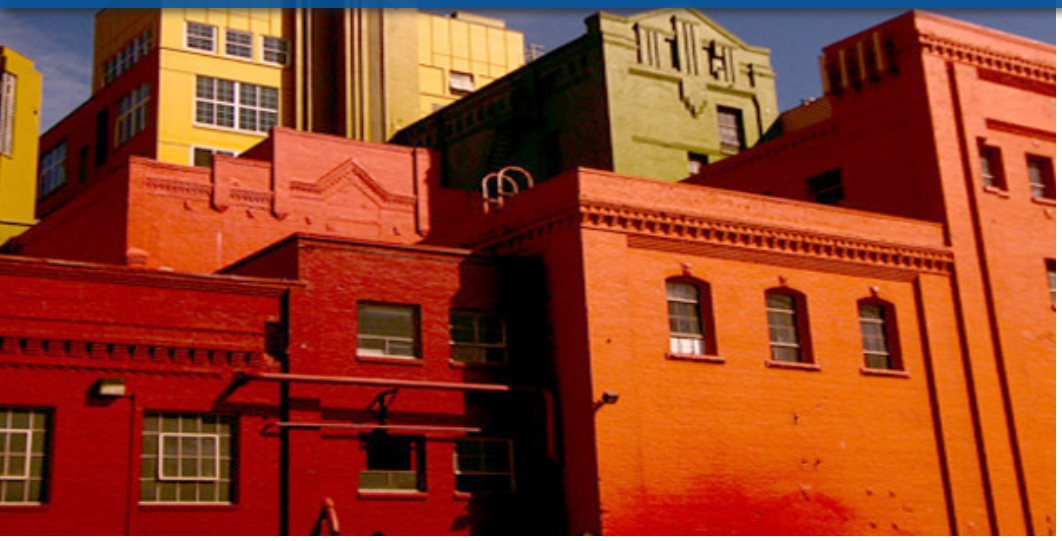
Section 3.9

Housing



This section summarizes the affected environment—including the current housing policy framework, and current housing in the study area—and compares impacts of the alternatives on housing in the study area.

Three impact thresholds were used to identify potential adverse housing impacts in the study area. Impacts of the alternatives on housing are considered significant if they:

- Result in **loss of housing due to redevelopment** and insufficient development capacity, tools, or programs to address displacement of dwellings and population.
- **Potential to increase households' exposure** to air pollution, noise pollution, or environmental hazards in census tracts identified as having high environmental health disparities and with sensitive populations.
- **Creation of demand for housing that cannot be accommodated within the city in adjacent districts or areas where housing is planned**.

Mitigation measures and a summary of any significant unavoidable adverse impacts are included following the impacts analysis.

3.9.1 Affected Environment

The study area consists of lands used and zoned for industrial purposes, primarily in the BINMIC and Greater Duwamish MIC. Though these areas are predominantly used for employment there remain scatted residential dwellings. Some are caretakers' quarters.

The data and methods considered in this section include: housing inventory, production trends, and challenges and needs (including public health, access to opportunity and displacement risk) based on U.S. Census American Community Survey, City of Seattle, and King County Assessor data.

Current Policy & Regulatory Framework

Existing housing patterns in the study area are influenced by the current land use policy and regulatory framework. This framework flows from the State of Washington Growth Management Act (GMA), the Puget Sound Regional Council's (PSRC's) Multi-County Planning Policies (MPPs), King County's County-Wide Panning Policies (CPPs) the City Comprehensive Plan (Seattle 2035), and implementation actions including development standards in the Seattle Municipal Code (SMC) and the City's Shoreline Master Program. Several other regulatory measures affect industrial land use including localized overlay districts and community agreements.

Detailed descriptions of the framework are included in **Section 3.8 Land & Shoreline Use**.

Housing Inventory & Production

This section characterizes existing housing patterns in the study area and breaks out housing patterns for the EIS subareas where information is available and useful.

Existing Housing Inventory

As of 2020, the study area included an estimated 413 housing units. More than half (54%) of housing units in the study area are in multi-unit apartment buildings while 32% of the area's housing units are in single-family buildings (as defined by the King County Assessor). Relatively smaller numbers of housing units are duplexes and 4-plexes. **Exhibit 3.9-1** below presents the units by housing type within the study area.

Exhibit 3.9-1 Study Area Housing Units by Type by Subarea, 2021

Housing Type	Ballard	Interbay Dravus	Interbay Smith Cove	SODO/ Stadium	Georgetown	Total
Single-family*	49			9	78	136
Duplex	9				15	24
4-plex	20				12	32
Apartments	111	3	1	12	91	218
**Other	3					3
Total	192	3	1	21	196	413

*Detached single family may include some accessory dwelling units. King County Assessor does not track ADUs or DADUs separately so we cannot reliably summarize the number of ADUs in this inventory. It is also possible there are many additional units in ADUs that are not included in the totals. Between 1994 and 2020, Seattle permitted 862 DADUs and about 1,900 ADUs.
**Housing units classified as "Other" include unique residence types such as houseboats, caretaker quarters, housing attached to private schools and churches, and housing units in certain historic properties.
Source: King County Assessor, 2020; BERK, 2021.

Most of the housing in the study area is in the Ballard (46%) and Georgetown/South Park (47%) subareas.

Ballard

The Ballard Subarea consists of the land between the Salmon Bay shoreline and the Ballard Urban Village. For the purposes of this analysis the subarea also includes portions of the study area in the Fremont Urban Village and along the north and east shores of Lake Union.

Housing in this subarea is located along the northern edge where the industrial areas are adjacent to more residential and commercial areas in Ballard, primarily the scattered single family and multi-family homes in blocks flanking 14th Avenue NW.

There are roughly 192 housing units in the Ballard Subarea. More than half these units are apartments. Single-family homes constitute a little more than 20% of housing units in the subarea. There are a small number of duplexes and 4-plexes. See **Exhibit 3.9-2**.

Exhibit 3.9-2 Housing Type by Structure and Units, Ballard

Housing Type	Percentage of Residential Structures	Percentage of Units
Single-family	59.7%	22.4%
Duplex	5.6%	4.7%
4-plex	5.6%	10.4%
Apartments	26.4%	57.8%
Other	2.8%	1.6%

Source: King County Assessor, 2020; BERK, 2021.

Interbay Dravus and Interbay Smith Cove

The Interbay Dravus and Interbay Smith Cove subareas consists of three distinct nodes—Fisherman's Terminal and vicinity, Dravus, and Smith Cove. These subareas stretch from the southern shoreline of Salmon Bay between the locks and ship canal on the north and Elliott Bay to the South, and are bound by the Queen Anne and Uptown neighborhoods to the east and Magnolia to the west. Both subareas contain very little housing. The Interbay Dravus Subarea includes only three units characterized as apartments in the assessor data (**Exhibit 3.9-3**) and the Interbay Smith Cover Subarea includes one apartment building (**Exhibit 3.9-4**).

Exhibit 3.9-3 Housing Type by Structure and Units, Interbay Dravus

Housing Type	Percentage of Residential Structures	Percentage of Units
Apartments	100%	100%

Source: King County Assessor, 2020; BERK, 2021.

Exhibit 3.9-4 Housing Type by Structure and Units, Interbay Smith Cove

Housing Type	Percentage of Residential Structures	Percentage of Units
Apartments	100%	100%

Source: King County Assessor, 2020; BERK, 2021.

SODO/Stadium

The SODO/Stadium Subarea includes the mouth of the Duwamish River where it outlets to Elliott Bay. The SODO/Stadium Subarea includes 21 housing units. About one-half of the units are in apartments and the other half are single-family homes. The Subarea has no duplexes or 4-plexes. See **Exhibit 3.9-5**.

Exhibit 3.9-5 Housing Type by Structure and Units, SODO/Stadium

Housing Type	Percentage of Residential Structures	Percentage of Units
Single-family	90%	48%
Apartments	10%	52%

Source: King County Assessor, 2020; BERK, 2021.

Georgetown/South Park

The Georgetown portion of the subarea is situated on the east bank of the Duwamish River. The study area surrounds two residential areas in the Georgetown neighborhood—the Van Asselt district between Ellis Avenue S and Corson Avenue S and a roughly four-block residential district between S Homer Street and S Fidalgo Street. Both areas include townhomes, single family, and multifamily housing including some new construction. Residents of these areas are closely adjacent to the surrounding industrial activities.

The South Park portion of the study area is situated on the west bank of the Duwamish River. The study area contains only the industrial lands that surround the South Park neighborhood, which is a mixed-use neighborhood that is designated as a residential urban village in Seattle's Comprehensive Plan.

Approximately 196 housing units are scattered throughout the subarea, especially along the edges. Single-family homes constitute roughly 40% of the housing units in the subarea. There are a small number of duplexes and 4-plexes. See **Exhibit 3.9-6**.

Exhibit 3.9-6 Housing Type by Structure and Units, Georgetown

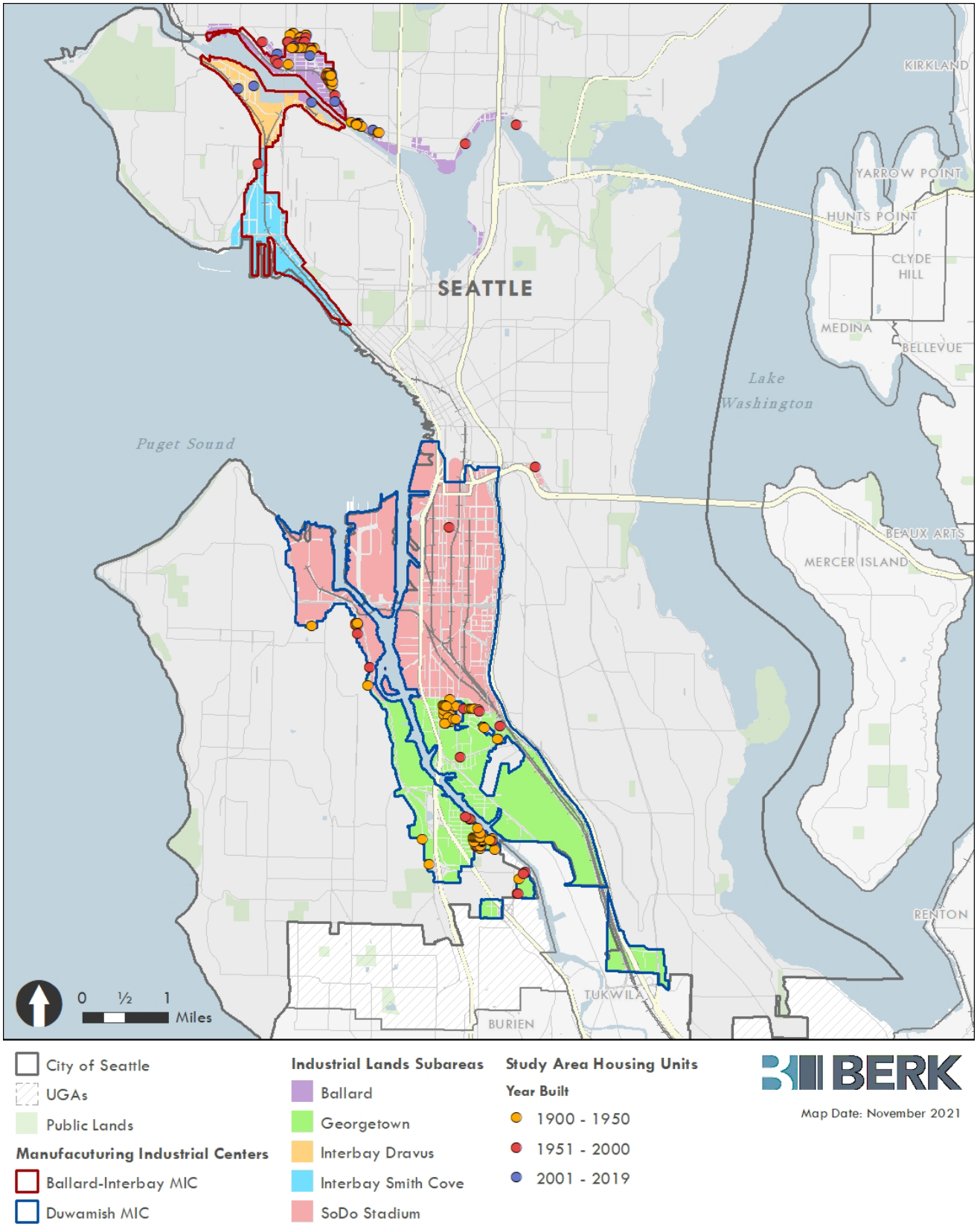
Housing Type	Percentage of Residential Structures	Percentage of Units
Single-family	84%	40%
Duplex	7%	8%
4-plex	3%	6%
Apartments	6%	46%
Other	0%	0%

This subarea includes three hotels/motels that are not included in the unit count.
Source: King County Assessor, 2020; BERK, 2021.

Age of Existing Housing

The Study Area has seen little housing development in the past twenty years. Roughly 32% of the housing in the Study Area was built prior to 1950, 62% were built between 1950 and 2000, and 17% were built in and after 2000. See **Exhibit 3.9-7**.

Exhibit 3.9-7 Housing Units by Year Built, Study Area



Source: King County Assessor, 2020; BERK, 2021.

Housing Production Trends

Citywide Trends

Between 2010 and 2019, Seattle added over 69,000 new housing units and demolished nearly 6,000 older housing units, for a net gain of over 63,000 units in total. On average, the city gained 6,300 new units per year, with annual production increasing most years from a low of 2,340 in 2011 following the last economic recession to a high of 10,651 in 2019. Citywide, however, housing production has not kept pace with employment growth, leading to an increasing supply shortage (City of Seattle 2021).

Nearly all of Seattle's capacity for residential growth is in villages/centers and corridors with mixed-use and multifamily zoning. According to analysis of development (2010-2019) by year built in King County Assessor data by far, the largest share of new development is in the Greater Downtown market area, followed by the North Central area which stretches from Ballard in the west to northeast Seattle in the east (City of Seattle 2021).

Subarea Trends

City permit data shows that the industrial areas are not locations for significant housing development. A total of 62 housing units were added to the subareas between 2000 and 2021. Housing ancillary to units attached to commercial development accounted for the bulk of these units. See **Exhibit 3.9-8**.

Exhibit 3.9-8 New Housing Added by Permit Class, 2000-2021

	Ballard	Interbay Dravus	Interbay Smith Cove	SODO/ Stadium	Georgetown/ South Park	Total
Single Family/Duplex	1	0	0	0	0	1
Multifamily	0	0	0	1	0	1
Commercial	11	16	4	8	1	40
Industrial	3	0	2	1	3	9
Institutional	0	0	0	1	0	1
Vacant Land	0	0	2	0	8	10
Total	15	16	8	11	12	62

Source: City of Seattle permit data, 2021.

Housing Challenges, Needs, & Considerations

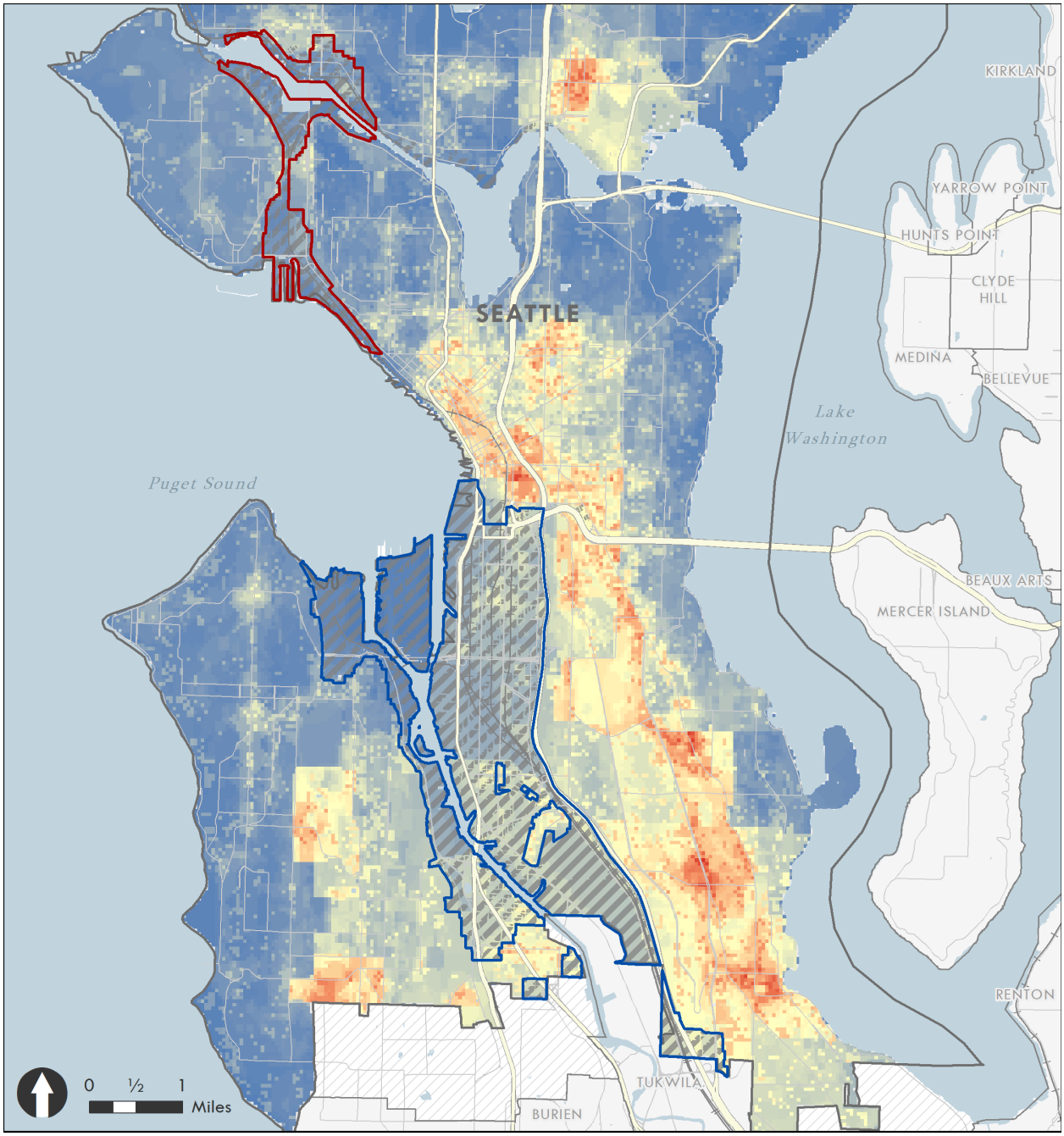
Displacement Risk

As a companion document to the Seattle 2035 Comprehensive Plan EIS, Seattle's Growth and Equity Analysis examined demographic, economic, and physical factors to evaluate the risk of displacement and access to opportunity for marginalized populations across Seattle neighborhoods. The findings are expressed as the Displacement Risk Index in this section and the Access to Opportunity Index in the following section.

The Displacement Risk Index identifies areas of Seattle where displacement of marginalized populations may be more likely. It combines data about demographics, economic conditions, and the built environment into a composite index of displacement risk. It focuses on displacement that affects marginalized populations, defined in the Seattle 2035 Comprehensive Plan as people of color, people with low incomes, English-language learners, and people with disabilities. It reflects data on vulnerability, amenities, development capacity, and rent to identify where displacement of those populations is more likely to occur. The map below shows areas of the city according to their level of displacement risk.

Exhibit 3.9-9 illustrates this index for Seattle and the study area. Overall, parcels within the study area are at low or moderate risk for displacement.

Exhibit 3.9-9 Displacement Risk Index



Source: City of Seattle, 2016; BERK, 2021.

Access to Opportunity

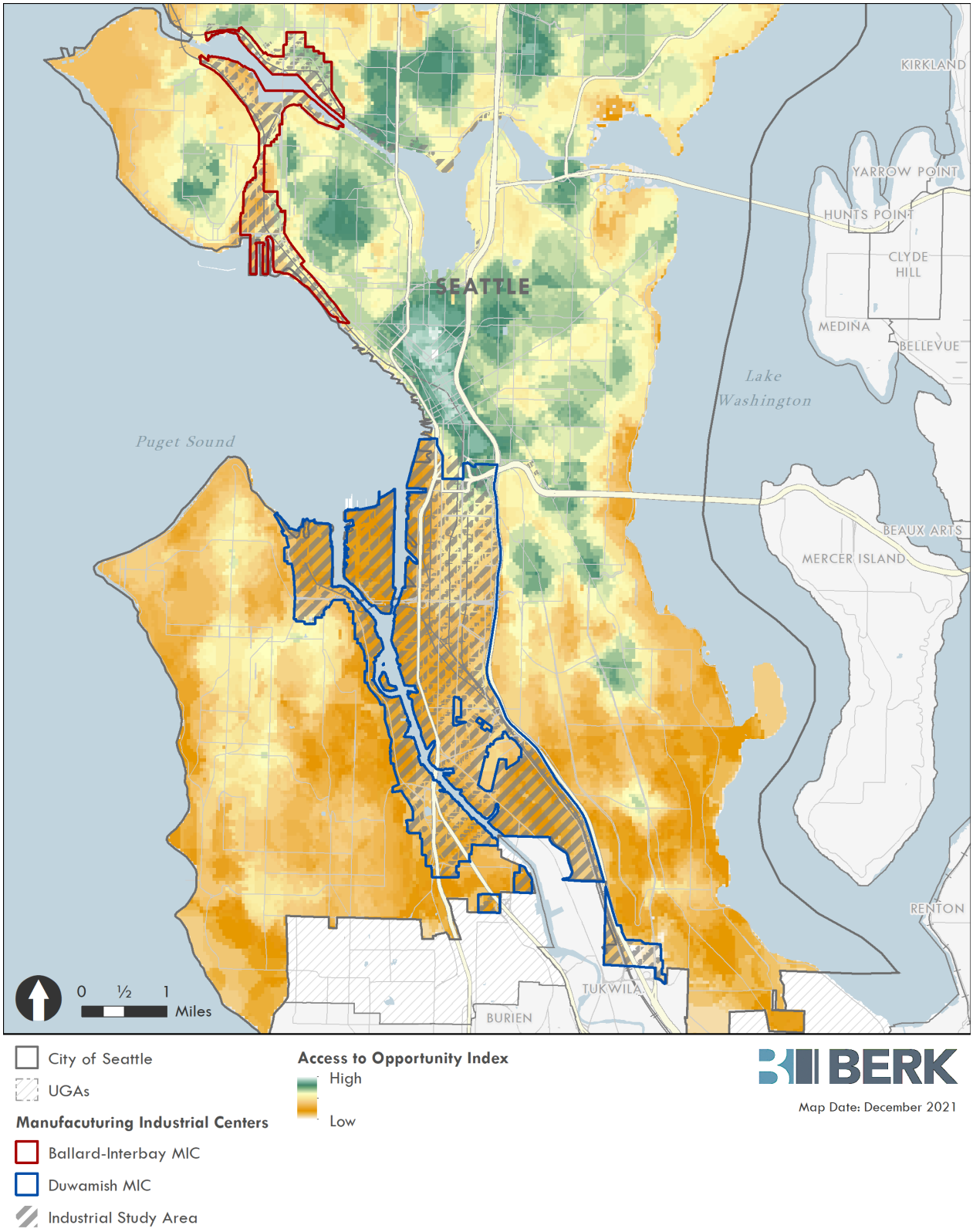
Historic practices such as redlining, and more modern policies have shaped access to opportunity across the city. As a result, access to neighborhoods with large parks, more trees, and walkable streets varies significantly by race. Marginalized populations tend to live in areas (in Seattle or elsewhere) with fewer opportunities.

Seattle's Growth and Equity Analysis (2016) examined demographic, economic, and physical factors to evaluate the risk of displacement and access to opportunity for marginalized populations across Seattle neighborhoods. The findings are expressed as the Access to Opportunity Index in this section and the Displacement Risk Index in the previous section.

The analysis considers marginalized populations' access to some key determinants of social, economic, and physical well-being. This includes data in the following categories: education, economic opportunity, transit, civic infrastructure, and health. The index captures a broad range of indicators that measure access to some of the resources that residents need to succeed and thrive.

Exhibit 3.9-10 illustrates this index for Seattle and the Study Area. Overall, parcels within the study area have low or moderate access to opportunity. Some limited areas in the Ballard subarea are seen to have relatively higher access to opportunity.

Exhibit 3.9-10 Access to Opportunity Index



Source: City of Seattle, 2016; BERK, 2021.

Jobs/Housing Balance

Another indicator of housing challenges is the jobs/housing ratio. Data show that housing production has not kept pace with employment growth in Seattle. In 2005 there were 1.8 jobs for every one housing unit in Seattle. Between 2005 and 2019, the city gained about 169,000 net new jobs. Over the same time, Seattle would have needed to increase its housing production by an additional 9,000 units just to maintain its 2005 jobs to housing ratio of 1.8.

Balancing jobs and housing within a city can reduce commuting and improve traffic congestion and air quality. A jobs/housing imbalance can cause upward pressure on housing costs. In employment centers, local workers may have no choice but to pay higher prices to avoid longer commutes.

Lower wage workers are especially vulnerable to displacement risks. Those who move to more affordable communities further from employment centers face longer commutes. While not all Seattle workers may wish to live in the city, workers in low-wage jobs who are commuting very long distances are a good indicator of a lack of an adequate supply of affordable housing in the city.

Exhibit 3.9-11 shows the distance traveled by workers in industrial subareas. Roughly 37% of workers (29,543) travel 10-24 miles one-way to get to their jobs. The remainder travel more than 25 miles each way between home and work.

Exhibit 3.9-11 Distance Traveled by Workers in Study Area, 2018

Distance	Count	Share
Less than 10 miles	31,471	39.7%
10 to 24 miles	29,543	37.3%
25 to 50 miles	10,592	13.4%
Greater than 50 miles	7,604	9.6%
Total All Jobs	79,210	100.0%

Source: Census LEHD Origin-Destination Employment Data, 2018; BERK, 2021.

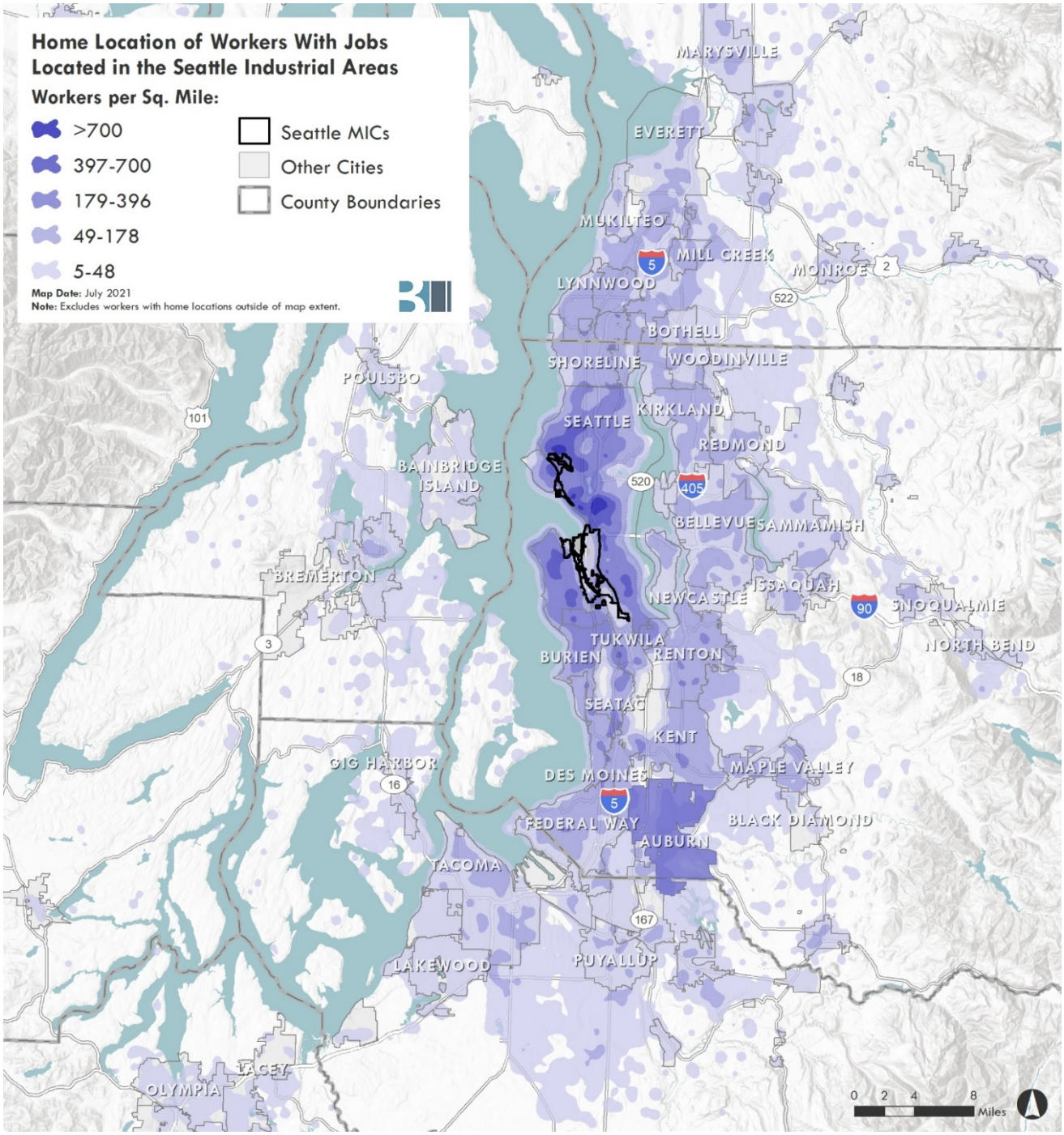
Workers in industrial areas commute from homes in Seattle, other parts of King County, Snohomish County, and Pierce County. See **Exhibit 3.9-12** and **Exhibit 3.9-13**.

Exhibit 3.9-12 Top 25 Places of Worker Residence by Count/Percent

City	Count	Share
Seattle city, WA	22,769	28.7%
Kent city, WA	2,853	3.6%
Renton city, WA	2,452	3.1%
Burien city, WA	2,108	2.7%
Tacoma city, WA	1,937	2.4%
Federal Way city, WA	1,902	2.4%
Bellevue city, WA	1,841	2.3%
Shoreline city, WA	1,419	1.8%
Auburn city, WA	1,296	1.6%
Kirkland city, WA	1,154	1.5%
Everett city, WA	1,118	1.4%
Des Moines city, WA	924	1.2%
SeaTac city, WA	921	1.2%
Edmonds city, WA	905	1.1%
Tukwila city, WA	823	1.0%
Sammamish city, WA	741	0.9%
White Center CDP, WA	738	0.9%
Lynnwood city, WA	691	0.9%
Marysville city, WA	660	0.8%
Redmond city, WA	646	0.8%
Bothell city, WA	624	0.8%
Bryn Mawr-Skyway CDP, WA	554	0.7%
Mountlake Terrace city, WA	525	0.7%
South Hill CDP, WA	521	0.7%
Issaquah city, WA	501	0.6%
All Other Locations	28,587	36.1%

Source: Census LEHD Origin-Destination Employment Data, 2018; BERK, 2021.

Exhibit 3.9-13 Home Location of Workers with Jobs in the Study Area, 2018



Source: Census LEHD Origin-Destination Employment Data, 2018; BERK, 2021.

Public Health

The Washington Environmental Health Disparities Map (EHD Map) is an existing tool created by DOH and others that ranks environmental health disparities by census tract. It is an interactive tool that combines the most comprehensive data available to rank Washington communities according to the risk each faces from environmental factors that influence health outcomes. The EHD includes fossil fuel exposure as well as social and health vulnerability measures. The map shows pollution measures such as diesel emissions and ozone, as well as proximity to hazardous waste sites. In addition, it displays measures like poverty and cardiovascular disease.

The data on the map include 19 indicators and are divided into four themes:

- Environmental Exposures (NOx-diesel emissions; ozone concentration; PM2.5 Concentration; populations near heavy traffic roadways; toxic release from facilities (RSEI model))
- Environmental Effects (lead risk from housing; proximity to hazardous waste treatment, storage, and disposal facilities (TSDFs); proximity to National Priorities List sites (Superfund Sites); proximity to Risk Management Plan (RMP) facilities; wastewater discharge)
- Sensitive Populations (death from cardiovascular disease; low birth weight)
- Socioeconomic Factors (limited English; no high school diploma; poverty; race—people of color; transportation expense; housing cost burden; unemployment)

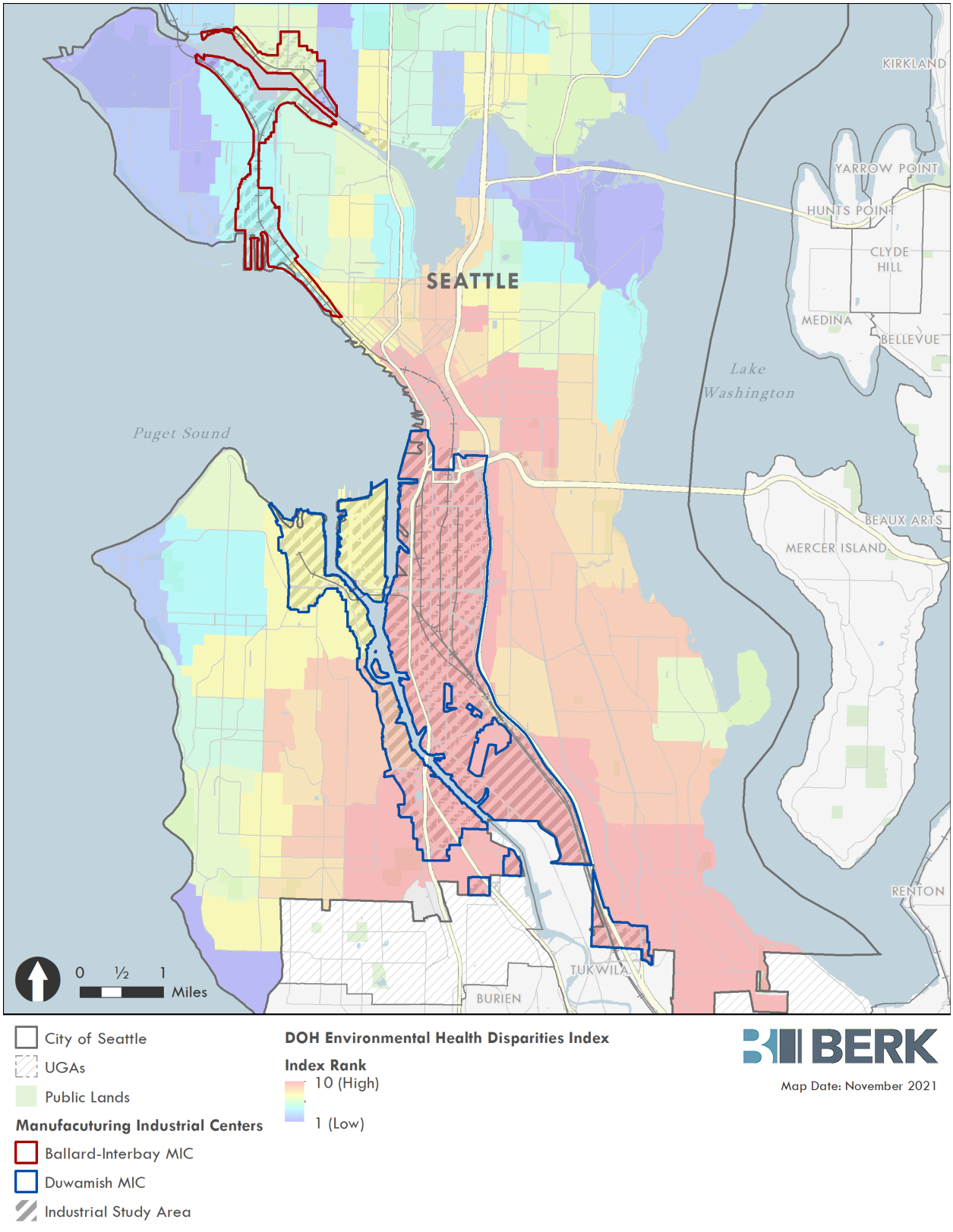
The EHD map ranks the risks communities face from environmental burdens including fossil fuel pollution and vulnerability to climate change impacts that contribute to health inequities. The EHD map is based on a conceptual formula of Risk = Threat x Vulnerability. Threat is comprised of both environmental effects and exposures, and vulnerability is comprised of socioeconomic factors and sensitive populations. It is a well-known vulnerability index for environmental health disparities and is being used by state processes to guide funding to reduce environmental health disparities.

Industrial areas in the Greater Duwamish MIC are ranked at high risk based on environmental factors that influence health. See **Exhibit 3.9-14**. This map is aligned with several studies that have documented the disproportionately high environmental health burdens and risks relative to the rest of Seattle that communities in the Duwamish Valley experience. Exposure to air pollution, noise pollution, and highways is higher in the Duwamish Valley than the city average and access to open space is lower. See **Exhibit 3.9-15** breaking down potential exposure to environmental exposures to NOx-Diesel emissions, Ozone, PM 2.5, and potential toxic releases from facilities. **Exhibit 3.9-16** illustrates census tract populations near heavy traffic roadways. **Exhibit 3.9-17** shows a moderate proximity to hazardous waste sites compared to other census tracts in Washington State.

The Duwamish River is a 5.5-mile Superfund site, and the City is working closely with the U.S. Environmental Protection Agency (EPA) on cleanup and source control efforts. While cleanup is ongoing, health advisories are still in place. The Duwamish Valley is also an area subject to flooding, which is anticipated to increase due to climate change.

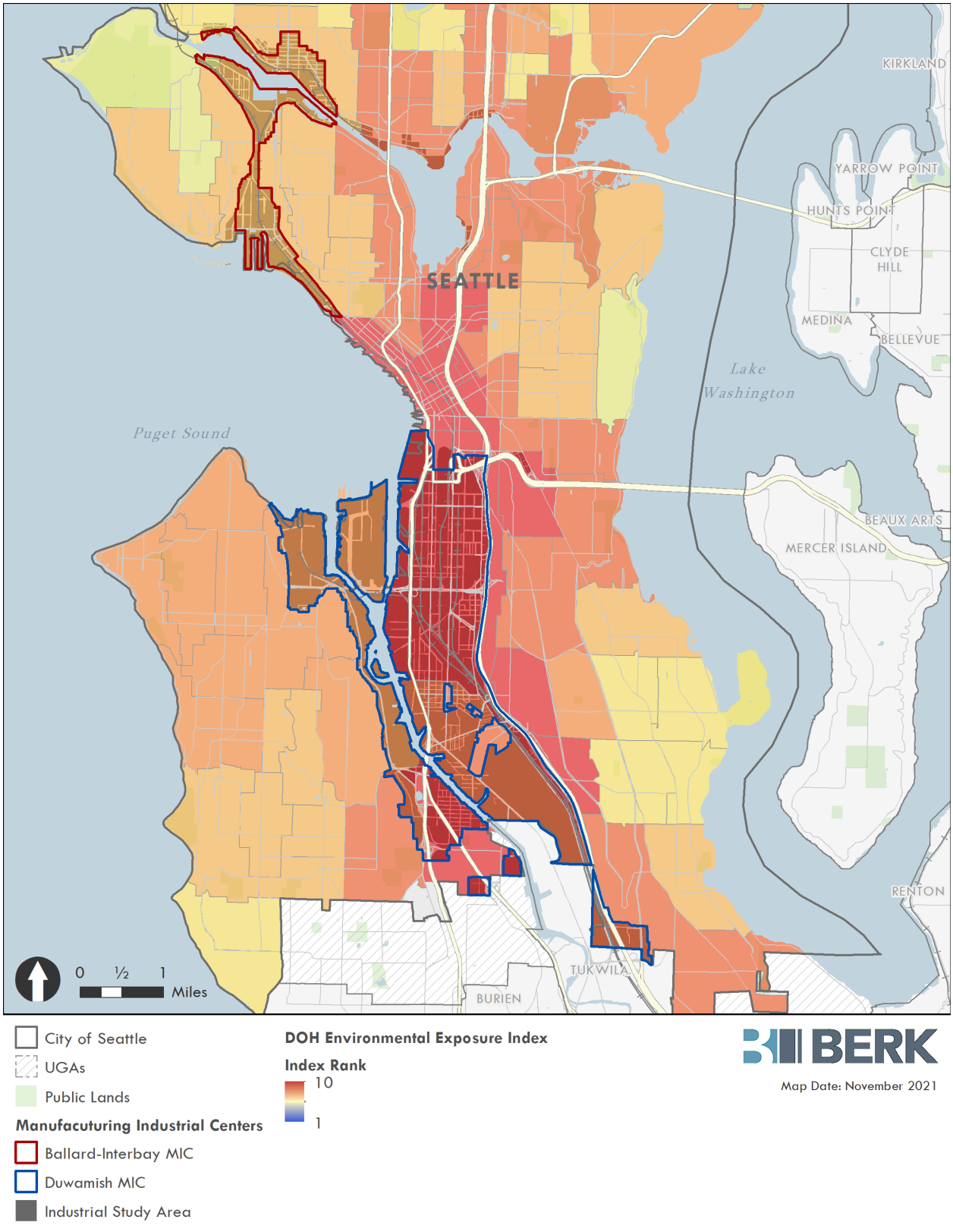
The health impacts on residents of housing in or adjacent to industrial areas must be considered carefully to ensure equitable outcomes.

Exhibit 3.9-14 Washington Environmental Health Disparities Map



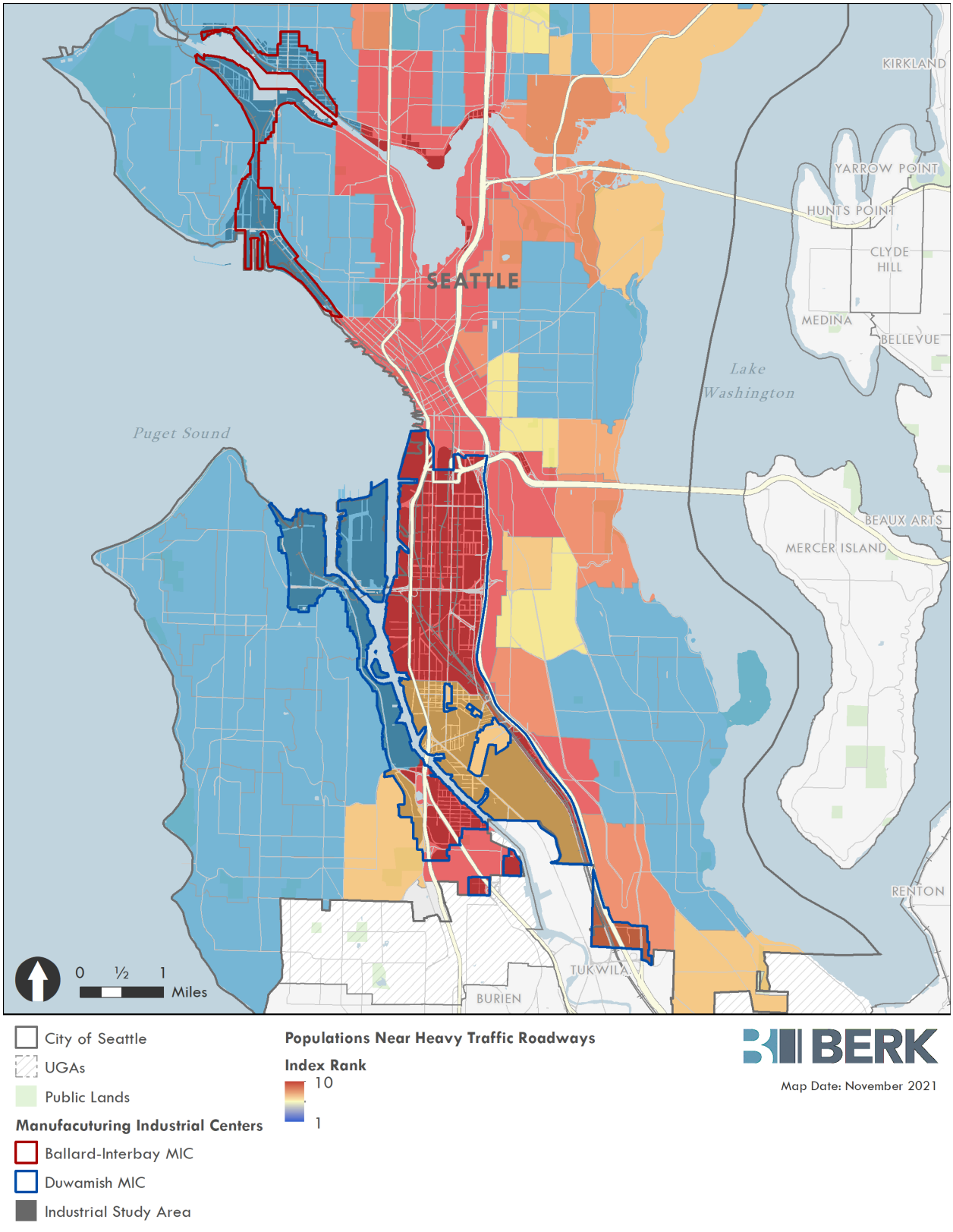
Source: Washington Department of Health, 2021.

Exhibit 3.9-15 Air Quality: Environmental Exposure Map



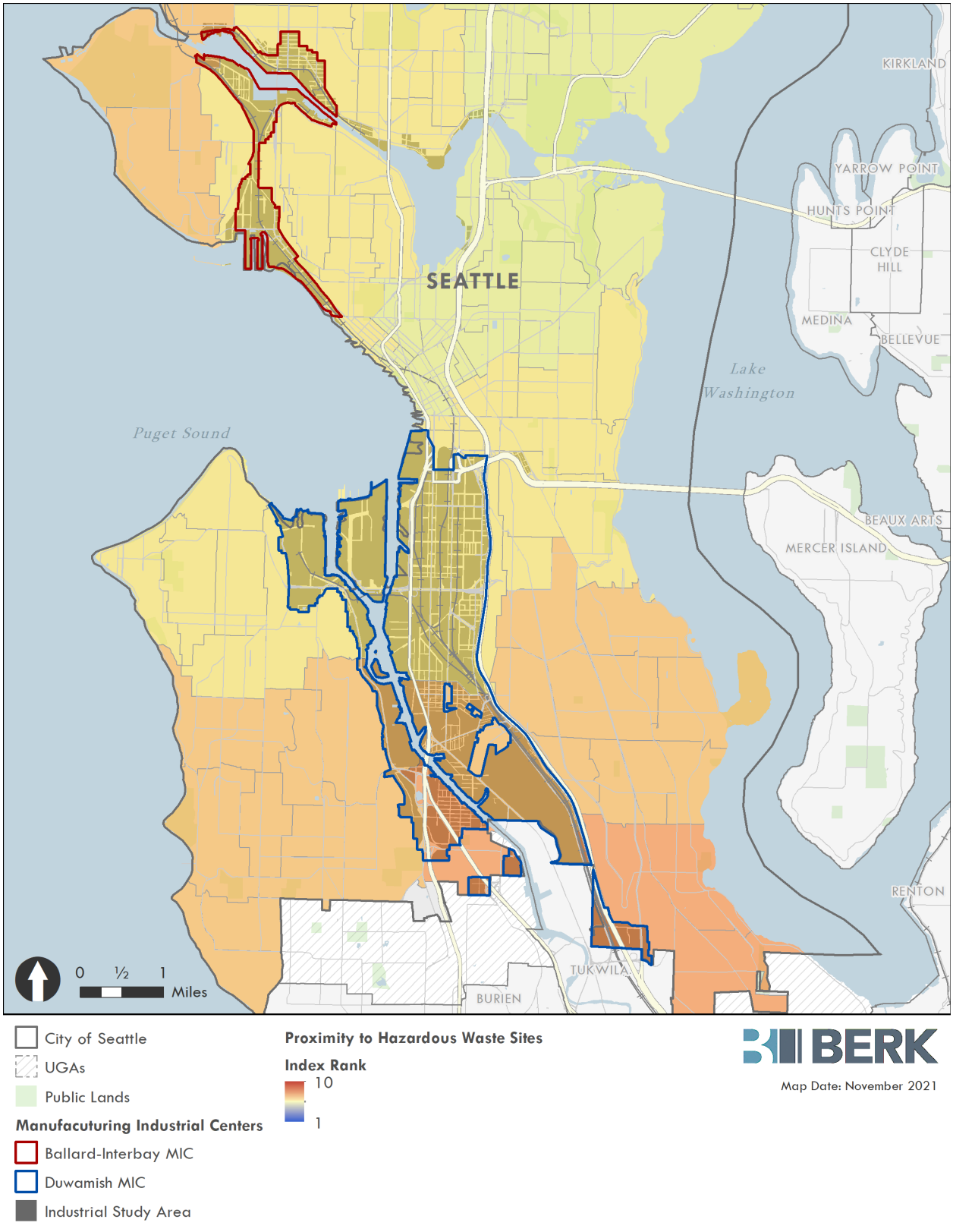
Source: Washington Department of Health, 2021.

Exhibit 3.9-16 Population Near Heavy Traffic Noise



Source: Washington Department of Health, 2021.

Exhibit 3.9-17 Proximity to Hazardous Waste Sites



Source: Washington Department of Health, 2021.

3.9.2 Impacts

As described in the introduction to this section, three impact thresholds were used to identify potential adverse housing impacts in the study area and at a subarea level (where applicable). Impacts of the alternatives on housing are considered significant if they:

- Result in **loss of housing due to redevelopment** and insufficient development capacity, tools, or programs to address displacement of dwellings and population.
- **Potential to increase households' exposure** to air pollution, noise pollution, or environmental hazards in census tracts identified as having high environmental health disparities (e.g., exposure to diesel emissions and ozone or proximity to hazardous waste sites) and with sensitive populations (e.g., poverty, cardiovascular disease) based on the Washington Department of Health Environmental Health Disparities Index.
- **Creation of demand for housing that cannot be accommodated within the city in adjacent districts or areas where housing is planned**.

Equity & Environmental Justice Considerations

Jobs/Housing Balance

Housing production has not kept pace with employment growth in Seattle putting pressure on prices. While roughly 29% of workers in the study area live in Seattle, the majority of workers live in places across the region and travel long distances to get to their jobs. **Exhibit 3.9-11** shows the distance traveled by workers in industrial subareas. Roughly 37% of workers (29,543) travel 10-24 miles one-way to get to their jobs. More than 10,000 workers travel 25-50 miles one-way to get to their jobs. Some of these workers may prefer to live closer to their jobs if adequate and affordable housing were available.

The continued regulatory support for industry-related housing (caretakers' residences and artist lofts) and the slight increases in housing envisioned in alternatives 3 and 4 can add to the housing supply and allow some workers to live close to where they work. Applying the Mandatory Housing Affordability (MHA) regulations to the proposed new Industry & Innovation (II) zone can also mitigate some of the housing impacts on the study area. Additional housing supply near jobs can reduce the costs of commuting. In addition, adding capacity for additional housing in areas adjacent to or connected by transit to these employment centers can also mitigate the impacts of increased employment growth on housing.

Access to Opportunity

A key concern around adding housing to industrial areas is whether this would perpetuate historic patterns of increasing housing capacity in areas with low opportunities. The City's Access to Opportunity Index shows that parcels within the study area have low or moderate access to opportunity. No significant new housing in these areas of low or moderate opportunity is anticipated under any of the Alternatives. While there are slight increases in housing envisioned

in alternatives 3 and 4, in the Ballard and SODO/Stadium subareas, these increases are tied to a change to zoning from the existing zones to Urban Industrial (UI) zoning. UI zoning is intended to create thoughtful integration between the edges of these industrial areas and adjacent neighborhoods. UI zoning would seek to improve environmental health, walkability, and comfort in these areas. These changes tied to zoning are likely to ensure that the limited amount of housing allowed within the UI zone is accompanied by changes that add amenities to the area.

Public Health

Residents of industrial areas in the Greater Duwamish MIC are at high risk of environment-related health problems. Exposure to air pollution, noise pollution, and highways is higher in the Duwamish Valley than the city average and access to open space is lower. In addition, health advisories are in place for the Duwamish River as the City works with the U.S. Environmental Protection Agency (EPA) on cleanup and source control efforts. The Duwamish Valley is also an area subject to flooding, which is anticipated to increase due to climate change.

The Action Alternatives limit new housing in industrial zones and focus primarily on industrial uses. Alternatives 3 and 4 add mixed-use housing opportunities near Georgetown/South Park, addressed by alternative below. Given the health impacts of housing proximity to industrial areas, especially the Duwamish area, limiting the amount of housing in these areas avoids impacts on health equity.

Impacts of Alternative 1 No Action

Loss of housing due to redevelopment and insufficient development capacity, tools, or programs to address displacement of dwellings and population. Under Alternative 1 No Action, the full study area would support 488 total housing units or an addition of 75 housing units from the existing 413 units. As the area grows, the mix of land uses under Alternative 1 will remain similar to the existing condition. There is likely to be some redevelopment in areas adjacent to Seattle's designated urban villages, in areas where the Industrial Commercial (IC) zone applies, but concentrated development of housing is not anticipated. See **Exhibit 3.9-18**.

Exhibit 3.9-18 Alternative 1—No Action Jobs and Housing, Existing and 2044

	Existing	2044
Industrial Jobs	54,500 (2018)	66,400
Total Jobs	98,500 (2018)	122,000
Residential Dwellings	413 (2021)	488

Sources: CAI, 2021; City of Seattle, 2021.

As noted earlier most of the modest increase in housing is anticipated to be in typologies that remain similar to the forms that exist today.

Under Alternative 1 No Action, most industrial jobs as well as total jobs are located in the SODO/Stadium and Georgetown/South Park subareas, with relatively less in the Ballard, Interbay Dravus, and Interbay Smith-Cove subareas. Since housing is limited to those connected to industrial activities, increases in housing are also anticipated to be concentrated in the SODO/Stadium and Georgetown/South Park subareas. See **Exhibit 3.9-19**.

Exhibit 3.9-19 Alternative 1—No Action Housing by Subarea

Subarea		Existing (2021)	Total	Growth
Ballard	10%	192	199	7
Interbay Dravus	10%	3	11	8
Interbay Smith Cove	10%	1	9	8
SODO/Stadium	40%	21	51	30
Georgetown/South Park	30%	196	218	22
Grand Total Housing in Study Area		413	488	75

Sources: CAI, 2021; City of Seattle, 2021.

The City's Displacement Risk Index identifies areas of Seattle where displacement of marginalized populations may be more likely. It reflects data on vulnerability, amenities, development capacity, and rent to identify where displacement of those populations is more likely to occur. Overall, parcels within the study area are at low or moderate risk for displacement.

Very little housing growth and related redevelopment is anticipated under Alternative 1. With a mix of land uses and housing typologies similar to existing conditions, there is unlikely to be any significant loss of housing due to redevelopment within the study area under Alternative 1.

Potential to increase households' exposure to air pollution, noise pollution, or environmental hazards in census tracts identified as having high environmental health disparities and with sensitive populations**.** Under Alternative 1, the number of dwellings is only projected to increase by 75 units, with most of this increase assumed to be in the form of caretakers' units and artist/studio quarters. Under this Alternative, housing is limited to those connected with industrial activities, and modest increases are anticipated in the SODO/Stadium and Georgetown/South Park subareas. While these are areas with high disparities, the increase in housing of 75 units is not considered significant.

Creation of demand for housing that cannot be accommodated within the city in adjacent districts or areas where housing is planned. Alternative 1 anticipates an increase in total jobs in the study area. Increases in employment growth envisioned under this Alternative could shift some of the overall expected citywide employment growth into industrial areas. This could have an impact on housing, especially if additional new employment were added to industrial areas not subject to the MHA regulations. Overall, the increased employment growth envisioned in Alternative 1 is addressed within the City's 2035

Comprehensive Plan and will be within the amount that the City will plan for in the 2024 major Comprehensive Plan update for 2044. Similarly, the City will evaluate the overall citywide demand for housing consistent with its growth targets.

Impacts of Alternative 2

Loss of housing due to redevelopment and insufficient development capacity, tools, or programs to address displacement of dwellings and population. Little new housing is envisioned in this Alternative**.** Under Alternative 2, housing units are expected to increase slightly by only 80 units to 493 from the existing 413 units. Similar to existing conditions, and Alternative 1 No Action, the housing types that are added are likely to be caretakers' quarters and some artist/studios. See **Exhibit 3.9-20**.

Exhibit 3.9-20 Alternative 2 Jobs and Housing, Existing and 2044

	Existing	2044
Industrial Jobs	54,500 (2018)	66,400
Total Jobs	79,400 (2018)	132,900
Residential Dwellings	413 (2021)	493

Sources: CAI, 2021; City of Seattle, 2021.

Modest increases in housing under Alternative 2 are anticipated to be concentrated in the SODO/Stadium and Georgetown/South Park subareas. See **Exhibit 3.9-21**.

Exhibit 3.9-21 Alternative 2 Housing by Subarea

Subarea	Total	Growth
Ballard	200	8
Interbay Dravus	11	8
Interbay Smith Cove	9	8
SODO/Stadium	53	32
Georgetown/South Park	220	24
Grand Total Housing in Study Area	493	80

Sources: CAI, 2021; City of Seattle, 2021.

As noted earlier the City's Displacement Risk Index shows the study area with low or moderate risk of displacement. While some changes to housing patterns may be possible under this Alternative, this is an expected part of a changing urban environment. There is unlikely to be any significant loss of housing due to redevelopment within the study area under Alternative 2.

Potential to increase households' exposure to air pollution, noise pollution, or environmental hazards in census tracts identified as having high environmental health disparities and with sensitive populations**.** Housing growth is relatively higher in SODO/Stadium and Georgetown/South Park subareas under this Alternative. These are areas with high disparities. However, only an estimated 80 new homes would be added in caretakers' quarters and artist/studios under this Alternative. This modest addition is not considered significant.

Creation of demand for housing that cannot be accommodated within the city in adjacent districts or areas where housing is planned*.* Under Alternative 2, employment is projected to grow substantially more than under Alternative 1 No Action. A total of 34,400 additional jobs are projected for the study area, an increase of 35%.

Increases in employment growth envisioned under this Alternative could shift some of the overall expected citywide employment growth into industrial areas. This could have an impact on housing, especially if additional new employment were added to industrial areas not subject to the MHA regulations. Demand for new housing could be shifted to areas of the city closer to locations of dense employment growth (II zones), but outside of the study area. The II zones are in the closest locations to light rail (1/4–1/2 mile) and locations with fast access by light rail to these areas may see some shifts in demand.

Overall, the increased employment growth envisioned in Alternative 2 is within the citywide amount that the City will plan for in the 2024 major Comprehensive Plan update; similarly, the City will plan for its housing growth target and address the citywide demand for housing.

Impacts of Alternative 3

Loss of housing due to redevelopment and insufficient development capacity, tools, or programs to address displacement of dwellings and population. Under Alternative 3, housing units are projected to increase by 610 units in addition to 413 existing units. Housing types are expected to include caretakers' quarters and makers' studios as well as newer industry-supportive formats allowed under the UI zone such as live/work units, and housing connected to makers' studios. See **Exhibit 3.9-22**.

Exhibit 3.9-22 Alternative 3 Jobs and Housing, Existing and 2044

	Existing	2044
Industrial Jobs	54,500 (2018)	83,500
Total Jobs	98,500 (2018)	155,900
Residential Dwellings	413 (2021)	1,023

Sources: CAI, 2021; City of Seattle, 2021.

The following section describes the anticipated changes to housing by subarea under this Alternative. See **Exhibit 3.9-23**.

- **Ballard.** While Alternative 3 adds housing in the Ballard Subarea, it does so in limited locations along the edge or transition areas between industrial areas and the neighborhood. Land in the Ballard uplands in the 14th Avenue NW corridor north of NW Leary would be placed in the UI zone, and the zone would allow industry supportive housing at a maximum density of 25 dwelling units / acre. Housing allowed under the new UI zone would include development standards that limit the types of housing to those that are industry-supportive. An additional 260 units are anticipated.
- **Interbay Dravus**. Land north of Dravus Street along Thorndyke Avenue W would be in the UI zone as in Alternative 2. However, in Alternative 3 the zone would allow for supportive housing at a maximum density of 25 dwelling units / acre. An additional 75 housing units are estimated, and they would typically be located on an upper floor of a 3-4 story mixed-use development.
- **Interbay Smith Cove**. UI zoned areas in the four blocks along 15th Avenue NW would be the location for an estimated 15 housing units.
- **SODO/Stadium.** Under Alternative 3 land in the stadium area in the UI zone could receive an estimated 200 industry-supportive housing units.
- **Georgetown/South Park.** Under Alternative 3 edges of South Park and Georgetown residential areas would be zoned UI, which is anticipated to enable an estimated 60 industry supportive residential units interspersed in these areas. Under Alternative 3, the triangular area of Georgetown bounded by Corson Avenue S, Carleton Avenue S and I-5 would be removed from the MIC and placed into a mixed-use zone. The area would likely develop with a high concentration of urban mixed-use structures with ground level retail and residential above. An estimated 1,078 housing units could be added. Land removed from the MIC at the edges of South Park would be placed in a mixed-use zone. Some of it would likely redevelop with mixed-use structures including housing on upper floors. This would add capacity for a range of housing in these areas. These areas currently include a mix of industrial service and repair businesses, and small-scale commercial uses.

Exhibit 3.9-23 Alternative 3 Housing by Subarea

Subarea	Total	Growth
Ballard	452	260
Interbay Dravus	78	75
Interbay Smith Cove	16	15
SODO/Stadium	221	200
Georgetown/South Park	256	60
Total: Ind Zone Housing (Caretaker/Artist)	1,023	610
		Added MU Housing
With MIC Adjustments—Seattle Mixed-Use Zone Housing		1,078
Grand Total Housing in Study Area	2,101	1,688

Sources: CAI, 2021; City of Seattle, 2021.

Potential to increase households' exposure to air pollution, noise pollution, or environmental hazards in census tracts identified as having high environmental health disparities and with sensitive populations**.** Alternative 3 adds housing in the SODO/Stadium and Georgetown/ South Park area and has the potential to add more residents in a census tract shown to have greater exposure to air pollution, noise sources and health disparities. Application of mitigation measures under air quality and noise (**Sections 3.2 and 3.6**) could help reduce potential impacts, e.g., building design, distance, landscaping, and others.

Creation of demand for housing that cannot be accommodated within the city in adjacent districts or areas where housing is planned*.* Overall employment under Alternative 3 would increase by 57,000 jobs.

Increases in employment growth envisioned under this Alternative could shift some of the overall expected citywide employment growth into industrial areas. This could have an impact on housing, especially if additional new employment were added to industrial areas not subject to the MHA regulations. Demand for new housing could be shifted to areas of the city closer to locations of dense employment growth (II zones), but outside of the study area. The II zones are in the closest locations to light rail (1/4–1/2 mile) and locations with fast access by light rail to these areas may see some shifts in demand.

Overall, the increased employment growth envisioned in Alternative 3 is within the citywide amount that the City will plan for in the 2024 major Comprehensive Plan update; likewise, the City will plan for its housing growth target in 2024 and address the citywide demand for housing.

Impacts of Alternative 4

Loss of housing due to redevelopment and insufficient development capacity, tools, or programs to address displacement of dwellings and population. Alternative 4 expands limited housing allowances to the greatest degree of any of the alternatives. Under Alternative 4 about 2,195 new homes would be added in UI zoned portions of industrial areas due to increased flexibility for caretakers' quarters and makers' studios. Housing types in this Alternative are likely to be a combination of existing and newly allowed formats such as caretakers' quarters, makers' studios, live/work units, and housing in conjunction with small production spaces. See **Exhibit 3.9-24**.

Exhibit 3.9-24 Alternative 4 Jobs and Housing Existing and 2044

	Existing	2044
Industrial Jobs	54,500 (2018)	66,400
Total Jobs	98,500 (2018)	157,700
Residential Dwellings	413 (2021)	2,608*

* With MIC adjustments—Seattle Mixed-Use Zone Housing

Sources: CAI, 2021; City of Seattle, 2021.

The following section describes the anticipated changes to housing by subarea under this Alternative. See **Exhibit 3.9-25**.

- **Ballard**. Under Alternative 4 land in the Ballard uplands in the 14th Avenue corridor north of NW Leary would be placed in a combination of the II zone and the UI zone. The UI zone would allow a greater density of industry supportive housing at a maximum density of 50 dwelling units / acre. Other areas that are north of NW Leary and in Fremont north of 36th Street would be placed in the UI zone and would likely receive a substantial amount of increased infill development. An additional 790 housing units are estimated and would typically be located on several upper floors of a 4-6 story mixed-use development.
- **Interbay Dravus**. Within the Interbay Dravus subarea, land north of Dravus Street along Thorndyke Avenue W would be zoned UI as in alternatives 2 and 3, but in Alternative 4 the zone would allow for industry supportive housing at a maximum density of 50 dwelling units per acre. An additional 175 housing units are estimated, and they would typically be located on an upper floor of a 4-6 story mixed-use development.
- **Interbay Smith Cove**. No additional housing is expected in the Interbay Smith Cove Subarea under Alternative 4 because of the small application of the UI zone on parcels unlikely to redevelop.
- **SODO/Stadium.** Under Alternative 4, land in the stadium area would be zoned UI, and the UI zone would be extended further south along 1st Avenue to Starbucks Center. This would allow the area to receive an estimated 990 industry-supportive housing units.
- **Georgetown/ South Park.** Under Alternative 4 (as in Alternative 2) edges the residential areas would be zoned UI, and increased infill development with light industrial uses, brewers/makers, and small manufacturers with large ancillary spaces is expected. However, the zone would enable an estimated 240 industry supportive residential units interspersed in these areas.

  Similar to Alternative 2, under Alternative 4, the triangular area of Georgetown bounded by Corson Avenue S, Carleton Avenue S and I-5 would be removed from the MIC and placed into a mixed-use zone. An estimated 1,078 housing units could be added.

  Land removed from the MIC at the edges of South Park would be placed in a mixed-use zone. Some of it would likely redevelop with mixed-use structures including housing on upper floors. This would add capacity for a range of housing in these areas. These areas currently include a mix of industrial service and repair businesses, and small-scale commercial uses.

  Alternative 4 adds more housing than alternative 1, 2, or 3. Housing added to the Ballard subarea would be part of mixed-use infill development. New zone standards would allow small parcels to accommodate new structures as well. Areas that are changing to the Urban Industrial Zone in SODO under Alternative 3 currently has no significant amounts of housing.

  Redevelopment in the areas zoned for UI may be more likely to add housing under the industry-supportive housing formats allowed under UI zone rather than displace existing

housing. As noted earlier the City's Displacement Risk Index shows the study area overall with low or moderate risk of displacement. While some loss of existing housing may be possible under this Alternative this is an expected part of a changing urban environment. There is unlikely to be any significant loss of housing due to redevelopment within the study area under Alternative 4.

Exhibit 3.9-25 Alternative 4 Housing by Subarea

Subarea	Total	Growth
Ballard	982	790
Interbay Dravus	178	175
Interbay Smith Cove	1	0
SODO/Stadium	1011	990
Georgetown/South Park	436	240
Total: Ind Zone Housing (Caretaker/Artist)	2,608	2,195
		Added MU Housing
With MIC Adjustments—Seattle Mixed-Use Zone Housing	1078	
Grand Total Housing in Study Area	3,686	3,273

Sources: CAI, 2021; City of Seattle, 2021.

Potential to increase households' exposure to air pollution, noise pollution, or environmental hazards in census tracts identified as having high environmental health disparities and with sensitive populations**.** Similar to Alternative 3, adding housing in the Seattle Mixed zone under Alternative 4, particularly in the South Park area, and housing growth in the SODO/Stadium and Georgetown areas, could add more residents in a census tract shown to have greater exposure to air pollution, noise sources and health disparities. Similar to Alternative 3, the air quality and noise mitigation measures (**Sections 3.2 and 3.6**) could help reduce potential impacts of housing located in or near the study area, e.g., building design, distance, landscaping, and others.

Creation of demand for housing that cannot be accommodated within the city in adjacent districts or areas where housing is planned. Under Alternative 4, employment is projected to grow substantially more than under Alternative 1 No Action and Alternative 2, and by a similar amount to Alternative 3. A total of 59,2000 additional jobs are projected for the study area, an increase of 59%.

Increases in employment growth envisioned under this Alternative could shift some of the overall expected citywide employment growth into industrial areas. This could have an impact on housing, especially if additional new employment were added to industrial areas not subject to the MHA regulations. Demand for new housing could be shifted to areas of the city closer to locations of dense employment growth (II zones), but outside of the study area. The II zones are

in the closest locations to light rail (1/4–1/2 mile) and locations with fast access by light rail to these areas may see some shifts in demand.

Overall, the increased employment growth envisioned in Alternative 4 is within the citywide amount that the City will plan for in the 2024 major Comprehensive Plan update; similarly, the City will plan for its housing growth target and address the citywide demand for housing.

3.9.3 Mitigation Measures

Incorporated Plan Features

The Seattle Comprehensive Plan designates the MICs as major industrial employment centers. While alternatives 2, 3, and 4 include some expansions in allowed housing, the scale of housing growth is significantly smaller than employment growth. The addition of small amounts of housing in limited locations is intended to foster vibrant industrial districts that support a mix of uses that include local manufacturing, production, arts. This mix has the potential to address the shortage of small or affordable space for makers and creatives.

Increases in housing units under alternatives 2, 3, and 4 will be subject to the development standards developed under the UI zone. These include pedestrian and cyclist-oriented frontage improvements, development of green public spaces, access to planned transit and non-motorized transportation connections that support new development. The integration of public green open spaces, pedestrian-oriented amenities, and the access to transit, helps to soften potential impacts of locating housing in areas of intensive industrial activity and employment growth. Access to open space is an amenity that can be used for recreation, community gathering, access to nature, and a variety of environmental benefits. Housing in proximity to transit can help potential employees in the industrial centers live closer to their jobs. See Other Potential Mitigation Measures regarding reducing health disparities.

Regulations & Commitments

Seattle's City Code contains regulations that help to address potential displacement. A summary of these regulations, which would mitigate impacts associated with the alternatives, is presented below.

SEPA Review

Section 25.05 of Seattle Municipal Code contains environmental procedures that govern the issues to be addressed during development review under the State Environmental Policy Act (SEPA). SEPA addresses issues related to height, bulk, scale, and land use compatibility. Future site-specific development would be subject to additional SEPA review.

Development Regulations

Title 23 contains Seattle's Land Use Code, which establishes zoning and development regulations. These development regulations contain provisions governing the design of buildings, site planning, and provisions for adaptive reuse of existing buildings. Industrial zones generally contain provisions relating to limits of housing designed in industry supportive formats. Regulations are in place to address housing development related to the implementation of Alternative 1.

Existing Programs to Address Potential Displacement

- **Seattle's Tenant Relocation Assistance Ordinance**. This provides relocation assistance to very low-income households and provide notice to all households prior to relocation. Renters are considered displaced when their housing is scheduled to be torn down or undergo substantial renovation, have its use changed (for example, from an apartment building to a hotel), or have certain rent or income restrictions removed (for example a property is no longer required to rent only to low-income renters under a federal program).
- **Notice of Intent to Sell Ordinance.** The Notice of Intent to Sell ordinance reauthorized by Council in 2019, provides the City with information about the intention to sell residential rental property with at least one unit rented at 80% of Area Median Income (AMI) or below. The City, in partnership with the Seattle Housing Authority and community partners, can use the notification information to evaluate properties and deploy a range of property preservation tools, including incentives and acquisition. The notice can also help residents seek tenant protections and relocation resources if necessary.
- **Rental Registration and Inspection Ordinance.** The Rental Registration and Inspection Ordinance (RRIO) helps ensure that all rental housing in Seattle is safe and meets basic housing maintenance requirements. All rental property owners in Seattle must register their properties with the City. Inspectors will make sure all registered properties comply with minimum housing and safety standards at least once every 5–10 years. RRIO helps improve and maintain the quality of Seattle's rental housing over time.

This patchwork of programs and regulations works to address displacement in the areas in which they are applied. These rules would be in place under all alternatives.

Other Potential Mitigation Measures

Impacts of anticipated residential growth under the alternatives are not significant based on the thresholds identified in the EIS.

Comprehensive Plan Update

The City will plan for the citywide amount of housing growth in the Comprehensive Plan EIS on a citywide scale. As part of this ongoing commitment, the City could consider

- Adding additional capacity for housing in urban villages and residential areas in locations that will have fast access to the new II zones to help address the shifts in demand for housing in response to employment growth in industrial areas. The II zones are in the closest locations to light rail (1/4–1/2 mile), and light rail will provide good access to these areas.
- Adding additional capacity for housing in urban village and residential areas in locations adjacent to new UI zones to address the shifts in demand for housing in response to employment growth in the industrial areas.

Mandatory Housing Affordability

Given the potential for employment growth to shift demand for housing, the City could consider the following mitigation measures:

- Apply MHA regulations to the to the proposed new Industry and Innovation zone. Increases in employment growth envisioned under the Alternatives could shift some of the overall expected citywide employment growth into industrial areas. This could have an impact on housing, especially if additional new employment were added to industrial areas not subject to the MHA regulations. Applying MHA to the proposed new Industry and Innovation zone can mitigate this shift in demand.
- The City can also mitigate negative impacts of industrial development on nearby residents as follows (see **Section 3.2 Air Quality & GHG** and **Section 3.6 Noise** for details)**:**
  - Include policy guidance that recommends that residences and other sensitive land uses be separated 500 feet or appropriate distance from freeways, railways, and port facilities.
  - Add a denser tree canopy near high-volume roadways and industrial areas.
  - Impose greater noise reduction standards in residential buildings where exterior noise levels greater than 65 dBA are likely to occur.
  - Install noise reducing pavement on major arterials and roadways that experience relatively high traffic volumes and speeds.

3.9.4 Significant Unavoidable Adverse Impacts

Under all alternatives additional growth and development will occur in the study area, with small changes in the mix of housing. This change is unavoidable but is not considered significant or adverse within an urban area designated as an employment center in the Comprehensive Plan. No significant loss of existing housing due to redevelopment is anticipated under any of the alternatives. The potential impacts related to these changes may differ in intensity and location in each of the alternatives. However, with existing and new development regulations, anti-displacement programs currently in place, no significant adverse impacts are anticipated.

Increases in housing, particularly under alternatives 3 and 4, could increase households' exposure to air pollution, noise pollution, or environmental hazards in census tracts identified as having high environmental health disparities and with sensitive populations. With the application of air quality and noise mitigation measures, no significant unavoidable adverse noise impacts would occur under any of the alternatives.

Increases in employment growth in the study area may shift some demand for housing. The increment of employment growth in all alternatives is within the citywide amount that the City will plan for in the 2024 Major Comprehensive Plan update. With the application of mitigation measures, including the application of MHA regulations to the II zone, and citywide planning for housing capacity through the Comprehensive Plan, no significant unavoidable impacts would occur under any of the alternatives.