NORTH PORTLAND IN MOTION

EXISTING CONDITIONS ATLAS

PBOT
PORTLAND BUREAU OF TRANSPORTATION

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VOL. 1 - FALL 2021

PBOT

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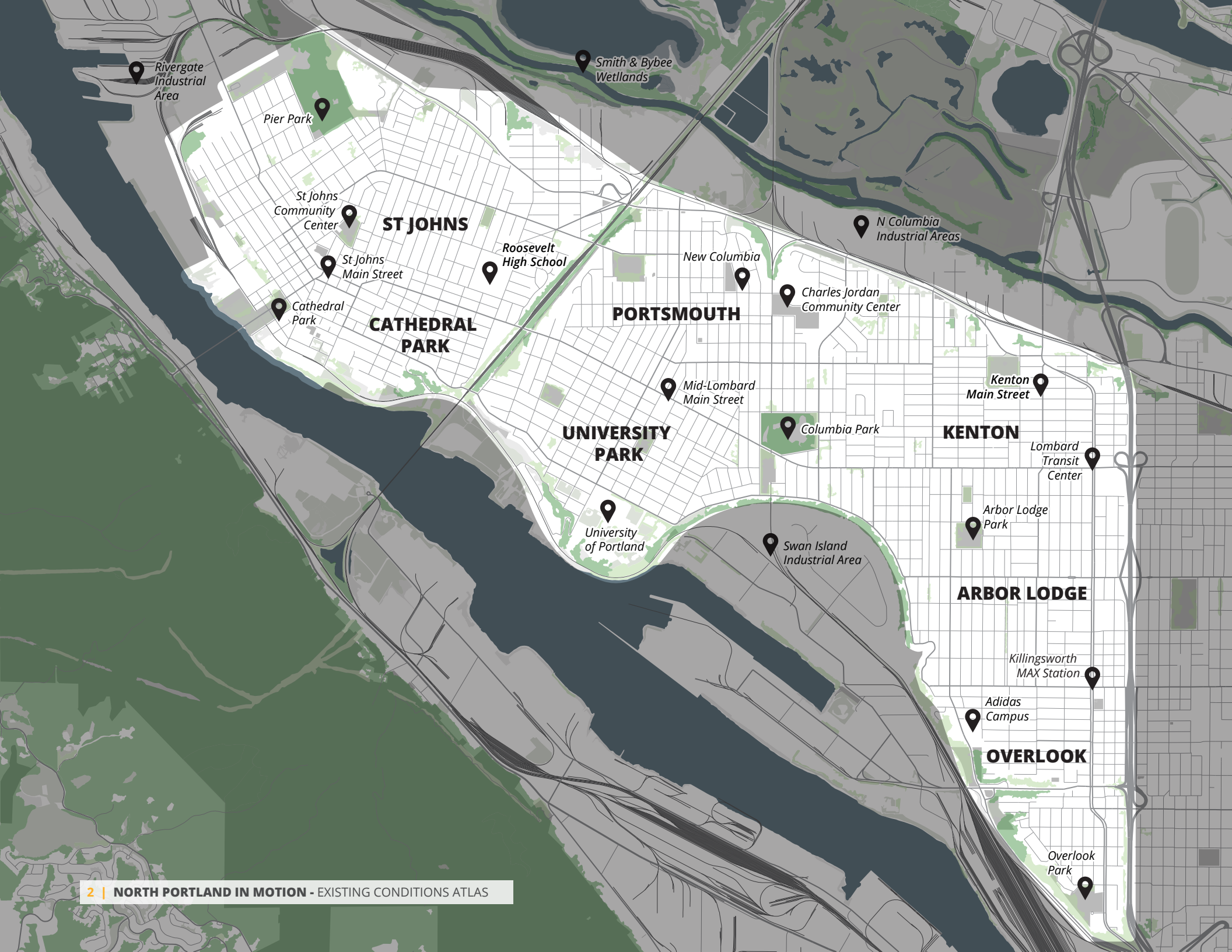
I. Introduction & Plan Context

The Portland Bureau of Transportation (PBOT) recognizes that North Portland is long overdue for a community-driven transportation plan. We've heard for many years from people who live and work in North Portland that there is a lack of attention and investment in the transportation system in the North Portland peninsula.

Long transit travel times, an incomplete and insufficient biking network, unpaved streets and sidewalk gaps, and a lack of safe, accessible crossings pose challenges for North Portlanders in meeting their daily mobility needs. Many have shared that they feel that the neighborhoods served by this plan lack a complete and community-supported vision for transportation investments, especially in the areas further into the peninsula.

This plan is an opportunity to convene the greater North Portland community to identify shared priorities and key opportunities for new investments to support better access to important places within the peninsula as well as better connections to Northeast Portland and the Central City.

Through North Portland in Motion, PBOT will:

- Engage deeply with North Portlanders to understand transportation needs and barriers to meeting daily mobility needs.

- Identify a near-term prioritized investment strategy of projects and programs to improve conditions for walking, biking, and transit.

- Build new relationships with community-based organizations to represent the diverse neighborhoods and communities within North Portland.

Rivergate Industrial Area

Smith & Bybee Wetlands

Pier Park

St Johns Community Center

ST JOHNS

St Johns Main Street

Roosevelt High School

N Columbia Industrial Areas

New Columbia

Charles Jordan Community Center

PORTSMOUTH

Cathedral Park

CATHEDRAL PARK

Mid-Lombard Main Street

Kenton Main Street

Columbia Park

KENTON

UNIVERSITY PARK

Lombard Transit Center

Arbor Lodge Park

University of Portland

Swan Island Industrial Area

ARBOR LODGE

Killingsworth MAX Station

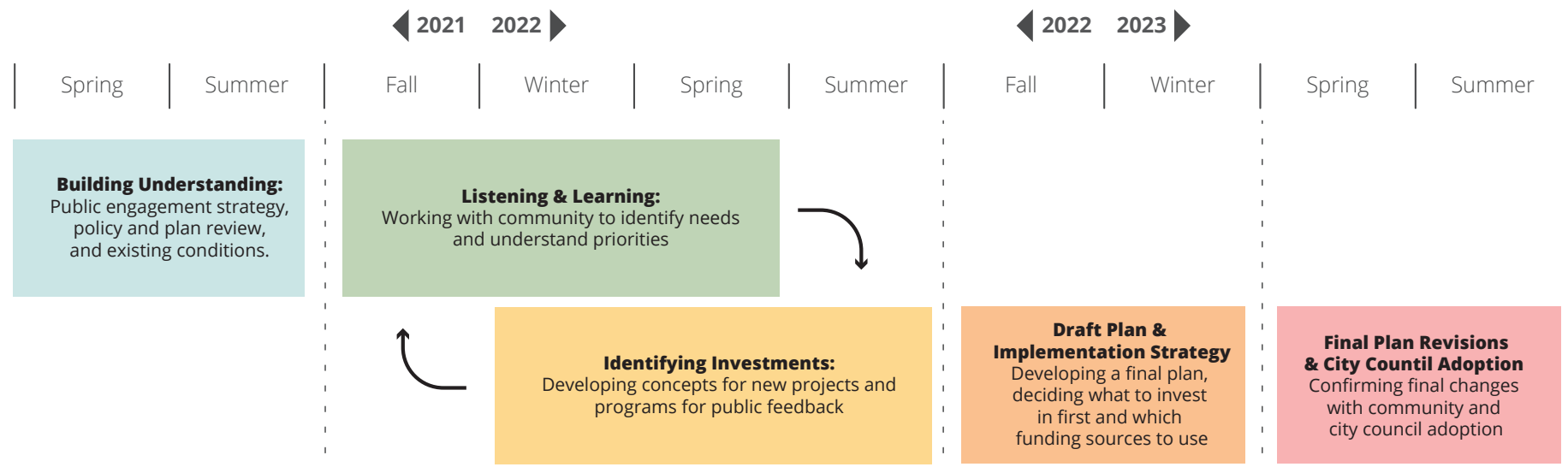Adidas Campus

OVERLOOK

Overlook Park

Study Area

North Portland in Motion will focus on the residential and commercial areas of North Portland west of Interstate 5. The North Portland in Motion study area is defined by both natural and human-made edges, including rivers, bluffs, highways, railroads, and industrial areas. The study area is home to seven neighborhoods, each with a unique and strong civic identity.

Project Timeline

The project timeline is just over two years, ending in the early spring of 2021, with an anticipated final plan appearing before City Council in the first half of 2023. PBOT is deeply invested in elevating voices from North Portland's diverse communities, especially those who may have historically been not represented. The community will be engaged throughout the project timeline through a Community Advisory Group, partnerships with several Community Based Organizations, focus groups and workshops, online and in-person open houses, neighborhood walks and rides, and consultation with Neighborhood Associations and other civic organizations.

◄ **2021 2022** ►   ◄ **2022 2023** ►

| Spring | Summer | Fall | Winter | Spring | Summer | Fall | Winter | Spring | Summer |

Building Understanding:
Public engagement strategy, policy and plan review, and existing conditions.

Listening & Learning:
Working with community to identify needs and understand priorities

Identifying Investments:
Developing concepts for new projects and programs for public feedback

Draft Plan & Implementation Strategy
Developing a final plan, deciding what to invest in first and which funding sources to use

Final Plan Revisions & City Countil Adoption
Confirming final changes with community and city council adoption

II. People & Place

This atlas begins with a focus on the people and places of the North Portland Peninsula. This chapter intends to illustrate the racial, linguistic, and economic diversity of the people who call the North Portland home.

With a deep focus on equity, this analysis seeks to build a better understanding of the current status and recent trends of key demographics indicators. This will provide a better foundation for engaging with the public as we seek to understand the address the priorities of North Portlanders through the North Portland in Motion planning process.
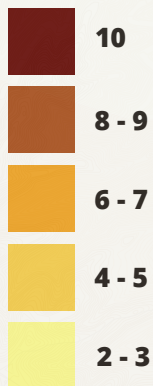
The second half of this chapter seeks to represent important places and community destinations within the study area as well as provide a general overview of the land-use regulations currently in place.
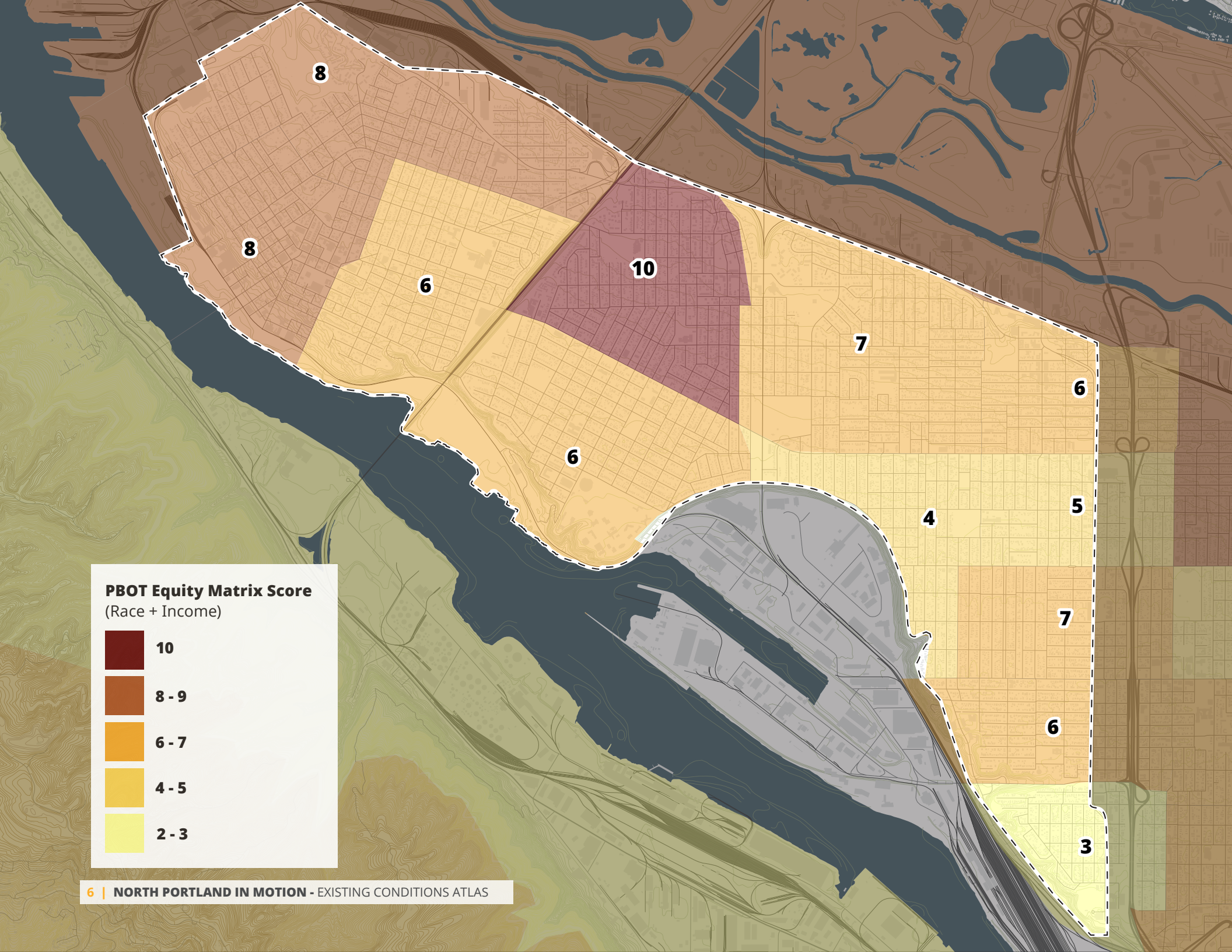
PBOT Equity Matrix Score
(Race + Income)

- 10
- 8 - 9
- 6 - 7
- 4 - 5
- 2 - 3

Study Area Demographics

The North Portland in Motion study area is home to just over 60,000 residents, representing just under 10% of the City of Portland as a whole. There are just under 23,000 households and a median household income that roughly tracks with the city as a whole. There are a slightly higher share of people living in poverty and as a whole, the study area is more racially diverse than the rest of Portland.

Equity Matrix

PBOT uses a simple ranking index called an Equity Matrix to help make decisions on projects and programs. This map uses data on race, ethnicity, and income to apply a score to census tracts.
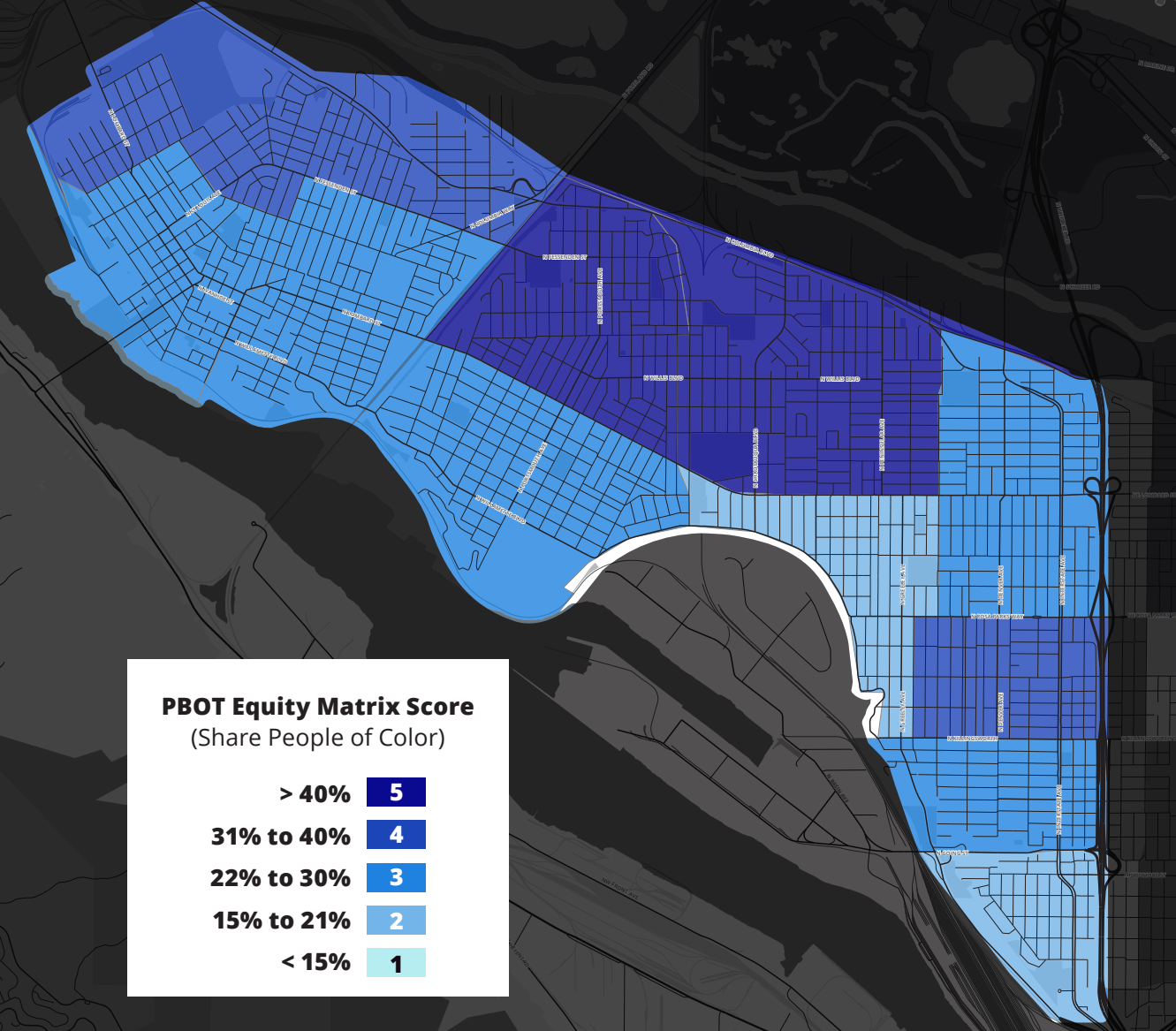
Within the North Portland Study Area, the Portsmouth neighborhood and the upper section St Johns emerge as areas that rank higher on this composite index. Both of this areas are home to larger affordable housing developments as well as higher shares of people who identify as a non-white and/or of Hispanic/Latino origin.

On the following pages, the specific racial and household income statistics are broken out in more detail for further analysis and discussion.

Population Characteristics	Study Area	City of Portland
Total Population	60,500	642,800
Total Households	22,900	266,600
Median Household Income	$65,500	$65,740
Share of Families in Poverty	14.9%	13.4%
People of Color	33.3%	29.3%

Race/Ethnicity	Study Area	City of Portland
Black	8.3%	5.8%
Native American	<1%	<1%
Asian	4.2%	8.1%
Pacific Islander	<1%	<1%
Another Race	1.6%	1.9%
Multiracial	6.5%	5.3%
Hispanic	14.0%	9.8%
Non-Hispanic White	66.7%	70.7%

Age Characteristics	Study Area	City of Portland
Share under 18	19.0%	17.8%
Share 18-29	21.0%	17.7%
Share 30-64	51.2%	51.6%
Share over 64	8.7%	12.8%

Race & Ethnicity

As a whole, the North Portland in Motion study area is more racially diverse with a higher share of Black, Indigenous, and Residents of Color than the City of Portland as a whole.

The Portsmouth neighborhood is the most racially diverse area on the peninsula, and is one of the most racially diverse areas in State of Oregon with less than 50% of residents identifying as non-Hispanic White. The neighborhoods north of N Lombard St and in the northern section of St Johns tend to more racially diverse as well.

PBOT Equity Matrix Score
(Share People of Color)

> 40%	5
31% to 40%	4
22% to 30%	3
15% to 21%	2
< 15%	1

Arbor Lodge (North)
Kenton (East)
Arbor Lodge & Overlook (West)
Overlook (North)
Kenton (West)
Portsmouth
Overlook (South)
SJ / CP (East)
SJ / CP (West)
St Johns (North)
University Park
Arbor Lodge (South)

15%   25%   35%   45%   55%
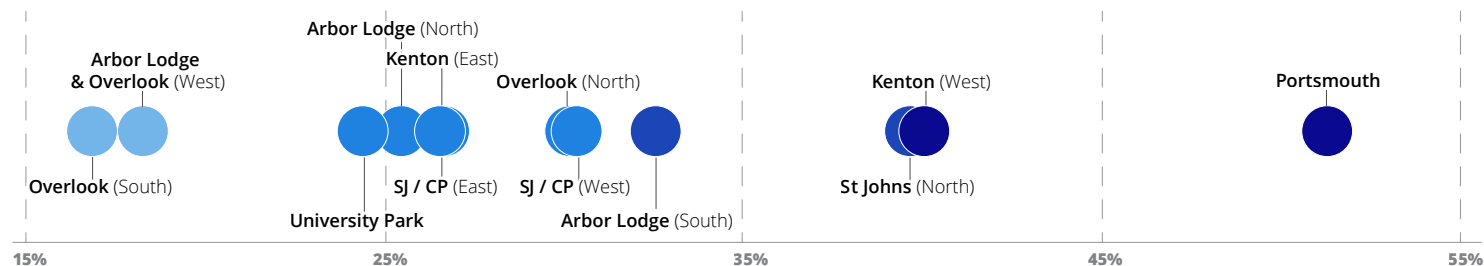
Household Income

Generally, household incomes in the North Portland in Motion study area tend to range between $60,000-$80,000 annually.
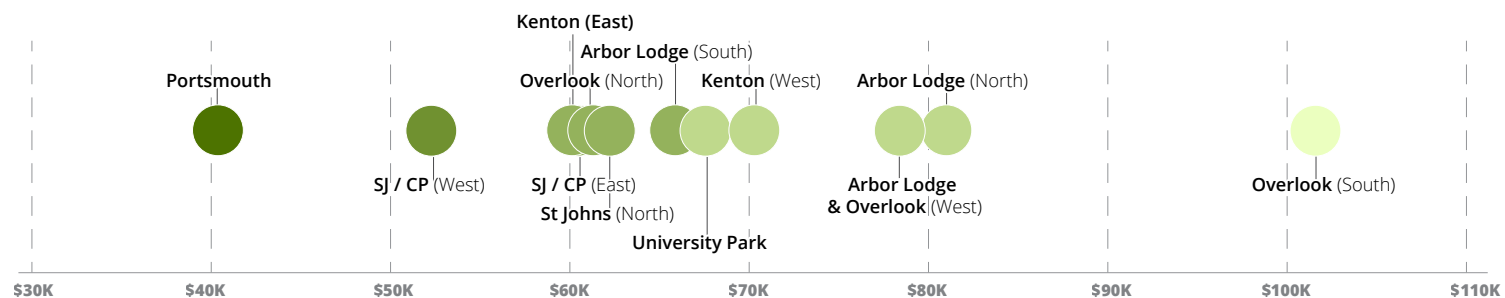
Household incomes are lowest in the western side of the Portsmouth neighborhood at just over $40,000. This neighborhood is home to New Columbia, the state's largest affordable housing development.

On the other end of the spectrum, the lower section over the Overlook neighborhood south of N Going St is where median household incomes are highest, at just over $100,000.
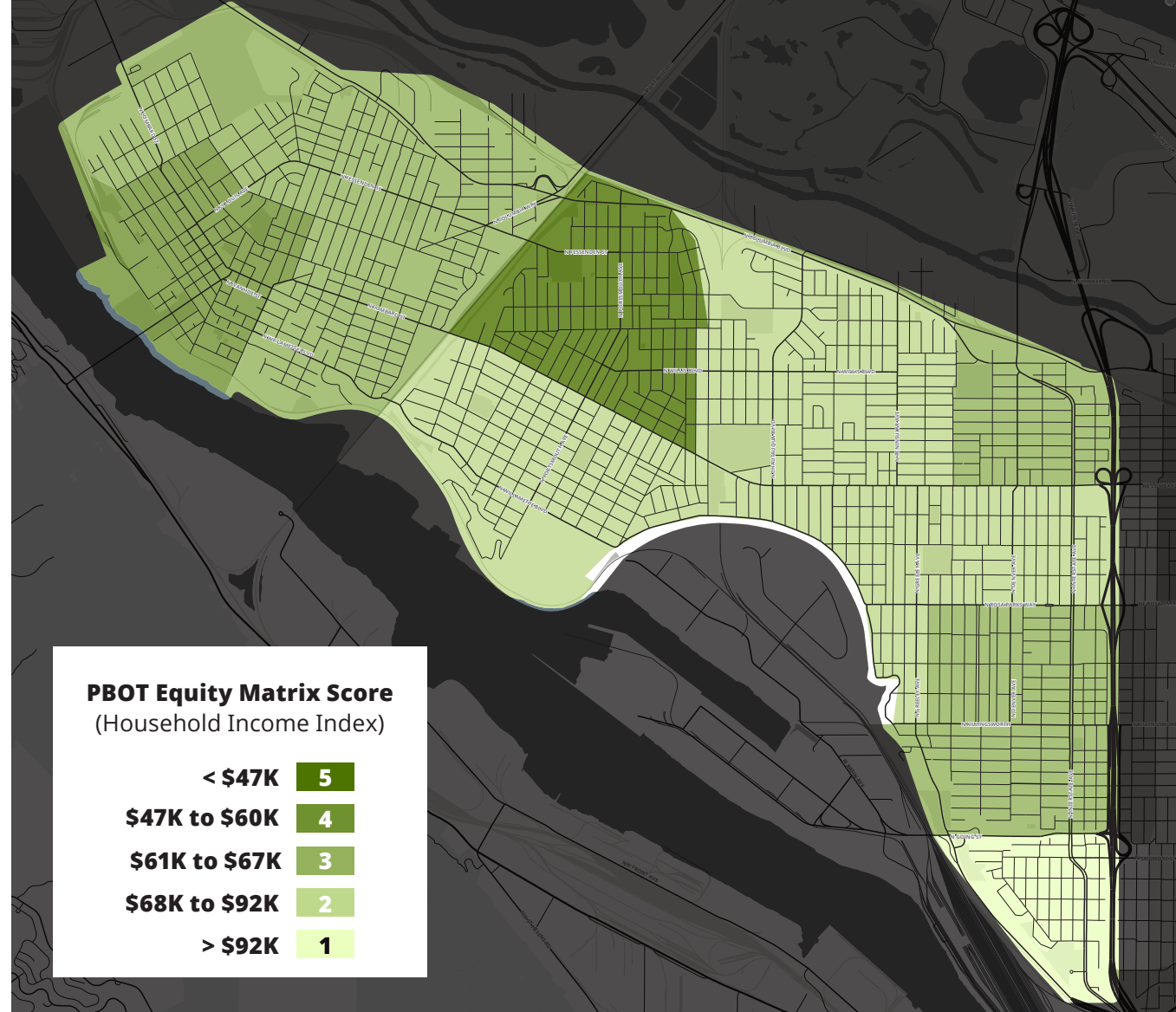
PBOT Equity Matrix Score
(Household Income Index)

< $47K	**5**
$47K to $60K	**4**
$61K to $67K	**3**
$68K to $92K	**2**
> $92K	**1**

Portsmouth

SJ / CP (West)

Kenton (East)
Arbor Lodge (South)
Overlook (North)
Kenton (West)

SJ / CP (East)
St Johns (North)
University Park

Arbor Lodge (North)
Arbor Lodge & Overlook (West)

Overlook (South)

$30K $40K $50K $60K $70K $80K $90K $100K $110K

Language Spoken at Home

More than 4 out of 5 households speak English at home, which is just slightly higher than the citywide average. The second most common language spoken at home is Spanish, representing just over 10% of households.

LANGUAGE SPOKEN AT HOME	Study Area	City of Portland
English	82.8%	81.1%
Spanish	10.1%	6.9%
European and Slavic Languages	2.5%	4.2%
Asian & Pacific Islander Languages	2.3%	6.7%
Other Languages	2.3%	1.1%

Source: US Census Bureau, 2019 American Community Survey 5-year estimate

Disability Status

Roughly 11% of people who live in North Portland live with a disability, which is comparable to the citywide average.

DISABILITY STATUS	Study Area	City of Portland
No Disability	89.1%	87.9%
Living with a Disability	10.9%	12.1%

Source: US Census Bureau, 2019 American Community Survey 5-year estimate

Educational Attainment

As of 2019, the educational attainment of people living within the study area is similar to the city of Portland as a whole. There is a similar trend towards a rapid increase of residents who have attained a Bachelor's degree or higher, though the rate of change is more pronounced in North Portland.

EDUCATIONAL ATTAINMENT	Study Area		City of Portland	
	2014	2019	2014	2019
Less than High School diploma	11%	▼ 8%	9%	▼ 8%
High School diploma	18%	▼ 16%	17%	▼ 15%
Some college or associate's degree	33%	▼ 27%	30%	▼ 27%
Bachelor's degree	38%	▲ 49%	44%	▲ 50%

Source: US Census Bureau, 2019 American Community Survey 5-year estimate

House Tenure and Cost Burden

The project area has a slightly greater share of homeowners than renters than the city overall. While only 1 in 4 owner-occupied household's housing costs exceed more than 30% of their total household income, the rate is nearly double for rented occupied households.
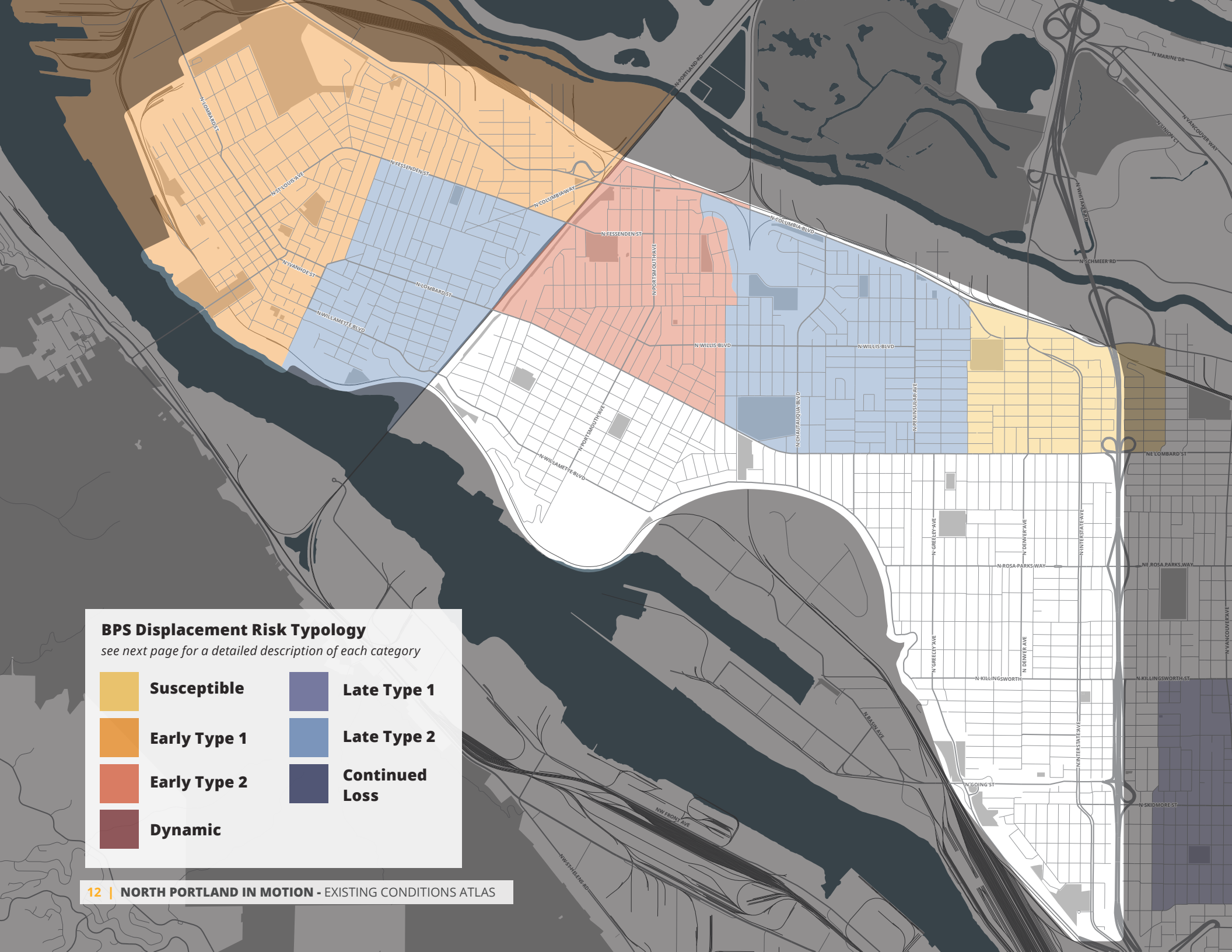
HOUSING TENURE	Study Area	City of Portland
Owners	59.2%	53.4%
Renters	40.8%	46.6%

Source: US Census Bureau, 2019 American Community Survey 5-year estimate

COST BURDEN	Owners	Renters
Less than 20%	53.2%	23.7%
20%-29%	22.0%	26.7%
30% or more	24.5%	45.2%

Source: US Census Bureau, 2019 American Community Survey 5-year estimate

BPS Displacement Risk Typology

see next page for a detailed description of each category

- Susceptible
- Early Type 1
- Early Type 2
- Dynamic
- Late Type 1
- Late Type 2
- Continued Loss

Residential Displacement Risk

EARLY-STAGE GENTRIFICATION: These neighborhoods are not yet gentrifying or are showing early signs that they could be gentrifying.

◼ **Susceptible:** These neighborhoods have higher shares of vulnerable populations but have not yet experienced demographic changes. Their housing market is low or moderate, but they are adjacent to tracts whose values are already high or are increasing rapidly.

◼ **Early: Type 1:** These neighborhoods have higher shares of vulnerable populations but have not yet experienced demographic changes. Their housing market is still low or moderate but has experienced high appreciation since 2008 (or 2012 for rents).

◼ **Early: Type 2:** These neighborhoods have higher shares of vulnerable populations but have experienced demographic changes whereby they are losing vulnerable populations proportionally. Their housing market is low or moderate, but they are adjacent to tracts whose values are already high or are increasing rapidly.

MID-STAGE GENTRIFICATION

◼ **Dynamic:** These neighborhoods are currently undergoing gentrification. They have higher shares of vulnerable populations but have experienced demographic changes by losing vulnerable populations proportionally. Their housing market is still low or moderate but has experienced high appreciation since 2008 (or 2012 for rents)

LATE-STAGE GENTRIFICATION: These neighborhoods have mostly gentrified but vulnerable populations may still reside in there. The housing market has completely shifted from low or moderate to high value.

◼ **Late: Type 1:** These neighborhoods have higher shares of vulnerable populations but have experienced demographic changes by losing vulnerable populations proportionally. Their housing market used to be low or moderate in 2000 but has appreciated rapidly since, and now values are high.

◼ **Late: Type 2:** A new typology in 2018, these neighborhoods no longer have high shares of vulnerable populations like they used to in 2000 or in 2006-10. They have experienced demographic changes by losing their once-high share of vulnerable populations. Their housing market is still low or moderate but has experienced high appreciation since 2008 (or 2012 for rents).

◼ **Continued loss:** These neighborhoods no longer have high shares of vulnerable populations like they used to in 2000 or in 2006-10. The share of white people is growing and/or the share of people with a four-year degree is growing. Their housing market used to be low or moderate in 2000 but has appreciated rapidly since, and now values are high

NORTH PORTLAND CONTEXT

In the North Portland in Motion Study Area, there are multiple neighborhoods that are identified using this methodology - each at different stages and exhibiting different indicators of change or displacement risk.

In the Portsmouth and the northern section of St Johns & Cathedral Park, there are higher shares of vulnerable residents with varying levels of displacement.

In the central St Johns area and western Kenton area, there has already been significant displacement of vulnerable residents and housing costs are continuing to rise at a rapid rate.

PLACES & DESTINATIONS

Town Center

Neighborhood Center

Schools & Universities

Parks

New Columbia

Pier Park

St Johns Community Center

St Johns Main Street

Cathedral Park

Roosevelt High School

New Columbia

Charles Jordan Community Center

Mid-Lombard Main Street

Columbia Park

Kenton Main Street

Lombard Transit Center

Arbor Lodge Park

University of Portland

Killingsworth MAX Station

Adidas Campus

Overlook Park

Places & Land Use

North Portland is home a rich mix of diverse places, ranging from neighborhood main streets, to large public parks, to areas of employment and higher education, to the largest affordable housing development in the state of Oregon.

To better understand the places and destinations that are most important to North Portlanders, this atlas categorizes these places into three broad categories of "everyday places", which are highlighted in the following pages.

Places of Community, Learning, and Health
- Schools & Libraries
- Grocery Stores
- Community Centers

Places of Recreation & Nature
- Public Parks
- Natural Areas

Places of Commerce & Activity, and Connection
- Main Streets
- Employment Areas
- Mixed Use Areas

St Johns Main Street

New Columbia Bicycle Skills HUB

Swan Island below the Willamette Bluffs

Kenton Main Street

Sitton K-5

George Middle School

El Compadre

St Johns Community Center

James John K-5

St Johns Library

Tienda Santa Cruz

Roosevelt High School

Safeway

Grocery Outlet

Fred Meyer

Clarendon Early Learning Center

Village Market

Rosa Parks K-5

Charles Jordan Community Center

New Seasons

Cesar Chavez K-8

Peninsula K-5

Kenton Library

Astor K-8

Green Zebra

De La Salle High School

Fred Meyer

Chief Joseph K-5

University of Portland

New Season's

Ockley Green Middle School

EVERYDAY PLACES:

Places of Community, Learning, and Health

⊙ **LIBRARIES**

⊙ **COMMUNITY CENTERS**

⊙ **SCHOOLS / UNIVERSITIES**

⊙ **GROCERY STORES / MARKETS**

Roosevelt High School

Charles Jordan Community Center

University of Portland

St Johns Community Center

Smith & Bybee
Natural Area

Pier
Park

Baltimore
Woods

St Johns
City Park

George
Park

Cathedral
Park

Northgate
Park

McCoy
Park

University
Park

Trenton
Park

Peninsula
Crossing Trail

Kenton
Park

Willamette
Cove

Arbor Lodge
Park

Columbia
Park

Arbor Lodge
Park

Forest Park

Willamette
Bluffs

Arbor Lodge
Park

Dog Bowl

Madrona
Hill

Skidmore
Bluffs

Overlook
Park

Places of Recreation & Nature

Pier Park

Cathedral Park

Columbia Park

Arbor Lodge Park

Pier Park

St Johns
Community Center

St Johns
Main Street

Roosevelt
High School

New Columbia

Charles Jordan
Community Center

Cathedral
Park

Mid-Lombard
Main Street

Kenton
Main Street

Columbia Park

Lombard
Transit
Center

University
of Portland

Arbor Lodge
Park

Killingsworth
MAX Station

Adidas
Campus

Overlook
Park
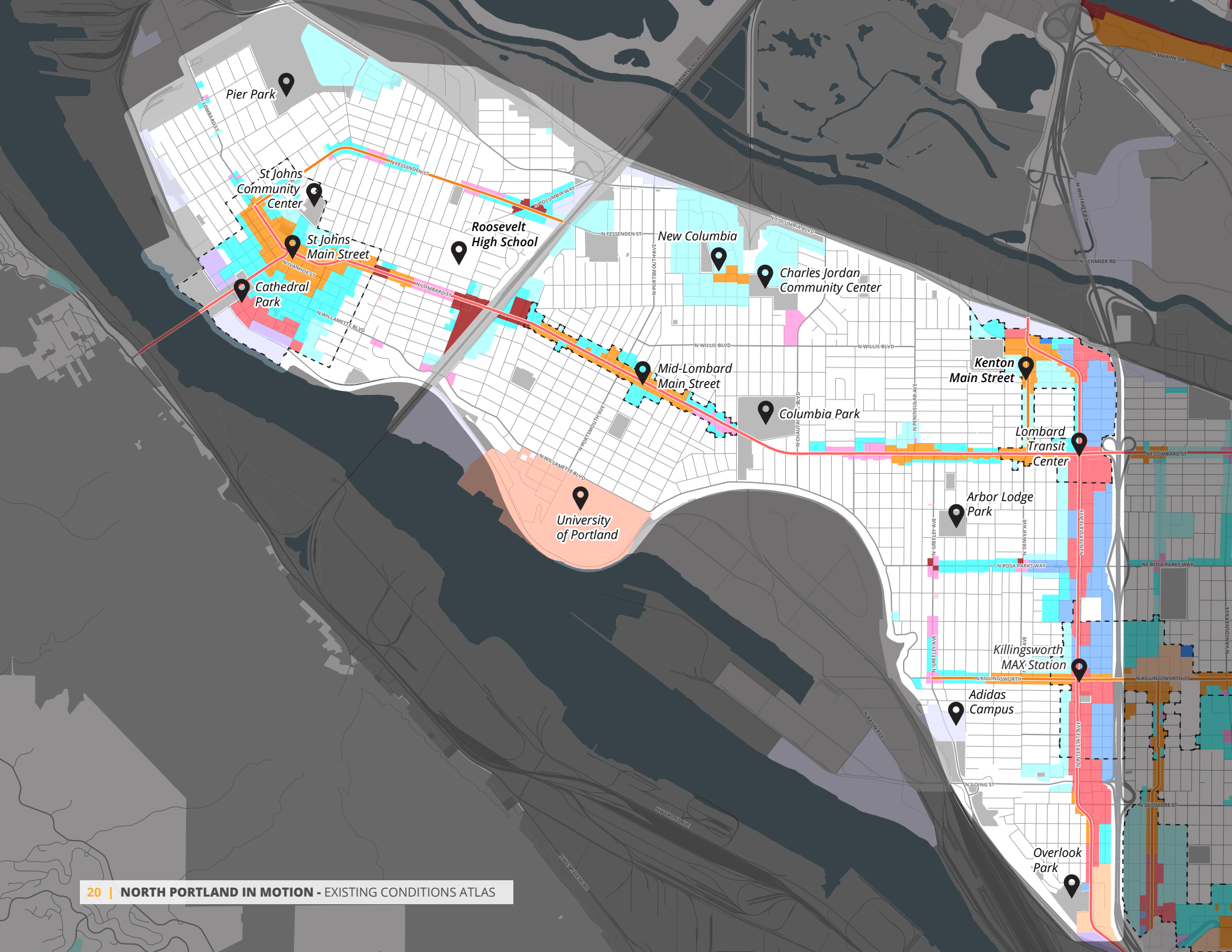
EVERYDAY PLACES:

Places of Commerce & Activity, and Connection
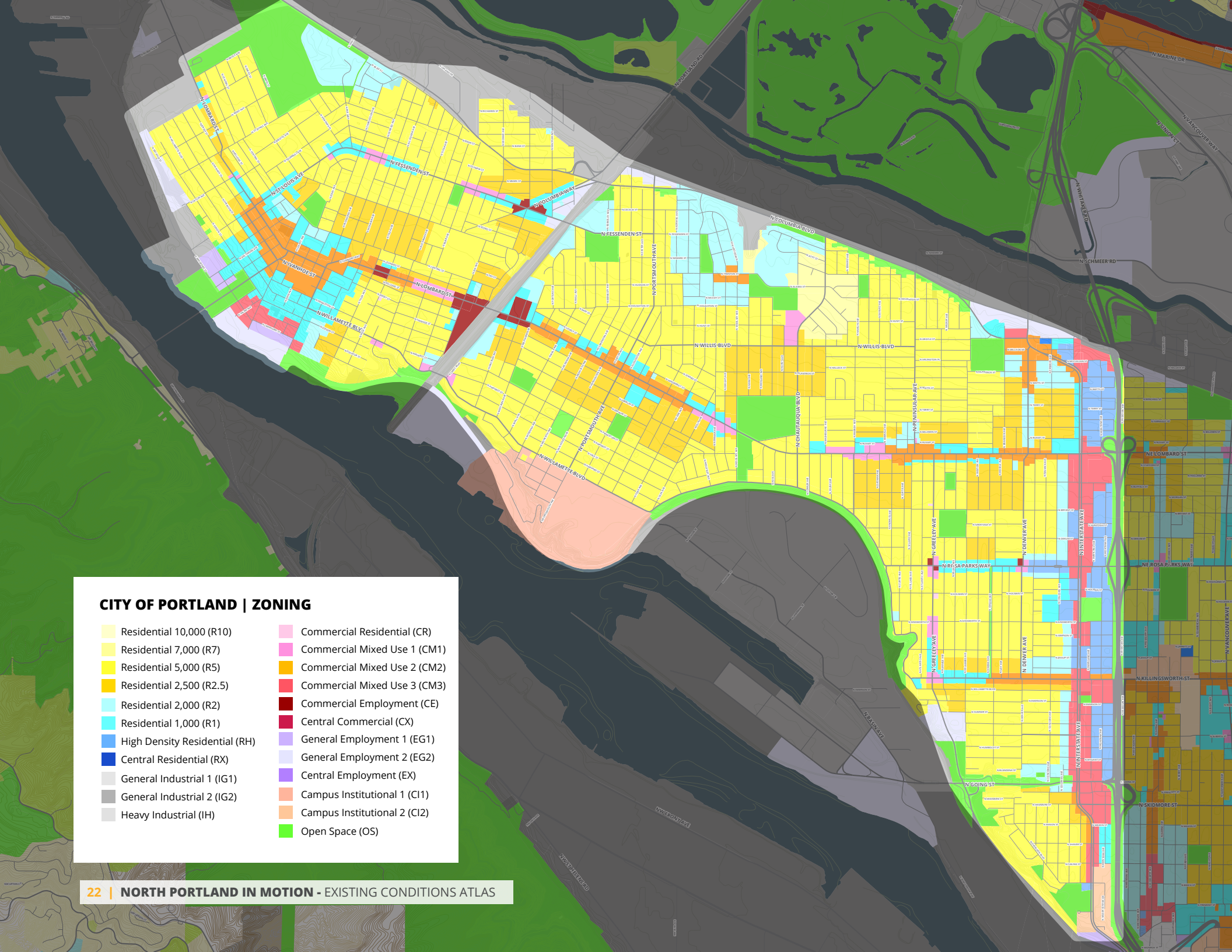
CITY OF PORTLAND | ZONING

- Residential 10,000 (R10)
- Residential 7,000 (R7)
- Residential 5,000 (R5)
- Residential 2,500 (R2.5)
- Residential 2,000 (R2)
- Residential 1,000 (R1)
- High Density Residential (RH)
- Central Residential (RX)
- General Industrial 1 (IG1)
- General Industrial 2 (IG2)
- Heavy Industrial (IH)
- Commercial Residential (CR)
- Commercial Mixed Use 1 (CM1)
- Commercial Mixed Use 2 (CM2)
- Commercial Mixed Use 3 (CM3)
- Commercial Employment (CE)
- Central Commercial (CX)
- General Employment 1 (EG1)
- General Employment 2 (EG2)
- Central Employment (EX)
- Campus Institutional 1 (CI1)
- Campus Institutional 2 (CI2)
- Open Space (OS)

Current Zoning

Current Nearly half of the study area's land is single-dwelling zoning, interspersed with corridors and nodes of commercial, employment, and mixed use areas. This table shows the percentage of the study area's land in various zoning categories and generalized development characteristics.

- The most predominant single dwelling zone in the area is R5, with the small-lot R2.5 zone mapped in areas directly adjacent to the area's major corridors..

- Multi-dwelling zoning and commercial/mixed-use zoning is located predominantly in the peninsula's busier corridors served by frequent transit and in neighborhood/town centers. Corridors zoned for higher intensity uses include N Interstate, N Lombard, and the N Killingsworth Main Street area in the Overlook neighborhood. In addition to these corridors, there is clusters of mixed-use and multi-family zoning in the Kenton and St Johns Main Street areas and in the greater New Columbia area of Portsmouth.

- Employment and industrial zoning surrounds the study area on the north, west, and southern edges with small clusters of industrial uses within the study area in the Cathedral Park & St Johns waterfront and along the N Columbia Blvd corridor.

STUDY AREA ZONING BREAKDOWN

Zoning	% of area	Predominant development
Single dwelling	**49.7%**	
R2.5	9.7%	Houses or attached houses, typically on 2,500 SF lots, duplexes
R5	38.9%	Houses, typically on 5,000 SF lots, corner duplexes
R7	1.1%	Houses, typically on 7,000 SF lots
Multi-dwelling	**12.7%**	
RM1	6.2%	Multi-dwelling development, typically 2-3 stories
RM2	4.2%	Multi-dwelling development, typically 3-4 stories
RM3	2.3%	Multi-dwelling development, typically 3-6 stories
Commercial/mixed use	**7.1%**	
CM1	1.1%	Commercial and/or multi-dwelling development up to 3 stories
CM2	3.0%	Commercial and/or multi-dwelling development up to 4 stories
CM3	2.7%	Commercial and/or multi-dwelling development up to 6 stories
CE	0.5%	Auto-oriented commercial and/or multi-dwelling development
Employment	**4.1%**	
EG1	0.4%	Employment or light industrial on small properties
EG2	3.7%	Employment or light industrial on larger properties
Industrial	**10.1%**	
IG2	9.8%	Industrial uses on larger properties
IH	0.3%	Heavy industrial uses, manufacturing, warehousing, railroad
Open space	**11.6%**	**Typically parks and other public open space**
Institutional	**4.8%**	**Educational or medical campus**
Total	**100%**	

COMPREHENSIVE PLAN DESIGNATIONS

- Single-Dwelling 10,000
- Single-Dwelling 7,000
- Single-Dwelling 5,000
- Single-Dwelling 2,500
- Multi-Dwelling 2,000
- Multi-Dwelling 1,000
- High Density Multi-Dwelling
- Central Residential
- Institutional Campus
- Mixed Use – Dispersed
- Mixed Use – Neighborhood
- Mixed Use – Civic Corridor
- Mixed Use – Urban Center
- Central Commercial
- Central Employment
- Mixed Employment
- Industrial Sanctuary
- Open Space
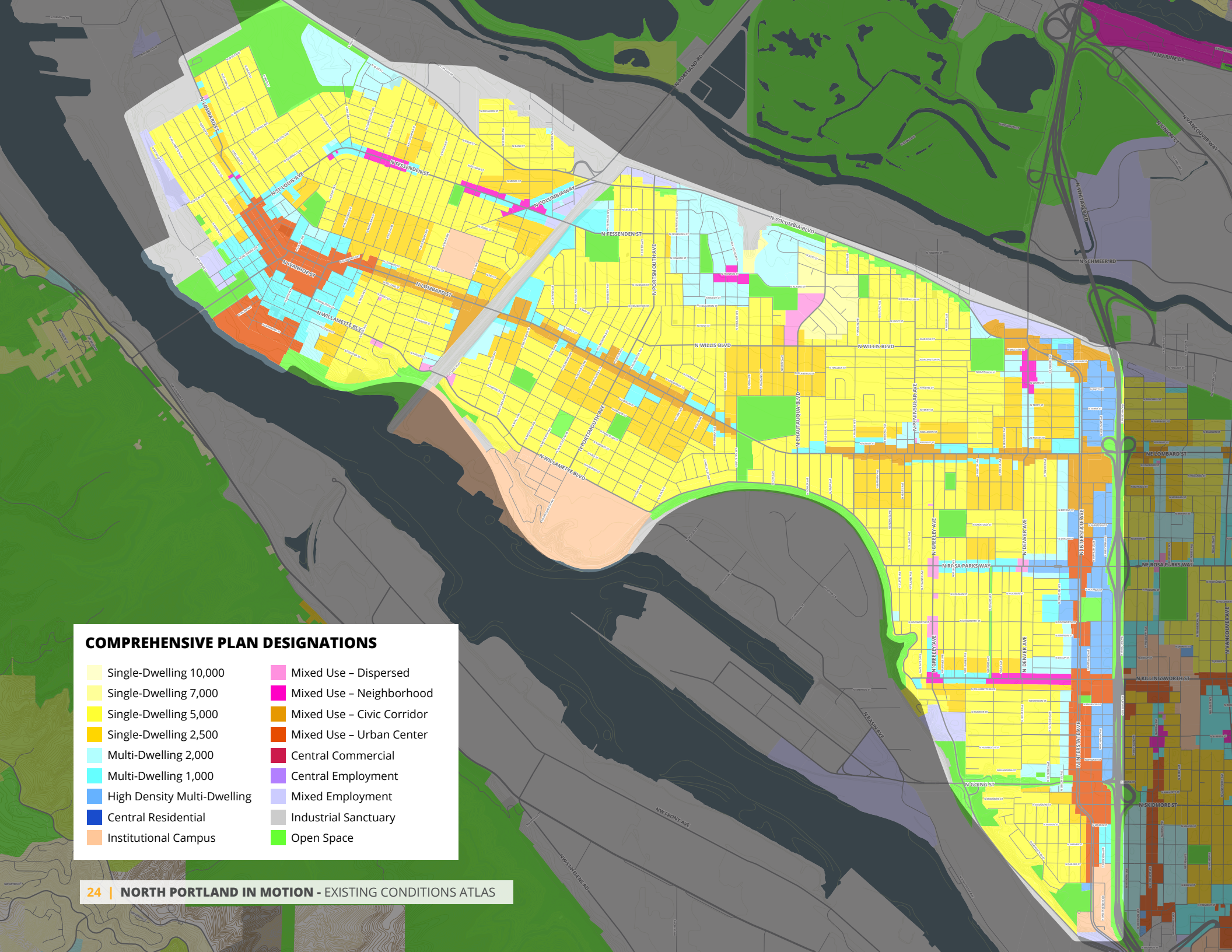
Comprehensive Plan Designations

Portland's 2035 Comprehensive Plan, adopted by Portland City Council in December 2016, establishes the framework for the growth and development of the city through 2035. The Comprehensive Plan and associated map designations reflect long-term aspirations for the future development of Portland and are typically broad in terms of their land use direction.

The Comprehensive Plan and Map are implemented through associated zoning designations, the zoning map and zoning code. In some cases, Comprehensive Plan Map land use designations call for more intense development or different land uses than allowed by current zoning on a property, reflecting the long-term intended land uses for the property. In such cases, future zone changes are allowed in conformance with the Comprehensive Plan Map designations when infrastructure is sufficient to support the new land uses.

Generally, the Comprehensive Plan designations in North Portland translate directly to the existing zoning. However, a notable point of departure is in the Cathedral Park / St Johns waterfront area which contains Comp Plan designations to become a Mixed Use Urban Center - which entail a very high intensity of development. Today, the area is generally zoned for lower density employment uses.

2035 COMPREHENSIVE PLAN

DECEMBER 2018
CITY OF PORTLAND, OREGON

to gaze upon Portland

III. Climate & Resiliency

URBAN HEAT ISLAND

On June 29th, Portland experienced its highest recorded temperature (116 degrees F) following a weekend of record-setting weather. In Multnomah County, at least 59 people died of heat-related causes.

The Urban Heat Island map at right shows that the effect of these record-level temperatures may have been magnified by environmental factors, such as lack of tree canopy/vegetation and high concentrations of paved surfaces. These areas are more pronounced in the N Interstate Corridor, near large surface-parking lots on N Lombard St, and in the northern sections of the St Johns neighborhood.

URBAN HEAT ISLAND
AFTERNOON TEMPERATURE

Lower ▬▬▬▬▬ Higher
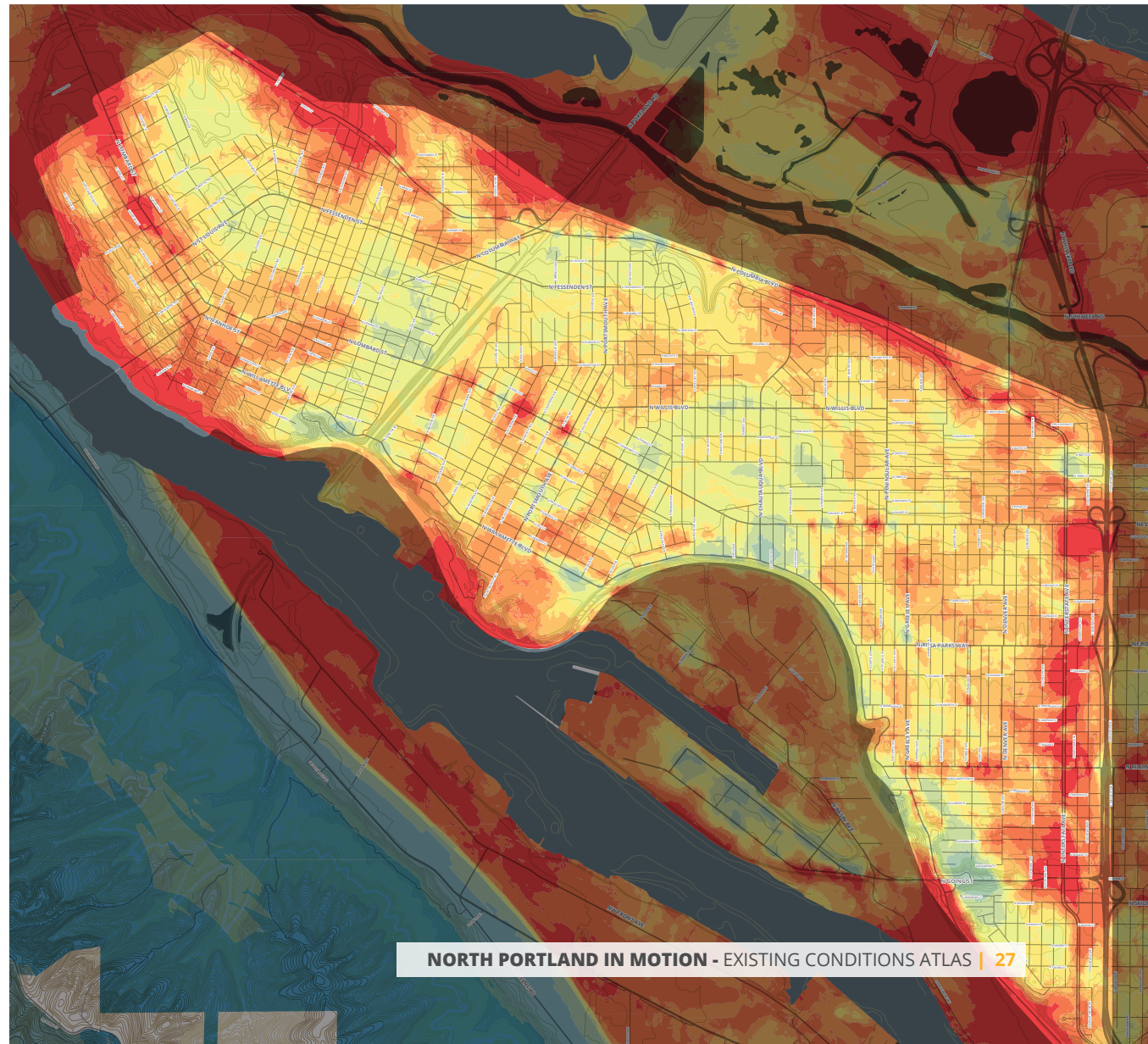
CASCADIA EARTHQUAKE LIQUEFACTION RISK [MAGNITUDE 9.0]

HIGH   MEDIUM   LOW

SEISMIC RESILIENCY

A 2018 study prepared for the Regional Disaster Preparedness Organization (RDPO) measured and evaluated the impacts of multiple major seismic events in the greater Portland area. One of the scenarios modeled was the effects of the Cascadia Subduction Zone earthquake with an assumed Richter scale measurement of 9.0. As part of their evaluation, the team looked at the risk of permanent ground deformation as a result of soil liquefaction caused by the earthquake's shaking. The effects of ground liquefaction on the built environment can be devastating and permanently damage the built environment.

Much of the area within the North Portland in Motion study area is at lower risk for major impacts due to liquefaction. It is at periphery of the study area that liquefaction poses major risks to the built environment - this is especially true in the Swan Island industrial area, the industrial and natural waterfront areas along the Willamette, and the areas to north between the Columbia River and the slough.

N Willamette Blvd Bridge

BRIDGE CONDITION OVER THE "RAILROAD CUT"

One of the major risks facing the peninsula is the structural condition of the major bridges and other elevated structures that connect the St Johns and Cathedral Park neighborhoods to the rest of the study area. None of these bridges are considered to be seismically resilient. PBOT owns the bridges that serve N Columbia Blvd, while Burlington Northern Sante Fe (BNSF) railroad corporation owns the structurally deficient bridges which span the cut at N Willamette Blvd, N Lombard St, and N Fessenden St.

IV. Transportation System

This section of the atlas focuses on the current state of transportation infrastructure and services, traffic crashes, and the travel behavior and patterns of people living and working in North Portland.

Most the peninsula neighborhoods grew up around the historic walkable neighborhood centers linked by public transit. However, the infrastructure and transportation characteristics within the plan area can vary significantly by neighborhood.

The following section documents these differences by illustrating the plan area's: pedestrian network, sidewalk coverage, crossings and bike network connectivity, existing transit routes, recent crashes, commute patterns, traffic volumes, and typical layouts of the study area's major streets. Understanding the current transportation network, as well as deficiencies and needs, will help determine project recommendations and how investments should be prioritized.

TriMet Line 4 in New Columbia

People walking to the park in Arbor Lodge

Pedalpalooza North Portland in Motion Kick-off Ride (Summer 2021)

PEDESTRIAN NETWORK

Pedestrian District / Comprehensive Plan Identified Center

Existing Signal

Identified Crossing Gap

Enhanced Ped Crossing

Sidewalk Gap (two sides)

Marked Crosswalk

Sidewalk Gap (one side)

PEDESTRIAN NETWORK

Pedestrian Districts are intended to give priority to pedestrian access in areas where there is high levels of pedestrian activity, such as the Central City, transit hubs, and hubs of commercial activity. These districts are located throughout the North Portland peninsula, including the St Johns/Cathedral Park area, the Mid-Lombard area bordering Portsmouth and University Park, and along the Interstate MAX in the Kenton, Arbor Lodge, and Overlook neighborhoods.

Depicted on the map on the opposite page are existing crossings, signals, and sidewalk gaps throughout the peninsula. While North Portland has a relatively comprehensive network of basic sidewalks on it's major streets, there are large gaps between marked or enhanced pedestrian crossings which can make accessing basic daily needs difficult or unsafe for people walking.

PEDPDX

PedPDX is Portland's Citywide Pedestrian Plan. It prioritizes sidewalk and crossing improvements, along with other investments to make walking safer and more comfortable across the city. The plan identifies the key strategies and tools PBOT staff utilize to prioritize investments and develop new projects.

PedPDX defines the City of Portland's pedestrian network (see page 56 for a detailed map), and sets specific policies for upgrading or building new sidewalks, as well as identifying and closing crossing gaps in the network. The following pages include a high-level snapshot of this applied prioritization within the North Portland in Motion Study Area.
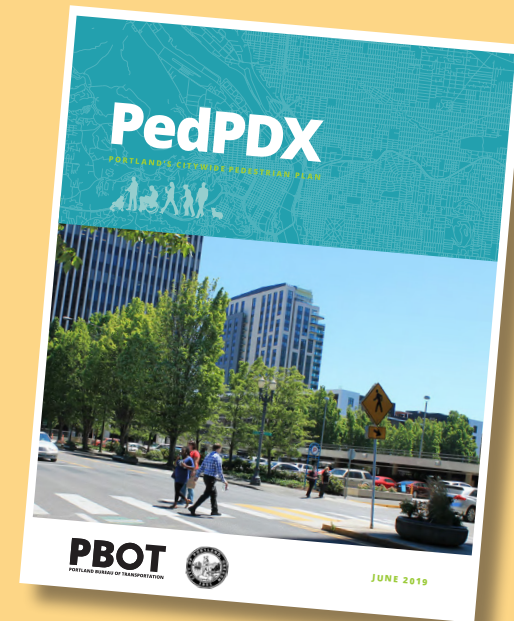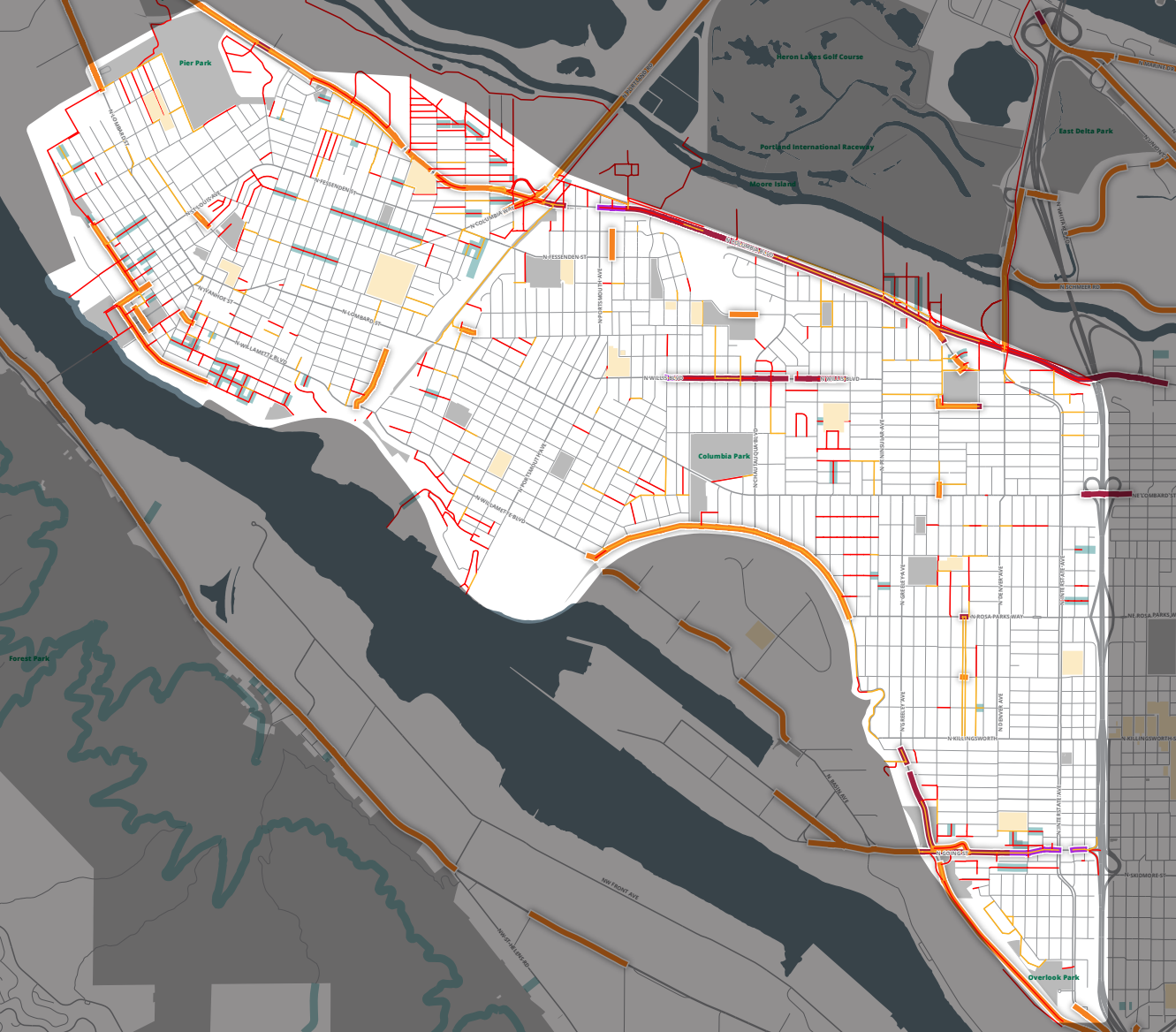
SIDEWALKS GAPS

There are multiple locations throughout the North Portland in Motion study area where there sidewalk gaps on major pedestrian streets. Some notable sidewalk gaps include:

- N Willis Blvd, a major thoroughfare with frequent-service transit connecting the Portsmouth and Kenton neighborhoods;

- N Ida Ave, an important pedestrian connection between N Willamette and N Lombard in the Cathedral Park / St Johns area;

- Gaps along the industrial periphery including N Columbia Blvd and N Crawford St

In addition to these major corridors that were identified as priorities in PedPDX, there are also a number of gaps on the local street network and adjacent to parks and other community destinations.
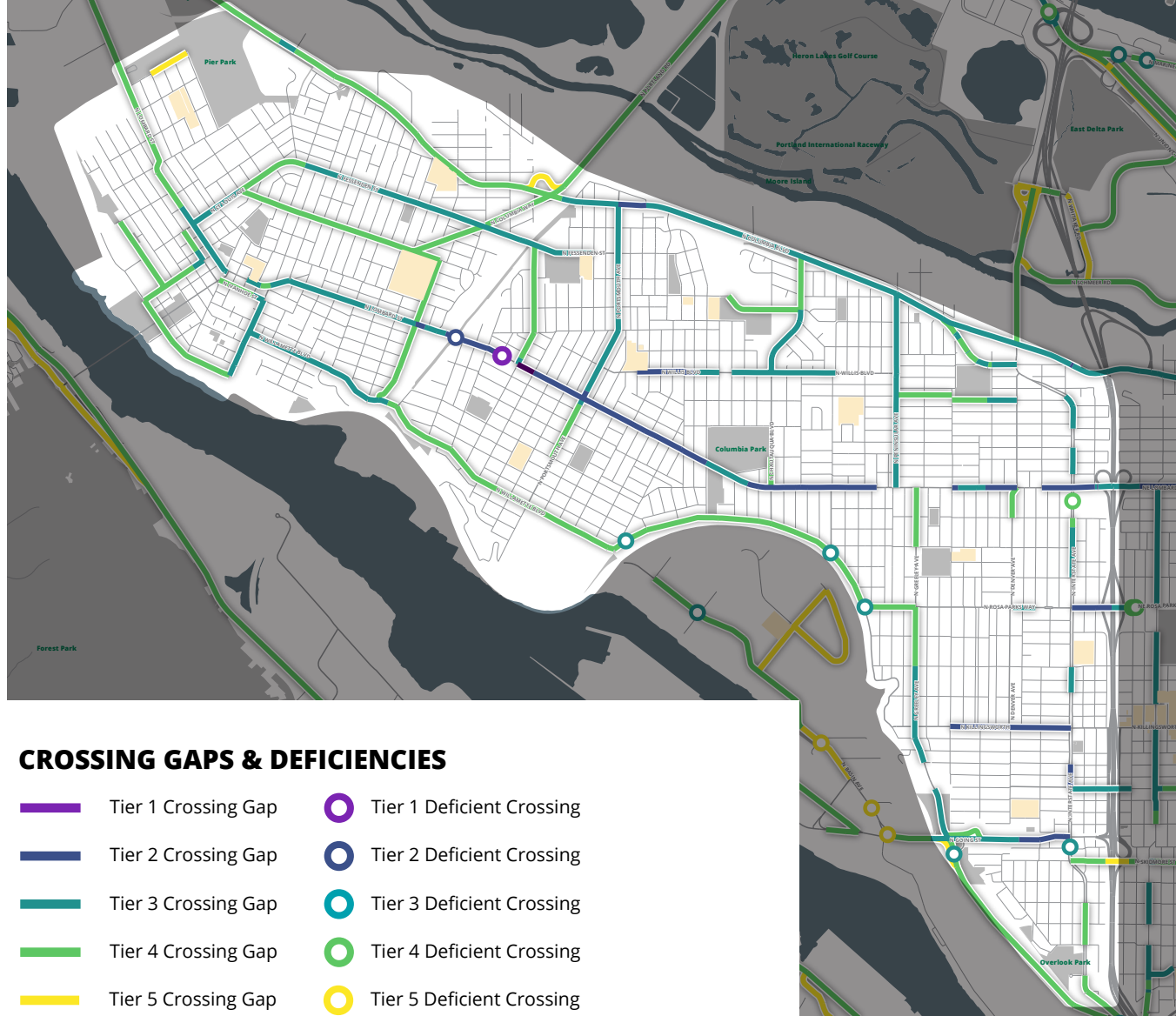
EXISTING SIDEWALKS

━━━	Higher Tier Priority Sidewalk Gap
━━━	Lower Tier Priority Sidewalk Gap
━━━	No Sidewalks
━━━	Sidewalks on One Side

CROSSINGS GAPS & DEFICIENCIES

In addition to identifying crossing gaps in the pedestrian network, PedPDX applies a prioritization framework based on three factors: pedestrian demand (or places where pedestrian activity is expected to be highest); equity (based on residential demographic data); and safety (areas where frequent pedestrian crashes occur). Tier 1 crossings and crossing gaps are the higehst priority.

CROSSING GAPS & DEFICIENCIES

▬ Tier 1 Crossing Gap	◯	Tier 1 Deficient Crossing
▬ Tier 2 Crossing Gap	◯	Tier 2 Deficient Crossing
▬ Tier 3 Crossing Gap	◯	Tier 3 Deficient Crossing
▬ Tier 4 Crossing Gap	◯	Tier 4 Deficient Crossing
▬ Tier 5 Crossing Gap	◯	Tier 5 Deficient Crossing

EXISTING BIKE NETWORK

— Protected / Buffered Bike Lane

— Buffered Bike Lane

— Striped Bike Lane

— Neighborhood Greenway

— Off-Street Path

BIKEWAY NETWORK

The bike network in North Portland is comprised of a mix of facility types including neighborhood greenways, striped bike lanes, recently upgraded buffered and protected bike lanes, and off-street trails.

North of N Lombard Street and east of N Chautauqua Ave, there is a loose network of neighborhood greenways, which are lower-traffic streets where bikes operated in a shared environment with other vehicles. These routes include N Central Ave, N Houghton/Kilpatrick/ Terry St, N Wabash Ave, N Bryant St, and the lower traffic section of N Willamette Blvd south of N Rosa Parks Way.

There are a number of striped bike lanes that were built during the 1990's on some of the study areas wider, busier streets such as N Portsmouth Ave, N Denver Ave, and N Willamette Blvd west of N Woolsey. More recently, there are some upgrade buffered/ protected bike lanes that were built in the past decade on streets like N Fessenden Ave, N Rosa Parks Way, and N Willamette Blvd east of N Woolsey.
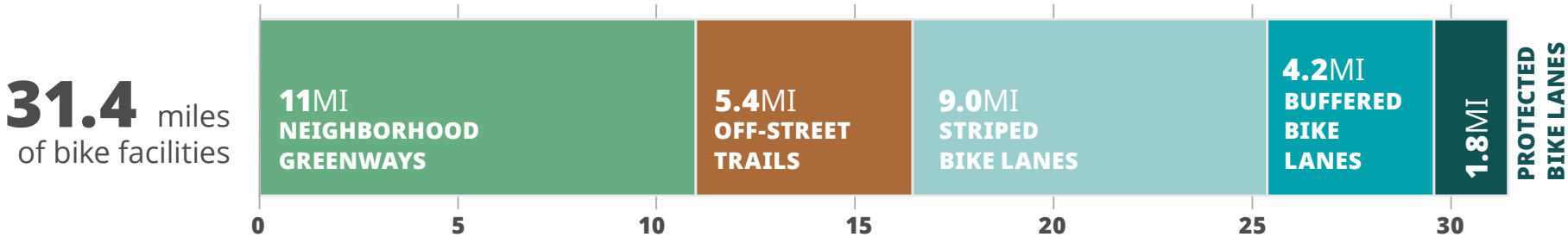
In addition to these on-street bike facilities, there are a number of notable off-street trails within the study area including the Peninsula Crossing Trail along the east edge of the railroad cut and the N Columbia Trail just south of N Columbia Blvd between N Portsmouth Ave and N Argyle Way.

Striped Bike Lanes on N Portsmouth Ave at N Houghton St

N Willamette Blvd was restriped with buffered bike lanes in 2017

31.4 miles of bike facilities

11MI NEIGHBORHOOD GREENWAYS	5.4MI OFF-STREET TRAILS	9.0MI STRIPED BIKE LANES	4.2MI BUFFERED BIKE LANES	1.8MI PROTECTED BIKE LANES

0   5   10   15   20   25   30

FREQUENT SERVICE / STANDARD SERVICE

75	44
04	35
72	16
YELLOW	11
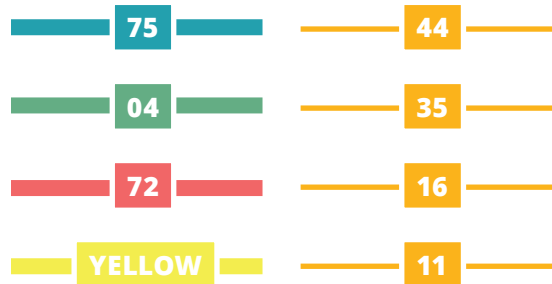
RIDERSHIP
(DAILY ONS + OFFS)

◄ LOWER

HIGHER ►
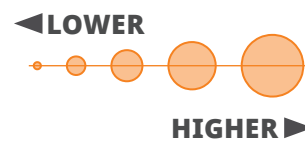
TRANSIT NETWORK

The North Portland peninsula is served by a mix of standard and frequent-service bus lines, as well as the MAX Yellow Line along N Interstate Ave at the eastern edge of the study area. Trimet Lines 75 and 4 comprise the backbone of the intra peninsula network. Both lines enter the peninsular near the N Lombard Transit Center, the busiest area for daily boardings within the study area. From there, these two frequent service lines traverse the length of the peninsula, with Line 75 staying primarily on N Lombard and Line 4 taking a serpentine route to the north stringing together a series of major destinations including Kenton Main Street, New Columbia, and the N Fessenden commercial corridor.

Line / Route	Northern Terminus	Leaves Study Area at...	Continues on to..	Weekday Ridership (Fall 2019)
75	Pier Park	Lombard TC	Cesar Chavez	~9,000
04	St Johns	Lombard TC	Central City	~7,000
72	Swan Island	Killingsworth MAX Station	82nd Ave	~13,500
YELLOW	Expo Center	Rose Quarter	Central City	~13,500
44	Pier Park	Rosa Parks MAX Station	Central City	~5,000
35	University of Portland	Greeley/ Interstate	Central City	~3,750
16	St Johns	St Johns Bridge	Central City	<1,000
11	St Johns	Rivergate	Delta Park	<250

FREQUENT SERVICE (rows 75, 04, 72, YELLOW)

TRANSIT "HOT SPOTS"

There are number of spots and areas within North Portland where there is a high level of transit ridership activity (daily ons/offs). Most of these higher ridership areas are served by the peninsula's higher frequency bus lines and/or are at places where people are transferring to/from the MAX Yellow Line along N Interstate Ave.

The highest activity bus stop locations are:

Location	Daily Boardings
MAX Transfer (all)	3,300
Lombard Transit Center	2,500
St Johns Main Street	2,000
New Columbia	1,100
Fessenden Main Street	1,100
Roosevelt High School	800
Mid-Lombard Main Street	550
Pier Park	500
Kenton Main Street	~450

STREET SURFACE TYPE

— Paved w/ Curb

— Paved w/out curb

— Unpaved

— Impassable

STREET SURFACE TYPE

Most streets in North Portland are paved with curbs on both sides. However, there are a number of streets within the North Portland in Motion study are that are unpaved, unimproved, or lacking curbs. A number of these streets are impassable by vehicles due to topography, condition, and/or vegetation.

In particular, there are a number of streets in the Cathedral Park and St Johns neighborhoods that are unpaved or impassable. Some of these streets function as very low-traffic shared environments or informal areas for gardens or parking. However, some of these streets are in areas slated for high amounts of future growth and development or on streets intended to carry higher volumes of vehicles or be usable by people walking or cycling.

N Seneca St, St Johns

N Stafford St, University Park
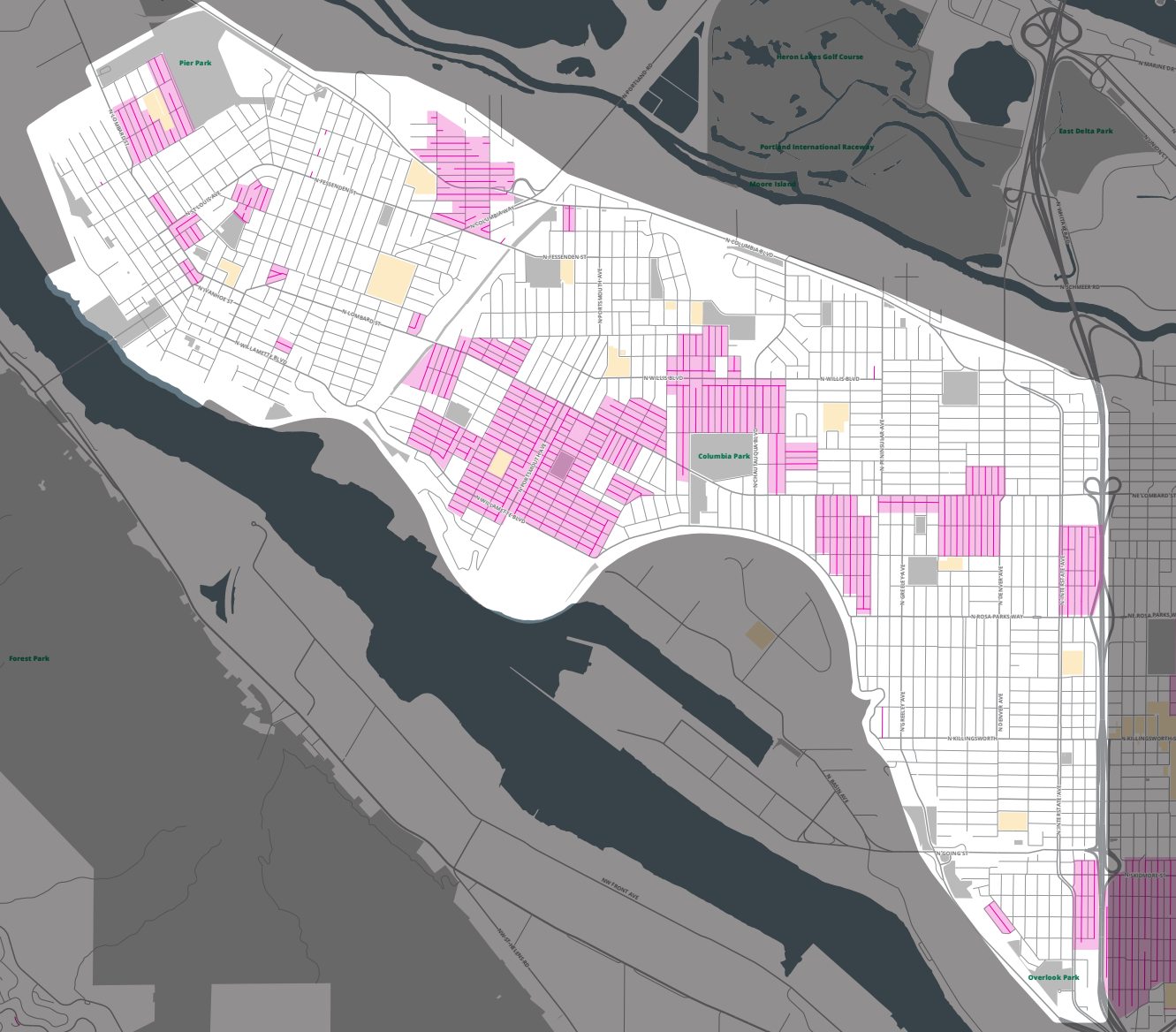
ALLEYS

While relatively uncommon in the City of Portland as a whole, alleys are a unique element of the transportation system in North Portland. They are common in the University Park neighborhood, and in certain sections of Arbor Lodge, Portsmouth and St Johns. Alleys vary in condition with some fully paved and accessible and others completely overgrown with vegetation and impassable by vehicles.

STREET WIDTH

The vast majority of streets in North Portland are 36ft or narrower curb to curb with the space configured as two general purpose travel lanes with on-street parking on either side. However, there are a number of major streets within the peninsula that are wider and offer better opportunities for different configurations, including bike facilities, median islands, transit priority treatments, or additional travel lanes

40ft wide streets include:
- **N Willamette Blvd (40ft)** Ainsworth to Buchanan
- **N Greeley Ave (46ft)** Killingsworth to Lombard

44-47ft wide streets include:
- **N Wall Ave (46ft)** Lombard to Fessenden
- **N Richmond Ave (46ft)** Crawford to Lombard

48-53ft wide streets include:
- **N Denver Ave (50ft)** Lombard to Killingsworth
- **N Portsmouth Ave (50ft)** Willamette to Columbia
- **N Lombard Ave (50ft)** Westana to Interstate Ave

54-77ft wide streets include:
- **N Columbia Way (56ft)** Smith to Columbia
- **N Macrum Ave (64ft)** Fessenden to Columbia
- **N Columbia Blvd (64ft)** Fessenden to Columbia

>78ft wide streets include:
- **N Interstate Ave (80-82ft)** Fenwick to Central City

STREET WIDTH

■	78ft or greater
■	54ft - 77ft
■	48ft - 53ft
■	44ft - 47ft
■	40ft - 43ft
■	less than 40ft
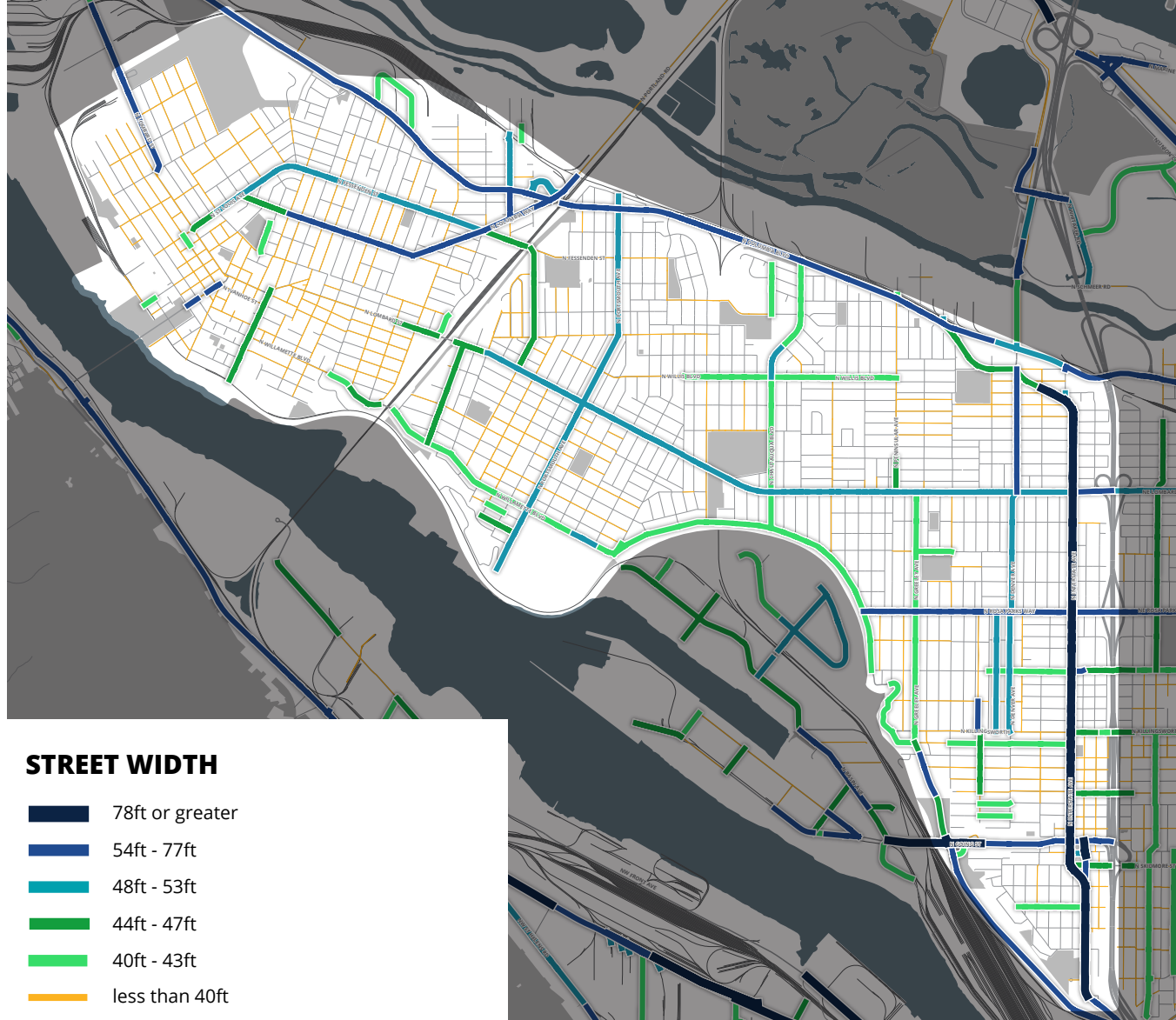
TRAFFIC VOLUMES

This map shows the daily traffic on the average weekday on the significant streets within the North Portland in Motion plan area.
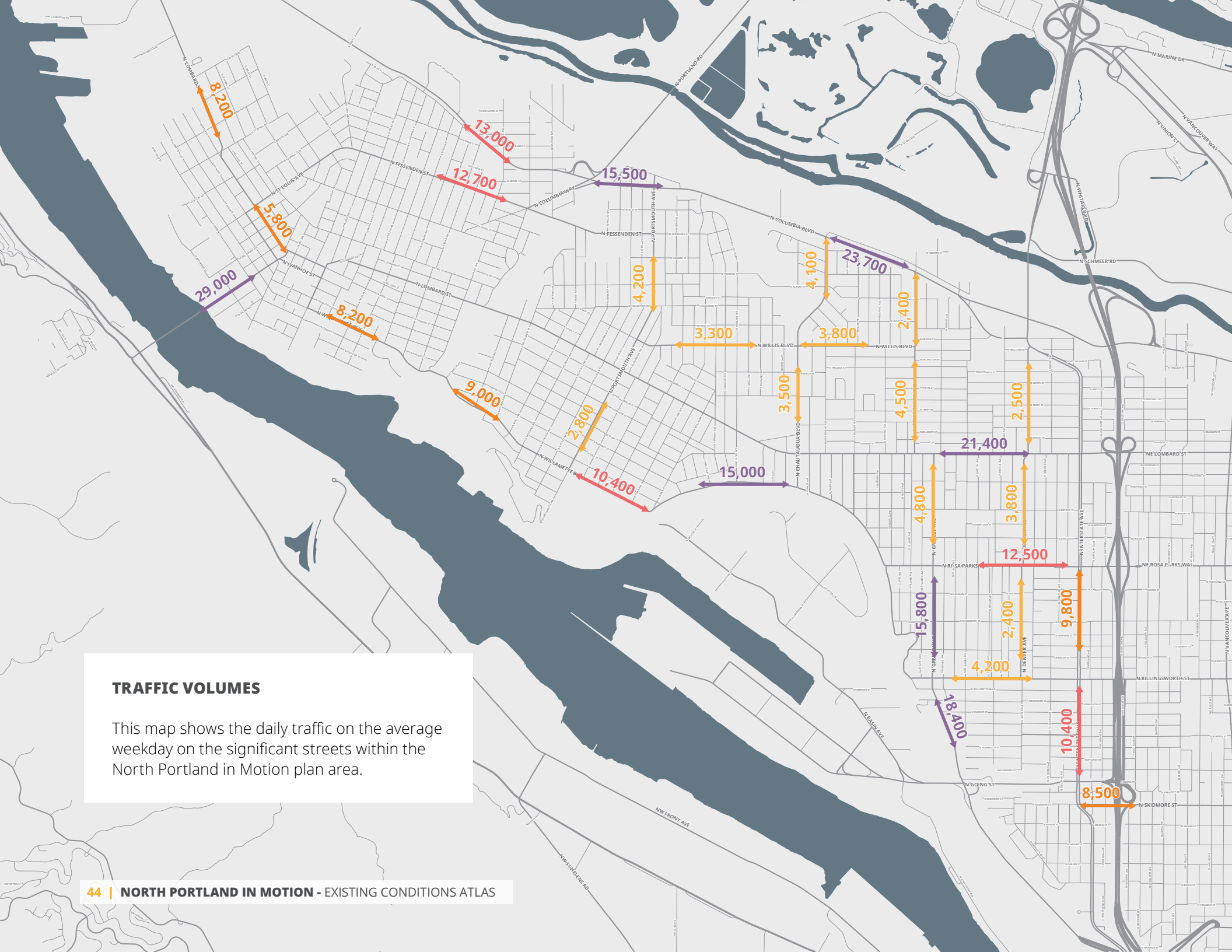
Vehicle Volumes

PBOT looks at traffic volumes to understand where the busiest streets are and where there might be opportunities for traffic calming or excess capacity that can be easily used for other purposes. Many of the highest volume streets in the plan area run the length of the peninsula (N Lombard St, N Willamette Blvd, N Greeley, and N Columbia Blvd). Other than these major thoroughfares, most of the other arterial- or collector-type streets internal to the plan area have fewer than 5,000 cars on an average weekday.

TRAFFIC VOLUMES	
Street segment with more than 10,000 autos per day (sorted by traffic volume)	*Weekday traffic volume*
St Johns bridge	29,000
Columbia Blvd (Peninsular - Chautauqua)	23,700
Lombard (Interstate - Greeley)	21,400
Greeley (Going - Killingsworth)	18,400
Greeley (Killingsworth - Rosa Parks)	15,800
Columbia Blvd (Portsmouth Ave)	15,500
Willamette Blvd (Columbia Park)	15,000
Columbia Blvd (Macrum - Upland)	13,000
Fessenden (Columbia Way - Tioga)	12,700
Rosa Parks (Interstate - Greeley)	12,500
Interstate (Going - Killingsworth)	10,400
Willamette (University of Portland)	10,400

VISION ZERO CRASHES

2014-2018

Any crash involving a pedestrian or a person riding a bicycle, or that resulted in a death or serious injury to someone in an automobile

1	2-3	4-5	>5

—— Vision Zero High Crash Network

● Person killed (2010-present)

Vision Zero Crashes

In 2016, the City of Portland made a commitment to Vision Zero, the achievement of zero deaths or serious injuries as a result of traveling around Portland. It rejects the complacent mindset that the current level of traffic deaths and serious injuries is an acceptable "cost of doing business" in modern society. As a part of all transportation planning efforts, PBOT looks at the most recent 5 years of crash data to try to understand where these crashes are occurring and what the city can do to prevent them.

As a part of the 2016 Vision Zero commitment, PBOT analyzed where crashes were happening and found that the majority of crashes happen on just a handful of streets. PBOT designated the 30 streets with the highest crash rates the High Crash Network with an eye to addressing those streets first. The North Portland in Motion study area contains 4 designated High Crash Corridors including N Interstate Ave, N Lombard St, N Columbia Blvd, and N Killingsworth St. Over the past decade there have been fatal crashes on streets not on the High Crash Network, including N Willamette Blvd, N Fessenden St, and N Greeley Ave.

WHAT IS A VISION ZERO-FOCUSED CRASH?

While there are many more crashes in the project area than are mapped here, the City of Portland focuses first on preventing the subset of crashes that result in fatalities or life-altering injuries for people walking, biking, and driving on Portland's streets.

For people in cars, that means we focus on those crashes that result in fatalities and serious injuries.

For pedestrians and people biking, we look at all crashes; without the protection of a car around them, for people walking and biking, the difference between being knocked down and a life-altering injury can be a matter of milliseconds, so we take all reported collisions involving people walking and biking into account. We also know that crashes involving bicyclists and pedestrians are significantly underreported.
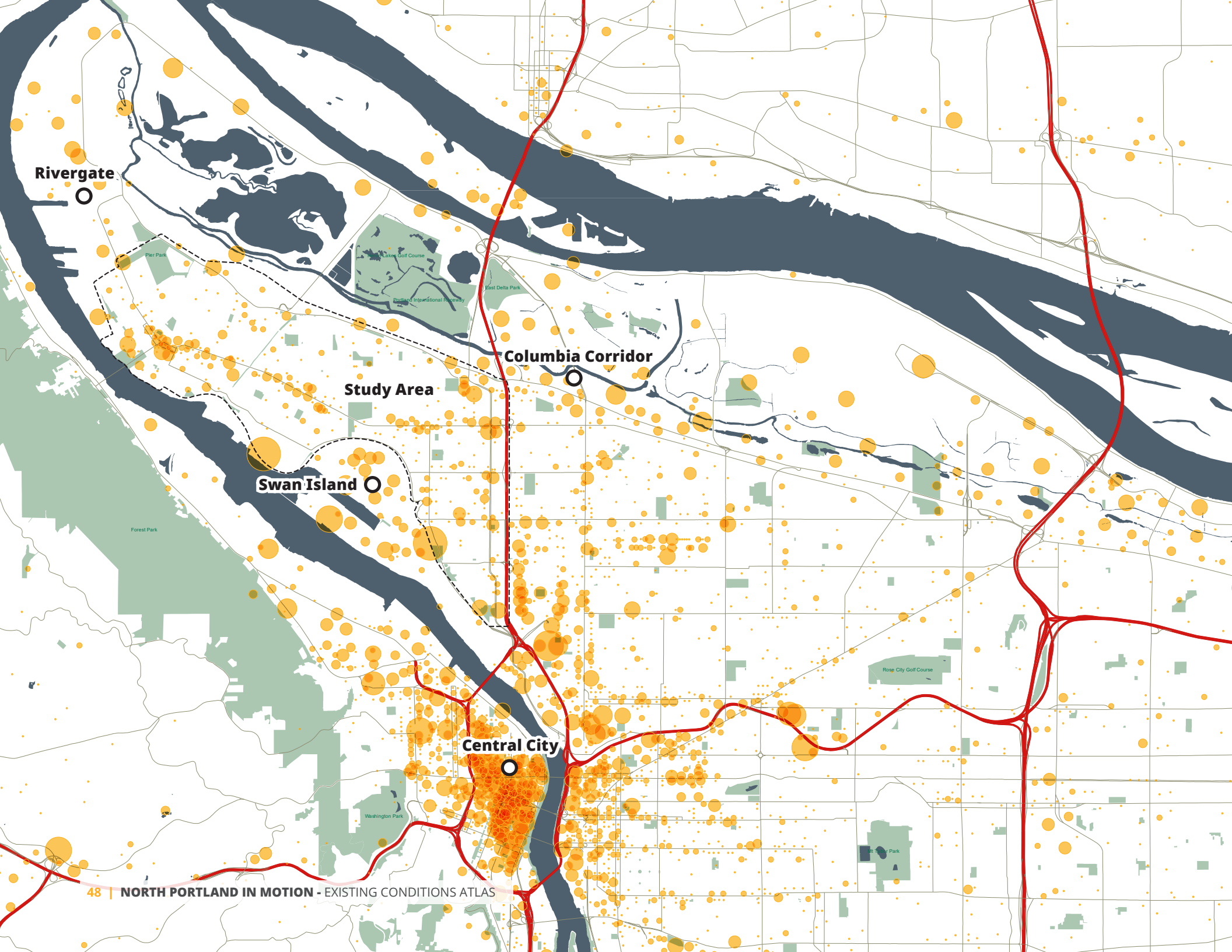
Rivergate

Columbia Corridor

Study Area

Swan Island

Central City

WHERE PEOPLE WORK

Within the North Portland in Motion Study Area there are just over 60,000 residents. Roughly one in three (about 21,000) of these residents are employed outside of the home in a wage earning job.

Of the nearly 21,000 jobs outside the home held by residents of the North Portland peninsula, nearly 25% (just over 5,000) are employed in the Central City. Less than 1,000 people both live and work within the study area boundaries.

Nearly 1,300 study area residents are employed in the industrial areas peripheral to the study area, including the Columbia Corridor west of NE MLK Jr Blvd, Rivergate, and Swan Island industrial areas.

Roughly two thirds of study area residents are employed at a job within the City of Portland, and about half of residents work at a job with 3 miles of the study area boundary.

A NOTE ABOUT "EVERYDAY" TRIPS

How people get to and from work is a major share of the total trips people take each day. But it is also important to remember that only 25%-30% of all trips are commute-related and that only one in three people in the North Portland in Motion study area are employed outside of the home before the COVID-19 pandemic.

With flexible schedules and work-from-home likely to become more common as we emerge from the pandemic, there is no better time to begin to emphasize and focus on the broader range and type of trips people take everyday.

One of the key goals of the PBOT is to reduce 'vehicle miles traveled' (VMT) as a way to reduce the overall greenhouse gas emissions (GHG's) generated by our people driving. Those GHG's emitted are the same per mile whether someone is driving to work or driving down to the local main street or to a neighborhood park.

By emphasizing everyday trips alongside commute trips, PBOT can help engage a broader group of people traveling and develop and prioritize projects that help people meet their daily needs without having to depend on a vehicle.
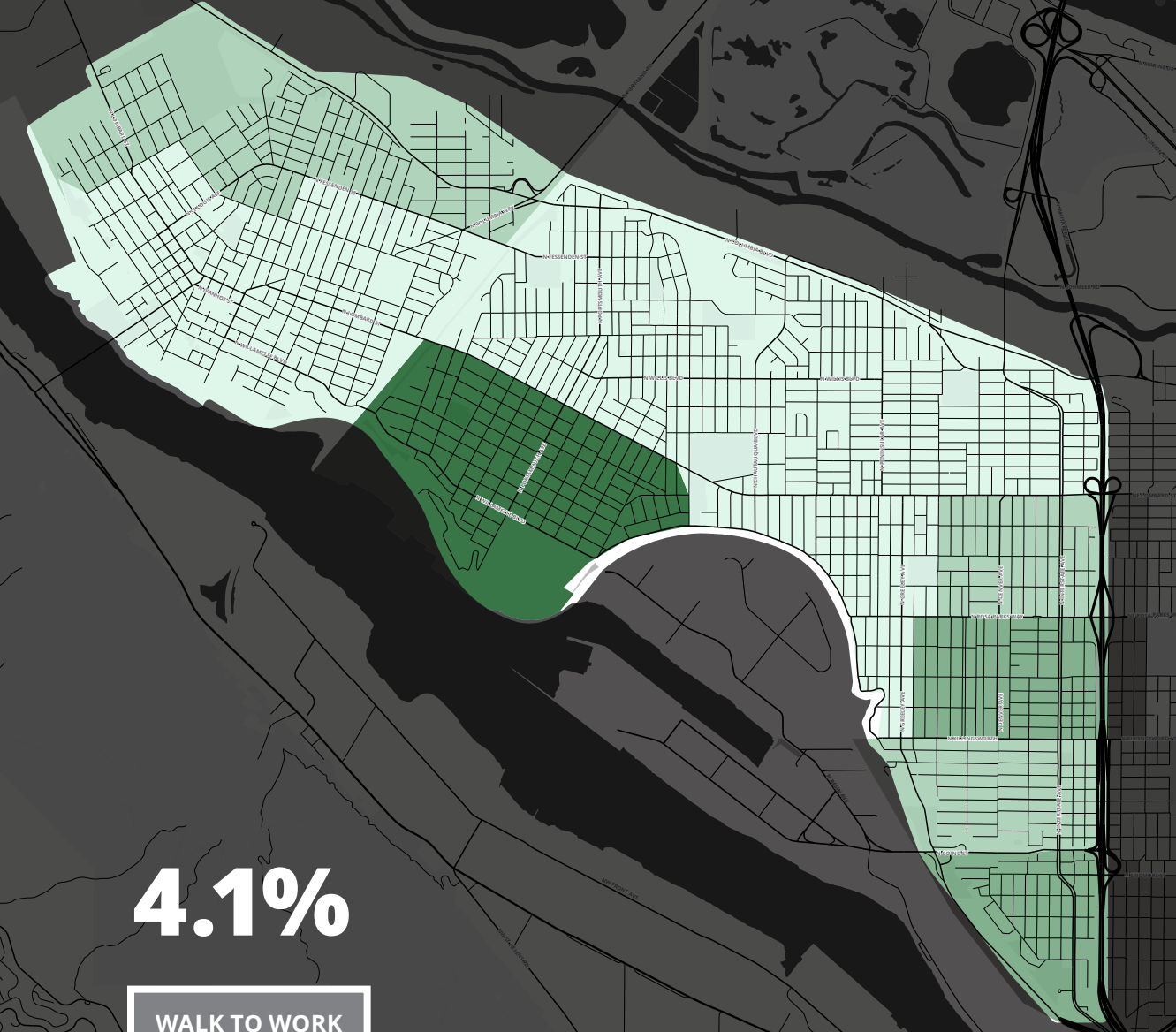
PEOPLE WALKING

Within the North Portland in Motion study area 4.1% of people walk as their means getting to and from work. The major exception in the study area is the University Park neighborhood where approximately 18% of people walk to work. This is assumed to be largely attributable to the presence of University of Portland, one of the major employers within the study area.

4.1%

WALK TO WORK

WALK TO WORK - MODE SHARE

< 3%	3 - 5%	5 - 10%	> 10%
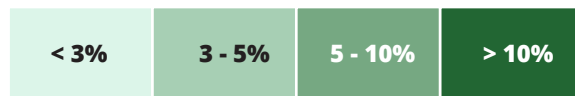
PEOPLE BIKING

Roughly 7% of the population in North Portland bikes to work, which tracks roughly with the citywide average. The share of people commuting via bicycle decreases consistently further north as one moves deeper into the peninsula.

The areas with the highest share of people biking are located along the N Interstate Ave corridor in Arbor Lodge and Overlook which ranges from 11% to 16%. Conversely in St Johns and Cathedral Park the share of people biking to work is just above 3%.

6.9%
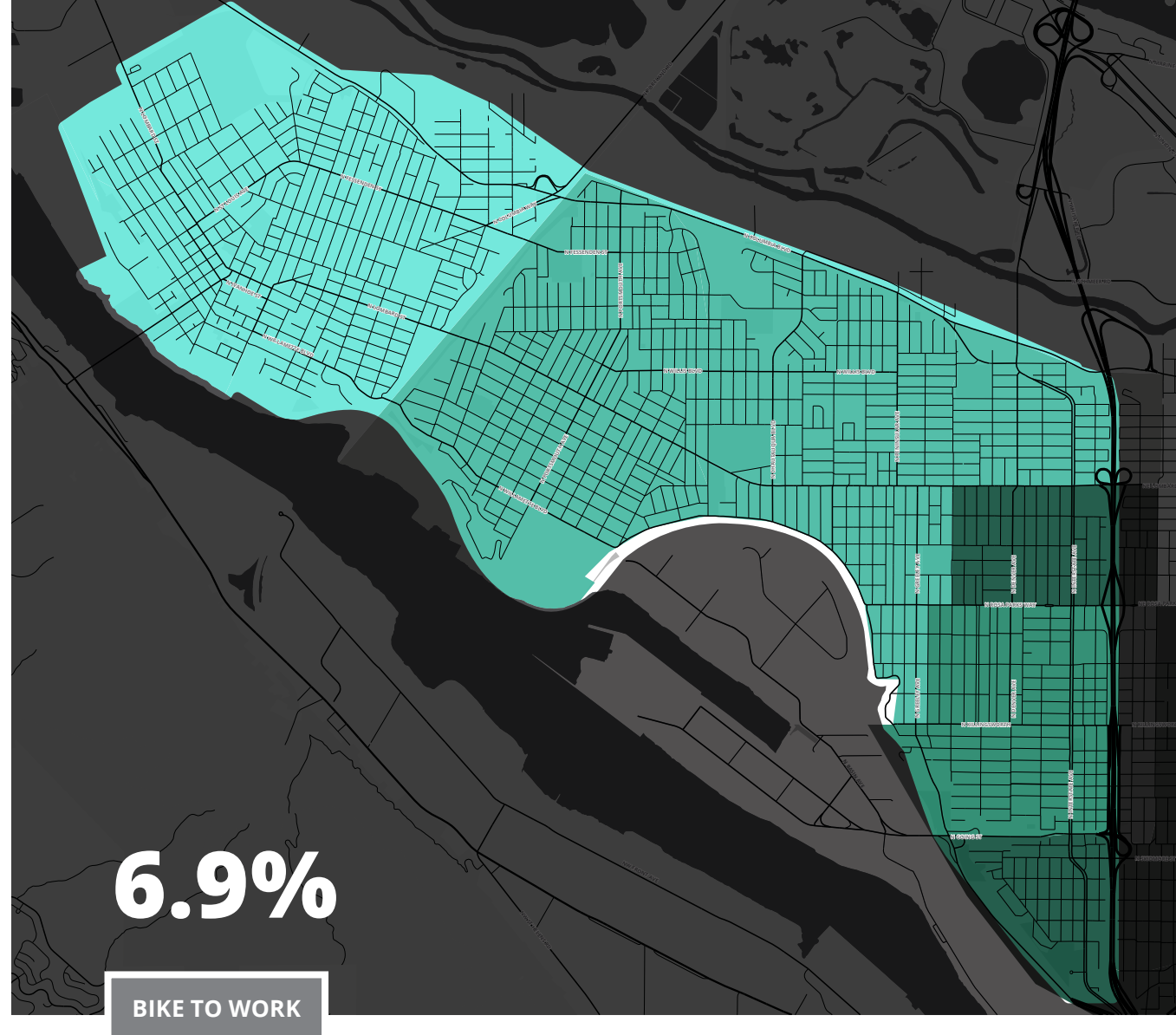
BIKE TO WORK

BIKE TO WORK - MODE SHARE

< 5%	5 - 10%	10 - 15%	> 15%
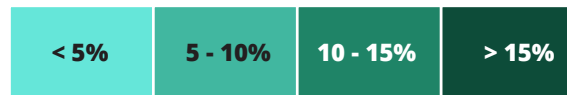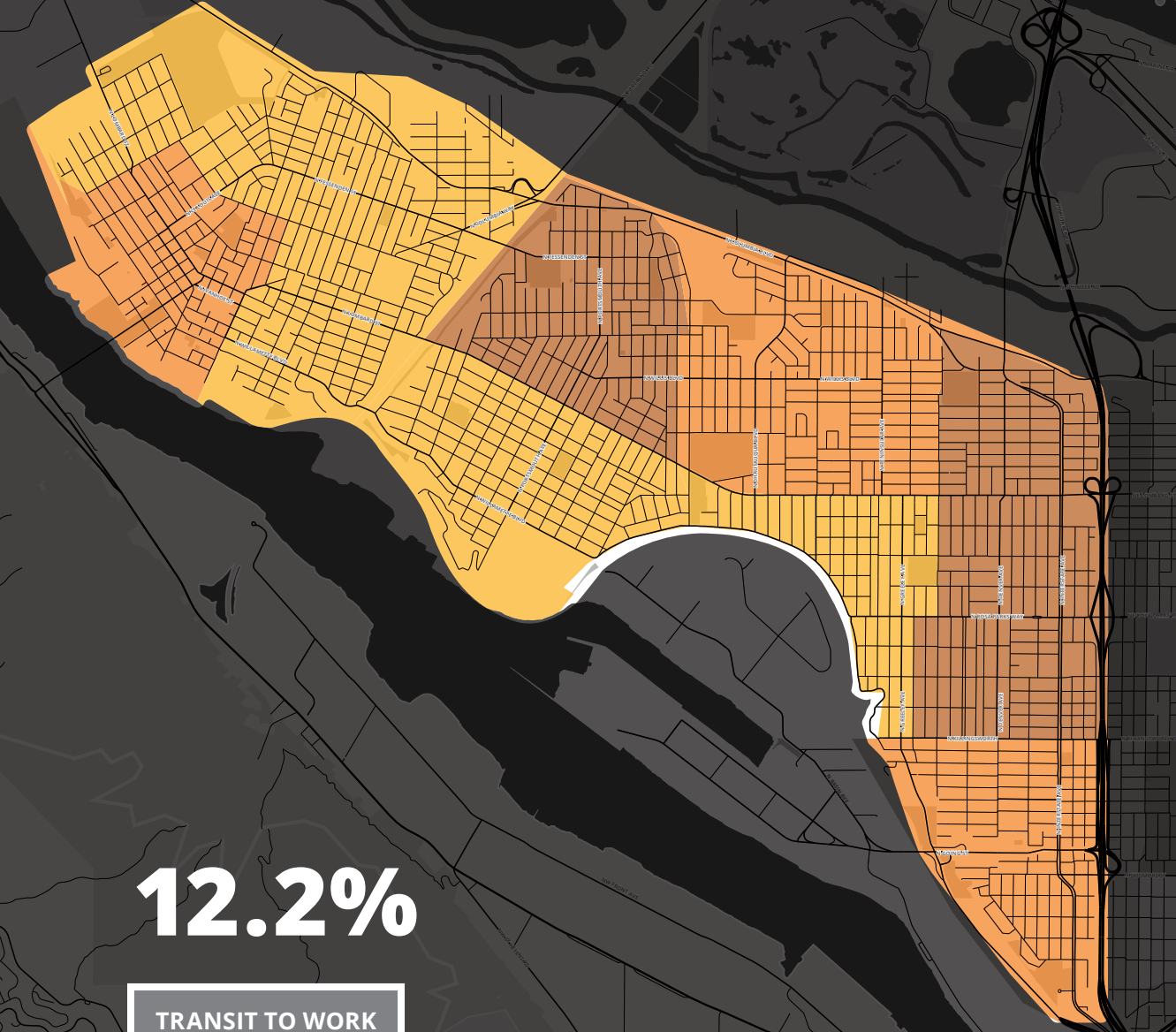
PEOPLE TAKING TRANSIT

Transit ridership in North Portland tracks with a citywide average of roughly 12%. Within the study area, transit ridership is higher in the N Interstate Ave corridor which is in proximity to the MAX and other frequent-service bus lines. In the upper peninsula neighborhoods, Portsmouth has a relatively high share of people using transit - in particular, the stops served by Line 4 around New Columbia have high daily ridership.

12.2%

TRANSIT TO WORK

TRANSIT TO WORK - MODE SHARE

< 5%	5 -10%	10 - 15%	> 15%

PEOPLE DRIVING ALONE

Overall, there is a slightly higher share of people driving to work in North Portland, compared to the city as a whole. This is especially true in the furthest north sections of St Johns where other transportation options are limited.

60.3%
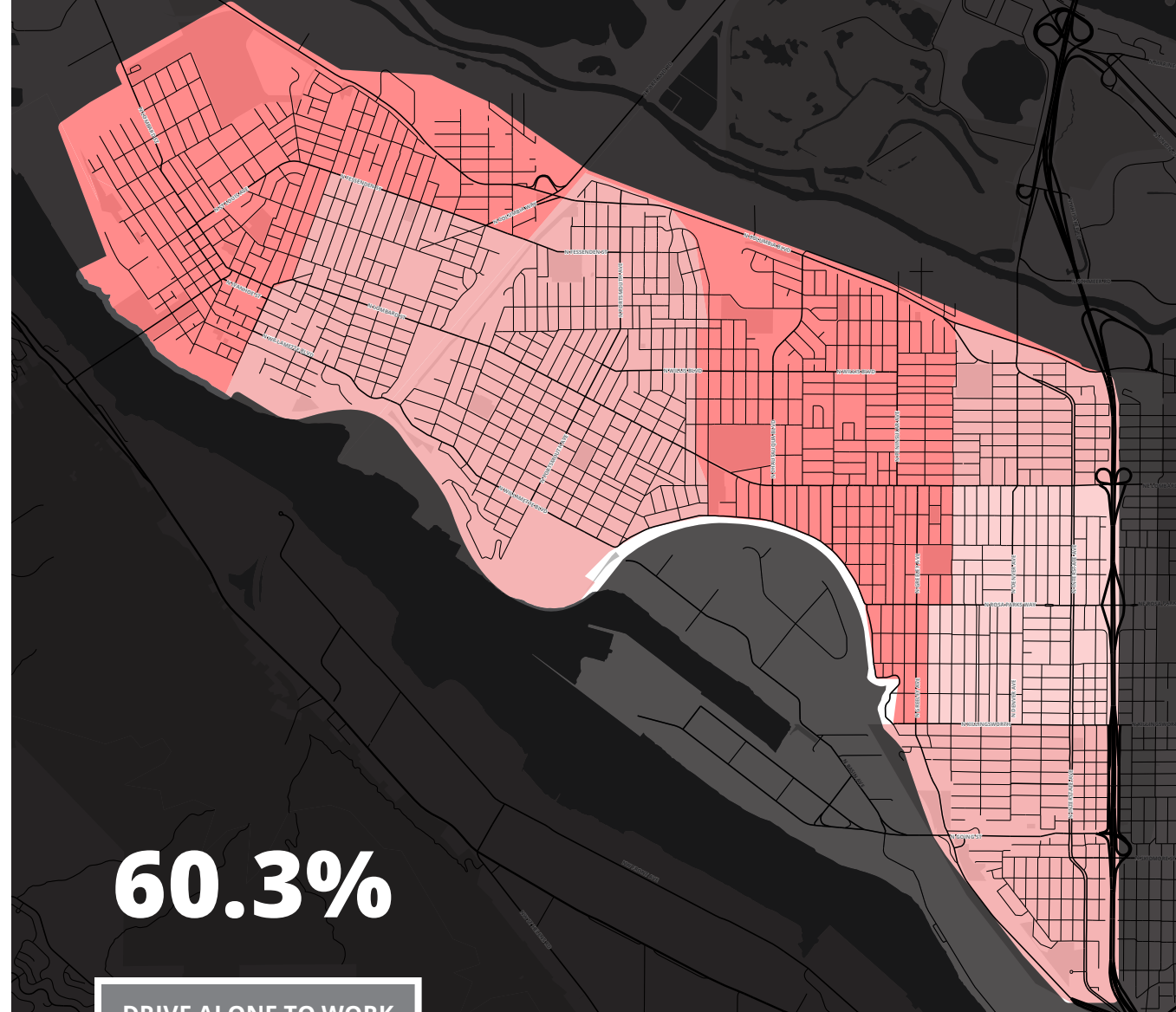
DRIVE ALONE TO WORK

DRIVE ALONE TO WORK - MODE SHARE

< 50%	50-60%	60-75%	> 75%
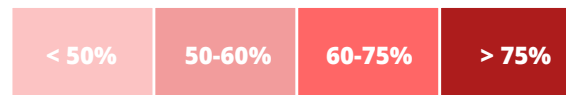
IV. Transportation Policy & Classifications

The Transportation System Plan (TSP), a component of the City's Comprehensive Plan, guides the City's transportation policy and investment strategy for the next 20 years. The TSP guides policy and investment through street classifications, area plans, master street plans, and modal plans.

As Portland and the region grow, there is a continuing challenge to maintain the natural environment, economic prosperity, and overall quality of life. If in 2035, the percentage of people who drive alone to work remains the same as it is now (nearly 60 percent), traffic, carbon emissions, and household spending on vehicles and fuel will all worsen significantly.

To accommodate this growth, our transportation system must provide Portlanders safer and more convenient ways to walk, bike, and take transit for more trips. The 2035 Transportation System Plan guides investments to maintain and improve the livability of Portland by:

- Supporting the City's commitment to Vision Zero by saving lives and reducing injuries to all people using our transportation system
- Helping transit and freight vehicles move more reliably
- Reducing carbon emissions and promoting healthy lifestyles
- Keeping more money in the local economy by enabling people to spend less on vehicles and fuel; and
- Creating great places.

The following classification maps define how the streets should operate for each travel mode, not necessarily how they operate today. The classifications guide investment to achieve these goals.

City of Portland
Bureau of Transportation

PORTLAND 2035
TRANSPORTATION
SYSTEM PLAN

May 2018
Ordinance No: 187832, 188177, & 188957

PEDESTRIAN CLASSIFICATIONS

— Major City Walkway
— City Walkway
— Neighborhood Walkway
▨ Pedestrian District

WALKING CLASSIFICATIONS

Pedestrian classification reflects the level of demand for pedestrian movement on that street. Higher classifications reflect a prioritization of pedestrian connections to key transit and land use destinations.

Pedestrian Districts are intended to give priority to pedestrian access in areas where there is high levels of pedestrian activity, such as the Interstate Ave corridor and St Johns, Kenton, and Mid-Lombard main street areas.

BICYCLE CLASSIFICATIONS

— Major City Bikeway
— City Bikeway
▨ Bicycle Districts

BIKING CLASSIFICATIONS

Bicycle Classifications designate streets that are intended to support direct, convenient access to 2040 land use types, and both significant and neighborhood destinations. Major City bikeways form the backbone of the city's bicycle network, while City and local service bikeways provide coverage to connect from high volume thoroughfares to local destinations.

TRANSIT CLASSIFICATIONS

Regional Transitway

Regional Transitway & Major Transit Priority Street

Major Transit Priority Street

Transit Access Street

TRANSIT CLASSIFICATIONS

Transit classifications describe streets that support the movement of transit vehicles for regional, inter-district and local trips. Regional transitways facilitate fast and reliable service over long distances, operating in right-of-way exclusively reserved for transit use where feasible. Major transit priority streets serve higher frequency transit vehicles that connect Central City, Regional and Town Centers, and other major designations. Local service transit streets are focused on serving smaller transit vehicles, including paratransit, and community or connect shuttles.

EMERGENCY RESPONSE CLASSIFICATIONS

— Major Emergency Response

— Secondary Emergency Response

EMERGENCY RESPONSE CLASSIFICATIONS

Emergency Response classifications provide a clear system of routes for fire and other emergency response systems to efficiently reach their destinations to address emergency situations. Major Emergency Response Streets are the primary network of streets emergency responders use, while Secondary Emergency Response Streets indicate alternative routes in case Major streets are congested or otherwise blocked. These classifications can impact options for street design and traffic calming, to make sure street changes do not overly impact emergency response times.

FREIGHT CLASSIFICATIONS

FREIGHT CLASSIFICATIONS

- Regional Truckway
- Priority Truck Street
- Major Truck Street
- Truck Access Street
- Freight District

Streets with freight classifications designate a system of truck streets, railroad lines, and intermodal freight facilities that support local, national, and international distribution of goods. Freight districts are intended to provide safe and convenient truck mobility and access in industrial and employment areas serving high levels of truck traffic, and to accommodate intermodal goods movement.

TRAFFIC CLASSIFICATIONS

TRAFFIC CLASSIFICATIONS

— Regional Trafficway
— Regional Trafficway & Major City Traffic Street
— Major City Traffic Street
— District Collector Street
— Neighborhood Collector Street
— Traffic Access Street (CCTMP only)

TRAFFIC CLASSIFICATIONS

Traffic classification streets create a hierarchy of automobile activity on a roadway, reflecting volumes, speeds, and the type of anticipated trips. Within the City of Portland, classifications range from regional trafficway to serve longer distance, regional trips that either start, end or bypass the City of Portland, and local service streets to provide access to neighborhoods. In between are collector and traffic access streets that serve elevated numbers of vehicles to connect major destinations.
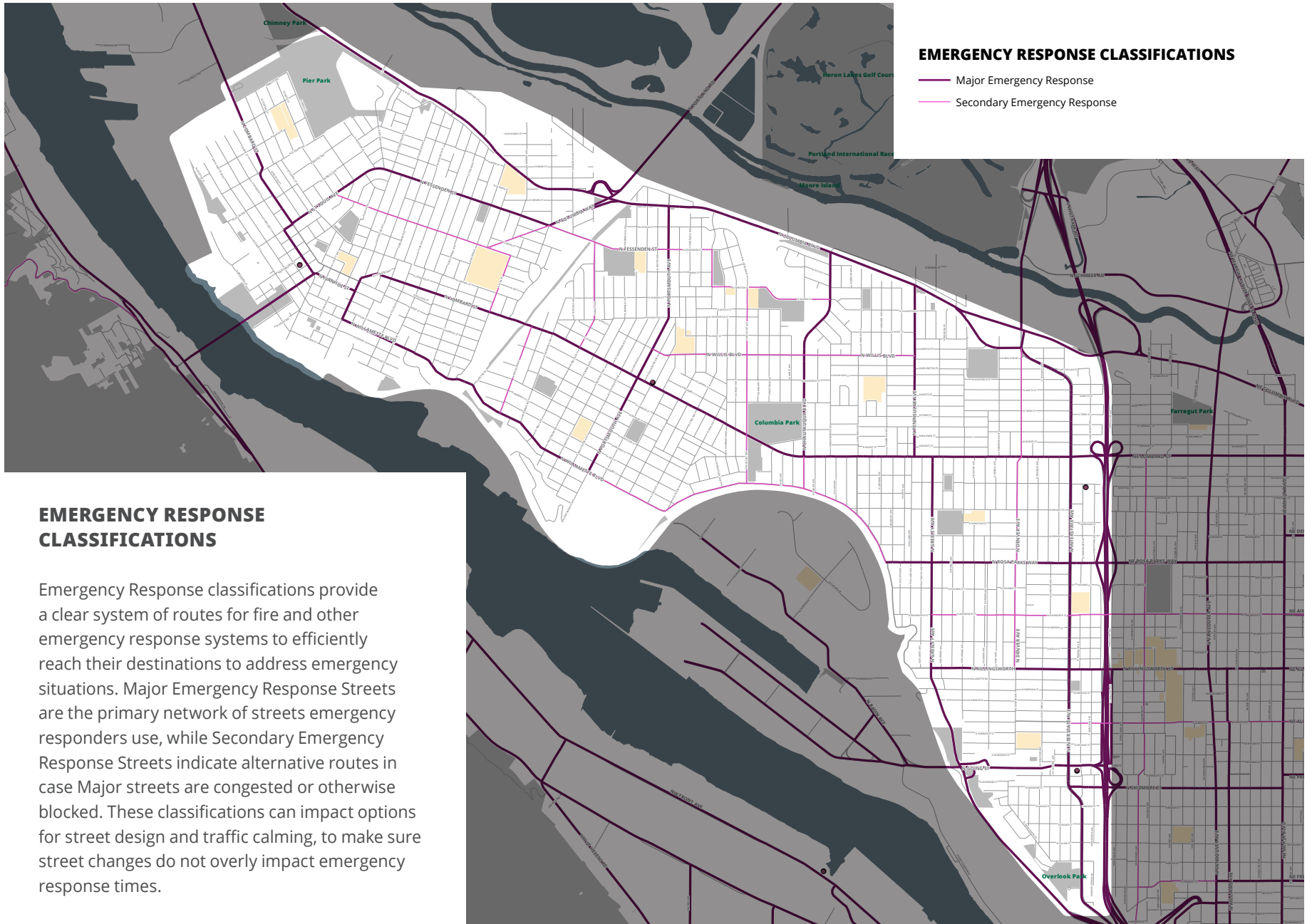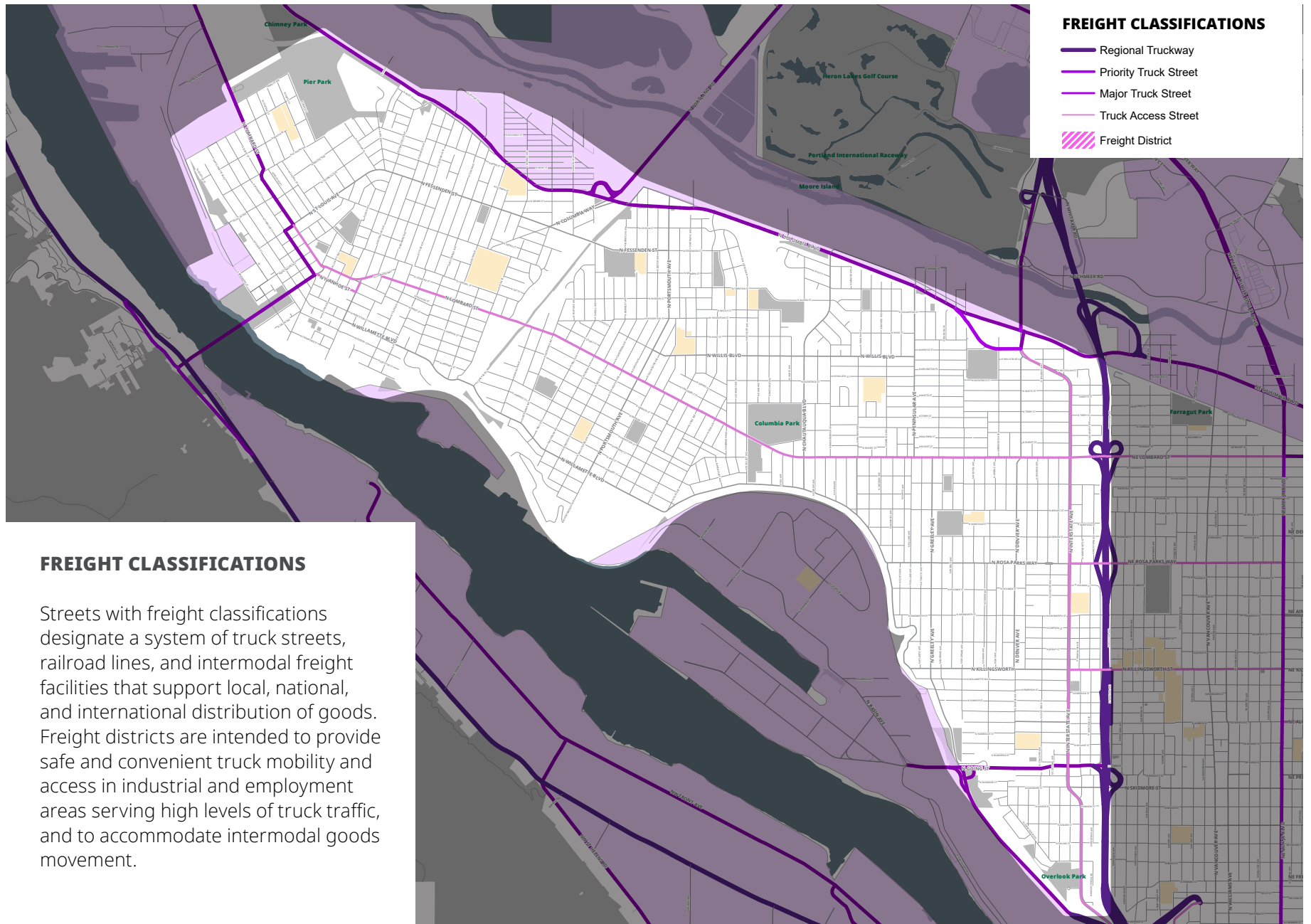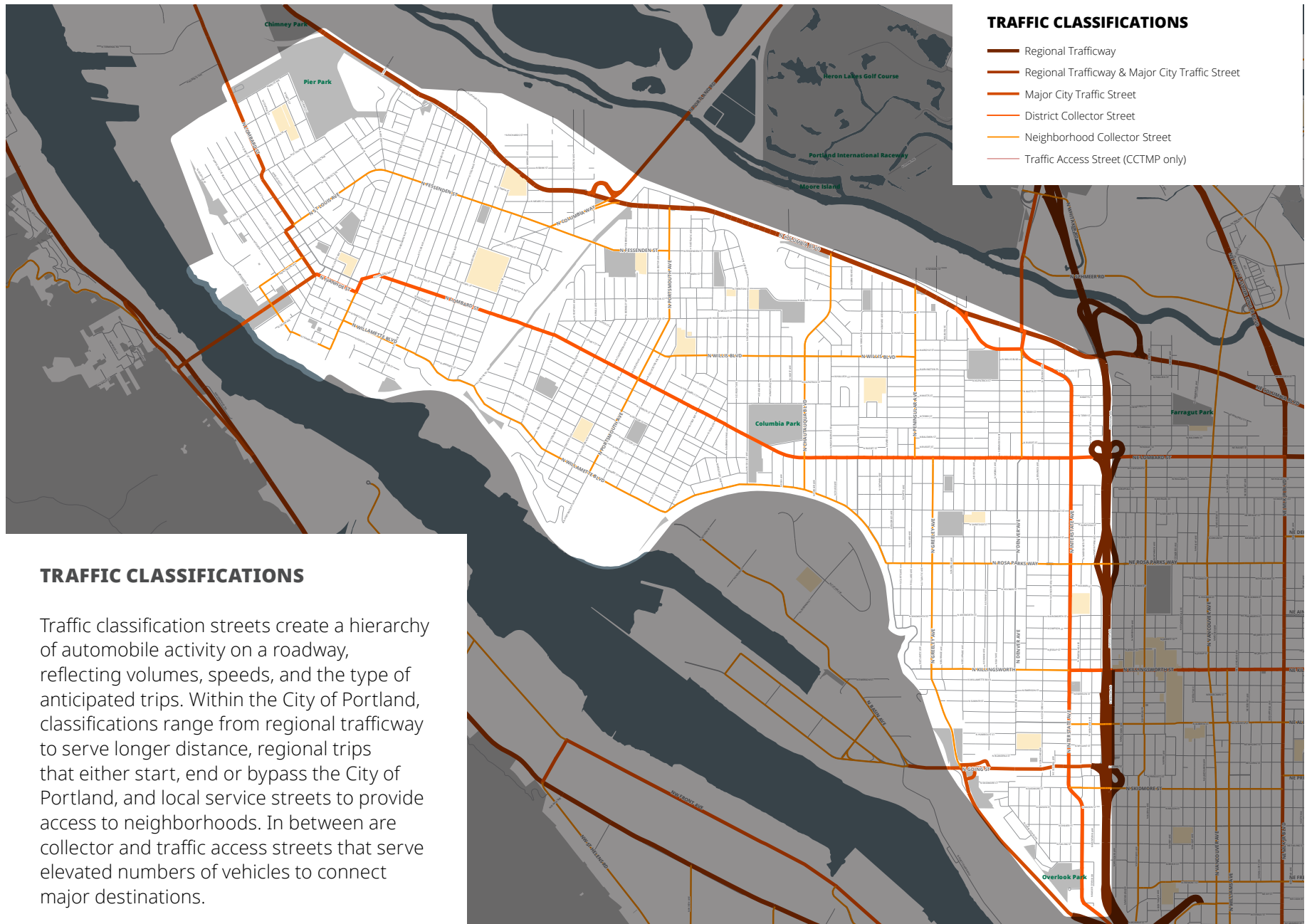
NORTH PORTLAND

IN MOTION