enhancements in areas that were identified as particularly dangerous, such as N Chautauqua Blvd, N Ida Ave, and N Edgewater Ave. Intersection simplification that creates standard crossing distances and calms traffic in the area can also help people using sidewalks and crossing the street.

High vehicle speeds and volumes lead many to feel unsafe when biking, especially inexperienced riders and children. Physically separating bikes from cars would support biking on the corridor. Bike facilities are needed in areas where none exist, like in Cathedral Park. In addition, the high volumes and speeds of neighborhood through traffic makes neighborhood streets unsafe for any type of activity. Diversion to larger collectors and arterials is needed to prevent neighborhood through traffic and support proper street function.

Participants also voiced concerns about improper lighting on the corridor, substandard bus stops, non-compliant ADA ramps, poorly maintained bike lanes, and missing sidewalks. Addressing these concerns will help the corridor become a safe and comfortable place for people of all ages and backgrounds to walk, bike, and take transit. In addition to physical safety issues, respondents shared about social problems that prevent them from using active transportation. For many, affordability is a barrier to using bikes or transit to get around. Low-income households are increasingly struggling with affordability as their neighborhoods gentrify. Addressing problems of affordability and gentrification will require public investment in affordable housing, access to transportation, and economic opportunity for low-income households, communities of color, and youth.

Racial discrimination within communities, on transit, and from bus operators is a common concern for people of color. Better training and representation at TriMet could reduce racial hostility from operators. Training could also help operators recognize when people are being racially harassed by other passengers, and have specific protocols for how to intervene.

Insufficient and inaccessible community engagement has caused participants to feel left out of public process, undervalued by the institutions serving them, and resistant to change. Deeper and more accessible community engagement is necessary to ensure that underrepresented communities can participate in shaping their city, that public institutions understand the problems they aim to solve, and that community members are more welcoming of changes in their neighborhoods. New engagement practices are necessary, as well as more equity training for City staff, and having better demographic representation within bureaus of the populations they serve.
LIMITATIONS

Several conditions constricted the extent and quality of PACE Planning’s community engagement process. The team did not recruit a representative sample of North Portland’s population to participate in the survey and mapping workshops. There is also an issue of selection bias for these methods. That is, the mapping workshops are likely to attract participants who are excited about the project and want to engage in making changes, while the surveys may be more likely to attract people who oppose change. The project’s short timeline also reduced the opportunity for the team to build relationships, trust, and networks within the community.
Infrastructure recommendations for better crossings, new and improved bike lanes, diversion of neighborhood through traffic, safer intersection design, and other amenities; evaluated based on equity, safety and comfort, community input and cost. Policy and program recommendations for better engagement, investments, training and hiring, and promoting equity and inclusion in future transportation projects.
**INTRODUCTION**

*North PDX Connected* offers two categories of recommendations for community members, organizations, and public actors to promote: 1) changes to physical infrastructure, and 2) improvements in public policy and processes.

The infrastructure recommendations were developed by PACE Planning in collaboration with key stakeholders such as PBOT and some Neighborhood Association board members. Some recommendations were presented to community members for direct input.

Infrastructure recommendations are grouped into five thematic categories:

- **CROSSINGS**
- **IN ROADWAY CHANGES**
- **THROUGH TRAFFIC DIVERSION**
- **INTERSECTION SIMPLIFICATION**
- **OTHER AMENITIES**

Recommendations within each of these category are grouped by segments, indicated on the map on the opposite page. The segments group together similar roadway conditions and in roadway facilities. Segments also roughly represent neighborhood boundaries, making it easier for people to see what recommendations are in their neighborhood.

The policy and process recommendations were developed by analyzing focus group outcomes and studying approaches in other places. They focus on how to create more equitable planning processes and and are grouped into three thematic categories:

- **ENGAGEMENT**
- **INVESTMENT**
- **TRAINING AND HIRING**

**MISSION**

Working in partnership with interested community stakeholders and historically underrepresented groups, PACE Planning aims to create an active transportation plan for N Willamette Blvd that provides a safe and comfortable connection for people walking, biking, and rolling throughout the peninsula. Recommendations promote the equitable distribution of impacts among all North Portlanders.

**GOALS**

**PROCESS**

Engage community members to collect opinions, concerns, hopes, and ideas for the corridor, with additional focus on priority groups who have historically been excluded from planning processes, such as People of Color, youth, and people with low incomes.

**PRODUCT**

Develop recommendations that improve safety and comfort for people walking, biking, and accessing transit on N Willamette Blvd between the Killingsworth MAX station and the St. Johns Bridge.

**IMPACT**

Assess the potential benefits and burdens caused by active transportation investment and offer recommendations to promote an equitable distribution among all North Portlanders.
SEGMENT 1
N INTERSTATE AVE to N ROSA PARKS WAY
A traffic calmed neighborhood residential portion of N Willamette Blvd that offers access to Dog Bowl Park and the Killingsworth MAX station.

SEGMENT 2
N ROSA PARKS WAY to N PORTSMOUTH AVE
The busiest segment of N Willamette Blvd that run along the scenic bluff, Columbia Park Annex, and University of Portland. This segment contends with complex three-street intersections and development on only one side.

SEGMENT 3
N PORTSMOUTH to N IDA AVE
A residential segment of N Willamette Blvd that serves as a key collector for people in the neighborhood and moving through the peninsula, terminating with one of the few bridges over the railroad tracks.

SEGMENT 4
N IDA AVE to N BURLINGTON AVE
A residential segment of N Willamette Blvd that connects the rest of the corridor to the St. Johns Bridge and includes the only commercial activity on N Willamette Blvd, a key transit route, and an overburdened neighborhood residential street.

SEGMENT 5
ALTERNATIVE ALIGNMENTS in ST. JOHNS
Three streets that connect the N Willamette Blvd corridor to key destinations such as Fred Meyer, downtown St. Johns, Roosevelt High School, and the St. Johns Community center, as well as the broader St. Johns community.
EVALUATION CRITERIA

THERE ARE MANY DIFFERENT TYPES OF INFRASTRUCTURE RECOMMENDATIONS: LARGE, SMALL, COMPLICATED, SIMPLE, EXPENSIVE, AND AFFORDABLE. EACH RECOMMENDATION IS EVALUATED ACCORDING TO FOUR CRITERIA: EQUITY, SAFETY & COMFORT, COMMUNITY INPUT, AND COST.

Recommendations are ranked on a scale of 1 to 3 for each category. The scale gives a general sense of how well a recommendation measures up in these categories. The score is not calculated mathematically. A low score does not mean the project has a negative impact. For example, a low community input score may simply mean that PACE Planning did not hear much about a given area or issue, but the community may still be supportive of the proposal.

Scores should not be compared across recommendations. For example, recommendation I-2.1 has a cost score of 3, because pouring concrete and adding ramps is expensive, but the scope of the recommendation is very small, only at one intersection. Recommendation R-4.1 has a cost score of 1, because striping bike lanes is fairly inexpensive, but because it spans a number of blocks it may be more expensive than I-2.1. The scores are relative to the size and scope of a given recommendation.

All recommendations have been discussed with PBOT staff to ensure that they align with PBOT’s policy and practices. Suggestions that violated PBOT policy were not included in the recommendations section.

EQUITY

Recommendations receive a higher equity score if they help support the three priority groups - People of Color, youth, and low-income people - or other key equity groups. The support is primarily determined by responses from the equity focus groups, stakeholder conversations, and existing research. This measure helps meet the impact goal.

Some common elements that support equity include: better crossings and better access to transit.
SAFETY & COMFORT

The safety and comfort score is determined by existing research on the safety of different facilities or treatments. It also includes research on the perceived safety and comfort of different facilities or treatments, using measures such as level of stress. This measure helps meet the product goal.

Some elements that support safety and comfort include: bike facilities that match street conditions, safe crossings, and lighting.

COMMUNITY INPUT

PACE Planning collected a lot of feedback from the community through the survey, workshops, and focus groups. Most comments did not respond directly to specific recommendations. The community input measure gauges how popular recommendations might be based on general preferences. For example, if many people indicated they want more separation between cars and bikes, that suggests a protected bicycle facility gets a higher score. The measure goes beyond counting every survey response and workshop or focus group attendee, recognizing that some people had access to more information or live closer to the project than others. This measure helps preserve the process goal.

Some elements that support community input include: safer bike facilities, safer crossings, and preserving parking.

COST

Project implementation is often packaged, making reliable cost estimates complicated and out of the scope of this plan. The cost score gives a general estimate from affordable to expensive. Cost is not directly related to the project goals but helps determine feasibility and phasing.

An example of a low-cost intervention is painting bike lanes, whereas pouring concrete is expensive.
One of the most common concerns raised during multiple outreach efforts was that it is difficult to cross N Willamette Blvd and that there are not enough marked crossings. The plan recommends over a dozen new crossings.

CROSSING LOCATION

Crossing locations are mentioned by segment below. Crossing locations were chosen based on the following factors.

- **PUBLIC INPUT**: The mapping workshops and comments in the survey revealed some key intersections that are particularly difficult or dangerous to cross.
- **ACCESS TO TRANSIT**: Crossings at transit stations improves access and safety. PBOT’s current crossing guidelines ask for crossings at every transit station.*
- **PBOT GUIDELINES**: The current spacing guidelines call for a crossing every 800 feet on a Major City Walkway like N Willamette Blvd. This guideline was not followed for every segment but was used to inform the recommendations.

*CROSSING DESIGN BY ROADWAY TYPE
ADAPTED FROM PBOT’S GUIDANCE FOR PEDPDX

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<th>VEHICLE ADT</th>
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*There are certain transit stations along N Willamette Blvd that were not chosen for a crossing. These stations have very low usage, and are close to other transit stations. TriMet intends to consolidate stops along N Willamette Blvd. Although there are no specific plans for which stops will be removed, it is very possible that the stops which are not marked with crossings will not exist by the time this plan is implemented.
CROSSING DESIGN

All crossing recommendations fall into one of the following two categories:

MARKED CROSSING
Marked crossings consist of painted zebra stripes across the roadway. Yield to pedestrian signs may also be added.

CROSSING WITH REFUGE ISLAND
Pedestrian refuge islands can be added to marked crossings. These provide physical protection for people to stop in the middle of the street. As a result people only have to cross one direction of traffic at a time.

The crossing design was chosen based on PBOT’s guidelines. For speeds between 30 MPH and 40 MPH, PBOT recommends marked crossings when there are fewer than 15,000 average daily trips (ADT), and a refuge island when the ADT is greater than 15,000. Refuge islands are recommended in a few instances where the ADT is lower than 15,000 because of significant input that these crossings are problematic.

EVALUATION

EQUITY
Crossings were mentioned as a priority in almost all outreach efforts, including the equity focus groups. They were particularly important for youth. Many of the areas where priority groups indicated crossings are needed are outside the project scope.

SAFETY & COMFORT
All crossing recommendations meet or exceed PBOT design guidelines. Some people expressed that N Willamette Blvd would only be comfortable to cross if it had a traffic light that stopped traffic.

COMMUNITY INPUT
Crossing locations were heavily influenced by input from the mapping workshops. Crossings that were highlighted by many people were chosen for additional safety enhancements.

COST
Marked crossings are very inexpensive. Pedestrian islands are somewhat more expensive.
RECOMMENDATIONS

The crossings for each segment are presented below. Unless otherwise noted, recommendations are only for marked crossings to help people cross N Willamette Blvd.

SEGMENT 1
N INTERSTATE AVE TO N ROSA PARKS WAY
• C-1.1: N Denver Ave (*)

SEGMENT 2
N ROSA PARKS WAY TO N PORTSMOUTH AVE
• C-2.1: N Chautauqua Blvd (*)(|)
• C-2.2: N Woolsey Ave (*)(|)

SEGMENT 3
N PORTSMOUTH AVE TO N IDA AVE
• C-3.1: N Monteith Ave
• C-3.2: N Wall Ave (+)
• C-3.3: N Macrum Ave
• C-3.4: N Carey Ave

SEGMENT 4
N IDA AVE TO N BURLINGTON AVE
• C-4.1: N Ida Ave & N Alma Ave (+)
• C-4.2: N Edgewater Ave (+)
• C-4.3: N Tyler Ave
• C-4.4: N Mohawk Ave
• C-4.5: N Richmond Ave (*)
• C-4.6: N Burlington Ave (*)

SEGMENT 5
N IDA AVE, N JERSEY ST, AND N CENTRAL ST
Crossing recommendations for N Ida Ave:
• C-5.1: N Princeton
• C-5.2: N Jersey St
• C-5.3: N Central St

Crossing recommendations for N Jersey St:
• C-5.4: N Buchanan Ave

(*) means the recommendation includes a crossing on the street that intersects with N Willamette Blvd as well.
(|) means the recommendation includes a pedestrian island on N Willamette Blvd because of high ADT.
(+) means the recommendation includes a pedestrian island on N Willamette Blvd although the ADT is below 15,000.
The recommendation are profiled in greater detail on the following pages.
C-3.2 | CROSSING IMPROVEMENT
N WALL AVE & N WILLAMETTE BLVD

BACKGROUND

N Wall Ave is a key road in this segment. It offers a connection to McKenna Park and a direct path to N Lombard St. N Wall Ave also has bus stops in both directions at the intersection with N Willamette Blvd. It is likely to attract more people walking, biking, and driving.

RECOMMENDATION

C-3.2: Install a pedestrian island at this crossing. Although vehicle volumes in this section are not high enough for PBOT’s guidelines for pedestrians islands, the lack of enhanced crossings between N Portsmouth Ave and N Ida Ave call for a more robust improvement at this intersection.

“A crosswalk at Wall and Willamette Blvd would be really helpful - Both Wall and Willamette are heavily traveled so this is a good place for a crosswalk.”

- University Park Resident

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<tr>
<th>EQUITY</th>
<th>SAFETY &amp; COMFORT</th>
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BACKGROUND

The intersection of N Ida Ave and N Willamette Blvd has been the site of several crashes. It was mentioned by many participants, particularly Roosevelt students, as a dangerous and uncomfortable intersection. Roosevelt students also mentioned that accessing the bus stop at N Alma Ave was particularly important.

RECOMMENDATION

C-4.1: Add a pedestrian island and marked crossing on the east side of the N Ida Ave intersection to help people walking and biking. Add a pedestrian island and marked crossing at N Alma Ave to improve crossing for people trying to access the eastbound bus stop.

“The Ida/Willamette intersection is dangerous for bikes to turn SE (toward UP) from Ida onto Willamette. No light and cars come around the corner fast. A light at Ida and Willamette would allow me to make the turn safer - or even a pedestrian/bike crosswalk.”

- Roosevelt High School Student
C-4.2 | CROSSING IMPROVEMENT
N EDGEWATER AVE & N WILLAMETTE BLVD

BACKGROUND

The speeds and volumes only call for a marked crossing at this intersection. However, this is the only portion of the corridor that has commercial activity on it (a convenience store and a cafe). The store and cafe generate a lot of crossings. The intersection also has a transit stop. Many people in Cathedral Park highlighted this intersection as needing a crossing. This need was made acute when someone was hit and seriously injured crossing this street while this plan was being developed.

RECOMMENDATION

C-4.2: Install a pedestrian island at the N Edgewater Ave crossing. Parking is already prohibited there because there is a bus stop.

“There are a ton of people crossing the street here. I really encourage the use of all safety devices at this location: curb extensions, marked crosswalks, etc.”

- Cathedral Park Resident

EQUITY | SAFETY & COMFORT | COMMUNITY INPUT | COST
---|---|---|---
〇 | 〇〇〇 | 〇〇〇〇 | 〇〇〇〇
A common concern unearthed during outreach is that biking on N Willamette Blvd felt unsafe. In certain segments of the corridor there are no bike lanes at all, though there is a high volume of fast-moving vehicles. In other segments there are painted bike lanes but they are narrow and do not offer sufficient buffering or protection from fast-moving vehicles.

N Willamette Blvd is identified in the TSP and 2030 Bike Plan as a Major City Bikeway. The corridor should offer a low-stress biking option that feels comfortable and safe for users of varying experience. Creating these facilities will require painting some bike lanes differently and making changes in the roadway. The specific facility recommendations are different for the various segments based on existing conditions.
TYPES OF RECOMMENDED FACILITIES

PROTECTED BIKE LANE
Protected bike lanes offer a physical barrier between moving vehicles and people riding bikes.

- Protected bike lanes offer the greatest level of safety and comfort in areas where many cars travel quickly.
- PBOT has committed to installing physical protection on all new facilities when possible.
- Protected bike lanes tend to be more expensive and take up more space.
- The physical barrier can create conflicts with buses, intersecting roads, and driveways.

BUFFERED BIKE LANE
Buffered bike lanes offer an in-road painted lane with a painted buffer to separate people biking from moving vehicles.

- Buffered bike lanes prevent fast vehicles from passing too close to people riding bikes.
- Buffered bike lanes are inexpensive.
- Buffered bike lanes take up more road space.
- Buffered bike lanes do not offer any physical protection and do not feel safe for inexperienced riders when many cars are travelling fast.

TWO-WAY BIKE LANE
A two-way bike lane puts both directions of bicycle traffic on one side of the street.

- Two-way bike lanes require less total roadspace than two separated bike lanes on each side of the street.
- Two-way bike lanes are ideal when one side of the street does not have cross traffic, reducing conflicts between people riding bikes and vehicles.
- Two-way bike lanes create complicated conflicts if they are added in areas where cross streets or driveways allow cross traffic.
- Two-way bike lanes force some people biking to cross the street twice.
TYPES OF RECOMMENDED FACILITIES (CONTINUED)

PAINTED BIKE LANES
Painted bike lanes offer a lane for bikes designated by a single paint line.

• Painted bike lanes are inexpensive and take up the least roadspace.
• Painted bike lanes do not feel safe or comfortable for many people when many cars are travelling fast.

SHARED ROADWAY & NEIGHBORHOOD GREENWAYS
Neighborhood greenways have no road markings aside from sharrows. They employ traffic calming and diversion to ensure low vehicle speeds and volumes, and to encourage people to bike in the middle of the street along with cars.

• Neighborhood greenways are the lowest-stress facility.
• Neighborhood greenways cannot be built on collectors that are intended for heavy vehicle use.
• Traffic diversion for neighborhood greenways can create circulation challenges and push cars to other neighborhood streets.

PARKING AND CURBSIDE ACTIVITY
Road space is often used for on-street parking. When parking utilization is mentioned in this plan, it measures the number of cars parked during evening hours. This accounts mostly for storing personal vehicles and does not consider other curbside uses. Outreach efforts revealed that on-street parking is very highly valued in this area in part because it can serve many functions, including:

• A place to park personal vehicles if they do not fit in garages and driveways;
• A place for friends, family, and other visitors to park;
• A loading zone for delivery drivers and taxis; and
• A merging zone for pulling in and out of driveways and merging with traffic.
R-1 | NEIGHBORHOOD GREENWAY / SHARED ROADWAY
SEGMENT 1 - N INTERSTATE AVE TO N ROSA PARKS WAY

BACKGROUND

Segment 1 has low volumes and low speeds, and currently functions as a shared roadway. It is listed in the TSP as a neighborhood greenway. There are further recommendations in the through traffic diversion section to ensure this segment maintains low volumes and speeds.

RECOMMENDATION

R-1: Maintain the current roadway configuration and paint sharrows through Segment 1.
BACKGROUND:
Segment 2 is one of the most complicated and controversial in the entire corridor. Certain segments have very high ADT, nearing 20,000. The bluff and University of Portland on the south side mean there is no cross traffic. This creates and opportunity for facilities that reduce bicycle and vehicle conflicts. It also results in faster driving speeds through this segment. There are no sidewalks along the bluff, making it difficult for people to access bus stops in this and scenery.

There are currently bike lanes throughout segment two, however they are narrow and offer little buffered protection from the fast moving vehicles, such that they do not meet PBOT’s standards.
SUBSEGMENTS:

Segment 2 is broken up into three subsegments that each have slightly different existing conditions. Segment 2 is still considered one segment because it shares the uninterrupted southside and is therefore a good candidate for one cohesive facility. However, each subsegment benefits from slightly different considerations.

SUBSEGMENT 2.1:
N ROSA PARKS WAY TO N WOOLSEY AVE

This subsegment serves as a particularly important biking and walking connection because there are no alternative east-west residential streets south of N Lombard St. Studies of this subsegment show a very low parking utilisation and short block faces offer many alternative parking options on side streets. Subsegment 2.1 was restriped in November 2017 to include a wider bike lane and a pedestrian lane. The restriping removed on-street parking. It is against PBOT policy to reinstate parking in this subsegment because that would result in lower quality bicycle facilities on a Major City Bikeway.

SUBSEGMENT 2.2:
N WOOLSEY AVE TO N OLIN AVE

This subsegment is similar to subsegment 2.1. Differences include parallel residential streets that offer a less direct, low stress walking and biking alternative to N Willamette Blvd. Subsegment 2.2 has longer block faces and higher parking utilisation, such that removing on-street parking would be a greater burden.

SUBSEGMENT 2.3:
N OLIN AVE TO N PORTSMOUTH AVE

This subsegment runs along the University of Portland and has sidewalks on both sides of the street. It is similar to the other two subsegments because the southern blockface is almost uninterrupted. The exceptions are N Mocks Landing Rd and the entrance to the University of Portland.
PRECEDENTS & INSPIRATION FOR SEGMENT 2

Clockwise from top left: Protected bike lane with floating transit island in Seattle, WA (SOURCE: Seattle Bike Blog); Better Naito, Portland, OR (SOURCE: BikePortland.org); Buffered bike lane in Davis, CA (SOURCE: Davis Enterprise); Two-way protected bike lane in Downtown Seattle, WA (SOURCE: Seattle Bike Blog)
ALTERNATIVES CONSIDERED FOR SEGMENT 2

PROTECTED TWO-WAY BIKE LANE
This alternative moves both bike lanes to the south side of N Willamette Blvd. This option can be built with on-street parking on one side or with a pedestrian lane, depending on the needs of each subsegment.

BENEFITS
• Offers physical protection for both directions of bike travel for highest level of safety.
• Removes conflicts with driveways, turning movements, and buses on the north side.
• If a pedestrian lane is added, it offers better access to the bluff and to bluffside transit stops.

CONCERNS
• Some westbound people will have to cross N Willamette Blvd twice.
• Adding a pedestrian lane would remove on-street parking.
• A two-way bike facilities will create points of complicated conflict with cross traffic in subsegment 2.3 at N Mocks Landing Rd and the entrance to University of Portland.

BUFFERED AND PROTECTED BIKE LANE
This alternative would create a seven foot bike lane and two foot buffer on the northside of N Willamette Blvd, and offer the same on the south bluff side, but with physical protection.

BENEFITS
• Wide lanes and buffers offer better safety
• South side lane along the bluff or University of Portland campus has physical protection

CONCERNS
• Wide northside lane will be used by people driving to overtake other drivers when traffic is congested because there is no physical protection.
• Pedestrian or parking lane is removed, depending on the existing conditions of the subsegment.
RECOMMENDATION

R-2 | PROTECTED TWO-WAY BIKE LANE WITH A PEDESTRIAN LANE ALONG THE BLUFF

The two-way protected bike lane offers a safer and more comfortable biking option in both directions. The pedestrian lane improves access to transit, which was a key concern for the priority groups. There is no pedestrian lane or parking removal recommended for subsegment 2.3 because there is already a sidewalk on the south side of the street. The protected bike lanes remove the least amount of parking, and offer opportunities to preserve even more parking.
RECOMMENDATIONS | IN ROADWAY - SEGMENT 2

SUBSEGMENTS 2.1 & 2.2
N ROSA PARKS WAY TO N OLIN AVE
PROTECTED TWO-WAY BIKE LANE WITH WALKING PATH

SUBSEGMENT 2.1 & 2.2 CROSS SECTION | PACE
END POINT TRANSITION: N ROSA PARKS WAY

The intersection of N Willamette Blvd and N Rosa Parks Way currently has an enhanced crossing with a pedestrian island. People biking westbound can arrive at this intersection from N Rosa Parks Way or from Segment 1, the traffic-calmed portion of N Willamette Blvd. Currently those arriving from N Willamette Blvd have to cross this intersection. With a two-way bike lane, people arriving on N Rosa Parks Way would have to cross instead.

“This is an ambiguous intersections for bikes, cars, and peds. Do cars stop for bikes, as pedestrians? Do cars treat bikes like cars? More signage for bikes and cards are needed here or a flashing pedestrian crossing.”

- Roosevelt High School Student

END POINT TRANSITION: N PORTSMOUTH AVE

At N Portsmouth Ave, west-bound people on bikes need to get back to the north side of the street to continue in the bike lane. The recommendation includes installing a bike signal at this intersection that would facilitate a diagonal crossing.

“Lots of college students crossing - make this an ‘all-walk’ light.”

- University Park Resident
PROTECTED CROSSINGS & ACCESS TO TRANSIT

N Willamette Blvd requires additional crossings. These crossings are needed to improve access to transit stops, improve access to both bike lanes which will now be on the bluff side, and to support crossing spacing recommendations for major city walkways.

For crossings to be safe in this portion of the corridor, they must include a pedestrian refuge island, so that people crossing only need to move across one lane at a time.

Buses will no longer be able to pull up curbside on the south bluff side of N Willamette Blvd. It would be too dangerous to encourage buses to move into a pedestrian lane and two directions of bike traffic. Instead, transit stops on the south side will be served by a floating transit island which will be offset from the pedestrian island.

The pedestrian and transit islands will require roughly eight feet of road space. To accommodate, the pedestrian lane and two-way bike lane will merge temporarily to form a multi use path. More space can be allocated from slightly narrowing travel lanes and the physical protection buffer.

Recommended crossings and transit islands do not cover all current bus stops. TriMet has voiced intentions to consolidate bus stops along this corridor. The recommendation makes tentative assumptions about which bus stops will remain after the consolidation. Implementation should include consultation with TriMet.

“Difficult to cross the road to the bluff. Crosswalks along Willamette to the bluff.”

- University Park Resident

“Not sure how to cross the road on a bike, heading N on Willamette and turning right at Chautauqua. It’s difficult to cross traffic and we’d be sitting in the bike lane a while waiting.”

- Arbor Lodge Resident
AESTHETICS

The area along the bluff and University of Portland offer beautiful natural scenery and views. A number of people expressed concern that the common plastic bollards used for protected bike lanes would be aesthetically incompatible with this corridor. The recommendation includes exploring alternative options for physical protection that better align with the neighborhood setting.

“Improved bollard aesthetics, think of a fence that looks nice. Better would be concrete planters, there could still be gaps between some to allow bikes to pass on the road.”

- Arbor Lodge Resident

PARKING CUTOUTS

The recommendation includes cutting parking spots into the planting strips between N Rosa Parks Way and N Olin Ave. Outreach efforts revealed that having curbside access was extremely important to people living along this section. Cutting parking spots into the planting strip would provide curbside access while offering the pedestrian lane to enhance transit access.

Cutting parking spots out of the planting strip will significantly increase the project costs. PACE Planning recommends that these cutouts would be funded by the adjacent property owners, with hardship waivers made available to residents with disabilities or property owners with low-income.
**POINTS OF CONFLICT NEAR UNIVERSITY OF PORTLAND**

**N MOCKS LANDING RD**

This is a small road that exits the University of Portland campus onto N Willamette Blvd. People using this exit will have to cross two directions of bicycle traffic to get onto N Willamette Blvd. N Mocks Landing Rd has very low volumes. Cars are not allowed to turn onto it from N Willamette Blvd, and people exiting N Mocks Landing Rd can only turn right. The low volumes and limited movement suggest this spot is unlikely to create significant conflict.

**UNIVERSITY OF PORTLAND ENTRANCE**

The two-way bike lane would run directly in front of the University of Portland main entrance. This area has high volumes and allows for all turning movements.

There are a number of opportunities for solutions. There is increased roadspace in this area because the University cut into the curb for a bus pull out. The University also owns a lot of frontage space in this area that could be used to support a smooth transition. There is no specific recommendation for how to resolve this conflict. Implementation should include consultation with the University of Portland to develop a collaborative solution.

**SEGMENT 2 - IN ROADWAY RECOMMENDATION EVALUATION**

**EQUITY**

The two-way protected bike lane allows for a pedestrian lane along the bluff. Increasing pedestrian access on the south side of N Willamette Blvd improves access to transit, which was a key concern for the priority groups.

**SAFETY AND COMFORT**

Bicycle facility guides and PBOT guidelines consider physically separated bicycle facilities to be the safest and lowest stress facilities. The two-way bike facility provides physical protection in both directions. The recommendation removes almost all points of conflict between people biking and people driving.

**COMMUNITY INPUT**

Survey results and workshop comments suggest that people prefer bike lanes with physical protection. People were particularly skeptical of painted buffers because cars are currently using the bike and pedestrian lane to cut around turning vehicles. The two-way bike lane helps preserve the most possible parking, which was a priority for many.

**COSTS**

Changing all of the lines on the road because the center line will be moved and pouring concrete for a number of the recommendation components makes this recommendation fairly expensive.
R-3.1 | NO CHANGE
SEGMENT 3 - N PORTSMOUTH AVE TO N CAREY AVE

BACKGROUND
Segment 3 has narrow bike lanes and parking on one side of the street. The prevailing volumes and speeds in this area are high enough that narrow bike lanes are not sufficient for a low stress facility, but lower than in segment 2 along the bluff. The existing street grid and land use make it difficult to arrange the street in any other way, unless on-street parking is completely removed.

RECOMMENDATION
R-3.1: Maintain existing conditions. PACE Planning considered buffered bicycle lanes as the only potential alternative for this segment. Those would require removing all on-street parking. However, there were no bicycle or pedestrian crashes along this segment from 2006-2015, suggesting safety concerns are low. Perceived safety and comfort improvements support making this segment more inviting for new and inexperienced riders. Although that goal is important, the outreach findings are clear that removing all parking from an area has serious negative consequences. This segment is not unsafe, stressful, or long enough to justify removing parking.
R-3.2 | PROTECTED BIKE LANE
SEGMENT 3 - N CAREY AVE TO N IDA AVE

BACKGROUND

There is a short bridge, 350 feet long, that crosses the railroad just east of N Ida Ave. The bridge was mentioned by a number of people as a particularly dangerous and scary location for biking. The lanes widen to 15 feet in over this bridge, which prompts drivers to speed but also offers opportunities to use that roadspace for safer biking facilities.

RECOMMENDATION

R-3.2: The travel lanes along the bridge can be narrowed to 11 feet. This would allow the bike lanes to be expanded to seven feet with a two foot buffer and physical protection. There is enough space along this subsegment because there is no parking allowed on the bridge. Physical protection is possible because there is also no cross traffic on the bridge. This recommendation addresses a common concern and would calm traffic approaching the intersection with N Ida Ave, which was also an issue raised by many.
SEGMENT 4  
N IDA AVE TO N BURLINGTON AVE  

BACKGROUND

Segment 4 is the only segment along the corridor that is completely unequipped to support bicycles in its current state. This segment has much lower traffic and speeds compared with the segment along the bluff, but far too high for bikes and cars to share the roadway.

Segment 4 has three distinct roadway conditions and requires different recommendations for each. They are all part of the same segment because they are all in Cathedral Park and are two small to be considered independent segments.

SUBSEGMENT 4.1  
N IDA AVE TO N PIERCE AVE  
This subsegment has parking on both sides of the street and is 40 feet curb to curb.

SUBSEGMENT 4.2  
N PIERCE TO N RICHMOND AVE  
This subsegment has parking on both sides of the street and 36 feet curb to curb.

SUBSEGMENT 4.3  
N RICHMOND AVE TO N BURLINGTON AVE  
This subsegment is 30 feet curb to curb. At N Richmond Ave, N Willamette Blvd transitions from a Neighborhood Collector to a residential street. The 44 bus turns off of N Willamette Blvd at N Richmond Ave. The ADT in this subsegment is very high for a residential street.

No recommendation is made for subsegment 4.3. The street is classified as residential and functions well as a shared roadway facility when traffic volumes are at residential levels. There are recommendations in the through traffic diversion section to address volumes and speeds.
RECOMMENDATION
R-4.1 | PAINTED BIKES LANES
SUBSEGMENT 4.1
N IDA AVE TO N PIERCE AVE

The amount of space available in this subsegment is the same as in segment 3. The recommendation is to maintain the same facility as in segment 3 - a painted bike lane in each direction and parking on one side of the street. The volume and speed is lower in this segment and there are no exceptional equity or safety needs. A painted bike lane is an imperfect facility for these road conditions, but allows some on-street parking to be preserved and offers a much better facility for people biking than what currently exists. PBOT should conduct parking utilisation studies and engage with residents on the corridor to determine which side should maintain parking.

RECOMMENDATION
R-4.2 | BUFFERED BIKE LANES
SUBSEGMENT 4.2
N PIERCE AVE TO N RICHMOND AVE

The 36 feet in subsection 4.2 is not wide enough for two travel lanes, a parking lane, and two bike lanes. Leaving this subsection without any bike facilities would create a major gap in the corridor. The volumes and speeds are too high for a comfortable shared roadway facility. The lack of bike lanes in the segment between N Ida Ave and N Richmond Ave was mentioned frequently by Cathedral Park residents. The level of stress, discomfort, and the lack of safety are pressing. This portion of the corridor is more likely to be used by lower-income People of Color living further into the peninsula. The recommendation also includes adding parking cutouts in the planting strip based on consultation with residents and property owners to acknowledge the hardship of losing all on-street parking.
SEGMENT 5
ADDITIONAL ALIGNMENTS
IN ST. JOHNS

BACKGROUND

Segment 5 is not on N Willamette Blvd. It was added to the scope of North PDX Connected in order to link the corridor with major destination in the North Portland peninsula such as Roosevelt High School and downtown St. Johns. The segment includes N Ida Ave, N Jersey St, and N Central St.

**N IDA AVE** is 36 feet wide. It has parking on one side and very narrow bike lanes, approximately 4 feet. N Ida Ave serves as a connection to N Jersey St and N Central St and is also a connection to the Fred Meyer grocery store.

**N JERSEY ST** is a small residential street that is recommended as a future neighborhood greenway in the TSP. It connects directly with downtown St. Johns.

**N CENTRAL ST** is an existing neighborhood greenway that runs along Roosevelt High School and the St. Johns Community Center.
RECOMMENDATION

R-5: The recommendation includes expanding the bike lanes to seven feet and adding two foot painted buffers and physical protection on the east side on N Ida Ave between N Willamette Blvd and N Lombard St. In order to have space for this recommendation, on-street parking is removed from N Ida Ave along this stretch. PACE Planning determined that this would not be a serious detriment because parking utilization is very low and block faces are very short, meaning all houses are on corner lots and can access on-street parking on cross streets. Offering a more comfortable connection on this street is important to better serve priority groups.

<table>
<thead>
<tr>
<th>EQUITY</th>
<th>SAFETY &amp; COMFORT</th>
<th>COMMUNITY INPUT</th>
<th>COST</th>
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</table>
There are a few areas along the N Willamette Blvd corridor and the alternative alignments where the street is classified as Neighborhood Residential. These streets are supposed to have low volumes of traffic and low speeds. These conditions are important for nearby neighbors and they support safer walking and biking conditions.

In a number of areas, peak hour commuters are using N Willamette Blvd and neighboring streets to avoid congestion on the collector and arterial routes. As a result, walking, biking, and accessing transit in these areas has become less safe, comfortable, or desireable. The recommendations in this section explore opportunities to divert neighborhood through traffic back to collectors and arterials.

Diverters can look many different ways. They can consist of large concrete planters put in place to block a certain flow of traffic, poured concrete, permanent planting medians, new striping, and signage. Their aim is to block certain movements for vehicles while allowing people walking and biking to move through.

Diverters can cause a number of unintended consequences. Barriers that block certain flows of traffic affect both commuters and local residents. The burden on residents that are diverted may not be worth the benefit of calming through traffic. Cars that are diverted from a certain route are also likely to travel on nearby streets. The project aims to divert cars back to arterials and collectors, but in some cases drivers find other neighborhood residential streets and the problem reemerges in a new place.

For all of the recommended diverters, PACE Planning recommends initially implementing a removable pilot, such as large concrete planters. Once these are put in, new data can be collected, such as gathering input from nearby residents, measuring speed and volume on the streets where diversion is implemented, and measuring speed and volume on nearby streets. Depending on the findings, the diverter can then be made permanent, removed, or moved to a new location. New or complementary solutions may also follow such as more diverters, speed bumps, or additional signage.
Example of prototype traffic diverter using temporary materials at North Portland. | PACE

Example of permanent traffic diverter using higher quality materials and design in North Portland. | PACE
D-1 | HALF CLOSURE
N VILLARD AVE & N WILLAMETTE BLVD (DOG BOWL PARK)

BACKGROUND
Many residents in this area expressed concern about commuters using N Willamette Blvd to get around congestion on N Greeley Ave. A large volume of cars turns off of N Rosa Parks Way onto N Willamette Blvd, N Curtis Ave, or N Villard Ave in order to reach N Greeley Ave farther south. As a result, there are too many cars for this type of facility during the AM peak hour.

“Increased traffic speeding down Willamette to avoid Greeley”
- Overlook Resident

RECOMMENDATION
D-1: A half closure on N Willamette Blvd at N Villard Ave would not allow cars to travel east (toward N Greeley Ave) along N Willamette Blvd, but would allow cars to travel west (toward N Rosa Parks Way).* A closure in this section has the added benefit of discouraging vehicle use next to Dog Bowl, a popular park in the area. This location is also particularly well suited for a diverter because all of the houses on N Willamette Blvd between N Jessup St and N Villard Ave have alternative entrances along N Atlantic Ave.

As with all diverters there is concern that eliminating certain movements can create some circulation difficulties for neighboring residents and emergency vehicles. Furthermore diverting neighborhood through traffic on N Willamette Blvd, N Curtis Ave, and N Villard Ave may increase through traffic on N Atlantic Ave.

The diverter should be implemented as a pilot to collect feedback from neighbors who may have a difficult time accessing their homes. It should also monitor volumes on N Atlantic Ave in case people driving cars divert to it instead. If the volume or speed on N Atlantic Ave goes up significantly, mitigation measures such as other diverters, speed bumps, or stop signs should be used.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>PEAK HOUR VOLUME</th>
<th>APPROXIMATE CARS/MINUTE</th>
<th>% OVER SPEED LIMIT</th>
<th>DATE</th>
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<tbody>
<tr>
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*During discussion with the community, PACE Planning gathered feedback on a full closure at this location. The new crossing at N Greeley Ave and N Willamette Blvd has removed the need to stop westbound traffic, so the recommendation was changed to a half closure.
SEGMENT 1 RECOMMENDED DIVERSION STRATEGY

- **Diverter Location**
- **Desired Traffic Movement**
- **Discouraged Traffic Movement**
- **Areas for Monitoring & Mitigation**

**Legend:**

- **Equity:** 3
- **Safety & Comfort:** 5
- **Community Input:** 5
- **Cost:** 3

1,000 FEET
D-4.1 & D-4.2 | TRAFFIC DIVERTERS

D-4.1: N BURLINGTON AVE AND N SYRACUSE ST (EXITING ST. JOHNS BRIDGE)
D-4.2: N BURLINGTON AVE AND N WILLAMETTE BLVD (ACCESSING ST. JOHNS BRIDGE)

BACKGROUND

A number of residents highlighted issues with neighborhood through traffic on N Willamette Blvd between N Richmond Ave and N Burlington Ave, and to a lesser extent, on N Princeton St for the same stretch. Commuters getting on and off the St. Johns Bridge use these streets to avoid backups on N Ivanhoe St.

RECOMMENDATION

D-4.1: This diverter would stop eastbound traffic coming off the bridge and going into the neighborhood. It would encourage people driving cars to instead use N Ivanhoe St.

PACE Planning investigated and collected comments on a diverter at N Burlington Ave and N Willamette Blvd as well. Recommendation D-4.1 was determined to better reduce neighborhood through traffic because it is closer to the source of traffic, the St. Johns Bridge. A diverter at N Burlington Ave and N Willamette Blvd would likely push vehicles onto N Princeton St, which already has a problem with eastbound neighborhood through traffic.

The diverter should be implemented as a pilot to collect feedback from neighbors who may have a difficult time accessing their homes. It should also monitor volumes on N Princeton St in case people driving cars still use it for through traffic. If the volume or speed on N Princeton St goes up significantly, mitigation measures such as other diverters, speed bumps, or stop signs should be used.

D-4.2: This diverter would stop westbound traffic coming from N Willamette Blvd from getting onto the bridge. It would encourage people driving cars to turn onto N Richmond Ave and N Ivanhoe St instead.

PACE Planning investigated and collected comments on a diverter at N Richmond Ave and N Willamette Blvd as well. Recommendation D-4.2 was determined to better reduce neighborhood through traffic because it is closer to the source of traffic, the St. Johns Bridge. A diverer at N Richmond Ave and N Willamette Blvd may push vehicles onto N Princeton St.

The diverter should be implemented as a pilot to collect feedback from neighbors who may have a difficult time accessing their homes. It should also monitor volumes on N Edison St in case people driving cars divert to it to avoid arterial congestion. If the volume or speed on N Edison St goes up significantly, mitigation measures such as other diverters, speed bumps, or stop signs should be used.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>PEAK HOUR VOLUME</th>
<th>APPROXIMATE CARS/MINUTE</th>
<th>% OVER SPEED LIMIT</th>
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</table>
SEGMENT 4 RECOMMENDED DIVERSION STRATEGY

4.1 EASTBOUND DIVERTER

4.2 WESTBOUND DIVERTER

DESIRED TRAFFIC MOVEMENT

DISCOURAGED TRAFFIC MOVEMENT

AREAS FOR MONITORING & MITIGATION

1,000 FEET

EQUITY

SAFETY & COMFORT

COMMUNITY INPUT

COST
**INTERSECTION SIMPLIFICATION**

*N Willamette Blvd has wide sidewalks on at least one side of the street, making it a comfortable corridor for walking. There are a number of intersections where this flow is disrupted because the crossings are very long, usually because N Willamette Blvd intersects with at an angle or because there are multiple streets intersecting in the same spot.*

Some intersections also have poor controls to ensure safe movement. Intersection simplification includes sidewalk extensions, sidewalk islands, paint, and stop signs to improve the experience of crossing difficult intersections.

**I-2.1-2.3 | INTERSECTION SIMPLIFICATION**

**SEGMENT 2 - N ROSA PARKS WAY TO N PORTSMOUTH AVE**

**BACKGROUND**

Along the bluff, N Willamette Blvd has three intersections where two streets connect with N Willamette Blvd in the same spot. Crossing distances at the intersection are between 100-120 feet. Recommendations for specific intersections vary based on the exact geometry of that space.

**RECOMMENDATION**

**N LIBERTY ST & N OATMAN AVE**

**I-2.1:** This recommendation creates a large sidewalk island inside the crossing. Two narrower crossings remain. Each is one-way, one for turning onto N Willamette Blvd, and one for turning off of N Willamette Blvd. Eastbound traffic on N Willamette Blvd will not be able to turn left onto N Liberty St or N Oatman Ave anymore.

**EQUITY**

**SAFETY & COMFORT**

**COMMUNITY INPUT**

**COST**
**RECOMMENDATION**  
N SARATOGA ST & N VINCENT AVE

**I-2.2:** This recommendation extends the sidewalk to create a standard crossing distance. All turning movements are preserved. Turning movement to and from N Vincent Ave and N Saratoga St is concentrated at one location.

---

**RECOMMENDATION**  
N OLIN ST & N HARVARD AVE

**I-2.3:** This intersection already has an island, but the crossing at N Olin Ave is still 120 feet long. The recommendation extends the island into N Olin Ave. All turning movements would be preserved at N Harvard St. N Olin Ave would only allow cars a right turn exit onto N Willamette Blvd.
The intersection at N Richmond Ave and N Willamette Blvd is currently a three way stop. South bound traffic on N Richmond Ave does not have to stop. Because the roadway moves downhill, cars tend to travel fast. This makes crossing N Richmond Ave to continue on N Willamette Blvd very difficult.

**RECOMMENDATION**

**I-4.1:** This recommendation adds a stop sign to southbound traffic on N Richmond Ave to make N Willamette Blvd and N Richmond Ave a four-way stop. Curb extensions and marked crosswalks improve pedestrian connections in the area.

"A poorly marked 3-way stop at an intersection is a bad idea. Make it a 4-way stop or add signage that makes protocol at the stop clear to all."

- Cathedral Park Resident
BACKGROUND

The intersection at N Burlington Ave has wide crossings. N Willamette Blvd approaches N Burlington Ave at an angle. The angle forces open the crossings across N Willamette Blvd and N Burlington Ave. The crossings are up to 90 feet.

“The intersection of Burlington and Willamette is very confusing to pedestrians and cars alike. Suggest crosswalk and/or a traffic circle. It’s dangerous, especially for visitors.”

- St. Johns Resident

RECOMMENDATION

I-4.2: This recommendation builds out the NW and SE corners of the intersection. The result is decreased crossing distances and tighter turns. Marked crossings across N Burlington Ave improve pedestrian connections in this area.

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The intersection of N Ida Ave and N Lombard St has far more bike and pedestrian crashes than any other spot along the North PDX Connected corridor. It was also frequently mentioned by Roosevelt High School students who regularly use it to get to school and to go to lunch. Making improvements to this intersection may be challenging because it is controlled by ODOT. The recommendations call on PBOT to improve what it can and formally request ODOT to make the improvements under its jurisdiction.

“Put in those flashing walk signs or put a yield that says to wait/watch for pedestrians.”

“More visible sign to prevent dangerous situation such (as) car crash and other direct situation.”

- Roosevelt High School Students
RECOMMENDATION
I-5.1 | SIGNAL PRIORITY & HIGH VISIBILITY CROSSWALKS

This recommendation gives pedestrians an early signal to reduce the chance that they will not be seen by someone turning in a vehicle. A high visibility crosswalk improves visibility of crossing.

Example of a high visibility crosswalk at N Portsmouth Ave at N Lombard St. | PHOTO: PACE

RECOMMENDATION
I-5.2 | CURB EXTENSION

This recommendation bumps out the curbs on the south side of N Lombard St where the eastbound lane is roughly twenty feet wide.

Example of a curb extension in Downtown Portland. | PHOTO: PACE
Throughout the outreach process, PACE Planning heard a number of concerns that cannot be fixed with crossings, roadway changes, diversion, or intersection simplification. Those concerns have been synthesized and presented along with recommendations to address them.

TRANSIT STATIONS

BACKGROUND

Many transit stations currently consist of a pole in the grass and nothing else. Transit riders have to stand in the mud and rain and in the dark as they wait for the bus. Many of these stations are not ADA accessible. A number of respondents mentioned bus station quality as a deterrent to using transit.

When transit islands are added between N Rosa Parks Way and N Portsmouth Ave, they will address some of these concerns. There are many other pole-in-the-ground transit stations along the corridor.

RECOMMENDATION

0-1 | ENHANCE TRANSIT STATIONS

This recommendation would ensure all transit stations:

- Are ADA accessible.
- Have a concrete landing pad so people do not have to stand in the mud.
- Have a minimum of a one-seat bench that attaches to the stop pole.

Where possible, this recommendation supports:

- Larger benches.
- Better lighting at bus stops.
- Some form of shelter.
LIGHTING

BACKGROUND
Multiple respondents mentioned that lighting is poor along the corridor. A number of people specifically mentioned poorly lit intersections where cars turning off of N Willamette Blvd do not see them as they cross. A focus group member complained of poor visibility at some of the bus stops.

The current lighting on the N Willamette Blvd corridor is provided by overhead cobra lamps only on one side of the street. From N Rosa Parks Way to the University of Portland, lighting is on the south bluff side of the street, leaving the sidewalks and intersections in the dark. West of University of Portland, lighting moves to the north side of the street.

SIDEWALK INFILL

BACKGROUND
N Ida Ave has sidewalks only on the east side of the street between N Willamette Blvd, and N Jersey St. N Ida Ave is classified as a Major City Walkway. It is a major connection for people in St. Johns, especially Roosevelt High School students, to walking, biking, and transit opportunities on N Willamette Blvd.

RECOMMENDATION: O-2 | PEDESTRIAN SCALE LIGHTING
This recommendation adds lower lights that are meant to illuminate sidewalks along the N Willamette Blvd corridor. When prioritizing installation, the following order should be used:
1) at crossings;
2) at other intersections;
3) at transit stops;
4) along the north side sidewalks between N Rosa Parks Way and N Olin Ave, and;
5) elsewhere along the corridor.

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RECOMMENDATION: O-3 | SIDEWALK INFILL
This recommendation would add a sidewalk on N Ida Ave between N Willamette Blvd and N Jersey St on the west side of the street. There is already existing curb space between the current curb and the property line. Sidewalk infill would not require allocating or acquiring any ROW.

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ADA CURB RAMPS

BACKGROUND
Sidewalks along N Willamette Blvd have curb ramps. PACE Planning was not able to evaluate whether or not the current curb ramps are compliant with ADA standards and requirements.

RECOMMENDATION: O-4 | ADA CURB RAMPS
This recommendation is to test the compliance of existing curb ramps against ADA standards and requirements. If existing curb ramps are not compliant, they should be fixed or replaced.

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The goals of North PDX Connected led PACE Planning to center equity in the outreach process and to offer infrastructure recommendations that support safety and comfort for all people, keeping in mind that different groups of people require different things to feel safe and comfortable. The goals also charge the plan to ensure equitable impacts.

**EQUITY DEFINITION**

A variety of definitions exist for the concept of social equity. PACE Planning finds it important to establish the definition by which the team operates. For PACE, equity means just and fair inclusion and distribution of resources such that all members of society have equitable opportunity to participate in public processes as well as equitable access to the resources and amenities necessary not only to survive, but to prosper. Equity efforts should not only seek to resolve present or future disparities but also to recognize and rectify historic injustices. With equity as a central focus for PACE Planning, the team seeks to promote a just and fair process and product, and to provide recommendations for other agencies to do the same.
PROCESS & OUTCOME

Communities of Color, low-income households, and youth have been underrepresented in public processes in the past and still today. Failure to include these populations has resulted in inequitable policy and development outcomes, with low-income households and people of color incurring disproportionate burdens of policy decisions and implementation while other groups enjoy disproportionate benefit. In some cases exclusion has been intentional. Other disparities result from well-meaning naivety or short-sightedness on the part of planners and policy-makers. The following recommendations are based on lessons learned from these past mistakes, strategies employed in other cities, and feedback from priority groups during the plan engagement.

INVESTMENT & DISPLACEMENT

Access to transportation options is crucial for communities affected by the spatial, and economic disparities present in Portland. With many low income households unable to afford a personal vehicle or fare for transit, active transportation can offer low-cost access to important services and opportunities. At the same time, transportation projects can make previously disinvested neighborhoods more desirable, fueling the gentrification of historically low-income neighborhoods and neighborhoods of color, and causing rents to rise rapidly. Many long-time residents are forced to move out of their neighborhoods. This widespread displacement of People of Color and low-income households not only breaks apart longstanding communities and exacerbates vulnerability among these residents, but it also means that public investments originally meant to serve those communities end up serving the wealthier newcomers.

RECOMMENDATIONS & IMPLEMENTATION

Public institutions and decision makers have power to mitigate and prevent some of the detrimental effects of gentrification and displacement through the policies, programs, and investments they create. In neighborhoods, cities, and regions experiencing the pressures of gentrification, decision-makers must prioritize social equity in every project, policy, and program. The following three sections outline practices that PACE Planning considers important for promoting equity through public engagement, investment and programming, and within agencies, followed by specific recommendations informed by findings from PACE Planning’s outreach process and review of case studies.

The recommendations in this section are intended to improve PBOT policies and programs to encourage more equitable processes and outcomes. Some recommendations focus on other agencies and offices such as TriMet or ONI, urging PBOT to use its influence and partnership to promote more equitable practices in agencies that directly affect its work. The recommendations are also intended as an advocacy tool for community members or organizations to promote equitable practices throughout the City. To that end, recommendations are written broadly so that advocates can promote such improvements at any public agency.
The underrepresentation of People of Color and those with low incomes in the planning process results from public entities failing to prioritize community engagement that includes and is meaningful to marginalized communities. Findings from PACE Planning’s engagement with such groups suggest that many low-income communities and People of Color in North Portland feel unconsidered by those making decisions about their neighborhoods, and feel helpless to do anything about it. Public actors must conduct accessible, welcoming, and culturally relevant outreach with these communities to ensure that those who already experience exclusion due to their race, low income, disability, or language are not further excluded from decisions that affect them.
RECOMMENDATIONS

The following recommendations provide an advocacy agenda for community members and organizations to promote improved community engagement by PBOT, in partnership with ONI and TriMet, and by other City bureaus.

PE-1 | MEASURE ENGAGEMENT AND INCLUSION
Measure and document the extent to which each project engages underrepresented and vulnerable populations, such as People of Color, people with low-incomes, victims or people at risk of displacement, and non-native English speakers. Measure engagement and inclusion before, during, and after project implementation.

PE-2 | STANDARDS FOR UNDERSTANDING
Institutionalize standards to ensure that public information and engagement activities do not require participants to understand technical concepts or jargon.

PE-3 | EXPANDING ENGAGEMENT STRATEGIES
Engage communities on their terms by expanding strategies beyond the traditional forums that often fail to engage vulnerable groups. This recommendation includes looking to successful case studies for examples and documenting results to allow for future use or improvement of the model.

PE-4 | COMMUNITY AMBASSADORS:
Build trust between public institutions and the communities they serve by staffing community ambassadors and liaisons dedicated to building and maintaining relationships with marginalized communities, such as People of Color, immigrants, and unhoused people. The assigned staff should be familiar with the community’s values, capture the community’s input about projects and issues, and provide community members with relevant information and resources.

PE-5 | NEIGHBORHOOD ASSOCIATION REQUIREMENTS
The Office of Neighborhood Involvement (ONI)*: Establish diversity and inclusion requirements for Neighborhood Associations and offers resources to bolster engagement with underrepresented groups.

PE-6 | TRIMET DRIVER REPORTING HOTLINE
TriMet: Clarify and advertise where people can call to comment on inappropriate bus operator behavior. Develop specific consequences for drivers that discriminate based on race, gender, age, or ability, such as mandatory equity trainings.

CASE STUDY: THE PEOPLE’S PLAN

The Portland African American Leadership Forum (PAALF) published The People’s Plan in 2017 after an extensive community engagement process with Portland’s African and African American communities.1 PAALF recognized that the technical nature of planning processes created an unwelcoming environment for many, reminding that “visioning for a healthy community is often difficult for communities that have been confronted by continuous barriers.” In an effort to alleviate this difficulty, researchers crafted a set of simple, accessible, and relatable questions that they asked to all participants. Some of the questions they asked included, “If Portland was a Utopia, what would the African-American community look like?” and “If you had to pick three priorities for People’s Plan to focus on, what would they be?”2 With this data set, PAALF was able to translate nuanced findings about over 400 Black community members’ experiences and aspirations into an equity agenda representative of the community’s goals. Engaging community members on their terms was key for ensuring that people were able and excited to participate, and that the resulting plan was influenced by the people it aims to serve.

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2 Ibid pg 119

* On July 1, 2018, ONI will change its name to the Office for Community and Civic Life.
In both of the focus groups held at Roosevelt High School, PACE Planning heard that North Portland is experiencing a rapid change in demographics and new development. These new changes cause many People of Color and low-income people to feel that they are no longer welcome in what was once their community, and that they soon will no longer be able to afford to live there.

Investment choices by the City affect neighborhood gentrification. Bureaus must be intentional and proactive about investing against displacement. Without tools in place to combat displacement, investments intended to benefit marginalized communities may end up, at best, serving the wealthier people who replace them, and at worse, contributing to their displacement. City bureaus should measure and respond to displacement risk in programming and investments to ensure they benefit current residents and do not create additional burdens.

Another criterion that should inform bureau decisions is the risk of displacement in a given neighborhood. The Gentrification and Displacement Study by Lisa Bates outlines methodology for determining a neighborhood's potential for gentrification and displacement based on demographic trends, housing market conditions, and other indicators of vulnerability. The study also matches anti-displacement policy tools to types of investment and stages of gentrification. Public actors must determine a neighborhood's displacement risk before making investment decisions and implement or champion the interventions necessary to prevent displacement.

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RECOMMENDATIONS

The following recommendations provide an advocacy agenda for community members and organizations to promote improved public investment by PBOT and other City bureaus.

PI-1 | NORTH PORTLAND IN MOTION
Advocate for a North Portland in Motion project similar to PBOT’s East Portland in Motion. Amend prioritization criteria to assign greater value to marginalized groups when weighting and aggregating variables.

PI-2 | INTEGRATING DISPLACEMENT RISK
Assess and respond to neighborhood displacement risk through methodology and tools outlined in the Bureau of Planning and Sustainability Gentrification and Displacement Study. Promote affordable housing and wealth-building solutions in vulnerable neighborhoods alongside infrastructure investments through partnerships with other public agencies.

PI-3 | IMPACT EVALUATION
Evaluate and document project impacts before and after implementation. The evaluation should include tracking a number of demographic factors of groups that are particularly vulnerable to displacement. The evaluation should produce recommendations for future anti-displacement tools based on which methodologies were more or less effective in the evaluated project.

CASE STUDY: EAST PORTLAND IN MOTION
PBOT’s 2012 East Portland in Motion project incorporated a set of ranking criteria that the bureau used to determine which locations should be prioritized for infrastructure investments. The criteria measured community support, transportation equity, accessibility, connectivity, and funding leverage. However, the researchers defined transportation equity based on the density of an area’s population, businesses, children, and zero-car households, as well as the density of low-income households and people of color. This categorization could be problematic because the first four variables may include wealthy white residents rather than measure people affected by systemic disparity. The prioritization criteria for accessibility also ranked projects based on the number of people served and compared that ranking with a list of projects that serve the most people in poverty. While not perfect, East Portland In Motion’s ranking criteria provide a helpful starting point for the type of criteria PBOT could use to prioritize equity in every project.

Public institutions can uphold systems of oppression when staff are not sufficiently representative of the marginalized populations they serve. A common idea among equity advocates is that the composition of public institutions and officials should roughly reflect the distribution of races, genders, and sexual orientation in the communities for whom they make decisions. Because Portland has a long history of excluding People of Color and immigrants, proportional representation of marginalized groups may not be sufficient to rectify decades of injustice. PACE Planning believes that an over-representation of People of Color in public institutions is necessary to achieve restorative justice and to ensure that agencies remain accountable to equity initiatives into the future.

PBOT’s Racial Equity Plan sets goals for hiring and training that aim to increase the representation of People of Color among staff and that promote bureau-wide understanding and commitment to equity. Anti-racism training for City workers was one suggestion that came up on multiple occasions during PACE Planning’s conversations with Students of Color at Roosevelt High School. Students reported feeling racially targeted by bus drivers and called for TriMet to conduct racial equity trainings for drivers. They suspected that bus drivers with less connection to Communities of Color were more likely to harbor racist sentiments and mistreat People of Color. The underrepresentation of People of Color within PBOT makes the organization susceptible to the same under-exposure that contributes to TriMet drivers’ alleged discrimination, and increases the risk of investment decisions that harm already vulnerable communities.
RECOMMENDATIONS

The following recommendations provide an advocacy agenda for community members and organizations to promote diversity, equity, and inclusion through hiring and training staff at PBOT and other City bureaus.

PT-1 | EQUITY TRAINING
Provide and mandate annual diversity and inclusion trainings for management and staff of public agencies, including PBOT and TriMet.

PT-2 | HIRE AND PROMOTE PEOPLE OF COLOR
Extend current goals for demographic representation within City bureaus to aim for overrepresentation of marginalized and vulnerable groups. Ensure that representation of people of color extends to higher positions within the bureau.

PT-3 | DEDICATED OPPORTUNITIES
Maintain and increase devotion of resources and staff time to providing professional training, internships, and shadowing opportunities dedicated to People of Color.

PT-4 | EQUITY COMMITTEE
Facilitate opportunities for City bureaus’ equity committees to learn from and cooperate with community-based organizations and members of marginalized groups who are not bureau staff.

PT-5 | PBOT’S RACIAL EQUITY PLAN
Evaluate staff and resources needed to carry out racial equity goals and commit to hiring necessary staff to implement Racial Equity Plans on time.

CASE STUDY: UNDERSTAND BARRIERS TO BIKING PROJECT

The Community Cycling Center’s Understanding Barriers to Biking Project, which identified factors keeping low-income people and People of Color from biking, encountered a serious barrier.5 The researches recognized that their lack of diversity and the lack of diversity among bicycle advocates in general would diminish their ability to understand perspectives that are most often excluded from decision-making processes. In response, they engaged a cultural competence consultant to help them fill this gap. Until an organization’s composition is at least representative of the marginalized populations it serves, intentional accommodations must be made to compensate.

Some of the recommendations presented can be carried out immediately, while some may need much more time before they can be implemented. Several factors affect the recommendation timeline.

**COST** has the greatest impact on project timeline. Inexpensive recommendations can be funded along with other projects or using discretionary funding. More expensive recommendations may require new budget allocations or applications for regional and federal funding. Applications for funding outside the City run on multi-year cycles and will add several years to a project’s implementation timeline.

More expensive materials or alterations to streetscape create the greatest cost burden for infrastructure projects. Policy and process recommendations that require additional staff will increase project costs.

**PLANNING PROCESSES** add time to project implementation. Simple recommendations may not require further planning and outreach beyond what was done for this plan. More complicated recommendations will likely require further planning, lengthening the project timeline.

**POLICY CHANGES**, especially changes that would affect the entire City of Portland or Bureau of Transportation, face significant legal and bureaucratic hurdles. Recommendations that create deeper and longer changes will take longer to implement.

Funding availability and political will is not predictable. Exact project implementation timelines are not realistic. Instead, projects are considered short-term or long-term depending on how the above factors affect the implementation process. To see phasing estimates for each recommendation, see the recommendations table in Appendix B.
**INFRASTRUCTURE RECOMMENDATIONS**

**SHORT TERM**
- ALL CROSSINGS, EXCEPT IN SEGMENT 2
- IN ROADWAY CHANGES FOR SEGMENTS 1, 3, AND 5, AND FOR SUBSEGMENT 4.1
- ALL DIVERTERS - PILOTS
- INTERSECTION SIMPLIFICATION - SIGNAGE AND LIGHTING
- BIKE LANE MAINTENANCE
- BASIC TRIMET STATION IMPROVEMENTS (PENDING DECISIONS ON CONSOLIDATION)

**LONG TERM**
- SEGMENT 2 CROSSINGS
- IN ROADWAY CHANGES FOR SEGMENT 2 AND SUBSEGMENT 4.2
- ALL DIVERTERS - FINAL VERSIONS
- INTERSECTION SIMPLIFICATION - SIDEWALK EXTENSIONS AND ISLANDS
- LIGHTING IMPROVEMENTS
- HIGH END TRIMET STATION IMPROVEMENTS
- SIDEWALK INFILL
- ADA CURB RAMPS

**POLICY AND PROGRAM RECOMMENDATIONS**

**SHORT TERM (INITIAL IMPLEMENTATION)**
- ENGAGEMENT STANDARDS AND EVALUATION
- TRIMET REPORTING HOTLINE
- INTEGRATING DISPLACEMENT RISK AND EVALUATION
- TRAINING RECOMMENDATIONS
- EXPANDING THE EQUITY COMMITTEE

**LONG TERM**
- EXPANDING ENGAGEMENT
- COMMUNITY AMBASSADORS
- NEIGHBORHOOD ASSOCIATION REQUIREMENTS
- NORTH PORTLAND IN MOTION
- HIRING RECOMMENDATIONS
North PDX Connected provides a first step toward creating a safe, accessible, and enjoyable connection along N Willamette Blvd for communities moving within and through the North Portland peninsula. It envisions a place where anyone wishing to walk, bike, use a wheelchair, or take transit are able to do so. People can commute to work, go to school, reach the grocery store, visit the park, or simply enjoy the natural scenery of the bluff and North Portland’s neighborhood charm.

This is a future in which young people, People of Color, elderly folks, and people with wheelchairs or other mobility needs can use the corridor without difficulty crossing the street, clashes with people using different modes of travel, fear of being struck by a vehicle, or discrimination from bus operators. People with lower incomes who may struggle to afford a personal vehicle will enjoy a greater array of higher quality mobility opportunities.
Increases in safety and comfort for active transportation options will reduce the number of cars driving through the peninsula. Everyone will benefit from cleaner air and quieter streets, on top of improved safety. Diversion from neighborhood streets will reopen those spaces for recreation, play, and other means of community connection and interaction. Commitment and action by City bureaus will ensure that implementation is led by communities through equitable and inclusive engagement processes. Equitable hiring and training practices in City bureaus will allow underrepresented communities to feel reflected and valued by the institutions that serve them.

Future investments will be vetted to mitigate against displacement so that the communities living here today will be able to enjoy the improvements in their neighborhoods for years to come. North PDX Connected seeks a future North Portland where low-income households and Communities of Color can remain in their homes and communities, can afford the goods and services in their area, and have access to a variety of transportation options that meet their needs.
APPENDIX

- A: GLOSSARY
- B: LIST OF RECOMMENDATIONS
- C: SURVEY INSTRUMENT
APPENDIX A | GLOSSARY OF TERMS

ACTIVE TRANSPORTATION - human powered transportation, most commonly walking, biking, accessing transit.

AMERICANS WITH DISABILITIES ACT (ADA) - a civil rights law passed in 1990 that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public.

AVERAGE DAILY TRIPS (ADT) - the average number of cars that travel through an area in a given day.

BIKE LANE - a portion of the street or sidewalk that is dedicated for bicycle riding.

BIKE LANE, BUFFERED - a bike lane with a painted buffer that creates additional spatial separation between the person riding a bicycle and moving traffic.

BIKE LANE, PAINTED - a bike lane on the street with a painted line to separate the person riding a bike from moving traffic.

BIKE LANE, PROTECTED - an on-street bike lane that has some physical object to separate the person biking from moving traffic. Examples of physical protection include parked cars, plastic bollards, concrete curbs, and planters.

BIKE LANE, TWO-WAY - two bike lanes the run in opposite directions but are placed on one side of the street.

COLUMBIA VILLA - see New Columbia

CROSSWALK - an area that is marked to call attention to the fact that pedestrians have a right of way when crossing the street.

DISPLACEMENT - a process by which rising housing prices and redevelopment make it impossible for low-income individuals or a community to remain in the neighborhood.

GENTRIFICATION - a process of renovation of deteriorated urban neighborhoods by means of the influx of more affluent residents and/or new investments. Gentrification often leads to higher housing costs, causing displacement.

EQUITY - just and fair inclusion and distribution of resources such that all members of society have equitable opportunity to participate in public processes as well as equitable access to the resources and amenities necessary not only to survive, but to prosper.

INTERSECTION SIMPLIFICATION - adjustments to intersections that reduce crossing distances, remove turning movements, control travel, or otherwise make it easier for people walking to navigate the intersection.

DIVERTER - an object that blocks certain traffic movements in order to direct traffic appropriately.
LEVEL OF TRAFFIC STRESS (LTS) - a measure developed by Peter Furth of Northeastern University that measures how stressful it is to ride a bike on a given street. LTS depends on the number and speed of cars, as well as on the level of physical separation between cars and cyclists.

MULTI-USE PATH - a path that is usually unstriped that is open for walking, biking, and other forms of active travel.

NEW COLUMBIA - a mixed-income housing development in North Portland. It was originally Columbia Villa. It was rebuilt with Hope VI funding in 2005 and called New Columbia.

NORTH PORTLAND - A “quadrant” of Portland that includes the area bordered by the Columbia River, the Willamette River, and N Williams Ave.

NORTH PORTLAND LAND USE GROUP (NPLUG) - a committee of NPNS that gathers land-use and transportation representatives from North Portland neighborhoods. NPLUG hears proposals and provides input on land-use and transportation changes in North Portland.

NORTH PORTLAND NEIGHBORHOOD SERVICES (NPNS) - works with grassroots organizations and community building projects that engage residents in the 11 NPNS neighborhoods. NPNS is one of seven regional neighborhood offices funded by the City of Portland Office of Neighborhood Involvement.

NORTH PORTLAND PENINSULA - North Portland extends as a peninsula into the confluence of the Columbia River and Willamette River. As a result, much of the North Portland grid is very narrow in the north-south direction. The peninsula generally refers to the narrower portion and may refer to all of North Portland, everything west of N Interstate Ave, or only everything west of N Greeley Ave.
GLOSSARY OF TERMS (CONTINUED)

OFFICE OF NEIGHBORHOOD INVOLVEMENT (ONI) - serves as a communication link between community members, neighborhoods, and City of Portland bureaus. ONI works in partnership with many organizations including Neighborhood Associations, District Coalitions, Business District Associations, City agencies, and a wide range of community organizations to involve and inform the public in the civic life of the City.

OREGON DEPARTMENT OF TRANSPORTATION (ODOT) - develops programs related to Oregon’s system of highways, roads, bridges, railways, public transportation services, transportation safety programs, driver and vehicle licensing, and motor carrier regulation. ODOT has jurisdiction over a number of roads in Portland and over certain policies, such as setting speed limits.

PEDESTRIAN ISLAND - a concrete island in the middle of a crossing. It allows pedestrians to stop mid crossing and to only cross one lane of traffic at a time.

PLANTING STRIP - the area between the sidewalk and the curb, when that area has soil, grass, trees, bushes, or other plant life.

PORTLAND BUREAU OF TRANSPORTATION (PBOT) - maintains the $8.4 billion investments in infrastructure facilities from streets and structures to traffic signals and street lights in the city of Portland.

RAPID RECTANGULAR FLASHING BEACON (RRFB) - a flashing yellow light that is push activated. It warns people driving that a pedestrian is trying to cross the street so that they can yield.

RIGHT OF WAY (ROW) - the area between tax lots, owned by PBOT. The ROW includes the roadway, on-street parking, the sidewalk, and the planting strip.

SHARRY - a pavement marking of a bicycle and a chevron. Sharrows inform people biking that they should ride in mixed traffic and warn people driving that bikes ride in the middle of the road on these streets.

STREET CLASSIFICATION - how a street is defined within a plan or by a transportation agency. Street classifications set expectations for speeds and volumes, but can also indicate expected safety and comfort while walking, biking, or accessing transit, and access for emergency vehicles.

TRAFFIC SIGNAL - also called a traffic light or a stop light. A traffic signal is the classic red-yellow-green signal that tells people using the roadway when to go and when to stop. Traffic signals may also include special lights, such as protected left turns.
**TRANSIT** - also public transportation, includes buses, streetcar, light rail, and any other transportation service that moves large numbers of people and is open to the public. Transit in Portland is managed by TriMet (except for the Portland Streetcar.)

**TRANSIT ISLAND** - a concrete area that serves as a transit stop which has some type of moving traffic on both sides, often vehicles on one side and bikes on the other.

**TRANSPORTATION SYSTEMS PLAN (TSP)** - the long-range plan to guide transportation investments in Portland. The TSP addresses local transportation needs for cost-effective street, transit, freight, bicycle, and pedestrian improvements. The most recent TSP draft was approved in Portland on May 24th, 2018.

**TRIMET** - also Tri-County Metropolitan Transportation District of Oregon, is the regional public transportation agency that owns and operates transit services in the greater Portland metro region.

**VANPORT, OREGON** - a city built in current day North Portland along the Columbia River to house workers for the Kaiser Shipyards during WWII. Vanport flooded in 1948, completely destroying the city and displacing nearly 20,000 people, many of whom resettled in North Portland.

**WILLAMETTE CORRIDOR MOBILITY COMMITTEE (WCMC)** - formed as a collection of transportation representatives from North Portland Neighborhood Associations. WCMC is dedicated to addressing transportation challenges in North Portland around the N Willamette Blvd corridor. It is currently exploring reforming and associating the the NPLUG to address broader transportation issues in North Portland.
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<td>N Wall Ave &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>81</td>
</tr>
<tr>
<td>C-3.3</td>
<td>Marked crossing</td>
<td>N Macrum Ave &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>80</td>
</tr>
<tr>
<td>C-3.4</td>
<td>Marked crossing</td>
<td>N Carey Blvd &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>80</td>
</tr>
<tr>
<td>C-4.1</td>
<td>Pedestrian island</td>
<td>N Ida Ave, N Alma Ave, &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>82</td>
</tr>
<tr>
<td>C-4.2</td>
<td>Pedestrian island</td>
<td>N Edgewater Ave &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>83</td>
</tr>
<tr>
<td>C-4.3</td>
<td>Marked crossing</td>
<td>N Tyler Ave &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>80</td>
</tr>
<tr>
<td>C-4.4</td>
<td>Marked crossing</td>
<td>N Mohawk Ave &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>80</td>
</tr>
<tr>
<td>C-4.5</td>
<td>Marked crossing</td>
<td>N Richmond Ave &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>80</td>
</tr>
<tr>
<td>C-4.6</td>
<td>Marked crossing</td>
<td>N Burlington Ave &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>80</td>
</tr>
<tr>
<td>C-5.1</td>
<td>Marked crossing</td>
<td>N Princeton St &amp; N Ida Ave</td>
<td>Short-term</td>
<td>80</td>
</tr>
<tr>
<td>C-5.2</td>
<td>Marked crossing</td>
<td>N Jersey St &amp; N Ida Ave</td>
<td>Short-term</td>
<td>80</td>
</tr>
<tr>
<td>C-5.3</td>
<td>Marked crossing</td>
<td>N Central St &amp; N Ida Ave</td>
<td>Short-term</td>
<td>80</td>
</tr>
<tr>
<td>C-5.4</td>
<td>Marked crossing</td>
<td>N Jersey St &amp; N Buchanan Ave</td>
<td>Short-term</td>
<td>80</td>
</tr>
</tbody>
</table>
## INFRASTRUCTURE | IN ROADWAY

<table>
<thead>
<tr>
<th>ID</th>
<th>RECOMMENDATION</th>
<th>LOCATION</th>
<th>PHASING</th>
<th>PAGE #</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-1</td>
<td>Neighborhood greenway</td>
<td>N Interstate Ave to N Rosa Parks Way along N Willamette Blvd</td>
<td>Short-term</td>
<td>87</td>
</tr>
<tr>
<td>R-2</td>
<td>Protected two-way bike lane</td>
<td>N Rosa Parks Way to N Portsmouth Ave along N Willamette Blvd</td>
<td>Long-term</td>
<td>92</td>
</tr>
<tr>
<td>R-3.1</td>
<td>No change</td>
<td>N Portsmouth Ave to N Carey Ave along N Willamette Blvd</td>
<td>NA</td>
<td>98</td>
</tr>
<tr>
<td>R-3.2</td>
<td>Protected bike lanes</td>
<td>Railroad bridge between N Carey Ave and N Ida Ave</td>
<td>Short-term</td>
<td>99</td>
</tr>
<tr>
<td>R-4.1</td>
<td>Painted bike lanes</td>
<td>N Ida Ave to N Pierce Ave along N Willamette Blvd</td>
<td>Short-term</td>
<td>101</td>
</tr>
<tr>
<td>R-4.2</td>
<td>Buffered bike lane</td>
<td>N Pierce Ave to N Richmond Ave along N Willamette Blvd</td>
<td>Long-term</td>
<td>101</td>
</tr>
<tr>
<td>R-5</td>
<td>Buffered and protected bike lanes</td>
<td>N Willamette Blvd to N Lombard St along N Ida Ave</td>
<td>Short-term</td>
<td>103</td>
</tr>
</tbody>
</table>

## INFRASTRUCTURE | THROUGH TRAFFIC DIVERSION

<table>
<thead>
<tr>
<th>ID</th>
<th>RECOMMENDATION</th>
<th>LOCATION</th>
<th>PHASING</th>
<th>PAGE #</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-1</td>
<td>Half closure</td>
<td>N Willamette Blvd east of N Villard Ave</td>
<td>Short-term</td>
<td>106</td>
</tr>
<tr>
<td>D-4.1</td>
<td>Half closure</td>
<td>N Burlington Ave south of N Syracuse St</td>
<td>Short-term</td>
<td>108</td>
</tr>
<tr>
<td>D-4.2</td>
<td>Half closure</td>
<td>N Willamette Blvd west of N Burlington Ave</td>
<td>Short-term</td>
<td>108</td>
</tr>
</tbody>
</table>


### LIST OF RECOMMENDATIONS (CONTINUED)

#### INFRASTRUCTURE | INTERSECTION SIMPLIFICATION

<table>
<thead>
<tr>
<th>ID</th>
<th>RECOMMENDATION</th>
<th>LOCATION</th>
<th>PHASING</th>
<th>PAGE #</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-2.1</td>
<td>Sidewalk island</td>
<td>N Liberty St, N Oatman Ave, &amp; N Willamette Blvd</td>
<td>Long-term</td>
<td>110</td>
</tr>
<tr>
<td>I-2.2</td>
<td>Sidewalk extension</td>
<td>N Saratoga St, N Vincent Ave, &amp; N Willamette Blvd</td>
<td>Long-term</td>
<td>110</td>
</tr>
<tr>
<td>I-2.3</td>
<td>Sidewalk island</td>
<td>N Olin St, N Harvard Ave, &amp; N Willamette Blvd</td>
<td>Long-term</td>
<td>110</td>
</tr>
<tr>
<td>I-4.1</td>
<td>Stop sign and curb extension</td>
<td>N Richmond Ave &amp; N Willamette Blvd</td>
<td>Short-term</td>
<td>12</td>
</tr>
<tr>
<td>I-4.2</td>
<td>Sidewalk extension</td>
<td>N Burlington Ave &amp; N Willamette Blvd</td>
<td>Long-term</td>
<td>113</td>
</tr>
<tr>
<td>I-5.1</td>
<td>Signal priority</td>
<td>N Ida Ave &amp; N Lombard St</td>
<td>Short-term</td>
<td>114</td>
</tr>
<tr>
<td>I-5.2</td>
<td>Curb extension</td>
<td>N Ida Ave &amp; N Lombard St</td>
<td>Long-term</td>
<td>114</td>
</tr>
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</table>

#### INFRASTRUCTURE | OTHER AMENITIES

<table>
<thead>
<tr>
<th>ID</th>
<th>RECOMMENDATION</th>
<th>LOCATION</th>
<th>PHASING</th>
<th>PAGE #</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-1</td>
<td>Transit stations</td>
<td>Entire corridor</td>
<td>Long-term</td>
<td>116</td>
</tr>
<tr>
<td>O-2</td>
<td>Lighting</td>
<td>Entire corridor</td>
<td>Long-term</td>
<td>117</td>
</tr>
<tr>
<td>O-3</td>
<td>Sidewalk infill</td>
<td>N Willamette Blvd to N Jersey St along N Ida Ave</td>
<td>Long-term</td>
<td>117</td>
</tr>
<tr>
<td>O-4</td>
<td>ADA curb ramps</td>
<td>Entire corridor</td>
<td>Long-term</td>
<td>117</td>
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</tbody>
</table>
## POLICY & PROCESS | ENGAGEMENT

<table>
<thead>
<tr>
<th>ID</th>
<th>RECOMMENDATION</th>
<th>LOCATION</th>
<th>PHASING</th>
<th>PAGE #</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-1</td>
<td>Measure engagement and inclusion</td>
<td>PBOT Racial Equity Plan</td>
<td>Short-term</td>
<td>121</td>
</tr>
<tr>
<td>PE-2</td>
<td>Standards for understanding</td>
<td>PBOT Racial Equity Plan</td>
<td>Short-term</td>
<td>121</td>
</tr>
<tr>
<td>PE-3</td>
<td>Expanding engagement strategies</td>
<td>PBOT Racial Equity Plan</td>
<td>Long-term</td>
<td>121</td>
</tr>
<tr>
<td>PE-4</td>
<td>Community ambassadors</td>
<td>PBOT Racial Equity Plan</td>
<td>Long-term</td>
<td>121</td>
</tr>
<tr>
<td>PE-5</td>
<td>Neighborhood Association Requirements</td>
<td>Office of Neighborhood Involvement</td>
<td>Long-term</td>
<td>121</td>
</tr>
<tr>
<td>PE-6</td>
<td>TriMet driver reporting hotline</td>
<td>TriMet</td>
<td>Short-term</td>
<td>121</td>
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</tbody>
</table>

## POLICY & PROCESS | INVESTMENT

<table>
<thead>
<tr>
<th>ID</th>
<th>RECOMMENDATION</th>
<th>LOCATION</th>
<th>PHASING</th>
<th>PAGE #</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI-1</td>
<td>North Portland in Motion</td>
<td>PBOT</td>
<td>Long-term</td>
<td>123</td>
</tr>
<tr>
<td>PI-2</td>
<td>Integrating displacement risk</td>
<td>PBOT</td>
<td>Short-term</td>
<td>123</td>
</tr>
<tr>
<td>PI-3</td>
<td>Displacement evaluation</td>
<td>PBOT Racial Equity Plan</td>
<td>Short-term</td>
<td>123</td>
</tr>
</tbody>
</table>

## POLICY & PROCESS | TRAINING & HIRING

<table>
<thead>
<tr>
<th>ID</th>
<th>RECOMMENDATION</th>
<th>LOCATION</th>
<th>PHASING</th>
<th>PAGE #</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-1</td>
<td>Equity training</td>
<td>All City Bureaus</td>
<td>Short-term</td>
<td>125</td>
</tr>
<tr>
<td>PT-2</td>
<td>Hire and promote People of Color</td>
<td>PBOT</td>
<td>Long-term</td>
<td>125</td>
</tr>
<tr>
<td>PT-3</td>
<td>Dedicated opportunities</td>
<td>PBOT</td>
<td>Long-term</td>
<td>125</td>
</tr>
<tr>
<td>PT-4</td>
<td>Equity committee</td>
<td>PBOT</td>
<td>Short-term</td>
<td>125</td>
</tr>
<tr>
<td>PT-5</td>
<td>PBOT's racial equity plan</td>
<td>PBOT</td>
<td>Long-term</td>
<td>125</td>
</tr>
</tbody>
</table>
APPENDIX C | SURVEY INSTRUMENT

North PDX Connected

The goal of this survey is to understand the perspectives of people who use N Willamette Blvd and surrounding streets. Your input will help us create an plan to improve safety and access for people walking, biking, rolling, and taking transit along the corridor. The survey takes about 5-10 minutes to complete and is anonymous. You may skip any question that you prefer not to answer. Thank you for sharing with us!

About us: We are a team of students in Portland State University’s Master of Urban and Regional Planning program. We are completing this project for a local client, the Willamette Corridor Mobility Coalition.

1. What is your connection to N Willamette Blvd?
   • I live very close (within 1/4 mile).
   • I live nearby (1/4 mile - 1 mile).
   • I live in the area (more than 1 mile away).
   • I do not live here, but I come to this area often (at least once a week).
   • I do not live here, and I do not visit often (less than once per week).
   • Other: _______________________________________

2. We would like to know more about how you typically get around North Portland. How many times do you use the following methods to travel in North Portland?

<table>
<thead>
<tr>
<th>Method</th>
<th>Never</th>
<th>1-3 times per month</th>
<th>1-3 times per week</th>
<th>4+ times per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Use a wheelchair</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Ride a bicycle</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Ride a skateboard, rollerblades/skates, or something similar</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Drive a motorized scooter or motorcycle</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Drive or ride in a car</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Ride the bus or MAX</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
3. Do the following conditions discourage or prevent you from walking or using a wheelchair along N Willamette Blvd?

<table>
<thead>
<tr>
<th>Condition</th>
<th>No, this is not a barrier</th>
<th>Yes, this is a small barrier</th>
<th>Yes, this is a major barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersections are missing curb ramps/not ADA accessible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidewalks or walking infrastructure are in bad condition (buckled, uneven, other tripping hazards)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough sidewalks or other walking infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There aren’t (enough) safe ways to cross streets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t feel safe/protected from motor vehicles (like cars, buses)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too much noise and/or pollution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of streetlights or other lighting at night</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No destinations within walking distance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weather (like rain, snow, wind)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Do the following conditions discourage or prevent you from biking along N Willamette Blvd?

<table>
<thead>
<tr>
<th>Condition</th>
<th>No, this is not a barrier</th>
<th>Yes, this is a small barrier</th>
<th>Yes, this is a major barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of bike lanes, or poor quality bike lanes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There aren't (enough) safe places to cross streets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don't feel safe/protected from motor vehicles (e.g. not enough separation from traffic)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too much noise and/or pollution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough streetlights or other lighting at night</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don't have my own bicycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can't/don't know how to ride a bicycle.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weather (like rain, snow, wind)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Please list any specific locations of problems along N Willamette Blvd that discourage or prevent you from walking, biking, or using a wheelchair. Include any issues that we have not already mentioned, as well as problems on streets surrounding N Willamette Blvd.

6. Would the following solutions make you more likely to walk or use a wheelchair along N Willamette Blvd?

<table>
<thead>
<tr>
<th>Solution</th>
<th>No more likely</th>
<th>A little more likely</th>
<th>Much more likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building or improving sidewalks on N Willamette Blvd</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Building or improving sidewalks on connecting/nearby neighborhood streets</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Walking lanes protected from traffic by planter boxes, curb stops, or other separation</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Slower vehicle traffic</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Signals, crosswalks, or other improvements to help pedestrians cross the street</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Better lighting</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Art and landscaping along walkways</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Other - Please explain</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
7. Would the following solutions make you more likely to bike along N Willamette Blvd?

<table>
<thead>
<tr>
<th>Solution</th>
<th>No more likely</th>
<th>A little more likely</th>
<th>Much more likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>More painted bike lanes on busy streets</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>More or better connections with other bike routes</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Bike lanes protected from traffic by parked cars, bollards (vertical posts), or other separation</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Slower vehicle traffic</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Bike crossings</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Better lighting</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Clear pavement markings and signs</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Better road conditions such as smooth pavement or lack of potholes</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Other - Please explain</td>
<td>(10)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. North Portland Neighborhood Services is a partner on this project. What neighborhood do you live in?

- Arbor lodge
- Bridgeton
- Cathedral Park
- East Columbia
- Hayden Island
- Kenton
- Piedmont
- Overlook
- Portsmouth
- St. Johns
- University Park
- Other: N/NE Portland
- Other: SE Portland
- Other: NW Portland
- Other: Other
- Prefer not to respond

9. What is your gender?

- Female
- Male
- Non-binary
- Other
- Prefer not to respond

10. How old are you?

- 0-17 years old
- 18-24 years old
- 25-44 years old
- 45-64 years old
- 65-80 years old
- 80+ years old

11. What is your current housing situation?

- Owner
- Renter
- Doubled up (staying with a friend or family)
- Unsheltered
- Other
- Prefer not to respond

12. Do you have access to a motorized vehicle (car, truck, motorcycle, etc)?

- Yes, I have my own personal vehicle.
- I sometimes have access to a vehicle owned by family or friends.
- No, I do not have access to any vehicle.
- Other / Prefer not to answer

13. What is your race, ethnicity, or cultural identity? Select all that apply.

- African
- Asian or Pacific Islander
- Black or African American
- Hispanic or Latino
- Native American, Alaskan Native, or American Indian
- Slavic
- White or Caucasian
- Middle Eastern
- Other (please specify)

14. Tell us about yourself. Select all that apply.

- My household makes less than 50% of the area median income less than $26,150 for a one-person household less than $29,900 for two people less than $37,350 for four people.
- English is not my first language.
- I am a first-generation immigrant or refugee (I moved here from a different country).
- I have one or more disabilities: _____
- Other: _____

15. Is there anything else you would like to share about how we can improve N Willamette Blvd and surrounding streets?

____________________________________________________

16. If you want to learn more about the project, join in on conversations or events, or stay updated about our progress, share your email below to be added to our mailing list. You may also contact us through our website, NorthPDXConnected.com.

____________________________________________________
REFERENCES

• https://www.portlandoregon.gov/bps/article/454027

• https://www.portlandoregon.gov/transportation/article/664432

Community Cycling Center. (2012). *Understanding Barriers to Bicycling Project*.

• http://www.northeastern.edu/peter.furth/criteria-for-level-of-traffic-stress/

• https://www.portlandoregon.gov/transportation/article/264746

• https://oregonencyclopedia.org/articles/columbia_villa_new_columbia_/#.WxhNQO4vxpg


• Retrieved from http://www.policylink.org/

• Retrieved from https://www.paalf.org/paalf-peoples-plan/

• Retrieved from https://www.portlandoregon.gov/bps/index.cfm?a=58586

• Retrieved from https://www.portlandoregon.gov/transportation/article/391907

• Retrieved from https://www.portlandoregon.gov/transportation/index.cfm?c=72504

• Retrieved from https://www.portlandoregon.gov/transportation/article/289122

• Retrieved from https://www.portlandoregon.gov/transportation/article/674220