



CHAPTER 4: LAND USE

4.1 Introduction

This chapter describes the affected environment in the study area and evaluates the project's compatibility with existing, allowed, and intended land uses and the federal, state, and local regulations, plans, and policies that guide and govern land use in the study area. Adopted policies and plans are generally not regulatory in nature, but rather provide guidance regarding the current and future management of land use and other resources. Policies are therefore important considerations for decision makers but generally are not binding requirements. Decision makers must also consider that complete consistency with one policy may mean some degree of inconsistency with another. In such cases, decision makers must weigh the degree of overall consistency with adopted plans in the final decision. When a shoreline permit is required, the City must make a finding that a proposal is consistent with the policies of the Shoreline Management Act, Ecology rules, and the local shoreline master program.

Where impacts are identified, measures to mitigate or minimize impacts are described. In this evaluation, an alternative is considered to have the potential for significant adverse environmental impacts if it would likely cause the permanent loss of land uses that are preferred (such as water-dependent, water-related, and industrial uses) under adopted City of Seattle policies.

4.2 Affected Environment

4.2.1 Study Area

The study area for the land use analysis is the area where construction or operation of the project could impact current and future land uses, including business operations and existing character. The study area is bounded by 32nd Ave NW to the west, NW 56th St/20th Ave NW/Leary Ave NW to the north, 8th Ave NW to the east, and Salmon Bay to the south (Figure 4-1). The study area includes properties on both sides of the street adjacent to each of the Build Alternatives and connector segments, areas providing access for those properties, and properties whose primary access may be affected by a proposed Build Alternative.

The team also considered the greater Ballard area when it was needed to provide context and assess the project's overall compatibility with community character, neighborhood plans, and policies for future growth.

4.2.2 Land Uses

Land uses within the study area vary in type, intensity, and their relationship to other nearby uses and amenities (Figure 4-2). Commercial, industrial/manufacturing, residential, parking, parks/open space, and transportation uses are present, as well as government buildings, a hospital, a training center, and other miscellaneous uses (labeled "other" on Figure 4-2) and currently vacant or unused parcels (labeled "vacant"). Parking that is accessory to a primary use is designated as the primary use it is associated with; for example, parking accessory to a commercial use is labeled as a commercial use. Stand-alone parking is designated "parking."

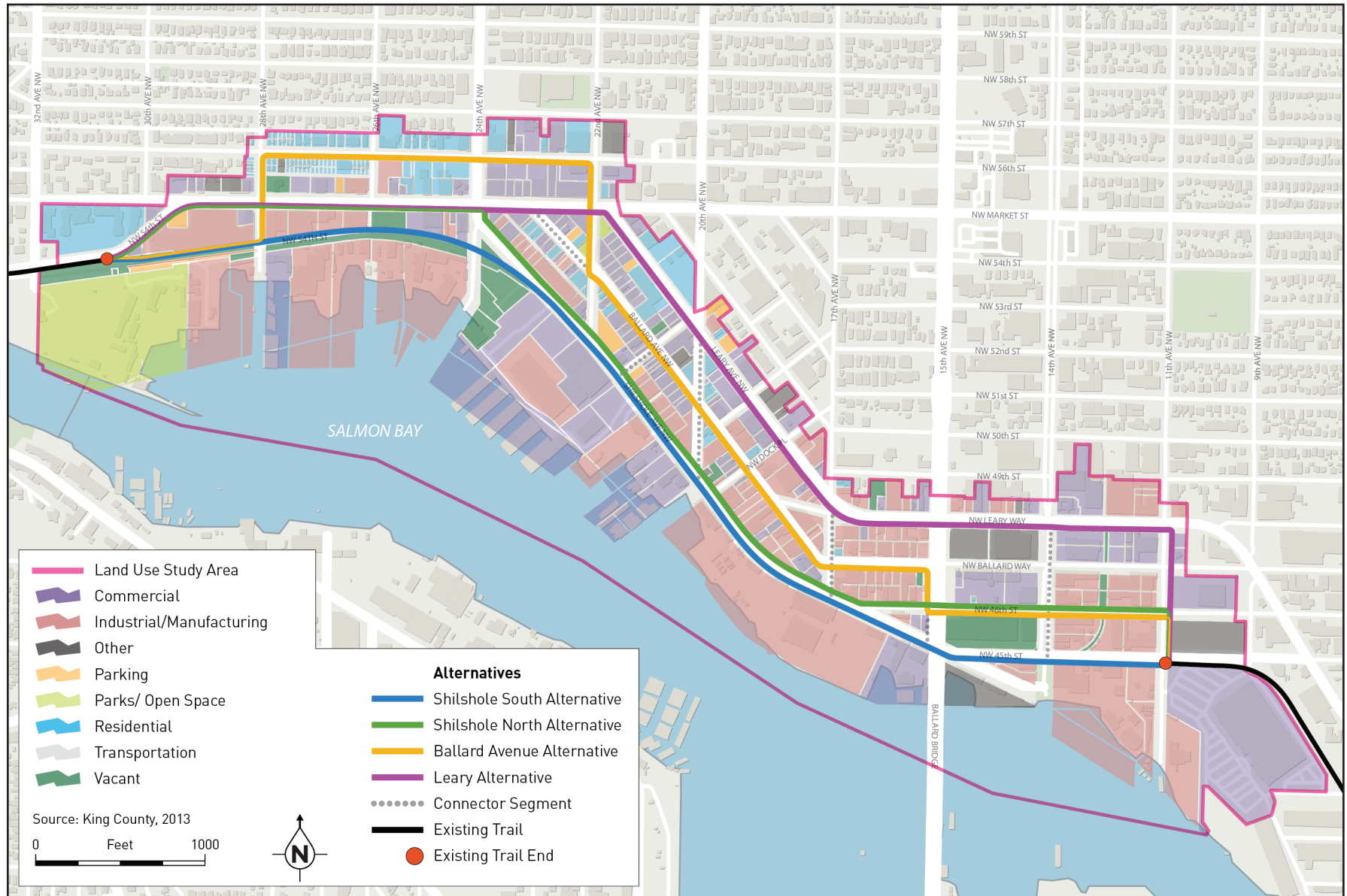


Figure 4-2. Land Uses within the Study Area

Because Ballard is experiencing rapid growth, land uses are dynamic as redevelopment and development occur. Growth pressure continually results in changes to form, type, intensity, and the presence of development in the study area. Parcels that have not maximized development potential or that are designated as vacant at the time of this report may change uses or be developed as growth occurs and new land use preferences are adopted.

Existing uses, architecture, and age of structures contribute to the character of the study area. The southern portion of the study area is the historic center of Ballard where lumber, fishing, and shipbuilding industries developed in the late 1800s, dependent on Salmon Bay to transport raw and finished products. The waterfront industry provided employment opportunities for workers who settled neighborhoods to the north, and NW Market St provided a downtown commercial core (City of Seattle, 2015a). Although most of the activity in the lumber industry has been replaced, many other industrial, manufacturing, and commercial uses remain, particularly along Shilshole Ave NW. Some of these uses continue as water-dependent uses, or support water-dependent uses with repair work or other related services and products.

The Ballard Terminal Railroad or BTR (formerly known as the Seattle, Lake Shore, and Eastern Railway) corridor extends from the Ballard Locks to 24th Ave NW. The BTR corridor is used for freight transport and provides vehicular access to several abutting parcels. Part of the corridor is used as a public parking area near the Ballard Locks. Uses adjacent to the railroad corridor extending east from the Ballard Locks are mostly industrial, along with commercial uses such as the Stimson Industrial Park offices, Salmon Bay Sand and Gravel, Covich Williams fuel dock, and Sagstad and Branchflower Marinas. Storage, parking, and other activities occur on some of the vacant railroad corridor parcels.

One of Ballard's defining features is the Ballard Avenue Landmark District, also known as "Old Ballard," located along Ballard Ave NW from NW Dock Pl to NW Market St (Figure 4-3). Buildings in the landmark district embody the distinctive characteristics of modest commercial architecture from the 1890s through the 1940s (City of Seattle, 2015b; SWCA, 2016). A variety of restaurants, shops, bars, salons, and other businesses, including some industrial and marine-related service and retail businesses, are located on Ballard Ave NW. Many of these uses are housed in historic buildings.

Near the west end of the study area on NW Market St, uses are mostly commercial along the north side of the street and industrial along the south side of the street; examples include storage, cafes, shops, and a lumberyard. Heading east, uses generally transition to mixed-use residential, and then to pedestrian-oriented commercial retail uses (restaurants, shops, bars, boutiques, etc.). Leary Ave NW near NW Market St contains mixed-use residential and commercial uses (cafes, health-related establishments, restaurants, etc.) and transitions to more concentrated industrial/manufacturing uses near the east end of the study area.

The Ballard Locks and the Ship Canal are major recreational attractions in the study area. The City of Seattle also owns and operates a number of local parks and areas designated as shoreline street ends, which provide public shoreline access and views. In addition, special events like the Ballard Farmers Market, the annual weekend-long SeafoodFest, and the Seventeenth of May Festival take place throughout the study area.

Pedestrian activity is relatively heavy along NW Market St and Leary Ave NW near 20th Ave NW, and along Ballard Ave NW, particularly in the Ballard Avenue Landmark District. This is partly attributed to nearby land uses. The area's concentration of commercial uses provides shopping, dining, and entertainment opportunities that can be accessed by foot by nearby residents living in mixed-use, multifamily, and single-family neighborhoods. The commercial opportunities and special events also attract shoppers from outside of the area. Frequent public transit that runs along NW Market St and Leary Ave NW allows visitors to walk to these destinations from transit stops. Parking is available for drivers in paid lots or on the street throughout the study area.



Figure 4-3. Shoreline Environments, Critical Areas, and Ballard Historic Landmark District

Existing public rights-of-way provide for freight, transportation, and recreational activity throughout the study area. Regular maintenance and improvements, as well as occasional reconfigurations of the right-of-way occur throughout the study area. Although the east and west trail ends are not currently connected, residential and commercial land uses within the study area create origination and destination points for trail users. Public transit often provides bicycle racks, which promote multi-modal trip opportunities to and from the area. In addition, recreational and commuter trail users traveling through the area to surrounding destinations use Shilshole Ave NW, as well as other rights-of-way within the study area, as the direct connection between the east and west trail ends.

Today, the diversity of land uses and activity in Ballard reflect its past, before zoning regulations were established. Over the years, changes in market demand, population, the economy, and other factors have caused individual uses to persist, adapt, grow, relocate, or discontinue operations. Seattle's current zoning and planning policies support the continuation of long-established, hard-to-site, water-related and water-dependent industrial and commercial uses as a strong employment base integral to Ballard's historic identity, while also promoting needed capacity for residential and commercial growth in established areas to the north (City of Seattle, 2015a).

Figure 4-4 displays the approximate square footage of land within the study area that is allocated to each major land use category, excluding rights-of-way. Industrial uses compose the greatest portion, approximately 40% of the total land area, with commercial uses composing approximately 33%, and residential uses accounting for about 8% of the total land area within the study area.

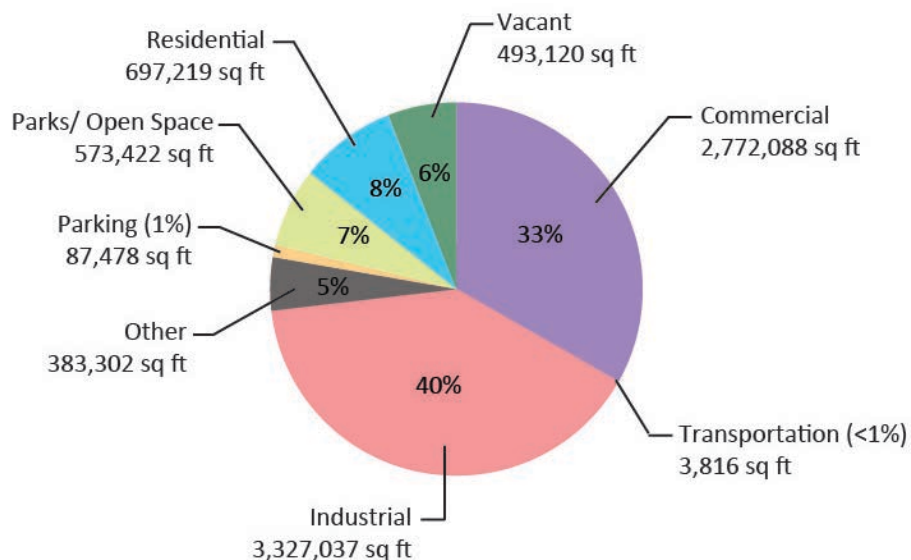


Figure 4-4. Land Area Occupied by Existing Land Uses within the Study Area

4.2.3 Regulatory Context

Land use and development in the study area are governed by the federal, state, regional, and local plans and regulations described in this section. The regulations are intended to ensure compatibility and predictability between existing and future land uses. In addition to the overview provided below, the Land Use Discipline Report (ESA, 2016) describes applicable plans and policies in more detail.

Federal and State Laws and Regulations

The study area is adjacent to Salmon Bay, which is under the jurisdiction of the Coastal Zone Management Act. The Washington State Shoreline Management Act ensures the state's compliance with the federal Coastal Zone Management Act. The Washington State Growth Management Act (GMA) also governs land use in the study area.

Local and Regional Plans and Regulations

The Puget Sound Regional Council's (PSRC's) VISION 2040 is the applicable regional plan relating to land use in the study area (PSRC 2008).

The City of Seattle has adopted a Comprehensive Plan, land use codes, and supplemental plans that guide how and where development should occur. These guidelines support the attainment of goals and objectives to manage growth, provide efficient and diverse transportation opportunities, maintain and improve economic development, encourage sustainable urban design, and protect environmental resources. The following City of Seattle plans, policies, and regulations apply to the study area:

- City of Seattle Comprehensive Plan (City of Seattle, 2015c)
 - City of Seattle Urban Village – Ballard Hub Neighborhood Plan
 - Ballard-Interbay Northend Manufacturing and Industrial Center (BINMIC) Plan
- Seattle Department of Transportation Freight Mobility Strategic Action Plan (SDOT, 2005)¹
- Seattle Department of Transportation Bicycle Master Plan (SDOT, 2014)
- City of Seattle Parks and Recreation 2011 Development Plan (City of Seattle, 2011)
- City of Seattle Climate Action Plan (City of Seattle, 2013)
- City of Seattle Ballard Urban Design and Transportation Framework Draft Plan (City of Seattle, 2015b)
- Seattle Department of Transportation Pedestrian Master Plan (SDOT, 2009)
- Seattle Department of Transportation Move Ballard Draft Plan (SDOT, 2015)
- City of Seattle Municipal Code (SMC) (City of Seattle, 2015d)
 - Land Use Code (SMC Title 23)
 - Zoning (SMC Title 23, Subtitle III)
 - Shoreline Master Program Code (SMC 23.60A)
 - Environmental Protection and Historic Preservation (SMC Title 25)
 - Regulations for Environmentally Critical Areas (SMC 25.09)
 - Ballard Avenue Landmark District (SMC 25.16)

¹ A Draft Freight Master Plan that considers the Freight Mobility Strategic Action Plan, as well as other studies, reports, and analyses related to freight in Seattle, has been released by SDOT for public comment and will be reviewed in the FEIS for the Missing Link project.

4.2.4 Zoning

The City of Seattle Land Use Code implements the City's Comprehensive Plan and regulates land use in Seattle. The purpose of the Land Use Code is to allocate land uses in a compatible, efficient pattern with access to services and amenities and without major disruption to natural resources. The Land Use Code classifies land into different zoning designations, creating parameters for the types of allowed uses, as well as bulk and dimensional standards that determine intensity thresholds for allowed uses. The provisions are designed to provide adequate light, air, access, and open space; conserve the natural environment and historic resources; maintain a compatible scale within an area; minimize traffic congestion; and enhance the streetscape and pedestrian environment. As a multi-use facility, the Missing Link would provide transportation opportunities within the public right-of-way and opportunities for recreation in an open space network. Permits and approvals for allowed uses within any zoning designation may include conditions of approval to ensure that uses are compatible and meet the intent of the Land Use Code.

The location, intensity, and nature of allowed uses on any parcel of land are determined by the parcel's zoning designation. Zoning in Seattle is regulated by SMC Title 23, Subtitle III – Land Use Code. As shown on Figure 4-5, zoning classifications in the study area include industrial, commercial, multifamily, and residential-commercial zones. Additionally, the Land Use Code identifies overlay designations. The P1 pedestrian overlay designation in the study area encourages intense pedestrian interest and activity at the street level.

4.2.5 Urban Villages

The Urban Village Element of the City of Seattle Comprehensive Plan attempts to match growth to the existing and intended character of the city's neighborhoods. A village designation recognizes the contributions that a particular area makes to the city and provides guidance regarding the intended function, character, intensity, type, and degree of growth anticipated for an area. Urban village designations supplement state and regional growth management plans. They provide tailored guidance for further developing Seattle's established, densely developed, and complex urban neighborhoods.

Of the four categories of urban villages, the study area contains two: the Ballard Hub Urban Village and the BINMIC (Figure 4-6). The BINMIC covers the southern portion and areas adjacent to Salmon Bay. The Ballard Hub Urban Village covers the remainder of the study area.

Hub urban villages are communities that provide a balance of housing and employment, generally at densities lower than those found in urban centers but higher than single-family neighborhoods.

Manufacturing/industrial centers provide siting opportunities for industrial activity and development, and are an important regional resource. Many non-industrial uses are discouraged or prohibited in industrial areas.

4.2.6 Shorelines

The Shoreline Master Program (SMP) implements the Shoreline Goals and Policies of the Seattle Comprehensive Plan and includes the regulations codified in SMC 23.60A—Shoreline District. The SMP guides and regulates the development of city shorelines in order to protect shoreline ecosystems; encourage water-dependent uses; provide for maximum public use and enjoyment of the shorelines; and preserve, enhance, and increase views of and access to the water.

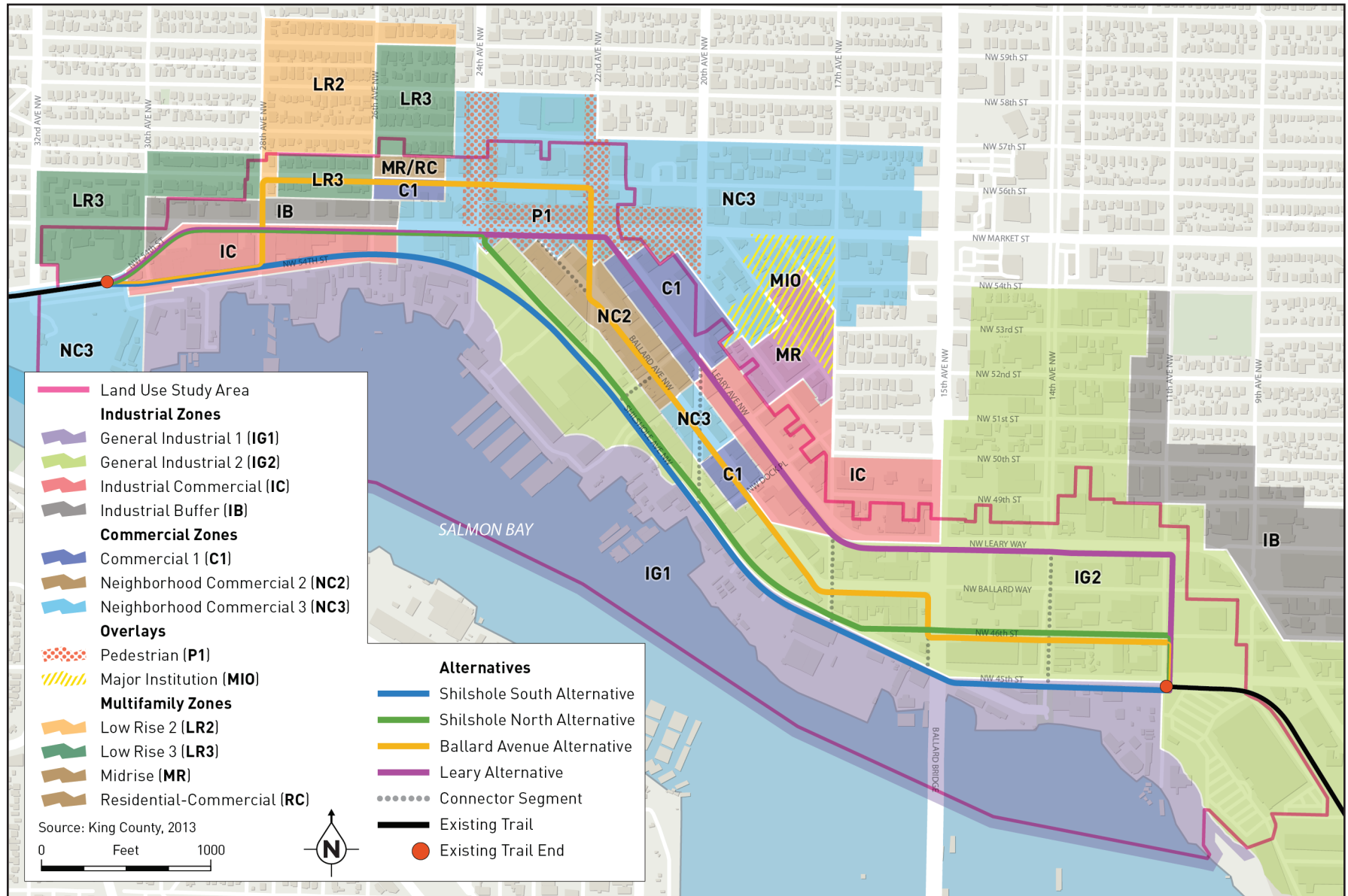


Figure 4-5. Zoning Classification of Parcels in the Study Area



Figure 4-6. Ballard Hub Urban Village and the Ballard-Interbay Northend Manufacturing Industrial Center

Within the study area, the Ship Canal and Salmon Bay are regulated under the SMP, as are the lands within 200 feet of these waters (Figure 4-3). Portions of the study area along Shilshole Ave NW and near NW 54th St are within the shoreline district of Salmon Bay, which is a regulatory overlay established by the state Shoreline Management Act and adopted in the City's SMP. Regulations for the shoreline overlay district often influence only a portion of a parcel (i.e., only land areas with 200 feet of the ordinary high water mark). All property within the shoreline district is subject both to the standards of the applicable zone and to the requirements imposed by the SMP (as well as requirements imposed by other applicable codes).

The SMP designates "shoreline environments" within the shoreline district. Like zoning designations, each shoreline environment has unique, allowable uses and development standards, based on existing and aspirational uses, character, and function. Of Seattle's 11 shoreline environments, three are present in the study area: Urban Industrial (UI), Conservancy Management (CM), and Conservancy Navigation (CN). For further discussion, see the Land Use Discipline Report (ESA, 2016). Reconfiguration of the existing right-of-way for the Missing Link would be allowed within the shoreline jurisdiction under the SMP.

4.2.7 Environmental Protection and Historic Preservation

SMC Title 25 regulates designated historic areas and environmentally critical areas. These codes protect sensitive environmental features, buildings, landmarks, and architecture that establish the city's unique identity while allowing reasonable development. The regulations promote safe, stable, and compatible development that avoids adverse environmental impacts and potential harm to the designated areas, adjacent property, and the surrounding neighborhood.

Environmentally Critical Areas

An abandoned landfill, liquefaction-prone zones, and fish and wildlife habitat conservation areas are present in the study area (Figure 4-3).

The abandoned landfill is south of Shilshole Ave NW and the land is now used for industrial and office uses. Development within the former landfill area is subject to special engineering and construction management requirements to prevent damage from methane gas buildup, subsidence, and earthquake-induced ground shaking.

The liquefaction-prone zones are located at the southwest corner of 11th Ave NW and Shilshole Ave NW and the southeastern-most corner of the study area. Development in liquefaction-prone areas may require soil engineering studies to determine the physical properties of the surficial soils, especially the thickness of unconsolidated deposits and their liquefaction potential.

Fish and wildlife habitat conservation areas are located near the west trail end and are lands designated and managed to encourage long-term viability and the proliferation of targeted species. Areas designated by WDFW as priority habitats and species areas are considered to be fish and wildlife habitat conservation areas. Development in fish and wildlife habitat conservation areas that does not encroach within, alter, or increase environmental impacts may be exempt from the critical areas regulations. All other development proposed within fish and wildlife habitat conservation areas or associated buffers requires an application that complies with SMC Title 25. The project proponent must submit the application to the City of Seattle and obtain necessary permits and approvals prior to undertaking development.

Ballard Avenue Historic/Landmark District

A portion of the study area along Ballard Ave NW lies within the Ballard Avenue Historic/Landmark District, an area of historical significance to Ballard and Seattle. The Ballard Avenue Historic/Landmark District boundary runs along Ballard Ave NW from NW Dock Pl to the southeast to NW Market St to the northwest (Figure 4-3). All property within the district is subject both to the standards of the applicable zone and regulations concerning the district status. The district designation is intended to preserve, protect, enhance, and perpetuate cultural, social, economic, architectural, and historic heritage. The City has adopted regulations to protect or improve the aesthetic and economic vitality and values of the district; to promote and encourage continued private ownership and use of historic buildings and structures; and to promote the local identity of the area to the extent that these objectives can be reasonably attained. (For more information on the district designation, see Chapter 10, Cultural Resources.)

4.3 Potential Impacts

The land use analysis examined the potential for the project to alter land uses in the study area in a way that would be inconsistent with adopted plans and policies. Transportation, parking, and economic impacts were considered to the extent that they could affect and cause changes to existing land uses (Parametrix, 2016a, 2016b; ECONorthwest, 2016). The consistency of an alternative with adopted policies, plans, and regulations was also considered. If an alternative could change land use in a way that is inconsistent with policies and plans, this would be a potentially significant adverse impact.

4.3.1 No Build Alternative

Effect on Existing Uses

The No Build Alternative would not alter current land uses. These uses would either remain consistent or continue to adapt and change as determined by population and business growth, market conditions, and regulatory changes.

Consistency with Adopted Plans, Policies, and Codes

The No Build Alternative is inconsistent with regional and local land use plans that emphasize multimodal transportation opportunities and improved connectivity for nonmotorized transportation modes, particularly in areas experiencing rapid growth and development, such as the Ballard Hub Urban Village. Motorized and nonmotorized traffic within the study area is expected to grow between 2015 and 2040 (Parametrix, 2016a). Under the No Build Alternative, nonmotorized users would continue to travel on available sidewalks and along the street network, which lacks designated bike lanes. Particularly along Shilshole Ave NW, which nonmotorized users often use as a direct link between the two trail ends, the increase in traffic would increase user conflicts and slow freight movement. The No Build Alternative would not mitigate those conflicts through the engineering and design of a designated trail.

The No Build Alternative would be inconsistent with the following policies and plans:

- **City of Seattle Comprehensive Plan:** Goals and policies promote transportation improvements that support walking, strive to direct future development and density to areas conducive to walking and bicycling, and provide increased opportunities to walk and bicycle between urban villages by connecting trails and providing an open space network. Goals also include the facilitation of industrial traffic flow and truck mobility. The No Build Alternative would not

improve conditions for pedestrian and bicycle opportunities, and the increased potential for user conflicts would not improve traffic flow or truck mobility.

- **Seattle Department of Transportation Freight Mobility Strategic Action Plan:** Goals and policies promote the efficient and safe movement of freight and access to manufacturing and industrial areas. Increased motorized and nonmotorized congestion in the study area would result in slower freight movement, delayed goods delivery, and a greater potential for user conflicts, and would not promote increased efficiency or access.
- **PSRC's VISION 2040:** Transportation investments in regional growth centers and areas with compact, mixed-use development are an integral component of the regional strategy, particularly for nonmotorized uses. Completion of the Missing Link is included as a key project in the Transportation 2040 Update.
- **Seattle Department of Transportation Bicycle Master Plan:** The Missing Link is identified as a “catalyst project” whose completion would eliminate a critical network gap and increase user safety.
- **City of Seattle Parks and Recreation 2011 Development Plan:** The plan includes the development of new multi-use trails in accordance with the Bicycle Master Plan, which promotes completion of the Missing Link.

4.3.2 Impacts Common to All Build Alternatives

Construction

Construction impacts associated with all of the Build Alternatives include the following:

- Noise generated by construction equipment could disturb business patrons, particularly in commercial areas, or could also disturb residential uses.
- Increased traffic from construction crews could delay freight movement for commercial and industrial uses.
- Increased parking needs from construction crews and reduction of available on-street parking; the loss of parking could displace or discourage business patrons of retail and entertainment commercial uses and employees for other uses.
- Dust and debris from land-disturbing activities could inhibit pedestrians in pedestrian-oriented commercial centers and other business patrons, employees, and residents.
- Potential partial and temporary sidewalk and road closures could inhibit pedestrians in pedestrian-oriented commercial centers and other business patrons, employees, and residents.
- Roadway congestion could delay freight movement and goods delivery, and frustrate business patrons and residents.
- Temporary changes to driveway widths and locations, and temporary loss of loading zones could disrupt industrial, manufacturing, and commercial uses; could delay or disrupt traffic and access to existing uses near the project footprint; and could delay the movement of goods, although access to all uses within the study area would be maintained.

Noise, traffic, dust and debris, and sidewalk and road closures could result in a temporary loss in patronage for businesses, particularly commercial retail and entertainment that rely on auto and foot traffic. Traffic congestion could delay pick-up and delivery of goods, thus impacting normal business

activities. Nonmotorized activity would continue during construction, which would result in user conflicts; however, nonmotorized users would generally use alternative routes to avoid the construction. All construction impacts are expected to be minor and temporary, are not expected to disrupt uses to the extent of being inconsistent with adopted codes, and therefore would not have a significant adverse impact on land uses in the study area.

Operation

Effect on Existing Land Uses

All of the Build Alternatives would connect the existing trail ends, thus providing a dedicated, nonmotorized connection between the surrounding neighborhoods, and connecting trail users to parks and open space, businesses within the study area, and employment opportunities. The project would provide infrastructure improvements such as the new trail, sidewalks, landscaping, and buffers. Improvements would channel most existing BGT users to the new trail and attract new users because the trail would reduce the potential for user conflicts and link to the rest of the BGT. The improvements would also beautify the streetscape and repair sidewalk segments, attracting additional people to the project area.

The infrastructure improvements could support existing and expanding residential and commercial uses near the trail. Residential and commercial uses could benefit from trail users because new people could be potential residents, customers, and workers (ECONorthwest, 2016). However, the improvements may not support and could even discourage new and expanded industrial uses.

Alterations to the road network associated with all Build Alternatives would facilitate traffic flow at some study area intersections (Parametrix, 2016a), which could encourage ongoing activity of existing uses within the study area. However, all Build Alternatives would likely result in minor delays at some intersections, access points for uses along the alignment, and the loss of some parking and loading spaces. Additional people in the project area could also delay freight transport by crossing the roads and driveways used by freight vehicles. Because of the minor disruptions to access and loading for some of these uses within the BINMIC, a minor adverse impact could occur. The impact would not be significant and could be minimized (but not completely eliminated) through the design measures described in the Transportation Discipline Report (Parametrix, 2016a).

All Build Alternatives would also eliminate some parking spaces. The study area has the capacity to absorb parking displaced by each of the Build Alternatives. Additionally, trail completion could offset some loss of parking by encouraging people to travel to events using nonmotorized means. Elimination of some loading zones along all of the Build Alternative alignments would occur, which could negatively impact business activities, particularly for auto-oriented commercial businesses and businesses that use street space for loading and unloading.

Businesses would likely adapt to the minor delays, loss of parking, and changes to loading areas along with other changing conditions. These adaptations could increase operating costs, which could place incremental economic pressure on some businesses (ECONorthwest, 2016). However, none of the Build Alternatives would displace any existing uses.

Consistency with Adopted Plans, Policies, and Codes

The GMA and several planning documents promote the development of infrastructure for nonmotorized and multimodal transportation opportunities, particularly where the infrastructure connects population centers and existing infrastructure segments (e.g., PSRC's VISION 2040 and Transportation 2040, City of Seattle Climate Action Plan, City of Seattle Parks and Recreation 2011 Development Plan, Seattle

Department of Transportation Bicycle Master Plan, and Seattle Department of Transportation Pedestrian Master Plan). These guidance documents influence the development of local codes that regulate current land use and future development, and inform regulators' decision-making process when land use permits are submitted for approval. A project's adherence to adopted plans, policies, and codes ensures that current development is consistent with local and regional long-term plans for land use and that as land is developed, user conflicts are minimized. If a project does not adhere to adopted plans and policies, user conflicts could negatively affect community health, safety, and welfare.

In general, the project would be consistent with most policies. The BGT is used for both commuting and recreation. State, regional, and local plans and policies generally promote the development of infrastructure for nonmotorized and multimodal transportation opportunities, particularly to connect population centers and existing infrastructure segments. Completion of the Missing Link is specifically included in some plans as a priority improvement. Build Alternatives that minimize trail length in the BINMIC and maximize trail length in the Ballard Hub Urban Village are the most consistent with adopted policies, as described below.

City of Seattle Comprehensive Plan

The City of Seattle Comprehensive Plan Urban Village Element, Land Use Element, and Transportation Element generally promote transportation improvements that support walking and bicycling; the provision, expansion, and enhancement of parks and open space; and provision of amenities to support the interests of a range of uses and people. Completion of the Missing Link is specifically included in some of these plans as a priority improvement in order to provide alternatives to motorized transportation, to connect neighborhoods, and for the positive health impacts that trail recreation could provide. The Build Alternatives would be consistent with these aspects of the plan elements.

All of the Build Alternatives would serve the Ballard Hub Urban Village. Build Alternatives that locate more trail in the Ballard Hub Urban Village would be more consistent with adopted policies that support activated streetscapes in a pedestrian-oriented environment. For details about the applicable adopted policies, see the Land Use Discipline Report (ESA, 2016).

All of the Build Alternatives would locate some of the trail within public right-of-way in the manufacturing/industrial center and could impact existing manufacturing and industrial uses.

Comprehensive Plan policies for the BINMIC support commuting to work to and through the BINMIC by bicycle and walking, but policies also direct that the trail's design should consider the operational requirements of adjacent property owners and users (as determined by the City), the safety of trail users, the operational requirements of industrial users, and that through trails should be located away from industrial areas. In particular, policies discourage actions that could delay freight movement or interfere with industrial/ manufacturing uses, especially water-related or water-dependent uses. All of the Build Alternatives require some portion of the trail to be located within the BINMIC due to the location of the eastern end of the existing trail. The amount of trail that would be located in the BINMIC varies by alternative (Table 4-1). These and other differences among the alternatives are described separately in Sections 4.3.3 through 4.3.6.

Table 4-1. Summary of Urban Villages and Land Uses Affected by Build Alternatives

<i>Build Alternative</i>	<i>Length of Trail in BINMIC (approx. linear feet)</i>	<i>Length of Trail in Ballard Hub Urban Village (approx. linear feet)</i>	<i>Adjacent Land in Industrial Uses (acres and %)</i>	<i>Number of Adjacent Water-dependent and Water-related Uses</i>
Shilshole South	4,455	1,982	31 acres (54%)	27
Shilshole North	4,512	2,135	13 acres (67%)	20
Ballard Avenue	2,814	4,704	9.5 acres (45%)	9
Leary	2,308	4,466	5.3 acres (33%)	7

There could be minor to moderate impacts on preferred uses in the BINMIC under any Build Alternative, primarily due to impacts on access, egress, and loading. These impacts are described in greater detail in the Transportation Discipline Report (Parametrix, 2016a). However, the impacts would be localized to particular businesses and, while potentially reducing business activity at certain times, are not expected to cause any business to fail. Therefore, the vitality of the BINMIC would not be significantly adversely impacted under any Build Alternative.

All Build Alternatives would reconfigure the existing right-of-way to accommodate the project. The Missing Link would also use a portion of the BTR corridor that overlays street right-of-way. The Missing Link would serve a transportation function as a commuter route serving both nonindustrial and industrial area commuters (including marine/fishing industry employees) using nonmotorized transportation, as well as a recreation function.

The trail would be within the existing right-of-way and would not displace any existing industrial, water-related, or water-dependent uses. Therefore, all Build Alternatives would be consistent with Comprehensive Plan Policy UV 24.1.

The Comprehensive Plan also contains goals and policies that strive to improve industrial traffic flow to and through the BINMIC, facilitate truck mobility, and enhance truck connections. All of the Build Alternatives would cross or run parallel to major truck streets, but none would substantially reduce the level of service on these roadways, and some would improve the functions of these routes (Parametrix, 2016a).

Seattle Department of Transportation Freight Mobility Strategic Action Plan

The Seattle Department of Transportation Freight Mobility Strategic Action Plan incorporates sections of the Comprehensive Plan Neighborhood Planning Element that relate to freight mobility in particular neighborhoods. It strives to improve industrial and manufacturing activity, including traffic flow, truck mobility, land preservation for industrial activities, and business expansion in the BINMIC. To varying degrees, portions of all Build Alternatives (except some connector segments) are within the BINMIC and could conflict with these goals and policies, depending on freight and traffic delays caused by trail users.

The Freight Mobility Strategic Action Plan stresses the importance of preserving industrial and manufacturing areas and facilitating goods movement via truck, rail, and water. The plan aims to preserve freight movement on major truck streets. All Build Alternatives would make some traffic flow, roadway, and rail improvements that support the plan's goals and policies for efficient traffic flow and safe

movement of goods by rail. However, designated and undesignated loading zones would be altered and removed under any of the Build Alternatives, affecting the delivery and collection of goods that are integral to many industrial and commercial uses. The transportation analysis indicates that the project could cause minor increases in delays to and from industrial and manufacturing businesses under any of the Build Alternatives, with a negative impact on the delivery and collection of goods. Potential conflicts between industrial and trail users would increase under all Build Alternatives but could be reduced through engineering and design. Mitigation for these impacts is described in the Transportation Discipline Report (Parametrix, 2016a).

City of Seattle Codes: Zoning, Shoreline, Critical Areas, and Historic Preservation

The Missing Link project would be allowed in all zoning and shoreline designations within the study area. The Build Alternatives would be designed in compliance with critical areas regulations and would be subject to approval of the Department of Neighborhoods Office of Historic Preservation for compliance with the Ballard Avenue Landmark District requirements, where applicable. The Build Alternatives may make the area more attractive to development; however, any new development would be required to be consistent with uses allowed in each zone.

4.3.3 Shilshole South Alternative

Construction

In addition to the construction impacts described in Section 4.3.2, Impacts Common to All Build Alternatives, the Shilshole South Alternative could affect shorelines. Small portions of the Shilshole South Alternative are within the UI shoreline district (see Figure 4-3). Construction within the shoreline must protect shoreline resources such as water quality or any cultural resources present. As described in other chapters of this DEIS, the project would include BMPs to ensure consistency with these requirements. The project would comply with applicable critical areas and shoreline regulations.

Operation

Effect on Existing Uses

In the BINMIC, industrial uses, and especially water-dependent and water-related industrial uses, are preferred. Land uses abutting or gaining access along the Shilshole South Alternative are approximately 54% industrial, approximately 38% commercial, and about 5% vacant, with other uses composing about 3% of the total (see Figure 4-7). The abutting parcels for this alternative include about 1.34 million square feet of land in industrial use, the most of any Build Alternative. The mix of land uses abutting the Shilshole South Alternative is substantially more industrial compared to the overall study area, and is about 5% more commercial and less residential.

Of the 40 total uses abutting or gaining access along the Shilshole South Alternative, 15 (about 38%) are water-dependent and 12 (30%) are water-related. This alternative has the highest number of adjacent water-dependent uses of any Build Alternative, and has the second-highest occurrence of adjacent lands with water-related uses. Overall, water-dependent and water-related uses combined occupy the highest concentration of land (68%) along the Shilshole South Alternative. The viability of these uses depends on their proximity to water, making them particularly hard to locate. Because of their industrial nature, their operations depend on freight mobility. Freight vehicles tend to occupy more right-of-way to conduct business activities, which could conflict with the multi-use trail.

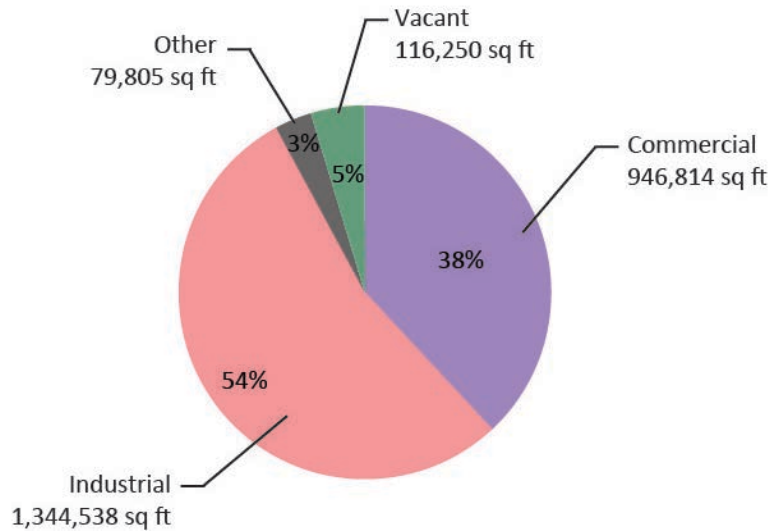


Figure 4-7. Existing Land Uses along the Shilshole South Alternative

Changes in traffic flow and access can disrupt normal activities and impact the viability of a land use. Roadway improvements included in the Shilshole South Alternative would maintain or improve traffic flow along this trail alignment (Parametrix, 2016a). This alternative would cross about 41 driveways and loading docks, similar to the Ballard Avenue Alternative (which has 42) (Parametrix, 2016a). Where the trail intersects access locations, vehicles would need to stop and check the trail for pedestrians and bicyclists before advancing, resulting in minor delays to business activities. This impact would likely occur for only short periods, mostly during commute times, and would not be significant. Some drivers would view this as an inconvenience, and it could add incrementally to operating costs for some businesses, but it is not likely to result in land use changes.

The Shilshole South Alternative is the only Build Alternative where no designated loading spaces would be permanently removed. However, some undesignated loading spaces may be removed or impacted, including driveways that cross the trail alignment where undesignated loading activities currently occur (Parking Discipline Report; Parametrix, 2016b). Several commercial and industrial uses have high truck loading, unloading, and delivery activity at driveway locations relative to other uses. Because uses are highly industrial along this alignment, the loss of loading spaces and delays during loading and unloading activities could negatively impact industrial uses. Loading activities that occur within the trail alignment would need to be relocated or the business would need to otherwise adapt because vehicles would not be allowed to block the trail while loading and unloading. Required adjustments and delays could increase costs for businesses, but are not expected to cause significant impacts because businesses would likely adjust their practices around these areas (ECONorthwest, 2016).

The Shilshole South Alternative would permanently remove about 261 parking spaces and the most non-metered parking spaces of any Build Alternative (Parametrix, 2016b). This number includes unregulated parking that is often double- and sometimes triple-parked, so this number is conservatively high. Removal of these parking spaces would impact the overall parking availability for businesses in the area, the Ballard Farmers Market, and other special events. Businesses along the alignment largely use the spaces for employee parking, and completion of the trail would require employees to use other parking areas or commute by transit or nonmotorized means. While this could result in inconvenience and increased costs for some businesses, it is not expected to significantly impact businesses. It would contribute to a trend of increased congestion in the area that may deter some customers and employees, who may choose to shop and/or work in locations with available parking.

Many nonmotorized users currently travel on the segment of the Shilshole South Alternative east of 24th Ave NW to connect the east and west trail ends because this is generally the shortest, flattest, and fastest route. The number of overall users along the entire alignment would increase under this alternative (Parametrix, 2016a). The Shilshole South Alternative also would channel many more recreational users, in addition to commuters, through the manufacturing and industrial area, particularly in the area between the Ballard Locks and 24th Ave NW, which currently has few recreational users. While other sections of the alignment currently accommodate nonmotorized uses, this segment does not, so businesses would likely experience a more dramatic shift in normal activities to accommodate the influx of new, nonmotorized trail users. This increase in nonmotorized users would likely increase the number of user conflicts with vehicles accessing their businesses, resulting in potential delays that could cause inconvenience and/or additional costs for businesses along this section of the route. These additional delays and associated costs are not expected to result in the businesses closing, but could add to general increases in costs of doing business in this area.

Along Shilshole Ave NW and NW 45th St, the volume of nonmotorized users would continue to grow under the No Build and Shilshole South Alternatives. Because nonmotorized users already use this route, there could be a less noticeable impact than at the west end of this alternative. Industrial vehicles (such as fork lifts) and heavy-duty commercial trucks are common along this alternative alignment, with small commercial trucks less common. Conflicts between vehicles and trail users along this alternative alignment could cause additional delays for freight, with associated increased costs as described above.

While additional delays in access and freight movement may occur, the trail would not prohibit access to any properties. Land use regulations would prevent a major change in land use, and the impact would not be significant. Uses consistent with plans, policies, and land use codes that have a lower need for freight and commercial access could be permitted in this area, and changes in use could occur over time.

Consistency with Adopted Plans, Policies, and Codes

The Shilshole South Alternative is consistent with adopted plans and policies, except the BINMIC policies. The primary inconsistencies with BINMIC policies relate directly to the trail being located within the BINMIC, which cannot be mitigated except by reducing the types of conflicts that the policy seeks to avoid, which are primarily related to transportation. By increasing access delays for freight vehicles, the Shilshole South Alternative could cause minor impacts on water-dependent and water-related industrial uses, which are specified as preferred uses in the BINMIC policies. None of these impacts are considered significant because they would not cause a permanent loss of a land use that is preferred under adopted City of Seattle policies.

City of Seattle Comprehensive Plan

Approximately 4,455 linear feet of the Shilshole South Alternative lies within the BINMIC, representing about 70% of the total 6,437 linear feet for this alternative (Table 4-1). The Shilshole South Alternative is generally not consistent with policies that encourage trails to be located outside of the BINMIC. (The Shilshole North Alternative has slightly more trail length within the BINMIC but is relatively similar in this regard.)

The Comprehensive Plan supports locating the trail in the Ballard Hub Urban Village, and 30% (1,982 linear feet) of the alignment is within this area. Of all the Build Alternatives, the Shilshole South Alternative provides the smallest portion of the trail directly within the urban village hub and abuts mostly industrial and auto-oriented commercial uses outside of the core of Ballard. Therefore, trail users could need to leave the trail and specifically seek out goods, services, and entertainment in other areas of Ballard.

The Shilshole South Alternative would abut the largest number of water-related and water-dependent uses of the Build Alternatives (Table 4-1). The BINMIC policies call for the highest priority to be placed on water-dependent and water-related industrial uses. The Shilshole South Alternative could cause minor disruptions to driveway operations for these types of uses, an adverse impact that could be minimized (but not completely eliminated) through the design measures described in the Transportation Discipline Report (Parametrix, 2016a).

The Comprehensive Plan contains goals and policies to improve industrial traffic flow to and through the BINMIC, facilitate truck mobility, and enhance truck connections. The Shilshole South Alternative could reduce the level of service at one intersection, and could improve traffic flow at others. While this alternative could have minor impacts on truck mobility, it would reestablish NW 45th St as a two-way street open to trucks, thus improving traffic flow and connections in that portion of the study area and continuing to support industrial land uses. A new signal at 17th Ave NW and Shilshole Ave NW could improve traffic flow, which could benefit both freight and non-freight traffic.

Seattle Department of Transportation Freight Mobility Strategic Action Plan

Because the Shilshole South Alternative fronts highly industrialized, water-related, and water-dependent uses, and because a substantial portion of it is on Shilshole Ave NW (a major truck street), conflicts could occur between trail users and existing industrial uses, which is not consistent with the Freight Mobility Strategic Action Plan. One of the functions of the project is to separate nonmotorized traffic on the trail from trucks on the roadway to reduce user conflicts that occur under the No Build Alternative, although separation would not eliminate all such conflicts.

City of Seattle Codes: Zoning, Shoreline, Critical Areas, and Historic Preservation

Land adjacent to the Shilshole South Alternative is mostly zoned to accommodate medium to heavy industrial uses. As stated for all Build Alternatives, the Missing Link would be allowed in all industrial zones, and the Shilshole South Alternative is consistent with use allowances in the zone. Unlike other Build Alternatives, the Shilshole South Alternative is completely outside of the pedestrian overlay along NW Market St, which encourages uses of this kind in the downtown Ballard area. While not specifically consistent with the goal to encourage a pedestrian-oriented streetscape within the downtown Ballard area, it is generally consistent in that it would provide pedestrian and nonmotorized access nearby.

A portion of the Shilshole South Alternative is within the UI shoreline environment (Figure 4-3). The Missing Link would be permitted in this environment. The project would be required to comply with all applicable shoreline regulations.

An abandoned landfill and a liquefaction-prone zone are adjacent to the Shilshole South Alternative, and fish and wildlife habitat conservation areas are located within the project footprint near the Ballard Locks. Development in this area would comply with critical areas regulations.

The Shilshole South Alternative lies outside of the Ballard Avenue Landmark District, and would therefore not be required to comply with development requirements for the district.

4.3.4 Shilshole North Alternative

Construction

Construction impacts that could occur are described in Section 4.3.2, Impacts Common to All Build Alternatives. In addition, small portions of the Shilshole North Alternative are within the UI shoreline

environment (see Figure 4-3). Construction within the shoreline must protect shoreline resources such as water quality or any cultural resources present. As described in other chapters of this DEIS, the project could include BMPs to ensure consistency with these requirements. The project would comply with applicable critical areas and shoreline regulations.

Operation

Effect on Existing Uses

In the BINMIC, industrial uses are preferred, especially water-dependent and water-related industrial uses. Land uses abutting the Shilshole North Alternative are approximately 67% industrial, 25% commercial, and less than 1% residential, with a small mix of other uses (see Figure 4-8). All uses along this alignment take access directly from the street frontage.

The amount of land adjacent to the Shilshole North Alternative that is in industrial use is less than half of that adjacent to the Shilshole South Alternative, even though a higher percentage of the land uses are industrial. Because of the relatively tight configuration of industrial uses along this alignment, these uses could generally have less land available to relocate displaced loading spaces or to physically reconfigure operations than those along the Shilshole South Alternative. The mix of land uses abutting the Shilshole North Alternative is highly industrial, less commercial, and less residential than the overall study area.

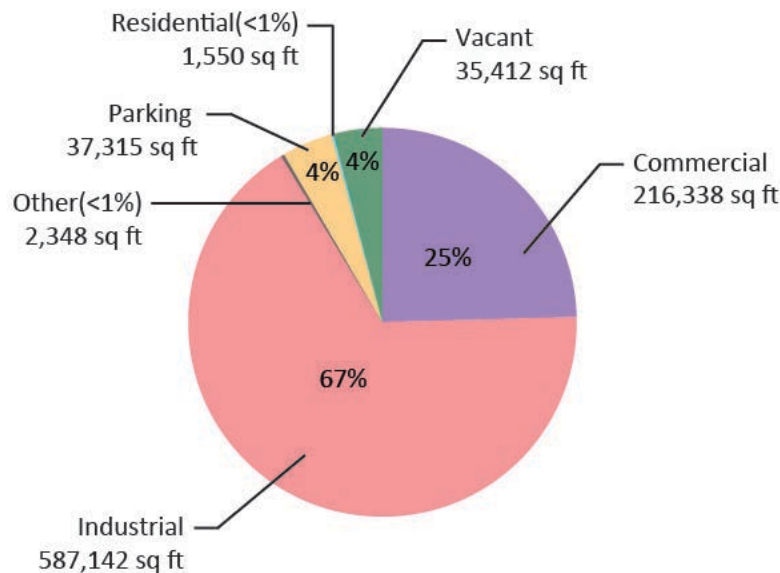


Figure 4-8. Existing Land Uses along the Shilshole North Alternative

Of the 62 total uses abutting this alternative, four uses (6%) are water-dependent and about 16 uses (26%) are water-related. Salmon Bay Sand and Gravel is a water-related use with seven parcels on the landward side of Shilshole Ave NW. This alternative has fewer water-dependent and more water-related uses than Shilshole South, and more water-related and water-dependent uses than the Leary and Ballard Avenue Alternatives.

Changes in traffic flow and access can disrupt normal activities and impact the viability of a land use. Roadway improvements included in the Shilshole North Alternative would maintain or improve traffic flow, but additional delays may be experienced at some intersections and driveways where the trail intersects with access.

Of all the Build Alternatives, the Shilshole North Alternative has the highest number of uses that are dependent on loading zone and access space along the alignment. This alternative would cross approximately 58 loading zones and driveways. This alternative also would remove the highest number of loading zone spaces (approximately 24). Because industrial and commercial uses typically have high loading, unloading, and delivery activity at driveways, the removal of loading zones and delays at access points could impact business activities. However, delays to business operations from the new trail crossings are expected to occur for only short periods, mostly during commute periods (Parametrix, 2016a, 2016b), and are therefore not expected to substantially affect business operations or viability. Businesses that use driveways crossing the trail alignment for loading activities may need to adjust their operations to ensure that the trail is not blocked by vehicles except during active ingress and egress at the access point.

The Shilshole North Alternative could permanently remove about 227 parking spaces (Parametrix, 2016b). The removal of these parking spaces could impact parking availability for businesses and special events. Generally, industrial and commercial uses have high truck loading, unloading, and delivery activity relative to other uses. Removal of these spaces could have negative impacts on business activity but is not expected to result in a significant impact to land uses along this alignment because there are other travel modes available for workers, and other off-street parking options. Loading and unloading may need to be relocated for some businesses, possibly requiring spaces to be located across the street or on side streets.

Many nonmotorized users currently use the segment of the Shilshole North Alternative between 24th Ave NW and 17th Ave NW to connect the east and west trail ends because this is generally the shortest, flattest, and fastest route. The number of overall users along the entire alignment could increase under this alternative (Parametrix, 2016a).

Consistency with Adopted Plans, Policies, and Codes

The land use impacts under the Shilshole North Alternative would be largely the same as under the Shilshole South Alternative. The Shilshole North Alternative could adversely affect fewer water-dependent industrial uses and thus may be considered slightly more consistent with BINMIC policies. No significant land use impacts are expected because no permanent land use changes are anticipated.

City of Seattle Comprehensive Plan

Approximately 4,512 linear feet of the Shilshole North Alternative is within the BINMIC, representing 68% of the total 6,647 linear feet for this alternative; this is comparable to the Shilshole South Alternative (Table 4-1). The Shilshole North Alternative is the least consistent alternative with regard to the policy that encourages the trail to be located outside of the BINMIC. The Shilshole North Alternative would place about 2,135 linear feet of trail (32% of the alignment) in the Ballard Hub Urban Village. The plan specifically supports the addition of the trail, associated right-of-way improvements, and vibrancy that the Missing Link could provide. The Shilshole North Alternative would not displace any existing industrial or water-related or water-dependent uses.

The Comprehensive Plan contains goals and policies to improve industrial traffic flow to and through the BINMIC, facilitate truck mobility, and enhance truck connections. The Shilshole North Alternative would be consistent with these policies because it could generally improve the level of service on roadways, resulting in approximately similar conditions as the No Build Alternative. Some intersection operations, such as 11th Ave NW and NW 46th St, would be improved under this Build Alternative compared to the No Build Alternative, improving freight mobility and intersection operations. Some intersections could increase in level of service, and some vehicles could experience additional delays crossing driveways.

Seattle Department of Transportation Freight Mobility Strategic Action Plan

Because the Shilshole North Alternative fronts highly industrialized, water-related, and water-dependent uses, and because a substantial portion of it is on Shilshole Ave NW, a major truck street, conflicts could occur between trail users and existing industrial uses, which is not consistent with the Freight Mobility Strategic Action Plan. As with the Shilshole South Alternative, separation of nonmotorized traffic on the trail from trucks on the roadway could limit but not completely eliminate such user conflicts.

City of Seattle Codes: Zoning, Shoreline, Critical Areas, and Historic Preservation

Land adjacent to the Shilshole North Alternative is mostly zoned to accommodate medium to heavy industrial and commercial uses. A portion of the Missing Link along NW Market St would be in the NC3 zone, which supports pedestrian-oriented uses. A nominal segment of the alignment at the intersection of 24th Ave NW and NW Market St is in a pedestrian overlay, which encourages such uses in the downtown Ballard area.

Similar to the Shilshole South Alternative, a portion of the Shilshole North Alternative is within the UI shoreline environment. The project would be required to comply with all applicable shoreline regulations.

No portions of the Shilshole North Alternative are within the Ballard Avenue Landmark District (Figure 4-3). Similar to other alignments, critical areas are present in the western portion of the alignment. Development in this area would comply with critical areas regulations.

4.3.5 Ballard Avenue Alternative

Construction

Construction impacts that could occur are described in Section 4.3.2, Impacts Common to All Build Alternatives. In addition to the construction impacts identified, the Ballard Avenue Alternative could affect shorelines. Similar to the Shilshole North and Shilshole South Alternatives, a small portion of this alternative is within the UI shoreline district (see Figure 4-3). Construction within the shoreline district must protect shoreline resources such as water quality or any cultural resources present. As described in other chapters of this DEIS, the project could include BMPs to ensure consistency with these requirements. The project would comply with applicable critical areas and shoreline regulations.

Operation

Effect on Existing Uses

Land uses abutting or gaining access along the Ballard Avenue Alternative are approximately 45% industrial, 25% commercial, and 13% residential, with a mix of other uses (see Figure 4-9). All uses abutting this alignment access their properties directly from the street frontage. The mix of land uses adjacent to this alternative is slightly more industrial, less commercial, and more residential than the overall study area. Of the 90 total uses adjacent to the alternative, five uses (6%) are water-dependent and four uses (4%) are water-related.

The southeast portion of the Ballard Avenue Alternative is largely industrial, and the middle and northwest segments are largely retail commercial, transitioning into more multi-family uses near the western portion (Figure 4-2). The north and west portions are heavily commercial, retail, and service uses with some offices. The parcels are relatively small and most have no off-street parking. The Ballard

Avenue Landmark District largely inhibits redevelopment, and existing uses depend on car, bike, and pedestrian access.

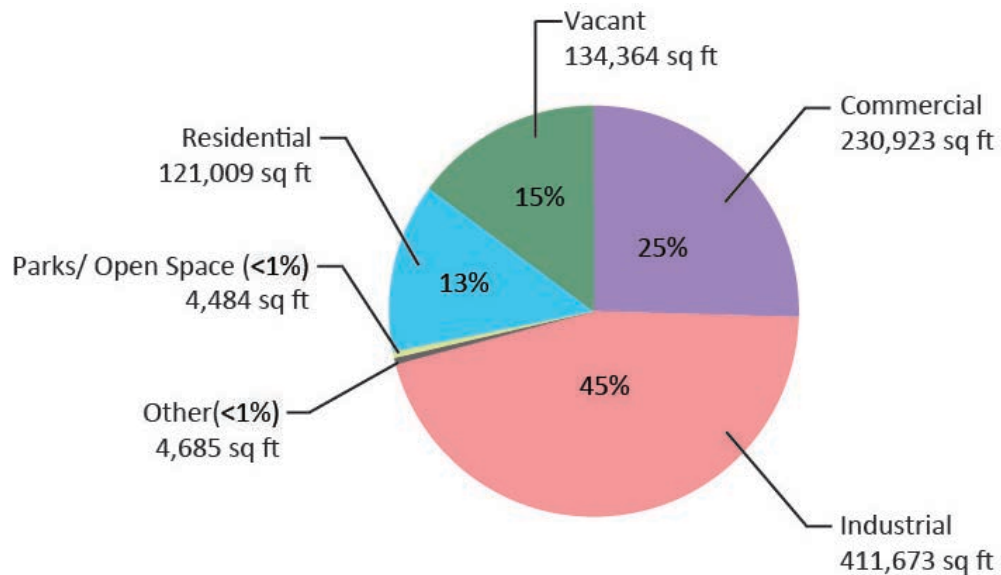


Figure 4-9. Existing Land Uses along Ballard Avenue Alternative

Existing industrial and commercial uses in the southeast portion of the alignment are mostly small-scale industrial on relatively small parcels compared to the Shilshole North and South Alternatives. Future uses in the Ballard Avenue Landmark District could accommodate a mix of industrial, office, commercial, and residential development.

Changes in traffic flow and access can disrupt normal activities and impact the viability of a land use. Roadway improvements included in the Ballard Avenue Alternative would likely improve traffic flow (which could encourage business patronage), but this alternative could cause additional vehicle delays at some intersections and where the trail intersects with driveways (Parametrix, 2016a). This could negatively impact the flow of freight and business operations; however, the delays at driveways are expected to be very minor (approximately 10–12 seconds, or about 3 seconds of additional delay during commute times compared to the No Build Alternative, on average) and would not significantly impact business uses. The Ballard Avenue Alternative could also permanently remove about 14 loading zone spaces (Parametrix, 2016b), which could impact business uses and the Ballard Farmers Market.

The Ballard Avenue Alternative could remove about 198 parking spaces that serve adjacent land uses and special events (Parametrix, 2016b). This loss of on-street parking is not expected to significantly affect land uses along the Ballard Avenue Alternative.

The Ballard Avenue Alternative could channel many more recreational users through areas of commercial, retail, and entertainment uses than the Shilshole North and Shilshole South Alternatives. Delivery vehicles associated with business activity along this alternative alignment are largely small to medium commercial vehicles, except in the industrial area near the southeast end of the alignment. The nature of many of the commercial, retail, and entertainment uses along this alternative may be more consistent with trail user patronage than industrial uses. Nearby residential and commercial uses could serve as starting points and destinations for trail users.

Consistency with Adopted Plans, Policies, and Codes

The Ballard Avenue Alternative is consistent with adopted plans and policies, except the BINMIC policies described for the other Build Alternatives. However, it is more consistent with BINMIC policies than the Shilshole South and Shilshole North Alternatives because less of the trail would be within the BINMIC. The Ballard Avenue Alternative could affect far fewer water-dependent and water-related industrial uses than the Shilshole South or Shilshole North Alternatives. As with other Build Alternatives, none of the impacts to land use from the Ballard Avenue Alternative would be significant because the alternative is not expected to cause any land uses to change.

City of Seattle Comprehensive Plan

The Ballard Avenue Alternative is more consistent with Comprehensive Plan policies and goals that promote the expansion of open space networks in high-density areas targeted for residential growth with high pedestrian, bicycle, or transit use than the Shilshole South and Shilshole North Alternatives, which run predominantly through industrialized areas not as well served by transit.

Approximately 2,814 linear feet of the Ballard Avenue Alternative is within the BINMIC, representing 37% of the total 7,518 linear feet for this alternative. This is the second-least of any alternative and similar to the Leary Alternative (Table 4-1). This alignment contains the most linear feet of trail (4,704 feet) within the Ballard Hub Urban Village, consistent with the goals and policies in the Comprehensive Plan that encourage development of nonmotorized infrastructure, and the BGT specifically.

The Ballard Avenue Alternative abuts far fewer water-dependent and water-related uses than the Shilshole North or South Alternative. It has more water-dependent uses but fewer water-related uses than the Leary Alternative, and is somewhat similar to the Leary Alternative in total water-dependent and water-related uses.

Seattle Department of Transportation Freight Mobility Strategic Action Plan

The Ballard Avenue Alternative would be more consistent with the freight goals and policies than the previously described alternatives because it locates less trail in the BINMIC than the Shilshole South and Shilshole North Alternatives. However, the removal of loading spaces would not be consistent with the policies and goals that support the need for deliveries and collection of goods.

City of Seattle Codes: Zoning, Shoreline, Critical Areas, and Historic Preservation

Zoning adjacent to the Ballard Avenue Alternative allows for a broad mix of activity, including industrial (IC), mixed- and light-industrial (IG2, IB), commercial (C1, NC2, NC3), and multifamily (LR3). The southern and eastern portions of the alternative are industrial, and the zones allow a mix of industrial uses including IC that could accommodate large offices and other nonindustrial uses. The C1 zone is generally applied to areas with limited pedestrian and transit services. (Under this alternative, the City could reassess the zoning designation of the C1 properties along the multi-use trail.) The NC2 and NC3 zones specifically support active and attractive pedestrian-oriented experiences, and the alignment follows pedestrian overlays on 22nd Ave NW, NW Market St, and 24th Ave NW (Figure 4-5).

A portion of the Ballard Avenue Alternative is within shoreline district, where the proposed use would be permitted. Similar to other alternatives, the western portion of the alignment is within critical areas (Figure 4-3), and development in this area would need to be consistent with critical areas regulations.

A portion of the alternative, from NW Market St to NW Dock Pl, is within the Ballard Avenue Landmark District. This area is particularly sensitive to changes in character, culture, social, and historic use. The project could be consistent with the Ballard Avenue Landmark District, subject to compliance with additional regulations and approvals.

4.3.6 Leary Alternative

Construction

Construction impacts that could occur are described in Section 4.3.2, Impacts Common to All Build Alternatives.

Operation

Effect on Existing Uses

Land uses abutting the Leary Alternative are approximately 33% industrial, 37% commercial, and 5% residential, with a mix of other uses (see Figure 4-10). All uses abutting this alignment take access directly from the street frontage. The mix of land uses along this alternative is less industrial, more commercial, and similarly residential compared to the study area as a whole. This alternative contains the lowest proportion and least land area occupied by industrial uses of any of the alternatives. Of the 58 total uses, one use (2%) is water-dependent and about six uses (10%) are water-related.

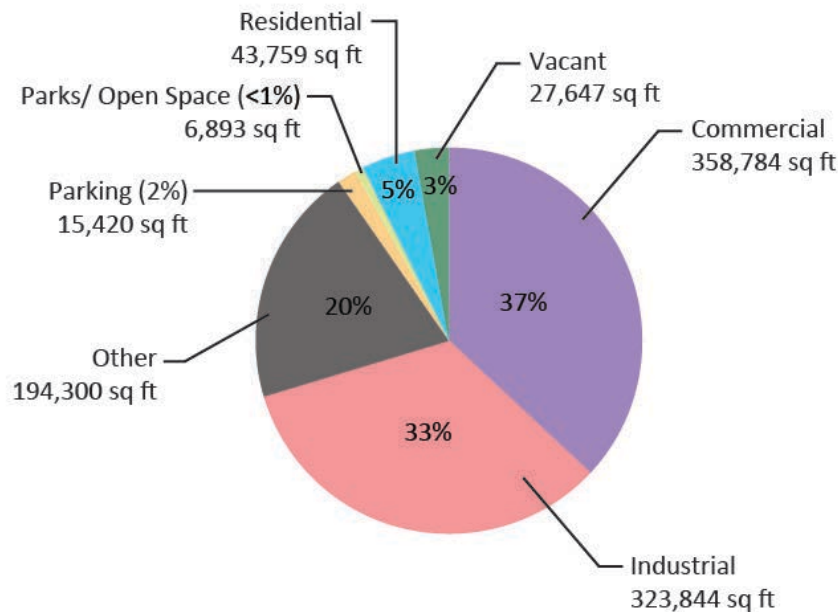


Figure 4-10. Existing Land Uses along the Leary Alternative

Changes in traffic flow, access, and the ability of a land use to continue normal activities can impact its viability. Under the Leary Alternative, level of service could be worsened at about six intersections compared to the No Build and other Build Alternatives (Parametrix, 2016a). This could negatively impact the delivery of goods to and from the area, and other vehicle movement. However, some intersection operations could also be improved and could offset some of this impact.

Approximately 33 driveways and loading docks are located along the Leary Alternative alignment, the least of any Build Alternative. About 15 loading zone spaces could be removed with construction of this alternative (Parametrix, 2016b). Similar to other alternatives, vehicles crossing the trail could experience minor delays as drivers stop and check for pedestrians and bicyclists before advancing to the roadway (Parametrix, 2016a, 2016b). This impact would likely occur for only short periods, mostly during commute times, and is not expected to be significant.

The Leary Alternative could remove approximately 103 parking spaces, the fewest of any of the Build Alternatives (Parametrix, 2016b). Similar to other Build Alternatives, businesses and residential uses could be impacted by the reduction in parking spaces. Fewer spaces may be available for special events in the study area. This loss of on-street parking is not expected to significantly affect land uses along the Leary Alternative alignment.

The Leary Alternative would locate the trail along an alignment with the lowest proportion of industrial uses (Table 4-1). Commercial uses along this alternative are proportionately similar to the Shilshole South Alternative. Many of the uses along the Leary Alternative within the Ballard Hub Urban Village rely on small to medium commercial trucks for the delivery of goods. In the southeast corner of the alignment, uses include several car dealerships and repair businesses that use NW Leary Way for loading, unloading, and towing. Completion of the trail could require businesses to adjust loading locations and activities to ensure that trail users are able to pass without obstruction. Commercial uses outside of the commercial/industrial area to the southwest are largely retail-oriented. The Leary Alternative could benefit retail markets by expanding them to trail users, and trail users could have increased retail opportunities.

Consistency with Adopted Plans, Policies, and Codes

As with all other Build Alternatives, the Leary Alternative is consistent with plans and policies, except the BINMIC policies. However, it is more consistent with BINMIC policies than the other alternatives because less of the trail would be located within the BINMIC. The Leary Alternative could affect far fewer water-dependent and water-related industrial uses than the other alternatives. As with other Build Alternatives, none of the impacts to land use from the Leary Alternative are expected to be significant.

City of Seattle Comprehensive Plan

Approximately 2,308 linear feet of the Leary Alternative alignment is within the BINMIC, representing about 34% of the total 6,774 linear feet of this alternative (Table 4-1). (The proportion of this alternative within the BINMIC is comparable to the Ballard Avenue Alternative, but the Leary Alternative is slightly shorter.) Additionally, the Leary Alternative is second only to the Ballard Avenue Alternative for linear feet of trail within the Ballard Hub Urban Village (4,466 linear feet). Completion of the trail within this area would support plans and policies for the Ballard Hub Urban Village. Of all the Build Alternatives, the Leary Alternative would locate the least amount trail through the BINMIC, thereby minimizing disruptions to driveway operations and loading within the industrial center. The disruption could be minimized (but not completely eliminated) through the design measures described in the Transportation Discipline Report (Parametrix, 2016a). The Leary Alternative would not displace any existing industrial uses or other uses.

Seattle Department of Transportation Freight Mobility Strategic Action Plan

Similar to the Ballard Avenue Alternative, the Leary Alternative would be more consistent the Freight Mobility Strategic Action Plan than the Shilshole North and Shilshole South Alternatives because it locates less trail in the BINMIC and adjacent to industrial uses whose operations could be affected. Additionally, many of the water-related and water-dependent uses along the alignment are outside of the

BINMIC. However, the removal of loading spaces and minor delays to operations at access points would not be consistent with the policies and goals that support the need for deliveries and collection of goods.

City of Seattle Codes: Zoning, Shoreline, Critical Areas, and Historic Preservation

Zoning adjacent to the Leary Alternative allows for mixed-industrial/commercial (IG2, IC) and commercial (C1, NC3). The NC3 zone specifically supports active and attractive pedestrian-oriented experiences. The C1 zone is generally applied to areas with limited pedestrian and transit services. Under this alternative, the City could reassess the zoning designation of C1 properties along the multi-use trail. The Leary Alternative passes through Ballard's downtown "core" on NW Market St, capitalizing on the P1 designation's intent of an intense pedestrian-oriented experience in this area. Consistent with the Land Use Code's intent for this overlay, this portion of the alignment is developed with mixed street-level uses that concentrate retail and service opportunities.

No part of the Leary Alternative is within the shoreline district or the Ballard Avenue Landmark District (Figure 4-3). Construction within critical areas near the existing west trail end would need to comply with critical areas regulations.

4.3.7 Connector Segments

As with the primary Build Alternatives, the connector segments are consistent with adopted plans and policies, except the BINMIC policies. Virtually all of these segments are located at least partially within the BINMIC. However, these segments could be used to reduce the total length of trail in the BINMIC by connecting to either the Ballard Avenue or Leary Alternative outside of the BINMIC.

Ballard Avenue NW

The Ballard Avenue NW connector segment is entirely outside of the BINMIC designation; it lies within the NC2 and NC3 zoning designations, and is outside of the Ballard Avenue Landmark District. This segment would be consistent with adopted plans, policies, and codes.

NW Vernon Place

Approximately 50% of the NW Vernon Place connector segment is within the BINMIC and would be inconsistent with the same plan goals and policies as previously described. The segment lies within the IG2 and NC2 zoning designations. A portion of the segment is within the Ballard Avenue Landmark District. The project could be consistent with the Ballard Avenue Landmark District, subject to compliance with additional regulations and approvals.

20th Avenue NW

Approximately 25% of the 20th Avenue NW connector segment is within the BINMIC and would be inconsistent with the same plan goals and policies as previously described. The segment lies within the IG2, NC3, IC, and C1 zoning designations. A portion of the segment is within the Ballard Avenue Landmark District. The project could be consistent with the Ballard Avenue Landmark District, subject to compliance with additional regulations and approvals.

17th Avenue NW

The 17th Avenue NW connector segment is entirely within the BINMIC and would be inconsistent with the same plan goals and policies as previously described. The segment is within the IG2 zoning designation.

15th Avenue NW

The entire 15th Avenue NW connector segment is within the BINMIC and would be inconsistent with the same plan goals and policies as previously described. The segment is within the IG2 zoning designation.

14th Avenue NW

The entire 14th Avenue NW connector segment is within the BINMIC and would be inconsistent with the same plan goals and policies as previously described. The segment is within the IG2 zoning designation.

4.4 Avoidance, Minimization, and Mitigation Measures

The following measures are common to all Build Alternatives.

4.4.1 Construction

Construction of the Missing Link would cause traffic delays and disruptions to residential and business uses in and around the project footprint. The following measures could be used to minimize those impacts:

- Construction and staging plans could be required to minimize impacts to business and residential access, maintain traffic flow, and maintain business visibility to encourage continued patronage.
- The public and business owners could be provided information about the construction schedule, hours of operation, location and duration of lane closures, and changes to parking provisions. This information would allow sensitive businesses to coordinate business operations such as delivery times, hours of operation, and other activities accordingly, as well as to provide information to customers to encourage continued patronage.
- The construction schedule and hours of operation could be timed and coordinated with other construction projects to minimize impacts to adjacent and surrounding uses so that potential user conflicts.
- Additional measures, such as flaggers, could be employed to minimize freight delays in areas heavily used by freight, consistent with City policies promoting efficient transportation flow in industrial areas and to minimize impacts to industrial and manufacturing uses.
- To the extent feasible, loading zones and access could be maintained or alternative loading locations identified to minimize impacts to uses that rely on the delivery and shipment of goods.

4.4.2 Operation

The alternatives evaluated for the Missing Link are all partially located within industrial zoned areas and the BINMIC. City plans and policies focus on the preservation of land in this area for water-dependent and industrial activities. Therefore, minimizing the extent of the trail within the BINMIC could minimize impacts. Connector segments could be utilized to channel trail users into the Ballard Hub Urban Village, where zoning and policies encourage trail completion, connection, and user activity during day and evening hours. Additional mitigation measures described in the Transportation Discipline Report (Parametrix, 2016a) could also reduce trail impacts on adjacent land uses.