



## CHAPTER 8: PARKING

### 8.1 Introduction

This chapter describes publicly available on-street and off-street parking in the BGT Missing Link study area and analyzes the potential impacts of project construction and operation on these resources. The Parking Discipline Report (Parametrix, 2017) describes in detail the methods used to identify and evaluate parking in the study area. Analysts relied on the following three recent parking studies to determine the on-street and off-street parking conditions in the study area in 2017:

- The 2015 Ballard Parking Study—on-street parking (SDOT, 2015a);
- The 2017 BGT Missing Link Parking Study—on-street and off-street parking (IDAX, 2017); and
- The Ballard Off-street Parking Study, July 2014—off-street parking (SDOT, 2014).

These three studies were used because they were completed recently and cover the entire study area.

### 8.2 Affected Environment

The study area for the Missing Link parking analysis is the area bounded by the Ship Canal to the south, 9<sup>th</sup> Ave NW to the east, NW 50<sup>th</sup> St/Tallman Ave NW/NW 58<sup>th</sup> St to the north, and 32<sup>nd</sup> Ave NW to the west (Figure 8-1). For the portions of the study area bounded by a street, the study area includes the entire street. This area, which is approximately two blocks from the most peripheral of the Build Alternatives, is the distance most people would be willing to walk to their destinations after parking, accounting for such factors as the trip purpose, topography, the walking environment, and available time.

The affected environment consists of the parking supply, parking occupancy, and parking utilization in the study area in 2017. These terms are defined as follows:

- **Parking supply** comprises all publicly available on-street and off-street parking spaces in the study area, whether available at no cost or for a fee.
- **Parking occupancy** is the number of parking spaces that are occupied at a given time.
- **Parking utilization** is the percentage of the parking supply that is being occupied at a given time.

Parking supply, occupancy, and utilization vary throughout the study area and fluctuate depending on the day of the week and the time of day. Therefore, data were collected during multiple hours of both weekdays and weekends. Data collected during any weekday are assumed to reflect typical weekday parking. Data collected during any weekend are assumed to reflect typical weekend parking.

---

#### *Changes from the DEIS*

Chapter 8 was updated to reflect comments received on the DEIS and to include analysis of the Preferred Alternative. Additional evening and weekend parking data were collected to provide more information on potential impacts. Other edits were made to correct errors and improve clarity.

---

## BURKE-GILMAN TRAIL MISSING LINK

### 8.2.1 Parking Supply

The study area contains different types of parking supply. This analysis considered the following types of parking:

- On-street parking spaces;
- Off-street parking spaces available for public use; and
- On-street passenger and commercial loading spaces.

#### ***On-street and Off-street Parking***

In the study area, on-street parking varies from short-term metered parking with 2-hour limits to unmetered spaces with no time limits. All on-street parking spaces in the study area, whether paid or unpaid, were included in the parking analysis.

Unstriped areas of City-owned right-of-way along some blocks of Shilshole Ave NW have historically been used by private businesses for parking and loading, although these areas are not formally organized and have not been expressly approved or permitted as parking areas by the City. The occupancy of parked vehicles depends on the efficiency of the drivers parking on a particular day. In some areas along Shilshole Ave NW, vehicles could be perpendicularly parked on one day and aligned in a parallel manner the next. These unpermitted spaces were counted as they are currently used, whether it is parallel, multiple parallel rows, perpendicular, or angled parking.

NW 54<sup>th</sup> St between 26<sup>th</sup> Ave NW and 30<sup>th</sup> Ave NW is not identified as a legal City street. While people do park on this section of NW 54<sup>th</sup> St, the parking was not counted as available public parking supply because it is not an officially sanctioned City street or public parking area.

A total of 20 off-street parking lots and garages were included in the parking analysis. Users of these off-street lots available for public use are generally required to pay lot-specific rates that vary by parking duration. The number of off-street parking lots and garages in the study area can change quickly, as new lots open and others close due to various factors, including new development displacing lots and garages or new lots and garages being built. This analysis provides the most accurate estimation of off-street parking at time of writing.

A total of 3,086 on-street parking spaces and a minimum of 730 off-street parking spaces are available for public use in the study area on weekdays (Table 8-1). The off-street parking supply varies throughout the day as well as by day of week. The weekday off-street supply from 8 AM to 5 PM is 730 spaces, from 5 PM to 6 PM it is 855 spaces, and after 6 PM it is 950 spaces. The weekend off-street supply from 8 AM to 1 PM is 795 spaces, from 1 PM to 5 PM it is 825 spaces, from 5 PM to 6 PM it is 932 spaces, and after 6 PM it is 950 spaces. To be conservative, the minimum off-street parking supply count for weekday (730) and weekend (795) is used in Table 8-1. Figure 8-2 shows the on-street parking supply for each block face in the study area, and Figure 8-3 shows the off-street parking supply for each lot and garage in the study area.

The weekend on-street parking supply can be affected by events such as the Ballard Farmers Market, which is held every Sunday on one block of Ballard Ave NW between NW Vernon Pl and 22<sup>nd</sup> Ave NW and on 22<sup>nd</sup> Ave NW between Ballard Ave NW and NW Market St. On Sundays, no on-street parking is allowed on this block between 6 AM and 5 PM, but all of the paid parking blocks in the study area are free on Sundays with no time restrictions; therefore, parking occupancy and utilization could be considerably different than on Saturdays.

## BURKE-GILMAN TRAIL MISSING LINK



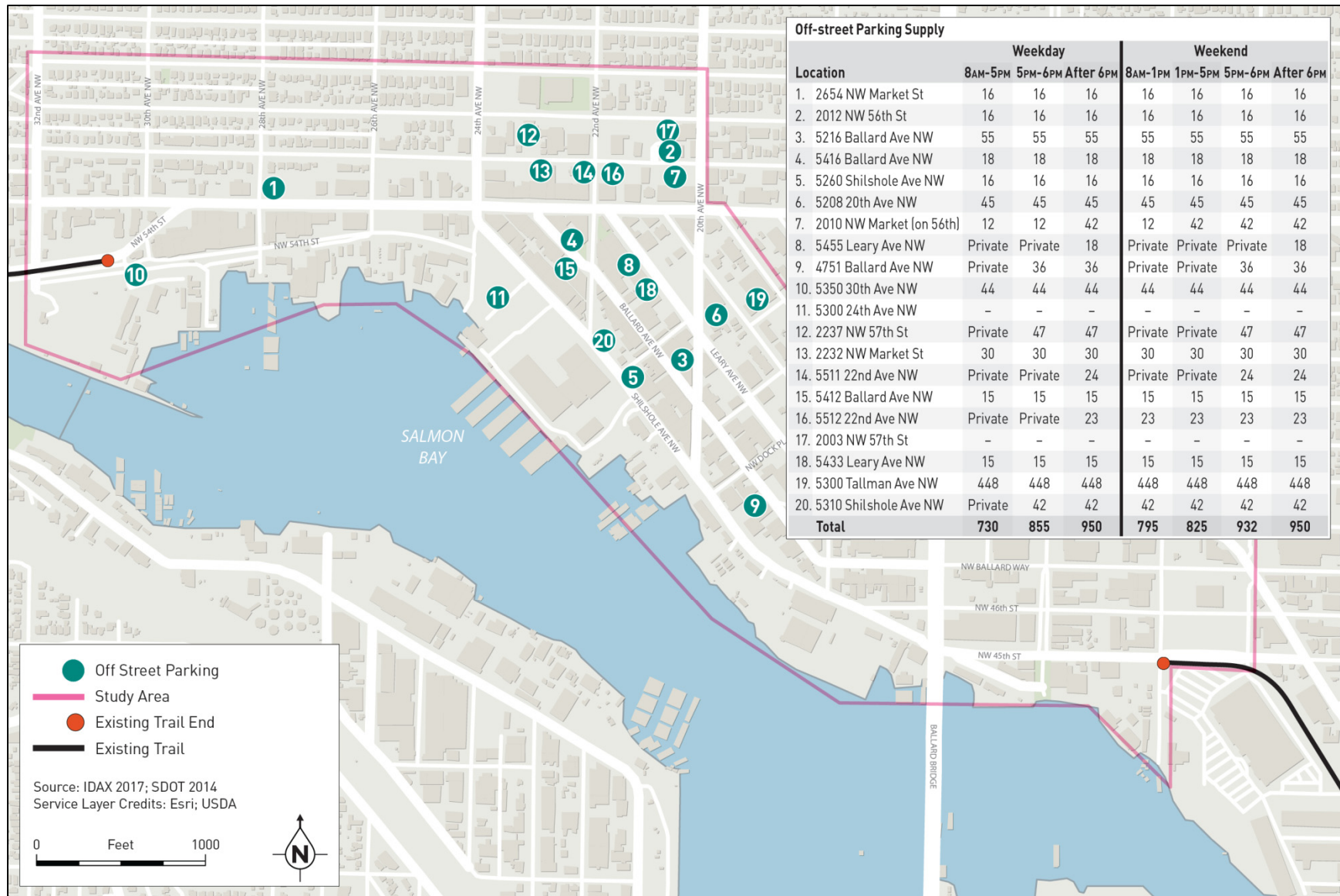


Figure 8-3. Off-Street Parking Supply

**Table 8-1. Parking Supply in Study Area**

	<i>Paid On-Street Supply<sup>1</sup></i>	<i>Non-Paid On-Street Supply<sup>2</sup></i>	<i>Total On-Street Supply</i>	<i>Off-Street Parking Supply<sup>2</sup></i>	<i>Total Parking Supply</i>
<b><i>Weekday</i></b>					
Number of Spaces	484	2,602	3,086	730	3,816
Percent of Total	13%	68%	81%	19%	100%
<b><i>Weekend</i></b>					
Number of Spaces	484	2,602	3,086	795	3,881
Percent of Total	12%	67%	79%	21%	100%

Sources:

<sup>1</sup> SDOT, 2015a.<sup>2</sup> IDAX, 2017.***Loading Zone Spaces***

Table 8-2 summarizes the existing loading zone spaces in the study area. In some cases, the City may post one sign for a loading zone that could accommodate multiple vehicles. Each loading zone sign was assumed to indicate one loading zone space. In total, 132 loading zone spaces are available in the study area; these spaces are relatively evenly distributed throughout the study area (Figure 8-4). Loading zone spaces are used for various purposes including commercial loading, passenger drop-off, and taxi loading.

**Table 8-2. Loading Zone Spaces in Study Area**

<i>Unrestricted Loading Zone Spaces</i>	<i>Passenger Loading Zone Spaces</i>	<i>Truck-Only Loading Zone Spaces</i>	<i>Commercial Vehicle Loading Zone Spaces</i>	<i>Total Loading Zone Spaces</i>
82	15	32	3	132

Source: SDOT, 2015b.



**Figure 8-4. Loading Zone Spaces**

## 8.2.2 Parking Occupancy and Utilization

SDOT sets an on-street utilization target range of 70 to 85% for commercial and mixed-use areas. However, SDOT does not have an on-street utilization target for residential and industrial areas, where parking turnover is less important. SDOT's on-street utilization target for commercial and mixed-use areas is consistent with SDOT's Annual On-Street Paid Parking Occupancy (SDOT, 2015a) requirements to manage paid parking areas so that one or two parking spaces are available per block face. At higher levels of utilization, it becomes difficult for a driver to find an on-street parking space. If the threshold of 85% for on-street parking utilization is exceeded, it is assumed that the motorists who would otherwise park on the street on a particular block would search farther for an on-street parking space or would use off-street parking.

### *Occupancy and Utilization by Time of Day—Weekday*

Weekday occupancy and utilization data were collected during the AM and PM peak periods to capture the daily fluctuations in occupancy and utilization from business-related, retail-related, and residential parking. Occupancy and utilization data were collected at 8 AM, 9 AM, 3 PM, 4 PM, 5 PM, 6 PM, 7 PM, 8 PM, and 9 PM.

Table 8-3 summarizes the weekday on-street and off-street parking occupancy and utilization observed in the study area across the time periods studied for the 2017 existing conditions. On-street and off-street parking occupancy and utilizations are described separately below.

#### On-Street Parking Occupancy and Utilization—Weekday

As shown in Table 8-3, the occupancy and utilization for weekday on-street parking varies throughout the day. Major findings are as follows:

- Parking occupancy and utilization for paid parking varies dramatically throughout the day and is low in the morning and very high later in the evening. Paid parking utilization is highest at 7 PM and 8 PM (95%) and lowest at 8 AM (29%).
- Parking occupancy and utilization for non-paid parking is consistently moderate throughout the day. Non-paid parking utilization is highest at 9 AM (68%) and lowest at 9 PM (57%).

The following is a summary of on-street parking occupancy and utilization for each hour evaluated.

On-street parking utilization is highest at **8 AM** in the non-paid, residential blocks of central Ballard and on the northernmost blocks of the study area. The majority of the paid parking in Ballard has very low utilization at 8 AM. It is assumed that the main destination in the study area on weekdays is the Ballard central business district and the businesses on Shilshole Ave NW. It is also assumed that the non-paid, residential parking areas in the central portion of the study area, roughly south of NW Market St and west of 15<sup>th</sup> Ave NW, and the northernmost blocks may have high utilization due to residents leaving cars there. The non-paid, residential area in central Ballard has high utilization throughout all hours studied. West of 28<sup>th</sup> Ave NW, the residential density is lower; therefore, there is more available parking in the northwestern corner of the study area. Utilization in the southeast portion of the study area is mixed.

At **9 AM**, more of the non-paid parking in central Ballard has filled up, and some of the paid blocks also have high utilization. Some of the blocks in the northernmost portion of the study area have a decline in utilization from 8 AM to 9 AM. This could be due to some residents leaving for work outside of the study area. In the southeast portion of the study area, utilization increased slightly but is still mixed.



At **3 PM**, utilization is very different than during the morning hours studied. Utilization is still very high on the non-paid blocks in central Ballard, but by 3 PM most of the paid blocks have reached a moderate level of utilization, and some have reached over 85% utilization. Utilization on the northernmost blocks slightly increased after the morning, with the paid blocks seeing more usage.

Utilization declines slightly throughout the study area between 3 PM and **4 PM**. The central Ballard non-paid blocks are still highly utilized, but the paid blocks are less utilized. This could be due to some daytime workers leaving the study area and freeing up spaces for those who would have used paid blocks. The northern and southeastern portions of the study area are largely similar between 3 PM and 4 PM, with mixed utilization.

Utilization continues to decline slightly between 4 PM and **5 PM**. This could reflect more daytime workers leaving the study area for the day. At the same time, utilization on the paid blocks increases by 13%, possibly reflecting more people coming to the Ballard central business district for evening activities and evening restaurant/bar workers coming to work. The northern and southeastern portions of the study area are largely similar between 4 PM and 5 PM, with mixed utilization.

Utilization for the study area increases slightly at **6 PM**, but the geographic occupancy pattern is unique at 6 PM. Utilization for paid spaces in the Ballard central business district increases dramatically from 71 to 91%, possibly reflecting the high occupancy for evening activities in the study area. Utilization for non-paid spaces continues to decline slightly from its peak at 9 AM, possibly reflecting that many daytime workers have left the study area for the day. Utilization for the northern portion of the study area remains mixed, similar to the other hours during the day, while utilization for the southeastern portion of the study area slightly declines from 5 PM.

Utilization for the study area increases slightly at **7 PM**. Utilization for paid spaces in the Ballard central business district continued to increase to almost capacity at 95%, reflecting the high utilization for evening activities in the study area. Utilization for non-paid spaces stayed similar to 6 PM, possibly reflecting that many daytime workers have left the study area for the day. Utilization for the northern portion of the study area started filling up, while utilization for the southeastern portion of the study area continued to decline.

Utilization for the study area decreased slightly at **8 PM**. Utilization for paid spaces in the Ballard central business district continued to be near capacity at 95%, reflecting the high utilization for evening activities in the study area. Utilization for non-paid spaces continued to decline slightly from its peak at 9 AM, possibly reflecting that many daytime workers have left the study area for the day. Utilization for the northern portion of the study area continued to increase, while utilization for the southeastern portion of the study area continued to decline.

Utilization for the study area continued to decrease slightly at **9 PM**. Utilization for paid spaces in the central business district started to decline from the peak of 95% at 7 and 8 PM to 92%. Utilization for non-paid spaces continued to decline slightly from its peak at 9 AM. Utilization for the northern portion of the study area continued to increase, while utilization for the southeastern portion of the study area continued to decline with a large amount of availability in this area.

**Table 8-3. Overall On-Street Parking Occupancy and Utilization—Weekday**

<i>Parking Type</i>	<i>Parking Supply</i>	<i>Weekday Occupancy and Utilization (%)</i>																	
		<i>8 AM</i>		<i>9 AM</i>		<i>3 PM</i>		<i>4 PM</i>		<i>5 PM</i>		<i>6 PM</i>		<i>7 PM</i>		<i>8 PM</i>		<i>9 PM</i>	
		<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>
Paid	484	139	29%	206	43%	323	67%	280	58%	343	71%	440	91%	461	95%	460	95%	447	92%
Non-Paid	2,602	1,706	66%	1,779	68%	1,754	67%	1,684	65%	1,579	61%	1,564	60%	1,595	61%	1,564	60%	1,482	57%
Total	3,086	1,845	60%	1,985	64%	2,077	67%	1,964	64%	1,922	62%	2,004	65%	2,056	67%	2,024	66%	1,929	63%

Sources: SDOT, 2015a; IDAX, 2017.

### Off-Street Parking Occupancy and Utilization—Weekday

Table 8-4 summarizes weekday off-street parking occupancy and utilization within the study area. Utilization by time ranges from a high of 71% at 9 AM to a low of 20% at 9 PM. Parking utilization is higher during the AM peak period than the PM peak period. Some lots and garages within the study area are not open to the public at all hours of the day. When lots or garages are not available for public use, they are indicated as “Private” in Table 8-4.

### ***Unused and Available Parking—Weekday***

Table 8-5 shows the number of unused and available parking spaces in the study area that are available on-street and off-street for weekdays during each hour of the parking study. A minimum of 1,009 on-street spaces and 213 off-street spaces are unused and available between 8 AM and 9 PM. Overall, 3 PM has the smallest supply of unused and available parking spaces (1,286), because both on- and off-street occupancy is moderate at this time (67 and 62%, respectively).

### ***Occupancy and Utilization by Time of Day—Weekend***

Weekend occupancy and utilization data were collected during the AM and PM peak periods on a typical Saturday to capture the daily fluctuations in occupancy and utilization from business-related, retail-related, and residential parking. Occupancy and utilization data were collected at 8 AM, 9 AM, 12 PM, 3 PM, 4 PM, 5 PM, 6 PM, 7 PM, 8 PM, and 9 PM.

Table 8-6 summarizes the weekend on-street and off-street parking occupancy and utilization observed in the study area across the time periods studied for the 2017 existing conditions. On-street and off-street parking occupancy and utilizations are described separately below.

### On-Street Parking Occupancy and Utilization—Weekend

As shown in Table 8-6, the occupancy and utilization for weekend on-street parking is similar to but more heavily utilized than on weekdays. Specific findings are as follows:

- Parking occupancy and utilization for paid parking varies dramatically throughout the day and is low in the morning and very high later in the evening. Paid parking utilization is highest at 7 PM and 8 PM (99%) and lowest at 8 AM (35%).
- Parking occupancy and utilization for non-paid parking is consistently moderate throughout the day. Non-paid parking utilization is highest at 4 PM (68%) and lowest at 8 AM (51%).
- The weekend on-street parking supply can be affected by events such as the Ballard Farmers Market, which is held every Sunday on one block of Ballard Ave NW between NW Vernon Pl and 22<sup>nd</sup> Ave NW. On Sundays, no on-street parking is allowed on this block between 6 AM and 5 PM.
- In addition, all of the paid parking blocks in the study area are free on Sundays with no time restrictions; therefore, parking occupancy and utilization could be considerably different than on Saturdays.

Table 8-4. Off-Street Parking Occupancy and Utilization—Weekday

Lot/ Garage Number	Parking Supply	Weekday Occupancy and Utilization (%) <sup>1</sup>																	
		8 AM		9 AM		3 PM		4 PM		5 PM		6 PM		7 PM		8 PM		9 PM	
		Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization
1	16	4	26%	8	52%	12	75%	7	43%	4	27%	2	13%	7	44%	4	25%	4	25%
2	16	3	16%	3	16%	5	31%	16	100%	16	100%	10	63%	2	13%	1	6%	1	6%
3	55	14	25%	31	56%	24	44%	21	39%	55	100%	32	58%	8	15%	18	33%	10	18%
4	18	7	38%	9	51%	16	89%	8	44%	11	59%	16	89%	9	50%	6	33%	5	28%
5	16	4	27%	6	36%	10	63%	8	50%	11	67%	16	100%	11	69%	10	63%	4	25%
6	45	7	15%	9	20%	16	36%	11	23%	14	31%	21	47%	36	80%	25	56%	12	27%
7	12/42	2	17%	2	17%	4	33%	5	42%	10	83%	24	57%	39	93%	23	55%	16	38%
8	18	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	13	72%	5	28%	7	39%	5	28%
9	36	Private	Private	Private	Private	Private	Private	Private	Private	11	30%	16	44%	6	17%	2	6%	1	3%
10	44	10	23%	20	45%	29	66%	24	55%	15	34%	7	16%	28	64%	33	75%	19	43%
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	47	Private	Private	Private	Private	Private	Private	Private	Private	4	9%	1	2%	3	6%	0	0%	0	0%
13	30	6	20%	8	27%	21	70%	16	53%	14	47%	11	37%	17	57%	9	30%	7	23%
14	24	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	16	67%	24	100%	17	71%	13	54%
15	15	3	20%	4	27%	7	47%	6	40%	8	53%	12	80%	6	40%	8	53%	7	47%
16	23	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	8	35%	7	30%	7	30%	6	26%
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	15	4	27%	9	60%	7	47%	2	13%	6	40%	3	20%	6	40%	8	53%	1	7%
19	448	333	74%	408	91%	302	67%	263	59%	152	34%	106	24%	123	27%	95	21%	74	17%
20	42	Private	Private	Private	Private	Private	Private	Private	Private	28	67%	42	100%	25	60%	7	17%	6	14%
Totals	730/ 855/ 950 <sup>2</sup>	396	54%	517	71%	453	62%	387	53%	358	42%	356	37%	362	38%	280	29%	191	20%

Source: IDAX, 2017; SDOT, 2014.  
Note: Utilization **highlighted in gray** indicates that this is an estimated value, based on ratios of similar nearby lots and garages.  
<sup>1</sup> “Private” indicates spaces that are not open for public use.  
<sup>2</sup> Total parking spaces vary based on public availability of off-street parking lots. Numbers represent 8 AM – 5 PM/5 PM – 6 PM/After 6 PM.



**Table 8-5. Available Unused Parking—Weekday**

	8 AM		9 AM		3 PM		4 PM		5 PM		6 PM		7 PM		8 PM		9 PM	
	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>
Parking Supply	3,086	730	3,086	730	3,086	730	3,086	730	3,086	855	3,086	950	3,086	950	3,086	950	3,086	950
Parking Occupancy (Filled Spaces)	1,845	396	1,985	517	2,077	453	1,964	387	1,922	358	2,004	356	2,056	362	2,024	280	1,929	191
Utilization (%)	60%	54%	64%	71%	67%	62%	64%	53%	62%	42%	65%	37%	67%	38%	66%	29%	63%	20%
Available Unused Parking (Unfilled Spaces)	1,241	334	1,101	213	1,009	277	1,122	343	1,164	497	1,082	594	1,030	588	1,062	670	1,157	759

Sources:

<sup>1</sup> SDOT, 2015a; IDAX, 2017.<sup>2</sup> IDAX, 2017; SDOT, 2014.**Table 8-6. Overall On-Street Parking Occupancy and Utilization—Weekend**

<i>Parking Type</i>	<i>Parking Supply</i>	<i>Weekend Occupancy and Utilization (%)</i>																			
		8 AM		9 AM		12 PM		3 PM		4 PM		5 PM		6 PM		7 PM		8 PM		9 PM	
		<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>	<i>Occupancy</i>	<i>Utilization</i>
Paid	484	167	35%	231	48%	461	95%	464	96%	465	96%	472	98%	476	98%	478	99%	478	99%	466	96%
Non-Paid	2,602	1,333	51%	1,497	58%	1,711	66%	1,749	67%	1,773	68%	1,755	67%	1,705	66%	1,705	66%	1,669	64%	1,627	63%
Total	3,086	1,500	49%	1,728	56%	2,172	70%	2,213	72%	2,238	73%	2,227	72%	2,181	71%	2,183	71%	2,147	70%	2,093	68%

Sources: SDOT, 2015a; IDAX, 2017.

The following is a summary of on-street parking occupancy and utilization for each hour evaluated.

On-street parking utilization is highest at **8 AM** in the non-paid, residential blocks of central Ballard and on the northernmost blocks of the study area. The majority of the paid parking in Ballard has very low utilization at 8 AM. It is assumed that the main destination on weekends in the study area is the Ballard central business district. It is also assumed that the non-paid, residential parking areas in the central portion of the study area, approximately south of NW Market St and west of 15<sup>th</sup> Ave NW, and the northernmost blocks may have high utilization due to residents leaving cars there. The non-paid, residential area in central Ballard has high utilization throughout all hours studied. West of 28<sup>th</sup> Ave NW, the residential density is lower; therefore, there is more available parking in the northernmost corner of the study area. Utilization in the southeast portion of the study area is low on weekend mornings.

At **9 AM**, even more of the non-paid parking in central Ballard has filled up, and utilization on some of the paid blocks has started to increase. In the northernmost portion of the study area the utilization remained similar to 8 AM as residents are assumed to still be at home. In the southeastern portion of the study area utilization increased slightly, but was still low.

At **12 PM**, utilization is very different than during the morning hours studied. Not only is utilization very high on the non-paid blocks in central Ballard, but by 12 PM most of the paid blocks are approaching 100% utilization. Utilization on the northernmost blocks slightly increased compared to the morning, and utilization in the southeastern portion of the study area has also increased.

At **3 PM**, utilization for the study area increased slightly. Utilization remained very high on the non-paid and paid blocks in central Ballard, with the paid blocks being almost 100% utilized. Utilization on the northernmost blocks decreased slightly compared to the morning, while utilization in the southeastern portion of the study area increased slightly.

At **4 PM**, utilization increased slightly throughout the study area. The central non-paid blocks are still highly utilized, with the paid blocks almost 100% utilized. The northern and southeastern portions of the study area continued to increase slightly in utilization compared to 3 PM.

Utilization remained similar between 4 and **5 PM**. The central non-paid blocks were still highly utilized, with the paid blocks almost 100% utilized. While the northern portion remained similar to the previous hour, the southeastern portion of the study area started to have slightly less utilization than at 4 PM.

Utilization remained similar between 5 and **6 PM**. The central non-paid blocks are still highly utilized, with the paid blocks almost 100% utilized. While the northern portion remained similar to the previous hour, the southeastern portion of the study area continued to have less utilization than the previous hour.

At **7 PM**, utilization remained similar to the previous hour. The central non-paid blocks were still highly occupied, with the paid blocks almost 100% utilized. While the northern portion remained similar to the previous hour, the southeastern portion of the study area continued to have less utilization than the previous hour.

At **8 PM**, utilization remained similar to the previous hour. The central non-paid blocks were still highly occupied, with the paid blocks almost 100% utilized. While the northern portion remained similar to the previous hour, the southeastern portion of the study area continued to have less utilization than the previous hour.

At **9 PM**, utilization for the study area started to decline. The central non-paid blocks were still highly occupied, with the paid blocks almost 100% utilized. While the northern portion remained similar to the previous hour, the southeastern portion of the study area continued to have less utilization than the previous hour and is relatively underutilized.

### Off-Street Parking Occupancy and Utilization—Weekend

Table 8-7 summarizes weekend off-street parking occupancy and utilization within the study area. Utilization by time ranges from a high of 49% at 7 PM to a low of 24% at 8 AM. Parking utilization is higher during the PM peak period than the AM peak period. Some lots and garages within the study area are not open to the public at all hours of the day. When lots or garages are not available for public use, they are indicated as “Private” in Table 8-7.

### ***Total Unused and Available Parking—Weekend***

Table 8-8 shows the number of unused parking spaces in the study area that are available for both on-street and off-street parking for weekends during each hour of the parking study. A minimum of 848 on-street spaces and 483 off-street spaces are available between 8 AM and 9 PM at any given time period. Overall, 4 PM has the smallest supply of unused and available parking spaces (1,344) because the on-street utilization is 73% and the off-street utilization is 40%.

Table 8-7. Off-Street Parking Occupancy and Utilization—Weekend

Lot/ Garage Number	Parking Supply	Weekend Occupancy and Utilization (%) <sup>1</sup>																			
		8 AM		9 AM		12 PM		3 PM		4 PM		5 PM		6 PM		7 PM		8 PM		9 PM	
		Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization	Occupancy	Utilization
1	16	3	19%	3	19%	3	19%	3	19%	2	13%	2	13%	3	19%	3	19%	3	19%	3	19%
2	16	1	6%	3	19%	3	19%	5	31%	4	25%	7	44%	7	44%	13	81%	12	75%	10	63%
3	55	19	35%	22	40%	17	31%	25	45%	24	44%	35	64%	37	67%	45	82%	46	84%	44	80%
4	18	0	0%	1	6%	5	28%	8	44%	8	44%	11	61%	13	72%	15	83%	16	89%	16	89%
5	16	1	6%	1	6%	5	31%	9	56%	13	81%	12	75%	16	100%	16	100%	16	100%	16	100%
6	45	39	87%	44	98%	43	96%	37	82%	37	82%	39	87%	44	98%	45	100%	29	64%	32	71%
7	12/42	1	8%	1	8%	12	100%	13	31%	21	50%	23	55%	24	57%	39	93%	23	55%	16	38%
8	18	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	6	33%	6	33%	7	39%	7	39%
9	36	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	24	67%	32	89%	32	89%	27	75%	26	72%
10	44	21	48%	31	70%	44	100%	44	100%	38	86%	26	59%	21	48%	15	34%	14	32%	13	30%
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	47	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	3	6%	4	9%	5	11%	3	6%	0	0%
13	30	1	3%	4	13%	25	83%	28	93%	21	70%	18	60%	29	97%	28	93%	28	93%	29	97%
14	24	Private	Private	Private	Private	Private	Private	6	25%	16	67%	11	46%	14	58%	17	71%	10	42%	10	42%
15	15	4	27%	3	20%	6	40%	4	27%	4	27%	5	33%	8	53%	10	67%	13	87%	9	60%
16	23	2	9%	4	17%	12	52%	10	43%	12	52%	11	48%	17	74%	21	91%	18	78%	14	61%
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	15	5	33%	5	33%	10	67%	10	67%	10	67%	13	87%	15	100%	15	100%	12	80%	10	67%
19	448	85	19%	88	20%	101	23%	99	22%	90	20%	82	18%	80	18%	95	21%	73	16%	60	13%
20	42	12	29%	35	83%	26	62%	31	74%	29	69%	24	57%	42	100%	42	100%	41	98%	42	100%
Totals	795/ 825 932/ 950 <sup>2</sup>	194	24%	245	31%	312	39%	332	40%	329	40%	346	37%	412	43%	462	49%	391	41%	357	38%

Sources: IDAX, 2017; SDOT, 2014.  
<sup>1</sup> “Private” indicates spaces that are not open for public use.  
<sup>2</sup> Total parking spaces vary based on public availability of off-street parking lots. Numbers represent 8 AM – 12 PM/1 PM – 4 PM/5 PM – 6 PM/After 6 PM.



**Table 8-8. Available Unused Parking—Weekend**

	8 AM		9 AM		12 PM		3 PM		4 PM		5 PM		6 PM		7 PM		8 PM		9 PM	
	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>	<i>On-Street<sup>1</sup></i>	<i>Off-Street<sup>2</sup></i>
Parking Supply	3,086	795	3,086	795	3,086	795	3,086	825	3,086	825	3,086	932	3,086	950	3,086	950	3,086	950	3,086	950
Parking Occupancy (Filled Spaces)	1,500	194	1,728	245	2,172	312	2,213	332	2,238	329	2,227	346	2,181	412	2,183	462	2,147	391	2,093	357
Utilization (%)	49%	24%	56%	31%	70%	39%	72%	40%	73%	40%	72%	37%	71%	43%	71%	49%	70%	41%	68%	38%
Available Unused Parking (Unfilled Spaces)	1,586	601	1,358	550	914	483	873	493	848	496	859	586	905	538	903	488	939	559	993	593

Sources:

<sup>1</sup> SDOT, 2015a; IDAX, 2017.<sup>2</sup> IDAX, 2017; SDOT, 2014.

## 8.3 Potential Impacts

Construction impacts on parking were evaluated qualitatively because the location and amount of affected parking would change as construction progresses. The potential for temporary loss of parking is described below for each alternative, along with disruption to business access and loading areas.

The operational impacts of the Build Alternatives for parking in 2040, the design year, were evaluated using the following methods:

- A comparison of the total number of on-street and off-street parking spaces in the study area under the No Build Alternative and the Build Alternatives.
- An assessment of the parking supply under the Build Alternatives in relation to the existing parking occupancy.

### 8.3.1 No Build Alternative

#### **Construction**

No construction activities for the Missing Link would occur under the No Build Alternative; therefore, there would be no construction impacts.

#### **Operation**

The parking supply and loading zone spaces in the study area under the No Build Alternative are expected to remain the same as under existing (2017) conditions. Table 8-9 summarizes the expected No Build Alternative parking supply.

**Table 8-9. No Build Alternative Parking Supply**

	<i>Paid On-Street Supply</i>	<i>Non-Paid On-Street Supply</i>	<i>Total On-Street Supply</i>	<i>Off-Street Parking Supply</i>	<i>Total Parking Supply</i>
Number of Spaces	484	2,602	3,086	730	3,816
Percent of Total	13%	68%	81%	19%	100%

Occupancy of both on-street and off-street parking within the study area is expected to increase by the year 2040 in conjunction with population and employment growth in Ballard. Parking prices (adjusted for inflation) would also increase for both on-street and off-street parking based on this increase in occupancy. Parking supply would remain constant under the No Build Alternative. Therefore, an increase in occupancy (number of spaces filled) would increase on-street parking utilization rates across all time periods and all parts of the study area. However, the scale of increased on-street parking occupancy or utilization cannot be predicted using typical traffic forecasting tools.

The No Build Alternative would not change the existing (2017) passenger and commercial loading zone spaces (Table 8-10).

**Table 8-10. Loading Zone Spaces under the No Build Alternative**

<i>Unrestricted Loading Zone Spaces</i>	<i>Passenger Loading Zone Spaces</i>	<i>Truck-Only Loading Zone Spaces</i>	<i>Commercial Vehicle Loading Zone Spaces</i>	<i>Total Loading Zone Spaces</i>
82	15	32	3	132

### 8.3.2 Impacts Common to All Build Alternatives

#### **Construction**

Construction activities for the Build Alternatives would temporarily affect on-street parking throughout the entire study area. The amount of parking affected would vary by construction stage and street block, and would be determined once construction and staging plans are finalized. Parking supply outside of the construction area would not be affected. Access routes or loading zones at some businesses could be blocked, but this would only occur intermittently. Off-street parking is not expected to be affected by construction, except for minor temporary changes in access. Construction impacts are not significant because the overall availability of parking during the construction period would be largely unchanged and the City would maintain parking availability to the extent feasible during construction.

#### **Operation**

Occupancy of both on-street and off-street parking within the study area would increase by the year 2040 in conjunction with population and employment growth. All of the Build Alternatives would remove parking spaces, as described below for each alternative. Therefore, an increase in parking occupancy, coupled with reduced parking supply, would increase on-street and off-street parking utilization across the study area. Because occupancy of on-street spaces in some areas is already high, the removal of on-street parking spaces would likely shift occupancy to off-street parking areas.

All of the Build Alternatives would improve the nonmotorized facilities in the form of the new multi-use trail, new sidewalks, and improved road crossings. The enhanced availability of nonmotorized facilities for bicyclists and pedestrians under all of the Build Alternatives would provide local residents, employees, and visitors with additional choices in how they travel to, from, and through the study area. This could result in changes to the split among vehicle and nonmotorized modes of travel. A shift to nonmotorized modes could reduce parking occupancy in the study area, which would minimize the impacts of parking loss associated with the Build Alternatives.

City policy prioritizes other uses of street space over parking and is moving toward limiting parking requirements for new development. The Missing Link would replace some parking with enhanced nonmotorized facilities, supporting overall City planning goals for reducing dependency on single-occupancy vehicles (SOVs) in Ballard. The loss of parking would not be considered significant because the parking loss is spread throughout the alignments, can be absorbed in other on-street or off-street spaces throughout the study area although drivers may need to travel further, and is consistent with City planning goals relating to street space prioritization.

### 8.3.3 Preferred Alternative

#### ***Construction***

Construction impacts are not significant and would be the same for all of the Build Alternatives. There are no construction impacts unique to the Preferred Alternative compared to the other alternatives.

#### ***Operation***

##### Parking Supply

The Preferred Alternative would remove a total of approximately 344 on-street parking spaces (Table 8-11). These parking spaces would be replaced by the new multi-use trail, sidewalks, landscaping, and buffers. The removed parking spaces are generally characterized as employee and business customer parking for industrial businesses, and include the following areas:

- Both sides of NW 54<sup>th</sup> St would have no parking between 30<sup>th</sup> Ave NW and NW Market St.
- Along NW Market St between NW 54<sup>th</sup> St and 24<sup>th</sup> Ave NW, parking would remain similar to today on the north side of the street and would have some parking spaces removed on the south side of the street.
- The north side of Shilshole Ave NW and NW 45<sup>th</sup> St would remain largely unchanged, except at intersections where pedestrian crossing improvements require the removal of a few parking spaces close to the intersections and between NW Vernon Pl and 20<sup>th</sup> Ave NW. Between NW Vernon Pl and 20<sup>th</sup> Ave NW, the roadway would be shifted to the north to provide additional space for vehicle movements at driveways on the south side of Shilshole Ave SW. In this area, the parking spaces on the north side of Shilshole Ave NW would be reoriented as parallel parking spaces.
- The south side of Shilshole Ave NW and NW 45<sup>th</sup> St would largely have no parking from where the multi-use trail intersects Shilshole Ave NW at 24<sup>th</sup> Ave NW until 14<sup>th</sup> Ave NW, except for the segment between NW Vernon Pl and 20<sup>th</sup> Ave NW because parallel parking spaces would be provided.

Approximately 62 of the 344 removed spaces could remain between the proposed multi-use trail and existing buildings or between the proposed multi-use trail and Shilshole Ave NW depending on where the trail is adjacent to the roadway or buildings. If these 62 spaces remain, the Preferred Alternative would remove approximately 282 on-street parking spaces.

Overall, the loss of 344 on-street parking spaces represents approximately 11% of the on-street parking supply in the study area and approximately 9% of the total parking supply (on-street and off-street) in the study area. The loss of parking would not be considered a significant adverse impact because the parking loss is spread throughout the Preferred Alternative, can be absorbed in other on-street or off-street spaces throughout the study area although drivers may need to travel further, and is consistent with City planning goals relating to street space prioritization.



**Table 8-11. On-Street and Off-Street Parking Supply under the No Build Alternative and Preferred Alternative**

<i>Parking Type</i>	<i>No Build Alternative</i>	<i>Preferred Alternative</i>	<i>Net Parking Supply Change</i>	<i>Percent Reduction in Supply</i>
On-street	3,086	2,742	344	11%
Paid	484	486	0	0%
Non-paid	2,602	2,258	344	13%
Off-street	730	730	0	0%
<b>Total</b>	<b>3,816</b>	<b>3,472</b>	<b>344</b>	<b>9%</b>

**Loading Zone Spaces**

Table 8-12 summarizes the net change in loading zone spaces between the No Build Alternative and the Preferred Alternative. The Preferred Alternative could potentially remove two unrestricted loading zone spaces and two truck-only loading zone spaces. These spaces could remain by shifting them to other locations along existing block faces, to the other side of a street, or to an adjacent block. Generally, the City prioritizes retention of loading zone spaces and will work with adjacent businesses to retain or replace loading zones to the maximum extent feasible, as needed. However, moving loading zone spaces may not be an option on some blocks; therefore, to be conservative, it was assumed that all four loading zone spaces would be removed by the Preferred Alternative. This could result in trucks parking in the street to unload or developing other approaches to loading, which would present safety concerns for trail users and vehicles. SDOT would work with the potentially affected businesses to maintain freight access, and reduce potential impacts to businesses.

**Table 8-12. On-Street Loading Zone Spaces under the No Build Alternative and Preferred Alternative**

<i>Alternative</i>	<i>Unrestricted Loading Zone Spaces</i>	<i>Passenger Loading Zone Spaces</i>	<i>Truck-Only Loading Zone Spaces</i>	<i>Commercial Vehicle Loading Zone Spaces</i>	<i>Total Loading Zone Spaces</i>
No Build	82	15	32	3	132
Preferred	80	15	30	3	128
Net Reduction	2	0	2	0	4

**8.3.4 Shilshole South Alternative****Construction**

Construction impacts would be the same for all of the Build Alternatives, and are not significant. There are no construction impacts unique to the Shilshole South Alternative compared to the other alternatives.

## Operation

### Parking Supply

The Shilshole South Alternative would remove a total of approximately 279 on-street parking spaces (Table 8-13). These parking spaces would be replaced by the new multi-use trail, sidewalks, landscaping, and buffers. The removed parking spaces are generally characterized as employee and business customer parking for industrial businesses, and include the following areas:

- The north side of Shilshole Ave NW and NW 45<sup>th</sup> St would remain largely unchanged, except at intersections where pedestrian crossing improvements require the removal of a few parking spaces close to the intersections.
- The south side of Shilshole Ave NW and NW 45<sup>th</sup> St would largely have no parking between 24<sup>th</sup> Ave NW and 11<sup>th</sup> Ave NW.

Space for approximately 68 of the 279 spaces could continue to remain between the proposed multi-use trail and existing buildings, or between the proposed multi-use trail and Shilshole Ave NW depending on where the trail is adjacent to the roadway or buildings. If these 68 spaces remain, the Shilshole South Alternative would remove approximately 211 on-street parking spaces.

Overall, the loss of approximately 279 on-street parking spaces represents approximately 9% of the on-street parking supply in the study area and approximately 7% of the total parking supply (on-street and off-street combined) in the study area. The loss of parking would not be considered a significant adverse impact because the parking loss is spread throughout the Shilshole South Alternative, can be absorbed in other on-street or off-street spaces throughout the study area although drivers may need to travel further, and is consistent with City planning goals relating to street space prioritization.

**Table 8-13. On-Street and Off-Street Parking Supply under the No Build Alternative and Shilshole South Alternative**

<i>Parking Type</i>	<i>No Build Alternative</i>	<i>Shilshole South Alternative</i>	<b>Net Parking Supply Change</b>	<i>Percent Reduction in Supply</i>
On-street	3,086	2,807	279	9%
Paid	484	484	0	0%
Non-paid	2,602	2,323	279	11%
Off-street	730	730	0	0%
<b>Total</b>	<b>3,816</b>	<b>3,537</b>	<b>279</b>	<b>7%</b>

### Loading Zone Spaces

Table 8-14 summarizes the net change in loading zone spaces between the No Build Alternative and the Shilshole South Alternative. The Shilshole South Alternative would not remove any designated loading zone spaces (i.e., those marked by a sign). It could potentially remove or relocate some undesigned loading areas used by businesses that are within the City right-of-way. However, it is not possible to quantify these areas because they are not recognized by the City.

**Table 8-14. On-Street Loading Zone Spaces under the No Build Alternative and Shilshole South Alternative**

<i>Alternative</i>	<i>Unrestricted Loading Zone Spaces</i>	<i>Passenger Loading Zone Spaces</i>	<i>Truck-Only Loading Zone Spaces</i>	<i>Commercial Vehicle Loading Zone Spaces</i>	<i>Total Loading Zone Spaces</i>
No Build	82	15	32	3	132
Shilshole South	82	15	32	3	132
Net Change	0	0	0	0	0

### 8.3.5 Shilshole North Alternative

#### **Construction**

Construction impacts would be the same for all of the Build Alternatives, and are not significant. There are no construction impacts unique to the Shilshole North Alternative compared to the other alternatives.

#### **Operation**

##### Parking Supply

The Shilshole North Alternative would remove a total of approximately 206 on-street parking spaces (Table 8-15). These parking spaces would be replaced by the new multi-use trail, sidewalks, landscaping, and buffers. The removed parking spaces are generally characterized as employee and business customer parking for industrial businesses, and include the following areas:

- Both sides of NW 54<sup>th</sup> St would have no parking between 30<sup>th</sup> Ave NW and NW Market St.
- Along NW Market St between NW 54<sup>th</sup> St and 24<sup>th</sup> Ave NW, parking would remain similar to today on the north side of the street and some parking spaces would be removed on the south side of the street.
- Much of the parking on the north side of Shilshole Ave NW would be removed under this alternative, but some parallel parking would remain.
- The south side of Shilshole Ave NW would remain largely unchanged, except at intersections where pedestrian crossing improvements require the removal of a few parking spaces close to the intersections.
- Both sides of NW 46<sup>th</sup> St would largely have no parking from Shilshole Ave NW to 11<sup>th</sup> Ave NW.

Overall, the loss of approximately 206 on-street parking spaces represents approximately 7% of the on-street parking supply in the study area and approximately 5% of the total parking supply (on-street and off-street) in the study area. The loss of parking would not be considered a significant adverse impact because the parking loss is spread throughout the Shilshole North Alternative, can be absorbed in other on-street or off-street spaces throughout the study area although drivers may need to travel further, and is consistent with City planning goals relating to street space prioritization.

**Table 8-15. On-Street and Off-Street Parking Supply under the No Build Alternative and Shilshole North Alternative**

<i>Parking Type</i>	<i>No Build Alternative</i>	<i>Shilshole North Alternative</i>	<b>Net Parking Supply Change</b>	<i>Percent Reduction in Supply</i>
On-street	3,086	2,880	206	7%
Paid	484	486	-2*	0%
Non-paid	2,602	2,394	208	8%
Off-street	730	730	0	0%
<b>Total</b>	<b>3,816</b>	<b>3,610</b>	<b>206</b>	<b>5%</b>

\*The DEIS design for the Shilshole North Alternative included an increase of two paid parking spaces where the No Build Alternative had one loading zone space and one unused bus zone. Generally, the City prioritizes the retention of loading zone spaces and would not assume a conversion to a parking space. However, the initial design did not delineate loading zone spaces. The City would work with adjacent businesses to prioritize the retention or replacement of loading zones as needed.

### Loading Zone Spaces

Table 8-16 summarizes the net change in loading zone spaces between the No Build Alternative and the Shilshole North Alternative. The Shilshole North Alternative could potentially remove or relocate 10 unrestricted loading zone spaces and 14 truck-only loading zone spaces. These spaces could remain by shifting them to other locations along existing block faces, to the other side of a street, or to an adjacent block. Generally, the City prioritizes the retention of loading zone spaces, and the City would work with adjacent businesses to retain or replace loading zones to the maximum extent feasible, as needed. However, moving loading zone spaces may not be an option on some blocks; therefore, to be conservative, it was assumed that all 24 loading zone spaces would be removed by the Shilshole North Alternative. Of all the Build Alternatives, this represents the highest number of loading zone spaces removed for the project, and could represent a substantial inconvenience for loading/unloading of merchandise for businesses along Shilshole Ave NW. This action could result in trucks parking illegally in the street or developing other approaches to loading, which would present safety concerns for trail users and vehicles. SDOT would work with the potentially affected businesses to maintain freight access, and reduce potential impacts to businesses.

**Table 8-16. On-Street Loading Zone Spaces under the No Build Alternative and Shilshole North Alternative**

<i>Alternative</i>	<i>Unrestricted Loading Zone Spaces</i>	<i>Passenger Loading Zone Spaces</i>	<i>Truck-Only Loading Zone Spaces</i>	<i>Commercial Vehicle Loading Zone Spaces</i>	<i>Total Loading Zone Spaces</i>
No Build	82	15	32	3	132
Shilshole North	72	15	18	3	108
Net Reduction	10	0	14	0	24

### 8.3.6 Ballard Avenue Alternative

#### Construction

Construction impacts would be the same for all of the Build Alternatives and are not significant. There are no construction impacts unique to the Ballard Avenue Alternative compared to the other alternatives.

#### Operation

##### Parking Supply

The Ballard Avenue Alternative would remove a total of approximately 198 on-street parking spaces (Table 8-17). These parking spaces would be replaced by the new multi-use trail, sidewalks, landscaping, and buffers. The removed parking spaces are generally characterized as residential, employee, and business customer parking for retail businesses. A small number of removed parking spaces in the southeast portion of the study area can be characterized as employee and business customer parking for industrial businesses, and include the following areas:

- The south side of NW 56<sup>th</sup> St would have no parking between 28<sup>th</sup> Ave NW and 22<sup>nd</sup> Ave NW.
- The west side of 22<sup>nd</sup> Ave NW would have no parking between NW 56<sup>th</sup> St and Ballard Ave NW.
- The southwest side of Ballard Ave NW would have no parking between 22<sup>nd</sup> Ave NW and 17<sup>th</sup> Ave NW.
- The south side of NW Ballard Way would have no parking between 17<sup>th</sup> Ave NW and 15<sup>th</sup> Ave NW.
- The south side of NW 46<sup>th</sup> St would have no parking between 15<sup>th</sup> Ave NW and 11<sup>th</sup> Ave NW.
- The west side of 11<sup>th</sup> Ave NW would have no parking between NW 46<sup>th</sup> St and NW 45<sup>th</sup> St.

Overall, the loss of approximately 198 on-street parking spaces represents approximately 6% of the on-street parking supply in the study area and approximately 5% of the total parking supply (on-street and off-street) in the study area. The Ballard Avenue Alternative is the only Build Alternative to have an impact on paid parking, with the removal of 86 paid parking spaces or 18% of paid parking within the study area. The loss of parking would not be considered a significant adverse impact because the parking loss is spread throughout the Ballard Avenue Alternative, can be absorbed in other on-street or off-street spaces throughout the study area although drivers may need to travel further, and is consistent with City planning goals relating to street space prioritization.

**Table 8-17. On-Street and Off-Street Parking Supply under the No Build Alternative and Ballard Avenue Alternative**

<i>Parking Type</i>	<i>No Build Alternative</i>	<i>Ballard Avenue Alternative</i>	<b>Net Parking Supply Change</b>	<i>Percent Reduction in Supply</i>
On-street	3,086	2,888	198	6%
Paid	484	398	86	18%
Non-paid	2,602	2,490	112	4%
Off-street	730	730	0	0%
<b>Total</b>	<b>3,816</b>	<b>3,618</b>	<b>198</b>	<b>5%</b>

### Loading Zone Spaces

Table 8-18 summarizes the net change in loading zone spaces between the No Build Alternative and the Ballard Avenue Alternative. The Ballard Avenue Alternative could potentially remove or relocate 10 unrestricted loading zone spaces, two truck-only loading zone spaces, and two commercial vehicle loading zone spaces. It is possible that these spaces could remain by shifting them to other locations along existing block faces, to the other side of a street, or to an adjacent block. Generally, the City prioritizes the retention of loading zone spaces, and the City would work with adjacent businesses to retain or replace loading zones to the maximum extent feasible, as needed. However, moving loading zone spaces may not be an option on some blocks; therefore, to be conservative, it was assumed that all 14 loading zone spaces would be removed by the Ballard Avenue Alternative. This could result in trucks parking in the street to unload or developing other approaches to loading, which would present safety concerns for trail users and vehicles. SDOT would work with the potentially affected businesses to maintain freight access, and reduce potential impacts to businesses.

**Table 8-18. On-Street Loading Zone Spaces under the No Build Alternative and Ballard Avenue Alternative**

<i>Alternative</i>	<i>Unrestricted Loading Zone Spaces</i>	<i>Passenger Loading Zone Spaces</i>	<i>Truck-Only Loading Zone Spaces</i>	<i>Commercial Vehicle Loading Zone Spaces</i>	<i>Total Loading Zone Spaces</i>
No Build	82	15	32	3	132
Ballard Avenue	72	15	30	1	118
Net Reduction	10	0	2	2	14

### 8.3.7 Leary Alternative

#### **Construction**

Construction impacts would be the same for all of the Build Alternatives and are not significant. There are no construction impacts unique to the Leary Alternative compared to the other alternatives.

#### **Operation**

##### Parking Supply

The Leary Alternative would remove a total of approximately 82 on-street parking spaces (Table 8-19). These parking spaces would be replaced by the new multi-use trail, sidewalks, landscaping, and buffers. The removed parking spaces are generally characterized as residential, employee, and business customer parking for retail businesses, and includes some parking along the south side of NW Market St and NW Leary Ave and the west side of 11<sup>th</sup> Ave NW.

Overall, the loss of approximately 82 on-street parking spaces represents approximately 3% of the on-street parking supply in the study area and approximately 2% of the total parking supply (on-street and off-street) in the study area. The loss of parking would not be considered a significant adverse impact because the parking loss is spread throughout the Leary Alternative, can be absorbed in other on-street or

off-street spaces throughout the study area although drivers may need to travel further, and is consistent with City planning goals relating to street space prioritization.

**Table 8-19. On-Street and Off-Street Parking Supply under the No Build Alternative and Leary Alternative**

<i>Parking Type</i>	<i>No Build Alternative</i>	<i>Leary Alternative</i>	<b>Net Parking Supply Change</b>	<i>Percent Reduction in Supply</i>
On-street	3,086	3,004	82	3%
Paid	484	490	-6*	-1%*
Non-paid	2,602	2,514	88	3%
Off-street	730	730	0	0%
<b>Total</b>	<b>3,816</b>	<b>3,734</b>	<b>82</b>	<b>2%</b>

\*An increase of six paid parking spaces under the Leary Alternative is due to the DEIS design for Leary Alternative shifting a bus zone and including additional parking spaces where the No Build Alternative had three loading zone spaces and one unused bus zone. Generally, the City prioritizes the retention of loading zone spaces and would not assume a conversion to a parking space. However, the initial design did not delineate loading zone spaces. The City would work with adjacent businesses to prioritize the retention or replacement of loading zones as needed.

### Loading Zone Spaces

Table 8-20 summarizes the net change in loading zone spaces between the No Build Alternative and the Leary Alternative. The Leary Alternative could potentially remove or relocate eight unrestricted loading zone spaces, three passenger loading zone spaces, and four truck-only loading zone spaces. It is possible that these spaces could remain by shifting them to other locations along existing block faces, to the other side of a street, or to an adjacent block. Generally, the City prioritizes the retention of loading zone spaces, and the City would work with adjacent businesses to retain or replace loading zones to the maximum extent feasible, as needed. However, moving loading zone spaces may not be an option on some blocks; therefore, to be conservative, it was assumed that all 15 loading zone spaces would be removed by the Leary Alternative. This could result in trucks parking in the street to unload or developing other approaches to loading, which would present safety concerns for trail users and vehicles. SDOT would work with the potentially affected businesses to maintain freight access, and reduce potential impacts to businesses.

**Table 8-20. On-Street Loading Zone Spaces under the No Build Alternative and Leary Alternative**

<i>Alternative</i>	<i>Unrestricted Loading Zone Spaces</i>	<i>Passenger Loading Zone Spaces</i>	<i>Truck-Only Loading Zone Spaces</i>	<i>Commercial Vehicle Loading Zone Spaces</i>	<i>Total Loading Zone Spaces</i>
No Build	82	15	32	3	132
Leary	74	12	28	3	117
Net Reduction	8	3	4	0	15



### 8.3.8 Connector Segments

#### Construction

Construction impacts would be the same for all of the Build Alternatives, and are not significant. There are no construction impacts unique to the connector segments compared to the other alternatives.

#### Operation

The designs of the connector segments would depend on what segments were being connected; therefore, it is assumed that on-street parking and loading zone removal could occur on one or both sides of any connector segment that was used in the selected alternative. Table 8-21 lists the number of spaces on each side of each segment. The worst case would be the removal of all on-street spaces on any one segment. However, removal of all on-street spaces on both sides of the street would be unlikely, and would only occur on a narrow street with insufficient width for parking.

**Table 8-21. On-Street Parking and Loading Zone Spaces Under the Connector Segments**

<i>Segment Name</i>	<i>Street Name/Side of Street</i>	<i>Net Parking Supply Change</i>	<i>Net Loading Zone Supply Change</i>
Ballard Ave NW	Ballard Ave NW between NW Market St and 22 <sup>nd</sup> Ave NW (northeast side)	14	1
	Ballard Ave NW between NW Market St and 22 <sup>nd</sup> Ave NW (southwest side)	39	3
NW Vernon Pl	NW Vernon Pl between Shilshole Ave NW and Ballard Ave NW (northwest side)	6	0
	NW Vernon Pl between Shilshole Ave NW and Ballard Ave NW (southeast side)	8	0
20 <sup>th</sup> Ave NW	20 <sup>th</sup> Ave NW between Shilshole Ave NW and Ballard Ave NW (east side)	9	1
	20 <sup>th</sup> Ave NW between Shilshole Ave NW and Ballard Ave NW (west side)	9	2
	20 <sup>th</sup> Ave NW between Ballard Ave NW and Leary Ave NW (east side)	11	0
	20 <sup>th</sup> Ave NW between Ballard Ave NW and Leary Ave NW (west side)	13	0
17 <sup>th</sup> Ave NW	17 <sup>th</sup> Ave NW between NW 46 <sup>th</sup> St and NW Ballard Way (east side)	4	0
	17 <sup>th</sup> Ave NW between NW 46 <sup>th</sup> St and NW Ballard Way (west side)	1	0
	17 <sup>th</sup> Ave NW between NW Ballard Way and NW Leary Way (east side)	2	0
	17 <sup>th</sup> Ave NW between NW Ballard Way and NW Leary Way (west side)	9	0

<i>Segment Name</i>	<i>Street Name/Side of Street</i>	<i>Net Parking Supply Change</i>	<i>Net Loading Zone Supply Change</i>
15 <sup>th</sup> Ave NW	15 <sup>th</sup> Ave NW between NW 46 <sup>th</sup> St and NW Ballard Way (west side)	0	0
14 <sup>th</sup> Ave NW	14 <sup>th</sup> Ave NW between NW 45 <sup>th</sup> St and NW 46 <sup>th</sup> St (east side)	3	0
	14 <sup>th</sup> Ave NW between NW 45 <sup>th</sup> St and NW 46 <sup>th</sup> St (mid-block)	18	0
	14 <sup>th</sup> Ave NW between NW 45 <sup>th</sup> St and NW 46 <sup>th</sup> St (west side)	7	0
	14 <sup>th</sup> Ave NW between NW 46 <sup>th</sup> St and NW Ballard Way (east side)	3	2
	14 <sup>th</sup> Ave NW between NW 46 <sup>th</sup> St and NW Ballard Way (mid-block)	18	0
	14 <sup>th</sup> Ave NW between NW 46 <sup>th</sup> St and NW Ballard Way (west side)	4	1
	14 <sup>th</sup> Ave NW between NW Ballard Way and NW Leary Way (east side)	5	0
	14 <sup>th</sup> Ave NW between NW Ballard Way and NW Leary Way (west side)	7	0

## 8.4 Avoidance, Minimization, and Mitigation Measures

### 8.4.1 Measures Common to All Build Alternatives

#### **Construction**

Construction avoidance, minimization, and mitigation measures would be the same for all of the Build Alternatives.

While the Missing Link would reduce the overall parking supply in the study area during construction, the City would maintain parking availability to the extent feasible during construction. Once construction and staging plans have been developed, the City could determine practices to manage parking during construction so that parking is convenient and accessible to businesses and their patrons to the extent feasible. In addition, the City would continue to enforce short-term parking limits to make the most efficient use of the supply of short-term parking within the project construction area. The City could encourage the contractor's workers to find alternative parking areas away from the work site or to use transit to access the work site, thereby maximizing available nearby parking spaces for the public. Strategies used by the contractor could include, but are not limited to, setting up an off-site parking area and/or setting up a staging area to store tools and materials that would eliminate the need to park work trucks close to the work site.

**Operation**

Operation avoidance, minimization, and mitigation measures would be the same for all of the Build Alternatives.

The alternatives evaluated for the Missing Link would eliminate between approximately 82 and 344 on-street parking spaces, which represents 2 to 9% of all on- and off-street parking supply in the study area. If connector segments were used, this number could increase or decrease, depending on the combination of segments selected.

Current City plans and policies include strategies to encourage the use of transit and nonmotorized modes of travel, and to discourage the use of SOVs. This emphasis is reflected in the City's prioritization in which curb space for transit and loading has higher priority than on-street parking (City of Seattle, 2016). It is the City's general policy to replace short-term parking only when a project results in a concentrated and substantial amount of on-street parking loss. This project would not remove parking spaces in a concentrated or substantial manner. Although the on-street parking loss may be perceived to be substantial, the parking removal would be spread out along each of the alternative alignments. The maximum amount of on-and off-street parking in the study area that could be removed is 9% (under the Preferred Alternative).

Mitigation measures to offset the impact of parking removal include:

- Working with individual property and business owners, as well as interested stakeholders and the general public, throughout the design process to better understand the parking needs along the alignment
- Identifying areas where parking can be installed or replaced as the project progresses through design
- Modify on-street parking policies and practices, such as varying rates by time of day, to make parking more consistently available for short-term users.
- Adjust short-term parking limits to make the most efficient use of the supply of short-term parking for customers of study area businesses.
- Continue to provide information on off-street parking spaces on the City's website, including the Seattle Parking Map.
- Work with transit agencies to increase the awareness of transit routes and facilities in the area and to encourage visitors to use alternative modes of transportation.
- Work with businesses to increase the awareness of the BGT and other bicycle and pedestrian connections in the area to encourage employees and visitors to use nonmotorized modes of transportation.

A mitigation measure to offset the loss of loading zones would be to shift loading zone spaces to other locations along existing block faces, to the other side of a street, or to an adjacent block. However, shifting loading zone spaces could remove additional parking spaces.