SDOT
Seattle Department of Transportation

BURKE-GILMAN TRAIL MISSING LINK PROJECT

Land Use Discipline Report

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Draft Environmental Impact Statement
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ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
BGT	Burke-Gilman Trail
BINMIC	Ballard-Interbay Northend Manufacturing and Industrial Center
BTR	Ballard Terminal Railroad
C1	Commercial 1
CAP	Climate Action Plan
CIP	Capital Improvement Program
CM	Conservancy Management
CN	Conservancy Navigation
CSO	combined sewer overflow
DEIS	Draft Environmental Impact Statement
GIS	geographic information system
GMA	Growth Management Act
IB	Industrial Buffer
IC	Industrial Commercial
IG1	General Industrial 1
IG2	General Industrial 2
LR2	Low Rise 2
LR3	Low Rise 3
MR	Midrise
NACTO	National Association of City Transportation Officials
NC	Neighborhood Commercial
NC2	Neighborhood Commercial 2
NC3	Neighborhood Commercial 3

P1	Pedestrian Overlay
PSRC	Puget Sound Regional Council
RC	Residential-Commercial
RCW	Revised Code of Washington
SDOT	Seattle Department of Transportation
SEPA	State Environmental Policy Act
SMA	Shoreline Management Act
SMC	Seattle Municipal Code
SMP	Shoreline Master Program
SPU	Seattle Public Utilities
TDM	transportation demand management
UDTF	Urban Design and Transportation Framework
UI	Urban Industrial
WAC	Washington Administrative Code

EXECUTIVE SUMMARY

This Land Use Discipline Report describes the potential impacts of the Burke-Gilman Trail (BGT) Missing Link on land uses in the area surrounding the project. The City of Seattle Department of Transportation (SDOT) has proposed the Missing Link project to connect two existing segments of the BGT, a regional multi-use, nonmotorized trail, in the Ballard neighborhood of Seattle, Washington. 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.

Two neighborhood plans apply to the study area.

The Ballard-Interbay Northend Manufacturing and Industrial Center (BINMIC) covers the southern portion and areas adjacent to Salmon Bay.

The Crown Hill/Ballard neighborhood plan includes the Ballard Hub Urban Village and covers the remainder of the study area.

Impacts are assessed based on the project's compatibility with existing, allowed, and intended land uses and federal, state, and local regulations, plans, and policies that guide and govern land use in the study area. Where impacts are identified, the report discusses measures that can be taken to mitigate or minimize impacts. For the purposes of this evaluation, an alternative would be considered to have the potential for significant adverse environmental impacts if it would be likely to cause the loss of preferred land uses, such as water-dependent and water-related industrial uses, under adopted City plans, policies, and codes.

Land uses in the study area are varied. Industrial and manufacturing, and water-related and water-dependent uses are generally concentrated along Salmon Bay, with a transition to commercial and residential uses to the north. Within land use categories, individual uses are also varied. For example, commercial uses near the south portion of the study area are largely water-related and high intensity; near the north portion of the study area, they tend toward pedestrian-oriented retail and service uses.

Adopted City plans and policies encourage uses and development consistent with zoning to support population and employment growth projections; encourage efficient land utilization, economic growth, and shoreline management; and increase nonmotorized and multimodal transportation. Some plans and policies encourage nonmotorized transportation, particularly within the residential and commercial areas of Ballard, and specifically identify the Missing Link as a priority project. Other plans and policies prioritize industrial and manufacturing uses and freight movement, but generally support locating a nonmotorized trail away from the industrial area. Two applicable City neighborhood plans support completion of the BGT but have different policies regarding where it should be sited. 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, Washington State Department of Ecology rules, and the local shoreline master program.

The analysis examines the No Build Alternative, as well as four Build Alternatives (Shilshole North Alternative, Shilshole South Alternative, Ballard Avenue Alternative, and Leary Alternative). The No Build Alternative is generally not consistent with goals and policies related to increasing safe,

nonmotorized transportation opportunities, particularly walking and bicycling opportunities, and connecting the east and west trail ends of the BGT. Nonmotorized trail use would continue to grow, but users would take undesignated routes to continue through Ballard or disperse to destinations in Ballard. Additionally, traffic congestion and delays would continue, impacting freight movement and associated business activity within the study area.

All Build Alternatives (except the Ballard Ave NW connector segment) lie partially within geographic areas where plans encourage trail completion (the Ballard Hub Urban Village) and partially within the industrial and manufacturing area (the Ballard-Interbay Northend Manufacturing and Industrial Center, or BINMIC) (see Table ES-1). Plans and policies for these areas generally support completing the Missing Link. However, these plans and policies generally do not support locating commuter or recreational trails within the BINMIC, particularly if this could delay freight movement, interfere with industrial and manufacturing uses, or negatively affect water-related or water-dependent uses. Table ES-1 summarizes differences among the four Build Alternatives.

Table ES-1. Summary of Neighborhoods and Land Uses Affected by Build Alternatives

Alternative	*Length of Trail in BINMIC (approx. linear feet)*	*Length of Trail in Ballard Hub Urban Village (approx. linear feet)*	*Adjacent Land in Industrial Uses (acres and %)*	*Number of Adjacent Water-dependent and Water-related Uses*
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

The Shilshole South Alternative is consistent with all 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. Shilshole South could also cause minor impacts on water-dependent and water-related industrial uses, which are preferred uses in the BINMIC policies.

The land use impacts under the Shilshole North Alternative could be largely the same as under the Shilshole South Alternative. The Shilshole North Alternative would potentially adversely affect fewer water-dependent industrial uses and may thus be considered slightly more consistent with BINMIC policies.

The Ballard Avenue Alternative is consistent with all plans and policies except the BINMIC policies. However, it is more consistent with BINMIC polices than the Shilshole South and Shilshole North Alternatives because less of the trail would be located within the BINMIC. The Ballard Avenue Alternative would affect far fewer water-dependent and water-related industrial uses than the Shilshole South or Shilshole North Alternatives.

As with all other Build Alternatives, the Leary Alternative is consistent with all plans and policies except the BINMIC policies. However, it is more consistent with BINMIC polices than the Shilshole South and Shilshole North Alternatives because less of the trail would be located within the BINMIC. The Leary Alternative would affect far fewer water-dependent and water-related industrial uses than the Shilshole South or Shilshole North Alternatives.

Both the Ballard Avenue and Leary Alternatives lie partially within pedestrian-oriented zoning designations with a special pedestrian overlay designation. The Leary Alternative follows the pedestrian overlay through Ballard's downtown core along NW Market St. The Ballard Avenue and Leary Alternatives would be more compatible with both the BINMIC policies and the Ballard Hub Urban Village policies. This is because the Ballard Avenue and Leary Alternatives would adversely affect fewer preferred land uses in their respective neighborhoods, and would locate more of the trail in areas where adopted policies support expanding nonmotorized transportation and recreation infrastructure.

Build Alternatives that would locate the trail in pedestrian-oriented zoning areas adjacent to retail and service-oriented commercial destinations would align with the policies and intent of the Ballard Hub Urban Village and Ballard Neighborhood Plan. Many of the adopted plans outlined in Section 4.2 generally support nonmotorized transportation infrastructure improvements and trail connections, and/or specifically support completion of the BGT.

All Build Alternatives would result in minor, short-term construction impacts that could affect uses in the study area, particularly business activities. Operation of any of the Build Alternatives would support the City of Seattle's long-term plans for increasing safe, nonmotorized transportation. Associated street improvements could facilitate freight movement in some areas. However, any of the Build Alternatives would require some land uses to adapt to pedestrian and bicycle traffic using the trail, or to change how they use the existing rights-of-way.

No direct displacement of any land uses is expected under any of the alternatives. While all of the Build Alternatives would generally support long-range plans and goals, Build Alternatives that cause less disruption to existing water-related, water-dependent, and industrial uses within the BINMIC are more compatible with overall plans and land uses. The primary disruption to existing business would be from trail users interrupting access and egress at business driveways, and the dislocation, in some cases, of loading areas that have traditionally used the street right-of-way. Displacement of on-street parking to make room for the trail would also inconvenience businesses and business patrons under any of the Build Alternatives. However, none of the businesses are expected to be disrupted severely enough to cause them to cease operations. No significant impacts are anticipated because land use would not change in a way that is inconsistent with adopted plans, policies, and codes.

The Build Alternatives could employ connector segments to reduce potential impacts to the BINMIC by orienting the trail toward commercial and residential uses and zones. Mitigation measures discussed in the Transportation Discipline Report (Parametrix, 2016b) could also reduce trail impacts on adjacent land uses. None of the Build Alternatives would cause the potential for significant unavoidable adverse impacts.

CHAPTER 1: PROJECT HISTORY AND ALTERNATIVES

1.1 Introduction

The Burke-Gilman Trail (BGT) is a regional trail that runs east from Golden Gardens Park in Seattle and connects to the Sammamish River Trail in Bothell, except for a missing segment through the Ballard neighborhood. Currently, the regional trail ends at 30th Ave NW by the Hiram M. Chittenden (Ballard) Locks on the west, and begins again at the intersection of 11th Ave NW and NW 45th St on the east. The Seattle Department of Transportation (SDOT) proposes to connect these two segments of the BGT with a marked, dedicated route that would serve all users of the multi-use trail. The proposed project to complete the regional facility is referred to as the Missing Link.

Completing this section of the BGT has been discussed since the late 1980s. Refer to Chapter 1 in the Draft Environmental Impact Statement (DEIS) for a detailed summary of the project history. The alternatives evaluated in the DEIS were developed from suggestions received in 2013 during scoping for the DEIS. Suggested routes were evaluated using the following screening criteria: directness of route, number and types of trail crossings (i.e., driveways and intersections), street and arterial classification, adjacent land uses, and right-of-way width.

1.2 No Build Alternative

Under the No Build Alternative, no new multi-use trail would be constructed to connect the existing segments of the regional Burke-Gilman Trail. Trail users would continue to use the existing surface streets and sidewalks to travel between the existing trail segments, a distance of approximately 1.2 miles. Currently, trail users tend to use the most direct route, which is along Shilshole Ave NW. Pedestrians may opt for a street with sidewalks such as Ballard Ave NW or NW Leary Way. The No Build Alternative serves as the baseline condition, against which the Build Alternatives are compared over time to their 2040 design year. Over that time period, population and employment growth is expected to continue in the Ballard neighborhood, leading to an increase in traffic congestion, parking demand, and the number of people walking and biking.

1.3 Build Alternatives

Four Build Alternatives are analyzed in the DEIS: the Shilshole South, Shilshole North, Ballard Avenue, and Leary Alternatives. The alternatives described below are conceptual routes designed to provide distinct alternatives for analysis in the DEIS. The route that is eventually selected as the preferred alternative could be any one of these routes, or a combination of portions of any of them.

1.3.1 Shilshole South Alternative

Under the Shilshole South Alternative, the multi-use trail would be primarily routed along the south side of Shilshole Ave NW (Figure 1-1). There would be changes to parking, lanes, and intersection configurations on both sides of the street along this alternative alignment. The trail would accommodate users on a newly paved surface for most of its length.

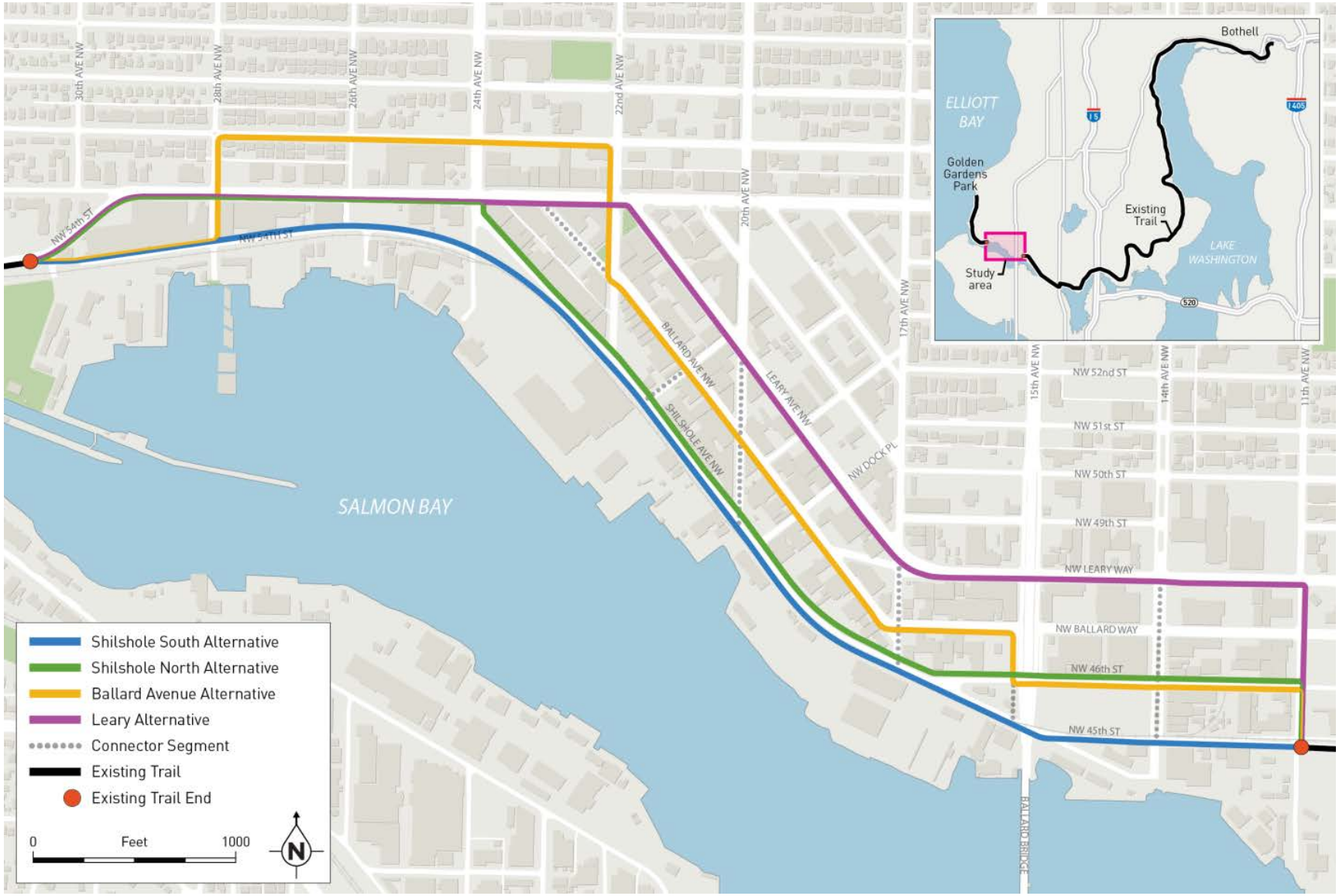

Figure 1-1. Proposed Alternatives

Beginning at the existing western trail end at the Ballard Locks, the trail would continue east along the north side of the unimproved NW 54th St right-of-way until the intersection with Shilshole Ave NW, just east of 24th Ave NW. The trail would then proceed along the south side of Shilshole Ave NW, continuing onto the southern side of NW 45th St to the eastern project end at 11th Ave NW.

From the existing western trail end at the Ballard Locks, the trail would be north of the Ballard Terminal Railroad (BTR) tracks until just before 17th Ave NW, at which point the trail would cross to the south of the tracks. A signal would be installed at the intersection of Shilshole Ave NW and 17th Ave NW for trail users crossing Shilshole Ave NW to access 17th Ave NW**.**

The trail width would vary throughout the corridor due to existing conditions and constraints, but would generally be between 8 and 12 feet wide. Based on the design concepts, the typical right-of-way on Shilshole Ave NW for this alternative would include a buffer zone adjacent to the railroad tracks and vehicle traffic lanes, a multi-use trail, two vehicle travel lanes, and preservation of parking areas where feasible.

1.3.2 **Shilshole North Alternative**

Under the Shilshole North Alternative, the multi-use trail would be primarily routed along the north side of Shilshole Ave NW (Figure 1-1). Beginning at the existing western trail end at the Ballard Locks, the trail would continue east along the south side of NW 54th St until it turns into NW Market St. The trail would continue along the south side of NW Market St, until it crosses 24th Ave NW and turns south on the east side of 24th Ave NW. The trail would then proceed east along the north side of Shilshole Ave NW to the intersection with NW 46th St. A signal would be installed at the intersection of Shilshole Ave NW and 17th Ave NW for trail users crossing 17th Ave NW. It would continue along the north side of NW 46th St underneath the Ballard Bridge to 11th Ave NW. At this point, the trail would turn south along the east side of 11th Ave NW until it connects to the eastern end of the trail at NW 45th St.

There would be changes to parking, vehicle travel lanes, and intersection configurations on both sides of the street in this alternative. The typical right-of-way section on NW Market St would include a sidewalk, the multi-use trail, a buffer zone, two vehicle travel lanes, center turn lane, and parallel parking areas on both sides of the street. The typical right-of-way on Shilshole Ave NW for this alternative would include a buffer zone and informal parking adjacent to the railroad tracks, two vehicle travel lanes, parallel parking area, buffer area, multi-use trail, and sidewalk. The existing gravel shoulder on the south side of Shilshole Ave NW would be maintained. These elements would vary along the trail due to the existing road configuration and structures.

1.3.3 **Ballard Avenue Alternative**

Under the Ballard Avenue Alternative, the multi-use trail would be primarily routed along the south side of Ballard Ave NW (Figure 1-1). Beginning at the existing western trail end at the Ballard Locks, the trail would continue east along the north side of the unimproved NW 54th St right-of-way until 28th Ave NW. At this point the trail would turn north along the east side of 28th Ave NW until it reaches NW 56th St. The trail would then turn east along the south side of NW 56th St to the intersection with 22nd Ave NW. At 24th Ave NW and NW 56th St, a new pedestrian-activated signal would be installed to facilitate the trail crossing of 24th Ave NW. The trail would turn south along the west side of 22nd Ave NW, cross NW Market St, and proceed south to Ballard Ave NW. At this point the trail would turn southeast along the south side of Ballard Ave NW and continue east on the south side of NW Ballard Way to the intersection with 15th Ave NW. The trail would then turn south onto the one-way road on the west side of 15th Ave NW, which could potentially be converted to trail-only use (no motor vehicles). The trail would cross to

the south side of NW 46th St at a newly signalized intersection and proceed east across 11th Ave NW. It would then turn south along the east side of 11th Ave NW to the eastern trail end at NW 45th St.

There would be changes to parking and vehicle travel lane configurations on all streets traversed by this alternative. The typical right-of-way section on Ballard Ave NW would include pedestrian sidewalks on both sides of the street, buffer zone, two vehicle travel lanes, and a parallel parking area on the north side of the street. These elements would vary along the trail due to the existing road configurations and structures.

1.3.4 Leary Alternative

Under the Leary Alternative, the multi-use trail would be primarily routed along the south side of Leary Ave NW (Figure 1-1). Beginning at the existing western trail end at the Ballard Locks, the trail would continue east along the south side of NW 54th St until it turns into NW Market St. The trail would continue east along the south side of NW Market St, crossing 22nd Ave NW. At 22nd Ave NW, the trail would turn southeast on the south side of Leary Ave NW. The trail would continue east along the south side of Leary Ave NW, which becomes NW Leary Way, to 11th Ave NW. At this point, the trail would turn south along the east side of 11th Ave NW to the current trail end at NW 45th St.

There would be changes to parking, vehicle travel lanes, and intersection configurations on both sides of the street along this alternative. The typical right-of-way on Leary Ave NW would include buffer zones on both sides of the street, a multi-use trail, parking areas on both sides of the street, sidewalks on both sides of the street, two vehicle travel lanes, and one two-way center left turn lane. The typical right-of-way on NW Market St would include a sidewalk, the multi-use trail, a buffer zone, two vehicle travel lanes, center turn lane, and parking areas on both sides of the street. These elements would vary along the trail due to the existing road configuration and structures.

1.3.5 Connector Segments

As mentioned previously, there are a number of possibilities to configure the routes, and six segments have been identified as the most likely connectors (Figure 1-1). These segments may be used as connections between portions of the previously identified alternative routes and could be on either side of the road. The connector segments include the following:

- Ballard Avenue NW;
- NW Vernon Place;
- 20th Avenue NW;
- 17th Avenue NW;
- 15th Avenue NW; and
- 14th Avenue NW.

Should NW Vernon Pl be used as a connector segment, a signal at NW Vernon Pl and Shilshole Ave NW may also be warranted, depending on whether the trail would continue on the north or south side of Shilshole Ave NW.

1.4 Features Common to All Build Alternatives

1.4.1 Roadway Design Considerations

Roadway designs would vary for each alternative based on factors such as intersection geometry, vehicle volumes, and types of vehicles. This section describes roadway modifications, intersection treatments, driveway design, and parking lot changes that could be incorporated during the final design phase of the project to address safety, access, non-motorized users, and vehicle types. Similar concepts can be found throughout the city and in design documents such as the Urban Bikeway Design Guide (National Association of City Transportation Officials [NACTO], 2015) and Guide for Development of Bicycle Facilities (American Association of State Highway and Transportation Officials [AASHTO], 2012). These features are common to all Build Alternatives, but the location and other specifics would vary by alternative.

Roadway Design

Adding a trail to the existing street system would require roadway modifications for vehicles to co-exist with non-motorized users. These changes could include geometric changes to create perpendicular intersections, changes to roadway lane configurations, alterations of curb radii, and design details that provide sight lines between vehicles and non-motorized users.

Intersection Design

Intersections would be designed to more clearly identify crossings of the multi-use trail. These improvements could include the following:

- Curb extensions or curb bulbs;
- Pavement markings;
- Raised crosswalks;
- Driveway-style entrances at intersections;
- Signalized intersections;
- Rapid flashing beacons at road crossings of the trail;
- Medians used either to improve the street crossing for pedestrians or to restrict left turns across the trail;
- Barriers, fences, or buffers separating non-motorized trail users from moving vehicular traffic or the railroad; and
- Alternative pavement treatments.

Driveway Design

Driveways that cross or intersect with the multi-use trail would also be evaluated for possible design changes. Design changes could include many of the intersection elements described above, including curb bulbs, and pavement markings and treatments. Driveways and loading docks would be reconfigured so that parked vehicles or trucks would not block the trail. Some driveways may be eliminated, relocated, or consolidated where there are multiple driveways at a single property.

Access Modifications

Some private lots may be affected where vehicle parking currently extends into the public right-of-way, or due to changes to property access from the multi-use trail. For example, striping in parking lots may be modified to prevent vehicles from parking in the right-of-way and blocking the trail, which may reduce the number of parking spaces in some lots.

1.4.2 Construction Activities and Durations

Overall construction of any of the Build Alternatives would last 12 to 18 months. Duration would vary depending on the extent of utility relocations, storm drainage improvements, and existing roadway reconfigurations including bus stop relocations. Construction would likely occur in segments, and one segment would be completed before moving on to the next segment to minimize the construction duration at any given location.

Construction of any of the Build Alternatives would consist of the following general activities:

- Demolition, including removal of pavement, curbs, sidewalks, driveways, trees, signs, bus shelters, fencing, or other features located in the new trail area.
- Construction of new roadway elements, including pavement, curbs and gutters, sidewalks, driveways, trees, bus shelters, fencing, signs, and buffer elements. Buffer elements include such things as paving, landscaping, barriers, fencing, and signage.
- Utility relocations, ranging from moving fire hydrants, stormwater catch basins, and overhead utility and power poles to the installation of new drainage facilities.

1.4.3 Construction Staging

Construction staging and scheduling are typically determined by the contractor; however, the City would specify some mandatory restrictions for the contractor. Demolition would likely be limited to a certain length of the trail; as such, the contractor would not be allowed to demolish the work space along the entire length of the trail. Rather, the project would be constructed in multiple smaller segments.

The project would generally use areas within or near the project footprint for construction staging and storing materials and equipment, including vacant lots, parking lots, and unused rights-of-way. Temporary construction offices (such as trailers) could also use these areas. Alternatively, construction offices may be located in a rented office space. All staging areas would be restored to their pre-construction condition or better.

1.4.4 Construction Traffic and Haul Routes

Construction would generate traffic to transport materials and equipment to the work site and to remove demolition debris and excess soil. The contractor would require access to the site for heavy vehicles such as dump trucks and concrete trucks, light vehicles such as pickup trucks, and heavy equipment such as excavators and compactors. Trucks would transport construction material. The contractor would determine the best construction methods, as permitted by the City and in conformance with the project construction plans and specifications. The exact number of truck trips per day during construction cannot yet be determined because project design is not yet complete. However, preliminary estimates indicate that the highest number would be approximately 20 round-trip truck trips per work day during a paving operation, spread uniformly throughout the day. City streets that could be used as haul routes include Shilshole Ave NW, NW 46th St, NW Leary Way/Leary Ave NW, and 15th Ave NW.

CHAPTER 2: REGULATORY CONTEXT

Land use and development within 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, Section 4.2 discusses applicable plans and policies in more detail.

2.1 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 (SMA) 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.

2.2 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, 2015a)
    - 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)
- City of Seattle Climate Action Plan (City of Seattle, 2013)
- City of Seattle Parks and Recreation 2011 Development Plan (City of Seattle, 2011)
- Seattle Department of Transportation Bicycle Master Plan (SDOT, 2014)
- Seattle Department of Transportation Seattle Pedestrian Master Plan (SDOT, 2009)
- Seattle Department of Transportation Move Ballard Draft Plan (SDOT, 2015)
- Ballard Urban Design and Transportation Framework Draft Plan (City of Seattle, 2015b)
- City of Seattle Municipal Code (SMC) (City of Seattle, 2015e)
    - 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)

CHAPTER 3: METHODS

This chapter describes the methods used to analyze the potential land use impacts from construction and operation of the Missing Link. This analysis was conducted to satisfy the requirements of the State Environmental Policy Act (SEPA) in Washington Administrative Code (WAC) 197-11. The City of Seattle implements SEPA through SMC 25.05 and has adopted specific environmental policies to minimize construction impacts and impacts resulting from incompatible land and shoreline uses. This report evaluates the project's potential impacts and outlines mitigation measures for consistency with SMC 25.05.

3.1 Data Collection

The project team used several sources of land use information. Assessor's information and geographic information system (GIS) data from King County (2015) and City of Seattle (2015d) were used to derive existing land uses, zoning classifications, and regulatory overlays of parcels within the study area. The GIS information obtained was cross-referenced with publicly available aerial photographs, as well as windshield surveys of the study area for accuracy. The team also reviewed regulations, policies, and plans as discussed in Chapter 4, Affected Environment.

3.2 Selection of Study Area

The Missing Link project is located in the Ballard neighborhood of Seattle, Washington. For the purposes of this study, "Ballard" refers to the area bounded by Shilshole Bay to the west, Salmon Bay to the south, 8th Ave NW to the east, and NW 85th St to the north (Figure 3-1).

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 3-1). The study area includes properties on both sides of the street adjacent to each of the Build Alternatives and connector segments, areas from which those properties take access, and properties whose primary access may be affected by a proposed Build Alternative.

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

3.3 Identification of 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 identified as a potentially significant adverse impact.

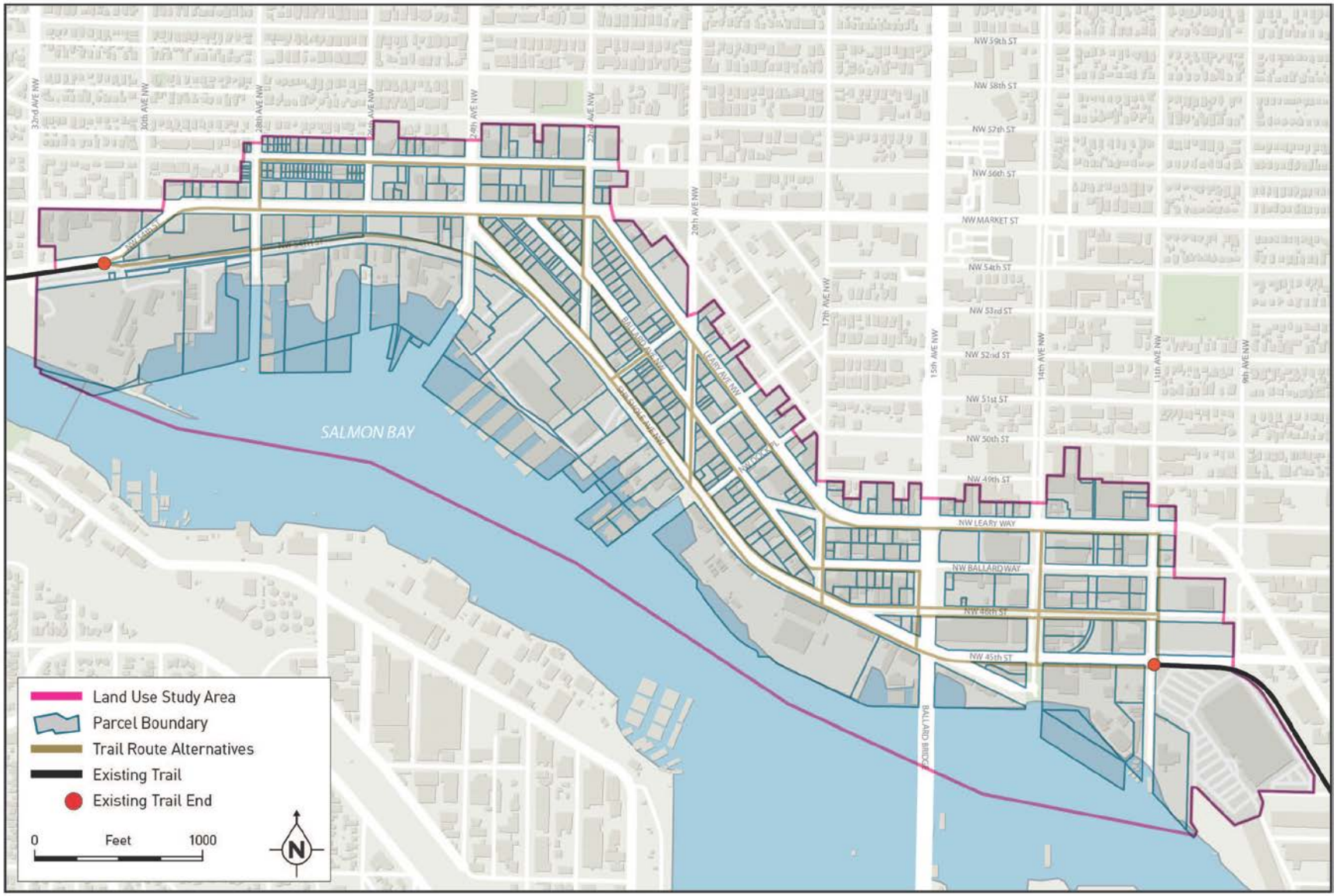

Figure 3-1. Study Area

3.4 Identification of Avoidance, Minimization, and Mitigation Measures

Where potential land use impacts could occur, the team identified measures to avoid, minimize, or mitigate those impacts. These measures are proposed to encourage continuation of existing property uses, avoid use conflicts, and maintain consistency with policy guidance.

3.5 Cumulative Impacts Analysis

Cumulative impacts were analyzed by considering past, present, and reasonably foreseeable future actions that could impact land uses when considered in conjunction with the Missing Link project. This could include transportation projects, other planned developments, or land use changes within the area. SDOT compiled a list of projects and plans that may contribute to cumulative impacts in the study area, as discussed in Chapter 7 of this report.

CHAPTER 4: AFFECTED ENVIRONMENT

4.1 Existing Land Uses

Land uses within the study area vary in type, intensity, and their relationship to other nearby uses and amenities. Land uses in the study area are depicted in Figure 4-1. 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") and currently vacant or unused parcels (labeled "vacant"). Parking that is accessory to a primary use is designated as the primary use with which it is associated; for example, parking accessory to a commercial use is labeled as a commercial use. Stand-alone parking is designated "parking."

Photo 4-1. Pacific Fisherman Shipyard

Source: Google Images, 2016.

Because Ballard is experiencing rapid growth (City of Seattle, 2015b), 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 (Photo 4-1). The waterfront industry provided employment opportunities for workers who settled neighborhoods to the north, and Market Street provided a downtown commercial core (City of Seattle, 2015b). 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. Appendices A–D list water-dependent and water-related uses along each alternative route.

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 are evident on some of the vacant railroad corridor parcels.

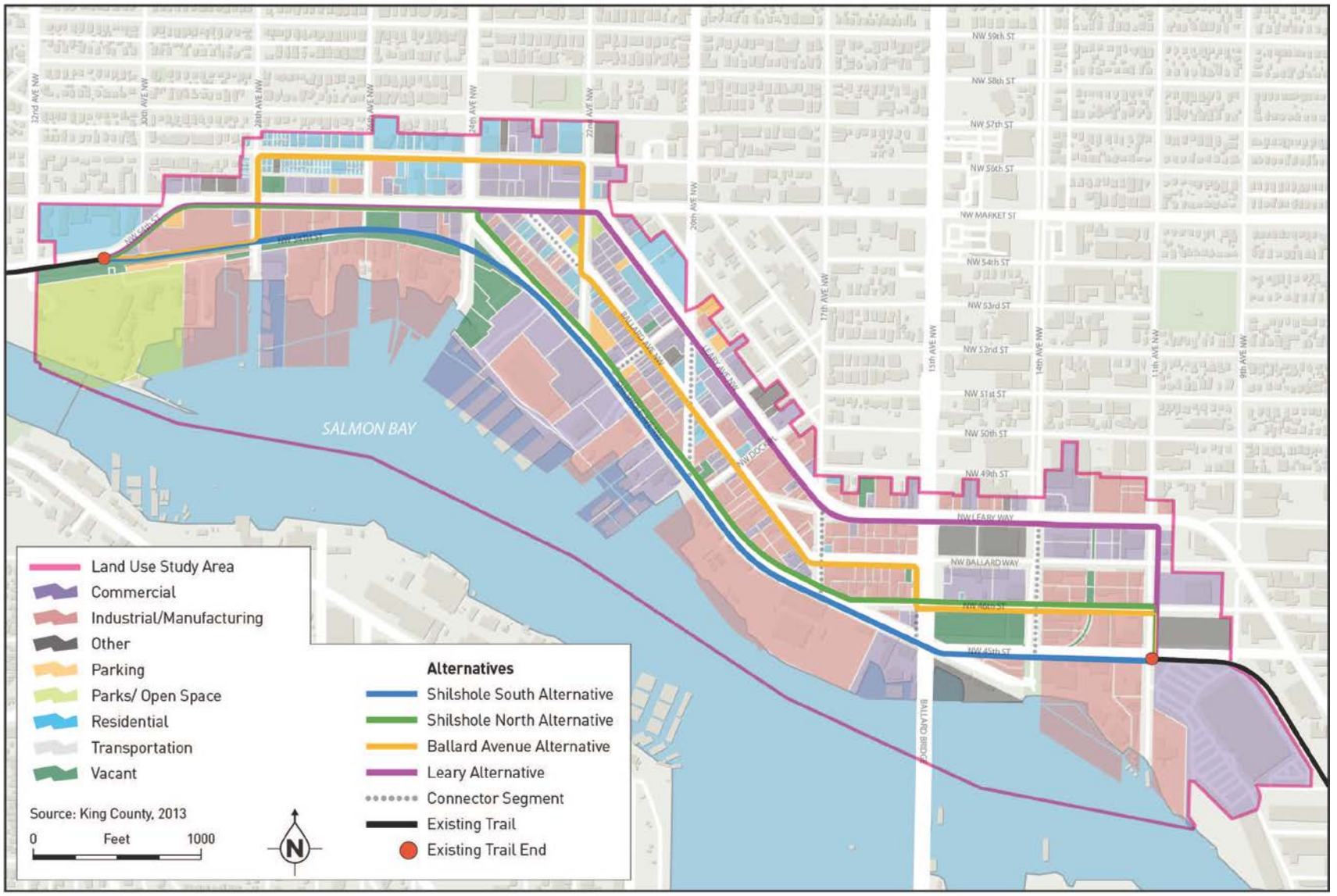

Figure 4-1. Land Uses within the Study Area

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 (Section 4.3.2). Buildings throughout the landmark district embody the distinctive characteristics of modest commercial architecture from the 1890s through the 1940s (City of Seattle, 2015c; SWCA Environmental Consultants, 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. Uses generally transition to mixed-use residential, and then to pedestrian-oriented commercial retail (restaurants, shops, bars, boutiques, etc.) heading east. 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 weekly Ballard Farmers Market, the annual weekend-long SeafoodFest, and the Seventeenth of May Festival take place throughout the study area.

Pedestrian activity is generally 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 provide 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.

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 rights-of-way occur throughout the study area. Although the east and west trail ends of the BGT 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 provide multi-modal trip opportunities to and from the area. In addition, 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 reflects 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 and industrial 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 (see Section 4.3) (City of Seattle, 2015b).

Figure 4-2 displays the 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 percent of the total land area, with commercial uses composing approximately 33 percent, and residential uses accounting for about 8 percent of the total land area within the study area.

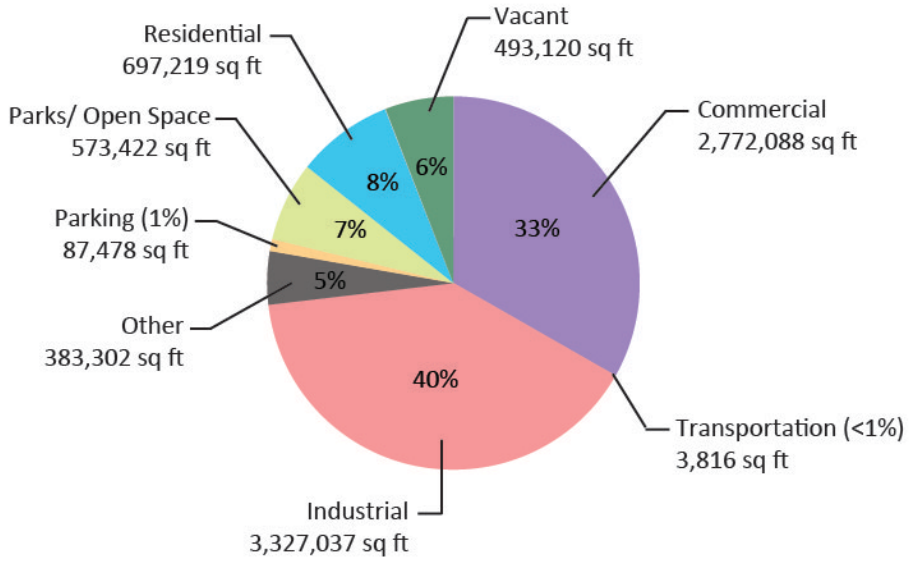

Figure 4-2. Land Area Occupied by Existing Land Uses within the Study Area

4.2 Applicable Plans and Policies

This section discusses state, regional, and City land use laws, codes, and plans that currently apply to this project. Each of the following laws, codes, or plans promotes one or more overarching land use goals. Note that laws, codes, and plans are regularly updated and may change, and the project will be subject to all that are applicable.

4.2.1 State Plans and Policies

Growth Management Act

The GMA provides a framework for local jurisdictions to plan for growth (Revised Code of Washington [RCW], Chapter 36.70A). It establishes goals, deadlines, and direction on how to prepare local comprehensive plans and development regulations so that the state's resources are used efficiently and are available for current and future generations to enjoy.

Shoreline Management Act

The SMA addresses the use of shorelines within the state by establishing a regulatory framework that focuses on compatible, environmentally sustainable, and publicly accessible shoreline use. The SMA emphasizes accommodating appropriate uses that require a shoreline location, differentiating between uses that are not water-dependent or water-oriented and those that are, and encouraging stewardship of the shoreline environment. The SMA also requires protection of shoreline environmental resources and protection of the public's right to access and use the shorelines (RCW 90.58.020). The City of Seattle implements the SMA through its Shoreline Master Program (SMP), discussed in Section 4.3.1.

4.2.2 Regional Plans – VISION 2040

The PSRC developed VISION 2040 as a strategy for accommodating expected growth in central Puget Sound by 2040 through regional transportation, economic development, and growth management planning (PSRC, 2008). VISION 2040 proposes concentrated growth and employment in urban centers, with high-quality multimodal transportation linkages between the centers. The plan promotes the well-being of people and communities, economic vitality, and a healthy environment. It contains an environmental framework, goals, implementation actions, and measures to monitor progress, and it provides a regional framework for long-range transportation planning that integrates various forms of transportation, including bicycling and walking.

Transportation 2040, a component of VISION 2040, provides a long-term strategy for regional investment in transportation to account for rising travel demands. The Missing Link is included in PSRC's Transportation 2040 Update as a priority project in the 10-year action strategy. Infrastructure improvements for nonmotorized transportation, particularly facilities that complete a missing link, are considered key projects (PSRC, 2014).

4.2.3 City of Seattle Comprehensive Plan

The City of Seattle Comprehensive Plan—Toward a Sustainable Seattle is a 20-year plan that articulates a vision for growth in Seattle in a way that sustains its citizens' values (City of Seattle, 2015a). The plan guides the City's decision-making process for integral elements of the City's design and development, including land use, transportation, housing, capital facilities, utilities, economic and human development, and neighborhood planning, while considering regional land uses and infrastructure. The City reviews and amends the Comprehensive Plan annually, and it was last updated in June 2015. Final adoption of the next full Comprehensive Plan update is anticipated in June 2016.

Several elements of the 2015 Seattle Comprehensive Plan contain goals and policies that are relevant to the Missing Link, as described below.

Urban Village Element 1.1

The Urban Village Element strives 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 Ballard-Interbay Northend Manufacturing and Industrial Center (BINMIC) (Figure 4-3). Hub urban villages are communities that provide a balance of housing and employment, generally at densities higher than single-family neighborhoods but lower than those found in urban centers. 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.

Figure 4-3. Ballard Hub Urban Village and the Ballard-Interbay Northend Manufacturing and Industrial Center

Following is a summary of applicable urban village goals and policies in the Comprehensive Plan, followed by goals and policies specific to hub urban villages and manufacturing/industrial centers.

General Urban Village Goals and Policies

Urban Village Strategy - Relevant Goals

UVG3: Promote densities, mixes of uses, and transportation improvements that support walking, use of public transportation, and other transportation demand management (TDM) strategies, especially within urban centers and urban villages.

UVG6: Accommodate a range of employment activity to ensure employment opportunities are available for the city's diverse residential population, including maintaining healthy manufacturing and industrial areas.

UVG9: Maximize the benefit of public investment in infrastructure and services, and deliver those services more equitably by focusing new infrastructure and services, as well as maintenance and improvements to existing infrastructure and services, in areas expecting to see additional growth, and by focusing growth in areas with sufficient infrastructure and services to support that growth.

UVG11: Increase public safety by making villages places that people will be drawn to at all times of the day.

UVG12: Promote physical environments of the highest quality, which emphasize the special identity of each of the city's neighborhoods, particularly within urban centers and villages.

Urban Village Strategy - Relevant Policies

UV2: Promote conditions that support healthy neighborhoods throughout the city, including those conducive to helping mixed-use urban village communities thrive, such as focused TDM strategies, vital business districts, a range of housing choices, a range of park and open space facilities, and investment and reinvestment in neighborhoods.

UV3: Consider the following characteristics appropriate to all urban village categories except Manufacturing and Industrial Centers [*policy includes a numbered list of characteristics; the following are the two relevant to this project*]:

(10.) Parks, open spaces, street designs, and recreational facilities that enhance environmental quality, foster public health and attract residential and commercial development;

(11.) A place, amenity, or activity that serves as a community focus.

UV4: Consider the following characteristics appropriate to Manufacturing and Industrial Centers:

(3.) The ability to accommodate a range of industrial activity compatible with the overall function, character, and intensity of development specified for the center.

UV9: Preserve developments of historic, architectural, or social significance that contribute to the identity of an area.

UV10: Maintain and enhance retail commercial services throughout the city, especially in areas attractive to pedestrians and transit riders, to support concentrations of residential and employment activity, with special emphasis on serving urban villages.

Categories of Urban Villages - Relevant Goals

UVG16: Guide public and private activities to achieve the function, character, amount of growth, intensity of activity, and scale of development of each urban village consistent with its urban village designation and adopted neighborhood plan.

Open Space Network – Relevant Goals

UVG37: Provide healthy spaces for children and their families to play; for more passive activities such as strolling, sitting, viewing, picnicking, public gatherings, and enjoying the natural environment; and for active uses such as community gardening, competitive sports, and running.

UVG38: Through the creation, preservation, and enhancement of the city's open spaces, support the development patterns called for by this plan and provide spaces for sports and recreation.

UVG39: Enhance the urban village strategy through the provision of amenities in more densely populated areas, increased opportunities to walk regularly to open spaces by providing them close by, connections linking urban centers and villages through the provision of urban trails and other means, and a network of connections to the regional open space system.

Open Space Network - Relevant Policies

UV50: Establish, through the combined systems of urban trails, green streets, and designated boulevards, a network among the city's varied open space features and urban villages and urban centers as well as connections with recreational and natural areas within the Puget Sound region.

UV53: Direct efforts to expand the open space network into urban centers and villages targeted for the largest share of residential growth and/or into locations with a recognized neighborhood plan that includes open space recommendations consistent with open space policies. Acquire and develop facilities in critical open space linkages, connectors, and corridors that are highly accessible for active use within or directly serving urban villages, high density, and/or high pedestrian, bicycle or transit use areas; open space linkages, connectors, and corridors that are highly accessible for active use serving other high pedestrian, bicycle, or transit use areas; and other types of open space within or adjacent to urban villages that are accessible from adjacent urban villages.

Manufacturing/Industrial Centers Goals and Policies within the Urban Village Element

Manufacturing/Industrial Centers – Relevant Goals

UVG21: Ensure that adequate accessible industrial land remains available to promote a diversified employment base and sustain Seattle's contribution to regional high-wage job growth.

UVG22: Promote the use of industrial land for industrial purposes.

UVG23: Encourage economic activity and development in Seattle's industrial areas by supporting the retention and expansion of existing industrial businesses and by providing opportunities for the creation of new businesses consistent with the character of industrial areas.

Manufacturing/Industrial Centers - Relevant Policies

UV19: Designate as manufacturing/industrial centers areas that are generally consistent with the following criteria and relevant Countywide Planning Policies: Reasonable access to the regional highway, rail, air, and/or waterway system for the movement of goods.

UV22: Strive to retain and expand existing manufacturing and industrial activity.

UV24.1: The City should limit its own uses on land in the manufacturing/industrial centers to uses that are not appropriate in other zones and should discourage other public entities from siting non-industrial uses in manufacturing/industrial centers. An exception for essential public facilities should be provided.

Hub Urban Villages Policies within the Urban Village Element

Hub Urban Villages - Relevant Policies

UV25: Designate as hub urban villages areas that have:

UV25.7.d: Convenient and direct connections to adjacent areas by pedestrians and bicyclists.

UV25.8.b: Open space amenities that include accessibility to major open space resources in the general area via either existing or potential urban trails, boulevards, or other open space links, or anticipated major public investment in open space.

Land Use Element 2.1

The goals of the Land Use Element include the following:

- Providing for a development pattern consistent with the urban village strategy by designating areas within the city where various types of land use activities, building forms, and intensities of development are appropriate (LUG1);
- Fostering neighborhoods in which current and future residents and business owners will want to live, shop, work, and locate their businesses, as well as providing for a range of housing types, commercial, and industrial spaces to accommodate a broad range of people and businesses (LUG2); and
- Encouraging, through the City's land use regulations, development that protects the public's health and maintains environmental quality (LUG3).

Transportation Element 3.1

The Transportation Element contains goals to increase current and future residents' mobility needs by promoting walking and bicycling (TG8, TG9, and TG16). It also includes goals and policies to support the growing economy by preserving and improving mobility and access for the transportation of goods and services (TG19). Additionally, the Transportation Element incorporates recognition and promotion of the urban village strategy when making transportation investments (TG28).

Neighborhood Planning Element 8.1

The Neighborhood Planning Element establishes a set of neighborhood-specific goals and policies for the BINMIC, Ballard/Crown Hill neighborhood, and other neighborhoods that constitute the adopted neighborhood plan and continuing vision and desires of the community. Except for the Ballard Locks, the study area for the Missing Link lies completely within either the BINMIC or the Ballard Hub Urban Village.

The goals and policies most applicable to economic development, freight mobility and transportation, maritime and fishing industry, public services, utilities, open space, and infrastructure for the study area are outlined below. Only goals and policies related to the study area (Figure 4-3) are included, and provisions related to Crown Hill have been omitted.

BINMIC Goals and Policies

Freight Mobility and Transportation – Relevant Goals

BI-G1: Strive to improve industrial traffic flow to and through the BINMIC.

BI-G2: Facilitate truck mobility.

BI-G4: Strive to maintain and enhance intermodal (barge, ship, rail, and truck) connections.

BI-G5: Strive to maintain and promote rail service to and through the BINMIC.

BI-G6: Strive to provide adequate room in the street right-of-way for truck loading and maneuvering where it will not interfere with traffic flow.

BI-G8: Maintain major truck routes to and within the BINMIC in good condition.

BI-G10: To preserve freight mobility: strive to preserve and improve turning radii, visibility and sight lines, clearance and existing lane configuration of streets within the BINMIC; and consider impacts on BINMIC of changes to arterial access routes to the BINMIC.

BI-G11: Support commuting to work to and through the BINMIC by bicycle and walking. Two major factors to consider in trail design and operation are: (1) the operational requirements of adjacent property owners and users, as determined by the City; and (2) the safety of bicycle riders and pedestrians. The City must make every effort in trail design to meet the operational requirements of industrial users while providing for trail safety.

Economic Development – Relevant Policies

BI-P2: Preserve land in the BINMIC for industrial activities such as manufacturing, warehousing, marine uses, transportation, utilities, construction, and services to businesses.

BI-P3: Retain existing businesses within the BINMIC and promote their expansion.

BI-P4: Attract new businesses to the BINMIC.

BI-P5: Recognize that industrial businesses in the BINMIC have the right to enjoy the lawful and beneficial uses of their property.

BI-P6: Strive to provide infrastructure in the BINMIC that is sufficient to ensure the efficient operation and smooth flow of goods to, through, and from the BINMIC. Infrastructure includes publicly built and maintained roads, arterials, utilities, moorage facilities, and other capital investments by the City, Port, County, and state and federal agencies.

BI-P8: Maintain the BINMIC as an industrial area and work for ways that subareas within the BINMIC can be better utilized for marine/ fishing, high tech, or small manufacturing industrial activities.

BI-P12: Within the BINMIC, water-dependent and industrial uses shall be the highest priority use.

Freight Mobility and Transportation – Relevant Policies

BI-P15: Support preservation of all streets within the BINMIC and arterial access routes to the BINMIC for freight mobility. To accomplish this, support preservation of turning radii, visibility and sight lines, clearance, and existing lane configurations.

BI-P16: Support commuting to work by BINMIC employees by bicycle and walking. For safety and operational reasons, however, support locating recreational and commuter through trails away from industrial areas.

Maritime and Fishing Industry – Relevant Policies

BI-P18: Recognize the interdependence of the maritime and fishing industries and related businesses and their special requirements for transportation, utilities, pier space, and chill facilities. Encourage retention of this cluster of businesses and facilitate the attraction of related businesses.

BI-P21: Strive to retain shorelines for water-dependent uses by enforcing waterfront and shoreline regulations in industrial areas.

BI-P22: Strive to provide a physical and regulatory environment that fosters the continued health of the maritime and fishing industries in the BINMIC.

BI-P23: Encourage land assembly on the BINMIC waterfront to accommodate commercial fishing and other heavier maritime uses.

Crown Hill/Ballard Neighborhood Goals and Policies

Relevant Goals

CH/B-G1: A defined, vital, accessible mixed use core with residential and commercial activity in the Ballard Hub Urban Village...

CH/B-G4: A transportation system that supports residential, commercial, and civic activity in the core of the Ballard … urban village, and encourages people to use transit and non-motorized transportation modes.

CH/B-G5: A neighborhood with open space, parks, and recreation sites connected by a network of “green links” that offer a full range of active and passive recreational opportunities to area residents and visitors, throughout Ballard.

Relevant Policies

CH/B-P2: Improve the attractiveness of the business areas in the Ballard Hub Urban Village… to businesses, residents, and shoppers through the creation of pleasant streetscapes and public spaces.

CH/B-P3: Strive to create a mix of locally owned, unique businesses and regional and national retailers.

CH/B-P4: Encourage tourists visiting the Ballard Locks to patronize businesses in the neighborhood.

CH/B-P7: Improve mobility for people using all modes of transportation to, within, and around the Ballard Hub Urban Village to increase retail, commercial, and civic activity.

CH/B-P8: Emphasize accessibility by transit, bicycle, and pedestrians in the downtown Ballard area.

CH/B-P9: Preserve the function of 15th Avenue NW as a principal arterial and a major truck street, but strive to overcome the street as a barrier that isolates the neighborhood areas to the east and west from each other and to improve its contribution to the visual character…

CH/B-P10: Strive to improve the pedestrian environment along NW Market Street while retaining its function as a principal arterial.

CH/B-P11: Take advantage of present and future economic, cultural, and open space developments to enhance the bicycle and pedestrian network.

CH/B-P13: Increase the range of recreation opportunities and types of open space available in the neighborhood. Encourage the development of new facilities, including but not limited to passive parks, tennis courts, basketball courts, ballfields, play areas, marine and shoreline parks, pedestrian-friendly walkways, trails (including the Burke-Gilman), and gateways.

CH/B-P14: Enhance existing open space and recreation sites and facilities...

CH/B-P15: Create opportunities for people to experience the natural environment through encouraging … tree planting… in the public right-of-way; creating access to views and waterways.

CH/B-P20: Seek to attract industrial uses that could have a symbiotic relationship with the local arts community, including but not limited to glass blowing facilities, welding and metalwork shops, facilities that recycle materials into usable objects, woodworking facilities, or large-scale ceramics.

4.2.4 City of Seattle Climate Action Plan

The 2013 Climate Action Plan (CAP) provides a coordinated strategy for City actions to reduce greenhouse gas emissions while supporting other community goals, including building vibrant neighborhoods, fostering economic prosperity, and enhancing social equity. While greenhouse gas emissions can be found in virtually every sector of the community and economy, the 2013 CAP focuses on those sectors where City action is most needed and will have the greatest impact: road transportation, building energy, and waste management. The 2030 vision and 2015 action item list include general pedestrian and bicycle infrastructure expansion and improvements, particularly in the city center and urban villages, but the Missing Link is not specifically mentioned (City of Seattle, 2013).

4.2.5 Seattle Parks and Recreation 2011 Development Plan

The Parks and Recreation Development Plan provides goals and policies related to park acquisition and development; an open space gap analysis update that identifies areas of the city where distribution guidelines for parks and open space are not being met; and the adopted 2006–2011 Capital Improvement Program (CIP) for parks and recreation facilities (City of Seattle, 2011). It states that priority will be given to adding these amenities in underserved areas of the city, particularly urban centers and urban villages with ongoing or projected population growth. The plan states that new multi-use trails will be developed in accordance with the Bicycle Master Plan, with a goal of having an interconnected system of primary and secondary trails throughout the city.

4.2.6 Seattle Department of Transportation Bicycle Master Plan

The Bicycle Master Plan provides a blueprint to encourage and accommodate increased bicycle use by people of all demographic sectors and riding abilities throughout the city. It sets forth goals, objectives, programs, and strategies to make bicycling in Seattle enjoyable and safe on residential streets, multi-use trails, or protected bicycle lanes. The Missing Link is identified as a "catalyst project" whose completion will reduce a critical network gap and increase user safety. The bicycle network map shows the recommended alignment for the Missing Link along Shilshole Ave NW. However, the final alignment for this portion of the BGT will be determined following the completion of the DEIS process, and any changes in the alignment will be reflected in a subsequent update of the plan (SDOT, 2014).

4.2.7 Seattle Department of Transportation Pedestrian Master Plan

The Pedestrian Master Plan is an action agenda intended to build a healthy community through increased walking, bicycling, and transit use with a mission to make Seattle the most walkable city in the nation. It outlines goals, policies, and program recommendations to realize this mission. The goals include safety (reducing the number and severity of crashes involving pedestrians); equity (making Seattle a more walkable city for all through equity in public engagement, service delivery, accessibility, and investments); vibrancy (developing a pedestrian environment that sustains healthy communities and supports a vibrant economy); and health (raising awareness of the important role of walking in promoting health and preventing disease). The plan does not specifically include completion of the Burke-Gilman Trail; however, the study area is included as a high priority for pedestrian improvements (SDOT, 2009).

4.2.8 Seattle Department of Transportation Freight Mobility Strategic Action Plan

The Freight Mobility Strategic Action Plan (SDOT, 2005) recognizes that freight mobility issues are particularly important for the BINMIC and the Duwamish Manufacturing Industrial Center. It reports that these two areas are expected to accommodate at least 10 percent of Seattle's new employment from 2005 through 2025. The plan identifies protection of the industrial land base and improvements to freight mobility as important elements for keeping and retaining business in the manufacturing and maritime sectors. With guidance from the Comprehensive Plan, the Strategic Action Plan outlines measures to encourage freight mobility with an emphasis on ground transportation, particularly around marine uses. This plan will be replaced upon adoption of the City's first Freight Master Plan, currently in development.

All arterial streets within the city are designated freight routes (SDOT, 2005). A number of streets within the study area are also designated "major truck streets" that accommodate a substantial amount of freight movement to and from major freight traffic generators. As described in the Transportation Discipline Report (Parametrix, 2016b), these major truck streets include the following:

- Shilshole Ave NW;
- NW 46th St;
- NW Leary Way between 11th Ave NW and 15th Ave NW; and
- 15th Ave NW.

The Comprehensive Plan and Transportation Strategic Plan guide the City's freight policy. The following transportation, economic development, and neighborhood planning goals, policies, and strategies are integral to the Freight Mobility Strategic Action Plan and are not previously discussed in this report.

Relevant Goals and Policies

TG20: Maintain Seattle as the hub for regional goods movement and as a gateway to national and international suppliers and markets.

T47: Maintain a forum for the freight community to advise the City and other entities on an ongoing basis on topics of land-based freight transportation facility modifications and enhancements. Coordinate the review of potential operational changes, capital projects, and regulations that may impact freight movement. Participate and advocate Seattle's interests in regional and state forums.

T48: Recognize the importance of the freight network to the city's economic health when making decisions that affect "major truck streets" as well as other parts of the region's roadway system.

T49: Support the efficient and safe movement of goods by rail where appropriate. Promote continued operation of freight rail lines and intermodal yards that serve industrial properties and the transport of goods. Improve the safety and operational conditions for freight rail transport at the rail track crossings within city streets.

T50: Promote an intermodal freight transportation strategy, including rail, truck, air, and water transport and advocate for improved freight and goods movement. Work toward improved multimodal connections among rail yards, industrial areas, airports, and regional roadways.

T51: Consider the needs for the local delivery and collection of goods at businesses by truck when making street operational decisions and when developing and implementing projects and programs for highways, streets, and bridges.

Relevant Strategies

GS1: Maintain a street and highway network for trucks.

GS1.3: Design Standards for Oversized Vehicles: … The City will continue to review current standards and modify them to ensure that when arterials—especially major truck streets—are redesigned and rebuilt, they are better able to accommodate truck movements, in coordination with other street use needs.

GS1.6: Minimize Conflicts between Trucks and Other Transportation Modes: There are a number of basic conflicts between medium to heavy truck traffic and other motorized, nonmotorized, and pedestrian

modes of transportation that the City continually needs to evaluate and address. Possible solutions might include identifying alternative routes, developing separate facilities, and clarifying priorities for specific locations.

GS3: Improve Freight Access to Manufacturing and Industrial Areas: This strategy calls for reliable, direct infrastructure connections to water, rail, and truck facilities for existing and new businesses in Seattle's manufacturing and industrial areas. The strategy acknowledges the "paramount importance" of truck access, because the nature of these businesses requires higher truck volumes and trip frequencies than in other areas of the City. It states that to protect and improve freight access to manufacturing and industrial areas, the City should develop strategies that preserve good ground transportation access to manufacturing and industrial sites served by freight carriers and their supporting facilities (including rail and marine); improve and protect the utility of "major truck streets" to and from manufacturing and industrial areas; facilitate efficient movement of goods within the manufacturing and industrial areas; include local business access during construction planning in industrial areas; and allow loading and maneuvering of trucks on nonarterial access streets in industrial areas, where safe and appropriate.

GS5: Facilitate Efficient Retail and Office Goods Delivery.

GS5.1: Improve Freight-Dependent Business Site Access through Management of Curb Space and Alleys. Continue to work with business district representatives and individual businesses to install commercial and passenger load zones where appropriate.

GS5.2: Develop and Implement Goods Delivery Strategies: The everyday delivery of goods and services purchased by the general public, businesses, and government is critical to our economy's success. Explore strategies that address issues of goods delivery and managing operational impacts on adjacent land uses. Balance the needs for loading zones with other curb use needs. Ensure that loading zones are reserved for freight loading and unloading as intended with appropriate levels of enforcement.

GS6: Freight Mobility Coordination and Implementation.

GS6.5: Improve Communication Tools for Construction-Related Traffic Impacts for Freight Mobility and Access. Timely notification of [construction] activities can assist freight operators in planning for alternative routes.

4.2.9 Move Ballard: A Multimodal Transportation Plan for the Hub Urban Village

The Move Ballard Multimodal Transportation Plan is currently being developed, but no draft is yet available. It is included in this study because, if adopted, it will affect land use and transportation infrastructure in Ballard. In response to recent rapid growth in the Ballard Hub Urban Village, the plan will identify and prioritize near-term multimodal transportation improvements. It will also evaluate potential future stations for high-capacity transit (light rail, streetcar, and bus rapid transit) in anticipation of possible Metro and Sound Transit investments in the area. The plan is an integrated element of the Ballard Urban Design and Transportation Framework currently underway.

Projects and improvements identified in the Move Ballard plan will support transit-oriented development, multimodal mobility, freight access and circulation, and user safety. They will also reflect the goals and objectives of existing neighborhood plans, citywide modal plans, previous transportation studies, and the City's overall goals and objectives. Move Ballard will consider the entire Ballard Hub Urban Village with a focus on the potential future high-capacity transit station areas identified in the draft Urban Design and Transportation Framework (November 2015). The Missing Link is not specifically identified in the proposal. The draft plan is expected to be available in mid-2016 (SDOT, 2015).

4.2.10 **Draft Ballard Urban Design and Transportation Framework Plan**

The Ballard Urban Design and Transportation Framework (UDTF) Plan presents recommendations for guiding long-term growth and providing needed improvements while maintaining Ballard's historic character. The UDTF Plan provides recommendations for guiding Ballard's urban design, character, and transportation. The framework includes guidelines supporting a vibrant downtown Ballard business district; creating a hierarchy of great streets and public spaces with special attention to Market Street; preserving green spaces; balancing the mobility needs of pedestrians, bicycles, transit, cars, and freight; and other objectives. It identifies 15th Ave NW as one of the busiest arterials in Seattle, and Shilshole Ave NW as a dedicated truck route, and confirms the Bicycle Master Plan recommendation of completing the Missing Link. It also independently recommends completion of the Missing Link to provide access to the Ballard Locks, Golden Gardens, and Gasworks Park with "careful attention to supporting ongoing maritime and industrial businesses, and associated access needs" (City of Seattle, 2015b).

4.3 Seattle Municipal Code

4.3.1 **Seattle Land Use Code**

The 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 within the city into different zoning designations, creating parameters for 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 (City of Seattle, 2015e). 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.

Zoning

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 4-4, zoning classifications in the study area include industrial, commercial, multifamily, and residential-commercial zones. The function of each zoning designation present in the study area is described below. The ongoing use of streets for transportation purposes is allowed in all 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.

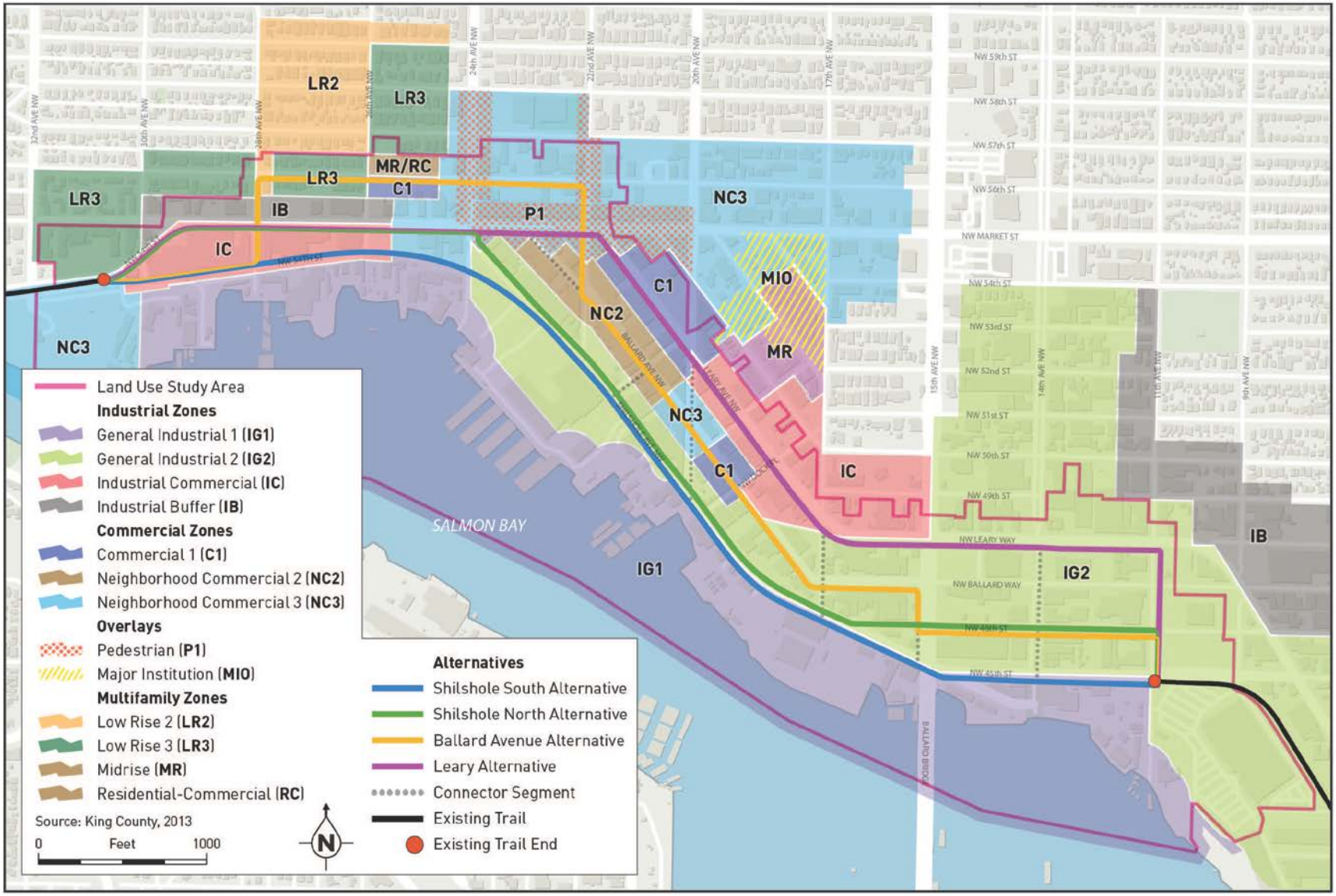

Figure 4-4. Zoning Classification of Parcels in the Study Area

Industrial Zones

General Industrial 1 (IG1)

The function of the IG1 zone is to provide opportunities for manufacturing and industrial uses and related activity where these activities are already established and viable, and where their accessibility by rail and/or waterway makes them a specialized and limited land resource. This zoning designation is most appropriate in areas generally characterized by the following:

- Suitable water access for marine industrial activity;
- Upland property of sufficient depth to accommodate an industrial activity;
- An existing character established by industrial uses and related commercial activity including manufacturing use, warehousing, transportation, utilities, and similar activities;
- Areas directly related to major rail lines serving industrial businesses; and
- Areas containing mostly industrial uses, including manufacturing, heavy commercial, warehousing, transportation, utilities, and similar activities.

This zone allows most nonresidential uses but limits the size of office and retail uses in order to reduce pressure on these areas to convert to nonindustrial uses (City of Seattle, 2012b). Most residential uses are not allowed in the IG1 zone; residential uses are limited to artist studios, caretaker quarters, and dwelling units in a landmark structure or district. These residential uses require special conditions and approvals.

General Industrial 2 (IG2)

The IG2 zone includes existing industrial uses and provides space for new industrial development. The function of the IG2 zone is to accommodate a broad mix of activity, including additional commercial development, when such activity improves employment opportunities and the physical conditions of the area without conflicting with industrial activity. This zoning designation is most appropriate in areas generally characterized by the following:

- Industrial activity or a mix of industrial activity and a wide range of commercial uses;
- Areas where facilities have established a more commercial character for the surroundings and have created the need for a broader mix of support uses;
- Areas with adequate access to the existing and planned neighborhood transportation network where additional trips generated by increased commercial densities can be accommodated without conflicting with the access and circulation needs of industrial activity;
- Areas where increased commercial densities would allow the economic reuse of small sites and existing buildings no longer suited to current industrial needs; and
- Areas that, because of their size and isolation from a larger industrial area due to separation by another type of zone or major physical barrier, such as an arterial or waterway, can accommodate more nonindustrial activity without conflicting with the industrial function of the larger industrial area.

This zone allows most nonresidential uses and limits the size of office and retail uses, but to a lesser extent than the IG2 zone (City of Seattle, 2012b). Similar to the IG1 zone, the IG2 zone limits residential uses to artist studios, caretaker quarters, and dwelling units in a landmark structure or district, and only allows them under special conditions and approvals.

Industrial Commercial (IC)

The IC zone is intended to promote development of businesses that incorporate a mix of industrial and commercial activities, including light manufacturing and research and development, while accommodating a wide range of other employment activities. This zone allows most nonresidential uses and limits the size of retail uses, but it does not specifically limit the size of office uses (City of Seattle, 2012b). Similar to the IG1 and IG2 zones, the IC zone limits residential uses to artist studios, caretaker quarters, and dwelling units in a landmark structure or district, and only then allows them under special conditions and approvals.

Industrial Buffer (IB)

The function of the IB zone is to provide an appropriate transition between industrial areas and adjacent residential zones, or commercial zones with a residential orientation and/or pedestrian character. The IB zoning designation is most appropriate in areas generally characterized by the following:

- Existing industrial uses or a mix of industrial activity and a wide range of commercial uses that are located on the edge of a larger industrial area; and
- Areas where a transition is needed to protect a less-intensive zone from potential negative impacts of industrial activity when the area directly abuts a residential or commercial zone with a substantial amount of residential development and/or pedestrian character.

The IB zone allows most nonresidential uses and limits the size of retail and office uses to allow the transition to residential uses (City of Seattle, 2012b). Similar to the IG1, IG2, and IC zones, the IB zone limits residential uses to artist studios, caretaker quarters, and dwelling units in a landmark structure or district, and only then allows them under special conditions and approvals.

Commercial Zones

Commercial 1 (C1)

The function of the C1 zone is to provide for an auto-oriented, primarily retail/service commercial area that serves surrounding neighborhoods and the larger community, citywide, or regional clientele. This zoning designation is generally applied to areas with limited pedestrian and transit services. This zone allows most commercial and residential uses and prohibits heavy manufacturing and high-impact uses.

Neighborhood Commercial 2 (NC2)

The function of the NC2 zone is to support or encourage a pedestrian-oriented shopping area that provides a full range of household and personal goods and services to the surrounding neighborhoods and that accommodates other uses compatible with the retail character of the area (such as housing or offices), where an atmosphere attractive to pedestrians can be achieved, and where shoppers can drive to the area but walk from store to store. The designation is generally characterized by the following:

- Streets with good capacity, such as principal and minor arterials, but generally not on major transportation corridors;
- A lack of strong edges to buffer the residential areas;
- A mix of small and medium sized parcels; and
- Limited or moderate transportation service.

The NC2 zone allows most commercial uses that are not auto-oriented (within certain size limits), allows residential uses, and prohibits high-impact uses and most manufacturing uses.

Neighborhood Commercial 3 (NC3)

The function of the NC3 zone is to support or encourage a pedestrian-oriented shopping district that serves the surrounding neighborhood and a larger community, citywide, or regional clientele; that provides comparison shopping for a range of retail goods and services; that incorporates offices, business support services, and residences that are compatible with the retail character of the area and where intense pedestrian activity can occur; where excellent transit service is available and an important means of access; and where shoppers can drive to the area but walk from store to store. This zone allows most commercial uses (allowing larger businesses than NC2), allows residential uses, and prohibits high-impact uses and most manufacturing uses.

Pedestrian Overlay (P1)

The Seattle Land Use Code provides for special pedestrian overlays in commercial zones that are intended to preserve and encourage pedestrian-oriented retail areas. New developments must meet specific standards that include a set of permitted and prohibited uses, reduced parking requirements, and limitations on blank facades. These areas are, or could become, neighborhood main streets where services can be accessed without driving, or at least with fewer automobile trips. In pedestrian zones, people are encouraged to park their cars conveniently and walk from business to business if they choose to drive.

When the pedestrian overlay is added to a neighborhood commercial (NC) zone, the intention is to preserve areas that offer a mix of street-level, pedestrian-oriented destinations accessible by foot, bicycle, and transit; identify and encourage areas that have potential to transition to a pedestrian-oriented neighborhood business district; and encourage more walking, biking, and transit use to and within neighborhood business districts by preserving and promoting active destinations. The Seattle Land Use Code identifies two pedestrian overlay zones, P1 and P2. The study area contains the P1 pedestrian overlay (Figure 4-4). The P1 designation encourages “intense pedestrian interest and activity at street level with a wide variety of retail and service activities, and large numbers of shops and services per block.” This designation favors development built to the front property line, minimal pedestrian/auto conflicts, and a minimum of auto–oriented uses or interruptions (City of Seattle, 2016).

Multifamily Zones

Low Rise 2 (LR2)

The dual functions of the LR2 zone are to: (1) provide opportunities for a variety of multifamily housing types in existing multifamily neighborhoods and along arterials that have a mix of small-scale residential structures, and (2) accommodate redevelopment in areas within urban centers and urban villages in order to establish multifamily neighborhoods of low scale and density. This zone allows residential and associated uses and the establishment or expansion of parks and playgrounds, but largely prohibits other uses (SMC 23.45.504, Table A) (City of Seattle, 2015e).

Low Rise 3 (LR3)

The functions of the LR3 zone are to provide opportunities for a variety of multifamily housing types in existing multifamily neighborhoods, and along arterials that have a mix of small to moderate scale residential structures, and to accommodate redevelopment in areas within urban centers, urban villages, and Station Area Overlay Districts in order to establish multifamily neighborhoods of moderate scale and

intensity. This zone allows residential and associated uses and the establishment and expansion of parks and playgrounds, but largely prohibits other uses (SMC 23.45.504, Table A) (City of Seattle, 2015e).

Midrise (MR)

The function of the MR zone is to provide concentrations of housing in desirable, pedestrian-oriented neighborhoods with convenient access to regional transit stations, where the mix of activity provides convenient access to a full range of residential services and amenities, and opportunities for people to live within walking distance of employment. These areas are generally served by major arterials with good to above-average transit service close to major employment centers and open space and recreational facilities. This zone allows residential and associated uses and the establishment and expansion of parks and playgrounds, but largely prohibits other uses (SMC 23.45.504, Table A) (City of Seattle, 2015e).

Residential-Commercial Zones

Residential-Commercial (RC)

Areas zoned RC are always combined with another multifamily designation, but they allow limited commercial uses (on the ground floor only) and allow accessory parking for commercial uses in an adjacent commercial district. All uses in this zone are regulated by the residential zone provisions except some commercial uses and live-work units, which are either permitted outright or by conditional use permit in the applicable residential zone (SMC 23.46.004.A) (City of Seattle, 2015e).

Shoreline District and Environments

The 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 the ecosystems of shoreline areas; encourage water-dependent uses; provide for maximum public use and enjoyment of the shorelines of the city; and preserve, enhance, and increase views of and access to the water.

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 4-5). 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 SMA 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 within the study area: Urban Industrial (UI), Conservancy Management (CM), and Conservancy Navigation (CN). Reconfiguration of the existing right-of-way for the Missing Link would be allowed within the affected shoreline environments under the current SMP. Shoreline environments present within the study area are described below and shown on Figure 4-5.

Urban Industrial (UI)

The purpose of the UI environment is to provide for the efficient use of industrial shorelines by major cargo facilities and other water-dependent and water-related industrial uses, to allow for warehouse uses

that are not water-dependent or water-related where they currently exist, to provide public access on public lands, and to accommodate ecological restoration and enhancement where reasonable. The UI environment allows limited uses that are not water-oriented and development where they would not displace water-oriented uses. Streets, railroads, rail transit facilities, and shoreline parks and open space are allowed. Overwater uses are generally prohibited, unless the use is water-dependent in an existing building or on existing structures, and it is a commercial, light, or general manufacturing use of a terminal for cargo or passengers. Overwater uses are only allowed with special permit or City Council approval.

Conservancy Management (CM)

The purpose of the CM environment is to provide for water-dependent infrastructure, such as navigational locks, that provide a substantial public health benefit and recreational facilities, such as marinas and parks. Development allowed in the CM environment is intended to be managed to preserve ecological functions and typically should provide public access. Uses that can be allowed in the CM environment include shoreline parks and open space, recreational marinas and dry boat storage, rail transit facilities, and streets. Prohibited uses include manufacturing uses, commercial marinas and other heavy commercial uses, and residential uses.

Conservancy Navigation (CN)

The CN environment provides for open water navigation. This shoreline environment designation is generally limited to submerged lands used as a fairway for vessel navigation. Navigational aids and rail transit facilities are allowed uses in this environment and most uses unrelated to water navigation are prohibited. However, streets, bicycle paths, pedestrian paths, and viewpoints can be allowed on dry land.

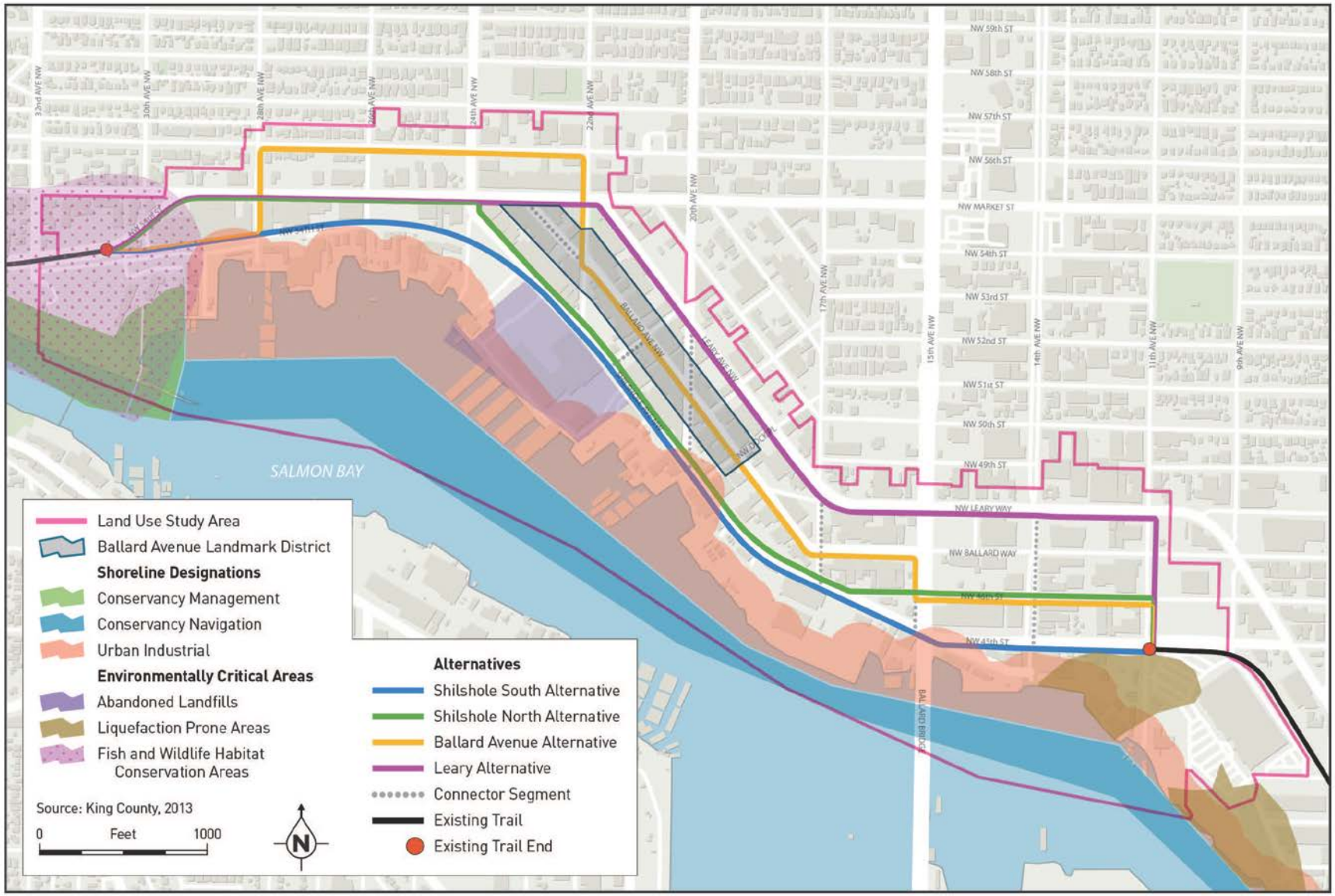

Figure 4-5. Shoreline Environments, Critical Areas, and Ballard Avenue Landmark District

4.3.2 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. The study area contains environmentally critical areas and a designated historic district as discussed below.

Environmentally Critical Areas

An abandoned landfill, liquefaction-prone zones, and fish and wildlife habitat conservation areas are present within the study area (Figure 4-5).

The abandoned landfill is south of Shilshole Ave NW and is 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 the long-term viability and proliferation of targeted species. Areas designated by the Washington State Department of Fish and Wildlife 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 Landmark District

A portion of the study area along Ballard Ave NW lies within the Ballard Avenue Landmark District, an area of historical significance to Ballard and Seattle. The district boundary runs along Ballard Ave NW from NW Dock Pl to the southeast to NW Market St to the northwest (Figure 4-5). 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.

CHAPTER 5: POTENTIAL IMPACTS

This chapter evaluates the potential for each alternative to impact existing land uses, as well as each alternative's consistency with adopted plans, policies, and codes. A potential significant adverse impact on land use would occur if an alternative would change existing land uses in a manner that is inconsistent with adopted plans, policies, and codes.

5.1 No Build Alternative

5.1.1 Effect on Existing Land 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.

5.1.2 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, 2016b). Under the No Build Alternative, nonmotorized users would continue to travel on available sidewalks and along the street network, which lacks designated bicycle lanes. Particularly along Shilshole Ave NW, which often serves as a direct link for nonmotorized users 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 engineering and design of a designated trail.

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

- **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.
- **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.
- **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.
- **Seattle Department of Transportation Bicycle Master Plan:** The Missing Link is identified as a "catalyst project" whose completion will eliminate a critical network gap and increase user safety.

- **Seattle Department of Transportation Freight Mobility Strategic Action Plan:** Goals and policies promote the efficient and safe movement and access of freight to manufacturing and industrial areas. Increased motorized and nonmotorized congestion in the study area would result in slower freight movement, delayed goods delivery, and worsening potential for user conflicts, and would not promote increased efficiency or access.

The existing BGT is used for both commuting and recreation. State, regional, and local plans and policies discussed in Section 4.2 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 in order to provide alternatives to motorized transportation, to connect neighborhoods, and for the positive health impacts that trail recreation could provide. The No Build Alternative would be inconsistent with these plans and policies. It would also be inconsistent with some policies in SDOT's Freight Mobility Strategic Action Plan because motorized and nonmotorized traffic congestion and user conflicts are expected to increase, and the No Build Alternative would not propose a plan that would provide predictability to traffic flow.

See Appendices E and F for a summary discussion of alternative consistency with the goals and policies of the Comprehensive Plan and the Seattle Department of Transportation Freight Mobility Strategic Action Plan. Increased congestion in the study area would not promote increased efficiency or access.

5.2 Impacts Common to All Build Alternatives

5.2.1 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;
- Parking needs would increase from construction crews, and the available on-street parking would be reduced; 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; and
- 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 land 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 reduction in patronage for businesses, particularly commercial retail and entertainment that rely on auto and foot

traffic. Traffic congestion could delay the pick-up and delivery of goods, thus impacting normal business activities. Nonmotorized activity would continue during construction, which could result in use 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 plans, policies, and codes, and are therefore not expected to have a significant adverse impact on land uses in the study area.

5.2.2 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 in the form of 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 the rest of the BGT. The improvements would also beautify the streetscape and repair sidewalk segments, which could attract additional people to the study 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. Attracting additional people to the study area may tend to not benefit industrial uses.

Alterations to the road network associated with all Build Alternatives are expected to facilitate traffic flow at some study area intersections (Parametrix, 2016b), 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, 2016b).

All Build Alternatives could 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 routes 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 are anticipated to adapt to the minor delays, loss of parking, and changes to loading areas along with other changing conditions of their business practice. 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 plans discussed in Section 4.2 promote the development of infrastructure for nonmotorized and multimodal transportation, as well as recreation 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, use conflicts are minimized. If a project does not adhere to adopted plans, policies, and codes, use conflicts could negatively affect community health, safety, and welfare.

Additionally, 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 generally consistent with these aspects of all these plans. A summary discussion of each Build Alternative's consistency with the Comprehensive Plan and the Seattle Department of Transportation Freight Mobility Strategic Action Plan is included in Appendices E and F, respectively. Some policies require further discussion (below).

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

Goal UVG3 promotes transportation improvements that support walking and other transportation strategies, especially within urban villages. Goal UVG9 supports maximizing the benefit of public investment in infrastructure, and making improvements to existing infrastructure, in areas expected to see additional growth. Policy UV53 supports the expansion of the open space network into urban villages that are targeted for residential growth. Policy UV3 states that street designs, recreational facilities, parks, and open spaces that enhance environmental quality, foster public health, and attract residential and commercial development; and places, amenities, or activities that serve as a community focus are appropriate to all urban village categories *except manufacturing and industrial centers* (emphasis added).

Neighborhood goals and policies encourage nonmotorized access and connected "green links" that support residential, commercial, and civic activity, particularly along the "core" of NW Market St. These goals and policies target the Ballard Hub Urban Village and the Ballard Locks. Additionally, pedestrian and bicycle accessibility to the downtown core from transit stops, the Ballard Locks, and elsewhere is emphasized. The plan specifically supports the development of the BGT (CH/B-P13).

The Comprehensive Plan also makes specific provisions for manufacturing and industrial centers. The Comprehensive Plan contains specific goals to:

- Protect the vitality of manufacturing and industrial centers;

- Promote, retain, and expand existing manufacturing and industrial areas for industrial purposes;
- Encourage the City to limit its uses of land in the manufacturing/industrial centers to uses that are not appropriate in other zones;
- Maintain the BINMIC as an industrial area and provide for better use of the BINMIC for marine/fishing and other industrial activities; and
- Make water-dependent and industrial uses within the BINMIC the highest priority use.

These plans and policies do not support locating commuter or recreational trails within the BINMIC, particularly if this could delay freight movement, interfere with industrial/ manufacturing uses, or affect water-related or water-dependent uses. All of the Build Alternatives require some portion of the trail to be located within the BINMIC. To provide nonmotorized access to the BINMIC, some portion of the trail would need to be located within the manufacturing and industrial land uses. The amount of trail that would be located in the BINMIC varies by alternative (Figure 5-1). These and other differences among the alternatives are discussed separately in Sections 5.3 through 5.6. Although all Build Alternatives would serve a hub urban village, a substantial portion of the project footprint for each Build Alternative is located within industrial zones. There could be minor to moderate impacts on industrial, water-dependent, and water-related businesses in the BINMIC under any alternative, due primarily to impacts on access, egress, and loading. These impacts are described in greater detail in the Transportation Discipline Report (Parametrix, 2016b). However, the potential 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 is not expected to be significantly adversely impacted under any Build Alternative.

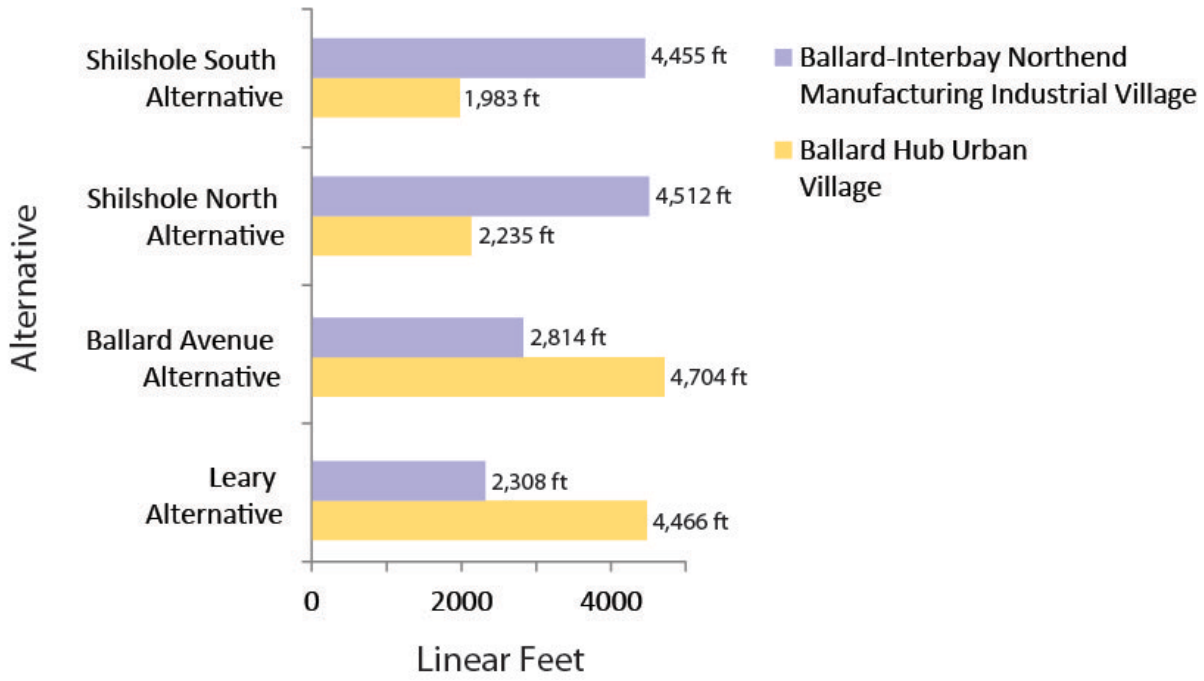

Figure 5-1. Length of Trail within Ballard Hub Urban Village and BINMIC Designations for Each Build Alternatives

Any of the Build Alternatives would reconfigure at least a small amount of existing right-of-way in the BINMIC for the multi-use trail, including a portion of existing right-of-way within the industrial area. 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, 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 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, and 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 and manufacturing uses, especially water-related or water-dependent uses. 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. The amount of trail that could be located in the BINMIC varies by alternative, but all of the Build Alternatives would locate some of the trail within public right-of-way in the manufacturing and industrial center because the east trail end is in it. All of the Build Alternatives would cross or run parallel to major truck streets, but none would substantially reduce the level of service (LOS) on these roadways, and some could improve the functions of these routes.

Seattle Parks and Recreation 2011 Development Plan

The Seattle Parks and Recreation 2011 Development Plan supports the acquisition and development of parks and open space, and states that new multiuse trails will be developed in accordance with the Bicycle Master Plan.

Seattle Department of Transportation Bicycle Master Plan

The 2014 Bicycle Master Plan identifies the Missing Link as a priority project needed to close a network gap. The plan recommends a final trail alignment that is consistent with the DEIS and states that the plan will be updated accordingly. All Build Alternatives would be consistent with this plan.

Seattle Department of Transportation Pedestrian Master Plan

All Build Alternatives would encourage walking and bicycling in the study area, which has been identified as a high-priority area for improvements. The Build Alternatives are also relatively close to transit stops, and the plan encourages increased transit use. All Build Alternatives would be consistent with this plan.

Move Ballard and the Draft Ballard Urban Design and Transportation Framework

All Build Alternatives would be consistent with these plans since any trail alignment would likely support enhancing Ballard's overall vibrancy and balancing mobility needs of various right-of-way users. The UDTF specifically recommends completion of the BGT Missing Link to provide access to the Ballard Locks, Golden Gardens, and Gasworks Park with "careful attention to supporting ongoing maritime and industrial businesses, and associated access needs."

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 through several goals and policies, including the following:

- **T48:** Recognize the importance of the freight network to the city's economic health when making decisions that affect "major truck streets."
- **T51:** Consider the needs for the local delivery and collection of goods at businesses by truck when making street operational decisions and when developing and implementing projects for streets.
- **GS1.3: Design Standards for Oversized Vehicles:** …Ensure that when arterials, especially major truck streets, are redesigned and rebuilt, they are better able to accommodate truck movements, in coordination with other street use needs.
- **GS1.6: Minimize Conflicts between Trucks and Other Transportation Modes:** The City continually needs to evaluate and address a number of basic conflicts between medium to heavy truck traffic and other motorized, nonmotorized, and pedestrian modes of transportation. Possible solutions might include identifying alternative routes, developing separate facilities, and clarifying priorities for specific locations.

All Build Alternatives would make some traffic flow, roadway, and rail improvements that could support the plan's goals and policies for efficient traffic flow and safe movement of goods. However, designated and undesignated loading zones could be altered and removed under any of the Build Alternatives, potentially 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, potentially having a negative impact on the delivery and collection of goods. Potential conflicts between industrial and trail users could increase under all Build Alternatives but could also be minimized through engineering and design. Mitigation for these impacts is discussed in the Transportation Discipline Report (Parametrix, 2016b).

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

The Missing Link would be allowed in all zoning and shoreline designations within the study area. The Build Alternatives could 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 for trail segments that would be located within the district. 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.

5.3 Shilshole South Alternative

5.3.1 Construction

In addition to the construction impacts discussed in Section 5.2, 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 environment (Figure 4-5). The UI environment allows limited uses that are not water-oriented and development where they would not displace water-oriented uses. Street uses are allowed in the UI environment. Construction within the Shoreline District must protect shoreline resources such as water quality or any cultural resources present, and the project could include best management practices to ensure consistency with these requirements. Other construction impacts that could occur are discussed in Section 5.2.1.

5.3.2 Operation

Effect on Existing Land 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 percent industrial, approximately 38 percent commercial, and about 5 percent vacant, with other uses composing about 3 percent of the total (Figure 5-2). 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 percent more commercial and less residential.

Of the 40 total uses abutting or gaining access along the Shilshole South Alternative, 15 (about 38 percent) are water-dependent and 12 (30 percent) are water-related (Appendix A). 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 percent) 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.

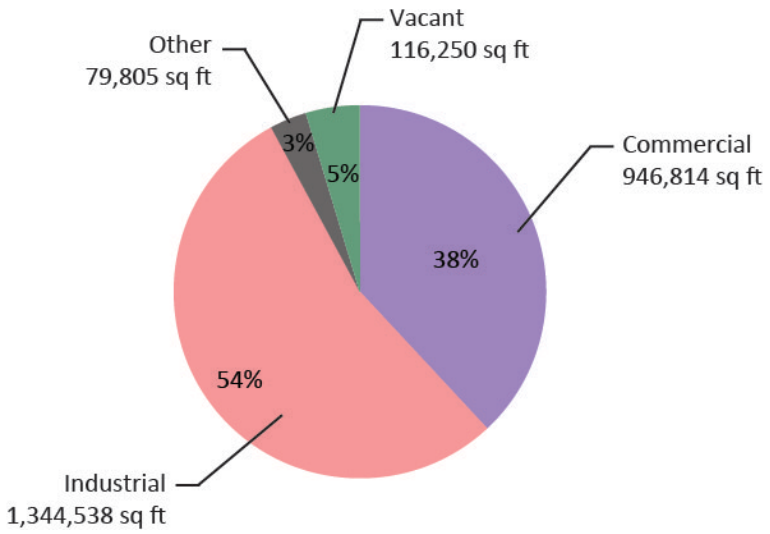

Figure 5-2. Existing Land Uses along the Shilshole South Alternative

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 are expected to maintain or improve traffic flow along this trail alignment (Parametrix, 2016b). This alternative could cross about 41 driveways and loading docks, an amount similar to the Ballard Avenue Alternative (which has 42)

(Parametrix, 2016b). Where the trail intersects access locations, vehicles would need to stop and check the trail for trail users before advancing, resulting in minor delays to business activities. This impact would likely occur for only short periods, mostly during commute times, and is not expected to be significant. Some drivers could 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, 2016a). 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 alternative 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 may 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 are not expected to significantly adversely impact business uses as businesses are likely to adjust their practices around these areas.

The Shilshole South Alternative could permanently remove about 261 parking spaces and the most non-metered parking spaces of any Build Alternative (Parametrix, 2016a). This number includes unregulated parking that is often double- and sometimes triple-parked, so it is conservatively high. Removal of these parking spaces could impact 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 potentially require employees to use other parking areas or commute by transit or nonmotorized means. While this could inconvenience and increase costs for some businesses, it is not expected to significantly adversely impact businesses. It could 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 west and east 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, 2016b). The Shilshole South Alternative also would likely 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 could likely experience a more dramatic shift in normal activities in order to accommodate the influx of new, nonmotorized trail users. Along Shilshole Ave NW and 45th St NW, the volume of nonmotorized users is expected to continue to grow under the No Build and Shilshole South Alternatives, so there may be less 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, with small commercial trucks less common. Conflicts between vehicles and trail users along this alternative could cause additional delays for freight. This potential increase in use conflicts with vehicles accessing their businesses could result in potential delays that could cause inconveniences 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.

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 is not expected to be significantly adverse. 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

City of Seattle Comprehensive Plan

Approximately 4,455 linear feet of the Shilshole South Alternative lies within the BINMIC, representing about 70 percent of the total 6,437 linear feet for this alternative (Figure 5-1). The Shilshole South Alternative is generally not consistent with policies that encourage City trail facilities 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 percent (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 hub and abuts mostly industrial and auto-oriented commercial uses outside of the core of Ballard. Therefore, trail users could likely need to leave the trail and specifically seek out goods, services, and entertainment in other areas of Ballard.

Of the Build Alternatives, the Shilshole South Alternative would locate almost as much trail in the BINMIC as the Shilshole North Alternative, and more than the Ballard and Leary Alternatives. The amount of land used by the trail would be relatively small and would not displace any existing industrial, water-related, or water-dependent uses.

The Shilshole South Alternative would abut the most water-related and water-dependent uses of the Build Alternatives. 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, 2016b).

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 LOS 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 could 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 reconfiguration of existing street right-of-way would be allowed in all industrial zones, and the alternative is consistent with use allowances in the zone. Unlike other Build Alternatives, the Shilshole South Alternative lies 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 lies within the UI shoreline environment. The project would be required to comply with all applicable shoreline regulations.

As discussed in Section 4.3.2, 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 could 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.

Summary – Shilshole South Alternative

The Shilshole South Alternative is consistent with all plans and policies except the BINMIC policies. The primary inconsistencies with the 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. The Shilshole South Alternative could also cause minor impacts on water-dependent and water-related industrial uses, which are preferred uses in the BINMIC policies. None of these impacts are considered significant adverse environmental impacts.

5.4 Shilshole North Alternative

5.4.1 Construction

Potential construction impacts are discussed in Section 5.2.1. In addition, a small portion of the Shilshole North Alternative is within the UI shoreline environment (Figure 4-5). Construction within the shoreline must protect shoreline resources such as water quality or any cultural resources present. The project could include best management practices to ensure consistency with these requirements and could comply with applicable critical areas and shoreline regulations.

5.4.2 Operation

Effect on Existing Land Uses

In the BINMIC, industrial uses, and especially water-dependent and water-related industrial uses, are preferred. Land uses abutting the Shilshole North Alternative are approximately 67 percent industrial, 25 percent commercial, and less than 1 percent residential, with a small mix of other uses (Figure 5-3). 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 land uses are industrial. Because of the relatively tight configuration of industrial uses along this alignment, these uses may generally have less land available to relocate displaced loading spaces or to physically reconfigure operations than those along the Shilshole

South Alternative alignment. The area surrounding the Shilshole North Alternative is highly industrial, less commercial, and less residential than the overall study area.

Of the 62 total uses abutting this alternative, four uses (6 percent) are water-dependent and about 16 uses (26 percent) are water-related (Appendix B). This alternative has fewer water-dependent and more water-related uses than the Shilshole South Alternative, and more water-related and water-dependent uses than the Leary and Ballard Alternatives. The Shilshole South and Shilshole North Alternatives could adversely affect a similar number of preferred uses in the BINMIC, and substantially more than the Leary and Ballard Avenue Alternatives.

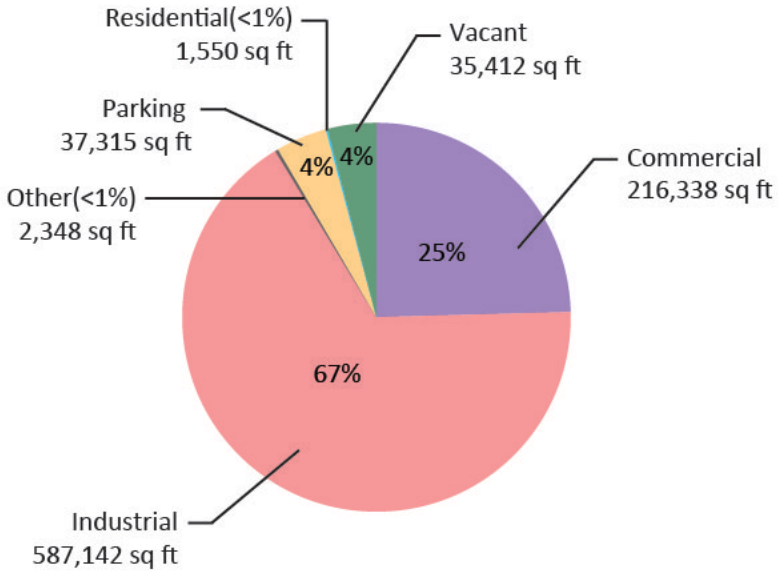

Figure 5-3. Existing Land Uses along the Shilshole North Alternative

Changes in traffic flow and access can disrupt normal activities and impact the viability of a land use. Roadway improvements included in the Shilshole North Alternative are expected to 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 most uses that are dependent on loading zone and access space along the potential alignment. This alternative would cross approximately 58 loading zones and driveways. This alternative also has the highest number of loading zone spaces that could be removed (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 caused by 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 currently 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 approximately 227 parking spaces (Parametrix, 2016a). 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 adverse impact to land uses along this alignment because other travel modes are 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 would increase under this alternative (Parametrix, 2016b), which contains the most concentrated industrial uses within the study area.

Consistency with Adopted Plans, Policies, and Codes

Comprehensive Plan

Approximately 4,512 linear feet of the Shilshole North Alternative lies within the BINMIC, representing 68 percent of the total 6,647 linear feet for this alternative; this is comparable to the Shilshole South Alternative (Figure 5-1). 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 unless the use is not appropriate for other areas.

The Shilshole North Alternative could place about 2,135 linear feet of trail (32 percent 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 generally consistent with these policies because it could improve LOS on roadways. 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 LOS, 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 of its proximity to a major truck street, conflicts could occur between trail users and existing industrial uses. Separation of nonmotorized traffic on the trail from trucks on the roadway could limit user conflicts, but some conflicts could likely occur.

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 trail along NW Market St would be located in the NC3 zone, which supports pedestrian-oriented uses, and a nominal segment of the alignment is at the intersection of 24th Ave NW and NW Market St, in a pedestrian overlay. Parks and open space uses are allowed in all zoning designations along the Shilshole North Alternative, and the alternative is consistent with use allowances.

A portion of the Shilshole North Alternative lies 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. Similar to other alignments, critical areas are present in the western portion of the alignment. Development in this area could comply with critical areas regulations.

Summary – Shilshole North Alternative

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 adverse land use impacts are expected because no permanent land use changes are anticipated.

5.5 Ballard Avenue Alternative

5.5.1 Construction

Potential construction impacts are discussed in Section 5.2.1. In addition, the Ballard Avenue Alternative could affect shorelines. A small portion of the Ballard Avenue Alternative is within the UI shoreline environment (Figure 4-5). Construction within the shoreline must protect shoreline resources such as water quality or any cultural resources present. A portion of the project is also within the Ballard Avenue Landmark District. The project could include best management practices to comply with applicable critical areas, shoreline, and Ballard Avenue Landmark District regulations for construction.

5.5.2 Operation

Effect on Existing Land Uses

Land uses abutting or gaining access along the Ballard Avenue Alternative are approximately 45 percent industrial, 25 percent commercial, and 13 percent residential, with a mix of other uses (Figure 5-4). 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 percent) are water-dependent and four uses (4 percent) are water-related (Appendix C).

The southeastern 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 4-4). The northern and western 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 land uses depend on car, bicycle, and pedestrian access. Many more existing industrial and commercial uses in the southeast portion of the alignment are 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.

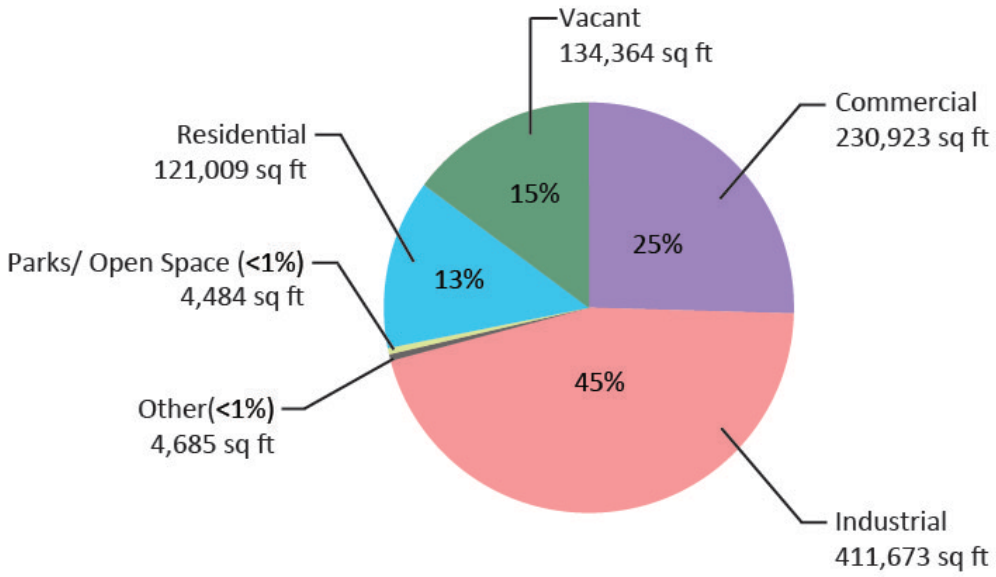

Figure 5-4. Existing Land Uses along Ballard Avenue Alternative

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 could 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, 2016b). This could negatively impact the flow of freight and business operations; however, the delays 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, including the Ballard Farmers Market.

The Ballard Avenue Alternative would remove about 198 parking spaces that serve adjacent land uses and special events (Parametrix, 2016a). 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 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

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 lies within the BINMIC, representing 37 percent of the total 7,518 linear feet for this alternative. This is the second-least of any alternative and similar to the Leary Alternative (Figure 5-1). 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 Shilshole 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. 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, 2016b).

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 discussed 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 policies and goals that support consideration of 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). Street uses are allowed in all these zones. The southeast portion of the alternative is 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 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 4-4).

A portion of the Ballard Avenue Alternative lies within the Shoreline District, where the proposed use would be permitted. Similar to other alternatives, the western portion of the alignment lies within critical areas, 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 City would apply additional regulations to this alternative to promote these values and support economic activity in this area. The project could be consistent with the Ballard Avenue Landmark District, subject to compliance with additional regulations and approvals.

Summary – Ballard Avenue Alternative

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

5.6 Leary Alternative

5.6.1 Construction

Potential construction impacts are discussed in Section 5.2.1.

5.6.2 Operation

Effect on Existing Land Uses

Land uses abutting the Leary Alternative are approximately 33 percent industrial, 37 percent commercial, and 5 percent residential, with a mix of other uses (Figure 5-5). 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 overall study area. 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 percent) is water-dependent and about six uses (10 percent) are water-related (Appendix D).

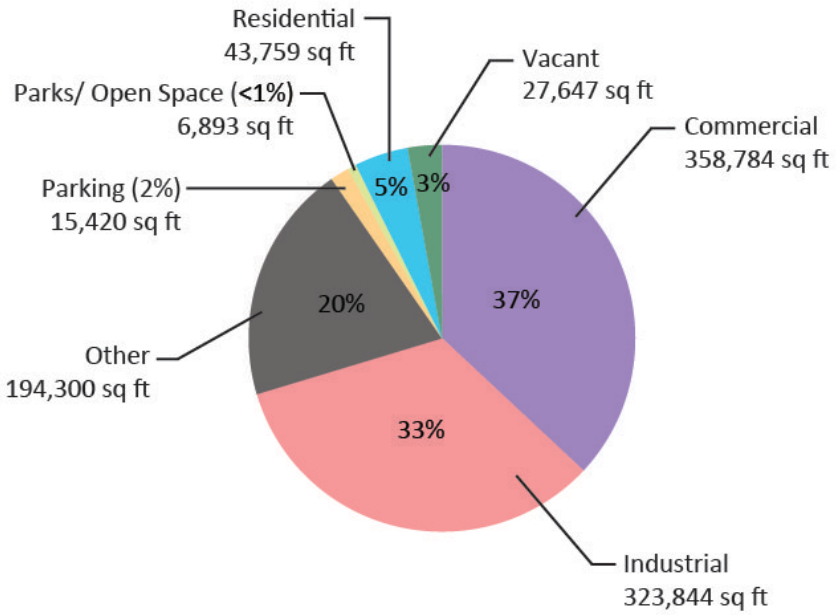

Figure 5-5. Existing Land Uses along the Leary Alternative

Changes in traffic flow, access, and the ability of a land use to continue normal activities can impact its viability. Under the Leary Alternative, LOS could be worsened at about six intersections compared to the No Build and other Build Alternatives (Parametrix, 2016b). 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 the completion of this alternative (Parametrix, 2016a). Similar to other alternatives, vehicles crossing the trail could experience minor delays as drivers stop and check for trail users before advancing to the roadway

(Parametrix, 2016a, 2016b). This impact would likely occur for only short periods, mostly during commute periods, and is not expected to be significant.

The Leary Alternative could remove approximately 103 parking spaces (Parametrix, 2016a), the fewest of any alternative. Similar to other Build Alternatives, businesses and residential uses could be impacted by the reduction in parking spaces. Fewer spaces could 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. 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

Comprehensive Plan

Approximately 2,308 linear feet of the length of the Leary Alternative lies within the BINMIC, representing about 34 percent of the total 6,774 linear feet of this alternative (Figure 5-1). (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). As discussed in Section 5.2.2, completion of the trail within this area could 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 disruption to driveway operations and loading for the associated uses. The disruption that could result could be minimized but not completely eliminated through the design measures described in the Transportation Discipline Report (Parametrix, 2016b). 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 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 policies and goals that support consideration of 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 to offer 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 offer concentrated retail and service opportunities.

No part of the Leary Alternative lies within the Shoreline District or the Ballard Avenue Landmark District. Construction within critical areas near the existing west trail end would need to comply with critical areas regulations.

Summary – Leary Alternative

As with all other Build Alternatives, the Leary Alternative is consistent with plans and policies except the BINMIC policies. However, it is generally more consistent with BINMIC polices than the Shilshole South and Shilshole North 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 Shilshole South or Shilshole North Alternative. As with other Build Alternatives, none of the impacts on land use from the Leary Alternative are expected to be significant.

5.7 Connector Segments

Trail design for all connector segments, including on which side of the right-of-way the trail would be located, would determine specific impacts on existing land uses, including parking, loading, and access locations. None of the connector segments are in the Shoreline District or a mapped critical area. Table 5-1 reflects the proportion (i.e., percent) of each connector segment alignment within the BINMIC or Ballard Hub Urban Village, as well as the proportion of trail abutting various land uses. Connector segment alignments are relatively short and do not have the potential to significantly impact land uses.

Table 5-1. Neighborhood Plan and Land Use Characteristics for Connector Segment Alignments

Connector Segment and Alignment	*Proportion (%) Of Connector Segment Alignment Abutting:*								
	Neighborhood Plans		*Land Uses*						
	BINMIC	*Ballard Hub Urban Village*	*Industrial Uses*	*Commercial Uses*	*Residential Uses*	*Parking Uses*	*Parks Uses*	*Other Uses*	*Vacant*
Ballard Ave NW - South	0	100	16	50	34	0	0	0	0
Ballard Ave NW - North	0	100	0	50	14	14	21	0	0
NW Vernon Pl - North	50	50	0	100	0	0	0	0	0
NW Vernon Pl – South	50	50	0	53	0	47	0	0	0
20th Ave NW - West	25	75	43	26	25	0	0	6	0

Connector Segment and Alignment	*Proportion (%) Of Connector Segment Alignment Abutting:*								
	Neighborhood Plans		*Land Uses*						
	BINMIC	*Ballard Hub Urban Village*	*Industrial Uses*	*Commercial Uses*	*Residential Uses*	*Parking Uses*	*Parks Uses*	*Other Uses*	*Vacant*
20th Ave NW - East	25	75	21	14	61	0	0	4.5	0
17th Ave NW - West	100	0	50	50	0	0	0	0	0
17th Ave NW - East	100	0	86	0	14	0	0	0	0
15th Ave NW - West	100	0	0	100	0	0	0	0	0
15th Ave NW - East	100	0	0	0	0	0	0	0	100
14th Ave NW - West	100	0	0	26	0	0	0	24	50
14th Ave NW - East	100	0	76	24	0	0	0	0	0

5.7.1 **Ballard Ave NW**

Land uses abutting the Ballard Ave NW connector segment alignment are reflected in Table 5-1. General operational impacts associated with this segment are described in Section 5.2.

The Ballard Ave 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.

5.7.2 **NW Vernon Pl**

Land uses abutting the NW Vernon Pl connector segment alignment are reflected in Table 5-1. General operational impacts associated with this segment are described in Section 5.2.

Approximately 50 percent of the NW Vernon Pl connector segment is within the BINMIC and would be inconsistent with the same plan goals and policies as previously discussed. The segment lies within the IG2 and NC2 zoning designations. A portion of the segment lies 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.

5.7.3 **20th Ave NW**

Land uses abutting the 20th Ave NW connector segment alignment are reflected in Table 5-1. General operational impacts associated with this segment are described in Section 5.2.

Approximately 25 percent of the 20th Ave NW connector segment is within the BINMIC and would be inconsistent with the same plan goals and policies as previously discussed. The segment lies within the IG2, NC3, IC, and C1 zoning designations. A portion of the segment lies 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.

5.7.4 17th Ave NW

Land uses abutting the 17th Ave NW connector segment alignment are reflected in Table 5-1. General operational impacts associated with this segment are described in Section 5.2.

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

5.7.5 15th Ave NW

Land uses abutting the 15th Ave NW connector segment alignment are reflected in Table 5-1. General operational impacts associated with this segment are described in Section 5.2.

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

5.7.6 14th Ave NW

Land uses abutting the 14th Ave NW connector segment alignment are reflected in Table 5-1. General operational impacts associated with this segment are described in Section 5.2.

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

5.7.7 Summary – Connector Segments

As with the primary Build Alternatives, the connector segments are consistent with all 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.

CHAPTER 6: AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

The following avoidance, minimization, and mitigation measures are common to all Build Alternatives.

6.1 Construction

Construction of the Missing Link would delay traffic and disrupt 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 the 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.

6.2 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 trail length within the BINMIC could minimize impacts. Connector segments could be used 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 discussed in the Transportation Discipline Report (Parametrix, 2016b) could also reduce trail impacts on adjacent land uses.

CHAPTER 7: CUMULATIVE IMPACTS

Cumulative impacts are the accumulation of impacts that result from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. They are an important part of the environmental analysis because they allow decision makers to look not only at impacts of an individual project, but the overall impact on a specific resource, from several different projects.

This report has identified the study area, affected environment, and land use context to consider in the cumulative impact analysis. Impacts that could contribute to cumulative impacts are discussed in Chapter 5, and the following section identifies current and reasonably foreseeable projects considered in the analysis.

7.1 Cumulative Impacts Project List

The Ballard area has experienced significant development and redevelopment in the past several years, and this trend is anticipated to continue as long as favorable economic conditions persist. Ballard's rapid growth (City of Seattle, 2015b) has resulted in substantial construction activity, with numerous apartments and condominiums being built throughout the area. Several larger construction and development projects that are known and are reasonably expected to occur in the near future are described below.

7.1.1 West Ship Canal Water Quality Project

Seattle Public Utilities (SPU) is proposing a large project to reduce combined sewer overflow (CSO) that would occur in the vicinity of the proposed Missing Link project. The project will be constructed over an approximate 6-year period, beginning in approximately 2018. Active construction would occur in phases at different locations, but would be heavy in the Ballard area over much of the construction period.

7.1.2 C.D. Stimson Development

Developer C.D. Stimson Co. plans to build a 500,000-square-foot office complex consisting of five, five-story buildings at 5423 Shilshole Ave NW. The project will start with one 105,000-square-foot building, with the remaining added in the following years. Construction of the first building is anticipated to take 2 years beginning in 2016 or 2017.

7.1.3 Sound Transit 3 Draft Priority Projects List

Sound Transit has developed a draft priority projects list as part of their planning process to expand the regional mass transit system to meet anticipated population growth expected by 2040. Sound Transit is currently conducting further analysis, and a final list will be included in a ballot measure that could go to voters as early as November 2016. The schedule for these potential projects is not yet known. The projects on the draft project list in the study area are:

- **C-02 Ballad to University District**. This project would build light rail in a tunnel from Ballard's Market Street area to the vicinity of the newly opened University District light rail station.

- **Light Rail Downtown Seattle to Ballard (Market Street Vicinity).** Several alternative projects would build light rail from downtown Seattle to Ballard's Market Street area.

7.1.4 SDOT Move Seattle Transportation Strategy

Two Move Seattle projects overlap with the study area: the Ballard to Downtown Enhanced Transit Corridor, and the Market/45th Transit Improvement Project. Both of these projects are proposed to be implemented by 2024.

- **Ballard to Downtown Enhanced Transit Corridor.** In preparation for the potential inclusion of a Ballard light rail line in the future Sound Transit 3 ballot measure, the Ballard to Downtown Enhanced Transit Corridor project improves the corridor's existing transit operations and adds interim safety improvements for people who cycle and walk across the Lake Washington Ship Canal.

- **Market/45th Transit Improvement Project.** The Market/45th Transit Improvement Project enhances transit speed and reliability on of one the city's primary east-west corridors and most chronically congested routes.

7.1.5 Seattle Department of Transportation Bicycle Master Plan Projects

The Bicycle Master Plan proposes a number of bicycle improvements in and near the Missing Link project study area. These projects include constructing neighborhood greenways on NW 50th St, 11th Ave NW, 28th Ave NW, and NW 64th St. Bicycle lanes with minor separation are proposed for NW Market St between 24th Ave NW and 32nd Ave NW, and on 14th Ave NW.

7.1.6 Other Private Development

The Ballard neighborhood has been experiencing growth in the last few years, and it is anticipated that this growth will continue (City of Seattle, 2015b). The types of development expected are commercial buildings, as well as residential medium and high-density housing including multi-family complexes with commercial development on the ground floor.

7.2 Assessment of Cumulative Impacts

During construction of any of the projects, temporary cumulative impacts on nearby land uses could increase. These could include noise, traffic congestion, delays at intersections and driveways, loss of street parking, and visual impacts. All of these could negatively impact land uses; however, impacts would be temporary, and project proponents could be required to implement timing and phasing considerations and other mitigation measures during construction.

Zoning regulations prevent major changes in land use, but allow for a range of uses within each designation. Uses consistent with plans, policies, and land use codes that have less need for freight and commercial access could be permitted within the study area, and changes in use could occur over time. Industrial uses could face increased pressure to relocate because of the increased delays, costs, and general inconveniences associated with development trends in the area.

Operation of the projects could result in higher land utilization to accommodate projected employment and population growth, which would be consistent with adopted land use plans and policies. The transportation projects are required to mitigate for impacts in compliance with adopted codes and plans.

Light rail stations could cause demand for office, multifamily residential, restaurants, and other non-industrial uses within the vicinity of the stations. Land use goals, policies, and plans support the growth that Ballard is experiencing. The developments increase residential, employment, recreational, and retail opportunities, and generally concentrate uses consistent with land use plans and policies. The addition of a multi-use trail could have a cumulative negative impact on the uses that currently rely on relatively predictable vehicular access and traffic flow, on-street parking, and loading zones, and plans and policies that support the viability of these uses. As with existing uses, user conflicts could occur where a Build Alternative crosses a driveway access to a use with high volumes of ingress and egress, such as the C.D. Stimson Development. However, anticipated improvements to the transit infrastructure, combined with measures discussed in Chapter 6 and other discipline reports associated with this project (Parametrix, 2016a, 2016b), could minimize and mitigate impacts on existing land uses. The long-term viability of any land use preferred under Seattle adopted plans and policies is not anticipated to be significantly compromised.

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CHAPTER 9: LIST OF PREPARERS

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APPENDIX A

WATER-DEPENDENT AND WATER-RELATED USES ALONG THE SHILSHOLE SOUTH ALTERNATIVE

Table A-1. Water-Dependent and Water-Related Uses Along the Shilshole South Alternative

Property ID	*Property Name*	*Water Dependency*
467000130	ALASKA DIESEL ELECTRIC MOORAGE - DNR LEASE #80311	Water Dependent
467000132	ALASKA DIESEL ELECTRIC MOORAGE - DNR LEASE # 20-010460	Water Dependent
467000145	ROLLS-ROYCE	Neither
467000155	SCC MARITIME TRAINING CENTER	Water Dependent
467000422	STIMSON MARINA - DNR LEASE # 9477	Water Dependent
467000423	YANKEE BAR & GRILL SITE	Neither
467000425	DNR LEASE 20-009664	Neither
467000426	STIMSON INDUSTRIAL PARK	Water Related
467000428	STIMSON INDUSTRIAL PARK	Water Related
467000429	STIMSON INDUSTRIAL PARK	Water Related
467000430	STIMSON INDUSTRIAL PARK & MARINA	Water Related
467000431	VACANT LAND	Neither
467000446	DNR MOORAGE - LEASE 20-12551	Water Dependent
467000477	SAGSTAD MARINE MOORAGE - DNR LEASE #20-012100	Water Dependent
467000478	SAGSTAD MARINE MOORAGE - DNR LEASE	Water Dependent
467000479	CANAL COVE MARINA - DNR LEASE 20-12390	Water Dependent
467000075	COMMERCIAL MARINE CONSTRUCTION	Water Dependent
467000335	BALLARD MILL & MARINA	Water Dependent
467000385	BRANCHFLOWER MARINA	Water Dependent
467000417	VACANT LAND	Neither
467000418	STIMSON INDUSTRIAL PARK	Neither
467000419	STIMSON INDUSTRIAL PARK	Water Related

Property ID	*Property Name*	*Water Dependency*
467000420	STIMSON INDUSTRIAL PARK	Water Related
467000421	SALMON BAY SAND & GRAVEL	Water Related
467000427	STIMSON INDUSTRIAL PARK	Water Related
467000445	FUEL DOCK WILLIAMS & COVICH	Water Dependent
467000475	SAGSTAD MARINA	Neither
467000476	CANAL COVE MARINA	Water Dependent
1125039009	BALLARD TRANSFER & STORES	Neither
1125039011	OFFICE BUILDING	Neither
1125039037	VACANT LAND	Neither
1125039077	LIEB MARINE SERVICES	Water Dependent
1175001225	LOCKSPOT CAFE	Neither
1175001235	TRIAD BALLARD DEVELOPMENT	Neither
2768303765	TANK FARM MOBIL	Neither
2768400025	WAREHOUSE/OFFICE	Water Dependent
8673400270	FEN PRO	Water Related
8673400285	FEN PRO	Water Related
8673400305	FEN PRO	Water Related
8673400350	FEN PRO	Water Related

APPENDIX B

WATER-DEPENDENT AND WATER-RELATED USES ALONG THE SHILSHOLE NORTH ALTERNATIVE

Table B-1. Water-Dependent and Water-Related Uses Along the Shilshole North Alternative

Property ID	*Property Name*	*Water Dependency*
1125039004	HABITUDE SALON	Neither
1125039009	BALLARD TRANSFER & STORES	Neither
1125039011	OFFICE BUILDING	Neither
1125039037	VACANT LAND	Neither
1125039077	LIEB MARINE SERVICES	Water Dependent
1125039097	RETAURANT/RETAIL BUILDING	Neither
1175000995	RETAIL - FOOD PROCESSING	Neither
1175001225	LOCKSPOT CAFE	Neither
1175001235	TRIAD BALLARD DEVELOPMENT	Neither
2767702190	EURO PRODUCTS INC	Water Related
2767702230	ALEXANDER'S CONTRACTOR LIGHTING	Neither
2767702260	UNITED ELECTRIC MOTORS	Neither
2767702270	WAREHOUSE/INDUSTRIAL BUILDINGS	Neither
2767702290	VILLAGE MARINE	Water Dependent
2767702295	STEWART'S MARINE	Water Dependent
2767702320	COVICH & WILLIAMS	Water Dependent
2767702355	BALLARD SHEET METAL	Neither
2767702357	BALLARD HARDWARE	Neither
2767702360	BALLARD HARDWARE	Neither
2767702400	CANVAS SUPPLY CO	Neither
2767702410	SALMON BAY SAND & GRAVEL	Water Related
2767702420	KOLSTAD'S	Neither
2767702445	DANTRAWL U.S.	Water Related

Property ID	*Property Name*	*Water Dependency*
2767702460	MARINE WORKS INC	Water Related
2767702470	STORAGE LOT	Neither
2767702471	METRO PUMPING STATION	Neither
2767702480	OFFICE/BOOK STORE	Neither
2767702483	SALMON BAY SAND & GRAVEL	Water Related
2767702570	OFFICE AND RETAIL BUILDING	Neither
2767702591	SALMON BAY SAND & GRAVEL	Water Related
2767702605	SALMON BAY SAND & GRAVEL	Water Related
2767702615	SALMON BAY SAND & GRAVEL CO	Water Related
2767702620	C&C PAINT CO	Neither
2767702630	SALMON BAY SAND & GRAVEL	Water Related
2767702640	SALMON BAY SAND & GRAVEL	Water Related
2767702645	HATTIES HAT PARKING	Neither
2767702655	STIMSON CO	Neither
2767702660	PARKING	Neither
2767702750	RESTAURANT	Neither
2767702760	BALLARD BOOKCASE	Neither
2767702765	MAGNUM SELF STORAGE	Neither
2767702795	J DESIGN FABRICATION CONSTRUCTION	Neither
2767702800	BALLARD BAIT	Water Related
2767702805	GEO LEE'S GARAGE	Neither
2767702810	PETERSEN'S 4 WHEEL	Neither
2767702820	OFFICE BLDG	Neither
2767702825	RETAIL/SVC GARAGE	Neither

Property ID	*Property Name*	*Water Dependency*
2767702830	RETAIL	Neither
2767702831	AZTECA RESTAURANT	Neither
2768303070	PLATT ELECTRIC	Neither
2768303080	BAY VALUE SERVICE	Neither
2768303100	BN RR RW	Neither
2768303105	ALGAS SDI	Neither
2768303115	SALTY DOG POTTERY & THE BOATWRIGHT	Neither
2768303190	BALLARD BLOCKS 1 - TRADER JOES/LINE RETAIL/RETAIL/PARKING	Neither
2768303225	NEW CONSTRUCTION COMING	Neither
2768303229	BALLARD BLOCKS 1 - HEALTH CLUB/LINE RETAIL/PARKING	Neither
2768303430	RADKE MARINE	Water Related
8673400270	FEN PRO	Water Related
8673400285	FEN PRO	Water Related
8673400305	FEN PRO	Water Related
8673400350	FEN PRO	Water Related

APPENDIX C

WATER-DEPENDENT AND WATER-RELATED USES ALONG THE BALLARD AVENUE ALTERNATIVE

Table C-1. Water-Dependent and Water-Related Uses Along the Ballard Avenue Alternative

Property ID	*Property Name*	*Water Dependency*
1175001225	LOCKSPOT CAFE	Neither
1175001235	TRIAD BALLARD DEVELOPMENT	Neither
2767700995	CLASSIC CONSIGNMENT STORE	Neither
2767701000	PARKING LOT	Neither
2767701030	THE KRESS BUILDING	Neither
2767701036	CHASE	Neither
2767701055	BALLARD BUILDING	Neither
2767701080	BALLARD SQUARE	Neither
2767701115	LIMBACK LUMBER COMPANY	Neither
2767701130	AMLI BALLARD JACOBSEN SITE MIXED USE APARTMENT	Neither
2767701135	AMLI BALLARD JACOBSEN SITE MIXED USE APARTMENT - BLDG ON MINOR 1150	Neither
2767701136	VACANT LAND ASSOC W/ -1150	Neither
2767701150	AMLI BALLARD JACOBSEN SITE MIXED USE APARTMENT	Neither
2767701155	AMLI BALLARD JACOBSEN SITE MIXED USE APARTMENT	Neither
2767702190	EURO PRODUCTS INC	Water Related
2767702205	WHITEFISH MARINE INC	Water Dependent
2767702215	THERMO-SONIC GLASS	Neither
2767702220	ANDERSON REFRIGERATION-MARINE	Water Dependent
2767702225	ANDERSON REFRIGERATION	Water Dependent
2767702230	ALEXANDER'S CONTRACTOR LIGHTING	Neither
2767702240	POR MI 2230	Neither

Property ID	*Property Name*	*Water Dependency*
2767702260	UNITED ELECTRIC MOTORS	Neither
2767702305	MIXED USE RETAIL W/ RES. UNIT	Neither
2767702306	MIXED USE OFFICE AND RETAIL BUILDING	Neither
2767702320	COVICH & WILLIAMS	Water Dependent
2767702325	COVICH - WILLIAMS	Water Dependent
2767702330	LOFT & BALLARD PIZZA	Neither
2767702335	DOCK ST BROKERS	Neither
2767702340	AMERICAN PIONEER/BALLARD LOFT OFFICE LIVE/WORK	Neither
2767702345	WAREHOUSE	Neither
2767702350	BALLARD SHEET METAL	Neither
2767702355	BALLARD SHEET METAL	Neither
2767702357	BALLARD HARDWARE	Neither
2767702360	BALLARD HARDWARE	Neither
2767702375	ED SMITH CONSTRUCTION	Neither
2767702376	KOLSTRAND	Neither
2767702390	SALMON BAY SAND & GRAVEL	Water Related
2767702400	CANVAS SUPPLY CO	Neither
2767702480	OFFICE/BOOK STORE	Neither
2767702500	MIXED USE RETAIL W/ APARTMENT	Neither
2767702501	SFR HOUSE STRUCTURE USE AS OPEN OFFICE	Neither
2767702505	RETAIL STORE	Neither
2767702510	MIXED USE APARTMENT & RETAIL STORE	Neither
2767702515	SANBORN & NEW HOME HOTEL BUILDINGS	Neither
2767702525	RETAIL STORE	Neither

Property ID	*Property Name*	*Water Dependency*
2767702530	RESTAURANT/RETAIL STORE	Neither
2767702535	RESTAURANT	Neither
2767702541	NORTH STAR	Neither
2767702550	PERCY'S (FORMER OLD TOWN ALE HOUSE)	Neither
2767702551	BITTERROOT BBQ	Neither
2767702555	HATTIES HAT RESTAURANT	Neither
2767702556	RETAIL/OFFICE MIXED USE BUILDING	Neither
2767702565	RETAIL/OFFICE/STORAGE MIXED-USE BUILDING	Neither
2767702570	OFFICE AND RETAIL BUILDING	Neither
2767702575	SECOND ASCENT	Neither
2767702580	RESTAURANT	Neither
2767702581	NEW YORK FASHION ACADEMY	Neither
2767702735	PORTLAND BLDG	Neither
2767702835	RETAIL STORES	Neither
2767702850	BALLARD CENTENIAL BELL TOWER	Neither
2767702855	MIXED-USE RESTAURANT AND APARTMENT	Neither
2768303245	LAND	Neither
2768303385	BOWMAN REFRIGERATION	Neither
2768303415	MORAD ELECTRIC	Neither
2768303430	RADKE MARINE	Water Related
2768303435	BN RR RW	Neither
2768400010	RESTAURANT	Neither
8673400135	TOWNHOUSE	Neither
8673400136	TOWNHOUSE	Neither

Property ID	*Property Name*	*Water Dependency*
8673400139	TOWNHOUSE	Neither
8673400140	TOWNHOUSE	Neither
8673400150	ROYAL QUARTER APTS	Neither
8673400155	TOWNHOUSE	Neither
8673400156	TOWNHOUSE	Neither
8673400157	TOWNHOUSE	Neither
8673400158	TOWNHOUSE	Neither
8673400165	TOWNHOUSE PLAT	Neither
8673400166	TOWNHOUSE PLAT	Neither
8673400169	TOWNHOUSE	Neither
8673400170	TOWNHOUSE	Neither
8673400175	TOWNHOUSE	Neither
8673400176	TOWNHOUSE	Neither
8673400180	TOWNHOUSE UNIT A	Neither
8673400181	TOWNHOUSE UNIT B	Neither
8673400185	BALLARD III CONGREGATE ROOMING HOUSE	Neither
8673400190	TOWNHOUSE PLAT	Neither
8673400191	TOWNHOUSE PLAT	Neither
8673400192	TOWNHOUSE PLAT	Neither
8673400200	AWAITING PROPOSED RETAIL/OFFICE BUILDING	Neither
8673400350	FEN PRO	Water Related

APPENDIX D

WATER-DEPENDENT AND WATER-RELATED USES ALONG THE LEARY ALTERNATIVE

Table D-1. Water-Dependent and Water-Related Uses Along the Leary Alternative

Property ID	*Property Name*	*Dependency*
1125039004	HABITUDE SALON	Neither
1125039009	BALLARD TRANSFER & STORES	Neither
1125039011	OFFICE BUILDING	Neither
1125039037	VACANT LAND	Neither
1125039077	LIEB MARINE SERVICES	Water Dependent
1125039097	RETAURANT/RETAIL BUILDING	Neither
1175000995	RETAIL -FOOD PROCESSING	Neither
1175001225	LOCKSPOT CAFE	Neither
1175001235	TRIAD BALLARD DEVELOPMENT	Neither
2767702065	COALITION SPECIALISTS	Neither
2767702070	HILL AUTO PARTS	Neither
2767702080	CRAIG SPRINGS	Neither
2767702090	HIGH ROAD AUTOMOTIVE	Neither
2767702115	MIXED USE WAREHOUSE	Neither
2767702125	NEW IMP CARRIED ON -2115	Neither
2767702685	STOREFRONT RETAIL	Neither
2767702825	RETAIL/SVC GARAGE	Neither
2767702830	RETAIL	Neither
2767702831	AZTECA RESTAURANT	Neither
2767702835	RETAIL STORES	Neither
2767702870	RETAIL	Neither
2767702875	RETAIL	Neither
2767702880	PARK	Neither

Property ID	*Property Name*	*Dependency*
2767702890	RETAIL STORE	Neither
2767702895	BALLARD CONSIGNMENT	Neither
2767702900	SKARBROS FURNITURE	Neither
2767702905	CANAL STATION CONDOMINIUM SALES AND LEASING OFFICE	Neither
2767702910	PARKING LOT	Neither
2767702915	BALLARD LANDMARK	Neither
2767702945	OFFICE BUILDING	Neither
2767702950	KING HOTEL BUILDING	Neither
2767702955	PARKING	Neither
2767702960	OLYMPIC ATHLETIC CLUB	Neither
2767703065	CURTIS BLDG	Neither
2767703075	PARKING CARTER VOLKSWAGEN	Neither
2767703095	CARTER VW SAAB SHOWROOM/SALES	Neither
2767703110	HATCH & KIRK	Water Related
2767703120	WAREHOUSE/OFFICE	Neither
2767703180	STG YARD FOR ITT HARPER	Neither
2767703190	HATCH & KIRK	Water Related
2767703205	RICH ELECTRONICS	Neither
2767703215	WHSE	Neither
2767703220	HILL MACHINE	Neither
2768302590	MARS HILL CHURCH/	Neither
2768302690	OFFICE/MEDICAL	Neither
2768302700	PARKING	Neither
2768302735	U-HAUL STORAGE LOT	Neither

Property ID	*Property Name*	*Dependency*
2768302745	U-HAUL	Neither
2768302750	BIG 5 SPORTS/RETAIL	Neither
2768302795	VACANT-INDUSTRIAL	Neither
2768302825	JACK IN THE BOX/7-11 (IMPS ON MINOR 2900)	Neither
2768302900	JACK IN THE BOX/7-11	Neither
2768302930	DEPT OF SOCIAL & HEALTH SERVICES	Neither
2768303520	GOVERNMENT BLD-POST OFFICE DISTRIBUTION	Neither
8673400270	FEN PRO	Water Related
8673400285	FEN PRO	Water Related
8673400305	FEN PRO	Water Related
8673400350	FEN PRO	Water Related

APPENDIX E

SUMMARY OF ALTERNATIVE CONSISTENCY WITH COMPREHENSIVE PLAN'S GOALS AND POLICIES

Table E-1. Summary of Alternative Consistency with Comprehensive Plan's Goals and Policies*

	No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
Urban Village Element 1.1					
Applicable General UV Goals and Policies					
UVG3	Promote transportation improvements that support walking and other transportation strategies, especially within urban villages.				
	O	X	X	X	X
UVG6	Accommodate a range of employment activity to ensure employment opportunities are available for the city's diverse residential population, including maintaining healthy manufacturing and industrial areas.				
	X	X	X	X	X
UVG9	Maximize the benefit of public investment in infrastructure and services, and deliver those services more equitably by focusing new infrastructure and services, as well as maintenance and improvements to existing infrastructure and services, in areas expecting to see additional growth, and by focusing growth in areas with sufficient infrastructure and services to support that growth.				
	O	X	X	X	X
UVG11	Increase public safety by making villages places that people will be drawn to at all times of the day.				
	O	X	X	X	X
	Public safety is expected to improve under all Build Alternatives because the trail would increase predictability and separation between motorized and nonmotorized uses. All alternatives except the No Build Alternative would bring additional people through the study area and could attract nonmotorized patrons. Additionally, the trail could encourage visitors to the entertainment and commercial districts during hours of the day when patrons could otherwise be discouraged by heavy traffic and few parking options.				
UVG12	Promote physical environments of the highest quality, which emphasize the special identity of each of the city's neighborhoods, particularly within urban centers and villages.				
	O	X	X	X	X

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
UV2	Promote conditions that support healthy neighborhoods throughout the city… such as focused transportation demand management strategies, vital business districts…a range of park and open space facilities, and investment and reinvestment in neighborhoods.					
		O	X	X	X	X
UV3	Consider the following characteristics appropriate to all urban village categories except Manufacturing and Industrial Centers: 10. Parks, open spaces, street designs, and recreational facilities that enhance environmental quality, foster public health and attract residential and commercial development; 11. A place, amenity, or activity that serves as a community focus.					
		O	Somewhat	Somewhat	Somewhat	Somewhat
	All alternatives are partially in the Ballard hub urban village and partially within the BINMIC. The policy is supported to the extent that the trail lies within the Ballard hub urban village, and not supported to the extent that the trail lies within the manufacturing and industrial center.					
UV4	Consider the following characteristics appropriate to Manufacturing and Industrial Centers: 3. The ability to accommodate a range of industrial activity compatible with the overall function, character, and intensity of development specified for the center.					
		X	X	X	X	X
	All alternatives would accommodate the existing range of industrial activity in the BINMIC without significant impact to overall uses or employment.					
UV9	Preserve developments of historic, architectural, or social significance that contribute to the identity of an area.					
		X	X	X	X	X
UV10	Maintain and enhance retail commercial services throughout the city, especially in areas attractive to pedestrians and transit riders, to support concentrations of residential and employment activity, with special emphasis on serving urban villages.					
		X	X	X	X	X
	All alternatives would allow services to be maintained. Build Alternatives could encourage entertainment and retail activity.					

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		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
UVG16	Guide public and private activities to achieve the function, character, amount of growth, intensity of activity, and scale of development of each urban village consistent with its urban village designation and adopted neighborhood plan.					
		O	Somewhat	Somewhat	Somewhat	Somewhat
	The No Build Alternative is inconsistent with Ballard hub urban village plans that encourage nonmotorized transportation, increased recreation, and creation of open spaces. The Build Alternatives are all partially within the BINMIC, where some policies discourage a nonmotorized through trail.					
UVG37	Provide healthy spaces for children and their families to play; for more passive activities such as strolling, sitting, viewing, picnicking, public gatherings, and enjoying the natural environment; and for active uses such as community gardening, competitive sports, and running.					
		O	X	X	X	X
UVG38	Through the creation, preservation, and enhancement of the city's open spaces, support the development patterns called for by this plan and provide spaces for sports and recreation.					
		O	X	X	X	X
UVG39	Enhance the urban village strategy through the provision of amenities in more densely populated areas, increased opportunities to walk regularly to open spaces by providing them close by, connections linking urban centers and villages through the provision of urban trails and other means, and a network of connections to the regional open space system.					
		O	X	X	X	X
UV50	Establish, through the combined systems of urban trails, green streets and designated boulevards, a network among the city's varied open space features and urban villages and urban centers as well as connections with recreational and natural areas within the Puget Sound region.					
		O	X	X	X	X

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
UV53	Direct efforts to expand the open space network into: urban centers and villages targeted for the largest share of residential growth and/or into locations with a recognized neighborhood plan that includes open space recommendations consistent with open space policies. Acquire and develop facilities in: critical open space linkages, connectors and corridors that are highly accessible for active use within or directly serving urban villages, high density and/or high pedestrian, bicycle or transit use areas; open space linkages, connectors, and corridors that are highly accessible for active use serving other high pedestrian, bicycle or transit use areas; and other types of open space within or adjacent to urban villages that are accessible from adjacent urban villages.					
		O	Somewhat	Somewhat	Somewhat	Somewhat
	The Missing Link would connect a network gap by developing right-of-way into an active, multi-use corridor in or near high-density areas. The Ballard hub urban village is targeted for residential growth; the BINMIC is not (residential uses are not allowed in industrial zones).Transit service is not present along Shilshole Ave NW.					
Applicable Manufacturing/Industrial Centers Goals and Policies						
UVG21	Ensure that adequate accessible industrial land remains available to promote a diversified employment base and sustain Seattle's contribution to regional high-wage job growth.					
		X	X	X	X	X
UVG22	Promote the use of industrial land for industrial purposes.					
		X	X	X	X	X
	All Build Alternatives would operate in existing right-of-way (not industrial land).					
UVG23	Encourage economic activity and development in Seattle's industrial areas by supporting the retention and expansion of existing industrial businesses and by providing opportunities for the creation of new businesses consistent with the character of industrial areas.					
		X	X	X	X	X
	None of the alternatives would reduce opportunities for business retention, creation, or expansion.					

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
UV19	Designate as manufacturing/industrial centers areas that are generally consistent with the following criteria and relevant Countywide Planning Policies: Reasonable access to the regional highway, rail, air and/or waterway system for the movement of goods.					
		X	X	X	X	X
UV 22	Strive to retain and expand existing manufacturing and industrial activity.					
		X	O	O	O	O
UV24.1	The City should limit its own uses on land in the manufacturing/industrial centers to uses that are not appropriate in other zones and should discourage other public entities from siting non industrial uses in manufacturing/industrial centers. An exception for essential public facilities should be provided.					
		X	X	X	X	X
	The Missing Link would not convert industrial land or acquire property in industrial use; it is primarily a transportation facility located in City right-of-way.					
Applicable Hub Urban Villages Goals and Policies						
UVG25	Designate as hub urban villages areas that have convenient and direct connections to adjacent areas by pedestrians and bicyclists; open space amenities that include accessibility to major open space resources in the general area via either existing or potential urban trails, boulevards, or other open space links, or anticipated major public investment in open space.					
		Somewhat	X	X	X	X
Land Use Element 2.1	Goals of the Land Use Element include providing for a development pattern consistent with the urban village strategy by designating areas within the city where various types of land use activities, building forms, and intensities of development are appropriate (LUG1); fostering neighborhoods in which current and future residents and business owners will want to live, shop, work, and locate their businesses, as well as providing for a range of housing types, commercial, and industrial spaces to accommodate a broad range of people and businesses (LUG2); and encouraging, through the City's land use regulations, development that protects the public's health and maintains environmental quality (LUG3).					
		X	X	X	X	X

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		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
Transportation Element 3.1		Goals include increased transportation choices, such as walking and biking (TG8, TG 9, and TG16). It also includes goals and policies to support the growing economy by preserving and improving mobility and access for the transportation of goods and services (TG19). Additionally, the Transportation Element incorporates recognition and promotion of the urban village strategy when making transportation investments (TG28).				
		O	Somewhat	Somewhat	Somewhat	Somewhat
		The Build Alternatives are consistent with the Ballard hub urban village strategy, but less so with the BINMIC strategy due to possible delays that trail operation could cause industrial uses.				
Neighborhood Planning Element 8.1						
Applicable BINMIC Goals and Policies						
BI-G1	Strive to improve industrial traffic flow to and through the BINMIC.					
		O	X	X	X	X
	Road improvements associated with each of the Build Alternatives are aimed at improving industrial flow. Traffic flow is expected to get worse under the No Build Alternative.					
BI-G2	Facilitate truck mobility.					
		O	O	O	O	O
	Under the No Build Alternative, existing BGT users would continue to informally use major truck streets, leading to unpredictability and delays at driveways. Truck mobility may be compromised at driveway accesses under the Build Alternatives where the trail intersects with driveway access.					
BI-G4	Strive to maintain and enhance intermodal (barge, ship, rail and truck) connections.					
		X	X	X	X	X
BI-G5	Strive to maintain and promote rail service to and through the BINMIC.					
		X	X	X	X	X

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
BI-G6	Strive to provide adequate room in the street right-of-way for truck loading and maneuvering where it will not interfere with traffic flow.					
		X	O	O	O	O
	Under all alternatives except the No Build, undesignated or designated truck loading spaces may be eliminated.					
BI-G8	Maintain major truck routes to and within the BINMIC in good condition.					
		X	X	X	X	X
BI-G10	In order to preserve freight mobility: strive to preserve and improve turning radii, visibility and sight lines, clearance and existing lane configuration of streets within the BINMIC; and consider impacts on BINMIC of changes to arterial access routes to the BINMIC.					
		X	O	O	O	O
	Under all Build Alternatives, sight lines could be compromised at some driveways.					
BI-G11	Support commuting to work to and through the BINMIC by bicycle and walking. Two major factors to consider in trail design and operation are: 1. the operational requirements of adjacent property owners and users, as determined by the City; and 2. the safety of bicycle riders and pedestrians. The City must make every effort in trail design to meet the operational requirements of industrial users while providing for trail safety.					
		X	X	X	X	X
	Under the No Build Alternative, commuters would still have access to the BINMIC via alternative infrastructure, such as sharrows and sidewalks in the vicinity.					
BI-P2	Preserve land in the BINMIC for industrial activities such as manufacturing, warehousing, marine uses, transportation, utilities, construction and services to businesses.					
		X	O	O	O	O
	No alternatives would displace industrial uses; however, some transportation right-of-way currently used by industrial activities would be taken for trail use.					

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
BI-P3	Retain existing businesses within the BINMIC and promote their expansion.					
		X	Somewhat	Somewhat	Somewhat	Somewhat
	None of the alternatives would displace BINMIC businesses. Existing right-of-way would be developed as a multi-use trail.					
BI-P4	Attract new businesses to the BINMIC.					
		X	X	X	X	X
	Some types of new businesses may be attracted to the BINMIC under Build Alternatives in order to capitalize on patronage of potential trail users.					
BI-P5	Recognize that industrial businesses in the BINMIC have the right to enjoy the lawful and beneficial uses of their property.					
		X	X	X	X.	X
BI-P6	Strive to provide infrastructure in the BINMIC that is sufficient to ensure the efficient operation and smooth flow of goods to, through and from the BINMIC. Infrastructure includes publicly built and maintained roads, arterials, utilities, moorage facilities and other capital investments by the City, Port, County, State and Federal agencies.					
		X	X	X	X	X
BI-P8	Maintain the BINMIC as an industrial area and work for ways that subareas within the BINMIC can be better utilized for marine/ fishing, high tech, or small manufacturing industrial activities.					
		X	Somewhat	Somewhat	Somewhat	Somewhat
	The BINMIC would be maintained as an industrial area. Some businesses, such as high tech and small manufacturing, may be encouraged to locate near the trail for the recreational, transportation, and potential patronage that the trail could provide. Trail operation would not likely facilitate water-dependent/-related uses in the BINMIC along the Shilshole South and Shilshole North Alternatives.					
BI-P12	Within the BINMIC, water-dependent and industrial uses shall be the highest priority use.					
		X	O	O	X	X

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
	Trail users would have priority over businesses as driveways of water-dependent and industrial uses. The Ballard Avenue and Leary Alternatives do not contain water-dependent uses in the BINMIC.					
BI-P15	Support preservation of all streets within the BINMIC and arterial access routes to the BINMIC for freight mobility. To accomplish this, support preservation of turning radii, visibility and sight lines, clearance and existing lane configurations.					
		X	O	O	O	O
	Under all Build Alternatives, sight-lines may be compromised and lane configurations would change. Alternatives with less trail in the BINMIC would be more consistent with this policy than those with more trail in the BINMIC.					
BI-P16	Support commuting to work by BINMIC employees by bicycle and walking. For safety and operational reasons, however, support locating recreational and commuter through trails away from industrial areas.					
		O	O	O	O	O
	The policy discourages through trails in the BINMIC. Alternatives with less trail in the BINMIC would be more consistent with this policy than those with more trail in the BINMIC.					
BI-P18	Recognize the interdependence of maritime and fishing industries and related businesses and their special requirements for transportation, utilities, pier space and chill facilities. Encourage retention of this cluster of businesses and facilitate attraction of related businesses.					
		O	O	O	X	X
	All Alternatives' minor delays at driveway access points could frustrate BINMIC water-related and water-dependent uses; however, delays are expected to be minor. No BINMIC water-related/-dependent uses are located along the Ballard Avenue or Leary Alternative.					
BI-P21	Strive to retain shorelines for water dependent uses by enforcing waterfront and shoreline regulations in industrial areas.					
	X		X	X	X	X

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
BI-P22	Strive to provide a physical and regulatory environment that fosters the continued health of the maritime and fishing industries in the BINMIC					
	X		O	O	X	X
	Build Alternatives are expected to cause minor delays at trail/access intersections. BINMIC water-related and water-dependent businesses are located along the Shilshole South and Shilshole North Alternatives and could experience minor impacts.					
BI-P23	Encourage land assembly on the BINMIC waterfront to accommodate commercial fishing and other heavier maritime uses.					
	X		X	X	X	X
Applicable (Crown Hill/)Ballard Goals and Policies						
CH/B-G1	A defined, vital, accessible mixed use core with residential and commercial activity in the Ballard Hub Urban Village...					
		Somewhat	Somewhat	Somewhat	X	X
	Locating the multiuse trail within the mixed use core would improve accessibility to the area; however, none of the alternatives would thwart the realization of this goal.					
CH/B-G4	A transportation system that supports residential, commercial and civic activity in the core of the Ballard … urban village, and encourages people to use transit and non-motorized transportation modes.					
		O	O	Somewhat	X	X
	Absent a BGT link through Ballard, nonmotorized modes wouldn't be encouraged so the No Build is not consistent with the goal. The Shilshole South Alternative does not pass through the core of Ballard. The Shilshole North Alternative consists largely of industrial uses outside of the urban village. Consistent with the goal, the Ballard Avenue and Leary Alternatives would pass through Ballard's core and would support residential and commercial uses.					
CH/B-G5	A neighborhood with open space, parks and recreation sites connected by a network of "green links," that offer a full range of active and passive recreational opportunities to area residents and visitors, throughout …Ballard.					
		O	X	X	X	X

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
CH/B-P2	Improve the attractiveness of the business areas in the Ballard Hub Urban Village… to businesses, residents and shoppers through creation of pleasant streetscapes and public spaces.					
		O	X	X	X	X
	A portion of each of the Build Alternatives lies within the Ballard Hub Urban Village and all include improvements to the streetscape.					
CH/B-P3	Strive to create a mix of locally-owned, unique businesses and regional and national retailers.					
		X	X	X	X	X
CH/B-P4	Encourage tourists visiting the Ballard Locks to patronize businesses in the neighborhood.					
		Somewhat	Somewhat	X	X	X
	Build Alternatives with more frontage in the Ballard Hub Urban Village would be more consistent with this policy in that tourists would directly link to business that would offer goods and services that they would demand. The Shilshole South Alternative would link tourists directly to the industrial area where businesses are less likely to offer goods and services that they demand; however, both the No Build and Shilshole South Alternatives would allow tourists to connect to the commercial areas via sidewalks.					
CH/B-P7	Improve mobility for people using all modes of transportation to, within and around the Ballard Hub Urban Village to increase retail, commercial and civic activity.					
		O	X	X	X	X
	Any of the Build Alternatives would improve mobility. The Shilshole North, Ballard Avenue, and Leary Alternatives would provide improved access to retail, commercial and civic activity, as well as to transit routes.					

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
CH/B-P8	Emphasize accessibility by transit, bicycle and pedestrians in the downtown Ballard area.					
		O	Somewhat	X	X	X
	The Shilshole South Alternative does not pass through the downtown Ballard area; however, accessibility to it would be improved by the installation of a multiuse trail nearby. The Shilshole North, Ballard Avenue, and Leary Alternatives would provide improved access to retail, commercial and civic activity, as well as to transit routes					
CH/B-P9	Preserve the function of 15th Avenue NW as a principal arterial and a major truck street, but strive to overcome the street as a barrier that isolates the neighborhood areas to the east and west from each other and to improve its contribution to the visual character.					
		O	X	X	X	X
	Completion of any Build Alternative would connect neighborhoods on either side of 15th Ave NW. Under any scenario, it would continue to function as a principal arterial and major truck street.					
CH/B-P10	Strive to improve the pedestrian environment along NW Market Street while retaining its function as a principal arterial.					
		O	O	X	X	X
CH/B-P11	Take advantage of present and future economic, cultural, and open space developments to enhance the bicycle and pedestrian network.					
		O	X	X	X	X
CH/B-P13	Increase the range of recreation opportunities and types of open space available in the neighborhood. Encourage the development of new facilities, including, but not limited to passive parks, tennis courts, basketball courts, ballfields, play areas, marine and shoreline parks, pedestrian-friendly walkways, trails (including the Burke-Gilman), and gateways.					
		O	X	X	X	X

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

		No Build	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
CH/B-P14	Enhance existing open space and recreation sites and facilities.					
		O	X	X	X	X
CH/B-P15	Create opportunities for people to experience the natural environment through encouraging … tree planting … in the public right-of-way; creating access to views and waterways.					
		O	X	X	X	X
CH/B-P20	Seek to attract industrial uses that could have a symbiotic relationship with the local arts community, including but not limited to, glass blowing facilities, welding and metalwork shops, facilities that recycle materials into usable objects, woodworking facilities, or large-scale ceramics.					
		X	X	X	X	X

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WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

APPENDIX F

SUMMARY OF ALTERNATIVE CONSISTENCY WITH SEATTLE DEPARTMENT OF TRANSPORTATION FREIGHT MOBILITY STRATEGIC ACTION PLAN'S GOALS, POLICIES, AND STRATEGIES

Table F-1. Summary of Alternative Consistency with Seattle Department of Transportation Freight Mobility Strategic Action Plan's Goals, Policies, and Strategies*

Seattle Freight Mobility Strategic Action Plan	*No Build*	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
TG20	Maintain Seattle as the hub for regional goods movement and as a gateway to national and international suppliers and markets.				
	X	X	X	X	X
T47	Maintain a forum for the freight community to advise the City and other entities on an ongoing basis on topics of land-based freight transportation facility modifications and enhancements. Coordinate the review of potential operational changes, capital projects and regulations that may impact freight movement. Participate and advocate Seattle's interests in regional and state forums.				
	X	X	X	X	X
T48	Recognize the importance of the freight network to the city's economic health when making decisions that affect "major truck streets" as well as other parts of the region's roadway system.				
	X	X	X	X	X
	All Alternatives recognize and consider project-associated economic, transportation, and land use impacts.				
T49	Support efficient and safe movement of goods by rail where appropriate. Promote continued operation of freight rail lines and intermodal yards that serve industrial properties and the transport of goods. Improve the safety and operational conditions for freight rail transport at the rail track crossings within city streets.				
	O	X	X	X	X
	Under the No Build Alternative, traffic congestion is expected to worsen, compromising rail/intermodal yard linkages. The Shilshole South Alternative would provide improved separation between nonmotorized users and the rail line, which would reduce user conflicts. All alternatives promote continued operation of freight trail lines and intermodal yards, although increased delays could be experienced under the No Build and all Build Alternatives.				

*NOTES:
X = CONSISTENT
O = INCONSISTENT

WHERE ALTERNATIVES ARE NOT IMPACTED BY A POLICY OR GOAL, THEY ARE ASSUMED TO BE CONSISTENT.

Seattle Freight Mobility Strategic Action Plan	*No Build*	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
T50	Promote an intermodal freight transportation strategy, including rail, truck, air and water transport and advocate for improved freight and goods movement. Work toward improved multi-modal connections among rail yards, industrial areas, airports, and regional roadways.				
	O	Somewhat	Somewhat	Somewhat	Somewhat
	Under the No Build Alternative, increased traffic congestion from population and employment growth are likely. All Build Alternatives propose some improvements and predictability to traffic flow.				
T51	Consider the needs for local delivery and collection of goods at businesses by truck when making street operational decisions and when developing and implementing projects and programs for highways, streets, and bridges.				
	O	Somewhat	Somewhat	Somewhat	Somewhat
	Under the No Build Alternative, increased traffic congestion with no anticipated improvements could delay goods delivery. Under the Build Alternatives, road improvements could improve traffic flow, but minor delays at driveway accesses and the removal of loading zones could compromise the flow of goods. Build Alternatives that limit trail length in the BINMIC are more consistent.				
GS1	Maintain a Street and Highway Network for Trucks.				
	X	X	X	X	X
GS1.3	Design Standards for Oversized Vehicles: … The City will continue to review current standards and modify them to ensure that when arterials—especially Major Truck Streets are redesigned and rebuilt, they are better able to accommodate truck movements, in coordination with other street use needs.				
	X	X	X	X	X
GS1.6	Minimize Conflicts Between Trucks and Other Transportation Modes: There are a number of basic conflicts between medium to heavy truck traffic and other motorized, non-motorized, and pedestrian modes of transportation that the City continually needs to evaluate and address. Possible solutions might include identifying alternative routes, developing separate facilities, and clarifying priorities for specific locations.				
	O	Somewhat	Somewhat	Somewhat	Somewhat

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Seattle Freight Mobility Strategic Action Plan	*No Build*	*Shilshole South Alternative*	*Shilshole North Alternative*	*Ballard Avenue Alternative*	*Leary Alternative*
	Under the No Build Alternative, congestion and user conflicts are anticipated to worsen. Build Alternatives that limit trail length in the BINMIC are more consistent with this policy.				
GS3	Improve Freight Access to Manufacturing and Industrial Areas.				
	O	Somewhat	Somewhat	Somewhat	Less Consistent
	Under All Build Alternatives, freight mobility is expected to improve because NW 45th St would be restored to a two-way roadway. However, delays could be experienced at driveway accesses and on certain primary freight corridors. On NW Leary Way, between 15th Ave NW and 11th Ave NW, freight could experience additional delays because NW Leary Way is reduced by one lane.				
GS5	Facilitate efficient retail and office goods delivery. Improve freight-dependent business site access through management of curb space and alleys. Continue to work with business district representatives and individual businesses to install commercial and passenger load zones where appropriate (GS5.1). Develop and implement goods delivery strategies. Explore strategies that address issues of goods delivery and managing operational impacts on adjacent land uses. Balance the needs for loading zones with other curb use needs. Ensure that loading zones are reserved for freight loading and unloading as intended with appropriate levels of enforcement (GS5.2).				
	Somewhat	Somewhat	Somewhat	Somewhat	Somewhat
	All Alternatives could cause additional delays in the BINMIC. Roadway improvements between 15th Ave NW and 11th Ave NW could improve traffic flow. The reduction of loading spaces could have minor impacts on goods delivery.				
GS6	Freight Mobility Coordination and Implementation. Improve communication tools for construction-related traffic impacts for freight mobility and access. Timely notification of [construction] activities can assist freight operators in planning for alternative routes (GS6.5).				
	X	X	X	X	X

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