33.590.250 Standards on Main Streets

A. Purpose. These regulations reinforce the continuity of the pedestrian-oriented environment and foster development with transit-supportive levels of activity along the main street. The standards also help to maintain a healthy urban district with architectural elements and active ground-floor uses that provide visual interest and interrelate with the pedestrian environment. The regulations also promote window areas to:

- Provide a pleasant, rich, and diverse pedestrian experience by connecting activities occurring within a structure to adjacent sidewalk areas;
- Encourage continuity of retail and service uses; and
- Encourage surveillance opportunities at street level.

B. Where these regulations apply. These regulations apply to sites in the EX zone with frontage on the main street shown on Map 590-2.

C. Ground floor windows. To meet the standards, ground floor windows must be windows that allow views into work areas or lobbies, or be windows in pedestrian entrances. Windows into storage areas, vehicle parking areas, garbage and recycling areas, mechanical and utility areas and display cases attached to outside walls do not qualify. Windows into bicycle parking areas are allowed to qualify for up to 25 percent of the ground floor windows coverage requirement. The bottom of the windows of nonresidential spaces must be no more than 4 feet above the finished grade.

1. Ground level facades that are located within 100 feet of and face the main street shown on Map 590-2 must have windows that cover at least 60 percent of the ground level wall area. For the purposes of this standard, ground level wall area includes all exterior wall area from 2 feet to 10 feet above the finished grade. Until January 1, 2029, the standard for development that includes a residential use is 40 percent of the ground level wall area.
2. All other ground level facades that face a street lot line, sidewalk, plaza, or other publicly accessible open area or right-of-way must have windows that cover at least 40 percent of the ground level wall area. For street facing facades of dwelling units the regulations of 33.130.230.B.4 apply. For the purposes of this standard, ground level wall area includes all exterior wall area from 2 feet to 10 feet above the finished grade.
3. Optional artwork. Projects proposing to use artwork as an alternative to the ground floor window requirements may apply for this through the adjustment procedure. Projects may also apply for a modification through design review if they meet the following qualifications. Buildings having more than 50 percent of their ground level space in storage, parking, or loading areas, or in uses which by their nature are not conducive to windows (such as theaters), may be allowed to use the design review process. Artwork and displays relating to activities occurring within the building are encouraged. In these instances, the artwork will be allowed if it is found to be consistent with the purpose for the ground floor window standard.

Replaced by Amendment

Replaced by Amendment

D. Ground floor active use standard. In order to accommodate active uses such as residential, retail, or office, the ground floor of buildings must be designed and constructed as follows. This standard must be met along at least 50 percent of the ground floor of walls that are at an angle of 45 degrees or less from the street lot line of the main street shown on Map 590-2. Development that includes a residential use is exempt from the ground floor active use standard until January 1, 2029:

Areas designed to accommodate active uses must meet the following standards:

1. The distance from the finished floor to the bottom of the structure above must be at least 12 feet. The bottom of the structure above includes supporting beams;
2. The area must be at least 25 feet deep, measured from the street-facing façade;
3. At least 25 percent of the area of the street-facing façade of the portion of the building designed to meet the requirements of this subsection must be windows and doors; and
4. Parking is not allowed in the areas designed to meet the standards of this subsection.

Replaced by Amendment

33.590.250 Standards near the Streetcar Alignment

The streetcar alignment in the Montgomery Park plan district is located on NW Wilson and NW Roosevelt between NW 24th and NW 26th avenues, as well as NW 26th Avenue between NW Wilson and Roosevelt, and NW 23rd Avenue between NW Roosevelt and NW Vaughn (see Map 590-2). The standards in this section apply within the area of a site that is within 200 feet of the streetcar alignment. The standards support a pedestrian-oriented environment along the streetcar line by limiting parking areas and access to parking areas in proximity to the streetcar alignment. The standards are intended to minimize conflicts between pedestrians and vehicles and between transportation modes.

The standards are similar to standards that apply near the streetcar line in Northwest Portland and the Central City.

Replaced by Amendment

33.590.255 Standards near the Streetcar Alignment

A. **Purpose.** These regulations reinforce the continuity of the pedestrian-oriented environment and limit the visual impact of parking facilities along a streetcar alignment.

B. **Location of parking.** The following parking location standards apply in the EX zone within 200 feet of the streetcar alignment shown on Map 590-2:

1. Surface parking is not allowed;
2. Structured parking is allowed only when one of the following is met:
   a. The finished ceiling is entirely underground;
   b. The lowest floor of the parking area is 9 feet or more above grade; or
   c. The parking area is at least 25 feet from the street-facing façade on main street frontages.

C. **Motor vehicle access.** Motor vehicle access to a vehicle area or structure is not allowed from the streetcar alignment shown on Map 590-2 except when the site has no other street frontage.

Replaced by Amendment

33.590.260 Urban Green Features

This section applies to new development in the EX zone and requires the inclusion of at least one green, climate-resilient element in the urban environment. The features are designed to respond to and enhance the natural features of the area. Green features help to soften the effects of built and paved areas, cool air temperature, intercept rainfall, and reduce stormwater runoff. They may also provide opportunities to grow food and provide habitat for birds and other wildlife.

Development that adds more than 10,000 square feet of building floor area must choose from one of several options:

1) 15% of the site can be landscaped;
2) 10% of the site can be landscaped with large trees; or
3) An ecoroof can be provided on buildings.

Replaced by Amendment

33.590.260 Urban Green Features

A. Purpose. Green elements integrated into the urban environment help to soften the effects of built and paved areas, cool the air temperature, intercept rainfall and reduce stormwater runoff by providing unpaved permeable surface. They may also provide opportunities to grow food and provide habitat for birds and other wildlife. A range of urban green options are provided to address this area's more urban development patterns and characteristics.

B. Where these options apply. The standard applies to new development and alterations to development in the EX zone when more than 10,000 square feet of floor area will be added to a site.

C. Urban green features standard. Development must include at least one of the following:

1. Landscaped area. A minimum of 15 percent of a site area must be landscaped. Any required landscaping, such as for required setbacks or parking lots, applies towards meeting the minimum amount of required landscaped area. Sites developed with a house, attached house or duplex are exempt from the required minimum landscaped area standard. The following apply:

    a. Landscaped areas must be at ground level and comply with at least the L1 standard described in Chapter 33.248, Landscaping and Screening, or be a vegetated stormwater management facility that meets minimum Bureau of Environmental Services stormwater management requirements. Up to one-third of the landscaped area may be improved for active or passive recreational use. Examples of active or passive recreational use include walkways, play areas, plazas, picnic areas, garden plots, and unenclosed recreational facilities.

    b. Landscaped areas raised above ground level may be used to meet the minimum landscaped area standard when landscaped to at least the L1 standard and soil depth is a minimum of 30 inches.

    c. Up to 50 percent of the required landscaped area may be improved for pedestrian use, such as walkways and plazas, if the area is surfaced with pervious pavement approved by the Bureau of Environmental Services as being in compliance with the Stormwater Management Manual. If this provision is used, no impervious surfaces can be counted toward meeting the minimum landscaped area standard.

2. Space for large trees. At least 10 percent of total site area must be provided as outdoor area with no dimension less than 30 feet in any direction. At least half of this outdoor area must be landscaped to at least the L1 level and the remainder may be hard surfaced for use by pedestrians. At least half of the trees provided to meet the L1 standard must be large tree species. Large trees are defined in Section 33.248.030, Plant Materials.

3. Ecoroof. An ecoroof must be provided that is equivalent in total area to at least 60 percent of the total building footprint of new buildings on the site. The ecoroof area must be approved by the Bureau of Environmental Services as being in compliance with the Stormwater Management Manual's *Ecoroof Facility Design Criteria.*

Replaced by Amendment

33.590.265 Required Outdoor Areas

The EX base zone does not require outdoor area for residential units. However, because the vision for the Montgomery Park plan district is a high-density, mixed-use residential and employment area, the plan district regulations will include required outdoor area. The standards in this section are the same standards required per dwelling unit in the commercial/mixed use zones. This helps implement the Comprehensive Plan polices to promote healthy, active living and access to outdoor space.

Required outdoor areas can be provided in the form of individual private outdoor spaces, shared common outdoor or indoor community or recreation space for the residents of the development, or publicly accessible open space.





Examples of residential outdoor areas in the form of individual balconies (left) and shared outdoor space (right).

The required outdoor area provisions also include exceptions that allow the requirement to be reduced by up to 50% in certain circumstances. These include:

1) When a publicly accessible open area or park is provided. This public area serves a greater neighborhood parks/open space goal and will help offset the reduction in required on-site open area. This provision can only be used when a public benefits agreement with large property owners requiring a publicly-accessible open space of at least 40,000 square feet in size, and meeting the requirements of Portland Parks and Recreation and approval by the Director of Portland Parks and Recreation, has been adopted by Portland City Council. The benefits agreement is expected to run with the property as it is subdivided, so subsequent owners should be aware of the existence of such an agreement through due diligence.
2) When a publicly-accessible open area that meets the criteria of 33.590.260.B.2.c is provided and the property owner executes a covenant with the City ensuring the preservation, maintenance, and continued operation of the plaza or park.

Replaced by Amendment

33.590.265 Required Outdoor Areas

A. Purpose. The required outdoor areas standards ensure opportunities for residents to have access to outdoor space for recreation, relaxation, natural area, or growing food. Outdoor areas are an important aspect for addressing the livability of a property with residential units by providing residents with opportunities for outdoor activities, some options for outdoor privacy, and a healthy environment. The standards ensure that outdoor areas are located so that residents have convenient access. These standards also allow for outdoor area requirements to be met by indoor community facilities because they provide opportunities for recreation or gathering. The standards also incent public plazas/open spaces and other larger publicly accessible outdoor areas that serve a park-like function and provide a broader outdoor area function in the district.

B. Requirements.

1. Amount required:

   a. Generally. Except as stated in Subparagraph B.1.b., outdoor area is required as follows:

      (1) Except in Subdistricts B, C and D, on sites that are up to 20,000 square feet in total area, at least 36 square feet of outdoor area is required for each dwelling unit on the site;

      (2) For sites that are more than 20,000 square feet in total area, and for all sites in Subdistricts B, C and D, at least 48 square feet of outdoor area is required for each dwelling unit on the site.

   b. Exceptions.

      (1) In Subdistricts B, C and D, the outdoor area requirement is reduced to 24 square feet for each dwelling unit on the site when a 40,000 square foot site is dedicated for a publicly accessible park or open space. This exception only applies to the first 2,000 dwelling units constructed in the combined Subdistricts B, C and D. To qualify, the applicant must:

         - Provide a letter from the Portland Bureau of Planning and Sustainability verifying that the Montgomery Park Area Plan Public Benefits Agreement specifying provision of a publicly accessible park or open space was adopted by Portland City Council on [INSERT ADOPTION DATE];
         - Provide a letter from Portland Parks and Recreation verifying that the site and terms of future development of a publicly accessible park or open space has been approved by Portland Parks and Recreation; and
         - Provide a letter from the Portland Bureau of Planning and Sustainability verifying that 2,000 housing units or fewer have been built in subdistricts B, C, and D.

      (2) When a publicly accessible outdoor area that meets requirements of 33.590.265.B.2.c. is provided, each one square foot of publicly accessible outdoor area counts as two feet toward the total amount of required outdoor area.

Replaced by Amendment

Replaced by Amendment

2. Size, location and configuration. Required outdoor area may be provided as individual, private outdoor areas, such as patios or balconies, as common, shared areas, such as outdoor courtyards and play areas, or indoor recreational facilities or community rooms, or as publicly accessible outdoor area. There also may be a combination of individual common, or publicly accessible areas.

   a. Individual unit outdoor areas. Where a separate outdoor area is provided for an individual unit, it must be designed so that a 4-foot by 6-foot dimension will fit entirely within it. The outdoor area must be directly accessible to the unit. Balconies that extend over street right-of-way count towards meeting this standard. Areas used for pedestrian circulation to more than one dwelling unit do not count towards meeting the required outdoor area. If the area is at ground level it may extend up to 5 feet into a required front setback, and may extend into required side and rear setbacks as long as the area is not closer than 5 feet to a lot line abutting an RF through RM4 zoned lot.

   b. Common areas. There are two types of common area:

      (1) Outdoor common area. Where outdoor areas are common, shared areas, each area must be designed so that it is at least 500 square feet in area and must measure at least 20 feet in all directions. The outdoor common area must be located within 20 feet of a building entrance providing access to residential units.

      (2) Indoor common area. Where an indoor common area is provided, it must be an indoor recreational facility or an indoor tenant community room. Indoor common areas that are not recreational facilities or community rooms, such as lobbies, hallways, laundry facilities, storage rooms, and vehicle or bicycle facilities, cannot be used to meet this requirement.

   c. Publicly accessible outdoor area. Where the outdoor area is publicly accessible, the outdoor area must be open to the public between the hours of 7 a.m. and 9 p.m. The property owner must record an easement for the outdoor area that provides for unrestricted public access from 7 a.m. to 9 p.m. The publicly accessible outdoor area must be approved through design review, or meet the following standards:

      (1) The area must be at least 1,000 square feet in area and must measure at least 20 feet in all directions;

      (2) The outdoor area must be located directly adjacent to a public street or public access easement;

      (3) If there is a building located directly adjacent to the outdoor area, the outdoor area must not be adjacent to any portion of a dwelling unit;

      (4) A maximum of 25 percent of the outdoor area may be covered by awnings, building eaves or other covered structures.

Replaced by Amendment

Replaced by Amendment

(5) A minimum of 15 percent of the outdoor area must be landscaped, and there must be a least one small canopy tree for each 100 square feet of landscaping.

(6) Include benches or seating that provides at least 10 linear feet of seats. The seating surface should be at least 15 inches deep and between 16 and 24 inches above the grade upon which the seating or bench sits.

(7) Include exterior light fixtures that meet the following:

- One light fixture is required every 30 feet; and
- Exterior lights must not project light upward;

d. Combination of individual, common, and publicly accessible outdoor area. Where a combination of individual unit, common, and publicly accessible area is provided, each individual area must meet Subparagraph B.2.a., each common area must meet B.2.b., and each publicly accessible area must meet B.2.c. or be approved through design review. Together, all the areas must provide a total amount of space equivalent to the combined amount of outdoor area required for each dwelling unit.

3. Surfacing materials. Except for publicly accessible outdoor areas, required outdoor areas must be surfaced with lawn, pavers, decking, or sport court paving which allows the area to be used for active or passive recreational use. Non-permeable portions of publicly accessible outdoor areas must be surfaced with brick, concrete, pavers or stone.

4. User amenities. User amenities, such as tables, benches, trees, shrubs, planter boxes, garden plots, drinking fountains, spas, or pools, may be placed in the outdoor area. Common, shared outdoor areas may also be developed with amenities such as play areas, plazas, roof-top patios, picnic areas, and open recreational facilities.

Replaced by Amendment

33.590.270 Off-Site Impacts Standards

The off-site impacts standards are intended to:

- Provide information to new residents and businesses that they are moving to an area that is in transition from, and proximate to, heavy industrial and other employment uses. Industrial and some employment uses may create noise, odors, and other forms of nuisance impacts that new residents and users should be aware of.
- Provide building design features - such as insulation and windows - that can reduce the noise impacts of nearby industrial and employment uses.

Replaced by Amendment

33.590.270 Off-Site Impacts Standards

A. Industrial impacts disclosure statement.

1. Purpose. This requirement is intended to ensure that people who choose to live or work in the district are aware of the potential impacts, such as noise, vibration, odors, glare, and heavy truck traffic that stem from nearby industrial and employment uses.

2. Disclosure statement required. Prior to the issuance of a building permit for a new building that will contain a Household Living, Retail Sales And Service, or Office use, and for alterations to an existing building that contains a Household Living, Retail Sales And Service, or Office use, the owner of the property must sign and record a copy of the City's Industrial Impacts Disclosure Statement. The statement must be recorded in the records of Multnomah County. The statement acknowledges that the property is located near industrial and employment uses, and signifies the owner's awareness of the associated nuisance impacts including noise, odor and light levels. The statement is available in the Development Services Center. After the permit is finalized, the property owner must provide a copy of the disclosure statement to every tenant or buyer, and post a copy of the disclosure statement on the premises in a location that is accessible to all tenants.

B. Noise insulation.

1. Purpose. Noise insulation is required in order to protect homes located near industrial areas from potential noise impacts generated by industrial operations.

2. Where this standard applies. The noise insulation standard applies in the EX zone within 400 feet of a lot line that abuts or is across the street from an IH, IG, or EG zone. In the case of split zoned sites, the standard applies within 400 feet of the zoning line.

3. Noise insulation standard. All new dwelling units must be constructed with sound insulation or other means to achieve a day/night average noise level of 45 dBA. An engineer registered in Oregon who is knowledgeable in acoustical engineering must certify that the building plans comply with the standard for noise insulation prior to issuance of a building permit. Garages or other attached accessory structures that do not include living space are exempt from this standard.

Replaced by Amendment

33.590.280 Transportation and Parking Demand Management

The purpose statement describes the need and rationale for the Transportation Demand Management (TDM) requirements. TDM plans are intended to reduce trips by automobiles and encourage use of alternative transportation modes. They may also reduce the need for vehicle ownership and corollary parking demand.

These regulations apply existing TDM regulations that are applicable in commercial/mixed use and multidwelling residential zones. A TDM plan will be required of developments and alterations that result in 10 or more new residential units on a site. For residential uses, the TDM requirements will allow an applicant/building manager to adopt a pre-approved "off the shelf" TDM plan (per Title 17). As an alternative, an applicant may choose to develop a custom TDM plan through a Transportation Impact Review (see 33.852).

In general, pre-approved TDM plans are expected to consist of the following:

- Education and Information: Education and information about walking, bicycling, and transit.
- Multimodal Incentives: A financial incentive for transit, bicycling, and walking to tenants and employees; these could include low cost transit passes, car share memberships, bike/walk incentives, or other benefits that can shift travel behavior.
- Surveys: Building operators will be required to participate in surveys monitoring how well strategies are working.

Replaced by Amendment

33.590.280 Transportation and Parking Demand Management

The regulations of 33.266.410, Transportation and Parking Demand Management, apply to new development and alterations to existing development in the EX zone when the development includes a building with more than 10 dwelling units.

Replaced by Amendment

33.590.290 Parking

Parking regulations are designed to achieve the following:

- Parking ratios in Table 590-2 are intended to reduce the amount of vehicle parking allowed for certain types of land uses in the EX zone in this new transit-oriented district. These standards are generally similar to those used in the Pearl District within the Central City, or Standard A in Table 266-2. Where a use or ratio is not specified, the regulations of 33.266 apply.
- Limit the number of surface parking spaces in areas where surface parking is allowed. Uses and sites that typically cannot support structured parking such as industrial uses and small sites are exempt from this limitation.

Replaced by Amendment

33.590.290 Parking

A. Purpose. The parking and access regulations manage the supply of off-street parking to improve mobility, promote the use of alternative modes, support existing and new economic development, maintain air quality, and enhance the urban form of the plan district area.

B. Where these regulations apply. The regulations of this section apply to sites in the EX zone.

C. Parking. Except where superseded by this subsection, the regulations of 33.266 apply to all parking.

1. Minimum required parking spaces. No minimum parking is required.
2. Maximum allowed parking. The maximum number of parking spaces allowed is stated in Table 590-3.
3. Surface parking limitation. No more than 25 percent of the total number of parking spaces on a site can be in surface parking. Industrial uses and sites 20,000 square feet or less in total site area are exempt from this requirement.

Table 590-2
Maximum Parking Spaces Allowed in the EX Zone

Use Categories	Specific Uses	Maximum Parking Spaces Allowed
Residential Categories		
Household Living		1 per unit, except SROs exempt
Group Living		1 per 4 bedrooms
Commercial Categories		
Retail Sales And Service	Retail, personal service, repair oriented	1 per 500 sq. ft. of net building area
	Restaurants and bars	1 per 250 sq. ft. of net building area
	Health clubs, gyms, lodges, meeting rooms, and similar. Continuous entertainment such as arcades and bowling alleys	1 per 330 sq. ft. of net building area
	Temporary lodging	1 per rentable room; for associated uses such as restaurants, see above
	Theaters	1 per 4 seats or 1 per 6 feet of bench area
Commercial Categories		
Office	General office	1.5 per 1000 sq. ft. of net building area
	Medical/Dental office	1.5 per 1000 sq. ft. of net building area
Quick Vehicle Servicing		Not applicable
Vehicle Repair		Not applicable
Commercial Parking		None
Self-Service Storage		Not applicable
Commercial Outdoor Recreation		Not applicable
Major Event Entertainment		Per CU review

Replaced by Amendment

Replaced by Amendment

Table 590-2 Maximum Parking Spaces Allowed in the EX Zone		
Use Categories	**Specific Uses**	**Maximum Parking Spaces Allowed**
Industrial Categories		
Manufacturing And Production		1 per 750 sq. ft. of net building area
Warehouse And Freight Movement		1 per 750 sq. ft. of net building area for the first 3,000 sq. ft. of net building area and then 1 per 3,500 sq. ft. of net building area thereafter
Wholesale Sales, Industrial Service		1 per 750 sq. ft. of net building area
Bulk Fossil Fuel Terminals		not applicable
Railroad Yards		not applicable
Waste-Related		not applicable
Institutional Categories		
Basic Utilities		None
Community Service		1 per 500 sq. ft. of net building area
Parks And Open Areas		Per CU review for active areas
Schools	Grade, elementary, middle, junior high	1 per classroom
	High school	7 per classroom
Medical Centers		1 per 500 sq. ft. of net building area
Colleges		1 per 600 sq. ft. of net building area exclusive of dormitories, plus 1 per 4 dorm rooms
Religious Institutions		1 per 100 sq. ft. of main assembly area
Daycare		1 per 500 sq. ft. of net building area
Other Categories		
Agriculture		Not applicable
Aviation		Per CU
Detention Facilities		Per CU
Mining		Not applicable
Radio Frequency Transmission Facilities	Personal wireless service and other non-broadcast facilities	None
	Radio or television broadcast facilities	2 per site
Rail Lines & Utility Corridors		None

Replaced by Amendment

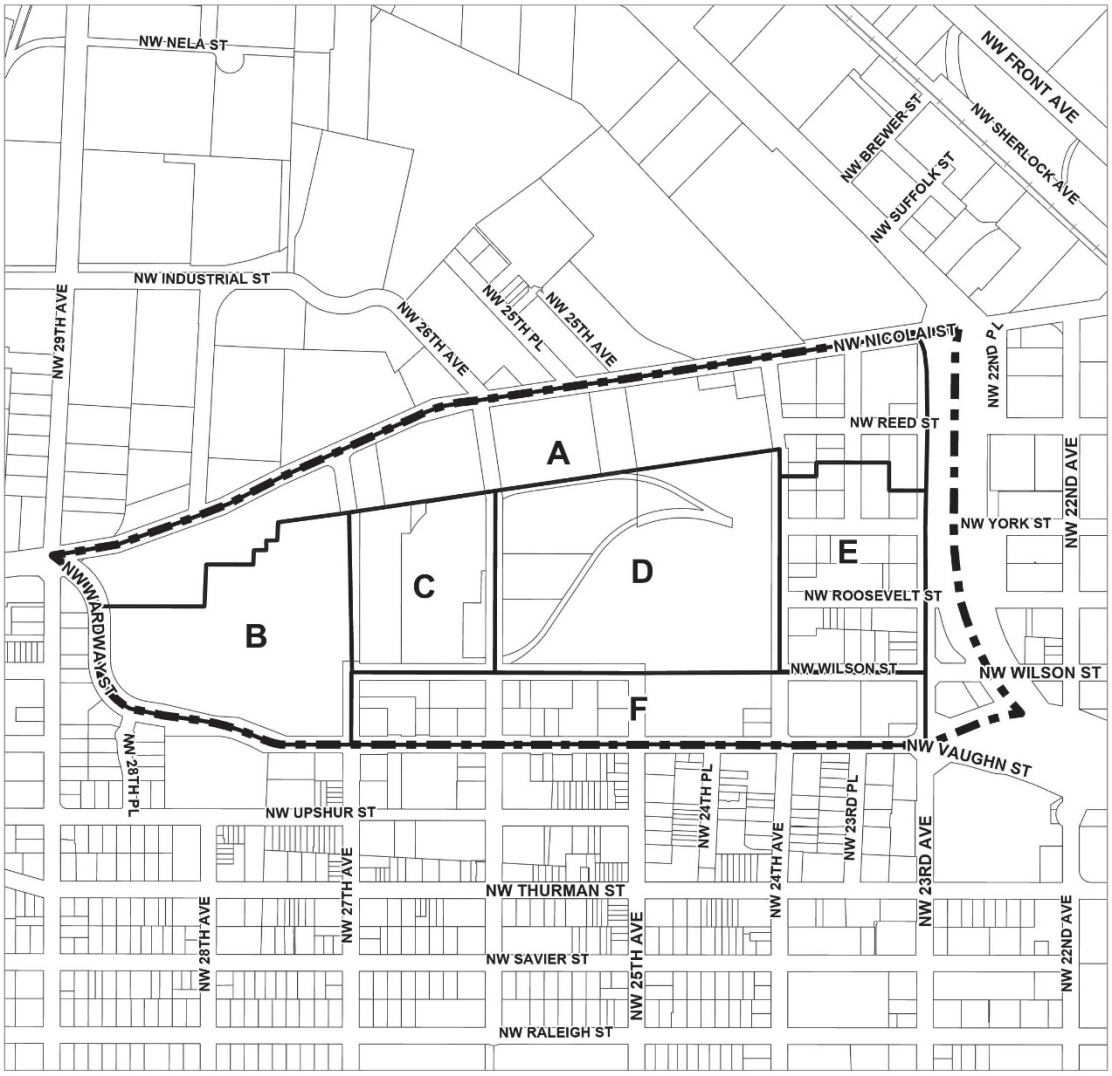
Map 590-1
This map shows the new Vaughn-Nicolai plan district and Subdistricts.

Replaced by Amendment

Vaughn-Nicolai Plan District

Map 590-1

Map Revised Xxxxx XX, 202X



Plan District Boundary

Subdistrict Boundaries

NORTH

0 400 800

Scale in Feet

Bureau of Planning and Sustainability
Portland, Oregon

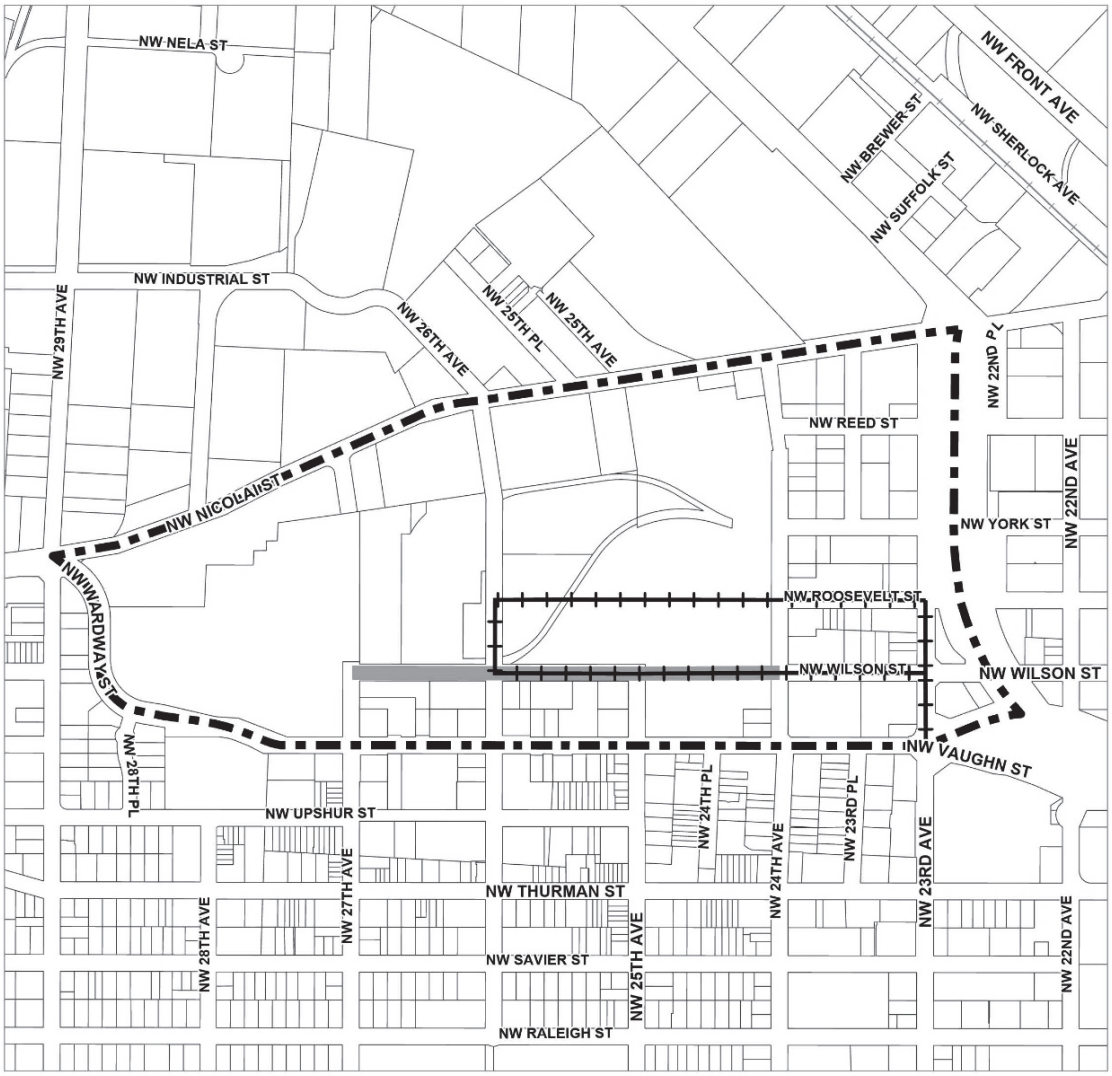
Map 590-2
This map shows the new Vaughn-Nicolai plan district and areas where streetcar-oriented regulations apply.

Replaced by Amendment

Vaughn-Nicolai Plan District
Streetcar Alignment and Main Street

Map 590-2

Map Revised Xxxxx XX, 202X



Plan District Boundary
Streetcar Alignment
Main Street

NORTH

0 400 800

Scale in Feet

Bureau of Planning and Sustainability
Portland, Oregon

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Replaced by Amendment

Section III: Technical Zoning Code Amendments

The zoning code amendments in this section are technical amendments that provide consistency among sections of the zoning code that address additional prohibited uses. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word “Additional” where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

Replaced by Amendment

33.258 Nonconforming Situations

33.258.070 Nonconforming Development

A-C. [No change]

D. Development that must be brought into conformance. The regulations of this subsection are divided into two types of situations, depending upon whether the use is also nonconforming or not. These regulations apply except where superseded by more specific regulations in the code.

1. [No change]

2. Nonconforming development with an existing nonconforming use, allowed use, limited use, or conditional use. Nonconforming development associated with an existing nonconforming use, an allowed use, a limited use, or a conditional use, must meet the requirements stated below. When alterations are made that are over the threshold of Subparagraph D.2.a., the site must be brought into conformance with the development standards listed in Subparagraph D.2.b. The value of the alterations is based on the entire project, not individual building permits. Sites with residential uses are exempt from the requirements until January 1, 2029.

   a-c. [No change]

   d. Timing and cost of required improvements. The applicant may choose one of the following options for making the required improvements:

      (1) [No change]

      (2) Option 2. Under Option 2, the required improvements may be made over several years, based on the compliance period identified in Table 258-1. However, by the end of the compliance period, the site must be brought fully into compliance with the standards listed in Subparagraph D.2.b. When this option is chosen, the following applies:

      - Before a building permit is issued, the applicant must submit the following to BDS:
        - Application. An application, including a Nonconforming Development Assessment, which identifies in writing and on a site plan, all development that does not meet the standards listed in subparagraph D.2.b.
        - Covenant. The City-approved covenant, which is available <u>from Portland Permitting & Development</u>~~in the Development Services Center~~, is required. The covenant identifies development on the site that does not meet the standards listed in subparagraph D.2.b, and requires the owner to bring that development fully into compliance with this Title. The covenant also specifies the date by which the owner will bring the nonconforming development into full compliance. The date must be within the compliance periods set out in Table 258-1. The covenant must be recorded as specified in Subsection 33.700.060.B.

Replaced by Amendment

Replaced by Amendment

33.400 Aircraft Landing Zone

400

33.400.030 Height Limits

All structures, vegetation, and construction equipment within the Aircraft Landing Overlay Zone are subject to the height limits of this section. Map 400-1 shows the boundaries of the overlay zone. The Aircraft Landing Overlay Zone Map, available from Portland Permitting & Development~~in the Development Services Center~~ shows the height limits.

A. **E, I, CI2, and OS zones.** In the employment, industrial, CI2, and open space zones, the height limits are shown on the Aircraft Landing Overlay Zone Map. When the base zone height is more restrictive than the Aircraft Landing Overlay Zone height, the base zone height applies. The Aircraft Landing Overlay Zone Map is available from Portland Permitting & Development~~at the Development Services Center~~.

B-C. [No change]

Replaced by Amendment

33.415.110 Prohibited Uses

This amendments is a technical amendment. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word "Additional" where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

33.415 Centers Main Street Overlay Zone

415

Sections:

General
- 33.415.010 Purpose
- 33.415.020 Short Name and Map Symbol
- 33.415.030 Where These Regulations Apply

Use Regulations
- 33.415.100 Additional Prohibited Uses
- 33.415.200 Required Ground Floor Active Use

Development Regulations
- 33.415.300 Prohibited Development
- 33.415.310 Minimum Floor Area Ratio
- 33.415.320 Maximum Building Setbacks
- 33.415.330 Location of Vehicle Areas
- 33.415.340 Ground Floor Windows
- 33.415.350 Entrances
- 33.415.410 Additional Use and Development Standards in the CM1 Zone

33.415.100 Additional Prohibited Uses

The following additional uses are prohibited **within 100 feet of a transit street:**

A. Quick Vehicle Servicing; and

B. Self-Service Storage.

Replaced by Amendment

Replaced by Amendment

33.470 Portland International Airport Noise Impact Zone

470

33.470.030 Where These Regulations Apply

The regulations of the chapter apply within the Portland International Airport Noise Impact Overlay Zone. There are several contours within the zone. The boundaries of the 65 DNL and 68 DNL noise contours are based on the 1990 Portland International Airport Noise Abatement Plan. The 55 DNL noise contour is based on the 2035 50th Percentile Forecast Noise Exposure Map in the 2010 Portland International Airport Master Plan Update.

A set of quarter-section maps, known as the PDX Noise Zone Maps, is available from Portland Permitting & Developmnt~~for viewing at the Development Services Center~~. The maps are the official reference maps for the PDX Noise Zone regulations. The maps show the 55 DNL noise contour and each successively higher noise contour in one DNL increments.

33.470.040 Regulations for Residential Uses

A. Noise disclosure statement in the 55, 65, and 68 DNL. The regulations of this subsection apply to sites in the 55, 65, and 68 DNL contours. Before a building permit is issued for new residential construction or reconstruction where the total cost of improvements is 75 percent or more of the total assessed improvement value of the site, the owner must sign the City's noise disclosure statement. The noise disclosure statement acknowledges that the property is located within the 55, 65, or 68 DNL noise contour and signifies the owner's awareness of the associated noise levels. The noise disclosure statement must be recorded in the County records by the owner. A packet containing the noise disclosure statement is available from Portland Permitting & Development~~at the Development Services Center~~.

B. Noise easement in the 65 and 68 DNL. The regulations of this subsection apply to sites in the 65 and 68 DNL contours. Before a building permit is issued for new residential construction or reconstruction where the total cost of improvements is 75 percent or more of the total assessed improvement value of the site, the owner must dedicate a noise easement to the Port of Portland. The easement authorizes aircraft noise impacts over the grantor's property at levels established by the DNL noise contour. Any increase of the DNL noise level above that stated on the easement will not void nor be protected by the easement. The easement forms are available from Portland Permitting & Development~~at the Development Services Center~~.

C-D. [No change]

Replaced by Amendment

Replaced by Amendment

Original Exhibit B - Volume 2 (for information only)

33.510.252 Additional Standards in the Central Eastside Subdistrict

The following additional standards apply in the Central Eastside subdistrict.

A. Industrial impacts disclosure statement.

1. [No change]

2. Disclosure statement required. Prior to the issuance of a building permit for a new building that will contain a Household Living, Retail Sales And Service, or Office use, and for alterations to an existing building that contains a Household Living, Retail Sales And Service, or Office use, the owner of the property must sign and record a copy of the City's Industrial Impacts Disclosure Statement. The statement must be recorded in the records of Multnomah County. The statement acknowledges that the property is located near industrial and employment uses, and signifies the owner's awareness of the associated nuisance impacts including noise, odor and light levels. The statement is available from Portland Permitting & Development~~in the Development Services Center~~. After the permit is finalized, the property owner must provide a copy of the disclosure statement to every tenant or buyer, and post a copy of the disclosure statement on the premises in a location that is accessible to all tenants.

B. [No change]

Replaced by Amendment

33.521.110 Prohibited Uses

This amendment is a technical amendment. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word "Additional" where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

33.521 East Corridor Plan District

521

Sections:

General
- 33.521.010 Purpose
- 33.521.020 Where These Regulations Apply

Use Regulations
- 33.521.100 Purpose
- 33.521.110 Additional Prohibited Uses

Development Standards
- 33.521.200 Purpose
- 33.521.210 Building Height
- 33.521.220 Floor Area Ratios
- 33.521.230 Connectivity
- 33.521.240 Pedestrian Standards
- 33.521.250 Entrances
- 33.521.260 Building Design
- 33.521.270 Exterior Display and Storage
- 33.521.280 Drive-Through Facilities
- 33.521.290 Parking
- 33.521.300 Additional Standards in the 122nd Avenue Subdistrict

Map 521-1 East Corridor Plan District

Map 521-2 Maximum Building Heights

Map 521-3 Floor Area Ratios

Map 521-4 Areas Where Exterior Display and Storage are Allowed

33.521.110 Additional Prohibited Uses

The following additional uses are prohibited in Pedestrian Districts and on the portion of a site within 100 feet of a light rail alignment:

A. Vehicle Repair that is not on the same site as auto sales in the Retail Sales And Service category;

B. Quick Vehicle Servicing;

C. Commercial Parking; and

D. Self-Service Storage.

Replaced by Amendment

33.526.110 Prohibited Uses

This amendment is a technical amendment. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word "Additional" where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

33.526 Gateway Plan District

526

Sections:

General
33.526.010 Purpose
33.526.020 Where These Regulations Apply
33.526.030 Early Project Consultation
Use Regulations
33.526.100 Purpose
33.526.110 Additional Prohibited Uses
33.526.120 Retail Sales and Service and Office Uses
Development Standards
33.526.200 Purpose
33.526.210 Building Height
33.526.220 Floor Area Ratio
33.526.230 Floor Area and Height Bonus Options
33.526.240 Open Area
33.526.250 Connectivity
33.526.260 Pedestrian Standards
33.526.270 Entrances
33.526.280 Enhanced Pedestrian Street Standards
33.526.290 Ground Floor Windows
33.526.300 Required Windows Above the Ground Floor
33.526.310 Exterior Display and Storage
33.526.320 Drive-Through Facilities
33.526.330 Gateway Master Plan
33.526.340 Parking
Map 526-1 Gateway Plan District
Map 526-2 Maximum Heights
Map 526-3 Floor Area Ratios
Map 526-4 Enhanced Pedestrian Streets
Map 526-5 Bonus Option Areas

33.526.110 Additional Prohibited Uses

A. Vehicle Repair, Quick Vehicle Servicing, Commercial Parking, and Self-Service Storage are prohibited in the plan district.

B. Sale or lease of consumer vehicles, including passenger vehicles, motorcycles, light and medium trucks, travel trailers, and other recreational vehicles is prohibited on the portion of a site within 200 feet of a light rail alignment. Offices for sale or lease of vehicles, where the vehicles are displayed or stored elsewhere, are allowed.

Replaced by Amendment

33.534.110 Prohibited Uses

This amendment is a technical amendment. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word "Additional" where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

33.534 Hillsdale Plan District

534

Sections:

General
33.534.010 Purpose
33.534.020 Where These Regulations Apply
Use Regulations
33.534.100 Purpose
33.534.110 Additional Prohibited Uses
Development Standards
33.534.200 Purpose
33.534.210 Setbacks
33.534.220 Exterior Display, Storage and Work Activities in the IR and C Zones
33.534.230 Drive-Through Facilities
Map 534-1 Hillsdale Plan District

Sections:

General
33.534.010 Purpose
33.534.020 Where These Regulations Apply
Use Regulations
33.534.100 Purpose
33.534.110 Prohibited Uses
Development Standards
33.534.200 Purpose
33.534.210 Setbacks
33.534.220 Exterior Display, Storage and Work Activities in the IR and C Zones
33.534.230 Drive-Through Facilities
Map 534-1 Hillsdale Plan District

33.534.110 Additional Prohibited Uses

The following additional uses are prohibited:

A. Vehicle repair;

B. Quick vehicle servicing;

C. Self-service storage; and

D. Warehouse and freight movement.

Replaced by Amendment

33.536.110 Prohibited Uses

This amendment is a technical amendment. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word "Additional" where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

33.536 Hollywood Plan District

536

Sections:

General
33.536.010 Purpose
33.536.020 Where These Regulations Apply
Use Regulations
33.536.100 Purpose
33.536.110 Additional Prohibited Uses
33.536.120 Required Residential Uses
33.536.130 Commercial Parking in the CM2 and CM3
Development Standards
33.536.200 Purpose
33.536.210 Prohibited Development
33.536.220 Maximum Building Height
33.536.230 Transition Between Residential and Commercial/Mixed Use Zones
33.536.235 Transition Between Commercial/Mixed Use Zones
33.536.240 Floor Area Ratio
33.536.250 Bonus Options
33.536.260 Building Facades Facing Sandy Boulevard
33.536.280 Enhanced Pedestrian Street Standards
33.536.290 Maximum Allowed Parking in the RX, CM2, and CM3 Zones
33.536.300 On-Site Location of Vehicle Areas Along Sandy Boulevard
33.536.320 Nonconforming Development
Map 536-1 Hollywood Plan District and Subdistricts
Map 536-2 Hollywood Plan District: Maximum Building Heights
Map 536-3 Hollywood Plan District: Enhanced Pedestrian Streets

33.536.110 Additional Prohibited Uses

A. Purpose. These regulations limit auto-oriented uses in the plan district, and help reduce traffic congestion, especially in the commercial core of Hollywood.

B. Additional ~~P~~prohibited uses.

1. Park and Ride facilities are prohibited in the plan district; and
2. Vehicle Repair and Quick Vehicle Servicing are prohibited in Subdistrict A.

Replaced by Amendment

33.538.100 Prohibited Uses

This amendment is a technical amendment. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word "Additional" where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

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33.538 Kenton Plan District

Sections:

General
33.538.010 Purpose
33.538.020 Where These Regulations Apply
Use Regulations
33.538.100 Additional Prohibited Uses
33.538.110 Limited Uses
Development Standards
33.538.200 Drive-Through Facilities
33.538.210 Maximum Building Height
33.538.220 Floor Area Ratio
33.538.230 Required Building Lines
33.538.240 Active Use Areas
33.538.250 Parking Access Restricted Streets
Map 538-1 Kenton Plan District
Map 538-2 Maximum Building Heights
Map 538-3 Floor Area Ratio
Map 538-4 Required Building Lines
Map 538-5 Active Building Use Areas
Map 538-6 Parking Access Restricted Streets

33.538.100 Additional Prohibited Uses

The following additional uses are prohibited:

A. Wholesale Sales; and

B. Vehicle Repair.

Replaced by Amendment

Replaced by Amendment

33.540 Laurelhurst/Eastmoreland Plan District

33.540.030 Required Building Setbacks

Required building setbacks are shown on the Special Building Setbacks maps available from Portland Permitting & Development~~for review in the Development Services Center~~.

Replaced by Amendment

33.550.100 Prohibited Uses

This amendment is a technical amendment. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word "Additional" where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

33.550 Macadam Plan District

550

Sections:

General
- 33.550.010 Purpose
- 33.550.020 Where the Regulations Apply

Use Regulations
- 33.550.100 Additional Prohibited Uses

Development Standards
- 33.550.200 Floor Area Ratio
- 33.550.210 Building Height
- 33.550.220 Building Setbacks
- 33.550.230 Building Coverage
- 33.550.240 Building Length
- 33.550.250 View Corridors
- 33.550.260 Exterior Display and Storage
- 33.550.270 Drive-Through Facilities
- 33.550.280 Signs

Map 550-1 Macadam Avenue Plan District

33.550.100 Additional Prohibited Uses

The following additional use categories are prohibited in the Macadam plan district:

A. Quick Vehicle Servicing; and

B. Vehicle Repair, excluding boat repair which is allowed.

Replaced by Amendment

33.583.110 Prohibited Uses

This amendment is a technical amendment. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word "Additional" where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

Original Exhibit B - Volume 2 (for information only)

33.583 St. Johns Plan District

Sections:

General
33.583.010 Purpose
33.583.020 Where These Regulations Apply
Use Regulations
33.583.100 Purpose
33.583.110 Additional Prohibited Uses
33.583.120 Retail Sales And Service Uses in the CM3 Zone
Development Standards
33.583.200 Purpose
33.583.210 Drive-Through Facilities
33.583.220 Exterior Activities in the EG and CM3 Zones
33.583.230 Detached Houses Prohibited in the CM3 Zone
33.583.250 Maximum Building Height
33.583.270 Building Coverage in the CM3 Zone
33.583.280 Residential Uses in the EG1 Zone
33.583.285 Additional Regulations in the Riverfront Subdistrict
Map 583-1 St. Johns Plan District
Map 583-2 Maximum Heights

33.583.110 Additional Prohibited Uses

A. Plan district. Quick Vehicle Servicing is prohibited in the plan district.

B. EG and CM3 zones. The following uses are prohibited in the EG and CM3 zones:

1. Vehicle Repair;
2. Commercial Parking;
3. Self-Service Storage;
4. Agriculture; and
5. Detention Facilities.

Replaced by Amendment

33.595.100 Prohibited Uses

This amendment is a technical amendment. Several overlay zones and plan districts prohibit uses in addition to the uses prohibited in the base zone. However, not all of the names of the sections are the same—some are simply Prohibited Uses, and others are Additional Prohibited Uses. The amendments in this section add the word "Additional" where necessary to ensure that all of the sections are titled in the same way.

Replaced by Amendment

33.595 West Portland Multicultural Plan District

595

Sections:

General
- 33.595.010 Purpose
- 33.595.020 Where These Regulations Apply
- 33.595.030 Neighborhood Contact
- 33.595.040 Initiating a Quasi-judicial Zoning Map Amendment

Use Regulations
- 33.595.100 Additional Prohibited Uses
- 33.595.110 Retail Sales and Service
- 33.595.120 Commercial Parking
- 33.595.130 Required Ground Floor Active Use

Development Standards
- 33.595.200 Minimum Density
- 33.595.210 Floor Area Ratio
- 33.595.220 Floor Area Bonus Options
- 33.595.230 Bonus Height
- 33.595.240 Required Affordable Commercial Space
- 33.595.250 Commercial Corridor Standards
- 33.595.260 Residential Corridor Standards
- 33.595.270 Setbacks
- 33.595.275 Design Standards for RM1 and RM2
- 33.595.280 Urban Green Features
- 33.595.290 Retaining Walls

Map 595-1 Plan District and Subdistricts

Map 595-2 Employment Focus Area

Map 595-3 Commercial Corridor and Residential Corridor Standards

Map 595-4 Maximum Floor Area Ratios

33.595.100 Additional Prohibited Uses

A. Purpose. These regulations prioritize employment opportunities in certain areas close to transit, promote pedestrian- and transit-oriented development, and help reduce traffic congestion, especially in the commercial core of the plan district.

B. Additional ~~P~~prohibited uses.

1. Residential uses are prohibited in the Employment Focus Area shown on Map 595-2;
2. Self-Service Storage is prohibited within the plan district; and
3. Quick Vehicle Servicing is prohibited within the plan district.

Replaced by Amendment

Replaced by Amendment

33.750 Fees

750

33.750.020 Fee Schedule and Procedures

Required fees for land use reviews and appeals of land use decisions are stated in the Fee Schedule for Title 33, available from Portland Permitting & Development~~at the Development Services Center~~. Rules and Procedures for the payment of fees, refunds, and waiver of fees are determined by the Director of BDS.

Replaced by Amendment

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Replaced by Amendment

Section IV: Future Zoning Code Amendments

This section presents zoning code amendments that will be effective when 200 units of affordable housing have been built in Subdistricts B, C and D in conformance with the Montgomery Park Plan Area Public Benefits Agreement. These amendments will not be effective at the time the Montgomery Park Area Plan become effective, but rather, they will automatically become effective within 60-days of certification that 200-units of affordable housing meeting the criteria of an adopted public benefit agreement have been built no later than seven years from the effective date of the Montgomery Park Area Plan. The ordinance will contain directives to this effect.

The section is formatted to facilitate readability by showing draft code amendments on the right-hand pages and related commentary on the facing left-hand pages.

Replaced by Amendment

These code amendments will become effective after 200 units of affordable housing have been built in Subdistricts B, C and D in compliance with the Montgomery Park Plan Area Public Benefits Agreement. These code provisions will not be effective when the Montgomery Park Area Plan becomes effective. They will become effective within 60-days of certification by Portland Housing Bureau (PHB) that 200 units of regulated affordable housing meeting inclusionary housing requirements have been built in Subdistricts B, C and D, no later than seven years from the effective date of the Montgomery Park Area Plan.

33.590.230.D Additional affordable housing bonus

When 200 units of regulated affordable housing meeting Inclusionary Housing requirements have been built in Subdistricts B, C and D no later than seven years from the effective date of the Montgomery Park Area Plan and certified by PHB, pre-approved code amendments will become effective within 60-days. The code section on the facing page shows the changes that will occur to 33.590.230.D when this occurs. The additional affordable housing bonus option will no longer apply to Subdistricts C and D. These subdistricts will then be subject to the base and bonus floor area ratios shown in "Future" Table 590-1, shown on page 119.

33.590.230.E Employment opportunity bonus

When 200 units of regulated affordable housing meeting Inclusionary Housing requirements have been built in Subdistricts B, C and D no later than seven years from the effective date of the Montgomery Park Area Plan and certified by PHB, pre-approved code amendments will become effective within 60-days. The code section on the facing page shows the changes that will occur to 33.590.230.E when this occurs. The Employment opportunity bonus option will no longer apply to Subdistricts C and D. These subdistricts will then be subject to the base and bonus floor area ratios shown in "Future" Table 590-1, shown on page 119.

Replaced by Amendment

33.590.230 Floor Area and Height Bonus Options

A-C. [No change]

D. Additional affordable housing bonus. In Subdistricts E and F, maximum height and FAR may be increased up to the maximum stated in Table 590-1 when at least 12 percent of the total number of dwelling units in the new building are affordable to those earning no more than 60 percent of the area median family income. To qualify for this bonus, the affordable dwelling units must be located on the site, and the applicant must provide a letter from the Portland Housing Bureau certifying that the development meets the affordability requirement of this bonus and any administrative requirements of the Portland Housing Bureau. The letter is required to be submitted before a building permit can be issued for development but is not required in order to apply for a land use review. ~~A bonus is provided when additional affordable housing is provided.~~

~~1. In subdistricts C and D, maximum height and FAR may be increased as stated in Table 590-1 when at least 15 percent of the total number of dwelling units in the new building are affordable to those earning no more than 60 percent of the area median family income. To qualify for this bonus, the affordable dwelling units must be located on the site, and the applicant must provide a letter from the Portland Housing Bureau certifying that the development meets the affordability requirement of this bonus and any administrative requirements of the Portland Housing Bureau. The letter is required to be submitted before a building permit can be issued for development but is not required in order to apply for a land use review.~~

~~2. In Subdistricts E and F, maximum height and FAR may be increased as stated in Table 590-1 when at least 12 percent of the total number of dwelling units in the new building are affordable to those earning no more than 60 percent of the area median family income. To qualify for this bonus, the affordable dwelling units must be located on the site, and the applicant must provide a letter from the Portland Housing Bureau certifying that the development meets the affordability requirement of this bonus and any administrative requirements of the Portland Housing Bureau. The letter is required to be submitted before a building permit can be issued for development but is not required in order to apply for a land use review.~~

E. Employment opportunity bonus. In subdistricts ~~A, C, D~~ and E, proposals that provide floor area for employment uses may increase maximum height and FAR up to the maximum stated in Table 590-1. Floor area may be increased by one square foot for every one square foot of floor area provided in one or more of the following use categories: Manufacturing and Production; Wholesale Sales; Industrial Office; Industrial Service; or any use in the Institutional category. Floor area provided to meet 33.590.135, Required Nonresidential Use, does not count toward this bonus.

F. [No Change]

Replaced by Amendment

These code amendments will become effective after 200 units of affordable housing have been built in Subdistricts B, C and D in compliance with the Montgomery Park Plan Area Public Benefits Agreement. These code provisions will not be effective when the Montgomery Park Area Plan becomes effective. They will become effective within 60-days of certification by Portland Housing Bureau (PHB) that 200 units of regulated affordable housing meeting inclusionary housing requirements have been built in Subdistricts B, C and D, no later than seven years from the effective date of the Montgomery Park Area Plan.

Table 590-1
When 200 units of regulated affordable housing meeting IH standards have been built and certified by Portland Housing Bureau (PHB), the amendments shown for Subdistricts C and D in Table 590-1 will become effective within 60-days.

Replaced by Amendment

Table 590-1 Summary of Maximum and Bonus FAR and Height							
		Subdistrict A	**Subdistrict B**	**Subdistrict C**	**Subdistrict D**	**Subdistrict E**	**Subdistrict F**
Maximums							
Maximum FAR		3 to 1	3 to 1	~~2~~3 to 1	~~2~~3 to1	2 to 1	2 to 1
Overall Maximum FAR with bonus		5 to 1	7 to 1	5 to 1	5 to 1	5 to 1	5 to 1
Overall Maximum Height with bonus		85 ft.	120 ft.	85 ft.	85 ft.	85 ft.	75 ft.
Maximum Increment of Additional FAR and Height Per Bonus							
Inclusionary Housing (see 33.590.230.C)	FAR Height	1 to 1 20 ft.	2 to 1 55 ft.	~~1~~2 to 1 20 ft.	~~1~~2 to 1 20 ft.	2 to 1 20 ft.	2 to 1 10 ft.
Additional Affordable Housing (see 33.590.230.D)	FAR Height	n/a n/a	n/a n/a	~~2 to 1~~ n/a ~~None~~n/a	~~2 to 1~~n/a ~~None~~n/a	1 to 1 none	1 to 1 none
Employment Opportunity (see 33.590.230.E)	FAR Height	1 to 1 20 ft.	n/a n/a	~~1 to 1~~n/a ~~20 ft.~~n/a	~~1 to 1~~n/a ~~20 ft.~~n/a	1 to 1 20 ft.	n/a n/a
Transportation Adequacy (see 33.852)	FAR Height	n/a n/a	2 to 1 none	n/a n/a	n/a n/a	n/a n/a	n/a n/a

Replaced by Amendment

Replaced by Amendment

Section V: Montgomery Park Area Design Character Statement

This section presents a Recommended Character Statement. All area plans, including town center plans, must include a Character Statement to comply with the Portland Citywide Design Guidelines. In accordance with this requirement the Montgomery Park Area Plan includes a Character Statement since the Vaughn-Nicolai Plan District will become part of the NW Town Center.

Replaced by Amendment

Commentary on Montgomery Park Area Plan Character Statement

All area plans, including town center plans, must include a Character Statement to comply with the Portland Citywide Design Guidelines. In accordance with this requirement the Montgomery Park Area Plan includes a Character Statement since the Vaughn-Nicolai Plan District will become part of the NW Town Center. As new buildings and public spaces in the district develop, the Character Statement will support the Guidelines in contributing to the area's emerging character. The role of the Character Statement is to articulate the existing and emerging character, as dictated by the community.

At the project open house and design workshop in June 2023, the online Character Statement Survey in Fall 2023, and a BIPOC Design Focus Group in Winter 2024, the community expressed a desire for future development to be designed to acknowledge the area's industrial past, particularly Montgomery Park and American Can. There is also a desire to acknowledge the displacement of past communities, and to support and foster the creation of a diverse, multi-cultural community. They also requested a green corridor along NW Vaughn, and a new public park, in addition to open spaces of various scales, to promote opportunities community gathering and recreation. This feedback has informed the development of this Character Statement and helped to identify what specific qualities in the area's community, architecture and nature contribute to this character.

Included here before the Character Statement is also an update to the Table of Contents within the Portland Citywide Design Guidelines.

<u>The following Draft Montgomery Park Area Plan Character Statement is proposed for inclusion as an amendment into the Citywide Design Guidelines.</u>

As the Character Statement is required for the Citywide Design Guidelines, the Design Commission will be the body making the recommendation to City Council on this component of the Town Center Plan. The Design Commission was briefed about the proposed Plan and Character Statement on August 17, 2023. The Design Commission will also participate in a joint public hearing with the Planning Commission on May 21, 2024 in addition to reviewing written public testimony. Design Commission work sessions to deliberate on the proposed Character Statement will be held as the Planning and Commission has their work sessions and makes their recommendations. These work sessions have not been scheduled yet. Information about future meetings dates will be posted on the project events page when they are scheduled.

Replaced by Amendment

A CHARACTER STATEMENT FOR MONTGOMERY PARK AREA PLAN

Centers are expected to be areas of growth and high activity. In recognition of this important role, additional consideration of how these centers look and feel is implemented through use of a Design overlay (d-overlay) zone. In addition to the proposed plan district provisions, all sites zoned Central Employment (EX) will be designated with the d-overlay zone. (The d-overlay zone currently applies to some properties within the existing project area boundary.)

What is the Design Overlay Zone?

The Design overlay (d-overlay) strives to ensure that new development forwards the goals and policies Portlanders set out in the 2035 Comprehensive Plan: to strengthen Portland as a city designed for people. It is applied to areas of high growth and activity, such as centers and corridors, but does not apply to most low-density residential areas. The Design overlay zone provides two options for development proposals: the objective track (using design standards) or the discretionary design review track (using design guidelines).

Under the objective track, a development must meet additional development standards. In some cases a project may not qualify to use the objective standards. In this case, design review is required, and decision-makers use design guidelines adopted by City Council to approve projects. Design guidelines give direction for each project that offers flexibility in how to meet them. The guidelines are based on a framework of three design-related core values, or "tenets" in Portland:

- Build on CONTEXT
- Contribute to the PUBLIC REALM
- Promote QUALITY AND RESILIENCE

What is the purpose of the Character Statement?

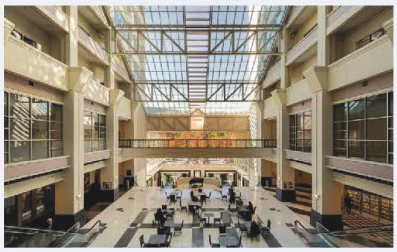
Character statements are additional tool to help guide future design reviews for each center.

The Montgomery Park Area Plan includes a proposal for a Character Statement. The statement will help development proposals undergoing design review be more responsive to the unique context of this center and the people who reside and work here. Ultimately, the goal of this statement is to provide future design reviews with a richer, more specific context description to guide how new development should address the area's character-defining features, ecological context, resources, and social and cultural values.

Help us identify what makes this place unique...

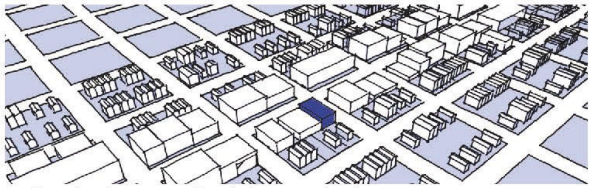


What are its special areas or features?
Historic Resources, Montgomery Park and American Can Factory

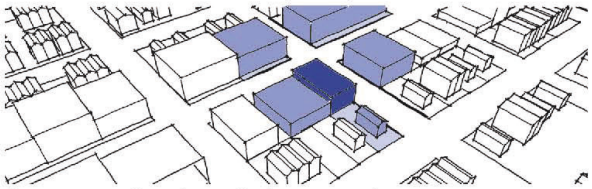


What are its community spaces and resources?
Atrium Space, Montgomery Park

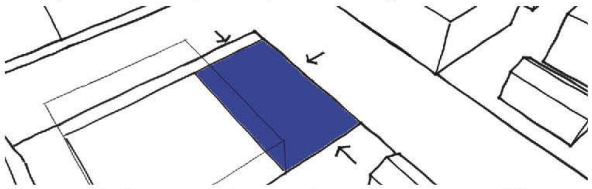
HOW ARE CONTEXT AND CHARACTER USED IN THE GUIDELINES?



Build on the character and local identity of the place.



Create positive relationships with adjacent surroudings.



Integrate and enhance on-site features and opportunities to meaningfully contribute to a location's uniqueness.

Replaced by Amendment

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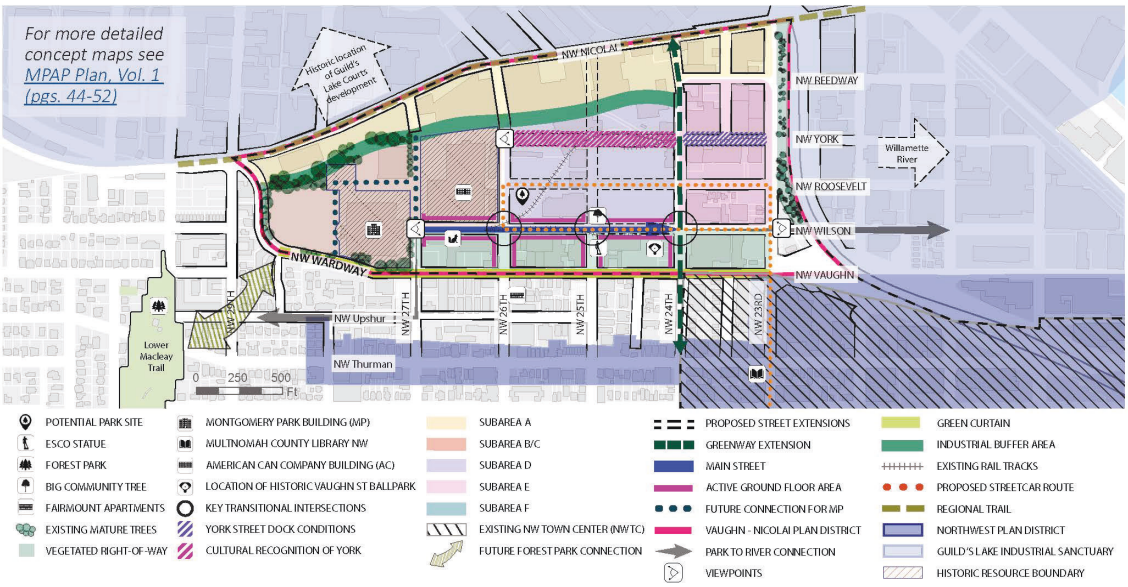
CHARACTER STATEMENT: Montgomery Park

TOWN CENTER



BACKGROUND

HISTORY & EXISTING CONDITIONS

Framed by the Guild's Lake Industrial District to the North and the vibrant mixed-use communities of the Northwest District to the South, the Montgomery Park Area Plan (MPAP) is an eclectic mix of land uses and building types. The designated Vaughn Nicolai Plan District (VNPD), within the expanded Northwest Town Center, has been an area of continual transition and transformation. The area's variety of lot sizes, building types, and history of industrial and manufacturing uses created a dynamic built environment but has also resulted in a disconnected, difficult to navigate, street grid resulting in an urban heat island with little trees or green space.

Once home to a lush marshland and the low-lying Guild's Lake, this area was part of a larger ecosystem which contributed to the vibrancy of nearby Indigenous villages on Sauvie Island and across the Willamette River. Before significant changes to the landscape began in the late 1800s, Chinese immigrants lived and farmed on land around the lake.[2] Plans for industrialization led to their displacement and to the filling of the lake in the 1920s to create a robust industrial center. Today, hints of this wild landscape remain in the nearby hills of Forest Park, Balch Creek watershed, and Willamette River, including an opportunity to connect Forest Park trails to the Willamette River Greenway. Connected to this legacy are Portland's extant Indigenous and Chinese communities, though little acknowledgment of them or the natural environment exists in this location.

The area was the site of the 1905 Lewis and Clark Exposition which showcased Portland's community, industry, and innovation. Industry and innovation was later carried on in the Montgomery [Ward] Park office building (1920), the American Can Company complex (1921), and the former ESCO steel foundry. Portland's Black community has strong ties to this area, including connections to the since-demolished WWII-era housing development Guild's Lake Courts (1940s/50s) and the Portland Rosebuds, a minor league baseball team that was part of the short-lived West Coast Negro League, which played one season (1946) at the Vaughn Street Park. More recently, NW York was renamed in honor of York, the enslaved man who was an essential member of the Lewis and Clark Expedition. Despite this, other recognition of the Black Community's contributions to NW Portland has been limited.

CURRENT POLICY FRAMEWORK

Located at the edge of both an Industrial/Employment hub and the NW District Town Center, the VNPD is close to jobs, transit, parks, and shops and services. While encouraging elevation of its employment roots and future, the MPAP leverages new development and public benefits to create an inclusive, vibrant, low-carbon mixed-use neighborhood served by the Portland Streetcar. A Public Benefits Agreement[3] outlines important public benefits, including the commemoration of York on NW York Street[1] to be done in partnership with the Office of Arts and Culture and community organizations who carry forward the lived experiences of communities of color with roots in the area.

ADDITIONAL RESOURCES

- NW District Plan
- Guild's Lake Industrial Sanctuary Plan
- Montgomery Park District Transportation Plan
- Preliminary Racial Equity Analysis
- [1] Indicates terms featured within the MPAP Plan, Vol.1, Pgs. 45 & 46
- [2] Oregon Historical Society, Photo Essay.
- [3] Public Benefits Agreement within the MPAP

> "...celebrate proximity to Forest Park by extending trees and open space into the neighborhood. 'Green Curtain' instead of the 'Steel Curtain'..."
>
> *- Community Members, 2023*

The following sections align with, and are derived from, content in the Portland Citywide Design Guidelines, specifically Guideline 01. They each focus on characteristics specific to this Town Center and suggest ways character could be incorporated into development.

COMMUNITY CHARACTER



The use of color, art and outdoor gathering spaces provides a sense of creative energy and vitality.

Home to a mix of residents, businesses, and institutions, this district takes immense pride in its industrial heritage and variety of uses. Public spaces that acknowledge the contributions of Portland's Black, Chinese and Indigenous communities are needed to support these various communities and reflect the multitude of histories of the area. Future development should celebrate the district's rich industrial character and provide spaces that allow for a true mix of uses, reflecting a history of ingenuity and innovation.

A few ways to support these goals include:

- Designing ground floors with views into maker spaces along NW Roosevelt and/or providing historic markers indicating the history and sites of the 1905 Lewis and Clark Exposition.
- Framing terminating vistas such as Montgomery Park on NW Wilson St and American Can on NW Roosevelt and NW York.
- Integrating historic railroad track remnants in Subareas E[1] and D[1] within, or as a connection between, contiguous open spaces.
- Integrating intimate, multi-functional and accessible gathering spaces to encourage intergenerational community gathering, especially in Subareas F[1] and D[1].
- Acknowledging and celebrating contributions of Portland's Communities of Color. Consider working with Black, Chinese or Indigenous artists to incorporate design elements such as color, patterns and/or artwork.
- Programming open spaces with elements such as playgrounds, performance spaces, historic markers and/or passive recreation areas.
- Referencing context on specific Streets:
  - On NW Wilson, incorporate neon signage as a nod to the neon MP sign.
  - On NW York, commemorate York with physical storytelling elements such as art or historic markers.[1]
  - On NW York, preserve historic dock conditions and reference them westward.[1]

ARCHITECTURE + URBAN DESIGN CHARACTER



Development on NW Wilson which repurposed an existing industrial building with an updated form and new materials.

A century of transition has created a diverse landscape of urban forms and uses in this Center, dividing it into five distinct subareas[1]. Perhaps most distinct is Subarea B/C[1], home to the historic Montgomery Park (MP) and American Can (AC) sites, whose size, in combination with the former ESCO Steel site in Subarea D, creates a challenging, disconnected street network between NW 24th and NW 27th. The Portland Streetcar[1] on NW Wilson and NW Roosevelt provides an opportunity for each subarea to preserve, emulate and celebrate its rich industrial context, while fostering a vibrant, safe and resilient mixed-use center.

A few ways to support these goals include:

- Referencing industrial materials (i.e. concrete, steel) and characteristics, such as the longer, regular facades and roof forms of industrial warehouses, the large scale operable windows and brick detailing of MP and AC, and re-purposing existing industrial buildings, materials and features.
- Improving urban heat island conditions in Subareas E[1], F[1] and D[1] with climate-responsive design approaches, like lighter building colors and roofing materials, and green features such as eco-roofs.
- Buffering development from noise pollution, particularly on sites near Hwy 30 and in the buffer area[1] along Subarea A by utilizing sound absorbing materials, landscaping and careful building orientation.
- Complementing industrial context adjacent to, and across the from, new development through aligning belt courses, roof lines and forms, repetition of bays and windows, and continuity of setbacks.
- Encouraging NW Wilson as a main street[1] with large openings at the ground floor offering views into flexible spaces with active uses[1], set-back frontages with hardscaped areas to accommodate large crowds, trees, and weather protection near transit stops.
- Supporting NW Vaughn, Roosevelt, and York as multi-modal, pedestrian-oriented streets by incorporating inclusive and accessible seating and weather protection, especially at key intersections, and by locating utilitarian uses toward and along NW 24th, 25th, and 26th.

NATURAL + SCENIC RESOURCES



Large, mature trees and vegetation along the public right-of-way on NW Wardway offer links to nature and relief from heat.

At first glance, this transitioning industrial district offers no connection to nature. Yet, a maturing tree canopy in the western Subarea A, an abundance of scenic views (West Hills, Mt. Hood and the Fremont Bridge), and rich natural history, provide this district with a foundational framework of natural and scenic resources. New development should reference, preserve, and build on this framework and address the community's desire for a more verdant- district one with easy access to its own green spaces, as well as improved and direct connections to nearby Forest Park and the river.

A few ways to support these goals include:

- Creating a "Green Curtain" on NW Vaughn to identify it as an access path to Forest Park by preserving trees around Montgomery Park and widening sidewalks through building setbacks to support the planting of trees.
- Strengthening pedestrian connections and way-finding to the NW 24th Greenway, Forest Park, and the Willamette Riverfront.
- Reducing heat island impacts and easing stormwater system demand by preserving and adding large canopy trees, native vegetation, and open spaces on sites within Subareas E, F, and D.
- Designing prominent surface stormwater facilities that are functional, attractive, and celebrate the Balch Creek Watershed.
- Orienting shared spaces and pedestrian pathways to provide access to natural and scenic resources, parks and open spaces, including views of Mt. Hood and Fremont Bridge in Subarea D, and highlighting NW Vaughn as an access path to Forest Park.
- Mitigating impacts from pollution by utilizing a landscaped buffer[1] and setbacks, particularly on sites along NW 23rd and in Subarea A.
- Incorporating elements referencing the former ecological and agricultural landscape of Guild's Lake. Consider utilizing water, native flora and first foods into landscape designs.

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About City of Portland Bureau of Planning and Sustainability

The Bureau of Planning and Sustainability (BPS) develops creative and practical solutions to enhance Portland's livability, preserve distinctive places, and plan for a resilient future.



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Montgomery Park

AREA TRANSPORTATION PLAN | RECOMMENDED DRAFT

MONTGOMERY PARK AREA PLAN: VOLUME 3 | OCTOBER 2024

PBOT
PORTLAND BUREAU OF TRANSPORTATION

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Amendment

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Montgomery Park Area Transportation Plan

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What is the *Montgomery Park Area Transportation Plan*, and why is this plan needed? Also, the history and present character of the area and an overview of previous plans.

2. **Future of the Montgomery Park Area** 23
An overview of the future vision for the Montgomery Park Area, including how people and goods will move in, to, from, and through the area as it redevelops.

3. **Plan Process and Community Engagement** 35
How was this plan made, and who was consulted? An overview of the planning process and how community input shaped the *Montgomery Park Area Transportation Plan*.

4. **Multimodal Recommendations** 49
The *Montgomery Park Area Transportation Plan* recommends projects around scales of connections: Internal Connections, Neighborhood Connections, and City and Regional Connections. This chapter details those recommendations, with focus on the centerpiece Big Move recommended project: an extension of Portland Streetcar to Montgomery Park.

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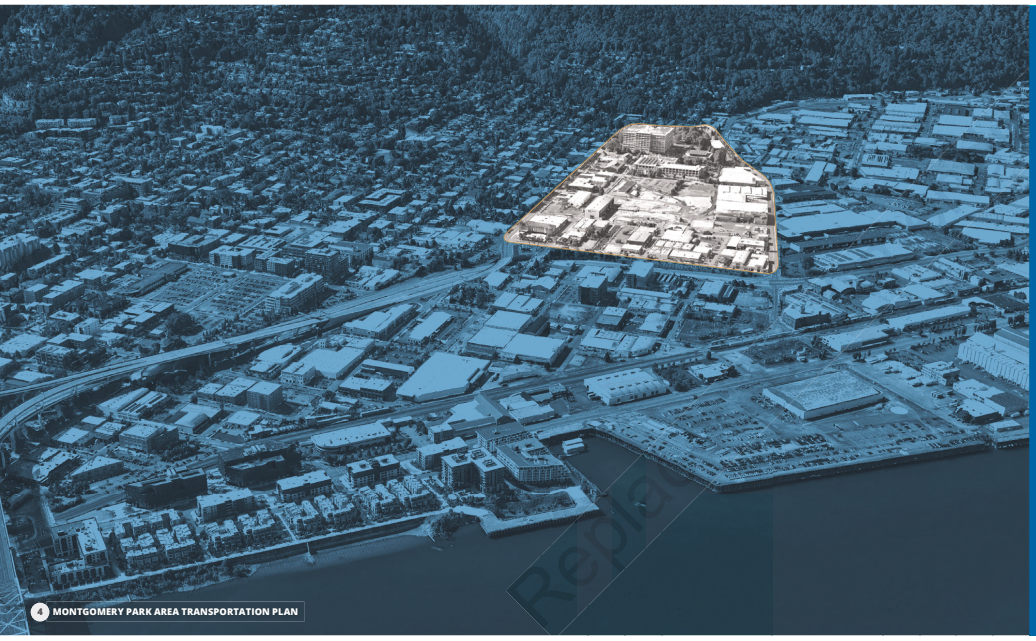
5. **Policy Recommendations** 87
In addition to projects, the *Montgomery Park Area Transportation Plan* includes policy-based recommendations to update the City's *Transportation System Plan*.

6. **Implementation Strategies** 105
A breakdown of strategies to support the implementation of the *Montgomery Park Area Transportation Plan*.



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Part 1

Montgomery Park Area Past and Present

What is the *Montgomery Park Area Transportation Plan*, and why is this plan needed? Also, the history and present character of the area and an overview of previous plans.

What is the Montgomery Park Area Transportation Plan?

The *Montgomery Park Area Transportation Plan* identifies transportation priorities to make it easy for people to walk, roll, bike, and take transit to, from, and within the growing Montgomery Park Area of Northwest Portland. The plan's recommendations aim to facilitate the safe, equitable, and comfortable movement of people within the emerging area itself, as well as to and from adjacent neighborhood amenities and throughout the broader city and region.

The *Montgomery Park Area Transportation Plan* is part of the City of Portland's broader *Montgomery Park Area Plan (MPAP)*. Funded in part by a grant from the Federal Transit Administration, the *MPAP* plans for a new transit-oriented mixed use district between NW Nicolai and NW Vaughn streets west of Highway 30 in Northwest Portland. The *MPAP* proposes land use changes and identifies a framework for affordable housing, economic development, and community benefit opportunities along a recommended extension of Portland Streetcar to Montgomery Park.



The Montgomery Park Area today

Where is the study area?

The core project area sits at the intersection of industry, urban Portland, and nature. Making up a portion of Portland's Northwest District, the core project area—hereafter called the Montgomery Park Area—is bounded by NW Nicolai Street to the north, NW 23rd Avenue to the east, and NW Vaughn Street/NW Wardway Street to the south and west. The area sits next to the 5,200 acres of Forest Park, which is one of the nation's largest urban forests. The iconic Montgomery Park office building gives the area its namesake, as it is a well-known and prominent feature of Portland's skyline and is also one of the largest office buildings in Oregon. The Montgomery Park Area is also home to the ESCO site, a 22-acre former steel foundry, as well as dozens of industrial and commercial businesses.

Areas surrounding the Montgomery Park Area vary in uses in character. North of NW Nicolai Street, uses are largely industrial, with businesses ranging between manufacturing, light industrial, office, warehousing, and storage. East of NW 23rd Avenue, more industrial land is home to small businesses. South of NW Vaughn Street, a mix of land uses include some of Portland's first single-dwelling homes, apartments, rowhouses, duplexes, and both older and newer commercial and mixed use buildings, including several retail services. To the west lie Forest Park and the trailhead to Lower Macleay Trail, one of the city's most popular hiking trails.

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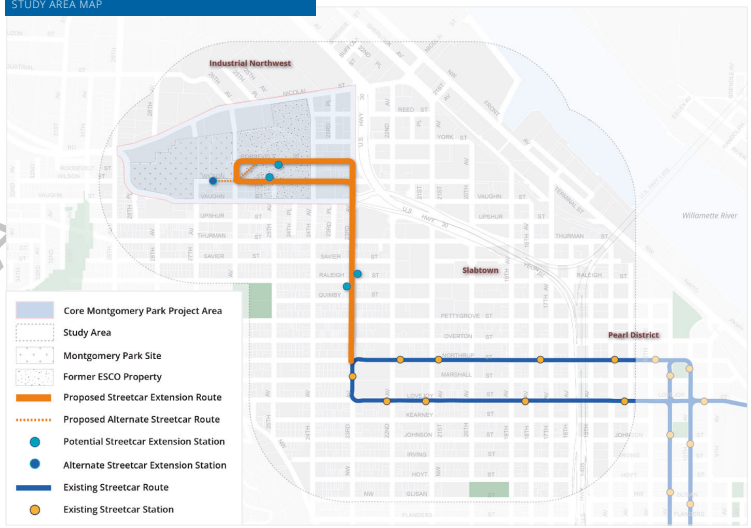
MONTGOMERY PARK AREA TRANSPORTATION PLAN
STUDY AREA MAP



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Why Northwest? Why now?

The *Montgomery Park Area Transportation Plan* arrives at a critical moment in the area's evolution. Transportation needs are shifting in the area, driven by a few significant opportunities:



Intensive private development is anticipated in the area.

On the Montgomery Park site alone, development may include more than 800 housing units and nearly 2 million gross square feet of renovated and new commercial, retail, and residential space.



The former ESCO steel foundry site is expected to redevelop.

Located in the heart of the Montgomery Park Area, the 22-acre site has recently been decommissioned and sold. Proposed land use changes on this site will support dense mixed use development.



The area's transition presents an opportunity to deliver on previous planning efforts.

An extension of the Portland Streetcar to Montgomery Park was identified in the 2009 *Portland Streetcar System Concept Plan*.

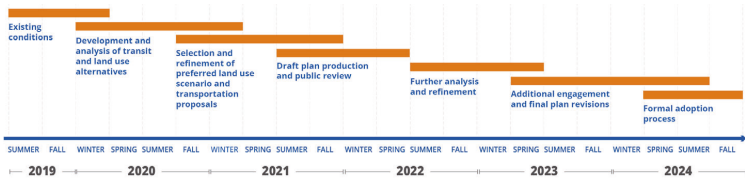
Over the next 20 years, the broader *Montgomery Park Area Plan (MPAP)* study area is expected to grow by up to 14,000 new households and 1,500 new jobs. Within the core project area, more than 2,000 new households and hundreds of new jobs could be accommodated. The existing transportation network would be unable to support this future growth if residents, workers, and visitors travel by driving alone.

A 2019 Federal Transit Administration grant funded a portion of this plan. In addition to studying the proposed streetcar extension to Montgomery Park, the companion *MPAP* addresses urban design, land use, housing, and equitable development in the area, as well as broader policy considerations.



A potential future for the Montgomery Park Area, based on land use changes proposed in the Montgomery Park Area Plan. The area could provide for thousands of new housing units and hundreds of new jobs served by high-capacity transit.

PLANNING PROCESS TIMELINE



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People wait for the Portland Streetcar at the Northwest 23rd and Marshall Station.

How does this plan support equity?

The transition of the Montgomery Park Area into a mixed use district served by high-capacity transit can support equitable outcomes. Through improved access to affordable transportation options, expanded housing stock, job opportunities, and other community benefits, the area can advance the City of Portland's equity priorities.

Considering equity

While developing the *Montgomery Park Area Transportation Plan* and *MPAP*, we evaluated how the proposed extension of Portland Streetcar and planned land use changes would impact equity. In addition to understanding whether these changes would support City goals including increased transit use, housing development, and carbon emissions reductions, we considered how they might reduce or exacerbate racial disparities in our community. We examined the potential impacts of public infastructure investments and mixed use development to land values, housing, jobs, and businesses, as well as gentrification and displacement risk in the project area. We also explored how to include impacted community members in the planning process.

The following page contains overviews some of the equitable benefits of the *Montgomery Park Area Transportation Plan* and the *MPAP*. More information about the equity analysis and equitable engagement is available in the *Preliminary Racial Equity Analysis (2019)* and the *Equitable Development Report (2023)*, which can be found at the MPAP webpage.

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Mobility options

Transportation costs are typically the second largest expense for households. Households of color and households living on lower incomes are more likely to be cost burdened than white households. These cost burdens can aggravate disparities, and vice versa. Offering high quality, accessible, and sustainable mobility choices in the Montgomery Park Area can help lower combined household and transportation costs for overburdened households.

Housing choices

The Montgomery Park Area is also considered a "High Opportunity" area, a designation that reflects the area's proximity to multiple community amenities that correlate with better quality of life outcomes. Expanding housing stock in the Montgomery Park Area, where there is currently very little, can help ease region-wide housing pressures, adding more housing options in a high opportunity area while relieving housing pressures in other gentrifying areas.

Job opportunities

Communities of color and other underrepresented groups benefit from industrial jobs, in part due to lower barriers to entry. The *MPAP* proposes focused land use changes in the Montgomery Park Area, preserving existing industrial land east of US-30. The *MPAP* also proposes implementation strategies to help offset the loss of industrial land in the area and help retain and grow employment oppportunities.

Equitable public benefits

To achieve more equitable outcomes, the *MPAP* includes a package of implementation tools that direct some of the value created from public infrastructure investments and land use changes toward public benefits that serve the broader community. These include creating opportunities for middle-wage jobs, more immediate or additional affordable housing, affordable commercial spaces, and new public open space.

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History of the Montgomery Park Area

Native history

The area that would become the City of Portland was populated for thousands of years by various Native peoples prior to settlement by European Americans. The Multnomah, Wasco, Cowlitz, Kathlamet, Clackamas, Bands of Chinook, Tualatin, Kalapuya, Molalla, and many other tribes and bands created communities and seasonal encampments along the Columbia and Willamette rivers.

When white settlers began entering the Portland Basin in the early 1800s, they brought with them diseases and created pandemics that decimated many of these longstanding communities. Institutionalized removal of Native peoples from their ancestral lands to make way for white settlement began with the Indian Removal Act of 1830. Subsequent government actions resulted in the forced resettlement of many of these original settlers to remote reservations. Broken treaties formalized state-sanctioned theft of land and livelihood from Native peoples in the area well into the twentieth century.

Today, Portland is home to the nation's ninth largest urban Native American population, representing more than 380 tribal affiliations. Some are descendants of northwestern tribes, while others are affiliated with tribes from across the country.



Guild's Lake, looking northwest, in around 1900; St Helens Road is in the foreground, made of planks.

Early settlement

The area north of NW Vaughn Street was sparsely developed until the 1900s but included lumber mills, grain storage, railroads, and docks along pastureland and a large, shallow lake known as Guild's Lake. The Guild's Lake Rail Yard, constructed by the Northern Pacific Railroad in the 1880s, served as a major switching facility for a number of Portland's railroads.

In the 1880s, Chinese immigrants lived in the Guild's Lake area, where they operated small farms. Chinese people experienced severe discrimination despite their broad contributions to the community.

Area streets

As the area developed, east-west streets continued the alphabetical naming pattern established in Northwest Portland in the 1800s. These streets include NW Vaughn Street, NW Wilson Street, and NW York Street; there are currently no "X" or "Z" streets, however. In 2002, as a result of the advocacy and efforts of award-winning filmmaker and historian Ron Craig, Portland City Council declared NW York Street in honor of York, the enslaved man who was critical to the success of the Lewis and Clark Expedition.



Northwest Vaughn Street looking west toward Vaughn Street Park and Montgomery Ward & Company Building (now Montgomery Park), 1939



York, portrayed in the 1912 painting by E.S. Paxson, "Lewis and Clark at Three Forks," which hangs in the Montana State Capitol

Who was York?

In 1803, President Thomas Jefferson commissioned the Lewis and Clark Expedition to explore the western portion of the continent. York, enslaved personal servant of William Clark, served as an integral member of the exhibition and contributed significantly to its success. York appears in both Clark's and Lewis's journals and is noted for going above-and-beyond in demonstrating skill, care, and compassion. Among his contributions, York risked his life to save Clark, Sacajawea, and her son when they were caught in a flash flood. At the conclusion of the journey in 1806, York requested his freedom from William Clark and was denied. He was finally freed, however, sometime after 1815.

The land use and transportation changes in the Montgomery Park Area present an opportunity to increase awareness of York, for whom NW York Street is named, and to recognize and commemorate both his and other Black individuals' contributions to the history of Portland.

Source: Millner, Darrell M. (Fall 2003). "York of the Corps of Discovery: Interpretations of York's Character and His Role in the Lewis and Clark Expedition". Oregon Historical Quarterly. 104 (3): 302–333.

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History of the Montgomery Park Area

Vaughn Street Park

In 1901, construction was completed on one of the city's first baseball parks, located on the north side of NW Vaughn Street between NW 24th and NW 25th avenues. Over the decades, it was renovated and expanded; at its largest, the ballpark seated 12,000. The Portland Beavers were the last team to play at Vaughn Street Park in 1955. The ballpark was demolished in 1956, and the site transitioned to industrial uses. One such use was the recently demolished ESCO steel foundry.



Vaughn Street Park hosted baseball games for more than fifty years beginning in 1901.



A birds-eye view illustration of the Lewis and Clark Exhibition used to advertise the 1905 event

1905 World's Fair

In 1905, the 100-year anniversary of the Lewis and Clark Exhibition was celebrated with the 1905 World's Fair, also known as the Lewis and Clark Centennial Exposition, located on an artificial island in Guild's Lake. The site was selected in part for its access—two local trolley lines ran within one block of the fair entrance. Little of the exposition remains today, as most of the structures were temporary and were torn down in 1906.

Following the World's Fair, Guild's Lake and the surrounding lowlands were filled with soil sluiced from development in the West Hills and sediment dredged from the Willamette River. The lake was completely filled by the mid-1920s, and industrial operations in the area proliferated.

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Montgomery Park Building

In 1920, Montgomery Ward & Company constructed a new nine story building in the area. At the time of its completion, the building was the largest in Portland in floor area. A wing was added in 1936, which included a retail store. After World War II, the retail business declined in part due to rapid suburbanization and eventually closed in 1976. By 1982, the warehouse closed, eliminating 500 jobs at the site. In 1985, the building was rehabilitated for office and retail uses and renamed Montgomery Park—with a new sign to match.



The Montgomery Ward & Company Buidling (now Montgomery Park) in 1939, with the American Can Company to the front right

Guild's Lake Courts

During World War II, a large temporary housing project was constructed in the area for shipyard workers and their families. Called Guild's Lake Courts, the community was the eighth largest housing project in the United States. While lesser known than its counterpart, Vanport City, Guild's Lake Courts housed a diverse population and included a significant number of Black/African American households. The housing project was demolished in 1951, and remaining residents were displaced to other areas of Portland and the region.



Guild's Lake Courts, a temporary public housing project, housed around 10,000 people during the peak of World War II. This photograph is from 1942.



The Montgomery Park Building today

The Montgomery Park Area today

Today, the Montgomery Park Area is a transitional space between Northwest Portland's industrial areas to the north/northeast and the residential areas and commercial spines to the south. North of NW Vaughn Street, the eastern portion of the area is largely zoned industrial, while the western half includes large parcels of mixed use and general employment. Businesses range between manufacturing, light industrial, office, storage, hotel, food carts, and others. As an area in transition, it includes a mix of longstanding active businesses, newer uses, and vacant sites. There are also a small number of older homes between NW 23rd and NW 24th avenues.

The core project area is predominantly industrial in character. The development pattern is dominated by one and two story buildings on a mix of medium and large lots, including the former ESCO steel foundry site. There, several large industrial structures were recently demolished, and the site sits largely vacant.

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The former ESCO steel foundry site in the Montgomery Park Area sits mostly vacant.

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The Montgomery Park Area today

Character of the Montgomery Park Area

Major character-defining features of the area include:



The Montgomery Park office building, the second largest in Portland, anchors the western portion of the area.



Industrial small businesses are dispersed throughout southern and eastern portions of the area.



The American Can Company Complex, a Historic Landmark, sits east of and adjacent to Montgomery Park.



Large surface parking lots cover significant acreage in the area and have long supplied Montgomery Park workers with free parking.



Decommissioned railroad tracks run down a few area streets, vestiges of the area's previous heavy industrial uses.



A small group of older homes is concentrated in the eastern portion of the area.

In January 2020, the project team published an *Existing Conditions Report* documenting demographic, transportation, land use, jobs, and commercial conditions in the larger *MPAP* study area (**see map on page 7**). The transportation section of the report includes information about current street classifications, employment patterns and travel behavior, and recent and planned investments in and near the Montgomery Park Area. While the analysis in the *Existing Conditions Report* focuses on the areas surrounding a previous potential alignment of the Portland Streetcar extension to Montgomery Park, the report's study area still includes all of the core Montgomery Park Area.

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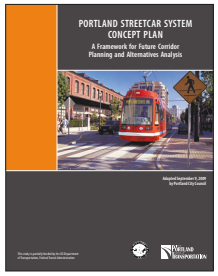
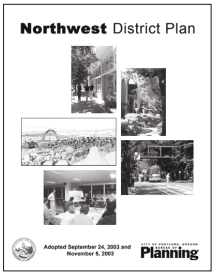
Planning context

Portland Streetcar System Concept Plan (2009)

The *Portland Streetcar System Concept Plan* identifies potential corridors to expand streetcar service to better serve Portland's neighborhoods. The planning process analyzed potential alignments to determine the most promising for future extensions based on public involvement, development potential, operational feasibility, and transit connectivity. The plan identifies an extension of streetcar service to serve the Montgomery Park Area as a priority.



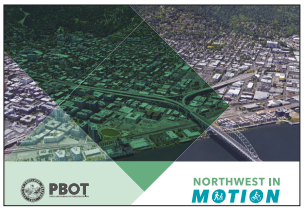


Northwest District Plan (2003)

The *Northwest District Plan* sets a specific framework for desired land uses and development in the district and includes broat transportation goals. The plan's boundaries overlap the western portion of the Montgomery Park Area, and the *Montgomery Park Area Transportation Plan* advances the *Northwest District Plan's* goals by investing in walking, bicycling, transit, goods delivery, and connections to shared mobility services.

Northwest in Motion (2020)

Northwest in Motion (NWIM) is a plan to make Portland's Northwest District safer and more convenient for people walking, rolling, biking, and taking public transit. The plan prioritizes near-term projects to be built in the next five to ten years. The plan's study area abuts the *Montgomery Park Area Transportation Plan* core project area at Northwest Vaughn Street, which is *NWIM's* northern boundary.

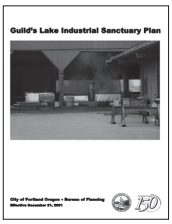


Three *NWIM* projects are included in Montgomery Park Area Transportation Plan:

1. **NW 24th Avenue Neighborhood Greenway (NG.5)**: Retrofit, improve, and extend the existing greenway from NW Vaughn Street to the NW Flanders Neighborhood Greenway.
2. **NW 25th Avenue Corridor Improvements (CI.1)**: Calm traffic along NW 25th Avenue by adding traffic-slowing devices and enhanced pedestrian/ bicycle crossings.
3. **NW Vaughn Street Corridor Improvements (CI.5)**: Improve safety along NW Vaughn Street and NW Wardway by adding improved crossings and bikeway enhancements.

Guild's Lake Industrial Sanctuary Plan (2001)

The *Guild's Lake Industrial Sanctuary Plan (GLIS)* covers portions of Northwest Portland from NW Vaughn Street north to the Willamette River and west to Forest Park. The plan provides a policy framework to preserve industrial land in the area. The recommendations in the *Montgomery Park Area Transportation Plan* and *MPAP* propose changing the primary industrial land use in the core Montgomery Park Area but preserve industrial uses east and north of US-30, as well as north of NW Nicolai Street. More information is available in Volumes 1 and 2 of the *MPAP*.



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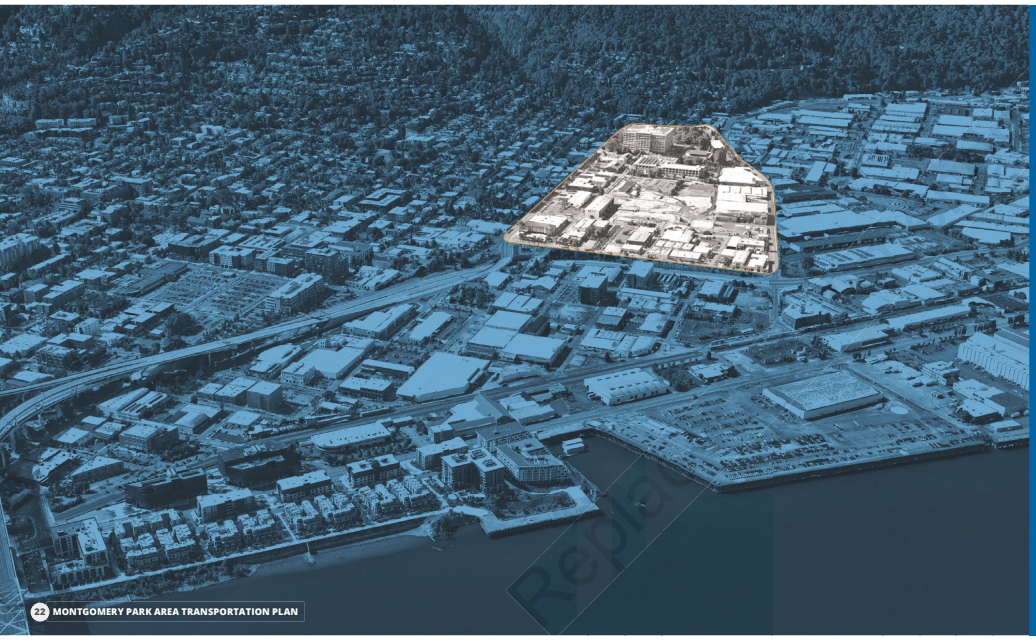

Part 2

Future of the Montgomery Park Area

An overview of the future vision for the Montgomery Park Area, including how people and goods will move in, to, from, and through the area as it redevelops.



A concept rendering of the potential vision for the Montgomery Park Area

A vision for the area

With this plan, the Montgomery Park Area—which includes the historic Montgomery Park office building and site, the historic American Can Company building, the former ESCO steel foundry site, and many other individual properties nearby—can transition from a relatively low-density industrial and office-employment area into a thriving, walkable and rollable new mixed use district served by sustainable, low carbon transportation options.

Anchored by the 200,000 square foot Montgomery Park office building, the area will continue to have a major employment emphasis. However, this emphasis will be augmented by additional employment uses (including office, institutional, and light industrial), commercial services such as retail and restaurants, and the opportunity for more than 2,000 new housing units in residential and mixed use buildings.

Supporting this transition are investments in new and improved transportation facilities, including an extension of the Portland Streetcar North/South (NS) Line to Montgomery Park, new streets to support mobility in the district, and improvements for pedestrians, people bicycling, people using mobility devices, and people accessing transit.

A variety of tools are being proposed by project partners at the Bureau of Planning and Sustainability and Prosper Portland to ensure the new transit-oriented district includes significant investment in affordable housing and opportunity for living wage jobs. These tools will work to direct some of the value created by proposed land use changes and investments in the Montgomery Park Area toward public benefits that serve the broader community.These benefits include middle-wage job opportunities, affordable housing, affordable commercial spaces, and the development of public open space in the area.

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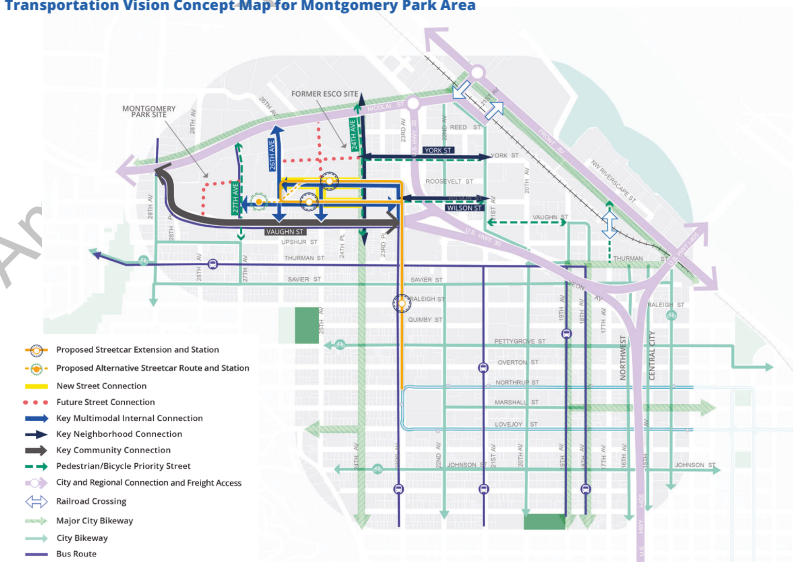
Transportation Vision Concept Map for Montgomery Park Area



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How will people move in the Montgomery Park Area?

Residents, workers, and visitors of the planned Montgomery Park Area can play a major role in meeting our citywide transportation and sustainability goals. The *Transportation System Plan (TSP)* sets a goal of reducing the share of trips made by single occupancy personal vehicles to 30 percent of all citywide trips by 2035. The Montgomery Park Area is planned to ensure that residents can meet their daily needs without a personal automobile. By planning an extension of the transit and infrastructure-rich character of much of Northwest Portland northward into the Montgomery Park Area, this plan can help us make that goal a reality.



The extension of Portland Streetcar to Montgomery Park will connect the area to other parts of Northwest Portland and the broader city via convenient, frequent, and high-quality transit service. The streetcar extension along NW 23rd Avenue and through the Montgomery Park Area will serve as a critical mitigation measure for the future trips generated by area growth.



Enhanced crossings in the study area will improve connections between existing bus service and future streetcar stations. New or improved pedestrian connections identified in the *Montgomery Park Area Transportation Plan* will make walking and rolling between transit and area destinations comfortable and convenient for users of all ages and abilities.



Multiple transportation options located near the streetcar terminus will centralize connections for users. Around the planned end-of-line station, people will be able to access transit, shared mobility services, wayfinding, travel information, and other transportation options and incentives provided through area transportation demand management (TDM) programming.

Reviewed by Agent

Sustainable Mobility Options in the Future Montgomery Park Area











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A pedestrian push button at a signalized intersection

Future of the Montgomery Park Area

Pedestrian connections

Today, the Montgomery Park Area's street network is disconnected, and some streets lack sidewalks. This makes it difficult for pedestrians to comfortably travel in and through the area. New street connections and enhanced crossings of busy streets will improve connectivity and accessibility for people walking and rolling in, to, and through the area.

Extensions of existing roads will create a more connected, walkable, and rollable street grid. Recommendations include key street extensions to enhance connectivity for both north-south and east-west travel. Through future redevelopment, City of Portland street connectivity requirements will ensure continued improvements to the pedestrian network in the area. Generally, these new connections are dedicated as right-of-way. Under certain circumstances, however, private streets with public access easements may be permitted.

Improved crossings of NW Vaughn Street will enhance connections to existing bus and future streetcar stations, as well as between the Montgomery Park Area and the destinations of Northwest Portland. The *Montgomery Park Area Transportation Plan* supports recommendations in *Northwest in Motion* to improve pedestrian crossings of NW Vaughn Street at NW 24th Avenue, NW 26th Avenue, and along NW Wardway to improve safety and reduce distances between crossings for pedestrians. These improvements will help stitch the redeveloping Montgomery Park Area to the destinations of Northwest Portland south of NW Vaughn Street and will serve as alternate routes to the wide, busy intersection of NW Vaughn Street, US-30, and NW 23rd Avenue.

City *Pedestrian Design Guide* standards and a new Pedestrian District will ensure sidewalk corridors are wide enough to support safe and comfortable pedestrian movement, an enjoyable streetscape, and active uses as the area redevelops. The 2022 revised *Pedestrian Design Guide* establishes sidewalk corridor width requirements based on a street's Design Classification in the *Transportation System Plan (TSP)*, as well as requirements for sidewalks within Pedestrian Districts. *The Montgomery Park Area Transportation Plan* recommends a new Pedestrian District for the Montgomery Park Area and a Neighborhood Main Street Design Classification along the streetcar alignment on NW Wilson Street. These combined recommendations will result in a 15-foot sidewalk corridor on each side of the street. These requirements will ensure ample space for uses like café dining, larger street trees and planting areas, pedestrian movement, and streetcar access along the emerging Neighborhood Main Street of NW Wilson Street. All other streets in the area are required to include 12-foot sidewalk corridors upon redevelopment, further supporting pedestrian movement.



Street Design Classification	Frontage Zone *minimum width*	Pedestrian Through Zone *minimum width*	Furnishing Zone *minimum width exclusive of curb width*	*Total minimum width*
Civic Main Street	2.5'	8'	4'	15'
Neighborhood Main Street	2.5'	8'	4'	15'
Civic Corridor	1.5'	6'	4'	12'
Neighborhood Corridor	1.5'	6'	4'	12'
Community Corridor	1.5'	6'	4'	12'
Regional Corridor	0.5'	6'	5'	12'
Industrial Road	0.5'	6'	5'	12'
Local Street	0.5'	6'	6'	11-13'

The City's Pedestrian Design Guide establishes required sidewalk corridor widths based upon a street's Design Classification. For streets within Pedestrian Districts, all sidewalk corridors are required to be a minimum of 12 feet wide. In the Montgomery Park Area, where a Pedestrian District is proposed, NW Wilson Street along the streetcar alignment is recommended to be classified as a Neighborhood Main Street. These combined recommendations will result in a 15-foot sidewalk corridor on both sides of the street. For more information about contextual factors impacting sidewalk width requirements, please refer to the Pedestrian Design Guide.

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Future of the Montgomery Park Area

Bicycle connections

The current bicycle network in the Montgomery Park Area is limited, indicative of its recent and current industrial and freight uses. New bikeway connections will link the area to the surrounding bicycle network, making biking comfortable and convenient for current and future workers, residents, and visitors of all ages and abilities.



A sidewalk level bikeway along NW Front Avenue and NW 17th Avenue in Portland

The NW 24th Avenue Neighborhood Greenway will provide the primary north-south connection for people bicycling to and from the Montgomery Park Area. This plan builds upon recommendations in *Northwest in Motion* to improve the 24th Avenue Neighborhood Greenway across NW Vaughn Street and northward to an improved crossing of NW Nicolai Street, connecting people bicycling to a planned multi-use path along NW Nicolai Street and broader city and regional destinations. An extension of the NW 27th Avenue Neighborhood Greenway will offer an additional north-south connection.

A multi-use path along NW Nicolai Street and NW St Helens Road will connect people from the Willamette River waterfront to the Montgomery Park Area, as well as to longer-term destinations. This plan recommends a new shared multi-use path along the underutilized right-of-way along the north side of NW Nicolai Street from NW 24th Avenue to NW 29th Avenue, and potentially farther west, with crossing improvements at NW 24th Avenue, NW 26th Avenue, and NW 29th Avenue. Longer term, improvements could connect the path to broader destinations such as St Johns, Linnton, and Sauvie Island.

New bikeways along the planned streetcar alignment on NW Roosevelt and NW Wilson streets will connect people bicycling east and west. Dedicated bikeways along these streets will serve people within the Montgomery Park Area, while connecting to north-south connections on NW 24th and NW 27th avenues. The *Montgomery Park Area Transportation Plan* recommends additional right-of-way dedication where required as a condition for new development. Bikeway design will minimize conflicts with streetcar tracks.

Additional recommended future bikeway connections will fill gaps in the bicycle network, connecting people bicycling across US-30 and from the Montgomery Park Area to the Central City and destinations across the Willamette River. This plan identifies bicycle network connections that connect the Montgomery Park Area and NW Portland to the industrial area north and east of US-30, connecting people bicycling to NW Front Avenue and the Willamette Greenway Trail while avoiding difficult intersections to reduce conflicts with other modes and to improve comfort for people bicycling in and through the area.

Draft Amendment



Vehicles queuing at the intersection of NW Vaughn Street and NW 23rd Avenue



Freight trucks and vehicles at the intersection of NW Nicolai Street and US-30

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Future of the Montgomery Park Area

Vehicle circulation

Currently, street connectivity in the Montgomery Park Area is limited due to large block sizes and piecemeal streets reflective of the industrial uses that previously occupied much of the area. Improved connections and continued access to US-30 will support circulation and multimodal travel in, to, and through the area as it develops.

US-30 access points located at NW Nicolai Street, as well as at NW Vaughn Street and NW 23rd Avenue, are key vehicle pathways in and out of the Montgomery Park Area. The intersections and corridors connecting to US-30 often experience congestion during peak hours. This plan details opportunities to calm traffic at key intersections and improve safety on local streets. Recommendations will encourage automobile traffic to use appropriates streets, whether people driving are traveling to, from, or through the area.

New street connections will support the vision of a mixed use employment and housing district, while providing more travel pathways and reducing demand on key arterials by creating alternate routes for local trips. New connections on NW Roosevelt Street, NW Wilson Street, and NW 25th Avenue will fill gaps in the Montgomery Park Area's street grid, while retaining developable parcel sizes and ensuring flexibility for development programming. With improved connectivity, the transportation network will provide safe and comfortable connections for all modes.

Shifting the boundary between mixed use/residential land uses and industrial land uses northward from NW Vaughn Street to NW Nicolai Street will create connections between the Montgomery Park Area and neighborhood destinations to the south. NW Vaughn Street has long served as the northern border of Northwest Portland's mixed use areas, dividing them from industrial land to the north. This plan builds upon planned bikeway and pedestrian crossing improvements along NW Vaughn Street, to improve multimodal connections to the Montgomery Park Area from the thriving area to the south.

Goods movement

The Montgomery Park Area is currently part of a designated Industrial District. However, the character and uses of the area are changing. This plan seeks to ensure safe and reliable freight access and movement where necessary, while supporting future mixed use development in the area.

NW Nicolai Street is prioritized for freight movement, connecting goods to and from industrial areas in Northwest Portland to US-30 and beyond. NW Nicolai Street is designated as a Priority Truck Street in the *Transportation System Plan*. US-30 is a regionally significant freight route with key connections that support goods movement and delivery throughout and beyond the Montgomery Park Area. Recommendations in this plan preserve safe, reliable freight access along NW Nicolai Street to and from US-30.

Updates to the Freight District boundary will support the shift of the Montgomery Park area from industrial uses to mixed use employment and residential uses. Moving the boundary of the existing Freight District to support redevelopment of the Montgomery Park Area will ensure that people can move in, to, and through the emerging area while reducing modal conflicts with goods movement. Freight access for goods delivery in the area will be provided.

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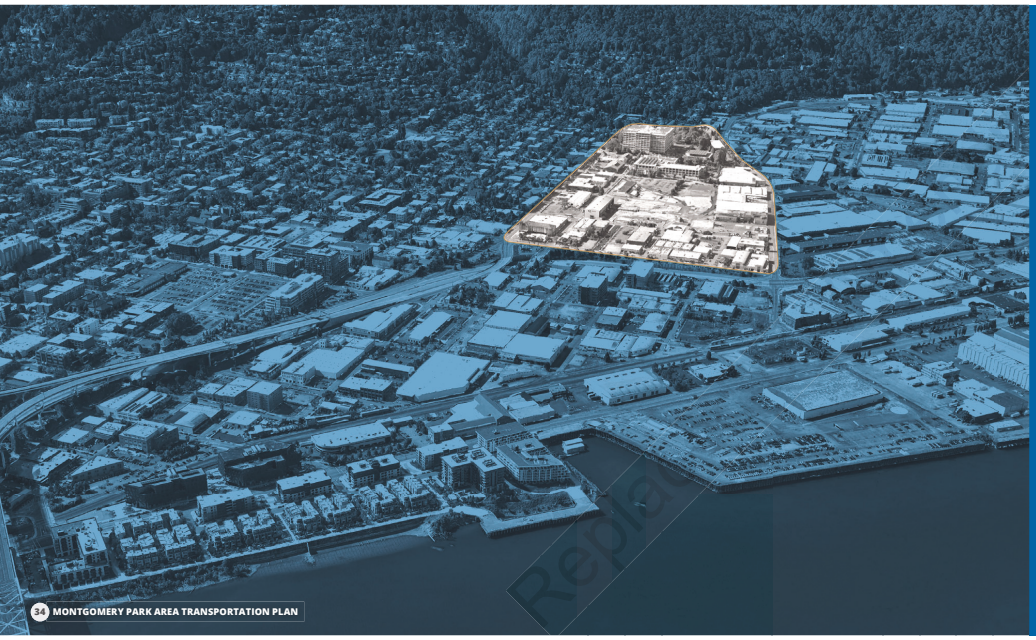

Part 3

Plan Process and Community Engagement

How was this plan made, and who was consulted? An overview of the planning process and how community input shaped the *Montgomery Park Area Transportation Plan*.

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Plan process

The Montgomery Park Area Transportation Plan is part of the *Montgomery Park Area Plan*. Both plans were initially developed as draft outcomes of the *Montgomery Park to Hollywood Transit and Land Use Development Strategy (MP2H)*, which studied opportunities to create an equitable development plan for transit-oriented districts in Northwest Portland and Northeast Portland. Funded in part by a grant from the Federal Transit Administration (FTA), *MP2H* was a collaboration between the Portland Bureau of Transportation (PBOT) and the Bureau of Planning and Sustainability (BPS) and took place from 2019 to 2023.

In Northwest Portland, *MP2H* explored development scenarios related to a potential extension of the Portland Streetcar system to the Montgomery Park building located in a predominanty industrial area between NW Nicolai and NW Vaughn streets west of US-30. During the *MP2H* process, the project team considered opportunities to generate public benefits for the broader community through equitable development strategies and incentives. Urban design options, land use development scenarios, and various transit alignments were also explored for their ability to support the City's transportation, climate, housing, equity, and economic and business development goals. To support these outcomes, we worked to develop, analyze, and refine a suite of multimodal transportation projects and policy recommendations to include in the *Montgomery Park Area Transportation Plan*. Community engagement was integral to the process, with community input shaping project goals and outcomes.

This section overviews the process we undertook to produce the *Montgomery Park Area Transportation Plan*. A timeline (**pages 38-39**) outlines the plan process and key milestones. An overview of community engagement (**pages 40-43**) describes who we consulted, what methods we used, and what we learned from public input. How we chose streetcar and developed the preferred alignment (**pages 44-46**) is also explained, and a brief description of traffic analysis (**page 47**) we conducted overviews key assumptions and takeaways.

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Ariel view east-southeast over the Montgomery Park Area toward the Willamette River, Fremont Bridge, and Central City from above the American Can Company Building

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Plan process

PROCESS TIMELINE AND KEY DELIVERABLE MILESTONES

2019

- Background research and existing conditions
- Begin Phase 1 community engagement

JULY 2019
Preliminary Racial Equity Analysis

SEPTEMBER 2019
Streetcar Extension and Land Use Alternatives Analysis

2020

- Development and analysis of transit and land use alternatives
- Streetcar is selected as preferred transit mode

JANUARY 2020
Existing Conditions Report

FEBRUARY 2020
Project Goals and Objectives

2021

- Selection and refinement of preferred land use scenario and transportation proposals
- Draft transportation and land use plans are released

JUNE 2021
Urban Design Concepts

MAY 2021
Opportunities and Challenges Report

2022

- Public review and comments on draft plans
- Further analysis and refinements of transportation and land use plans

DECEMBER 2021
Draft Transportation and Land Use Plans

2023

- Phase 2 community engagement
- Continued evaluation and refinements to transportation and land use plans

JANUARY 2023
Equitable Development Report

DECEMBER 2023
Preferred Alternative Alignment and Alternatives Report

2024

- Final plan revisions
- Publish proposed and recommended drafts of transportation and land use plans
- Legislative process toward plans adoption

APRIL 2024
Proposed Drafts of Transportation and Land Use Plans

SEPTEMBER 2024
Final Recommended Drafts of Transportation and Land Use Plans

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Community engagement

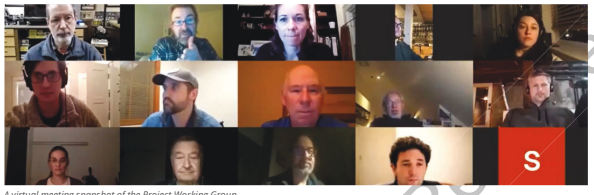
PHASE 1 | FALL 2019 - WINTER 2021/22

MONTGOMERY PARK TO HOLLYWOOD (MP2H) TRANSIT AND LAND USE DEVELOPMENT STRATEGY

Much of the community engagement for the *Montgomery Park Area Transportation Plan* was conducted as part of *MP2H*. Planned for Spring and Summer of 2020, our approach to engagement had to adapt significantly in response to the Covid-19 pandemic. This phase focused on gathering feedback as we developed and analyzed alternative transportation and land use scenarios for Northwest Portland, with focus on the Montgomery Park Area.

During Phase 1, we convened a Project Working Group of 16 community members representing a variety of viewpoints, many of whom had connections to local neighborhood groups, business organizations, transportation advocates, and property owners in the area. We also utilized funding from a Federal Transit Administration (FTA) grant to provide funding to two area Community Based Organizations to provide outreach to underserved communities regarding their aspirations, concerns, and priorities for the project.

We asked questions to better understand the existing transportation and land use conditions in the study area. We sought feedback on what goals the *Montgomery Park Area Transportation Plan* should seek to achieve. We also gathered input on various land use development scenarios and potential streetcar extension alignments.



A virtual meeting snapshot of the Project Working Group

ENGAGEMENT METHODS
PHASE 1 | FALL 2019 - WINTER 2021/22

7 Project Working Group Meetings
May 2020 - November 2021 | Serving as representatives for various community and business viewpoints through sounding board

1 Kickoff Open House
March 2020 | Input on area existing conditions, project goals, and desired outcomes
- *25 participants*

1 Urban Design Concept Open House
Summer 2020 | Feedback on preferences for land use scenarios and transit alignments
- *69 participants*
- *250 unique comments*

2 Community Based Organization Partnerships
Summer - Fall 2020 | Funded partnerships to reach underserved community members
- *2500 e-newsletters*
- *2,000 mailers*
- *192 survey responses*
- *70 information-sharing conversations*
- *3 virtual community forums*

1 Comment Period for Draft Plans
Winter 2021/22 | Feedback on the draft land use and transportation plans
- *3,000+ mailers*
- *60+ individual comments and letters*

Meetings with Neighborhood Organizations and Business Associations
Fall 2019 - Winter 2021/22 | Information-sharing and gathering input throughout the process

KEY TAKEAWAYS
WHAT WE LEARNED DURING PHASE 1

- **Desire for a broad and inclusive mix of land uses** including affordable housing, jobs, and services supported by multimodal transportation options
- **Interest in a dense, connected, and walkable urban district** with industrial uses intermingled and preserved if possible
- **Desire for improved safety** for people walking, rolling, biking, accessing transit, and driving in the area
- **Interest in more services and amenities**, including businesses that serve households of varying income levels
- **Desire to ensure that underserved community members have access** to benefits of investments and growth
- **Concern about neighborhood change** and the potential for gentrification and displacement
- **Concern that major investment in the area may lead to loss of jobs and neighborhood businesses**, especially industrial businesses offering well-paying jobs that benefit communities of color
- **Concern about impacts of the streetcar extension** to parking and small business access along NW 23rd Avenue and in the Montgomery Park Area

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Community engagement

PHASE 2 | SPRING 2023 - WINTER 2023/24

PORTLAND STREETCAR MONTGOMERY PARK EXTENSION

Phase 2 focused on learning more about the community's needs and priorities for the proposed streetcar extension. As time had passed since our Phase 1 engagement had ended, we used this phase to reintroduce the project to community members and groups and to gather feedback on the project and additional input on proposals in the *Montgomery Park Area Transportation Plan.*

Since in-person meetings were an option again, we combined face-to-face conversations with remote opportunities. This ensured we could share information and learn more from a broader portion of the Northwest District community. We held an online open house, and we canvassed businesses along NW 23rd Avenue. We also spoke with transit users of Northwest Portland near regulated affordable housing and existing transit stations.



Tabling event with Get Around Slabtown, Slabtown's TDM program

ENGAGEMENT METHODS
PHASE 2 | SPRING 2023 - WINTER 2023/24

5 Meetings with Neighborhood Groups
May - December 2023 | Reintroducing the project and gathering feedback, both in-person and remotely

7000 Postcards Sent to Area Addresses
May - June 2023 | Sharing information about the project and how to engage

1 Online Open House and Survey
June - July 2023 | Gathering input about the project, as well as interests and concerns
- ***179 respondents***

1 Northwest Parking District Open House
June 2023 | Tabling in the community to talk directly to people about the project
- ***50 attendees***

42 Businesses Canvassed
June 2023 | Visiting businesses along the preferred streetcar alignment to discuss the project

4 Days Spent Tabling, Canvassing, and Conducting Intercept Surveys
June -November 2023 | Telling people about the project and gathering feedback in Slabtown, in area parks, around regulated affordable housing developments, and at existing streetcar stations near the proposed extension
- ***127 conversations***

KEY TAKEAWAYS
WHAT WE LEARNED DURING PHASE 2

- **Overall majority support for the streetcar project** and desire for more transit opportunities in Northwest Portland and throughout the city
- **Interest in placemaking opportunities in the area**, especially along NW 23rd Avenue around the alignment
- **Desire for improved safety** for people walking, rolling, biking, accessing transit, and driving in the area
- **Interest in being involved more** in future phases of the project
- **Desire for more pedestrian focus and bicycle infrastructure** in the project area
- **Concern about using newer technologies for the streetcar extension** like utilizing batteries instead of overhead wires
- **Concern about impacts of the streetcar extension** to vehicle parking and movement along NW 23rd Avenue
- **Concerns about the potential costs and funding sources of the project**, as well as the impacts of a Local Improvement District to affordability in the area
- **Concerns about livability** and potential negative impacts of the streetcar extension and continued growth affecting crime, traffic, and living costs
- **Some opposition to the streetcar project**, with some individuals questioning the value of the project for Northwest Portland



Northwest Parking District Open House

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Developing the preferred alignment

For more than five years, the *MP2H* team explored alignment options to connect the Portland Streetcar to the Montgomery Park Area. Through community engagement, analysis of suitability and feasibility, and application of local policy, the preferred alignment was developed and selected.

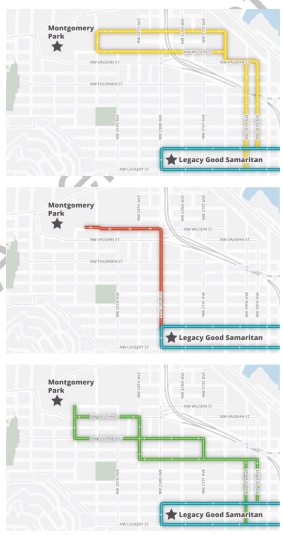
Considering transit alternatives

Different transit modes suit different land uses and intensities of development. Lower capacity transit types like traditional buses or microshuttles are better suited to low-density uses like single-dwelling residential or industrial. Higher capacity transit types including streetcar and enhanced buses are more appropriate for higher-density mixed land uses. With this in mind, we evaluated various transit mode alternatives for their feasibility and suitability.

Streetcar was chosen because of its suitability to support the densest development for the area. Streetcar offers the highest capacity of any of the alternatives and draws high ridership, with a proven background of spurring dense development including affordable housing. It also has the ability to leverage various funding sources toward its construction, as well as the potential to generate additional community benefits in the project area.



We considered four different transit alternatives for their suitability in the Montgomery Park Area. Clockwise from top left, we considered: Streetcar; Enhanced Bus; Traditional Bus; and Microshuttle.



We considered various alignments to connect Portland Streetcar to Montgomery Park, including the three above.

Development and analysis of alternative alignments

The preferred alignment was developed through research, community engagement, and analysis during the *MP2H* process. We analyzed various land use scenarios to understand which changes would have the best potential to facilitate the development of an equitable mixed use neighborhood, including affordable housing and jobs.

When it became clear that the most expected growth in the area would be concentrated on and around the former ESCO site in the Montgomery Park Area, a new land use scenario was developed to focus changes in the area of greatest impact. This scenario responds to community support for balance between more housing and retaining industrial character and jobs.

Further analysis of potential streetcar alignments revealed that a route on NW 23rd Avenue, connecting from the existing streetcar line at NW Northrup Street, would be the most feasible and cost effective. It would strategically serve the area of greatest expected change while directing the streetcar along NW 23rd Avenue, a bustling Neighborhood Main Street with high transit priority in local policy.

The preferred alignment was refined from previous alternatives using NW 23rd Avenue. When compared to those alignments, it was chosen for a number of reasons, including being free of fatal flaws in traffic analysis, supporting trip access and demand now and in the future, being cost competitive due to its length, and supporting phased redevelopment in the Montgomery Park Area over time.

More about the development of the preferred alignment, as well as the consideration of alternatives, is available in *Appendix A: Portland Streetcar Montgomery Park Extension: Preferred Alignment Overview*. The preferred land use plan concept and information about its development are available in Volume 1 of the *Montgomery Park Area Plan*.

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The preferred alignment

The preferred alignment is a short, direct route to Montgomery Park through an extension of the existing Portland Streetcar North-South (NS) Line along NW 23rd Avenue to a new one-way parallel couplet along NW Roosevelt and NW Wilson streets. This alignment will efficiently serve expected development around Montgomery Park. It will also serve one of Northwest Portland's most vibrant Main Streets, NW 23rd Avenue.

Current and future demand along the bustling corridor of NW 23rd Avenue will be supported by permanent mass transit. The street is designated in the *Transporation System Plan* to prioritize frequent transit and high-volume pedestrian movement. Because NW 23rd Avenue is a Neighborhood Main Street, it should effectively serve the surrounding neighborhood while its design emphasizes multimodal access and movement.

Additionally, NW 23rd Avenue is in disrepair and is in desperate need of rehabilitation. Community members have called for improvements to this street for years. Routing the streetcar along NW 23rd Avenue allows us to address current deficiencies on the street, including accessibility, utility, and stormwater management while constructing the streetcar extension. Combining improvements to NW 23rd Avenue with the streetcar extension will reduce construction impacts in the area and help us use public funds more efficiently.



The preferred alignment is a direct route to Montgomery Park, extending via a two-way on NW 23rd Avenue to a new parallel one-way couplet along rebuilt and extended NW Wilson and NW Roosevelt streets.

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Traffic analysis

We performed traffic modeling to estimate the impacts of land use changes to traffic in the Montgomery Park Area in the future. Using the City's Transportation Demand Model, we developed an existing year model and a future year model for 2040 to compare present-day conditions with forecasted growth in the area—both with and without the land use changes proposed in the *Montgomery Park Area Plan*.

Our analysis indicates that the Montgomery Park Area can absorb the proposed land use changes. However, in order to mitigate the impacts of added trip demand in the area as it grows, various project and programmatic elements are necessary. Those mitigation measures include transit improvements, improved multimodal facilities, improved or new signalized intersections, and some operational changes to support better movement. Programmatic recommendations are intended to manage demand and promote more spatially-efficient ways of travel in, to, and through the project area, including walking, rolling, biking, and taking transit.

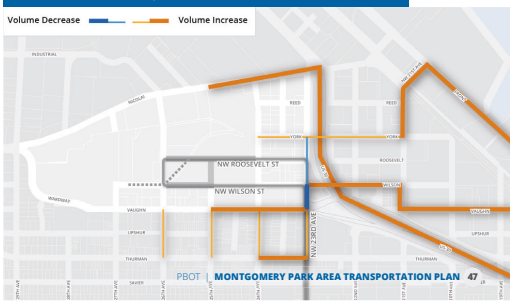
KEY ANALYSIS ASSUMPTIONS

- All new streets will meet City Title 17 street connectivity standards.
- A southbound left turn at the intersection of NW 23rd Avenue and NW Vaughn Street to access US-30 will be closed to support streetcar operations, with US-30 access maintained at NW Nicolai Street.
- Trip adjustments were made to account for expected nearby destinations and planned multimodal transportation options and connections in the area.

KEY TAKEAWAYS

- The transportation network within and around the Montgomery Park Area can support expected growth and demand.
- With proposed land use changes, auto trips are expected to increase 36 percent overall.
- Increases in trips are not expected to cause unnacceptable impacts to traffic operations in or around the area.
- More information about traffic analysis is available in *Appendix B: Traffic Technical Memorandum.*

EXPECTED TRAFFIC VOLUME CHANGES WITH FORECASTED GROWTH
MONTGOMERY PARK AREA | YEAR 2040 MODEL WITH LAND USE CHANGES



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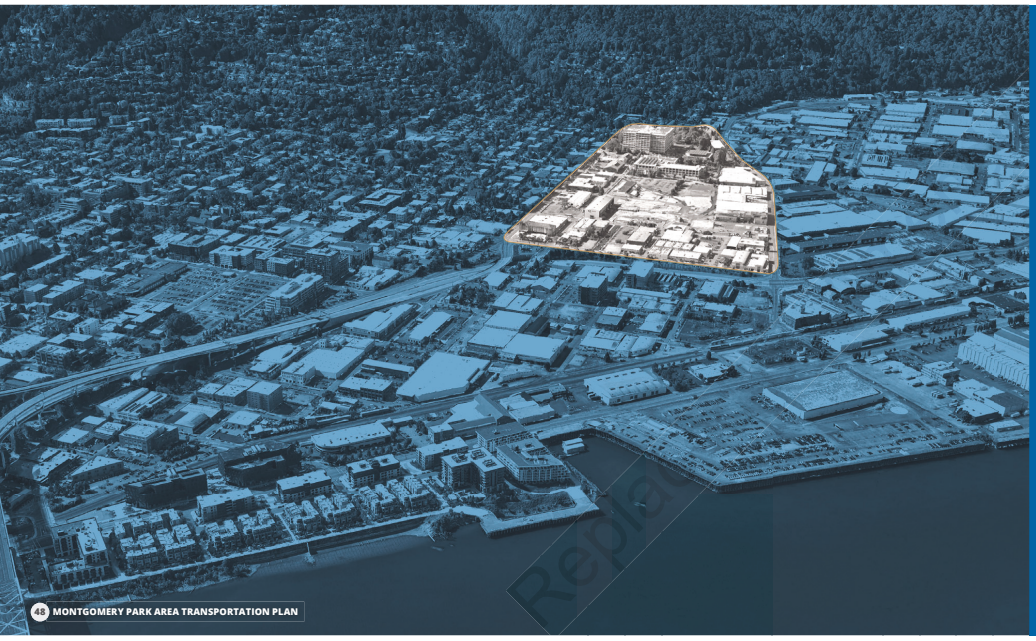

Part 4

Multimodal Recommendations

The *Montgomery Park Area Transportation Plan* recommends projects around scales of connections: Internal Connections, Neighborhood Connections, and City and Regional Connections. This chapter details those recommendations, with focus on the centerpiece Big Move recommended project: an extension of Portland Streetcar to Montgomery Park.

All about connections

The *Montgomery Park Area Transportation Plan* contains multimodal recommendations organized around scales of connections:

IC **Internal Connections**

Connections within the Montgomery Park Area itself

NC **Neighborhood Connections**

Connections that stitch the Montgomery Park Area together with the rest of the Northwest District

CR **City and Regional Connections**

Connections for movement to and from destinations across Portland and the region

The centerpiece recommended project of this plan is the extension of the Portland Streetcar to Montgomery Park. The streetcar extension improves connections at all three of the above scales. The project will improve internal connections within the Montgomery Park Area, connect to the Northwest District to the south via NW 23rd Avenue, and connet to the broader Portland Streetcar system and regional transit network. Because of this, we call this project the *Montgomery Park Area Transportation Plan*'s **Big Move**.

B **Big Move**

The extension of Portland Streetcar to Montgomery Park, which improves connections at all of the above scales

Original Exhibit B - Volume 3 (for information only)

Replaced by Amendment

RECOMMENDED PROJECTS

Big Move (details on pages 52-53)

B.1 Streetcar Extension to Montgomery Park
Extend the Portland Streetcar North-South (NS) Line to Montgomery Park, via NW 23rd Avenue, NW Roosevelt Street, and NW Wilson Street.

Internal Connections (details on pages 54-69)

IC.1 NW Roosevelt Street Extension
Extend NW Roosevelt Street from NW 23rd Avenue to NW 26th Avenue for one-way westbound movement, including streetcar. Include a protected bikeway connection and a general purpose travel lane, as well as 12-foot sidewalks and onstreet parking.

IC.2 NW Roosevelt Street to Montgomery Park Station
Connect the streetcar extension from NW Roosevelt Street to a new Montgomery Park Station near the intersection of NW 26th Avenue and NW Wilson Street, where the terminus of the streetcar extension will allow for charging, layover, and turnaround.

IC.3 NW Wilson Street Extension
Extend and rebuild NW Wilson Street between NW 23rd Avenue and NW 26th Avenue for one-way eastbound movement, including streetcar. Include a protected bikeway connection, a general purpose travel lane, 15-foot sidewalks, and onstreet parking.

IC.4 NW York Street Improvements and Future Extension
As a condition of redevelopment, require pedestrian and accessibility improvements and full roadway construction, including removal of abandoned railroad tracks. Require street connection across former ESCO site north of NW Roosevelt Street. Develop right of way standards for loading dock preservation.

IC.5 NW 25th Avenue Extension
Extend NW 25th Avenue between NW Roosevelt and NW Wilson Streets to improve access and north-south connectivity. As a condition of redevelopment, require street connections between NW Nicolai and NW Roosevelt streets in accordance with City street connectivity requirements.

IC.6 NW 26th Avenue and NW 27th Avenue Recommendations
Configure NW 26th Avenue as needed to support the streetcar extension. Through redevelopment, include upgrades between NW Nicolai and NW Vaughn streets. Ensure that NW 27th Avenue remains publicly accessible when redevelopment occurs, with emphasis on pedestrian and bicycle movement.

Neighborhood Connections (details on pages 70-79)

NC.1 NW Vaughn Street Corridor and Crossing Improvements
Refine and implement corridor and crossing improvements on NW Vaughn Street and NW Wardway Street between NW 24th and NW 29th avenues, as recommended in *Northwest in Motion.*

NC.2 NW 23rd Avenue Northwest District Connection
Connect the streetcar extension to existing North-South (NS) terminus at NW Northrup Street via NW 23rd Avenue. Rehabilitate roadway surface on NW 23rd Avenue between NW Vaughn and NW Lovejoy streets, and include interventions to improve safety and accessibility and to support streetcar movement.

NC.3 NW 24th Avenue Neighborhood Greenway
Connect the bicycle network to the rest of the Northwest District by extending the NW 24th Avenue Neighborhood Greenway between NW Nicolai and NW Vaughn streets. Include signage, necessary traffic calming elements, and safety improvements for pedestrians and people bicycling.

NC.4 Bikeway Connections to NW Front Avenue
Provide low-stress alternative routes for people to walk, roll, and bicycle between the Montgomery Park Area and NW Front Avenue, avoiding conflicts with US-30 on/off ramps and other high-stress streets.

City and Regional Connections (details on pages 80-85)

CR.1 NW Nicolai Street Freight Route
Emphasize NW Nicolai Street over NW Vaughn Street as the key freight connector to US-30 in the area, including updated signage.

CR.2 NW Nicolai Street Multi-Use Path
Convert the former railroad tracks north of NW Nicolai Street to a multi-use path for walking, rolling, and bicycling. Improve safety by providing an all ages and abilities active transportation route between NW 24th and NW 29th avenues, with eventual connections farther east and west for longer trips.

CR.3 Montgomery Park Station Transit Hub
Encourage transit use and multimodal options by establishing a transit hub within one block of NW Wilson Street and NW 26th Avenue, providing easy connections to different modes for all users near the streetcar terminus.

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Big Move

The extension of Portland Streetcar to Montgomery Park via NW 23rd Avenue, linking a major employment area and emerging residential and high-density mixed use area to the region's larger transit system

B.1 Streetcar Extension to Montgomery Park



PROJECT DESCRIPTION

Extend Portland Streetcar's North-South (NS) Line along NW 23rd Avenue from NW Northrup Street to a new terminus on NW Wilson Street near the entrance of Montgomery Park. A one block parallel couplet will allow the streetcar to move west on NW Roosevelt Street and east on NW Wilson Street.

PROJECT GOALS

- Connect the Montgomery Park Area to the rest of the Northwest District.
- Provide reliable, convenient, and comfortable single-seat ride from Montgomery Park to Downtown, Portland State University, OHSU, and the larger transit network.
- Leverage a major transit investment to advance the City's affordable housing and equity goals.
- Support trip demands and mitigate transportation impacts as the area grows.

KEY CONSIDERATIONS

- Streetcar operations are anticipated to require the removal of the southbound left-turn lane onto US-30 from NW 23rd Avenue at NW Vaughn Street. People driving that route today will be redirected to US-30 via NW Nicolai Street in the future.
- Signal timing for the streetcar crossing at NW 23rd Avenue/NW Vaughn Street/US-30 will need to be determined.
- Right-of-way dedication will be required for the streetcar couplet in the Montgomery Park Area.
- Transit operations may impact some onstreet parking in select locations, though impacts should be minimized.
- More detailed information about design, including recommeded cross sections, is available in recommended projects IC.1 (page 56), IC.2 (page 58), IC.3 (page 60), and NC.2 (page 74).

Replaced by Attachment

Streetcar Extension to Montgomery Park



Original Exhibit B - Volume 3 (for information only)

Internal Connections

Multimodal connections within the Montgomery Park Area itself, filling gaps in the street grid and providing local trip options for residents, workers, and visitors



Extend NW Roosevelt Street, NW Wilson Street, and NW 25th Avenue to improve connectivity, support streetcar operations, and provide multimodal transportation options in the area.



Build new and improve existing sidewalks and bikeway connections along the streetcar alignment and in key areas to improve conditions for pedestrians and people bicycling.



Ensure future street connectivity and multimodal access as the area redevelops in the future.

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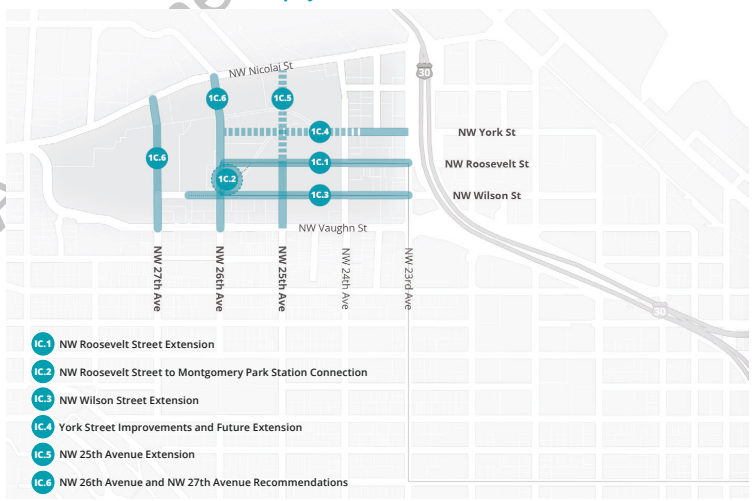
Internal Connections recommended project locations



Internal Connections

IC.1 NW Roosevelt Street Extension

PROJECT DESCRIPTION

Extend NW Roosevelt Street from NW 23rd Avenue to NW 26th Avenue for one-way westbound streetcar movement. Include a westbound general purpose travel lane, a shared streetcar priority lane, a bikeway on the north side of the street, and onstreet parking on the south side of the street. Improve conditions for pedestrians by requiring 12-foot sidewalk corridors on both sides of the street.



PROJECT GOALS

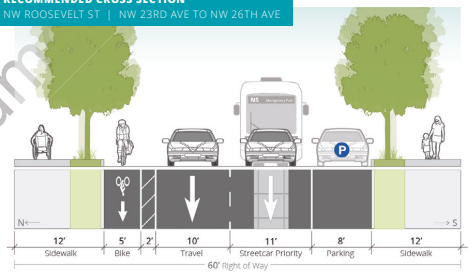
- Ensure that NW Roosevelt Street serves its critical role as the westbound portion of the couplet connecting the streetcar extension toward its terminus at a transit hub near Montgomery Park.
- Provide all-ages-and-abilities bicycle facilities in the area connecting to the rest of the city's bike network.
- Prioritize pedestrian movement and access to streetcar stations.
- Support internal multimodal circulation for all users.

KEY CONSIDERATIONS

- The one-way westbound conversion of NW Roosevelt Street between NW 23rd Avenue and NW 24th Avenue will change local travel patterns.
- The protected bikeway will be located on the opposite side of the street from the shared streetcar priority lane, reducing conflicts between the two modes.
- The protected bikeway is currently recommended to be at street level due to physical constraints of underground utilities.
- Traffic control at the intersection of NW Roosevelt Street and NW 23rd Avenue will likely require a new signal. Future design phases should confirm.
- Between NW 23rd Avenue and NW 24th Avenue, it may be possible to maintain onstreet parking on both sides of the street, dependent on final design of the streetcar extension and finalized north-south bicycle connections in the area.

Original Exhibit B - Volume 3 (for information only)
Replaced by Amendment

RECOMMENDED CROSS SECTION
NW ROOSEVELT ST | NW 23RD AVE TO NW 26TH AVE



EXISTING CONDITIONS LOOKING WEST OF NW 24TH AVE FROM NW ROOSEVELT ST



Internal Connections

IC.2 NW Roosevelt Street to Montgomery Park Station Connection

PROJECT DESCRIPTION

Connect the westbound streetcar alignment on NW Roosevelt Street to the extension's terminus at Montgomery Park Station near NW Wilson Street and NW 26th Avenue. There are currently three potential options for this connection: two use NW 26th Avenue for southbound movement of the streetcar, and one uses a diagonal route connecting to NW Wilson Street along the alignment of an abandoned rail spur.



PROJECT GOALS

- Connect streetcar transit to a future Montgomery Park Station located on NW Wilson Street near NW 26th Avenue.
- Create a transit hub near the terminus of the streetcar extension where multiple transit and shared mobility options are easily accessible.
- Provide clear, direct, safe connections for users of all modes to reach destinations within the Montgomery Park Area.

KEY CONSIDERATIONS

- All three options will require property dedication to support streetcar turning movements and end-of-line station location.
- For the two routes using NW 26th Avenue to connect the streetcar to Northwest Wilson Street, the tail track terminus between NW 26th Avenue and NW 27th Avenue is not required for streetcar operation. If eliminated in future design, the station on NW Wilson Street should be located as close to the intersection of NW 26th Avenue as possible.
- The diagonal route connecting NW Wilson Street along the location of an abandoned rail spur running southwest from NW Roosevelt Street to NW Wilson Street would require the inclusion of the tail track terminus between NW 26th and NW 27th avenues for turnaround, layover, and charging.

Original Exhibit B - Volume 3 (for information only)
Rejected by Amendment

PROJECT OPTIONS AND KEY CONSIDERATIONS

1 NW 26TH AVENUE CONNECTION USING EAST SIDE OF STREET (PREFERRED)

Continue streetcar alignment along NW Roosevelt Street to the intersection with NW 26th Avenue, turning south and traveling along the east side of NW 26th Avenue to connect with NW Wilson Street.



KEY CONSIDERATIONS

- This option will require property dedication or acquisition, especially on the east side of NW 26th Avenue between NW Roosevelt and NW Wilson streets, though this routing could eliminate the need for signalized intersections.
- This option would support southbound bicycle movement to connect the recommended protected bikeways on NW Roosevelt Street and NW Wilson Street.

2 NW 26TH AVENUE CONNECTION USING WEST SIDE OF STREET

Continue streetcar alignment along NW Roosevelt Street to the intersection with NW 26th Avenue, turning south and traveling along the west side of NW 26th Avenue to connect with NW Wilson Street.



KEY CONSIDERATIONS

- This option will require property dedication or acquisition beyond the existing right-of-way, though it would minimize impacts to developable parcels east of NW 26th Avenue between NW Roosevelt and NW Wilson streets.
- If selected, final design must include a way for southbound bicycle movement to avoid conflicts with streetcar or other modes.

3 DIAGONAL ROUTE USING LOCATION OF ABANDONED RAIL SPUR

Route streetcar alignment southwest following an existing abandoned rail spur along the property line between the Montgomery Park Site and the former ESCO site.



KEY CONSIDERATIONS

- This option would support optimal streetcar operations due to larger turning radiuses, improving transit speeds and reliability.
- This option could create the opportunity for the creation of a public space surrounding the diagonal track, but impacts developable parcels the most of all three options and reduces programmatic flexibility for property owners.

Internal Connections

IC.3 NW Wilson Street Extension

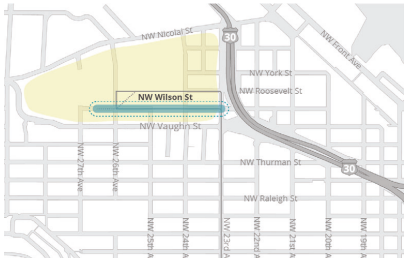
PROJECT DESCRIPTION

Extend and rebuilt NW Wilson Street from NW 23rd Avenue to NW 26th Avenue for one-way eastbound streetcar movement. Include an eastbound general purpose travel lane, a shared streetcar priority lane, a bikeway on the south side of the street, and onstreet parking on the north side of the street. Support conditions for a Neighborhood Main Street on NW Wilson Street by requiring 15-foot sidewalk corridors. Add a new signal at intersection with NW 23rd Avenue.

Between NW 26th and NW 27th avenues, the optional bidirectional tail track for the streetcar terminus would be located on the north side of the street. Two general purpose travel lanes and parking on the south side of the street would be maintained, and a new signal at NW 26th Avenue would be added.

PROJECT GOALS

- Ensure that NW Wilson Street serves its critical role as the eastbound portion of the couplet connecting the streetcar extension from its terminus near Montgomery Park to NW 23rd Avenue and the larger transit network.
- Provide all-ages-and-abilities bicycle facilities in the area connecting to the rest of the city's bike network.
- Prioritize pedestrian movement and access to streetcar stations, as well as active sidewalk uses.
- Support internal multimodal circulation for all users.

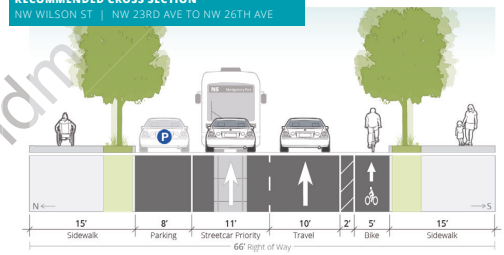


KEY CONSIDERATIONS

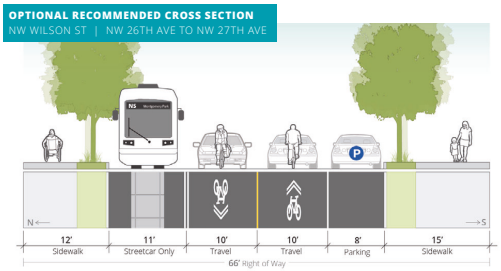
- The one-way eastbound conversion of NW Wilson Street will change local travel patterns.
- The protected bikeway will be located on the opposite side of the street from the shared streetcar priority lane, reducing conflicts between the two modes.
- The protected bikeway is currently recommended to be at street level due to physical constraints of underground utilities.
- Streetcar alignment on the north side of the street enables the turn onto NW 23rd Avenue and supports the optional terminus tail track between NW 26th and 27th avenues.
- The sidewalk corridor width on the north side of NW Wilson Street between NW 26th and 27th avenues will be constrained by the historic American Can Company building.
- Between NW 23rd Avenue and NW 24th Avenue, it may be possible to maintain onstreet parking on both sides of the street, dependent on final design of the streetcar extension. However, no final design should preclude this connection in the future.

Original Exhibit B - Volume 3 (for information only)
Rejected by Amendment

RECOMMENDED CROSS SECTION
NW WILSON ST | NW 23RD AVE TO NW 26TH AVE



OPTIONAL RECOMMENDED CROSS SECTION
NW WILSON ST | NW 26TH AVE TO NW 27TH AVE



Internal Connections

IC.4 NW York Street Improvements and Future Extension

PROJECT DESCRIPTION

As a condition of redevelopment, require pedestrian and accessibility improvements and full roadway construction, including removal of abandoned railroad tracks. Require street connection across former ESCO Site north of NW Roosevelt Street in accordance with CIty Title 17 street connectivity requirements. Develop right-of-way standards to support the preservation of loading docks as recommended by the urban design direction in Volume 1, if accessibility requirements can be met.



PROJECT GOALS

- Increase connectivity for all modes by eliminating superblocks in the area, while supporting flexibility for future development programming.
- Provide regular, safe multimodal connections through the area as it grows, especially for pedestrians and people bicycling.
- Disperse vehicle traffic by providing multiple local routes to reach destinations.

KEY CONSIDERATIONS

- Raised concrete loading docks are a common feature of buildings on NW York Street between NW 23rd and NW 24th avenues. While in active use, these docks present challenges for pedestrian access. Right-of-way standards are needed to support modification as redevelopment occurs, especially to meet accessibility requirements.
- Design and final location of the future east-west connection through the former ESCO site between NW 24th and NW 26th avenues will be determined through future development review process and City approval. This street shall be dedicated as public right-of-way.

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EXISTING CONDITIONS ON NW YORK STREET WEST OF NW 23RD AVENUE









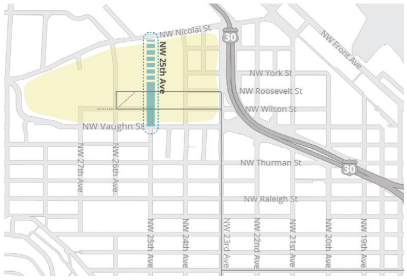


Internal Connections

IC.5 NW 25th Avenue Extension

PROJECT DESCRIPTION

Extend NW 25th Avenue between NW Roosevelt and NW Wilson streets to improve access and north-south connectivity. As a condition of redevelopment, require north-south street connection between NW Nicolai and NW Roosevelt streets in accordance with City Title 17 connectivity requirements.



PROJECT GOALS

- Improve north-south connectivity through the area by eliminating existing superblocks.
- Provide a main vehicle access route into the center of the Mongtomery Park Area using the existing traffic signal at NW Vaughn Street and NW 25th Avenue.
- Provide service access to buildings in the area while avoiding service access on streetcar alignment streets or Neighborhood Greenways.
- Provide onstreet parking and loading zones.

KEY CONSIDERATIONS

- NW 25th Avenue is currently used as a cut-through route for regional traffic south of NW Vaughn Street. The extension of NW 25th Avenue to NW Roosevelt Street—and eventually to NW Nicolai Street—may increase cut-through traffic. Evaluation for future mitigation is recommended.
- North of NW Vaughn Street, NW 25th Avenue will serve a building access function. This street will accommodate driveway, curb cut, and loading areas, as they cannot be located on the streetcar alignment.
- Design and final location of the future north-south connection through the former ESCO site between NW Nicolai and NW Roosevelt streets will be determined through future development review process and City approval. This street shall be dedicated as public right-of-way.

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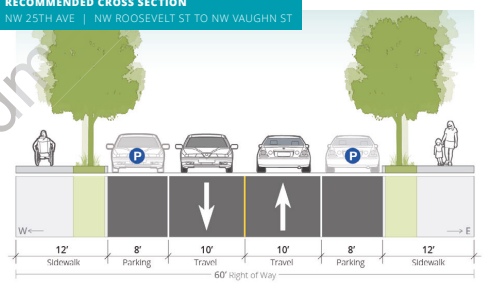
RECOMMENDED CROSS SECTION
NW 25TH AVE | NW ROOSEVELT ST TO NW VAUGHN ST



EXISTING CONDITIONS ON NW 25TH AVE NORTH OF NW VAUGHN ST



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Internal Connections

IC.6 Part 1: NW 26th Avenue Recommendations

PROJECT DESCRIPTION

Improve safety and access by adding a pedestrian refuge crossing at the intersection of NW Vaughn Street and NW 26th Avenue, as identified in *Northwest in Motion*. Upgrade striping, curbs, and sidewalks in conjuntion with redevelopment. In the event the streetcar alignment is routed along NW 26th Avenue, rebuild the street between NW Roosevelt and NW Wilson streets to support streetcar movement. Ensure design minimizes conflicts betweeen modes and supports multimodal movement.



PROJECT GOALS

- Improve safety and transit access for pedestrians by providing 12-foot sidewalk corridors on both sides of the street.
- Complete the internal bike network in the area by connecting new bikeways on NW Roosevelt and NW Wilson streets.

KEY CONSIDERATIONS

- The addition of a recommended pedestrian refuge crossing at the intersection of NW Vaughn Street and NW 26th Avenue will require the removal of a limited number of parking spaces on the south side of NW Vaughn Street.
- Final design should support southbound bicycle movement to connect people bicycling from NW Roosevelt Street to NW Wilson Street.
- It may be possible to improve connections between streetcar, recommended shared mobility services, and existing buses by moving the existing bus layover from NW 27th Avenue to NW 26th Avenue. Coordination with TriMet would be necessary.
- Coordination with recommended project IC.2: NW Roosevelt Street to Montgomery Park Station Connection (**page 58**) will be required. The first cross section on the following page will change based upon the selected project option for IC.2.

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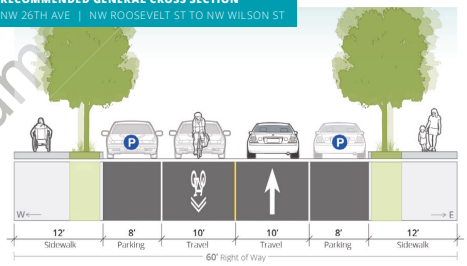
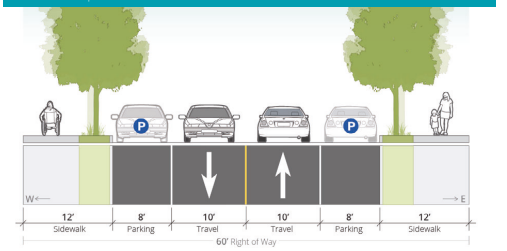
RECOMMENDED GENERAL CROSS SECTION
NW 26TH AVE | NW ROOSEVELT ST TO NW WILSON ST



RECOMMENDED CROSS SECTION
NW 26TH AVE | NW NICOLAI ST TO NW ROOSEVELT ST & NW WILSON ST TO NW VAUGHN ST



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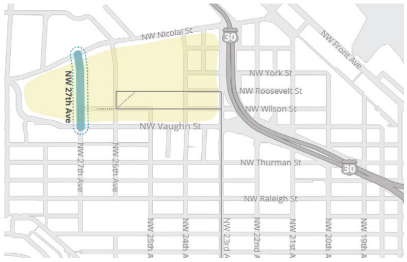
IC.6 Part 2: NW 27th Avenue Recommendations

PROJECT DESCRIPTION

NW 27th Avenue is a partially-private street connecting people to the front door of the Montgomery Park building. Future improvements during redevelopment should emphasize NW 27th Avenue as a primary entrance to Montgomery Park, with supportive pedestrian infrastructure. Extend the NW 27th Avenue Neighborhood Greenway between NW Nicolai and NW Savier streets to provide safe, direct access to Montgomery Park from the rest of the Northwest District to the south.



PROJECT GOALS

- Maintain privately-owned, publicly-accessible status of NW 27th Avenue between NW Nicolai Street and NW Wilson Street.
- Emphasize NW 27th Avenue as a pedestrian-oriented street, functioning as the primary north-south connection for pedestrians accessing the Montgomery Park Building.
- Extend the 27th Avenue Neighborhood Greenway from NW Nicolai Street to NW Savier Street to provide safe, direct access to Montgomery Park from the Northwest District to the south.

KEY CONSIDERATIONS

- Public access must be maintained on NW 27th Avenue as redevelopment occurs on and around Montgomery Park in the future. Future design should be finalized as a condition of redevelopment onsite.
- TriMet currently uses NW 27th Avenue for bus layovers. In the event this street continues to serve a layover function for transit, future street design should ensure adequate space for buses while still supporting safe and comfortable movement for pedestrians, people bicycling, and people driving on the street.
- An enhanced pedestrian and bicycle crossing of NW Nicolai Street is recommended, in order to support the street as a Neighborhood Greenway and important north-south connection for people walking, rolling, and biking to and through the Montgomery Park Area.

EXISTING CONDITIONS ON NW 27TH AVE BY MONTGOMERY PARK



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Original Exhibit B - Volume 3 (for information only)

Neighborhood Connections

Multimodal connections that stitch the Montgomery Park Area together with the rest of the Northwest District, improving access for people walking, rolling, bicycling, or using transit in the neighborhood



Improve corridor and crossings on NW Vaughn Street to stitch together the area with the rest of the neighborhood and move the industrial boundary northward to NW Nicolai Street.



Connect the area to the NW 23rd Avenue Neighborhood Main Street and reduce conflicts between modes.



Create alternate pedestrian and bike routes toward the east to improve low-stress connections between the area and NW Front Avenue across US-30.

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Neighborhood Connections recommended project locations



NC.1 NW Vaughn Street Corridor and Crossing Improvements

NC.2 NW 23rd Avenue Northwest District Connection

NC.3 NW 24th Avenue Neighborhood Greenway

NC.4 Bikeway Connections to NW Front Avenue

Neighborhood Connections

NC.1 NW Vaughn Street Corridor and Crossing Improvements

PROJECT DESCRIPTION

Refine and implement corridor and crossing improvements on NW Vaughn Street and NW Wardway Street between NW 24th and NW 29th avenues, as recommended in *Northwest in Motion*. Prioritize short-term implementation to support multimodal movement between the Montgomery Park Area and the Northwest District Neighborhood, as well as along NW Vaughn Street. Explore opportunities to support greening in the right-of-way. Ensure operational needs of streetcar are met at intersection of NW Vaughn Street, NW 23rd Avenue, and US-30 ramps.



PROJECT GOALS

- Improve pedestrian safety and comfort along NW Vaughn Street by enhancing crossings between the Montgomery Park area and Northwest District areas to the south.
- Move the functional southern boundary of Northwest Portland's industrial district northward from NW Vaughn Street to NW Nicolai Street.
- Satisfy operational needs at the intersetion of NW Vaughn Street/NW 23rd Avenue/US-30.
- Mitigate congestion on NW Vaughn Street by improving connectivity and comfort for people walking, rolling, biking, and taking transit.

KEY CONSIDERATIONS

- As redevelopment occurs along the street, sidewalk dedication requirements will improve conditions for pedestrians.
- The NW 24th Avenue Neighborhood Greenway will be the primary bike route for accessing the Montgomery Park area from the south. A new pedestrian/bicycle refuge and median diverter at the intersection of NW Vaughn Street and NW 24th Avenue may cause some people driving to travel out of direction.
- Crossing improvements with traffic diversion have been installed as an interim treatment at NW 24th Avenue. Funding identification for a permanent design should be prioritized.
- The addition of bike lane striping through intersections with NW 25th and NW 27th avenues will improve visibility for people bicycling. Future design should also explore the extension of bike lanes along NW Vaughn Street.

Original Exhibit B - Volume 3 (for information only)

INSTALLED INTERIM DESIGN
NW VAUGHN ST AND NW 24TH AVE



KEY CONSIDERATIONS CONTINUED

- Westbound bikes continuing on NW Wardway currently travel in mixed traffic west of the intersection of NW Vaughn Street and NW 27th Avenue. Due to space constraints, this will remain consistent, with sharrows marking the westbound lane west of NW 27th Avenue. If right-of-way on NW Wardway is reallocated in the future, dedicated space for separated westbound bicycle facililities would improve safety for people bicycling to NW St Helens Road via NW Wardway.
- When future traffic signal upgrades occur at intersections with NW 25th Avenue and NW 27th Avenue, protected left turn signals should be considered to improve safety.
- Other recommended crossing improvements are detailed in *Northwest in Motion* in recommended project CI.5: NW Vaughn Street Corridor Improvements.

FUTURE DESIGN CONCEPT
NW VAUGHN ST AND NW 24TH AVE



Rejected by Amendment

Neighborhood Connections

NC.2 NW 23rd Avenue Northwest District Connection

PROJECT DESCRIPTION

Connect the streetcar extension to existing North-South (NS) Line terminus at NW Northrup Street via NW 23rd Avenue. Rehabilitate NW 23rd Avenue between NW Vaughn and NW Lovejoy streets, including stormwater, utility, and accessibility upgrades. Address operational needs by eliminating southbound left turn lane onto US-30 from NW 23rd Avenue. Improve safety and efficiency by adjusting existing signal timing, and add a new traffic signal at intersections with NW Wilson Street and NW Roosevelt Street.



PROJECT GOALS

- Connect the Montgomery Park Area to the Neighborhood Main Street of NW 23rd Avenue and the rest of the Portland Streetcar system via the recommended streetcar extension project B.1 (page 74).
- Reduce traffic and freight use of the NW Vaughn Street/NW 23rd Avenue/US-30 on-ramp.
- Reduce modal conflicts along NW 23rd Avenue.
- Levarage federal transit project funding opportunity to address known deficiencies on NW 23rd Avenue.

KEY CONSIDERATIONS

- Two-way streetcar operation on NW 23rd Avenue will require rehabilitation of the roadway, including accessibility upgrades, triggered onsite stormwater management, and utility upgrades.
- No loading zones currently exist on NW 23rd Avenue. To support transit operations, new loading zones should be prohibited.
- As redevelopment occurs on NW 23rd Avenue south of NW Wilson Street, sidewalk dedications will meet Neighborhood Main Street standards of 15-foot sidewalk corridors.
- In order to minimize impacts to parking on NW 23rd Avenue, final streetcar extension project design should coordinate with TriMet to share stations with existing transit service.

KEY CONSIDERATIONS CONTINUED

- Between NW Wilson Street and NW Vaughn Street, current recommendations include a 15-foot sidewalk corridor on the west side of the street to facilitate north-south movement for pedestrians to and from the Neighborhood Main Street of NW 23rd Avenue south of NW Vaughn Street. This dedication will be required as a condition of future redevelopment.
- On the east side of the street between NW Wilson Street and NW Vaughn Street, future redevelopment should explore the utilization of the existing 8-foot edge zone (see recommended cross section on the top right of this page) to improve conditions and widen the sidewalk corridor for pedestrians to 15 feet. Alternatively, right-of-way dedication triggered by redevelopment would accommodate a wider sidewalk corridor.
- There may be an opportunity to utilize space on NW 23rd Avenue betwen NW Roosevelt and NW Wilson streets to connect the recommended one-way protected bikeways on those streets with a northbound bikeway. Future design should confirm based upon right-of-way width and streetcar turning radius requirements from NW 23rd Avenue to NW Roosevelt Street.

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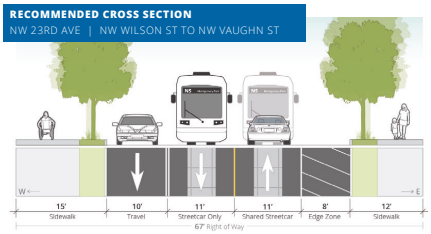
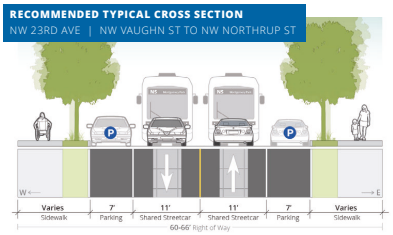
RECOMMENDED CROSS SECTION
NW 23RD AVE | NW WILSON ST TO NW VAUGHN ST



RECOMMENDED TYPICAL CROSS SECTION
NW 23RD AVE | NW VAUGHN ST TO NW NORTHRUP ST



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Neighborhood Connections

NC.3 NW 24th Avenue Neighborhood Greenway

PROJECT DESCRIPTION

Connect the bicycle network to the rest of the Northwest District by extending the NW 24th Avenue Neighorhood Greenway between NW Nicolai and NW Vaughn streets. Include signage, necessary traffic calming elements, and safety improvements for pedestrians and people bicycling. Improve safety by adding a pedestrian refuge and median diverter at the intersection of NW Nicolai Street and NW 24th Avenue, as well as making the one at NW Vaughn Street and NW 24th Avenue permanent.



PROJECT GOALS

- Improve safety and comfort for people walking, rolling, and biking to, from, and through the Montgomery Park Area.
- Extend connection of a low-stress pedestrian and bicycle route for people entering and exiting the district.
- Enhance a low-stress alternative to the NW Vaughn Street/ NW 23rd Avenue/US-30 intersection for pedestrians and people bicycling.

KEY CONSIDERATIONS

- A pedestrian refuge and median diverter at NW Vaughn Street and NW 24th Avenue was recommended in *Northwest in Motion* and has been installed as an interim treatment. While it reduces cut-through vehicle traffic on NW 24th Avenue, it may require out-of-direction travel for some people driving in the area. For more information on the funded design and future concept, see NC.1: Vaughn Street Crossing Improvements (**page 72**).
- A proposed pedestrian refuge and median diverter at NW Nicolai Street and NW 24th Avenue will also reduce cut-through traffic on the Neighborhood Greenway. The future design concept should be similar to the one on NW Vaughn Street.
- Traffic calming on NW 24th Avenue will reduce traffic speeds and improve comfort for people walking, rolling, and bicycling.

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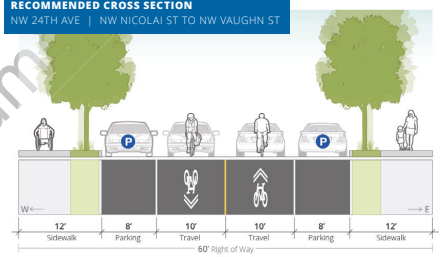
RECOMMENDED CROSS SECTION
NW 24TH AVE | NW NICOLAI ST TO NW VAUGHN ST



EXISTING CONDITIONS ON NW 24TH AVE NORTH OF NW ROOSEVELT ST



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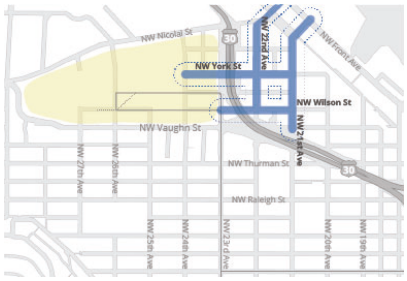
Neighborhood Connections

NC.4 Bikeway Connections to NW Front Ave

PROJECT DESCRIPTION

Provide low-stress alternative routes for people walking, rolling, and bicycling between the Montgomery Park Area and NW Front Avenue, avoiding conflicts with US-30 on/off ramps. Connect the bike network across existing overpasses of US-30 at NW York Street and NW Wilson Street and provide north-south connections via NW 21st and NW 22nd avenues.



PROJECT GOALS

- Improve safety and comfort for people walking, rolling, and biking to, from, and through the Montgomery Park Area.
- Extend connection of a low-stress pedestrian and bicycle route for people entering and exiting the district.
- Enhance a low-stress alternative to the NW Vaughn Street/ NW 23rd Avenue/US-30 intersection for pedestrians and people bicycling.

KEY CONSIDERATIONS

- NW 21st Avenue is proposed to be a one-way northbound bike connection across the railroad tracks to NW Front Avenue, with NW 22nd Avenue functioning as a one-way southbound bike connection. These changes will connect to existing bikeway improvements along US-30 between NW 20th and NW 21st Avenues, providing a low-stress route for people bicycling under US-30 at NW 20th Avenue.
- Additional recommended north-south pedestrian and bikeway connections under US-30 include NW 18th Avenue northbound and NW 19th Avenue southbound, and recommended policy changes support these connections.
- NW York Street and NW Wilson Street may support bi-directional bikeways. They may alternatively operate as a one-way bikeway couplet if necessary, with, westbound movement on NW York Street and eastbound movement on NW Wilson Street.

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EXISTING CONDITIONS ON NW WILSON EAST OF NW 23RD AVE



An east-west bike connection will use the existing overpass of US-30 on NW Wilson Street.

BICYCLE CONNECTION NORTH OF US-30 BETWEEN NW 20TH AND NW 21ST AVES



North-south bike routes on NW 20th and NW 21st avenues will connect to the bikeway running adjacent to the north side of US-30.

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City and Regional Connections

Connections for multimodal movement of people and goods to and from destinations across Portland and the region



Prioritize NW Nicolai Street as a freight route and direct trucks accessing and exiting US-30 to use this route instead of NW Vaughn Street.



Create a multi-use path connecting Front Avenue to St Helens Road by repurposing an abandoned rail spur on the north side of NW Nicolai Street.



Formalize a transit hub near the terminus of the streetcar extension near Montgomery Park to connect travelers to transit options and shared mobility services.

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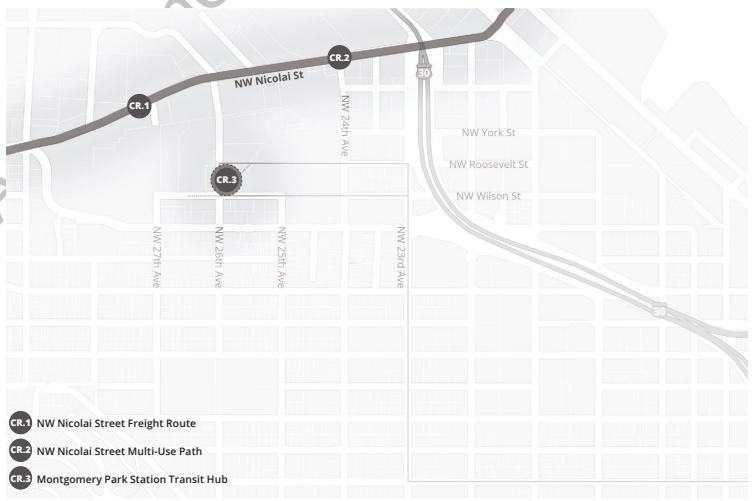
City and Regional Connections recommended project locations



CR.1 NW Nicolai Street Freight Route

PROJECT DESCRIPTION

Emphasize NW Nicolai Street over NW Vaughn Street as the key freight connector to US-30 in the area, including updated signage.

PROJECT GOALS

- Reduce freight travel and decrease freight through-trips using NW Vaughn Street to access US-30.
- Redirect freight travel to NW Nicolai Street to support multimodal safety, comfort, and access between the Montgomery Park Area and the Northwest District across NW Vaughn Street.

KEY CONSIDERATIONS

- Prioritizing NW Nicolai Street for city and regional freight trips will help connect the Montgomery Park Area to the Northwest DIstrict to the south and reinforce the shift of the boundary of the Northwest industrial district northward.
- Redirecting freight travel will not only improve safety and comfort for pedestrians and people bicycling across NW Vaughn Street, but also will support streetcar and traffic operations at the intersection of NW Vaughn Street/NW 23rd Avenue/US-30 by reducing demand.



NW NICOLAI ST TOWARD NW 23RD AVE/US-30 RAMPS TODAY



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City and Regional Connections

CR.2 NW Nicolai Street Multi-Use Path

PROJECT DESCRIPTION

Convert the former railroad tracks north of NW Nicolai Street to a multi-use path for walking, rolling, and bicycling from NW 24th Avenue to NW 29th Avenue, and potentially farther west, with crossing improvements at NW 24th Avenue, NW 26th Avenue, and NW 29th Avenue. Longer term, improvements could connect the path eastward to NW Front Avenue and to broader east/northeast destinations such as St Johns, Linnton, and Sauvie Island.

PROJECT GOALS

- Complete a section of the long-planned Willamette Greenway Trail along NW Nicolai Street, supporting longer-term public access to the WIllamette River.
- Connect people walking, rolling, and biking safely from the Montgomery Park Area to the larger citywide and regional bicycle network for longer trips.

NW NICOLAI STREET WITH OLD RAIL SPUR ON RIGHT TODAY



KEY CONSIDERATIONS

- Construction of the multi-use path on the north side of NW Nicolai Street will require formalization of curb cuts on the street and eliminate a limited amount of informal parking curently occurring within the right-of-way.
- The improved crossing of the NW 24th Avenue Neighborhood Greenway at NW Nicolai Street recommended in this plan will eliminate leftbound turn lanes for vehicles from NW Nicolai Street onto NW 24th Avenue. This will cause out of direction travel for some area drivers.
- Longer term extensions will require significant changes to the intersection of NW St Helens Road and NW Yeon Avenue, as well as around the US-30/NW Nicolai Street interchange. Further planning and design will be required.

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City and Regional Connections

CR.3 Montgomery Park Station Transit Hub

PROJECT DESCRIPTION

Encourage transit use and multimodal travel by establishing a transit hub within one block of the streetcar extension terminus near NW Wilson Street and NW 26th Avenue. Provide shared mobility options for residents, employees, and visitors near Montgomery Park Station.



PROJECT GOALS

- Advance adopted City mobility policies by supporting investments in transit, station amenities, and pedestrian and bicycle infrastructure and services.
- Provide sustainable transportation options to mitigate auto trip demand as the Montgomery Park Area grows.
- Support Montgmery Park as a destination through placemaking and service provision for users of all ages and abilities.

KEY CONSIDERATIONS

- Transit hubs provide easy connections between modes, integrating multiple travel options with convenience and safety.
- Partnering with area property owners is recommended to focus resources effectively toward the creation of the transit hub.
- Consider integration with PBOT's Transportation Wallet program to support multimodal travel and help residents and employees meet their daily needs without a personal automobile.
- Elements of the transit hub could include shared mobility services such as bike share stations, carshare parking, dedicated loading zones for ridesharing, and e-scooter parking; bicycle parking and wayfinding signage; placemaking elements; real-time transit arrival and connection information; goods delivery lockers for centralized area delivery options; and electric charging stations for vehicles.

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POTENTIAL TRANSIT HUB ELEMENTS
MONTGOMERY PARK STATION

















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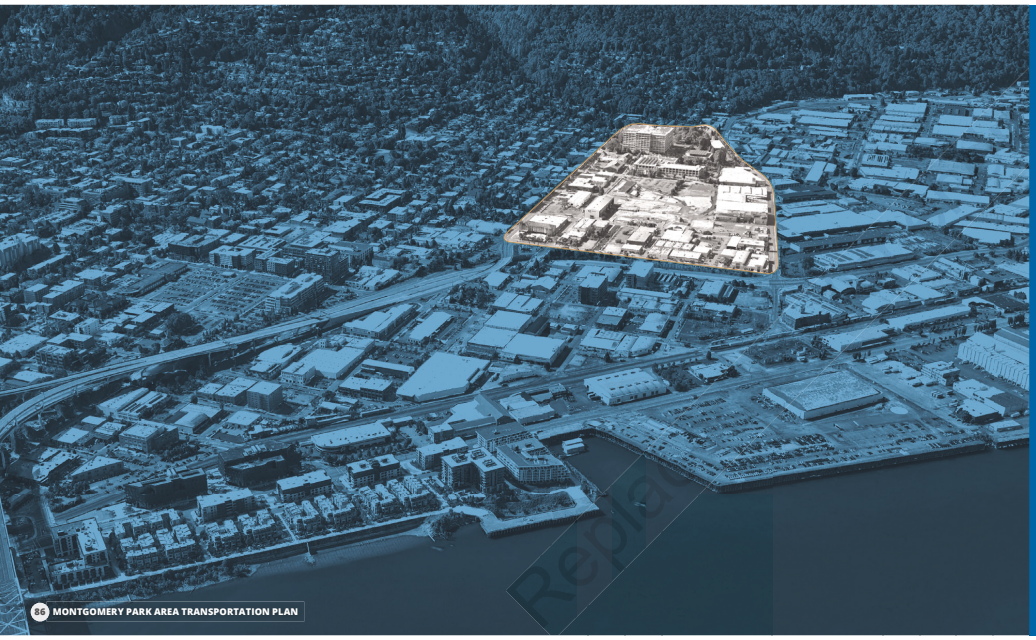

Part 5

Policy Recommendations

In addition to projects, the *Montgomery Park Area Transportation Plan* includes policy-based recommendations to update the City's *Transportation System Plan*. These policy recommendations include a Master Street Plan, as well as updates to modal street classifications and design classifications.

Policy Recommendations

Master Street Plan

The *Montgomery Park Area Transportation Plan* recommends the adoption of a Master Street Plan to help chart a course for future development and street connectivity in the area. Future street connectivity will increase efficiency of the transportation system, improving multimodal mobility access as the area grows. A dense, connected street grid also helps spread local trips more evenly over the local street network, reducing congestion on arterial roads and improving arterial capacity by as much as 25 percent.

Distance and accessibility are two of the most important factors in mode choice, or how a person decides to move. If street connectivity is limited or blocks are too big, or if streets lack safe and comfortable facilities for pedestrians and people bicycling, the resulting necessary out-of-direction travel discourages people from walking, rolling, biking, or accessing transit. As a result of those conditions, people tend to use automobiles more frequently, even for trips to destinations nearby. Trips need to be relatively short and direct to encourage pedestrian or bicycle travel.

In accordance with State rules, street connectivity must be a part of the *Transportation System Plan (TSP)* and adopting ordinances. The Master Street Plan recommendations on the following page should be included in the next *TSP* update. The Master Street Plan identifies three types of streets within the Montgomery Park Area.

1. **New public streets, where street connection locations and alignments are certain**, based upon the recommended projects in the *Mongomery Park Area Transportation Plan*.
2. **Existing and future private streets with public access easements** supporting redevelopment around the Montgomery Park building.
3. **Future street connections**, where connections and alignment locations are uncertain. Future street connections through the former ESCO site north of NW Roosevelt Street will be required by City of Portland Title 17 street connectivity requirements as a condition for redevelopment. This plan intentionally leaves those future connections undefined in order to offer flexibility in future development programming. When the Master Street Plan is finalized, street classifications for these future connections should be identified.

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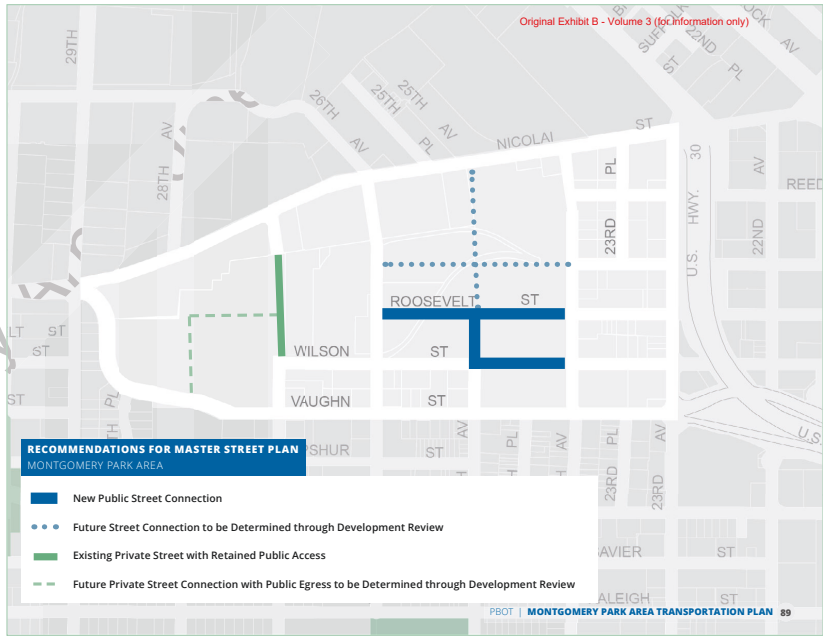



A Rapid Flash Beacon at a crosswalk in Portland

Policy Recommendations

Pedestrian Classifications Updates

We analyzed Pedestrian Classifications in and near the Montgomery Park Area to understand if any updates are necessary to support the recommended projects in this plan. We sought to ensure convenient and comfortable movement for people walking, rolling, and accessing transit in the Montgomery Park Area as it grows, as well as supportive connections for pedestrians from the area to the rest of the Northwest District.

Streets with high expected pedestrian demand due to a high level of expected transit and land use destinations are given higher pedestrian priority (Major City Walkways and City Walkways). Lower priority Pedestrian Classifications (Neighborhood Walkways and Local Service Walkways) are intended to support neighborhood and local-level demand. A key recommendation is the addition of a Pedestrian District in the Montgomery Park Area. Pedestrian Districts prioritize pedestrian access areas in areas where high levels of pedestrian activity exist or are expected in the future.

Recommended updates to Pedestrian Classifications are displayed in the map on the opposite page. A full list of recommended changes is available in *Appendix C: Recommended Transportation System Plan Updates*.

TSP STREET CLASSIFICATIONS
PEDESTRIAN HIERARCHY



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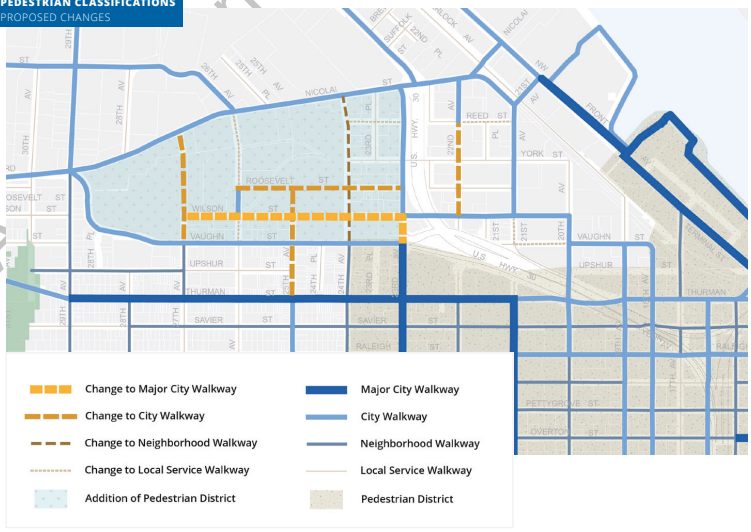
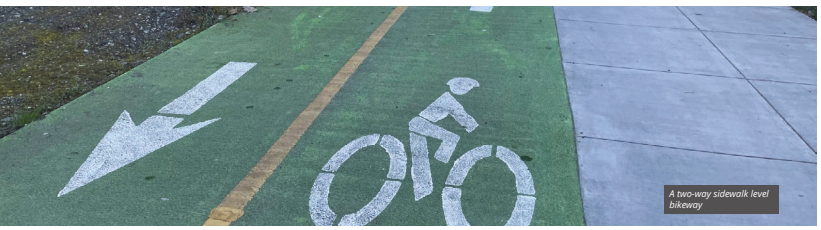
PEDESTRIAN CLASSIFICATIONS
PROPOSED CHANGES





A two-way sidewalk level bikeway

Policy Recommendations

Bicycle Classifications Updates

The *Montgomery Park Area Transportation Plan* process included an analysis of Bicycle Classifications in order to understand if any updates are necessary to support the plan's recommended projects. We worked to ensure that the area will have adequate north-south and east-west connections with higher Bicycle Classifications (Major City Bikeways and City Bikeways) connecting to existing bicycle routes. Some classifications were adjusted based on recommended project alignments or physical constraints. We also analyzed options to support internal bicycle circulation as the Montgomery Park Area grows.

Recommended updates to Bicycle Classifications are displayed in the map on the opposite page. The proposed changes south of NW Vaughn Street are also recommendations in *Northwest in Motion*. A full list of recommended changes is available in *Appendix C: Recommended Transportation System Plan Updates*.

TSP STREET CLASSIFICATIONS
BICYCLE HIERARCHY



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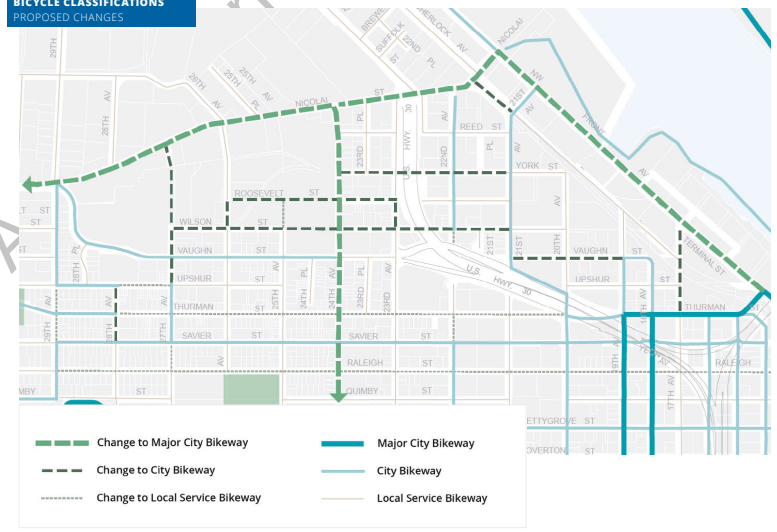
BICYCLE CLASSIFICATIONS
PROPOSED CHANGES



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The Portland Streetcar on Tillikum Crossing over the Willamette River

Policy Recommendations

Recommendended Transit Classifications Updates

We analyzed Transit Classifications to see if updates are needed to support the *Montgomery Park Area Transportation Plan's* recommended projects. The analysis primarily focused on ensuring classifications are consistent with the planned transit network and service levels. The changes reflect updates to the proposed routing of the Portland Streetcar extension to Montgomery Park, with the highest transit priority (Major Transit Priority Street) recommended along the preferred alignment.

Recommended updates to Transit Classifications are displayed in the map on the opposite page. A full list of recommended changes is available in *Appendix C: Recommended Transportation System Plan Updates*.

TSP STREET CLASSIFICATIONS
TRANSIT HIERARCHY

MAJOR TRANSIT PRIORITY STREET

TRANSIT ACCESS STREET

LOCAL SERVICE TRANSIT STREET

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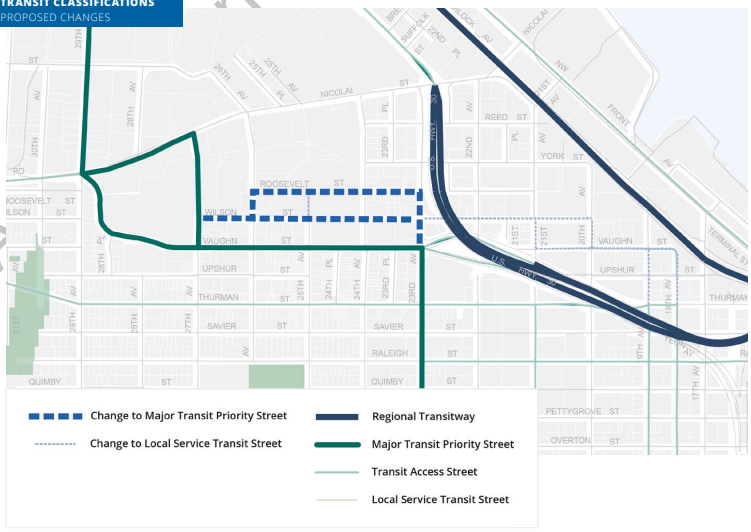
TRANSIT CLASSIFICATIONS
PROPOSED CHANGES





NW 26th Avenue south of NW Wilson Street is classified as a Local Street. Local Streets are typically narrower and designed with sidewalks, on-street parking, and street trees.

Policy Recommendations

Street Design Classifications Updates

The *Montgomery Park Area Transportation Plan* process included an analysis of Street Design Classifications in order to understand if any updates are necessary to support the plan's recommended projects, as well as the *Montgomery Park Area Plan's* proposed land use changes. Street Design Classifications offer guidelines based on current and planned land use context around the street.

The City's *Pedestrian Design Guide* bases sidewalk corridor width requirements on Street Design Classifications. Main Streets (both Civic Main Streets and Neighborhood Main Streets) require 15-foot sidewalk corridor widths within Pedestrian Districts. All other Design Classifications typically require 12-foot sidewalk corridors, except for Local Streets which can be more narrow in some areas. In all Pedestrian Districts, including the one recommended for the Mongtomery Park Area, all sidewalk corridors must be a minimum of 12 feet wide. That requirement is typically triggered by adjacent redevelopment.

Recommended updates to Street Design Classifications are displayed in the map on the opposite page. A full list of recommended changes is available in *Appendix C: Recommended Transportation System Plan Updates*.

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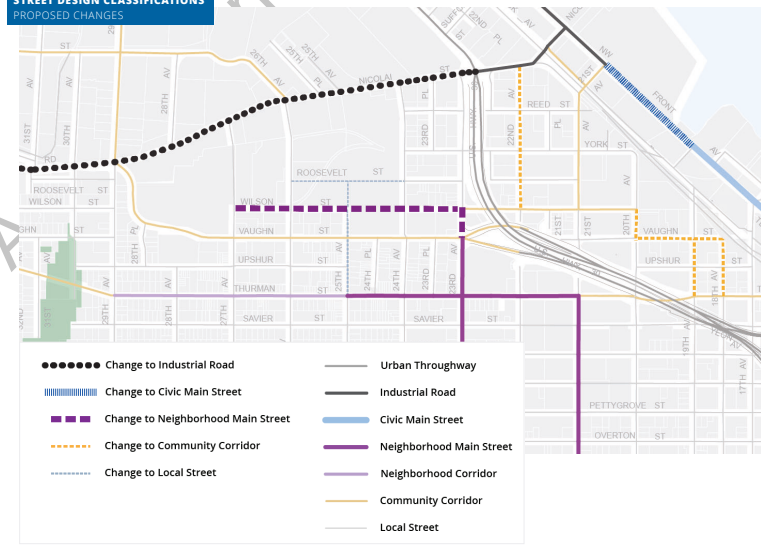
STREET DESIGN CLASSIFICATIONS
PROPOSED CHANGES



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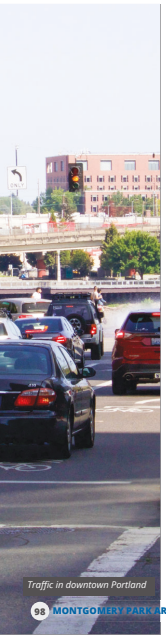
Traffic in downtown Portland

Policy Recommendations

Recommendended Traffic Classifications Updates

We analyzed Traffic Classifications to see if updates are needed to support the *Montgomery Park Area Transportation Plan's* recommended projects. We found that, in order to support traffic distribution, a few changes are necessary.

We recommend changing NW Nicolai Street to a District Collector, as many longer trips both starting and ending in the area currently are and will continue to be distributed by this street. Changes east/north of US-30 support adequate collector spacing to support traffic distribution, with some changes reflecting how those streets are already functioning.

Recommended updates to Traffic Classifications are displayed in the map on the opposite page. A full list of recommended changes is available in *Appendix C: Recommended Transportation System Plan Updates*.

TSP STREET CLASSIFICATIONS
TRAFFIC HIERARCHY

MAJOR CITY TRAFFIC STREET

DISTRICT COLLECTOR

NEIGHBORHOOD COLLECTOR

LOCAL SERVICE

TRAFFIC CLASSIFICATIONS
PROPOSED CHANGES



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NW Nicolai Street will remain a Priority Truck Street, supporting freight movement to and from the adjacent Freight District and connecting to US-30.

Policy Recommendations

Recommendended Freight Classifications Updates

The *Montgomery Park Area Transportation Plan* process included an analysis of Freight Classifications in order to understand if any updates are necessary to support the plan's recommended projects, as well as the *Montgomery Park Area Plan's* proposed land use changes. The primary recommendation is the elimination of a Freight District in the Montgomery Park Area west of NW 23rd Avenue and south/southwest of US-30, reflecting the area's transition away from industrial uses. As a result, all area streets are proposed to change from Freight District Streets to Local Service Truck Streets, with the updated classification supporting local goods and service delivery within the Montgomery Park Area.

Recommended updates to Freight Classifications are displayed in the map on the opposite page. A full list of recommended changes is available in *Appendix C: Recommended Transportation System Plan Updates*.

TSP STREET CLASSIFICATIONS
FREIGHT HIERARCHY

PRIORITY TRUCK STREET

MAJOR TRUCK STREET

FREIGHT DISTRICT STREET

LOCAL SERVICE

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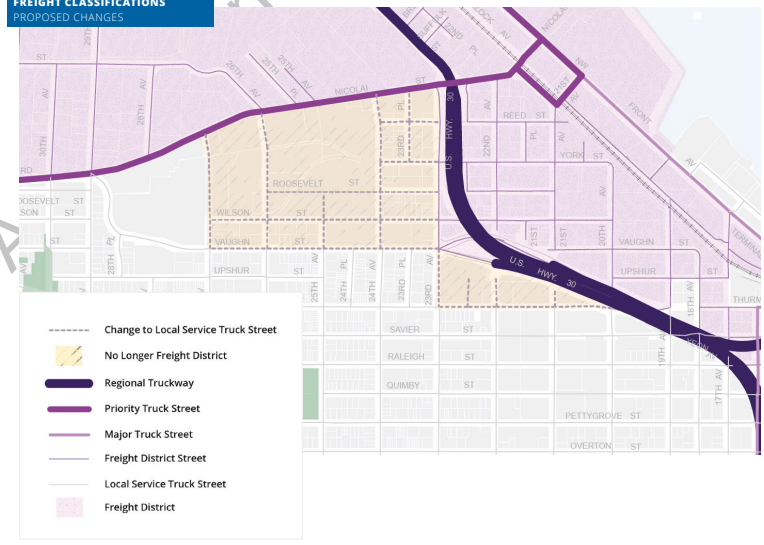
FREIGHT CLASSIFICATIONS
PROPOSED CHANGES





A firetruck on a street overlooking downtown Portland

Policy Recommendations

Recommendended Emergency Response Classifications Updates

The *Montgomery Park Area Transportation Plan* process included analysis of Emergency Response Classifications in order to understand whether changes are necessary to provide a network of streets that facilitate prompt emergency responses.

Some updates are included because of changes to the local street network around US-30 east of NW 23rd Avenue. We also recommend providing a Secondary Emergency Response route east of US-30, shifting one eastward from NW 24th Avenue because it is a recommended Neighborhood Greenway. South of NW Vaughn Street, changes reflect existing street connectivity in the area.

Recommended updates to Transit Classifictions are displayed in the map on the opposite page. A full list of recommended changes is available in *Appendix C: Recommended Transportation System Plan Updates*.

TSP STREET CLASSIFICATIONS
EMERGENCY HEIRARCHY

MAJOR EMERGENCY RESPONSE

SECONDARY EMERGENCY RESPONSE

MINOR EMERGENCY RESPONSE

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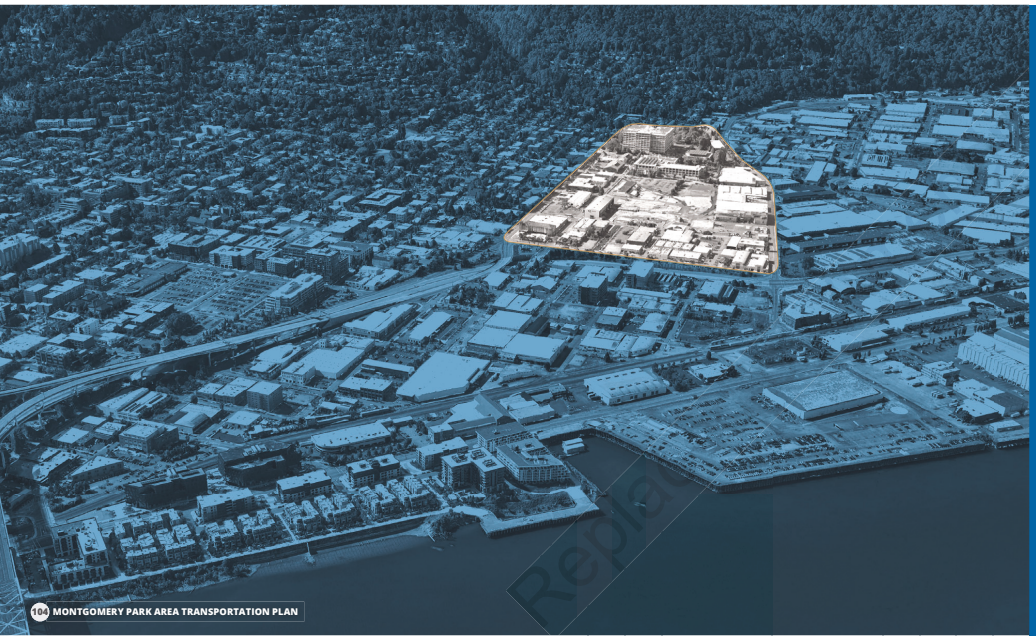
EMERGENCY RESPONSE CLASSIFICATIONS
PROPOSED CHANGES





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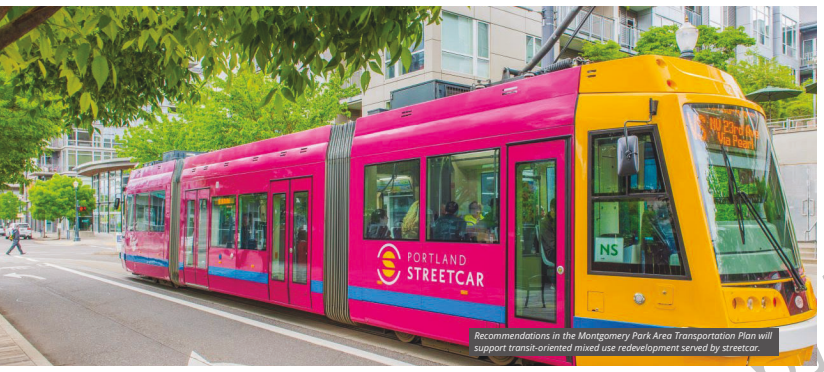
Part 6

Implementation Strategies

A breakdown of strategies to support the successful implementation of the *Montgomery Park Area Transportation Plan*.



Recommendations in the Montgomery Park Area Transportation Plan will support transit-oriented mixed use redevelopment served by streetcar.

Implementing the plan

The project and policy recommendations in the *Montgomery Park Area Transportation Plan* will help transform the Montgomery Park Area into a comfortable, accessible, and transit-oriented mixed use district. By making a significant investment in the area through the extension of Portland Streetcar and addressing deficiences in the local transportation network, successful implementation of this plan will make multimodal transportation choices safer, more comfortable, and more convenient as the area grows in the future.

Many of the recommended projects in this plan will be constructed as part of the extension of streetcar to Montgomery Park. Other recommendations will occur as the area redevelops over time. This approach will allow for significant transformation of connectivity to and within the Montgomery Park Area within a relatively short time frame, while allowing for flexibility of phased development in the area.

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IS Implementation Strategies

As this plan is implemented in conjunction with the land use changes and tools proposed in the *Montgomery Park Area Plan (MPAP)*, there are a number of programmatic and structural strategies necessary to realize and support these recommendations.

IS.1 Create a Plan District
Coordinate with the Bureau of Planning and Sustainability to establish a Plan District for the Montgomery Park Area. Pursue approval through the formal legislative process. The recommended Plan District is a part of the *MPAP*.

IS.2 Manage Parking
Establish a proactive strategy to manage parking supply and demand in the Montgomery Park Area. Meter onstreet parking concurrently with new streets in the area, and explore issuing limited parking permits in new permit zones. Parking revenues may be used to support funding for recommended projects in the *Montgomery Park Area Transportation Plan*.

IS.3 Develop a Transportation Demand Management Program
Apply the City's Transportation Demand Management (TDM) Plan requirements for commercial/mixed use zones in the Montgomery Park Area. Work with area employers to develop commuter programs and incentives for walking, rolling, biking, and transit use.

IS.4 Explore Pilot Projects
Partner with area agencies, organizations, and property owners to explore the implementation of pilot projects and programs in the Montgomery Park Area that activate public space and encourage walking, rolling, biking, gathering, and transit use.

IS.5 Pursue Federal Funding
Pursue necessary steps to apply for federal funding through the Federal Transit Administration's (FTA's) Small Starts Capital Investment Grants (CIG) Program to fund at least 50 percent of the Portland Streetcar Montgomery Park Extension and related projects.

IS.6 Form a Local Improvement District
Work with area property owners to initiate the formation of a Local Improvement District (LID) to fund a portion of the Portland Streetcar Montgomery Park Extension and related projects.

Implementation Strategies

IS.1 Create a Plan District

STRATEGY DESCRIPTION

Coordinate with the Bureau of Planning and Sustainability to to establish a Vaughn-Nicolai Plan District covering the area. Pursue approval through the formal legislative process.

WHAT IS A PLAN DISTRICT?

Plan Districts consist of regulations that have been tailored to respond to unique circumstances in a specific, defined area of the city. Plan District regulations are additional provisions that augment regulations of an area's base land use zoning. Plan District provisions can regulate more specific allowable uses of land, the form of future development, incentives for developers who provide specific uses that benefit the public, parking locations and limits, and Transportation Demand Management (TDM) programs.

WHY IS THIS IMPORTANT?

In order to achieve the vision for the Montgomery Park Area's future as a dense, walkable and rollable transit-oriented district, Plan District provisions are needed. These additional provisions are intended to ensure an urban, mixed use development pattern with forms that support an active streetscape for pedestrians, people bicycling, and people accessing transit.



An aerial view of the Montgomery Park Area, where a Plan District is recommended

KEY CONSIDERATIONS

- The Vaughn-Nicolai Plan District would limit the amount of on-site parking for new development, with restrictions on locations near the streetcar alignment in order to encourage walking, rolling, biking, and transit use in the area, as well as active mixed land uses.
- The Plan District would require developments with ten or more units to develop a plan or participate in a standard TDM program with transit passes for new residents.
- More information about the proposed Vaughn-Nicolai Plan District is available in the *Montgomery Park Area Plan*.

IS.2 Manage Parking

STRATEGY DESCRIPTION

Establish a proactive strategy to manage parking supply and demand in the Montgomery Park Area. Meter onstreet parking concurrently with new streets in the area, and explore issuing limited parking permits in new permit zones.

WHY MANAGE PARKING?

Onstreet parking is planned where feasible along new and existing streets in the Montgomery Park Area. Parking demand is affected by changes in land use and travel patterns. As the Montgomery Park Area grows, parking management will ensure that these parking spaces serve multiple users throughout the day, improving access to area destinations.

WHY IS THIS IMPORTANT?

Parking policies that reduce driving and make it easier to find a space help Portland reduce carbon emissions and improve air quality. Revenue generated from managed parking in the area may be used for projects and programs in the area that further reduce demand for parking and improve multimodal acces and safety.



A person pays for parking at a meter in Northwest Portland

KEY CONSIDERATIONS

- Like other areas with managed parking in Portland, a residential and/or employee parking permit zone may be designated.
- To support parking management and reduce parking demand, incentives for residents and employees to use other travel modes should be considered.
- The City's current Parking Meter District Policy requires that the majority (51 percent) of net meter revenues be used for programs and projects in the district where they are raised.
- In order to support parking turnover and access in the emerging area, metered parking is recommended to be implemented concurrently with new street connections.

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Implementation Strategies

IS.3 Develop a Transportation Demand Management Program

STRATEGY DESCRIPTION

Apply the City's Transportation Demand Management (TDM) Plan requirements for commercial/mixed use zones. Work with area employers to develop commuter programs and incentives for walking, rolling, biking, and transit use.

WHAT IS TRANSPORTATION DEMAND MANAGEMENT?

TDM promotes efficient travel modes to move more people within limited roadspace. In order to prevent, reduce, and mitigate the impacts of new development on an area and broader transportation system, TDM plans are required for new developments in some areas. TDM plans establish programs that provide information, encouragement, incentives, and other tools to promote non-driving trips to, from, and within that area.

WHY IS THIS IMPORTANT?

TDM is about choice. Making transportation choices available to people and incentivizing their use helps reduce congestion on roadways. TDM is important becasue the transportation system in growing urban areas like the Montgomery Park Area cannot support the trips generated if workers, residents, and visitors travel exclusively by driving alone. As the Montgomery Park Area grows, TDM will help maintain and improve livability, support reduced carbon emissions, and provide safe and efficient mobility options.



A postcard for Get Around Slabtown, Slabtown's TDM program in Northwest Portland

KEY CONSIDERATIONS

- The City's existing Title 33 requirements for TDM Plans in commercial/mixed use areas is recommended for this area.
- First/last mile solutions including electric, autonomous, and micromobility options should also be considered.
- Coordination of TDM strategies for the Montgomery Park Area should be explored with those in the Slabtown TDM District, as should other potential area partnerships in the Northwest District neighborhood.

IS.4 Explore Pilot Projects

STRATEGY DESCRIPTION

Partner with area agencies, organizations, and property owners to explore the implementation of pilot projects and programs in the Montgomery Park Area that activate public space and encourage walking, rolling, biking, gathering, and transit use.

WHY IS THIS IMPORTANT?

Pilot projects are a great way to test new services, programs, or technologies in the Montgomery Park Area that help activate streets and reduce driving trips. Using a pilot approach, these projects can be monitored for success, refined in real time to as needed, and transitioned to permanent implementation if effective. If a pilot is unsuccessful, lessons learned can be applied to other programs, services, or projects in the area and across the city.

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CASE STUDY:
DALLAS, TX



Bicycle Repair Station: University of Texas, Dallas installed bike repair stations, free for anyone in the community. Stations include tools, air, and are equiped with QR codes for smartphone users, which link to videos about basic bike repairs.

CASE STUDY:
LONG BEACH, CA



Cargo Bike Program: A partnership with Long Beach, California's Conservation Corps equips at-risk young adults in a workforce development program with e-cargo bikes and trailers for projects along the Lower Los Angeles River in Long Beach.

CASE STUDY:
MCALLEN, TX



Interactive Art: Transit hubs are ideal locations for interactive art. In McAllen, Texas a bus stop is turned into a play area for the whole family with swings and hopscotch.

Implementation Strategies

IS.5 Pursue Federal Funding

STRATEGY DESCRIPTION

Pursue necessary steps to apply for federal funding through the Federal Transit Administration's (FTA's) Small Starts Capital Investment Grants (CIG) Program to fund at least 50 percent of the Portland Streetcar Montgomery Park Extension and related projects.

WHAT IS THE SMALL STARTS PROGRAM?

The Small Starts program is the current discretionary competetive federal grant program funding transit capital projects with fixed guideway systems, including streetcars, with total project costs of less than $400 million. This program is part of the FTA's CIG Program. In the past decade, the CIG Program has provided more than $18 billion to dozens of new or extended transit systems throughout the United States. A project may be awarded up to 80 percent of a total project's qualifying costs through the Small Starts program.

WHY IS THIS IMPORTANT?

The costs to construct an extension of streetcar to Montgomery Park are high and cannot be funded through local means alone. The FTA provides significant funding for transformational transit projects like this one, which create economic opportunity, improve quality of life, and address climate change. The Small Starts program may fund a share of street construction and rehabilitation along the streetcar's alignment, including improvements to NW 23rd Avenue.



The Small Starts program helped fund the Division Transit Project, which implemented enhanced Bus Rapid Transit between Downtown Portland and Gresham.

KEY CONSIDERATIONS

- The City is working with project partners to determine the appropriate timing to apply for FTA Small Starts funding. With rising capital construction costs, it is important to seek this funding as soon as is feasible.
- The project has received dedicated funding for the first phase of the Small Starts process, called Project Development. Project Development includes completing environmental review, selecting the Locally Preferred Alternative (LPA), finalizing local funding commitments, completing sufficient design and engineering, and adopting the project into the fiscally constrained long range transportation plan.
- Upon completion of the Project Development phase, the project will be scored based upon a set of criteria determined by the FTA. It will then become eligible to compete for a capital construction grant agreement.

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IS.6 Pursue a Local Improvement District

STRATEGY DESCRIPTION

Work with area property owners to initiate the formation of a Local Improvement District (LID) to fund a portion of the Portland Streetcar Montgomery Park Extension and related projects.

WHAT IS A LOCAL IMPROVEMENT DISTRICT?

An LID is a a method by which a group of property owners can share the cost of infrastructure improvements, most commonly for transportation and stormwater projects that benefit a defined area. LIDs are relatively common and have been used to fund improvements throughout the city, including Northwest Portland. More information about LIDs is available at the City of Portland's Local Improvement District Projects webpage.

WHY IS THIS IMPORTANT?

The formation of an LID is a key strategy to help fund infrastructure improvements for which other local funding sources are unavailable or insufficient. The LID formation process provides an opportunity for benefiting property owners to provide input into what needs or desires may or may not be included in the defined improvements and anticipated costs of an LID, as well as whether to form one.

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An LID funded the extensions of NW 20th Avenue and NW Thurman Street in Northwest Portland, reconnecting the street grid under US-30.

KEY CONSIDERATIONS

- LIDs are often the result of a negotiation between the City and benefitting propery owners to determine whether and how much will be paid in assessments for improvements.
- While the decision to form an LID ultimately lies with Portland City Council, affected property owners may formally decide whether to support its formation. Property owners representing a majority share of the total LID costs must support the LID for City Council consideration.
- Property owners may provide input into how assessment methodologies are derived for an LID. Those methods must be equitable and comply with state law in capturing measurable benefit received by each included property. This means that those who measurably benefit more from the included infrastructure improvements pay a greater share of the costs.

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OCTOBER 2024

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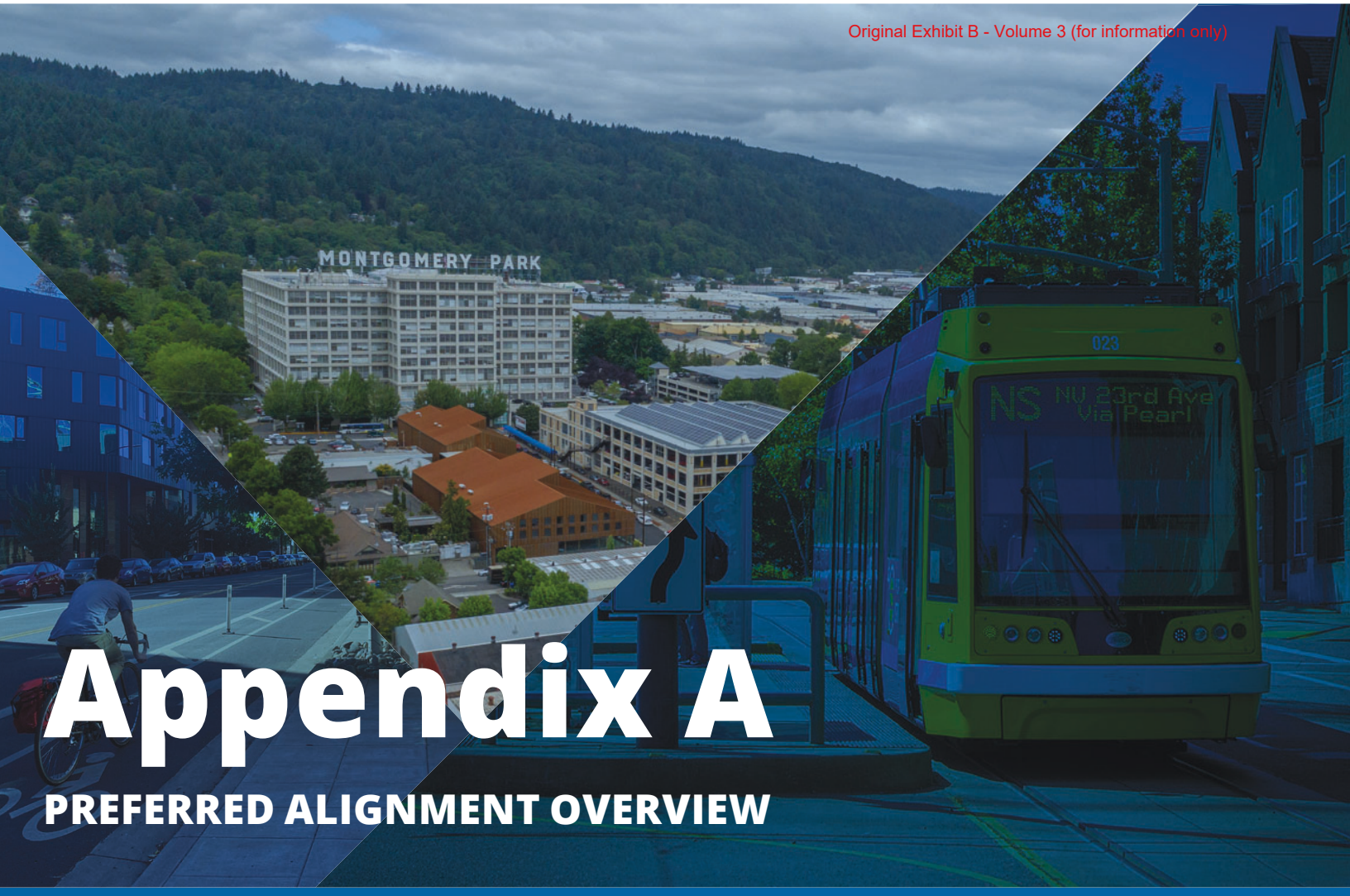

Appendix A

PREFERRED ALIGNMENT OVERVIEW

RECOMMENDED DRAFT | OCTOBER 2024

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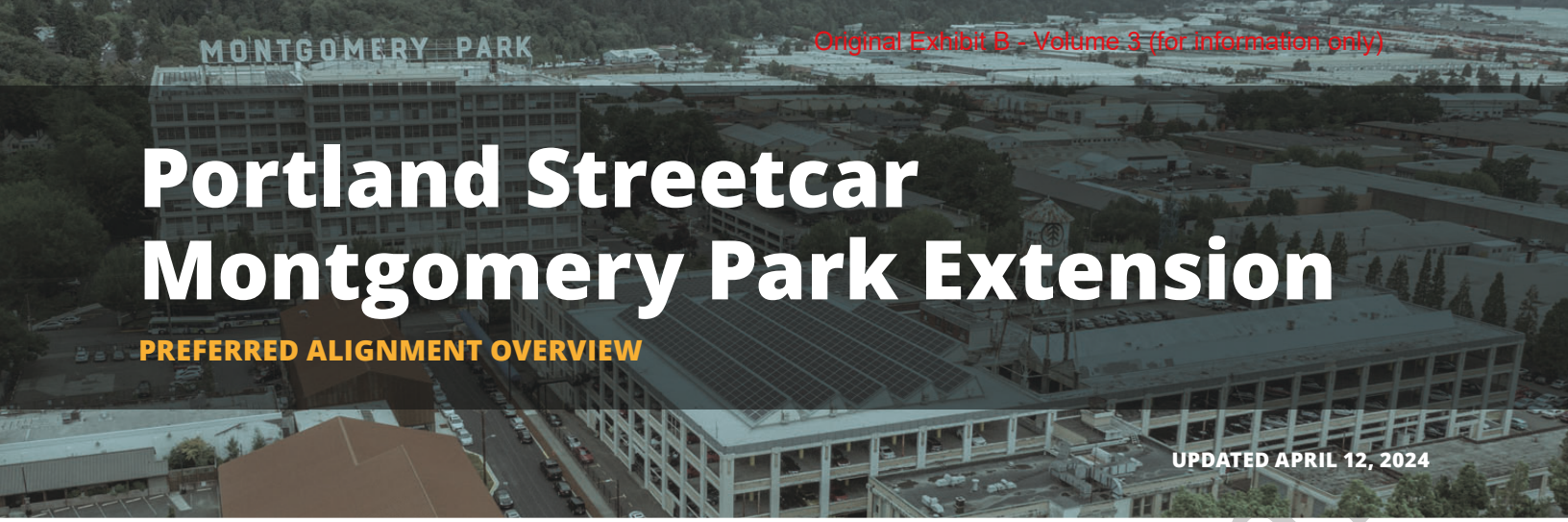

Portland Streetcar Montgomery Park Extension

PREFERRED ALIGNMENT OVERVIEW

UPDATED APRIL 12, 2024

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OVERVIEW

This document describes the development and selection of the preferred alignment for the Portland Streetcar Montgomery Park Extension. It also compares the preferred alignment to alternatives considered during various stages of the Montgomery Park to Hollywood (MP2H) planning process.

For more than five years, the MP2H project team explored alignment options for the project area. They considered community input, local policy, and feasibility. Federal Transit Administration (FTA) Small Starts Project Evaluation Criteria were also considered.

While this document illustrates the project team's evaluation of options, it is not a formal alternatives analysis. Further evaluation will be completed as part of the anticipated environmental review process and will be conducted in accordance with federal requirements.

More information about the Portland Streetcar Montgomery Park Extension, as well as related plans and studies, are available at the project webpage: http://portland.gov/MPStreetcar

PBOT
PORTLAND BUREAU OF TRANSPORTATION

THE BUREAU OF PLANNING & SUSTAINABILITY

PROJECT BACKGROUND

The City of Portland and Portland Streetcar, Inc. have been exploring various ways to connect the existing streetcar network to Montgomery Park for many years. Planning documents dating to the 1970s envisioned a streetcar connection to the large office building, and the 2009 Portland Streetcar System Concept Plan identified Montgomery Park as a key destination for future extension. The 2035 Portland Transportation System Plan and 2035 Comprehensive Plan prioritized this extension for planning and implementation. However, none of these documents identified an alignment.

In 2018, Portland City Council funded a preliminary Northwest Public Streetcar Extension and Land Use Alternatives Analysis to study an extension of streetcar to Montgomery Park. In 2019, the Montgomery Park to Hollywood Land Use and Development Study (MP2H) was funded through a grant from the FTA. In Northwest Portland, MP2H focused on short-term potential transit investment and land use changes in the area.

Over the next two and a half years, the Portland Bureau of Transportation (PBOT) worked with the Bureau of Planning and Sustainability (BPS) to develop the Draft Montgomery Park Area Transportation Plan and the Northwest Plan (MP2H-NW) Discussion Draft. Through community engagement and study, various land use scenarios, transit modes, and alignments were explored for their potential to support local and regional transportation needs and to facilitate mixed-use and equitable development.

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FORMER ESCO SITE IN NORTHWEST PORTLAND

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WHY NOW?

The industrial areas of inner Northwest Portland are undergoing a major transformation. Since the 2000s, major industries have been leaving the area. This phenomena is reflected in the loss of major industrial tenants including Con-way and ESCO. This shift has created an opportunity to reimagine the role these large sites play in providing for future housing and jobs in a growing region.

Over the past decade, the land that was once used for Con-way's logistics operations has given way to a sustainable new urban area in Slabtown. The ESCO site now sits largely vacant and has the potential to become a place of living, work, and play for thousands of community members. The ESCO site, taken in context with investment potential in Montgomery Park, presents a unique opportunity for large-scale housing and employment development near Portland's Central City.

The City of Portland has the ability to leverage land use and transportation decisions to shape a vibrant new district west of Highway 30 between NW Nicolai and Vaughn streets. A key strategy to spur development is to make a high-quality, high-capacity transit investment paired with focused land use changes in this area. A framework to promote equitable development is also being proposed, in order to ensure the provision of middle-wage jobs, affordable housing, affordable commercial space, and climate-friendly features through development.

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WHY STREETCAR?

For more than 20 years, the Portland Streetcar has been one of the City's tools for equitable and sustainable development. With its proven track record of spurring the creation of dense, walkable, and rollable neighborhoods, the streetcar helps Portland achieve its climate goals and address the city's housing shortage.

The streetcar functions as a high-capacity, sustainable transit mode that helps people meet their daily needs without a personal automobile. It presents many of the same benefits of light rail at a much lower cost, so streetcar offers a more cost effective route toward transit-oriented urban living.

The Portland Streetcar also helps the City achieve its equity goals. It supports the development of centrally-located affordable housing while improving access to critical destinations for its diverse riders. It also provides opportunity for economic development and job creation in areas with permanent access to affordable, climate-friendly transit.

SINCE 2001 IN PORTLAND,
40 PERCENT OF ALL NEW REGULATED AFFORDABLE HOUSING AND 50 PERCENT OF ALL NEW HOUSING HAS BEEN BUILT WITHIN ONE QUARTER MILE OF A STREETCAR LINE.



PORTLAND STREETCAR RIDERS ARE MORE DIVERSE AND TRANSIT-DEPENDENT THAN PORTLANDERS AS A WHOLE...

- 35% EARN LESS THAN $30,000 PER YEAR
- 32% IDENTIFY AS PEOPLE OF COLOR AND/OR HISPANIC/LATINÉ
- 26% USE TRIMET'S HONORED CITIZEN FARE
- 76% RIDE DAILY



PORTLAND STREETCAR IN THE PEARL DISTRICT



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CONSIDERING TRANSIT ALTERNATIVES

Different transit modes suit different land uses and intensities of development. Lower capacity transit types like traditional buses or microshuttles are better suited to low-density uses like single-dwelling residential or industrial. Higher capacity transit types including streetcar and enhanced buses are more appropriate for higher-density mixed land uses.

With this in mind, the MP2H project team evaluated the four most feasible transit alternatives to develop a more comprehensive understanding of the costs, benefits, and suitability of each mode to serve various land use scenarios and growth potential being explored for the area. The study assessed standard bus, enhanced bus like the TriMet Frequent Express (FX), streetcar, and microshuttle service.

Criteria in the study were both qualitative and quantitative. They included land use suitability, support of development, improved access, costs, potential ridership, improved connectivity, construction and funding feasibility, pollution impacts, and equity impacts.

When a preferred land use scenario was developed and selected for MP2H with high-density mixed land uses in part of the study area, the project team considered the results of the transit alternatives assessment along with additional deliberation about funding and project feasibility.

Streetcar was chosen as the preferred transit alternative because of its suitability to support the most dense development potential for the area. Streetcar offers the highest capacity of any of the alternatives and draws high ridership, with a proven background of spurring. dense development including affordable housing. It also has the ability to leverage various funding sources toward its construction, and streetcar has the potential to generate additional community benefits through binding agreements with property owners near Montgomery Park.



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DEVELOPING THE PREFERRED ALIGNMENT

The preferred alignment was developed through research, community engagement, and analysis during the MP2H process. The project team analyzed various land use scenarios to understand which changes would have have best potential to faciliate the development of an equitable mixed-use neighborhood, including affordable housing and jobs.

When it became clear that the most expected growth in the area would be concentrated on and around the former ESCO site, a new land use scenario was developed to focus changes in the area of greatest impact. This scenario responds to community support for balance between more housing and retaining industrial character and jobs. It retains industrial uses east of Highway 30, maintaining a significant amount of existing prime industrial land.

Further analysis of potential streetcar alignments revealed that a route on NW 23rd Avenue, connecting from the existing streetcar line at NW Northrup Street, would be most feasible and cost effective. It would strategically serve the area of greatest expected change while directing the streetcar down NW 23rd Avenue, a street designated as both a Neighborhood Main Street and a Major Transit Priority Street in the City's Transportation System Plan.

The project team then considered three different routes where the streetcar would connect from NW 23rd Avenue to Montgomery Park. The preferred alignment was selected from these three alternatives. In this document, those options are the Preferred Alignment, Alignment D, and Alignment E.

THE PREFERRED MP2H NORTHWEST LAND USE SCENARIO



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PEOPLE WAITING FOR STREETCAR ALONG NW 23RD AVENUE

THE PREFERRED ALIGNMENT

The preferred alignment is a short, direct route to Montgomery Park through an extenson of the existing Portland Streetcar North-South (NS) Line along NW 23rd Avenue to a new one-way couplet along NW Roosevelt and NW Wilson streets. This alignment would efficiently serve expected development around Montgomery Park as well as one of Northwest Portland's most vibrant Main Streets, NW 23rd Avenue.

NW 23rd Avenue was chosen as the preferred route for the streetcar extension for several reasons. Current and future demand along the bustling corridor would be supported by mass transit. The street is designated in City policy to prioritize frequent transit and high-volume pedestrian movement, and its designation as a Neighborhood Main Street means it should effectively serve the surrounding neighborhood while its design emphasizes multimodal access and movement.

Additionally, NW 23rd Avenue is in disrepair and is in desparate need of rehabilitation. Community members have called for improvements on this street for years. Combining the two projects would provide the opportunity to address NW 23rd Avenue's current deficiencies between NW Lovejoy and NW Vaughn streets, including accessibility, utilities, and stormwater management. Folding the two otherwise separate major construction efforts into one would would reduce cosntruction impacts in the area and use public funds more efficiently.

The preferred alignment was refined from previous alternatives using NW 23rd Avenue. Those alternatives include Alignments C, D, and E in this report. When compared with those alignments, the Preferred Alignment is the most feasible for a number of reasons, including being free of fatal flaws in traffic analysis, supporting traffic demands now and in the future, being cost competitive due to its length, and supporting phased development in the area of proposed land use changes along and near the new proposed couplet.

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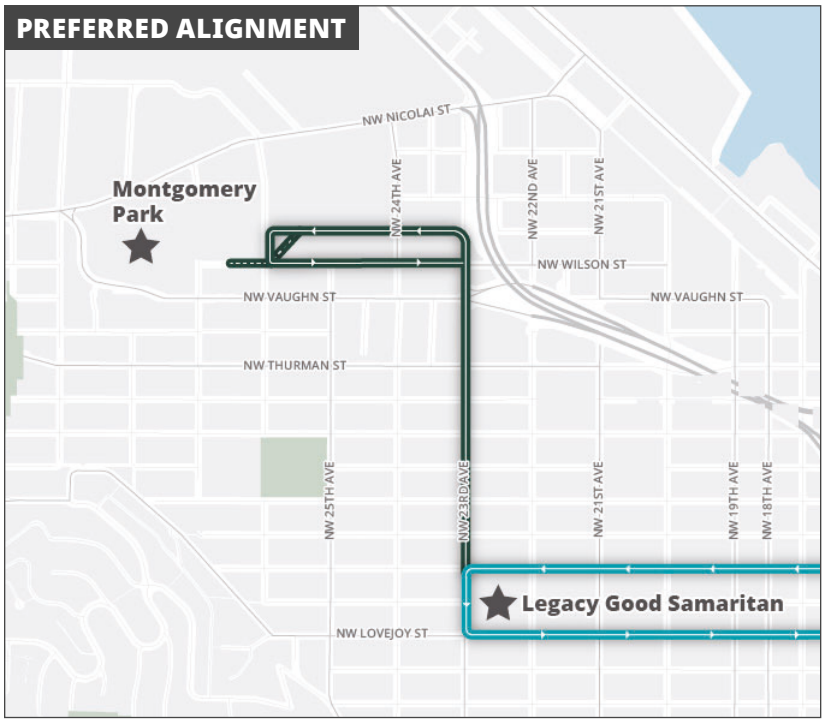
PREFERRED ALIGNMENT



ALIGNMENT DESCRIPTION:

*The preferred alignment is an extension of the NS Line, connecting to Montgomery Park using **NW 23rd Avenue** and tying into a one-block parallel one-way couplet on **NW Roosevelt and NW Wilson streets**.*

This alignment would include the construction of new complete streets to connect both NW Roosevelt and NW Wilson streets through the former ESCO site.

The extension's terminus is proposed to be located near NW 26th Avenue and NW Wilson Street and include a new transit hub.

1.3 miles of new track and two new streetcars would be required.

CRITERION	SCORE	CONSIDERATION FOR PREFERRED ALTERNATIVE
CAPITAL COST AND FEASIBILITY	●	Length makes this alignment cost competitive, with one-block couplet supporting internal circulation and phased land development
OPERATING COST	●	Minimal increases in operating cost compared to other alternatives, due to direct route and length of alignment
RIDERSHIP POTENTIAL	●	Would serve the area of most development potential directly, while serving the vibrant Main Street of NW 23rd Avenue
COMPATIBILITY WITH EXISTING TRANSIT	●	Utilizes streets prioritized for transit while tying efficiently into existing streetcar system; would share stations with buses
TRAFFIC AND OPERATIONS	◕	Transportation modeling analyses indicate that impacts are minimal overall, and any issues can be mitigated effectively
MOBILITY IMPROVEMENTS	◕	Would include multimodal improvements on new streets with connections to broader network, while creating a couplet through area with existing limited access; one-block couplet easily accessible
CONSISTENCY WITH ADOPTED PLANS AND POLICY	●	Supports preservation of prime industrial land east of Highway 30 and utilizes a Main Street prioritized for transit operations and access
NEW HOUSING OPPORTUNITY	●	Creates a direct route to/through area of highest development potential while preserving development options north of NW Roosevelt Street
NEW JOBS OPPORTUNITY	●	Creates a direct route to/through area of highest development potential while preserving development options north of NW Roosevelt Street
FUNDING POTENTIAL	●	Requires lower capital costs and limited LID participation compared to alternatives; federal funding can help pay for NW 23rd Avenue

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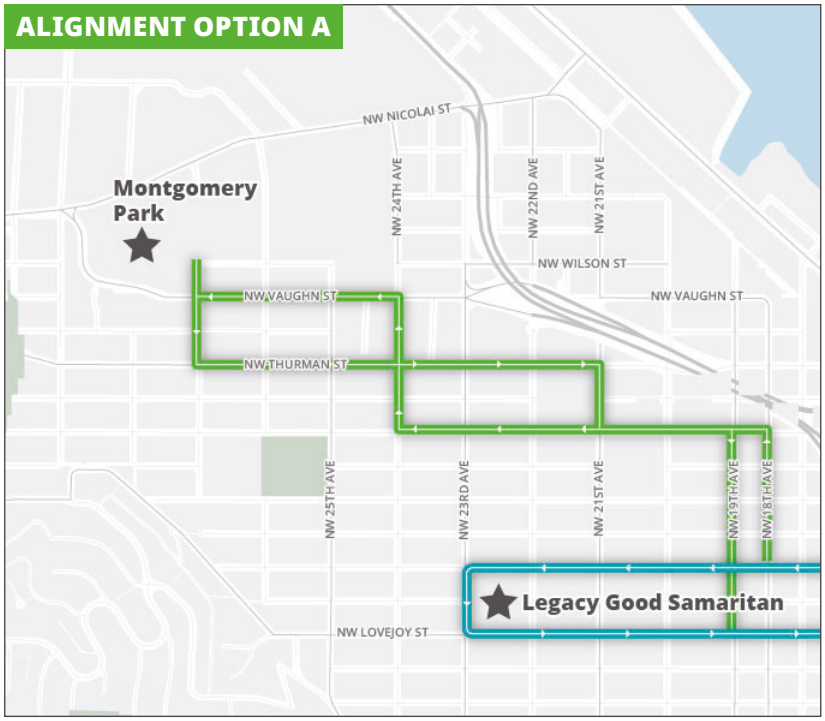
ALIGNMENT OPTION A



ALIGNMENT A DESCRIPTION:

New line connecting to Montgomery Park via a combination of ***NW Raleigh, Thurman, and Vaughn Streets*** *as well as* ***NW 18th, 19th, 21st, and 24th avenues****.*

The alignment's terminus would be a station on NW 27th Avenue between NW Wilson and NW Vaughn streets.

This route would be slow and circuitous to its final destination on narrow streets using tight turns and requiring significant right-of-way acquisition.

2.7 miles of new track construction and six new streetcars would be required.

CRITERION	SCORE	CONSIDERATION FOR ALIGNMENT OPTION A
CAPITAL COST AND FEASIBILITY	○	Length, alignment, and right-of-way acquisition requirements would make this alignment expensive and challenging to construct
OPERATING COST	◔	New line would require six new streetcars, and length would require more operators and significant maintenance costs
RIDERSHIP POTENTIAL	◕	Alignment serves existing and new housing and retail in Slabtown and more intense uses planned on Montgomery Park and ESCO site
COMPATIBILITY WITH EXISTING TRANSIT	◑	Much of the alignment is within a quarter mile of existing streetcar service
TRAFFIC AND OPERATIONS	◔	Alignment uses narrow streets with tight turns and would likely require significant parking removal and potential ROW acquisition near corners
MOBILITY IMPROVEMENTS	◔	Slow, circuitous route to final destination with limited space between curbs for streetcar movement or other multimodal improvements
CONSISTENCY WITH ADOPTED PLANS AND POLICY	◕	Compatible with Streetcar Concept Plan, Conway Master Plan, and Northwest District Plan, but utilizes streets with limited transit priority
NEW HOUSING OPPORTUNITY	◑	Portions of the alignment run through historic areas with low planned densities for future housing
NEW JOBS OPPORTUNITY	◔	Most of the alignment runs through areas with low planned densities for future jobs
FUNDING POTENTIAL	◔	Scale of extension would require significant LID participation, including areas of limited growth potential

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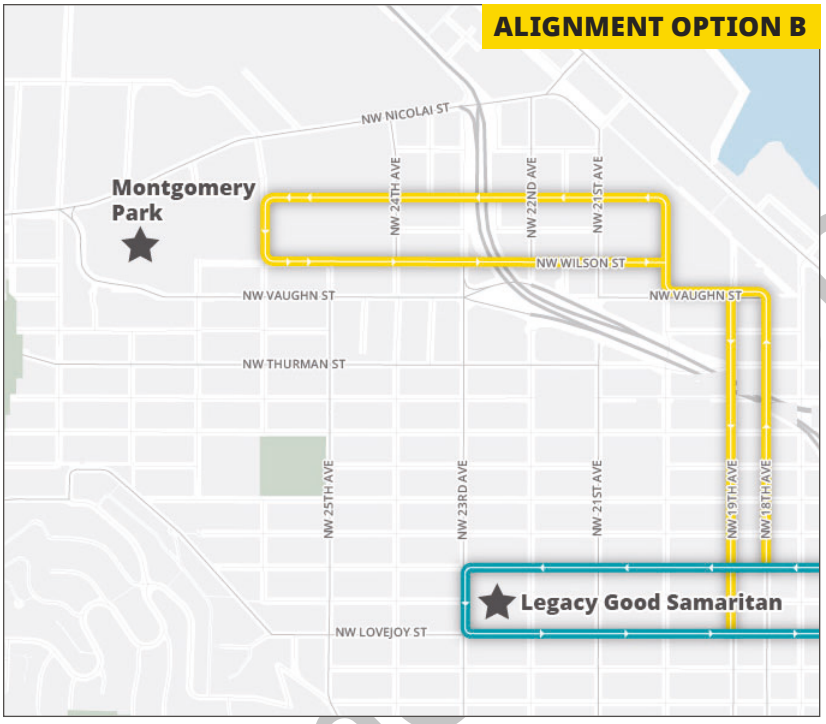
ALIGNMENT B DESCRIPTION:

*New line heading north along **NW 18th and 19th avenues**, connecting to Montgomery Park via **NW York and Wilson streets**.*

This alignment was used for much of MP2H's earlier analysis process, prior to the development of a land use scenario intended to preserve prime industrial land east of Highway 30.

3.5 miles of new track construction and six new streetcars would be required.



CRITERION	SCORE	CONSIDERATION FOR ALIGNMENT OPTION B
CAPITAL COST AND FEASIBILITY	◔	Length of extension would make this alignment the most expensive, and much of the extension would traverse prime preserved industrial land
OPERATING COST	◔	New line would require six new streetcars, and length would require more operators and significant maintenance costs
RIDERSHIP POTENTIAL	◕	Alignment serves existing and new housing as well as areas of growth potential, with limited opportunity in industrial area
COMPATIBILITY WITH EXISTING TRANSIT	●	Would add transit service to underserved areas and use streets prioritized for transit
TRAFFIC AND OPERATIONS	●	Alignment utilizes overpasses on Highway 30 and avoids high-traffic streets
MOBILITY IMPROVEMENTS	◑	Relatively direct route to final destination and expands transit benefits; conflicts with freight district with wayfinding challenges
CONSISTENCY WITH ADOPTED PLANS AND POLICY	○	Alignment traverses through low-density industrial land which could eventually pressure land use changes in industrial preserve; potential conflicts with large section of freight district
NEW HOUSING OPPORTUNITY	◑	Potential for housing along some of the alignment, with limited opportunity east/northeast of Highway 30 without land use changes
NEW JOBS OPPORTUNITY	◑	Significant potential for jobs along some of the alignment, but supportive land use changes would result in loss of industrial jobs
FUNDING POTENTIAL	◔	The length and location of this extension would make this alignment the most expensive, with LID support challenging in industrial preserve

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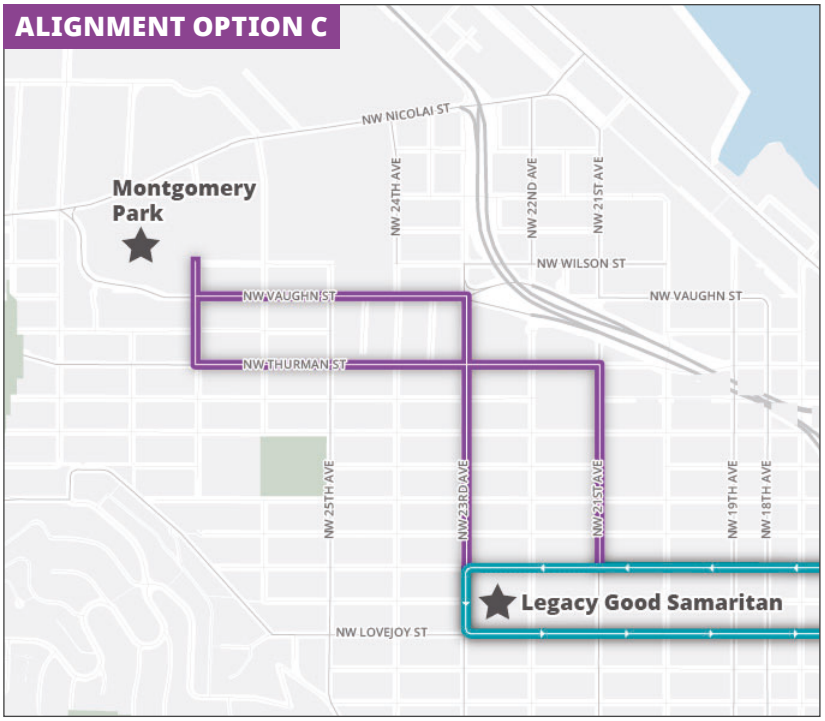
ALIGNMENT OPTION C



ALIGNMENT C DESCRIPTION:

*Extension of existing NS Line, connecting to Montgomery Park via **NW 21st and 23rd avenues**, as well as **NW Thurman and Vaughn streets**.*

This alignment would face significant challenges due to required turning movements and ROW width in some areas and would require closure of stops near the hospital.

2 miles of new track construction and two new streetcars would be required.

CRITERION	SCORE	CONSIDERATION FOR ALIGNMENT OPTION C
CAPITAL COST AND FEASIBILITY		Challenges on NW Thurman Street and at key intersections on NW Vaughn Street make this route challenging to construct
OPERATING COST		Length of alignment versus other alternatives puts this operating cost in the mid-range compared to others
RIDERSHIP POTENTIAL		Would serve two Main Streets and could capture ridership of recently developed neighborhoods with high density
COMPATIBILITY WITH EXISTING TRANSIT		Much of alignment would use streets prioritized for transit, with impacts to existing NS line users near hospital
TRAFFIC AND OPERATIONS		A challenging turning movement from NW Vaughn Street to NW 23rd Avenue would likely cause significant issues, as would conflicts between Streetcar and higher-volume auto traffic
MOBILITY IMPROVEMENTS		Requires closure of stops near hospital; couplet width and directionality challenging for access; tight right-of-way on NW 27th Avenue
CONSISTENCY WITH ADOPTED PLANS AND POLICY		Supports preservation of industrial land and utilizes streets prioritized for transit operations, except NW 27th Avenue
NEW HOUSING OPPORTUNITY		Limited value capture opportunity due to service through areas with limited development potential
NEW JOBS OPPORTUNITY		Limited value capture opportunity due to service through areas with limited development potential
FUNDING POTENTIAL		Alignment would require larger area of LID participation than preferred alignment and large-share participants may have limited access

BEST ••••••••••••••••••••••••• WORST

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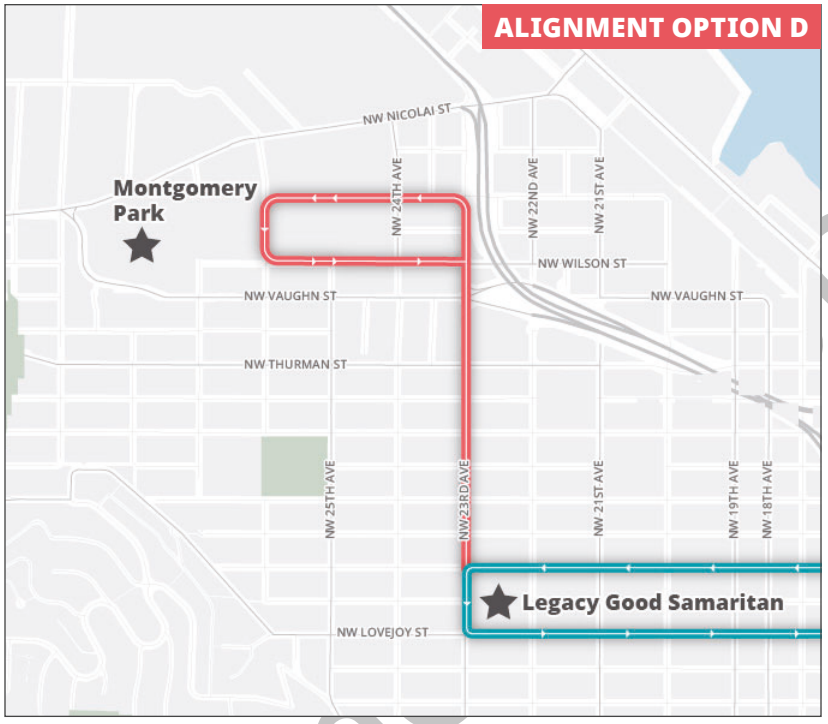
ALIGNMENT D DESCRIPTION:

*Extension of existing NS Line, connecting to Montgomery Park along **NW 23rd Avenue** and tying into a two-block parallel one-way couplet along **NW York and Wilson streets**.*

While this alignment would provide many of the same benefits of the preferred alignment, the couplet width would limit large-scale development flexibility and would be more challenging for wayfinding and transit access.

1.7 miles of new track construction and two new streetcars would be required.



CRITERION	SCORE	CONSIDERATION FOR ALIGNMENT OPTION D
CAPITAL COST AND FEASIBILITY	◕	Direct route and length make it cost-competitive, but two-block couplet would likely serve area large enough to take many years to fully develop
OPERATING COST	◕	Minimal increases in operating cost compared to other alternatives, due to direct route and length of alignment; not the best
RIDERSHIP POTENTIAL	●	Would serve the area of most development potential directly, while serving one of Northwest Portland's most vibrant Main Streets
COMPATIBILITY WITH EXISTING TRANSIT	●	Utilizes new streets and streets prioritized for transit
TRAFFIC AND OPERATIONS	◕	Careful planning required at NW Vaughn Street and NW 23rd Avenue and a tight turn from NW Northrup Street onto NW 23rd Avenue
MOBILITY IMPROVEMENTS	◕	Would include multimodal improvements on new streets with easy long-term connections, but access and wayfinding would be more challenging
CONSISTENCY WITH ADOPTED PLANS AND POLICY	●	Supports preservation of industrial land east of Highway 30 and utilizes a Main Street prioritized for transit operations and access
NEW HOUSING OPPORTUNITY	◕	Creates a direct route to/through area of highest development potential, but limits development flexibility north of NW Roosevelt Street
NEW JOBS OPPORTUNITY	◕	Creates a direct route to/through area of highest development potential, but limits development flexibility north of NW Roosevelt Street
FUNDING POTENTIAL	◑	Requires limited LID participation, but couplet size creates development challenges for large-share participants

● ◕ ◑ ◔ ○

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ALIGNMENT OPTION E



ALIGNMENT E DESCRIPTION:

*Extension of existing NS Line, connecting to Montgomery Park via **NW 23rd Avenue** and two-way movement on **NW Wilson Street**.*

This alignment has critical flaws in its design, both in required right-of-way acquisition for two-way turning movement at NW 23rd Avenue and NW Wilson Street as well as unacceptable traffic queues backing up onto Highway 30.

1.2 miles of new track construction and two new streetcars would be required.

CRITERION	SCORE	CONSIDERATION FOR ALIGNMENT OPTION E
CAPITAL COST AND FEASIBILITY	◔	Shortest alignment makes this option cost-competitive, but critical design flaws and right-of-way acquisition impacts limit feasibility
OPERATING COST	●	Shortest track length makes this alignment's operating cost low
RIDERSHIP POTENTIAL	●	Would serve the area of most development potential directly, while serving one of Northwest Portland's most vibrant Main Streets
COMPATIBILITY WITH EXISTING TRANSIT	●	Utilizes new and rehabilitated streets and streets prioritized for transit
TRAFFIC AND OPERATIONS	○	Traffic backups are a critical flaw, with auto traffic backing up onto Highway 30
MOBILITY IMPROVEMENTS	◔	While this alignment provides opportunity for Main Street design on NW Wilson Street, right-of-way limitations would impact potential for dedicated bike lanes and cause unacceptable impacts to auto traffic
CONSISTENCY WITH ADOPTED PLANS AND POLICY	●	Supports preservation of industrial land and utilizes a Main Street prioritized for transit operations and access
NEW HOUSING OPPORTUNITY	●	Creates a direct route to/through area of highest development potential
NEW JOBS OPPORTUNITY	●	Creates a direct route to/through area of highest development potential
FUNDING POTENTIAL	●	Least amount of new streets and alignment lower capital costs and minimize area of LID participation

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COMPARISON OF ALTERNATIVES

ALIGNMENT OPTION	CAPITAL COST AND FEASIBILITY	OPERATING COST	RIDERSHIP POTENTIAL	COMPATIBILITY WITH EXISTING TRANSIT	TRAFFIC AND OPERATIONS	MOBILITY IMPROVEMENTS	CONSISTENCY WITH ADOPTED PLANS AND POLICY	NEW HOUSING OPPORTUNITY	NEW JOBS OPPORTUNITY	FUNDING POTENTIAL	TOTAL SCORE*
PREFERRED ALIGNMENT: Extension via NW 23rd Avenue with NW Roosevelt Street and NW Wilson Street couplet	●	●	●	●	◕	◕	●	●	●	●	**38**
OPTION A: New line via NW Raleigh, NW Thurman, and NW Vaughn streets	○	◔	◕	◑	◑	◑	◕	◑	◔	◔	**15**
OPTION B: New line via NW 18th and NW 19th avenues as well as NW York and NW Wilson streets	◔	◔	◕	●	●	◑	○	◑	◑	◔	**20**
OPTION C: Extension via NW 21st and NW 23rd avenues, and NW Thurman and NW Vaughn streets	◔	◑	●	◕	◑	◔	●	◑	◑	◑	**23**
OPTION D: Extension via NW 23rd Avenue with NW York Street and NW Wilson Street couplet	◕	◕	●	●	◕	◕	●	◕	◕	◑	**32**
OPTION E: Extension via NW 23rd Avenue with two-way on NW Wilson Street	◔	●	●	●	○	◔	●	●	●	●	**30**

● ◕ ◑ ◔ ○

BEST ····· WORST

**This score is based upon project team interpretation of both qualitative and quantitative "criteria" as listed. For each criterion considered, a score of 0-4 was assigned based upon the scale to the left (where "BEST" = 4 and "WORST" = 0).*

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WHAT'S NEXT?

In August 2023, The Portland Bureau of Transportation (PBOT) worked with the Bureau of Planning and Sustainability (BPS) to finalize the FTA grant that funded the Montgomery Park to Hollywood (MP2H) Study.

The project team is also working to integrate community feedback and additional refinements into current drafts of the Montgomery Park Area Transportation Plan and the MP2H Northwest Plan. City staff will propose final proposed draft versions of these plans for consideration and adoption in 2024.

PBOT staff recently completed Summer-Fall 2023 community engagement. The project team is also working on preliminary engineering and cost estimation for the proposed alignment. As a funding strategy is explored for the proposed streetcar extension, a Locally Preferred Alternative (LPA) is expected to be presented to City Council in 2024. The project team may seek federal funding in 2024, as well.

The extension of the streetcar to Montgomery Park and rehabilitation of NW 23rd Avenue between NW Lovejoy and NW Vaughn streets could be under construction by 2026, including new stormwater and accessibility upgrades. The project may be completed and in service by 2028.

LEARN MORE AND SIGN UP FOR EMAIL UPDATES AT THE PROJECT WEBPAGE:

http://portland.gov/MPstreetcar

QUESTIONS OR COMMENTS? EMAIL THE PROECT TEAM AT:

MPStreetcar@portlandoregon.gov



CITY OF PORTLAND, OREGON 1851

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THE BUREAU OF PLANNING & SUSTAINABILITY

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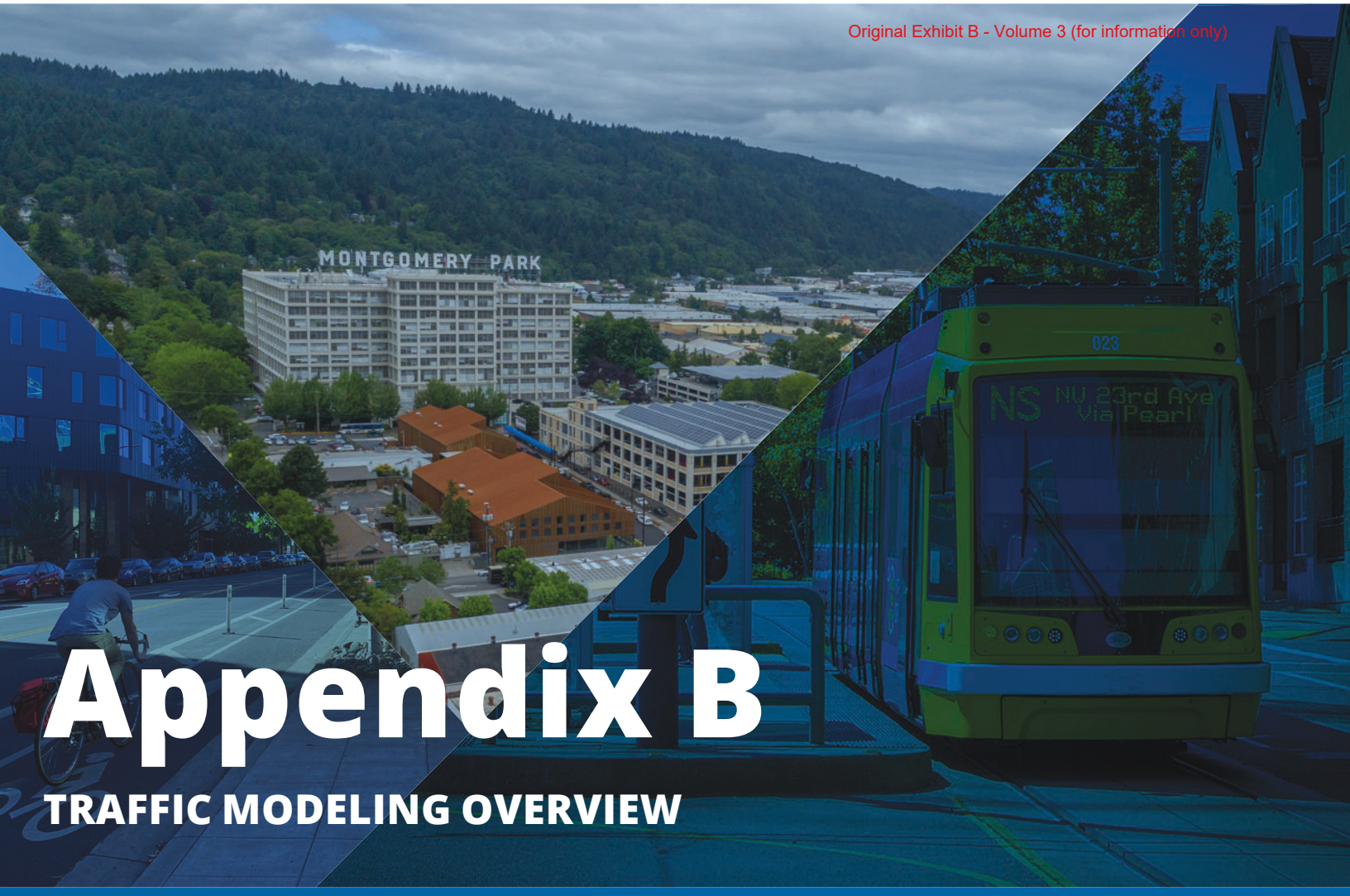

Appendix B

TRAFFIC MODELING OVERVIEW

RECOMMENDED DRAFT | OCTOBER 2024

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Overview

During the planning process for the Montgomery Park Area Plan (MPAP) and Montgomery Park Area Transportation Plan, the Portland Bureau of Transportation (PBOT) conducted transportation modeling to estimate the impacts of the proposed land use changes to the Montgomery Park Area in the future. Initial modeling was conducted as part of scenario planning during the Montgomery Park to Hollywood Transit and Land Use Development Strategy (MP2H) process, from which the proposed land use changes and transportation recommendations in the MPAP and Montgomery Park Area Transportation Plan were developed.

Early Scenario Planning and Analysis

To achieve the proposed vision in the MPAP of a dynamic, mixed-use neighborhood with equitable access to housing, and economic opportunity, the project team created three preliminary development scenarios as part of the MP2H process: Enhanced Industrial; Employment; and Mixed-Use. An overview of this process and related land development analysis are available in Volume 1 of the MPAP (page 36), as well as in the MP2H Northwest Opportunities and Challenges Report. Through this process, public feedback and further analysis resulted in the development of a fourth hybrid scenario combining Industrial and Mixed-Use focuses.

PBOT conducted preliminary transportation modeling for all four of these scenarios. Initial results were compiled into a list of congestion hotspots for further analysis. As the hybrid scenario moved forward for further planning and analysis, the preferred alignment of the streetcar was also changed to support the area of focused land use changes. More information about the development and selection of the preferred transit alignment alternative is available in Appendix A: Preferred Alignment Overview.

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Further Traffic Analysis

The project team conducted further analysis to understand the traffic impacts of the preferred hybrid development scenario land use changes with the preferred alignment. Intersections and movements in and near the Montgomery Park Area were modeled to identify any hotspots with failing Levels of Service (LOS) under future build conditions with the land use changes. This analysis included proposed transportation improvements in the area, including circulation improvements to address hotspots identified in earlier analyses. The results of this analysis, available in Appendix B - Part 2: Traffic Technical Memorandum, indicate no failing intersections or street segments under future build conditions.

Analysis of Development Scenario Refinements

Drafts of the MPAP and Montgomery Park Area Transportation Plan were released in December 2021. Based on community input and further research and analysis, the project team refined both plans and released Proposed Drafts in April 2024. During refinement, the project team worked to further respond to concerns about job losses, and particularly middle-wage job losses, in the Montgomery Park Area. As a result, refinements to the hybrid development scenario were made to emphasize an employment focus in the area.

PBOT conducted transportation modeling to understand whether these changes would lead to any areas of traffic congestion in and near the Montgomery Park Area in the future. The results of this analysis, which are available in Appendix B – Part 3: MPAP Model Outputs – Land Use #5 Proposal, indicate that the Montgomery Park Area can absorb development resulting from the proposed land use changes with acceptable impacts to traffic, as long as future trip demand is mitigated.

In order to mitigate the impacts of added trip demand in the area as it grows, the project and programmatic recommendations within the Montgomery Park Area Transportation Plan are necessary. Mitigation measures include investment in high-capacity streetcar transit, multimodal street grid connections to support trip dispersion, and improvements for non-driving modes to promote walking, rolling, biking, and transit use. Additional required interventions include improved or signalized intersections, as well as some operational changes to support better movement. More information is available in Parts 4, 5, and 6 of the Montgomery Park Area Transportation Plan (pages 48-113).

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Summary of Results

The traffic analysis described in Appendix B – Part 3: MPAP Model Outputs Land Use #5 Proposal indicates the following key takeaways:

The traffic analysis indicates a 36 percent increase in auto demand over base 2040 conditions during the PM Peak Hour in 2040. Further assessment of traffic patterns concludes that no more than 100 vehicles would be added to any streets in or surrounding the Montgomery Park Area during the PM Peak Hour, with an average increase of 35 vehicles (representing an average 5 percent increase over the base model demand per street segment).

PM Peak Hour Volume over Capacity (V/C) ratios were also calculated to identify any congested areas. Based on these calculations, no street segments within the Montgomery Park study area are expected to experience worse congestion than the 2040 base assumption.

Two freeway interchanges are located adjacent to the Montgomery Park Area. Offramp congestion can be a safety issue if vehicle queues extend beyond the offramps into freeway through lanes. To address this concern, PBOT completed a supplemental planning-level safety analysis to estimate the potential maximum queue lengths at the two US-30 offramps in the area during the 2040 PM Peak Hour. This analysis indicates that expected queues will be shorter than the ramp lengths and do not present a safety issue.

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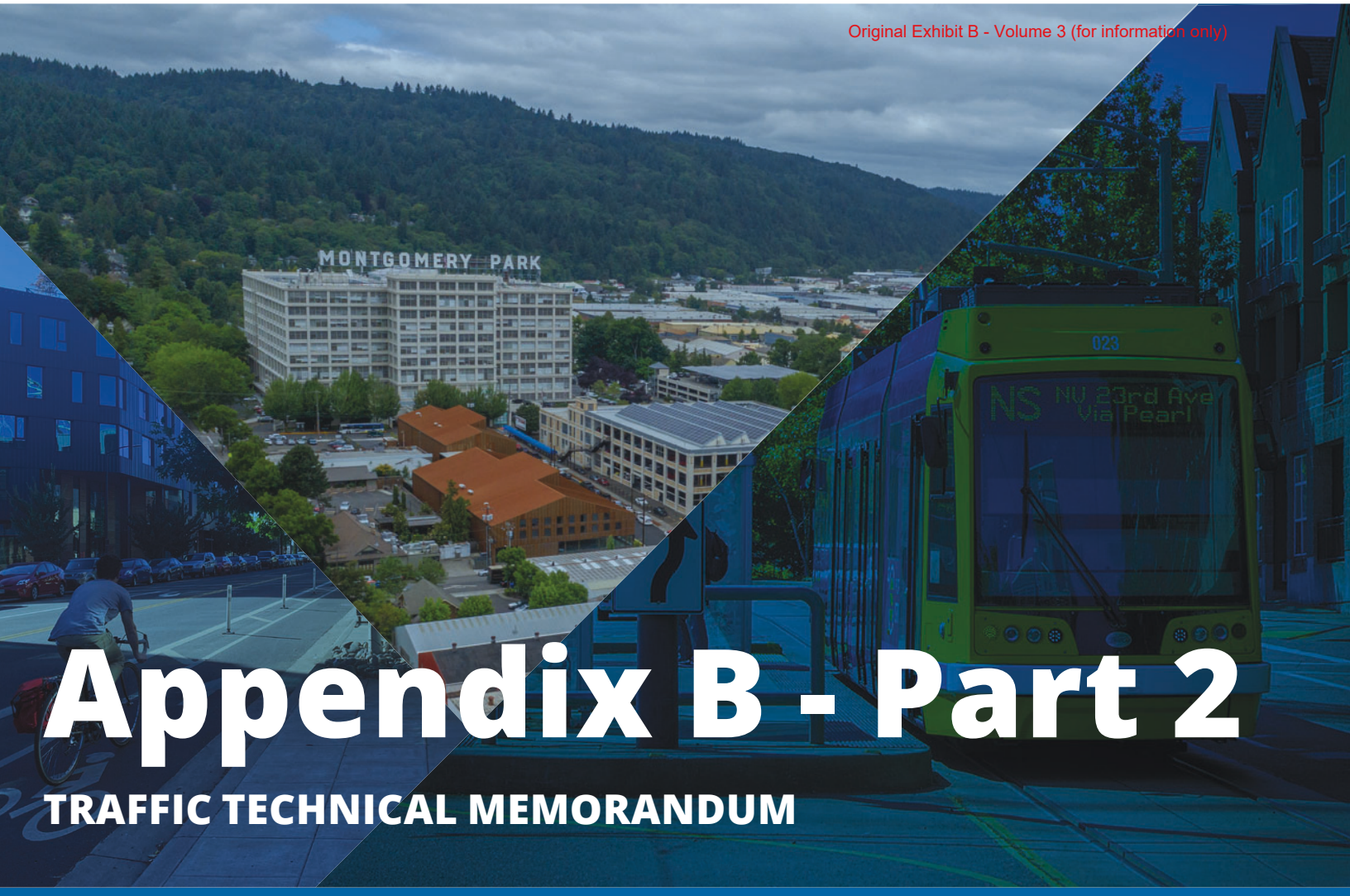

Appendix B - Part 2

TRAFFIC TECHNICAL MEMORANDUM

RECOMMENDED DRAFT | OCTOBER 2024

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Traffic Technical Memorandum

Montgomery Park District Transportation Plan

Portland, OR

December 30, 2021

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Appendix G. Traffic Analysis Methodology Memo

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1 Introduction

Portland Bureau of Transportation (PBOT) is developing the "Montgomery Park District Transportation Plan" (MPD Transportation Plan) in northwest Portland. The plan presents recommendations for implementing multi-modal transportation alternatives in the study area to accommodate existing and future growth. Transportation improvements include extending the streetcar into the Montgomery Park District area in order to serve the businesses and residences located in the proposed development. This Traffic Technical Memorandum (Tech Memo) is a supporting appendix to the MPD Transportation Plan.

The purpose of this Tech Memo is to identify intersections and movements in the study area that are expected to experience failing Levels of Service (LOS) under future build conditions identified as part of the recommended alternative in the MPD Transportation Plan. The MPD Plan details the nature of the study area roadways.

The scenarios studied by this traffic analysis are summarized as follows:

- Existing – Existing conditions as of the date of the report
- No Build– Future traffic growth in the study area without the proposed changes (construction of the streetcar extension, street network changes, and land use changes)
- Build – Future traffic growth in the study area with construction of the streetcar extension, implementation of street network and land use changes

2 Data Collection

2.1.1 Turning Movement Counts

The project study area is shown in **Figure 1.** The following intersections along the preferred alternative were identified for traffic analysis. Peak hour turning movement counts were collected at these intersections in February 2021 and June 2021.

- NW 23rd Ave. and Roosevelt St. (August 2021)
- NW Nicolai St. and NW Yeon Ave. / US 30 (June 2021)
- NW Nicolai St. and Wardway St. (Feb 2021)
- NW 23rd Ave. and Vaughn St. (June 2021)
- NW 23rd Ave. and Thurman St. (Feb 2021)
- NW 23rd Ave. and Wilson St. (Feb 2021)
- NW 25th Ave. and Vaughn St. (Feb 2021)
- NW 27th Ave. and Vaughn St. (Feb 2021)

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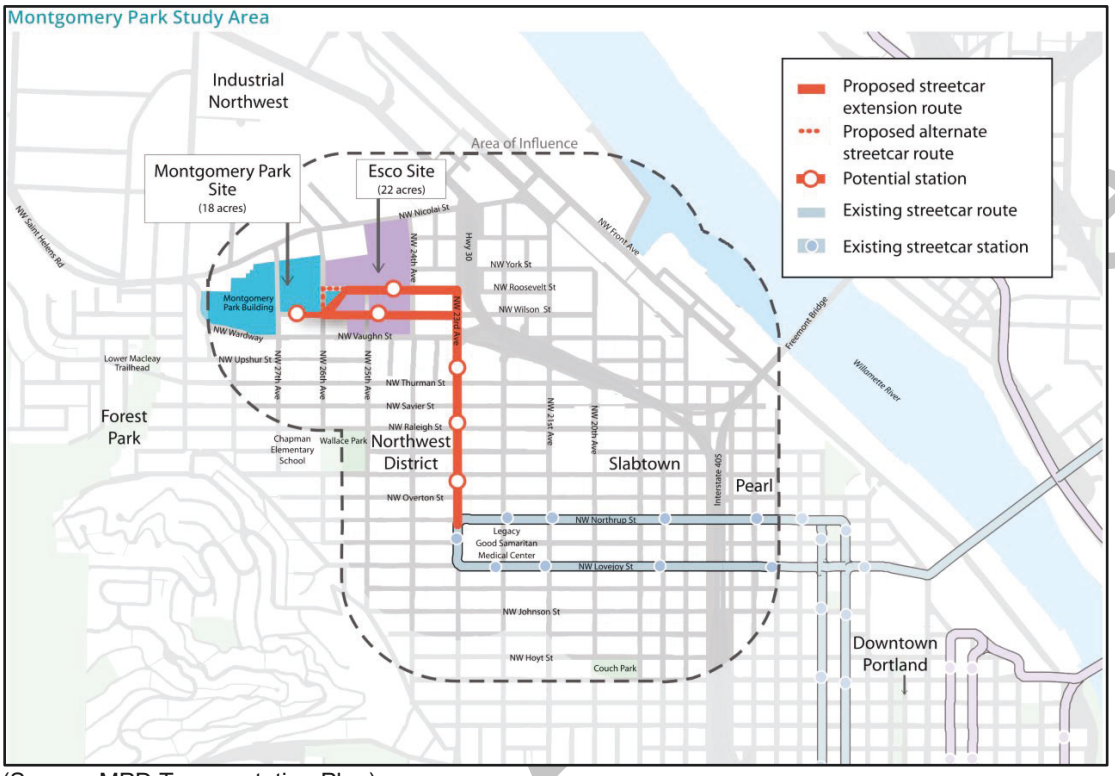
Figure 1: Montgomery Park Study Area



(Source: MPD Transportation Plan)

Historic turning movement counts at the study intersections were obtained from the Oregon Department of Transportation (ODOT) and PBOT websites, where available, to compare them to the 2021 counts and identify locations where traffic volumes may have been decreased due to the COVID-19 pandemic. The following historic turning movement counts were available in the project area:

- NW 23rd Ave. and Thurman St. – November 2017 (the week after Thanksgiving)
- NW 25th Ave. and Vaughn St. – May 2016
- NW 27th Ave. and Vaughn St. – May 2016

Raw turning movement counts are included in **Appendix A: Raw Turning Movement Counts**. In general, the historic traffic counts were higher than the 2021 counts but not for all movements. The higher of these two volumes, where applicable, was used for volume development.

2.2 Signal Timings

Existing signal timings for the following intersections were provided by PBOT:

- NW 23rd Ave. and Thurman St.
- NW 23rd Ave. and Vaughn St.
- NW 25th Ave. and Vaughn St.
- NW 27th Ave. and Vaughn St.

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- NW Nicolai St. and NW Yeon Ave. / US 30
- NW Nicolai St. and Wardway St.

3 Volume Development

A traffic analysis Methodology Memo was developed to identify the volume development methodology for this project. The methodology included using the *Iterative Method* from the National Cooperative Highway Research Program (NCHRP) Report 765: Analytical Travel Forecasting Approaches for Project-Level Planning and Design to develop future PM turning movement volumes. Based on further discussions with PBOT, the future volume development was revised to use the *Ratio Method* from NCHRP, which deviates from the approved methodology. The previously agreed upon Methodology Memo is included in **Appendix G: Traffic Analysis Methodology Memo**.

3.1 Existing Conditions

Historic turning movement counts and Annual Average Daily Traffic (AADT) volumes in the project area were analyzed to determine the appropriate existing conditions volumes to be analyzed by this project.

3.1.1 Peak Hour Determination

The global peak hours for the project area were based on the peak hours of the two major intersections in the study area, NW 23rd Ave. at Vaughn St., and NW Yeon Ave. at Nicolai St. The AM and PM peak hours were determined to be 7:45 – 8:45 AM and 4:30 – 5:30 PM, respectively.

3.1.2 Existing Turning Movement Volumes

ODOT's "Covid-19 Traffic Reports" track the change in traffic across Oregon roadways from the beginning of 2019 through the pandemic. Comparing volumes in the month of June between 2019, 2020, and 2021, these reports show that average weekday traffic in June 2021 is approximately 11 percent higher than the June 2019 volumes. The report also states that, by May 2021, "traffic volumes are approaching pre-Covid volumes." Therefore, it was determined that the turning movement counts obtained for this project in Summer 2021 would not require any adjustments.

The following methodology was adopted to adjust turning movement counts that were obtained in February 2021:

1. The February 2021 counts were compared to historic turning movement counts and the higher volume for each movement was used for the existing conditions analysis to account for a conservative analysis.
2. Study intersections located adjacent to the intersections with the Summer 2021 turning movement counts were increased and adjusted to balance the volumes along the corridor.

The adjusted turning movement volumes used for existing conditions analysis are shown in **Appendix B: Turning Movement Volumes**.

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3.2 No-Build and Design Conditions

3.2.1 No-Build Volumes

The design year for the project was determined to be 2040. PBOT provided travel demand model (TDM) data with peak hour, directional future volumes along the roadway segments in the project area for the PM peak hour. These volumes are included in **Appendix C: Travel Demand Model Reports**. An average annual background growth of 0.9 percent for the project area was determined based on the model growth.

The following methodologies were used to determine the 2040 no-build volumes for this study:

1. For intersections with two-way streets, the *NCHRP Report 765 Ratio Method* was used to develop future PM turning movement volumes. This methodology was applied to the following intersections:
    - NW 23rd Ave. and Thurman St.
    - NW 23rd Ave. and Vaughn St.
    - NW 23rd Ave. and Wilson St.
    - NW Yeon Ave. and Nicolai St.
    - NW 25th Ave. and Vaughn St.
2. For intersections with one-way streets, or at locations where the TDM had no future volumes, existing turning movement volumes were grown at a rate of 0.9 percent per year to determine 2040 no-build PM peak hour volumes. This methodology was applied to the following intersections:
    - NW 23rd Ave. and York St.
    - NW 23rd Ave. and Roosevelt St.
    - NW 27th Ave. and Vaughn St.
    - NW Nicolai St. and Wardway St.

    The no-build TDM showed a decrease in peak hour traffic along Nicolai St. compared to the 2021 volumes. For the purpose of this planning study, the 2021 volumes at the NW Nicolai St. and Wardway St. intersection were grown at an average rate of 0.9 percent per year to obtain the future no-build volumes, with the exception of traffic going to and from Wardway St. This intersection is not failing under no-build conditions and with residual capacity on NW Nicolai St., it was assumed that this section of Wardway St. is unlikely to see much growth in the future. Therefore, the no-build volumes were assumed to match existing counts.
3. AM Peak Hour Volumes

    The TDM for no-build conditions was only developed for the PM peak hour. In order to estimate the traffic impacts of the two critical study area intersections, the design year intersection volumes for the AM peak hour were developed for NW 23rd Ave. at Vaughn St. and NW Yeon Ave. at Nicolai St. intersections.

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For the purpose of this planning study, the existing AM peak hour volumes at these two intersections were grown at an average rate of 0.9 percent per year to obtain the future no-build volumes.

4. Additional adjustments were made at the following intersections as described:
    - NW Nicolai St and Yeon Ave

      Westbound departing link volume from future Build TDM data was used instead of the *NCHRP Report 765 Ratio Method* due to unreasonably high growth.

The future no-build volumes analyzed for this project are shown in **Appendix B: Turning Movement Volumes**.

3.2.2 Build Volumes

The design year for the project was determined to be 2040. PBOT provided travel demand model (TDM) data with peak hour, directional future volumes along the roadway segments in the project area for the PM peak hour. The build volumes sheets from the TDM are included in **Appendix C: Travel Demand Model Reports**.

The future build conditions assume the implementation of the hybrid land-use plan, which includes the Montgomery Park Master Plan in the study area, and growth was projected using the provided TDM data. As part of this plan, the streetcar or comparable transit service will be extended into the Montgomery Park district, going north-bound along NW 23rd Avenue, west-bound along Roosevelt St., southwest-bound through the ESCO site after passing approximately NW 25th Ave, west-bound along Wilson St. to the layover, east-bound along Wilson St., and south-bound on NW 23rd Ave. in the study area.

As part of this alternative, the southbound left turn at the intersection of NW 23rd Ave. and Vaughn St. will be eliminated. For the AM peak hour, where no TDM data was provided, this left turn volume is assumed to use the intersection of NW Yeon Ave. and Nicolai St. to access US 30 and I-405.

The TDM was developed to reflect a previous version of the Montgomery Park Master Plan where the streetcar extension was proposed along York Street, with York Street being converted into a one-way street going westbound. This lane configuration was retained for the traffic analysis since York Street currently carries higher traffic volumes when compared to Roosevelt Street and would therefore provide for a conservative traffic analysis in the study area.

The following methodologies were used to determine the 2040 build volumes for this study, similar to the no-build volumes:

1. For intersections with two-way streets, the *NCHRP Report 765 Ratio Method* was used to develop future PM turning movement volumes. This methodology was applied to the following intersections:
    - NW 23rd Ave. and Thurman St.
    - NW 23rd Ave. and Vaughn St.
    - NW 23rd Ave. and Wilson St.
    - NW Yeon Ave. and Nicolai St.

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- NW 25th Ave. and Thurman St.

2. For intersections with one-way streets, or at locations where the TDM had no future volumes, existing turning movement volumes were grown at a rate of 0.9 percent per year to determine 2040 no-build PM peak hour volumes. This methodology was applied to the following intersections:
    - NW Nicolai St. and Wardway St.
3. Build volumes for NW 23rd at York Ave. and Roosevelt St. were determined by initially using TDM turning volumes before reducing them to balance between Nicolai St. and Vaughn St.
4. Additional adjustments were made at the following intersections as described:
    - NW 23rd Ave and Wilson St

      Turning movement counts at this intersection were determined using the *NCHRP Report 765 Ratio Method*, except for the westbound left turn. This movement was determined by growing the existing westbound left turn volumes at the rate of 0.9percent per year in order to balance network volumes along the corridor.
    - NW 23rd Ave and York St

      Turning movement volumes were determined using the TDM turning movement counts since the TDM model was adjusted to account for the streetcar traveling on this roadway. The turning movement volumes were then adjusted to balance network volumes along the corridor.
    - NW Nicolai St and Yeon Ave

      Westbound departing link volume from future Build TDM data was used instead of the *NCHRP Report 765 Ratio Method* due to unreasonably high growth.
5. AM Peak Hour Volumes

   The TDM for build conditions was only developed for the PM peak hour. In order to estimate the traffic impacts of the two critical study area intersections, the design year intersection volumes for the AM peak hour were developed for NW 23rd Ave at Vaughn Street and NW Yeon Ave at Nicolai Street intersections.

   For the purpose of this planning study, the existing AM peak hour volumes at these two intersections were grown at an average rate of 0.9 percent per year to obtain the future build volumes.

   The southbound left turn at the intersection of NW 23rd Ave and Vaughn Street is proposed to be eliminated under future build conditions. With no TDM data provided for the AM peak hour, this volume was assumed to use the intersection of NW Yeon Ave and Nicolai Street. The westbound, southbound and eastbound volumes at NW Yeon Ave and Nicolai Street were adjusted accordingly.

The future build volumes analyzed for this project are shown in **Appendix B: Turning Movement Volumes**.

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4 Traffic Analysis

A traffic analysis Methodology Memo was developed to identify the traffic analysis methodology and measures of effectiveness (MOEs) for this project. The Methodology Memo is included in **Appendix G: Traffic Analysis Methodology Memo**.

The existing, no-build, and build condition volumes developed as described under Section 3 were analyzed using Synchro 10, a traffic analysis and signal optimization software that replicates Highway Capacity Manual (HCM) methodologies. Signalized intersection results were obtained from the HCM 2000 report in Synchro and unsignalized intersection results were obtained from the HCM 2010 report in Synchro.

4.1 Existing Conditions

Table 1 and **Table 2** show the results of the analysis for the existing conditions AM and PM peak hours, respectively. The detailed HCM reports for each of the study intersections are included in **Appendix D: Existing Conditions Synchro Reports**.

Table 1. Existing Intersection Performance (AM Peak)

Intersection	Control Type	Intersection v/c	Intersection Delay	Intersection LOS	Failing approaches
Units			***s/veh***		***v/c > 1***
NW Vaughn & NW 23rd Ave	Signalized	0.64	30.7	C	SBL
NW Nicolai & NW Yeon Ave	Signalized	0.65	14.6	B	v/c < 1

Table 2. Existing Intersection Performance (PM Peak)

Intersection	Control Type	Intersection v/c	Intersection Delay	Intersection LOS	Failing approaches
Units			***s/veh***		***v/c > 1***
NW Nicolai & Wardway St	Signalized	0.38	19.6	B	v/c < 1
NW Wilson & NW 23rd Ave	TWSC*	N/A	19.4	E**	v/c < 1
NW Vaughn & NW 23rd Ave	Signalized	0.66	43.2	D	SBL
NW Thurman & NW 23rd Ave	Signalized	0.58	48.5	D	SB
NW Vaughn & NW 27th Ave	Signalized	0.4	11.4	C	v/c < 1
NW Vaughn & NW 25th Ave	Signalized	0.50	13.9	B	v/c < 1
NW Nicolai & NW Yeon Ave	Signalized	0.66	14.1	B	v/c < 1
NW York & NW 23rd Ave	AWSC*	N/A	7.3	A**	v/c < 1
NW Roosevelt & NW 23rd Ave	TWSC*	N/A	1.5	A**	v/c < 1

* AWSC – All-way STOP Control; TWSC – Two-way STOP Control

**Note: Intersection delay for AWSC and TWSC intersections are based on worst stop-controlled movement at the intersection.

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4.2 Future No-Build Conditions

The no-build volumes were modeled in Synchro to estimate future no-build traffic conditions in the study area. The no-build Synchro models reflect existing land use conditions and existing lane configurations with signal timings optimized and coordinated for the forecast 2040 volumes. **Table 3** and **Table 4** show the results of the no-build analysis during the AM and PM peak hours, respectively. The detailed HCM reports for each of the study intersections are included in **Appendix E: No-Build Conditions Synchro Reports**.

Table 3. No-Build Conditions Intersection Performance (AM Peak)

Intersection	Control Type	Intersection v/c	Intersection Delay	Intersection LOS	Failing approaches
Units			***s/veh***		***v/c > 1***
NW Vaughn & NW 23rd Ave	Signalized	0.72	33.3	C	v/c < 1
NW Nicolai & NW Yeon Ave	Signalized	0.76	21.8	C	v/c < 1

Table 4. No-Build Conditions Intersection Performance (PM Peak)

Intersection	Control Type	Intersection v/c	Intersection Delay	Intersection LOS	Failing approaches
Units			***s/veh***		***v/c > 1***
NW Nicolai & Wardway St	Signalized	0.43	18.1	B	v/c < 1
NW Wilson & NW 23rd Ave	TWSC*	N/A	78.3	F**	v/c < 1
NW Vaughn & NW 23rd Ave	Signalized	0.69	33.9	C	v/c < 1
NW Thurman & NW 23rd Ave	Signalized	0.58	14.6	B	v/c < 1
NW Vaughn & NW 27th Ave	Signalized	0.48	12	B	v/c < 1
NW Vaughn & NW 25th Ave	Signalized	0.58	13.3	B	v/c < 1
NW Nicolai & NW Yeon Ave	Signalized	0.73	14.4	B	v/c < 1
NW York & NW 23rd Ave	AWSC*	N/A	7.2	A**	v/c < 1
NW Roosevelt & NW 23rd Ave	TWSC*	N/A	2.5	A**	v/c < 1

* AWSC – All-way STOP Control; TWSC – Two-way STOP Control
**Note: Intersection delay for AWSC and TWSC intersections are based on worst stop-controlled movement at the intersection.

4.3 Future Build Conditions

The future build volumes were also modeled in Synchro to estimate future build conditions in the study area. **Table 5** and **Table 6** show the results of the build analysis during the AM and PM peak hours, respectively. The detailed HCM reports for each of the study intersections are included in **Appendix F: Build Conditions Synchro Reports**.

Replaced by Attachment

The streetcar is currently scheduled to operate every 20 minutes in the AM peak hour and 15 minutes in the PM peak hour. According to the Montgomery Park District Transportation Plan, a streetcar stop is proposed to be located at the intersection of NW 23rd Ave. and Thurman St.

Table 5. Build Conditions Intersection Performance (AM Peak)

Intersection	Control Type	Intersection v/c	Intersection Control Delay	Intersection LOS	Failing approaches
Units			***s/veh***		***v/c > 1***
NW Vaughn & NW 23rd Ave	Signalized	0.69	28	C	v/c < 1
NW Nicolai & NW Yeon Ave	Signalized	0.79	20.4	C	v/c < 1

Table 6. Build Conditions Intersection Performance (PM Peak)

Intersection	Control Type	Intersection v/c	Intersection Delay	Intersection LOS	Failing approaches
Units			***s/veh***		***v/c > 1***
NW Nicolai & Wardway St	Signalized	0.47	17.8	B	v/c < 1
NW Wilson & NW 23rd Ave	Signalized	0.16	6.9	A	v/c < 1
NW Vaughn & NW 23rd Ave	Signalized	0.74	34.5	C	v/c < 1
NW Thurman & NW 23rd Ave	Signalized	0.74	26.1	C	v/c < 1
NW Vaughn & NW 27th Ave	Signalized	0.51	11.6	B	v/c < 1
NW Vaughn & NW 25th Ave	Signalized	0.46	7.6	A	v/c < 1
NW Nicolai & NW Yeon Ave	Signalized	0.73	15.7	B	v/c < 1
NW York & NW 23rd Ave	AWSC*	N/A	7.3	A**	v/c < 1
NW Roosevelt & NW 23rd Ave	TWSC*	N/A	1.3	A**	v/c < 1

* AWSC – All-way STOP Control; TWSC – Two-way STOP Control

**Note: Intersection delay for AWSC and TWSC intersections are based on worst stop-controlled movement at the intersection.

5 Summary

A comparison of intersection operations between future no-build and build conditions is provided in **Table 7** and **Table 8**. The information in these tables matches the MOEs that were identified in the Methodology Memo. According to the Synchro analysis, all study area intersections are operating below a v/c of 0.99, and both ramp terminal intersections are operating below a v/c of 0.85. In addition, all study area intersections are operating at LOS C or better in the future build condition. Due to the close proximity of many of the study area intersections, there are several 95th percentile queue lengths that block upstream intersections as noted in **Table 9**.

Replaced by Amendment

Although the analysis indicates that no mitigation is required, Synchro is limited in its capacity to evaluate transit impacts on a corridor, including impacts of a streetcar and the effects of implementing transit signal priority at signalized intersections. It is therefore recommended that detailed micro-simulation be performed during the design stage with updated tuning movement counts to determine the multi-modal traffic impacts of the build alternative.

Table 7. Signalized Intersection v/c Summary

Intersection	Control Type (No-Build)	Control Type (Build)	No-Build AM	No-Build PM	Build AM	Build PM
NW Nicolai & Wardway St	Signalized	Signalized	N/A	0.43	N/A	0.47
NW Wilson & NW 23rd Ave	TWSC*	Signalized	N/A	N/A	N/A	0.16
NW Vaughn & NW 23rd Ave	Signalized	Signalized	0.72	0.69	0.69	0.74
NW Thurman & NW 23rd Ave	Signalized	Signalized	N/A	0.58	N/A	0.74
NW Vaughn & NW 27th Ave	Signalized	Signalized	N/A	0.48	N/A	0.51
NW Vaughn & NW 25th Ave	Signalized	Signalized	N/A	0.58	N/A	0.46
NW Nicolai & NW Yeon Ave	Signalized	Signalized	0.76	0.73	0.79	0.73

* TWSC – Two-way STOP Control

Table 8. Intersection LOS Summary

Intersection	Control Type (No-Build)	Control Type (Build)	No-Build AM	No-Build PM	Build AM	Build PM
NW Nicolai & Wardway St	Signalized	Signalized	N/A	B	N/A	B
NW Wilson & NW 23rd Ave	TWSC*	Signalized	N/A	F**	N/A	A
NW Vaughn & NW 23rd Ave	Signalized	Signalized	C	C	C	C
NW Thurman & NW 23rd Ave	Signalized	Signalized	N/A	B	N/A	C
NW Vaughn & NW 27th Ave	Signalized	Signalized	N/A	B	N/A	B
NW Vaughn & NW 25th Ave	Signalized	Signalized	N/A	B	N/A	A
NW Nicolai & NW Yeon Ave	Signalized	Signalized	C	B	C	B
NW York & NW 23rd Ave	AWSC*	AWSC*	N/A	A**	N/A	A**
NW Roosevelt & NW 23rd Ave	TWSC*	TWSC*	N/A	A**	N/A	A**

* AWSC – All-way STOP Control; TWSC – Two-way STOP Control

**Note: Intersection delay for AWSC and TWSC intersections are based on worst stop-controlled movement at the intersection.

Replaced by Amendment

Table 9. Approaches with 95th Percentile Queue Blocking Upstream Intersections

Approaches with 95th percentile queue blocking upstream intersections					
Intersection	**Control Type**	**No-Build AM**	**No-Build PM**	**Build AM**	**Build PM**
		Movements (95th percentile queue length)			
NW Vaughn & NW 23rd Ave	Signalized	*EB (388'), SB (187'), *WB (533'), *NB (113')	EB (378'), *WB (416'), *NB (113), SB (233')	SB (62'), EB (363'), *WB (533'), *NB (92')	*SB (91'), EB (558'), *WB (450'), *NB (215')
NW Nicolai & NW Yeon Ave	Signalized	*EB (105'), *WB (184'), *NB (476'), *SB (660')	*EB (74'), *WB (233'), *NB (593), SB *(413')	*EB (103'), *WB (222'), *NB (508'), *SB (696')	*EB (58'), *WB (241'), *NB (592'), *SB (455')

*95th percentile queue does not block upstream intersection but is reported because the intersection is a ramp terminal.

Replaced by Amendment

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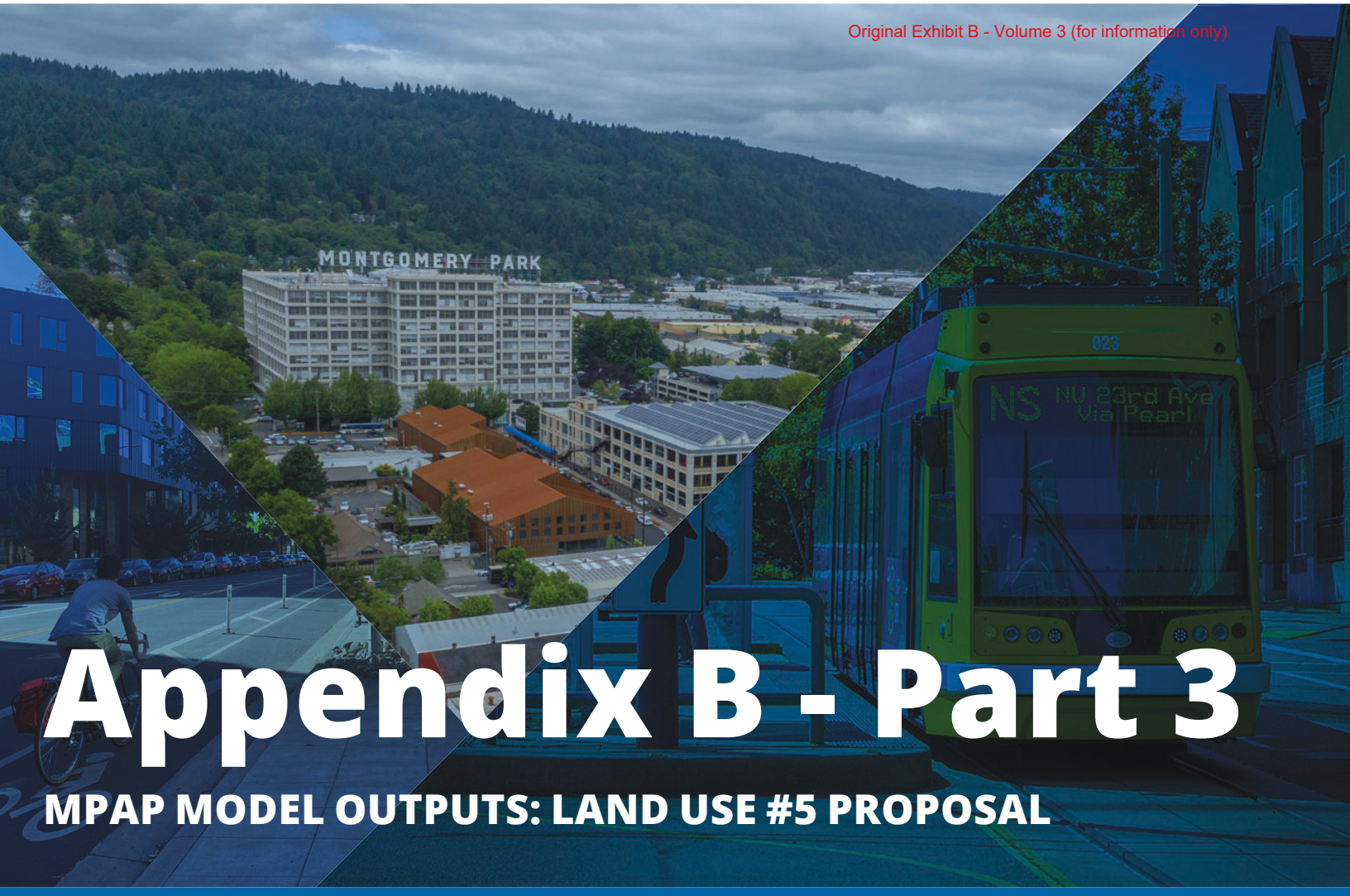

Appendix B - Part 3

MPAP MODEL OUTPUTS: LAND USE #5 PROPOSAL

RECOMMENDED DRAFT | OCTOBER 2024

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Original Exhibit B – Volume 3 (for information only)

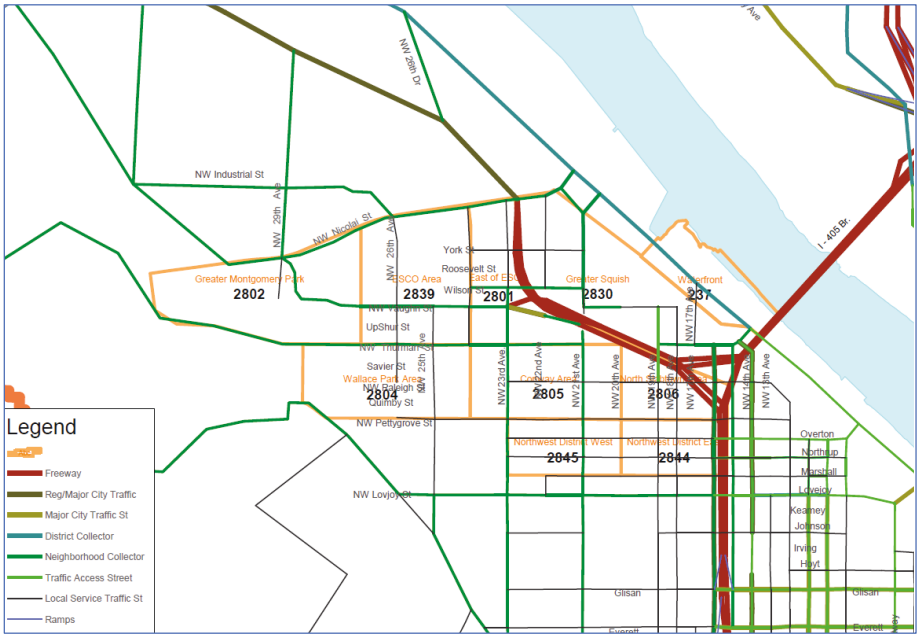
MPAP Model Outputs – Land Use #5 Proposal

Ning Zhou, PBOT

April 2023

- Base model
- MPAP land use plan Scenario #5
- Transportation improvements planned in the area
- Traffic changes result from the land use plan
- Conclusions

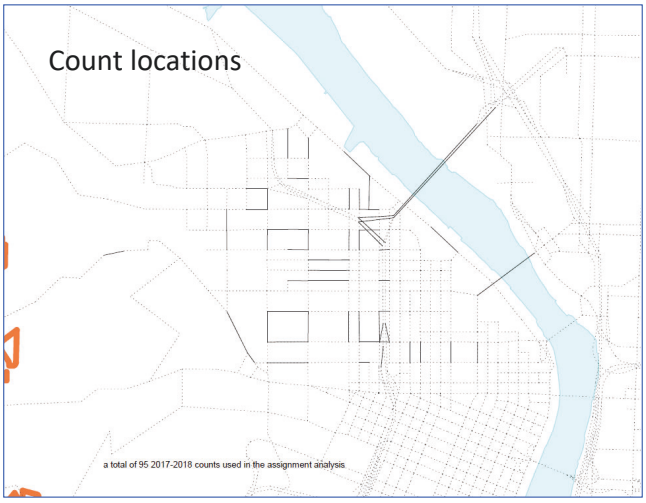
2040 RTP Base Model

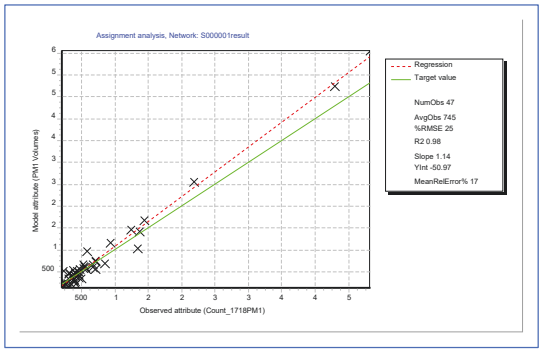


- Converted from Metro's 2040 RTP FC model
- With all RTP improvements

- Within MPAP area --
  - Two FWY interchanges
  - NW Front Ave, NW Yeon Ave support regional / Citywide traffic
  - NW Nicolai St, Vaughn St, Thurman St, 23rd Ave, 21st Ave form the back bone of the area circulation network

RTP Base Model – MPAP Area Assignment Validation



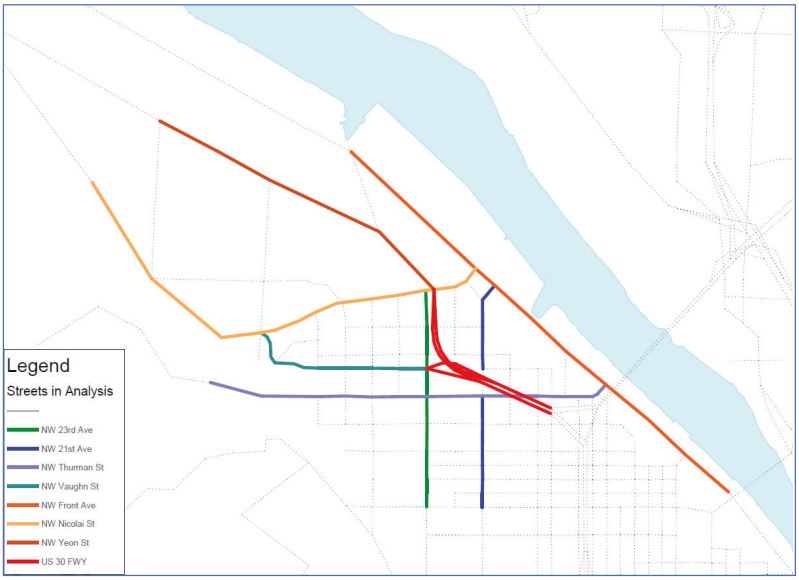


A total of 95 2017-2018 traffic counts in the MPAP area, and half of them (47) with a volume > 200.

The R^2 score for the 47 count locations is 0.98, with the mean relative error of 0.17. About 60% of the mismatched locations are over assigned.

(Validation standard: +-15% deviation from counts)

MPAP Traffic Analysis Settings

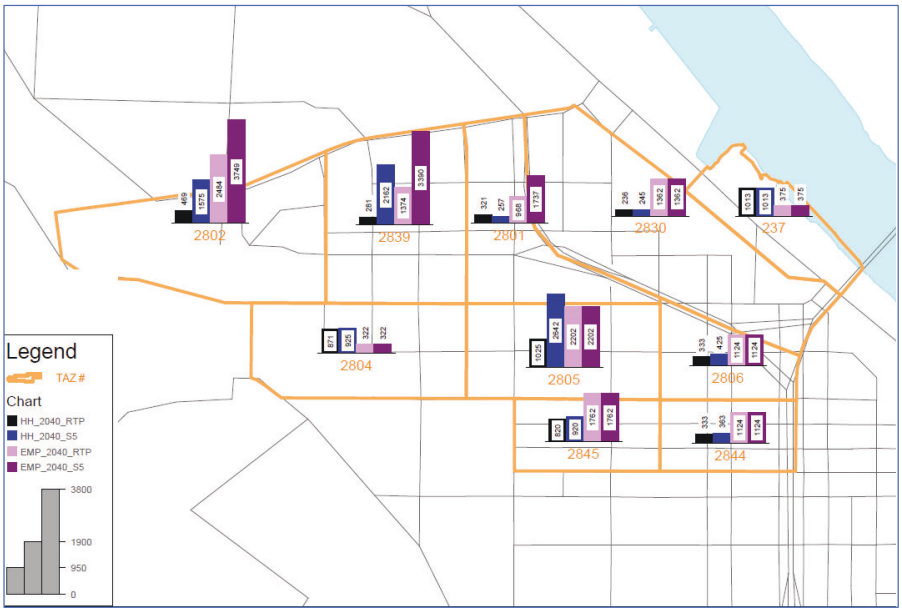


Streets Included in Traffic Analysis

- FWY –
  - US30
- Major City Traffic Way –
  - NW Yeon St
- District Collector –
  - NW Front Ave
- Neighborhood Collector –
  - NW Nicolai St
  - NW Vaughn St
  - NW Thurman St
  - NW 23rd Ave
  - NW 21st Ave

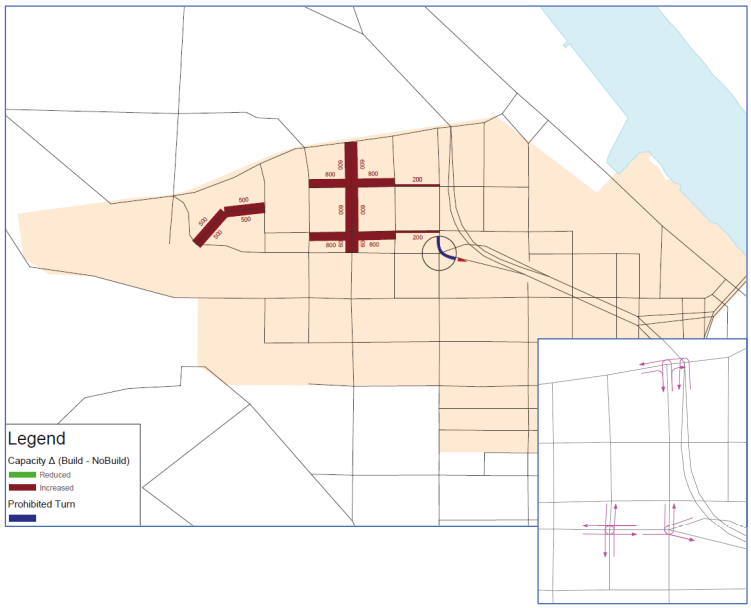
The average length per street in the analysis is about 1.2 miles

MPAP Land Use Plan Proposal Scenario #5



- Propose to increase 4,825 Household, and 4,050 Employments in the area from 2040 RTP (Regional Transportation Plan)
- Almost all new developments are at four TAZs of 2802, 2839, 2801 and 2805, which make 94% and 100% of the total proposed HH and Emp new developments, respectively.

Proposed Transportation Improvements at the Area



- Recent improvements and updates in the future base model:
  - The US30 tunnel connection on NW 20th Ave
  - The Vaughn On-ramp connection
- Updated circulation improvements over RTP:
  - Extension of NW 25th Ave
  - Extension of one-way couplet of NW York St and Wilson St
  - Prohibit the SB left turn at intersection of Vaughn St and 23rd Ave.
  - A connection local street west of NW 27th Ave.
  - Turn prohibitions at intersection of NW 24th Ave and Vaughn St
- Expansion of Streetcar network to this area. Alignment?

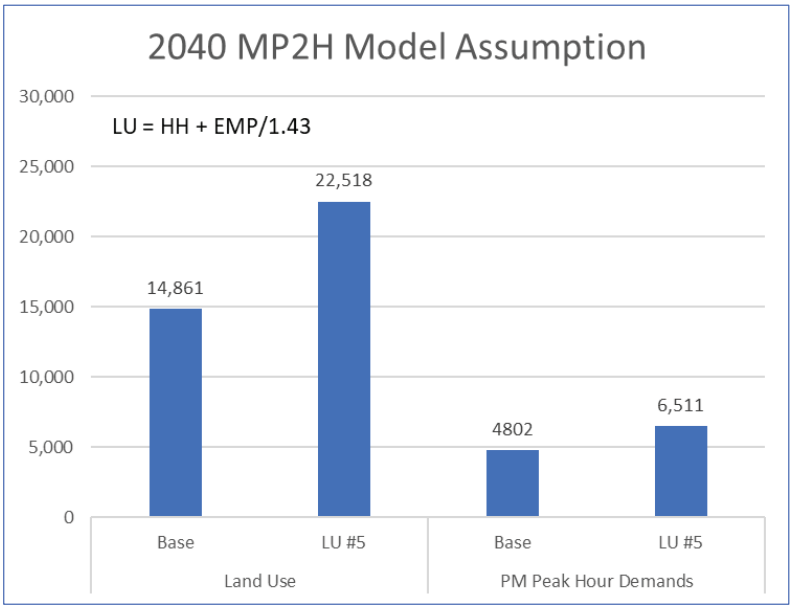
TSP Measurements -- MPAP area mode share data

	2015 RTP				2040 RTP				2040 LU #5
	Daily		Commuting		Daily		Commuting		Daily
	MP2H	C-City	MP2H	C-City	MP2H	C-City	MP2H	C-City	MP2H
Auto-P	78.0%	62.2%	76.7%	45.7%	70.0%	45.8%	62.3%	22.0%	66.6%
Transit	5.0%	16.2%	10.3%	38.7%	11.2%	28.4%	21.1%	56.7%	12.5%
Bike	6.2%	7.4%	8.2%	11.0%	7.5%	9.6%	11.1%	14.8%	8.3%
Walk	10.8%	14.3%	4.7%	4.5%	11.3%	16.2%	5.5%	6.4%	12.6%
Non-SOV	54.2%	66.9%	33.2%	63.6%	60.7%	78.9%	47.4%	85.2%	

* 2040 LU #5 daily mode share data is estimated from PM peak hour added auto demands upon the development proposal

- MPAP area mode share is much behind the nearby Central City area, especially in transit mode
- The rate of the future mode share improvement in MPAP area is even slower than Central City area
- With the assumed -10% reduction, the auto mode share is still much higher than Central City area.

2040 PM Peak Hour Added Auto Demands



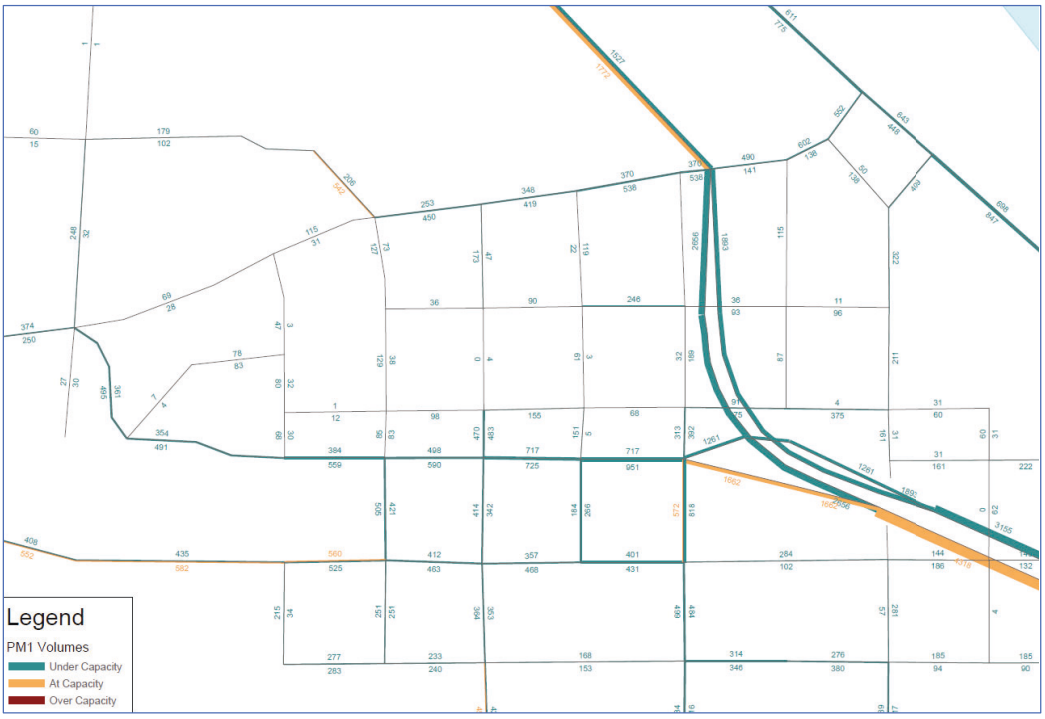
- Assume the MPAP development will maintains the same traffic pattern as the RTP model at the site.
- MPAP development scenario #5 raises 52% in HH and EMP from the 2040 RTP
- Accordingly, the 2040 PM peak hour auto demand is projected to increase 50%.
- The model assumed -10% deduction auto demands for MPAP TAZ based on:
  - Streetcar expansion to the area
  - More dense developments
  - Active travel network improvements
- With the -10% mode shift discount, additional 36% auto demands is modelled

Table 1. 2040 PM Peak Hour Volume Changes (by direction)

	Length (Mi)	Base		LU Scenario #5		
		Max	Average	Max	Average	Δ of the Average
US30	0.9	4240	2375	4320	2465	90
NW Yeon Ave	1.2	1730	1345	1770	1360	15
NW Front Ave	1.8	815	695	880	720	25
NW Nicolai St	1.7	550	265	600	300	35
NW Vaughn St	0.7	660	510	950	550	40
NW Thurman St	1.4	580	330	580	360	30
NW 21st Ave	0.6	410	220	435	310	90
NW 23rd Ave	0.8	775	370	820	370	0

- No streets add traffic more than 100
- On average, traffic increased 35 v/h, 5% of the base
- NW 21st Ave will find heaviest traffic increase, 90 v/h, on average. No congestion is expected though.

Plot 1. 2040 PM Peak Hour Volumes (Scen #5)



Plot 2. 2040 PM Peak Hour Volume Changes (LU S5 – Base)

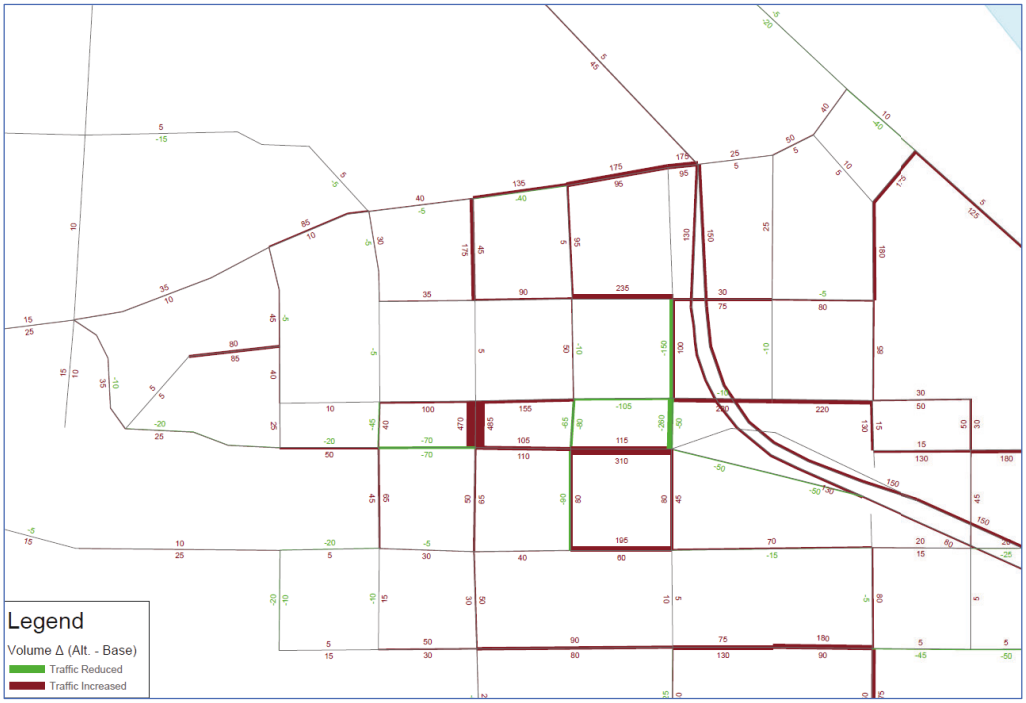
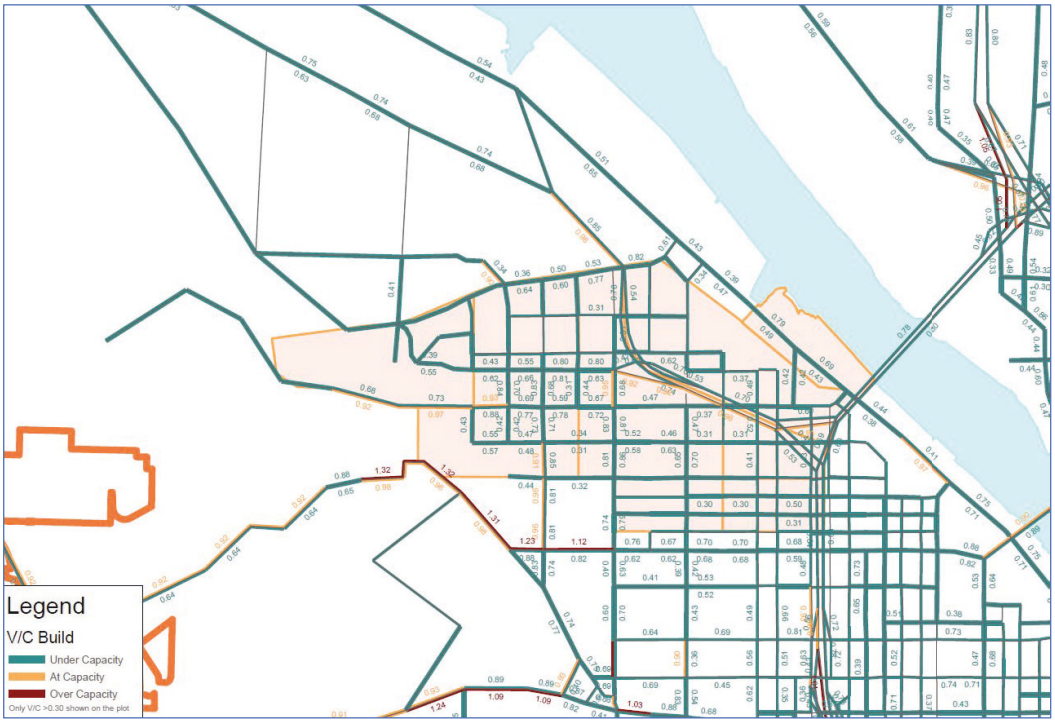


Table 2. 2040 PM Peak Hour R/C Ratio Changes

	Length (Mi)	Base		LU Scenario #5		
		Max	Length with V/C >=0.9	Max	Length with V/C >=0.9	Δ of the Cong. length
US30	0.9	0.95	0.47	0.96	0.47	0
NW Yeon Ave	1.2	0.96	0.28	0.98	0.28	0
NW Front Ave	1.8	0.90	0.18	0.97	0.18	0
NW Nicolai St	1.7	0.77		0.82		
NW Vaughn St	0.7	0.77		0.83		
NW Thurman St	1.4	0.97	0.3	0.97	0.49	0.19
NW 21st Ave	0.6	0.68		0.72		
NW 23rd Ave	0.8	0.95	0.05	0.95	0.10	0.05

- No streets is projected to reach V/C >= 1
- Only two streets, Thurman and 23rd are projected to have longer streets with V/C >=0.9, and the addition is small

Plot 3. 2040 PM Peak Hour V/C Ratios



Plot 4. 2040 PM Peak Hour V/C Ratio Changes

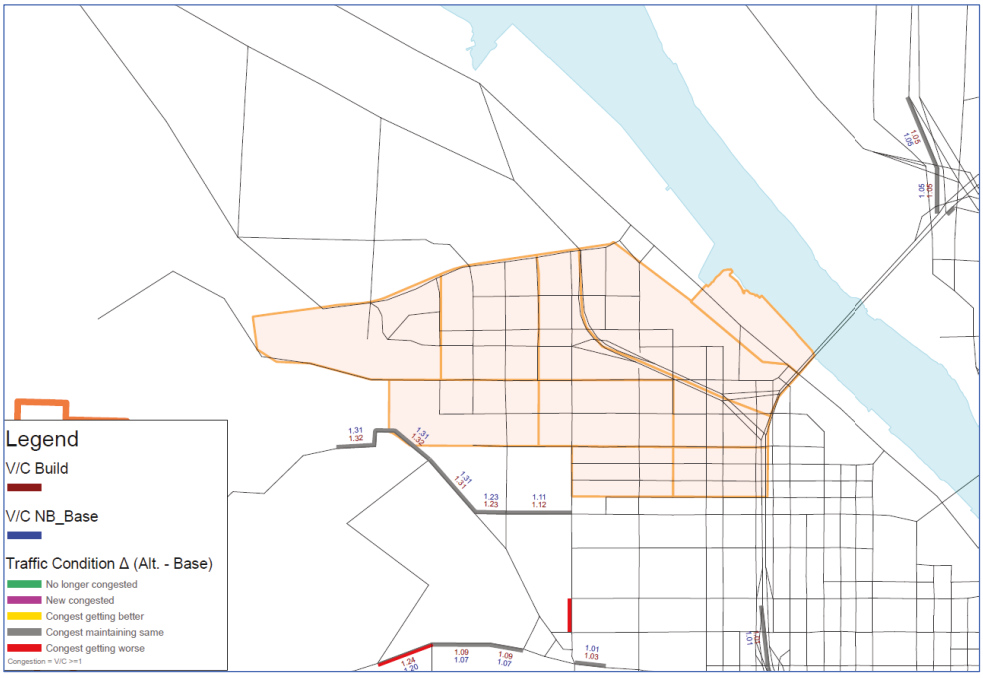


Table 3. 2040 PM Peak Hour Average Speed Changes

	Length (Mi)	Base		LU Scenario #5		
		Speed (m/h)	Travel Time (m)	Speed (m/h)	Travel Time (m)	Travel Time Δ
US30	0.9	32.7	1.6	31.7	1.7	
NW Yeon Ave	1.2	27.4	2.6	26.8	2.6	
NW Front Ave	1.8	29.9	3.7	29.1	3.8	
NW Nicolai St	1.7	28.8	3.4	27.8	3.6	0.2
NW Vaughn St	0.7	20.8	1.9	19.2	2.1	0.2
NW Thurman St	1.4	19.4	4.4	18.6	4.6	0.2
NW 21st Ave	0.6	21.8	1.6	20.8	1.7	
NW 23rd Ave	0.8	15.0	3.1	14.7	3.2	

- No street is projected to have noticeable travel time increase within the project area.
- Note, the travel time from demand model doesn't count the intersection delay

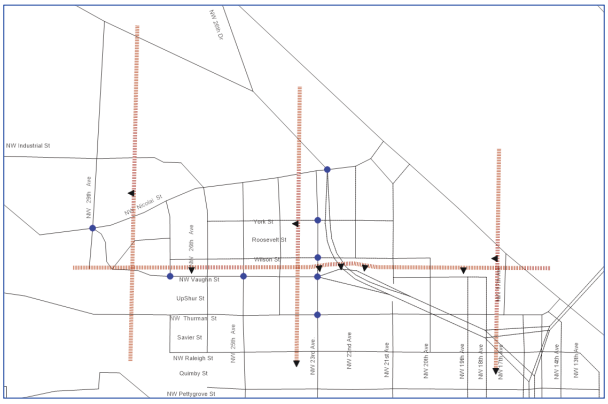
Traffic Growth Rate Calculation

	2018PM	2040PM NB Base	2040PM LU#5
Sum	25,775	29,270	32,135
Growth		13.6%	24.7%
Annual Growth Rate		0.6%	1.0%

Annual growth rate is projected at **1.0%** to 2040

The growth rate calculation is based on the total traffic on the 4 screen-lines as in the right plot.
The traffic growth counts:

- Added trips from the land use development proposal
- Rerouted traffic results from the network circulation plan

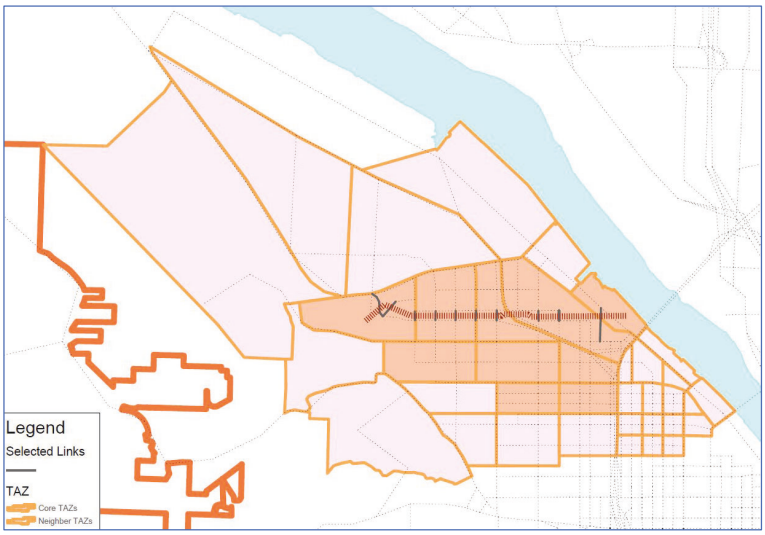


Through traffic analysis 1

TSP Traffic Classification Policy for Neighborhood Collectors:

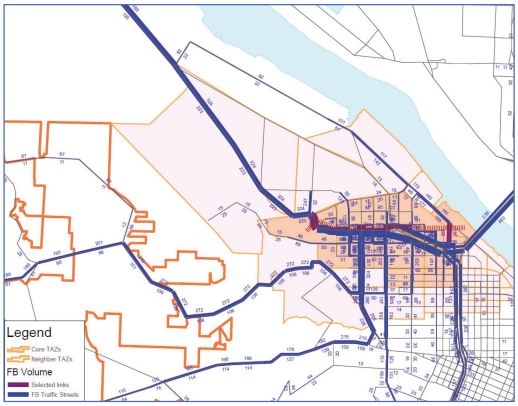
"Neighborhood Collectors are intended to serve as distributors of traffic from Major City Traffic Streets or District Collectors to Local Service Streets or to serve trips that both start and end within areas bounded by Major City Traffic Streets and District Collectors."

The main task is to identify if the circulation plan attracts more through traffic to the area's neighborhood collector and local streets as marked in the right plot



Through traffic analysis 2

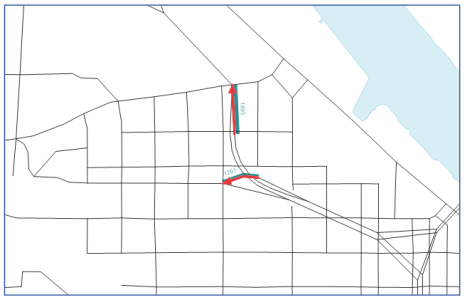
	Through1		Through2	
	Base	LU #5	Base	LU #5
Through Trips	1,215	1,210	390	365
Through Trip %	41.1%	32.8%	13.1%	9.9%



The proposed development and circulation network **will not attract more through traffic** to the area's Neighborhood Collector and Local Streets, even though the total trips on those streets increased from 2,950 to 3,690.

Through1 measured as the trips with both trip ends outside the core 10-TAZ area (dark Brown area)
Through2 measured as the trips with both trip ends outside the neighbor TAZ area (light brown area)

Safety Analysis -- Freeway Off Ramp Queue length Estimation



	Ramp Length (ft)	# lanes	Volume	Max Queue in Cars	Max Q length (ft)
to Vaughn	590	3	1,260	8	200
To Nicolai	740	4	1,895	11	275

- Analysis to estimate the potential max queue length at the ramps based on:
  - 2040 PM peak hour volumes (MP2H model)
  - Ramp characters: # of lanes, length (measured from Google Maps)
- Planning level analysis methods:
  - Assumed 90s signal cycle length, 50% green time split
  - Max arrival per cycle estimated by Poisson distribution with 95th confidence
  - Max queue is ½ of max arrival (50% green time)

- The estimated max queue lengths at the 2 FWY off ramps are **shorter** than their ramp lengths during 2040 PM peak hour with the proposed development.

Conclusions

- MPAP area needs multi-mode transportation improvements
- Compared to the 2040 RTP No-Build base, the proposed land use development, scenario #5, along with the network circulation plan will not degrade the transportation service in MP2H planning area:
  - It will result in a slight additional traffic increase on area streets, adding 70 vehicles more per street in 2040 PM peak hour, or 5% increase
  - The added traffic will not result in significant traffic condition changes, no streets will have V/C >= 1
  - The travel time increases from the development on MP2H streets are negligible
  - The through traffic will be kept no changes
  - FWY off-ramp will still be running at safety level

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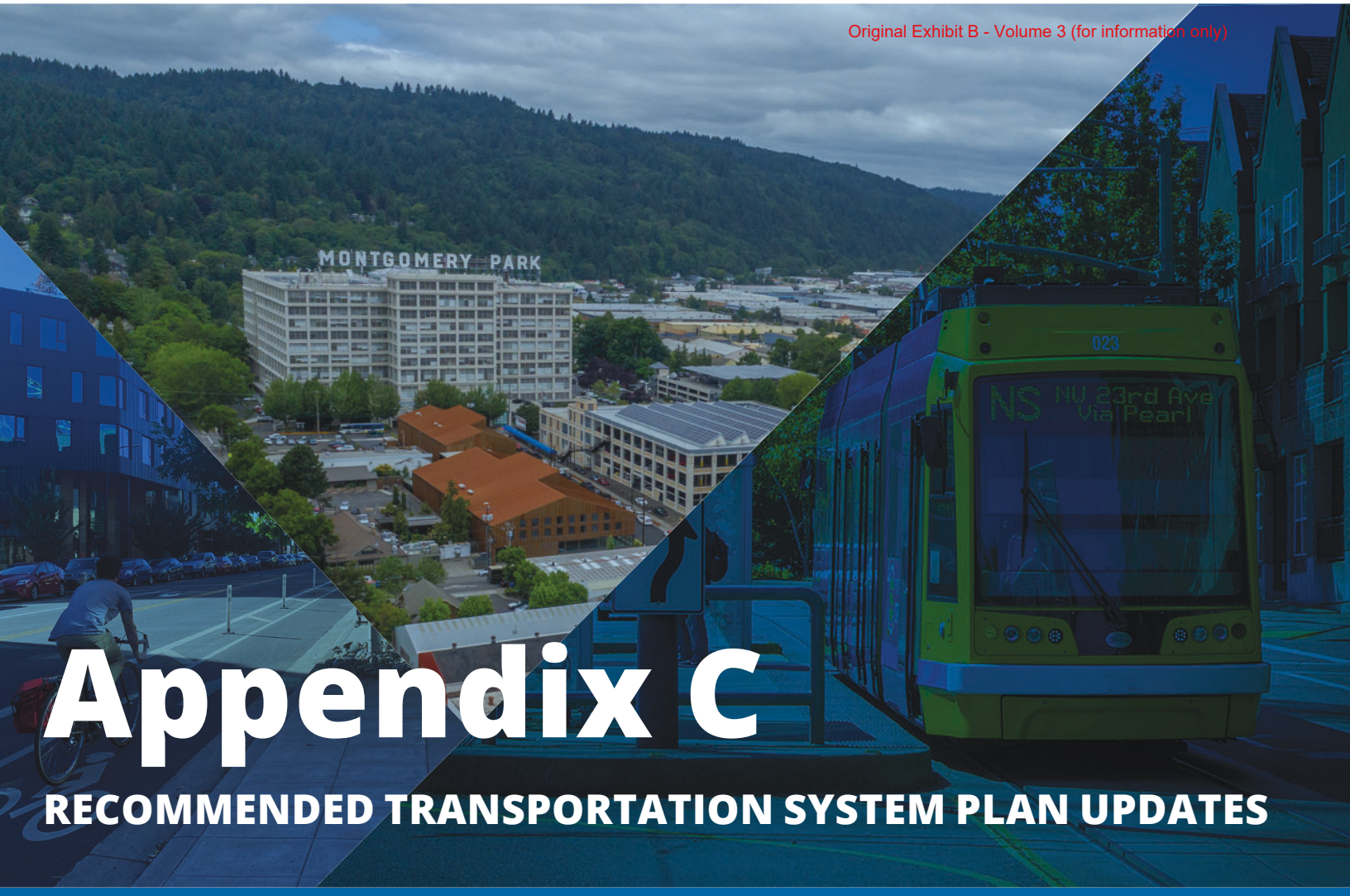

Appendix C

RECOMMENDED TRANSPORTATION SYSTEM PLAN UPDATES

RECOMMENDED DRAFT | OCTOBER 2024

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Replaced by Amendment

Recommended Updates to Pedestrian Street Classifications

NAME	CURRENT	UPDATE	RATIONALE
NW Reed St (NW 21st Ave – NW 22nd Ave; NW 23rd Ave – NW 24th Ave)	City Walkway	Local Walkway	Reflects existing conditions and uses while aligning with Montgomery Park Area Transportation Plan recommendations
NW Roosevelt St (NW 23rd Ave – NW 26th Ave)	Local Service Walkway	City Walkway	Proposed alignment of streetcar extension
NW Wilson St (NW 23rd Ave – NW 27th Ave)	Local Service Walkway	Major City Walkway	Proposed alignment of streetcar extension, with proposed Street Design Classification of Neighborhood Main Street
NW Vaughn St (NW 20th Ave – NW 21st Ave)	City Walkway	Local Service Walkway	Directs pedestrian priority to streets with clear access through the area
NW 21st Ave (NW Wilson St – NW Vaughn St)	City Walkway	Local Service Walkway	Directs pedestrian priority to streets with clear access through the area
NW 22nd Ave (NW Reed St – NW Wilson St)	Local Service Walkway	City Walkway	Provides critical north-south pedestrian connection east of US-30
NW 23rd Ave (NW Wilson St – NW Vaughn St)	City Walkway	Major City Walkway	Proposed alignment of streetcar extension, with proposed Street Design Classification of Neighborhood Main Street; connects proposed NW Wilson Neighborhood Main Street with existing Neighborhood Main Street of NW 23rd Avenue south of NW Vaughn St
NW 24th Ave (NW Nicolai St – NW Vaughn St)	Local Service Walkway	Neighborhood Walkway	Proposed extension of NW 24th Avenue Neighborhood Greenway, which should prioritize pedestrians and bicycles with lower traffic volumes
NW 25th Ave (NW Roosevelt St – NW Thurman St)	Local Service Walkway and Major City Walkway	City Walkway	Aligns with Montgomery Park Area Transportation Plan recommendations while still placing emphasis on pedestrian access to transit and Major City Walkways
NW 26th Ave (NW Nicolai St – NW Roosevelt St; NW Wilson St – NW Vaughn St)	City Walkway	Local Service Walkway	Aligns with Montgomery Park Area Transportation Plan recommendations; directs pedestrian priority to streets with clear connections to signalized intersections on NW Vaughn St; Between NW Roosevelt and NW Wilson streets, this plan recommends that the segment of NW 23rd Avenue remain a City Walkway due to the proposed alignment of the streetcar extension
NW 27th Avenue (NW Nicolai St – NW Vaughn St)	Neighborhood Walkway	City Walkway	NW 27th Avenue is the main north-south pedestrian access route to the Montgomery Park Building; this plan recommends shifting the connected City Walkway between NW Nicolai and NW Vaughn streets to NW 27th Avenue to support increased pedestrian activity and place higher north-south pedestrian priority on a street with an existing signalized intersection with NW Vaughn Street

Recommended Updates to Bicycle Street Classifications[1]

NAME	CURRENT	UPDATE	RATIONALE
NW Nicolai St/St Helens Rd (NW Front Ave – NW Kittridge Ave)	City Bikeway	Major City Bikeway	Supports long-term city/regional bicycle connection toward St Johns and aligns with Montgomery Park Area Transportation Plan recommendations
NW Front Ave (NW Nicolai St – NW Thurman St)	City Bikeway	Major City Bikeway	Continues Major City Bikeway Designation between NW Naito Pkwy and NW Nicolai St; supports highest priority city/regional bicycle connection to the Central City and further destinations
NW Sherlock Ave (NW Nicolai St – NW 21st Ave)	Local Service Bikeway	City Bikeway	Provides low stress connection to nearby City Bikeways and Major City Bikeways, improving the network
NW York St (NW 21st Ave – NW 24th Ave)	Local Service Bikeway	City Bikeway	Completes an important connection in the bike network, utilizing an existing overpass of US-30
NW Roosevelt St (NW 23rd Ave – NW 26th Ave)	Local Service Bikeway; N/A	City Bikeway	Supports bicycle connections to and circulation within the Montgomery Park Area; NW Roosevelt St is a key connection for internal area circulation
NW Wilson St (NW 21st Ave – NW 27th Ave)	Local Service Bikeway; N/A	City Bikeway	Supports bicycle connections to and circulation within the Montgomery Park Area; NW Wilson St is a key connection for internal area circulation
NW Vaughn St (NW 19th Ave – NW 21st Ave)	Local Service Bikeway	City Bikeway	Fills a gap in the low-stress bike network, connecting the area to the bikeway couplet on NW 18th and NW 19th Aves
NW 17th Ave (NW Front Ave – NW Thurman St)	Local Service Bikeway	City Bikeway	Recent improvements to this segment warrant an upgrade to City Bikeway classification
NW 22nd Ave (NW Wilson St – NW Savier St)	City Bikeway	Local Service Bikeway	Reflects actual conditions; segment dead ends and is for local service only
NW 23rd Ave (NW Roosevelt St – NW Wilson St)	Local Service Bikeway	City Bikeway	This segment fills an important circulation gap between NW Wilson St and NW Roosevelt St
NW 24th Avenue (NW Nicolai St – NW Lovejoy)	City Bikeway	Major City Bikeway	Aligns with Montgomery Park Area Transportation Plan recommendations; NW 24th Avenue Greenway extension is key low-stress north-south connection through the district and connects to recommended Major City Bikeway on NW Nicolai St and Existing Major City Bikeway on NW 24th Avenue south of NW Lovejoy St
NW 25th Ave (NW Roosevelt St – NW Wilson St)	N/A	Local Service Bikeway	New street segment for local service
NW 26th Ave (NW Roosevelt St – NW Wilson St)	Local Service Bikeway	City Bikeway	Supports bicycle circulation within the Montgomery Park Area, connecting one-way parallel bikeway couplet recommended on NW Roosevelt and NW Wilson streets
NW 27th Ave NW Nicolai St – NW Upshur St)	Local Service Bikeway	City Bikeway	Provides low stress connection to nearby City Bikeways, improving the network and supporting an extension of the NW 27th Avenue Greenway

[1] Note: Additional recommended updates to Bicycle Street Classifications in the *Montgomery Park Area Transportation Plan* map (page 93) not included in the above table are recommendations in *Northwest in Motion*. See *Northwest in Motion* for extents and rationales.

Replaced by Amendment

Recommended Updates to Transit Street Classifications

NAME	CURRENT	UPDATE	RATIONALE
NW Roosevelt St (NW 23rd Ave – NW 26th Ave)	Local Service Transit Street and N/A	Major Transit Priority Street	Alignment of proposed streetcar extension
NW Wilson St (NW 23rd Ave – NW 27th Ave)	Local Service Transit Street	Major Transit Priority Street	Alignment of proposed streetcar extension
NW Wilson St (NW 20th Ave – NW 23rd Ave)	Transit Access Street	Local Service Transit Street	No longer part of a transit route
NW Vaughn St (NW 18th Ave – NW 21st Ave)	Transit Access Street	Local Service Transit Street	No longer part of a transit route
NW 18th Ave (NW Vaughn St – NW Thurman St)	Transit Access Street	Local Service Transit Street	No longer part of a transit route
NW 19th Ave (NW Vaughn St – NW Thurman St)	Transit Access Street	Local Service Transit Street	No longer part of a transit route
NW 20th Ave (NW Wilson St – NW Vaughn St)	Transit Access Street	Local Service Transit Street	No longer part of a transit route
NW 21st Ave (NW Wilson St – NW Vaughn St)	Transit Access Street	Local Service Transit Street	No longer part of a transit route
NW 23rd Ave (NW Roosevelt St – NW Vaughn St)	Local Service Transit Street and Transit Access Street	Major Transit Priority Street	Alignment of the proposed streetcar extension
NW 25th Ave (NW Roosevelt St – NW Wilson St)	N/A	Local Service Transit Street	New street segment for local service
NW 26th Ave (NW Roosevelt St – NW Wilson St)	Local Service Transit Street	Major Transit Priority Street	Alignment of proposed streetcar extension

Recommended Updates to Street Design Classifications

NAME	CURRENT	UPDATE	RATIONALE
NW Nicolai St/St Helens Rd (NW Yeon Ave/US-30 – US-30)	Community Corridor	Industrial Road	NW Nicolai Street is preferred Freight Route in the area; prioritizes NW Nicolai for Industrial uses over NW Vaughn Street
NW Front Ave (NW 21st Ave – NW 19th Ave)	Industrial Road	Civic Main Street	Emphasizes multimodal access and supports existing mixed land uses along the corridor; extends existing Civic Main Street
NW Roosevelt St (NW 24th Ave – NW 26th Ave)	N/A	Local Street	New street segment classified to support local multimodal circulation
NW Wilson St (NW 23rd Ave – NW 27th Ave)	Local Street	Neighborhood Main Street	Proposed land use changes including active uses along NW Wilson Street should emphasize pedestrian access along streetcar alignment
NW Vaughn St (NW 18th Ave – NW 20th Ave)	Local Street	Community Corridor	Proposed change to Community Corridor in Traffic Classifications
NW 18th Ave (NW Vaughn St – NW Thurman St)	Local Street	Community Corridor	Proposed change to Community Corridor in Traffic Classifications
NW 19th Ave (NW Vaughn St – NW Thurman St)	Local Street	Community Corridor	Proposed change to Community Corridor in Traffic Classifications
NW 20th Ave (NW Wilson St – NW Vaughn St)	Local Street	Community Corridor	A Community Corridor in Traffic Classifications
NW 22nd Ave (NW Nicolai St – NW Wilson St)	Local Street	Community Corridor	Proposed change to Community Corridor in Traffic Classifications
NW 23rd Ave (NW Wilson St – NW Vaughn St)	Community Corridor	Neighborhood Main Street	Connecting the Neighborhood Main Street Classifications of NW 23rd Avenue to the south and the proposed classification on NW Wilson Street; streetcar gateway to Montgomery Park
NW 25th Ave (NW Roosevelt St – NW Thurman St)	Local Street and Neighborhood Main Street	Local Street	Reflects actual conditions and proposed projects in Montgomery Park Area Transportation Plan

Replaced by Amendment

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Recommended Updates to Traffic Street Classifications

NAME	CURRENT	UPDATE	RATIONALE
NW Nicolai St/NW St Helens Rd (NW Kittridge Ave/NW Yeon Ave Frontage Rd – NW Front Ave)	Neighborhood Collector Street	District Collector Street	Reflects current function/conditions as well as recommendations in the Montgomery Park Area Transportation Plan
NW Sherlock Ave (NW Nicolai St – NW 21st Ave)	Neighborhood Collector Street	District Collector Street	Reflects current function/conditions
NW Roosevelt St (NW 24th Ave – NW 26th Ave)	N/A	Local Service Traffic Street	New street segment for local traffic access
NW Vaughn St (NW 18th Ave – NW 20th Ave)	Local Service Traffic Street	Neighborhood Collector Street	Reflects current function/conditions
NW 18th Ave (NW Vaughn St – NW Thurman St)	Local Service Traffic Street	Neighborhood Collector Street	Reflects current function/conditions
NW 19th Ave (NW Vaughn St – NW Thurman St)	Local Service Traffic Street	Neighborhood Collector Street	Reflects current function/conditions
NW 20th Ave (NW Vaughn St – NW Thurman St)	Neighborhood Collector Street	Local Service Traffic Street	Recent changes to street network have deprioritized this street for traffic movement
NW 21st Ave (NW Front Ave – NW Sherlock Ave)	Neighborhood Collector Street	District Collector Street	Reflects current functions/conditions
NW 22nd Ave (NW Nicolai St – NW Wilson St)	Local Service Traffic Street	Neighborhood Collector Street	Reflects current function/conditions
NW 25th Ave (NW Roosevelt St – NW Wilson St)	N/A	Local Service Traffic Street	New street segment for local traffic access

Recommended Updates to Freight Street Classifications

NAME	CURRENT	UPDATE	RATIONALE
NW Reed St (NW 23rd Ave – NW 24th Ave)	Freight District Street	Local Service Truck Street	Proposed removal of Freight District in the Area
NW York St (NW 23rd Ave – NW 24th Ave)	Freight District Street	Local Service Truck Street	Proposed removal of Freight District in the Area
NW Roosevelt St (NW 23rd Ave – NW 26th Ave)	Freight District Street and N/A	Local Service Truck Street	Proposed removal of Freight District in the Area
NW Wilson St (NW 23rd Ave – NW 27th Ave)	Freight District Street	Local Service Truck Street	Proposed removal of Freight District in the Area
NW Vaughn St (NW 23rd Ave – NW 27th Ave)	Freight District Street	Local Service Truck Street	Proposed removal of Freight District in the Area
NW 23rd Pl (NW Nicolai St – NW York St)	Freight District Street	Local Service Truck Street	Proposed removal of Freight District in the Area
NW 24th Ave (NW Nicolai St – NW Vaughn St)	Freight District Street	Local Service Truck Street	Proposed removal of Freight District in the Area
NW 25th Ave (NW Roosevelt St – NW Vaughn St)	N/A	Local Service Truck Street	Proposed removal of Freight District in the Area, new segment
NW 26th Ave (NW Nicolai St – NW Vaughn St)	Freight District Street	Local Service Truck Street	Proposed removal of Freight District in the Area
NW 27th Ave NW Nicolai St – NW Vaughn St)	Freight District Street	Local Service Truck Street	Proposed removal of Freight District in the Area

Recommended Updates to Emergency Response Street Classifications

NAME	CURRENT	UPDATE	RATIONALE
NW York St (NW 23rd Ave – NW 24th Ave)	Major Emergency Response	Minor Emergency Response	Supports recommendations in the Montgomery Park Area Transportation Plan
NW Roosevelt St (NW 24th Ave – NW 26th Ave)	N/A	Minor Emergency Response	New street segment, intended to serve shorter local leg of emergency response trips
NW Wilson St (NW 23rd Ave – NW 24th Ave)	Major Emergency Response	Minor Emergency Response	Supports recommendations in the Montgomery Park Area Transportation Plan
NW Wilson St (NW 20th Ave – NW 21st Ave)	Minor Emergency Response	Major Emergency Response	Completes emergency response network, shifts major response from NW 21st Ave to NW 18th and NW 19th Aves under US-30
NW Vaughn St (NW 18th Ave – NW 20th Ave)	Minor Emergency Response	Major Emergency Response	Completes emergency response network, shifts major response from NW 21st Ave to NW 18th and NW 19th Aves under US-30
NW Thurman St (NW 20th Ave – NW 21st Ave)	Minor Emergency Response	Major Emergency Response	Completes emergency response network; Thurman now connects under US-30
NW 18th Ave (NW Vaughn St – NW Thurman St)	Minor Emergency Response	Major Emergency Response	Completes emergency response network, shifts major response from NW 21st Ave to NW 18th and NW 19th Aves under US-30
NW 19th Ave (NW Vaughn St – NW Thurman St)	Minor Emergency Response	Major Emergency Response	Completes emergency response network, shifts major response from NW 21st Ave to NW 18th and NW 19th Aves under US-30
NW 20th Ave (NW Wilson St – NW Vaughn St)	Minor Emergency Response	Major Emergency Response	Completes emergency response network, shifts major response from NW 21st Ave to NW 18th and NW 19th Aves under US-30
NW 21st Ave (NW Wilson St – NW Thurman St)	Major Emergency Response	Minor Emergency Response	Reflects actual conditions; street does not connect across US-30
NW 22nd Ave (NW Nicolai St – NW Wilson St)	Minor Emergency Response	Secondary Emergency Response	Completes major emergency response network; offers secondary north-south route
NW 24th Ave (NW Nicolai St – NW Vaughn St)	Secondary Emergency Response	Minor Emergency Response	Reflects recommendations in the Montgomery Park Area Transportation Plan; secondary route shifted to NW 25th Avenue or equivalent to centralize secondary alternative route through area
NW 25th Ave (NW Roosevelt St – NW Wilson St)	N/A	Secondary Emergency Response	New street segment; offers secondary emergency response access into Montgomery Park Area on loading/vehicle access priority street
NW 25th Ave or equivalent (NW Nicolai St – NW Roosevelt St)	N/A	Secondary Emergency Response	When north-south connection between NW 24th and NW 26th avenues is constructed, it should prioritize secondary emergency response through the area
NW 26th Ave (NW Vaughn St – NW Thurman St)	Major Emergency Response	Minor Emergency Response	Secondary emergency response offered on NW 25th Avenue, where access for trucks is prioritized
NW 27th Ave (NW Vaughn St – NW Thurman St)	Major Emergency Response	Minor Emergency Response	Reflects current conditions; street does not connect for vehicles

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Montgomery Park Area Plan

Recommended Draft

Volume 4: Amendments to Guild's Lake Industrial Sanctuary Plan and Northwest District Plan

October 2024

THE BUREAU OF PLANNING & SUSTAINABILITY

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The Montgomery Park to Hollywood Transit and Land Use Development Strategy was funded in-part by a grant from the Federal Transportation Administration (FTA) in partnership with Metro.

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Section 2. Amendments to Northwest District Plan 21

How to read this document:

This document includes recommended amendments to the Guild's Lake Industrial Sanctuary Plan (2001) and Northwest District Plan (2003) that are a result of the recommended Montgomery Park Area Plan (MPAP). This report and the amendments include an overview context statement for each plan, as well as specific text and map amendments for each plan.

The context statement, and specific text and/or map amendments are shown on odd numbered pages. Where amendments to the text of a plan is proposed, the language to be **added** is underlined and the language to be **deleted** is shown in ~~strikethrough.~~

Commentary that explains the purpose and/or intent of the amendment is shown on the preceding even-numbered page.

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Commentary

Section 1: Amendments to the Guild's Lake Industrial Sanctuary Plan

The "Context and Intent" statement describes why the MPAP includes amendments to the Guild's Lake Industrial Sanctuary plan. The statement provides context and discusses relevant policy considerations for the proposed amendments.

Replaced by Amendment

Section 1: Guild's Lake Industrial Sanctuary Plan - Amendments

Context and Intent

The MPAP geography covers the area bounded by NW Nicolai Street to the north, NW Vaughn Street to the south, and Highway 30 to the east. Shifting work trends and large vacant or underutilized sites present an opportunity to re-envision much of the area as a more intensely developed mixed-use and transit-oriented district close to the Central City with an emphasis on the development of employment space and affordable housing within the plan area. New housing and jobs near the Central City and the thriving Northwest District connected by a high-quality transit investment supports key City policies around employment, equity, housing needs, and climate resilience.

The Guild's Lake Industrial Sanctuary Plan (GLIS), adopted in 2001, included a directive to add a transition subdistrict with the adoption of the Northwest District Plan in 2003. The subdistrict amendment adopted with the Northwest District Plan resulted in Subdistrict B of the Guild's Lake Industrial Sanctuary Plan District in the City of Portland zoning code. This subdistrict added use-specific regulations and development standards with the goal of incentivizing development of general employment type uses and limiting conflicts between residential and industrial uses. The 2035 Comprehensive Plan (2018) update further emphasized the employment and transition focus of the area by amending the Comprehensive Plan Map designations from "Industrial Sanctuary" to "Mixed-Employment" on many properties in the MPAP.

The MPAP is a further evolution and refinement of the employment and transition focus of the area. By removing this area from the GLIS plan boundary, the MPAP can employ a modern set of regulatory tools to manage conflicts between the industrial uses in GLIS and the dense mix of uses to the south. The MPAP also allows for the area to meet a broader set of Comprehensive Plan goals related to employment, housing, transit-oriented development, and equitable development. The MPAP retains an employment-only buffer along the southern side of NW Nicolai Street. The Vaughn-Nicolai Plan District in the zoning code includes setback and noise mitigation provisions, non-residential use requirements and affordable commercial space requirements that serve to create a more gradual and active transition from the dense, mixed-use, residential Northwest District and the industrial and employment uses in Guild's Lake.

The MPAP amends the GLIS plan boundary to remove areas where the current GLIS boundary overlaps with the proposed MPAP plan area, but does not amend GLIS policies or objectives. Specific amendments to the GLIS plan listed by page number can be found on the following pages.

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Commentary

Summary of Guild's Lake Industrial Sanctuary Plan Amendments

This table summarizes the recommended amendments to the Guild's Lake Industrial Sanctuary Plan.

Replaced by Amendment

Amendments to the Guild's Lake Industrial Sanctuary Plan

The Montgomery Park Area Plan (MPAP), adopted on [to be determined], amended elements of the Guild's Lake Industrial Sanctuary Plan. These amendments consist primarily of map changes, removing the portions of the MPAP plan area previously within the Guild's Lake Industrial Sanctuary plan area. In addition to the map changes, the MPAP removes text references to the amended geographies where necessary.

Pg. #	Section Title	Commentary
2	Introduction	Map 1: Guild's Lake Industrial Sanctuary. Amends the plan boundary of the GLIS to align with NW Nicolai Street, removing all overlaps with the MPAP plan area.
3	Introduction	A footnote is added to the text description of GLIS to clarify that Map 1 was amended with adoption of the MPAP.
12	Scope of the Guild's Lake Industrial Sanctuary Plan	Removes reference to Vaughn Street as the southern boundary of the GLIS to reflect adoption of the zone changes associated with adoption of the MPAP.

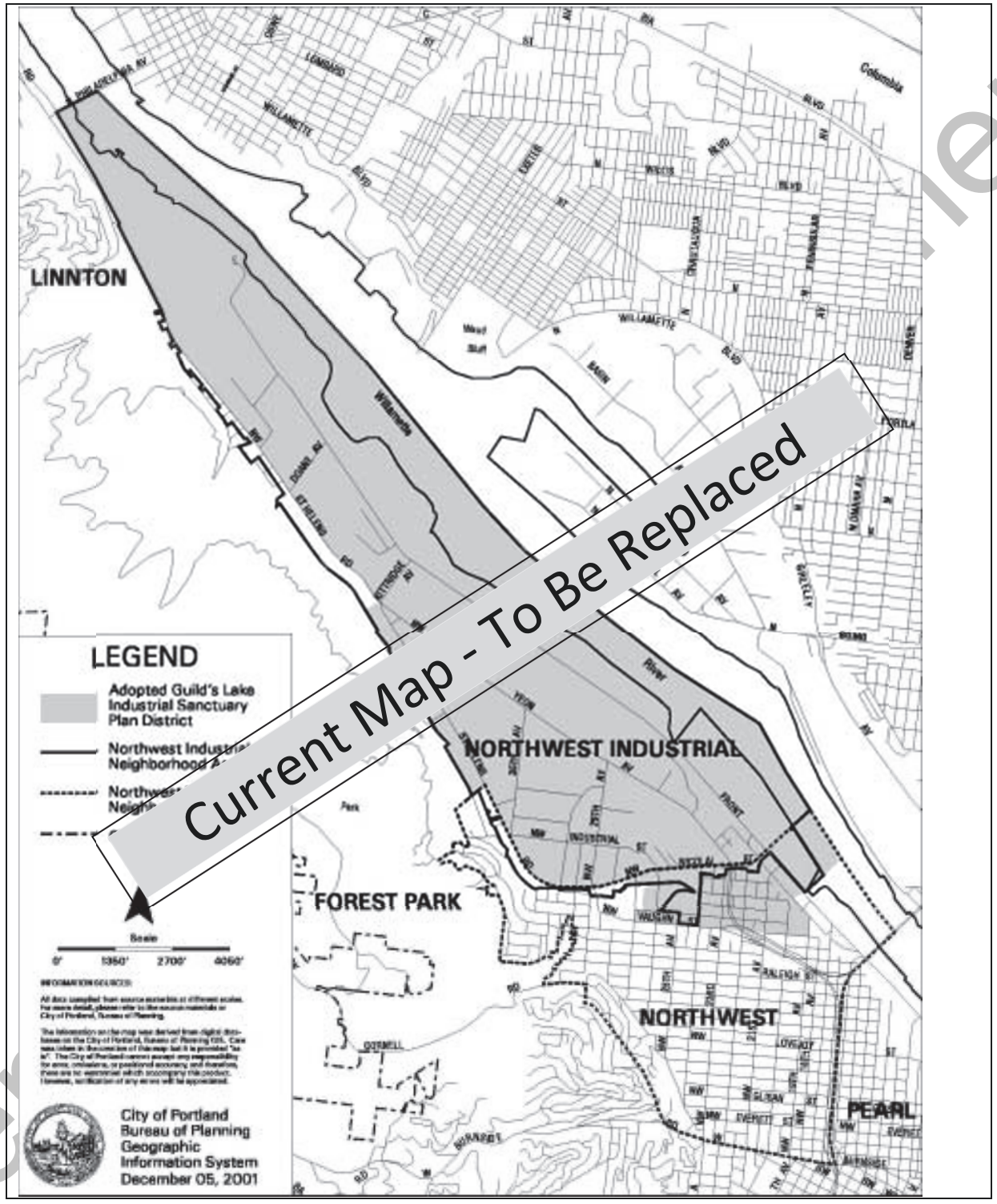
Replaced by Amendment

Commentary

Map 1: Guild's Lake Industrial Sanctuary, Page 2.
Deletes the current Map 1 to reflect amended plan boundary.

Replaced by Amendment

Map 1: Guild's Lake Industrial Sanctuary, Page 2



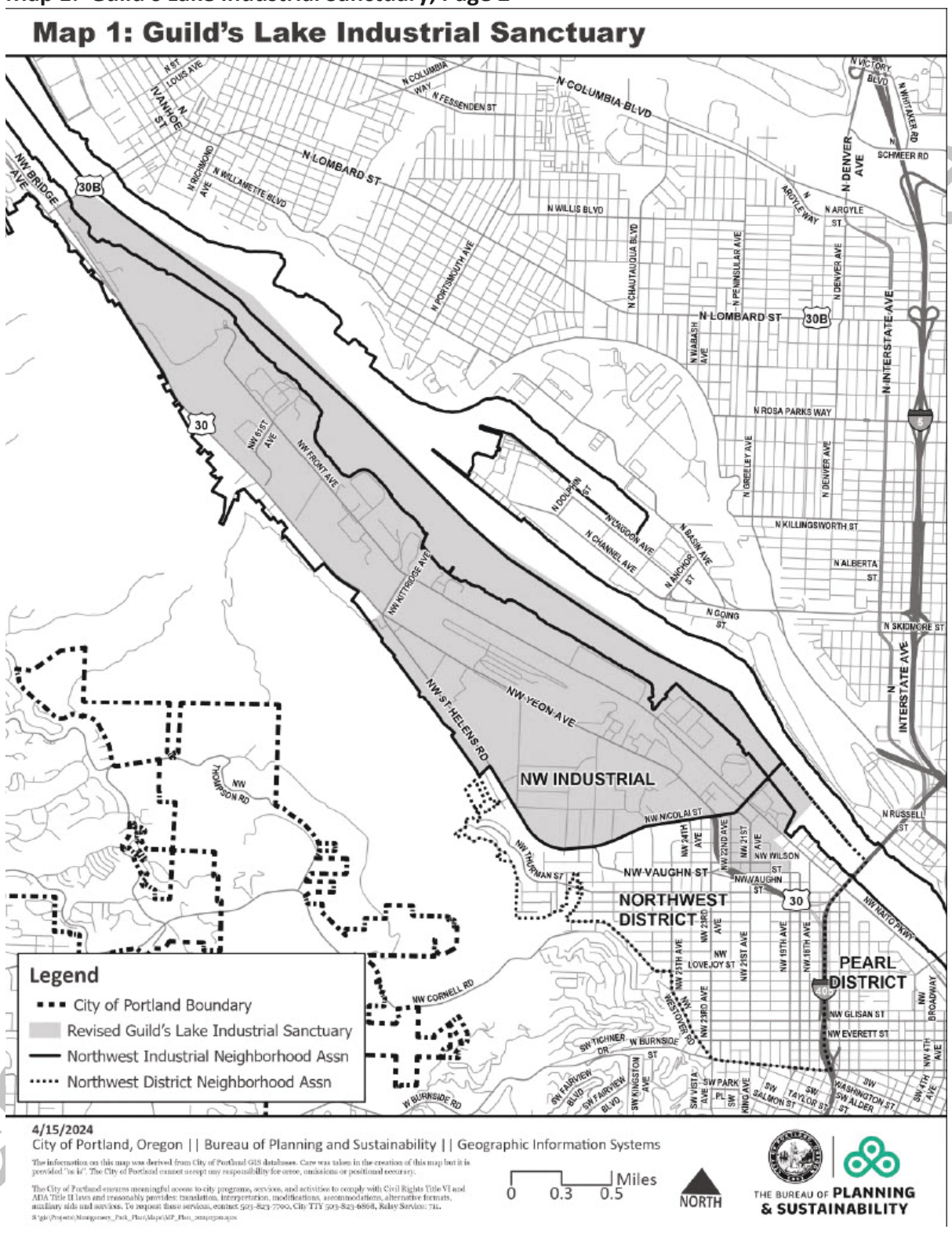
Recommended

Commentary

Map 1: Guild's Lake Industrial Sanctuary, Page 2.
Replace Map 1. Amends the plan boundary of the Guild's Lake Industrial Sanctuary Plan boundary to align with NW Nicolai Street, removing all overlaps with the MPAP plan area.

Replaced by Amendment

Map 1: Guild's Lake Industrial Sanctuary, Page 2



Revised Document

Commentary

Guild's Lake Industrial Sanctuary Introduction, Page 3.
Amendment adds footnote #2 specifying that Map 1: Guild's Lake Plan District was amended as part of the MPAP.

Replaced by Amendment

Guild's Lake Industrial Sanctuary Plan
Introduction, Pg. 3

The Guild's Lake Industrial Sanctuary (GLIS) is located between Forest Park in the West Hills and the Willamette River. It includes portions of two Portland neighborhood associations: most of the Northwest Industrial Neighborhood Association (NINA), and a part of the Northwest District Association (NWDA). The GLIS contains the majority of the industrially zoned land in Northwest Portland and is one of the few remaining large urban industrial districts in the United States.[1] The GLIS boundary is shown on Map 1, opposite page.[2]

The Guild's Lake Industrial Sanctuary area forms an important part of Portland's overall "Industrial Sanctuary," where land is preserved for long-term industrial use. Manufacturing, distribution and other industrial activities have occurred in the GLIS since the late nineteenth century. Over many decades, public and private investments in infrastructure such as marine, rail and highway facilities, as well as investments in industrial physical plants, have made it one of the premier heavy industrial districts in the Pacific Northwest. Industrial businesses continue to thrive in the district, providing well-paying jobs and contributing to the region's economy. However, because of its proximity to mixed-use and residential neighborhoods and the central city, the Guild's Lake Industrial Sanctuary is particularly vulnerable to pressure for redevelopment to nonindustrial uses.

Importance of Industry and Portland's Industrial Sanctuary Policy

Industrial activity is critical to the economy of the city and the region. Industry provides direct economic benefits, such as jobs and local tax revenues generated by industrial firms. It also has a number of indirect and induced benefits as well, known as "multiplier effects." These include jobs created to support industrial activity, such as insurance and financial services, and the complex cycles of spending and re-spending created by linkages between firms and industries. Multiplier effects result in the creation of jobs, income and wealth beyond that which is created by a firm or industry viewed in isolation. Industrial activity such as manufacturing and shipping often has greater economic multiplier effects than other sectors of the economy, such as retail trade or government services. As such, industry is vitally important to the city's economic health.

Industrial businesses are generally more land-intensive compared to other businesses, such as retail sales or business services. Industrial land uses can also be hard to site because they are often associated with impacts such as noise, odors and 24-hour activity that can negatively affect nearby nonindustrial areas. Land suitable for industrial uses is thus a valuable and finite resource within the city. A recent study indicates a region-wide shortage of readily developable industrial land that could constrain job growth within seven to ten years.[3] Any loss of industrial land therefore represents the loss of an irreplaceable component of the city's economy.

[1] "Urban" refers to the fact that this industrial area is located relatively close to Portland's urban core and adjacent to high-density residential and mixed-use districts.

[2] Amended with adopted Montgomery Park Area Plan, 2024

[3] Otak, Inc. et al, *Regional Industrial Land Study for the Portland-Vancouver Metropolitan Area*, December 1999

Replaced by Amendment

Commentary

Scope of the Guild's Lake Industrial Sanctuary Plan, Page 12
Amendment removes text reference to Vaughn Street as the southern boundary of the Guild's Lake Industrial Sanctuary to reflect the amended plan area and adoption of the zone changes approved as part of the MPAP.

Replaced by Amendment

Guild's Lake Industrial Sanctuary Plan
Scope of the Guild's Lake Industrial Sanctuary Plan, Pg. 12

Scope of the *Guild's Lake Industrial Sanctuary Plan*

This plan pertains to the area designated as the Guild's Lake Industrial Sanctuary plan district (see Map 1). The boundary of the GLIS plan district reflects the Northwest Industrial Sanctuary Working Group's (SWG) agreement regarding the boundaries for industrial lands in Northwest Portland. ~~It includes most of the Northwest Industrial Neighborhood Association's area and a portion of the Northwest District Association between NW Nicolai and NW Vaughn Streets~~. ~~The GLIS's southern boundary (essentially NW Vaughn Street and the US 30 ramp structure) provides the so-called "steel curtain barrier," which separates long-term industrial land from current and future nonindustrial land.~~

-

City Council adoption of the *GLIS Plan* with its special plan district regulations is a major step in defining the relationship between industrial and nonindustrial lands in Northwest Portland. The Bureau of Planning is also working with the community to transition the industrially zoned land south of NW Vaughn Street into other employment, commercial, residential or mixed-use zoning as part of the *Northwest Area Plan* process, which is scheduled for adoption in early 2003.

Replaced by Amendment

Commentary

Section 2: Amendments to the Northwest District Plan

The "Context and Intent" section clarifies why amendments to the Northwest District Plan are needed and which sections of the Northwest District Plan are recommended to be amended with adoption of the MPAP.

Replaced by Amendment

Section 2: Northwest District Plan Amendments

Context and Intent

The MPAP geography covers the area bounded by NW Nicolai Street to the north, NW Vaughn Street to the south, and Highway 30 to the east. Shifting work trends and large vacant or underutilized sites present an opportunity to re-envision much of the area as a more intensely developed mixed-use and transit-oriented district close to the Central City with an emphasis on the development of employment space and affordable housing within the plan area. New housing and jobs near the Central City and the thriving Northwest District connected by a high-quality transit investment supports key City policies around employment, equity, housing needs, and climate resilience.

The Northwest District Plan area currently includes portions of the recommended Montgomery Park Area Plan geography, including the historic Montgomery Park building site. To avoid overlap and conflicts between the two plans, the MPAP proposes amendments to the Northwest District Plan removing the areas of overlap from the Northwest District Plan boundary. The Northwest District plan area includes urban character areas that will no longer to apply to properties North of the Vaughn/Wardway corridor. The MPAP proposes a new urban design concept and character statement that will apply to the portions of the MPAP formerly within the Northwest District Plan boundaries.

The MPAP amends the Northwest District Plan such that the Northwest District Plan's northern boundary is the Vaughn/Wardway corridor. The overlapping Northwest District Plan subareas and subdistricts are clipped such that the existing subareas and subdistrict guidance and regulations applies only to properties located south of the Vaughn/Wardway corridor. Where necessary, the MPAP amends conflicting text references to areas currently within the Northwest District Plan area to be removed with the adoption of the MPAP. No other changes to Northwest District Plan policies, guidelines, or plan objectives are proposed.

Replaced by Amendment

Commentary

Summary of Northwest District Plan Amendments

This table summarizes the recommended amendments to the Northwest District Plan and will be included in the amended Northwest District Plan.

Replaced by Amendment

Summary of Northwest District Plan Amendments

The Montgomery Park Area Plan (MPAP), adopted on ___, amended elements of the Northwest District Plan in order to remove potential conflicts between the two plans. These amendments consist primarily of map changes, removing the portions of the MPAP plan area previously within the Northwest District plan area. In addition to the map changes, the MPAP removes text references to the amended geographies and revises text related to Northwest District plan subareas and subdistricts to be amended with adoption of the MPAP where necessary.

Pg. #	Section Title	Commentary
A-1	Boundaries	An amendment to the Northwest District Plan Boundary text removing the portions of the Northwest District also within the Guild's Lake Industrial Sanctuary Plan from the plan boundary. This edit is necessary because adoption of the MPAP removes all overlap between the MPAP and the GLIS/NW District plan geographies.
A-2	Boundaries	An amendment to Map 1: Northwest Planning Boundaries. Amends the northern boundary of the Northwest District Plan to align with the Vaughn/Wardway corridor, removing the portion of the Northwest District plan area that overlaps with the MPAP plan area.
A-4	Boundaries	An amendment to Map 3: NWDA and Adopted Plan Boundaries. There are three amendments to this map: • Removes the "portion of the NWDA within the GLIS" map layer from the map. • Amends the GLIS plan boundary to remove the existing portion of the GLIS that overlaps with the MPAP plan area. • Adds a new legend item showing the MPAP plan area.
C-3	Urban Design Concept Elements	Amends the "Vaughn Corridor" description to remove a reference to "the industrial uses of the Guild's Lake Industrial Sanctuary to the North" of Vaughn Street, as the referenced area will now be part of the MPAP plan area.
C-6	Urban Design Concept Elements	Amends the "Vaughn Transitional Corridor" description to remove references to Vaughn Street's role as "the seam between the GLIS and the residential and mixed-use neighborhood to the south." The amendment clarifies that the MPAP will create a new mixed-use area to the North of Vaughn Street. A footnote is added noting that this section was amended as part of the MPAP adoption.
C-15	Northwest District Desired Characteristics and Traditions	An amendment to Map 4: Urban Character Areas. This amendment redraws Subarea E (Vaughn Corridor) on the map so that its Northern boundary follows the Vaughn/Wardway corridor, removing the MPAP plan area from the Northwest District.
C-23	Urban Character Area E: Vaughn Corridor	Amends the description of the Vaughn Corridor to remove references to Vaughn Street as "the interface between the industrial operations of the industrial area and the residential and mixed-use area to the South." The amendment clarifies the intent for a new mixed-use district directly to the North of Vaughn Street.
E-3	Relationship to Land Use Review	Map 5: Northwest District Plan Area and Subarea Boundaries. Amends the boundary of Subarea C to remove the area within the MPAP plan area, aligning the northern border of Subarea C with the Vaughn/Wardway corridor.
E-4	Relationship to Land Use Review	Map 6: Main Streets and Streetcar Corridor. Amends the Northwest District Plan boundary to remove the existing area within the MPAP plan area, aligning the northern boundary of the Northwest District plan with the Vaughn/Wardway corridor.
E-69	Policy 15: Thurman-Vaughn Subarea	Amends paragraph describing Vaughn Street to include references to the MPAP. The amendment removes the existing statement of recognition that Vaughn Street acts as a boundary between the mixed-use area south of Vaughn and the industrial area north of Vaughn to reflect the expansion of the existing mixed-use area to north of Vaughn Street as part of the adoption of the MPAP.

Replaced by Amendment

Commentary

Boundaries, Page A-1

An amendment to the Northwest District Plan Boundary text removing the portions of the Northwest District also within the Guild's Lake Industrial Sanctuary Plan from the plan boundary. This edit is necessary because adoption of the MPAP removes all overlap between the MPAP and the GLIS/Northwest District plan geographies.

Replaced by Amendment

Northwest District Plan
Boundaries, Page A-1

Boundaries

Three major boundary areas are referenced in this report. These boundaries are shown on Map 1 and explained below. Area neighborhood association boundaries are shown on Map 2. Map 3 shows the relationship between the Northwest District Neighborhood Association boundary and relevant adopted plan boundaries.

The **Northwest Study Area** is generally bounded on the south by West Burnside Street, on the north by NW Vaughn Street and NW St. Helens Road, on the east by the I-405 freeway and on the west by the Hillside neighborhood and Forest Park. The study area is the broadest boundary used in the planning process and much of the background research and public outreach for the plan encompassed this larger area. Portions of the study area are covered by other adopted plans and are governed by the adopted *Northwest District Plan*. Proposals arising out of the Northwest District Planning process for these areas (including the *Guild's Lake Industrial Sanctuary Plan* area and the *Central City Plan* area) are affected through amendments to those plans.

The **Northwest District Plan** boundary defines the area where the vision, policies, and objectives of this plan apply. It generally corresponds to the Northwest District neighborhood, except for those portions are within ~~the Guild's Lake Industrial Sanctuary (north of NW Vaughn Street) and~~ the Central City (west of I-405 and along West Burnside Street) plan area~~s~~. The *Northwest District Plan* proposes some changes in these other areas, but they are excluded from the "Northwest District Plan Area" in order to avoid confusion and potential conflict between overlapping policies and regulations.

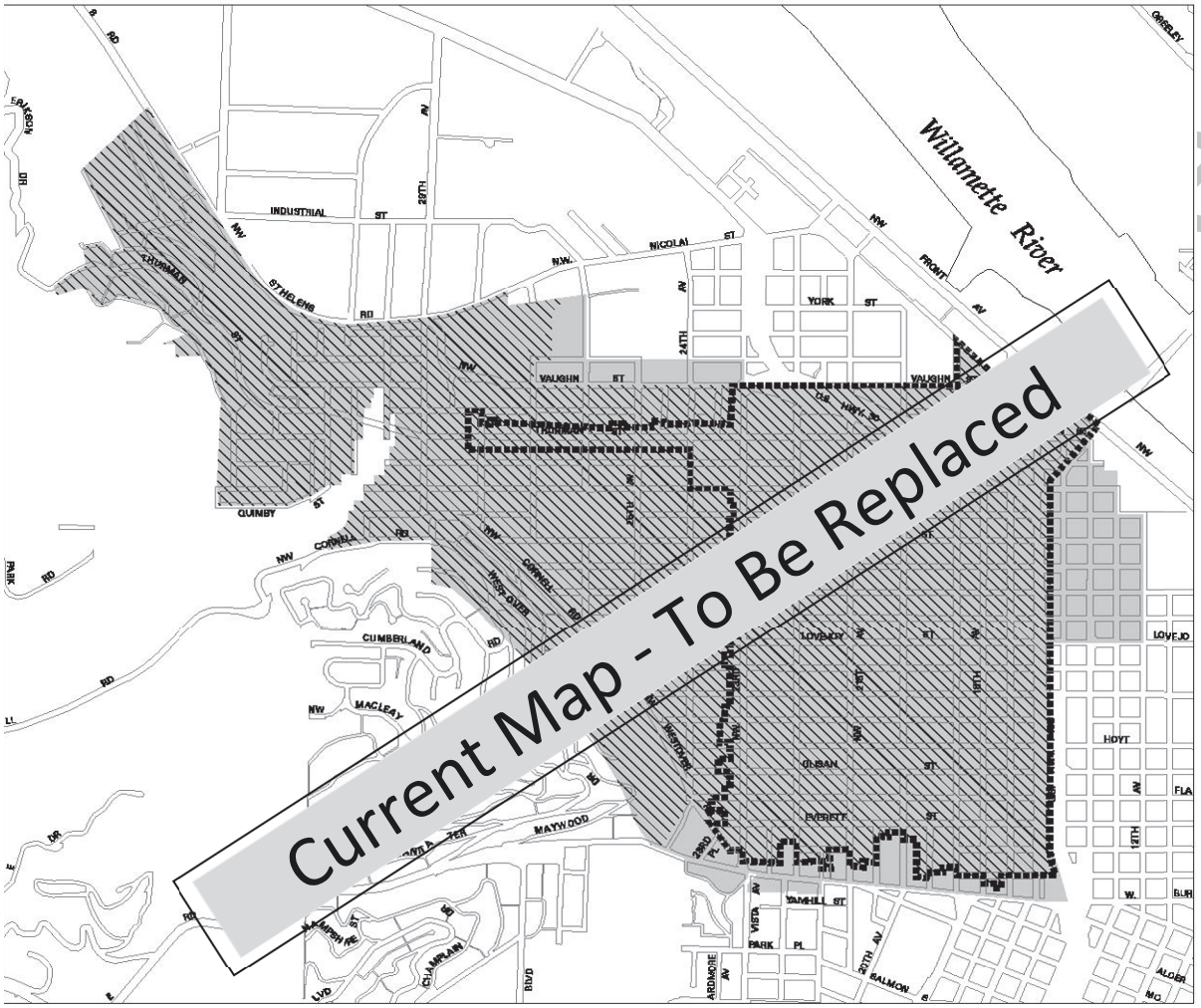
Replaced by Amendment

Commentary

Map 1, Northwest Planning Boundaries, Page A-2.
Deletes the existing Map 1.

Replaced by Amendment

Map 1, Northwest Planning Boundaries, Page A-2



Northwest Planning Boundaries

N

Scale
0' 700' 1400' 2100'

City of Portland
Bureau of Planning
Geographic
Information System
April 11, 2003

LEGEND

- Northwest Study Area
- Northwest District Plan Boundary
- Recommended Northwest Plan District Boundary

INFORMATION SOURCES:

Taxlots: Originally produced by Oregon Dept. of Revenue. Modified and updated by Multnomah County Assessment & Taxation and Portland Dept. of Transportation. Updated through Jan. 2003. Accuracy - +/- .1 feet.

All data compiled from source materials at different scales. For more detail, please refer to the source materials or City of Portland, Bureau of Planning.

The information on the map was derived from digital databases on the City of Portland, Bureau of Planning GIS. Care was taken in the creation of this map but it is provided "as is". The City of Portland cannot accept any responsibility for error, omissions, or positional accuracy, and therefore, there are no warranties which accompany this product. However, notification of any errors will be appreciated.

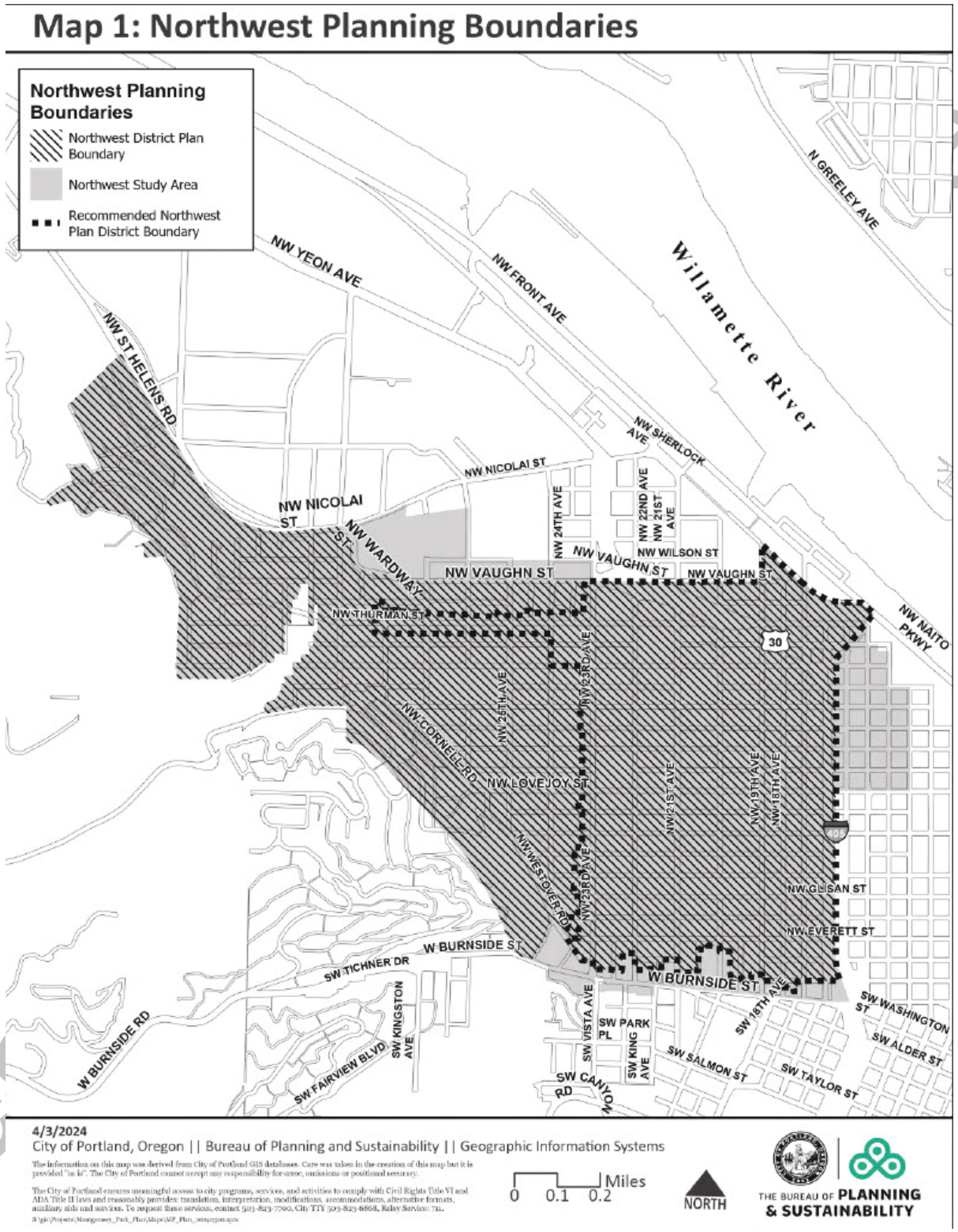
Re ent

Commentary

Map 1, Northwest Planning Boundaries, Page A-2.
Replaces Map 1. Amends the northern boundary of the Northwest District Plan to align with the Vaughn/Wardway corridor, removing the portion of the Northwest District Plan area that overlaps with the MPAP plan area.

Replaced by Amendment

Map 1, Northwest Planning Boundaries, Page A-2



Redacted

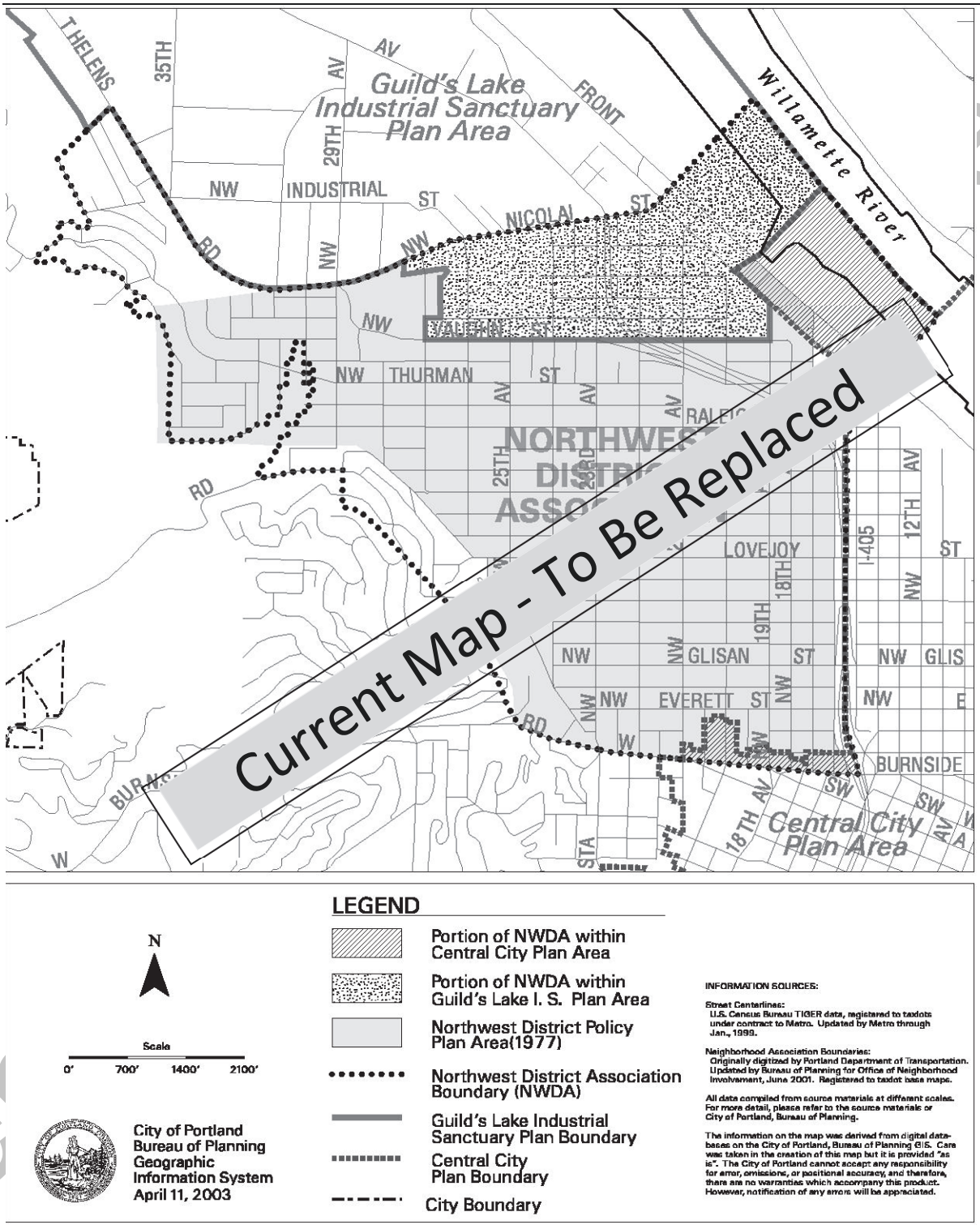
Commentary

Map 3: NWDA and Adopted Plan Boundaries, Page A-4

Deletes existing Map 3.

Replaced by Amendment

Map 3: NWDA and Adopted Plan Boundaries, Page A-4



Re

Commentary

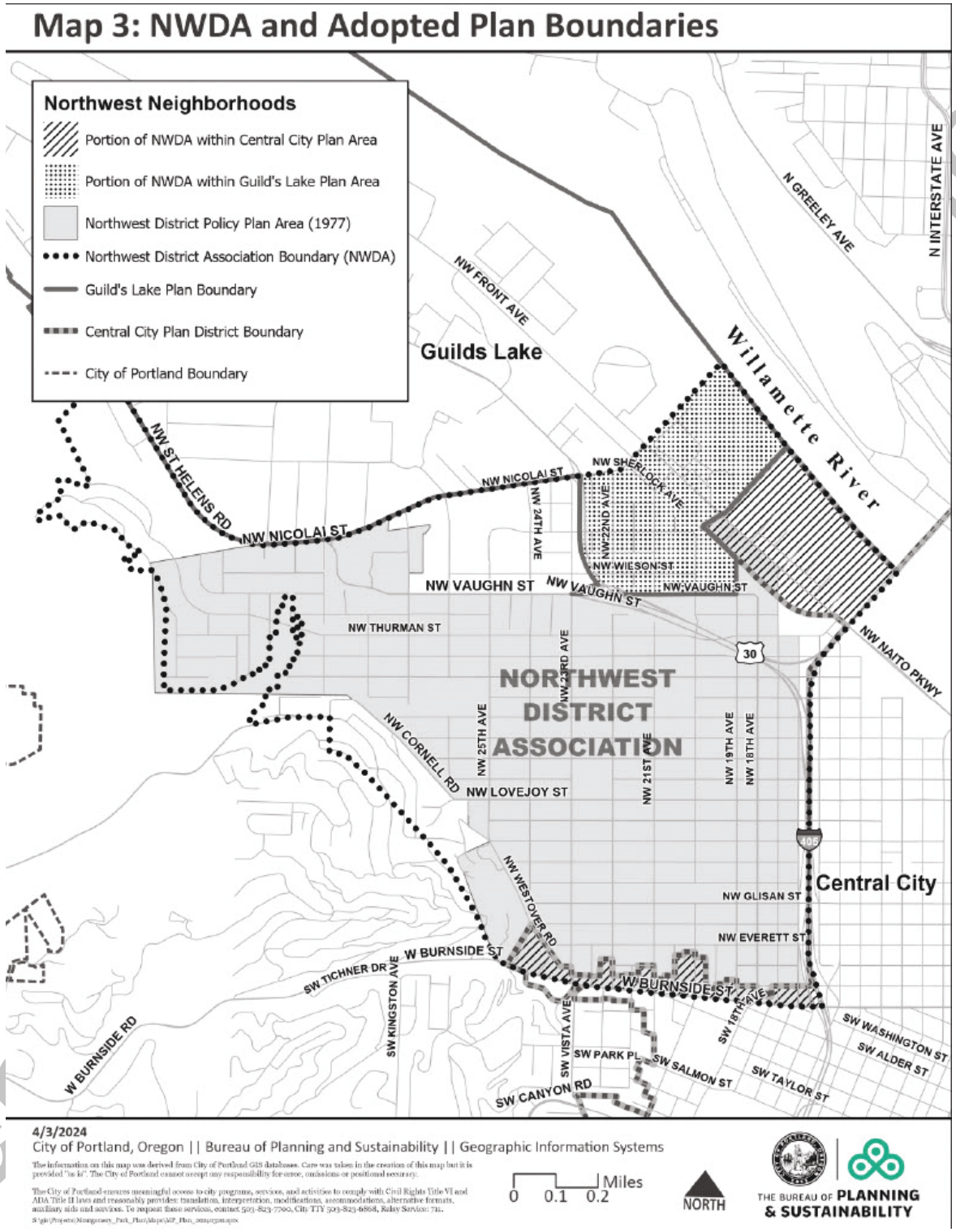
Map 3: NWDA and Adopted Plan Boundaries, Page A-4

Replace Map 3: NWDA and Adopted Plan Boundaries. Amends Map 3 to accomplish the following:

- Removes the "portion of the NWDA within the Guild's Lake Industrial Sanctuary" map layer from the map.
- Amends the Guild's Lake Industrial Sanctuary plan boundary to remove the existing portion of the Guild's Lake Industrial Sanctuary that overlaps with the MPAP plan area.
- Adds a new legend item showing the MPAP plan area.

Replaced by Amendment

Map 3: NWDA and Adopted Plan Boundaries, Page A-4



Re

Commentary

Urban Design Concept Elements, Page C-3

Amends the "Vaughn Corridor" description to remove a reference to "the industrial uses of the Guild's Lake Industrial Sanctuary to the North" of Vaughn Street, as the referenced area will now be part of the MPAP plan area.

Replaced by Amendment

Northwest District Plan
Urban Design Concept Elements, Page C-3

The Urban Design Concept identifies community features that are to be preserved and enhanced, as well as new improvements and development patterns that will contribute to realizing the community's vision for the next 20 years. Key elements of the Urban Design Concept, which the *Northwest District Plan* will help implement and support, are as follows:

- **Established Residential Areas**: Preservation of the character of the community's historic residential core, including the Alphabet Historic District. Future growth is primarily directed to mixed-use areas, rather than to established residential areas.
- **Transition Subarea**: Providing for future growth that builds on the character and assets of the Northwest District by allowing parts of the district to transition from existing industrial uses to redevelopment as vibrant mixed-use areas.
- **Main Streets**: Enhancement of the role of the area's main streets (particularly NW 21st and NW 23rd Avenues, as well as West Burnside Street) as the pedestrian-oriented, commercial "backbones" of the Northwest District.
- **Vaughn Corridor**: Improvement of this corridor as a seam between the residential and mixed-use parts of the Northwest District and ~~the industrial uses of the Guild's Lake Industrial Sanctuary~~ the mixed-use and industrial areas to the north.

Replaced by Amendment

Commentary

Vaughn Transitional Corridor, Page C-6

Amends the "Vaughn Corridor" description to remove a reference to "the industrial uses of the Guild's Lake Industrial Sanctuary to the North" of Vaughn Street, as the referenced area will now be part of the MPAP plan area.

Replaced by Amendment

Northwest District Plan
Vaughn Transitional Corridor, Page C-6

NW Vaughn Street is a seam that both separates and connects the ~~Guild's Lake Industrial Sanctuary and the residential and~~ mixed-use neighborhood to the south with the emerging mixed-use area to the north~~. City policies have contributed to its serving as a stable boundary for the Industrial Sanctuary. New development has been oriented to employment and commercial uses that have limited negative impacts on nearby residences and industrial operations.~~ The north side of NW Vaughn Street is characterized ~~primarily~~ by uses that are compatible or synergistic with industrial businesses in a mixed use setting. Development on both sides of NW Vaughn Street has contributed to an attractive, unified streetscape.

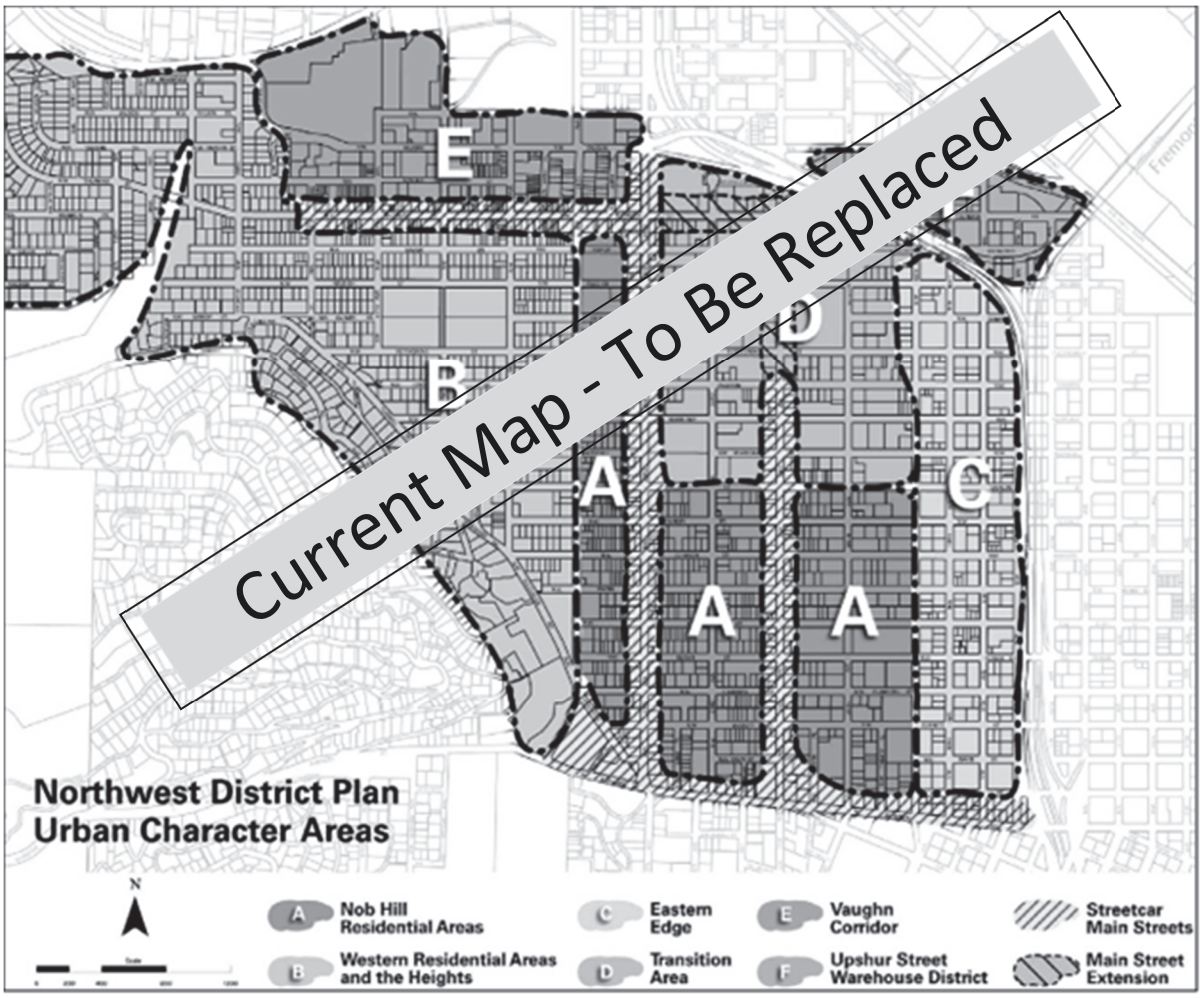
Replaced by Amendment

Commentary

Map 4: Urban Character Areas, Page C-15
Deletes Current Map 4.

Replaced by Amendment

Map 4: Urban Character Area, Page C-15



Replaced

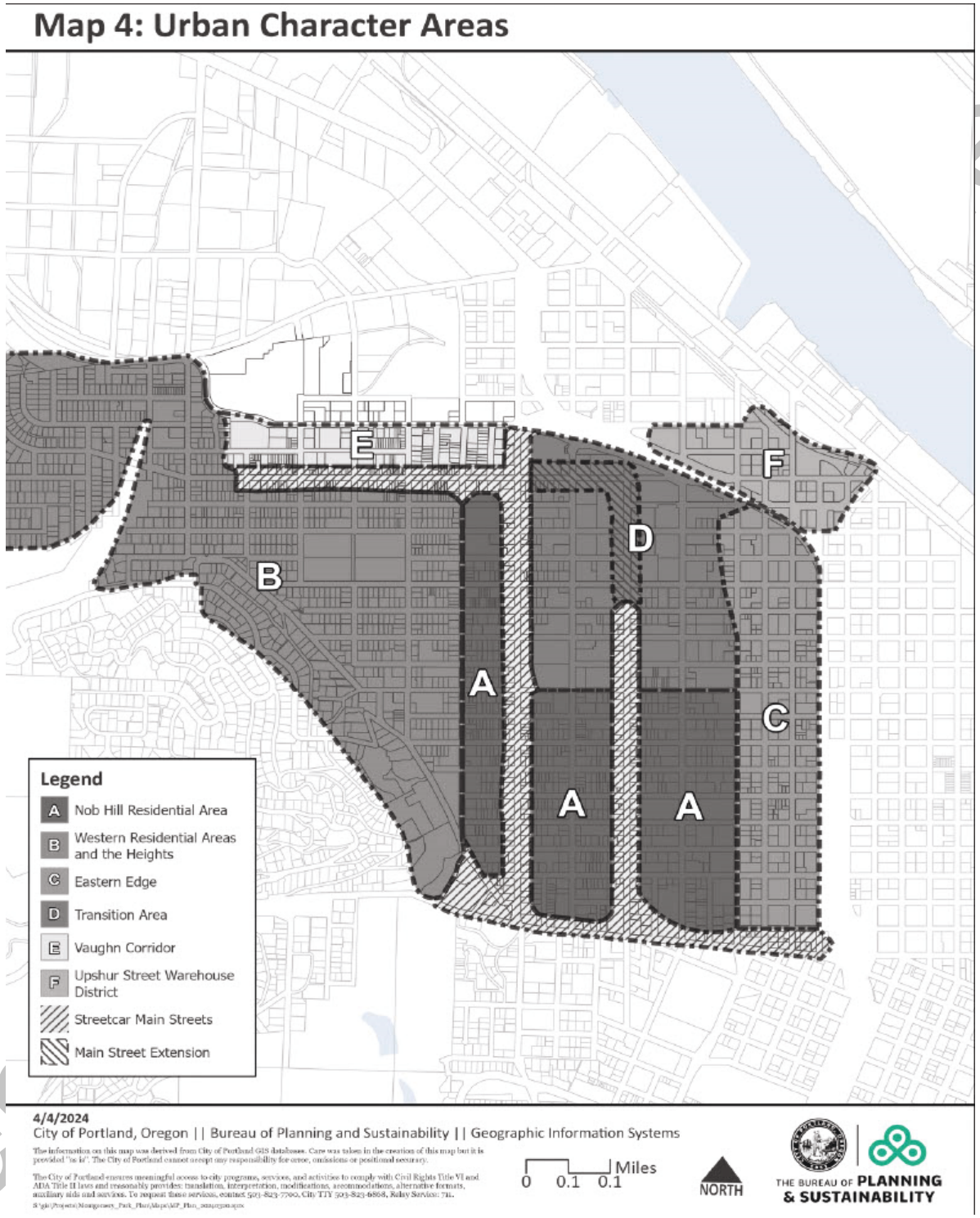
Commentary

Map 4 Urban Character Areas, Page C-15

Replace Map 4: Urban Character Areas. Amends Map 4 to redraw Subarea E (Vaughn Corridor) on the map so that its Northern boundary follows the Vaughn/Wardway corridor, removing the MPAP plan area from the Northwest District.

Replaced by Amendment

Map 4: Urban Character Area, Page C-15



Re ent

Commentary

Urban Character Area E: Vaughn Corridor, Page C-23

Amends the description of the Vaughn Corridor to remove references to Vaughn Street as "the interface between the industrial operations of the industrial area and the residential and mixed-use area to the South." The amendment clarifies the intent for a new mixed-use district directly to the North of Vaughn Street

Replaced by Amendment

Northwest District Plan
Urban Character Area E: Vaughn Corridor, Page C-23

Urban Character Area E: Vaughn Corridor

The Vaughn Corridor, like the Eastern Edge, is an "edge" area characterized by a great variety of architecture and development patterns. NW Vaughn Street is a busy traffic arterial that serves both the Northwest District's mixed-use areas and the Guild's Lake Industrial area. It also serves as the interface between ~~the industrial operations of the industrial area and~~ the residential and mixed-use neighborhood to the south and the emerging mixed-use and employment area to the north. The corridor's architectural diversity reflects the historically dynamic, changing relationship between industrial, employment, and residential uses in the area.

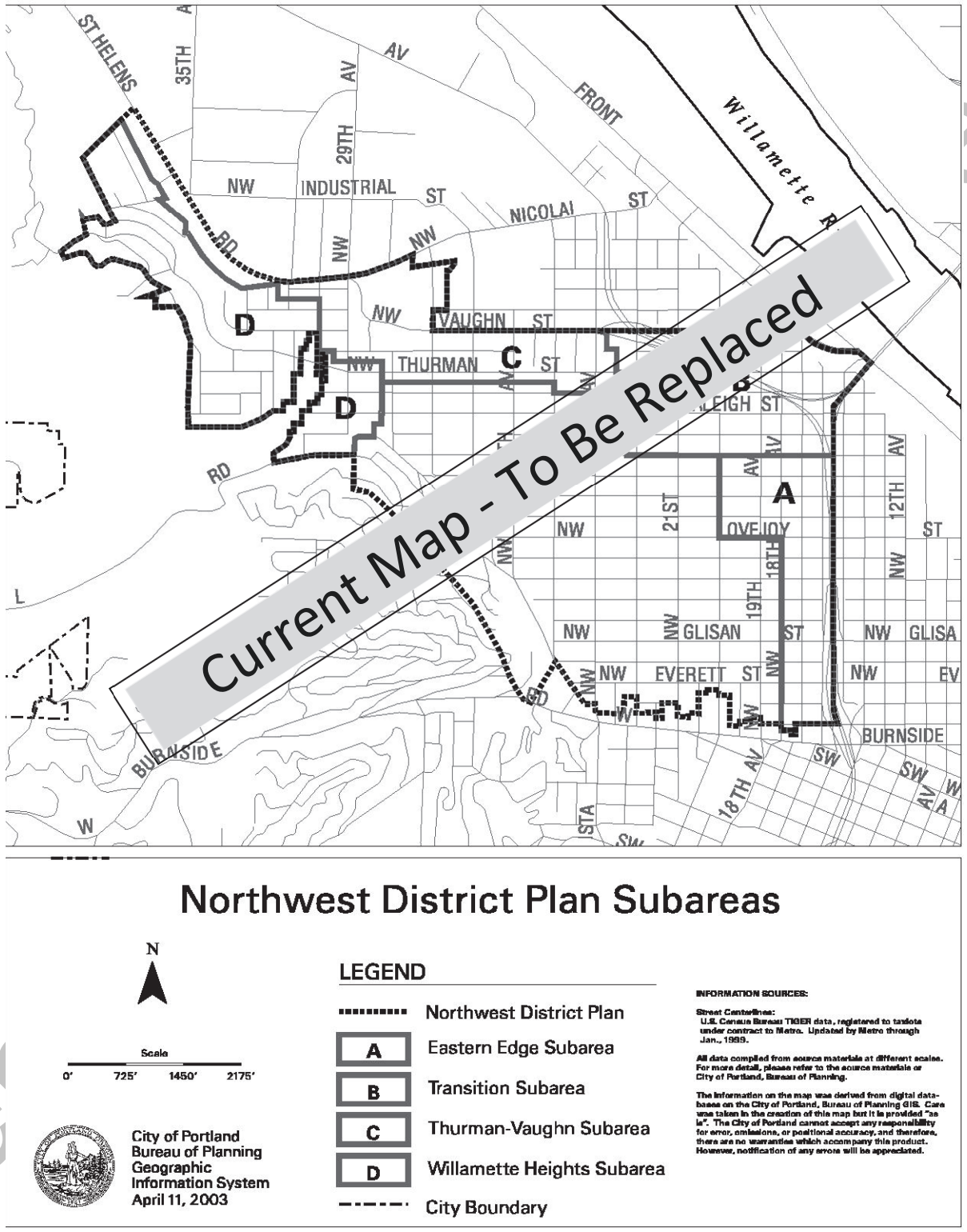
Replaced by Amendment

Commentary

Map 5: Northwest District Plan Area and Subarea Boundaries.
Deletes existing Map 5.

Replaced by Amendment

Map 5: Northwest District Plan Area and Subarea Boundaries, Page E-3

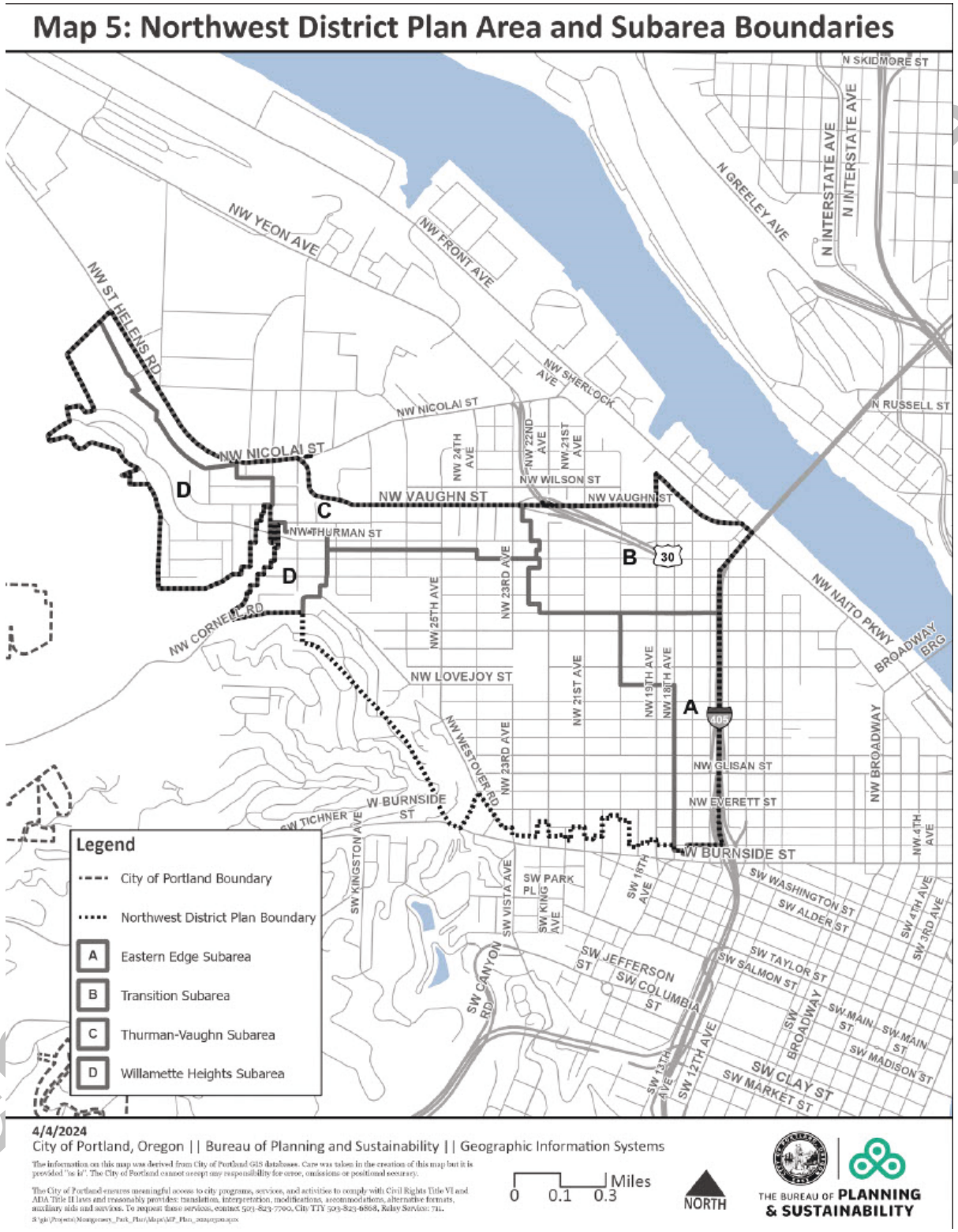


Commentary

Map 5: Northwest District Plan Area and Subarea Boundaries.
Replaces Map 5, Northwest District Plan Area and Subarea Boundaries. Amends the boundary of Subarea C to remove the area within the MPAP plan area, aligning the northern border of Subarea C with the Vaughn/Wardway corridor.

Replaced by Amendment

Map 5: Northwest District Plan Area and Subarea Boundaries, Page E-3



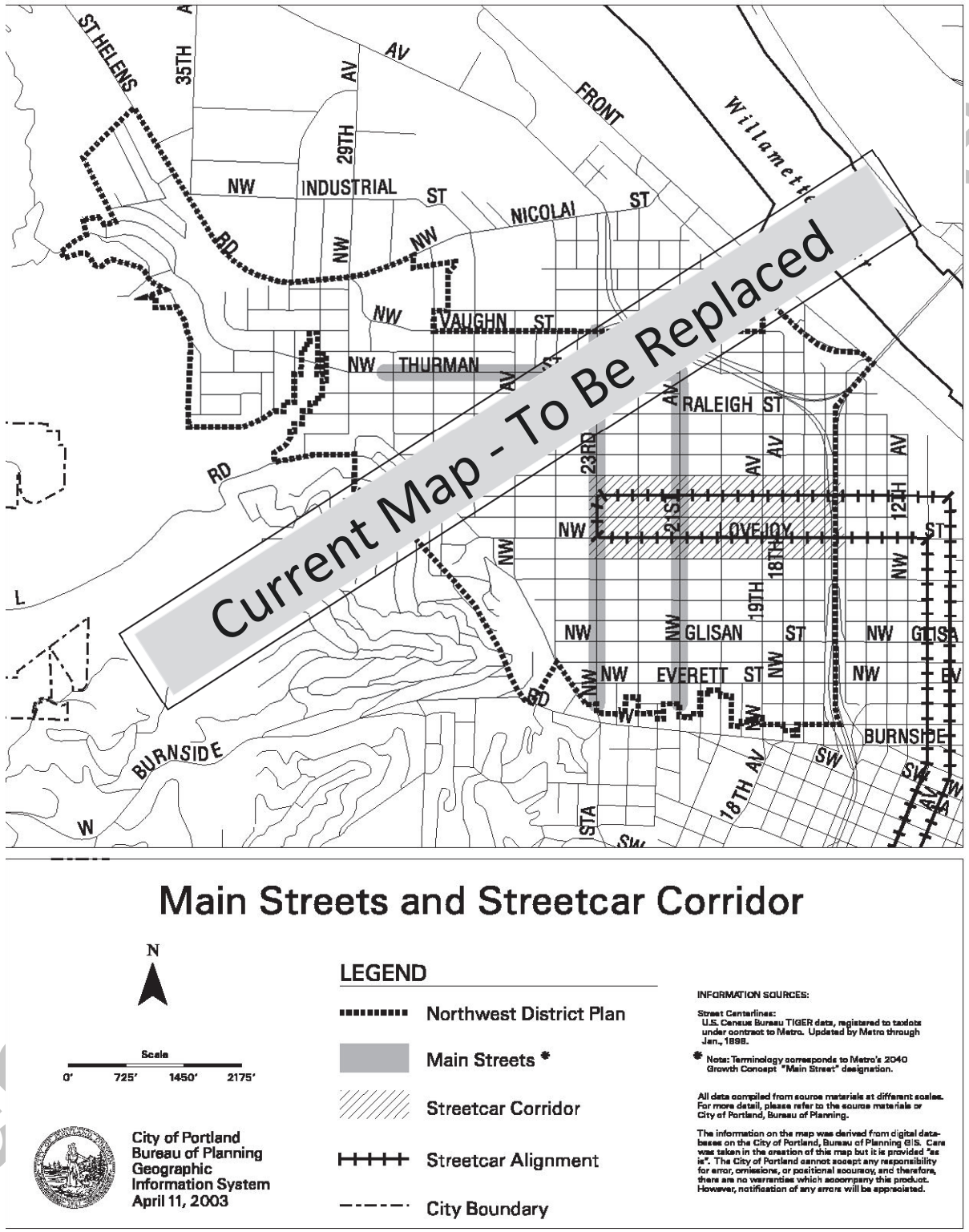
Re ent

Commentary

Map 6: Main Streets and Streetcar Corridor. Page E-4
Deletes existing Map 6.

Replaced by Amendment

Map 6: Main Streets and Streetcar Corridor, Page E-4



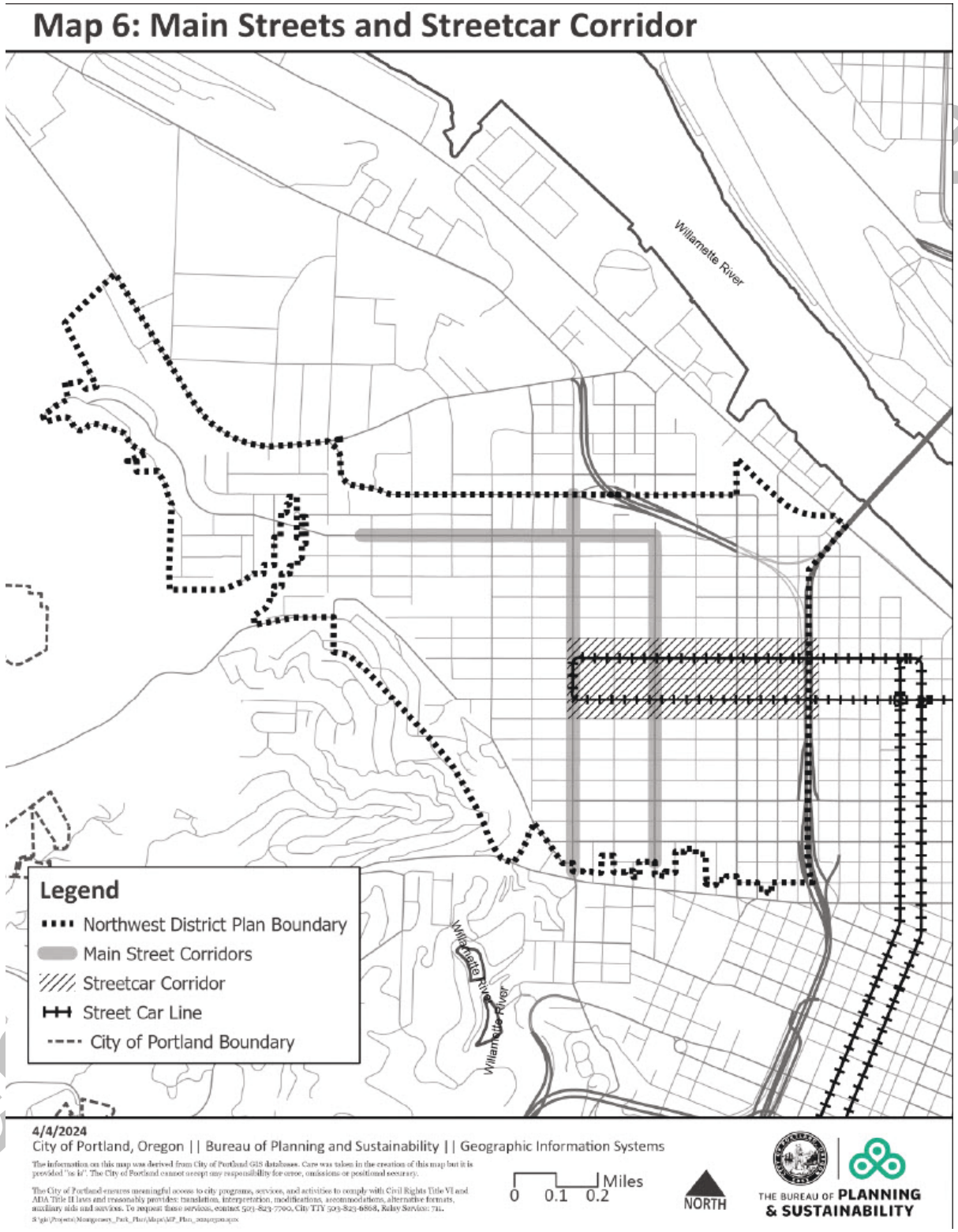
Commentary

Map 6: Main Streets and Streetcar Corridor. Page E-4

Replace Map 6, Main Streets and Streetcar Corridor. Amends the Northwest District Plan boundary to remove the existing area within the MPAP plan area, aligning the northern boundary of the Northwest District plan with the Vaughn/Wardway corridor.

Replaced by Amendment

Map 6: Main Streets and Streetcar Corridor, Page E-4



Re ent

Commentary

Policy 15: Thurman-Vaughn Subarea, Page E-69

Amends paragraph describing Vaughn Street to include references to the MPAP. The amendment removes the existing statement of recognition that Vaughn Street acts as a boundary between the mixed-use area south of Vaughn and the industrial area north of Vaughn to reflect the expansion of the existing mixed-use area to north of Vaughn Street as part of the adoption of the MPAP. Adds footnote specifying that the paragraph was amended with adoption of the MPAP.

Replaced by Amendment

Northwest District Plan
Policy 15- Thurman-Vaughn Subarea, Page E-69

Discussion

The Thurman-Vaughn Subarea Policy intends to retain the established pattern of residential and commercial development, while acknowledging the subarea's proximity to the Industrial Sanctuary. NW Thurman Street east of NW 28th Avenue is a designated main street with both neighborhood commercial and residential development. Many needed neighborhood services are found here, including a grocery store and Friendly House community center. In addition, the new Northwest branch of the Multnomah County Library at NW Thurman and NW 23rd Avenue attracts people to the subarea. The policy seeks to enhance the pedestrian environment of the main street and overall subarea, through pedestrian safety and transit service improvements.

The subarea contains a mix of older and newer housing, including a number of live-work units. The older units include clusters of modest housing built before World War 1 that are remnants of the working class "Slabtown" neighborhood. Some of the newer units are built as rowhouses. This plan includes *Comprehensive Plan map* changes for a number of properties along NW Thurman Street to encourage residential uses between commercial nodes and along the south side of NW Vaugh Street.



~~The~~ NW Vaughn Street ~~corridor,~~ has, <u>in the past</u>, been a dividing corridor between the mixed-use neighborhood to the south and the industrial area to the North. NW Vaughn Street carries traffic from the I-405 freeway to destinations to the north and west, including Montgomery Park, a major office development. ~~This plan recognizes the difference between the north and south sides of NW Vaughn Street and the potential conflicts that can occur between residential and industrial uses.~~ The plan includes zoning changes that encourage a continuous frontage of commercial buildings along the south side of NW Vaughn Street. New development along the south side of NW Vaughn Street will be encouraged to provide design elements that unify the streetscape and establish a more attractive corridor. ~~The "Guild's Lake Industrial Sanctuary Plan Amendments" chapter of this document includes amendments for a five-block area on the north side of NW Vaughn Street that complement the provisions applied along the south side of the street.~~ <u>The Montgomery Park Area Plan (MPAP), includes changes that extend mixed-use land use designations and zoning to the area between Vaughn and Nicolai. The MPAP changes include development and design requirements and guidelines that will help unify the streetscape on NW Vaughn[4].</u>

[4] Amended with the adoption of the Montgomery Park Area Plan, ___ 2024.

Recommended Amendment

Contact

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Email: mp2h@portlandoregon.gov

About City of Portland Bureau of Planning and Sustainability
The Bureau of Planning and Sustainability (BPS) develops creative and practical solutions to enhance Portland's livability, preserve distinctive places, and plan for a resilient future.

THE BUREAU OF **PLANNING & SUSTAINABILITY**

http://portland.gov/bps
503-823-7700
bps@portlandoregon.gov

Rejected by Amendment

Original Exhibit B - Volume 5 (for information only)

Montgomery Park Area Plan

Recommended Draft

Volume 5: Appendix

A. MPAP Draft Public Benefits Terms Sheet, As Amended - September 2024 (p. 2)

B. MP2H Northwest Urban Design Report (p. 13)

C. MP2H Northwest Opportunities and Challenges Report (p. 61)

D. MP2H Existing Conditions Report (p. 84)

E. MP2H Equitable Development Report - January 2023 (p. 234)

F. MP2H March 2020 Open House – Public Comments Summary (p. 447)

G. MP2H Urban Design Concept Open House – Public Comments Summary Report (p. 472)

H. 2019 Preliminary Northwest Racial Equity Analysis 2019 Northwest Streetcar Extension and Land Use Alternatives Analysis (p. 606)

I. 2019 Northwest Streetcar Extension and Land Use Alternatives Analysis (p. 627)

October 2024

Replaced by Amendment

Original Exhibit B - Volume 5 (for information only)

THE BUREAU OF PLANNING & SUSTAINABILITY

Montgomery Park Area Plan

Draft Public Benefits Agreement Term Sheet As Amended – September 2024

The Montgomery Park Area Plan (MPAP) proposes land use and transportation changes to establish a new transit-oriented district in Northwest Portland west of Highway 30 between NW Vaughn and NW Nicolai streets. The Plan seeks to transition the area into a mixed-use employment district that will support both job growth and housing development. The MPAP includes proposed land use changes to promote equitable, transit oriented development and complement a future extension of the Portland Streetcar. The land use changes include amendments to Portland's Comprehensive Plan map, zoning map, zoning code, and design guidance for future development.

In addition to the regulatory measures above, the MPAP includes an anticipated Public Benefits Agreement with property owners of key large sites (Montgomery Park; American Can Complex; 1535 LLC/Former ESCO Steel site) to achieve plan objectives and equitable development outcomes.

The attached Draft Public Benefits Terms Sheet outlines the key parameters of a future Public Benefits Agreement between the City of Portland and the owners of the large properties noted above. The Public Benefits Agreement is expected to be developed over the coming months and presented to Portland City Council for adoption along with other provisions of the Montgomery Park Area Plan. The future Public Benefits Agreement will complement the regulatory aspects of the plan and addresses the following issues:

- Provision of Affordable Housing
- Creation of Middle-Wage Jobs
- Wealth Building via Opportunities for Affordable Commercial Space
- Creation of a Public Open Space or Park
- Commemoration of York and Cultural Placemaking
- Transportation Funding

The Draft Public Benefits Terms Sheet is attached.

Replaced by Amendment

Montgomery Park Public Benefits Agreement
Preliminary Draft Term Sheet - As Amended

Introduction

The City of Portland has developed a land use and transportation plan that will create a new mixed-use district in Northwest Portland, focused on the area west of Highway 30 between NW Vaughn and NW Nicolai streets. The plan will change current zoning to allow greater development intensities and a greater mix of uses on properties currently zoned for industrial and employment uses in an area served by extension of an existing streetcar line. This plan builds on the City's previous action which removed the Industrial Comprehensive Plan designation on the former ESCO site and replaced it with the Mixed Employment Comprehensive Plan designation. The plan would create the opportunity for several thousand new housing units, and hundreds of new regulated affordable units. A 1.6-mile extension of the Portland Streetcar (.80 miles each way) would serve the new development. Two large sites in the area are in development transition: the Montgomery Park office complex and the former ESCO Steel manufacturing site.

The vision of the project is to transform the area from a largely low intensity industrial area to a mixed-use neighborhood that includes employment, housing, and other community-serving land uses. Increased density and transit-oriented development support the City's goals to reduce carbon emissions and create additional capacity for housing and jobs. The plan would also create additional land value through city actions, including land use regulation changes and transportation investments – and these city actions must address City policies that call for equitable development. In this instance, the public benefits of the project must address the loss of industrial land and the middle-wage jobs that might have been supported by industrial development and must contribute to solving Portland's acute need for housing, including affordable units.

The terms summarized below seek to address these public needs, even as they recognize that the land in question is privately owned – and thus these benefits can only be realized through the opportunity created by future development.

The requirements listed here are intended to outline the means to direct some of the value created from the change in land use regulations and transportation investments toward providing broader public benefits. These benefits include middle-wage jobs, affordable rental housing, wealth building opportunities, and a new publicly accessible open space or park.

As part of this agreement, the City and the property owners acknowledge that these benefits rely in part on future development, and the proposal is intended to enable that development. The proposed agreement seeks to strike a balance between private value created and benefits to the larger community – while recognizing the area's previous industrial character and uses.

Because there is no housing currently developed on either the former ESCO site or the Montgomery Park site, this plan presents no risk of housing displacement on those sites. Instead, with the opportunity for an increase in middle wage job growth and additional affordable housing, there is an opportunity for future developments with a more equitable distribution of benefits to be realized from city and private investment.

Replaced by Amendment

This project has the potential to provide meaningful community benefits. It presents an opportunity to help address Portland's housing crisis by increasing housing choices and affordable housing supply in an opportunity-rich and low-carbon neighborhood. The transit-oriented nature of this new community means that new residents can meet their daily needs without a personal vehicle. Increased density in an area with improved access to high quality, low-cost, and low-carbon transportation options that connect people to both nearby and regional destinations and job centers can reduce development pressure on Portland's edges. This, in turn, lowers city development expenditures, helps preserve open spaces and farmland in a growing region, and supports more equitable and sustainable urban living.

Proposed Public Benefit Package Summary

1. Middle Wage Jobs. A target of 800 middle wage jobs to be provided on site. If the job goal is not met within 10 years from the effective date of this agreement, a proportionate per-job payment will be required, which will be used to fund workforce development and training programs, up to a maximum payment of $4 million;

2. Small Business Job Creation. Incentives for below-market-rate, for-sale and for-rent commercial spaces; and

3. Minimum Affordable Rental Housing Units. Construction of 200 units affordable to households making 60% of Area Median Income (AMI) prior to or concurrent with any market rate units and within seven (7) years of the effective date of this agreement or each housing project must include 15% of its dwelling units at 60% of AMI;

4. Public Open Space. Provision of a single, contiguous, publicly accessible open space that is a minimum of 40,000-square-foot in size and is centrally located within Subdistricts B, C and D of the Vaughn-Nicolai Plan District;

5. Commemoration of York. Commemoration of York through public art and placemaking in a significant publicly accessible location within the development.

6. Transportation. Commitment of private property owners to fund a portion of the public Portland Streetcar extension project through formation of a Local Improvement District;

Proposed Public Benefits Package Components and Considerations

1. **Middle Wage Jobs.** The middle-wage jobs benefits package is intended to help offset the loss of prime industrial land and to continue to support middle wage jobs in this area. Prior to closure of the ESCO foundry the 16-acre campus had 800 jobs. This equates to 871 building square feet per lost industrial job. This calculation is confirmed by two sources: the US Energy Information Administration Survey of space utilization averages for specific building types which lists 1,500 square feet per industrial job and the landowner's own current job density statistics for operating factories which ranges from 890 square feet to 2,500 square feet per employee. Thus, the actual job loss from the rezoning of industrial land is estimated at 800 jobs. Net new job production in Subdistricts B, C and D must therefore be equal to or greater than 800 new middle-wage jobs on site. If these job targets are not realized within 10 years from the effective date of this agreement, the property owners will make a proportionate payment of $5,000 for each job under 800 not yet created, up to a total possible payment of $4,000,000. Payment shall

Replaced by Amendment

be made into the Middle Wage Jobs Fund (MWJF) to support business development and/or jobs programs associated with the following programs: The Oregon Manufacturing Extension Program (OMEP) and Oregon Manufacturing Innovation Center (OMIC) or similar.

a. A middle-wage job is defined as:
   i. A job where the starting annual salary is a minimum of $57,000 or greater than 50% of area median income (AMI) for a family of four, as published by the Federal Department of Housing and Urban Development, for the year in which the evaluation is taking place; and
   ii. Does not require a four-year college degree or more to qualify; and
   ii. Is within five priority industry clusters (Athletic & Outdoor, Green Cities, Food & Beverage Manufacturing, Metals & Machinery, and Software & Media), other traded sector industry, or otherwise meets criteria i. and ii.

b. Small Business Job Creation - Middle Wage Job Requirement Reduction: Commercial condominiums sold at a cost that is 15% below market value to buyers from priority communities or affordable commercial space leased to priority communities at 20% below market rents would qualify for a reduction in middle wages jobs. The allowable reduction in middle wage jobs is one (1) employee for every 200 square feet of non-residential floor area sold or leased at below market value. For-rent, affordable non-residential spaces shall be leased at below-market rents for a period of no less than 10 years. A reduction in middle wage jobs in exchange for affordable for-rent or for-sale commercial space shall not exceed 20% of the required middle wage jobs.

   i. Eligible renters or buyers shall initially be identified by contacting one or more Qualified Culturally Specific Organizations (QCSO). The developer/property owners shall make all reasonable efforts in this regard. The definition for a QCSO is the same as that used by Oregon Housing and Community Services (OHCS)]:

c. Reporting, Monitoring, and Enforcement of Middle Wage jobs.

   i. At intervals of 5, 7 and 10 years after the effective date of this agreement, the property owners will provide reports on how many net new total jobs and middle wage jobs have been created onsite since the effective date of the agreement.
   ii. Progress toward the middle wage job requirements will be measured at the three reporting intervals: 5, 7 and 10 years after the effective date of this agreement. Independent verification of the property owners middle wage jobs production performance is required. To accomplish this, the property owners will pay to Prosper Portland $25,000 at the beginning of the fiscal year in which each of the three reporting intervals occurs. Prosper Portland will use these funds to verify and enforce compliance with the middle wage jobs requirements and affordable commercial offsets. The funds will be used to hire and/or contract with an independent third party that will be tasked with verifying compliance with middle wage job requirement performance and for reimbursement of any associated staff

Replaced by Amendment

costs. The report produced by the third party will help form the basis for enforcement actions, if any. Additional fees, up to a maximum of an additional $25,000 and not to exceed $50,000 for each year in which reporting is required, may be assessed if necessary to offset the cost of verifying and enforcing compliance with middle wage jobs requirements and affordable commercial offsets. In its program administration and compliance monitoring role in this project area, Prosper Portland will use existing programs to market the area to target industry cluster employers and businesses to help achieve middle wage job targets within the first five years.

iii. Reporting, monitoring and enforcement provisions of this agreement including those pertaining to middle wage job creations will be contained in a legally binding agreement that runs with the land.

iv. Enforcement of non-compliance with the middle wage jobs production requirements will occur through payment of liquidated damages to the MWJF in the amount equal to $5,000/job in the first year of this agreement, which shall increase annually at a constant rate of 3%.

v. At each reporting milestone, property owners will either demonstrate job creation equivalent to the job target for that milestone or will be required to make a payment in an amount equivalent to any shortfall in the number of jobs required to meet the job target for that milestone, as outlined below:

1. Year 5: 50% of job target or 400 jobs
2. Year 7: 70% of job target for a total of 560 jobs or an additional 160 jobs from Year 5
3. Year 10: 100% of the job target for a total of 800 jobs or an additional 240 jobs from Year 7

For example, if only 200 middle wage jobs are created by Year 5, then property owners shall make a payment of $1.12 M to the MWJF at the time of the Year 5 reporting milestone. The payment amount includes the 3% annual escalation.

4. Reductions may be permitted through the lease or sale of commercial space at below -market rates consistent with applicable provisions of this agreement (see Small Business Job Creation).

vi. The MWJF will be administered by Prosper Portland (or its successor) which will use the 5-, 7- and 10-year performance reports and any other tools of its choosing to assist in administration. Prosper Portland may use the MWJF to fund any of its then extant jobs-related programs at its sole discretion. Prosper Portland will be entitled to retain an administrative fee not to exceed 10% of the value of MWJF.

2. **Affordable Rental Housing.** The affordable rental housing benefits package is intended to address the acute need for affordable housing in the near-term and to gain regulated affordable rental housing units in this high opportunity area to achieve a mixed income community.

a. The first housing units to be built in Subdistricts B, C D and F shall contain a minimum of 200 units of rental or ownership housing units, which may be provided in one or more buildings, and will be characterized by, at minimum:

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i. All units will be affordable at 60% of Area Median Income (AMI); and
ii. Rents and other requirements will be regulated by the Portland Housing Bureau (PHB), or its successor in accordance with the Inclusionary Housing program rules and requirements extant on the date the Agreement is executed; and
iii. The building will be deemed a Consolidated Building for purposes of Inclusionary Housing compliance for future development up to a maximum of 2,000 market rate units and will comply with all laws, rules, regulations, and ordinances that exist on the date the initial land use application is submitted for the Consolidated Building, consistent with PCC 33.700.080.A;
iv. To qualify the building must be located within a parcel or site bounded by NW Wardway to the west, NW Vaughn Street to the south, NW 24th Ave. to the east and NW York St. Extension to the north. The area defined above consists of roughly Subdistricts B, C, D and F in the proposed Vaughn-Nicolai Plan District; and
v. Reasonable Equivalency: The parties recognize that the goal of this agreement is to incentivize the early construction of affordable housing and to allow those affordable units to serve as a bank for the inclusionary housing requirement of future market-rate development. The parties also recognize that the banked affordable housing must be equal or superior to the average size and quality of a unit found in the market.

   The unit size, bedroom mix and quality of finishes will be determined by a market analysis of comparable developments in the Census Tracts that comprise the broader Northwest Study Area, as defined in the Montgomery Park to Hollywood Equitable Development Report. The market analysis shall be completed by the property owner/developer and shall be submitted to the city at the time of or prior to submittal of a land use application for the Consolidated Building. The market analysis shall have been completed no longer than six months prior to the submittal of the land use application. The Consolidated Building shall be constructed with a unit size, bedroom mix and quality of finishes that is equal or superior to recent comparable developments in the area, as determined by the market analysis. Implementation details will be further described in the public benefit agreement.

vi. The Consolidated Building may not request or receive any city-controlled subsidy of any kind, with the exception of system development charge and real estate tax exemptions.

b. Enforcement Options:
   i. No other residential building permits may be issued until the city issues a building permit for the Consolidated Building, all necessary financing has closed, and the property owner/developer has issued a notice to proceed to its general contractor, or
   ii. If the Consolidated Building does not meet the requirements of Section 2 a or a market rate building elects to build its own Inclusionary Housing units, all housing developments up to 2,000 units will be subject to a requirement to provide 15% Inclusionary Housing units at 60% AMI, or

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iii. Alternatively, property owners may comply with the requirement to provide 15% IH units at 60% AMI by paying the applicable Inclusionary Housing Fee In Lieu in the amount equivalent to the IH unit requirement, in accordance with the city's inclusionary housing regulations.

3. **New Park/Open Space.** The New Park/Open Space benefits package is intended to provide at least one quality publicly accessible parks or open space in this new mixed use area, which is expected to accommodate thousands of new jobs and housing units.
   a. Park Obligation. The property owners will be required to create at least one park on their current property, totaling a minimum of 40,000 square feet and having at least two public street or public easement frontages of a minimum of 100 linear feet. The park design will be determined through a public process, working with Portland Parks & Recreation (PP&R), but generally should be oriented to passive recreational uses and be characterized by significant vegetation and tree canopy and should include facilities for children and children's play.
   b. Park Ownership. PP&R agrees that the land upon which the park is built may be owned by the property owners and/or their successors only if the property owners agree to maintain public access to the park in perpetuity and will record an easement or similar legal document(s) to that effect, benefiting the city of Portland by and through PP&R or its successor.
   c. Park Maintenance. PP&R will provide basic maintenance for the park in keeping with the current level of service as defined by PP&R. Maintenance over and above PP&R's basic standard will be provided by the property owners and/or their successors, exclusively at their cost. PP&R and the property owners agree to collaborate on creation of a park maintenance agreement detailing levels of service, roles and responsibilities and payment of capital and ongoing costs. The park's operation and maintenance will be further detailed in coordination with PP&R.
   d. Key Park Features. Consistent with park function and character described above, key features of the park shall include:
      i. The park will be open to the public for free;
      ii. The park hours of operation will be at 5 a.m. to midnight every day of the year and will be open and accessible to the public during those hours. The hours of operation could be less, if determined by the current director of PP&R to be consistent with typical hours of operation in the current park system.
      iii. The park must be free of physical barriers to entry and surveillance equipment within the park, and it must also comply with the American Disabilities Act
      iv. The park will include at minimum the following amenities:
         1) Provide primarily green vegetated infrastructure with appropriate public accessways through it;
         2) Minimum of 20% canopy cover.
         3) Increase the urban tree canopy using a mix of tree species and sizes adapted to our changing climate and urban context (favoring large form canopy trees);
         4) Permanent seating areas with access walkways

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5) Water feature or other urban park amenities

e. Park Location. The open space shall be centrally located (between NW 24th and NW Wardway Avenues and, between NW Vaughn and a future NW York Street) in Subdistricts B, C and D or among the subdistricts.

f. Upon issuance of a building permit for the first market rate residential project on Subdistrict B, C or D, a site plan shall be provided that identifies the location of the required 40,000 square foot park. The site plan detailing this location, once approved by the city, shall be considered an addendum to this agreement.

g. Build out of the 40,000 square foot park shall be required at the time of the completion of construction of the 1,000th dwelling unit or within ten years of the effective date of this agreement, whichever comes first.

h. The property owners will be eligible for a reduction in Parks systems development charges (SDCs) equivalent to the value of the agreed upon improvements, which will be determined in coordination with the PP&R. Any other properties in the plan area that contribute to the development of open space may also be eligible for SDC credits. [to be determined]

i. The property owners and/or their developers will pay all SDCs due until such time as PP&R, or its successor, has issued a confirmation letter that a Park has been created that meets the requirement herein.

j. The property owners are considering one or more parks or recreation facilities in addition to the required park outlined above. In particular, enhanced connections or parking access to nearby Forest Park have been discussed. Such park or facilities are not required as part of this agreement, however, should the property owners and PP&R agree to such park or facility, PP&R may consider providing additional SDC exemptions or credits, above and beyond the SDC reduction provided for the required 40,000 square foot park, as part of a negotiation with the property owners.

k. Commemoration of York is outlined in Section 4 below. The property owners and PP&R will consider whether to include such commemoration in the required park outlined above. Location within the required park is optional, not required.

l. A maximum of 12 fee-for-entry events are permitted annually in the park; to the extent feasible, a portion of the park should remain accessible for free to the general public throughout the duration of the fee-for-entry events.

4. **Commemoration of York.** The Commemoration of York public benefit is intended to celebrate the contributions of York, an enslaved member of the Lewis and Clark Expedition and the first documented person of African descent to visit what would become Portland, Oregon, and for whom NW York Street, which exists in the area, is named.

a. The property owners and/or developers/owners must partner with the City Arts Program, through a Request for Proposal or other appropriate process, to work with the York Work Group to determine how York will be commemorated in the area~~demonstrate a partnership between them and the Regional Arts and Culture Council (RACC) or its successor, as determined by the City of Portland~~, a process that will result in the funding and installation of one or more features memorializing York at the intersection of NW York Street in the area between NW 24th and NW 26th avenues. ~~The owner/developer~~

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~~may propose any other bona fide organization or organizations in place of RACC and must consult with representatives of interested community groups.~~

b. All required contributions to the 2% for Art program by the city or Portland Streetcar Inc. will be made to a Montgomery Park Area Plan fund established by the City Arts Program~~RACC or its successor~~. All funds must be spent on memorializing York or contributions of other Black/African American people to the district, city, region or state of Oregon and otherwise generally commemorate the history of the area, as determined in partnership with the York Work Group.

5. **Transportation.** Broadly, transportation improvements in the project area can be broken into two categories: 1) those where costs will be shared by the City and the property owners; and 2) those where costs will be borne exclusively by the property owners.
   a. Shared Transportation Costs. Shared-cost transportation improvements will apply to the following streets:
      i. NW Roosevelt Street between NW 24th and NW 26th avenues
      ii. NW Wilson Street between NW 24th and NW 26th avenues
      iii. NW 23rd Avenue between NW Lovejoy and NW Roosevelt streets, by virtue of participation in the district-wide Local Improvement District
      iv. In addition:
         1) These streets are/will be part of the new Streetcar track alignment.
         2) Where these streets are on or cross the property owners' property, right-of-way dedications to the city will be required.
         3) The City, in partnership with Portland Streetcar Inc., will design and contract for construction of all improvements.
         4) Payment for design and improvements is anticipated to come from:
            i. Federal Transportation Administration (FTA) match, which the City will diligently pursue and maximize to the greatest extent possible.
            ii. City of Portland funds
            iii. A Local Improvement District (LID) in which the property owners will be significant contributors. The LID formation will require a separate public process in which property owners will actively participate. Participation and contribution to the LID will be based upon formal assessment and legal requirements, as such that costs borne by property owners are relational to their assessed benefit resulting from the improvements.
            iv. Property owner contribution outside the LID, if necessary.
            v. Dedication of rights-of-way for above streets
   b. Property owner streets. Property owners will be required to comply with the Montgomery Park Area Transportation Plan, as well as City Design Standards for Public Streets. The Montgomery Park Area Transportation Plan includes the following streets, at minimum:
      i. NW 25th Avenue from NW Wilson Street to NW Roosevelt Street.
      ii. Extensions of the street grid as required through development review to meet street spacing and connectivity standards.
      iii. In addition:

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1) In keeping with standard practice, it is expected that the property owners will pay for all costs for these streets; this includes the right of way dedications and associated infrastructure, per City codes.
2) Design of the streets will comply with the City's design standards and will be consistent with the Montgomery Park Area Transportation, which can be found at a conceptual level in the Montgomery Park Area Plan and which will be finalized through development review.
3) Contracting and management of construction of streets to be constructed as part of the streetcar project will be negotiated between the city and the property owners prior to and during design.

c. Commitments made by the City of Portland.
   i. The City shall demonstrate significant progress toward the design, funding and construction of the extension of Portland Streetcar within a reasonable time frame following adoption of the related land use plan and associated Comprehensive Plan and zone changes. Demonstration of progress includes but is not limited to seeking adoption of a Locally Preferred Alternative (LPA) from Portland City Council, TriMet and Metro before December 31, 2024; an application to enter project development with the Federal Transit Administration before June 30, 2025; and a commitment to form a local improvement district to assist in funding streets and streetcar related investments, prior to any building permits are issued for private development projects in the project area.
   ii. The City shall make every effort to fund and build the extension of Portland Streetcar as agreed upon in this document and to do so in a timely and cost-effective manner; however, there is no legal nexus between the land use decisions, zoning changes, and development agreements and the construction of streetcar.

6. **Infrastructure Planning.** The area, which consists of large unsubdivided parcels, will require new transportation, water, sanitary sewer and stormwater infrastructure to support future higher intensity, mixed use development. The property owners/developers agree to work with the public works bureaus to develop a comprehensive plan for the public infrastructure to ensure it will be appropriately phased, sited, and sized and that their connections to existing infrastructure will make effective use of existing system capacity. The intent is to provide greater certainty for both the city and property owners/developers in order to simplify later permit processes. Implementation details, including the timing of such plans, will be further described in the public benefit agreement.

7. **Other Agreement Terms and Obligations**

   a. Agreement Term: 10 years
   b. Upon issuance of a Temporary Certificate of Occupancy for a residential unit total of 2,000 or more and if there are no additional unmet obligations, all requirements of this

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agreement shall be deemed complete and the developers/owners shall have no further obligations under this agreement.

c. Racial equity in construction subcontracting firm and workforce participation. Property owners shall make best efforts to engage and involve as many as possible of the culturally-specific construction-related technical service providers in each development project. As of the date of this agreement, those include the National Association for Minority Contractors (NAMC), Professional Business Development Group (PBDG), LatinoBuilt and the Oregon Association for Minority Entrepreneurs (OAME).
d. The property owners/developers will first market all the regulated affordable units in all housing development projects to culturally specific organizations through PHB's network of CDCs.
e. Creation of a homeownership down payment assistance fund for priority communities, up to a maximum of $5 million, if equivalent financial offsets through reductions in other fees and charges can be identified, to the satisfaction of the parties to this agreement.

8. Any agreement between the City and the Developers/Property Owners will recognize the right to extend the period for performance of obligations for unforeseeable causes beyond the control of either or both of the parties without fault or negligence.

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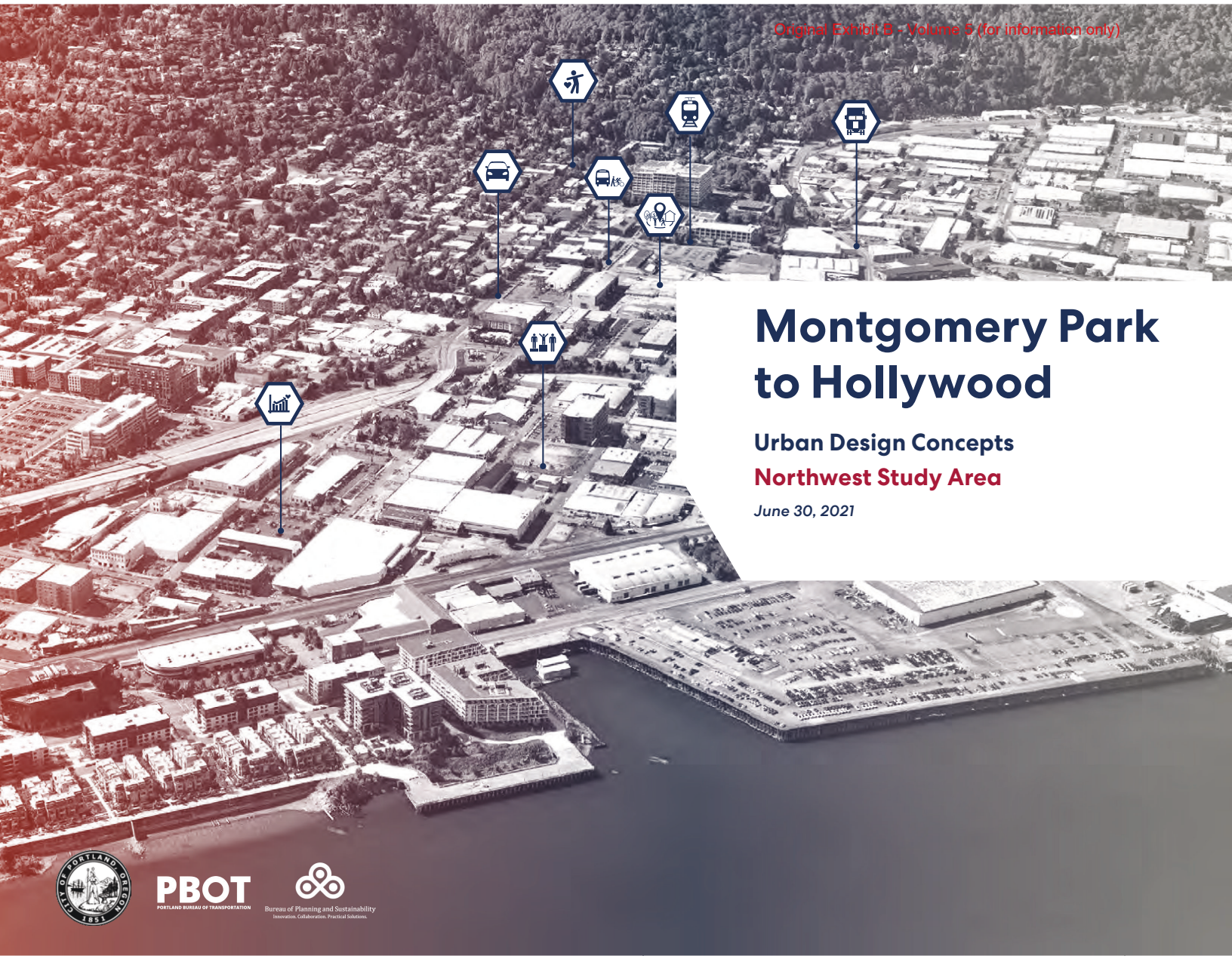

Montgomery Park to Hollywood

Urban Design Concepts

Northwest Study Area

June 30, 2021

PBOT
PORTLAND BUREAU OF TRANSPORTATION

Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.

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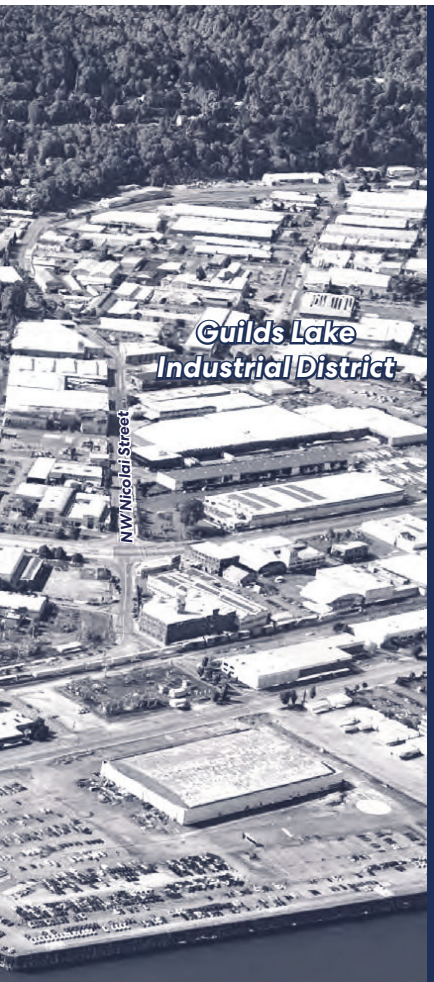

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Overview

The Montgomery Park to Hollywood Transit and Land Use Development Strategy (MP2H) aims to create an equitable development plan for potential transit-oriented districts in Northwest Portland (extending from the Central City to Montgomery Park) and Northeast Portland (extending from Central City to the Hollywood District). This project is co-led by the City of Portland's Bureau of Planning and Sustainability (BPS) and Portland Bureau of Transportation (PBOT), in partnership with Metro.

The Urban Design Concepts for the Northwest Study Area is a document that outlines an aspiration vision for future transformation of the Northwest District. This vision includes recommendations and best practices for land use and community infrastructure that upholds the 2035 Comprehensive Plan's vision for prosperous, equitable, transit-oriented communities. All scenarios consider opportunities for economic development and community benefits to support the City's racial equity, climate justice, employment, and housing goals.

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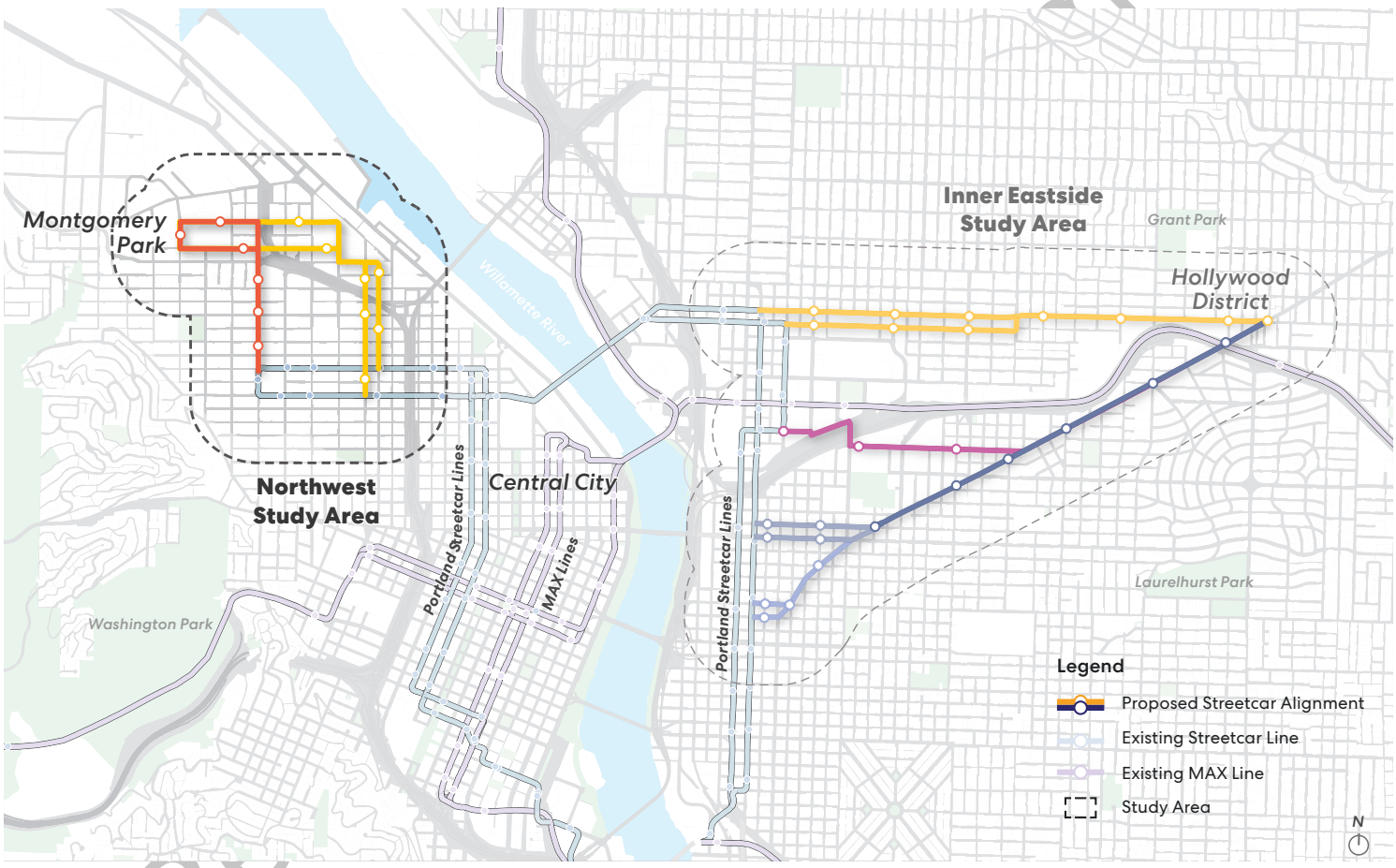

Study Area Map

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Planning Goals

The Urban Design Concepts were guided by the following planning goals developed by the City of Portland project team.



Support City of Portland's 2035 Comprehensive Plan and Climate Action Plan goals for reducing carbon emissions and for improving human and environmental health, equity and resilience.

Focus growth in centers and corridors with high levels of services and amenities.

Increase opportunities for employment and housing, particularly middle wage jobs and affordable housing.

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Improve access to affordable housing, middle wage jobs, nature and recreation through high quality, reliable, and frequent transit service and other multi-modal options.

Ensure that under-served, under-represented communities and those most vulnerable to impacts from land use and transportation proposals have **an opportunity to meaningfully participate in the planning process, and to benefit from project outcomes.**

Advance equitable outcomes by developing community benefits strategies to accompany land use decisions and transportation investments.

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Conceptual rendering of transit oriented development catalyzed by the extension of the Streetcar to Montgomery Park.

Credit: Portland Streetcar Inc.



1 Northwest Study Area

The Northwest study area is at a pivotal moment in its history. For many generations, the area was a thriving industrial center for the city. However, recent changes in property ownership and rethinking of future land uses for some of the large parcels has lessened the industrial footprint and changed the mix of jobs in the area. The arrival of streetcar can shape responsible growth and strategic investment to create a prosperous, equitable, working transit-oriented community. This aligns with the City's goals and policies to support the following:

- Fostering a strong and diverse economy through investment in high quality, frequent transit service;
- Leveraging the streetcar's development potential to build mixed-income housing and employment on large opportunity sites;
- Investment in green, community infrastructure to ensure that the district helps build diverse, healthy communities;
- Ensures that established businesses remain in the district while providing appropriate space for new businesses.

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The following urban design concepts are intended to help the City of Portland and community stakeholders make informed long-term decisions. Capturing the full potential of a new transit-oriented community will require new plans, policies, funding, and infrastructure investments to bring this vision to implementation.

The Study Area

The Northwest study area consists of quarter-mile buffer areas around potential streetcar alignments. The study area is primarily within the Northwest District, extending as far south as Couch Park, and north into the Guild's Lake Industrial District.

The neighborhoods surrounding the NW 18th/19th alignment are a mix of single and multi-family homes and buildings. The NW 23rd Avenue alignment consists of historic and new mixed-use development with a ground floor that consist of a diversity of retail and restaurant destinations.

The study area includes some of the City's fastest growing neighborhoods including Slabtown and the western edge of the Pearl District.

South of NW Vaughn Street, the study area is served by existing streetcar service, TriMet bus service, access to the region's freeway system, and a pedestrian and bicycle network. The existing transportation network is going to be expanded and enhanced through the recently adopted Northwest in Motion Plan.

North of NW Vaughn Street, the eastern portion of the study area is largely zoned industrial, while the western half includes large parcels of mixed use, and general employment. Businesses range from manufacturing, light industrial, office, and storage. This portion of the study area is lacking in community infrastructure such as sidewalks, bike facilities, and public open spaces. The area bounded by NW Nicolai Street to the north, NW Vaughn Street to the south NW Wardway Street to the west and NW 23rd Avenue to the east is most likely to see near-term land use change.

Potential Alignments

The Northwest study area explores two separate high-capacity transit alignments to Montgomery Park. These transit corridors were assessed to determine which alignments have the best potential for future streetcar investment and will help support the City's Comprehensive Plan's guiding principles to create prosperous, equitable, mixed use, transit-oriented communities.

The alignment for Scenarios 1-3 extends north off the existing North-South Streetcar Line onto NW 18th Avenue and NW 19th Avenue to connect to the NW Wilson Street and NW York Street couplet.

The alignment for Scenario 4 extends north from the terminus of the north-south streetcar line at NW 23rd Avenue to connect to the NW Wilson Street and NW York Street couplet.

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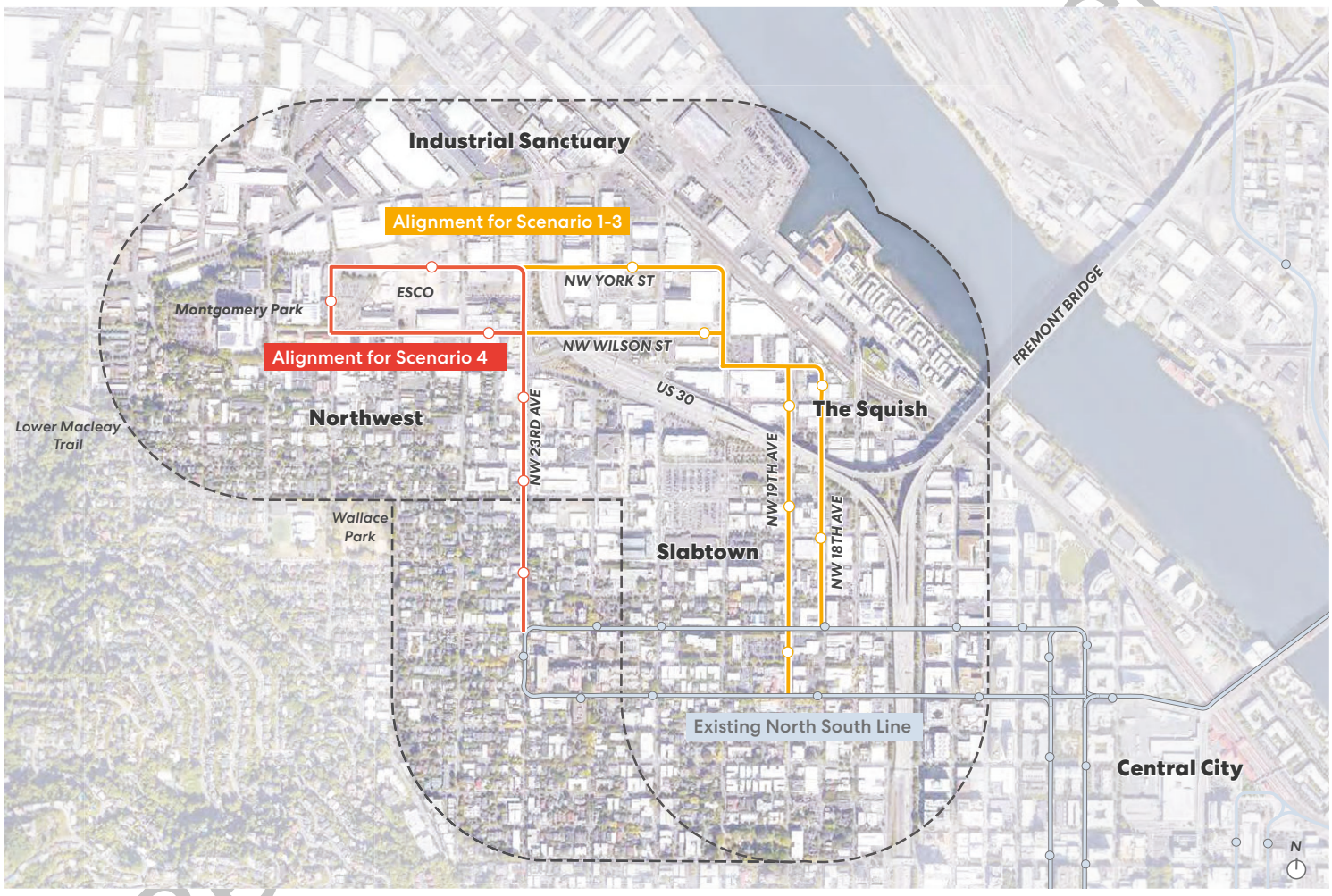

Northwest Alignments and Study Areas

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Key Urban Design Considerations

The following urban design considerations are national best practices utilized for the planning and design of good Transit Oriented Communities (TOC).

- ***A Diverse and Balanced Economy:*** TOCs provide a diversity of jobs and opportunities for upward mobility while reducing the risk of displacement of established businesses. Investment in a walkable environment also supports new local retail, and other services.
- ***Housing Choices for Everyone:*** TOCs offer a range of housing choices for people at all income levels.
- ***A Respect for Local Context:*** Future urban form should strike the balance between catalyzing compact, urban development while also demonstrating deference for historic landmarks and surrounding lower density neighborhoods. For this district, the City should explore setting building height limitations and establishing scenic viewpoints and corridors to ensure that landmarks like Montgomery Park remain a prominent feature in the district's skyline.
- ***A Compact and Walkable Urban Environment:*** TOCs offer easy access to everyday needs by allowing employees, residents, and visitors to navigate the district and connect to the region's robust transit network without need to drive. A multi-modal transportation network enhances the optimal user experience, through seamless mobility of high-capacity transit to active transportation options.
- ***An Engaging and Vibrant Public Realm:*** An Engaging and Vibrant Public Realm: TOCs prioritize activity at the street level—including shops, places to eat, and maker spaces to support the sale of goods by local manufacturers. Additionally, the public realm must support safe people spaces to help support diverse communities. This includes strengthening neighborhoods through identifying opportunities for spaces that foster and strengthen social connection such as community centers, event venues, and schools.

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NW 23rd Avenue. *Credit: Joel Mann.*

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The George Besaw Apartment, Portland, OR

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The Preferred Scenario: Balanced Growth

In September 2019, the City of Portland published the Northwest Portland Streetcar Extension and Land Use Alternatives Analysis that summarized preliminary findings about how land use changes and streetcar investment might support economic development, equity, and climate change goals, including the potential creation of affordable housing and job sites. This city-led analysis identified preliminary questions and trade-offs around streetcar investment and land use changes in Northwest Portland that became the basis for further evaluation of streetcar alignment and land use decisions.

Perkins&Will developed three initial urban design concepts to further explore urban form, transportation, and public realm outcomes for each of the land use scenarios in Northwest Portland. Perkins&Will built on the land use scenarios previously analyzed by City of Portland staff with a deeper dive into block and site level impacts of transportation investments and land use changes.

Scenario 4, the preferred scenario was developed as an outcome of initial evaluation of the previous three scenarios and to reflect updated thinking around a new transit alignment on NW 23rd Avenue. The pivot to this new transit corridor, allowed for a hybrid model that supported new mixed-use development while also supporting the preservation of existing industrial land.

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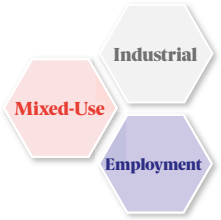

Evaluation Characteristics and Considerations

Transit Supportive Uses and Streets	– High-density mixed-use development is applied broadly, elevating the study area to an urban center comparable to Slabtown. – Create opportunity for more than 2,000 new housing units within this new district.
Sense of Place	– Land use focus unifies Montgomery Park, American Can Building, and ESCO site into a cohesive neighborhood. – NW 23rd Avenue alignment connects the alphabet district north of NW Vaughn Street to Montgomery Park.
Health	– New park or other community serving use in district. – NW Roosevelt street has the opportunity to provide a key pedestrian connection.
Economic Prosperity	– Transit supportive, high-density mixed-use allowances are applied to large 'opportunity sites' enabling potential for new jobs including retail, personal services, restaurants, office, and industrial.
Equity	– New affordable housing units are provided through inclusionary zoning and other benefits agreements. – Keeping the transit alignment west of I-30 allows for the preservation of existing industrial land and new industrial jobs. – Substantial increase in land value that can be captured for community benefits.

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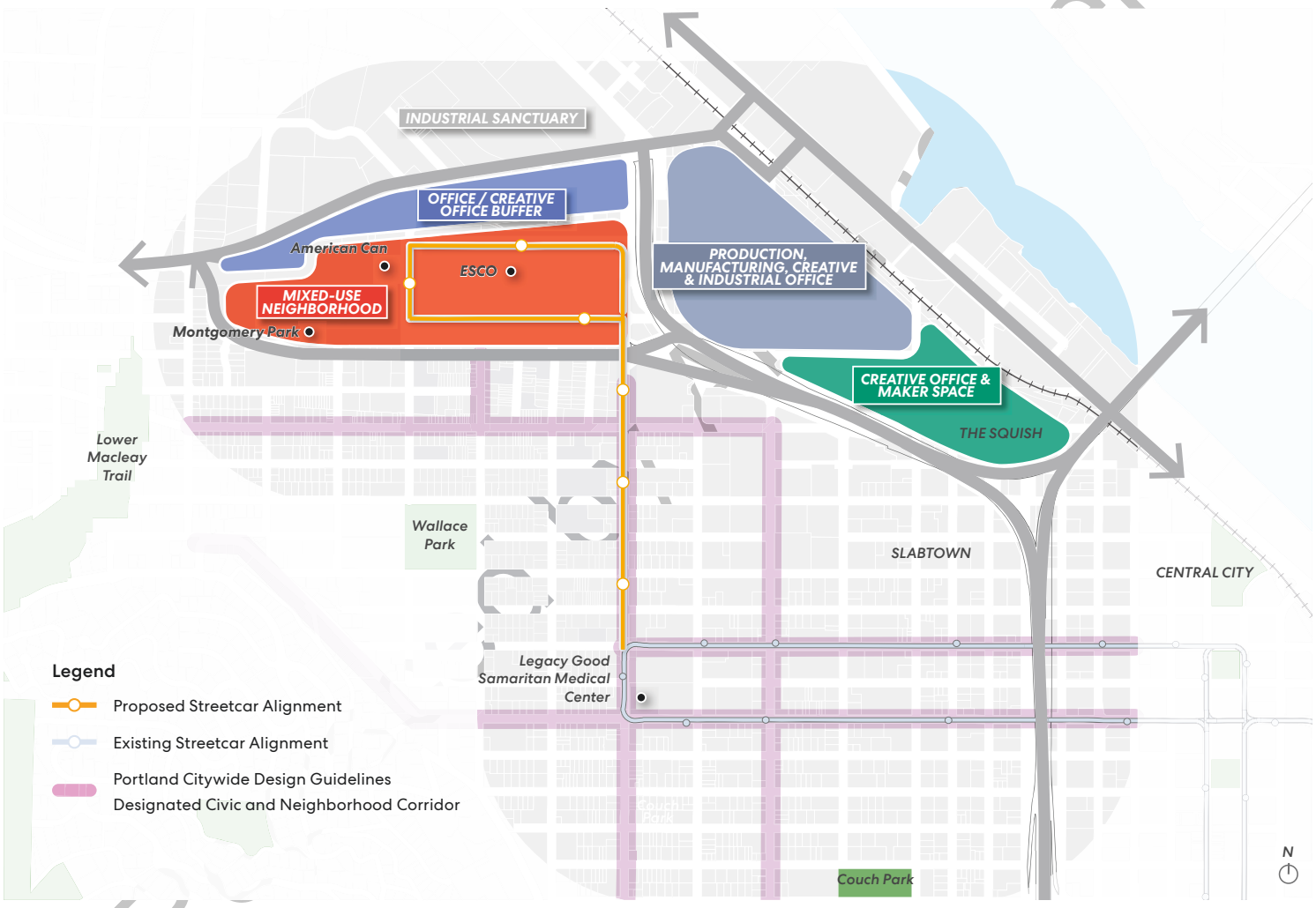

Preferred Scenario District Concept

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Land Use and Urban Form

Mixed Use

Mixed use development is concentrated in the area west of I-30, bordered by Northwest Reed Street and NW Vaughn Street. High-density mixed-use zoning is concentrated at the Montgomery Park, American Can Building, and the ESCO site. Height allowances would permit 6 to 10 story buildings. *New development would not exceed the height of the historic Montgomery Park Building.*

Medium density mixed use zoning along Vaughn and NW 24th Avenue will allow a gradual step down to the lower density neighborhoods within the Northwest District. Height allowances would permit 4 to 6 story buildings.

Industrial

The portion of the study area east of Highway 30 is maintained as primarily industrial land use. This will allow traditional manufacturing and distribution sectors to remain in the district in typically one-story buildings on large sites. However, larger-scale industrial office development, such as the New York Building, would still be allowed.

Employment

The Preferred Scenario also contains more flexible mixed employment zoning, allowing for a wider range of business sectors and jobs within the study area. This is located along the southern edge of Nicolai, creating a transition between the mixed-use zoning at Montgomery Park and the heavy industrial in the Guilds Lake District. This zoning is also found in the area commonly referred to as 'The Squish', a historic industrial area with several turn of the century and mid-century industrial structures. Due to its proximity to the Central City and Slabtown, the Squish is currently home to diversity of uses. Height allowances would permit 4 to 6 story buildings.

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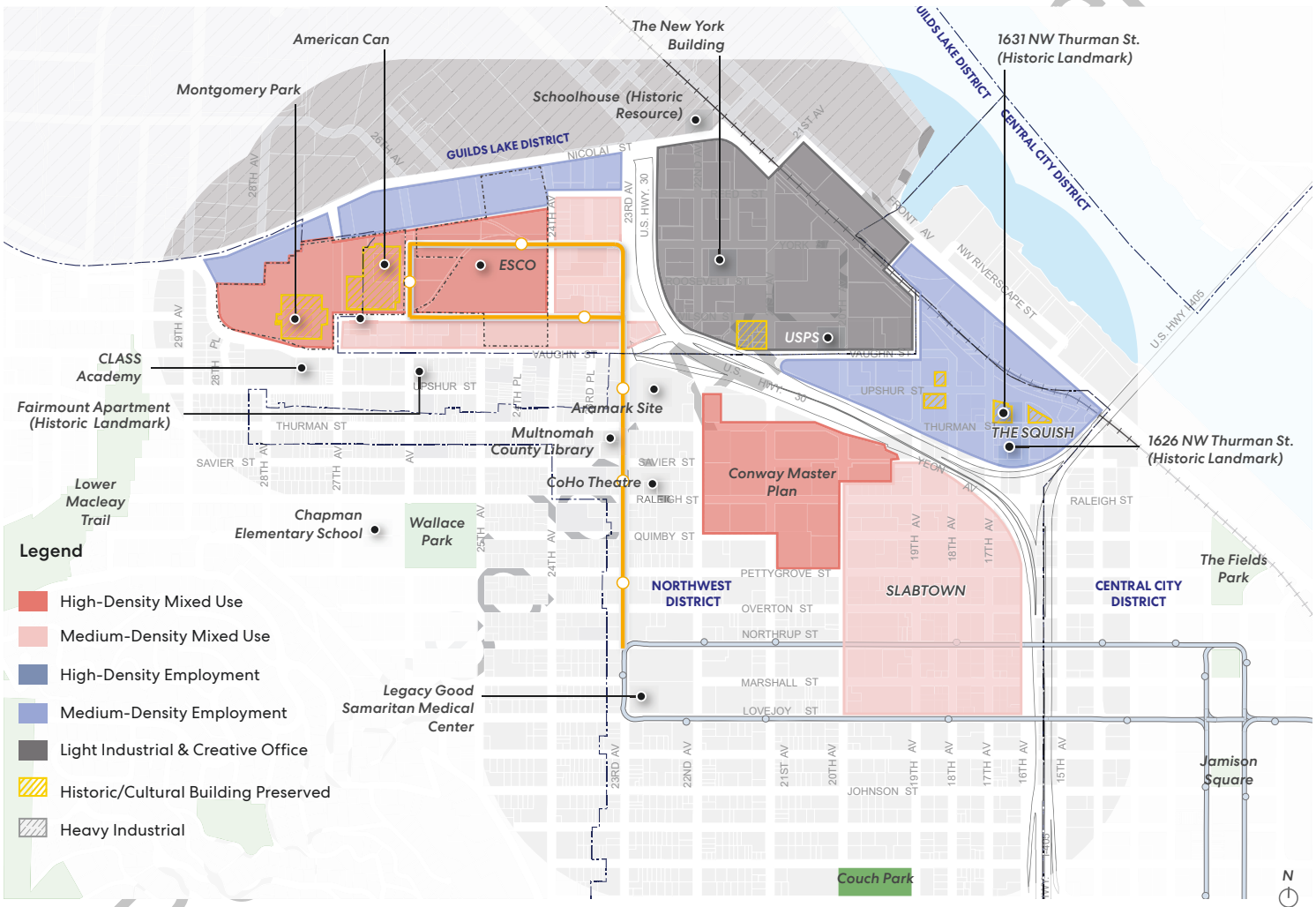

Preferred Scenario Land Use and Urban Form

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Transportation

The land use changes in the study area create opportunities to improve neighborhood connections across Vaughn Street, building off of existing and proposed active transportation routes from the adopted Northwest in Motion plan.

New Streets

The concept includes extension and completion of three existing streets: NW York Street, NW Wilson Street, NW 25th Avenue, and a pedestrian connection between NW 24th Street and NW 26th Street on Roosevelt Street.

Transit Streets

Streetcar: The new transit streets are: NW Wilson Street, NW York Street, NW 26th Avenue and NW 23rd Avenue. These streets will serve auto, bike, pedestrian, and transit needs.

Bus: At a minimum, bus transit is expected to serve the district via the existing transit routes on NW Vaughn Street, NW 23rd Street, NW Thurman Street, NW 25th Avenue, with shorter segments on NW 27th Street and NW Nicolai Street. Streetcar stops are located in coordination with bus stops to facilitate ease of transfer.

Bikeways

City bikeways include protected bicycle lanes on NW York Street and NW Wilson Street as well as a section of NW 26th Street, NW 27th Street and the NW 24th Avenue greenway. Bike lanes on sections of NW Vaughn Street, NW Thurman Street, NW 21st and NW 22nd connect to the NW 18th and 19th Street buffered bike lane couplet. Additional detail included in the Montgomery Park District Transportation Plan.

Pedestrian Routes

City walkway designation is anticipated for NW York Street and NW Wilson Street west of NW 23rd, NW 22nd Street and NW 27th Street. Neighborhood walkway designation is anticipated for NW 24th Street. Additional detail included in the Montgomery Park District Transportation Plan.

Community Corridor

Community Corridor street design classification is anticipated to remain on NW Vaugh Street. A pedestrian refuge at NW 24th Street and crossing improvements associated with the Montgomery Park Master Plan will improve crossing safety and reduce the sense of NW Vaughn Street as a barrier. Additional detail included in the Montgomery Park District Transportation Plan.

Freight Streets

NW Nicolai Street and U.S. Highway 30 are the primary freight streets in the district. The concept includes revised signage near the intersection of NW Nicolai Street and NW Wardway Street clarifying NW Nicolai Street's role as the freight/truck route.

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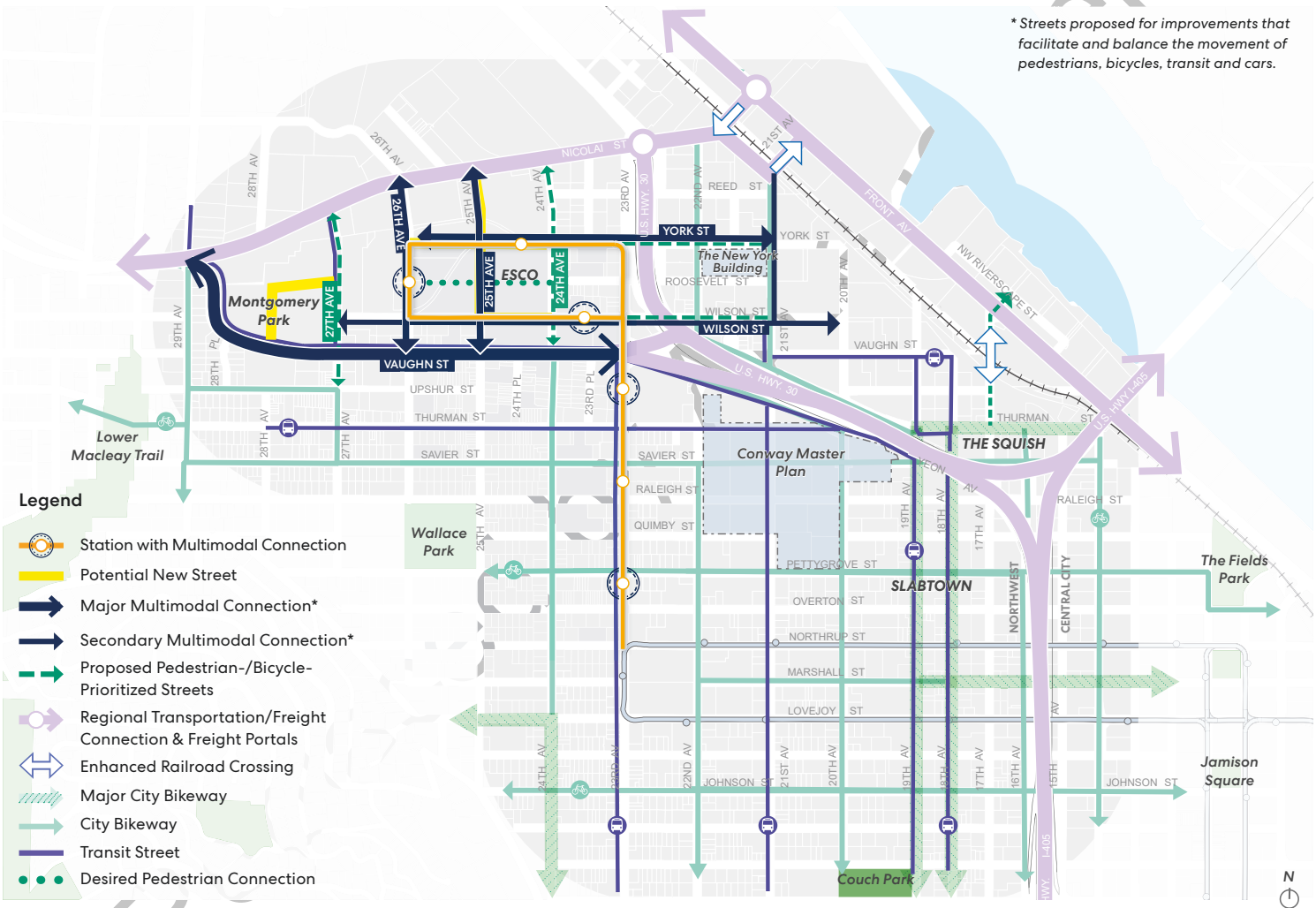

Preferred Scenario Transportation Connection

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Public Realm

Transit Main Streets

By connecting to the existing N-S streetcar line at NW 23rd, the preferred transit alignment will extend comparable public realm design standards and investment to NW Wilson and NW York Streets. This includes comfortable pedestrian throughways with safe crossings, the integration of green infrastructure such as plantings and stormwater facilities, as well as requirements for active frontages on the ground floor.

District Connectors

The preferred scenario features two important pedestrian connectors within the district. NW Wilson Street plays a major role as a district connector linking the Montgomery Park campus east through the district to connect to the Willamette River. The Roosevelt Street alignment provides an opportunity to create a linear park/plaza-like green pedestrian connection between NW 26th and NW 24th Avenues. The design of this space should encourage pedestrians, and potentially could include ground-level building activities - such as opportunities for outdoor dining, and other gathering spots that create a special sense of place.

Activity Centers

The preferred transit alignment should have requirements for active ground floor frontages. Retail spaces should be concentrated at prominent intersections within the study area. This includes the end-of-line station which is envisioned as an activity center with intermodal connections and activated public space.



Georgia Street, Indianapolis, IN

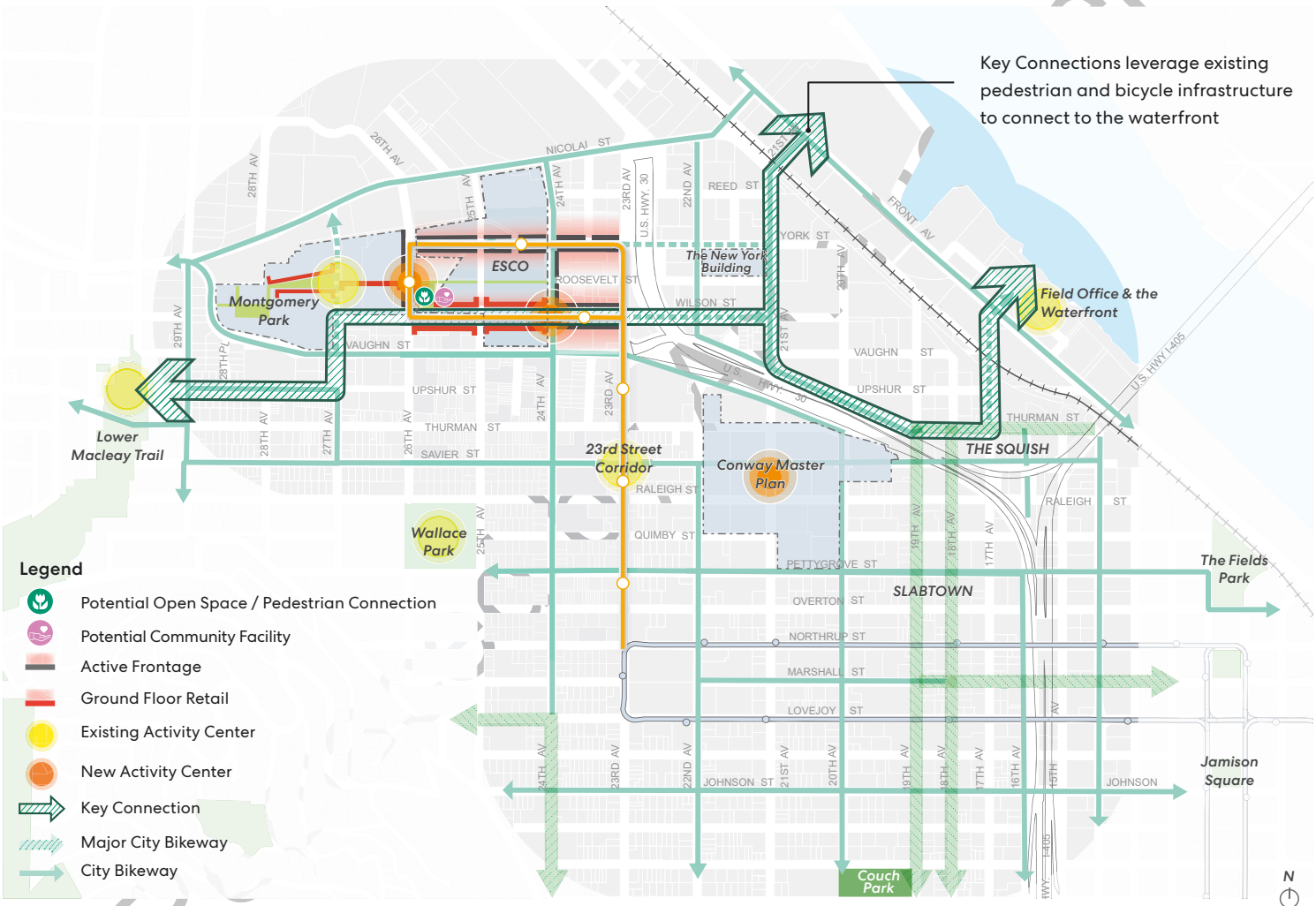


Marine Gateway, Vancouver, BC



Piazza Mazzini, Jesolo, Italy

Rejected by Amendment



Preferred Scenario Public Realm Improvement

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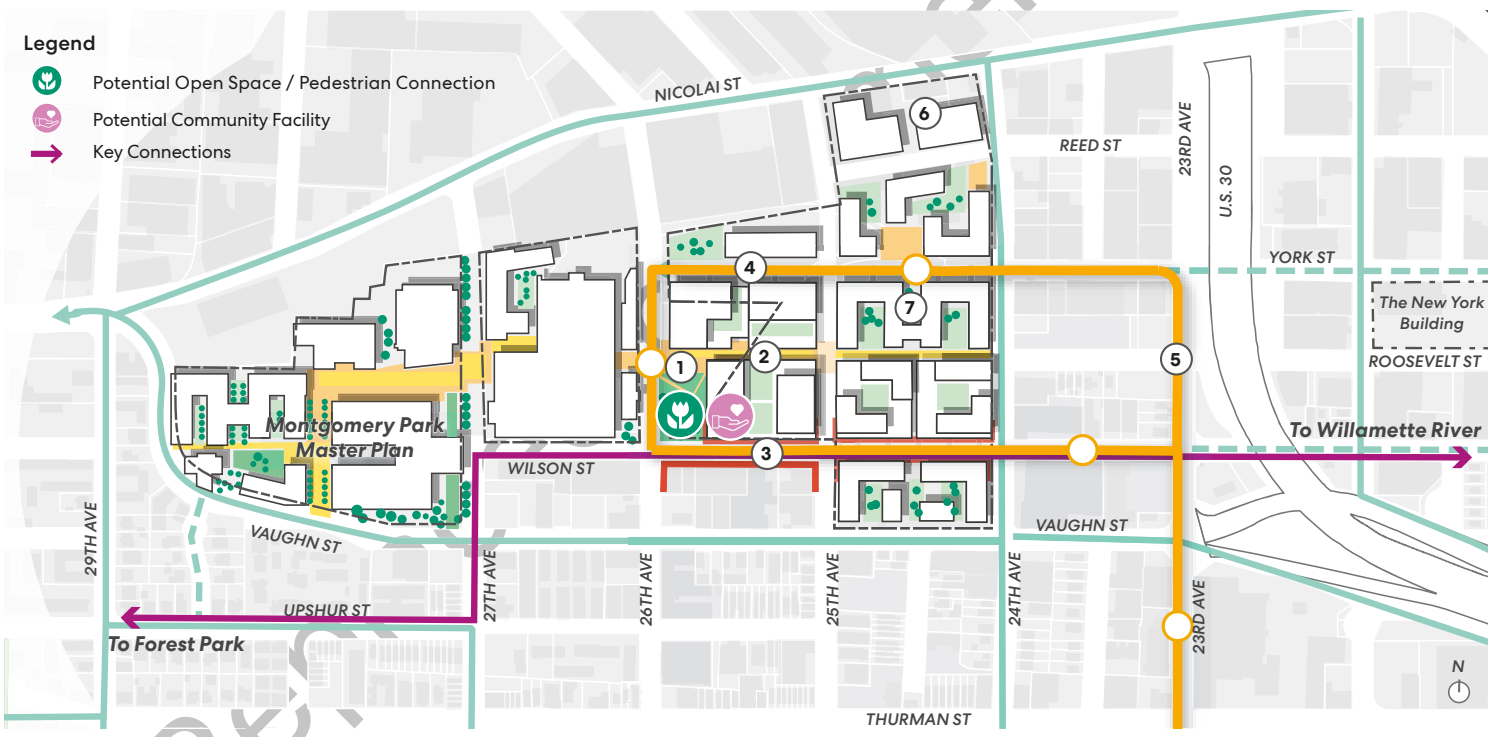
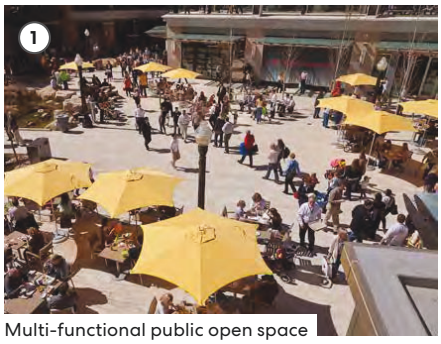
NORTHWEST STUDY AREA

This diagram above highlights urban design opportunities and the east-west connection through the area, connecting the district to Forest Park to the west and the Willamette River to the east.



Recommended Amendment



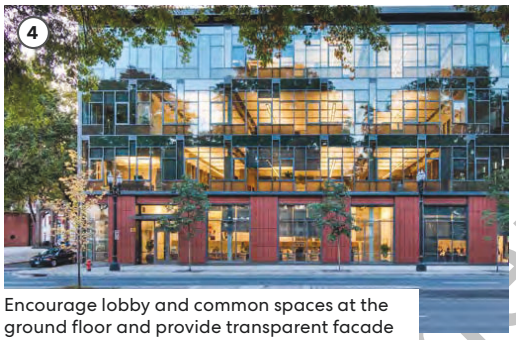
Multi-functional public open space



Pedestrian connection providing opportunities to sit and interact



Retail frontages that are transparent, flexible, and welcoming



Encourage lobby and common spaces at the ground floor and provide transparent facade



Tree-lined, pedestrian-oriented street buffering development from U.S. 30



Creative office or light industrial maker space



Medium to high density mixed-use neighborhood

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Replacement Amendment

Summary of Alternative Scenarios



Scenario 1

Enhanced Industrial



Scenario 2

Employment



Scenario 3

Mixed-Use

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Scenario 1:

Enhanced Industrial



Evaluation Characteristics and Considerations

Transit Supportive Uses and Streets

- New residential units are limited to Montgomery Park and areas south of Vaughn.
- Retail cluster located at Montgomery Park at end-of-line station.
- Industrial corporate campus on ESCO site.
- The streetcar extensions ties into the N-S Streetcar line at NW 18th and 19th, requiring extensive investment in new infrastructure to connect to Montgomery Park.

Sense of Place

- Urban industrial character with mixed use residential nodes at Montgomery Park and Slabtown.
- An industrial main street overlay encourages maker spaces for local manufacturers and retailers.

Health

- A small pocket park at end-of-line station
- Improvements on existing City Bikeways

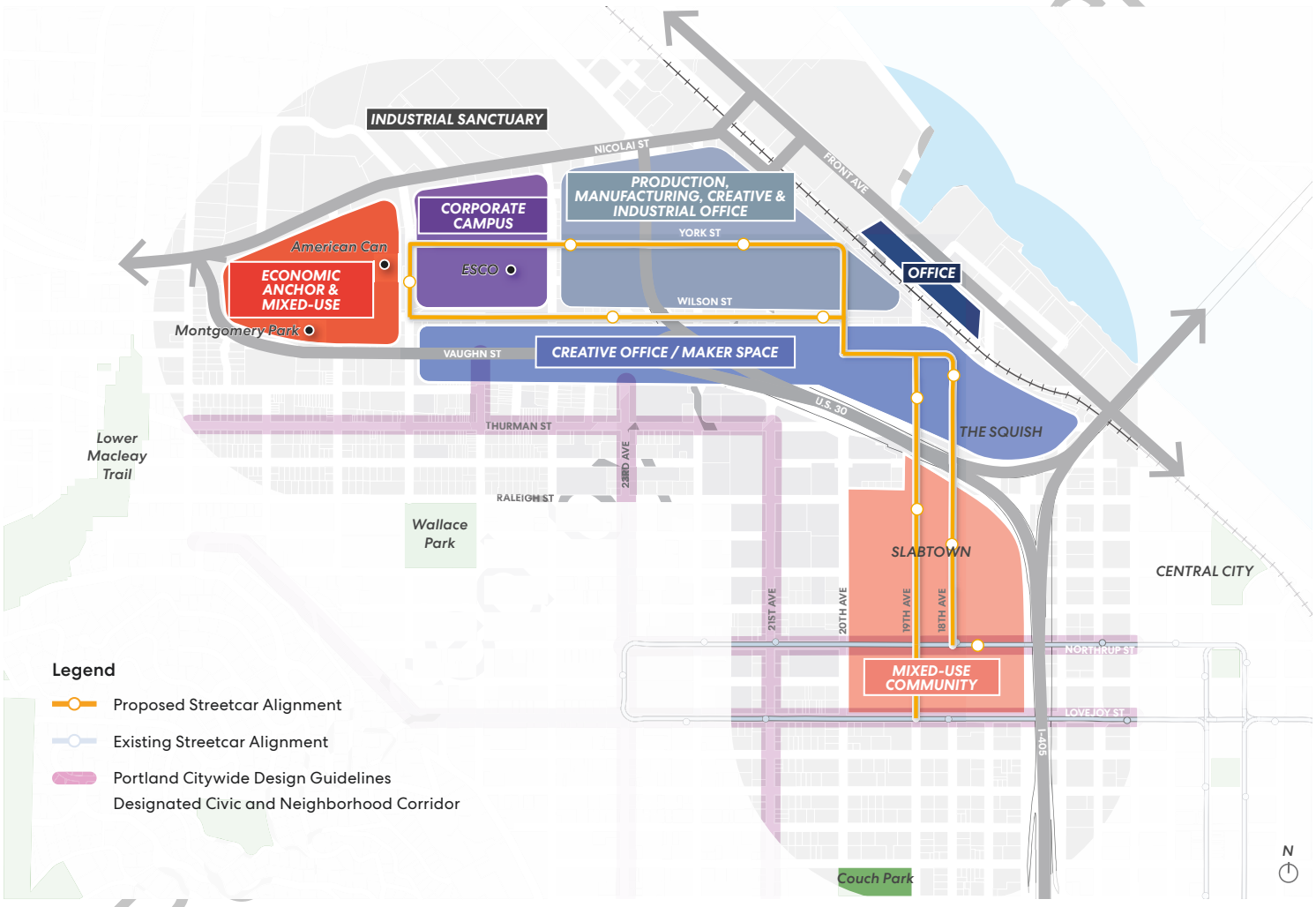
Economic Prosperity

- Creates the second highest number of new jobs split mostly between office and industrial sectors.

Equity

- Intensification of industrial lands creates additional industrial jobs.
- Preservation of industrial lands prevents the displacement of existing industrial businesses.
- Limited increase in land value that can be captured for community benefits. The least of amount of any scenario.

1201 Bryant Street, San Francisco, CA



District Concept

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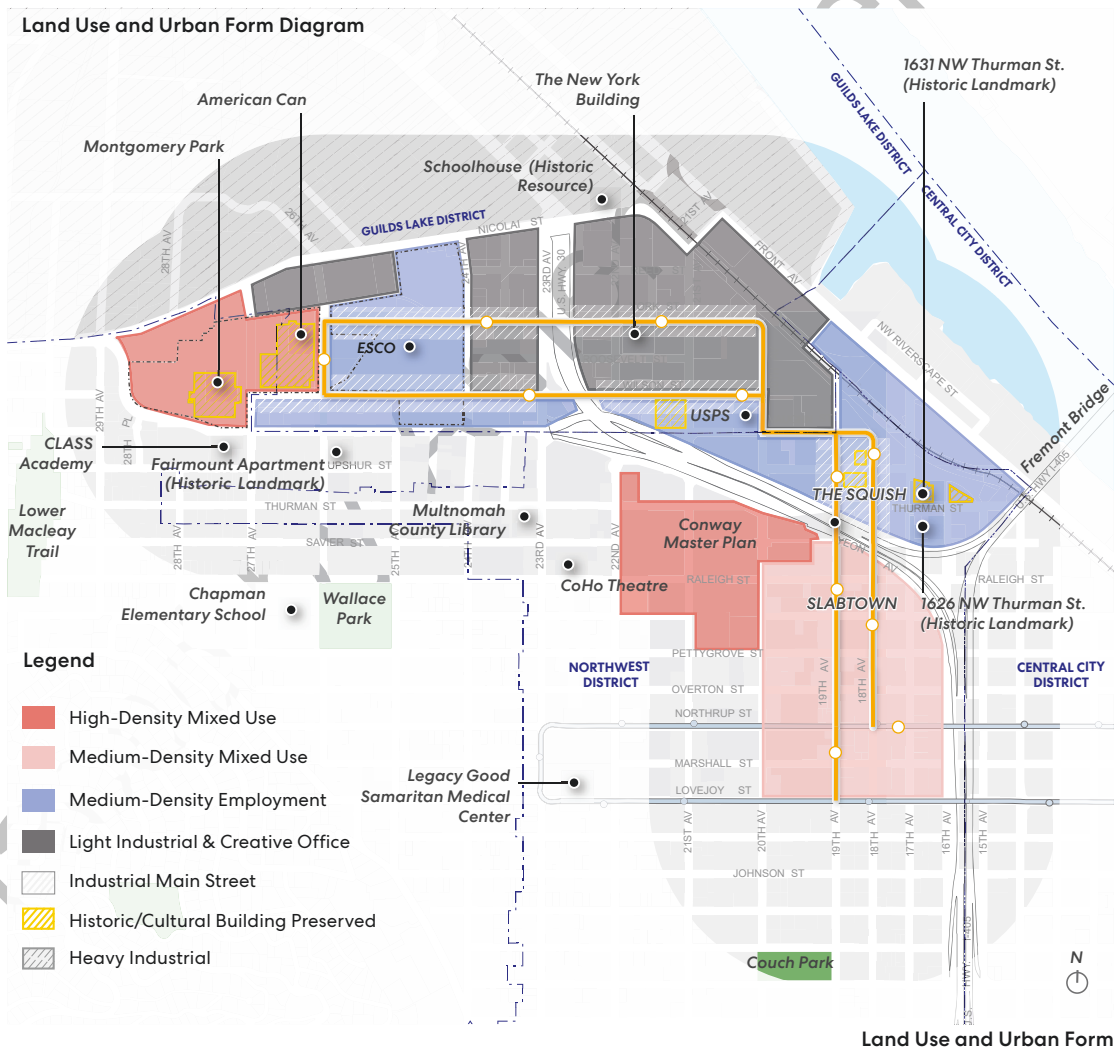
Land Use and Urban Form

This scenario allows an industrial-focused zoning pattern with more flexibility for creative office in the industrial zones. The enhanced industrial allowances is based on the current IG zone in the Central Eastside developed for the Southeast Quadrant Plan and the Central City 2035 Plan. The typical urban form for industrial zone is one-story buildings on large sites with the exception of newer industrial office typologies like the New York Building, which is 5 stories. The typical urban form for medium density employment zones would allow 4 to 6 story buildings.



Land Use and Urban Form

Original Exhibit B - Volume 5 (for information only)

Transportation

Transit Streets

The NW 18th and 19th couplet and the NW Wilson and NW York couplet accommodates streetcar/ bus, freight, autos, bicycles, and pedestrians. Each transit station seamlessly connects to active transportation network.

Multi-Modal Streets

Existing multi-modal corridors such as NW Vaughn Street, NW Thurman Street, NW 23rd Avenue and NW 21 Avenue have improved pedestrian crossings, bikeway enhancements, and transit priority treatments.

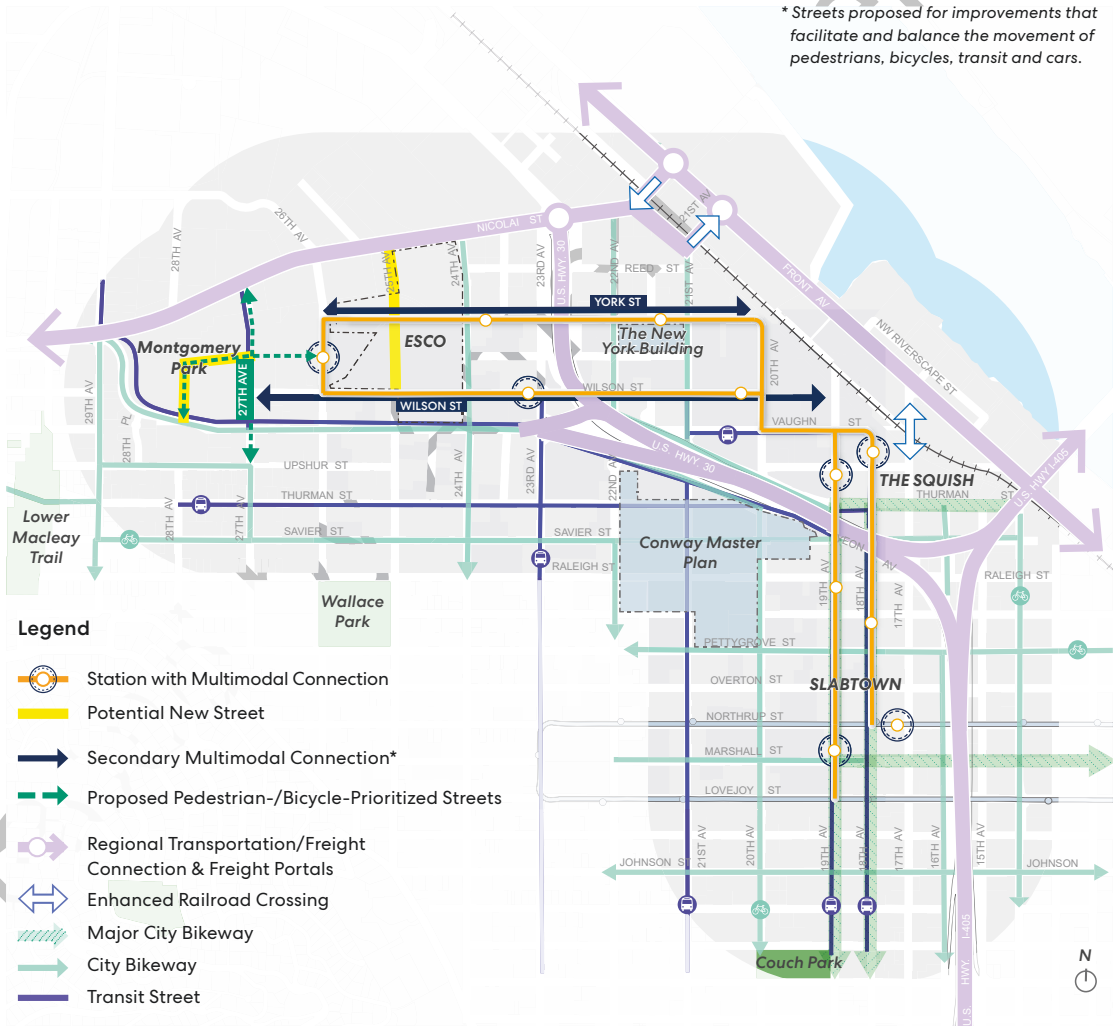
Active Transportation Streets

Existing City Bikeways identified in Northwest in Motion Plan and the TSP are improved.

Freight Streets

Freight streets and portals are enhanced for truck movement and access throughout the district and onto the regional freeway system. This includes improved crossings over the heavy rail line to connect to Front Avenue.

** Streets proposed for improvements that facilitate and balance the movement of pedestrians, bicycles, transit and cars.*



Transportation Connection

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Public Realm

Industrial Main Street

Along the transit streets, the industrial main street overlay requires special ground floor standards for new industrial development. The ground floor spaces provide smaller, affordable spaces for small manufacturers and promote economic diversity. Street level standards could include façade design, ceiling height, shop space depth, and other elements of building design to ensure new space is designed to support the success of smaller industrial tenants.

Activity Centers

Because much of the area is focused on industrial and employment uses, retail spaces are concentrated at the end-of-line station at NW 26th Avenue and NW Roosevelt Street which connects to additional a new activity center and retail destination at Montgomery Park.

Open Space

A small pocket park is siting adjacent to the end-of-line station at NW 26th Avenue and NW Roosevelt Street. This pocket park accommodates intermodal facilities such as bike share, scooters as well as spill out for adjacent retail spaces.

ESCO

ESCO parcels are kept large with minimal new street connections in order to support a corporate campus, which requires large industrial building footprints.

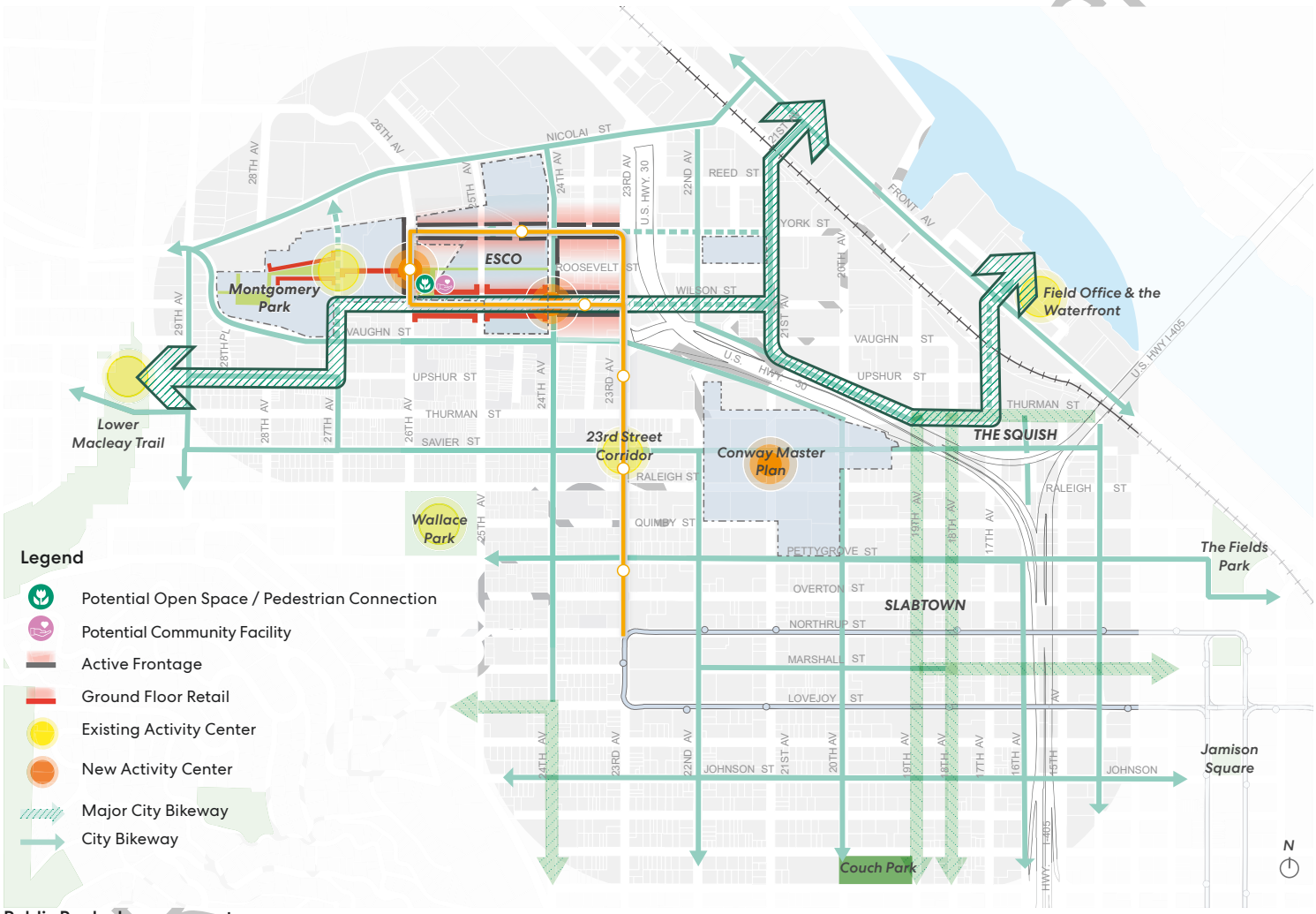


Potential frontage character of Industrial Main Street



Potential character of a pocket park

Replaced by Amendment



Public Realm Improvement

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Scenario 2:

Employment



Evaluation Characteristics and Considerations

Transit Supportive Uses and Streets

- There are limited opportunities for new market rate residential units outside of the Montgomery Park Master Plan.
- Retail cluster located at Montgomery Park at end-of-line station.
- ESCO is a high-density office center with multiple commercial tenants across employment sectors.
- The streetcar extensions ties into the N-S Streetcar line at NW 18th and 19th, requiring extensive investment in new infrastructure to connect to Montgomery Park.

Sense of Place

- High-density mixed-use employment area with intense mixed use residential nodes at Montgomery Park and Slabtown.
- An industrial main street overlay encourages maker spaces for local manufacturers and retailers.

Health

- A small pocket park at end-of-line station
- NW Roosevelt is green street to Forest Park and Willamette River
- New pedestrian/bike bridge crossing US-30.

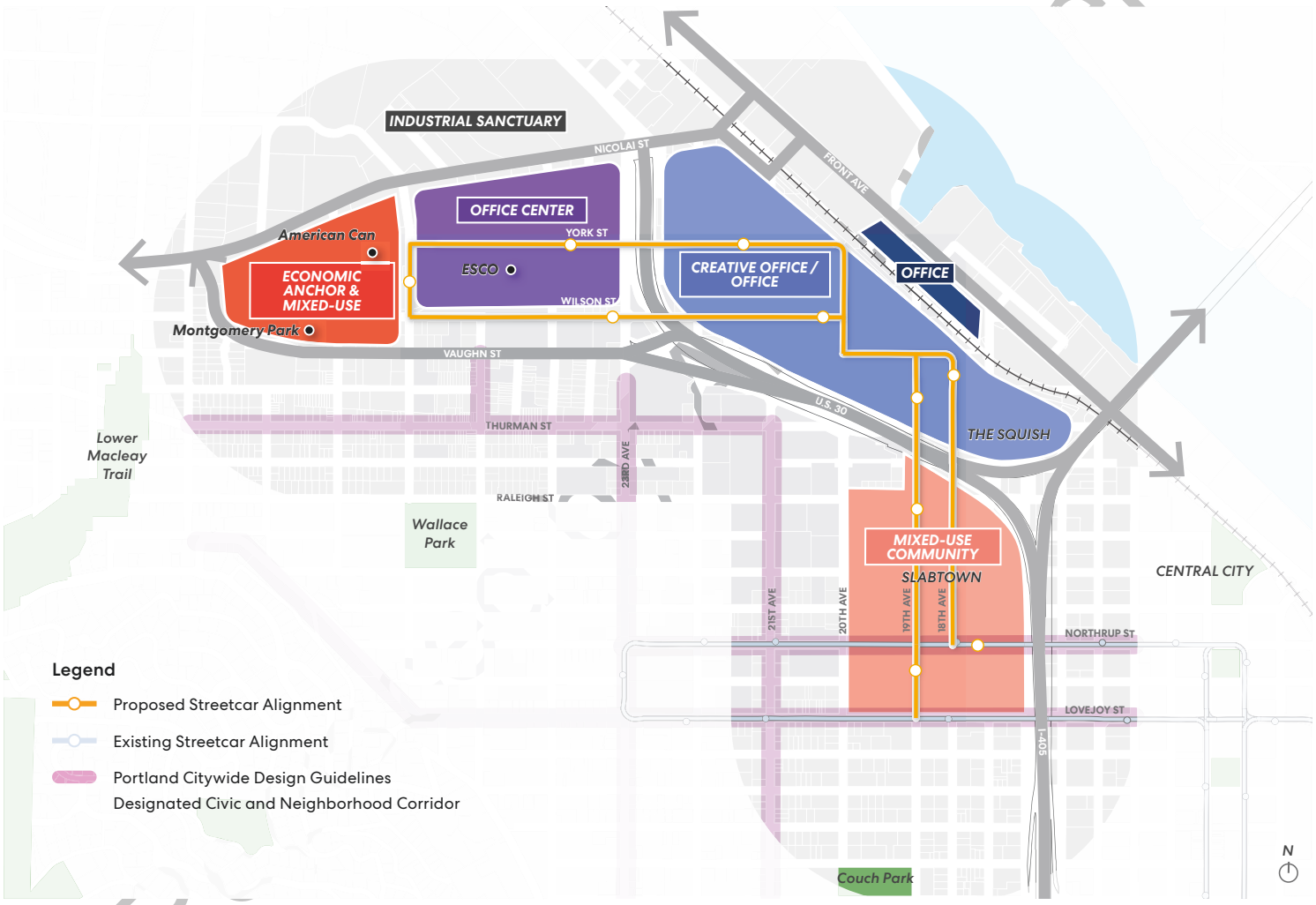
Economic Prosperity

- Creates the most jobs of all scenarios, many of which are in the office sector.
- Broader mix of employment uses applies across the existing industrial zones.

Equity

- Intensification of industrial lands creates additional industrial jobs.
- New affordable housing units created through inclusionary zoning are mostly limited to Montgomery Park, the Vaughn corridor, and areas south of Vaughn.
- Moderate increase in land value that can be captured for community benefits. The second least of amount of any scenario.

The New York Building



District Concept

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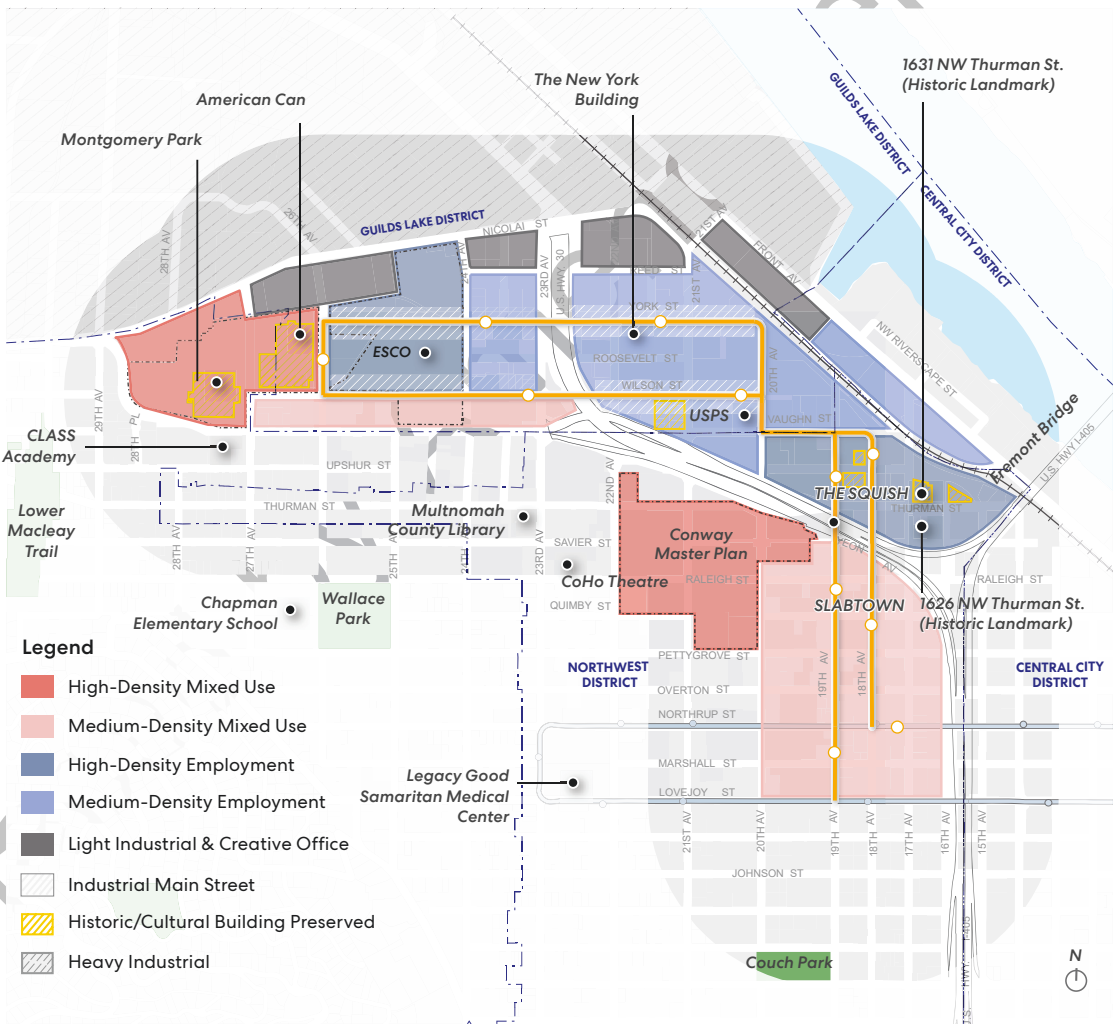
Land Use and Urban Form

This scenario allows intense employment uses including modified office allowances in existing industrial zones and increased density to support traditional and campus office type uses on larger sites throughout the study area. A high-density employment zone (with no housing allowed) is applied to the ESCO site, allowing upwards of 8 to 10 story buildings. High-density mixed use is allowed at Montgomery Park and the American Can Building. Medium density mixed use designation serves as a buffer to the lower density neighborhoods south of NW Vaughn Street.



Land Use and Urban Form

Replacement

Transportation

Transit Streets

The NW 18th and 19th couplet and the NW Wilson and NW York couplet accommodates streetcar/ bus, freight, autos, bicycles, and pedestrians. Each transit station seamlessly connects to active transportation network.

Multi-Modal Streets

NW Vaughn Street, NW 26th Avenue, and NW 24th Avenue have improved pedestrian crossings, bikeway enhancements, and transit priority treatments.

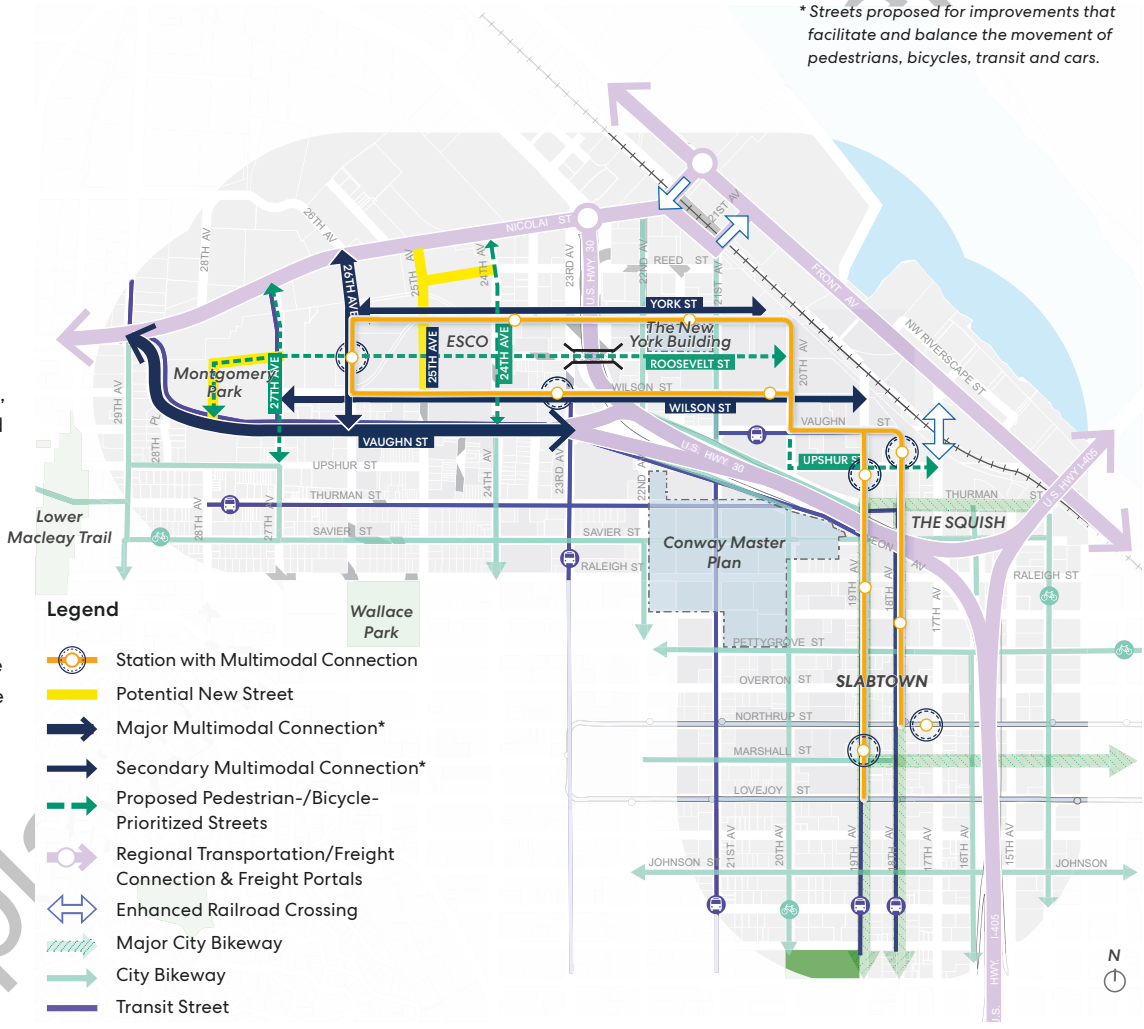
Active Transportation Streets

Pedestrian and bicycle streets prioritized across the study area, including new internal streets at the ESCO site. A new pedestrian/bicycle bridge crosses I-30 is proposed along Roosevelt Street.

Freight Streets

Major freight streets such as Nicolai Street and Front Avenue are enhanced to support truck movement and access onto the regional freeway system.

** Streets proposed for improvements that facilitate and balance the movement of pedestrians, bicycles, transit and cars.*



Transportation Connection

Replacement

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Public Realm

Industrial Main Street

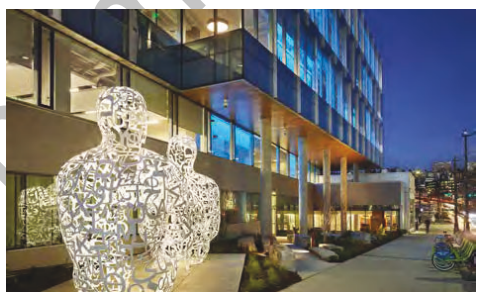
Along the transit streets, a main street overlay requires special ground floor standards for new industrial development. The ground floor spaces would provide smaller, affordable spaces for small manufacturers and promote economic diversity. Street level standards could include façade design, ceiling height, shop space depth, and other elements of building design to ensure new space is designed to support the success of smaller industrial tenants.

Activity Centers

The industrial main street is punctuated by two activity centers along the transit alignment that concentrates traditional ground floor retail spaces next to the transit station. The southern activity center is located at NW Upshur Street in between the NW 18th / 19th Avenue Transit Streets. This supports the emerging development occurring in The Squish. The northern activity center is located at the end-of-line station at NW 26th Avenue and NW Roosevelt Street which would connect to additional retail activity at Montgomery Park.

Open Space

Roosevelt Street serves as a linear open space, making a low-stress park like connection between the Lower Macleay Trail and the Willamette River.



Potential frontage character of office center



Potential character of active ground floor around activity centers



Potential character of open space

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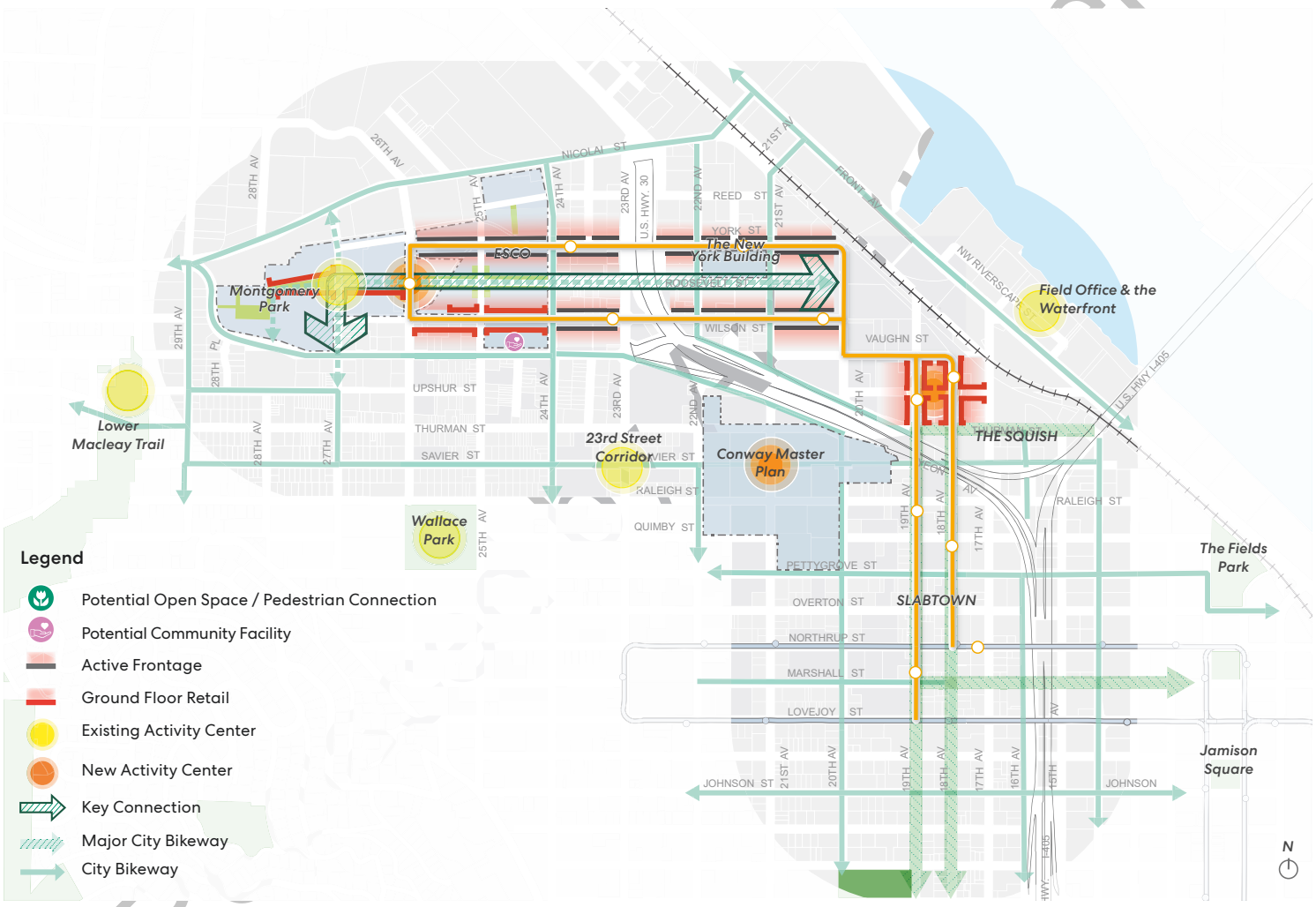

Public Realm Improvement

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Scenario 3:

Mixed Use



Evaluation Characteristics and Considerations

Transit Supportive Uses and Streets

- High-density mixed-use development is applied broadly, elevating the study area to an urban center comparable to Slabtown.
- Opportunity for thousands of new market rate residential units within the study area.
- Multiple retail clusters throughout the study area.
- High density mixed-use land-use unifies Montgomery Park, American Can Building, and ESCO site into a cohesive neighborhood.
- The streetcar extensions ties into the N-S Streetcar line at NW 18th and 19th, requiring extensive investment in new infrastructure to connect to Montgomery Park.

Sense of Place

- A main street overlay encourages active ground floor uses including for local manufacturers and retailers.

Health

- Proposed public open space on ESCO site next to end-of-line station and smaller pork along NW 20th Avenue.
- NW Roosevelt is green street to Forest Park and Willamette Rive.

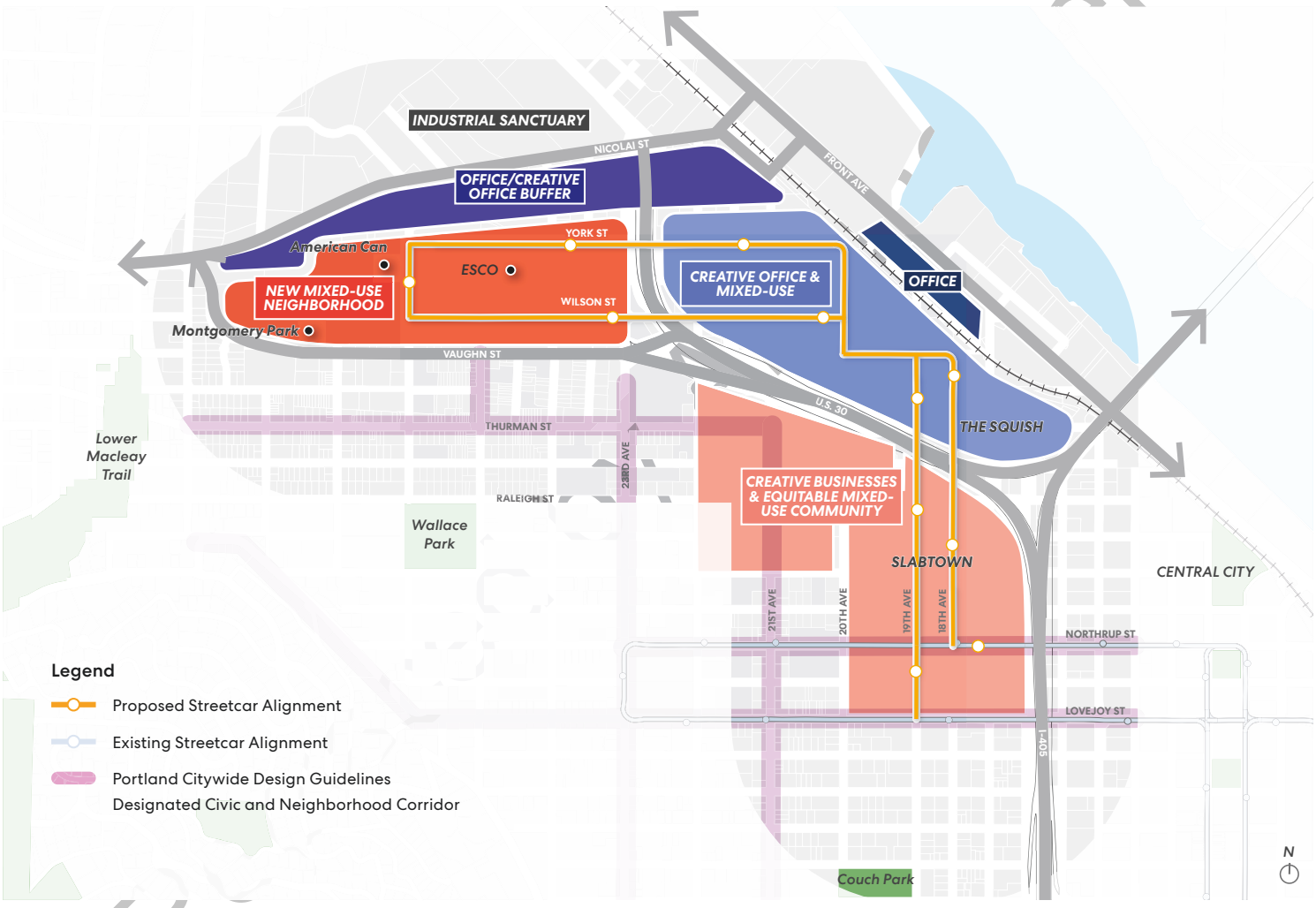
Economic Prosperity

- This scenario creates the fewest jobs of any scenario. This is due to redevelopment of industrial land for residential/mixed-uses.
- New jobs are likely to be commercial retail, services or office positions.

Equity

- Potential for hundreds of affordable units through inclusionary zoning.
- Densities support a community center or vocational school.
- Increase in land value leads to safer streets, inclusive park spaces, and other community benefits.

Conway Master Plan Development, Portland, OR
Credit: DOWL



District Concept

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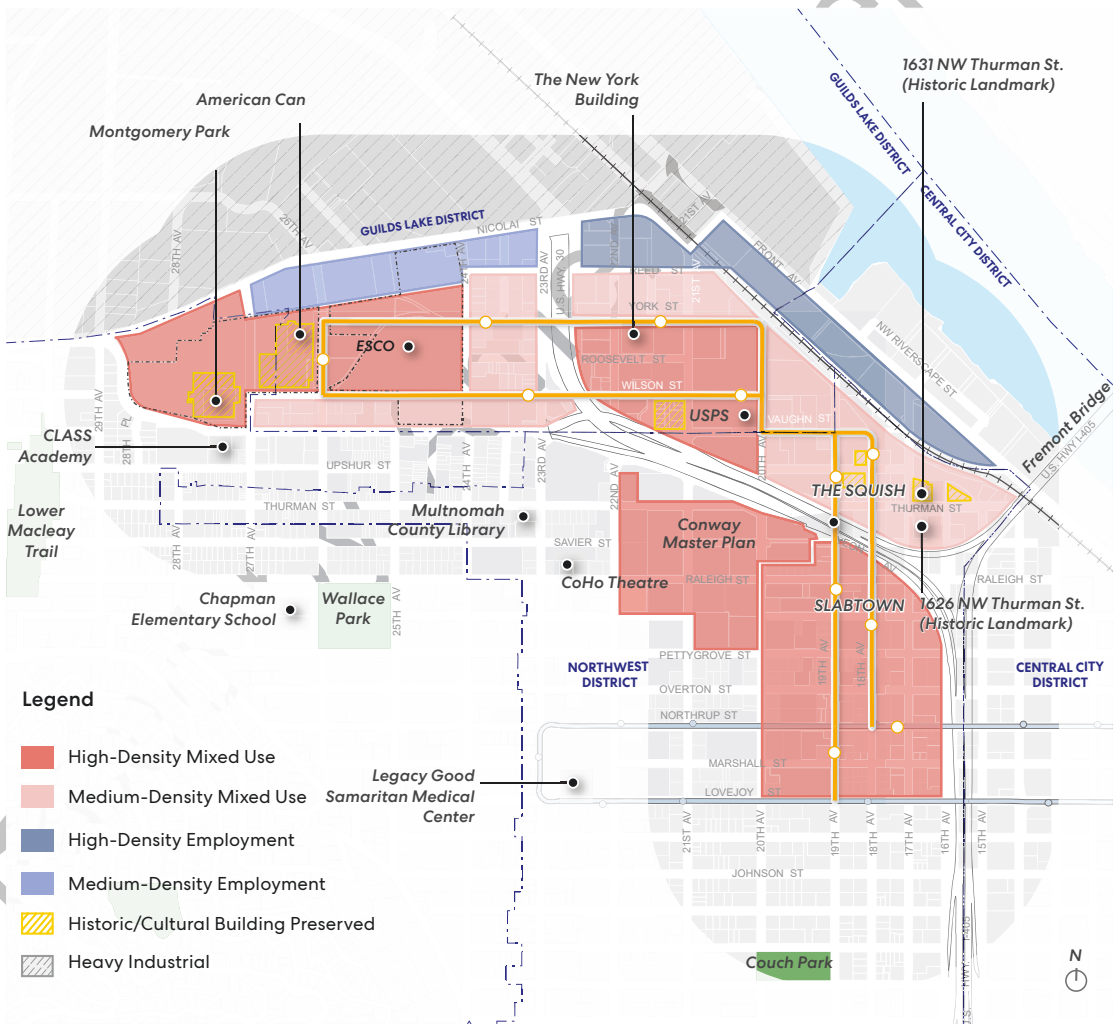
Land Use and Urban Form

This scenario allows a broader mix of uses including residential, office, retail, and industrial. Residential uses are applied broadly throughout the district with limitations on housing development for areas adjacent to Nicolai and between the rail line at Northwest Front Street. Urban form reflects some of the city's densest town centers with allowances for 6 to 10 story buildings.



Land Use and Urban Form

Replacement

Transportation

Transit Streets

The NW 18th and 19th couplet and the NW Wilson and NW York couplet accommodates streetcar/ bus, freight, autos, bicycles, and pedestrians. Each transit station seamlessly connects to active transportation network.

Multi-Modal Streets

NW Vaughn Street, NW 26th Avenue, and NW 24th Avenue have improved pedestrian crossings, bikeway enhancements, and transit priority treatments.

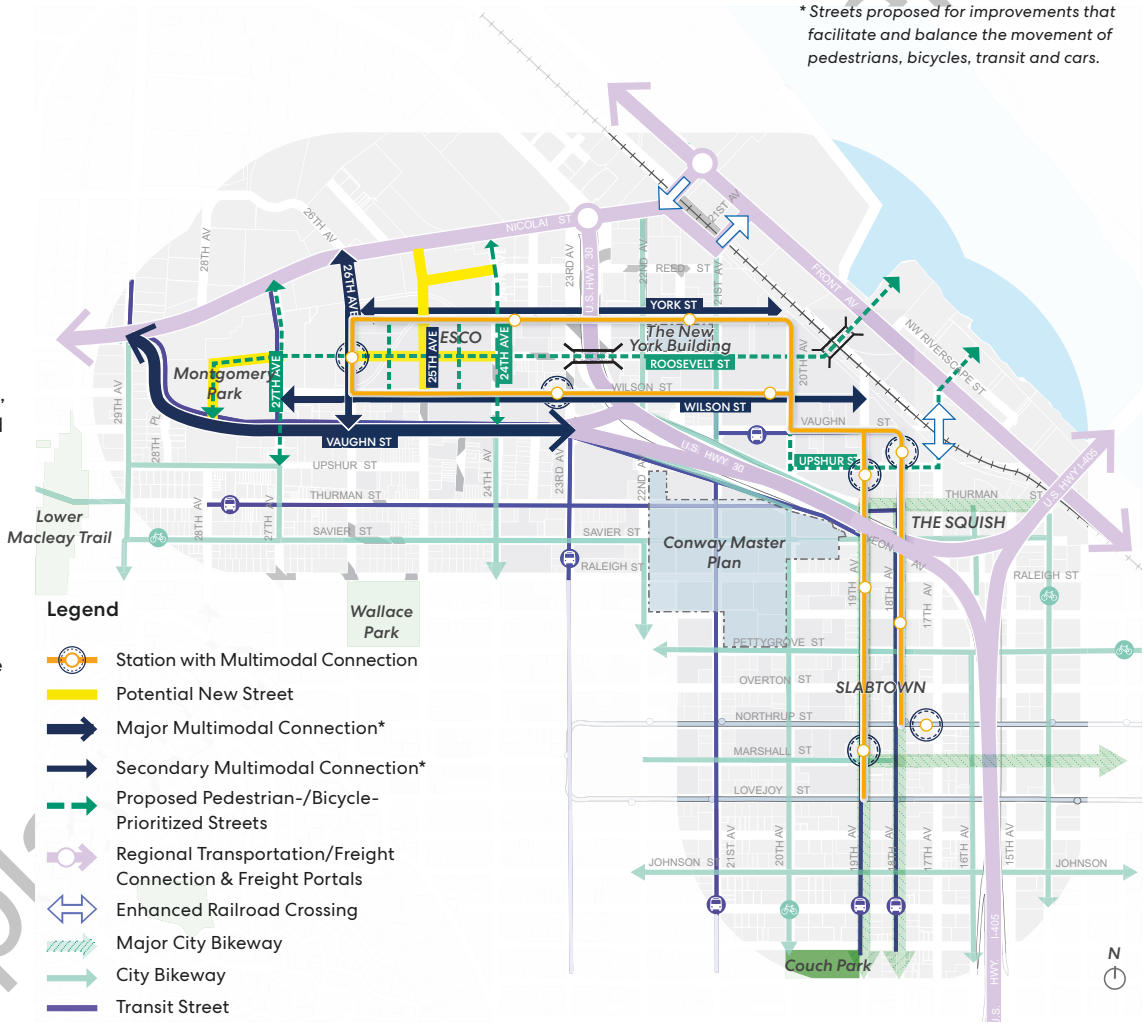
Active Transportation Streets

Pedestrian and bicycle streets prioritized across the study area, including new internal streets at the ESCO site. Two new pedestrian / bicycle bridges connect Forest Park to the Willamette River.

Freight Streets

Major freight streets such as Nicolai Street and Front Avenue are preserved to support truck movement and access onto the regional freeway system.

** Streets proposed for improvements that facilitate and balance the movement of pedestrians, bicycles, transit and cars.*



Transportation Connection

Replacement

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Public Realm

Activity Centers

This scenario features two activity centers with a concentration of ground floor retail. The southern activity center is located at NW Upshur Street in between the NW 18th / 19th Avenue Transit Streets. This supports the emerging development occurring in The Squish. The northern activity center is located at the end-of-line station at NW 26th Avenue and NW Roosevelt Street which would connect to additional retail activity at Montgomery Park. Ground floor activity is promoted along the streetcar alignment - potentially implemented with a main street overlay or similar regulatory tool.

Open Space

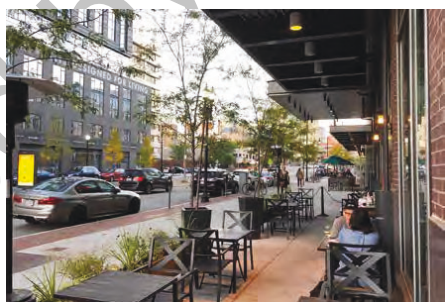
In this scenario, Roosevelt Street serves as a linear open space, making a low-stress park like connection between the Lower Macleay Trail and the Willamette River. Additional open space opportunities are proposed on the ESCO Site as well as at the intersection of NW 20th Avenue and NW Wilson Street.

ESCO Site

This scenario features 200' x 200' blocks to ensure compact, urban development.



Potential character of mid-block open space and pedestrian path



Potential character of ground floor retail with spill-out space



Potential character of open space

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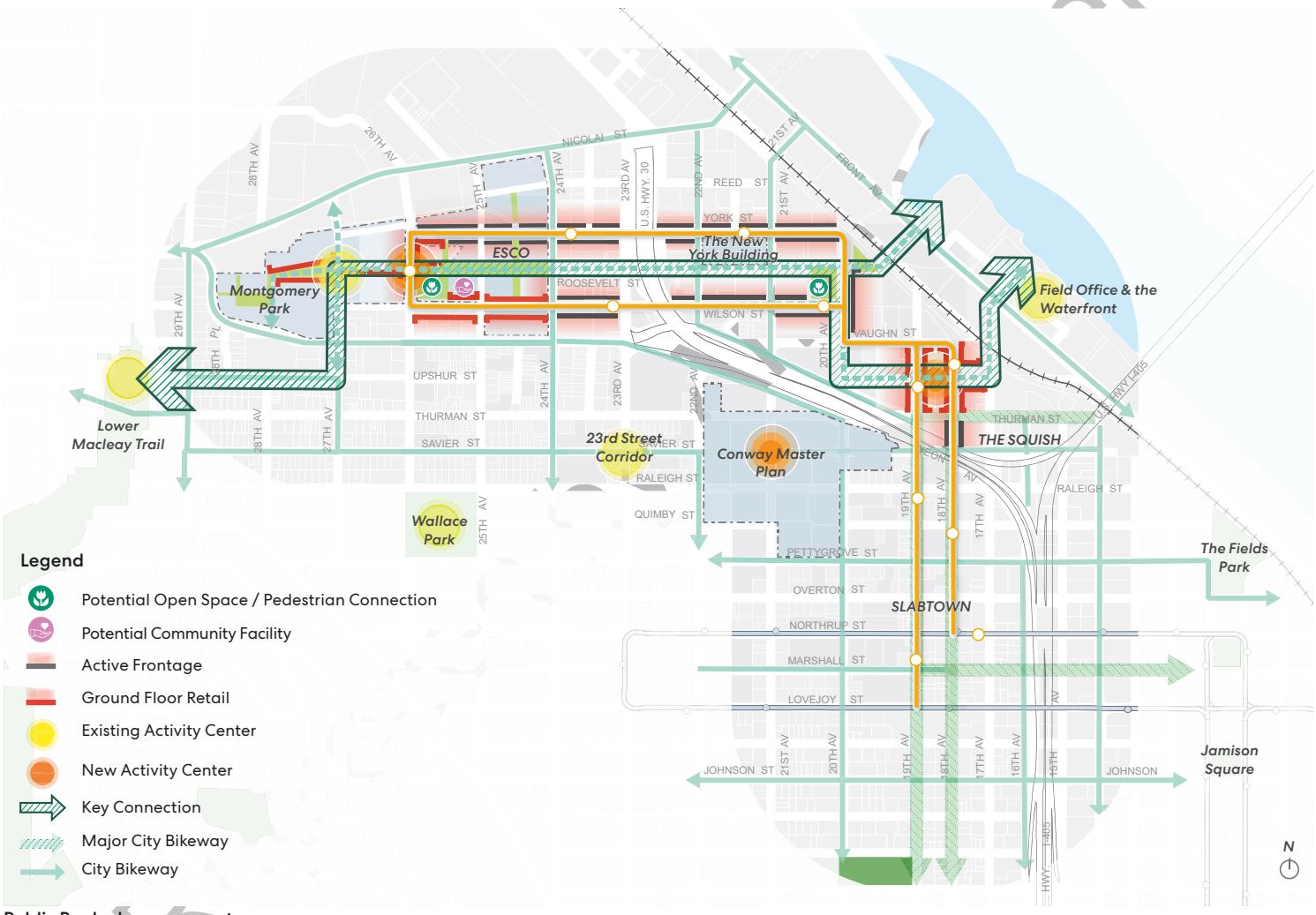

Public Realm Improvement

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Summary and Conclusion

This study evaluated three alternative land use scenarios each with a different focus: 1) Enhanced Industrial, 2) Employment, and 3) Mixed Use. Each alternative presented unique opportunities and challenges for the area.

Scenario 1, Enhanced Industrial, retained the emphasis on industrial uses and employment, but was less-supportive of future transit investments and service.

Scenario 2, Employment, fostered dense employment, but with the potential of resulting in a district lacking all-day activity, and the potential to overburden transportation systems.

Scenario 3, Mixed Use, achieved a dense mix of uses including opportunity for housing, but had impacts on the viability of industrial jobs in the area.

With the opportunity to revise the transit alignment to focus on NW 23rd Avenue, a new hybrid fourth scenario became possible. This hybrid scenario is the "Preferred Scenario" because it retains a significant amount of industrial land and job opportunity east of Highway 30, and provides opportunity for transformative new mixed use development, that can be effectively served by transit, in the area west of Highway 30.

The next step to implement the Preferred Concept in this report is for the City of Portland to develop more detailed draft implementation measures. The concepts and draft implementation measures will be available for public review. Ultimately, the concepts and draft implementation measures will be considered by city decision-making bodies - Portland Planning and Sustainability Commission and Portland City Council - at public hearings.

Following a successful adoption process, the City of Portland will update City policies and codes guiding land use and transportation in the study area, north of NW Vaughn Street. Policy updates should reflect the broad needs of the larger community - including inclusive economic opportunity and equity measures to protect businesses and residents, create a safe and welcoming public realm, and reduce disparities in accessing opportunity.

Redevelopment in this area may take time, and flexibility in decision making should be preserved and guided by the values adopted in the City of Portland's 2035 Comprehensive Plan.

Replaced by Amendment



Credit: Emily Wheeler

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MONTGOMERY PARK TO HOLLYWOOD:
URBAN DESIGN CONCEPTS

June 30, 2021

Original Exhibit B - Volume 5 (for information only)

Montgomery Park to Hollywood Transit and Land Use Development Strategy

Northwest Portland Opportunities and Challenges Report

April 26, 2021

Prepared for: City of Portland Bureau of Planning and Sustainability
City of Portland Bureau of Transportation

Final Report

ECONorthwest
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1. Executive Summary

This report analyzes the potential development outcomes of four different land use and urban design scenarios for the Northwest Portland portion of the Montgomery Park to Hollywood Transit and Land Use Development Strategy. The purpose of this analysis is to understand how the impacts and implications of different land use scenarios and development outcomes could respond to expanded transit service through an extension of the existing Northwest Streetcar alignment. While development would occur under all of the four land use scenarios evaluated, the outcomes for commercial development, residential development, and value created to fund public benefits varies between the scenarios.

- Development of industrial, employment, mixed-use, and residential prototypes are all feasible at varying levels in the study area
- Low density traditional industrial development types have limited feasibility in the study area due to a combination of relatively low rents and high existing land values
- All urban design and land use scenarios generated residual land value that could be captured to support public benefits
- The mixed-use land use scenario resulted in the least amount of industrial job growth and created the most amount of residual land value through land use changes
- The enhanced industrial results indicate industrial job growth similar to that of the employment scenario but results in the lowest residual land value created of the scenarios that could be available to capture for public benefits.
- The Mixed-Use Scenario creates the most amount of residual land value from land use changes that could be captured to fund public benefits and also results in the least number of jobs created in the district due to the introduction of residential allowances, which compete for land and limit the growth of industrial and office jobs.
- The hybrid enhanced industrial and mixed-use scenario best balances goals for limiting impacts to industrial employment in the district, allowing transit-supportive development to serve future streetcar service, and increasing the supply of affordable housing through the Inclusionary Housing Program.
- Increasing the height maximum to 75 feet to allow for seven-story development in the mixed-use zoned portions of the study area increases development feasibility, affordable and market rate housing production, and the potential for community benefits.
- Deeper affordable housing set-aside targets above 12% of units at 60% AMI create development financing challenges where project revenues cannot support debt service requirements. Deeper affordable housing requirements would cause feasibility challenges without incentives to support increase in net operating income.

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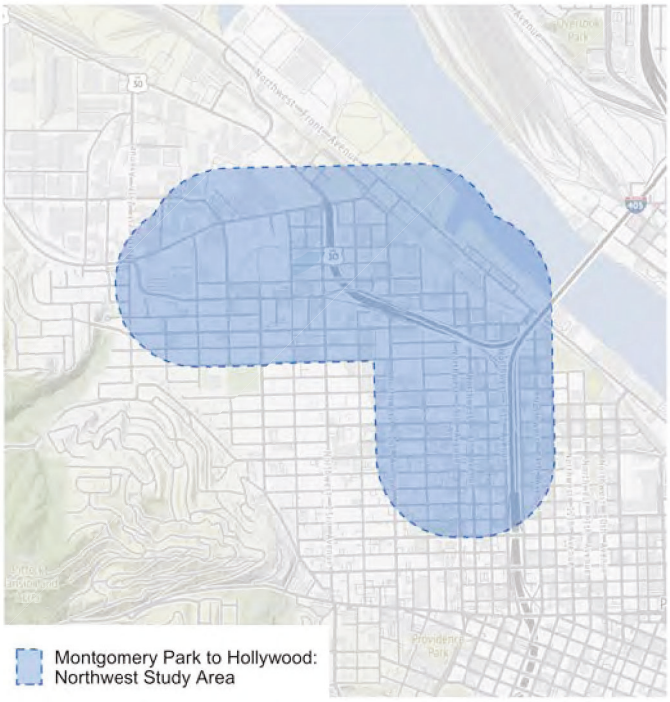
2. Project purpose

The purpose of this analysis is to understand how land use policy alternatives play out in different market conditions and zoning designations in response to the introduction of streetcar in Northwest Portland. This analysis was structured to highlight the outcomes of land use scenarios and provide information to help the City of Portland answer the following questions:

- How much development of different types is feasible for the alternative land use scenarios?
- What are the tradeoffs associated with changing land use allowances in the Northwest District?
- What level of change for employment and housing could be possible in the district if zoning permitted higher density employment and residential uses and development?
- What are the impacts of development under the different land use scenarios to existing industrial employment in the district?
- How much value (defined as residual land value) is created from zoning changes in the land use scenarios?
- How much value (defined as residual land value) could be captured in the district from land use changes that could help support public benefits?

Figure 1. Montgomery Park to Hollywood – Northwest Study Area Boundaries



Source: ECONorthwest

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v Amendment

3. Overview of Process

The development feasibility and land use outcomes analysis was structured to evaluate various land use and urban design scenarios in collaboration with the consultant team urban design lead Perkins+Will, city staff from the Bureau of Planning and Sustainability and the Bureau of Transportation, and the Montgomery Park to Hollywood Project Working Group. In September 2019 the City of Portland published the Northwest Portland Streetcar Extension and Land Use Alternatives Analysis that summarized preliminary findings about how land use changes and streetcar investment might support economic development, equity, and climate change goals, including the potential creation of affordable housing and job sites. This city-led analysis identified preliminary questions and trade-offs around streetcar investment and land use changes in Northwest Portland that became the basis for further evaluation of streetcar alignment and land use decisions.

Figure 2. Spectrum of Potential Land Use Changes



Source: City of Portland Bureau of Planning and Sustainability

Relationship to the Urban Design Process

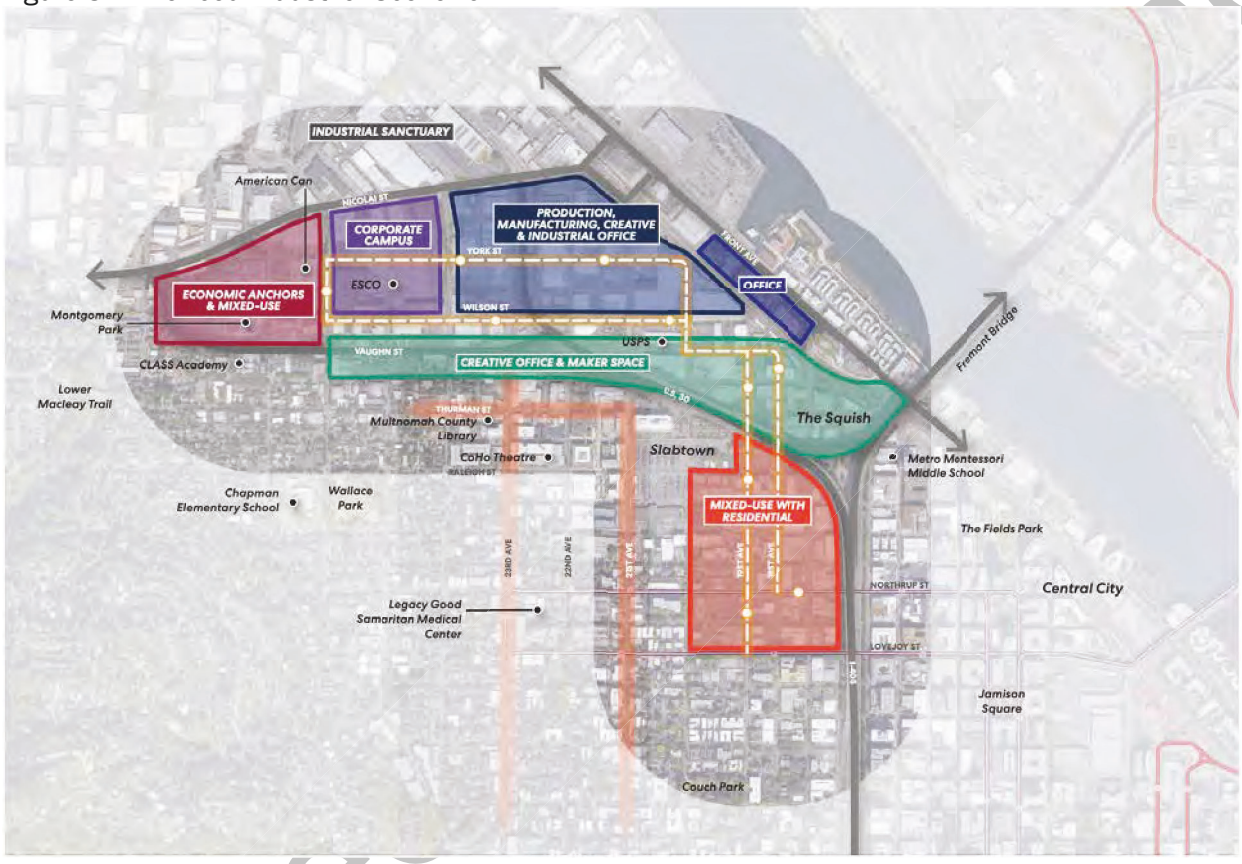
Perkins+Will developed three initial urban design concepts to further explore urban form, transportation, and public realm outcomes for each of the land use scenarios in Northwest Portland. Perkins+Will built on the land use scenarios previously analyzed by City of Portland staff with a deeper dive into block and site level impacts of transportation investments and land use changes to identify opportunities to integrate different land use scenarios from various streetcar alignment options.

Replacement

Urban Design Scenario 1: Enhanced Industrial

The intent of the enhanced industrial scenario was to evaluate an industrially focused land use pattern that allows for more flexibility for industrial uses, introduces the concept of transit streets to the district, and allows for more intense employment uses than currently allowed in around the ESCO site.

Figure 3. Enhanced Industrial Scenario



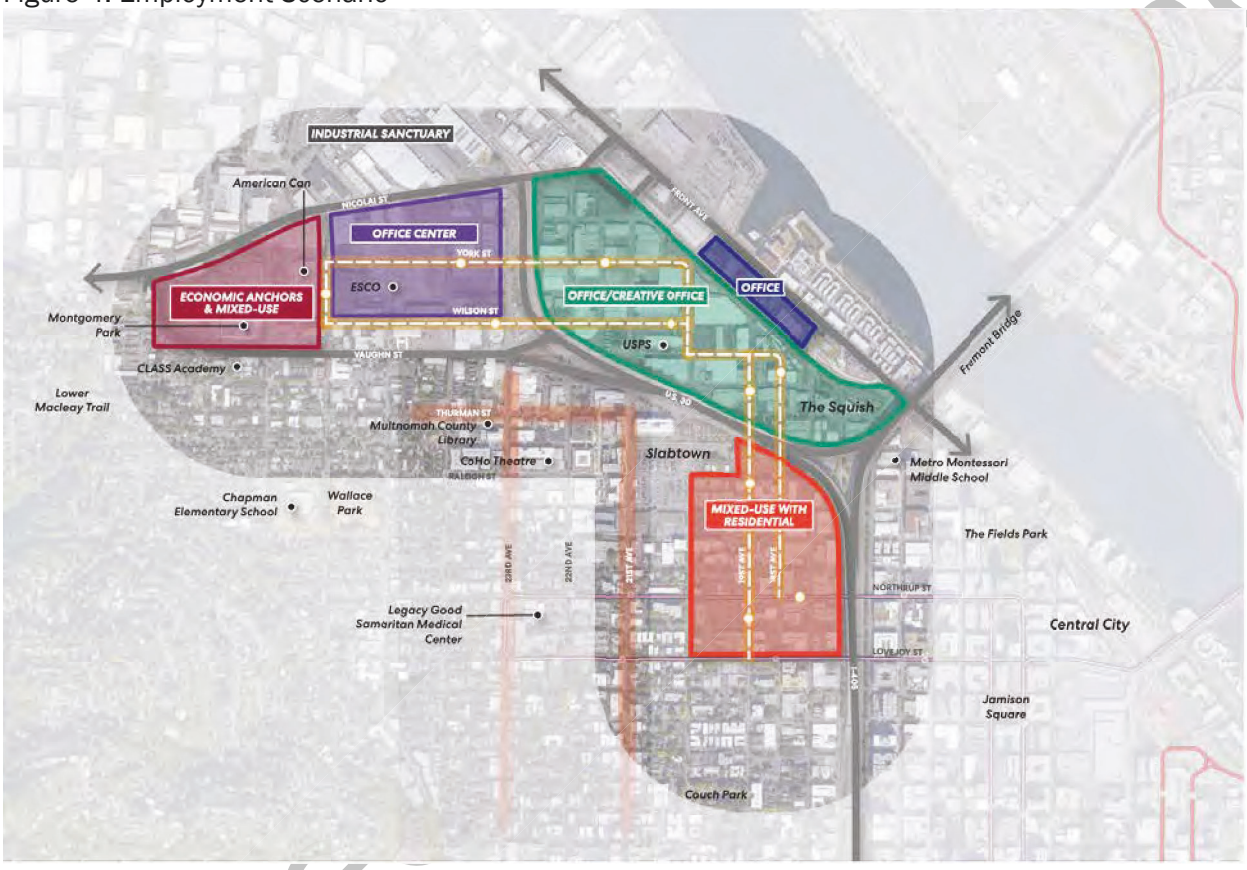
Source: Perkins+Will

Replacement

Urban Design Scenario 2: Employment

The intent of the employment scenario was to evaluate a denser employment-focused land use pattern that allows for higher density employment uses, broader office allowances across the district. This scenario also introduces a more focused pedestrian environment with public spaces connecting the district.

Figure 4. Employment Scenario



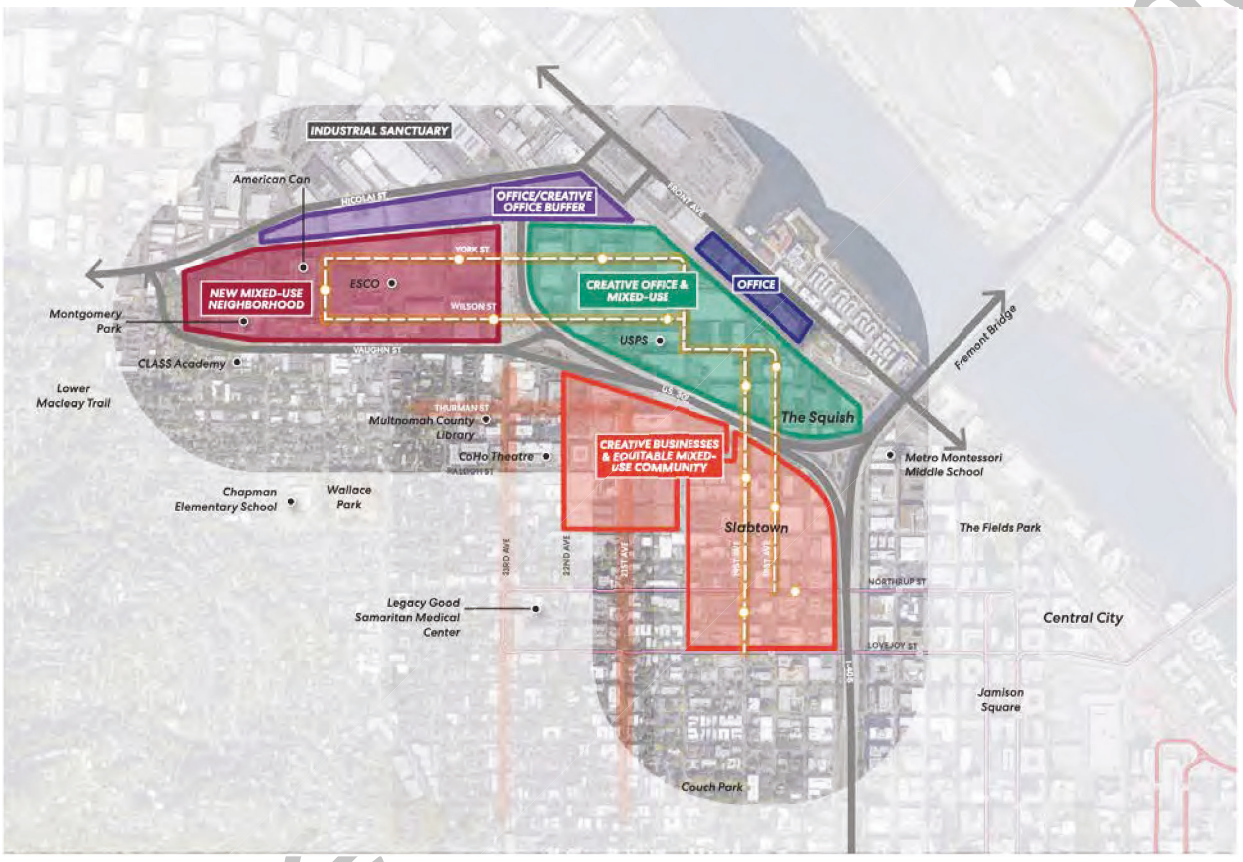
Source: Perkins+Will

Replacement

Urban Design Scenario 3: Mixed-Use Scenario

The intent of the mixed-use scenario was to evaluate a land use pattern that allows for residential and mixed-use development more broadly throughout the district, a focus on optimizing residential allowances to leverage more affordable housing, and adds a broader variety of public spaces and community facilities.

Figure 5. Mixed-Use Scenario



Source: Perkins+Will

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Urban Design Scenario 4: Hybrid Industrial and Mixed-Use Scenario

A fourth "hybrid" scenario was also developed as an outcome of initial evaluation of the previous three scenarios. The intent of the hybrid industrial mixed-use scenario was to evaluate a land use pattern that allows for residential and mixed-use development west of NW 23rd Avenue while maintaining a primary industrial land use function in the portion of the study area east of Highway 30. This scenario focuses the areas of change around Montgomery Park and the ESCO site.

Figure 6. Hybrid Industrial and Mixed-Use Scenario



Source: Perkins+Will

Summary of Land Use Scenarios Evaluated

This land use and development analysis evaluated, within the study area, the cumulative impacts of land use changes between the four urban design scenarios in addition to a baseline scenario that reflects current Comprehensive Plan and zoning designations. Detailed information about the zoning designations used to evaluate the land use scenarios and development prototypes evaluated within zoning designations is available in Table 3 and the Analysis Approach and Methodology section of this report.

Baseline Scenario – This scenario evaluated the development outcomes of existing zoning throughout the study area. The baseline scenario was the comparison by which all other land use scenarios were evaluated. This scenario represents a predominantly industrial zoning pattern in the area north of NW Vaughn Street and includes IH, IG, EG, and EX zones. The baseline scenario represents development outcomes that are market feasible under existing zoning, not current employment or housing units on the ground in the study area today.

Enhanced Industrial Scenario – This scenario evaluated an industrial-focused zoning pattern but allowed more flexibility for creative office in the industrial zones. The enhanced industrial allowances evaluated are based of the current IG zone allowances in the Central Eastside developed for the Southeast Quadrant Plan and the Central City 2035 Plan.

Employment Scenario – This scenario evaluated more intense employment uses including modified office allowances in existing IG zones and increased density to support traditional and campus office type uses on larger sites throughout the study area. This scenario evaluated a mix of EG-type zoning mapped throughout the study area. A more intense EX-type zone with no housing allowed was evaluated for the ESCO site and surrounding area.

Mixed-Use Scenario – This scenario evaluated a broader mix of uses including residential, office, retail, and industrial. This scenario allowed residential uses broadly throughout the district with limitations on residential development for areas adjacent to NW Nicolai Street and between the rail line and NW Front Avenue. This scenario evaluated a broader mix of CM2, CM3, and EX-type zones that were mapped more broadly across the study area.

Hybrid Mixed-Use and Industrial Scenario – This scenario tested a hybrid of the Enhanced Industrial Scenario and the Mixed-use Scenario. In this scenario, the area North of I-405 and East of Highway 30 was limited to enhanced industrial allowances, including industrial office allowances, while the remainder of the study area bounded by NW Vaughn Street, NW Nicolai Street, and Highway 30 was evaluated using mixed-use and residential prototypes. This scenario evaluated a mix of industrial and mixed-use zones including IG, EG, CM2, CM3, and EX. This scenario also evaluated higher height allowances for the EX zone in the core areas of the ESCO and Montgomery Park parcels that would allow up to seven story developments within a maximum height of 75 feet.

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4. Key Findings

For each of the scenarios evaluated, we summarized the total development outcomes including residual land value created, impact to jobs by type, change in housing production, and affordable units produced under an inclusionary housing program. These numbers represent what we call market supportive capacity. In other words, if unlimited market demand under each of these scenarios existed today, this is a realistic range of development outcomes that could be supported under current market conditions. Summarizing development impacts in this way allows staff, community stakeholders, and decisions makers to weigh the relative trade-offs of each land use scenario by comparing outcomes. For example, the residual land value created totals represent the increment of land value that is created from land use changes that can potentially be captured to fund public benefits. The results of this analysis are summarized in Tables 1 and 2 below.

Summary of Scenario Results

Enhanced Industrial Scenario –The Enhanced Industrial Scenario creates the least amount of residual land value, $22 million, of all the scenarios evaluated. The Enhanced Industrial Scenario creates the second highest number of new jobs split mostly between office and industrial sectors. This scenario creates 930 additional industrial jobs through intensification of existing zones that are still broadly limited to industrial uses. Additionally, there are over 1,390 office jobs forecast in this scenario that are the result of the zoning allowances for office and industrial office uses.

Employment Scenario– The Employment Scenario creates the second least amount of land residual value, $60 million, of all the scenarios evaluated. The Employment Scenario creates the most jobs of all the scenarios evaluated with nearly 2,370 new jobs, 58 percent of which are in office sectors. This scenario also sees an increase in industrial jobs, 930 new jobs, due to the increased allowances in the enhanced industrial type zoning east of Highway 30. This scenario also adds 820 new residential units from the introduction of allowances for mixed-use and residential development on the north side of Vaughn between 23rd and 27th.

Mixed-Use Scenario – The Mixed-Use Scenario creates the most amount of residual land value, $150 million, from land use changes that could be captured to fund public benefits. The Mixed-Use Scenario also creates the most amount of new market rate and affordable units under the inclusionary housing program.

However, this scenario sees the least amount of total job creation in the district. The small increase in jobs and employment development are the result of current industrial uses being redeveloped for residential and mixed-uses. Additionally, when redevelopment does occur, new jobs are more likely to be limited to ground floor commercial uses that are likely to be home to service sector jobs such as retail, personal services, or restaurants but could accommodate office and institutional jobs.

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Hybrid Mixed-Use and Industrial Scenario – The Hybrid Mixed-Use and Industrial Scenario creates the second highest amount of residual land value, $103 million, that could be captured for community benefits. This scenario generates 2,030 new market rate residential units in addition to 190 affordable units through the inclusionary housing program.

While this scenario creates 1,790 new jobs, a lot of which are in retail, personal services, and restaurants, it also sees a moderate increase to the total number of industrial jobs in the district. Notably, by excluding residential allowances in the area east of Highway 30 and allowing for intensification of industrial uses in current IG1 zones in combination with applying mixed-use allowances to larger sites on the west side of the study area, this scenario has a moderate net impact to the industrial jobs in the district.

Table 1: Land Use Scenario Results (Net Changes from Baseline Zoning)

	Enhanced Industrial Scenario	Employment Scenario	Mixed Use Scenario (10% set-aside)	Hybrid Industrial and Mixed Use (10% set-aside)
Residual Land Value	$22 M	$60 M	$150 M	$103 M
Industrial Jobs	930	930	250	560
Office Jobs	1,390	1,390	490	960
Retail / Restaurant Jobs	10	50	340	270
Net Job Changes	2,330	2,370	1,080	1,790
Market Rate Housing Unit Changes	190	820	3,110	2,030
Net Affordable Unit Changes	20	50	315	190

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Table 2. Land Use Scenario Results (Total Values for Each Scenario Evaluated)

	Baseline	Enhanced Industrial Scenario	Employment Scenario	Mixed Use Scenario (10% set-aside)	Hybrid Industrial and Mixed Use (10% set-aside)
Residual Land Value	$607 M	$629 M	$667 M	$757 M	$710 M
Industrial Jobs	370	1,300	1,300	630	930
Office Jobs	550	1,940	1,940	1,040	1,510
Retail / Restaurant Jobs	400	410	450	730	660
Market Rate Housing Units	10,810	10,990	11,630	13,920	12,840
Affordable Housing Units	940	960	990	1,250	1,130

This analysis also evaluated the impact of increasing the height maximum allowed in the EX zone in the study area in both the Mixed Use and Hybrid Industrial and Mixed Use Scenarios to be aligned with the height bonus option in the CM3 zone. This additional height analysis evaluated allowing development prototypes to access heights up to 75 feet compared to 65 feet in the EX base zone allowances. Increasing the height maximum results in an increase in the residual land value as well as an increase in housing units that are feasible to produce under current market conditions. Allowing buildings up to 75 feet in all scenarios allows a more feasible development type, five-over-two podium development, than what is allowed in 65-foot height maximum. While six-story buildings are permitted and physically possible within a 65-foot height maximum, in most cases a five-story development is identified as the most feasible development type. Allowing additional height up to 75 feet to get to seven-story development improves feasibility and development outcomes across the study area.

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Table 3: Scenario Results Comparing a Height Increase to 75 Feet (Net Changes from Baseline Zoning)

	Mixed Use Scenario (10% set-aside)	Mixed Use Scenario (10% set-aside) – more height	Hybrid Industrial and Mixed Use (10% set-aside)	Hybrid Industrial and Mixed Use (10% set-aside) – more height
Residual Land Value	$150 M	$186 M	$103 M	$140 M
Industrial Jobs	250	250	560	560
Office Jobs	490	490	960	960
Retail / Restaurant Jobs	340	560	270	480
Net Job Changes	1,080	1,300	1,790	2,000
Market Rate Housing Unit Changes	3,110	6,130	2,030	5,060
Net Affordable Unit Changes	315	670	190	550

5. Analysis Approach and Methodology

ECONorthwest utilized MapCraft labs to run financial pro formas to test the impact of changes to zoning and land use allowances within the study area defined as ¼ mile from the proposed Northwest Industrial streetcar alignment. To do this, we modeled development prototypes which conform to various land uses and entitlements currently present in the study areas. We will also model prototypes that conform to potential future entitlements in the study areas for the sensitivity testing of alternative scenarios. The analysis area for Scenario 4 is based on the original study area used for the initial three scenarios and is valid as a point of comparison because only the changes in land use were evaluated between scenarios. Additional analysis would need to be conducted to analyze full development outcomes with a revised study area based on a new transit alignment.

To understand the impact to development, given the factors of the alternative scenarios, our pro forma models evaluated changes to the *residual land value* (RLV) of the prototypes under both the existing zoning allowances (base scenario) and potential future zoning scenarios defined by the Perkins+Will urban design concepts and in discussion with City of Portland staff. RLV is an estimate of what a developer would be able to pay for land given the property's income from

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leases or sales, the cost to build as well as operate the building, and the investment returns needed to attract capital for the project. In other words, it is the budget that developers have remaining for land after all the other development constraints have been analyzed. While there are other quantitative methods for calculating value created from land use changes and calibrating public benefit requirements, such as an internal rate of return (IRR) threshold approach, all of the potential methods share drawbacks regarding the quality of inputs and sensitivity to those inputs. An advantage of the RLV approach is that it does not rely on land prices as an input. Rather, observed land prices can be compared with the model outputs to help calibrate the model and ensure it reflects reality. The residual land value results presented in this memo are the true residuals after subtracting the Multnomah County Assessor's estimates of real market value on each parcel.

We used RLV to identify the prototypical development with the highest value for each site in the study area. This reflects the likely market conditions where land will sell to whichever developer is able to pay the highest price. As a second filter for site level development feasibility, we applied debt service coverage thresholds to identify if projects could overcome financing requirements, even with positive RLVs. The RLV analysis is an estimate of the feasibility for the market to produce housing and commercial space – it is used to compare policy choices but does not produce a precise answer for every site due to variations in property conditions and property owner decisions. It is best to use these results to understand the direction and scale of policy choices relative to desired outcomes (e.g. more affordable housing or less impact on industrial jobs). The outputs of this analysis are not intended to be the final recommendation, but to help ground future recommendations and policy decisions in the context of market realities and how private investment decisions are made.

Additionally, this analysis relies heavily on recent trends and observed development within and around the study area. The near and mid-term impacts of COVID-19 on investment in residential and commercial development are unclear but will affect how and when the scenarios evaluated in this analysis might be realized. It is important to understand that there is still long-term demand for residential and commercial development in the City of Portland and that the location of the study area along with investment in infrastructure and public-realm improvements make the area well positioned for longer term investment.

Zoning Designations and Development Prototypes

ECONorthwest worked with city staff to identify the zoning designations that could implement the urban design scenarios. City of Portland Bureau of Planning and Sustainability provided information to translate the urban design concepts to zoning designations, floor area ratio (FAR) allowances, and heights that were used to develop the development prototypes that were evaluated. These development prototypes represent a typical development that could occur in zones throughout the district and under all land use scenarios. This analysis also evaluated both base and bonus FAR, density, and height bonuses by zone as applicable. Development prototypes that reflect bonus allowances account for current inclusionary housing obligations.

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Table 4: Zones from all scenarios plus respective prototypes evaluated

Zone	Prototypes allowed by base entitlements	Prototypes allowed by bonus entitlements
IH	Traditional low-rise industrial: warehouse and manufacturing 1 story, 0.6 FAR	N/A
IG1	Traditional low-rise industrial: warehouse, manufacturing, and flex 1 story, 0.6 FAR	N/A
IG1 Central City – IG1 zone with industrial office allowance	Traditional low-rise industrial: warehouse, manufacturing, and flex; Central City office; urban flex 4 stories, 3.4 FAR	N/A
EG1	Traditional low-rise industrial: warehouse, manufacturing, and flex; urban flex; low-rise office 6 stories, 2.1 FAR	N/A
EG2	Traditional low-rise industrial: warehouse, manufacturing, and flex; urban flex; low-rise office 6 stories, 2.1 FAR	N/A
EX	Traditional low-rise industrial: warehouse, manufacturing, and flex; urban flex; low-rise office; low to mid-rise residential 6 stories, 2.1 FAR – Flex 4 stories, 3.4 FAR – CC Indus.	Traditional low-rise industrial: warehouse, manufacturing, and flex; urban flex; low-rise office; low to mid-rise residential 5 stories, 4.6 FAR
EX - Pearl district height/FAR	Traditional low-rise industrial: warehouse, manufacturing, and flex; urban flex; low-rise office; low to mid-rise residential 6 stories, 2.1 FAR – Flex 4 stories, 3.4 FAR – CC Indus.	Traditional low-rise industrial: warehouse, manufacturing, and flex; urban flex; low to high-rise office; low to high-rise residential 10 stories, 9.3 FAR
EX – no housing	Traditional low-rise industrial: warehouse, manufacturing, and flex; Central City office; urban flex; low-rise office 6 stories, 2.1 FAR – Flex 4 stories, 3.4 FAR – CC Indus.	Traditional low-rise industrial: warehouse, manufacturing, and flex; Central City office; urban flex; low-rise office 6 stories, 3.4 FAR - Flex 5 stories, 4.4 FAR – CC Indus
EX – 7 stories (testing height bonus allowed in EX zone)	Traditional low-rise industrial: warehouse, manufacturing, and flex; Central City office; urban flex; low-rise office 6 stories, 2.1 FAR – Flex 4 stories, 3.4 FAR – CC Indus.	Traditional low-rise industrial: warehouse, manufacturing, and flex; Central City office; urban flex; low-rise office 7 stories, 6.5 FAR – MU Res
CM1	Low-rise residential; low-rise office 3 stories, 1.3 FAR	Low-rise residential; low-rise office 3 stories, 2.0 FAR
CM2	Low to mid-rise residential; low-rise office 4 stories, 2.1 FAR	Low to mid-rise residential; low-rise office 5 stories, 4.0 FAR
CM3	Low to mid-rise residential; low-rise office 4 stories, 2.1 FAR	Low to mid-rise residential; low-rise office 5 stories, 4.6 FAR

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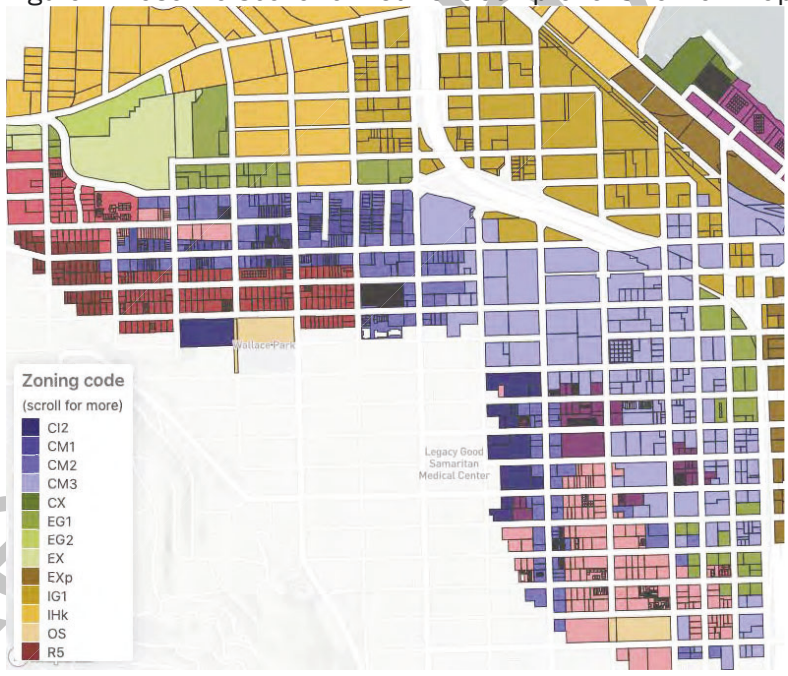
CX	Low to mid-rise residential; low-rise office 4 stories, 1.6 FAR	Low to mid-rise residential; low to mid-rise office 8 stories, 7.6 FAR
RM1	Low-rise residential 2 stories, 1 FAR	Low-rise residential 3 stories, 1.3 FAR
RM2	Low-rise residential 3 stories, 1.3 FAR	Low to mid-rise residential 4 stories, 2.1 FAR
RM3	Low-rise residential 4 stories, 1.6 FAR	Low to mid-rise residential 4 stories, 2.1 FAR
RM4	Low to mid-rise residential 5 stories, 4.0 FAR	Low to mid-rise residential 5 stories, 4.6 FAR
RX	Low to mid-rise residential 4 stories, 1.6 FAR	Low to mid-rise residential 7 stories, 6.5 FAR

Zoning Designations Analyzed by Land Use Scenario

For all of the land use scenarios, we tested numerous development prototypes within each of the zoning allowances for each scenario. For example, in the mixed-use scenario we evaluated multiple development prototypes (e.g.-three story wood frame construction, podium, and steel/concrete towers) and multiple land uses (e.g.- mixed-use, residential, and office uses all within a single type of development) across a range of mixed-use zones including CM2, CM3, and EX zones. Similarly, we tested prototypes for industrial and employment focused development in the IH, IG, and EG zones across all land use scenarios. The following maps in this section identify the zoning designations that were analyzed for each land use scenarios.

Figure 7. Baseline Scenario – Current Comprehensive Plan Map and Zoning



Source: ECONorthwest

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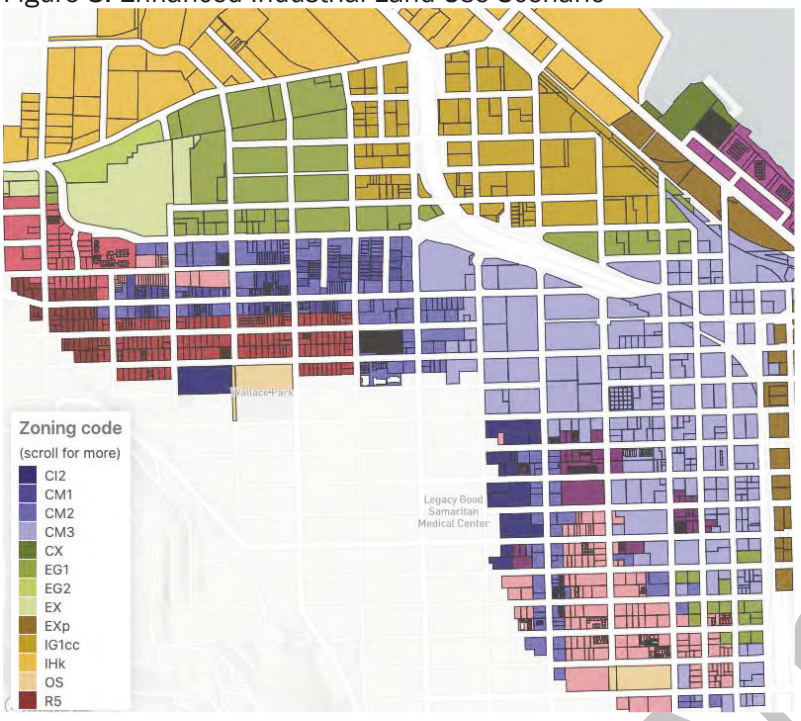
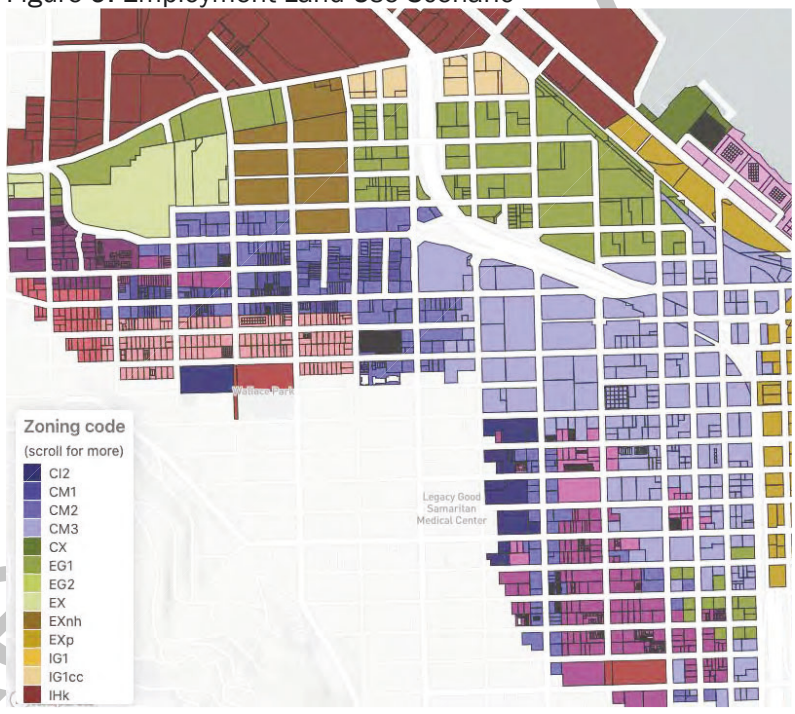
Figure 8. Enhanced Industrial Land Use Scenario



Source: ECONorthwest

Figure 9. Employment Land Use Scenario



Source: ECONorthwest

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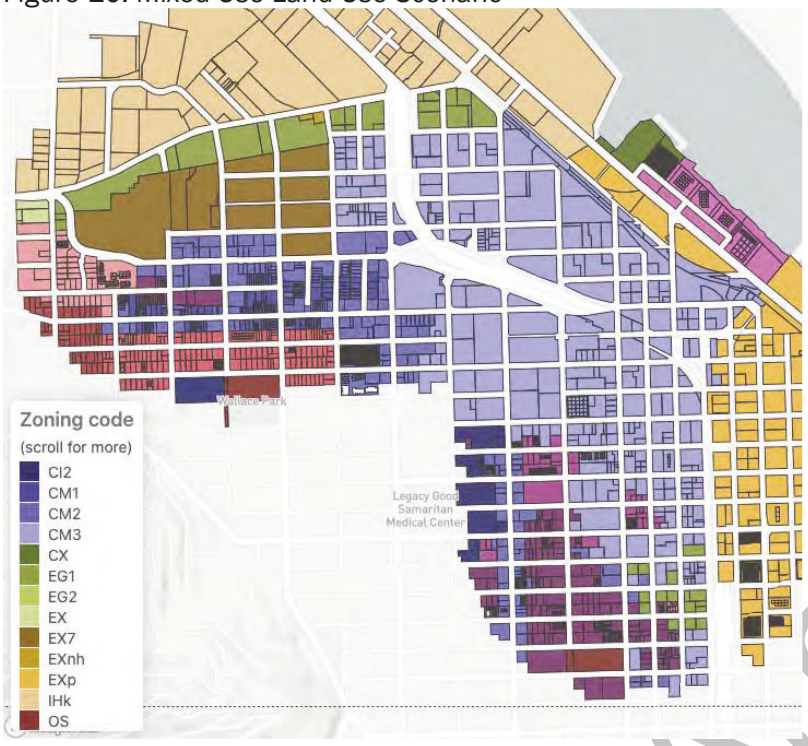
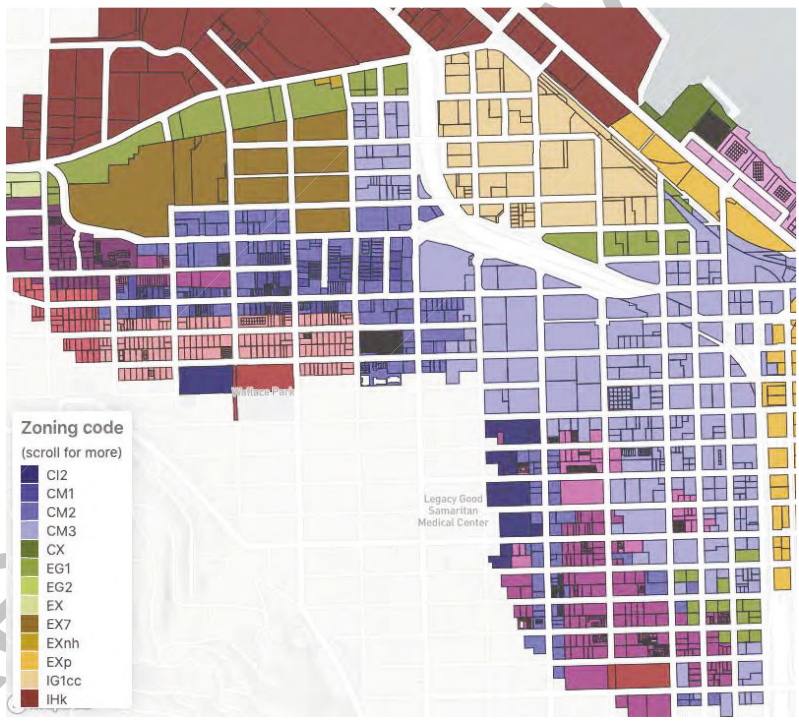
Figure 10. Mixed-Use Land Use Scenario



Source: ECONorthwest

Figure 11. Hybrid Industrial and Mixed-Use Land Use Scenario



Source: ECONorthwest

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Evaluating Deeper Affordable Housing Targets

We also evaluated multiple affordable housing targets under modifications to the existing inclusionary housing program. Increases in affordable housing set-aside requirements results in less development occurring overall and the scale at which development occurs that impacts both the amount of total housing units expected to be built as well as the number of jobs that are created in each scenario. We found that a 12% set-aside at 60% MFI was the highest outcome scenario for a district specific proposal that maximizes affordable housing through an existing program (Portland Inclusionary Housing Program) while still generating financial returns for site-specific development.

We found that, based on the debt financing assumptions (70% LTC, 6% interest rate), a 15% set-aside reduces the revenue, and subsequent net operating income, to a point that some projects cannot cover the debt service on the loan. At a 12% set-aside, the revenue from the mixes of income levels can still support the annual debt service payment, assuming the same debt financing parameters.

This analysis also evaluated the impact of increasing the height limit allowed in the EX zone in the study area in both the Mixed Use and Hybrid Industrial and Mixed Use Scenarios to be aligned with the height bonus option in the CM3 zone. Increasing the height maximum results in an increase in the residual land value as well as an increase in housing units that are feasible to produce under current market conditions.

Table 5: Affordable Housing Results (Net Changes from Baseline Zoning for Affordable Housing Targets)

	Mixed Use Scenario (10% set-aside)	Mixed Use Scenario (12% set-aside)	Mixed Use Scenario (15% set-aside)	Hybrid Industrial and Mixed Use (10% set-aside)	Hybrid Industrial and Mixed Use (12% set-aside)
Residual Land Value	$150 M	$99 M	$14 M	$103 M	$58 M
Industrial Jobs	250	250	250	560	560
Office Jobs	490	490	490	960	960
Retail / Restaurant Jobs	340	270	180	270	490
Net Job Changes	1,080	1,010	930	1,790	1,740
Market Rate Housing Unit Changes	3,110	2,100	930	2,030	1,170
Net Affordable Unit Changes	315	410	590	190	280

Source: ECONorthwest

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Table 6: Affordable Housing Results from a Height Increase to 75 Feet (Net Changes from Baseline Zoning for Affordable Housing Targets)

	Mixed Use Scenario (10% set-aside) – more height	Mixed Use Scenario (12% set-aside) – more height	Hybrid Industrial and Mixed Use (10% set-aside) – more height	Hybrid Industrial and Mixed Use (12% set-aside) – more height
Residual Land Value	$186 M	$125 M	$140 M	$84 M
Industrial Jobs	250	250	560	560
Office Jobs	490	490	960	960
Retail / Restaurant Jobs	560	490	480	440
Net Job Changes	1,300	1,230	2,000	1,960
Market Rate Housing Unit Changes	6,130	5,080	5,060	4,150
Net Affordable Unit Changes	670	810	550	670

Source: ECONorthwest

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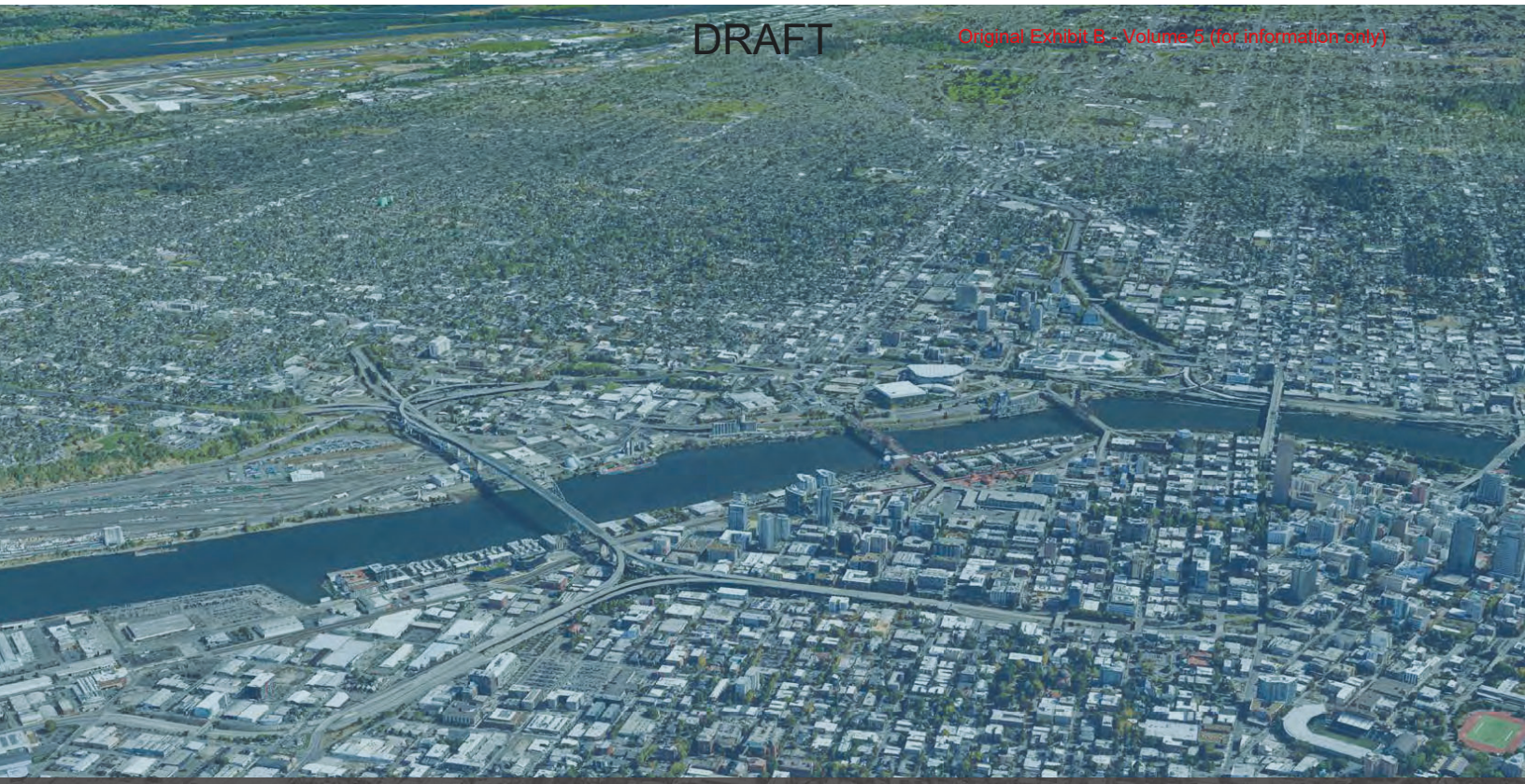

MONTGOMERY PARK *to* HOLLYWOOD

TRANSIT & LAND USE DEVELOPMENT STUDY

EXISTING CONDITIONS
JANUARY 2020

PBOT
PORTLAND BUREAU OF TRANSPORTATION

Bureau of Planning and Sustainability

PORTLAND CITY COUNCIL

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MONTGOMERY PARK *to* HOLLYWOOD

TRANSIT & LAND USE DEVELOPMENT STUDY

EXISTING CONDITIONS

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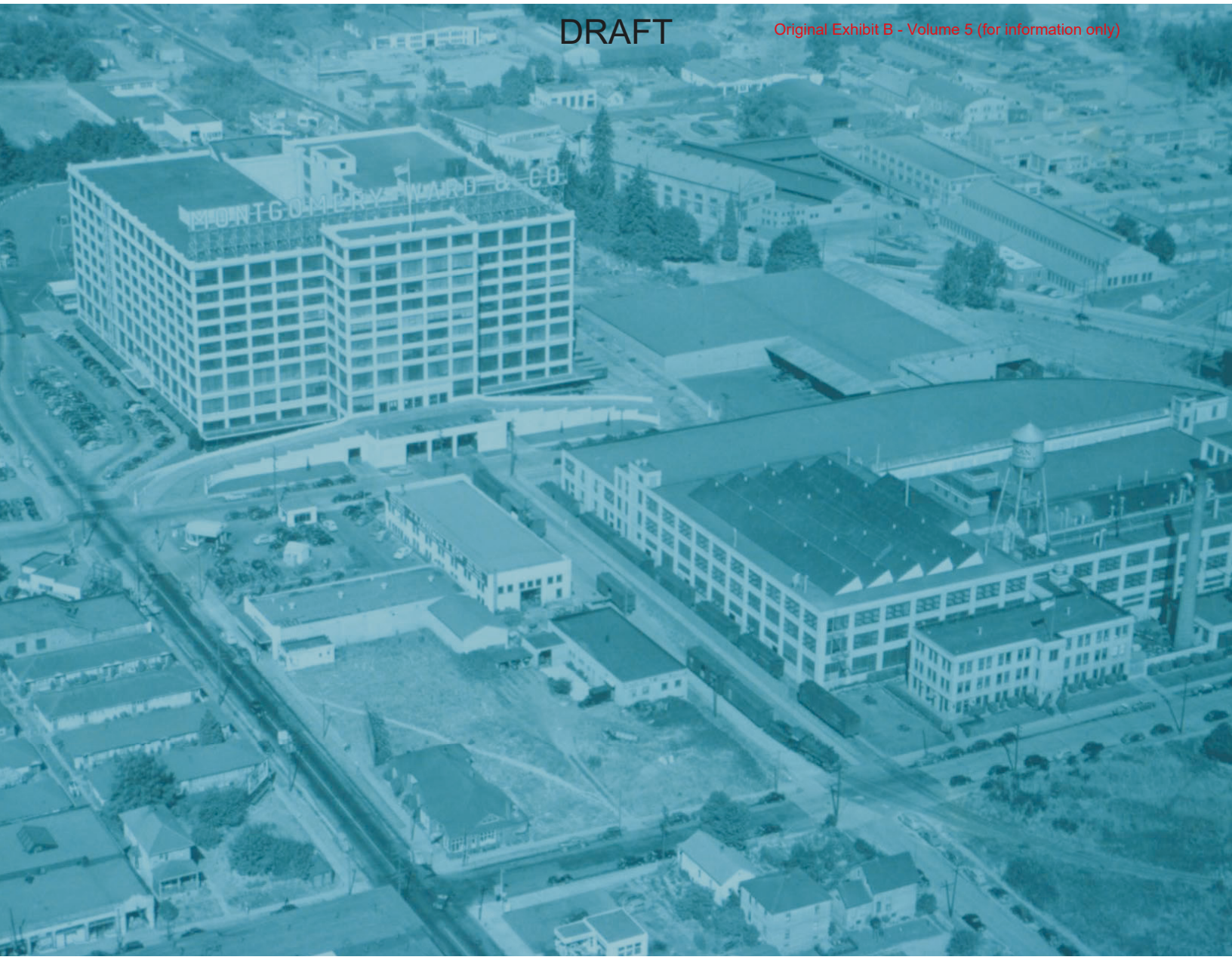

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Introduction & Plan Context

ABOUT THIS STUDY

The Montgomery Park to Hollywood Transit and Land Use Development Strategy (MP2H) will create an equitable development plan for potential transit-oriented districts in Northwest Portland and Inner East Portland.

The MP2H study will identify potential community benefits from land use, urban design, and economic development opportunities under a transit-oriented development scenario. Major transit investments are land use and transportation tools that can be used to shape the future growth of the Central City and surrounding areas. The MP2H project will consider how land use changes and transportation investments could support the City's racial equity, climate justice, employment and housing goals.

ABOUT THIS REPORT

The Land Use and Transportation Existing Conditions document represents the first phase of the MP2H study. The report provides a baseline overview of the land use and transportation conditions in each district. While the project seeks to eventually create a streamlined transit ride between the destinations of Montgomery Park and the Hollywood Transit Center, near-term work will consider each alignment and district separately. The westside study area looks at extending transit from the Central City to Montgomery Park, the second-largest office building in the City of Portland. On the eastside, the study area includes three potential alignments that could connect the Central City to the Hollywood District.

The Existing Conditions report provides information on who lives and works in these study areas, the mix of uses, zoning, and land use characteristics. The document also provides information on transportation volumes, classifications, street cross sections, travel networks and more. This document is intended to serve as an informative atlas of today's conditions upon which the project can analyze opportunities to shape vibrant, equitable, green and thriving neighborhoods. Future study phases will provide analysis of different opportunities and constraints related to land use scenarios and transportation investments.

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WESTSIDE STUDY AREA | MONTGOMERY PARK CONNECTION

The westside study area, also referred to as Northwest study area and alignment, consists of a quarter-mile buffer around a potential streetcar alternative route that connects the second-largest office building in Portland, Montgomery Park, to the existing Portland Streetcar network. The alignment diverges from the existing couplet on NW Lovejoy and NW Northrup, heading north via NW 18th And NW 19th beneath the HWY 30 ramps, before heading west via a couplet on NW Wilson and NW York.

The study area is primarily within the Northwest District and adjacent industrial areas to the north within the NW Industrial Business Association boundary. The neighborhoods surrounding the 18th/ 19th alignment are a mix of single and multifamily homes and buildings. Commercial buildings mix with restaurants and other destinations. Recent development at the former Conway site included large apartment buildings with a new grocer.

North of Vaughn the eastern portion of the study area is largely zoned industrial, while the western half includes large parcels of mixed use, and general employment. Businesses range from manufacturing, light industrial, office, storage, and more. Many parcels are currently transitioning

EASTSIDE ALIGNMENTS STUDY AREA

The eastside study area includes a quarter-mile buffer around three potential streetcar alignment alternatives. These alignments are spaced closely enough that the buffers around each alignment overlap. The northernmost alignment operates on the NE Broadway/Weidler couplet, tying into the existing streetcar system at NE Grand and Martin Luther King Jr. Boulevard. At 24th Ave, the alignment runs both east and west on Broadway to NE Sandy Boulevard where it terminates at the Hollywood Transit Center. The NE Irving alignment ties into the existing streetcar system at NE Oregon Street, runs east on LLoyd Boulevard across the 12th street bridge and east-west along Irving street until it joins Sandy, east of NE 24th Street. The NE Sandy alignment primarily operates between the Hollywood Transit Center and the Burnside Bridge via Sandy Boulevard, then connecting to E Burnside St. and NE Couch at NE 13th Ave.

ONE STUDY, TWO ALIGNMENTS

This planning effort is focused on examining the transportation and land use implications of providing a new high-capacity transportation link between Montgomery Park and the Hollywood Town Center. However, due to varying levels of background planning for the western and eastern extents, this study can also be framed as investigating two separate planning questions.

For the western extent, the pertinent questions focus on what land use changes (if any) would be supportive of a major transit investment connecting to Montgomery Park.

To the east, the focus of the study is at a higher level and seeks to understand the benefits and trade-offs between three alignment options, with the purpose of identifying the most promising alignment for future study and project development.

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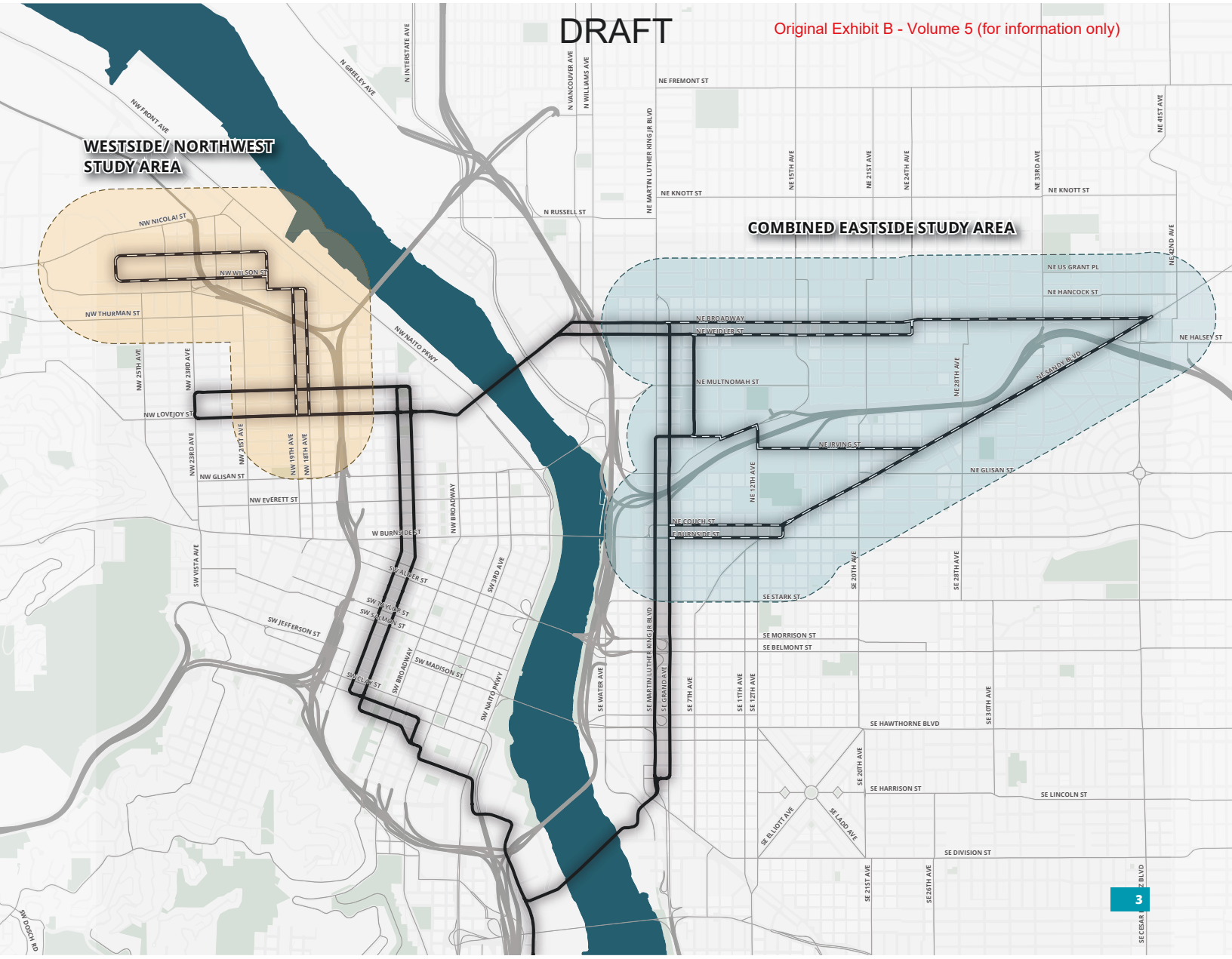
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WESTSIDE/ NORTHWEST STUDY AREA
COMBINED EASTSIDE STUDY AREA
NW FRONT AVE
N GREELEY AVE
N INTERSTATE AVE
N VANCOUVER AVE
N WILLIAMS AVE
NE MARTIN LUTHER KING JR BLVD
NE FREMONT ST
NE KNOTT ST
N RUSSELL ST
NE 15TH AVE
NE 21ST AVE
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NE US GRANT PL
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NE HALSEY ST
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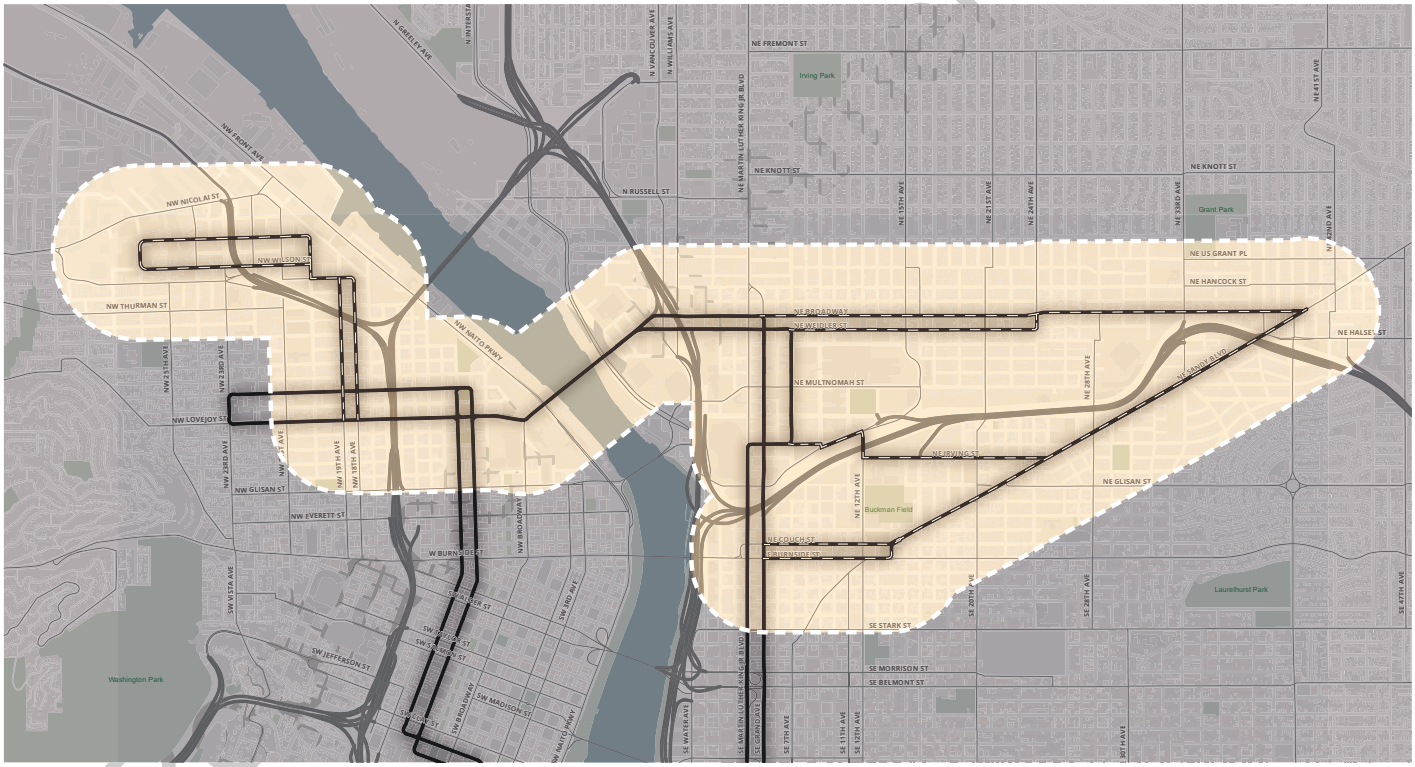
SE STARK ST
SE 20TH AVE
SE 28TH AVE
SE MORRISON ST
SE BELMONT ST
SE WATER AVE
SE GRAND AVE
SE 7TH AVE
SE 11TH AVE
SE 12TH AVE
SE 30TH AVE
SE HAWTHORNE BLVD
SE HARRISON ST
SE LINCOLN ST
SE BELMONT ST
SE LADD AVE
SE DIVISION ST
SE 21ST AVE
SE 26TH AVE
SE CESAR E CHAVEZ BLVD
3

ADDITIONAL STUDY AREAS

Looking outside the study areas under consideration helps to bring additional context to the existing conditions report. In addition to the Westside study area and the combined eastside study area, this document also reports numbers and figures when appropriate for a combined east-west extent, a Pearl District alignment, and a Central Eastside alignment.

COMBINED EAST-WEST EXTENT

The Combined East-West study area is a quarter-mile buffer around the proposed alignments (eastside and westside) as well as a buffer around the existing route along the NW Lovejoy/Northrup couplet over the Broadway Bridge.

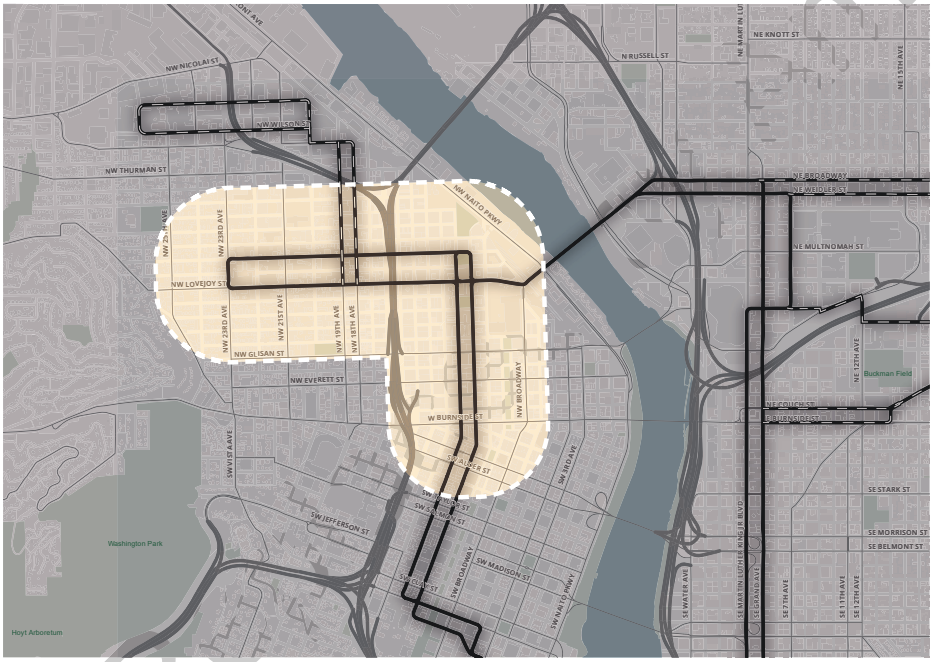


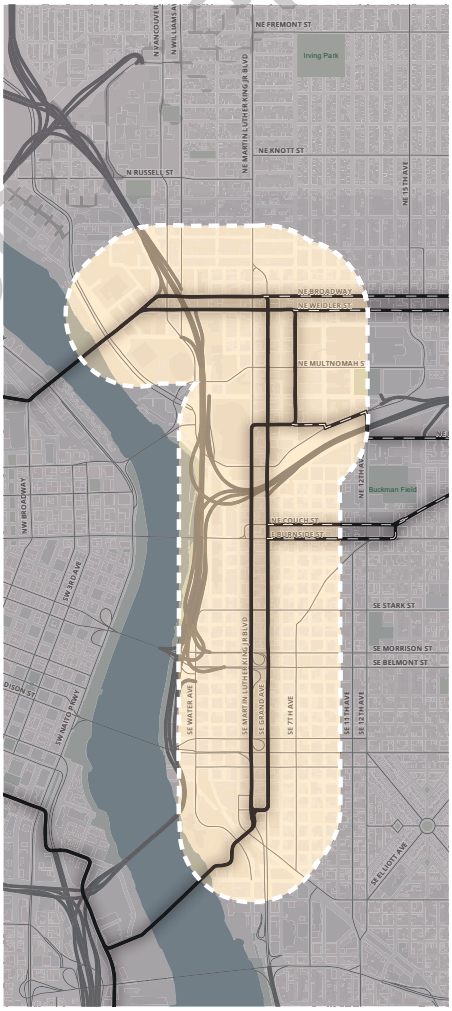
PEARL DISTRICT ALIGNMENT

The Pearl District study area is a quarter-mile buffer around the existing Streetcar alignment along the NW Lovejoy/Northrup couplet and along the NW 10th/11th couplet to W Burnside St. This study area is characterized by high-density development in the core Pearl District area as well as in Northwest.

CENTRAL EASTSIDE ALIGNMENT

The Central Eastside study area is a quarter-mile buffer along the existing Streetcar alignment on the eastside, running along the Grand/MLK Jr. couplet until the Lloyd center where it jogs to NE 7th Ave, and east-west along the NE Broadway/Weidler couplet. This study area is similar the Northwest alignment in its mix of industrial uses and pockets of higher-density housing.





Review Document

POLICY BACKGROUND

The 2035 Comprehensive Plan includes policies that address expanding transit and increasing density in centers and corridors identified for growth and investment, as well as the preservation of prime industrial and employment lands. Policies specific to urban planning, development, transportation, public infrastructure, and equity are included in Comprehensive Plan chapters related to Urban Form (3), Housing (5), Economic Development (6), Public Facilities (8), Transportation (9), and Land Use Designations and Zoning (10). The 2035 Comprehensive Plan policies related to Community Involvement (Chapter 2) are found in the MP2H Community Engagement Plan.

Policy 1.19 Area-specific plans. Use area-specific plans to provide additional detail or refinements applicable at a smaller geographic scale, such as for centers and corridors, within the policy framework provided by the overall Comprehensive Plan.

Policy 3.2 Growth and stability. Direct the majority of growth and change to centers, corridors, and transit station areas, allowing the continuation of the scale and characteristics of Portland's residential neighborhoods.

Policy 3.3 Equitable development. Guide development, growth, and public facility investment to reduce disparities; encourage equitable access to opportunities, mitigate the impacts of development on income disparity, displacement and housing affordability; and produce positive outcomes for all Portlanders.

Policy 3.6 Land efficiency. Provide strategic investments and incentives to leverage infill, redevelopment, and promote intensification of scarce urban land while protecting environmental quality.

Policy 3.9 Growth and development. Evaluate the potential impacts of planning and investment decisions, significant new infrastructure, and significant new development on the physical characteristics of neighborhoods and their residents, particularly under-served and under-represented communities, with particular attention to displacement and affordability impacts. Identify and implement strategies to mitigate the anticipated impacts.

Policy 3.15 Investments in centers. Encourage public and private investment in infrastructure, economic development, and community services in centers to ensure that all centers will support the populations they serve.

Policy 3.19 Center connections. Connect centers to each other and to other key local and regional destinations, such as schools, parks, and employment areas, by pedestrian trails and sidewalks, bicycle sharing, bicycle routes, frequent and convenient transit, and electric vehicle charging stations. Prepare and adopt future street plans for centers that currently have poor street connectivity, especially where large commercial parcels are planned to receive significant additional housing density.

Policy 3.33 Transportation. Improve Town Centers as multimodal transportation hubs that optimize access from the broad area of the city they serve and are linked to the region's high-capacity transit system.

Policy 3.39 Growth. Expand the range of housing and employment opportunities in the Inner Ring Districts. Emphasize growth that replaces gaps in the historic urban fabric, such as redevelopment of surface parking lots and 20th century auto-oriented development.

Policy 3.43 Active transportation. Enhance the role of the Inner Ring Districts' extensive transit, bicycle, and pedestrian networks in conjunction with land uses that optimize the ability for more people to utilize this network. Improve the safety of pedestrian and bike connections to the Central City. Strengthen transit connections between the Inner Ring Districts and to the Central City.

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Policy 3.67 Employment area geographies. Consider the land development and transportation needs of Portland's employment geographies when creating and amending land use plans and making infrastructure investments.

Policy 5.3 Housing potential. Evaluate plans and investments for their impact on housing capacity, particularly the impact on the supply of housing units that can serve low- and moderate-income households, and identify opportunities to meet future demand.

Policy 5.12 Impact analysis. Evaluate plans and investments, significant new infrastructure, and significant new development to identify potential disparate impacts on housing choice, access, and affordability for protected classes and low-income households. Identify and implement strategies to mitigate the anticipated impacts.

Policy 5.15 Gentrification/displacement risk. Evaluate plans and investments, significant new infrastructure, and significant new development for the potential to increase housing costs for, or cause displacement of communities of color, low- and moderate-income households, and renters. Identify and implement strategies to mitigate the anticipated impacts.

Policy 5.16 Involuntary displacement. When plans and investments are expected to create neighborhood change, limit the involuntary displacement of those who are under-served and under-represented. Use public investments and programs, and coordinate with nonprofit housing organizations (such as land trusts and housing providers) to create permanently-affordable housing and to mitigate the impacts of market pressures that cause involuntary displacement.housing providers) to create permanently-affordable housing and to mitigate the impacts of market pressures that cause involuntary displacement.

Policy 6.8 Business environment. Use plans and investments to help create a positive business environment in the city and provide strategic assistance to retain, expand, and attract businesses.

Policy 6.13 Land supply. Provide supplies of employment land that are sufficient to meet the long-term and short-term employment growth forecasts, adequate in terms of amounts and types of sites, available and practical for development and intended uses. Types of sites are distinguished primarily by employment geographies identified in the Economic Opportunities Analysis, although capacity needs for building types with similar site characteristics can be met in other employment geographies.

Policy 6.14 Brownfield redevelopment. Overcome financial-feasibility gaps to cleanup and redevelop 60 percent of brownfield acreage by 2035.

Policy 6.27 Income self-sufficiency. Expand access to self-sufficient wage levels and career ladders for low-income people by maintaining an adequate and viable supply of employment land and public facilities to support and expand opportunities in Portland for middle- and high-wage jobs that do not require a 4-year college degree.

Policy 6.30 Disparity reduction. Encourage investment in, and alignment of, public efforts to reduce racial, ethnic, and disability-related disparities in income and employment opportunity.

Policy 6.36 Industrial land. Provide industrial land that encourages industrial business retention, growth, and traded sector competitiveness as a West Coast trade and freight hub, a regional center of diverse manufacturing, and a widely-accessible base of family-wage jobs, particularly for under-served and under-represented people.

Policy 6.37 Industrial sanctuaries. Protect industrial land as industrial sanctuaries identified on the Comprehensive Plan Map primarily for manufacturing and distribution uses and to encourage the growth of industrial activities in the city.

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Policy 6.38 Prime industrial land retention. Protect the multimodal freight-hub industrial districts at the Portland Harbor, Columbia Corridor, and Brooklyn Yard as prime industrial land that is prioritized for long-term retention.

Policy 6.46 Impact analysis. Evaluate and monitor the impacts on industrial land capacity that may result from land use plans, regulations, public land acquisition, public facility development, and other public actions to protect and preserve existing industrial lands.

Policy 6.54 Neighborhood buffers. Maintain and enhance major natural areas, open spaces, and constructed features as boundaries and buffers for the Portland Harbor and Columbia Corridor industrial areas.

Policy 8.21 System capacity. Establish, improve, and maintain public facilities and services at levels appropriate to support land use patterns, densities, and anticipated residential and employment growth, as physically feasible and as sufficient funds are available.

Policy 8.22 Equitable service. Provide public facilities and services to alleviate service deficiencies and meet level-of-service standards for all Portlanders, including individuals, businesses, and property owners.

Policy 8.29 System development. Require private or public entities whose prospective development or redevelopment actions contribute to the need for public facility improvements, extensions, or construction to bear a proportional share of the costs.

Policy 8.113 School district capacity. Consider the overall enrollment capacity of a school district – as defined in an adopted school facility plan that meets the requirements of Oregon Revised Statute 195 – as a factor in land use decisions that increase capacity for residential development.

Policy 9.11 Land use and transportation coordination. Implement the Comprehensive Plan Map and the Urban Design Framework though coordinated long-range transportation and land use planning. Ensure that street policy and design classifications and land uses complement one another.

Policy 9.25 Transit equity. In partnership with TriMet, maintain and expand high-quality frequent transit service to all Town Centers, Civic Corridors, Neighborhood Centers, Neighborhood Corridors, and other major concentrations of employment, and improve service to areas with high concentrations of poverty and historically under-served and under-represented communities.

Policy 9.27 Transit service to centers and corridors. Use transit investments as a means to shape the city's growth and increase transit use. In partnership with TriMet and Metro, maintain, expand, and enhance Portland Streetcar, frequent service bus, and high-capacity transit, to better serve centers and corridors with the highest intensity of potential employment and household growth.

Policy 9.31 Economic development and industrial lands. Ensure that the transportation system supports traded sector economic development plans and full utilization of prime industrial land, including brownfield redevelopment.

Policy 10.1 Land use designations. Apply a land use designation to all land and water within the City's Urban Services Boundary. Apply the designation that best advances the Comprehensive Plan goals and policies. The land use designations are shown on the adopted Land Use Map and on official Zoning Maps.

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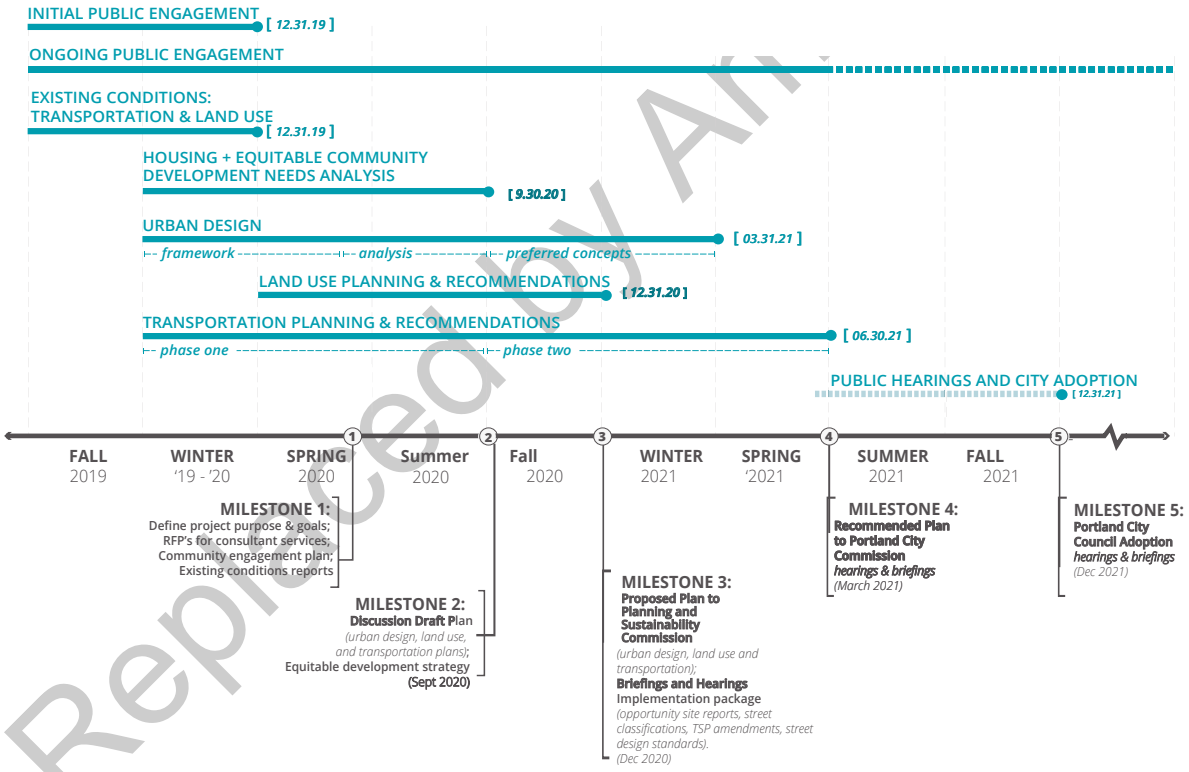
PROJECT TIMELINE

Over the period of 16 months, the MP2H project team will develop and analyze a range of options and alternatives to better understand the opportunities and challenges of land use changes and transportation investments in Northwest and inner East Portland. MP2H will organize the work around project milestones that define project purpose and goals, create urban design frameworks, identify needed community benefits, evaluate land use and transportation alternatives, and develop recommendations. Project milestones and decision-making will be informed by ongoing, purposeful engagement with area stakeholders and impacted community members. The diagram below outlines key planning efforts and project milestones.

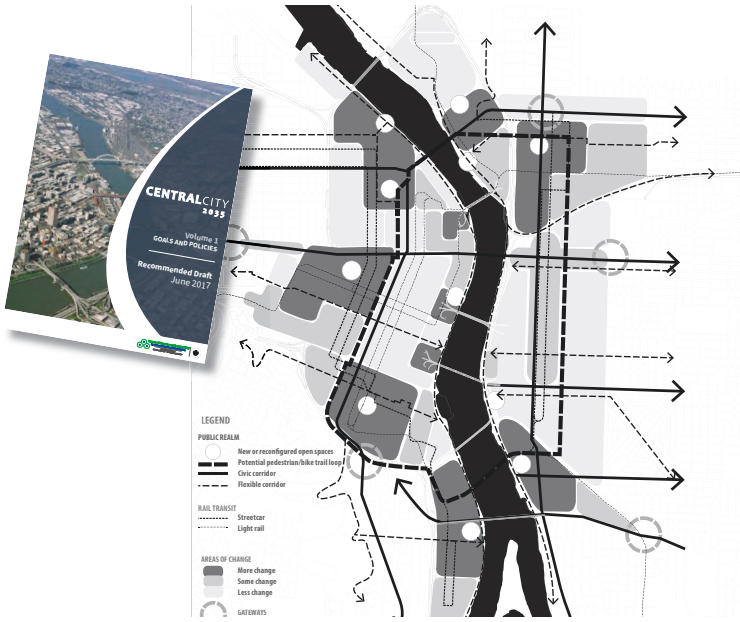


Planning Context



2035 COMPREHENSIVE PLAN

The 2035 Comprehensive Plan, adopted in 2016, sets the framework for growth and development in the City of Portland for the next 20 years. The 2035 Comprehensive Plan sets direction for land use, as implemented through the Portland Zoning Map and Zoning Code. It also sets the direction for transportation investments and improvements as shown in the Transportation System Plan. Finally, the 2035 Comprehensive Plan links to the city's infrastructure needs via the related Citywide Systems Plan.



CENTRAL CITY 2035

City Council adopted the Central City 2035 (CC2035) Plan in 2018, updating the plans and policies for downtown and central areas of Portland. The CC2035 is part of the Comprehensive Plan, which guides the physical development of the City over a 20-year span. CC2035 envisions a "prosperous, healthy, equitable and resilient Central City, where people collaborate, innovate and create a more vibrant future together." Much of the MP2H study area is adjacent, but outside the Central City, however portions of potential east side and west side alignments will travel through the Central City within the Pearl District and potentially in the Lloyd or Central Eastside.

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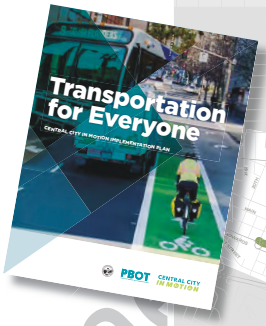
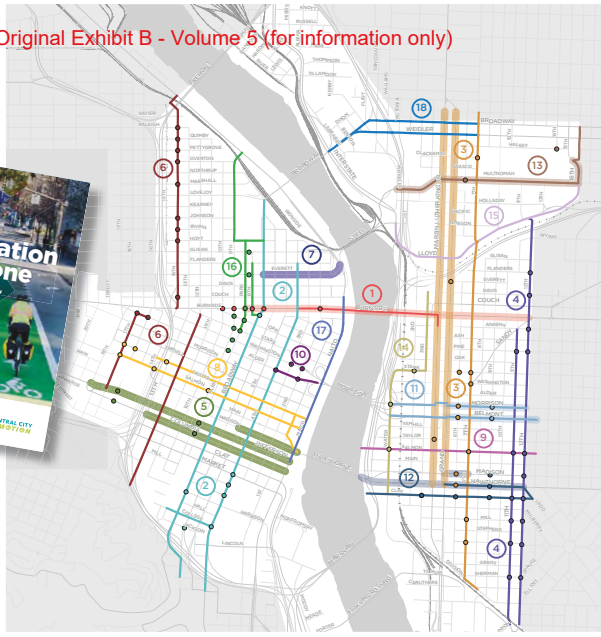
CENTRAL CITY IN MOTION

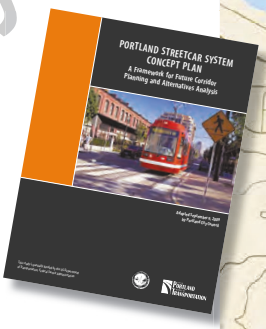
The Central City in Motion (CCIM) Plan identifies, prioritizes, and implements transportation improvements across the City's core. Eighteen projects have been developed to reshape Portland's streets into more safe, efficient, and flexible corridors. CCIM projects within the MP2H study area include a roadway reconfiguration on NE Broadway/ Weidler, improving a parking protected bike on NE Multnomah Street, coordinated multimodal improvements on Burnside and MLK/Grand/6th/7th. The MP2H plan should consider these planned projects when considering streetscapes and right-of-way configuration on these corridors.

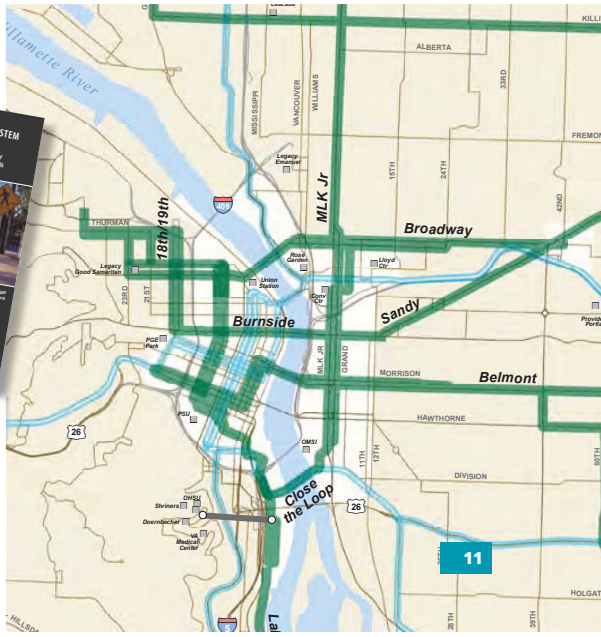




STREETCAR CONCEPT PLAN

The 2009 Streetcar Concept Plan identifies potential corridors that will build upon the successful existing streetcar system and expand service to best serve Portland's neighborhood and business districts. The Plan evaluated and compared corridors to determine what is most promising for streetcar expansion based upon development potential, operational feasibility, transit connectivity, and public involvement. The 2009 Plan included concept corridors to Montgomery Park on NW 18/th/19th and NW/Thurman/Vaughn, and to Hollywood on NE Broadway/Weidler and NE Sandy Boulevard.





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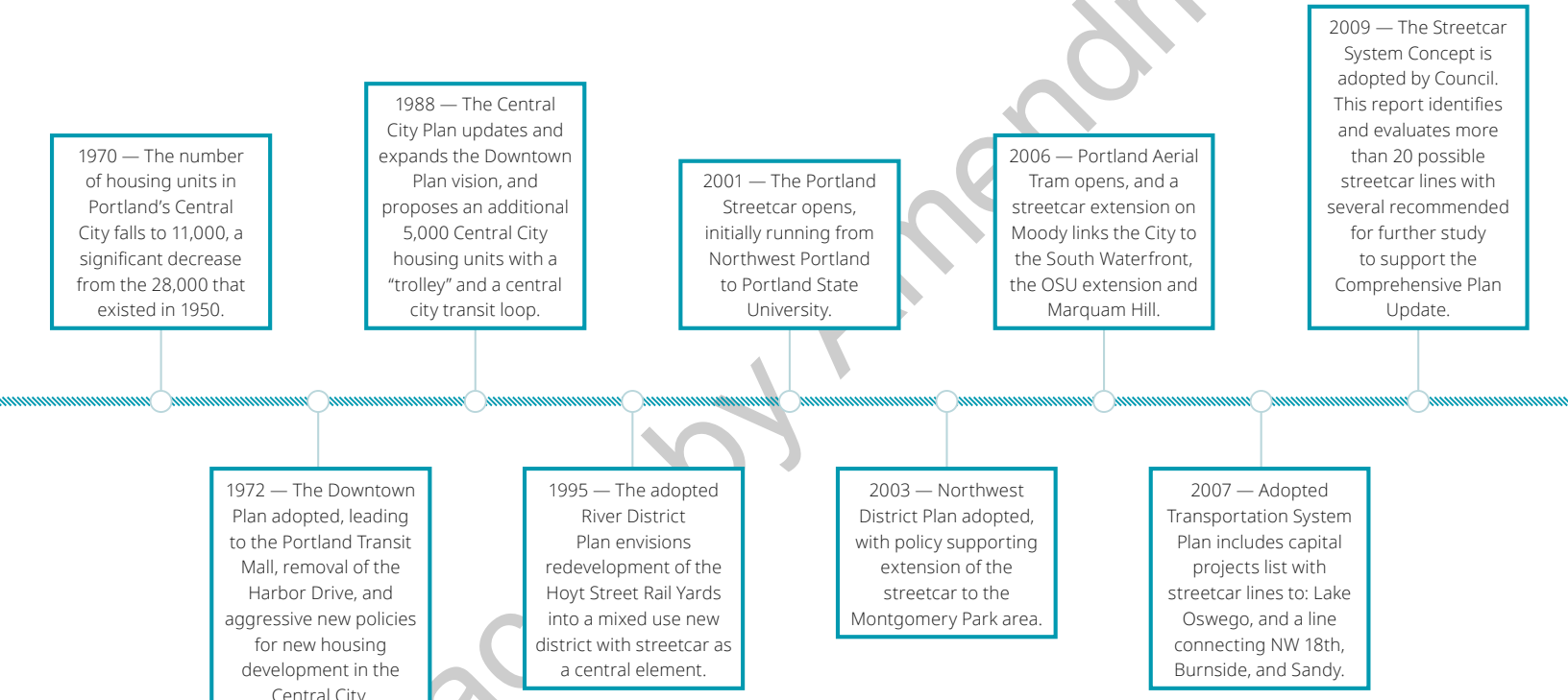
HOW WE GOT HERE—HOUSING AND STREETCAR PLANNING TIMELINE



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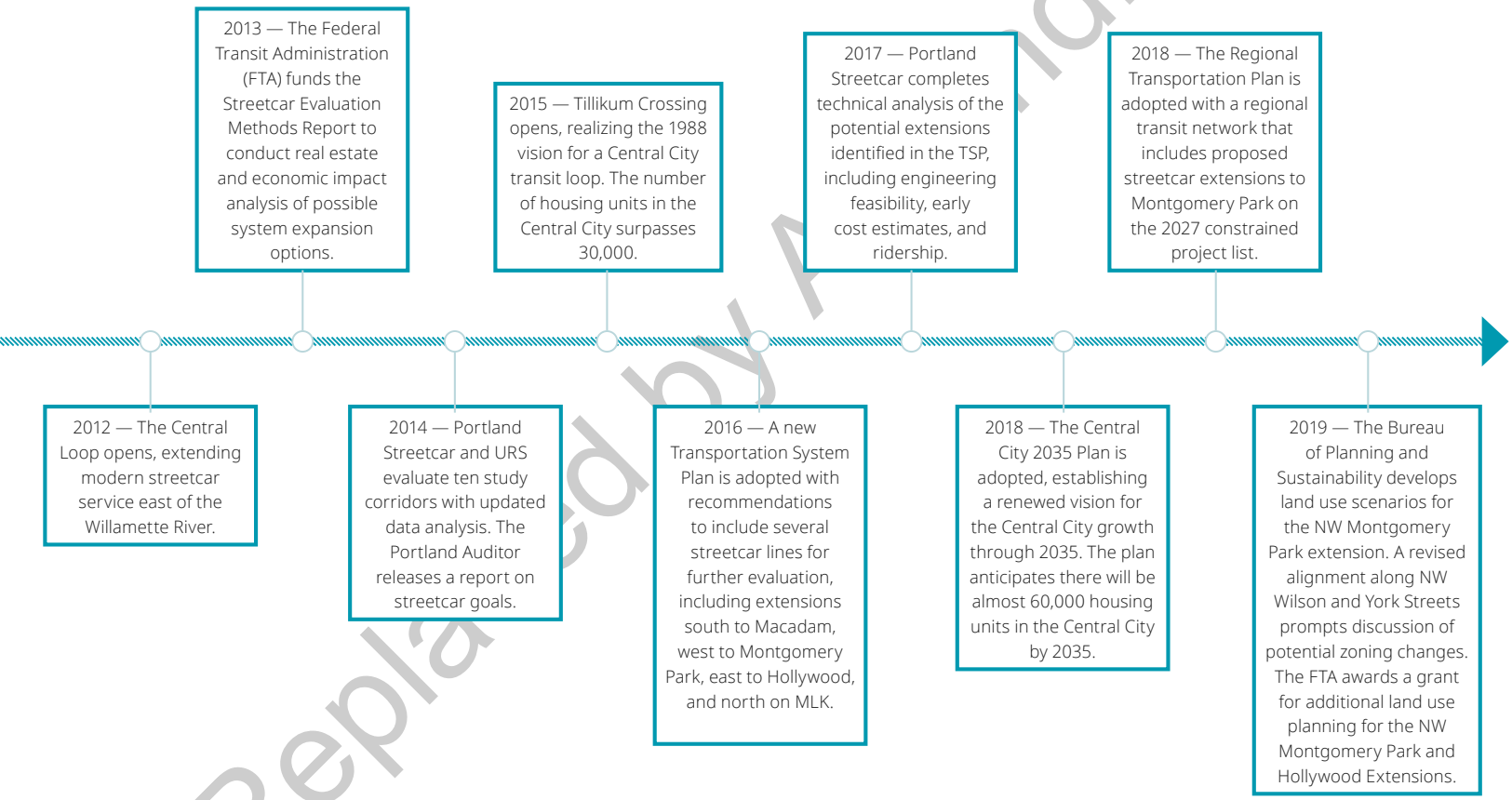

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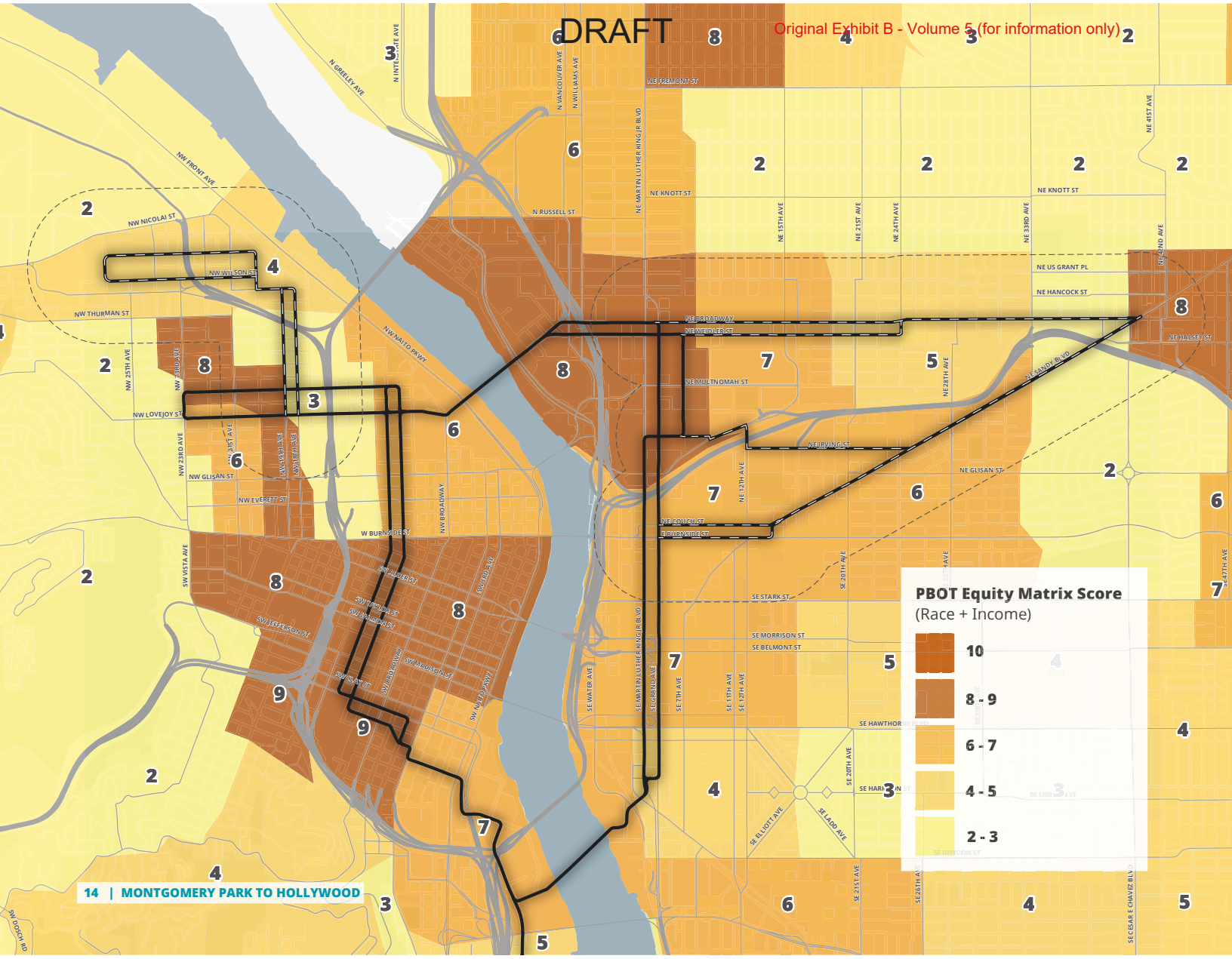

PBOT Equity Matrix Score
(Race + Income)
10
8 - 9
6 - 7
4 - 5
2 - 3
14 | MONTGOMERY PARK TO HOLLYWOOD

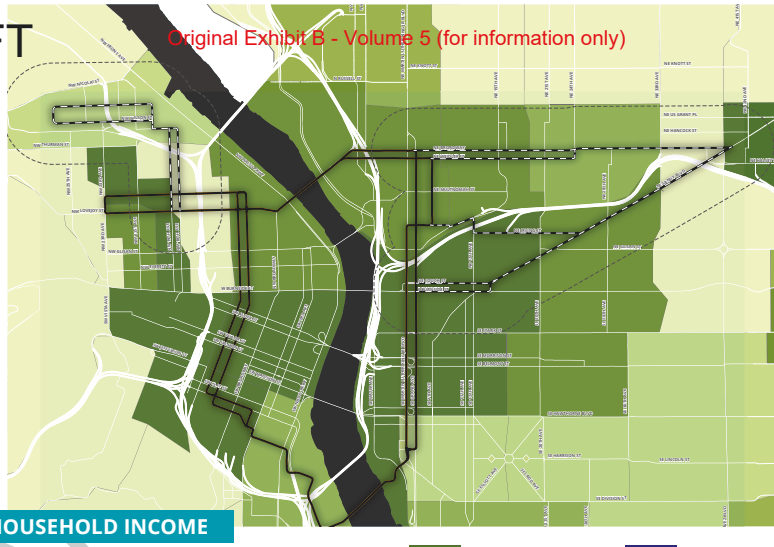
AREA EQUITY INDICATORS

The Portland Bureau of Transportation (PBOT) created an Equity Matrix to better refine our approaches and understand the impact of our work on marginalized groups. The tool is a simplified version of more complex, multi-factored matrices used in the past to identify marginalized and economically vulnerable populations. National best practice and the City's Office of Equity and Human Rights recommends using three demographic variables in equity matrices: race, income, and limited English proficiency.

Using these three demographic variables, PBOT designed a simplified Equity Matrix that identifies areas with higher than the citywide average concentration of people of color and people below the median household income. This strategy centers race and has intersectionality with people with disabilities. Limited English Proficiency (LEP) in not included in the calculation of the matrix due to a relatively high level of uncertainty and error in the underlying data. Instead, census tracts with higher than citywide averages of LEP households are identified.

The MP2H study area touches areas with higher concentrations of marginalized groups. On the west side of the river, a streetcar extension alternative (dashed alignment) could run adjacent to a higher-scoring census tract in the Slabtown area. On the east side, a potential streetcar alignment could tie into the existing system on NE Broadway/Weidler in an area with greater concentrations of marginalized populations. All three potential streetcar alignments serving the Hollywood District would terminate in an area that ranks higher in the equity matrix. Two of the variables, people of color and household income, largely overlap within the study area. One notable exception is south of I-84, where the equity matrix indicates higher levels of lower income people, with only moderately more concentrations of people of color. Only one study area census tract has more LEP households than the Citywide average.

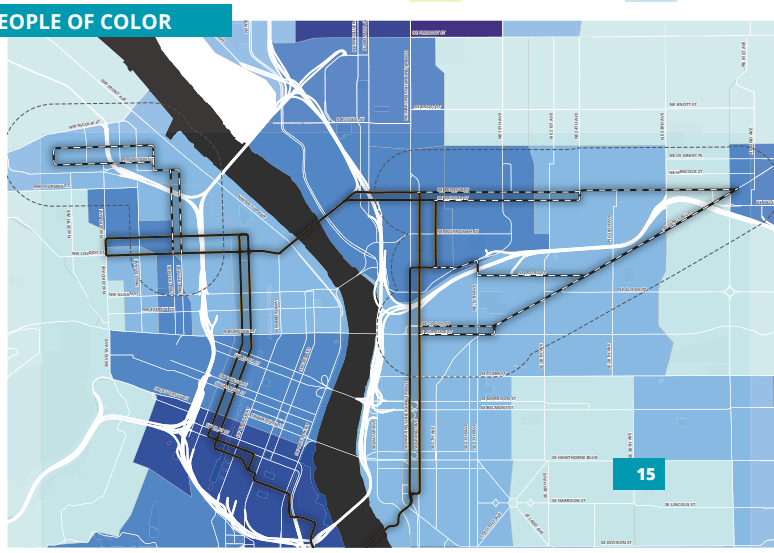
More information on PBOT's Equity Matrix can be found here:
https://www.portlandoregon.gov/transportation/74236



HOUSEHOLD INCOME

< $47K	5	> 40%	5
$47K to $60K	4	31% to 40%	4
$61K to $67K	3	22% to 30%	3
$68K to $92K	2	15% to 21%	2
> $92K	1	< 15%	1

PEOPLE OF COLOR



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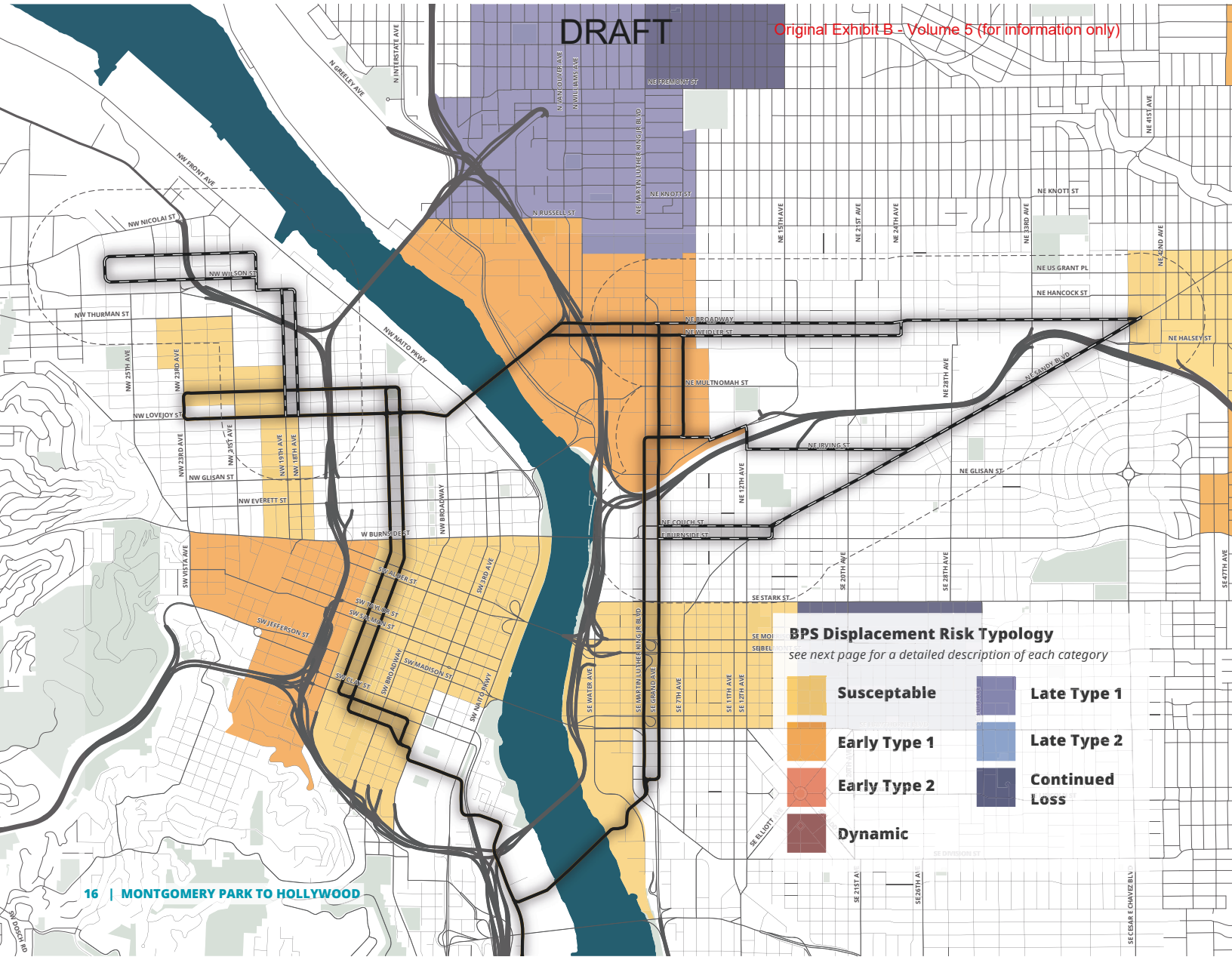
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BPS Displacement Risk Typology
see next page for a detailed description of each category
Susceptable
Early Type 1
Early Type 2
Dynamic
Late Type 1
Late Type 2
Continued Loss
NE FREMONT ST
N RUSSELL ST
NE KNOTT ST
NE US GRANT PL
NE HANCOCK ST
NE BROADWAY
NE WEIDLER ST
NE MULTNOMAH ST
NE HALSEY ST
NE SANDY BLVD
NE IRVING ST
NE GLISAN ST
NE COUCH ST
E BURNSIDE ST
SE STARK ST
NW FRONT AVE
NW NICOLAI ST
NW WILSON ST
NW THURMAN ST
NW LOVEJOY ST
NW GLISAN ST
NW EVERETT ST
W BURNSIDE ST
SW ALDER ST
SW TAYLOR ST
SW SALMON ST
SW JEFFERSON ST
SW MADISON ST
SW CLAY ST
SW NAITO PKWY
NW NAITO PKWY
SW BROADWAY
SW 3RD AVE
SW VISTA AVE
NW 25TH AVE
NW 23RD AVE
NW 21ST AVE
NW 19TH AVE
NW 18TH AVE
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NE 15TH AVE
NE 21ST AVE
NE 24TH AVE
NE 33RD AVE
NE 42ND AVE
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SE 28TH AVE
SE 47TH AVE
SE WATER AVE
SE GRAND AVE
SE 7TH AVE
SE 11TH AVE
SE 12TH AVE
SE ELLIOTT
SE 21ST AVE
SE 26TH AVE
SE CESAR E CHAVEZ BLVD
SW DOSCH RD

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

ABOUT THIS DATA SOURCE

Policy makers must consider the impact that plans and investments may have on vulnerable communities and the potential to cause displacement. A first step is to examine where the communities most vulnerable to displacement live. Montgomery Park to Hollywood alignments largely avoid areas with elevated displacement risk, but additional study and mitigating measures should be considered.

On the west side, Census Tract 49 at the southern tip of the alignment is classified as Susceptible to gentrification based on having higher shares of vulnerable populations but not yet having experienced demographic change or increasing housing costs.

On the east side, Census Tract 23.03 (Broadway bridgehead and lower Albina) is considered to be Early Type 1 typology, meaning that there is a high share of vulnerable communities here and housing costs have increased, but the area has not seen a significant change in demographics.

More information on gentrification typologies can be found in the 2018 Gentrification and Displacement Methodology and Key Findings report: https://www.portlandoregon.gov/bps/article/700970.

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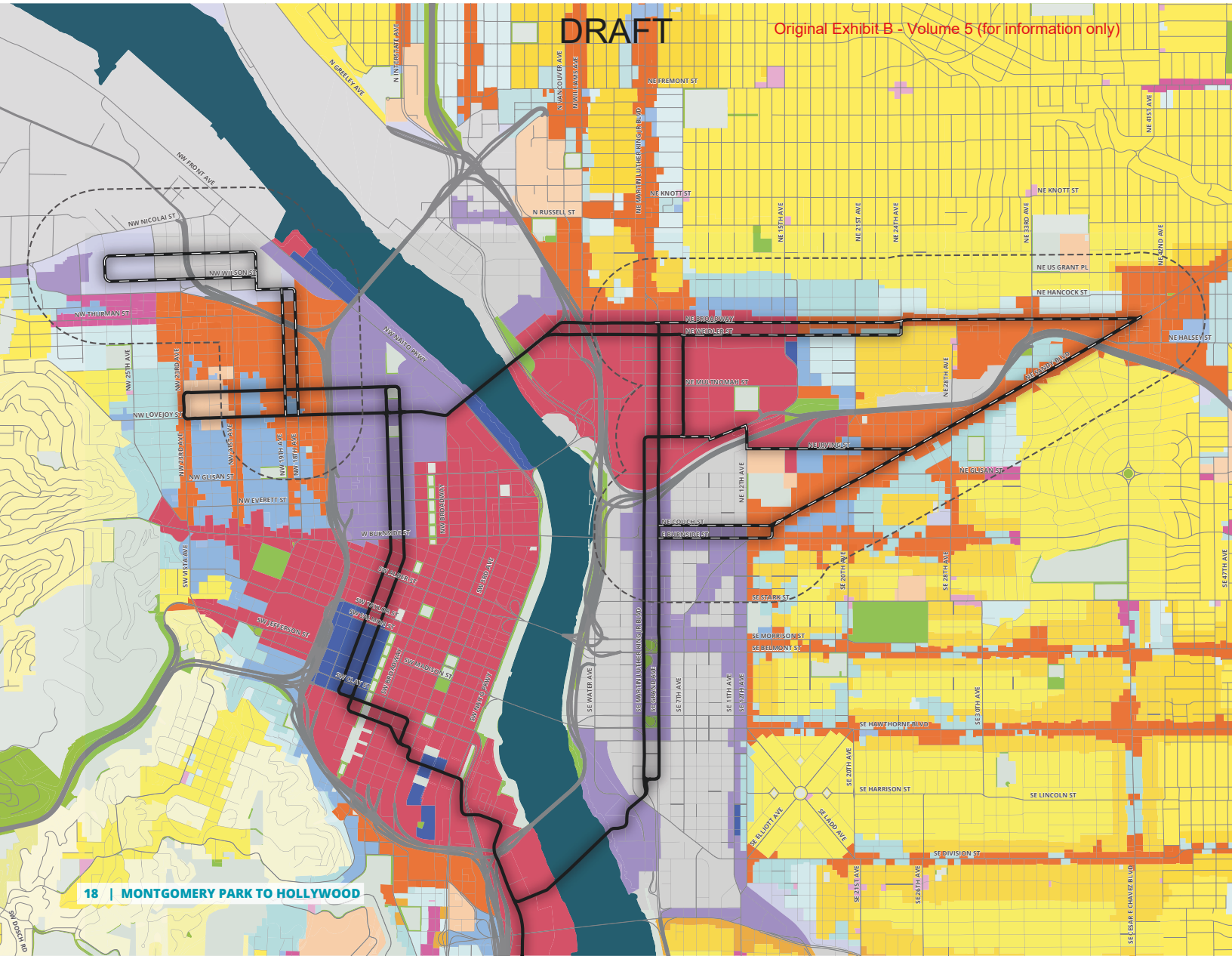
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NE 24TH AVE
NE 33RD AVE
NE 41ST AVE
NE 42ND AVE
NE US GRANT PL
NE HANCOCK ST
NE BROADWAY
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NE HALSEY ST
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SE HARRISON ST
SE LINCOLN ST
SE ELLIOTT AVE
SE LADD AVE
SE DIVISION ST
SE 21ST AVE
SE 26TH AVE
SE CESAR E CHAVEZ BLVD
SW DOSCH RD

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Land Use & Development

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 includes goals that set forth the city's aspirations for change and policies that further articulate the approach to accomplishing those goals. Future desired land uses are identified in the Portland Comprehensive Plan Map. This map, shown for the study area on the adjoining page, generally describes the type and character of land uses that are allowed or expected to be developed on privately and publicly owned land within the city. The Montgomery Park to Hollywood study area encompasees a broad array of Comprehensive Plan designations including industrial sanctuary areas in the west, as well as mixed use, Central City, and residential designations along the length of the study area alignments. A more detailed description can be found in the Westside and Eastside chapters.

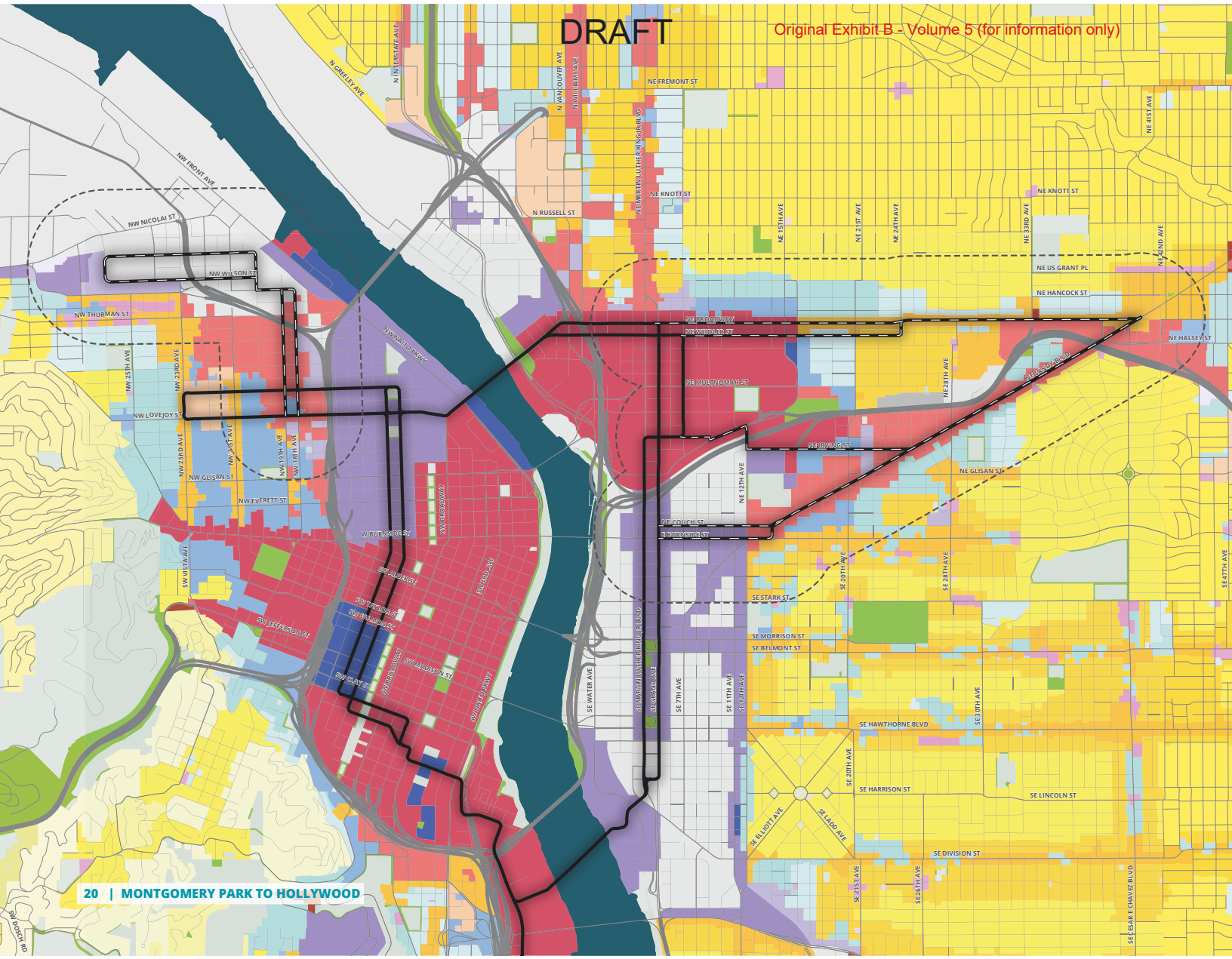
The Comprehensive Plan map and associated map designations are typically broad in terms of their land use direction, and are implemented through associated zoning designations, the zoning map (see next section), and zoning code. Comprehensive Plan designations may be implemented through one or more zoning map designations. Each zoning designation is associated with specific use allowances and development and design standards that are specified in the Portland Zoning Code (Title 33).

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

GEOGRAPHY	SINGLE-DWELLING	MULTI-DWELLING	MIXED USE/ COMMERCIAL	INSTITUTIONAL	EMPLOYMENT	INDUSTRIAL	OPEN SPACE	STREETS
COMBINED EAST-WEST STUDY AREA	9%	10%	32%	1%	11%	10%	2%	25%
NORTHWEST STUDY AREA	0%	10%	32%	1%	19%	25%	1%	12%
COMBINED EASTSIDE STUDY AREAS	15%	12%	34%	1%	3%	5%	2%	29%

Revised by Amendment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SE BELMONT ST
SE LADD AVE
SE DIVISION ST
SE 26TH AVE
SE CESAR E CHAVEZ BLVD
SW DOSCH RD

CURRENT ZONING

Zoning dictates the type of allowable land uses and development standards for a given parcel. A land use is how a property is used (e.g., commercial, residential, mixed-use, industrial, open space, community service, etc.) either by right, or with certain limitations. Development standards regulate the size, bulk, location, and features of the development on a site. Together, zoning shapes the activity and character of a neighborhood and specifies the types of development that can be built on both privately-owned and publicly-owned land.

In Portland, zoning allowances are typically determined by "base zones" that apply to different types of allowed uses (residential, commercial, industrial, etc.). These are augmented by "overlay zones" and "plan districts" which supplement base zones. See westside and eastside descriptions for details.

The Westside study area is a mix of zoning types within the NW District, including Commercial/Mixed Use, Residential, and Employment. The northern part of the study area is largely zoned Industrial, with Montgomery Park zoned Central Employment, which allows a mix of uses, and the former ESCO site is zoned as industrial, but is designated on the Comprehensive Plan map for more flexible employment uses in the future.

In the table below, the Northwest alignment refers to the potential streetcar alignment extension.

The Eastside study area is also mix of zoning. The Broadway alignment is zoned a mix of Central Commercial and Commercial/ Mixed Use. The Sandy alignment is bordered by Commercial/Mixed Use, and the Irving alignment varies from Central Commercial to Commercial/Mixed Use and multidwelling residential zoning.

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)

GEOGRAPHY	SINGLE-DWELLING	MULTI-DWELLING	MIXED USE/ COMMERCIAL	INSTITUTIONAL	EMPLOYMENT	INDUSTRIAL	OPEN SPACE	STREETS
COMBINED EAST-WEST STUDY AREA	10%	10%	30%	0%	11%	13%	2%	25%
NORTHWEST STUDY AREA	0%	10%	25%	1%	15%	36%	1%	12%
COMBINED EASTSIDE STUDY AREAS	15%	12%	32%	0%	5%	5%	2%	29%

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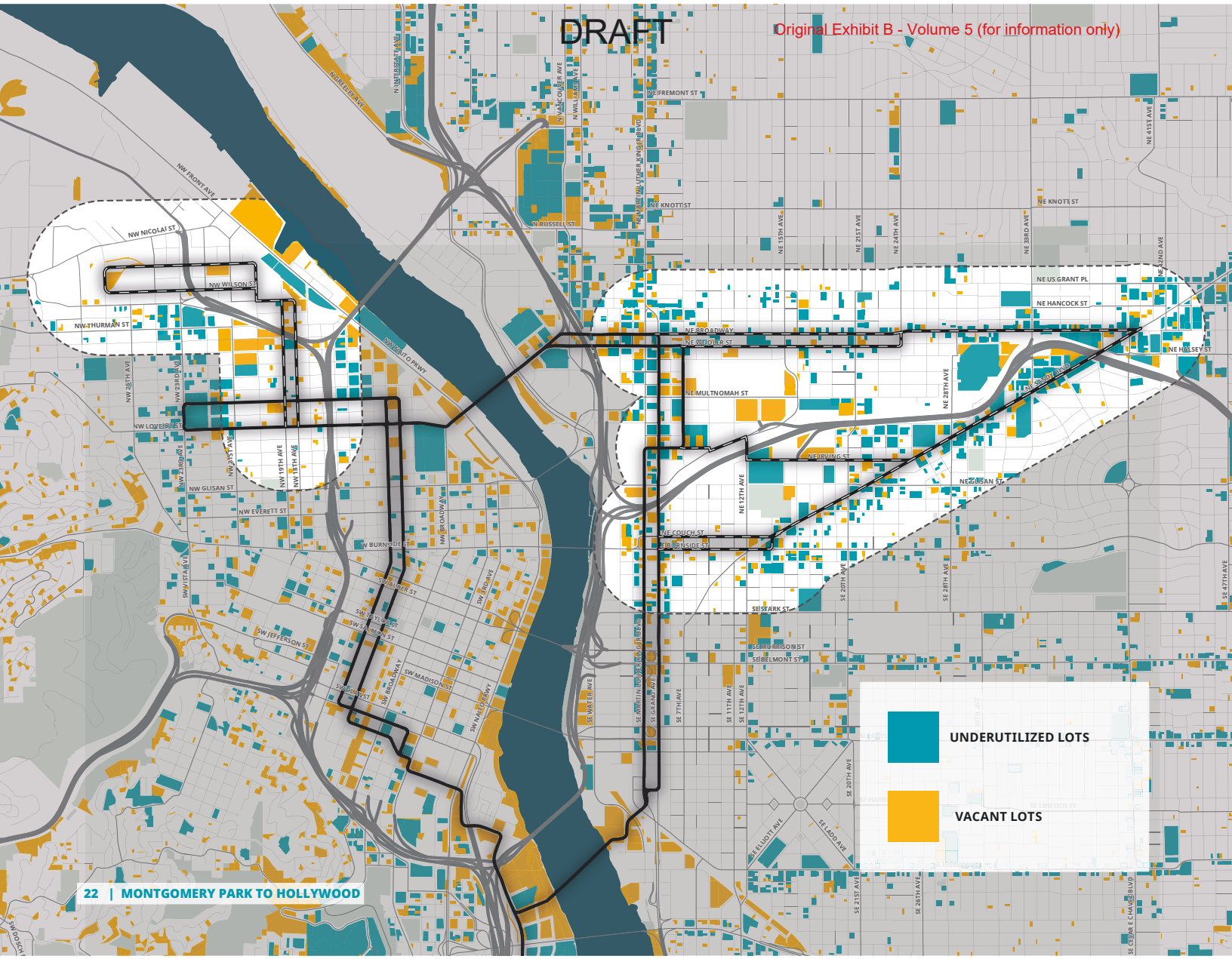

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ABOUT THIS DATA SOURCE: BUILDABLE LANDS INVENTORY

The following sequence of maps show the outputs of two models used to forecast where future growth in jobs and housing may occur. These are the Buildable Lands Inventory (BLI) capacity model and the allocation model. Visit the BLI homepage for more information, including a methodology of the models: https://www.portlandoregon.gov/bps/59296.

Buildable Lands Inventory

VACANT & UNDERUTILIZED PARCELS

The parcels on this map have been identified as vacant or re-developable based on the BLI capacity model from 2015. When a parcel's existing development is significantly less than what is allowed to be built by current zoning, the parcel is identified as re-developable (called "under-utilized" in the model). Together with vacant sites, under-utilized sites inform where the city could accommodate future growth in terms of housing and jobs.

Re-zoning areas of land as part of the Montgomery Park to Hollywood Streetcar Project will likely flag additional parcels as re-developable—this is particularly true for low-rise industrial warehouses that might convert to mixed-use, for example. In total, the combined East-West study areas, including the Northwest and Eastside alignments contain over 1,300 vacant or underutilized parcels and could accommodate up to 34,300 new housing units and 53,900 jobs under current zoning.

GEOGRAPHY	UNIT CAPACITY	JOBS CAPACITY	ACRES	PARCEL COUNT
NORTHWEST STUDY AREA	6,249	4,157	99	219
EASTSIDE STUDY AREA	25,205	39,977	276	946

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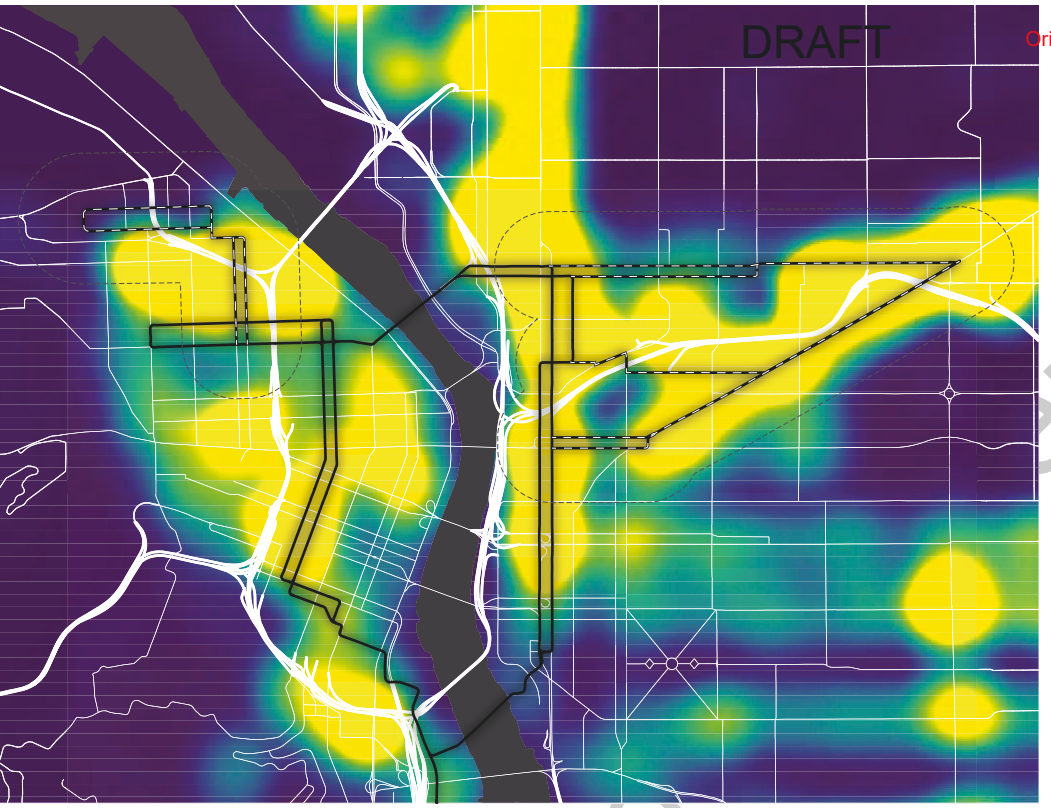

LOW UNIT CAPACITY

HIGH UNIT CAPACITY

HOUSING CAPACITY

Based on the vacant and under-utilized parcels that were identified in the BLI capacity model, we can estimate the net new number of jobs and housing units that could be accommodated under current zoning. Areas with a high capacity for new housing units include the MLK corridor, Sandy Boulevard, Broadway east of 24th, and the NW 18th/19th couplet in Northwest. However, current zoning does not support additional capacity for housing north of Vaughn, nor along the Broadway corridor between 10th and 24th Ave.

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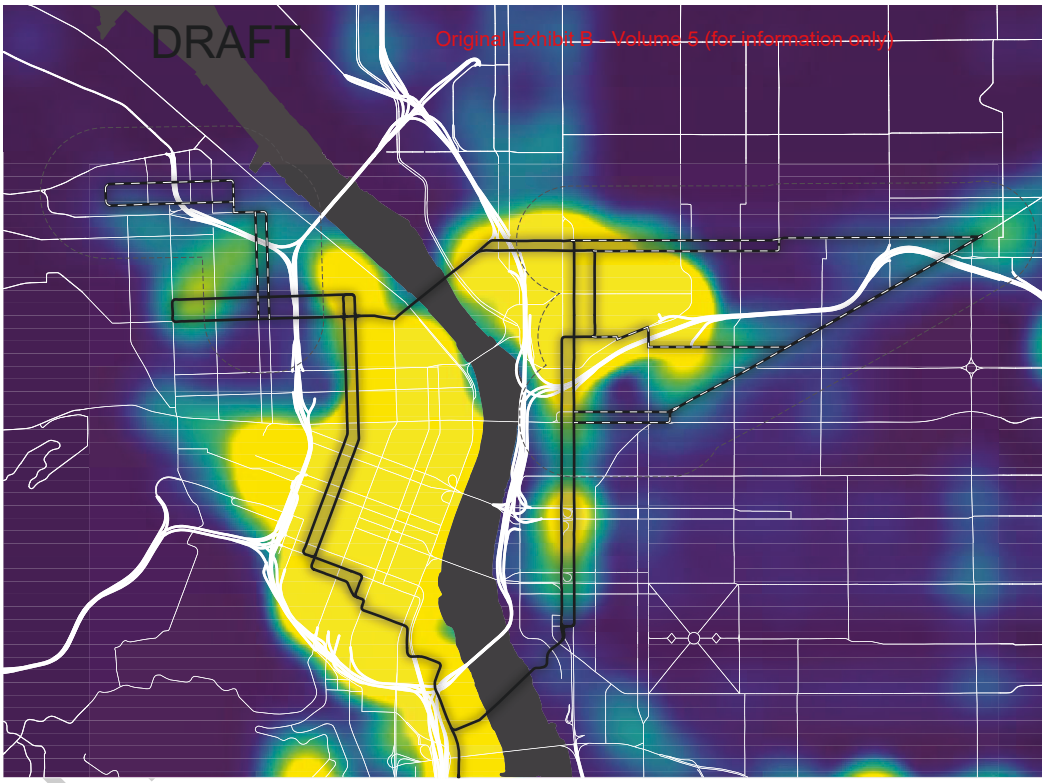
JOBS CAPACITY

It's also possible to estimate the number of jobs that could be accommodated under current zoning. The Comprehensive Plan's Urban Design Framework aims to locate employment and multi-family housing in Centers, Corridors and the Central City. As such, the Central City plays a prominent role in absorbing jobs capacity. Other locations with significant employment in the study areas include Hollywood and the area near NE Irving St.

Read more on the Urban Design Framework here: https://www.portlandoregon.gov/bps/65430



LOW UNIT CAPACITY — HIGH UNIT CAPACITY

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BUILDABLE LANDS INVENTORY: 2035 HOUSING AND JOBS ALLOCATION

The second component of the Buildable Lands Inventory is the allocation model. The City of Portland coordinates with Metro and the State Department of Land Conservation and Development (DLCD) to forecast the number of jobs and housing units the region will likely see. Metro then assigns jurisdictions in our region a growth forecast that they must plan for. Between 2015 and 2035, Portland was allocated 105,800 housing units to plan for.

The BLI allocation model apportions this growth throughout the city based on many factors, including recent development trends and where the city has capacity. Through this process, we are able to predict the number of jobs and housing units throughout the city in 2035.

The combined Northwest and Eastside alignment study areas will grow by about 16,900 new housing units between 2015 and 2035 for a total of approximately 33,100 housing units in 2035 (see table below). The largest growth will be in the NE Irving alignment, more than doubling its housing. NE Broadway will contain the highest number of housing units within the study area.

A healthy public transit system requires adequate supportive densities of jobs and housing to make transit viable. Using the forecast number of units from the BLI allocation model, we anticipate which areas will have the supportive densities in 2035, which starts at around 15 units per acre.

GEOGRAPHY	EXISTING UNITS (2015)	UNIT ALLOCATION (2015-2035)	FORECAST UNITS (2035)	FORECAST DENSITY (UNITS/AC)
COMBINED EAST-WEST STUDY AREA	22,414	19,871	42,285	17.0
NORTHWEST STUDY AREA	5,179	3,417	8,596	13.8
COMBINED EASTSIDE STUDY AREAS	11,038	13,440	24,478	16.7

GEOGRAPHY	EXISTING JOBS (2015)	JOBS ALLOCATION (2015-2035)	FORECAST JOBS (2035)	FORECAST DENSITY (JOBS/AC)
COMBINED EAST-WEST STUDY AREA	59,119	14,191	73,310	29.5
NORTHWEST STUDY AREA	15,518	1,539	17,057	27.4
COMBINED EASTSIDE STUDY AREAS	34,827	9,723	4,550	30.3

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The Eastside alignments all contain generally transit supportive future densities, particularly on Broadway close to the Lloyd Center, along the MLK corridor, and along Sandy. The NE Broadway alignment contains the highest supportive densities at almost 18 units per acre in aggregate.

In addition to adequate housing density that supports good public transit, we also consider the density of jobs, which starts at around 40 jobs per acre. The BLI allocation models helps us predict where these densities may occur in 2035.

With the exception of the NE Irving Alignment, the study areas do not contain generally supportive future densities of employment. However, the alignments all link specific areas with very supportive concentrations of employment, including Montgomery Park, the Lloyd, Hollywood and parts of Providence Hospital's campus.

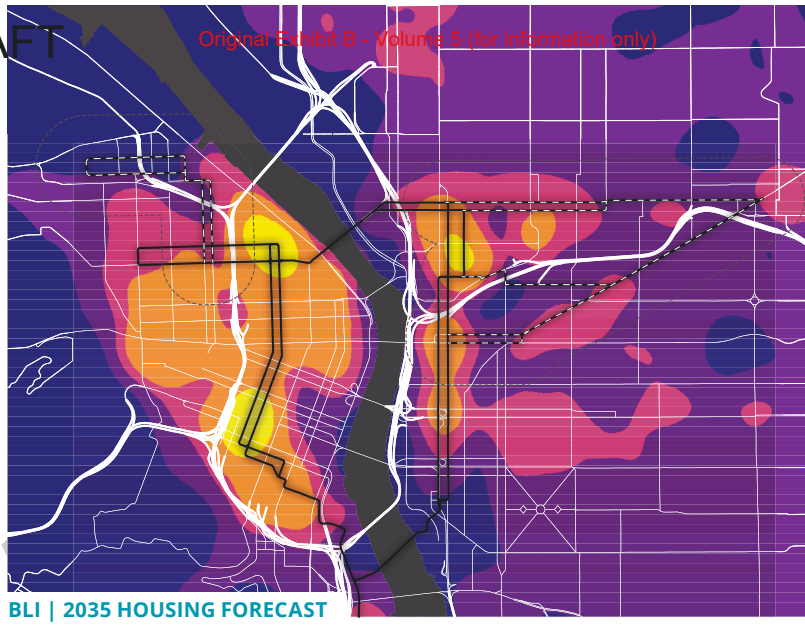
Any re-zoning processes associated with the Montgomery Park to Hollywood streetcar expansion will require re-running the BLI capacity and allocation models to anticipate the effects.

TRANSIT-SUPPORTIVE DENSITY

VERY SUPPORTIVE

SUPPORTIVE

NOT SUPPORTIVE



BLI | 2035 HOUSING FORECAST

BLI | 2035 JOBS FORECAST



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Transportation: Guiding Policy & Existing Investments

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, however, 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 to move more reliably
- Reducing carbon emissions and promoting healthy lifestyles
- Keep 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.

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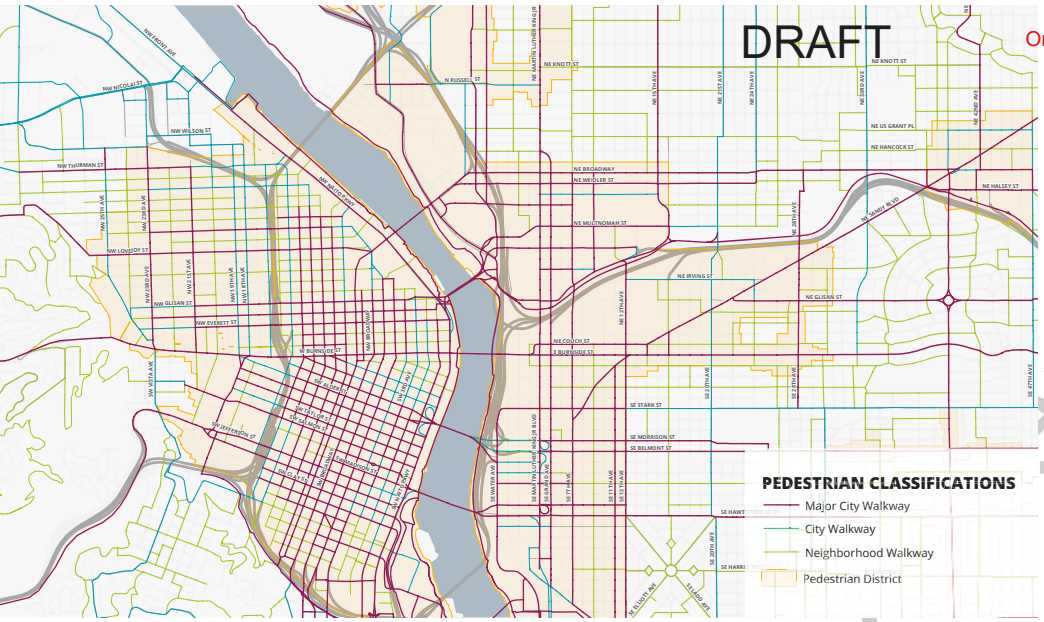
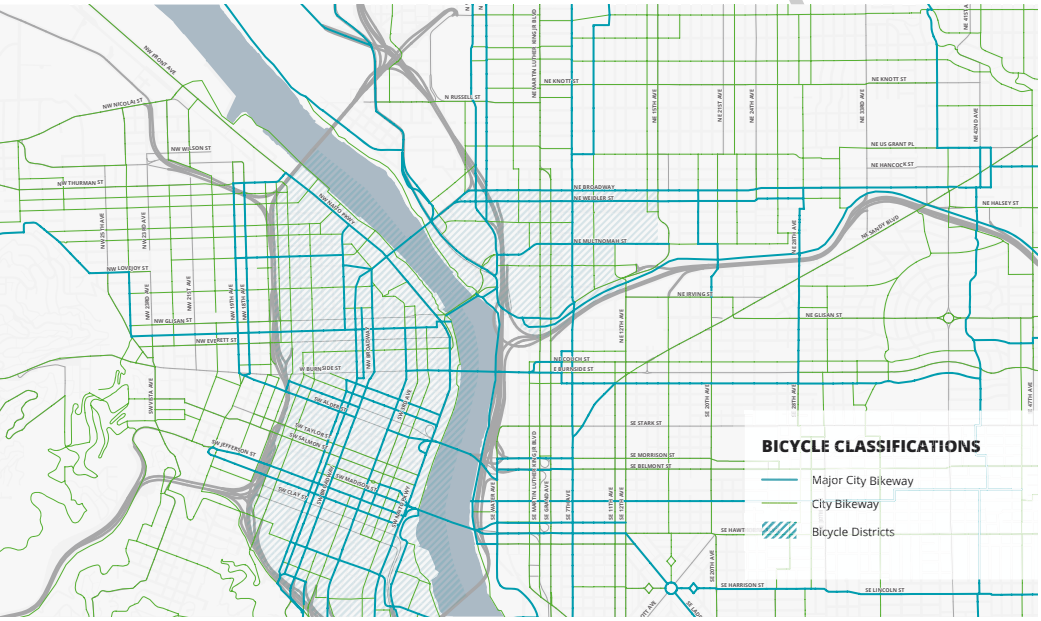




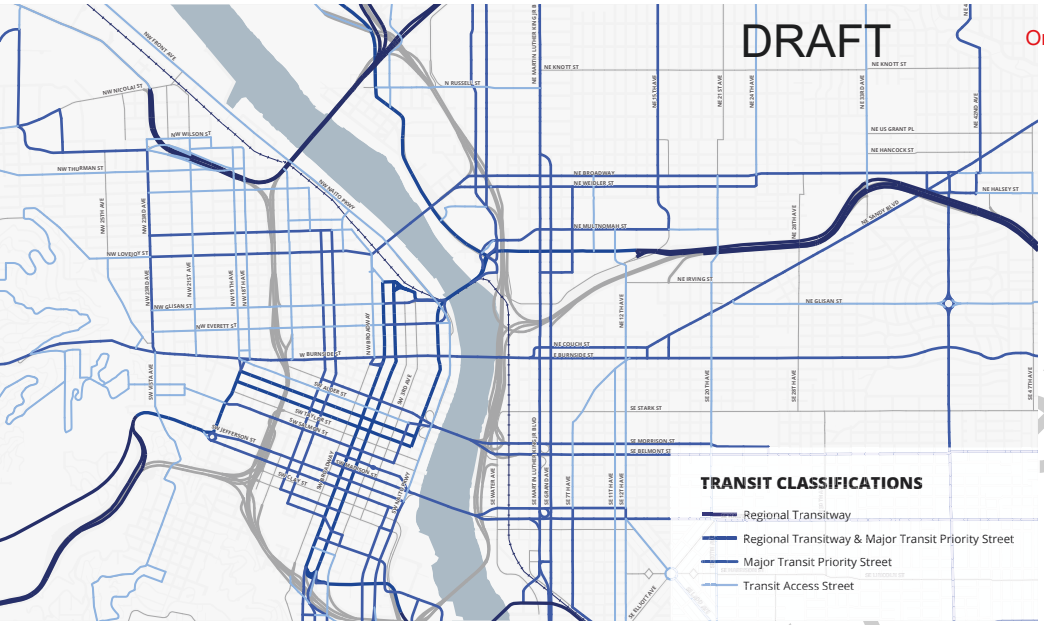
WALKING CLASSIFICATIONS

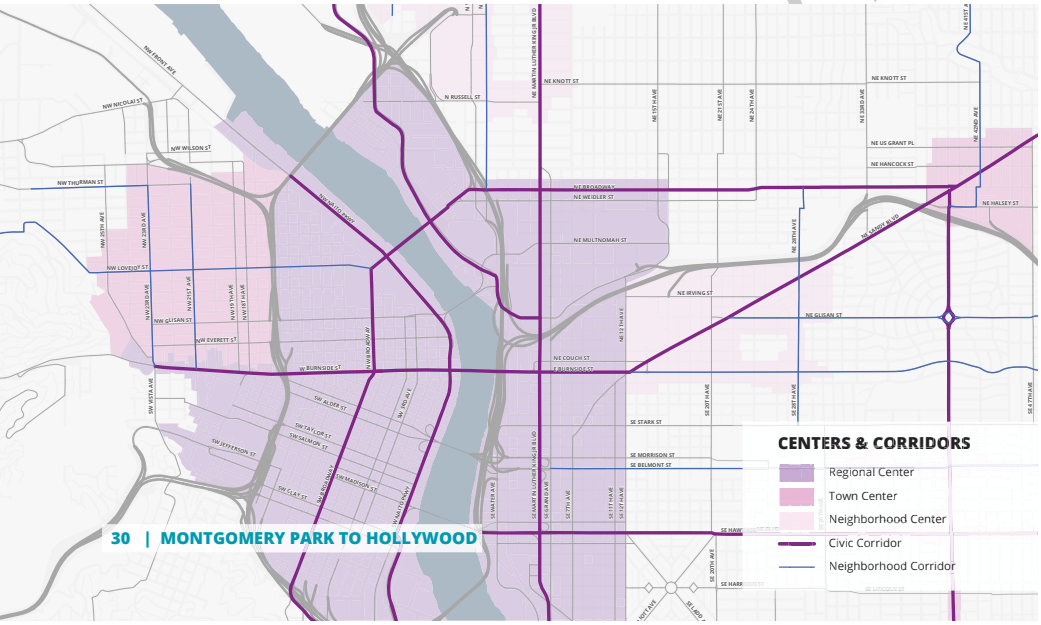
Pedestrian classification reflects the level of demand for pedestrian movement on that street. Higher classifications reflect a prioritization of pedestrian connections to key transit and land use destinations. The density of elevated walking classifications reflect places with high levels of pedestrian activity such as the Central City, and busy commercial districts in the Pearl District, the Central Eastside Industrial District and the Broadway/Weidler corridor.

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.

BIKING CLASSIFCATIONS

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.





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TRANSIT CLASSIFICATIONS

Transit classifications describe streets that support the movement of transit vehicles for regional, interdistrict 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.

COMPREHENSIVE PLAN CENTERS & CORRIDORS

The study areas include the Central City and Town Centers in Northwest and in the Hollywood District. There are also several Civic and Neighborhood Corridors in the study area, notably Sandy Boulevard, Broadway, Burnside Street, Lovejoy Street, Thurman Street, and others.

The Comprehensive Plan guides new growth toward centers and corridors to help expand access to employment and great neighborhoods. Centers are compact places that serve as anchors to complete neighborhoods. Civic corridors are some of Portland's most important and busiest transportation corridors. Neighborhood corridors are main streets that connect neighborhoods across the city. Densifying centers and corridors make good use of existing infrastructure and encourages efficiency in new investments.

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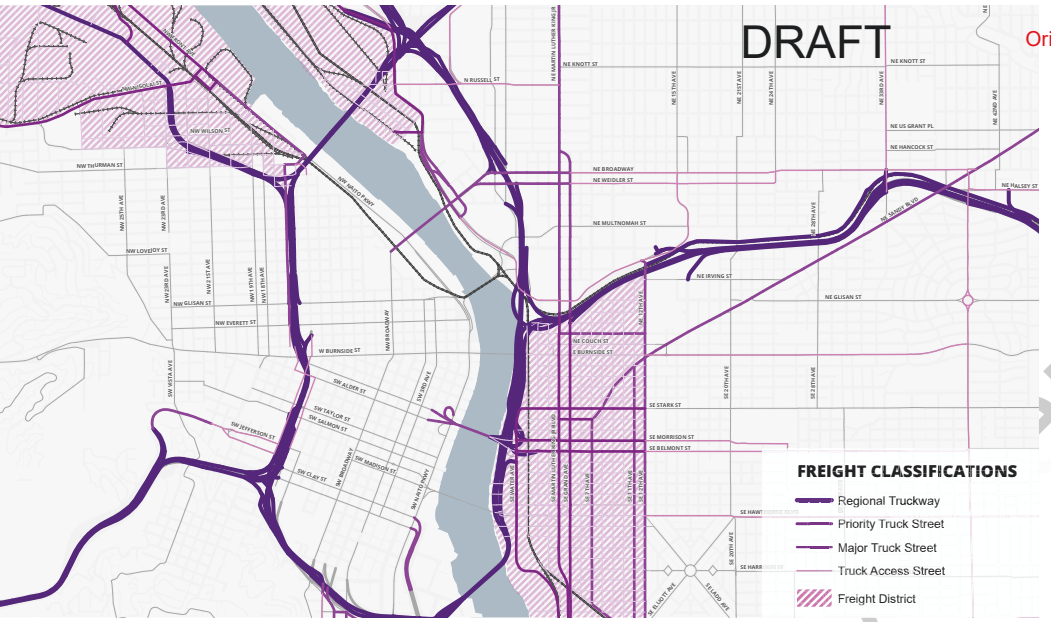
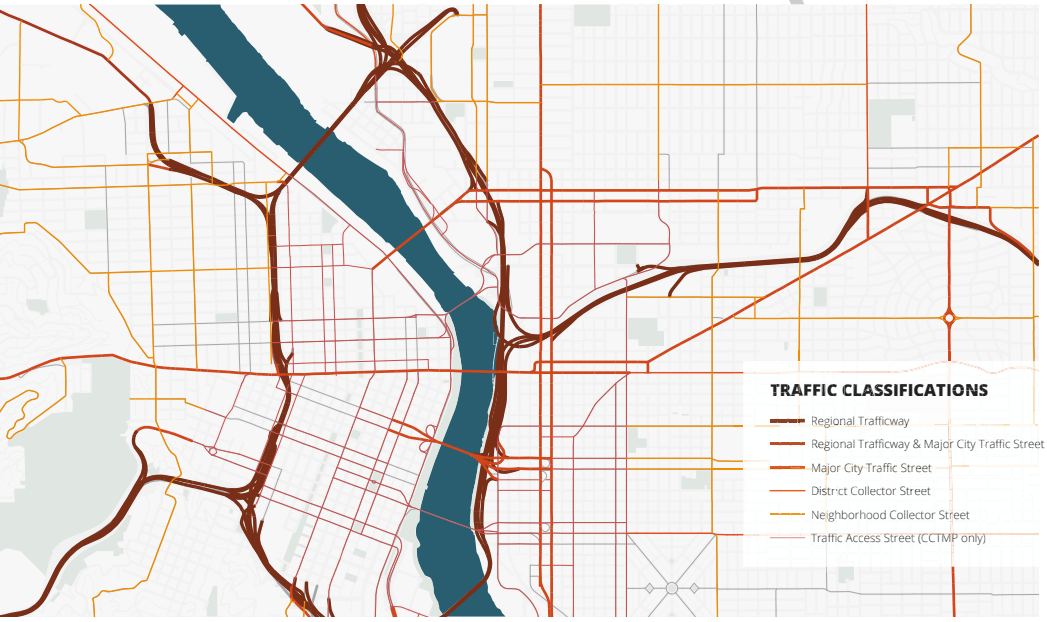


FREIGHT CLASSIFICATIONS

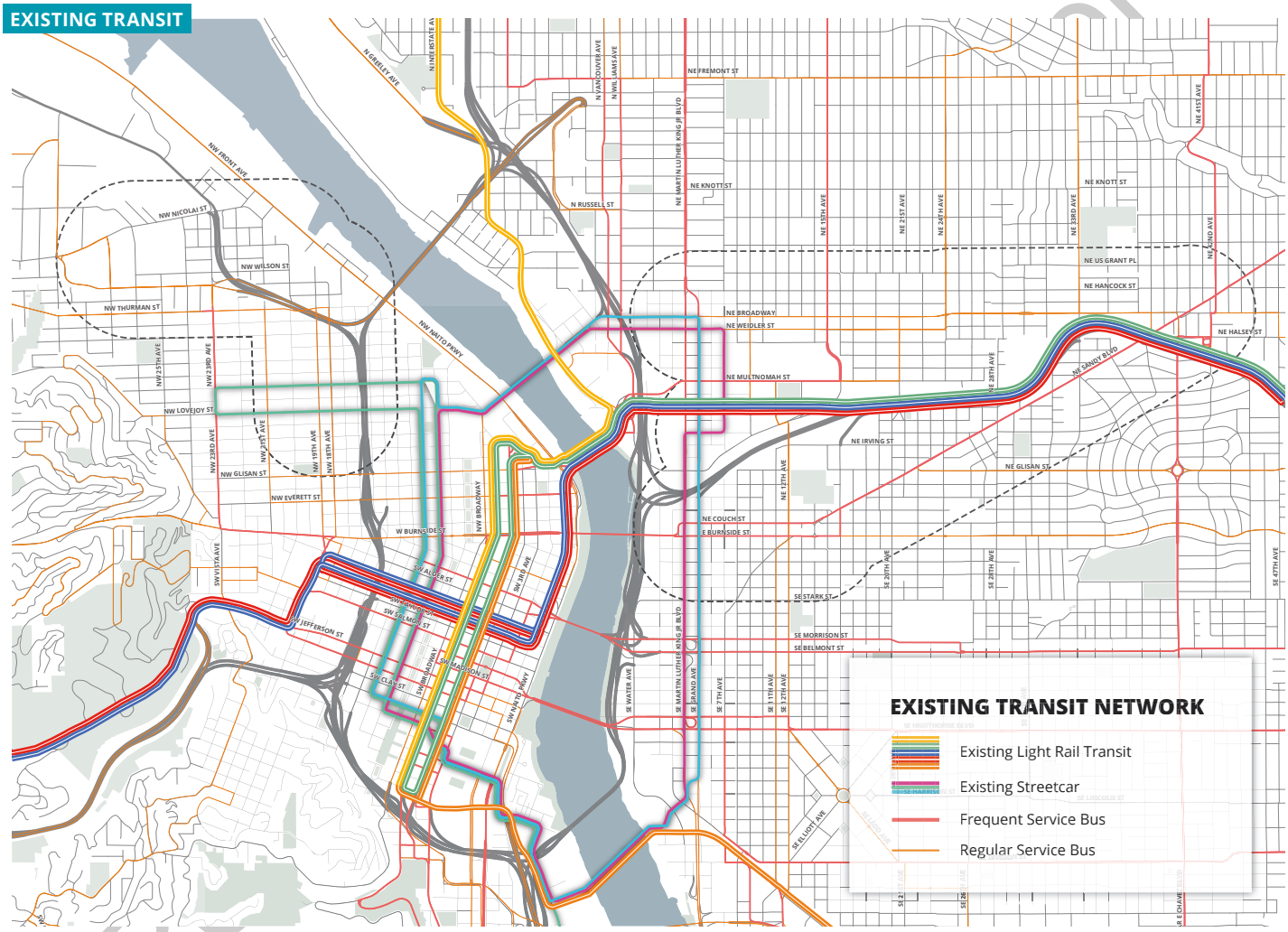
Streets with freight classifications designate a system of truck streets, railroad lines, and intermodal freight facilities that support local, national, and international distribution of goods. Freight districts are intended to provide safe and convenient truck mobility and access in industrial and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



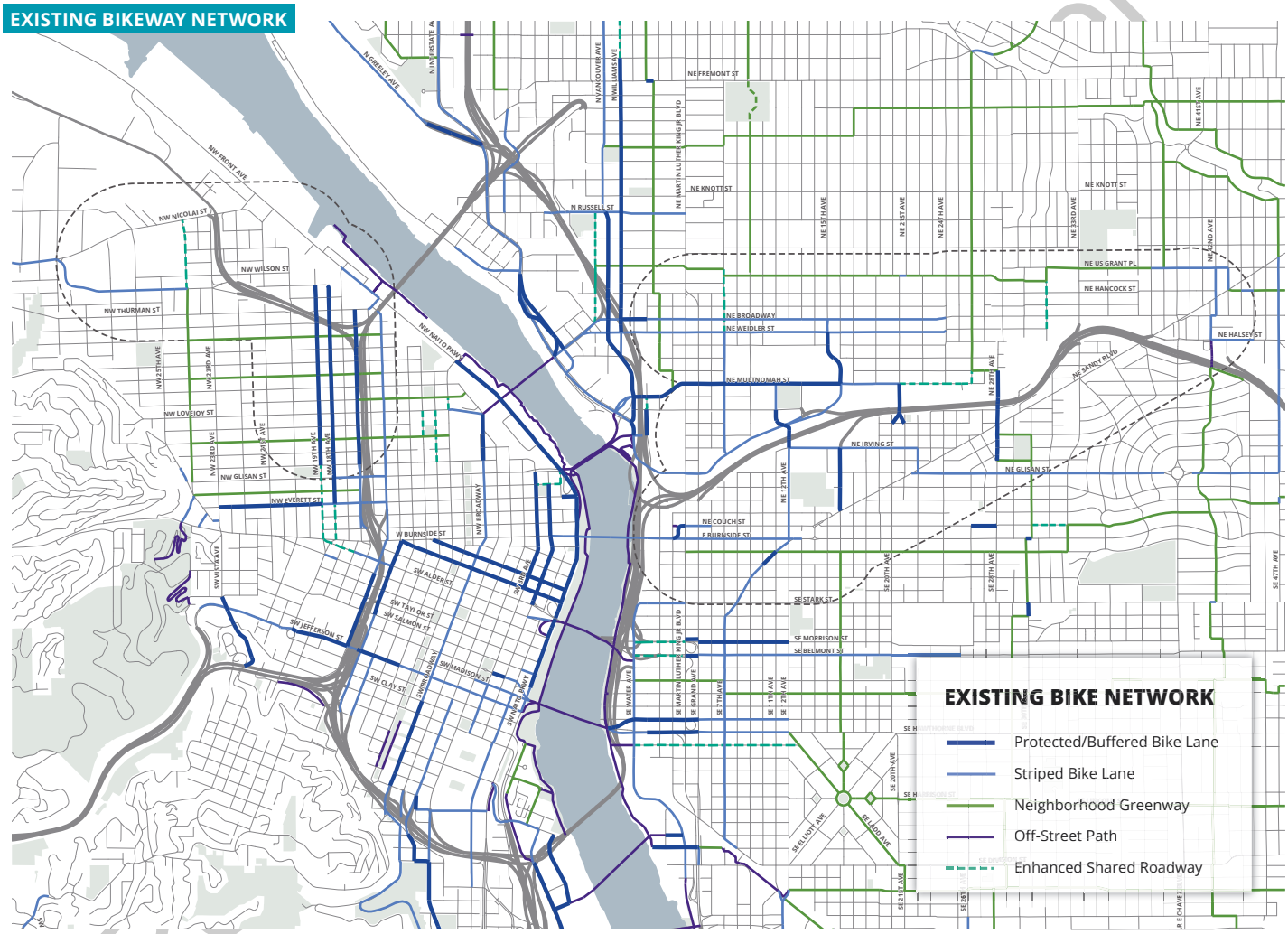
TRAFFIC CLASSIFICATIONS

Traffic 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.

EXISTING TRANSIT



EXISTING BIKEWAY NETWORK



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WESTSIDE | ALIGNMENT DETAIL

The Westside study area,also referred to as Northwest, consists of a quarter-mile buffer around a potential streetcar alternative route that connects the second-largest office building in Portland, Montgomery Park, to the existing Portland Streetcar network. The alignment diverges from the existing couplet on NW Lovejoy and NW Northrup via NW 18th and NW 19th to connect to NW Wilson and NW York.

The study area is primarily within the Northwest District and adjacent industrial areas to the north are within the NW Industrial Business Association boundary.

The neighborhoods surrounding the 18th/19th alignment are a mix of single-family homes, multi-dwelling buildings, and commercial buildings with retail and services and other land uses and destinations. Recent development at the former Conway site included large apartment buildings with a new grocer.

North of Vaughn the eastern portion of the study area is largely zoned industrial, while the western half includes large parcels of mixed use, and general employment. Businesses range from manufacturing, light industrial, office, storage, and more. Many parcels are currently transitioning in use following changes in ownership.

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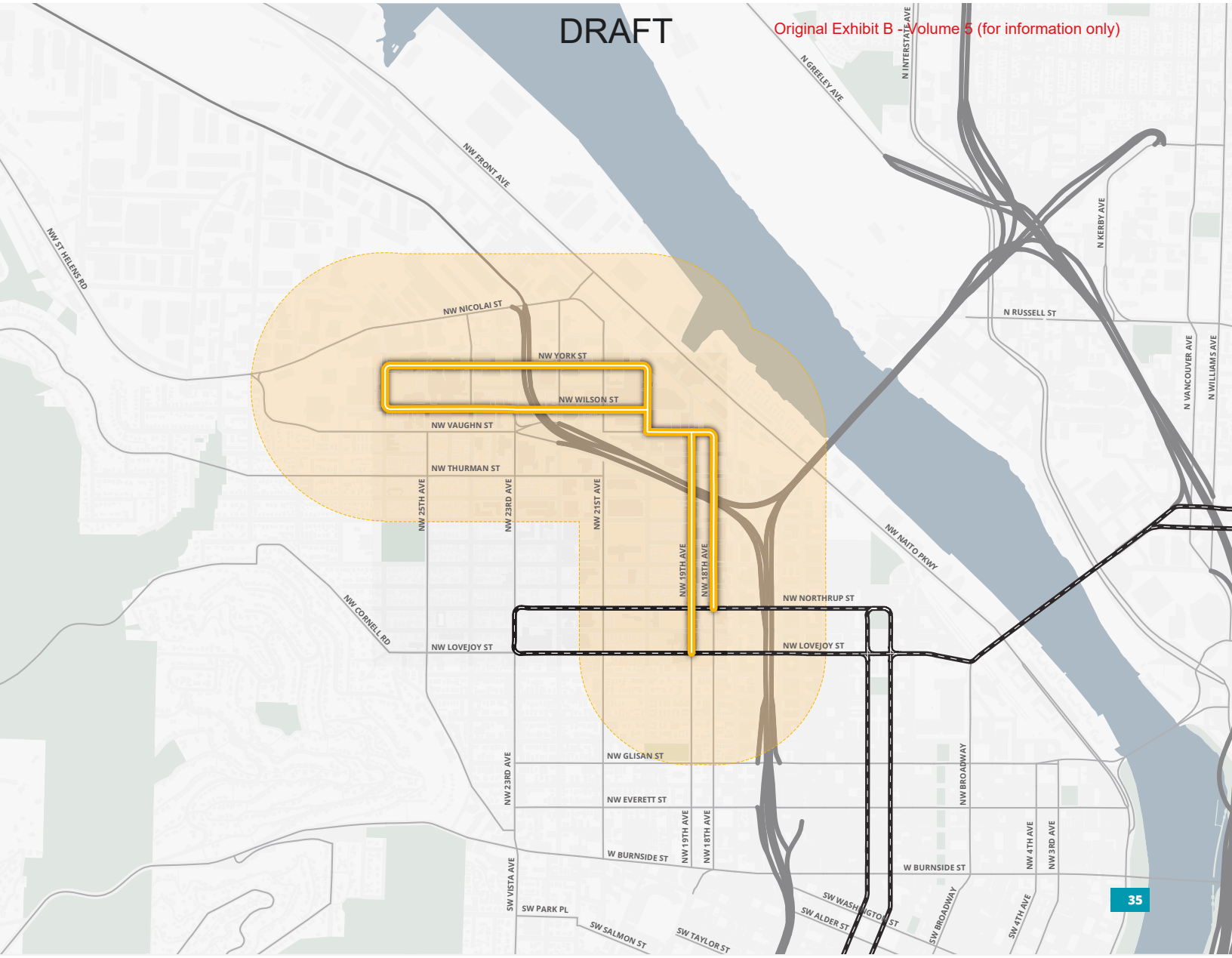
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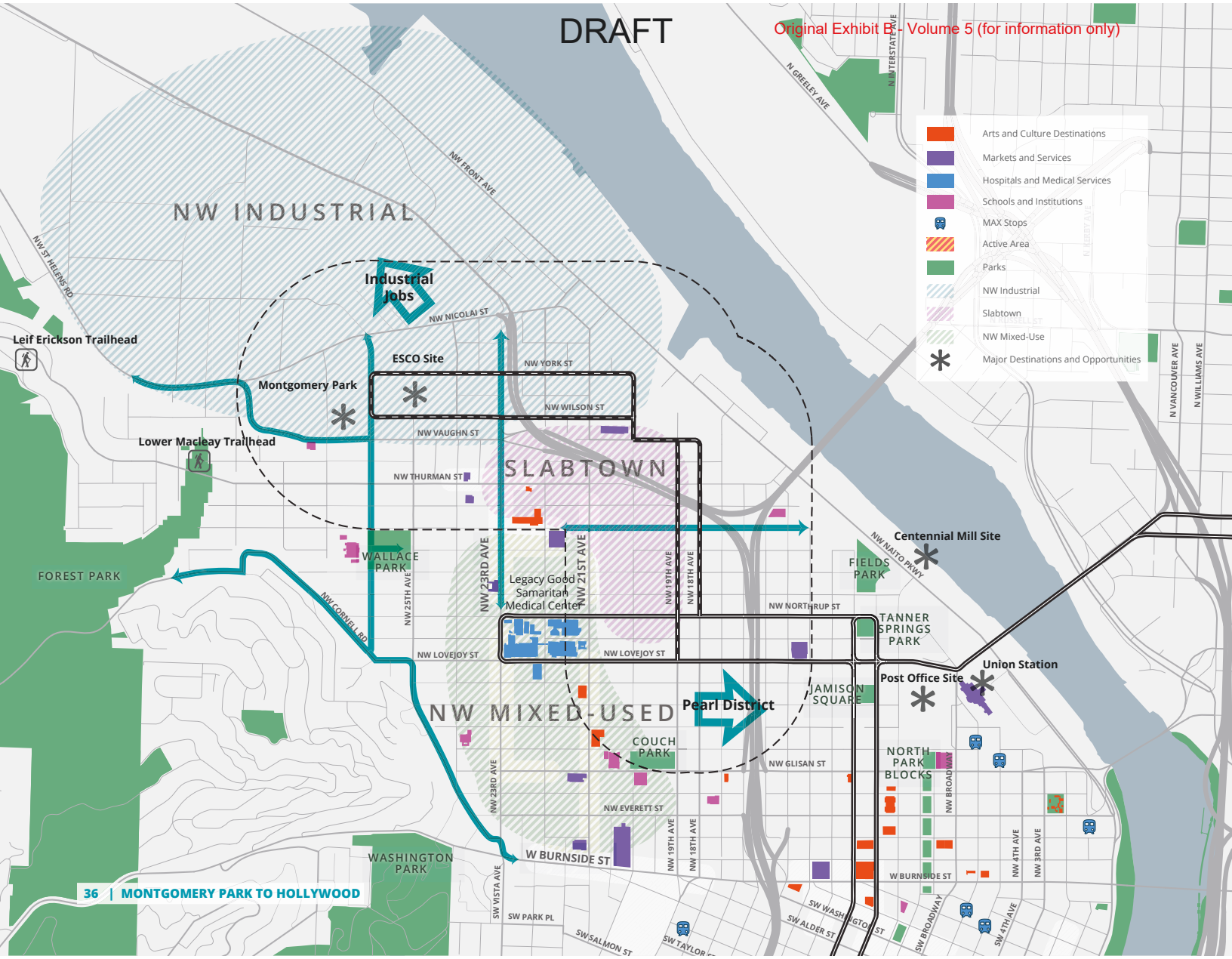
SW ALDER ST
SW BROADWAY
SW 4TH AVE
35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NW INDUSTRIAL
SLABTOWN
NW MIXED-USED
Industrial Jobs
Pearl District
Leif Erickson Trailhead
Montgomery Park
Lower Macleay Trailhead
ESCO Site
Centennial Mill Site
Post Office Site
Union Station
Legacy Good Samaritan Medical Center
FOREST PARK
WALLACE PARK
FIELDS PARK
TANNER SPRINGS PARK
JAMISON SQUARE
COUCH PARK
NORTH PARK BLOCKS
WASHINGTON PARK
NW FRONT AVE
NW NICOLAI ST
NW YORK ST
NW WILSON ST
NW VAUGHN ST
NW THURMAN ST
NW LOVEJOY ST
NW NORTHRUP ST
NW GLISAN ST
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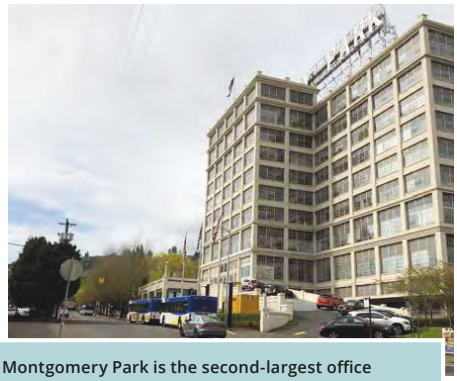
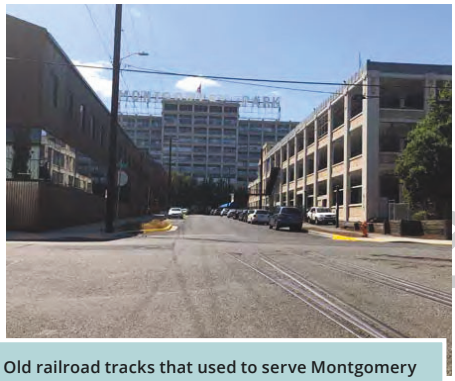
NW 3RD AVE
SW VISTA AVE
SW PARK PL
SW SALMON ST
SW TAYLOR ST
SW ALDER ST
SW BROADWAY
Arts and Culture Destinations
Markets and Services
Hospitals and Medical Services
Schools and Institutions
MAX Stops
Active Area
Parks
NW Industrial
Slabtown
NW Mixed-Use
Major Destinations and Opportunities



Montgomery Park is the second-largest office building in Portland, hosting a variety of businesses and services.



Old railroad tracks that used to serve Montgomery Park are still visible on NW Wilson Street.



A newer building in the district housing storage units.



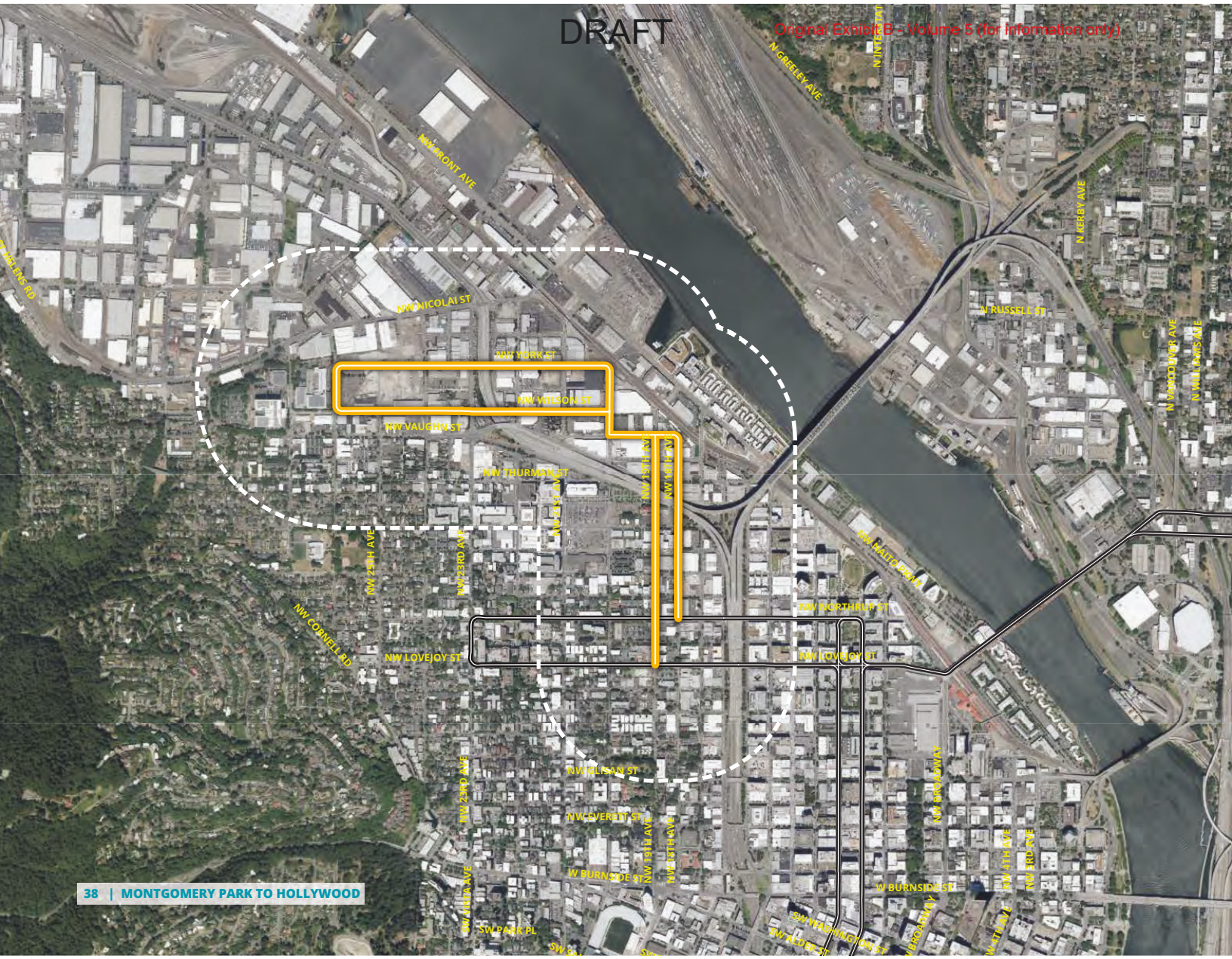
Large parking lots have long supplied Montgomery Park employees with free parking, but redevelopment may introduce other uses.



The corner of NW 18th and Vaughn serves an event space, garden nursery, and other uses that create placemaking opportunities.



Small creative workspaces fill the building at the corner of 18th and Upshur Street.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N GREELEY AVE
N INTERSTATE
NW FRONT AVE
N KERBY AVE
N RUSSELL ST
N VANCOUVER AVE
N WILLIAMS AVE
NW NICOLAI ST
NW YORK ST
NW WILSON ST
NW VAUGHN ST
NW THURMAN ST
NW 19TH AVE
NW 18TH AVE
NW 25TH AVE
NW 23RD AVE
NW CORNELL RD
NW LOVEJOY ST
NW NORTHRUP ST
NW LOVEJOY ST
NW LISAN ST
NW EVERETT ST
NW 23RD AVE
NW 19TH AVE
NW 18TH AVE
NW BROADWAY
NW 4TH AVE
NW 3RD AVE
W BURNSIDE ST
W BURNSIDE ST
SW PARK PL
SW WASHINGTON ST
SW TAYLOR ST
SW 3

WESTSIDE URBAN CHARACTER

The urban character of the Northwest study area is eclectic and varied, with a diversity of building types and land uses. The southern portion of the study area along and near NW 18th and 19th includes a mix of older 2-3 story, multi-family residential structures, more recent 4-to-6-story mixed-use developments, a scattering of low- to medium-scale commercial developments and aging, one- to six-story warehouse and industrial buildings.

Over the previous two decades, this "Slabtown" area has been transitioning from industrial uses to a broader mixed-use character. While there are pockets of smaller-lot developments typical of Northwest Portland further to the south and west, the development pattern here includes generally larger lot sizes and building floorplates. Block sizes east of NW 19th are generally the typical Portland 200 feet by 200 feet, while those to the west are larger at 200 feet by 460 feet, with some as large as 460 feet by 460 feet. Rights-of-way are typically 60 feet wide.

The northern area along NW Wilson and York is industrial in character, with NW Vaughn being the historical boundary between the Guild's Lake Industrial District and the mixed-use portion of Northwest Portland to the South. The development pattern is dominated by very large lots, including the former ESCO industrial site. There, several large industrial structures were recently demolished and the site sits mostly vacant. One of Portland's largest commercial structures, Montgomery Park, lies at the west end of the alignment, with large amounts of surface and structured parking. The Historic Landmark American Can Company complex is adjacent to the east.

A major character-defining feature of the Northwest study area is the Highway 30/I-405 alignment and the approaches to the Fremont Bridge—major pieces of infrastructure that pose a connectivity barrier in some areas, while towering over others. The area lacks significant public open space, although Forest Park lies about a half-mile to the west.

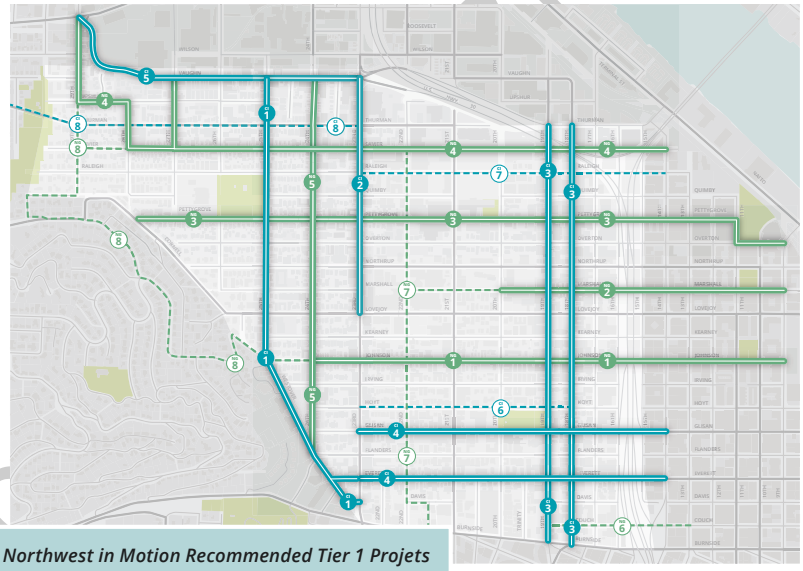
Replaced by Amendment

Westside Planning Context

NORTHWEST IN MOTION

Northwest in Motion (NWIM) is a plan to make Portland's Northwest District safer and more convenient for walking, biking, and riding public transit. People living in the NWIM project area travel by walking, biking, and transit at far higher shares on average than other Portlanders.The five-year implementation plan identifies and prioritizes projects that can be built in the next five to ten years.

The MP2H study area in northwest Portland overlaps with the northern and eastern extents of the NWIM project area. Projects in overlap areas should be coordinated with MP2H to ensure that the goals for both Plans are met through multimodal design. In particular, both plans are proposing corridor improvements on NW 18th and 19th avenues.



Northwest in Motion Recommended Tier 1 Projets

GUILD'S LAKE INDUSTRIAL SANCTUARY PLAN

The Guild's Lake Industrial Sanctuary (GLIS) Plan was adopted by City Council in 2001. Guild's Lake plan district covers portions of NW Portland from NW Wilson Street north to the banks of the Willamette River and west to Forest Park. This plan district overlaps with portions of the northwest study area. The plan provides a policy framework to preserve industrial land in NW Portland, in an area that has historically operated as an industrial and manufacturing hub. The plan recommends projects, programs and regulations to implement the plan's visions, policies and objectives. The land use changes and transportation investments the MP2H study will explore could change the neighborhood character and primary land use in the southernmost portion of the Guild's Lake Industrial Sanctuary.

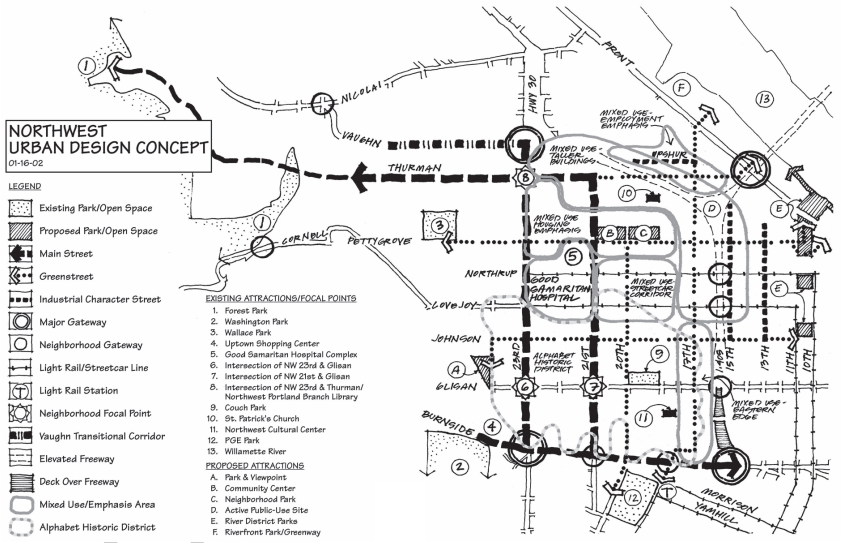
Guild's Lake Industrial Sanctuary Plan



Replaced by Amendment

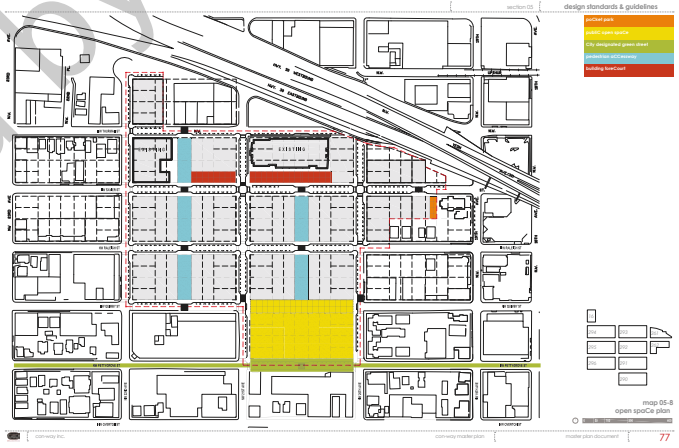
NORTHWEST DISTRICT PLAN

The Northwest District Plan was adopted in 2001 and sets a more specific framework of desired land uses and development for this densely developed neighborhood. The plan is implemented by the Northwest Plan District (33.562) which specifies additional land use allowances and development standards for parcels within the district.



CONWAY MASTER PLAN

The Conway Master Plan (Northwest Master Plan at ConWay Site, LU 12-135162 MS) is a site plan dictating detailed land use, development parameters, design guidelines and open areas for a 15 acre sub area located generally in the vicinity of NW 22nd Avenue, NW Pettygrove Street, NW 20th Avenue and NW Upshur Street within the Northwest Plan District area. The master plan guides the development of the area in a more specific and detailed way than the Northwest Plan District.



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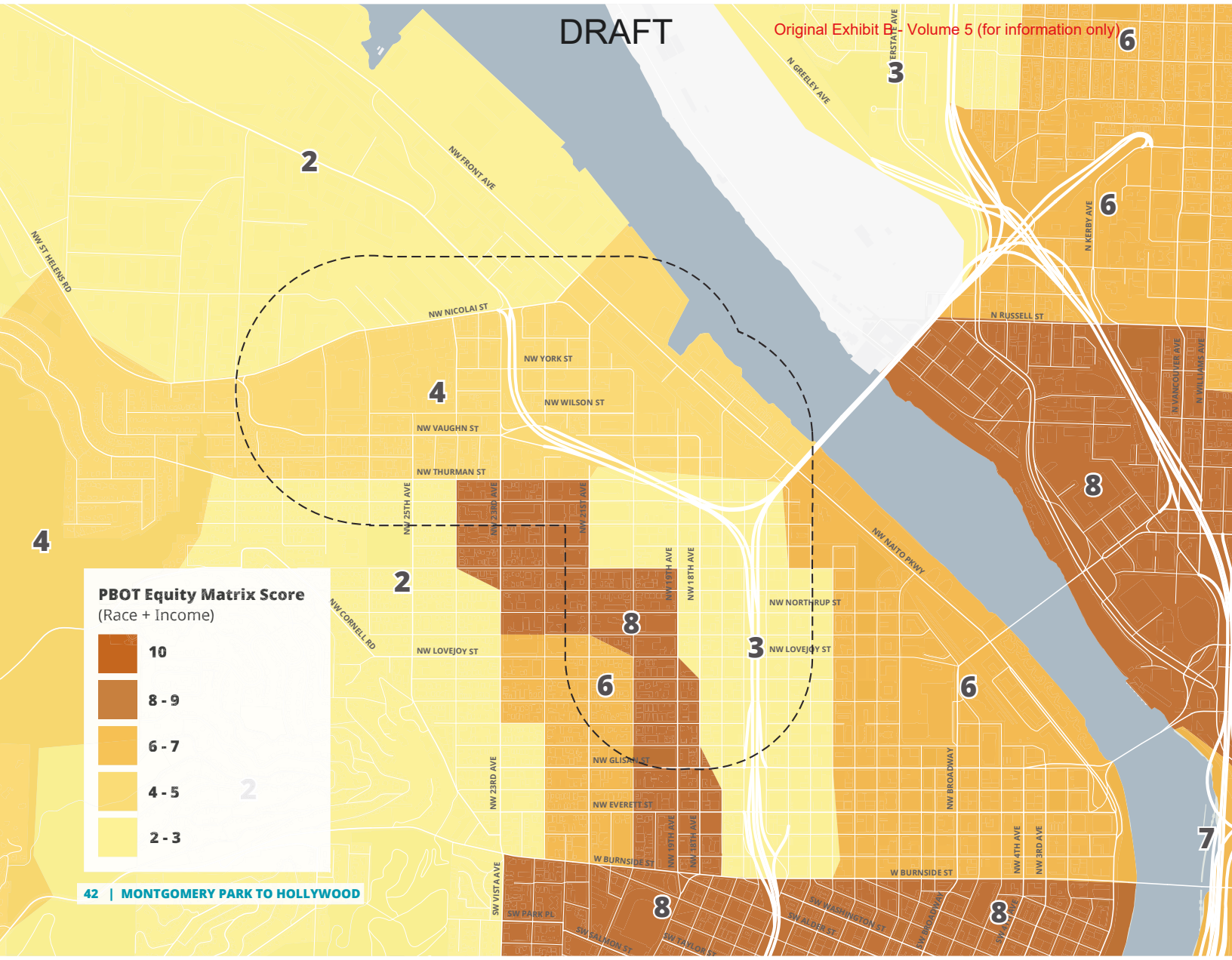

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People & Place:

STUDY AREA DEMOGRAPHICS AND EQUITY INDICATORS

The Portland Bureau of Transportation (PBOT) created an Equity Matrix to better refine our approaches and understand the impact of our work on marginalized groups. See page 15 for full explanation.

In Northwest Portland, the highest concentrations of equity index populations live along much of the existing streetcar line that operates on NW 18th and 19th, NW Lovejoy and NW Northrup Streets. There are also higher concentrations in Slabtown, reflecting areas of significant recent residential development. This area ranks has a racial equity score of 3, which reflects citywide averages. However, the income equity score of 5 means it has high concentrations of the lowest-income Portlanders compared to the city as a whole. The median income in this tract is about $37,000 and the most commonly spoken non-English language is Chinese. Approximately 4% of households have limited English proficiency.

In the tract north of NW Thurman, the income and racial equity scores are each a 2, which indicates that the area has lower concentrations of low-income and people of color than the citywide average. About 1% of the households have limited English proficiency, but no common non-English language has been identified for these households.

The tables in this section show characteristics of the population in the Northwest alignment study area compared to the city overall.

In general, the population in the Northwest study area includes fewer families in poverty, and a much higher per-capita income than Portland. Overall there is a lower percentage of people of color than citywide, as well as significantly fewer children than the city as a whole.

More information on PBOT's Equity Matrix can be found here:
https://www.portlandoregon.gov/transportation/74236

Population Characteristics	Northwest Study Area	City of Portland
Total Population	6,735	630,331
Per Capita Income	$64,295	$37,382
Total Families	1,108	135,543
Share of Families in Poverty	4%	10%
People of Color	20%	29%

Race/Ethnicity	Northwest Study Area	City of Portland
Black	2%	7%
Native American	2%	2%
Asian	10%	10%
Pacific Islander	0%	1%
Another Race	1%	3%
Hispanic	8%	10%
Non-Hispanic White	80%	71%

Age Characteristics	Northwest Study Area	City of Portland
Median Age	35.2	36.8
Share under 18	8%	18%
Share 18 to 64	80%	70%
Share over 64	11%	12%

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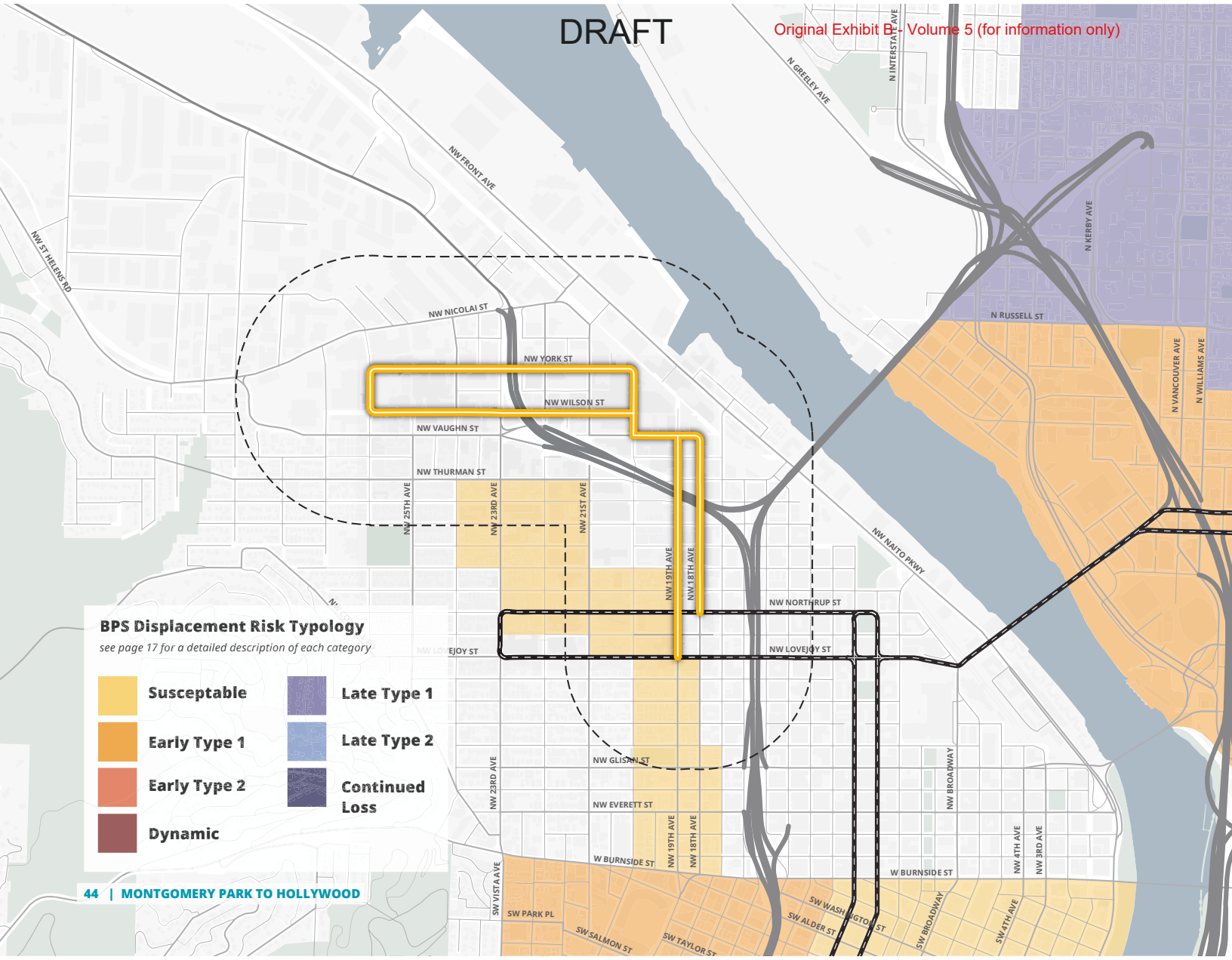

BPS Displacement Risk Typology

see page 17 for a detailed description of each category

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

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People & Place

RESIDENTIAL GENTRIFICATION & DISPLACEMENT RISK

The tables on this page show characteristics of the households, the educational attainment of the population, and the types of dwelling units in the Northwest alignment study area compared to the City of Portland overall.

In general, households in the Northwest study area are much smaller than the citywide average, and are composed of a greater percentage of renter households. Median household income is above the citywide average. The educational attainment of the population is significantly higher than the city overall, with over 75% of the population over 18 holding a 4-year degree or more. The population in the Northwest study area has a much greater percentage of people that live in multi-dwelling units than citywide, and less than 10% of residents live in detached units.

The map on the adjacent page shows displacement risk for the Northwest study area. See page 17 for more information on displacement typologies.

Household Characteristics	Northwest Study Area	City of Portland
Total Households	4,215	260,949
Owner-Occupied Households	29%	53%
Renter-Occupied Households	71%	47%
Average Household Size	1.56	2.35
Median Household Income	$68,834	$63,032

Highest Educational Attainment	Northwest Study Area	City of Portland
Total Adults 25 or Older	5,818	462,362
Less than HS Diploma	2%	8%
High School Diploma	6%	16%
Some College	18%	28%
Four-Year Degree	43%	29%
Advanced Degree	32%	19%

Housing Unit Characteristics	Northwest Study Area	City of Portland
Total Housing Units	4,806	277,499
Detached	8%	56%
Small Multi-dwelling	11%	14%
Medium Multi-dwelling	20%	11%
Large Multi-dwelling	60%	18%
Other Type	0%	2%

Replaced by Amendment

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mendment

People & Place:
Employment Patterns & Travel Behavior

WORKERS PER MI²

- 321 OR MORE
- 241 TO 320
- 161 TO 240
- 81 TO 160
- 80 OR LESS



JOBS LOCATION

This map shows the density of workplace locations of people that live in the Northwest study area. The highest concentration of workplaces for Northwest residents is in Downtown Portland, on both the east and west sides of I-405. Smaller concentrations work in the inner eastside in the Central Eastside and in the Rose Quarter and Lloyd Center neighborhoods. There is also a cluster of workplaces in Washington County, potentially attributed to the Nike campus and other tech jobs.

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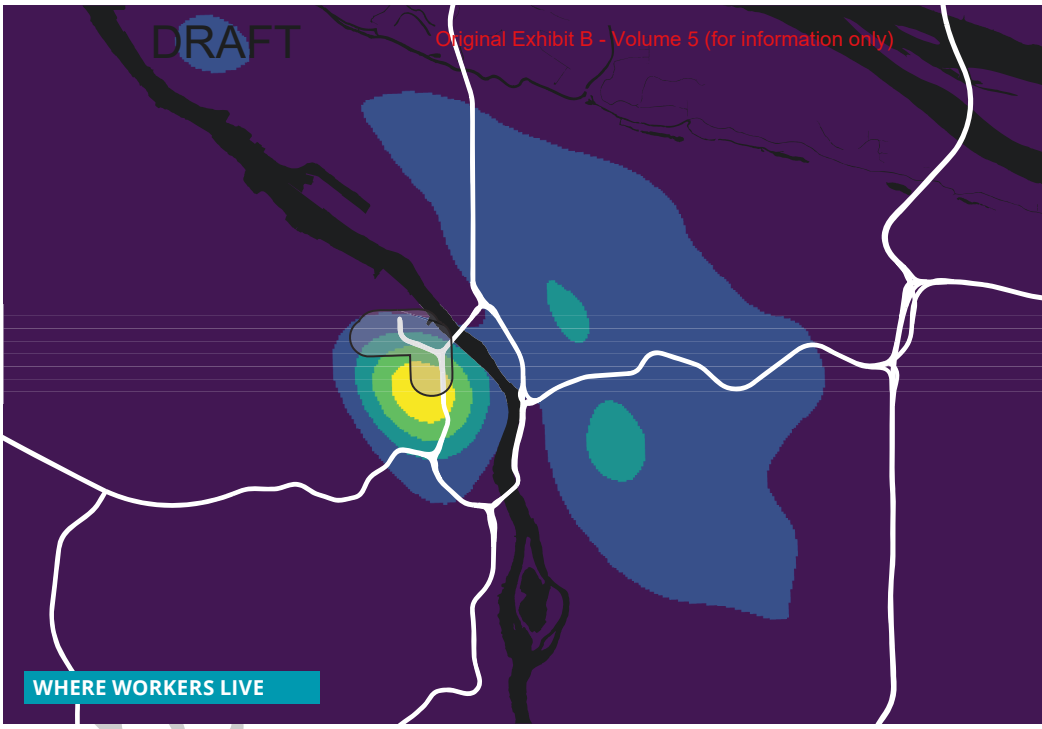
ABOUT THIS DATA SOURCE: LODES

The **Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES)** is a program run by the U.S. Census Bureau. The Census Bureau coordinates with state employment agencies to gather administrative data from state Unemployment Insurance and Quarterly Census of Employment and Wages (QCEW). This administrative data is then linked to Census surveys using encoded social security numbers (PIKs). From this dataset, the Census Bureau statisticians use a method called "fuzzing" to inject noise into the dataset to make it hard to identify individual employers, resulting in a **partially synthetic dataset** that policy makers can use to understand the dynamics between people and their workplace.

The LODES data contains a matrix showing showing the number of workers that commute between Census blocks. Users can input a study area to retrieve the characteristics about the people who work there as well as those who live in the study area. Users can track where residents go to work and where workers in the area commute from.

Knowing this information is useful for considering the demand to get from one point to another. The dataset also reveals the dynamics relating to wage, race, sex, age, industry and educational attainment. More information here: https://lehd.ces.census.gov/data/lodes/LODES7/LODESTechDoc7.4.pdf



HOUSING LOCATION

This map shows the concentration of households for people who work in the Northwest study area. Workers live across a more dispersed area than where Northwest residents work. The worker's households are most highly concentrated in the Central City, but also includes areas of SE and NE Portland. The highest eastside concentrations are in inner SE and NE neighborhoods. A cluster of workers also live in St. Johns.

RESIDENTS PER MI²

- **321 OR MORE**
- **241 TO 320**
- **161 TO 240**
- **81 TO 160**
- **80 OR LESS**

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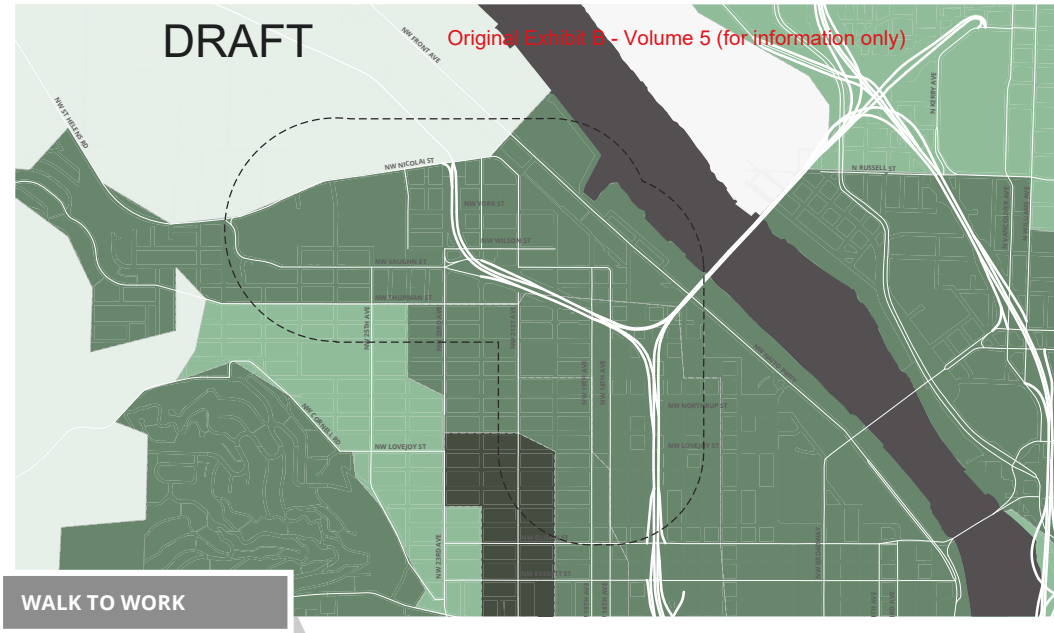
PEOPLE WALKING

NW Portland has the highest rate of people walking to work in the city. Average citywide walking modal share is 5.6%. In NW Portland, the area between NW 20th and 23rd, from Davis to Lovejoy has a rate of 25% or greater. Elsewhere in the study area, the rate is significantly above average, with rates from 10-25%. This typically indicates that a high concentration of people in the area live near their workplaces.

WALK TO WORK - MODE SHARE

< 5%	5 -10%	10-25%	> 25%

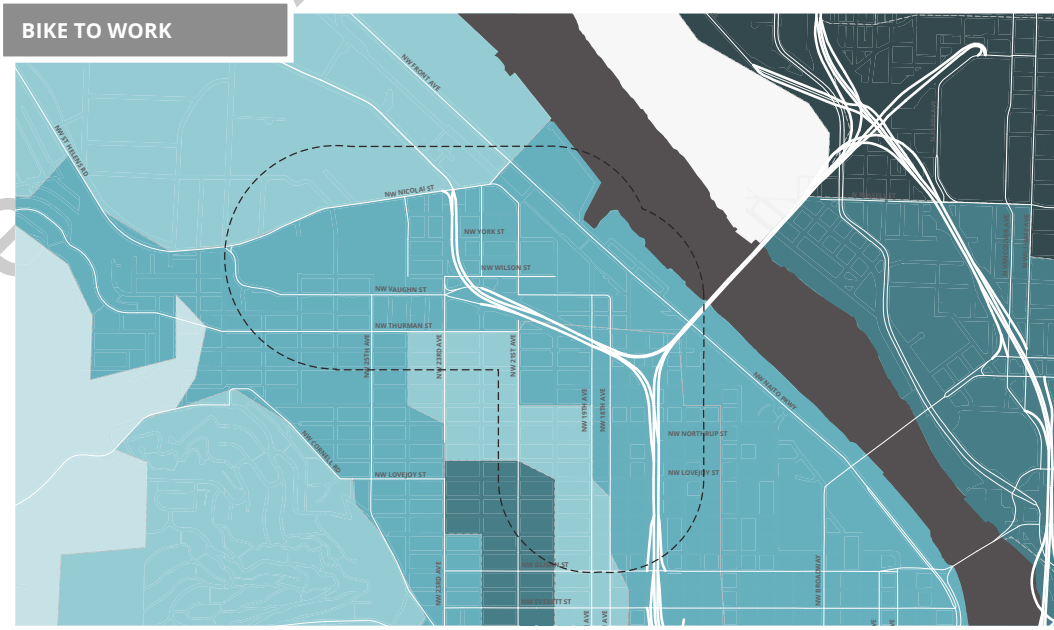


PEOPLE BIKING

Similar to walking, NW Portland has significantly higher rates of biking to work than the citywide average. The citywide average is 5.3%, while the Northwest study area has one tract above 20%, and much of the study area has ranges between 10 and 15%. This echos earlier maps that indicate that many of those who live in NW Portland work in the Central City. Similarly, many of those who work in the area live in either the Central City or inner NE and SE Portland.

BIKE TO WORK - MODE SHARE

< 5%	5 -10%	10 -15%	15-20%	>20%



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PEOPLE TAKING TRANSIT

Populations south of NW Thurman have transit mode shares above the Citywide average of about 12%. On either side of I-405, transit shares are more in line with City averages, while east and west of that tract boast ridership above 15%. North of Thurman, transit ridership is less than 5%, significantly lower than City averages. This could reflect less transit service availability for workers and residents.

TRANSIT TO WORK - MODE SHARE

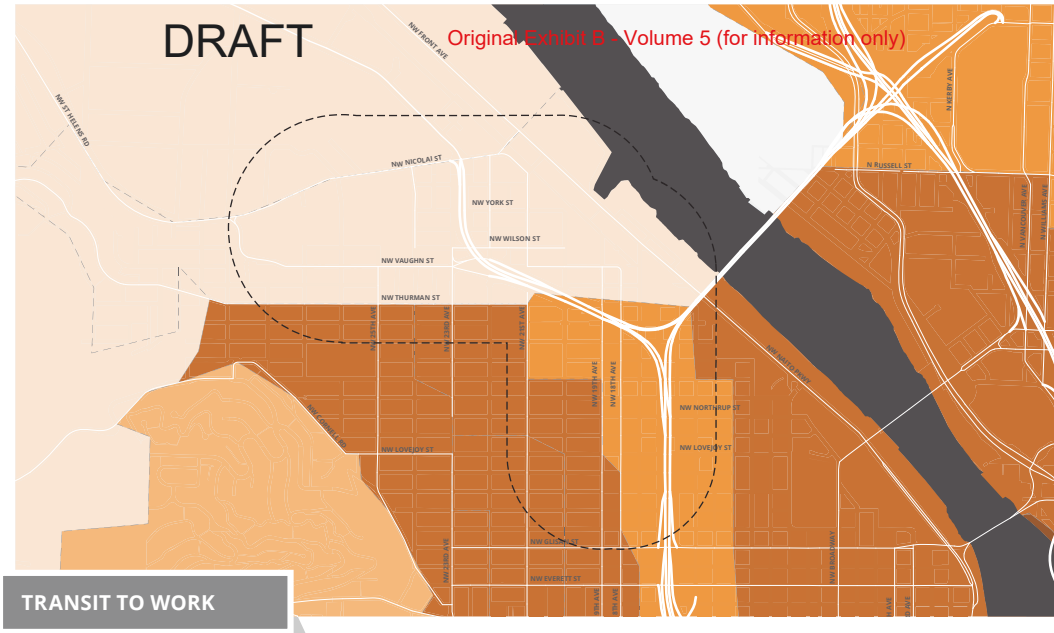
< 5%	5 -10%	10 -15%	15-25%	>25%

PEOPLE DRIVING ALONE

Due to greater numbers of people walking, biking, or taking transit to work, the Northwest study area has a significantly lower percentage of single occupant vehicle commuters and fewer households that own multiple vehicles.

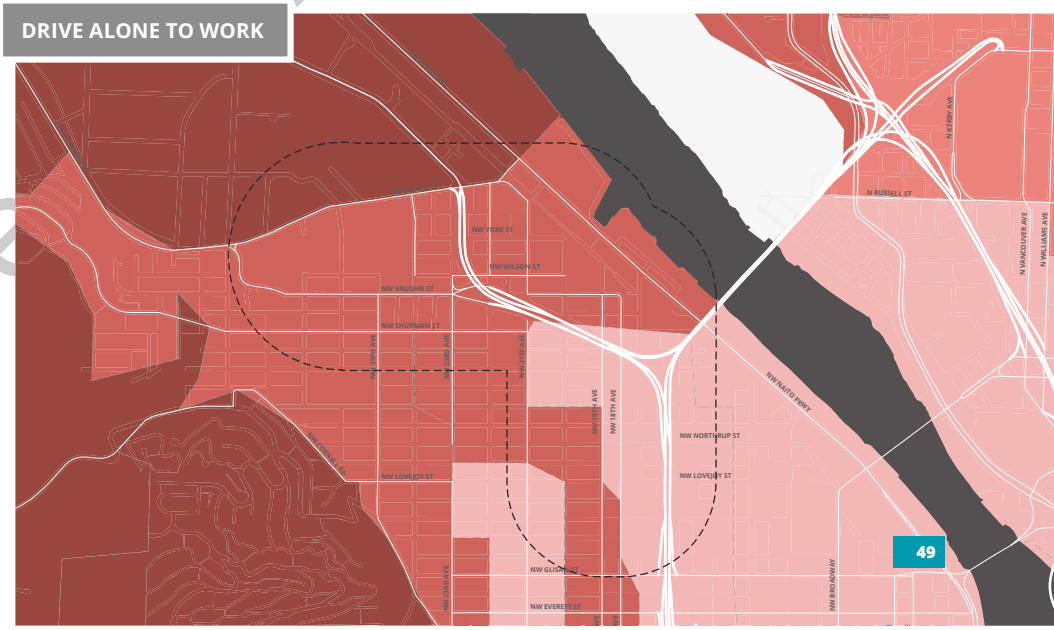
DRIVE ALONE TO WORK - MODE SHARE

< 30%	30-40%	40-50%	40-50%	> 60%



TRANSIT TO WORK

DRIVE ALONE TO WORK



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Land Use: Comprehensive Plan

COMPEHENSIVE PLAN DESIGNATIONS

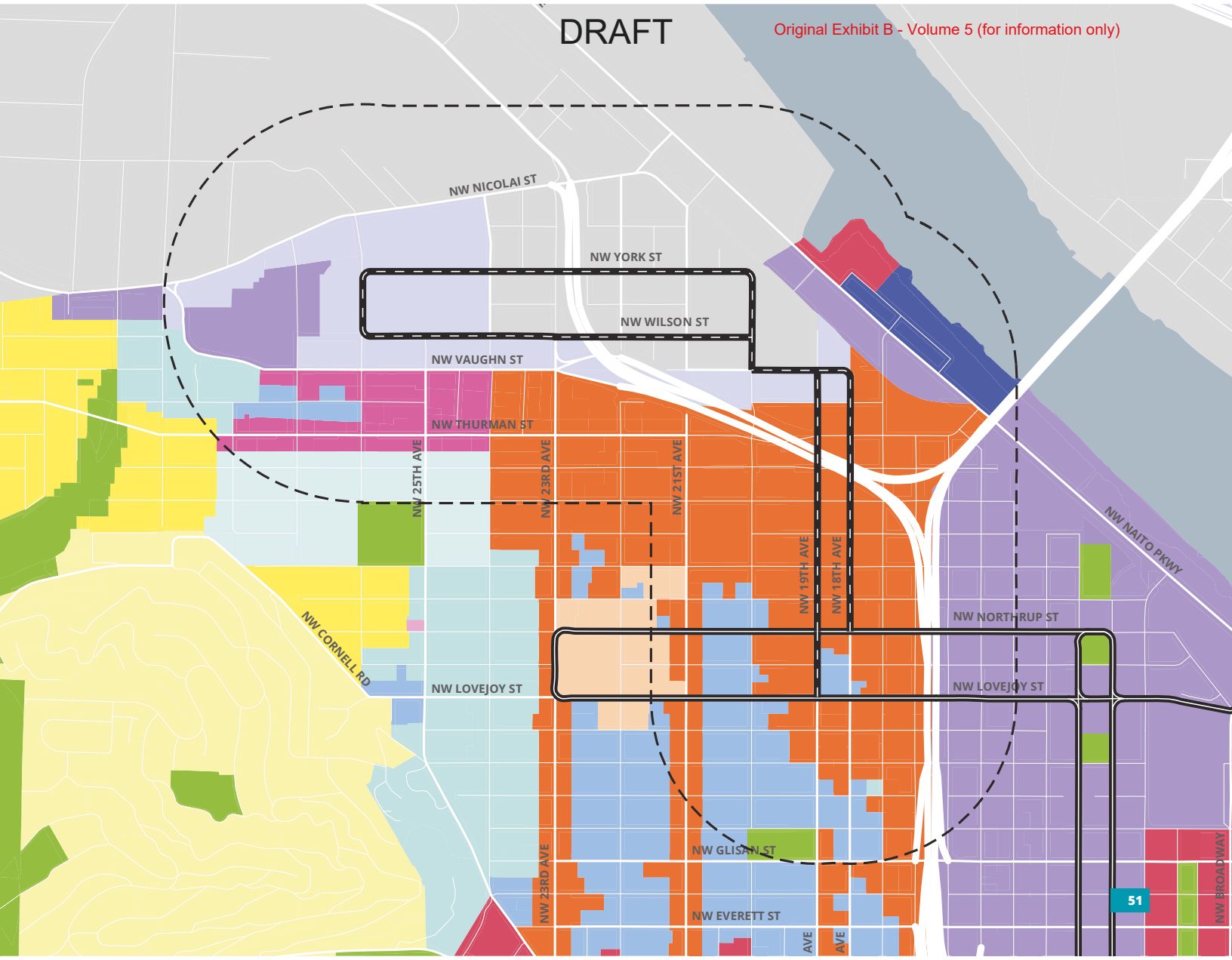
The Northwest study area features an array of different Comprehensive Plan designations along its path. Along NW 18th and NW 19th, the plan is generally Mixed Use Urban Center, which supports a variety of commercial, residential and employment uses at a mid-rise scale. North of NW Upshur and west to NW 24th, the Comprehensive Plan designation is Industrial Sanctuary, which limits non-industrial uses. At NW 24th, the designation becomes Mixed Employment, which allows a greater array of employment type uses, but prohibits housing. At NW 26th, the plan designations transition to Central Employment, which allows a full array of commercial, employment and residential land uses at a mid-rise scale.

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

GENERALIZED COMPREHENSIVE PLAN DESIGNATIONS	NORTHWEST	PORTLAND
AREA (ACRES)	599	89,042
SINGLE-DWELLING	0.4%	35.2%
MULTI-DWELLING	10.2%	6.2%
MIXED USE/ COMMERCIAL	32.0%	6.4%
INSTITUTIONAL	0.6%	1.5%
EMPLOYMENT	19.2%	2.4%
INDUSTRIAL	24.9%	16.3%
OPEN SPACE	0.5%	16.9%
RIGHT-OF-WAY	12.1%	15.1%

Policy Amendment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NW YORK ST
NW WILSON ST
NW VAUGHN ST
NW THURMAN ST
NW 25TH AVE
NW 23RD AVE
NW 21ST AVE
NW 19TH AVE
NW 18TH AVE
NW NAITO PKWY
NW CORNELL RD
NW LOVEJOY ST
NW NORTHRUP ST
NW LOVEJOY ST
NW GLISAN ST
NW 23RD AVE
NW EVERETT ST
51
NW BROADWAY

Land Use: Zoning

ZONING

At the southern part of Northwest study area near NW Lovejoy, the zoning is Commercial/Mixed Use 3 (CM3) and High Density Multi-dwelling (RH). Further north to NW Upshur, the zoning is CM3 and EG1 (General Employment) east of NW 18th at Quimby. North of Upshur, the zoning is primarily Industrial (IG1). At NW 24th, the zoning becomes Heavy Industrial (IH) on the former Esco site, transitioning to General Employment (EG1) at NW 26th. The area between Vaughn and Wilson between NW 23rd and NW 27th is also designated EG1. The zoning transitions to Central Employment (EX) at NW 26th and is applied to the Montgomery Park site. The area is also regulated by two plan districts. The Northwest Plan District is applied in the area generally south of NW Vaughn, and the Guilds Lake Plan District is applied in the industrial and general-employment zoned areas north of Vaughn.

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)

ZONING CATEGORIES	NORTHWEST	PORTLAND
AREA (ACRES)	599	89,042
SINGLE-DWELLING	0.4%	34.5%
MULTI-DWELLING	10.2%	6.1%
MIXED USE/ COMMERCIAL	25.5%	6.3%
INSTITUTIONAL	0.6%	1.2%
EMPLOYMENT	14.8%	2.5%
INDUSTRIAL	35.9%	16.3%
OPEN SPACE	0.5%	16.8%
RIGHT-OF-WAY	12.1%	15.1%

Policy Amendment

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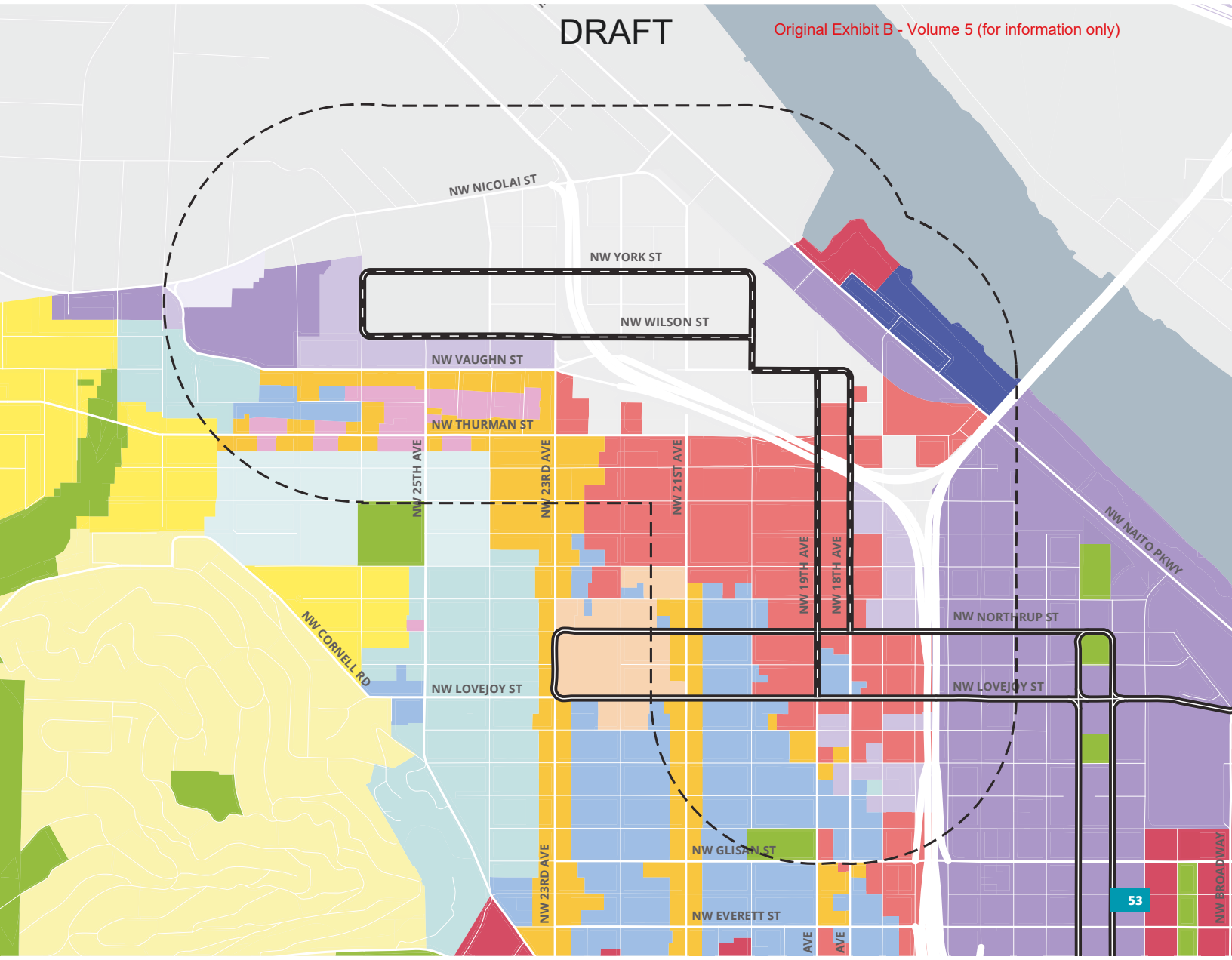

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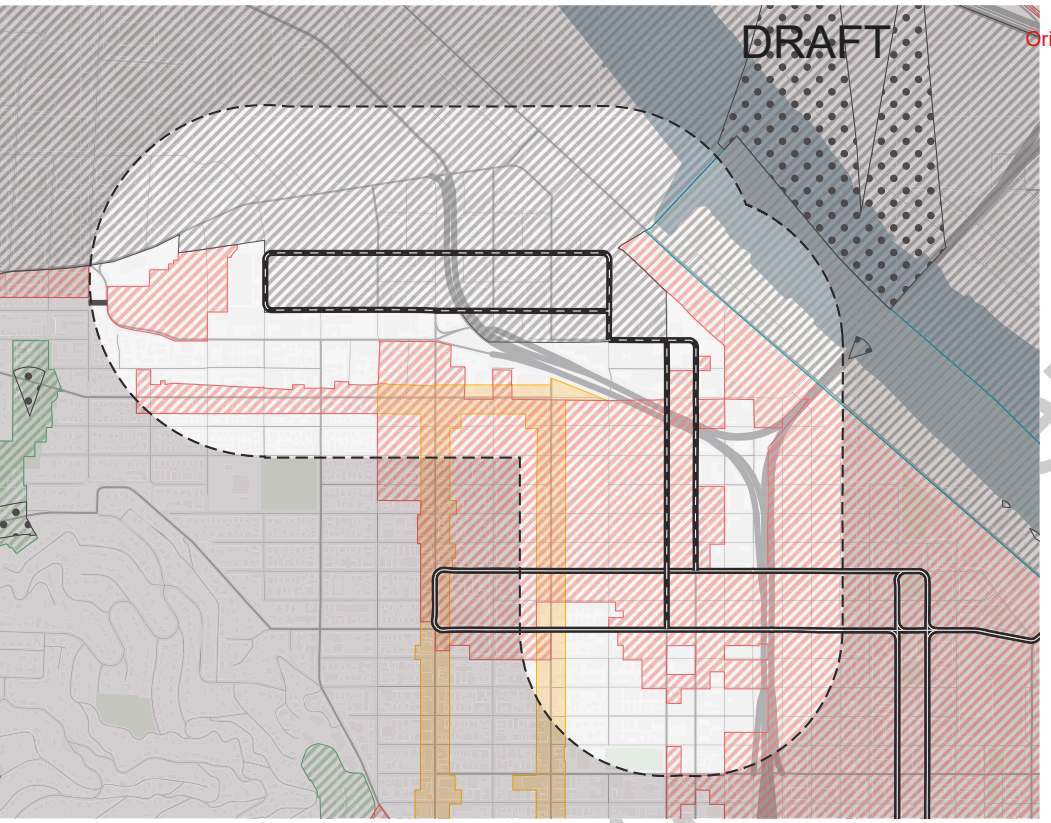


DESIGN

PRIME INDUSTRIAL

CENTERS MAIN ST

RIVER

ENVIRONMENTAL

SCENIC RESOURCES

OVERLAY ZONES

Overlay zones augment the regulations of the "base zones" and are applied to parcels in various parts of the city that have either a similar characteristic or similar desired zoning effect. In the NW Portland area, the following overlay zones are applied.

The **Design overlay zone ("d"),** implemented by 33.420, is applied in areas where new development is subject to a greater degree of design control due to special character of an area, or the scale of anticipated development.

The **Centers Main Street overlay zone ("m"),** implemented by 33.415, is applied to areas designated as neighborhood or town centers to evoke active urban development.

The **Prime Industrial overlay zone ("k")** is applied to protect industrial and employment land that has been identified in the Comprehensive Plan as Prime Industrial and to prioritize these areas for long-term retention.

The **Scenic Resource overlay zone ("s")**, implemented by 33.480, is applied to protect scenic resources that provide benefits to the public, enhance the appearance of Portland, create attractive entrance ways to Portland and its districts, improve economic vitality, and to implement scenic resource goals of Portland's Comprehensive Plan.

The **Environmental Conservation overlay zone ("c"),** implemented by 33.430, is applied to protect natural resources that have been identified in the Comprehensive Plan. This is applied outside the study area.

Replaced by Amendment

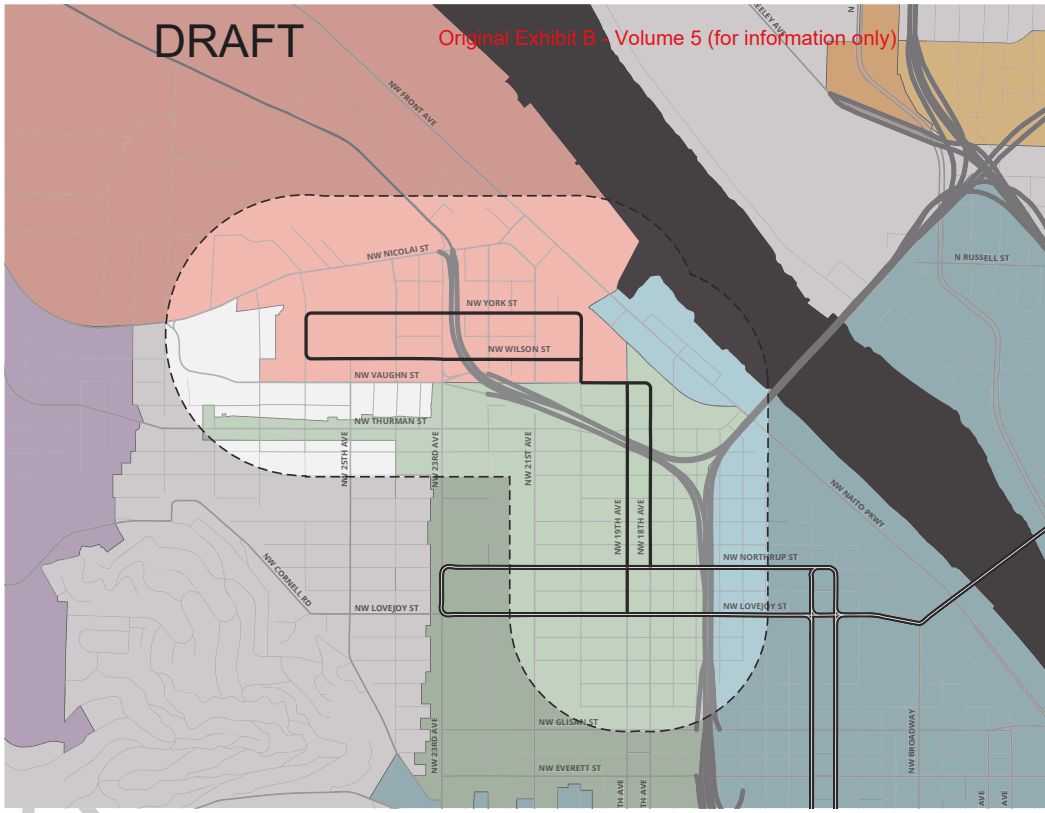
PLAN DISTRICTS

Plan districts are zoning tools that are applied to specific geographic areas within the city that have special or unique characteristics. Plan Districts are most often applied to provide additional regulatory guidance to implement area-specific land use plans. The NW Portland study area intersects three different plan districts.

The **Northwest Plan District** (33.562) is applied south of NW Vaughn Street to implement the Northwest District Plan. It provides for an urban level of mixed-use development including commercial, office, housing, and employment and strengthens the area's role as a commercial and residential center.

The **Guild's Lake Industrial Sanctuary Plan District** (33.531) is applied north of NW Vaughn Street to implement the Guild's Lake Industrial Sanctuary Plan. The plan district fosters the preservation and growth of the industrial district, recognizes that inappropriate nonindustrial uses potentially threaten the integrity of this district, and protects the area from incompatible uses which threaten the district's integrity, stability and vitality and compromise its transportation system.

The **Central City Plan District** (33.510) is applied in the area east of I-405 and along NW/ Naito Parkway/Front Avenue. The plan district encourages the highest densities in the city with a broad mix of commercial, residential, industrial and institutional uses, and fosters transit-supportive development, pedestrian and bicycle-friendly streets, a vibrant public realm and a healthy urban river.



CENTRAL CITY

GUILDS LAKE

NORTHWEST

NORTHWEST HILLS

Replaced

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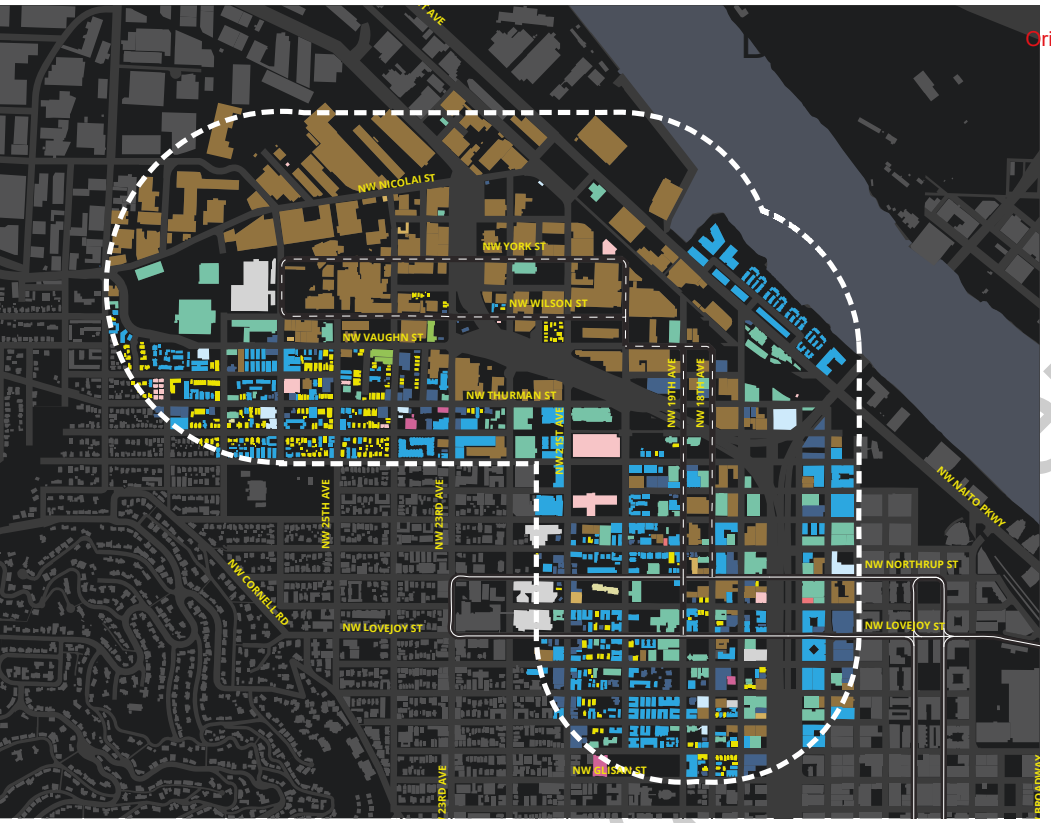

AUTO SERVICE
COMMERCIAL OR RETAIL
INDUSTRIAL
LODGING
OPEN SPACE
PARKING
PUBLIC BUILDING
RELIGIOUS
MISCELLANEOUS
MIXED USE
MULTI-FAMILY
OFFICE
SINGLE-FAMILY
SPECIAL RESIDENTIAL
VACANT

LAND USES

Current land uses in the Northwest study area include a wide array of uses. South of NW Vaughn, there is a concentration of commercial and residential uses, with a few industrial or auto-service uses primarily between NW 16th and NW 19th Avenue.

North of NW Vaughn, land uses are mostly industrial, with a few notable exceptions. The block between Wilson and Vaughn west of NW 21st is primarily residential (a block of older houses), as is an area along the Willamette River at the former Terminal 1 facility. The Montgomery Park site and nearby Red Fox Commons are shown as office space. There is a large parking structure on Wilson between 26th and 27th.

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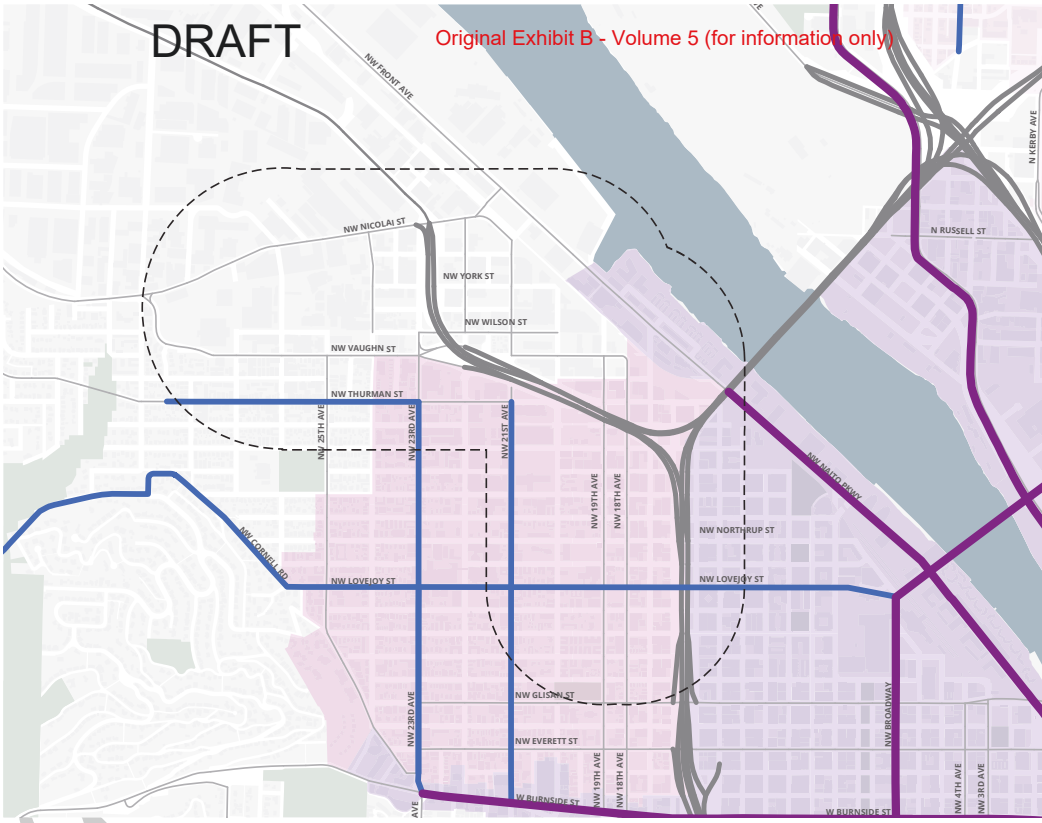
COMP PLAN CENTERS & CORRIDORS

The 2035 Comprehensive Plan identifies a number of "Centers" and "Corridors" throughout Portland. These are places where growth and change are expected.

The alignment along NW 18th and NW 19th passes through a portion of a designated Neighborhood Center in NW Portland. North of NW Upshur, the alignment passes through an area designated by Metro as a regionally significant industrial area, and by the City of Portland as a Prime Industrial Area. The alignment is not located along a designated Civic or Neighborhood Corridor.



REGIONAL CENTER
TOWN CENTER
NEIGHBORHOOD CENTER
CIVIC CORRIDOR
NEIGHBORHOOD CORRIDOR

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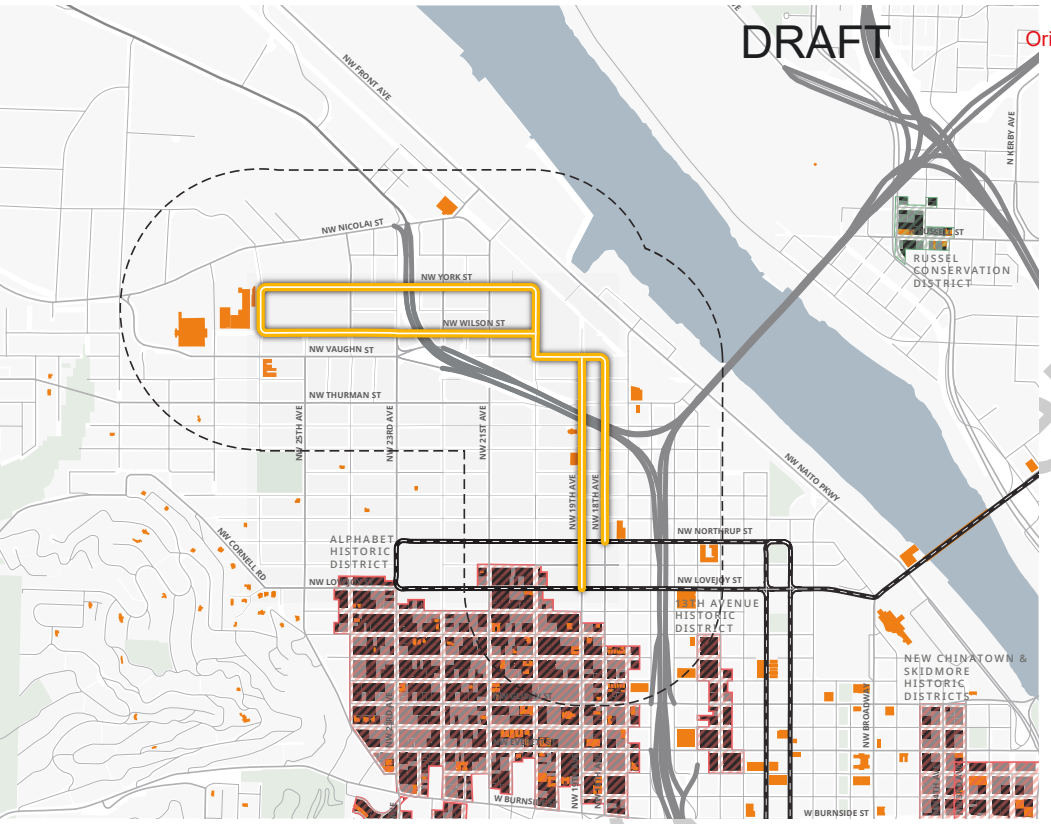

HISTORIC DISTRICT

CONTRIBUTING

NON-CONTRIBUTING

CONSERVATION DISTRICT

CONTRIBUTING

NON-CONTRIBUTING

HISTORIC LANDMARKS

HISTORIC RESOURCES

Most of the individual historic resources in the Northwest study area are associated with early twentieth-century industrial uses. Two large Historic Landmarks anchor the west end of the study area, the 1920 Montgomery Ward Co. warehouse, which has been rehabilitated as a large commercial office building, and the American Can Company complex, a former manufacturing plant. Both of these resources are listed in the National Register of Historic Places. Landmarks along the NW 18th and 19th corridor include the Lane-Miles Standish Printing Plant, the Cor-Berry Press building and the 1891 St. Patrick's Church, an excellent example of Beaux Arts religious architecture and a neighborhood icon.

The southern part of the study area includes a portion of the Alphabet Historic District. This National Register-listed district is characterized by a concentration of late nineteenth and early twentieth century multi-family structures, many of which were designed and constructed by the city's premier architects and developers, as well as streetcar-era commercial structures along NW 21st and 23rd avenues.

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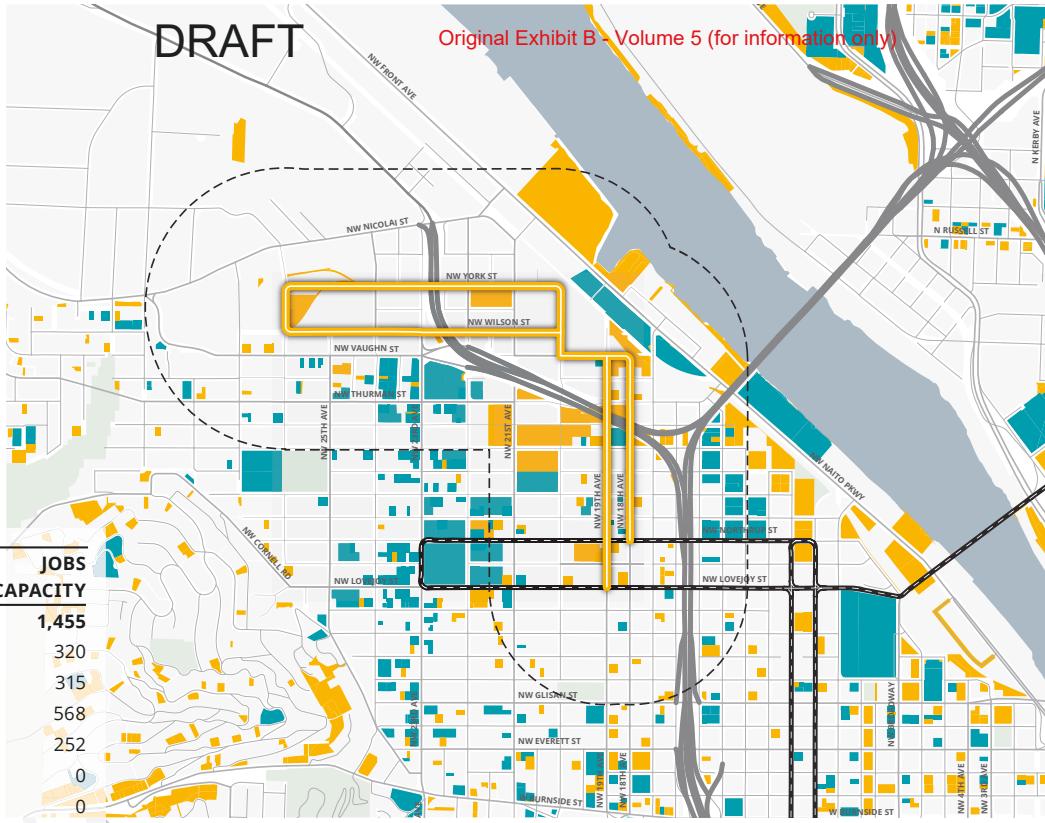
UNDERUTILIZED LOTS

In 2015, there were 219 lots in Northwest study area identified as vacant or underutilized, totaling about 100 acres. Half of the lots were vacant and the other half underutilized. On these parcels approximately 6,200 additional housing units and 4,200 additional jobs could be accommodated under current zoning. The largest opportunities for redevelopment are in smaller sites under 1 acre, which could accommodate up to 1,600 additional housing units. For vacant sites, medium-sized lots 3 to 5 acres in size have the highest capacity for housing (about 1,200 units).

	PARCEL COUNT	TOTAL ACRES	HOUSING CAPACITY	JOBS CAPACITY
UNDERUTILIZED	**110**	**43**	**3,280**	**1,455**
< 0.5 ACRES	36	6	450	320
0.5 TO 1 ACRE	30	10	1,125	315
1 TO 3 ACRES	35	12	689	568
3 TO 5 ACRES	8	11	841	252
6 TO 10 ACRES	1	6	175	0
10 TO 20 ACRES	0	0	0	0
20 TO 50 ACRES	0	0	0	0
> 50 ACRES	0	0	0	0
VACANT	**109**	**56**	**2,968**	**2,702**
< 0.5 ACRES	45	7	640	467
.5 TO 1 ACRE	14	4	300	407
1 TO 3 ACRES	37	17	864	977
3 TO 5 ACRES	12	12	1,163	850
6 TO 10 ACRES	0	0	0	0
10 TO 20 ACRES	1	16	0	0
20 TO 50 ACRES	0	0	0	0
> 50 ACRES	0	0	0	0
TOTAL	**219**	**99**	**6,249**	**4,157**



UNDERUTILIZED LOT

VACANT LOT

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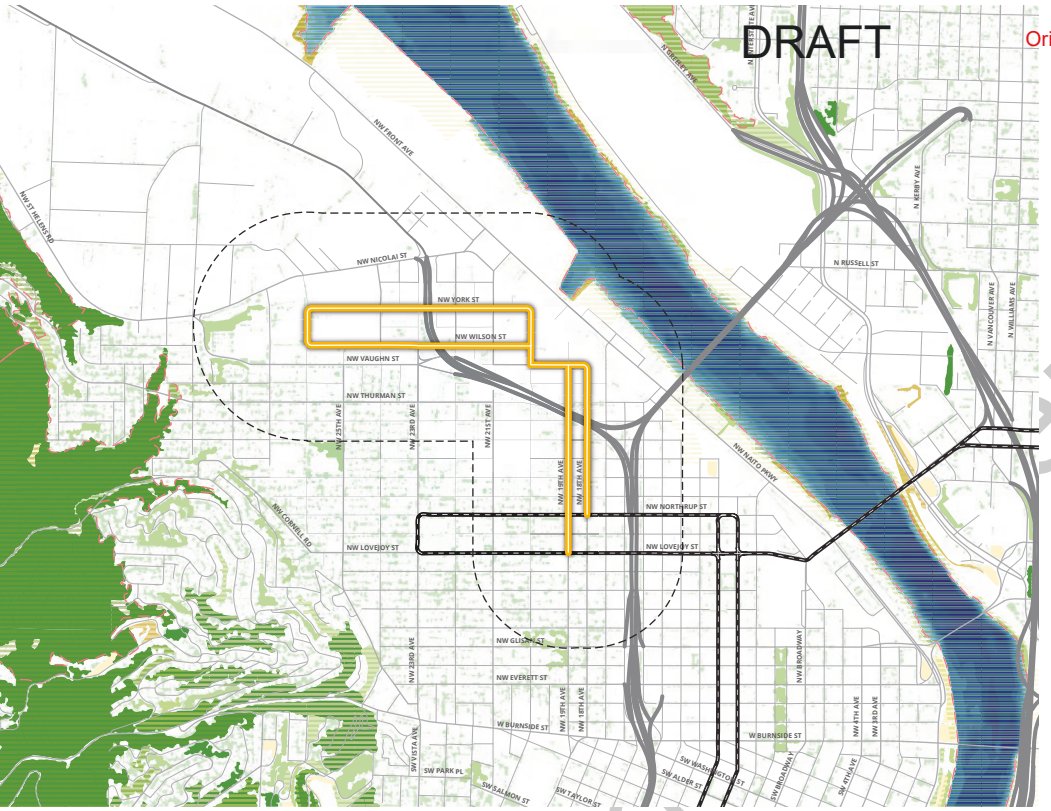

Special Habitat Areas

Natrual Resources Inventory Rank

High Medium Low

Vegetation Patches

Forest Woodland

Shurbland Herbaceous

River Depth from Ordinary Highwater

<5’ 40’ to 50’ >80’

NATURAL RESOURCES

The Northwest study area is highly urbanized, but its natural resources include the Willamette River, shallow water habitat, river banks both vegetated and non-vegetated, flood area and upland vegetation, primarily street trees and trees in parks.

The Willamette River and river banks provide important functions including river flow moderation, water storage, sediment and nutrient control, channel dynamics, food web and nutrient cycling and fish and wildlife habitat. The shallow water areas provide critical habitat for Endangered Act Species-listed fish. The flood area, both developed and not developed, provides water storage during large flood events. Upland vegetation, including street trees and landscape vegetation, captures and stores rainwater, cools the air and provide wildlife habitat.

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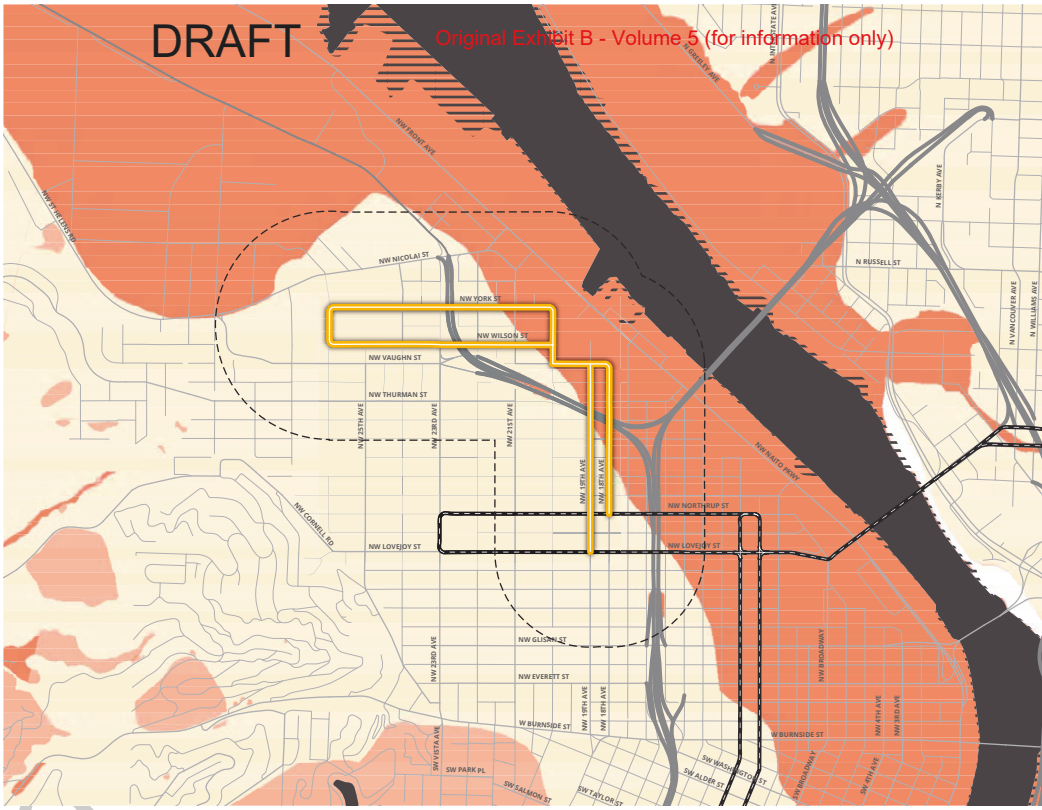
RESILIENCY

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 transportation infrastructure.

Much of Portland's Central City is at an elevated liquefaction risk. Within the Northwest study area the land nestled between the HWY 30 ramps and the Willamette River is at an elevated risk of liquefaction. This area contains the section of the alignment as it transitions from the NW 18th and 19th Ave couplet before turning west to reach Montgomery Park via NW York and Wilson St. Also notable is the liquefaction risk present north of NW Nicolai St as part of the Guild's Lake industrial sanctuary The Northwest study area shows minimal risk of flooding as only a small part of the waterfront area east of NW Naito Parkway lies within the FEMA 100-Year Floodplain.



CASCADIA EARTHQUAKE LIQUIFACTION RISK [MAGNITUDE 9.0]

- **HIGH**
- **MEDIUM**
- **LOW**

FEMA 100-YEAR FLOODPLAIN + 1996 FLOOD EXTENT

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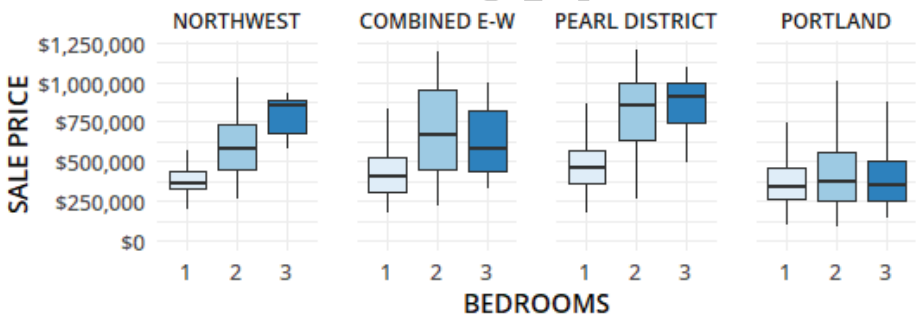
Housing & Development

FOR-SALE MARKET

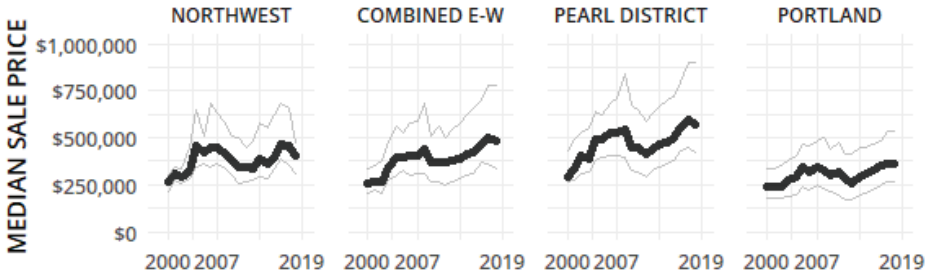
The for-sale housing market in Northwest is slim, with sales of 82 condos and 10 combined single-family and townhomes in 2018. This compares to 336 condo sales in the Pearl in 2018. The current sale price is about $410,000 at the median but varies significantly by submarket and bedroom count. One-bedroom condos start at about $190,000 and three-bedroom condos range as high as $940,000.

DISTRIBUTION OF CONDO SALES BY BEDROOM COUNT, 2017-18



Source: Regional Multiple Listings Services (RMLS).

TREND IN MEDIAN CONDO SALE PRICE



Source: Regional Multiple Listings Services (RMLS).

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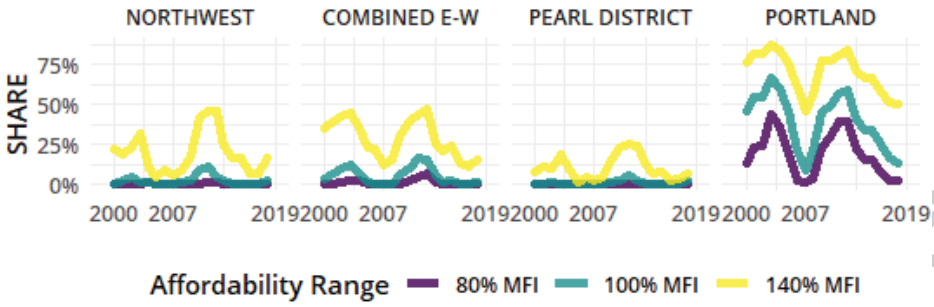
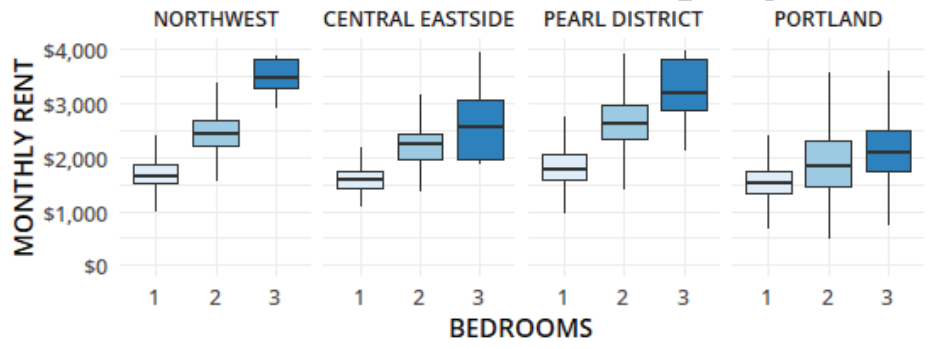
TREND IN SHARE OF HOME SALES BY AFFORDABILITY THRESHOLD



Source: Regional Multiple Listings Services (RMLS).

DISTRIBUTION OF MONTHLY RENTS BY BEDROOM COUNT, 2019



Source: Craigslist.

FOR-SALE AFFORDABILITY

Despite the range in sale prices, **homes in Northwest are largely unaffordable to most Portland households.** In 2018 only 16% of all home sales were affordable to a family earning 140% of the median family income (MFI), which was about $91,000 for a family of two in 2018. Citywide, about half of the homes sold in 2018 were affordable at 140% MFI.

RENTAL MARKET

Rents in Northwest vary by bedroom count but start as low as $1,000 per month for a one-bedroom unit and go as high as $3,900 per month for a three-bedroom. Overall, **median rent is around $1,800 per month,** compared to the citywide median of $1,600. Three-bedroom units are very uncommon. In 2019 in Northwest, only about 30 three-bedroom listings appeared on Craigslist, an online platform that many apartment-seekers use, compared to about 2,500 one-bedroom listings. The cost per ft^2 is similar across bedroom counts at about $2.40 per ft^2, compared to $2.20 citywide.

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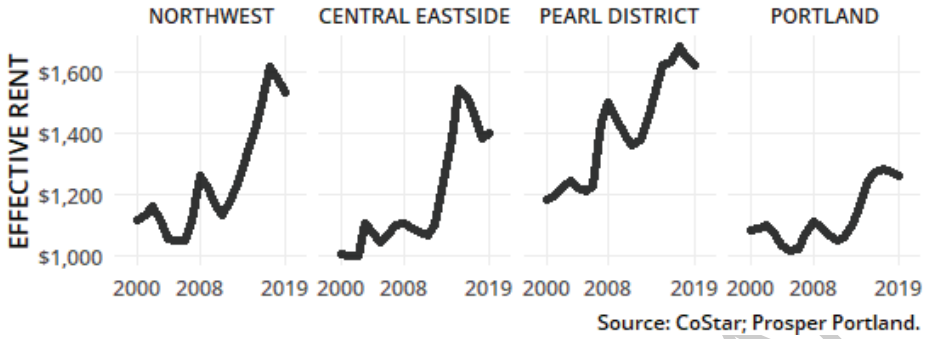
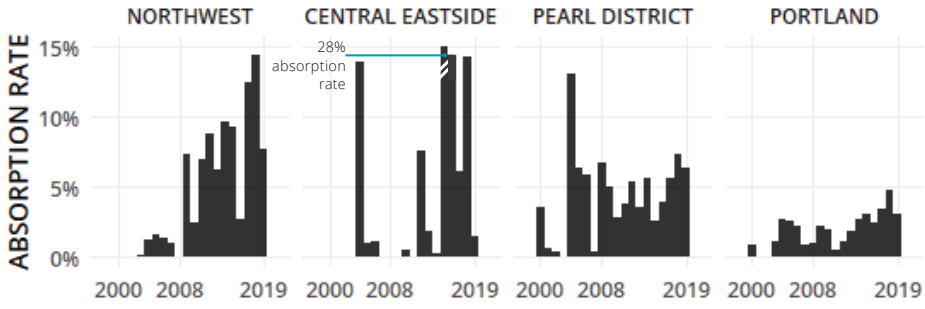
TREND IN MULTI-FAMILY MONTHLY RENTS



Source: CoStar; Prosper Portland.

TREND IN MULTI-FAMILY ABSORPTION RATES



Source: CoStar; Prosper Portland.

MULTI-FAMILY ABSORPTION

Since 2008, the multi-family housing stock in Northwest has more than doubled, from 2,000 units to about 5,500 today. Since new construction tends to be at higher price points, the trend in multi-family rents has grown considerably, increasing by 22% between 2008 and 2019, compared to about 8% in the Pearl and 13% citywide. The multi-family new construction in Northwest represents about 13% of the citywide multi-family deliveries. One of the largest deliveries was The Carson (built 2018) at NW 22nd and Savier, which has over 380 units. Other major deliveries include Modera (290 units) in the Pearl and the Waterline (240 units) and Rivage (260 units) along Front Ave.

The Carson (2018) with over 380 residential units



Source: Pamplin Media.

Replace - Attachment



NW Raleigh looking toward NW 21st Ave (Slabtown). The area west of 19th added more than 1,800 new units since 2008.

