



Appendices

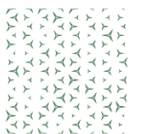
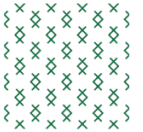


Table of Contents

Appendix 1 Transportation	A-2
Appendix 2 Housing	A-79
Appendix 3 Capital Facilities	A-278
Appendix 4 Utilities	A-339
Appendix 5 Legislative History	A-369

Appendix 1

Transportation

The Transportation Appendix includes technical information about the transportation system and its future needs. This information includes:

- Inventories of existing transportation infrastructure and facilities
- Planned future transportation investments
- Measures of multimodal levels of service
- Data related to transportation modeling, including land use assumptions
- Multiyear financing planning and assumptions

Existing and Planned Transportation Facilities

Seattle's transportation network comprises an array of facilities that support different modes of travel. The existing infrastructure includes roadways, transit (bus and rail), bicycle lanes and trails, pedestrian infrastructure, freight assets, airports, ferry terminals, and passenger and commuter rail lines. This section also includes a discussion of various transportation programs.

Maps included in this appendix illustrate existing and planned transportation facilities across Seattle. These visual representations offer an overview of existing facilities and planned and prioritized projects and improvements over the next 20 years. More detailed information on specific plans, timelines, and implementation strategies is included in the Seattle Transportation Plan.

Roadways

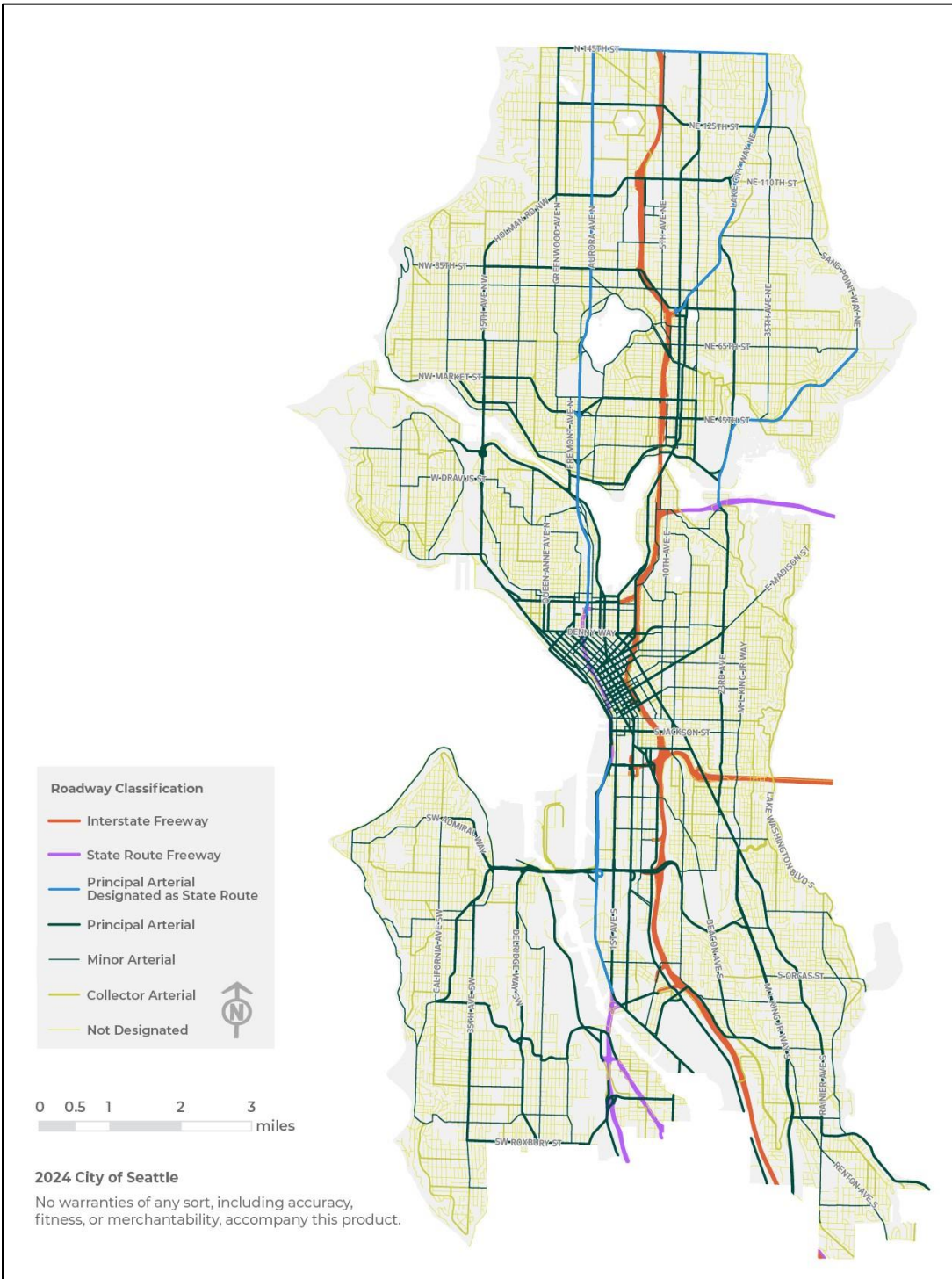
Seattle's street network consists of approximately 1,548 miles of arterials, including designated state routes, and more than 2,396 miles of non-arterials (see Figure A-1). The arterial system includes approximately 620 miles of principal arterials, 566 miles of minor arterials, and 348 miles of collector arterials.

Seattle also has a network of transit lanes which are travel lanes in the street that can only be used by transit, such as bus and streetcar. Seattle has three types of transit lanes:

- Time-restricted bus-only lanes
- All-day bus-only lanes
- Dedicated transit corridors

As Seattle grows over the next 20 years, the City will make the best use of its streets and roadways by continuing to build out a multimodal system that offers diverse travel options and maintaining a network of reliable streets for driving. This strategy focuses on maintaining and modernizing our streets and roadway network for safety, equity, sustainability, livability, mobility and economic vitality. With little to no room to expand the roadway network, the City does not have any plans to build any new major roadways.

Figure A-1
Existing Roadways



Transit

BUS

Public bus service in Seattle is primarily provided by two agencies. King County Metro operates bus transit services that cover most of King County. Sound Transit provides express bus services to Seattle from elsewhere in King County, as well as from Snohomish and Pierce Counties. Sound Transit is expanding their transit service with bus-rapid transit (BRT). A more limited role is played by Community Transit, which provides several commuter bus routes to Seattle from Snohomish County. (See Figure A-2 for existing bus routes in Seattle.)

As a component of the bus network, King County Metro operates RapidRide bus rapid transit (BRT) routes in Seattle and surrounding areas. In Seattle, five routes—lines C, D, E, G, H—are currently in service and one route—line J—is under construction. In addition, Sound Transit is developing its Stride bus rapid transit service. One line in Seattle is currently under construction. (See Figure A-3 for existing and planned BRT routes.)

King County Metro, in partnership with Solid Ground, a local non-profit, also provides accessible service to riders with disabilities across the entire transit system. For anyone whose disability prevents them from riding traditional buses and trains, Metro's Access Transportation program operates a network of accessible vans.

Solid Ground also partners with the Seattle Department of Transportation to provide the Downtown Circulator Bus service. The 7-stop circulator route provides free rides for people living on low incomes and those who access health and human services in downtown Seattle.

Metro Flex, an on-demand neighborhood transit service, is available in two areas in Seattle: Delridge/South Park and Othello/Rainier Beach. Minivans pick up and drop off passengers anywhere within the neighborhood service area for access to transit hubs, essential services, shopping, and more for the same price as a bus fare. Metro Flex is provided by King County Metro in partnership with a private mobility provider.

Figure A-2
Existing Bus Routes

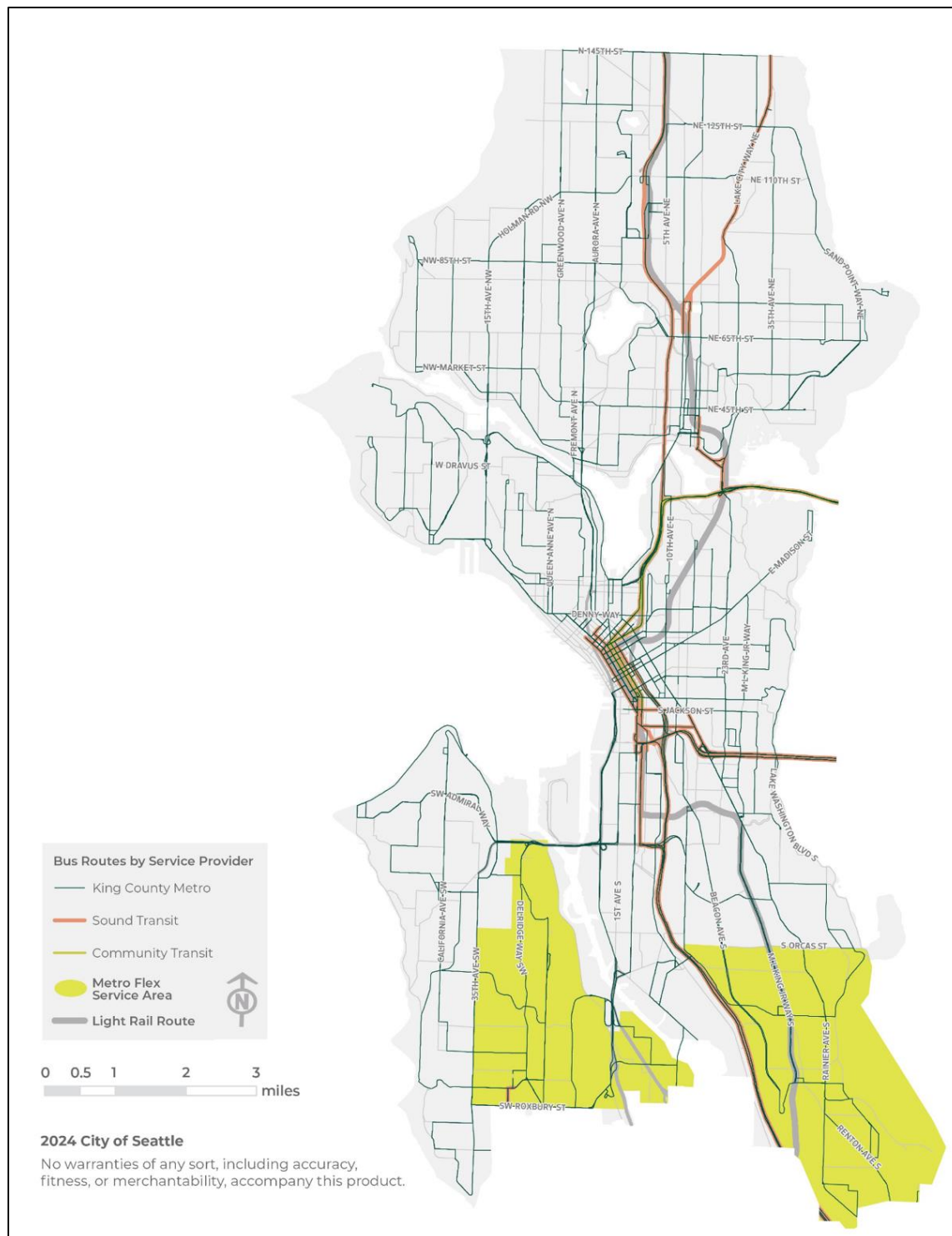
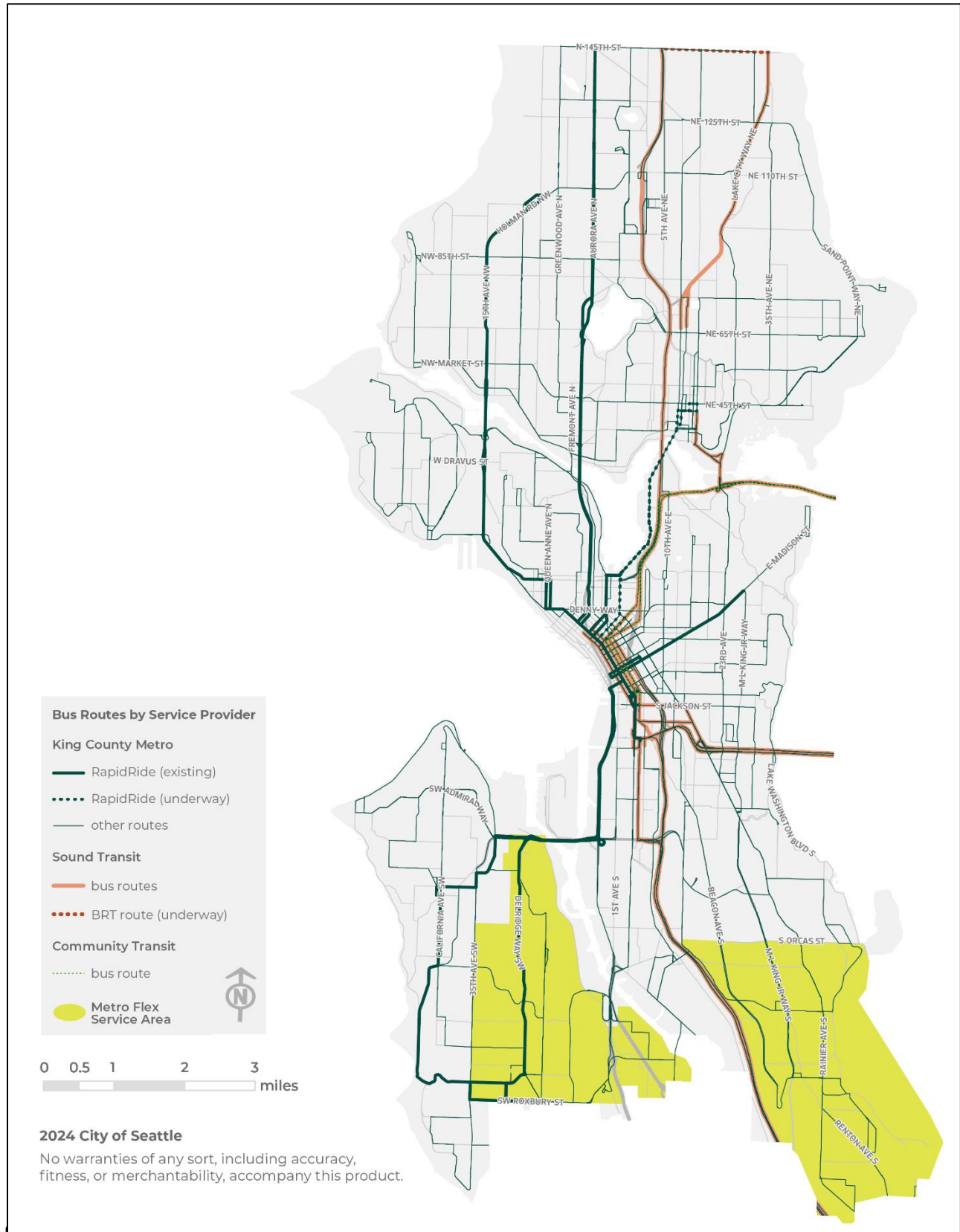


Figure A-3
Existing and Planned BRT Routes



As of 2024, King County Metro serves a population of more than 2.2 million people in a regional service area greater than 2,100 square miles. It operates more than 1,800 vehicles on about 214 bus, trolley, and dial-a-ride routes. Included are 159 electric trolley buses serving fourteen routes along almost seventy miles of two-direction overhead wires, all of which are within Seattle. At its peak in 2019, ridership was more than 123 million passengers.

As 2024, bus ridership in Seattle has steadily rebounded from pre-pandemic ridership. In Fall 2019, Seattle had on average about 312,000 daily boardings. Ridership declined during the pandemic. As of Fall 2023, ridership had rebounded to about 188,500 boardings. As of Spring 2024, average daily boardings has increased to 195,200.

The Frequent Transit Network (FTN) map (see Figure A-4) represents the Seattle Transportation Plan's vision for various levels of bus transit frequency out to the year 2031.¹ Over the next 20 years, adjustments to the FTN will occur on a regular cycle in partnership with King County Metro. Towards that future vision of frequent bus service, the City will continually measure progress towards a desired corridor-based frequency.

For the purposes of planning for capital investments that support transit, corridors are divided into 3 tiers, each with a different role in the transit network (see Figure A-5). The three tiers indicate the importance of and opportunity for capital improvements, particularly transit priority treatments such as bus lanes, queue jumps, Transit Signal Priority (TSP) and improvements for passengers accessing and waiting for transit.

Priority Transit Corridor Classifications Designation Description:

- Tier 1: Premium Transit Corridor. Highest-level arterial transit need, continuous transit priority, potential future light rail corridor. Examples: Third Ave, 15th Ave NE (U District), Rainier Ave S
- Tier 2: High-Priority Bus Corridor. Merits corridor-level investment programming, significant transit priority need. Examples: NE 65th St, 23rd Ave, California Way SW
- Tier 3: Priority Bus Corridor. Incremental or spot-location transit priority as per Transit Performance Policy. Examples: Sand Point Way NE, Boren Ave, 15th Ave S

¹ The FTN differs from the frequent transit routes used in the Growth Strategy and Zoning Proposal in that it is based on a future vision, whereas the frequent transit routes used to select sites near frequent transit is based on existing service level defined as: *King County Metro, Sound Transit, and Community Transit bus routes within the City of Seattle as of September 2024, and future routes approved by King County Council in March 2024 as part of the [Lynnwood Link Connections](#) Ordinance, that qualify as Frequent Transit Route as defined by SMC 23.54.015 and 23.84A ("Transit route, frequent")*.

Figure A-4
Frequent Transit Network Targets

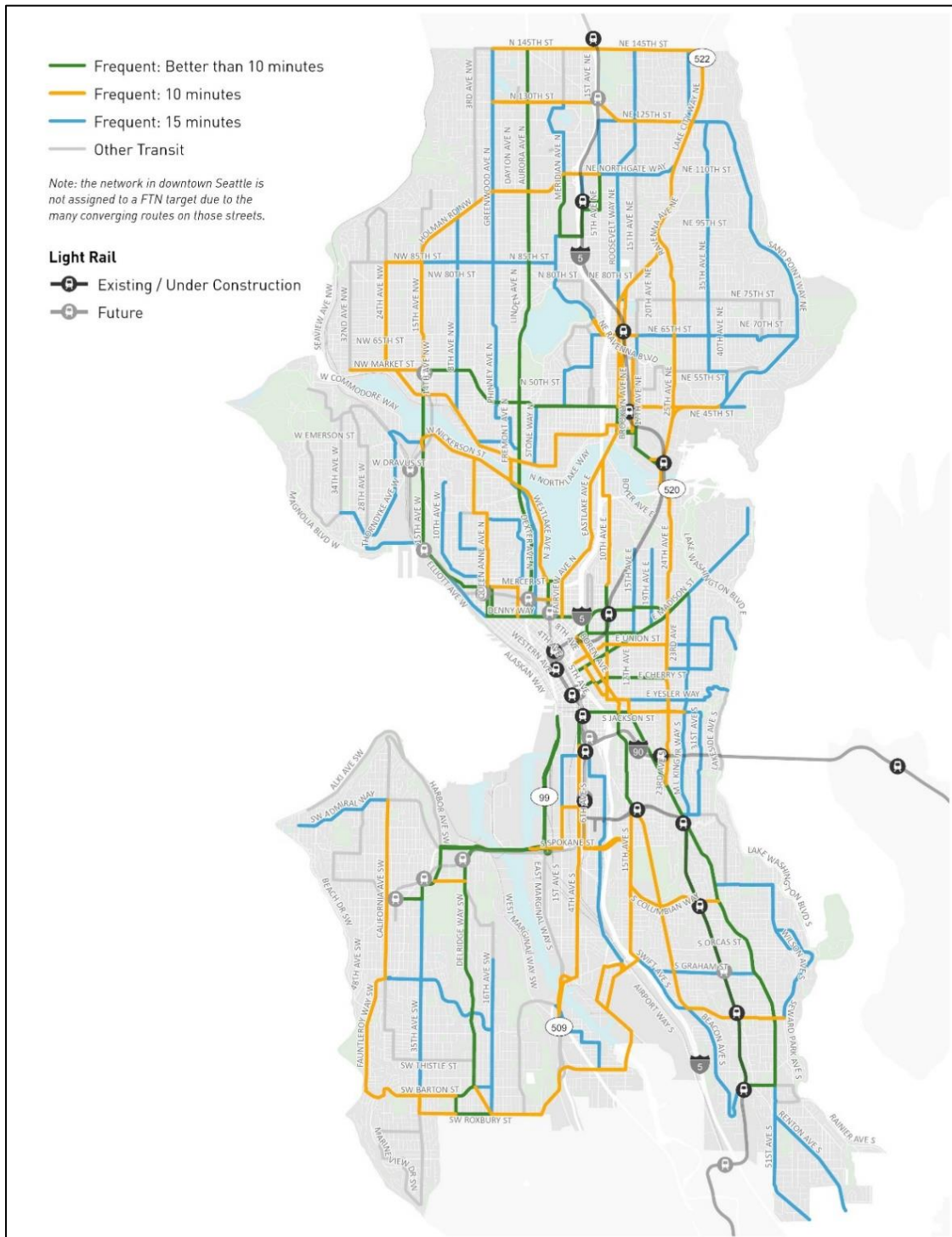
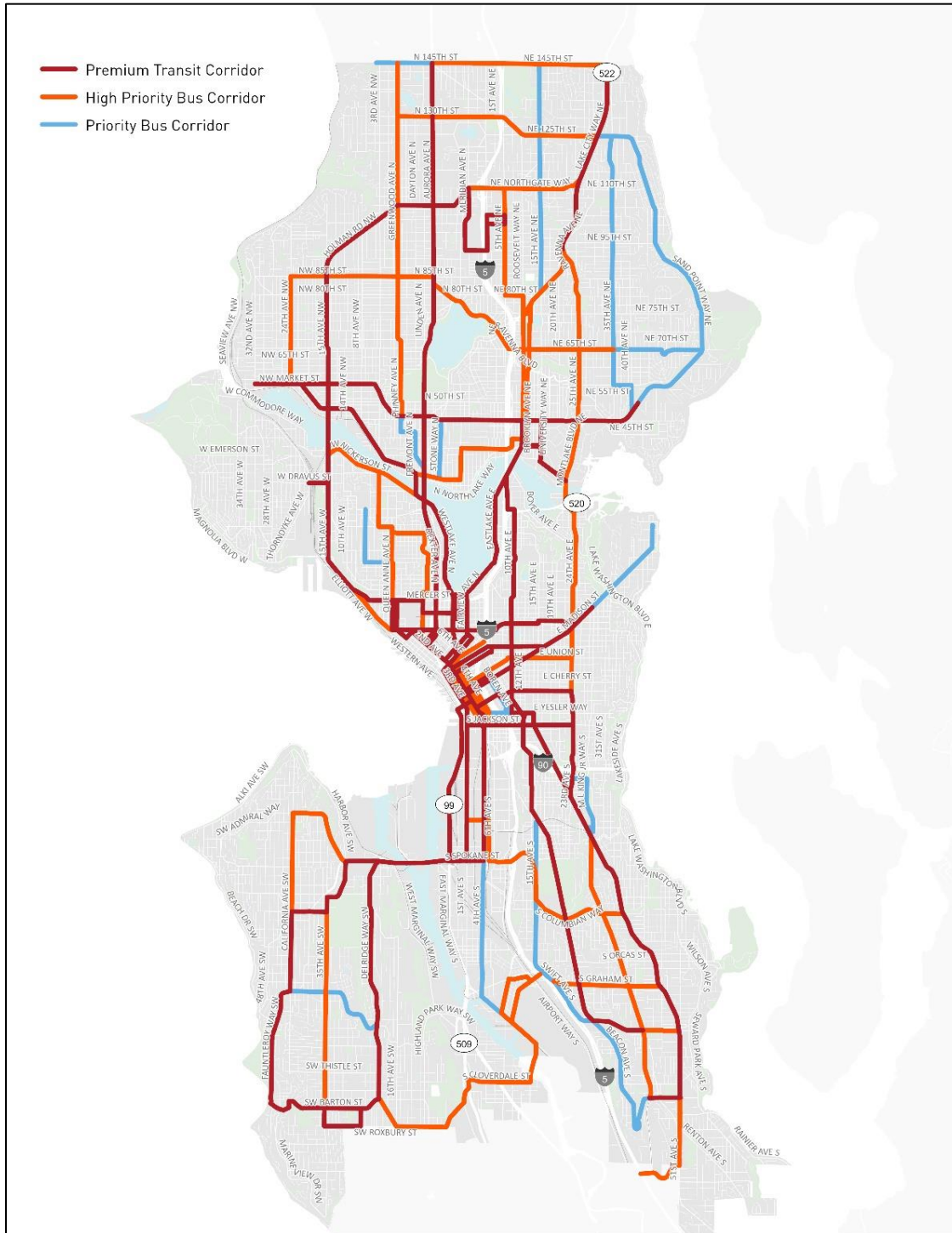


Figure A-5
Transit Capital Investment Corridors



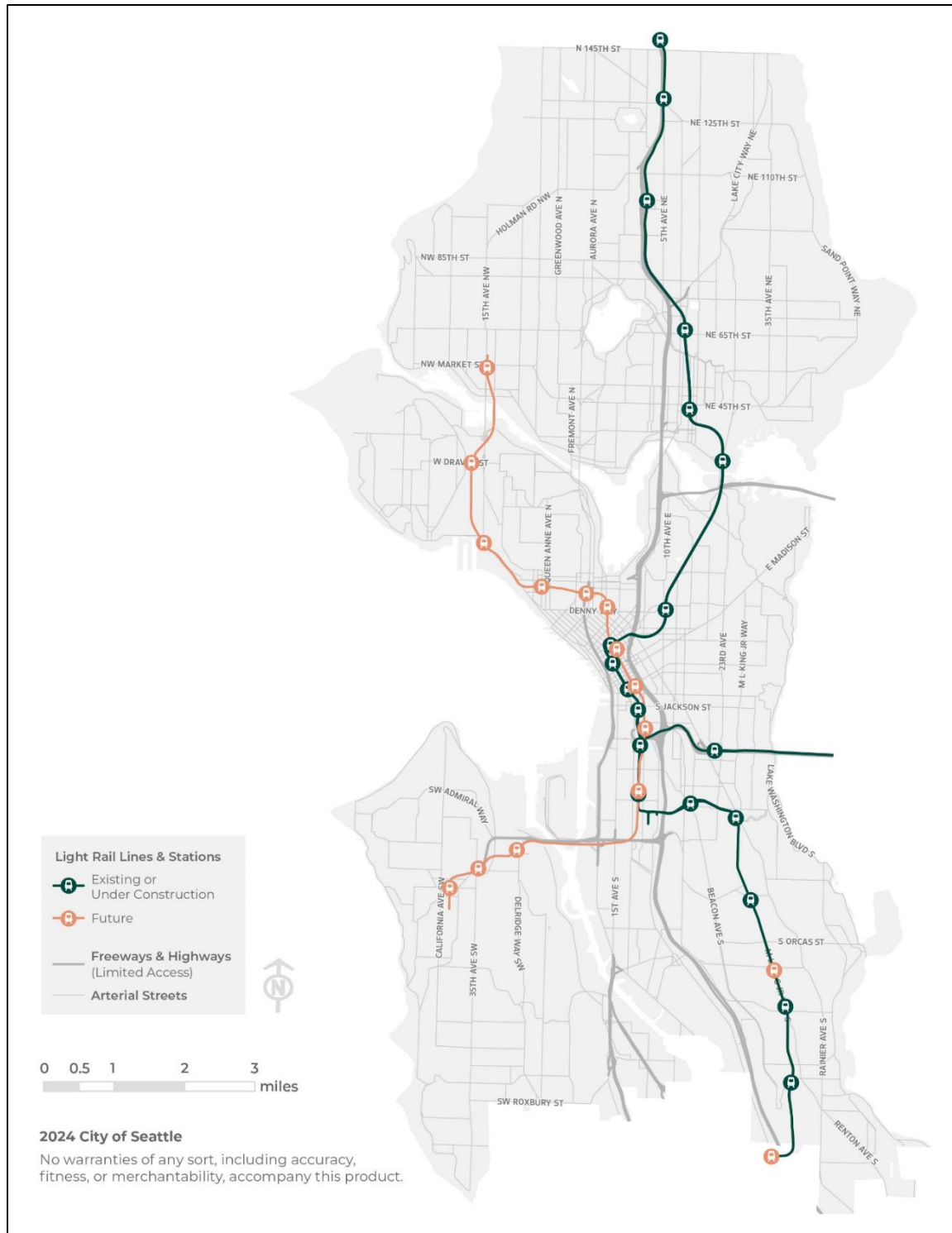
LIGHT RAIL

Sound Transit is the regional transit authority for the Puget Sound region, with a service area that includes portions of King, Snohomish, and Pierce Counties. Sound Transit currently operates light rail service, Link 1 Line, between Lynnwood and Angle Lake, including 15 stations in Seattle. Additional infill stations will open on Link 1 in 2026 (NE 130th St.) and 2031 (Graham St.).

In the coming years, Sound Transit will substantially expand light rail service in Seattle and the region. In 2025, the East Link extension will connect Seattle to Mercer Island, Bellevue, and Downtown Redmond. The extension includes a new station in Seattle, the Judkins Park Station, at the crossing of Rainier Avenue and I-90. Planning is underway for two other extensions in Seattle. The West Seattle Link extension includes four new stations and is expected to start service in 2032. The Ballard Link extension will include up to 10 new stations and is expected to start service in 2039. Other planned extensions are anticipated to reach Everett (2037-2041), Tacoma (in 2035), and Issaquah (in 2044).

The existing light rail transit network, including extensions already under construction, and future extensions of the network are shown in Figure A-6.

Figure A-6
Light Rail Network, Existing and Future



SEATTLE STREETCAR

The City of Seattle owns and funds the Seattle Streetcar, and partners with King County Metro to operate the system on the City's behalf. The Seattle Streetcar system consists of two streetcar lines: South Lake Union Streetcar (opened in 2007) and First Hill Streetcar (opened in 2016). As of 2022, riders took 1,117,000 rides on the system annually.

The South Lake Union Streetcar is 1.3 miles and services nine stops between its southern terminus at Westlake. The First Hill Streetcar connects major medical facilities, Seattle Central College, Seattle University, and a variety of neighborhoods to the King Street mobility hub, which provides connections to Sounder trains, Link light rail, and regional bus transit. The First Hill Streetcar line is 2.5 miles long. Streetcar routes are shown in Figure A-7.

MONORAIL

Seattle Center Monorail system is owned by the City of Seattle and operated by a private vendor. Its one-mile route is a fixed overhead guideway. Built in 1962 for the World's Fair, the Monorail has two stations, the Westlake Monorail Station in downtown Seattle and the Seattle Center Station. In 2019 changes to align fares and accept ORCA card payment have made the Monorail part of the local transit network. Passengers can transfer at the Westlake Station to Link light rail, local and regional bus service. The Monorail stations and route are shown in Figure A-7.

PASSENGER RAIL SERVICE TO AREAS OUTSIDE OF SEATTLE

Passenger rail services—commuter and intercity passenger trains--connect Seattle to other cities regionally, statewide, nationally, and internationally from King Street Station. Routes and stations in Seattle are shown in Figure A-7.

COMMUTER RAIL

Sound Transit operates the Sounder commuter rail service on existing rail alignments owned by BNSF Railway. The N Line connects downtown Seattle and Everett. As of fall 2024, service to four stations includes four morning and four afternoon trains. The S Line connects downtown Seattle and Lakewood. It serves nine stations with eight morning and thirteen afternoon trains. Commuters for the N Line can also use select Amtrak trains through a partnership between Sound Transit and Amtrak. In Seattle, King Street Station serves Sounder passengers.

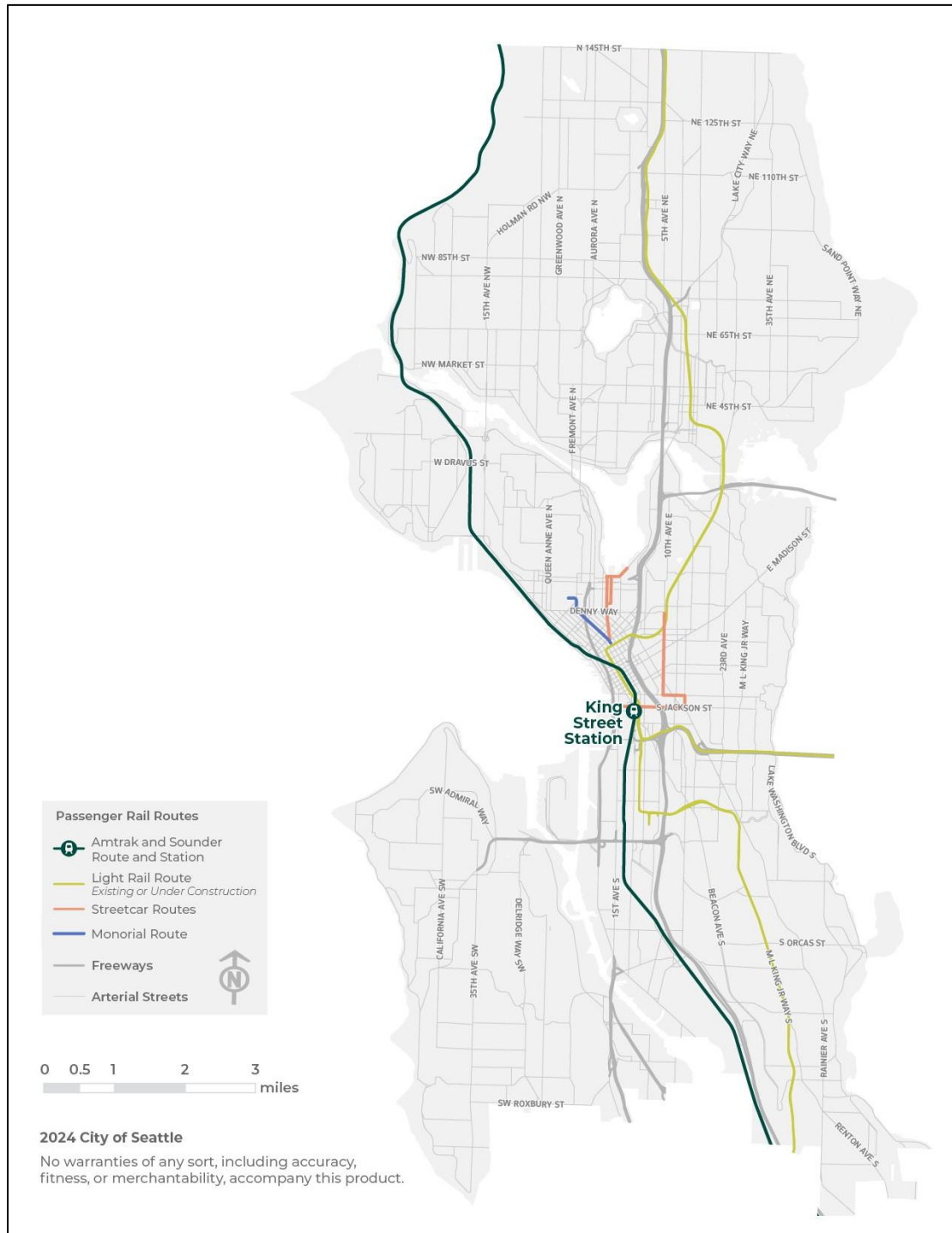
INTERCITY PASSENGER RAIL

Amtrak provides intercity passenger train service between City-owned King Street Station in downtown Seattle to regional, national, and international destinations. The service offers three long-distance routes: the Empire Builder (daily to Spokane and Chicago), the Coast Starlight (daily to Los Angeles), and the Cascades (multiple daily trips to Portland and Vancouver, BC). Amtrak service connects Seattle to 14 cities across the state.

Both Amtrak and Sounder services have grown in recent years and hope to further expand services in the future. Amtrak will soon begin major rail yard upgrades in Seattle. A new maintenance facility and rail yard improvements will support the existing fleet of Amtrak and Sounder trains, as well as accommodate Amtrak's new state-of-the-art Airo trains coming in 2026.

WDOT released a Preliminary Service Development Plan (2024) for the Amtrak Cascades corridor to reflect the growth, operational and social changes that will inform future improvements. It is the first step in developing a comprehensive plan that will serve as a blueprint for improving the entire Amtrak Cascades corridor.

Figure A-7
Existing Passenger Rail Routes



Bicycle and E-Mobility Network

Bicycling is growing in popularity as an everyday method of commuting and completing other daily trips as well as a recreational activity. Bicycles are classified as “vehicles” in the Seattle Traffic Code and have the right to use all streets in the city except where explicitly prohibited. The bicycle and e-mobility network serves not only people riding traditional bicycles, but also people using adaptive bikes, cargo bicycles for both personal use and deliveries, trikes, scooters, skateboards, roller skates, wheelchairs or other wheeled mobility devices, and “e-mobility” devices, which refers to personal and shared electric-powered bicycles, scooters, and other electric-powered devices. Bicycles and e-mobility serve a variety of trip purposes, such as getting to work, school, transit, the gym or doctor's office, recreating, making urban goods deliveries, and more.

Bicycle racks are provided in neighborhood commercial areas and Downtown and other appropriate locations, and some workplaces provide secure, weather-protected bike parking, showers, and lockers. As of 2024, the City has over 3,500 bike racks across the city. Seattle's Land Use Code also requires that many new developments include bike parking to complement car parking.

As of 2024, Seattle has over 155 miles of bicycle facilities, including neighborhood greenways, protected bike lanes, in-street separations, sharrows, climbing lanes, and multi-use trails (see Figure A-8). The Seattle Transportation Plan includes further expansion of the network to increase connectivity, completeness, and safety. Figure A-9 shows the future bicycle and e-mobility network. This is the long-range vision for a connected all-ages and abilities (AAA) network that would put 100 percent of Seattle households within a quarter mile of a AAA bikeway or multi-use trail.

The “Bike+” network consists of bikeways suitable for people of all ages and abilities (AAA), including protected bike lanes, Neighborhood Greenways, Healthy Streets, and bike lanes where vehicle speeds and volumes are sufficiently low. The network aims to upgrade existing bikeways to meet national AAA guidelines while also adding new connections to create a comprehensive cycling infrastructure throughout the city.

The bicycle and e-mobility network combines the Bike+ network with multi-use trails and is designed to accommodate increasing number and variety of mobility devices, from e-scooters and e-bikes to e-cargo bikes and other emerging mobility devices. For more details, please refer to the Bicycle Element of the Seattle Transportation Plan.

BICYCLE AND SCOOTER SHARE

Seattle's bicycle and scooter share system offers electric-assist bicycles and e-scooters. The program strives to provide flexible “last mile” transportation options for Seattle residents and visitors. The City's bicycle and scooter share program is currently in partnership with Lime and Bird to provide emission-free transportation throughout the city, including travel to and from transit stops, daily errands, and rides to and from major events. Riders can quickly locate and rent available devices using their phones, then ride to their destination and park responsibly for the following user. In 2023, there were 4.9 million rides, averaging 13,000 per day. Trips in 2024 are increasing over trips from 2023 by 3.4%.

Figure A-8
Existing Bicycle and E-Mobility Network (2024)

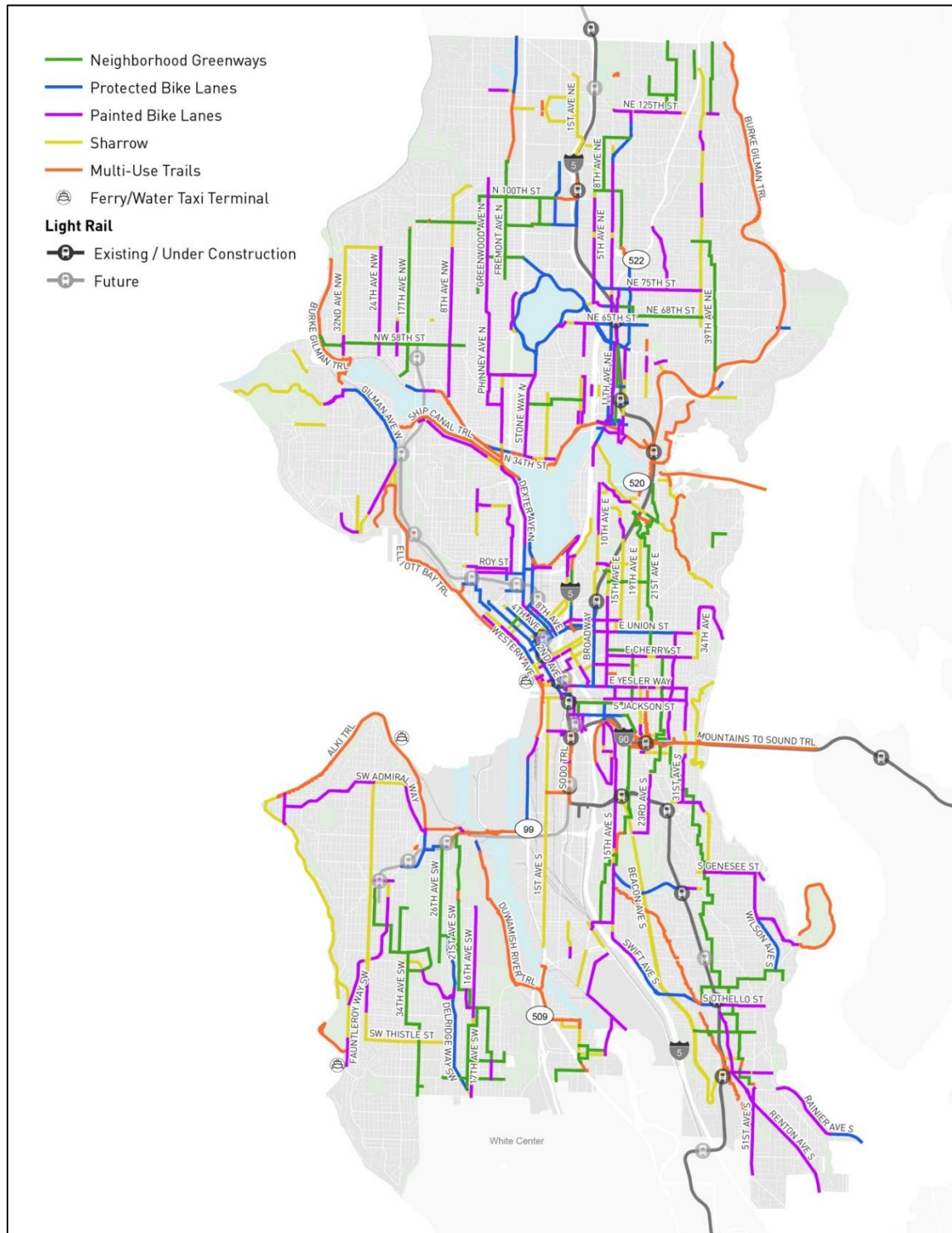
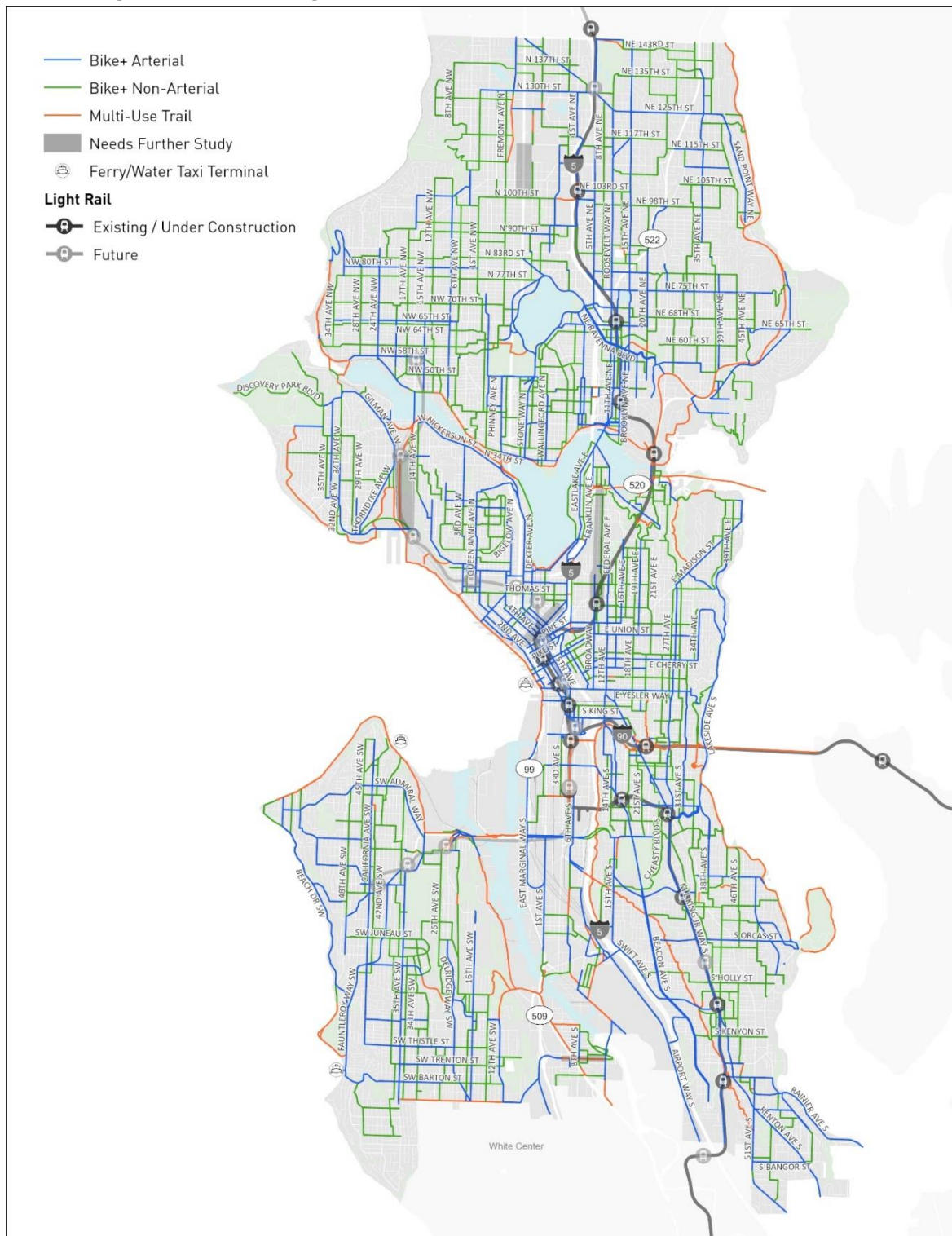


Figure A-9
Future Bicycle and E-Mobility Network



Pedestrians

As of 2024, Seattle has more than 2,285 miles of sidewalks, over 6,200 crosswalks, 34,100 curb ramps, over 500 stairways, and thirty-nine lane miles of at least twelve-foot wide trails (see Figure A-10).

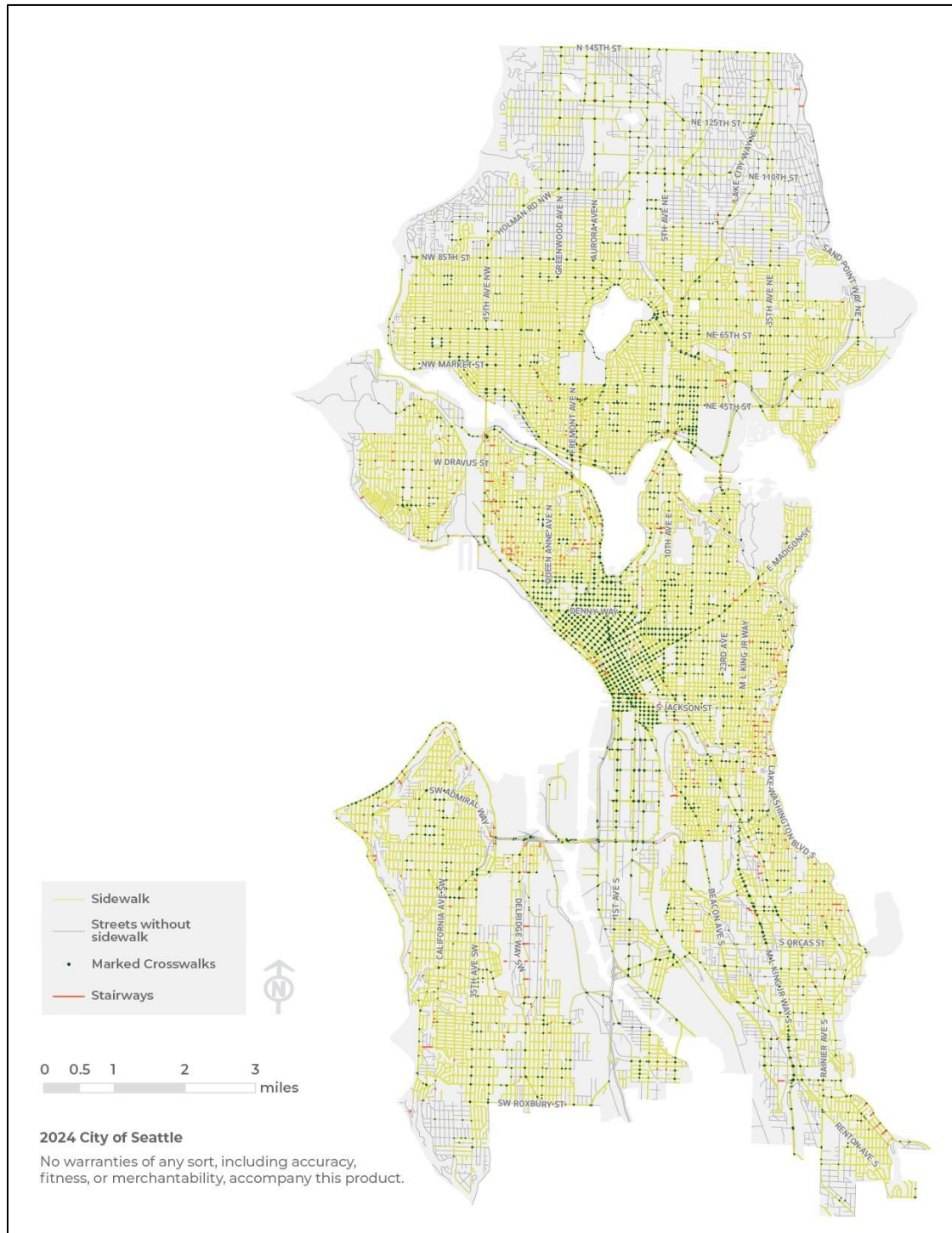
Over the past decade, the City has made progress in addressing gaps in sidewalk coverage. The City has built sidewalks or asphalt walkways in numerous locations where they were lacking. Between 2016 and 2024, approximately 250 blocks of new sidewalk were built citywide.

Seattle aims to make all streets walkable, but this goal faces challenges. It requires significant funding and will take longer than a 20-year timeframe. To address this, the city is looking to prioritize its investments, focusing on a select set of streets and projects that offer the most equitable benefits.

Planned pedestrian infrastructure improvements include new sidewalks on block faces where there are currently no sidewalks; upgrading sub-standard facilities; and enhancing street crossings for increase safety and access. These improvements may also include Corridor Network Projects and Catalyst Projects, dependent on available funding. Corridor Network Projects focus on improving access to transit with sidewalk upgrades, crossings, and amenities, while also enhancing people-prioritized streets in neighborhoods. Catalyst Projects address major connectivity barriers, like the proposed I-5 Lid and improvements to Aurora Ave and Lake City Way. These large-scale initiatives aim to transform pedestrian mobility citywide, often requiring significant investment and coordination among various stakeholders, including state and federal agencies.

For more details on the future improvements to the pedestrian network, see the Seattle Transportation Plan, Part II, Pedestrian Element, pages P-24 – P-46.

Figure A-10
Pedestrian Infrastructure



Freight Facilities

Freight-related facilities span from the commercial truck network to port facilities to shipyards to air and rail infrastructure and other related facilities. Figure A-11 shows the combined general set of freight assets in Seattle. Each component of the freight network will be described in more detail in the sections that follow.

Seattle's Freight Network is a system of designated routes designed to efficiently move goods by commercial truck transport while considering the needs of other road users and local communities. It connects major industrial areas, the Port of Seattle, rail yards, and regional highways using wider arterial streets built for larger vehicles. The network features over-legal routes for oversized loads, restricted streets, time-of-day limitations, weight-restricted bridges, and clear signage to guide drivers.

Managed by the Seattle Department of Transportation, the network aims to balance freight mobility with safety and neighborhood impact concerns. It directs truck traffic away from residential areas where possible while maintaining access to commercial and industrial zones. Key corridors include parts of Aurora Avenue, East Marginal Way, and the Duwamish industrial area. The city regularly evaluates and updates the network to address evolving needs and improve overall efficiency. Figure A-12 represents the Freight Network in Seattle.

OVER-LEGAL ROUTES AND HEAVY HAUL NETWORK

To support large commercial trucks, Seattle also has specific routes for oversized and overweight trucks, referred to as "over-legal." Permits are required to operate over-legal vehicles on designated streets. These routes can accommodate trucks with larger loads that require a 20-foot by 20-foot envelope, though specific segments of the network may not handle both excess width and height dimensions. The Heavy Haul Network (HHN) is located in the Duwamish MIC. The network provides key routes for commercial trucks moving heavy, divisible loads. These trucks typically make short trips from the Port to the transload facilities. The HHN helps manage freight flow around the ports and improve movement of large commercial trucks hauling heavy divisible cargo. Figure A-12 shows the Over-legal Routes and the Heavy Haul Network.

Figure A-11
Freight Assets

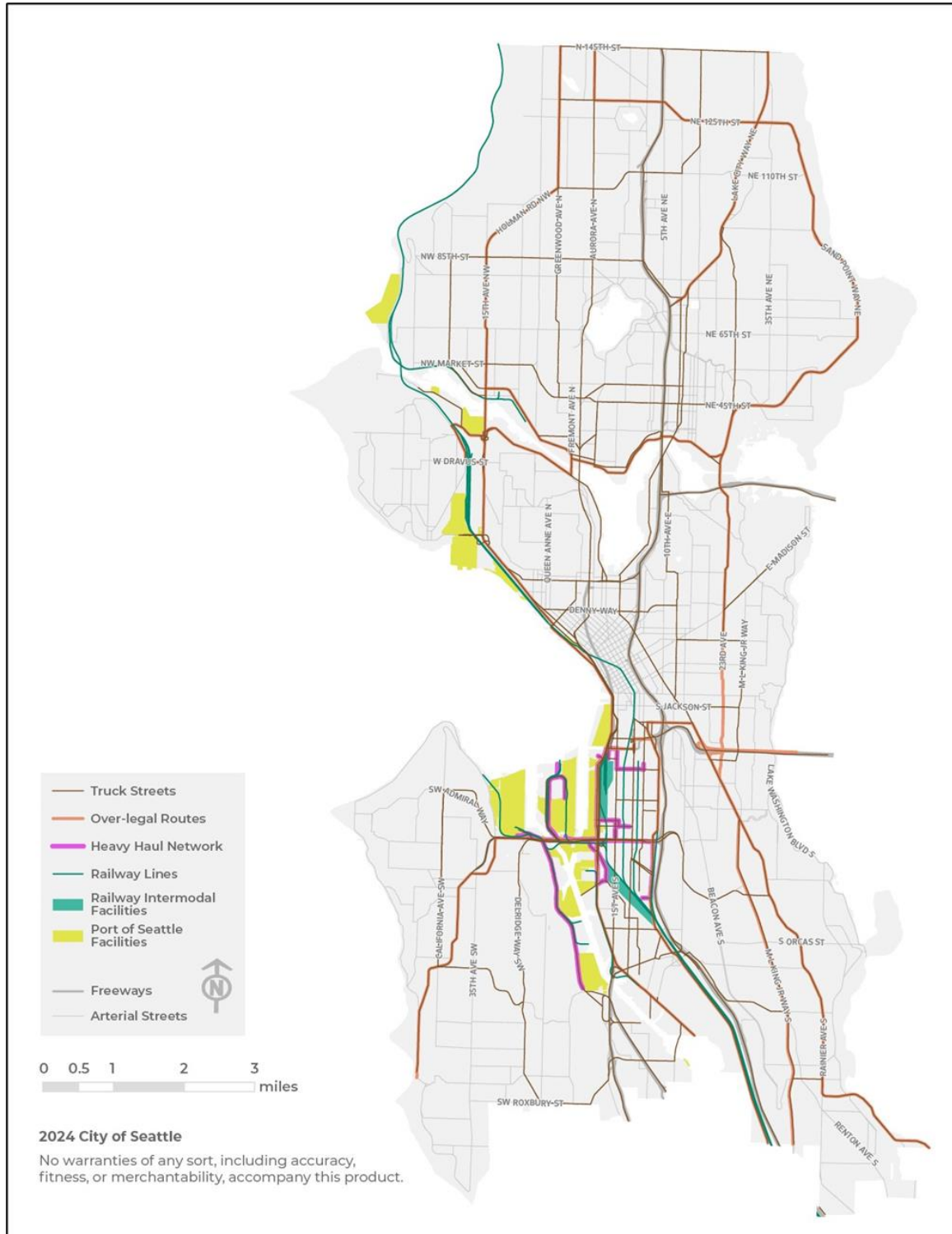
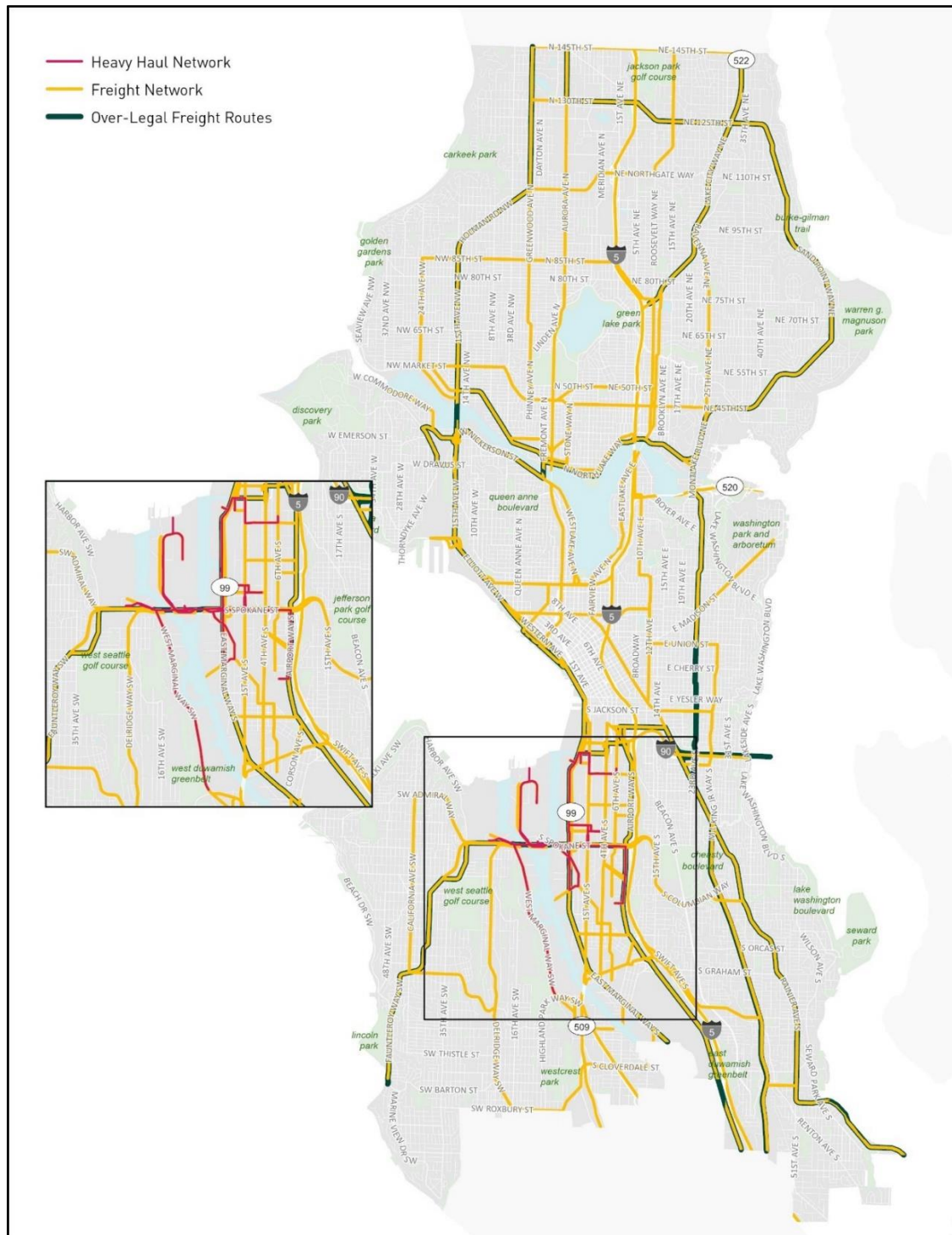


Figure A-12
Freight Network, including the Heavy Haul Network and Over-Legal Routes



FREIGHT RAIL

Two main components of our rail network handle freight. BNSF Railway Company (BNSF) owns and operates mainline tracks from Portland to Seattle. They also own and operate track extending north from Downtown Seattle to the Canadian border through Snohomish County and eastward to Spokane and extending to the Great Lakes region. Union Pacific Railroad (UP) owns and operates a single mainline track with two-way train operations between Tacoma and Seattle, its northernmost terminus on the West Coast.

There are five intermodal terminals providing the Duwamish Manufacturing Industrial Center with rail service. BNSF operates the Seattle International Gateway (SIG) Yard north of South Hanford Street and provides rail service within the Terminal 5 Intermodal Yard west of Harbor Island, Terminal 18 Intermodal Yard within Harbor Island, and Terminal 115 east of West Marginal Way. UP owns and operates ARGO Yard immediately south of South Spokane Street between East Marginal Way and Airport Way South and also provides rail service at the Terminal 18 Intermodal Yard. Port of Seattle intermodal facilities within the Duwamish MIC include Terminals 5, 18, 20, 46, and 115.

The Ballard Interbay Northend Manufacturing Industrial Center (BINMIC) contains BNSF's Balmer Yard in Interbay and the Ballard Terminal Railroad in Ballard. The latter is a shortline railroad that provides rail service along its 3-mile spur track on Shilshole Avenue NW.

PORT OF SEATTLE AND OTHER INTERMODAL FACILITIES

The Port of Seattle (POS) manages 21 distinct properties that support marine, rail, and air intermodal facilities. POS facilities include 9 commercial marine terminals, 4 ocean container terminals with 31 container cranes, and a deep-draft grain terminal. Steamship operators have direct service to Asia, Europe, Latin America, and domestic markets (Alaska and Hawaii).

Services are offered by seventeen ocean carriers, about thirty tug and barge operators, and BNSF Railway and Union Pacific railroads, operating intermodal yards. Figure A-13 shows Port of Seattle facilities located in Seattle.

2024 City of Seattle

No warranties of any sort, including accuracy, fitness, or merchantability, accompany this product.

Air Transportation

The Seattle metropolitan area has five airports offering scheduled service to regional, national or international destinations. Figure A-14 shows the general location of two of these airports, shown in bold below, which are located within the City of Seattle.

- King County International Airport-Boeing Field (BFI), owned by King County, is located partly in Seattle and Tukwila.
- Seattle Lake Union Seaplane Base (LKE), privately owned, is located on Lake Union in Seattle.
- Seattle-Tacoma International Airport (SEA), owned by the Port of Seattle, is located in the City of SeaTac.
- Seattle Paine Field International Airport (PAE), owned by Snohomish County, is located in unincorporated Snohomish County near Mukilteo and Everett.
- Kenmore Air Harbor (KEH), privately owned, is located on Lake Washington in the city of Kenmore.

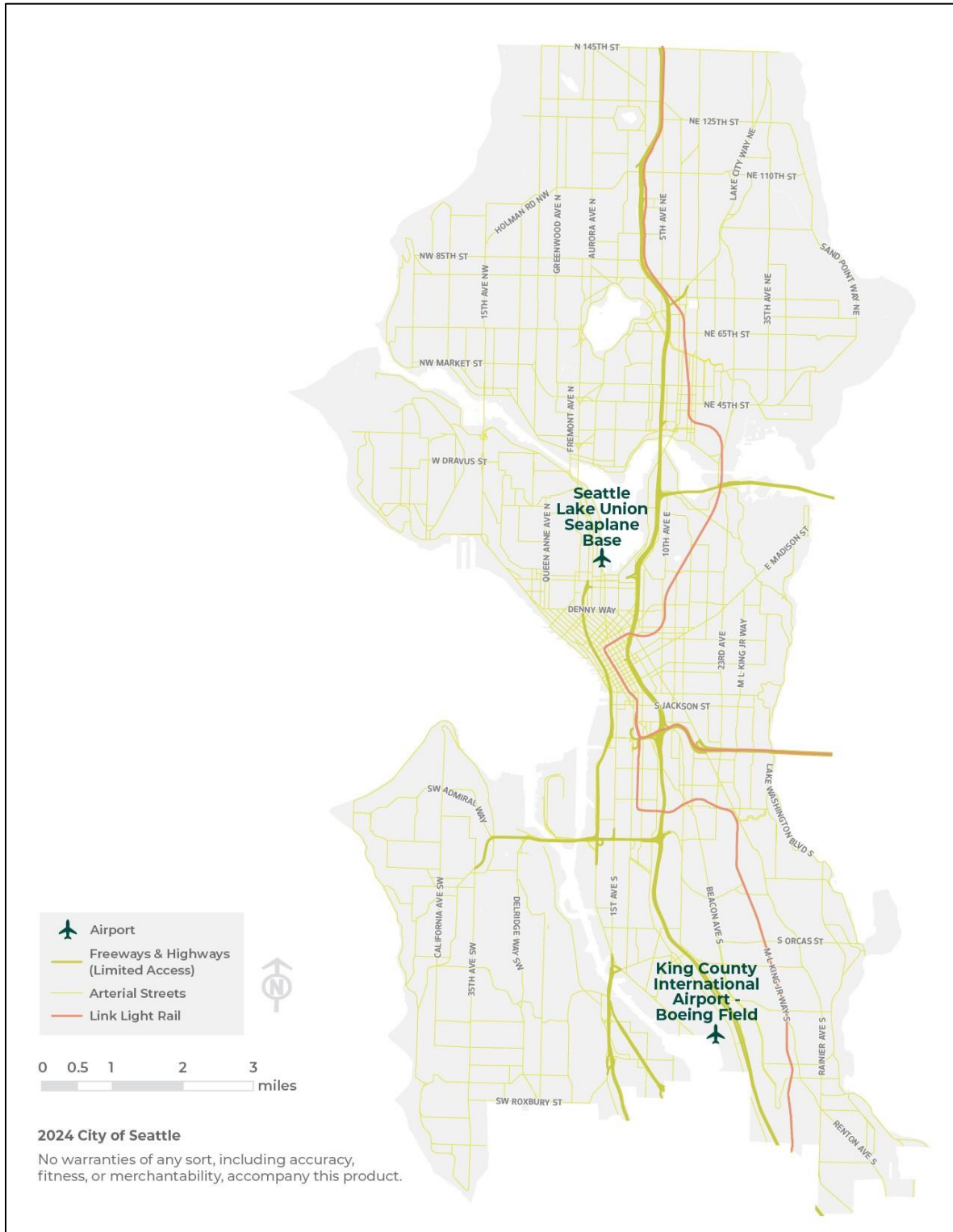
The airports located in Seattle, BFI and LKE, are generally compatible with surrounding land uses. Potential impacts of any development that may occur in proximity to the airports are mitigated for through the planning and permitting process, addressing high-intensity uses, airspace and height hazard obstruction, noise and safety issues. For both these airport locations land development is generally restricted to lower-density, lower-height uses and buildings.

BFI is located in a primarily industrial area. Noise, air pollution, and safety concerns affect residential neighborhoods adjacent to the airport. To reduce the impact on these residential areas, the airport service is restricted to primarily private and non-major commercial flight activities.

King County is currently developing a Vision 2045 Airport Plan to evaluate how BFI can evolve and adapt to meet future aviation needs and maintain its status as a world-class airport. This airport planning process will result in an airport plan that serves airport users and surrounding community members for the next 20 years. The Airport Strategic Plan will be completed by December 2024.

LKE serves commercial seaplane operators providing passenger service and private seaplane operators. Access to the facilities of seaplane operators on Lake Union are provided through the City's transportation system including roadways and transit. The seaplane facility is adjacent to the downtown area. Zoning regulations are in place limiting heights to establish a landing/approach corridor that specifically addresses the safe access needs of seaplanes.

Figure A-14
Airports within Seattle



Water Transportation

The Washington State Ferry (WSF) system operates two terminals in Seattle: the Seattle Ferry Terminal at Colman Dock in Downtown Seattle, and the Fauntleroy Terminal in West Seattle. Passenger-and-vehicle service is provided on four ferry routes.

- Colman Dock to Bainbridge Island
- Coleman Dock to Bremerton.
- Fauntleroy to Vashon Island and Southworth
- Fauntleroy to Southworth (direct service, no stop at Vashon)

Passenger-only water transportation is offered by King County Metro and Kitsap Transit. King County Metro Water Taxi service between Seattle Pier 50 and West Seattle (Seacrest Dock)

- King County Metro Water Taxi service between Seattle Pier 50 and Vashon Island
- Kitsap Transit Fast Ferry service between Seattle Pier 50 and Bremerton
- Kitsap Transit Fast Ferry service between Seattle Pier 50 and Southworth
- Kitsap Transit Fast Ferry service between Seattle Pier 50 and Kingston.

Figure A-15 shows ferry routes and terminals in Seattle.

Over the next 20 years, new passenger-only ferry routes may be added. Passenger ferry can provide fast and reliable connections in appropriate locations. Ferries serve as a supplement to the countywide transportation system in locations where it serves the network as well as, or better than, traditional fixed-route transit service. Service hours could be extended during summer and special events to accommodate rider demand.

King County Metro Long-Range Plan Metro Connects (2021) included two additional routes in their interim service network (targeted for implementation before the Ballard Link expansion) and three routes in the 2050 service network.

- Downtown Seattle to Shilshole (interim and 2050 service network)
- Kenmore to University of WA (interim and 2050 service network)
- Kirkland to University of WA (2050 service network)

Figure A-15
Existing Ferry Routes



Transportation Demand Management Strategies

The City of Seattle's Department of Transportation (SDOT) operates a comprehensive Transportation Demand Management (TDM) program to reduce single-occupancy vehicle trips and promote sustainable transportation options. This program includes initiatives such as the Commute Trip Reduction (CTR) program, which works with large employers to encourage alternative commute methods, and the Transportation Management Program (TMP), which focuses on managing transportation impacts from new developments. SDOT also supports various incentives and services, including transit pass subsidies, bike-sharing programs, and improved pedestrian and bicycle infrastructure. Additionally, the department provides resources and tools to help residents and businesses make informed transportation choices, ultimately aiming to alleviate traffic congestion, reduce emissions, and enhance overall mobility in Seattle.

Seattle has three main regulations to reduce traffic congestion and improve air quality by decreasing the number of people driving alone, particularly to commute to their place of employment, and reducing vehicle miles traveled (VMT):

- Commute Trip Reduction (CTR) Ordinance
- Transportation Management Program (TMP)
- Commuter Benefit Ordinance (CBO)

Through these programs, SDOT works with over 500 large worksites and buildings, representing more than 225,000 workers. They support impactful commuter transportation programs that include on-site amenities, subsidies, education, and communication to help workers with their transportation choices.

COMMUTE TRIP REDUCTION ORDINANCE

Seattle actively participates in Washington's Commute Trip Reduction (CTR) program, established in 1991 to reduce air pollution, traffic congestion, and energy use by promoting alternatives to driving alone. The city's local CTR program requires worksites with 100 or more full-time employees commuting during morning peak hours to conduct biennial commute surveys and submit reports on their commute programs. SDOT sets drive-alone rate (DAR) targets for the city as a whole and for individual neighborhoods.

TRANSPORTATION MANAGEMENT PROGRAMS

TMPs are used to mitigate transportation impacts identified as part of the land use and construction permitting process during a site's development review. They are triggered either through the State Environmental Policy Act (SEPA) review or Land Use Code requirements and are usually specified in the Master Use Permit.

TMPs are typically applied in three contexts:

- Individual Building Developments: Over 230 buildings in Seattle have active TMPs to mitigate transportation impacts from development; most are office or commercial buildings. More than 70% of these sites are occupied by employers affected by the CTR and participate in that program.

- **Major Institutions:** Seattle has 13 major educational and medical institutions. These institutions are required to develop City Council-approved Major Institution Master Plans (MIMPs), which guide long-term development and include ongoing monitoring practices. A key component of the MIMP is the TMP, as defined in Seattle Municipal Code 23.69.030.
- **Event Venues:** Large venues like stadiums are usually subject to TMPs to mitigate event-related transportation impacts and ensure ongoing coordination with key city departments and transit partners.

COMMUTER BENEFIT ORDINANCE

Seattle's Commuter Benefit Ordinance requires businesses with 20 or more employees worldwide to offer their Seattle employees a pre-tax payroll deduction for transit or vanpool expenses. The ordinance applies to all employees who:

- Work an average of 10 hours per week or more.
- Include telecommuting employees and those who live outside Seattle but work in the city.

TDM EXPANSION EFFORTS AND 5-YEAR STRATEGIC PLAN

SDOT is currently drafting a TDM Programs 5-Year Strategic Plan. This plan outlines how the city's TDM programs will evolve and expand to:

- Support progress towards mode split and VMT goals in the Seattle Transportation Plan and Climate Change Response Framework.
- Better reach and support BIPOC and vulnerable communities, guided by the Transportation Equity Framework.
- Support all types of trips, beyond just commutes, and adapt to post-pandemic travel patterns.
- Develop additional capacity and partnerships for ongoing programs while being mindful of limited resources.

Compliance with Title 29 of the American Disabilities Act of 1990 (ADA)

In 2020, the Seattle Department of Transportation published their [The American with Disabilities Act \(ADA\) Transition Plan for the Seattle Public Right-of-Way](#), a supplement of the City of Seattle's ADA Title II Transition Plan. SDOT prioritizes ADA accessibility improvements to the pedestrian network through multiple department programs, according to the criteria set forth in federal regulations. The SDOT Transition Plan includes a discussion and identification of physical barriers in the public right-of-way, or within SDOT-owned facilities, that limit the ADA accessibility of facilities to individuals with disabilities; describes the programs responsible and methods established to make those facilities accessible; provides a high-level schedule to making the accessibility modifications; and identifies SDOT's ADA Coordinator as the public official responsible for implementing the transition plan.

Transportation Level of Service (LOS) Measures

Overview

As established in policies T 1.9 and T 1.10 the City will track over time several measures that collectively describe the performance of the transportation system and multiple modes of travel that comprise that system, including vehicles, transit, bicycling, and walking. The purpose and role of this suite of multimodal level of service (LOS) measures will be to assess the performance of the transportation system over time as the policies and investments included in the Comprehensive Plan are implemented. The LOS measures will also be used to indicate potential need for additional transportation investments and demand management strategies as the city grows, consistent with the growth strategy. The Washington State Legislature recently adopted HB 1181, within which are new requirements to adopt multi-modal level service standards for transportation. The measures described are designed to provide a framework for further development of LOS standards that fully implement HB 1181 before the state deadline in 2029.

Vehicular LOS

The performance of the city's roadway system, including for the movement of vehicles of all types, not just private automobiles, but also transit, freight, and other vehicular travel, is based on two measures.

The first measure is vehicle miles traveled (VMT), which will be tracked citywide. Figure A-16 shows the existing VMT along with the reduction target included in policy T 4.2. With forthcoming guidance from the State of Washington, Seattle anticipates updating our VMT target as a per capita measure. Tracking of performance will also be updated to reflect forthcoming new data from the Washington State Department of Transportation.

Figure A-16

Vehicle Miles Traveled Baseline and Target

VMT in 2018	6.2 billion
Reduction Target	37%
VMT by 2044	3.9 billion

The second LOS measure that contributes to our assessment of the city's roadways for vehicular travel is the percent of trips that are made by a single occupant vehicle (SOV trips). This measure describes the percentage of all trips that are made by single-occupant vehicle (SOV) both citywide and within subareas of the city.

The performance of the overall system, including the city's arterials, will be measured in relation to the reduced share of trips that are drive alone. Tracking SOV share will help to gauge the people-moving capacity of the city's roadways by reducing the amount of driving alone. Driving alone is the least space-

efficient mode and occurs during the most congested period of the day. There are different performance levels defined for 8 geographic sectors—network areas—in the city, recognizing the diverse land use patterns and transportation contexts that exist across the city.

This SOV share measure is consistent with Seattle’s comprehensive planning approach because it informs and supports strategies other than adding new capacity for general-purpose travel. Adding vehicle capacity can be costly and can lead to community disruption and environmental impacts. Generally, widening arterials may not even be practical or feasible in a mature, developed urban environment as exists in the city. This measure of LOS supports the City in using existing current street rights-of-way as efficiently as possible and encourages a broader set of travel options.

Figure A-17 shows the latest available SOV share data that will be used as a baseline for monitoring progress. In the future, goal setting and monitoring will be coordinated with Seattle’s Commute Trips Reduction program (see the Transportation Demand Management Strategies section to learn more).

Figure A-17
SOV Share of All Trips

Subarea	Baseline SOV Share (2019)
Northwest Seattle	42%
Northeast Seattle	35%
Queen Anne/Magnolia	42%
Downtown/Lake Union	24%
Capitol Hill/Central District	37%
West Seattle	41%
Duwamish	72%
Southeast Seattle	36%
Citywide	36%

Transit LOS

Transit level of service uses two measures of transit accessibility. At a citywide scale, accessibility is measured as the percent of homes within a given distance of the frequent transit network.

The Frequent Transit Network (FTN) includes high-frequency bus and light rail routes designed to provide reliable and convenient public transportation across the city. The FTN includes existing and future planned service at least every 15 minutes throughout most of the day, seven days a week, covering major corridors and connecting key destinations. Distance is measured based on a half mile walk distance

from light rail and a quarter mile walk distance from bus transit and streetcar services. Figure A-18 provides baseline data for homes that are served by existing transit routes that meet this standard.

Figure A-18

Homes within ½ mile of existing and future frequent transit service (bus routes and light rail stations)

	Existing frequent transit	Future frequent transit
All Homes	391,000	391,000
Homes within ½ mile	357,000	375,000
Percent	91.3%	95.9%

Transit accessibility will also be measured for each type of center identified in the growth strategy, including Regional, Urban, and Neighborhood Centers. Figure A-19 shows whether each center is currently served by frequent transit and/or light rail, currently or planned for service within the 20-year planning period.

Figure A-19

Transit Accessibility by Centers

CENTER NAME	SERVED BY LIGHT RAIL?	SERVED BY FTN?
Regional Centers		
Downtown	Yes	Yes
First Hill/Capitol Hill	Yes	Yes
University	Yes	Yes
Northgate	Yes	Yes
South Lake Union	Planned	Yes
Uptown	Planned	Yes
Ballard	Planned	Yes
Urban Centers		
Admiral	No	Planned
Licton Springs	No	Yes

CENTER NAME	SERVED BY LIGHT RAIL?	SERVED BY FTN?
Bitter Lake	No	Yes
Central District	No	Yes
Central District South	Planned	Yes
Columbia City	Yes	Yes
Crownhill	No	Yes
East Lake	No	Yes
Fremont	No	Yes
Graham	Planned	Yes
Green Lake	No	Yes
Greenwood	No	Yes
Lake City	No	Yes
Madison-Miller	No	Yes
Morgan Junction	No	Yes
Mt Baker	Yes	Yes
North Beacon	Yes	Yes
Othello	Yes	Yes
Pinehurst-Haller Lake	Planned	Yes
Queen Anne	No	Yes
Rainier Beach	Yes	Yes
Roosevelt	Yes	Yes
Wallingford	No	Yes
West Seattle Junction	Planned	Yes
Neighborhood Centers		
Brandon Junction	No	Yes

CENTER NAME	SERVED BY LIGHT RAIL?	SERVED BY FTN?
Bryant	No	Yes
Delridge	Planned	Yes
Dravus	Planned	Yes
East Ballard	No	Yes
Fairmount	No	Yes
Fauntleroy	No	Yes
Georgetown	No	Yes
High Point	No	Yes
Hillman City	No	Yes
Holden	No	Yes
Holmen Road	No	Yes
Little Brook	No	Yes
Madison Park	No	Planned
Madison Valley	No	Yes
Madrona	No	Yes
Magnolia Village	No	Planned
Maple Leaf	No	Yes
Mid Beacon Hill	No	Yes
Montlake	No	Yes
North Magnolia	No	No
Northwest Green Lake	No	Yes
Olympic Hills	No	Yes
Ravenna	No	Yes
South Park	No	Yes

CENTER NAME	SERVED BY LIGHT RAIL?	SERVED BY FTN?
Tangletown	No	Yes
Upper Fautleroy	No	Yes
Upper Fremont	No	Yes
Wedgewood	No	Yes
Whittier	No	Yes

Bicycling LOS

In Seattle, bicycle level of service is a measure of the presence of bike lanes, trails, and other bicycling facilities within various centers of the city, based on the number of homes in proximity—access—to all ages and abilities bicycling facilities. The City aims to create a network of low-stress routes that accommodate cyclists of all ages and abilities, with a focus on implementing protected bike lanes, Neighborhood Greenways, Healthy Streets, and multi-use trails. The City aims to increase bicycle ridership, improve safety, and promote sustainable transportation options for its residents by continually working to improve access to AAA bicycling facilities.

Figure A-20 provides baseline data for the current number of homes within a ¼ mile of existing All Ages and Abilities (AAA) bicycling facilities.

Figure A-20

Homes within 1/4 mi. of All Ages and Abilities bicycling facility

All Homes 391,000

Homes within 1/4 mile 298,000

Percent 76.2%

Figure A-21 provides baseline data for access to All Ages and Abilities (AAA) bicycling facilities in different centers designations of the city.

Figure A-21

Centers served by AAA bicycling facilities

CENTER NAME	SERVED BY AAA BICYCLE FACILITY?
Regional Centers	
Downtown	Yes

CENTER NAME	SERVED BY AAA BICYCLE FACILITY?
First Hill/Capitol Hill	Yes
University	Yes
Northgate	Yes
South Lake Union	Yes
Uptown	Yes
Ballard	Yes
Urban Centers	
Admiral	Yes
Licton Springs	Yes
Bitter Lake	Yes
Central District	Yes
Central District South	Yes
Columbia City	Yes
Crownhill	Yes
East Lake	Yes
Fremont	Yes
Graham	Yes
Green Lake	Yes
Greenwood	Yes
Lake City	Yes
Madison-Miller	Yes
Morgan Junction	Yes
Mt Baker	Yes
North Beacon	Planned

CENTER NAME	SERVED BY AAA BICYCLE FACILITY?
Othello	Yes
Pinehurst	Yes
Queen Anne	Yes
Rainier Beach	Yes
Roosevelt	Planned
Wallingford	Yes
West Seattle Junction	Yes
Neighborhood Centers	
Brandon Junction	Yes
Bryant	Yes
Delridge	Yes
Dravus	Planned
East Ballard	Planned
Fairmount	Yes
Fauntleroy	Planned
Georgetown	Planned
High Point	Yes
Hillman City	Planned
Holden	Yes
Holmen Road	Planned
Little Brook	Yes
Madison Park	Planned
Madison Valley	Planned
Madrona	planned

CENTER NAME	SERVED BY AAA BICYCLE FACILITY?
Magnolia Village	Planned
Maple Leaf	Yes
Mid Beacon Hill	Yes
Montlake	Yes
North Magnolia	Planned
Northwest Green Lake	Yes
Olympic Hills	Planned
Ravenna	Yes
South Park	Yes
Tangletown	Planned
Upper Fauntleroy	Planned
Upper Fremont	Planned
Wedgewood	Planned
Whittier	Yes

Pedestrian LOS

Pedestrian level of service is an indicator of a good walking environment. It aims to represent the walkability and accessibility in different areas the city. The presence of sidewalks is the main measure. It indicates safe and dedicated spaces for people walking.

The availability of sidewalks currently varies across different neighborhoods. The City is actively working to improve pedestrian infrastructure, with a particular focus on increasing the number of block faces that have sidewalks. This effort aims to enhance pedestrian safety, promote walking as a viable transportation option, and create more livable, connected communities. Understanding the current sidewalk coverage and identifying gaps in the network is essential for prioritizing improvements and ensuring equitable access to pedestrian facilities across all areas of Seattle.

Figure A-22 provides a snapshot for the availability of sidewalks and the completeness of the sidewalk network in different centers designations of the city.

Figure A-22
Percent of block faces with sidewalks

	PERCENT OF BLOCK FACES THAT HAVE A SIDEWALK
CITYWIDE	75%
REGIONAL CENTERS	
Downtown	97%
First Hill/Capitol Hill	99%
University	92%
Northgate	70%
South Lake Union	96%
Uptown	98%
Ballard	98%
URBAN CENTERS	
Admiral	96%
Licton Springs	80%
Bitter Lake	47%
Central District	97%
Central District South	98%
Columbia City	92%
Crownhill	68%
East Lake	84%
Fremont	90%
Graham	64%
Green Lake	91%
Greenwood	90%

	PERCENT OF BLOCK FACES THAT HAVE A SIDEWALK
Lake City	54%
Madison-Miller	96%
Morgan Junction	93%
Mt Baker	73%
North Beacon	95%
Othello	87%
Pinehurst/	35%
Queen Anne	98%
Rainier Beach	69%
Roosevelt	94%
Wallingford	99%
West Seattle Junction	95%
NEIGHBORHOOD CENTERS	
Brandon Junction	65%
Bryant	100%
Delridge	83%
Dravus	78%
East Ballard	100%
Fairmount	100%
Fauntleroy	80%
Georgetown	90%
High Point	100%
Hillman City	95%
Holden	100%

	PERCENT OF BLOCK FACES THAT HAVE A SIDEWALK
Holman Road	56%
Little Brook	42%
Madison Park	98%
Madison Valley	98%
Madrona	99%
Magnolia Village	99%
Maple Leaf	100%
Mid Beacon Hill	88%
Montlake	100%
North Magnolia	98%
Northwest Green Lake	100%
Olympic Hills	46%
Ravenna	98%
South Park	80%
Tangletown	100%
Upper Fauntleroy	89%
Upper Fremont	100%
Wedgewood	98%
Whittier	100%

Estimating Future Travel

To estimate future travel levels and system needs, modeling in the Environmental Impact Statement (EIS) for this comprehensive plan update included data and future assumptions about the amount and distribution of population, housing, and employment. Analysis also included information on existing and planned transportation facilities. Data for both baseline and future years include the number and geographic distribution of both households and employment in Seattle and the region, characteristics of households and jobs (e.g., number of residents per household, household income), and the transportation network (e.g., streets, transit routes). A computer model generated the total number of person-trips between travel zones, the number of trips that would use different modes (e.g., car, bus, bike, walk), and the vehicle traffic volumes on streets throughout the city. Data, methods, and results of this transportation analysis are detailed in the One Seattle Plan Update Final EIS.

Land Use Data and Assumptions

The EIS considered two time periods for analysis: 2019 as the baseline of existing conditions and 2044 as a 20-year horizon point in time for which the outcomes of the alternatives, including the preferred alternative, are compared. Beginning in March 2020, the COVID-19 pandemic disrupted longstanding commute patterns and broader travel trends. In the same month, the closure of the West Seattle Bridge fundamentally changed local travel patterns through a large portion of the city until the bridge's reopening in September 2022. For these reasons, 2019 was selected as a more representative year for baseline travel conditions. Selecting 2019 as the base year also provides a more conservative assumption (i.e., a baseline with more traffic congestion) with respect to identifying potential impacts of the alternatives because growth is assumed to be additive to existing conditions.

Assumptions about the amount and distribution of future growth are based on several factors. Consistent with the state Growth Management Act (GMA), the King County Growth Management Planning Council, in 2021, updated Countywide Planning Policies (CPPs), including new growth targets for local jurisdictions to use in their forthcoming comprehensive plan updates. For the 2019-2044 period, Seattle is required by the CPPs to accommodate at least 112,000 housing units and 169,500 jobs. For the 20-year planning period covered in the One Seattle Plan, the housing target has been adjusted based on more recent growth trends to a figure of 80,000 housing units for the years 2024 to 2044.

The final EIS models transportation demand for two growth alternatives. The first "not action" alternative, demand is based on the adopted growth target. In the second "preferred" alternative, demand is based on the growth strategy included in the One Seattle Plan, with significant land use changes that add housing capacity in areas across the city including capacity for middle housing in all neighborhoods and additional capacity for denser forms of housing in centers and along transit routes. Housing growth under the preferred alternative is assumed to be 120,000 new units over the 20-year planning period. As described in the Transportation element and this appendix, the transportation needs of future potential growth will be met with investments in transit, active transportation, and strategies to use the existing assets and right of way in the city to meet the mobility needs of a growing population in a dense urban environment.

In addition, assumed future growth in housing and jobs was allocated to smaller areas across the city. Different amounts of growth were distributed to each place type in the growth strategy – including centers – and to smaller areas within each place type based on expected zoned densities. Land use assumptions for areas outside of the city are based on data provided by the Puget Sound Regional Council consistent with the Regional Growth Strategy in VISION 2050.

Traffic Volume Modeling

The City uses a modified version of PSRC’s travel model to better represent street conditions such as arterial speeds, future transit routing and service levels, the distribution of trips, and choice of transportation modes. Model output include a volume to capacity ratio (v/c) that compares actual or forecasted traffic volumes with existing and future roadway capacity. These measurements are taken at selected screenlines, which are east/west or north/south corridors across which a snapshot of ridership, traffic operations, and traffic shifts/modal splits can be measured. The v/c ratios generated as part of the analysis completed for the EIS are shown in Figure A-24. The model’s current and 2044 regionwide and city-limit traffic volume estimates are shown in the following tables.

A screenline methodology highlights transportation system performance citywide and between subareas of the city and region. This methodology recognizes that no single inter- section or arterial operates in isolation. Motorists have choices, and they select particular routes based on a wide variety of factors such as avoiding blocking conditions and minimizing travel times. Accordingly, this analytic methodology focuses on a “traffic-shed” where the screenlines measure groups of arterials among which drivers logically can choose to travel.

Transportation Appendix Figure A-23 is a map illustrating the location of forty-two screenlines, including screenlines that provide supplemental information about performance in and near Seattle’s Regional Centers.

Figure A-23
Screenlines

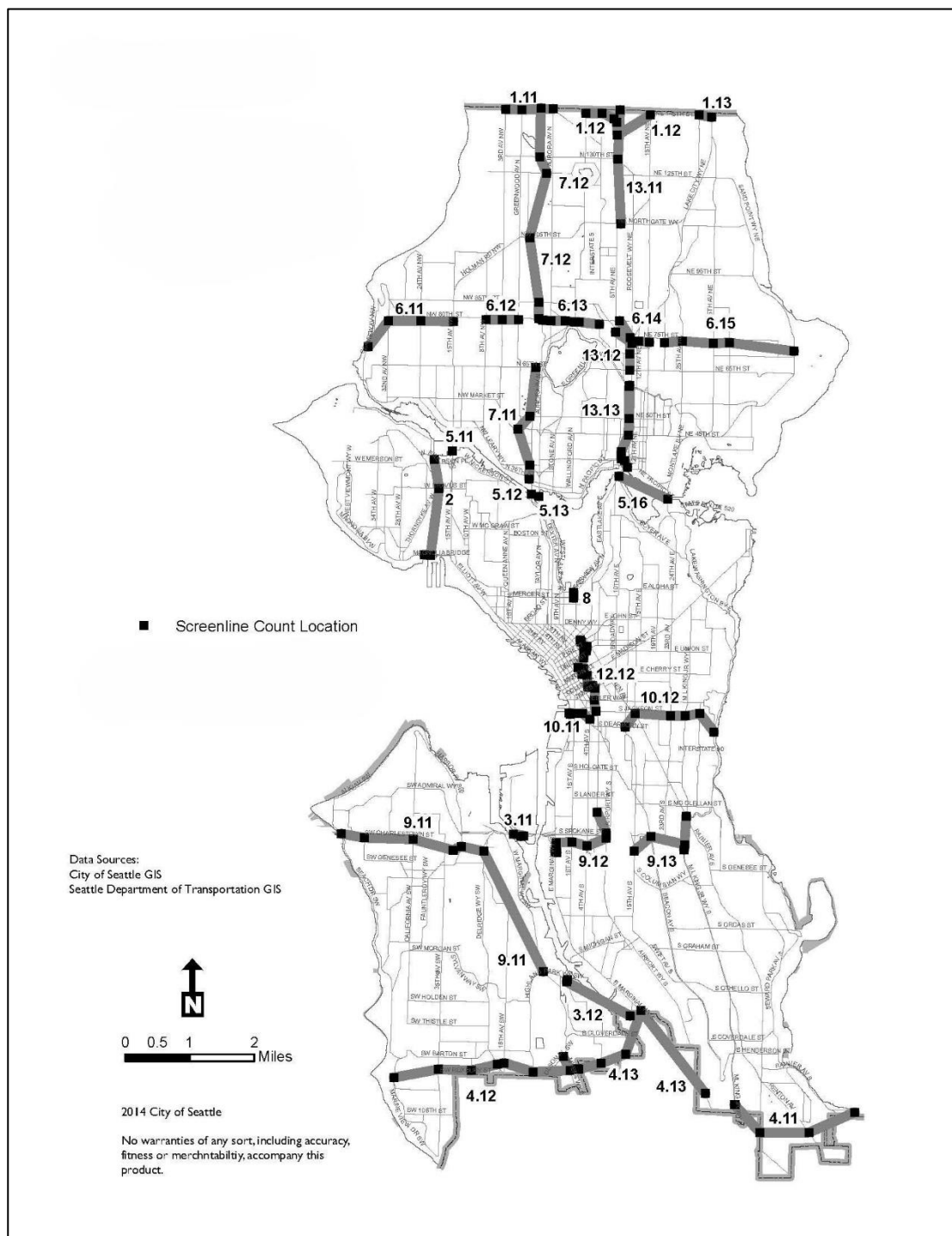


Figure A-24 lists for each screenline the current conditions and modeled traffic results for the evening peak hour in year 2044. The results are compared with analytic benchmarks, which are expressed as v/c ratios of 1.0 or 1.20, which indicates a level of use equivalent to 100 percent or 120 percent of rated roadway capacity, measured during peak commute times.

Figure A-24
Existing and modeled V/C ratios by Screenline

SCREENLINE	LOCATION	EXTENTS	2019		2044	
			NB/EB	SB/WB	NB/EB	SB/WB
1.11	North City Limit	3rd Ave NW to Aurora Ave N	0.68	0.52	0.88	0.83
1.12	North City Limit	Meridian Ave N to 15th Ave NE	0.47	0.30	0.58	0.54
1.13	North City Limit	30th Ave NE to Lake City Way NE	0.84	0.47	0.93	0.73
2	Magnolia	Magnolia Bridge to W Emerson Place	0.23	0.61	0.64	0.70
3.11	Duwamish River	West Seattle Bridge & Spokane St	0.64	0.81	0.75	0.89
3.12	Duwamish River	1st Ave S & 16th Ave S	0.56	0.87	0.69	0.88
4.11	South City Limit	Martin Luther King Jr. Way to Rainier Ave S	0.57	0.75	0.90	0.93
4.12	South City Limit	Marine Dr SW to Meyers Way S	0.37	0.42	0.51	0.53
4.13	South City Limit	SR 99 to Airport Way S	0.44	0.45	0.62	0.42
5.11	Ship Canal	Ballard Bridge	1.01	0.71	1.11	0.98
5.12	Ship Canal	Fremont Bridge	1.00	0.79	1.17	>1.20
5.13	Ship Canal	Aurora Ave Bridge	0.96	0.58	1.07	0.77
5.16	Ship Canal	University & Montlake Bridges	0.71	0.79	0.93	>1.20

SCREENLINE	LOCATION	EXTENTS	2019		2044	
			NB/EB	SB/WB	NB/EB	SB/WB
6.11	South of NW 80th St	Seaview Ave NW to 15th Ave NW	0.37	0.46	0.43	0.47
6.12	South of NW 80th St	8th Ave NW to Greenwood Ave N	0.57	0.49	0.67	0.60
6.13	South of NW 80th St	Linden Ave N to 1st Ave NE	0.54	0.49	0.55	0.62
6.14	South of NW 80th St	5th Ave NE to 15th Ave NE	0.71	0.56	0.77	0.82
6.15	South of NW 80th St	20th Ave NE to Sand Point Way NE	0.47	0.34	0.55	0.62
7.11	West of Aurora Ave	Fremont Pl N to N 65th S	0.53	0.65	0.69	0.70
7.12	West of Aurora Ave	N 80th St to N 145th St	0.41	0.41	0.78	0.70
8.00	South of Lake Union	Valley St to Denny Way	0.49	0.35	0.59	0.43
9.11	South of Spokane St	Beach Dr SW to W Marginal Way SW	0.45	0.71	0.58	0.92
9.12	South of Spokane St	E Marginal Way S to Airport Way S	0.51	0.54	0.72	0.51
9.13	South of Spokane St	15th Ave S to Rainier Ave S	0.56	0.57	0.79	0.73
10.11	South of S Jackson St	Alaskan Way S to 4th Ave S	0.61	0.64	0.84	0.85
10.12	South of S Jackson St	12th Ave S to Lakeside Ave S	0.52	0.64	0.78	0.84
12.12	East of CBD	S Jackson St to Howell St	0.36	0.36	0.40	0.44

SCREENLINE	LOCATION	EXTENTS	2019		2044	
			NB/EB	SB/WB	NB/EB	SB/WB
13.11	East of I-5	NE Northgate Way to NE 145th St	0.67	0.51	>1.00	0.89
13.12	East of I-5	NE 65th St to NE 80th St	0.52	0.54	0.71	0.66
13.3	East of I-5	NE Pacific St to NE Ravenna Blvd	0.59	0.52	0.77	0.72
A1	North of Seneca St	1st Ave to 6th Ave	0.47	0.50	0.67	0.70
A2	North of Blanchard	Elliott Ave to Westlake Ave	0.43	0.31	0.48	0.42
A3	East of 9th Ave	Lenora St to Pike St	0.46	0.83	0.50	0.92
A4	South of Mercer St	Elliott Ave W to Aurora Ave N	0.53	0.46	0.67	0.70
A5	East of 5th Ave N	Denny Way to Valley St	0.40	0.40	0.51	0.51
A6	North of Pine St	Melrose Ave E to 15th Ave E	0.39	0.32	0.39	0.41
A7	North of James St– E Cherry St	Boren Ave to 14th Ave	0.46	0.32	0.51	0.36
A8	West of Broadway	Yesler Way to E Roy S	0.47	0.38	0.65	0.54
A9	South of NE 45th St	7th Ave NE to Montlake Blvd NE	0.56	0.53	0.54	0.67
A10	East of 15th Ave NE	NE 45th St to NE 52nd St	0.51	0.48	0.69	0.65

SCREENLINE	LOCATION	EXTENTS	2019		2044	
			NB/EB	SB/WB	NB/EB	SB/WB
A11	South of Northgate Way (N/NE 110th St)	N Northgate Way to Roosevelt Way NE	0.44	0.46	0.59	0.71
A12	East of 1st Ave NE	NE 100th St to NE Northgate Way	0.43	0.48	0.57	0.53

State Highway Level of Service Standards

State facilities are roadways owned by the Washington State Department of Transportation (WSDOT). These facilities are also evaluated using volume-to-capacity measures and LOS benchmarks. WSDOT provides roadway capacity data for its facilities with consideration of number of lanes, presence of auxiliary lanes, and presence of ramp metering. Baseline (2019) annual average weekday traffic volumes were compiled from WSDOT's Traffic Count Database System. The results are summarized using state Level of Service (LOS) designations A-F. WSDOT sets the standard for most of its facilities in Seattle at LOS D; the exception is the segment of SR 99 between SR 509 and I-5 which has a standard of "E mitigated" meaning congestion should be mitigated when PM peak hour LOS falls below LOS E. Future year volumes were forecasted by applying the growth predicted by the PSRC regional travel demand model for each alternative to the observed counts.

Estimated Traffic Volumes on State-Owned Transportation Facilities

Figure A-25 includes, for State highways, information about existing conditions and future modeled conditions for 2044. This data is organized by “average annual daily traffic” (AADT), “average weekday daily traffic” (AWDT), and a calculation of the modeled increase in AWDT for each highway segment expressed as a percentage. AWDT represents the peak commuting periods when volumes and congestion are highest.

Forecasts are for components of State facilities including HOV lanes, express lanes, and collector-distributor lane volumes.

Figure A-25
Traffic Volumes on State Facilities

State Facility	Location	Existing Conditions Forecasted Volumes (AADT)	2044 Forecasted Volumes (AADT)
I-5	North of NE Northgate Way	215,000	230,000
I-5	Ship Canal Bridge	203,000	245,000
I-5	North of West Settle Bridge	253,000	271,000
I-5	North of Boeing Access Rd. Ramp	200,000	210,000
I-90	Mt. Baker Tunnel	148,000	166,000
SR 99	North of N Northgate Way	31,000	41,000
SR 99	Aurora Bridge	71,000	92,000
SR 99	Tunnel	39,000	46,000
SR 99	North of West Seattle Bridge	67,000	74,000
SR 99	Sough of S Cloverdale St	32,000	34,000
SR 509	1 st Ave S Bridge	60,000	80,000
SR 519	S Atlantic Street west of I-90 ramps	29,000	29,000

SR 520	Lake Washington Bridge	74,000	113,000
SR 522	NE/O NE 113th St	34,000	46,000

*Note: Location indicated with road names at cross-streets that show approximate endpoints of State highway segments.

State-Funded Highway Improvements & Local Improvements to State Highways

The City of Seattle will continue to coordinate with WSDOT for consistency in plans and projects. Figure A-26 shows the known anticipated major projects for the metropolitan area, based on data available from WSDOT, that will address State highways and facilities including ferries, and an indication of project status as applicable today and/or into the future ("x" indicates project is underway). These are the primary projects within Seattle and the broader metropolitan area that will affect the functioning of segments of State highways within city limits.

Figure A-26
State Highway Project List

PROJECT	EXECTED COMPLETION
Ferry System Electrification	2040
SR 520 Portage Bay and Roanoke Lid Project	2031
I-90 Judkins Park Station - Reconnection Communities	2027
Revive I-5: Preserving a vital freeway	2020s-2030s varies/TBD
SR 900/57th Ave S to 135th Pedestrian and Safety	2027

Impacts on Adjacent Jurisdictions

Four jurisdictions are adjacent to the City of Seattle: the cities of Shoreline and Lake Forest Park along Seattle’s north boundary and the city of Tukwila and unincorporated King County along Seattle’s south boundary. Several major arterials that connect to streets in these jurisdictions near the Seattle borders are represented by screenline V/C ratios in table A-24. At the north city limit Screenlines 1.11 and 1.12 show impacts to the City of Shoreline and screenline 1.13 shows impacts to Lake Forrest Park. At the south city-limit, screenline 4.11 and 4.13 show impacts with Tukwila and screenline 4.12 shows impacts to unincorporated King County.

Multi-Year Financing and 20-Year Project List

The City of Seattle relies on a diverse mix of revenue sources to finance its transportation projects, including local taxes, state and federal grants, and various fees. These funds support a wide range of initiatives, from street and bridge maintenance and public transit improvements to bicycle and pedestrian infrastructure. Seattle's transportation budget must be balanced to address competing priorities and immediate needs while also investing in long-term projects that align with the city's mobility, safety, sustainability and equity goals. As Seattle continues to grow and adapt to changing transportation needs and goals, the City will explore a range of options to secure adequate and stable funding for transportation investments. Funding will be coupled with strategies to manage demand and plan for growth and development where it can leverage key transportation improvements, especially new and planned transit service.

The tables in Figures A-28 and A-29 present estimated funding and projected expenditures, broadly categorized, for the period 2025-2035. Because much of the City's transportation budget has potential variability, the estimates are shown as a range from low to high. "High" revenue estimates assume 1) voter approval of relevant levies, bonds, sales taxes, and fees, 2) relatively high competitiveness for federal, state, and regional grants, and 3) higher local bonding, which may vary by budget cycle. "Low" revenue estimates assume no voter approval of transportation funds, low grant competitiveness, and low bonding. "High" and "low" projected expenditures were tailored to match available revenue to reflect a balanced budget to meet State law.

Figure A-27

Estimated Range of Future Transportation Revenue, 2025-2035

CATEGORY	LOW (000,000s)	HIGH (000,000s)
Dedicated Transportation Funding	\$2,400	\$2,880
Seattle Transit Measure (STM)	\$122	\$610
Voted Transportation Levies	\$1,550	\$2,030
Grants and Partnerships	\$570	\$1,140
General Fund and Cumulative Reserve	\$590	\$660
Long-term Financing	\$200	\$300
Voted Capital Bond Financing	\$ -	\$1,000
Total	\$5,432	\$8,620

Figure A-28

Estimated Range of Future Transportation Expenditures, 2025-2035

CATEGORY	LOW (000,000)	HIGH (000,000)
Operations and Maintenance	\$2,382	\$2,859
Major Maintenance and Safety	\$1,425	\$2,708
Mobility and Enhancements	\$1,625	\$3,053
Total	\$5,432	\$8,620

Over the longer term, the Seattle Department of Transportation continues to carry out work on its ongoing 20-year transportation improvement plan to address current infrastructure needs and anticipate future growth, as described in the Seattle Transportation Plan. Figure A-30 includes ongoing as well as newly planned projects and programs to accommodate travelers of all modes on Seattle’s roadways. The list includes all projects and programs described in the 2024-2029 Capital Improvements Projects list (CIP), the Seattle Transportation Plan Appendix A: Large Capital Projects, and those projects and programs committed to in the 2024 Transportation Levy. The table also indicates projects that are included in the Regional Transportation Plan (RTP). Projects described here may be carried out in the 10-year period described in Figures A-28 and A-29 or over a longer time period. Figure A-30 also does not include operations and maintenance costs which are reflected in the earlier tables.

Where overlap exists between CIP, STP Large Capital Projects and levy commitments, projects have been consolidated into one line in Figure A-30. The list depicts known cost estimates from funded 6-year CIP and funding from the 8-year levy. A number of programmatic needs and project costs, including large projects, do not currently have detailed cost estimates out the full 20 years. In these cases, the table includes a qualitative assessment of the order of magnitude of costs for the Large Capital Projects described in the Seattle Transportation Plan. Where indicated, \$ = less than \$25M, \$\$ = \$25M-\$50M, and \$\$\$ = above \$50M. These are rough estimates as determined at the time of STP release. Actual cost estimates may change as more detailed project scoping occurs for particular projects.

Figure A-29**Project List and Estimated Funding**

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Bridge Load Rating	MC-TR- C006			2,192,281		
Bridge Painting Program	MC-TR- C007			16,674,906		
Bridge Seismic - Phase III	MC-TR- C008			26,015,579		
Bridge Rehab and Replace P II	MC-TR- C039			3,923,251		
Structures Major Maintenance	MC-TR- C112			42,680,691		
Arterial Asphalt/Concrete Ph 2	MC-TR- C033			17,516,690		
Non-Arterial St Resurf & Rest	MC-TR- C041			6,320,633		
Arterial Major Maint	MC-TR- C071			12,563,500	67,000,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Retaining Wall Replace Pgm	MC-TR- C032			1,298,766		
Hazard Mitigation-Landslide	MC-TR- C015			3,115,396		
Hazard Mitigation Pgm- Areaways	MC-TR- C035			1,799,830	3,000,000	
Seawall Maintenance	MC-TR- C098			2,390,362	5,000,000	
BMP - Urban Trails & Bikeways	MC-TR- C060			2,411,119		
BMP - Protected Bike Lanes	MC-TR- C062			17,377,258	16,000,000	
BMP - Greenways	MC-TR- C063			8,441,694	20,000,000	
PMP - Stairways	MC-TR- C031			1,959,163	4,000,000	
PMP - New Sidewalk Program	MC-TR- C058			18,111,106	111,000,000	
PMP - School Safety	MC-TR- C059			30,938,604	14,000,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
PMP - Crossing Improvements	MC-TR-C061			8,499,995	14,000,000	
Sidewalk Safety Repair	MC-TR-C025			15,536,502	34,000,000	
Transit Corridor Improvements	MC-TR-C029			8,098,860	4,000,000	
Seattle Transportation Benefit District - Transportation Improvements	MC-TR-C108			29,900,000		
Shoreline Street Ends	MC-TR-C011			5,149,798		
Urban Design Capital Projects	MC-TR-C120			250,000		
Freight Spot Impr Pgm	MC-TR-C047			3,904,000	17,000,000	
Heavy Haul Network Program	MC-TR-C090			40,655,140	8,000,000	
SDOT ADA Program	MC-TR-C057			30,690,786	30,000,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025-2032	STP Cost Predictions
New Traffic Signals	MC-TR-C020			2,495,518		
Next Gen ITS Improvements	MC-TR-C021			1,323,095	17,000,000	
Signal Major Maintenance	MC-TR-C026			5,433,840	15,004,520	
Vision Zero	MC-TR-C064			30,590,778	70,000,000	
Neighborhood Traffic Control	MC-TR-C019			3,258,356	7,000,000	
Neighborhood Large Projects	MC-TR-C018			3,711,070		
Safe Streets and Roads for All	MC-TR-C125			32,085,800		
NPSF - Your Voice, Your Choice	MC-TR-C022			-	39,500,000	
Northgate Brdg and 1st Ave MUP	MC-TR-C030			2,820,389		
Sound Transit 3 (ST3)	MC-TR-C088			48,921,696	33,000,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Lynnwood Link Extension	MC-TR- C089			65,000		
Roosevelt Multimodal Corridor	MC-TR- C013			113,568,951		
Madison Street BRT	MC-TR- C051	5173	RapidRide Corridor 1: Central Area - First Hill - Downtown	32,333,523		
Route 40 Northgate to Downtown	MC-TR- C079	5774	Northgate to Downtown Transit Improvements	14,374,934		
SR-520 Project	MC-TR- C087			4,111,985	500,000	
Revive I-5 Project Support	MC-TR- C124			550,000		
Urban Forestry Capital Estab	MC-TR- C050			811,248		
West Seattle Bridge Repair	MC-TR- C110			4,681,500		
CWF Overlook and EW Connection	MC-TR- C073	4282	Central Waterfront Project - Alaskan Way, Promenade and Overlook Walk	6,250,000		

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Waterfront Transportation Infrastructure Maintenance	MC-TR-C109			3,850,000		
North of Downtown Mobility Act	MC-TR-C101			6,153,846		
Accela Permitting	MC-TR-C001			3,000,000		
Accessible Mt. Baker	MC-TR-C002			1,000,000		\$\$
3rd Avenue Corridor Impr	MC-TR-C034	5632	Third Avenue Transit Spine	3,200,000		\$\$\$
Center City St Car Connector	MC-TR-C040	5084	Seattle Center City Connector	92,695,135		\$\$\$
CWF Alaskan Way Main Corridor	MC-TR-C072			28,857,000		\$\$\$
Market / 45th Multimodal Corri	MC-TR-C078	5177	RapidRide Corridor 5: Ballard - U District - Laurelhurst	105,880		\$
Graham Street Station	MC-TR-C082			-		\$\$

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025-2032	STP Cost Predictions
Aurora Avenue North Safety Improvements	MC-TR-C118	5768	Aurora Avenue Corridor Improvement Project	48,650,000	30,000,000	\$\$\$
Harrison St Transit Corridor	MC-TR-C119	5801	Harrison St Transit Pathway	500,000	5,000,000	
NE 45th St Bridge I-5 Crossing Improvements	MC-TR-C122			1,500,000	500,000	\$\$\$
NE 130th St/NE 125th Corridor Improvements	MC-TR-C123	5769	NE 130th St Station: Corridor Access & Safety Improvements	18,401,374	55,600,000	\$\$\$
1st Ave N Bicycle Connection						\$\$
1st Ave S Multimodal Improvements						\$\$
4th Ave S Multimodal Improvements						\$\$
5th Ave Multimodal Improvements		5637	4th / 5th Avenue Protected Bike Lane			\$\$
8th Ave S Multimodal Improvements						\$\$

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
12th Ave Multimodal Improvements						\$\$
14th Ave NW Multimodal Improvements						\$
15th Ave NE Multimodal Improvements					12,700,000	\$\$
15th Ave W & Elliott Ave W Multimodal Improvements						\$\$
16th Ave SW Multimodal Improvements						\$
23rd Ave Multimodal Improvements		5777	23rd Ave Bus Rapid Transit		37,501,500	\$\$
35th Ave SW Multimodal Improvements					32,763,500	\$\$
N 50th St/Green Lake Way N/Stone Way Intersection Redesign						\$
N 85th St + NE 65th St Transit + Multimodal Improvements		5075	Priority Bus Corridor 4 Crown Hill			\$\$

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
NE 145th St Comfortable Connections					5,000,000	\$\$
SW Admiral Way Transit + Multimodal Improvements						\$\$
Airport Way S Multimodal Improvements						\$\$
SW Alaska St Link light rail station Multimodal Improvements						\$
Alki Trail Comfortable Connections						\$\$
Ballard Bridge						\$\$\$
Ballard to Northgate Multimodal Improvements		5141	RapidRide Corridor 6: Northgate - Ballard - Fremont - SLU - Downtown			\$\$\$
Boren Ave Multimodal Improvements						\$\$
Burke Gilman Trail Comfortable Connections						\$\$

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Burke Gilman Trail Missing Link		2668	Burke-Gilman Trail Extension		20,000,000	\$\$
California Ave SW Multimodal Improvements						\$\$
Chief Sealth Trail Comfortable Connections					2,000,000	\$\$
Chinatown-International District Station Multimodal Improvements						\$\$
Denny Way Multimodal Improvements		5218	Priority Bus Corridor 2 Denny		4,000,000	\$
Dravus St Multimodal Improvements						\$\$
East Marginal Way Multimodal Improvements					9,430,000	\$\$
Eastlake to Rainier Beach Transit + Multimodal Improvements		5073	Priority Bus Corridor 1: Othello		75,300,000	\$\$\$
Elliott Bay Trail Comfortable Connections						\$

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Fauntleroy Way SW Multimodal Improvements						\$\$
Fauntleroy Way SW Boulevard Multimodal Improvements						\$\$
W Garfield St Comfortable Connections						\$\$
Georgetown to Beacon Hill Comfortable Connections					5,000,000	\$\$
Greenwood & Phinney Transit + Multimodal Improvements		5156	Priority Bus Corridor 5 Greenwood			\$\$
Harbor Island Freight and Pedestrian Improvements						\$\$\$
Highland Park Way Comfortable Connections					5,500,000	\$\$
Holgate St Bridge						\$\$\$
Interbay Station and South Ship Canal Comfortable Connections						\$\$

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Jackson St Multimodal Improvements (Rainier Ave S to 31st Ave S)						\$\$
S Jackson St Transit + Multimodal Improvements (1st Ave S to Rainier Ave S)						\$\$
James St Multimodal Improvements					14,823,500	\$
Lake City Way Multimodal Improvements						\$\$
Lake City Way to Northgate Transit + Multimodal Improvements						\$\$
Lake Washington Blvd						\$
Leary Way NW Multimodal Improvements						\$\$\$
S Lucile St Reconstruction and Redesign						\$\$
NW Market St Multimodal Improvements					11,914,000	\$\$

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Martin Luther King Jr. Way Multimodal Improvements (E Madison St to S McLellan St)						\$\$
Martin Luther King Jr. Way Multimodal Improvements (Rainier Ave S to city limits)						
Northlake Retaining Wall						\$\$
SW Orchard St and Dumar Way SW Comfortable Connections						\$\$
Pike Place Event Street						\$
Pike-Pine Multimodal Improvements		5638	Pine - Pike Protected Bike Lane			\$\$
Rainier Ave S Multimodal Improvements					57,732,000	\$\$\$
Rainier Valley RapidRide Coordination					47,964,000	\$
SW Roxbury St Comfortable Connections						\$\$\$

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Sand Point Way NE Multimodal Improvements						\$\$\$
Ship Canal Pedestrian- Bicycle Crossing Study						\$\$\$
South Lake Union People Streets and Public Spaces		5711	Thomas Street Project			\$
South Park Comfortable Connections					22,333,000	\$\$
Southwest to Southeast Seattle Transit + Multimodal Improvements					9,062,000	\$\$
S Spokane St Multimodal Improvements						\$\$
Sylvan Way SW Comfortable Connections						\$\$
U District/Lake City NE Multimodal Improvements		5079	Priority Bus Corridor 3 Lake City			\$\$
University Bridge Comfortable Connections						\$

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Virginia St & Stewart St Multimodal Improvements		5279	Westlake Multimodal Transportation Hub			\$\$
West Seattle to Rainier Valley Transit + Multimodal Improvements						\$\$
E Yesler Way Multimodal Improvements						\$\$
AAC: NE 65th St: 2nd Ave NE to 35th Ave NE					11,914,000	
AAC:Elliott Ave & Western Ave: Bell St to Thomas St					14,605,000	
AAC: Fauntleroy Way SW: 35th Ave SW to SW Alaska St, to keep roadway functional during light rail construction by making street repairs and spot improvements					2,600,000	
Curb and Pavement Marking					6,000,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Preventative Bridge Maintenance					127,000,000	
Structural Repairs and Upgrades: Ballard Bridge Structural Repairs					15,000,000	
Structural Repairs and Upgrades: Magnolia Bridge Structural Repairs					16,000,000	
Structural Repairs and Upgrades: Ship Canal Electrical/Mechanical - Ballard					15,000,000	
Structural Repairs and Upgrades: Ship Canal Electrical/Mechanical - Fremont					12,500,000	
Structural Repairs and Upgrades: Ship Canal Electrical/Mechanical - University					12,500,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Project Readiness: Bridge Future grant/bond planning (1st and 4th over Argo, W Dravus St, NE 45th St Viaduct, Magnolia Cost Estimates and Emergency Planning)					15,000,000	
Transit Improvements and Access to Light Rail					13,000,000	
Transit Improvement and Accesss to Light Rail: Sound Transit Access Planning					1,000,000	
Transit Improvement and Accesss to Light Rail: Judkins Park Connections					1,500,000	
Transit Spot Improvements					27,000,000	
Transit Passenger Safety					9,000,000	
Traffic Signal Timing: Signal Operations					15,000,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Traffic Signals and Maintenance: New Traffic Signals					19,567,921	
Traffic Signals and Maintenance: Signal Maintenance					10,427,559	
Transportation Operations					18,000,000	
Sign Maintenance					5,000,000	
Georgetown connections (Study)					500,000	
14 Ave S (S Director St to South Park Bridge at Dallas)					5,000,000	
Upgraded Bike Lanes (aka Better Bike Barriers)					8,000,000	
Bike Lane Maintenance					8,000,000	
Bike Spot Improvements					10,000,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
People Streets Capital Projects					23,000,000	
People Streets Capital Projects: Beacon, N 130 St & Rainier Complete Streets contributions					1,600,000	
People Streets Capital Projects: CID Transformation, Alley Activation and FIFA					2,000,000	
People Streets Capital Projects: Cap Hill low cost implementation (E Union Street Revival Corridor)					2,000,000	
People Streets Capital Projects: NE 42nd St Green Street Improvements					2,000,000	
People Streets Capital Projects: Occidental Promenade					5,600,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Downtown Activation (near-term maintenance, placemaking, coordination, longer-term 3rd Ave vision)					15,000,000	
People Streets and Wayfinding Maintenance					2,000,000	
Pedestrian Lighting					10,000,000	
Lid I-5 Private Funding Study					500,000	
Climate and Electrification Program					32,000,000	
Low Pollution Neighborhoods					8,000,000	
Urban Forestry Field Ops					14,000,000	
Expanded Tree Program					5,000,000	
Urban Forestry-Arborist Svcs					10,000,000	

Project/Program Name	CIP Project #	RTP Project #	RTP Project Name	Funded CIP 2024-2029	Proposed Levy Funding 2025- 2032	STP Cost Predictions
Freight Program					10,000,000	
Port Connection to I-90/I-5					5,000,000	
Leary Way Industrial Zone Safety Improvements					5,000,000	

Appendix 2

Housing

Housing Appendix Table of Contents

<i>Introduction</i>	A-82
Policy Framework and Housing Appendix Contents	A-82
Overview of Data Sources	A-82
<i>Seattle’s Role as a Large, Growing Metropolitan City</i>	A-83
Seattle’s Growth in Recent Decades	A-83
Seattle’s Population Growth Since 2020	A-85
Seattle’s Projected Population Growth	A-85
<i>Growth Targets and Housing Need Projections</i>	A-86
Growth Targets	A-86
Housing Need Projections	A-87
<i>Historical Context of Racist Housing and Land Use Practices</i>	A-94
<i>Population Characteristics and Trends</i>	A-99
Age Distribution	A-99
Race, Ethnicity, and Related Demographics	A-101
<i>Household Characteristics and Trends</i>	A-105
Total Households	A-105
Tenure	A-106
Household Income Distribution	A-106
Housing Cost Burden	A-110
Overcrowding	A-113
<i>Household Disparities by Race and Ethnicity</i>	A-114
Disparities in Homeownership Rates	A-114
Disparities in Household Income	A-117
Disparities in the Prevalence of Housing Cost Burden	A-120

<i>Household Sizes, Types, and Needs</i>	A-122
Household Size and Type	A-122
Housing Needs of Selected Household Types	A-123
<i>Special Housing Needs</i>	A-126
Populations with Disabilities	A-126
Populations Needing Permanent Supportive Housing	A-128
Populations in Group Quarters	A-129
Populations with Housing-Associated Medical Services Needs	A-132
<i>Balance of Jobs and Housing</i>	A-133
<i>Housing Supply and Market Analysis</i>	A-136
Housing Supply	A-136
Recent Housing Production	A-144
Housing Market Overview	A-148
The Role of ADUs in Meeting Housing Needs	A-175
Housing Condition	A-177
The Role of Housing Vouchers in Seattle’s Rental Market	A-180
<i>Affordability of Housing: Analysis Based on CHAS Data</i>	A-185
Affordability of Ownership Units	A-185
Affordability of Rental Units	A-187
Affordability and Availability of Rental Units	A-189
<i>Zoned Development Capacity</i>	A-192
Development Capacity Methodology	A-193
Zoned Development Capacity throughout the City	A-193
Land Capacity and Housing Affordability Analysis	A-198
<i>Housing Production Barriers and Actions</i>	A-208
Barriers	A-208
Actions to Address Barriers	A-211
<i>Income-Restricted Housing</i>	A-213
Income-Restricted Housing Supply	A-213
City Investments in Permanently Affordable Housing	A-214
Funding and Funding Gaps for Production and Preservation of Income-Restricted Housing	A-220
Other Barriers to Increasing Supply of Income-Restricted Homes	A-221
<i>Homelessness</i>	A-225
Populations Experiencing Homelessness in King County	A-225
Existing Emergency Shelter and Housing for People Experiencing Homelessness	A-230

Emergency Housing and Shelter Capacity	A-231
Emergency Housing Production Barriers and Actions	A-237
<i>Geographic Analysis of Racial and Social Equity in Housing</i>	A-241
Patterns of Where People Live	A-241
Housing Affordability and Income	A-253
Community Indicator Outcomes in Racial and Social Equity Priority Areas	A-264
Housing with Access to Transit	A-268
<i>Displacement</i>	A-273
Prevalence and Demographics of Displacement	A-273
Legacy of Institutionalized Racism and Shifts in Communities of Color	A-275
Neighborhoods at Greatest Risk of Displacement as Growth Occurs	A-276

Introduction

Policy Framework and Housing Appendix Contents

The Housing Appendix provides data and analysis to inform Comprehensive Plan policies on housing consistent with requirements of state Growth Management Act, VISION 2050, and the King County Countywide Planning Policies. With the adoption of House Bill (HB) 1220 in 2021, the state Legislature strengthened GMA requirements related to housing policy and analysis. This appendix includes extensive new data and analysis that responds to these requirements.

Overview of Data Sources

The Housing Appendix draws from a wide array of resources and data. These include projections from the state Department of Commerce as well as datasets from the federal Census Bureau and Department of Housing and Urban Development (HUD), Puget Sound Regional Council (PSRC), King County Department of Assessments, Seattle City building permits database, and housing market analysis and datasets from companies such as Zillow and CoStar.

The analyses address different time periods or points in time. Temporal variation reflects differences in data release schedules and data availability at the time analysis for this appendix was performed.

Seattle's Role as a Large, Growing Metropolitan City

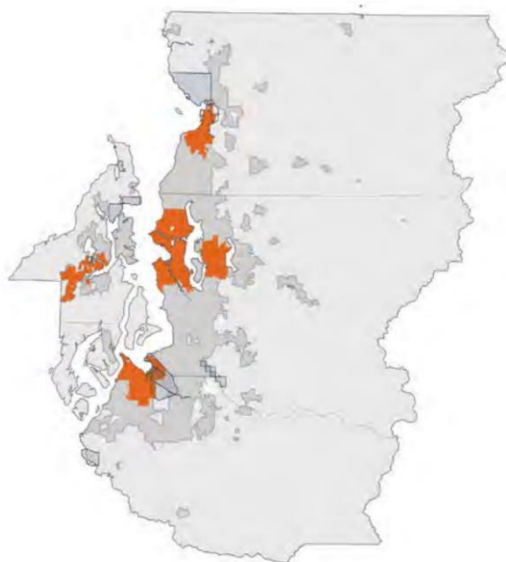
The 2020 Census counted 737,015 people in Seattle. This ranks Seattle as the 18th most populous U.S. city and the most populous city in King County, the Puget Sound region, and the state of Washington.

As shown in Figure A-31, Seattle is one of the five "Metropolitan Cities" in the Regional Growth Strategy adopted by PSRC as part of our region's VISION 2050 long-range plan. This designation acknowledges Seattle's role as a cultural, economic, and transit hub within the county and region.

As the Metropolitan Cities within King County, Seattle and Bellevue are expected to accommodate 44 percent and 46 percent of the county's population and employment growth, respectively. With regards to planned *regionwide* growth, Seattle and Bellevue together account for 22 percent of the increase in residents and 27 percent of the increase in jobs.

Figure A-30

Seattle: One of five Metropolitan Cities in the Puget Sound Region



Seattle in the 2020 Census: By the Numbers

- The 2020 Census counted 737,015 residents in Seattle, making it the 18th most populous city in the U.S.
- Seattle had the 3rd fastest population growth from 2010 to 2020 of the 50 largest U.S. cities.
- Seattle was one of 14 cities in the U.S. that grew by more than 100,000 people from 2010 to 2020.

Image from Puget Sound Regional Council [VISION 2050 Regional Growth Strategy](#)

Seattle's Growth in Recent Decades

Seattle has seen substantial population, household, and housing growth in recent decades.

The decade between 2010 and 2020 was a period of especially rapid population growth in Seattle, driven largely by our city's strong employment opportunities and high quality of life.

As illustrated in Figure A-32, Seattle's population grew by 21 percent from 2010 to 2020. This was more than double the 10-year growth rate experienced in each of the two preceding decades. A similar pattern is seen with the growth in the number of households in Seattle. While Seattle's housing supply also grew substantially between 2010 and 2020, it did so at a slower pace than the city's population and households.

For several years during the second half of the 2010s Seattle’s rapidly growing population made it one of the fastest-growing large cities in the U.S. according to the Census Bureau annual population estimates.

Figure A-31
Seattle Population, Households and Housing

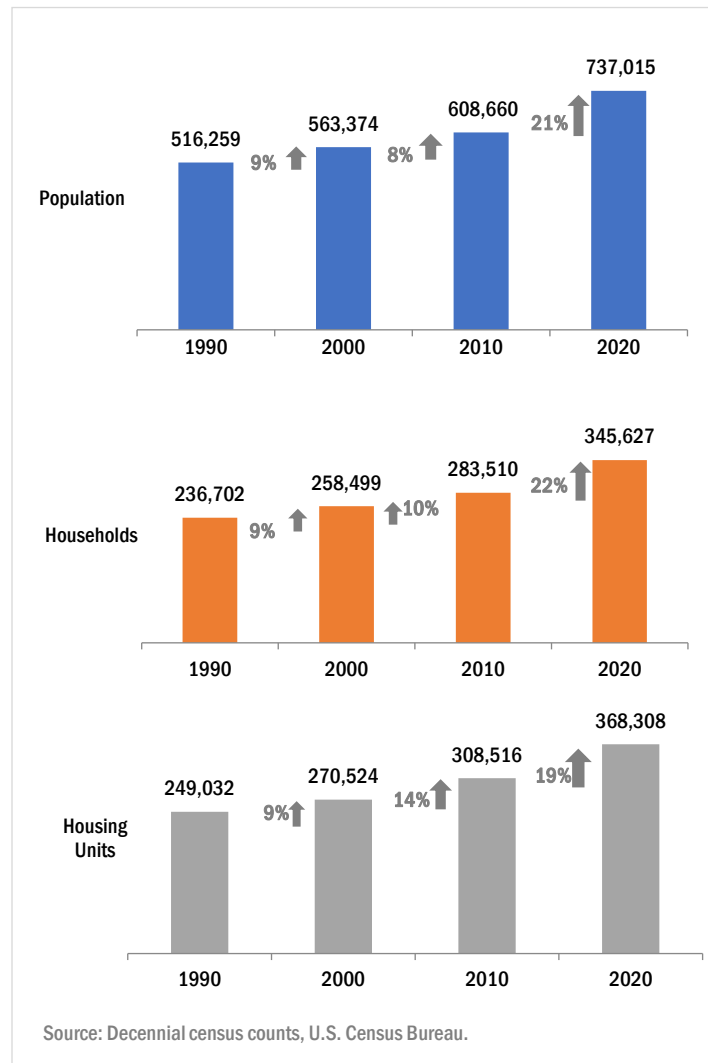


Figure A-33 includes statistics on job growth and compares how Seattle’s growth between 2010 and 2020 compares to that of King County as a whole. Between 2010 and 2020, the number of covered jobs located in Seattle increased by 38 percent, which is double the 19 percent rate of the city’s growth in housing units, and more than one and a half times the 24 percent growth in covered jobs in King County overall.

The fact that Seattle’s housing growth, while rapid, occurred at a slower rate than Seattle’s job growth has contributed to the rapid increase in rents and housing prices.

Figure A-32
Population, Households, Housing, and Jobs
Seattle and King County: 2010 and 2020

	Seattle				King County			
	2010	2020	Change 2010- 2020	% Change 2010- 2020	2010	2020	Change 2010- 2020	% Change 2010- 2020
Population	608,660	737,015	128,355	21%	1,931,249	2,269,675	338,426	18%
Households	283,510	345,627	62,117	22%	789,232	917,764	128,532	16%
Housing	308,516	368,308	59,792	19%	851,261	969,234	117,973	14%
Covered Jobs	462,739	637,913	175,174	38%	1,149,642	1,430,940	281,298	24%

Sources: Population, households and housing units from the decennial census, U.S. Census Bureau. [Covered employment estimates](#) published May 3, 2022, on PSRC's data portal.

Notes: Covered employment refers to jobs covered by the state unemployment insurance and excludes self-employed workers, proprietors, CEOs, and some other types of workers. PSRC estimates that regionally covered employment comprises roughly 85-90% of total employment. PSRC estimates that covered employment is roughly 85-90% of total employment.

Seattle's Population Growth Since 2020

After a temporary decrease in Seattle's population early in the COVID-19 pandemic, Seattle reclaimed its status from the late 2010s as one of the fastest-growing large cities in the nation. According to the Census Bureau's Vintage 2022 population estimates, Seattle was the fastest growing of the 50 largest cities in the U.S. from for the period July 1, 2021, to July 1, 2022.

Seattle's Projected Population Growth

Given recent trends—along with the strong economy, urban amenities, and natural beauty that Seattle and surrounding region offer—we anticipate that our city will continue to see substantial population growth. Informed by these considerations, and by regional and county-level projections, we expect Seattle's population to reach one million by the middle of this century and potentially reach this figure by the 2044 horizon for the One Seattle Plan.

Most recent population available for Seattle

- The Census Bureau's population estimates peg Seattle population at 749,256 as of July 1, 2022. With growth of 2.4% over July 1, 2021, this places Seattle as the fastest growing city among the 50 largest cities in the United States.
- The Washington State Office of Financial management, which uses a different methodology than the Census Bureau, estimates that Seattle's population was 762,500 on April 1, 2022. And 779,200 on April 1, 2023.

Growth Targets and Housing Need Projections

Growth Targets

Under GMA, Seattle must plan for and accommodate through zoned capacity the growth targets allocated to the city, consistent with population projections prepared by the state and frameworks provided by regional and countywide planning policies.

In 2021, the King County GMPC approved housing and employment growth targets for jurisdictions in the county to integrate into our 2024 comprehensive plan updates. Even though the planning period for our 2024 updates is 20 years, the growth targets in the CPPs refer to a 25-year period of 2019-2044 to reflect the base year data available at the time the targets were adopted.

For Seattle, the 25-year growth targets include at least 112,000 net new housing units and 169,500 net new jobs. The targets reflect Seattle's important role as a Metropolitan City in the VISION 2050 Regional Growth Strategy. The housing targets adopted by GMPC in 2021 were based on OFM population projections released in 2017 and are also consistent with the more recent projections released in 2022.²

Because the City's Comprehensive Plan covers a 20-year period, Seattle adapted the 25-year target to a 20-year timeframe for consistency with the One Seattle Comprehensive Plan's planning period spanning 2024 to 2044.³ Accounting for recent and ongoing growth, the estimated 20-year growth targets for the One Seattle Plan are 80,000 net new housing units and 158,000 net new jobs.

Growth targets in the CPPs are one source of information used to estimate the housing needs addressed in the One Seattle Plan. In addition to adopted targets, we also consider the following factors in identifying future housing need:

- **Past under-production.** Over the past decade, housing growth has lagged population, household, and employment growth in Seattle. This trend contributes to an overall housing shortage that drives housing costs ever higher. Planning for additional housing production in the future can help to alleviate this pressure and more completely meet the needs of Seattle's current residents.
- **Lack of housing diversity.** Seattle's housing stock is dominated by two categories of housing: increasingly expensive single-family detached dwellings and smaller rental apartments. Recent growth is predominantly zero-bedroom and one-bedroom apartments. Planning for abundant

² For details, see agenda item "[Washington State Office of Financial Management 2022 Growth Projections](#)" presented by the Interjurisdictional Staff Team (IJT) at the GMPC Meeting, March 22, 2023.

³ We prorated the 25-year housing growth target to our 20-year planning period by using building permit data and subtracting from the 25-year housing target a) an estimate of actual housing growth from the end of 2019 to the end of 2022 and b) a short-term projection of growth for the 2023 and 2024 calendar years. We employed a similar, though not identical, strategy to prorate the 25-year employment growth targets to our 20-year planning period.

housing supply, especially new housing options such as middle housing, can help to alleviate market pressure and boost housing choices for larger households, households with low- to moderate-incomes, and others.

- **Uncertainty about future growth.** Adopted growth targets are the product of analyses and policy goals. There is considerable uncertainty about the pace of future growth. For example, since the current Seattle 2035 Comprehensive Plan was adopted in 2015, Seattle has grown at approximately twice the rate that was anticipated in the growth targets in that plan. Factors such as continued strong economic growth or even climate migration could lead to future growth in Seattle that could significantly exceed our adopted GMA growth targets.

Housing Need Projections

Per new GMA requirements, the state Department of Commerce (Commerce) provides county-level projections of housing needs for households by income category, as well as the need for emergency housing and permanent supportive housing (PSH). GMPC has allocated these projections to each local jurisdiction to plan for and accommodate in their comprehensive plan updates.

State projections of future housing needs are designed to meet several overarching goals:

- First, that no household will have to pay more than 30 percent of its income on housing (the federal threshold for cost burden).
- Second, the housing needs of the homeless population will be fully met through permanent housing, including permanent supportive housing, and emergency housing.

The projections from Commerce present housing needs in two broad categories: a permanent housing category, with projected needs distributed by income level, and an emergency housing units/beds category.

STATE METHODOLOGY FOR PROJECTING HOUSING NEEDS

Following is a summary of the approach used by Commerce to project housing needs for each county.⁴

Permanent housing units: Commerce's model for projecting growth in the number of housing units needed by income level addresses current⁵ unmet needs as well as needs associated with projected population growth.

- **Housing needs of current housed residents.** The high market cost of housing, combined with an insufficient supply of subsidized below market rate housing, means that many existing households,

⁴ Commerce's guidebook "[Establishing Housing Targets for Your Community](#)" (Book 1), published July 2023, provides details on the sources, assumptions, and models used to project housing needs. (See pages 27-57.) This book is available on Commerce's [Updating GMA Housing Elements](#) webpage.

⁵ Here we are using the term "current" to describe baseline existing conditions in the Commerce model.

especially those in the lowest income categories, cannot find housing that is affordable to them and are thus cost burdened (i.e., paying more than 30% of their income for housing). In order to relieve the cost burden for these households, a portion of each county's projected need includes lower cost units, many of which would have to be subsidized to be affordable to lower-income households (generally below 50% of AMI). Market rate units currently occupied by low-income households would be freed up to meet housing needs at higher income levels, thus theoretically reducing the need to add units that are affordable to moderate income households.

- **Housing units needed for the current population experiencing homelessness.** Commerce assumes that 90 percent of the population experiencing homelessness needs permanent housing affordable at 0-30% of AMI and the remaining 10 percent need permanent housing affordable at 30-50% of AMI.
- **Housing needs of new households.** The remainder of the 25-year need for housing that is affordable at each income level is driven by population growth, as projected by the State Office of Financial Management. Commerce assumes that the proportion of future households at each income level will be consistent with the existing distribution of household income across income levels in each county.

Permanently supportive housing (PSH) is defined by Commerce as subsidized rental housing without limits on length of tenancy that provides on- or off-site voluntary services for people who need comprehensive support to successfully stay housed. This form of housing is tailored to persons who are living with complex and disabling behavioral or physical health conditions and who are experiencing homelessness or at imminent risk of homelessness.⁶

In their model, Commerce categorizes PSH units along with other forms of permanent housing while making the simplifying assumption that PSH units serve only households with incomes at or below 30% of AMI. Commerce's approach for projecting PSH needs considers both current unmet needs and ongoing needs. The model relies on estimates of both people experiencing chronic homelessness and people experiencing homelessness on a non-chronic basis who have a disabling condition, using these conditions as indicators that PSH would best meet these persons' needs.⁷

⁶ These descriptions of PSH and Emergency Housing are drawn from Commerce's guidance in, [Establishing Housing Targets for Your Community](#), July 2023)

⁷ Commerce's model assumes each person in need of PSH will stay in emergency housing for some time prior to moving into a PSH unit.

Emergency housing encompasses temporary indoor accommodations for individuals or families who are homeless or at imminent risk of becoming homeless. The emergency housing need projections by Commerce are for emergency housing and emergency shelters that provide overnight accommodations including, but not limited to, temporary apartments, hotel rooms, traditional shelter arrangements, shelters for people fleeing domestic violence, and homes in tiny home villages.

In modeling Emergency Housing needs, Commerce’s model aims to estimate the additional amount of emergency housing required to “functionally end unsheltered homelessness.”⁸ The model accounts for the baseline homeless population not yet served in emergency housing and uses the results of a simulation based on ten risk factors (a few of which include evictions, unemployment, severe rent burden, overcrowded housing, and incarceration) to project the number of people expected to become homeless each year.⁹

LOCAL ALLOCATION OF HOUSING NEEDS

The King County GMPC used a two-step methodology to allocate the housing need at each income level to cities:

- **Step 1:** Allocate shares of countywide need at each income level proportionally based on each city’s share of overall projected housing growth through 2044. Unlike the overall housing target, which was adjusted from 25 years to 20 years, projected need by affordability level retains a 25-year period due to CPP requirements and technical limitations in the ability to adjust for a shorter time period.
- **Step 2:** Adjust the mix of housing need to reflect a greater need to add units that can be affordable to lower-income households (with incomes at or below 80% of AMI) in cities where 1) housing costs are higher, 2) the supply of income-restricted affordable units is relatively low, and/or 3) there is a high number of jobs relative to housing units.¹⁰

Figure A-34 shows the resulting 25-year housing supply estimates and need projections for Seattle.

Figure A-33
Seattle Housing Supply Estimates and Need Projections

	Permanent Housing Units						Emergency Housing
	Total	0 to ≤30% of AMI					

⁸ For more background, see page 43 in [Establishing Housing Targets for Your Community](#).

⁹ Commerce notes that the projections of emergency housing needs assume only modest improvements over time in system performance. Commerce points out that substantial increases in resources devoted to affordable housing production or vouchers could reduce rates of homelessness and the corresponding need for emergency housing beds.

¹⁰ Specifically, increases to the portion of a growth target dedicated to affordable housing were made in jurisdictions where existing proportions of units affordable at or below 80% of AMI are lower, income-restricted housing shares of housing are lower, and the imbalance of low-wage workers to low-wage jobs is more pronounced. The allocation methodology is described in [AHC recommendations sent to the GMPC on December 29, 2022](#).

		Non-PSH	PSH	>30% to ≤50% of AMI	>50% to ≤80% of AMI	>80% to ≤100% of AMI	>100% to ≤120% of AMI	>120% of AMI	
Seattle Total Future Housing Needed: 2044	480,307	42,041	20,255	45,691	62,050	76,752	50,327	183,191	25,734
Seattle Current Housing Supply: 2019 Baseline	368,307	13,469	5,231	26,547	54,064	71,330	44,177	153,489	4,333
Seattle Net New Housing Needed: 2019-2044	112,000	28,572	15,024	19,144	7,986	5,422	6,150	29,702	21,401
Source: 2021 King County Countywide Planning Policies as amended August 15, 2023 (Ordinance 19660) and ratified November 30, 2023.									
Notes: The Housing Need Projections are contained in Housing Chapter Table H-1: "King County Countywide and Jurisdictional Housing Needs 2019-2044" and Appendix 4 Table H-2: King County Countywide and Jurisdictional Housing Needs 2019-2044.									

For reference, Figure A-35 shows 2023 maximum income thresholds, by household size, for each of the AMI-based categories for which housing need is projected.

Figure A-34
AMI-Based Income Limits by Household Size, 2023

HUD Area Median Family Income in 2023: 146,500					
Number of Persons in Household or Family	30% of AMI	50% of AMI	80% of AMI	100% of AMI	120% of AMI
1	\$30,750	\$51,300	\$82,050	\$102,550	\$123,050
2	\$35,150	\$58,600	\$93,750	\$117,200	\$140,650
3	\$39,550	\$65,950	\$105,500	\$131,850	\$158,200
4	\$43,950	\$73,250	\$117,200	\$146,500	\$175,800
5	\$47,450	\$79,100	\$126,600	\$158,200	\$189,850
6	\$51,000	\$84,950	\$135,950	\$169,950	\$203,950

Source: Area Median Family Income and household-size adjustment factors from [U.S. Department of Housing and Urban Development \(HUD\) Fiscal Year 2023 Income Limits Documentation System](#).

Notes: HUD estimates Area Median Family Income (HAMFI) annually for metropolitan areas across the U.S.; for Seattle the applicable area is a combination of King and Snohomish counties. After calculating HAMFI, HUD applies household size and other adjustments, HUD publishes area-specific income eligibility limits used to establish affordable housing restrictions. Consistent with the state GMA, the Housing Appendix uses the term "area median income" to refer to HAMFI.

This table is provided for general reference. The income limits shown here are calculated by multiplying HAMFI by the applicable percentages of AMI and then applying the standard household size adjustments HUD uses in calculating income limits. The income limits in this table do *not* include other adjustments that HUD and other agencies make in calculating income limits for administering affordable housing programs, as those limits vary between types of affordable housing regulatory agreements. [Income limits applicable to City of Seattle regulatory agreements](#) are listed on the Office of Housing's website.

Commerce's model factors in existing unmet need by estimating the number of units that would have to be produced to house each cost-burdened renter household¹¹ in a unit they can afford. The model assumes that producing housing units for cost-burdened renter households in a given income category (e.g., 0-30% of AMI), not only meets the needs of these households, but *also* vacates units affordable to households in the next income category up (e.g., 30-50% of AMI).¹²

¹¹ Commerce does not include cost-burdened owner households in calculating production of new units needed to eliminate cost burden, explaining that these households tend to be in a fundamentally different position compared to renter-households and that "building new housing units for these owner households to occupy is not necessarily the best or only solution for these households."

¹² As explained by Commerce, "the model determines 'New Production to Address Need' at each income level over time, assuming that 1/25th of the need to eliminate renter cost burden is built each year. For every unit built, the needs of up to two cost-burdened households is assumed to be addressed. For example, when a new housing unit affordable at 0-30% AMI is built, it can accommodate a baseline cost-burdened household with income of 0-30%. Then, the unit that household previously occupied is vacated and available to accommodate another higher-income cost-burdened household.... The model continues to build homes and vacate units until there are no more cost-burdened renter households to accommodate."

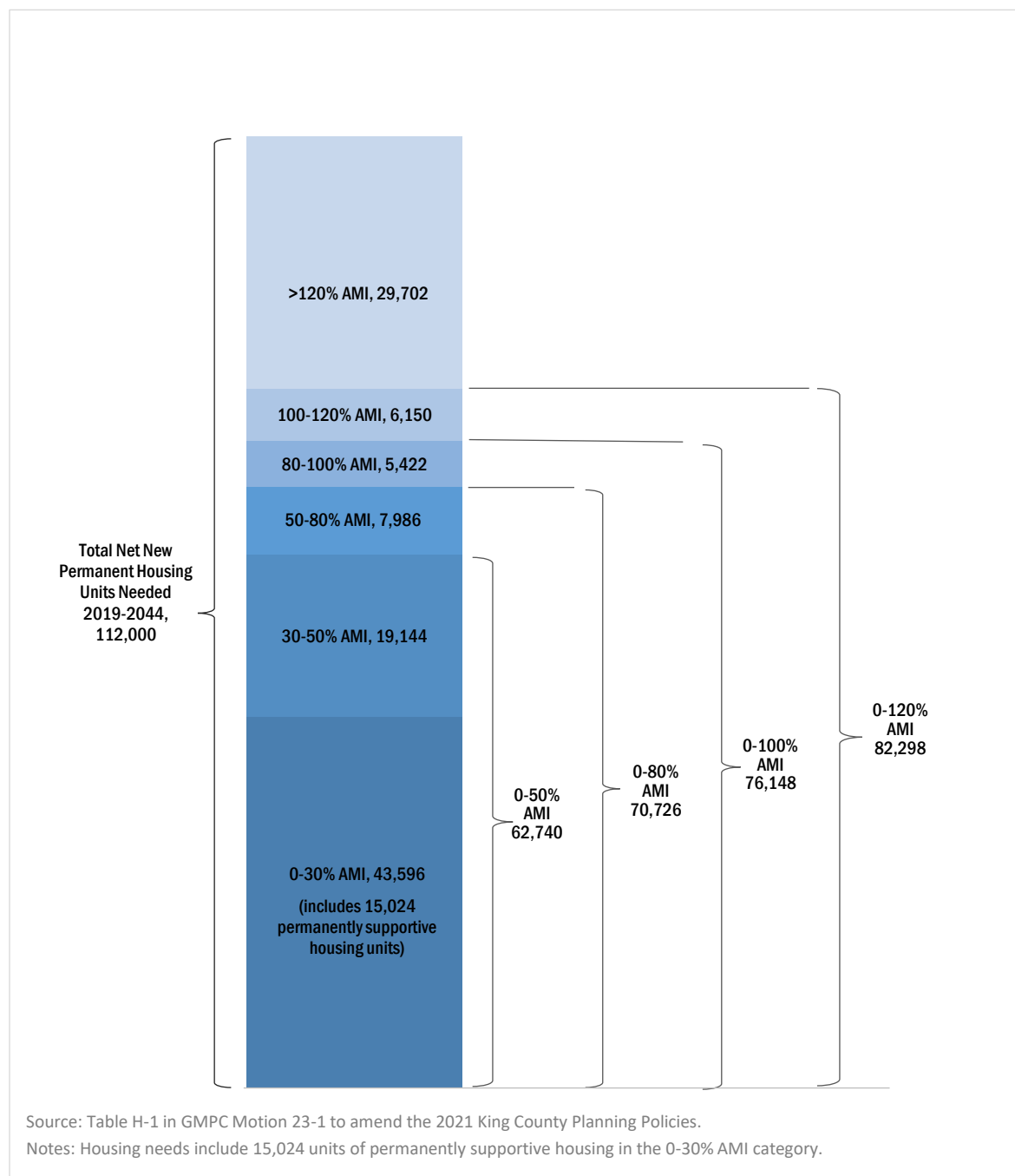
By assuming vacated units accommodate cost-burdened households in the next income category up, the model estimates lower new production needs in categories between 50 and 120% of AMI than would otherwise be necessary to address existing unmet need.

Further, as Commerce explains, projected need for each income category above 30% of AMI “assumes success at meeting the housing needs of households at lower income levels.” However, whether sufficient funding can be assembled to fully meet the needs of the lowest-income households is very uncertain.

By assuming needs within the lowest income categories are met, the model may underestimate needs of other low- and moderate-income households. After all, if the needs of the lowest-income households remain unmet, those shortfalls will not only leave those households cost burdened but also contribute to shortages felt by households somewhat higher up the income ladder.

As guidance from Commerce suggests, considering housing need on a cumulative basis in addition to looking at need in discrete income categories can help round out understanding of local housing needs. Figure A-36 shows projected net new housing needs within discrete income categories *and* under cumulative thresholds. Viewed *cumulatively*, more than half of the projected need in Seattle is for housing affordable at or below 50% of AMI, and roughly 63 percent is for housing affordable at or below 80% of AMI. Furthermore, nearly three-quarters of the net new need is for housing affordable at or below 120% of AMI.

Figure A-35
Seattle Net New Permanent Housing Units Needed by Income Category, 2019-2044



As stated in the Housing element, Seattle will continue to prioritize addressing the needs of households with incomes of 30% AMI or less given that the needs are, by far, greatest among these households. At the same time, aggressive efforts are necessary to increase production of income-restricted homes for all low-income categories and remove barriers to help the market meet the needs of households with incomes at or below 120% of AMI.

Historical Context of Racist Housing and Land Use Practices

Today's housing crisis has origins in a history of discrimination that shaped where Black, Indigenous, and other people of color could live, own land, and sustain their culture since the arrival of white European settlers in the Pacific Northwest in the 1840s. At that time, Washington State was part of the Oregon Territory and therefore subject to [Black exclusion laws](#), which discouraged through threat of physical punishment, and later outright forbade, Black people from settling, owning property, or making contracts as a way of ensuring the region's early development was primarily white. ,

In 1855, the [Treaty of Point Elliott](#) was signed, establishing the Tulalip, Port Madison, Swinomish, and Lummi reservations and guaranteeing hunting and fishing rights to the Tribes represented by its signatories. In exchange, the Tribes ceded tens of thousands of acres of their land, some of which had already been claimed by European-American settlers. In 1864, the Washington legislature granted anyone the right to own land "as if such an alien were a native citizen of this Territory or of the United States," as a measure to promote immigration by white people to displace Native Americans.¹³ After the city of Seattle was first incorporated in 1865, one of its first laws ([Ordinance 5](#)) called for the removal of Indigenous people from within city limits, barring Native people from living in Seattle unless a non-Native person needed to employ them. When the City government was dissolved in 1867 and reincorporated in 1869, the ban on Native residents was not re-enacted, but other efforts to exclude Native people persisted.

Exclusion and forced relocation of certain groups continued through the end of the 19th and into the 20th century with anti-immigrant, especially anti-Asian, policies. This included 1) the federal Chinese Exclusion Act in 1882 and anti-Chinese riots that followed in Seattle; 2) the Alien Land Law enshrined in Washington's first constitution prohibiting land ownership by "aliens ineligible for citizenship, which targeted Asian people whom Congress ruled in 1875 could not become citizens; and 3) forced incarceration of Japanese and Japanese Americans during World War II. Displacement also resulted from various city building efforts. The creation of the Ship Canal and Ballard Locks in the 1910s lowered the level of Lake Washington by more than eight feet and caused the Black River, on which many Duwamish

¹³ <https://digitalcommons.law.seattleu.edu/cgi/viewcontent.cgi?article=1286&context=sulr>, https://depts.washington.edu/civilr/alien_land_laws.htm

lived and depended for fishing, to disappear. The construction of Interstate 5 through downtown Seattle resulted in the [loss of homes, businesses, and cultural anchors](#) in the Chinatown–International District.

The 20th century saw the public and private sector turn to land use and housing as tools to protect and concentrate property ownership and wealth within white communities. Zoning was one of the first practices used to establish and solidify exclusion. In the early 1900s, Los Angeles and New York were early adopters of standards separating uses and regulating building form. But zoning did not arise only to shape the built environment or protect public health. The racism of mainstream white society was another basis for the rise of land use regulation.¹⁴ First Baltimore and then other cities, particularly in the South, employed zoning for explicit racial segregation, with separate districts for white and Black residents. After this was ruled unconstitutional in 1917, city officials substituted ostensibly race-neutral standards like minimum lot size and prohibitions on multifamily housing as covert ways to shield white neighborhoods from lower-income residents and people of color.

Those standards are still present in Seattle’s zoning today. While Seattle never had racial zoning, the City’s first zoning ordinance, adopted in 1923, was promoted by the Zoning Commission as a way to prevent “lowering...the standard of racial strength and virility”¹⁵ and crafted by a planner who touted zoning as a way to “preserve the more desirable residential neighborhoods” and prevent movement into “finer residential districts ... by colored people.”¹⁶ Before the advent of zoning, Seattle’s building code had regulated development, and dwellings with multiple families were allowed citywide. The 1923 zoning ordinance established the “First Residence District” where only “detached buildings occupied by one family” were allowed. In the subsequent decades, periodic downzoning expanded the extent of single-dwelling zoning into neighborhoods that previously allowed a mix of housing types. For just over a century, zoning in Seattle has limited access to many neighborhoods by prohibiting lower-cost housing forms, like apartments, thus raising the financial bar to afford housing and reinforcing racial segregation since people of color have disproportionately lower incomes and less wealth.

Furthering this pattern of exclusion were racially restrictive covenants, the use of which arose in response to the Supreme Court’s ruling on municipal racial zoning. Racial covenants were enforceable contract language written into deeds, plats, and homeowners association bylaws that restricted the sale and use of property based on someone’s race, ethnicity, and religion. As some residential areas began to diversify in the 1910s, the use of covenants in Seattle and surrounding cities became widespread, especially after

¹⁴ Christopher Silver. “The Racial Origins of Zoning in American Cities.” <https://www.asu.edu/courses/aph294/total-readings/silver%20--%20racialoriginsofzoning.pdf>

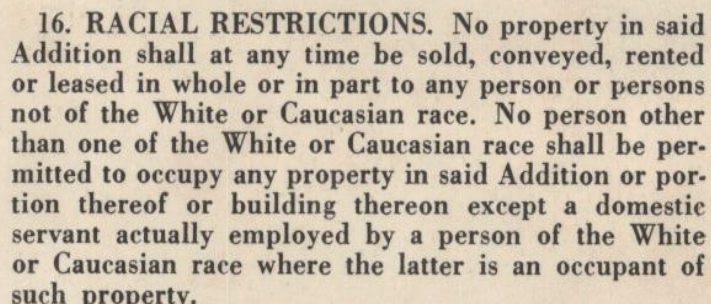
¹⁵ Excerpt from “A Zoning Program for Seattle.” Record Series 1651-02 Box 1, Folder 1. Seattle Municipal Archives.

¹⁶ <https://www.epi.org/publication/making-ferguson/>

the Supreme Court validated their use in 1926. Many neighborhoods prohibited the sale or occupancy of property to Asian Americans, Jewish people, Black people, or anyone “other than one of the White or Caucasian race.”¹⁷ One such covenant for the Windermere neighborhood said “No person or persons of Asiatic, African or Negro blood, lineage or extraction, shall be permitted to occupy a portion of said property, or any building thereon; except domestic servant or servants may be actually and in good faith employed by white occupants of such premises.”¹⁸ Figure A-37 further provides example text of racially restrictive covenants put on properties in the Blue Ridge neighborhood. This practice excluded people of color from much of Seattle and from the opportunity to pursue homeownership, which was becoming a more common pathway to stability and wealth in the 20th century.

Figure A-36

An example of racial restrictions recorded in 1938 in the subdivision covenants for the Blue Ridge neighborhood.



16. RACIAL RESTRICTIONS. No property in said Addition shall at any time be sold, conveyed, rented or leased in whole or in part to any person or persons not of the White or Caucasian race. No person other than one of the White or Caucasian race shall be permitted to occupy any property in said Addition or portion thereof or building thereon except a domestic servant actually employed by a person of the White or Caucasian race where the latter is an occupant of such property.

Source: https://depts.washington.edu/civilr/covenants_BlueRidge.htm

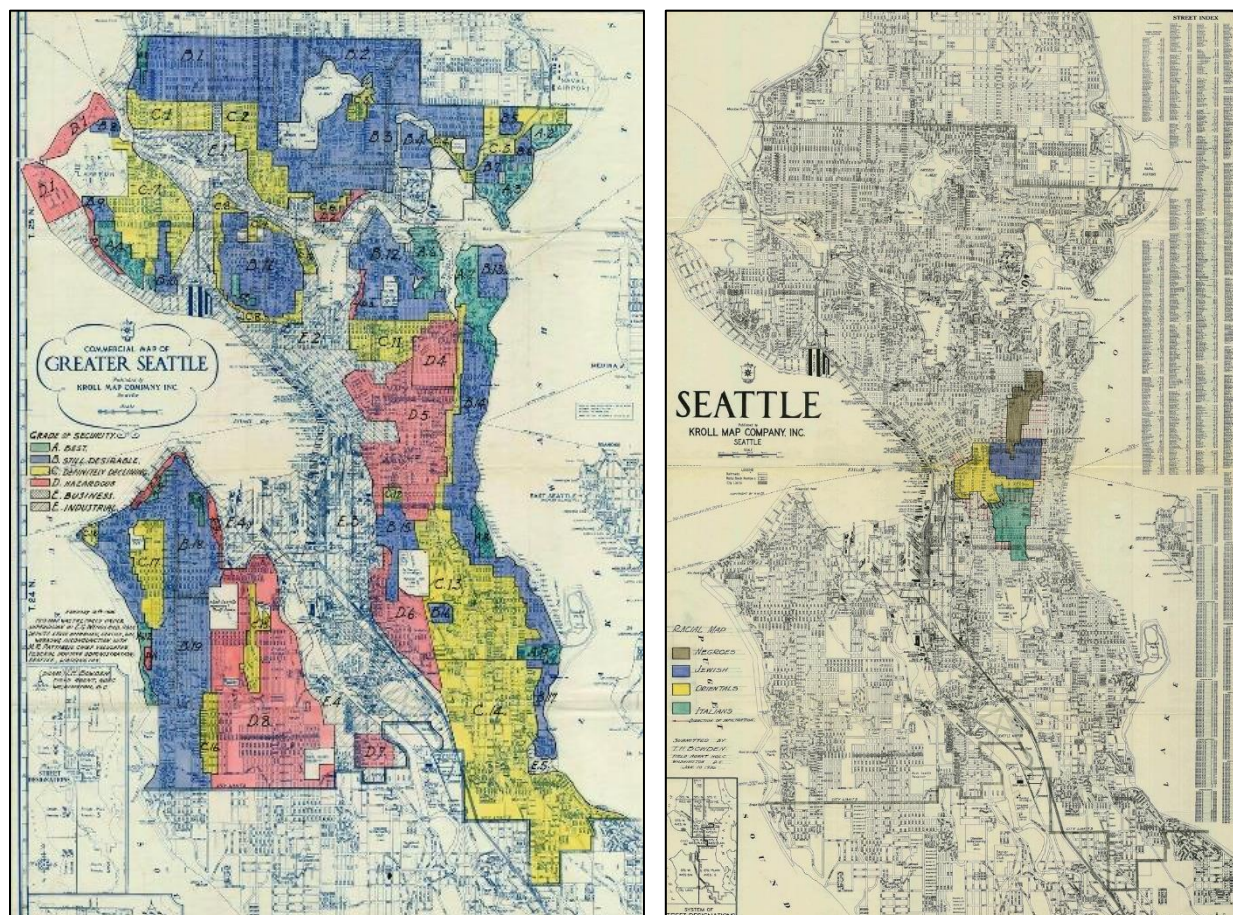
Alongside private deeds defining where people of color could *not* live, the Federal practice of [redlining](#) rendered them ineligible for government-backed home mortgages in the few areas where they could. As the U.S. emerged from the Great Depression, the National Housing Act was adopted in 1934 as part of the New Deal in an effort to boost housing stability and expand homeownership by underwriting and insuring home mortgages. To determine eligibility for those loans and delineate ideal areas for bank investment, the Home Owners Loan Corporation (HOLC), a Federal agency, created maps, shown in Figure A-38, that appraised the creditworthiness of entire neighborhoods based in part on their racial composition. Areas deemed too risky for mortgage lending were shaded in red or “redlined.” Elsewhere, an area’s high “grade of security” often explicitly referenced the presence of racial covenants. In Seattle, for example, the neighborhood of Windermere, shaded green, was touted as “protected...by racial restrictions,” and the Central Area, outlined in red, deemed too risky for mortgage lending because “it is the Negro area of Seattle” and “composed of mixed nationalities.”¹⁹

¹⁷ https://depts.washington.edu/civilr/covenants_BlueRidge.htm

¹⁸ <https://www.seattle.gov/documents/Departments/CityArchive/DDI/OpenHousing/covenant.pdf>

¹⁹ <https://dsl.richmond.edu/panorama/redlining/#loc=5/39.1/-94.58>

Figure A-37
Home Owners Loan Corporation (HOLC) maps of Seattle



Informal practices and unwritten rules also contributed to housing discrimination. Real estate agents typically didn't show houses in predominantly white neighborhoods to people of color, and, even if they did, purchasing that housing was difficult for a buyer of color.²⁰ Discrimination in the sale or rental of housing was legal until Congress passed the Fair Housing Act in 1968. But earlier in the decade, local discussions had begun of a potential City ordinance prohibiting housing discrimination. In 1963, Seattle's newly created Human Rights Commission drafted an open housing ordinance with criminal penalties for acts of housing discrimination on the basis of race, ethnic origin, or creed. The City Council referred the legislation to a public vote. Opponents organized and advertised heavily, and in March 1964 the measure failed two-to-one. Seattle eventually adopted Open Housing legislation in 1968, extending its protections against discrimination first in 1975 and as recently as 2017 to other identities and groups.

²⁰ <https://www.seattle.gov/cityarchives/exhibits-and-education/online-exhibits/seattle-open-housing-campaign>

In the decades after World War II, the government subsidized suburban development with housing finance and highway systems that disproportionately benefited white middle class and affluent households. When banks applied for government insurance on prospective loan for subdivision development, the Federal Housing Administration (FHA) pointed appraisers to its *Underwriting Manual*, which contained a “whites-only” provision that ensured none of the homes could be sold to people of color. This made racial segregation an official requirement of the federal mortgage insurance program and deprived people of color of the opportunity to own a home and build and pass on wealth.²¹ In recent decades, interest in urban neighborhoods close to prosperous regional job centers has risen among higher-income households. Increased demand for housing has made many underinvested, previously redlined areas too expensive for existing residents of color who had historically been prohibited from living anywhere else.

The legacy of these practices persists today, perhaps most notably in the lasting racial segregation that exists across Seattle neighborhoods and in Seattle’s racial wealth gap. Today, the HOLC’s highest-graded Seattle neighborhoods remain disproportionately white, restrictively zoned, and characterized by high-cost detached housing. The percentage of Black households with zero net worth in Seattle is almost twice that of white households.²² Homeownership remains one of the starkest measures of racial disparity in housing in Seattle: while roughly half of white households own their home, only about one-quarter of Native American households and one-quarter of Black households do.²³ As the primary way people accumulate and pass on wealth in the U.S., this homeownership gap reflects both the history of public- and private-sector racism in housing and the ongoing escalation of home prices and income inequality in our region.

The City has a statutory mandate under the 1968 federal Fair Housing Act to affirmatively further fair housing. This entails taking productive, meaningful actions to overcome historical patterns of segregation, promote fair housing choice, eliminate disparities in opportunities, and foster inclusive communities free from discrimination.

²¹ Rothstein, 2017.

²² <https://www.historylink.org/File/21296>;
https://prosperitynow.org/sites/default/files/Racial%20Wealth%20Divide_%20Profile_Seattle_FINAL_3.2.21.pdf

²³ CHAS data based on 2015-2019 ACS.

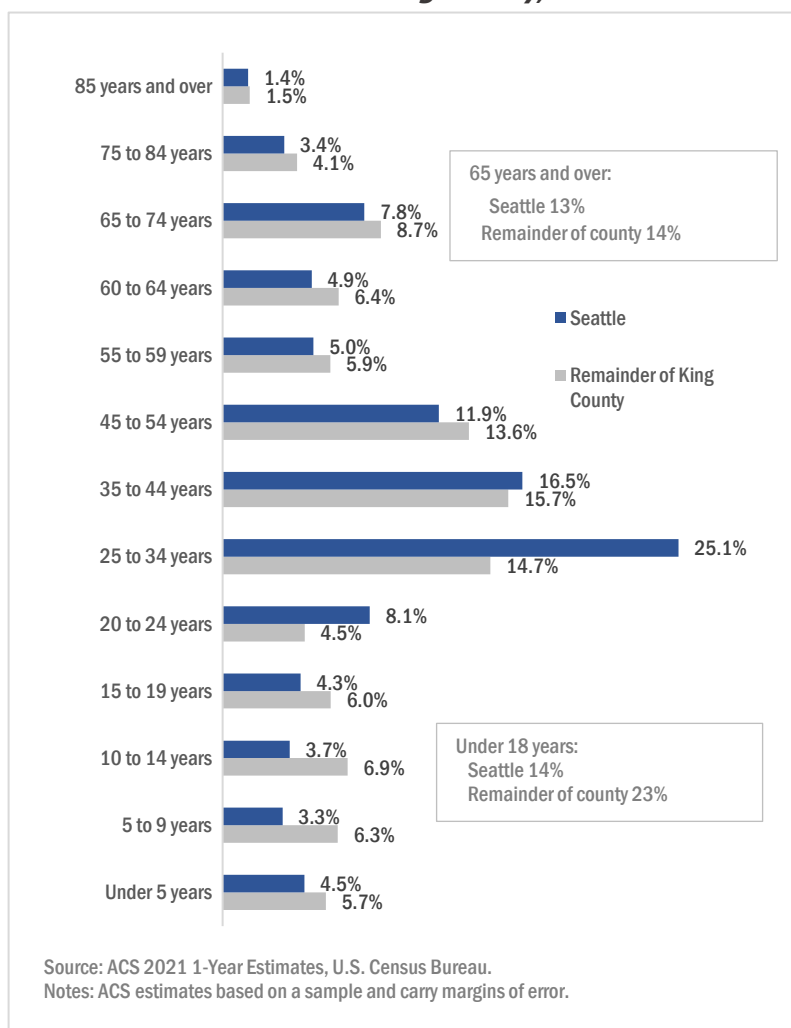
Population Characteristics and Trends

This section summarizes basic demographic characteristics and trends in Seattle using data from the U.S. Census Bureau and the Washington State Office of Financial Management (OFM). decennial census data and ACS estimates.²⁴ We also include comparisons with demographic patterns and trends in the remainder of King County.

Figure A-38

Population Age Distribution

Seattle and Remainder of King County, 2021



Age Distribution

As shown in Figure A-39, the shares of Seattle residents who are in middle- and older-adult age groups (38% ages 35-64, and 13% ages 65+) are fairly similar to the shares in the remainder of King County. In both Seattle and the remainder of King County, adults ages 35 to 65 outnumber both younger adults and older adults.

The biggest differences in the age composition of Seattle and the remainder of King County are found when looking at the shares of young adult groups, which are much larger in Seattle, and the shares of children and youth which are much smaller in Seattle.

²⁴ For many of these analyses the decennial census would normally be preferred over the sample-based ACS. However, at the time we are preparing these analyses for this draft of the Housing Appendix, the topics and detail available from the decennial census are very limited. We are planning to replace the 2021 1-year ACS estimates used to describe age composition with data from the 2020 Census for the final version of the Housing Appendix.

SEATTLE'S CONCENTRATION OF YOUNG ADULTS

Relative to many other central cities in the U.S., Seattle has an especially high concentration of residents ages 25 to 34. A quarter of all Seattleites belong to this age group compared to 15 percent in the remainder of King County,

This reflects the city's strong job opportunities, graduate-level educational institutions, and recreational offerings. A comparison of the 2021 ACS estimates with estimates collected 10 years prior suggests that the 25-34 age group grew at roughly twice the rate of Seattle's overall population.

A GROWING POPULATION AGE 65 AND OVER

The population of adults aged 65 and over also grew very quickly, with the 65-74 segment growing the fastest of all age groups. Between 2011 and 2021 the number of Seattle residents ages 65 to 74 increased by nearly one half, and by over one half in the balance of the county.

OFM forecasts that the population 65 and older in King County will grow by nearly 75 percent between 2022 and 2045.²⁵ Applying this rate to Seattle would see Seattle's current population of about 92,000 adults 65 and older rise to more than 160,000 by 2045. Even if the population of adults aged 65 and over grows somewhat more slowly in Seattle than in the remainder of King County, this will represent a dramatic increase. Furthermore, the underlying trend in the aging of the baby boom generation will drive substantial increases in the numbers and shares of older adults 75 and over.

A PROPORTIONALLY SMALL BUT GROWING CHILD POPULATION

Figure A-40 shows estimates for the child population for both Seattle and remainder of King County from the last two decennial censuses.²⁶

The 2020 Census counted nearly 107,000 children under 18 residing in Seattle.²⁷ Although Seattle's child population increased each of the last three decades, it did so at a slower pace than Seattle's overall population. By 2020, the share of Seattle's population under 18 years of age had declined to 14 percent, which has Seattle continuing to rank near the bottom among large cities. In 2020, San Francisco was the only large city in the U.S. where children were a lower share of the population than in Seattle. High housing costs are one of the drivers associated with the low percentages of children in Seattle and many other U.S. cities with very low proportions of children. The relative dearth of family size units in most forms of housing besides single-family residences and the domination of zero-bedroom and one-bedroom units in recent housing construction are key factors constraining the number of children in Seattle.

²⁵ [Growth Management Act population projections for counties: 2020 to 2050 | Office of Financial Management \(wa.gov\)](#)

²⁶ At the time we are writing this, the only age breakouts available from the 2020 Census are for the population under 18 and the population 18 and older. Using the 2020 Census data for the population under 18 population avoids the margins of error associated with sample-based ACS estimates and facilitates comparison with previous decennial data and enable examination of long-term trends.

²⁷ A recent report Annie E. Casey Foundation includes analysis of how the child population has changed in states and large cities throughout the U.S. Analysis of the 100 cities with the largest child populations found Seattle ranking 9th in both the highest numerical and the highest percent increases from 2010 to 2020 in the child population. See [aecf-changingchildpop-2023.pdf](#).

While the under-18 share of the population in the remainder of King County has also been declining, at 23 percent it remains much higher than in Seattle.

Figure A-39
Child Population, Seattle and Remainder of King County
Decennial Census Estimates from 1990 to 2020

	Seattle				King County			
	1990	2000	2010	2020	1990	2000	2010	2020
Population under 18 years of age	84,930	87,827	93,513	106,841	256,141	302,819	319,989	349,364
People under 18 as a share of the population	16%	16%	15%	14%	26%	26%	24%	23%
		1990-2000	2000-2010	2010-2020		1990-2000	2000-2010	2010-2020
Change in number of people under 18		2,897	5,686	13,328		46,678	17,170	29,375
Rate of change in population under 18		3%	6%	14%		18%	6%	9%

Source: Decennial census estimates, U.S. Census Bureau.

Race, Ethnicity, and Related Demographics

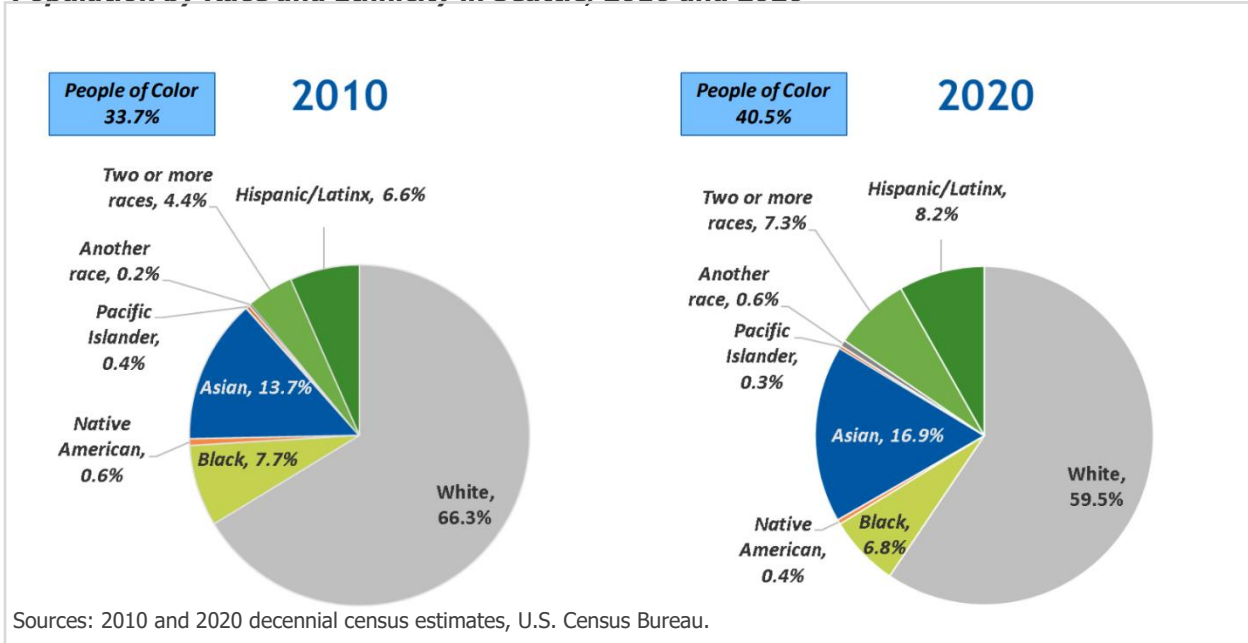
Based on 2020 Census estimates, four out of every 10 Seattle residents are people of color.

As reflected in the pair of pie charts in Figure A-41, this is a substantial increase compared with 2010, when people of color comprised slightly more than one third of Seattle’s population. **People of color include persons whose race and ethnicity are other than single-race white, non-Hispanic.**²⁸

Asians comprise the largest group of color. The next two most populous groups of color are persons of Hispanic/Latino ethnicity (8.2%) and persons of Black or African American race (6.8%). About seven percent of Seattle residents are multiracial.

²⁸ Existing federal standards for reporting race and ethnicity treat race and Hispanic/Latino ethnicity as separate concepts; Hispanic/Latino persons may be of any race. In this appendix, unless otherwise noted, persons who are Hispanic/Latino are grouped as Hispanic/Latino, while the racial categories reported are comprised of people who are not Hispanic or Latino.

Figure A-40
Population by Race and Ethnicity in Seattle, 2010 and 2020



Between 2010 and 2020, the population of color in Seattle rose by nearly 46 percent while the number of white residents in the city increased by only 9 percent, as shown in Figure A-42.

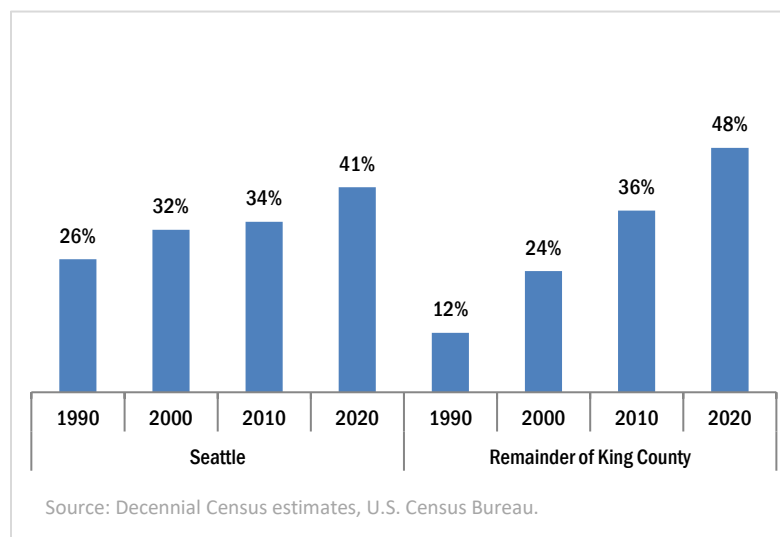
Figure A-41
Racial and Ethnic Composition of Seattle Population

Racial and Ethnic Composition of Seattle Population		
	2010 to 2020 Growth	2020 Population
Total population	21.1%	737,015
People of Color	45.7%	298,847
Black	6.6%	50,234
Native American	-15.8%	3,268
Asian	49.3%	124,696
Pacific Islander	-13.6%	1,941
Another race	205.5%	4,473
Two or more races	102.4%	53,672
Hispanic/Latino, of any race	50.2%	60,563
White	8.6%	438,168

Sources: Decennial census estimates, U.S. Census Bureau.

Multiracial people, Asians, and people of Hispanic/Latino ethnicity had the fastest growing populations in Seattle. In contrast, Seattle's Black population increased by only 7 percent, which was even slower than the growth among white people during the same period. Furthermore, decennial census tallies for the smallest racial groups in the city—Pacific Islander and Native Americans—fell between 2010 and 2020.

Figure A-42
Persons of Color as Share of Total Population



While people of color have been increasing as a share of the population, the increase in Seattle has been slower than in the rest of King County. This trend is evident over the last several decades as shown in Figure A-43.

The variation between Seattle and the remainder of King County in the trend toward racial diversification is more dramatic for the population under 18. The share of the child population who are persons of color

increased rapidly in King County outside Seattle, but nearly plateaued in Seattle over the past 2 decades as shown in Figure A-44.

Figure A-43
Children of Color as Share of Population Under 18 Years of Age

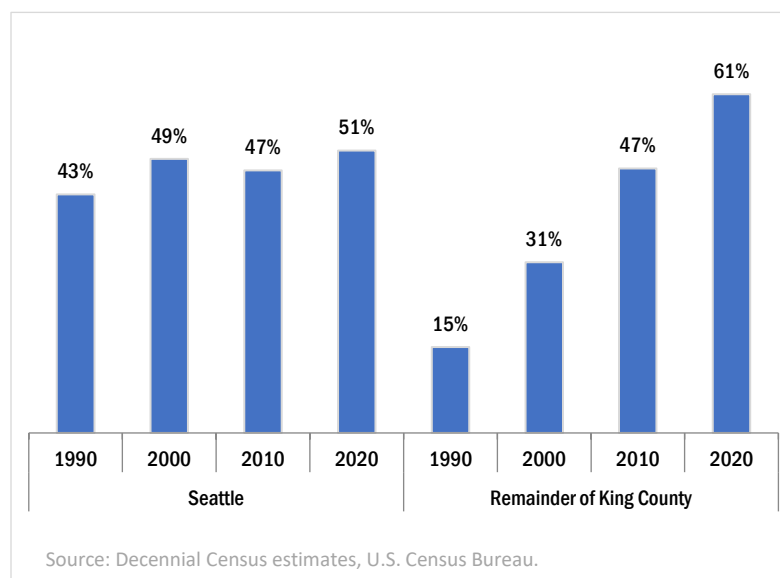


Figure A-45 shows growth rates between 2010 and 2020 by race and ethnicity for Seattle's child population compared with the city's adult population. Broadly speaking, for both children and—especially—for adults, rates of population growth were higher for people of color than for whites. There was, however, a great deal of variation in patterns between groups of color. Increases in the multi-racial population and the Hispanic/Latino population were big drivers of both child and adult population growth. In contrast, the

number of Asian children in Seattle declined between 2010 and 2020 even as the number of Asian adults in the city increased by over 50 percent.

Other racial groups with very small or negative child population growth rates between 2010 and 2020 include Blacks, Native Americans, and Pacific Islanders.

The lower rates of increase in Seattle compared to King County for children of color, suggest that households with children are finding it more difficult (or less beneficial) to move to or stay in Seattle. As

discussed elsewhere in this appendix, some key factors influencing these patterns include high housing costs in Seattle coupled with the relatively low and declining share of housing units in Seattle that are large enough to accommodate families with children.

Figure A-44

Growth in Seattle's Child and Adult Populations by Race & Ethnicity, 2010 to 2020

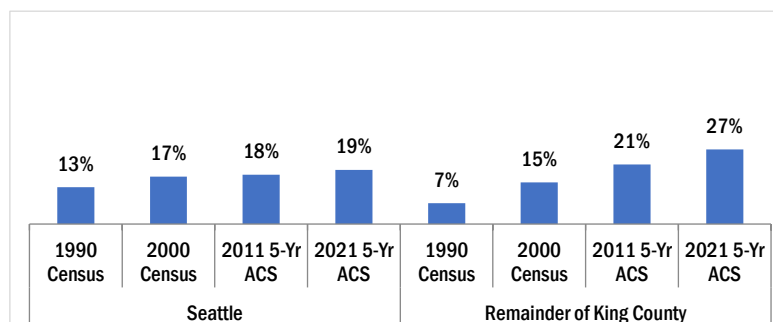
	Growth in Child Population	Growth in Adult Population
Population in age group:	14.3%	22.3%
People of Color:	22.8%	52.0%
Black	1.8%	8.1%
Native American	-9.5%	-16.7%
Asian	-1.5%	57.6%
Pacific Islander	-28.2%	-9.3%
Two or more races	74.5%	118.1%
Hispanic/Latino, of any race	26.9%	57.8%
White	6.7%	8.8%

Sources: Decennial census estimates, U.S. Census Bureau.

Other patterns in the data suggest that an important driver of the increase in Seattle's population of color has been young adults coming from other areas of the state, U.S., and world, for educational and job opportunities. This includes, but is not limited to, persons in South Asian and East Asian racial groups whom ACS "Selected Population Tables" indicate are more likely to have moved recently to Seattle and King County from areas outside of King County..²⁹

Figure A-45

Foreign-Born Population As Share of Total Population



Source: Decennial Census and 5-Year ACS estimates, U.S. Census Bureau.

Estimates from the ACS indicate that about 19 percent of Seattle's population immigrated to the U.S. from another country. In a pattern similar to that seen for the population of color, the foreign-born share of Seattle's population has increased more slowly than in the remainder of King County as shown in Figure A-46. As seen with the population of color, immigrants are now a larger

share of residents in King County outside of Seattle than inside Seattle.

²⁹ ACS 2021 5-Year Selected Population Detail Table B07003: Geographical Mobility in the Past Year.

Household Characteristics and Trends

This section examines basic household characteristics and trends impacting housing needs. The subsequent section analyzes differences by race and ethnicity. These analyses use data from the ACS, including a special set of ACS tabulations that HUD obtains from Census Bureau and publishes to help local communities evaluate their housing needs and supply – the Consolidated Housing Affordability Strategy data, or “CHAS” data for short.

CHAS Data

CHAS tabulations from ACS 5-year estimates provide a key source for analyses in Housing Appendix regarding the characteristics of households, the housing challenges they experience, and the affordability of the city’s housing stock. We use the CHAS to analyze these topics for Seattle as a whole and to examine patterns between neighborhoods.

The CHAS data, like other ACS data, provide a broadly representative picture of a community’s households and housing supply. These data do not, however, provide information on housing assistance that some households receive, nor do these data allow us to distinguish between subsidized housing and market-provided housing.

There is a significant lag between data collection and publication of CHAS data; the 2019 5-year CHAS data were the most recent available at the time of our analysis. For selected topics, we compare findings from these CHAS data with those from older CHAS data that we used to inform the previous major update of the Comprehensive Plan.

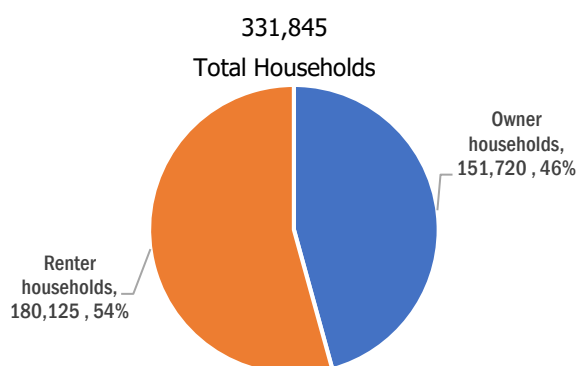
As sample-based estimates, the CHAS estimates carry margins of error and may be unreliable for small groups of households and small areas.

As a companion to the Housing Appendix, we provide a set of Supplemental Tables on the City’s [One Seattle Plan webpage](#) for readers who wish to examine CHAS data in more detail.

Total Households

The 2019 5-year CHAS estimates, which represent a weighted average of the 5-year analysis period, reflect approximately 331,845 total households in Seattle. This is lower than the 372,188 households that the state Office of Financial Management estimates reside in Seattle as of April 1, 2023.

Figure A-46
Seattle Households by Tenure (Owner/Renter); 2019 5-Year Estimates

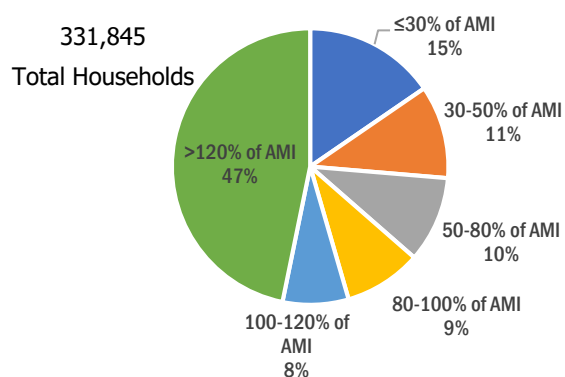


Source: CHAS tabulations of ACS 2015-2019 5-year estimates, U.S. Census Bureau and HUD.

Tenure

Tenure refers to whether a household owns or rents the housing unit in which they live. As shown in Figure A-47, approximately 54 percent of households in Seattle are renters while 46 percent of the households in the city own the home in which they reside.

Figure A-47
Seattle Household Income Distribution; 2019 5-Year Estimates



Source: CHAS tabulations of ACS 2015-2019 5-year estimates, U.S. Census Bureau and HUD.

Household Income Distribution

The distribution of incomes among Seattle households is shown in Figure A-48.

About 36 percent of households have incomes at or below the low-income threshold of 80% of area median income (AMI). Cumulatively, about 53 percent of Seattle's households have incomes at or below 120% of AMI:

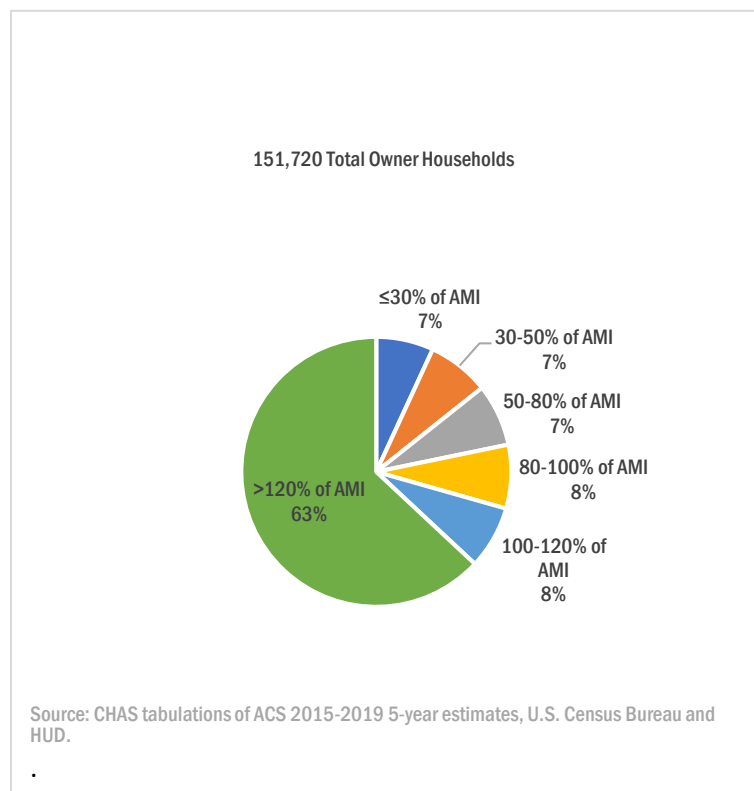
- 15 percent have extremely low incomes ($\leq 30\%$ of AMI),
- 11 percent have very low incomes (30-50% of AMI), and
- 10 percent have low incomes (50-80% of AMI).

Figure A-34, provided in the Housing Needs Projection section of this Appendix, shows incomes associated with various AMI levels. AMI thresholds for Seattle are based on incomes in King and

Snohomish counties combined. As shown in that table, 100% of AMI in 2023 is about \$146,000 for a household of four. (For 2019, 100% of AMI for a four-person household was \$108,600.)³⁰

Figure A-48

Seattle Owner Household Income Distribution; 2019 5-Year Estimates



**HOUSEHOLD INCOME
DISTRIBUTION BY TENURE**

The distribution of household incomes varies by tenure as shown in Figures A-49 and A-50. Compared with owner households, renter households are much more likely to have incomes at or below 80 percent of AMI, with almost half of renter households in this group. Meanwhile, only about one in five owner households have incomes this low.

Contrasts in income patterns between renters and owners are pronounced for the lowest and highest income categories:

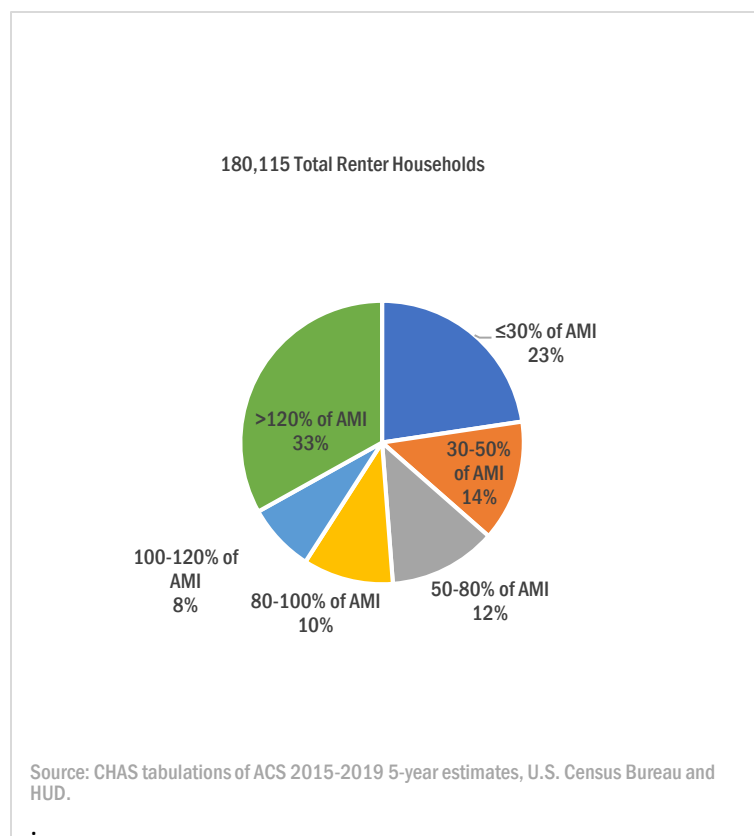
³⁰ HUD publishes [income limits](#) for federally funded programs on their website. To identify income limits for an area, HUD first takes the median family income estimate from the ACS for all area families and adjusts that using an inflation projection (because the income limits for each year must be published before ACS data are available for that year are available.) HUD designates the area median family income as applying to four-person families in the area, then makes a series of further adjustments for household size and AMI percentages using administratively determined formulas.

The income thresholds specified for the CHAS tabulations do not require applying an inflation projection and therefore vary somewhat official income limits., HUD does not publish the CHAS income thresholds but describes the methodology for producing them in "[Measuring Housing Affordability](#)," by Paul Joice, HUD, *Cityscape: A Journal of Policy Development and Research*, Volume 16, Number 1, 2014.

Both the federal income limits and the CHAS income thresholds can vary from actual income patterns within communities.

- 22 percent of renter households compared to 7 percent of owner households have incomes at or below 30% of AMI, while
- 33 percent of renter households compared to 63 percent of owner households have incomes above 120% of AMI.

Figure A-49
Seattle Renter Household Income Distribution; 2019 5-Year Estimates



TRENDS IN HOUSEHOLD INCOME DISTRIBUTION

To highlight trends in Seattle households' incomes over time, Figure A-51 compares estimates from the 2019 5-year CHAS with older data from the 2010 5-year CHAS.

Incomes in Seattle have become more polarized.

- This includes a substantial increase in the share of households who have high incomes (over 120% of AMI) coupled with a decrease in the share of households with incomes ranging from 50% of AMI to 120% of AMI.
- The biggest proportional decrease was in the 50-80% of AMI category. This was also the only income band with declines in the *number* of households. There was a net loss of nearly 5,000 households in this income band.

Several factors likely contributed to the polarization in Seattle incomes. These include growth in jobs in high-wage fields along with challenges faced by low- and moderate-income households, particularly households with incomes of 50-80% of AMI, in competing for housing with higher income households.

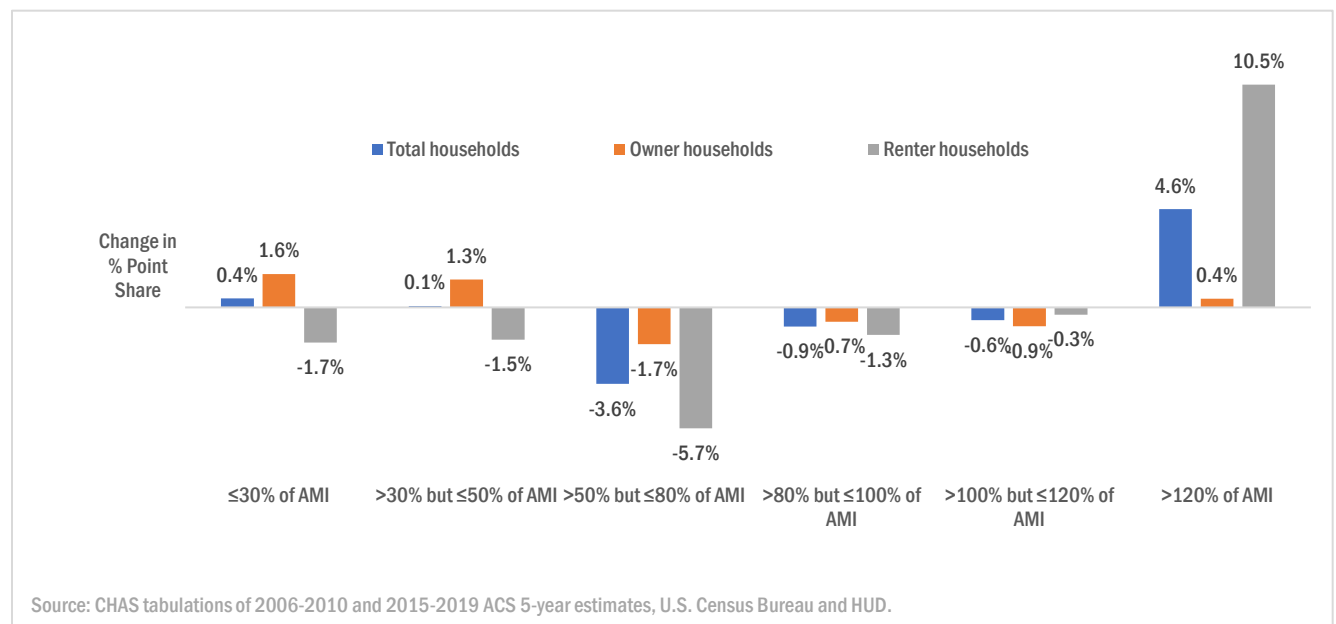
Changes in income distribution were driven mainly by shifts in the income profile of renter households.

- Notably, these shifts included a nearly 11 percentage point increase in the share of renter households with incomes above 120% of AMI—an increase that translates into a net addition of 27,000 high-income renter households.

- There was also a sizeable decline in the share and number of renter households with incomes of 50-80% of AMI.

Although there were declines in the proportions of renter households in the lowest income categories, the city saw increases in the numbers of these renter households, with the net addition of roughly 6,000 renter households with incomes of 0-30% of AMI and 3,000 renter households with incomes of 30-50% of AMI. Seattle’s investment in subsidized housing was likely a factor keeping the number of Seattle renter households with extremely and very low incomes from decreasing in the face of extreme competition and supply challenges these households face in the housing market.

Figure A-50
Change in Seattle Household Income Distribution
2010 5-Year Period to 2019 5-Year Period



Housing Cost Burden

A broadly used standard considers housing costs that consume 30 percent or less of a household’s income to be affordable. Based on this standard, HUD considers households cost-burdened if they spend more than 30 percent of their income on housing costs and severely cost-burdened if they spend more than 50 percent.

Housing is the single largest expense for most households. Households with unaffordable housing costs, particularly those in low-income categories, may not have enough money left over to pay for other essential needs or to make investments that can improve their long-term economic well-being.

An estimated 32 percent of all households in Seattle are cost burdened. That translates into more than 107,000 Seattle households shouldering unaffordable housing costs. Of these, close to 50,000 households are severely cost-burdened and at especially high risk of housing insecurity.

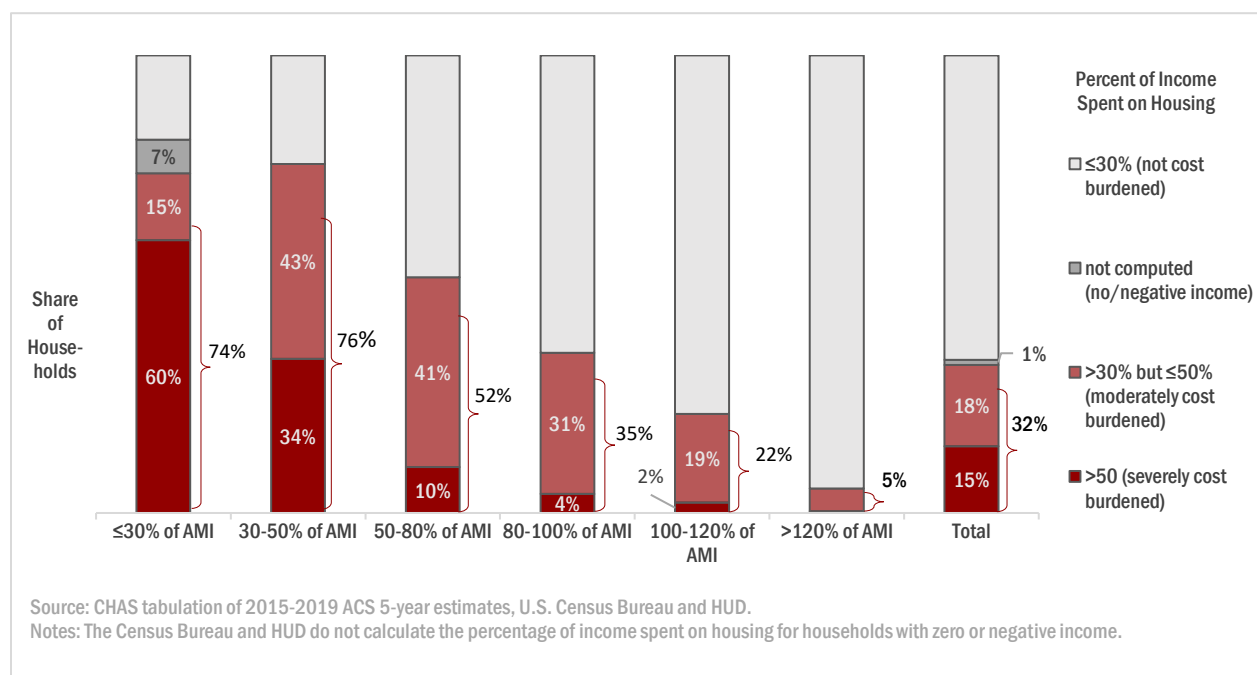
COST BURDEN BY HOUSEHOLD INCOME CATEGORY

As Figure A-52 shows, low-income households are much more likely to shoulder unaffordable housing costs than are moderate-income households, who in turn are more likely to be cost burdened than higher-income households.

- Roughly three-quarters of households in extremely low (0–30% of AMI) and very low (30–50% of AMI) income categories are cost burdened. Six in ten households with extremely low incomes, and more than a third of households with very low incomes, spend more than half of their income on housing. Severely cost-burdened households in these very low- and extremely low-income bands are especially vulnerable to displacement and homelessness.
- Although the prevalence of severe cost burden drops substantially for subsequent income categories, more than half of 50–80% AMI households are cost burdened.
- Substantial fractions of households are cost burdened even within income ranges between 80% and 120% of AMI: 1 in 3 households in the 80–100% of AMI band and approximately 2 in 10 households in the 100–120% of AMI band are cost burdened.

Figure A-51

**Prevalence of Housing Cost Burden by Household Income Category
2015-2019 5-Year Period**



COST BURDEN BY HOUSEHOLD INCOME CATEGORY AND TENURE

In general, renter households are substantially more likely than owner households to be housing cost burdened.

- About 40 percent of renter households are cost burdened, while a lower but still sizable 23 percent of owner households are cost burdened.
- Roughly 19 percent of renter households are shouldering severe cost burden compared to 10 percent of owner households.

These differences are largely correlated with the facts that a) renter households generally have lower incomes than owner households and b) lower income households are more likely to be cost burdened. Furthermore, in terms of sheer numbers, the largest groups of cost-burdened households are found among low-income renters. More than half of all cost-burdened households in the city are renter households with incomes no higher than 80% of AMI. Three-quarters of severely cost burdened households are renters with incomes at or below 50% of AMI.

That said, owner households within some income categories are as likely or more likely to be cost burdened than renter households within those income categories. This is the case for owners with incomes at or below 30% of AMI and owners in the 80-120% of AMI income categories. The former category may include fixed-income owner households struggling with property taxes while the latter may largely reflect households who stretched to become homeowners.

TRENDS IN HOUSING COST BURDEN

As previously described, the CHAS data set for the 2015-2019 5-year period shows roughly 32 percent of Seattle households as cost burdened; this is lower than the 38 percent share estimated based on the CHAS data for the 2006-2010 5-year period. This decline was driven primarily by a reduction in cost burden among owner households with incomes of 50% of AMI and above. Contributing factors likely included the opportunity between 2010 and 2019 that many had to refinance or secure new mortgages with interest rates lower than historical averages and possibly the tighter credit standards that existed in the wake of the Great Recession.³¹ (The trend toward lower prevalence of cost burden may change as a result of more recent increases in interest rates.)

In comparison, the prevalence of cost burden among renter households decreased among those with incomes no higher than 30% of AMI but rose for those with incomes between 50% and 100% of AMI. The reduced prevalence of cost burden among extremely low-income renter households may stem from

³¹ See article in the *Seattle Times*, "[The share of 'cost-burdened' Seattle households has fallen. Here's why](#)," Gene Balk, Oct. 14, 2022. Additional references: "[A Decade After the Recession, Housing Costs Ease for Homeowners](#)," Christopher Mazur, U.S. Census Bureau, November 04, 2019; and [U.S. Housing Cost Burden Declines Among Homeowners but Remains High for Renters](#), Matthew Martinez and Mark Mather, Population Resource Bureau, April 15, 2022

help that programs provided to address housing needs among the lowest income households as well as reduced unemployment rates associated with recovery from the Great Recession.

Despite declines in the *prevalence* of cost burden between these periods, the estimated *number of households* experiencing cost burden increased: this included an increase of roughly 1,600 owner households with cost burden and a substantial increase of about 11,500 renter households with cost burden.

Overcrowding

The CHAS data also allow us to look at the prevalence of overcrowding in homes. HUD defines overcrowding as more than one person per room.³²

Overcrowded housing has long been associated with increased risks of infection from communicable disease. More recently, researchers found that living in overcrowded housing likely increased the risks of COVID-19 mortality.³³ Harmful impacts of overcrowding are not limited to physical health. For example, studies have found that children residing in crowded housing experience more social conflicts at home and worse educational outcomes.³⁴

About 3.5 percent of all Seattle households live in overcrowded housing. However, rates of overcrowding vary by tenure, household type, and income. Living in overcrowded conditions is more common among renter households (5.5% overcrowded) than among owner households (1.2% overcrowded). An estimated 19 percent of Seattle families with incomes at or below 80% of AMI are in overcrowded housing. The rate of overcrowding is also relatively high for households comprised of multiple families; an estimated 16 percent of such households in Seattle are in overcrowded dwellings.³⁵

Overcrowding is one signal that the market is not providing enough adequately sized units that individuals and families can afford. However, these data provide an incomplete picture of such gaps given that households may avoid overcrowding within a city that has a shortage of affordable and adequately sized units by locating elsewhere in the region.

³² The rooms accounted for in this measure include living rooms, dining rooms, kitchens, bedrooms, and other types of rooms such as finished recreation rooms; excluded are bathrooms, hallways, open porches, and some other spaces.

³³ Varshney K, Glodjo T, Adalbert J. [Overcrowded housing increases risk for COVID-19 mortality](#): an ecological study. BMC Res Notes. 2022 Apr 5;15(1):126. doi: 10.1186/s13104-022-06015-1. PMID: 35382869; PMCID: PMC8981184.

³⁴ The California Department of Public Health's Office of Health Equity summarizes evidence on the adverse effects of overcrowding in the this document from their [Healthy Communities Data and Indicators Project](#).

³⁵ Households with multiple families can be comprised of either a family and at least one subfamily or more than one family. Given the relatively small number of multiple-family households in Seattle and the limited sample upon which CHAS estimates are based, further disaggregation of estimates for this group would likely be unreliable.

Household Disparities by Race and Ethnicity

This section of the Housing Appendix examines disparities by race and ethnicity based primarily on 5-year CHAS data for the period 2015-2019. This analysis is foundational to the City's goal of achieving more equitable housing outcomes through the Comprehensive Plan update.

An important consideration for viewing these data is that the broad racial and ethnic categories in the CHAS tabulations can mask significant differences in housing needs within these groups. Notably, while incomes and housing-related wellbeing generally show Asians faring better than other groups of color, more disaggregated data show that Vietnamese and other Southeast Asian subpopulations tend to be more disadvantaged on these indicators.³⁶

Another consideration is that the CHAS data presented predate the COVID-19 pandemic, which exacerbated affordable housing struggles. The Census Bureau's Household Pulse Survey responses in the Seattle metro area show households of color, households with lower incomes, LGBTQ persons, and disabled persons disproportionately likely to have experienced associated reductions in earnings and difficulty making payments for rent and mortgages.³⁷

Disparities in Homeownership Rates

As described in Seattle's Equitable Development Community Indicators Report,³⁸ owning a home is the most common way for households to build and pass on wealth. Although purchasing a home entails financial risk, homeownership generally tends to be associated with greater long term housing stability. For example, in gentrifying areas, homeowners are about half as likely to be displaced as are renters.³⁹

Reduced chances for people of color to access and sustain homeownership due to institutionalized racism and discrimination have contributed to an intergenerational legacy and ongoing cycle of diminished economic prospects for these members of our community. Programs to make purchasing a home possible for low-income households can help interrupt such intergenerational cycles and put families on paths to greater economic security. Affordable rental housing also plays a role in making homeownership ownership a possibility for a greater diversity of households as people who are stretched to pay their rent will not be able to save for downpayment on purchase of a home.

³⁶ While not tailored for examining housing needs in the same way that CHAS tabulations are, the [ACS Selected Population Tables and the American Indian and Alaska Native Tables](#) include many socio-economic and housing tabulations iterated for more detailed population groups.

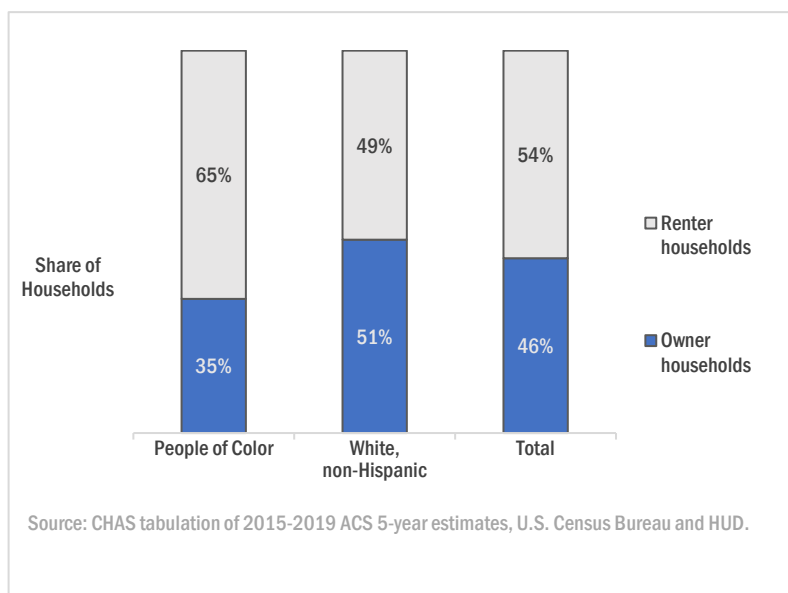
³⁷ [Tracking COVID-19's Effects by Race and Ethnicity: Questionnaire One | Urban Institute](#); Economic, social, and overall health impacts dashboard on [Housing security](#), Public Health—Seattle & King County.

³⁸ City of Seattle Office, [Equitable Development Community Indicators Report](#), 2021. See pages 22 to 26 for analysis on [homeownership](#).

³⁹ Martin, I. W., and K. Beck. 2018. [Gentrification, property tax limitation, and displacement](#), *Urban Affairs Review*, 54(1), 33-73.

Figure A-52

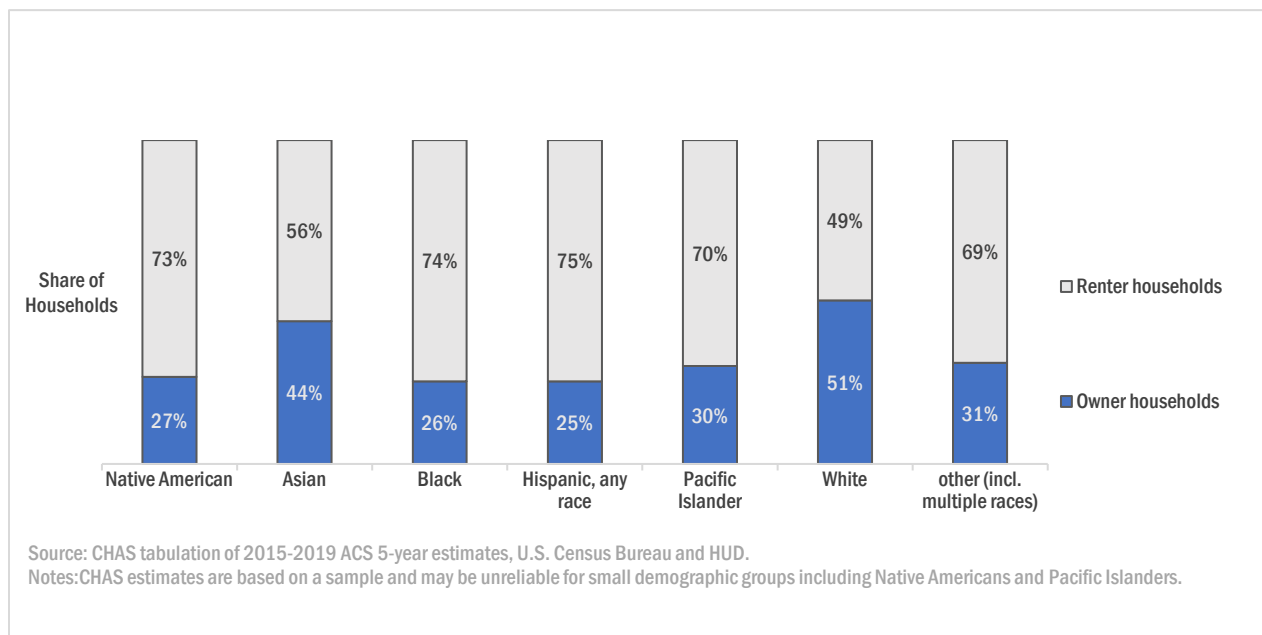
Tenure by Race and Ethnicity of Householder; 2015-2019 5-Year Period



Homeownership is much less common for Seattle's households of color than for the city's white households. Figure A-53 shows that a little over a third of households of color living in Seattle own their home compared to slightly over half of white households.

Figure A-53

Tenure by Race and Ethnicity of Householder; 2015-2019 5-Year Period

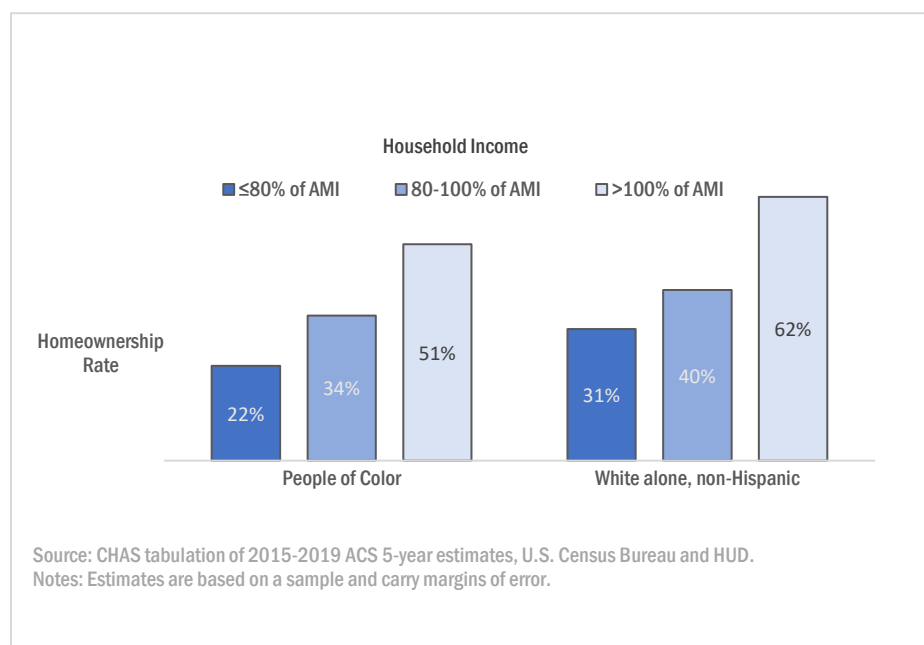


Owning the home in which one lives is uncommon for most groups of color. Figure A-54 shows that fewer than one-third of Hispanic/Latino, Native American, Black, and Pacific Islander householders in Seattle are estimated to own their home.⁴⁰

As shown in Figure A-55, even when controlling for income, people of color are less likely to own their home. Household and generational wealth, which tends to be distributed even more inequitably than income, is a major driver in who can afford to purchase and maintain homeownership.

Figure A-54

Homeownership Rates by Household Income and Race/Ethnicity; 2015-2019 5-Year Period



Homeownership rates among people of color have declined in Seattle over recent decades. Comparing estimates from the 1990 decennial Census and the 2019 5-Year CHAS data finds that homeownership rates in Seattle declined by roughly 5 percentage points for households of color but only by roughly 1 percentage point for white households. During

this period, Seattle saw an especially steep decline in homeownership among Black households with the rate declining by roughly 11 percentage points (from 37 percent as estimated in the 1990 Census to 26 percent as estimated in the 2019 5-year CHAS dataset).⁴¹

⁴⁰ CHAS data (and other ACS data) for households categorizes the race and ethnicity of the household based on that of the householder. Other members of a household may not share the same racial and ethnic characteristics as the householder.

⁴¹ Some caution is needed in comparing race and ethnicity crosstabulations between the 1990 Census and more recent Census Bureau surveys given that the Census Bureau questionnaires did not enable respondents to select multiple races until the year 2000. (For the more recent estimates reported, we group all multiracial persons, including persons who identified white as one of

The long-term decline in the Black homeownership rate reflects both increasing shares of Seattle's Black residents who are immigrants with low homeownership rates and dramatic declines in the homeownership rates among U.S.-born Black householders. The decrease in Black homeownership in Seattle is also linked to broader trends in the U.S. including those from the lingering effects of the Great Recession's foreclosure crisis, continued discrimination in lending, rising student loan debts, and various barriers that confront would-be first-time buyers in expensive markets.⁴² It is also likely the case that many Black homeowners have left Seattle to purchase homes or rent in communities outside of Seattle.⁴³

Disparities in Household Income

Household income distribution in Seattle is marked by wide disparities by race and ethnicity despite Seattle's status as a major economic hub and generator of wealth for businesses and individuals in the region.

As shown in Figure A-56:

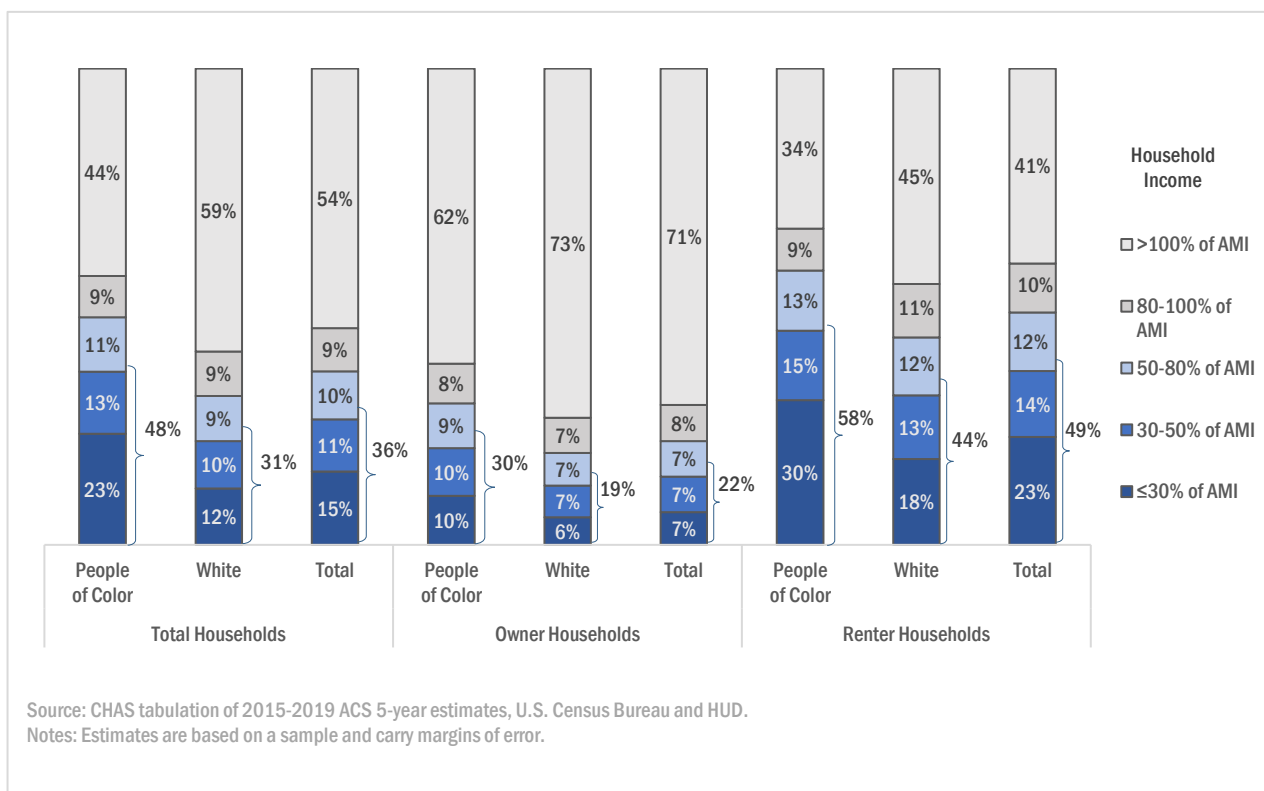
- Close to half of households of color have incomes at or below the 80% of AMI low-income threshold. In contrast, less than a third of white households have incomes below this threshold.
- At 30 percent, the proportion of owner households of color who have low incomes is substantially higher than the proportion of white owner households with low incomes.
- A sizeable majority (58 percent) of renter households of color are living with incomes no higher than 80% of AMI; the proportion of white renter households with incomes at or below 80% of AMI is not nearly as high but is still substantial (44 percent).

their races, as persons of color; this was not possible for the 1990 estimates.) That said the declines in homeownership rates for households of color and for Black households are so large that they dwarf the issues associated with comparability.

⁴² City of Seattle OPCD, [Equitable Development Community Indicators Report](#), 2021, p. 23; and "[The 'heartbreaking' decrease in black homeownership](#)," *Washington Post*, February 28, 2019.

⁴³ In the last three decades, the homeownership rate among Black households declined in both Seattle and the remainder of King County. Over the same period, the *number* of Black owner households decreased in Seattle but increased in the remainder of King County. The number of Black renter households also increased at a greater rate in the remainder of the county than in Seattle.

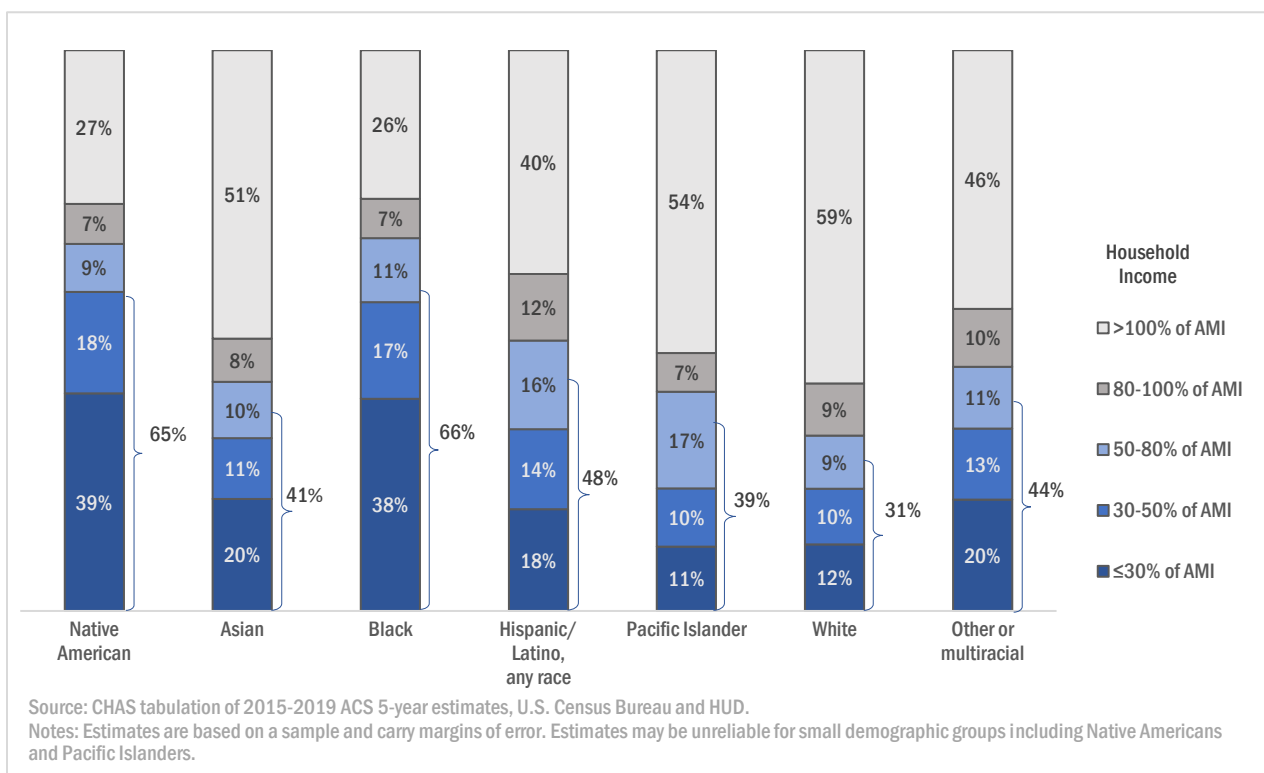
Figure A-55
Household Income Patterns by Tenure and Race/Ethnicity
2015-2019 5-Year Period



The subsequent chart, Figure A-57, shows household income distribution for each of the racial and ethnic groups for which the CHAS data provides tabulations.

- The low-income share of households is greater among every group of color than it is among white households.
- Native American households and Black households are most likely to have low incomes, with close to two-thirds of both groups having incomes at or below 80% of AMI. Nearly half of Hispanic or Latino households have incomes this low.

Figure A-56
Household Income Patterns by Race/Ethnicity of Householder
2015-2019 5-Year Period



Disparities in the Prevalence of Housing Cost Burden

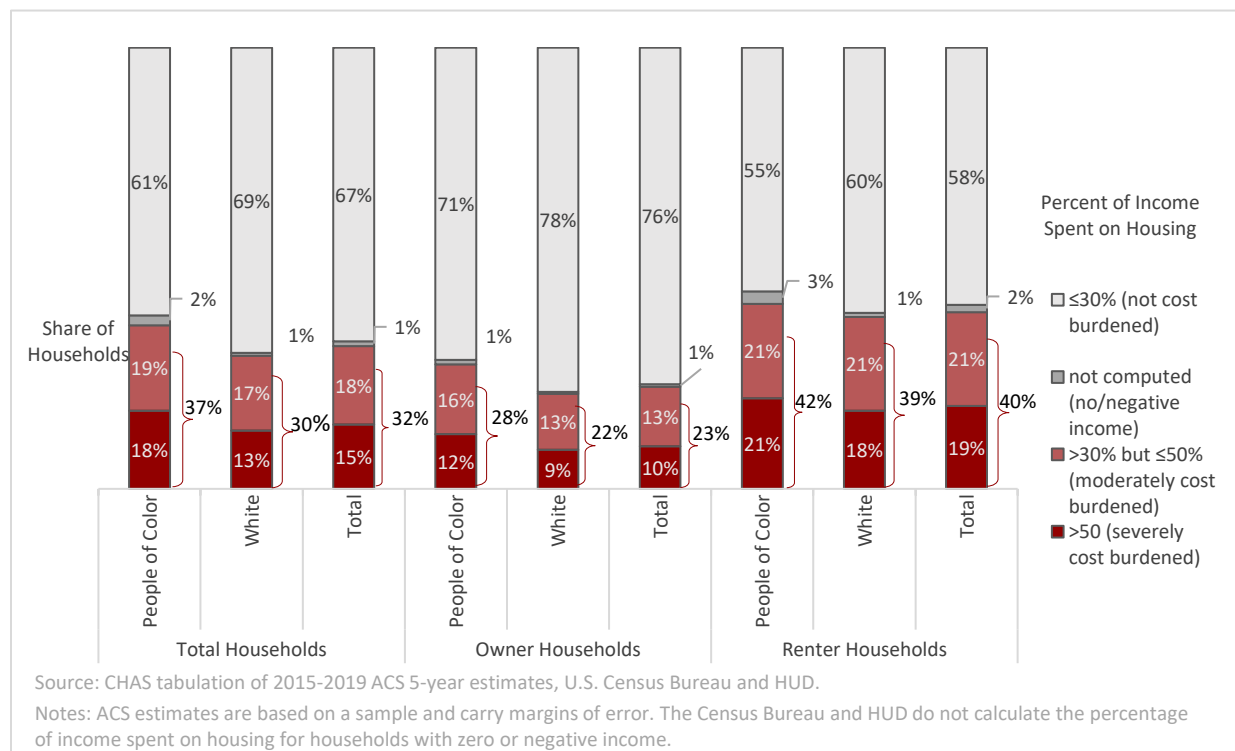
Housing cost burden falls disproportionately on households of color; this applies when looking at owner households, renter households, and households overall.

As shown in Figure A-58, 37 percent of households of color are moderately or severely cost-burdened compared with 30 percent of white, non-Hispanic households. About 18 percent of householders of color are severely cost-burdened, compared to roughly 13 percent of white, non-Hispanic households. At an estimated 42 percent the share of renter households of color who are shouldering unaffordable housing costs is slightly higher than the estimated 39 percent of white, non-Hispanic renter households with unaffordable housing.

While cost burden is less common for owner households than renter households, racial disparities are more pronounced among owner households. Twenty-eight percent of owner households of color are cost burdened compared to twenty-two percent of renter households of color.

Figure A-57

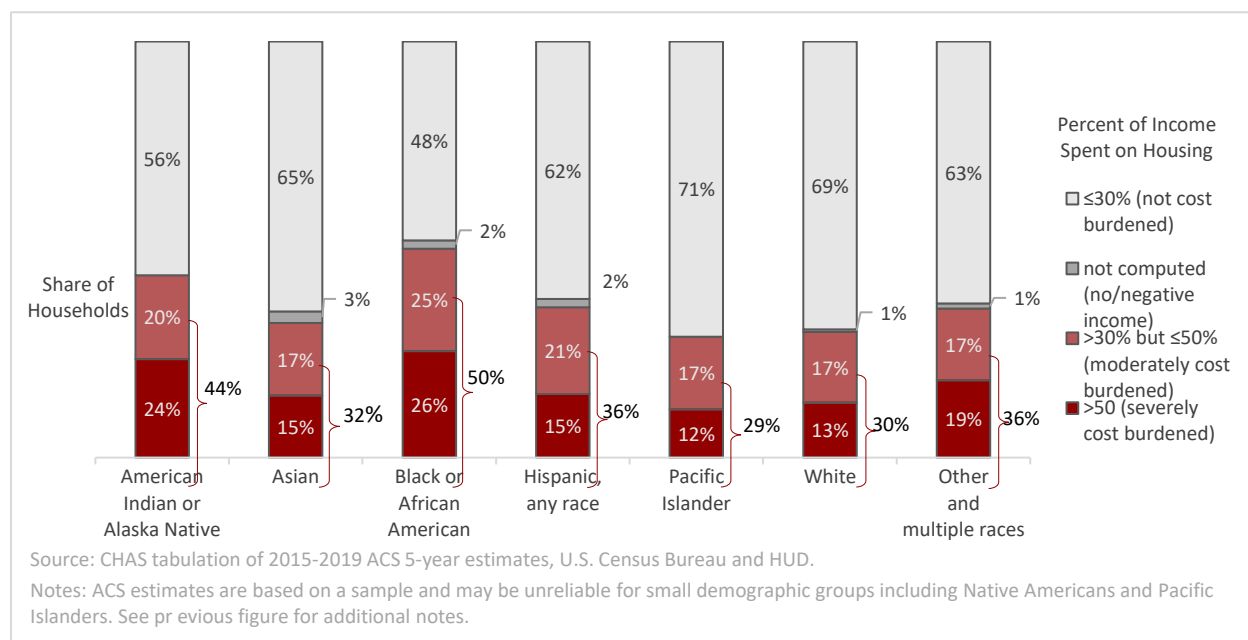
Prevalence of Housing Cost Burdens by Tenure and Race and Ethnicity 2015-2019 5-Year Period



Examining estimates for individual racial and ethnic groups in Figure A-59 finds a disproportionately common experience of cost burden for almost every group of color. That said, substantial variation exists in rates of cost burden among groups of color, with Black households and Native American households

more commonly impacted. The highest estimated prevalence is found among Black households, about half of whom are cost burdened—and roughly a quarter severely so.⁴⁴

Figure A-58
Prevalence of Housing Cost Burden by Race and Ethnicity
2015-2019 5-Year Period



⁴⁴ CHAS estimates can be unreliable for Pacific Islanders and other small populations in Seattle. Looking at the broader Seattle Metro Area provides more statistically reliable estimates and suggests this group is likely disproportionately cost burdened. About 35 percent of Pacific Islander households are cost burdened compared to 29 percent of White households.

Household Sizes, Types, and Needs

The household sizes, types, and needs in a community reflect a variety of demographic and social factors including but not limited to the age and cultural profile of the population; the time in life when young adults form new households; patterns associated with cohabitation, marriage, and divorce; birth rates; and norms associated with supporting elders.

Household sizes are also sensitive to economic and housing market conditions and are shaped by the opportunities and constraints in the existing local housing supply. The prevalence of small units in recent housing production within Seattle, which is detailed in the Housing Supply and Market Analysis section, is an important factor contributing to the size and composition of households that reside in the city.

Household Size and Type

As defined by the Census Bureau, a household includes the householder (someone whose name is on the lease or mortgage) along with anyone else occupying the housing unit as their usual residence.

One way the Census Bureau describes households is whether the household is a family household—households of at least two people where one or more persons is related to the householder by birth, marriage, or adoption—or a non-family household.

As shown in Figure A-60 roughly 43 percent of households in Seattle are family households. About 21 percent of households (and nearly half of family households) are married couple

households without own children under 18. About 17 percent of households are family households with an own child under age 18; about three in four households with own children are married-couple households. About 5 percent of households contain other configurations of families.

Figure A-59
Household Types and Sizes in Seattle, 2020

	Count
Total households	345,627
	Percent
HOUSEHOLD TYPE	
Family households:	43.0%
Married couple with no own children	21.2%
Families with own children under 18:	16.9%
Married couple with own children	12.7%
Cohabiting couple with own children	0.9%
One-parent household with own children	3.3%
Other family household	4.9%
Nonfamily households:	57.0%
Householder living alone	40.8%
Cohabiting couple	9.2%
Other nonfamily with 2 or more persons	7.0%
PRESENCE OF CHILDREN AND OLDER ADULTS	
With one or more people under 18	17.9%
With one or more people 65 years and over:	19.1%
Householder 65 years and over living alone	8.9%
HOUSEHOLD SIZE	
1 person	40.8%
2 persons	34.8%
3 persons	11.6%
4 persons	8.6%
5 or more persons	4.2%
	Estimate
AVE. NUMBER OF PERSONS PER HOUSEHOLD	2.05
Source: U.S. Census Bureau 2020 Census.	
Notes: Own children are biological, adopted, or stepchildren of the householder.	

In Seattle, family households are outnumbered by nonfamily households. Individuals living alone make up a large majority of nonfamily households and 41 percent of the city’s households overall. The balance of nonfamily households includes cohabiting couples and roommate households.

For broader context, the average size of households in the city is 2.05, compared to 2.65 in the remainder of King County and 2.55 nationally. Decennial census data for Seattle have been recording a downward, albeit slowing, trend in average household size for decades, consistent with trends in the U.S. in which people have waited longer to have children and the baby boom has aged. In Seattle, the average number of people per household decreased slightly from 2.06 in 2010 to 2.05 in 2020.⁴⁵

Notably, average household size in King County outside of Seattle followed a different path— *increasing* rather than decreasing during each of the last two decades. The combination of Census data and observations from community stakeholders suggests that divergence in household size trends between Seattle and the rest of King County is partly a function of larger households experiencing increasing difficulty finding units that are affordable and large enough in Seattle to meet their needs. Not only do housing units average fewer bedrooms in Seattle than in the remainder of King County, but this difference in average unit sizes has been widening. From 2008 to 2021, the average number of bedrooms per housing unit declined in Seattle from about 2.21 to 2.05, while remaining at roughly 2.81 bedrooms per unit in the remainder of King County.⁴⁶

Housing Needs of Selected Household Types

In this section, we discuss housing needs of households with older adults, households with children, and multigenerational households as addressing the needs of these households involves challenges that will require especially thoughtful planning and action.

HOUSING NEEDS OF HOUSEHOLDS WITH OLDER ADULTS

About 19 percent of Seattle’s households include one or more persons aged 65 or over, and close to half of these are older adults living alone. With the aging of the baby boom population, the share and number

⁴⁵ ACS data show that average household size locally and nationally reached a short-term peak between 2010 and 2020. A January 2023 blog post published by the Harvard Joint Center for Housing Studies, [The Surge in Household Growth and What It Suggests About the Future of Housing Demand](#), indicates that at the national level, the main contributor was a delay—exacerbated by affordability challenges—in millennials’ rate of household formation.

⁴⁶ These are rough calculations; we were not able to calculate an exact average using the ACS tables readily available because these tables lumped all units with 5 or more bedrooms into one category.

of households with older adults will increase as will the demand for housing that is accessible for older adults and convenient to services.

Many seniors will be aging in place, while others will downsize to a smaller housing unit, move into units in a retirement or assisted living community, while others—especially in their advanced years—will need care in a skilled nursing facility. A growing number of seniors will need in-home services and accessibility features as well as assistance with home repairs and yard care services. Those who have low incomes will need help paying for such services and require discounts on property taxes.

The aging of the baby boom is also likely to drive Seattleites' already strong demand for accessory dwelling units even higher.

HOUSING NEEDS OF HOUSEHOLDS WITH CHILDREN

Living in a home with sufficient space is one of the housing related factors important for children's wellbeing.⁴⁷ While housing with two or more bedrooms can be suitable for small families with children, three or more bedrooms are important for accommodating larger families.

The availability of suitably sized units is an important factor influencing where children live. The availability of affordable multi-bedroom housing, in both rental and ownership housing, is necessary for families of a variety of economic means to live in Seattle. Families of color and immigrant families tend to be larger⁴⁸ and generally have incomes that are lower⁴⁹ than other families. These, and other considerations, make the availability of affordable multi-bedroom housing in a community a key condition for racial equity.

⁴⁷ Solari CD, Mare RD. [Housing crowding effects on children's wellbeing](#). Soc Sci Res. 2012 Mar;41(2):464-76. doi: 10.1016/j.ssresearch.2011.09.012. Epub 2011 Oct 15. PMID: 23017764; PMCID: PMC3805127.

⁴⁸ In Seattle, per the 2021 ACS 5-Year estimates, the average size of all families (not just families with children) is 2.82. For those with householder of color, it is 3.30, compared to 2.58 for families with a white householder. For families with an immigrant householder, it is 3.08 compared to 2.74 for families with a non-immigrant householder. (Some family households include nonrelatives as well as relatives,

⁴⁹ In Seattle, the poverty rate for families with a related child of the householder is 7.2%. Looking at subsets of these families finds a 15.1% poverty rate for families with a householder of color compared to a poverty rate of just 3.1% for those with a white householder; and 13.8% for families with an immigrant householder compared to 5.0% for those with a non-immigrant householder,

The neighborhood location of these units is a key racial and social equity consideration, as rates of upward economic mobility and a range of outcomes in adulthood, are affected by the characteristics of the neighborhoods in which people lived when they were children.⁵⁰

HOUSING NEEDS OF MULTIGENERATIONAL HOUSEHOLDS

Multigenerational households are those in which there are two or more generations besides or in addition to a parent and one or more of their children under the age of 18. Examples are grandparents living with grandchildren, adult children living with parents, and households where there may be three or more generations.

Housing that can accommodate multiple generations is important for many cultural groups in Seattle. With the aging of the baby boom generation and the increasing cost of housing, broader demand for housing suitable for multiple generations is also likely to increase.

Multigenerational households currently make up about 8 percent of households in Seattle and 15 percent of households in King County as a whole.⁵¹ At 3.53 persons in Seattle and 3.83 in King County, multigenerational households also have significantly higher average household sizes than other households. The housing units in which these households live are also larger, with more than 3 bedrooms on average for both Seattle and King County. The relatively low share of large multi-bedroom units in Seattle plays an important role in the lower rates of multigenerational households within Seattle.

Households of color are more likely to live in a multigenerational household than are white households. The groups with the highest rates of multigenerational living in Seattle and King County are Pacific Islanders and Native Americans.⁵²

The need for multigenerational housing has been a strong theme voiced by BIPOC community stakeholders including the sləp̓ləbəx^w Indigenous Planning Group and the Wa Na Wari / CACE 21 team whom OPCD contracted to make recommendations for the Comprehensive Plan. These groups stress the need for more housing that provides opportunities for multiple generations to live with or near each other and that offers accessibility for older family members and outdoor spaces for children to play.

⁵⁰ See [The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility | Opportunity Insights](#), NBER Working Paper by Raj Chetty, et. al., October 2018, and [the non-technical summary here](#).

⁵¹ These estimates for multigenerational households described here are from the ACS 2011 5-Year Public Use Microdata Samples, 2011-2013; IPUMS USA.

⁵² In Seattle, 31 percent of Pacific Islander households and 25 percent of Native American households are multigenerational; respectively, these rates are six times and three times those of the 12.5 percent multigenerational household rate for white households. Households with a Black, Asian, or Hispanic households are roughly one and half to two times as likely than white households to be multigenerational.

Special Housing Needs

This section focuses on populations who have needs for special forms of housing and/or housing paired with special services. This includes people with a special housing need due to a disability or chronic health problem, those who require permanent supportive housing (PSH), those who live in group quarters, and those who have a medical housing need.

While we describe these populations separately, many people may identify with one or more population groups. Thus, these population groups are rather intertwined, sharing varying housing needs specific to the individual person. As these special housing needs are unique, a diverse supply of appropriate, available, and affordable housing is critical to meeting those needs.

Furthermore, many of these special housing needs are also correlated with a person's vulnerability to homelessness. For instance, populations experiencing homelessness are disproportionately more likely to have a disability or chronic health issue. In addition, permanent supportive housing is specifically for people who are at imminent risk of homelessness or who are currently homeless. We further cover emergency and permanent housing for people facing homelessness in the Homelessness section of this Housing Appendix.

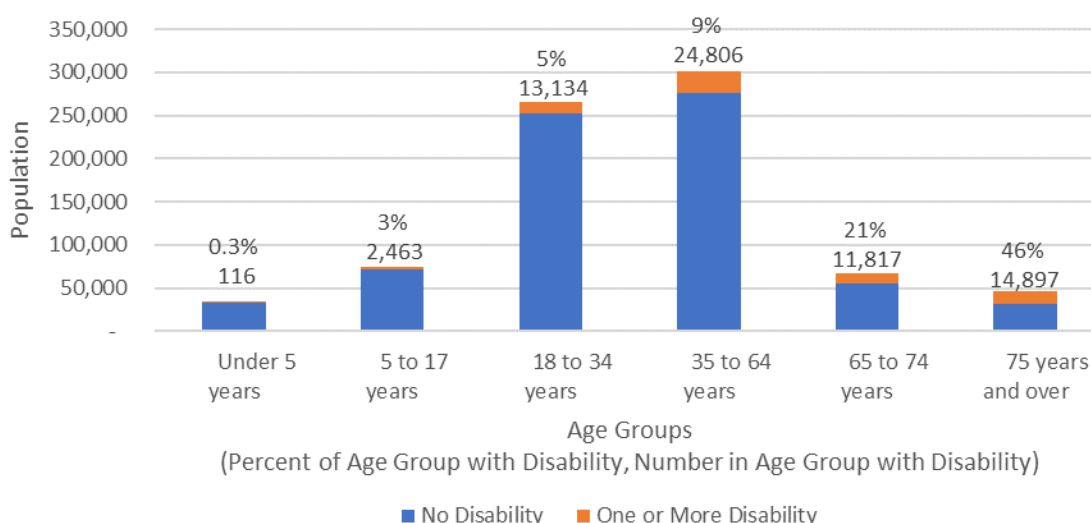
Populations with Disabilities

The ACS collects data on people living with disabilities in four domains: hearing, vision, cognition, and ambulation.⁵³ These data provide important but limited insights into the population in Seattle living with disabilities. Given the ACS's narrow scope of disability questions, the survey underestimates the population living with disabilities and fails to capture the full range of disabilities with which people are living. Researchers note that the ACS particularly underestimates disability due to disabling chronic health conditions and psychiatric conditions.

As shown in Figure A-61, roughly 9 percent of Seattle residents (67,233 people) live with one or more of the ACS-identified disabilities. The share of people living with disabilities greatly increases with age. The largest numerical age group of people living with disabilities is the 35-to-64-year range; however, the largest share of people living with disabilities are people aged 75 and up.

⁵³ The Disability questions in the ACS are shown in this primer from the Census Bureau: "[Why We Ask Questions About Disability](#)."

Figure A-60
Population in Seattle Living with One or More Disability by Age Group



Source: U.S. Census Bureau 5-Year American Community Survey for 2017 to 2021

Further analysis of ACS data provides information about the socioeconomic conditions of households where one or more persons have a disability. According to our analysis, nearly one in five Seattle households had at least one person with a disability in 2021. Figure A-62 demonstrates that households where at least one member is living with a disability are more likely to have lower incomes, with more than half at or below 80% of AMI, and more than a third at or below 50% of AMI. Research shows that lower household incomes are tied to a variety of systemic factors that impact individuals with disabilities, such as barriers to accessible education and employment as well as discrimination.⁵⁴ In addition, if there is a caregiver in the household, those members may take temporary leave or forego work altogether to assist in care. Female members of households are particularly more likely to forego paid work outside the home for unpaid caregiving work at home.⁵⁵

Given their lower incomes, households where someone has a disability are also significantly more likely to spend a high proportion of their income on housing costs, with greater rates of burden. That burden is more acute as many people with disabilities face higher costs of healthcare. Thus, many households are faced with tradeoffs between the costs of housing, other daily needs, and medical care.⁵⁶

⁵⁴ [Disability & Socioeconomic Status Resources](#), a series of study outcomes compiled by the American Psychological Association

⁵⁵ [Caregiving Statistics: Work and Caregiving](#), a series of statistics on informal and formal caregiving from Caregiver.org

⁵⁶ "Medication Adherence and Characteristics of Patients Who Spend Less on Basic Needs to Afford Medications", in Journal of the American Board of Family Medicine. Rohatgi, K., et al. 2021.

Figure A-61
Household Characteristics by Presence of Person with a Disability

	Households where no person has a disability	Households with one or more persons living with a disability	All Households
Household Income			
≤ 80% of AMI	32.2%	52.0%	36.2%
≤ 50% of AMI	18.4%	37.6%	22.3%
Housing Cost Burden			
>30% of income on housing	31.6%	40.6%	33.5%
>50% of income on housing	14.5%	23.2%	16.3%
Sources: U.S. Census Bureau ACS Public Use Microdata Samples, 2017-2021; IPUMS USA. Notes: PUMS data uses areas of approximately 100,000 are not always bound to jurisdictional boundaries. This results in some household data for unincorporated King County, particularly in White Center and Highline, being included in PUMS data. Household AMI level is determined using household income as a proportion of FY2021 area median income estimates, adjusted for household size.			

Populations Needing Permanent Supportive Housing

Permanent Supportive Housing (PSH) combines housing with services that help residents at risk of homelessness remain housed and improve their quality of life. PSH has been shown to benefit residents by reducing instances of medical emergency, homelessness, and incarceration. It is also a critical portion of the housing supply for populations with incomes at or below 30% of AMI. The specific needs of the population requiring PSH vary greatly depending on each person's situation.

Examples of services residents may need include job training, help with finances, transportation, and health care. Services are most effective if culturally appropriate to the residents, such as those being provided to QT2BIPOC (queer, trans, Two-Spirit, Black, indigenous and people of color) households by the Lavender Rights Project and those provided to Native American/Alaska Native households by Chief Seattle Club.⁵⁷

Figure A-34 in the Housing Need Projections section of this Housing Appendix shows that King County's Growth Management Planning Council estimates Seattle will need 20,255 PSH units by 2044. This estimate represents an increase of 15,024 units over the existing 5,231 units Seattle had at the beginning of 2020.

⁵⁷ [Lavender Rights Project and Chief Seattle Club will be joint operators of a 35-unit permanent supportive housing program funded by King County's Health Through Housing](https://www.lavenderrightsproject.org/). For more information about these organizations, visit their webpages: Lavender Rights Project: <https://www.lavenderrightsproject.org/> ; Chief Seattle Club: <https://www.chiefseattleclub.org/>

Several key conditions apply to the services provided to tenants in PSH. Tenants are not required to pay for services, nor is participation in services required to maintain tenancy in a community. Costs associated with services are considered an integral part of building-level operations and maintenance, which is paid for through income-restricted rents and out of subsidies from local, state, or federal governments.

Thus, the growing need for PSH in Seattle will require both a significant increase in income-restricted units at the lowest AMI levels as well as operations and maintenance subsidies to provide services required by residents. However, PSH has also been shown to reduce societal costs through homelessness prevention, particularly in the healthcare, shelter, and justice systems.⁵⁸ The Income-Restricted Housing section of this Housing Appendix further forecasts the available finances and gap in investments to meet the citywide need for PSH in 2044.

Populations in Group Quarters

Many group quarters categories are devoted to serving people who can broadly be regarded as populations with special housing needs. The Census Bureau defines group quarters as “places where people live or stay in a group living arrangement that is owned or managed by an organization providing housing and/or services for the residents.”⁵⁹ The decennial Census includes a tabulation of the population residing in group quarters and is thus one of our most valuable sources in understanding the size of this population.

Figure A-63 shows the 2020 Census enumerated 29,918 people living in group quarters in Seattle. Roughly 25,000 of the persons living in group quarters were counted in noninstitutional facilities while about 4,900 of the group quarters population were counted in institutional facilities, primarily in nursing facilities. Persons aged sixty-five and over made up a large majority of the nursing facilities population.

College/University student housing was the largest non-institutional category, with nearly 16,000 people. In addition, the 2020 Census counted 3,300 people under “other noninstitutional facilities” like soup

⁵⁸ “[Supportive Housing Helps Vulnerable People Live and Thrive in the Community](#).” Center on Budget and Policy Priorities. Dohler, et al. 2016.

⁵⁹ For more about the ways the Census Bureau collects and reports data on group quarters, see “[2020 Census Group Quarters](#),” U.S. Census Bureau blog post, March 16, 2021; and for detailed group quarters subject definitions see pages B-15 to B-20 in “[2020 Census Demographic and Housing Characteristics File \(DHC\) Technical Documentation](#),” prepared by the U.S. Census Bureau, Washington, DC, 2023.

kitchens and domestic violence shelters. Many people counted in “other noninstitutional facilities” may have been experiencing homelessness during the census.⁶⁰

The population in group quarters does little to tell us about the demand for these living situations. Rather, it tells us only the number of people who are living in group quarters currently, many of which operate at capacity due to high demand. Despite these limits, key takeaways for group quarters include the following:

- Growth over the last decade has been concentrated in the population in nursing homes (from 2,588 to 3,476), group homes intended for adults (from 1,387 to 2,557), and college dormitories (from 11,804 to 16,318).
- Group quarters populations in carceral facilities shrank from 2010 to 2020, which may reflect moves from facilities inside Seattle to those outside Seattle, changes in incarceration policies, and COVID-19 related early releases that occurred during the 2020 Census. In addition, King County has set forth a Roadmap to Zero Youth Detention, with the 2025 goal of eliminating youth detention in favor of a public health approach for youth.⁶¹
- The population in residential treatment centers also fell between 2010 and 2020. This may be in part due to COVID-19, which temporarily limited capacity in some facilities due to social distancing needs and labor shortages, but also reflects due to permanent closures of residential treatment centers that have occurred in Seattle⁶² and across King County.⁶³ This comes at a time when there have been notable increases in demand for mental and behavioral health residential treatment centers, which culminated in King County voters approving a levy in 2023 to develop five new residential treatment centers.⁶⁴

⁶⁰ However, a specific count of persons experiencing homelessness is not reported in the decennial census, and even though the Census Bureau [attempted to include these persons in the 2020 Census](#), the data that we have on the unhoused population from other sources, as described in Homelessness of this Housing Appendix indicates very incomplete coverage of this population in the 2020 Census.

⁶¹ [“Roadmap to Zero Youth Detention”](#). King County.

⁶² [Closure of El Rey, a residential treatment facility in Belltown](#). Written by Seattle Times reporter Sydney Brownstone, October 2020.

⁶³ [“Where did King County’s mental health beds go?”](#) Written by Seattle Times reporter Hannah Furfaro, February 2023.

⁶⁴ [“Voters approve King County’s crisis center levy.”](#) Written by Seattle Times reporter Michelle Baruchman, April 2023.

Figure A-62
Seattle Group Quarters Population

	2010 Census				2020 Census			
	<18	18 to 64	65 and Up	Total	<18	18 to 64	65 and Up	Total
Total Population in Group Quarters:	700	21,329	2,896	24,925	629	24,798	4,491	29,918
Institutionalized population in Group Quarters								
Total	198	2,502	2,204	4,904	225	1,336	3,352	4,913
Institutionalized population in Correctional Facilities for Adults:								
State Prisons	-	-	-	-	-	85	2	87
Local Jails	-	1,527	14	1,541	-	741	2	743
Correctional Residential Facilities	-	450	-	450	2	170	11	183
Institutionalized population in Juvenile Facilities:								
Group homes	48	10	-	58	122	18	-	140
Residential Treatment centers	57	-	-	57	9	12	-	21
Correctional facilities for juveniles	90	-	-	90	25	5	-	30
Nursing/Skilled-nursing facilities	-	449	2,139	2,588	-	227	3,249	3,476
Institutionalized population in Other institutional facilities:								
Psychiatric hospitals or units	1	48	4	53	25	64	67	156
Patient in hospital with no home	2	-	-	2	40	2	-	42
In-patient hospice facilities	-	18	47	65	2	12	21	35
Non-institutionalized population in Group Quarters								
Total	502	18,827	692	20,021	404	23,462	1,139	25,005
College/University student housing	71	11,733	-	11,804	64	16,254	-	16,318
Military quarters, barracks, or ships	-	362	-	362	8	398	2	408
Emergency and transitional shelters with sleeping facilities	227	2,208	115	2,550	104	1,875	140	2,119
Group homes intended for adults	7	1,054	326	1,387	42	1,831	684	2,557
Adult Residential treatment centers	5	619	13	637	2	322	48	372
Maritime/merchant vessels	-	305	2	307	-	134	-	134
Workers' group living quarters	5	41	24	70	3	23	8	34
Other non-institutional facilities*:	187	2,505	212	2,904	185	2,824	258	3,267
Source: U.S. Census Bureau, decennial Census 2010 & 2020, Table P18								
*Soup kitchens, religious group quarters, domestic violence shelters, scheduled mobile food vans, targeted non-sheltered outdoor locations, living quarters for victims of natural disaster								

Populations with Housing-Associated Medical Services Needs

There are several kinds of situations in which a person's medical care needs are paired with their housing need. These situations often involve people who need a change in their housing situation to accommodate their medical need. Populations who require medical services and have a housing need include, but are not limited to:

- hospitalized people who would otherwise face homelessness upon release,
- hospitalized people awaiting admission to another facility,
- people who face homelessness and require medical respite care,
- people staying in temporary or long-term medical facilities, and
- home-bound people who require home health services.

Having appropriate and available forms of medical services paired with housing is critical for improving this system. Skilled nursing and long-term care facilities are notable examples of the provision of housing with medical care, as are types of behavioral health facilities and substance use treatment centers. Emergency housing, such as Harborview's Edward Thomas House Medical Respite Program, also plays a critical role in providing medical services for people experiencing homelessness who are too sick to return to shelters or the street following a hospital stay.

Furthermore, recent conditions in the COVID-19 pandemic resulted in a shortage of available pairings of housing with medical services. In August and September of 2022, the *Seattle Times* reported that Harborview Medical Center began to divert non-critical patients to other local hospitals due to being over capacity. At the same time, some patients ready to be discharged to long-term care and skilled nursing facilities could not be released due to limited space and staffing in those facilities.⁶⁵ Instances like this demonstrate the vulnerability of the medical housing system to economic changes and pandemics, and require collaborative efforts between agencies, funders, and governments to reduce their frequency and impacts on local populations.

⁶⁵ "[Harborview still way over capacity, as long-term care shortage persists](#)". David Gutman. *Seattle Times*, September 14, 2022.

Balance of Jobs and Housing

A key principle of planning is that there needs to be a balance between jobs and housing within an area so that enough housing is available near people's workplaces. When the ratio of jobs to housing is imbalanced, residents commute long distances, which involves higher transportation costs; takes a toll on social wellbeing and health; and has negative environmental impacts. A supply of ample and affordable housing choices near job centers is especially important to address the needs of low-wage workers who are less to pay the premiums the housing market demands in these neighborhoods.

The Regional Growth Strategy calls upon Metropolitan Cities and Core Cities to improve the jobs housing balance and provide a greater variety and supply of housing to meet the needs of workers. As the largest Metropolitan City and major employment center for the region, Seattle has a particularly important role in this regard.

PSRC's 2022 Regional Housing Needs Assessment⁶⁶ states that a "balance" of jobs and housing "is attained where a community or market area attains roughly the regional average ratio." The ratio of jobs to housing units in Seattle is roughly 1.9, much higher than the overall ratio of 1.3 for the 4-county central Puget Sound region. PSRC also examined changes in the region's jobs-to-housing ratio from 2010, when the number of jobs was at a low point in the wake of the Great Recession, to 2019. The ratio increased substantially between 2010 and 2019, with many years of rapid job growth, and sizable—but not as rapid—housing growth.

The remainder of this section looks at trends in the jobs-to-housing ratio within Seattle using data on jobs covered by state unemployment insurance. For looking at trends in Seattle, we use statistics for covered jobs instead of total jobs because the covered jobs dataset provides the longest running and most precise employment numbers on employment available at the city level.⁶⁷ Figure A-64 shows trends in Seattle from 2004 to the most recent year for which data are available at the time of this analysis—2022 for jobs and 2023 for housing units.

As happened regionally, the jobs to housing also imbalance worsened in Seattle in the 2010s. Between 2010 and 2020 Seattle expanded its housing supply by 19 percent. Even with this boom in housing construction, Seattle's job growth far outpaced its housing growth, as the number of jobs in the city rose by 38 percent. Over the decade, Seattle added nearly 3 times as many jobs as housing units. The net effect was to increase the ratio of covered jobs to housing in the city from 1.5 in 2010 to roughly 1.7 in 2020.⁶⁸

By 2022, Seattle had one percent fewer covered jobs than in 2020 and five percent more housing units than in 2020 and Seattle's covered jobs to housing ratio had declined to roughly 1.6. During the early pandemic years, large housing developments continued to be constructed, albeit with some delays, by builders with permits issued prior to the pandemic. This happened as the labor market declined and then

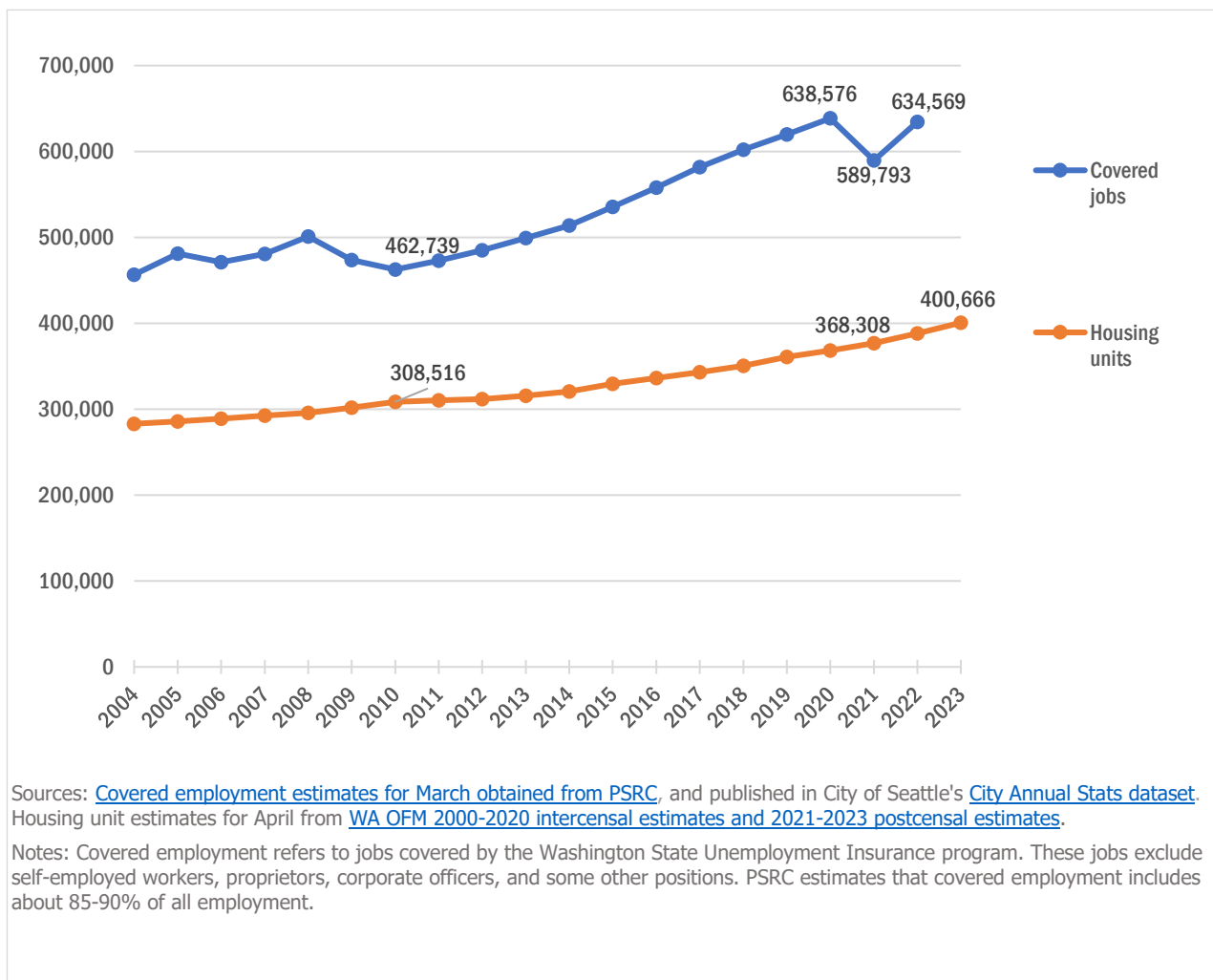
⁶⁶ [Regional Housing Needs Assessment \(January 2022\) \(psrc.org\)](#), pages 84-86.

⁶⁷ At the regional level, PSRC estimates that, covered jobs tend to comprise roughly 85 to 90 percent of total jobs. Total jobs estimates are readily available for Seattle only back to 2015.

⁶⁸ Factoring covered employment up to total jobs yields an estimate of 1.9 total jobs-to-housing for both 2019 and 2020; this is the ratio for Seattle that we compared to the regional 1.3 total jobs-to-housing ratio earlier in this section.

began recovering. While developers continued to complete large numbers of units into 2023, the City's data shows a sizable recent decline in the number of new units for which developers are getting permits issued. The reduced volume suggests that the "improvement" in the jobs housing balance during the first years of the pandemic may be temporary.

Figure A-63
Covered Jobs and Housing Units Located in Seattle



In addition to examining the jobs-housing imbalance, PSRC also examined the regional housing backlog that accumulated between 2010 to 2019 by taking into account the number of additional new households the region *would have* gained over the last decade if households were able to form without being constrained by the lack of available housing.⁶⁹ Through their examination of pent-up demand for formation of new households, PSRC estimated a backlog from the period 2010 to 2019 of approximately 45,000 to 50,000 units in the central Puget Sound region.⁷⁰

⁶⁹ [Regional Housing Needs Assessment \(January 2022\) \(psrc.org\)](#), page 98.

⁷⁰ This was a rough analysis that has limitations:

- Analyses that examine housing formation and production to estimate underproduction must naturally select a time period and baseline. In the baseline year of 2010 for this analysis, the housing vacancy rate in the region was unusually high, at 7.4 percent (compared to an average of 6.0 percent in the four decennial censuses between 1980 and 2010.) Using a baseline with a high housing vacancy rate could lead to the estimated backlog being somewhat of an overestimate.
- Other aspect of the analysis underestimate underproduction in important ways: as PSRC noted, the analysis does not account for housing units needed by the large and growing number of persons experiencing homelessness. The analysis also does not account for households unable to live in the Puget Sound region due to our region's high housing costs.

Housing Supply and Market Analysis

This section focuses on the housing supply and market, including recent development and pricing trends. It includes analyses that assess to what extent different occupations can afford rental housing, the quality and condition of housing, and the roles of ADUs and vouchers in Seattle's housing market.

These analyses are important when making policy decisions that focus on where and how housing should be developed in Seattle and to address gaps relative to housing need. Furthermore, this information can highlight choices and constraints that households face when trying to find and maintain housing in Seattle.

Housing Supply

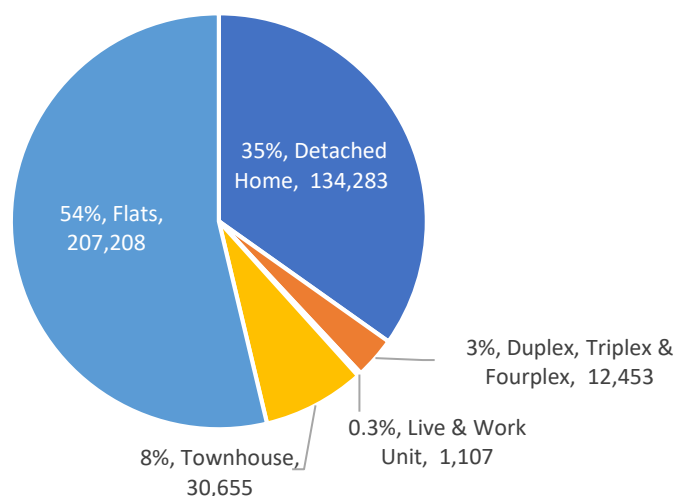
In this analysis, we use the term "housing supply" to refer to permanent structures in the form of housing units or congregate residences. Housing units include housing forms such as a detached home, flat, or an accessory dwelling unit, each of which would have, at minimum, a private kitchen and bathroom in the unit. Congregate residences include settings like group homes, student dormitories, senior housing, and certain institutional facilities, and may not include private kitchens or bathrooms for residents. For purposes of this section, housing supply does not include temporary or emergency housing accommodations such as shelters, tiny homes, and resident hotels. Temporary forms of housing for individuals experiencing homelessness are discussed in the Homelessness section of this Housing Appendix.

HOUSING UNITS BY TYPE

Figure A-65 provides detail on the composition of Seattle's housing unit supply by unit type based on data maintained by the King County Department of Assessments. As of mid-2022, Seattle had 385,706 housing units, with the following shares of unit types:

- Flats, which can be in multifamily or mixed-use buildings and are typically apartments or condominiums, make up 54 percent of units in Seattle.
- Detached homes make up an additional 35 percent of units.
- Townhouses make up 8 percent of housing units.
- Small multiplexes, including duplexes, triplexes and fourplexes make up only 3 percent of housing units.
- The remaining 0.3 percent are made up of live-work units, which vary in form, such as a townhouse where the first floor is used as a salon, or a caretaker unit at a storage facility.

Figure A-64
Seattle's Housing Supply by Housing Type



Source: King County Department of Assessments, compiled by City of Seattle, July 2022

HOUSING UNITS BY NUMBER OF UNITS IN BUILDING

Figure A-66 categorizes Seattle's housing units based on the number of units in each building. The number of units in each building closely relates to regulations, such as zoning, and market trends present during development. Zoning has precluded development of smaller multifamily structures in most of Seattle's residential land area since Seattle adopted its first zoning policies code in 1923.⁷¹ Many of these smaller multifamily structures have come to be known as the "missing middle" or "middle housing." Local

⁷¹ [Ordinance 45382](#) established a First Residential District which was limited to detached homes, public schools, private schools, churches, parks, art galleries, libraries, conservatories for plants and flowers, and railroads. Accessory uses were allowed for physicians and dentists. Fraternity houses, sorority houses, specific private schools, and certain communal spaces were subject to public hearings. The ordinance passed through the Public Safety committee. [Visit the Seattle City Archives to find out a more in-depth history of Seattle's zoning, including historical zoning maps.](#)

and state reforms in recent years, and policies in this Comprehensive Plan, seek to boost the production of middle housing throughout Seattle.⁷²

Most housing units in Seattle are either flats in larger buildings or single units in detached and attached configurations. A more detailed breakdown of the current supply of units in Seattle shows:

- Single-unit buildings comprise 156,800 housing units in total, which includes 133,600 detached homes, 22,300 townhomes, and 900 units in other attached configurations. Single-unit attached configurations indicate that these units are owned fee-simple.⁷³
- Buildings with between 2 and 4 units include around 19,100 units across approximately 7,700 buildings. This category includes duplexes, triplexes, and fourplexes along with townhouses and some detached homes.⁷⁴
- Buildings with 5 to 19 units include about 38,000 units in approximately 4,000 buildings.
- Buildings with 20 to 49 units have about 42,100 units in approximately 1,400 buildings.
- Buildings with 50 or more units have about 129,600 units in approximately 1,050 buildings.

⁷² In their [Middle Housing in Washington](#) webpage, the state Department of Commerce provides guidance to help local governments plan for middle housing and implement related requirements established by House Bill 1110, which the state legislature passed in 2023. Commerce's overview explains that:

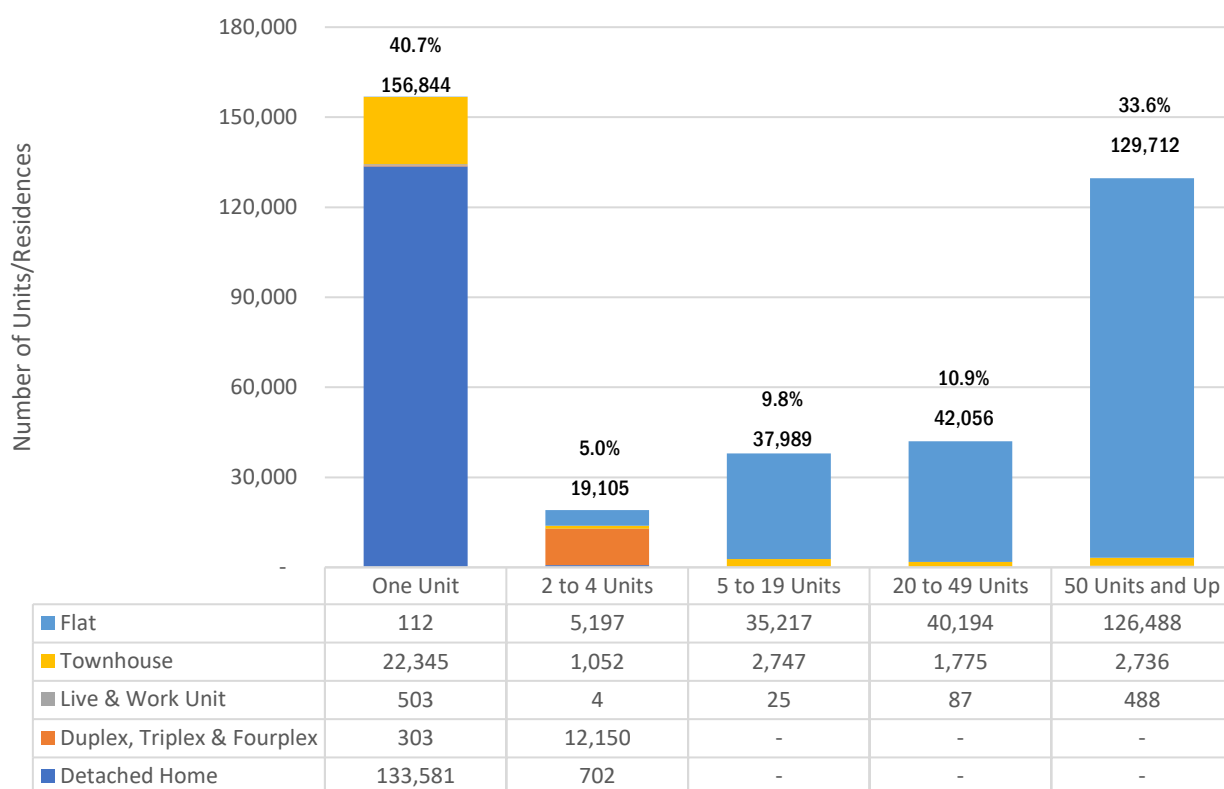
"Middle housing is a term for homes that are at a middle scale between detached single-family houses and large multifamily complexes. Examples include duplexes, triplexes, fourplexes, fiveplexes, sixplexes, courtyard apartments, cottage clusters, and townhomes. These types are typically 'house-scale'; that is, the buildings are about the same size and height as detached houses."

HB 1110 requires cities (with limited exceptions) to allow minimum numbers of middle housing units per lot, with Seattle and other cities with a population 75,000 being subject to the higher unit density requirements for middle housing than other cities.

⁷³ Fee-simple ownership indicates that both the land and housing units are sold together. See the Ownership Market section of this Housing Appendix for an in-depth explanation of fee-simple and condominium ownership.

⁷⁴ King County Department of Assessments frequently classifies detached homes with ADUs as structures other than detached homes, with many reported to be townhouses.

Figure A-65
Seattle's Housing Supply by Number of Units in Building



Source: King County Department of Assessments, compiled by City of Seattle, July 2022

HOUSING UNITS BY NUMBER OF BEDROOMS

The number of bedrooms that housing units contain is an indicator of how well the supply of housing accommodates households who reside in or seek to reside in Seattle. Examples of how units with various numbers of bedrooms can serve households include:

- Zero-bedroom units, such as studios and small efficiency dwelling units, and 1-bedroom units are important segments of the housing supply for persons living alone or as couple.
- Units with multiple bedrooms are important for meeting the needs of families with children and other multigenerational households, as well as for households with roommates.

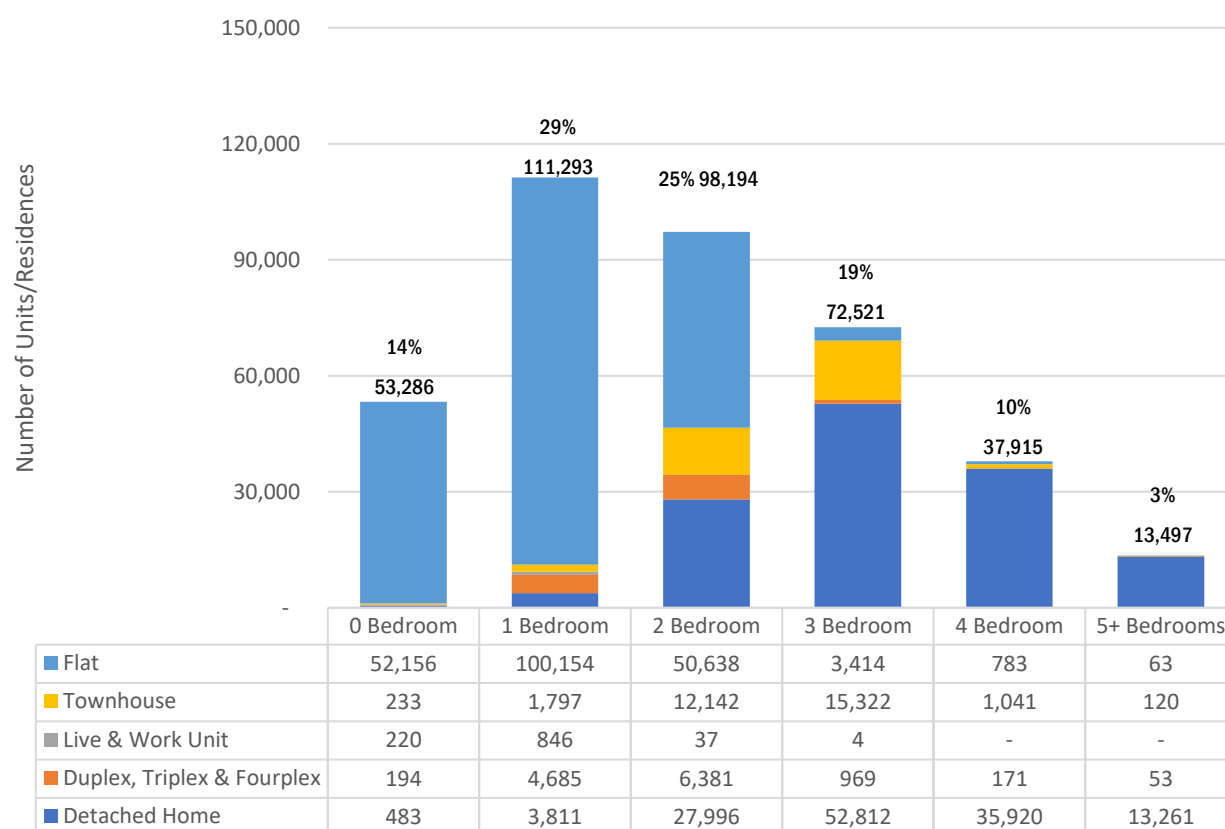
The two most common housing unit types—flats and detached homes—have very different bedroom profiles, as shown in Figure A-67. Three-quarters of existing flats in Seattle are 0- or 1-bedroom units. In contrast, more than 95 percent of all detached homes have multiple bedrooms, with most being 3- or 4-bedroom units. Nearly all units with 4 bedrooms or more are detached homes.

Other types of housing, while currently making up relatively small shares of the housing supply, play an important role in contributing units with different numbers of bedrooms. Townhomes, which are typically

limited in size and scale through development regulations, are mostly 2- or 3-bedroom units. A large majority of small multiplexes are 1- or 2-bedroom units.

Patterns in housing costs, changes in preferences, and demographic trends are influencing how populations seek housing units of different sizes in Seattle. The large concentration of young adults in Seattle contributes to demand for a variety of multi-bedroom units that can accommodate roommates. At the same time, the limited local supply and affordability of units with more than 2 bedrooms relative to many areas in the Puget Sound region can cause larger households, including families with children, to look outside Seattle even when they would prefer to live in Seattle.

Figure A-66
Seattle's Existing Housing Supply by Number of Bedrooms



Source: King County Department of Assessments, compiled by City of Seattle, July 2022

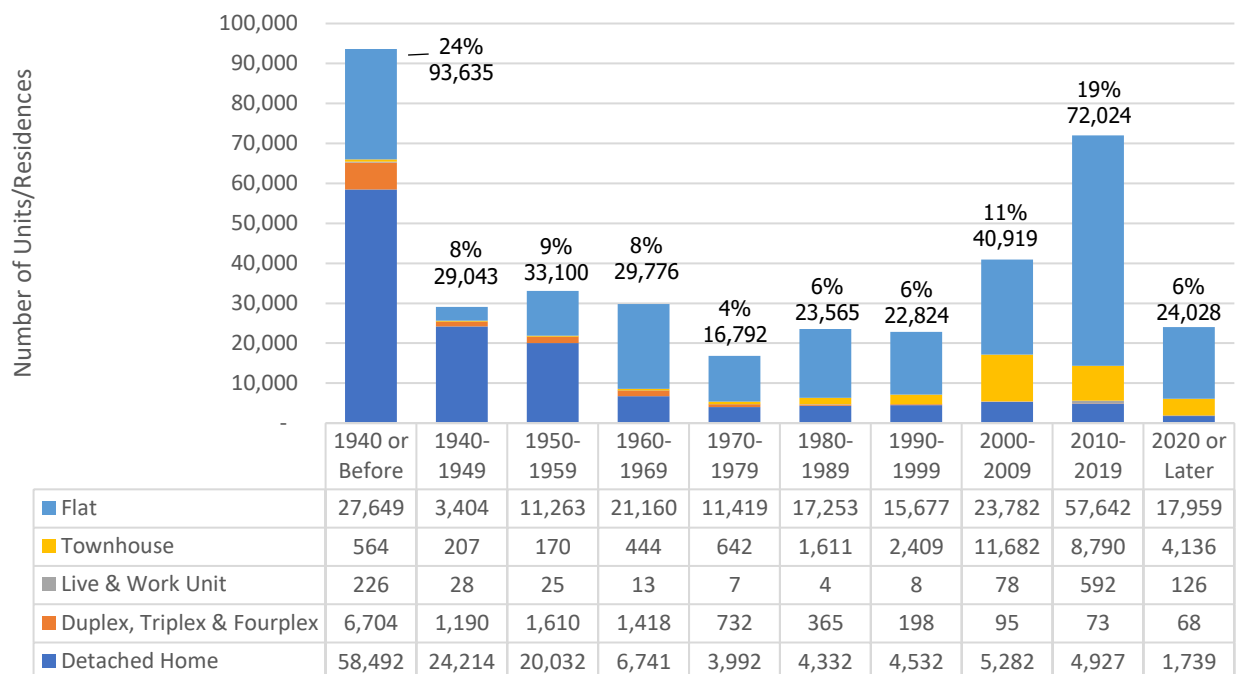
SUPPLY BY BUILDING AGE AND HOUSING TYPE

This section analyzes Seattle's housing supply by age and housing type. We use two measures to characterize housing units' age: the year the structure was built, and the effective year built.

The year a structure was built refers to when a building with a housing unit was first constructed. This is a useful measure for understanding when neighborhoods that exist today were shaped. The age of buildings reflects land use and policy decisions that have been made over time. Exclusive zoning for detached homes has essentially frozen the form of many Seattle neighborhoods in time for over a

century, precluding denser development since it was put in place.⁷⁵ In comparison, zones that allow townhouses and flats have been limited to few concentrated neighborhoods, primarily within Urban Centers and Urban Villages, which has resulted in changes to their neighborhood form and character as the city has grown.

Figure A-68 shows Seattle’s existing housing supply by the year a structure was built. Large majorities of Seattle’s detached homes and small multiplex units were built prior to 1970. While there is a significant supply of flats in older buildings, nearly half of existing flats are in buildings built in or after the year 2000. Townhouses tend to be even younger, as nearly 80 percent of townhomes have been built since 2000.



Source: King County Department of Assessments, compiled by City of Seattle, July 2022

⁷⁵ “[Seattle’s Single-Family Neighborhoods Already Include Thousands of Duplexes](#),” a 2016 analysis by Margaret Morales at the Sightline Institute, shows where multi-unit housing built many decades ago exists in Single-Family zones (since renamed Neighborhood Residential in 2021).

Figure A-67

Seattle's Existing Housing Supply by Year Built and Unit Type

In comparison to the year a structure is built, the effective year built refers to when a building was most recently substantially renovated or, if the building has not been substantially renovated, when the structure was first constructed.⁷⁶ This measure helps us understand the quality of our housing supply while also accounting for the fact that much of Seattle's housing supply is in older buildings that have been renovated, converted, or upgraded to extend their building life.

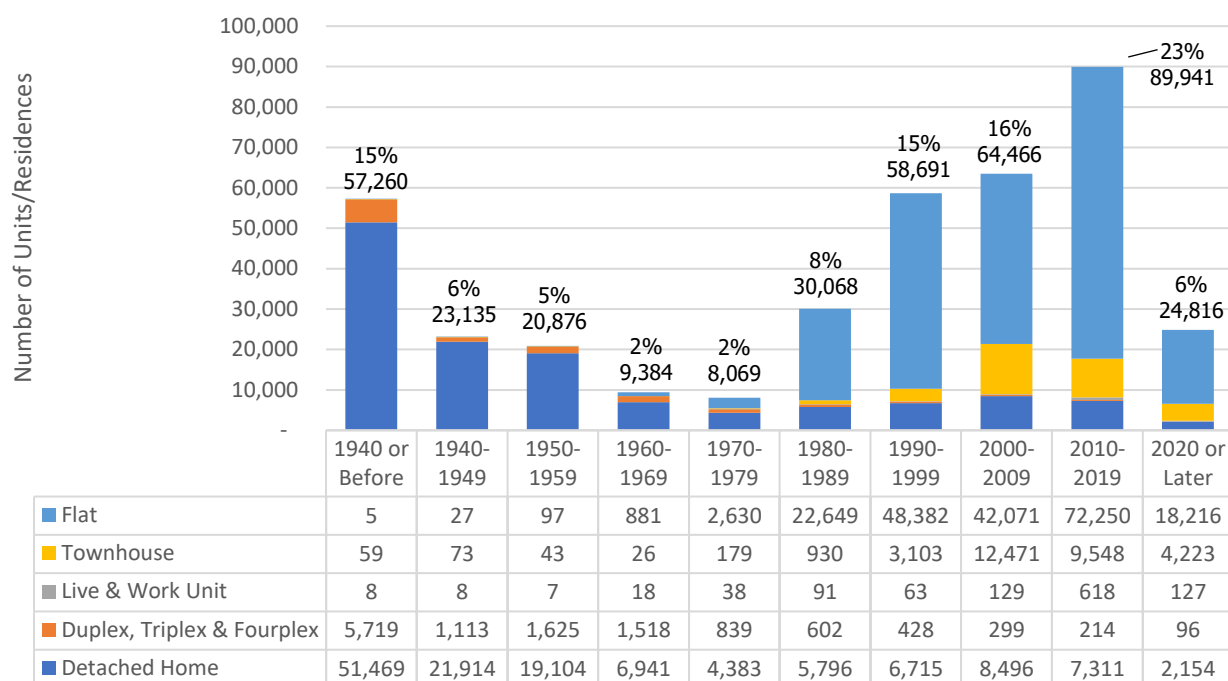
Effective year built is a particularly useful measure for understanding the market characteristics of flats, as multifamily rental housing tends to become less expensive as it grows older. However, substantial renovations, whether necessary to maintain unit habitability or simply to improve the marketability of an older building, tend to result in higher rents.

Figure A-69 looks at Seattle's housing supply by effective year built. Seattle's existing housing units vary drastically by age in this measure. Of the 110,000 homes older than 1970, approximately 91 percent are detached homes. Nearly all of Seattle's existing flats and townhomes have effective years built in the 1970s or later. These observations reflect that many flats have been built, renovated, or updated since the 1970s, but also point to a portion of the supply of flats that has not been substantially renovated since the 1980s, and is therefore aging.

⁷⁶ We use the King County Assessor's effective year built. King County's Assessor uses an internal methodology to determine when a building was most substantially renovated; however, typical definitions used include when renovations cost more than 50 or 60 percent of the cost to wholly replace a building, or renovations that extend the useful life of a building.

Figure A-68

Seattle's Existing Housing Supply by Effective Year Built and Housing Type



Source: King County Department of Assessments, compiled by City of Seattle, July 2022

SUPPLY OF CONGREGATE RESIDENCES

Congregate residences are several forms of permanent housing which include co-living, group homes, student dormitories, senior housing, and certain institutional facilities. In some cases, congregate residences are rented as just a bedroom, while in others they look like an apartment unit. In some cases, they provide services specific to a population with special housing needs, such as college students, older adults, or individuals with disabilities.

Figure A-70 shows that Seattle had 21,372 congregate residences as of 2022. Furthermore, congregate residences are largely in buildings that have 50 or more residences (i.e., sleeping rooms). Figure A-71 shows there was a growth of over 3,000 congregate residences between the beginning of 2016 and 2022, the period since the last major update of the Comprehensive Plan in 2015.

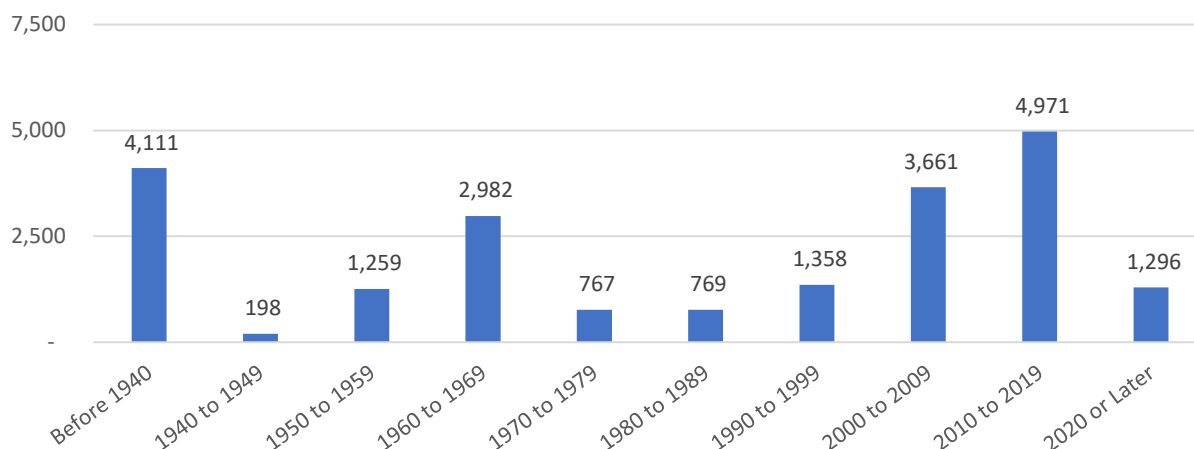
Figure A-69

Congregate Residences by Residences in Structure

Under 5 Residences	5 to 19 Residences	20 to 49 Residences	50+ Residences	Total Residences
189 (1%)	2,243 (10%)	4,015 (19%)	14,925 (70%)	21,372

Source: King County Department of Assessments, compiled by City of Seattle, July 2022

Figure A-70
Congregate Residences by Year Built



Source: King County Department of Assessments, compiled by City of Seattle, July 2022

Recent Housing Production

Annual housing production in Seattle has been strong since 2015, with a temporary slowdown in production during the COVID-19 pandemic. Key factors influencing production during this period include:

- the growth in demand associated with the rising population and employment,
- the large number of high-paid technology jobs added during the 2010s, and
- socioeconomic shifts associated with the COVID-19 pandemic.

Figure A-72 shows annual permit data for housing units from 2016 through 2022, including numbers of new units finalized, units demolished, and net new units.⁷⁷ In total, during this period, 62,739 new units were finalized and 4,411 units were demolished, for a net addition of 58,328 units.

During this period, Seattle's annual net unit growth saw an initial peak in 2019 with more than 10,000 net new units. The following year saw a precipitous drop in housing units finalized due to the pandemic. With

⁷⁷ Finalized units refers to units where the construction permit is considered finalized by receiving a final building inspection or temporary certificate of occupancy. Net new units are new units finalized minus units demolished. The numbers in the figures do not include data on production of new congregate housing. There were 3,071 congregate residences finalized over the 2016 to 2022 period; however, demolition data for congregate residences is limited.

The data we summarize in this subsection and the next are from the April 10, 2023, publication of the Quarterly Housing Report Dashboard, which uses City of Seattle permitting data to determine when and in what form housing is developed. This dashboard is updated quarterly by OPCD. Data on buildings and units are collected and categorized differently in Seattle's building permits data than in data from the King County Department of Assessments, which is used in many of the other analyses this Housing Appendix includes on Seattle's housing supply. This may result in slightly different building classes and total numbers of unit production being reported in any given year.

rapid changes in the finance and housing markets, net unit production accelerated between 2021 and 2022, with production finals surpassing the 2019 peak in 2022.

Figure A-71
Annual Housing Unit Production and Demolitions

Year	New Units Finaled	Demolitions	Net New Units
2016	7,211	607	6,604
2017	10,222	1,254	8,968
2018	9,198	707	8,491
2019	10,961	779	10,182
2020	6,170	408	5,762
2021	7,334	358	6,976
2022	11,643	298	11,345
Total 2016-2022	62,739	4,411	58,328
Source: City of Seattle Quarterly Housing Report Dashboard as of April 10, 2023			

RECENT HOUSING DEVELOPMENT BY PERMIT BUILDING TYPE

Of the 62,739 new units finaled from 2016 to 2022, a total of 59,559 units (90 percent) were in mixed-use and multifamily buildings, as shown in Figure A-73. Mixed-use and multifamily buildings include units in the form of flats, townhouses, and small multiplexes (duplex, triplex and fourplexes). An additional 3,999 units (6 percent) were detached homes. The remaining 2,173 units (4 percent) were built as Detached Accessory Dwelling Units (DADUs) or Attached Accessory Dwelling Units (AADUs) AADUs, which can be attached to either detached homes or townhouses.

Despite the largest proportion of demolished units being detached homes, Seattle still saw a net gain in the number of detached home units. In juxtaposition, there was a minor net loss of units in “institutional, industrial, or other” forms of housing over this period, which accounts for housing types such as caretaker units and live-work units.

Figure A-72

Housing Development by Housing Type, January 2016 – December 2022

Unit Type	New Units Finaled	Demolitions	Net New Units
Total Units:	62,739	4,411	58,328
Multifamily	11,705	1,490	10,215
Mixed-use	44,854	257	44,597
Detached	3,999	2,518	1,481
DADU	1,102	17	1,085
AADU	1,071	24	1,047
Institutional, industrial, or other	8	105	(97)

Source: City of Seattle Quarterly Housing Report Dashboard as of April 10, 2023

RECENT HOUSING DEVELOPMENT BY SIZE OF BUILDING

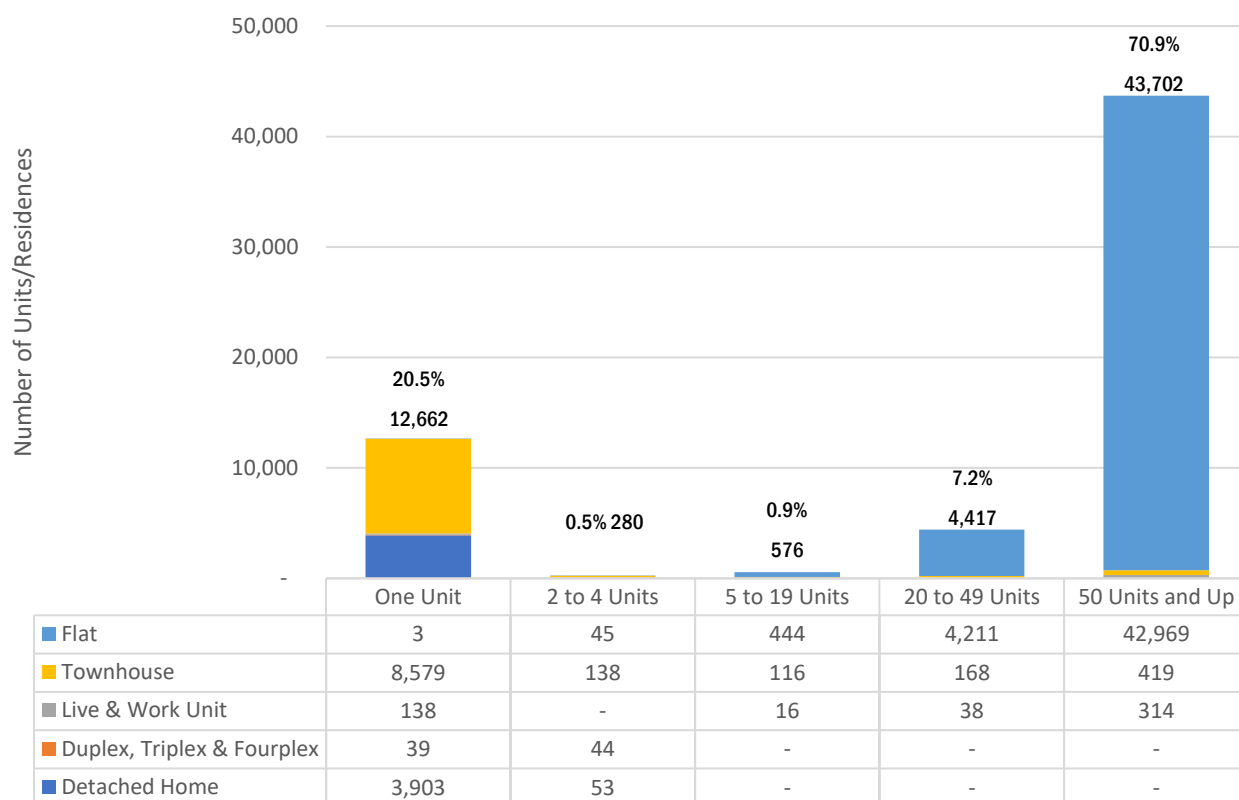
This section and the following utilize King County Department of Assessments data to estimate housing development, which produces slightly different estimates to the prior section which utilizes City of Seattle permit data but allows for more insights into recent housing development.

Housing unit development was concentrated in buildings with 50 or more units from 2016 to 2022. Almost 71 percent of units produced were in buildings with more than 50 units, nearly all of which were flats.

Figure A-74 shows that only 7 percent of units developed over this period were in buildings with 20 to 49 units, which were also nearly entirely flats. One-unit homes make up about 20 percent of units in recently developed, with double the number of attached townhomes developed than detached homes.⁷⁸ Furthermore, very few buildings with between 2 and 19 flats were developed over this period.

⁷⁸ As is pointed out in a prior section, one-unit townhouses are those which, in reality, are attached to neighboring townhouses, but these townhouse units sit upon separate townhouse plats. Some townhomes and detached homes are categorized in the Assessor's data as being in a building with more than one unit; these may have characteristics such as having an attached accessory dwelling unit. Many detached homes with accessory dwelling units are characterized as townhomes by the County, which is why these numbers are inconsistent with the permitting about AADUs.

Figure A-73
Seattle's Recent Housing Development by Units in Building



Source: King County Department of Assessments, compiled by City of Seattle, July 2022.

RECENT HOUSING DEVELOPMENT BY NUMBER OF BEDROOMS

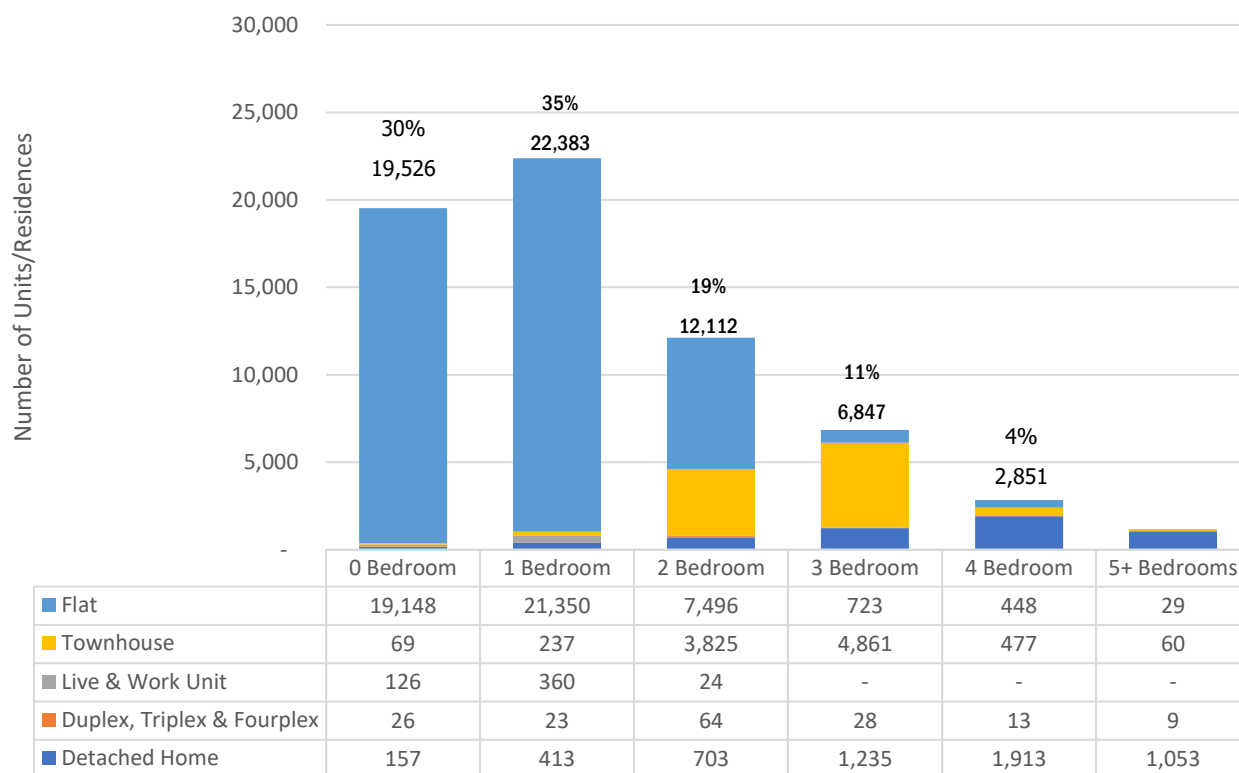
Figure A-75 shows that zero- and one-bedroom units made up most of the housing developed from 2016 to 2022. One-bedroom flats comprised the largest share of recently developed units, with 0-bedroom flats, such as studios and efficiency dwelling units, comprising the second largest share. Together 0-bedroom and 1-bedroom made up 65 percent of unit production during this period, with nearly all being flats.

Approximately 19 percent of units produced during this period were 2-bedroom units. While flats constitute most of the 2-bedroom units developed, townhomes were also a significant portion.

Very few flats with 3 or more bedrooms were produced over this period. Most townhomes developed over this period had 2 or 3 bedrooms, while more than three-quarters of detached homes produced over this period had 3 or more bedrooms. Nearly all units with 4 or more bedrooms were developed in detached housing.

Figure A-74

Seattle's Recent Housing Developments by Number of Bedrooms and Housing Type



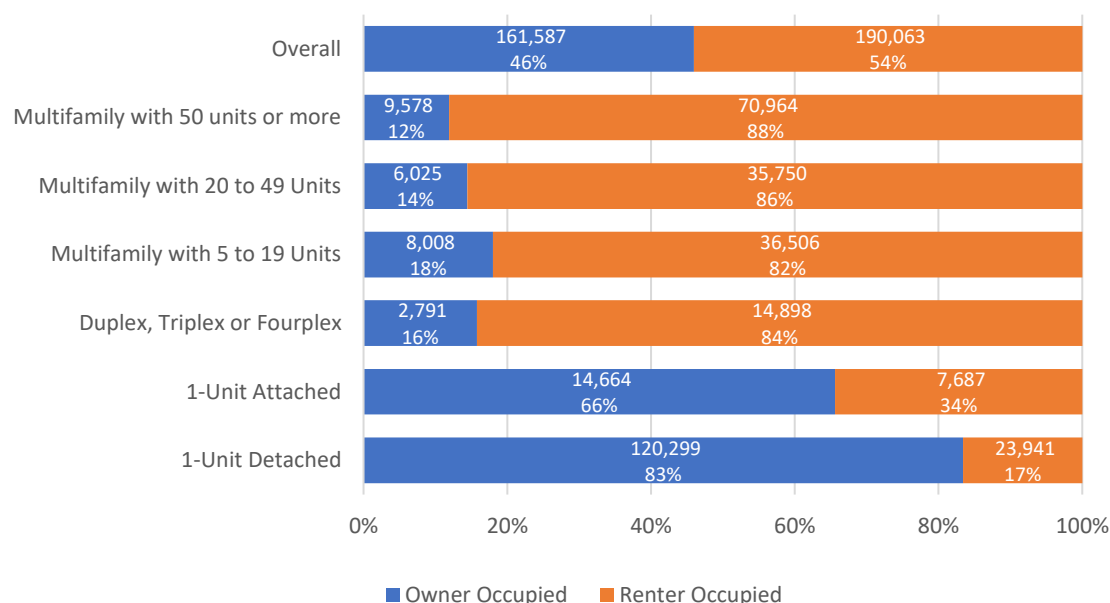
Housing Market Overview

This section looks at the local housing markets for both rental and ownership housing that is not income restricted. Understanding the underlying market data provides key insights into the costs of certain housing forms, as well as homeownership and renting.

At any given time, only a small portion of the overall housing supply is available to be newly leased or sold to households in the housing market. Many units that are available for sale or lease are also occupied by existing renters or owners. Approximately 91.4 percent of all Seattle's 385,000 units were

occupied full-time in 2021 according to the ACS, accounting for about 352,000 households.⁷⁹ While 8.6 percent of the total housing units in the city were vacant, only about half of those units were vacant and being offered for rent or sale.⁸⁰

Figure A-75
Tenure in Seattle's Occupied Housing Units



Source: American Community Survey 2021 1-Year Estimates, Table B25032

Note: The ACS does not differentiate mixed-use buildings, which occur in all building forms, but mostly in buildings with more multifamily flats.

As shown in Figure A-76, a majority (54 percent) of all Seattle households are renters. Households in multifamily and mixed-use buildings (which typically contain flats) and small multiplexes are much more likely to be renters than owners.⁸¹ This is related to the fact that a large proportion of multifamily units are rental apartments rather than condominiums. In comparison, households in attached homes (e.g., townhouses and rowhouses) and detached homes are predominately owner-occupied.

⁷⁹ The Census Bureau's definition for housing units excludes group quarters (e.g., college dormitories, skilled nursing facilities, and facilities for people experiencing homelessness) where people reside or stay in a group arrangement. For more on the Census Bureau's classification of living quarters as either housing units or group quarters, see [American Community Survey and Puerto Rico Community Survey 2021 Subject Definitions \(census.gov\)](#), pages 7-10.

⁸⁰ The other half of vacant units in the city were recently rented or sold but not yet occupied; unoccupied due to being only for seasonal, recreational, or occasional use, or unoccupied for another reason such as undergoing repairs or renovation.

⁸¹ Multifamily units in the ACS may be in multifamily buildings as well as mixed-use buildings.

OWNERSHIP MARKET

This section of the Housing Appendix looks at value, pricing, and income to better understand Seattle's ownership market. Households able to enter and maintain homeownership receive benefits in the form of housing stability and potential to accrue household wealth.

Home Values

The Zillow Home Value Index (ZVHI) provides estimates of the typical market value of all homes in Seattle.⁸² The ZHVI valued the typical detached home in Seattle at \$945K in 2022, and the typical multifamily condominium at \$509K.

When looking at the value by number of bedrooms in Figure A-77, regardless of ownership or building form, the value of Seattle homes sharply increases as the number of bedrooms increases. This makes Seattle's housing market especially difficult for young households with children to enter homeownership, potentially pushing them to other markets in the region.

Figure A-76
2022 Average Monthly ZVHI by Number of Bedrooms

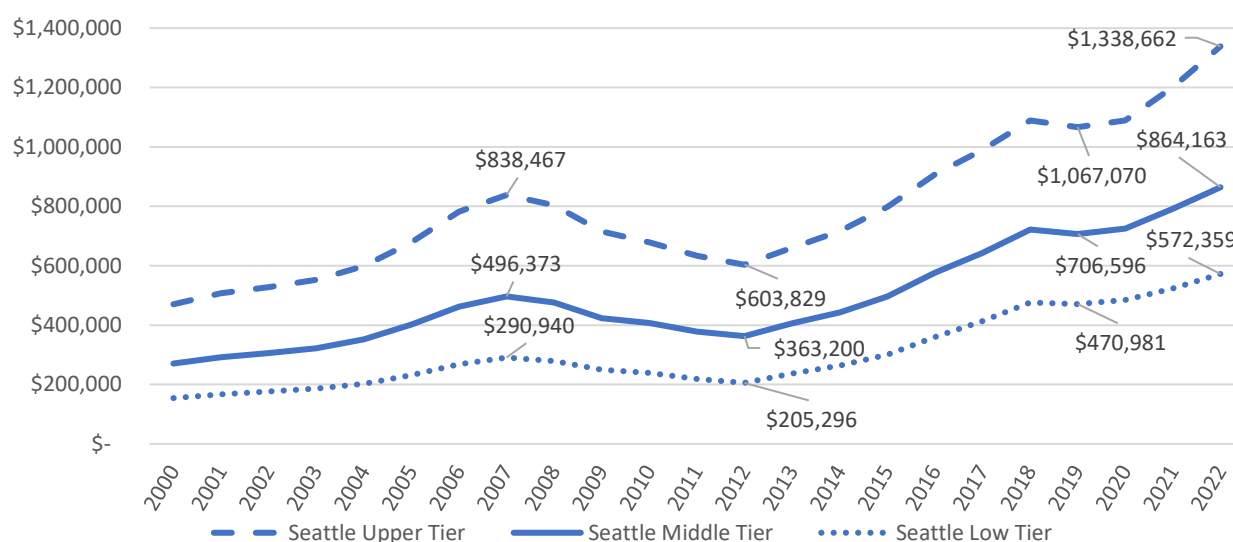
1 Bedroom	2 Bedrooms	3 Bedrooms	4 Bedrooms	5+ Bedrooms
\$467,435	\$710,523	\$933,231	\$1,192,120	\$1,351,468
Source: Zillow Home Value Index for 2022; Annual averages of monthly Zillow Home Value Index prepared by OPCD				

Furthermore, Zillow produces value estimates based on the upper, middle, and lower thirds of the market (referred to as 'tiers'), regardless of building form. Figure A-78 shows that the typical home in Seattle, referred to as "middle tier", was valued at \$864K in 2022. Upper tier homes had a typical value of \$1.339M, while the lower tier had a value of \$572K.

Figure A-78 shows the rapid increase in home values that have occurred since the Great Recession. In just a decade the value of upper tier homes doubled, while lower and middle tier home values more than doubled. The rapid increase in home values has a dual effect of producing wealth for homeowners, while also becoming increasingly difficult for buyers in the market – in particular first-time homebuyers and homebuyers with moderate incomes.

⁸² Zillow tracks recent sales and variations in number of bedrooms, building forms, and market price segment. Numbers presented in this section are 12-month averages of the monthly Zillow Home Value Index.

Figure A-77
Zillow Home Value Index for Seattle, 2000 to 2022 Annual Averages



Source: Zillow Home Value Index for Cities and Counties as of May 2023
 Notes: Annual averages of monthly Zillow Home Value Index prepared by OPCD

Recent Sales Prices by Age and Size of Housing

This section focuses on housing prices of homes sold in Seattle in 2022. We separate the data based on form of ownership and building type, first providing some context for background.

Forms of ownership include fee-simple ownership and condominium ownership. Fee-simple ownership is when a housing unit is sold and owned with the land. Our analysis includes fee-simple detached homes and attached townhomes.

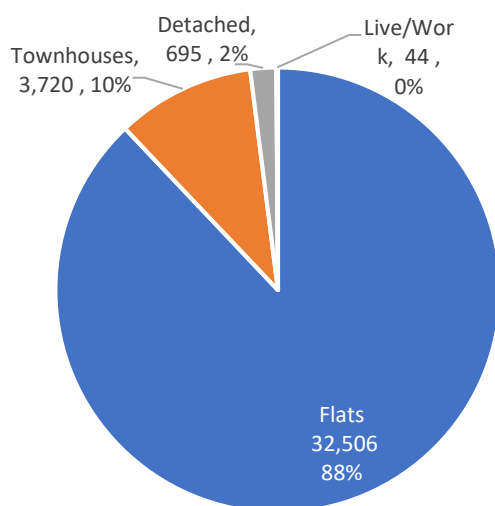
Condominium ownership is a form of homeownership in which multiple units are sold and owned separately, but owners have community interest in the land or community property that is held by an association (i.e., a homeowner's association or condominium board). As shown in Figure A-79, while most condominiums in Seattle are flats, there are also condominiums that come in other building forms including townhouses, detached homes, or live/work units.

For this analysis, we further break down ownership types based on building form. We consider detached homes as well as townhomes that are sold fee simple. We consider condominium ownership in Accessory Dwelling Units (ADUs), principal dwelling units, and multifamily units, which primarily includes flats but with some townhomes.⁸³ Condominized ADUs and principal dwelling units, which are detached

⁸³ Seattle's Neighborhood Residential zones currently allow two ADUs on every lot, but minimum lot sizes do not allow these units to be subdivided and sold "fee simple" as separate individual tax lots. Given these constraints, some recently constructed ADUs and the principal detached home on the lot are being offered for sale as condominiums. They typically resemble traditional condominiums in square footage and number of bedrooms.

homes with slightly larger floor areas that share lots with one or more ADU, are newer forms of for-sale condominium housing in Seattle.

Figure A-78
Condominiums by Building Form in Seattle



Source: King County Department of Assessments, compiled by City of Seattle, July 2022

Figure A-80 shows that the sales prices of all condominium types are less than for detached homes. Fee-simple townhouses are less expensive than detached homes and principal dwelling units, yet more expensive than ADUs and multifamily units. This is, in part, related to the relative size of townhouses, their smaller lot sizes, and their use of shared walls.

We also segment 2022 sales data by the age of housing units, looking at sales of units less than 10 years old to better understand new development and more than 30 years old to understand pricing for a large portion of Seattle's housing supply. Figure A-80 shows that the median sales price of units in older buildings is less than in newer buildings, particularly for detached homes and multifamily condominiums. Detached homes built in the last 10 years have the highest median sales price of any group, and the highest average number of bedrooms (3.9) and average square footage (2,816 SF).

In comparison, ADUs are the least expensive form of housing less than 10 years old. We find that the median price for ADUs (all of which were less than ten years old) was less than half the price of a detached home less than 10 years old, and about 70 percent of the price of detached homes older than 30 years. The median price of principal dwelling units less than 10 years old was two-thirds the cost of detached homes less than 10 years old but were higher in cost than detached homes over 30 years old. It is worth noting that ADUs and principal dwelling units are both small as a share of all homes sold in 2022 and account for a tiny fraction of the overall housing supply.

The lowest median sales price among all units is in multifamily units older than 30 years, but these units, like ADUs, are some of the smallest forms of homes sold in terms of unit size and number of bedrooms, limiting their suitability for larger households, such as families with children and other multiple-generation households.

Figure A-79
2022 Median Sale Prices by Unit Age and Size

Ownership and Unit Type	Median Sales Prices in 2022			Number of Units in Sample		
	All Units	Less than 10 Years Old	Over 30 Years Old	All Units	Less than 10 Years Old	Over 30 Years Old
Fee Simple Ownership						
Detached Home	\$1,060,000	\$1,610,000	\$995,000	4,786	410	3,860
Townhouse	\$816,250	\$830,000	\$749,900	2,042	1,390	25
Condominium Ownership						
Accessory Dwelling Unit	\$757,500	\$757,500	-	104	104	-
Principal Dwelling Unit	\$1,176,500	\$1,176,500	-	68	68	-
Multifamily Unit	\$512,500	\$759,000	\$495,000	2,581	363	443
Size of Units Sold in 2022						
Unit Type	Average Net Square Feet			Average Number of Bedrooms		
	All Units	Less than 10 Years Old	Over 30 Years Old	All Units	Less than 10 Years Old	Over 30 Years Old
Fee Simple Ownership						
Detached Home	1,980	2,816	1,802	3.3	3.9	3.2
Townhouse	1,434	1,427	1,962	2.7	2.6	2.4
Condominium Ownership						
Accessory Dwelling Unit	1,000	1,000	-	2.0	2.0	-
Principal Dwelling Unit	2,126	2,126	-	3.5	3.5	-
Multifamily Unit	924	929	916	1.5	1.7	1.5
Source: King County Recorded Sales, prepared by OPCD as of February 2023						
Notes: Sample size is limited based on the recording and documentation of sales and parcel data as of February 2023, which may result in leaving out some newly built units. Principal dwelling units and ADUs that are condominiumized and sold separately are determined based on the 1,000 square foot ADU size limit, plus an additional 200 feet for special exceptions like ADUs above garages, or storage space. ADUs include those units that are under 1,200 square feet and are sold as separate units from the principal dwelling unit and may either be physically detached or attached to a principal dwelling unit.						

Affordability Levels of Home Sale Prices in 2022

Figure A-81 shows the downpayments and monthly housing costs that could be expected for homes purchased in 2022, based on median sales prices in Figure A-80 in the immediately preceding subsection. We include two downpayment scenarios, one in which a purchaser pays a 20 percent downpayment, which is a typical recommended amount that avoids private mortgage insurance, and one in which a purchaser pays a 5 percent downpayment, closer to what we may expect for first-time homebuyers.⁸⁴

⁸⁴ In addition, closing costs between 2 and 5 percent may double a household's upfront costs due at closing, depending on the amount of downpayment. We do not account for closing costs in this model.

Downpayment and monthly costs have an inverse relationship; that is, if a household wants to have a lower monthly payment, they will require a larger downpayment.

Differences in household wealth influence a household's ability to provide a downpayment. Wealth comes from various places, such as equity from a home the household intends to sell, generational wealth from inheritance or familial gifts, or savings accounts and investments.

Downpayment costs can be prohibitive for households with limited access to wealth, an issue that is more acute for people of color, who have systemically been denied opportunities to gain and pass down wealth throughout Seattle's and this nation's history. In 2019 U.S. Black households had an average of \$24,100 in net worth, while white households had an average of \$189,100.⁸⁵ Furthermore, a 2021 study of Seattle found that people-of-color households—especially Black households—are more likely than white households to be both asset poor and have zero net worth.⁸⁶

Among the building forms and scenarios in Figure A-81, downpayments are highest among detached homes less than 10 years old and lowest among multifamily condominiums over 30 years old. Monthly costs, which also account for homeowners' insurance, taxes, condominium dues, and private mortgage insurance (where necessary), are lowest among ADUs while highest among detached homes less than 10 years old.⁸⁷ Color scales of red to green show highest to lowest costs options.

⁸⁵ The Board of Governors of the Federal Reserve System publishes estimates for [Net Worth by Race or Ethnicity](#). These estimates were last released for the year 2019. In addition to the statistics above, Hispanic households had \$36,050 in wealth while households of any other race had a net worth of \$74,500.

⁸⁶ Prosperity Now prepared [The Racial Wealth Divide in Seattle](#) report in 2021. The authors of this report calculate Households with Zero Net Worth and an Asset Poverty Ratio, which is the percentage of households without sufficient net worth to subsist at the poverty level for three months in the absence of income.

⁸⁷ Private Mortgage Insurance is generally charged with downpayments lower than 20% of the home purchase price. Therefore, we only apply it to the model with a 5% downpayment.

Figure A-80
Downpayment and Monthly Costs of Homes by Unit Type in 2022

Downpayment						
Unit Type	20% Downpayment			5% Downpayment		
	All Units	Less than 10 Years Old	Over 30 Years Old	All Units	Less than 10 Years Old	Over 30 Years Old
Fee Simple Ownership						
Detached Home	\$212,000	\$322,000	\$199,000	\$53,000	\$80,500	\$49,750
Townhouse	\$163,250	\$166,000	\$149,980	\$40,813	\$41,500	\$37,495
Condominium Ownership						
Accessory Dwelling Unit	\$151,500	\$151,500	-	\$37,875	\$37,875	-
Principal Dwelling Unit	\$235,300	\$235,300	-	\$58,825	\$58,825	-
Multifamily Unit	\$102,500	\$151,800	\$99,000	\$25,625	\$37,950	\$24,750
Monthly Costs of Homes						
Unit Type	With a 20% Downpayment			With a 5% Downpayment		
	All Units	Less than 10 Years Old	Over 30 Years Old	All Units	Less than 10 Years Old	Over 30 Years Old
Fee Simple Ownership						
Detached Home	\$6,386	\$8,947	\$5,968	\$8,328	\$11,667	\$7,782
Townhouse	\$5,417	\$5,434	\$5,520	\$7,018	\$7,041	\$7,152
Condominium Ownership						
Accessory Dwelling Unit	\$4,112	\$4,112	-	\$5,322	\$5,322	-
Principal Dwelling Unit	\$7,308	\$7,308	-	\$9,484	\$9,484	-
Multifamily Unit	\$4,235	\$5,719	\$4,240	\$5,416	\$7,351	\$5,426
Source: King County Recorded Sales, prepared by OPCD as of February 2023						
Notes: Assumptions include a 30-year mortgage at a 6% interest rate. An annual property tax levy of 8.8294 mills for Seattle in 2022 was assumed alongside a fee rate of 1 mill to cover any fire district or other fees the County applies to homes. Homeowners insurance was assumed to be \$2 per year for every \$1,000 of sale price. For the 5% downpayment model, private mortgage insurance at 1% of the home value per year was applied. We apply a monthly condominium fee of \$150 to townhouses, principal dwelling units, and ADUs, and \$350 to multifamily units.						

Figure A-82 further presents this analysis by showing the minimum income, as a percent of AMI, that household would need to spend no more than 30 percent of their household income on monthly housing costs, which is a benchmark for what is generally considered affordable. This portion of the analysis is based on the monthly cost of a home under both downpayment scenarios. Key findings from this analysis include:

- Based on this analysis, a household earning between 100 and 120% of AMI would find that only smaller and older multifamily units are affordable to their income, but this would only be the case if they had been able to make a 20% downpayment of approximately \$100,000. Multifamily units also tend to be smaller units, as shown in Figure A-80, and typically share land and amenity costs.

- Many forms of housing, such as detached homes, are only considered affordable to households with incomes at or above 120% of AMI. Detached homes and principal dwelling units require income as much as two or three times the area median income. Townhouses and ADUs also require incomes that are well above 120% of AMI.

Figure A-81

Income as a Percent of AMI Necessary to Afford Monthly Costs of Homes

Unit Type	With a 20% Downpayment			With a 5% Downpayment		
	All Units	Less than 10 Years Old	Over 30 Years Old	All Units	Less than 10 Years Old	Over 30 Years Old
Fee Simple Ownership						
Detached Home	164%	236%	153%	214%	308%	200%
Townhouse	131%	134%	147%	169%	173%	190%
Condominium Ownership						
Accessory Dwelling Unit	142%	142%	-	183%	183%	-
Principal Dwelling Unit	194%	193%	-	251%	251%	-
Multifamily Unit	119%	163%	112%	152%	208%	142%

Source: King County Recorded Sales, prepared by OPCD as of February 2023; HUD 2022 AMI.
Notes: Income necessary to afford each unit is a weighted average of bedroom-adjusted AMI using 1 person for a 0-bedroom unit, and 1.5 persons per bedroom thereafter. Elsewhere in this Housing Appendix we use 2023 HUD HAMFI, whereas in this analysis we use 2022 HUD HAMFI, as this analysis uses 2022 King County Recorded Sales.

Monthly Costs of Homeownership and Racial and Social Equity

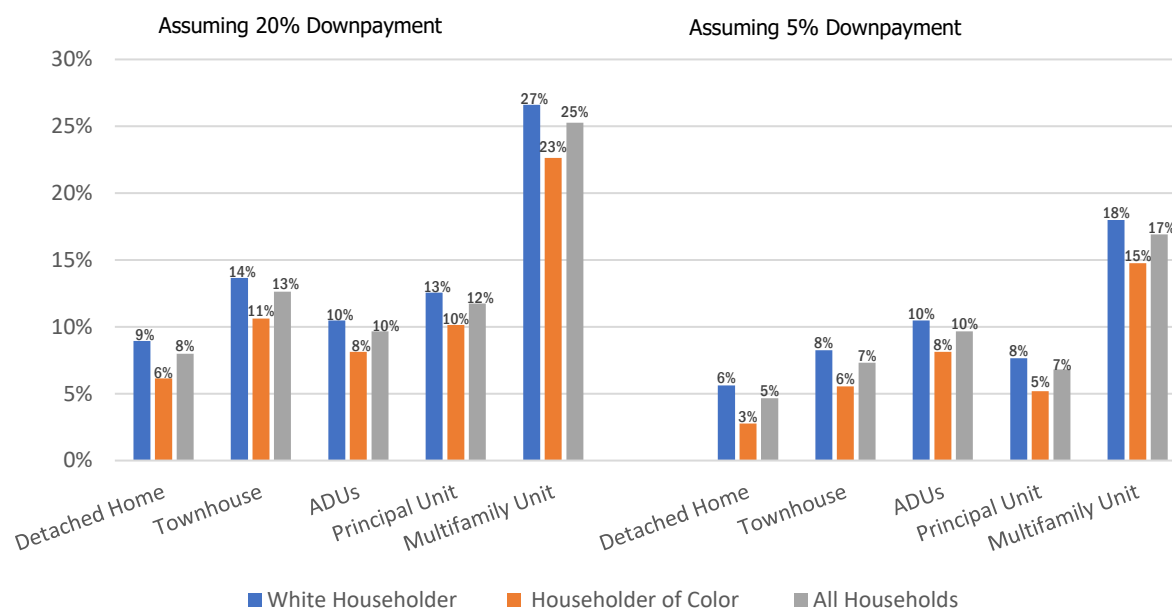
The affordability of housing is also a racial equity issue due to the legacy and continuation of systemic racism.

First, people of color have less wealth with which to purchase a home, as pointed out in the previous section. As a result, many can only make a lower downpayment or they may be unable to attain a mortgage at all.

Second, people of color have lower incomes with which to cover the monthly costs of homeownership. The combined disparities in wealth and income make purchasing a home particularly difficult for people of color compared with white households, especially in a high-cost market like Seattle.

Using data from 2022, Figure A-83 shows the racially disparate outcomes in who can afford the monthly costs of different housing forms based on the prices in “all units” in Figure A-80 in the preceding section. Overall, this analysis shows that most Seattle residents have incomes that render purchasing any type of home out of reach. This ranges from only 5 percent of Seattle households had the income necessary to afford monthly costs of a detached home purchased with a 5% downpayment to 27 percent of all households with incomes sufficient to afford a condo purchased with 20% downpayment. Households of color lagged white households by between 2 and 4 percent in ability to afford monthly ownership costs.

Figure A-82
Share of Seattle Households Who Could Afford the Monthly Costs
of a Median Home Purchased in 2022



Source: King County Recorded Sales, prepared by OPCD as of February 2023. U.S. Census Bureau 2017-2021 5-Year Public Use Microdata Samples; IPUMS-USA.

Notes: Median prices for properties of all ages in Figure A-80 used as input. Assumptions to determine income necessary to afford the monthly housing costs are the same as in Figure A-81. 2016-2021 5-Year PUMS are advanced to 2022 using the Federal Reserve Bank of Atlanta's Wage Growth Tracker for overall hourly workers over the 12-month period prior to June 2022.

RENTAL MARKET

To analyze Seattle's rental market, we use data from the ACS and from the CoStar real estate analytics company.⁸⁸ While these sources are very different in terms of both the methodology for collecting data, both of these sources are useful, with each providing important insights into Seattle's housing market.

When considering findings based on the ACS it is essential to keep in mind that the ACS estimates incorporate both rental units that are subsidized to provide affordable units as well as unsubsidized market rental units.⁸⁹

Also of note, the ACS provides detail on the single unit and small multiplex (duplex, triplex and fourplex) segments of the rental market which are not covered by CoStar and other real estate analytics companies. These are important segments of the rental market, with the ACS estimating that 13 percent of renter households (24,000 households) rent detached 1-unit homes, 4 percent (7,000 households) rent attached 1-unit homes (such as townhouses, rowhouses), and 9 percent (16,000 households) rent units in small multiplexes.

Rental housing makes up the majority of Seattle's growing housing supply. The 2021 ACS estimates that 190,000 households—54 percent of all households in Seattle—rent the home in which they live.

Figure A-84 provides ACS estimates of median monthly gross rents (which include the monthly cost of rent and basic utilities) paid by Seattle households in units in buildings of different sizes. Because these estimates incorporate both market rate units and rent- and -income restricted units, they show lower rents than would be found if we were examining rents in unrestricted units. Findings from the ACS data include:

- Detached homes rented for a median price 43 percent higher than the overall median gross rent in the city in 2021. These rents are higher, in part, due to larger unit sizes, but also due to having private outdoor space, and the neighborhood locations where they are located.
- The median gross rent in attached homes, which includes townhomes and rowhouses, was 24 percent higher than the citywide median.

⁸⁸ In contrast to the ACS, which collects data from approximately 1 percent of all households per year and releases data after a substantial time lag for processing, CoStar regularly collects and quickly releases data from apartment complex property owners and managers to understand local real estate markets.

⁸⁹ The Census Bureau does not distinguish between subsidized and unsubsidized units in either collecting or reporting the ACS data.

- Only units in small multiplexes, multifamily buildings with 5 to 19 units, and multifamily buildings with 20 to 49 units had lower median rents than the citywide median. This relates, in part, to the fact that these properties tend to be older than larger multifamily properties.
- Multifamily buildings with 50 units or more had median gross rents similar to the overall median in the city. The higher rents found in large multifamily buildings compared to smaller ones are correlated with the fact that larger buildings are generally newer and therefore have a price premium. In addition, larger buildings tend to also be taller, requiring more expensive materials such as steel or concrete framing.⁹⁰

Figure A-83
Median Monthly Gross Rent

Size and Type of Building in Which Renter-Occupied Unit is Located	Percent of Renter Households	Average Number of Bedrooms	Median Monthly Gross Rent in 2021 (PUMS)	Difference from Overall Median Gross Rent
1-Unit, Detached	13%	3.9	\$2,567	44%
1-Unit, Attached	4%	3.3	\$2,233	25%
Small multiplex (Duplex, Triplex, Fourplex)	9%	2.8	\$1,674	-6%
Multifamily with 5 to 19 units	20%	2.3	\$1,618	-9%
Multifamily with 20 to 49 units	19%	2.0	\$1,618	-9%
Multifamily with 50 units or more	36%	1.9	\$1,902	6%
All renter-occupied units	100%	2.4	\$1,787	-

Sources: U.S. Census Bureau American Community Survey 5-Year Public Use Microdata Sample (PUMS) estimates for 2017-2021; IPUMS USA; Seattle Office of Planning & Community Development
Note: Median monthly rents are in 2021 dollars

Median Gross Rents by Number of Bedrooms

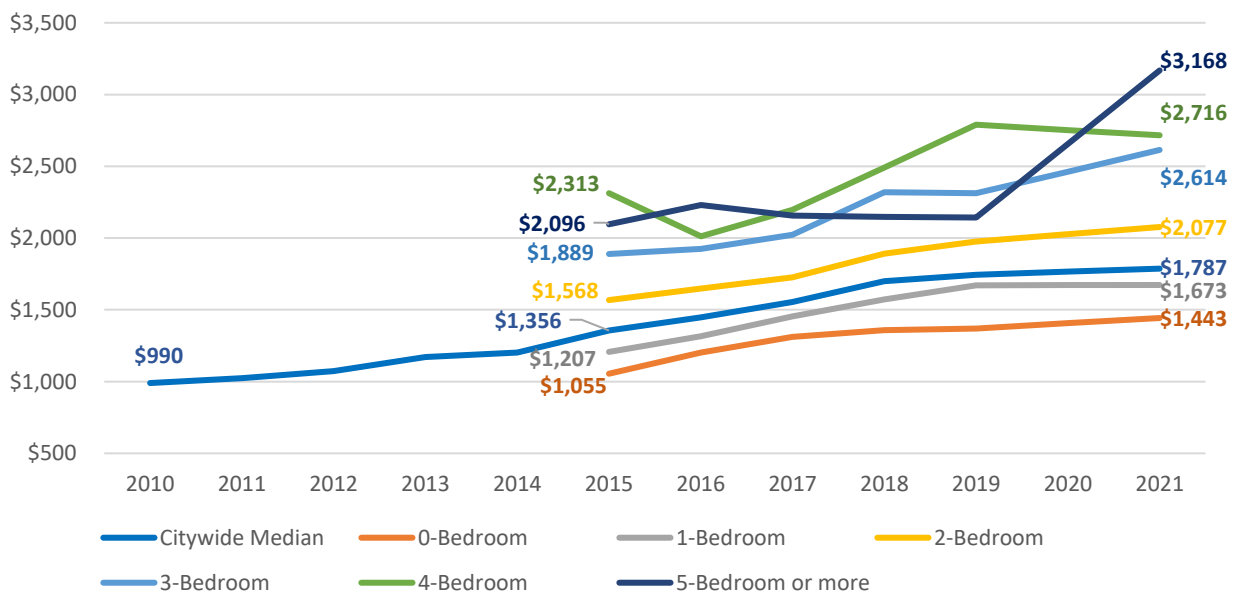
Figure A-85 presents estimates from the ACS to show how median gross rents have varied over time and by number of bedrooms in Seattle. These estimates include all building forms. Between 2010 and 2021, Seattle's median gross rent increased by \$797 per month, equating to an 81 percent increase. Adjusting for inflation finds that this still constitutes an increase of \$550 (45 percent).

The ACS also began providing median gross rent for units by number of bedrooms in 2015. Looking at these estimates gives us the following insights:

⁹⁰ In "[Making apartments more affordable starts with understanding the costs of building them](#)" (2020), Hannah Hoyt and Jenny Schuetz at the Brookings Institute present the cost per square foot of buildings by height and size, making note that costs escalate as the scale of residential buildings increase, in particular due to the hard costs of development.

- Zero-bedroom units, such as studios and small efficiency dwelling units, typically have median rents \$300 lower than the citywide median. 1-bedroom median gross rents were approximately \$100 less than the citywide median in 2021.
- At \$2,077 per month in 2021, 2-bedroom rents were approximately \$300 more than the citywide median and \$400 more than the median 1-bedroom.
- Rents for units with 3 bedrooms have increased more rapidly than the overall median rent in the city. While 3-bedroom rents were approximately \$500 more expensive than Seattle’s median gross rent in 2015, they were \$800 more expensive in 2021.

Figure A-84
Median Gross Rents by Number of Bedrooms Over Time



Source U.S. Census Bureau American Community Survey 1-Year Data

Notes: Due to COVID-19, The U.S. Census Bureau did not release 2020 1-Year ACS data. 2020 data presented are thus a middle point between 2019 and 2021 and may not reflect costs reductions or increases that households experienced in 2020. The estimates for 4-Bedroom and 5+ Bedroom apartments carry high margins of error due to the limited sample size, which may impact data reliability.

Median Gross Rents and Racial Equity

Figure A-86 uses the ACS estimates of median gross rents charged in 2021 along with ACS data on incomes to estimate the share of all Seattle households that could afford Seattle rents. Given that rents typically increase with the number of bedrooms in a unit, the share of households able to afford apartment rents generally declines as the number of bedrooms increases.

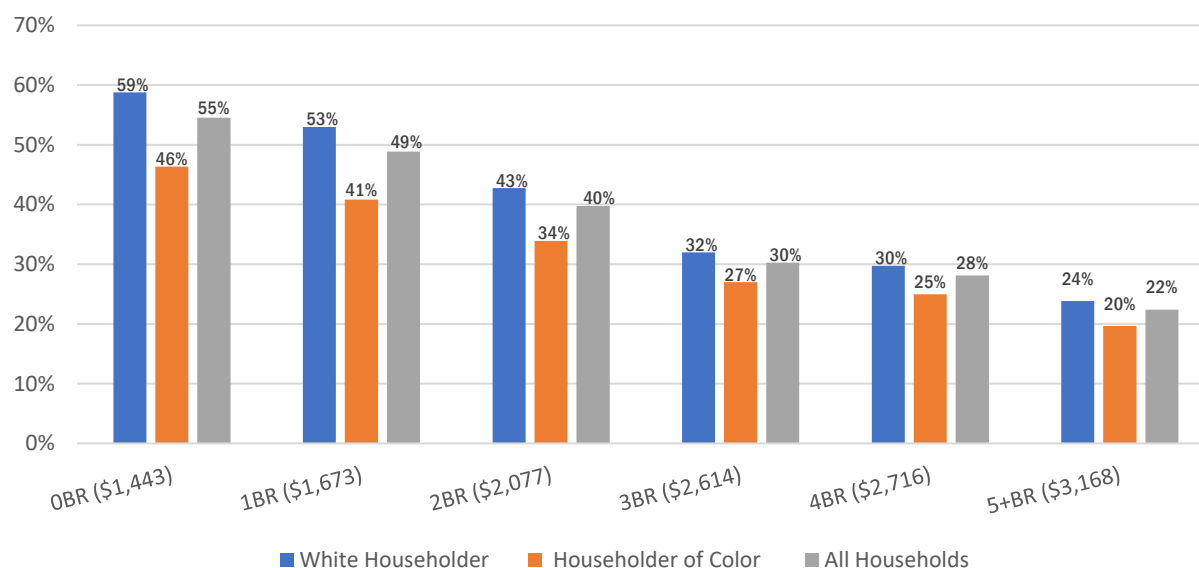
However, household incomes do not increase uniformly with household sizes. For example, a household comprised of a single parent with multiple children is likely to have a substantially lower income—and is thus likely to be able to afford much lower rents—than a similarly sized or smaller household that contains multiple adult earners.

Furthermore, there is a 13 percent difference in the share of households who can afford a 0-bedroom unit when considering if the householder is white or a person of color. While the percentage-point disparity decreases as the number of bedrooms increases, the overall share of Seattle households able to afford larger units also decreases. Just 43 percent of white householders can afford the typical 2-bedroom rental unit, while only 34 percent of householders of color can, and even fewer households of each group can afford the average 3-bedroom.

It is worth highlighting that this analysis considers the income distribution of owner and renter households in aggregate. If this analysis were constrained to consider only the incomes of renter households, it would show far lower shares of households able to afford these rents.

Figure A-85

Share of Seattle Households Who Could Afford Median Gross Rents in Seattle in 2021



Source: Rents from U.S. Census Bureau American Community Survey 1-Year Data; Incomes from U.S. Census Bureau 2017-2021 5-Year Public Use Microdata Samples; IPUMS-USA.

Affordability Levels of Apartment Rents

Figure A-87 presents estimates from CoStar to show how median rents in Seattle apartments vary by building age and by number of bedrooms.⁹¹ The rents we are reporting here are median gross rents, which are the effective contract rents of market-rate apartment units plus estimated tenant-paid utilities.⁹²

Key takeaways from this analysis include:

- Apartments over 30 years old play a significant role in housing affordability in Seattle, with effective rents ranging between \$220 to \$650 per month less than the median of all units with the same number of bedrooms.

⁹¹ Age presented as part of the Costar Multifamily analysis refers to the year the building was built or most recently renovated, therefore similar to effective year built in the Housing Supply analysis.

⁹² Sample is limited to market-rate or mixed market-affordable multifamily apartment buildings. Only properties with 5 or more units, which are typically CoStar's market focus, with current rent data are included. Further exclusions include cooperatives, dormitories, student housing, congregate housing, condominiums, corporate housing, and military housing. Effective rent estimates incorporate adjustments prorated over the lease term for concessions paid for by the landlord and for certain operating costs for which landlords charge tenants. Additional details can be found in the "effective rent" description in CoStar's glossary.

Estimates of tenant-paid utilities are created by using 2017-2021 5-Year Public Use Microdata Samples from IPUMS USA, University of Minnesota, www.ipums.org. Estimates of tenant-paid utilities are created for renter households by the number of bedrooms in the unit, then advanced to 2023 using mid-year CPI-U.

- Larger units are a small share of the overall apartment market in Seattle and are significantly more expensive than smaller units.
- In buildings that are less than 10 years old, the median rent for a 3-bedroom apartment, of which there are only 481 units in this analysis, was over \$5,000.

Figure A-86

Median Gross Rents by Number of Bedrooms in the Apartment

Number of Bedrooms	Median Gross Rent (February 2023)			Number of Units in CoStar Sample		
	All Units	Less than 10 Years Old	Over 30 Years Old	All Units	Less than 10 Years Old	Over 30 Years Old
0 Bedroom (studios, small efficiency dwelling units)	\$1,506	\$1,600	\$1,290	28,806	15,845	7,458
1 Bedroom	\$2,062	\$2,298	\$1,569	60,032	31,022	17,871
2 Bedroom	\$2,733	\$3,257	\$2,084	24,281	10,152	8,442
3 Bedroom	\$3,240	\$5,052	\$2,724	1,383	481	604
All	\$2,087	\$2,321	\$1,629	114,610	57,515	34,459

Sources: CoStar Group, www.costar.com; ACS 5-Year PUMS 2017–2021 prepared by City of Seattle OPCD
Notes: Median gross apartment rents are calculated using CoStar Effective Rents for apartments described in Footnote 92 and ACS PUMS estimates of tenant-paid utilities by the number of bedrooms.

Figure A-88 compares median gross rent data for February of 2023 to maximum gross rents considered affordable at various percentages of area median income.⁹³ Key takeaways from this comparison include:

- Median gross rents, regardless of age or number of bedrooms, are not affordable to households with incomes at or below 30% of AMI or 50% of AMI. Even in older units, median gross rents are only affordable to households with incomes higher than 50% of AMI.
- Median 0-bedroom rents, regardless of age, are affordable to households with incomes of 80% of AMI. Median gross rents of apartments with one or more bedrooms less than 10 years old are not affordable to households at 80% of AMI, while units over 30 years old are.

⁹³ The Housing Appendix uses the term “area median income” (AMI) to refer to HUD’s estimates of Area Median Family Income (HAMFI). HUD publishes HAMFI annually for areas across the U.S.; for Seattle the applicable area is a combination of King and Snohomish counties. Calculation of maximum affordable gross rents in the figure are based on Fiscal Year 2022 HAMFI of \$134,600, as the 2022 HAMFI fiscal year happened from May of 2022 to the end of March 2023, and rent data are from February 2023. We use standard adjustments to account for the number of bedrooms and assumed average household size per bedroom. Maximum affordable gross rents are equal to 30 percent of monthly household income for that AMI level.

- Median gross rents are largely affordable to households at 100% of AMI and at 120% of AMI. The exception is that 3-bedrooms less than 10 years old are not affordable to households with incomes at or below 120% of AMI.

Figure A-87

**Comparison of February 2022 Maximum Affordable Gross Rent by AMI Level
and Median Gross Rents for Unrestricted Apartment Units**

Unit Configuration	2022 Maximum Affordable Gross Rent					Median Gross Rents by Age for Unrestricted Apartment Units		
	30% of AMI	50% of AMI	80% of AMI	100% of AMI	120% of AMI	All Units	Less than 10 Years Old	Over 30 Years Old
0-Bedroom	\$707	\$1,178	\$1,885	\$2,356	\$2,827	\$1,506	\$1,600	\$1,290
1-Bedroom	\$757	\$1,262	\$2,019	\$2,524	\$3,029	\$2,062	\$2,298	\$1,569
2-Bedroom	\$909	\$1,515	\$2,423	\$3,029	\$3,635	\$2,733	\$3,257	\$2,084
3-Bedroom	\$1,050	\$1,750	\$2,800	\$3,500	\$4,200	\$3,240	\$5,052	\$2,724

Sources: HUD MFI for Fiscal Year 2022; CoStar Group, www.costar.com (February 2023); ACS 5-Year PUMS 2017-2021

Note: Median gross apartment rents are calculated using CoStar Effective Rents for apartments described in Footnote 92 and PUMS estimates of tenant-paid utilities by the number of bedrooms.

This table is provided for general reference. See Footnote 93 for information about how HAMFI is used to calculate 2023 Maximum Affordable Gross Rents and compare to specific AMI levels. The maximum affordable rents in this table do *not* include other adjustments that HUD and other agencies make in calculating rents limits for administering affordable housing programs, as those limits vary between types of affordable housing regulatory agreements. [Rent limits applicable to City of Seattle regulatory agreements](#) are listed on the Office of Housing's website.

Another, more precise, way to analyze the underlying data is by calculating the lowest *specific* income level that would be needed for median gross rents to be affordable to a household, as shown in Figure A-89. Analyzing the data this way allows us to understand how apartments less than 10 years old, except for those that are 0-bedroom, are not affordable to households with incomes at or below 80% of AMI, while older apartments, which are a limited portion of Seattle's apartment rental market, tend to have AMI levels lower than 80% of AMI.

Figure A-88

Household Income (Percentage of AMI) Needed to Afford Median Gross Apartment Rent

Unit Configuration	All Units	Less than 10 Years Old	Over 30 Years Old
0-Bedroom	64% of AMI	68% of AMI	55% of AMI
1 Bedroom	82% of AMI	91% of AMI	62% of AMI
2 Bedroom	90% of AMI	108% of AMI	69% of AMI
3 Bedroom	93% of AMI	144% of AMI	78% of AMI

Source: HUD MFI for Fiscal Year 2022; CoStar Group, www.costar.com; ACS 5-Year PUMS 2017-2021

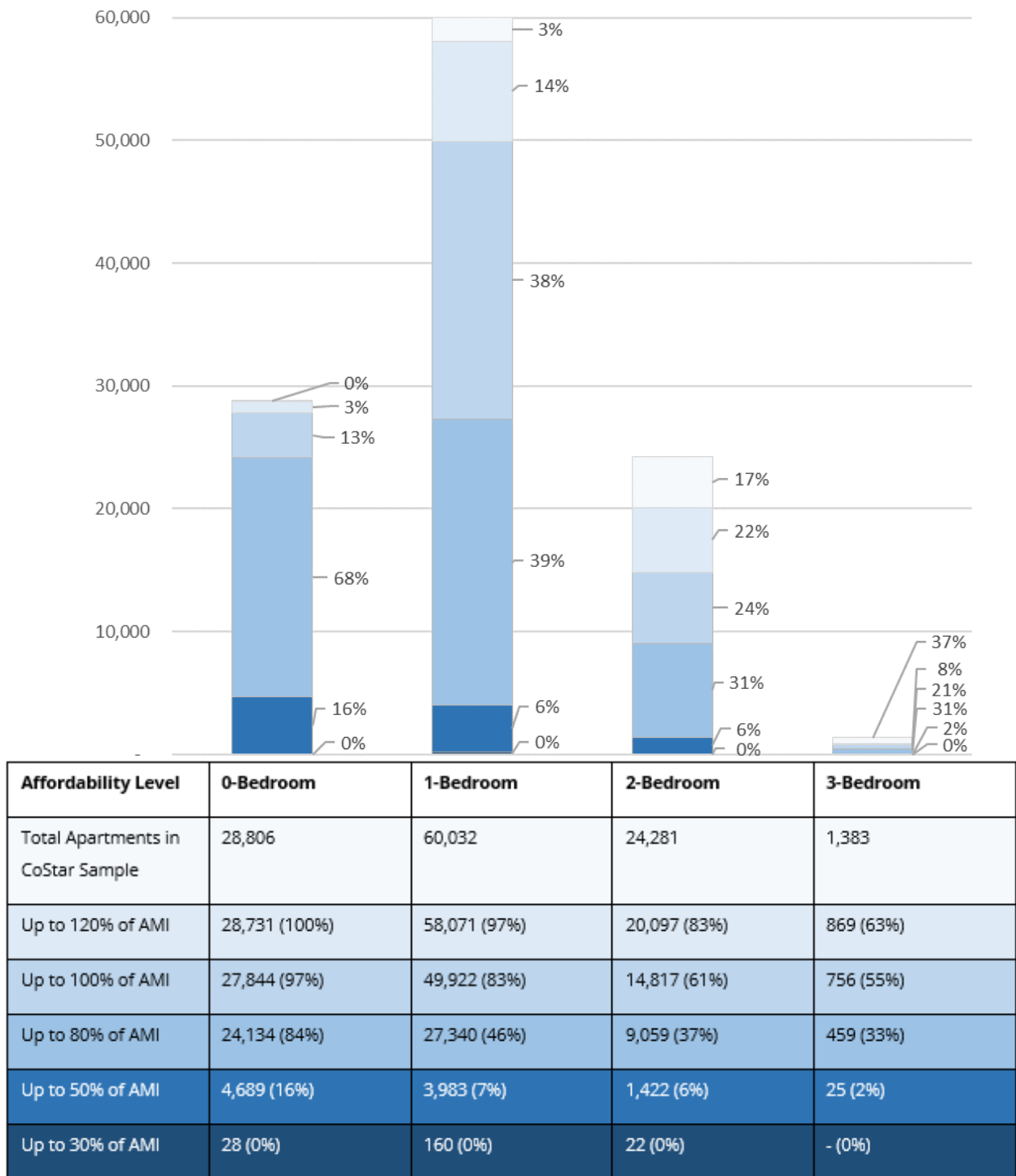
Notes: Median gross apartment rents are calculated using CoStar Effective Rents for apartments described in Footnote 92 and PUMS estimates of tenant-paid utilities by the number of bedrooms. See Footnote 93 for information about how HAMFI is used to calculate 2022 Maximum Affordable Gross Rents and compare to specific AMI levels.

Figure A-90 further visualizes the share of apartment units in CoStar’s database affordable to varying income levels, using the maximum affordable gross rents shown in Figure A-88. Apartment units are considered affordable at an income level when the gross rent of the apartment is less than or equal to the maximum affordable gross rent of that level. Thus, the percentage of units affordable to an income level is cumulative, i.e., the total number of units that are affordable to a household at 50% of AMI includes units affordable at 50% of AMI as well as units affordable to households at 30% of AMI. Key takeaways from this analysis include:

- Out of approximately 115,000 apartment units with rent data, fewer than 250 units are affordable to households at 30% of AMI.
- Considering both affordability and unit configuration regarding number of bedrooms finds that only 8 percent of all apartment units with rent data are multi-bedroom units affordable to households with incomes at or below 80% of AMI.
- Very few apartment units are affordable to households at 50% of AMI, with most of those being 0-bedroom and 1-bedroom units. Likewise, units affordable to households at 80% of AMI are primarily 0-bedroom and 1-bedroom units.
- A greater share of multibedroom units are affordable to households at 100% of AMI; however, only 55 percent of 3-bedroom units are affordable to households at this AMI level. In addition, there are very few multibedroom units relative to 0-bedroom and 1-bedroom affordable to households at 100% of AMI.
- While most units are affordable to households at 120% of AMI, the share of units affordable at this level decreases as the number of bedrooms increases.

Figure A-89

Apartments by Number of Bedrooms and AMI-based Affordability Level



Source: CoStar Group, www.costar.com; ACS 5-Year PUMS 2017-2021

Note: Median gross apartment rents are calculated using CoStar Effective Rents for apartments described in Footnote 92 and PUMS estimates of tenant-paid utilities by the number of bedrooms. See Footnote 93 for information about how HAMFI is used to calculate 2022 Maximum Affordable Gross Rents and compare to specific AMI levels. A small number of units (~50 units) are not included in this analysis that are analyzed earlier in this section.

Affordability Levels of Zero- and One-Bedroom Apartments by Square Footage

In addition to examining rents by number of bedrooms, it is also useful to look at rents by unit size based on square footage. The square footage of apartments dramatically impacts their market rents, with the smallest zero- and one-bedroom apartments having higher per square foot rents but lower unit rents overall compared to their larger counterparts.

Figure A-91 shows CoStar data for 0-bedroom and 1-bedroom apartments, categorized based on their square footage and the age of the property in which the apartments are located. This analysis uses less than 220 square feet to loosely represent the smallest category of units, commonly referred to as “micro-units.” Micro-units are typically suitable for one-person households. Some micro-units offer vertical space such as platforms with loft beds; such units are most appropriate for people able to climb ladders or stairs.

The analysis also includes a category for 220 to 400 square feet; and a category over 400 square feet to represent larger zero- and one-bedroom units.

There is nearly a \$1,000 difference in the median rent between micro-units with less than 220 square feet of net rentable floor area and 0-bedroom or 1-bedroom apartments over 400 square feet. The difference is about \$1,100 when looking at units in buildings less than 10 years old.

Calculating *specific* income levels required for these units to be affordable to households allows for greater insights. Regardless of the property age category, the median gross rent for units with less than 220 square feet is affordable to households with specific incomes between 37 and 45% of AMI, and the median gross rent for units with 220 to 440 square feet is affordable to households with specific incomes between 53 and 60% of AMI. In comparison, the median gross rent of new apartments over 400 square feet is only affordable to households at or above 86% of AMI while the median gross rent for apartments of the same size over 30 years old is affordable to households with incomes 60% of AMI or higher. Regardless of square footage, median gross rent required to afford units in this analysis is lower with age; however, the difference between newer apartments less than 10 years old and older apartments over 30 years old is greatest in apartments with more than 400 square feet.

Figure A-90**Median rents by Square Footage, for 0-Bedroom and 1-Bedroom Apartments**

Apartment Square Footage	Median Gross Rent (February 2023)			Number of Units in CoStar Sample		
	All Units	Less than 10 Years Old	Over 30 Years Old	All Units	Less than 10 Years Old	Over 30 Years Old
Less than 220 SF	\$1,025	\$1,058	\$883	2,351	1,839	200
220 to 400 SF	\$1,362	\$1,416	\$1,247	9,821	6,012	3,013
Over 400 SF	\$1,988	\$2,182	\$1,514	76,377	38,973	21,871
Household Income (Percentage of AMI) Needed to Afford Median Gross Apartment Rent						
Apartment Square Footage	All Units	Less than 10 Years Old	Over 30 Years Old			
Less than 220 SF	44% of AMI	45% of AMI	37% of AMI			
220 to 400 SF	58% of AMI	60% of AMI	53% of AMI			
Over 400 SF	79% of AMI	86% of AMI	60% of AMI			

Sources: CoStar Group, www.costar.com; ACS 5-Year PUMS 2017-2021 prepared by City of Seattle OPCD

Notes: Median gross apartment rents are calculated using CoStar Effective Rents for apartments described in Footnote 92 and PUMS estimates of tenant-paid utilities by the number of bedrooms. See Footnote 93 for information about how HAMFI is used to calculate 2022 Maximum Affordable Gross Rents and compare to specific AMI levels.

For this analysis, which includes CoStar identified 0-bedrooms and 1-bedrooms, we assume 1 person for apartments in the Less than 220 SF and 220 to 400 SF categories, and 1.5 person households for apartments in the Over 400 SF category. These assumptions may result in an overestimate of affordability for 1-person households and an underestimate of affordability for 2-person households.

Context on Housing Affordability with Recent Increases in AMI

The analysis presented in the prior section on the affordability of apartment rents measures the household income, expressed as a percentage of AMI, that a household would need if they were spending no more than 30 percent of their income on monthly housing costs. Estimated affordability levels are very sensitive to changes in AMI. During times when area median income is increasing rapidly, as it has been in recent years, affordability levels expressed as a percentage of AMI can paint an overly positive picture for the most economically vulnerable households unless those households' incomes increase as rapidly as AMI.

HUD's calculation of AMI starts with area median family income from the ACS for the most recent year for which data are available and then factors in inflation to arrive at AMI for the current year. Given increases in the median family income estimates from the ACS and the inflation rate adjustments applied to these estimates, the HUD-calculated AMI for the Seattle-Bellevue metro area (King and Snohomish counties combined) increased by 16 percent in a single year (2021 to 2022). This was followed by an additional 9 percent increase between 2022 and 2023.

Recent ACS estimates presented in Figure A-92 provide an indication that household incomes near the low-end of the spectrum have not risen as fast as AMI in the Seattle area. Looking at 2022 ACS data (the most recent available at the time of our analysis) finds that in the Seattle-Bellevue metro area, income at the 20th percentile of the overall household income distribution was only 35 percent of HUD's published AMI for Fiscal Year 2022; this compares to 38 percent for 2021 and 39 to 40 percent for 2015 to 2019.⁹⁴

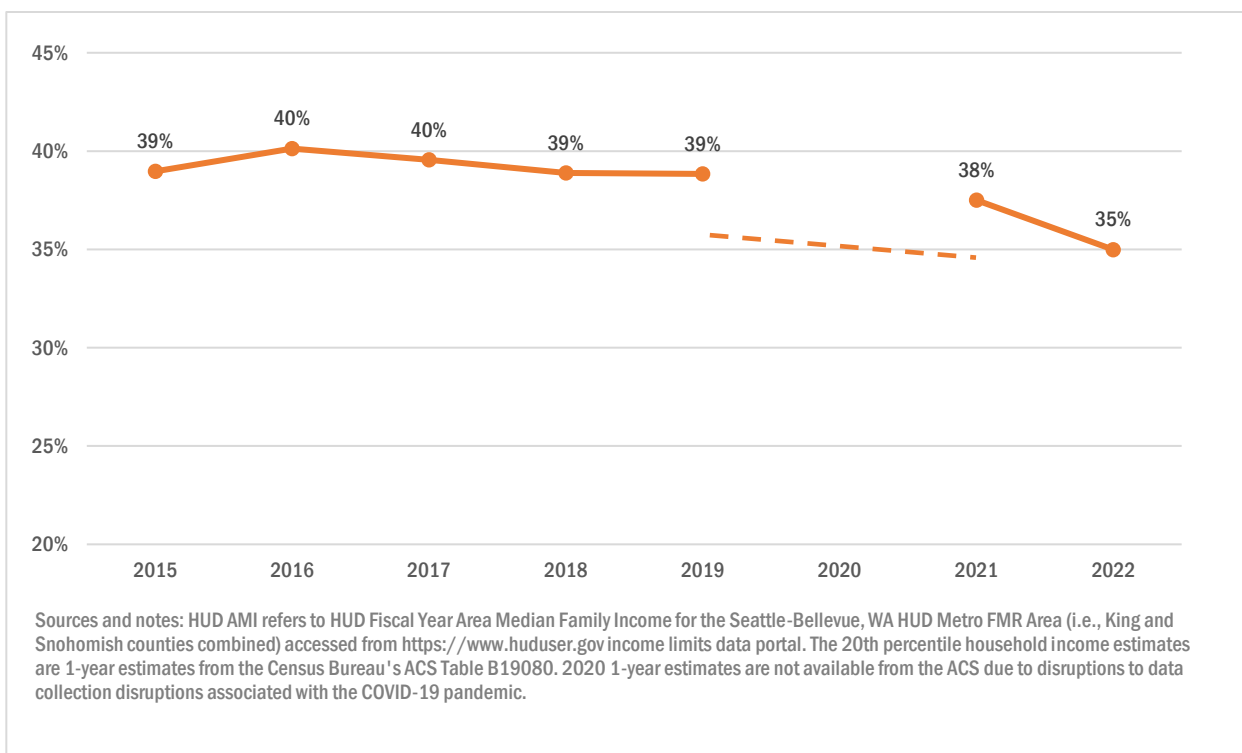
It is also useful to keep in mind that inflation impacts are greatest for households on the lowest rungs of the economic ladder. Low-income households have fewer options for reducing expenditures on basic needs like housing, healthcare, and food. Rising housing costs reduce their ability to afford other necessities, for which costs have also risen dramatically in recent years.⁹⁵

⁹⁴ In the city of Seattle, the 20th percentile household income, while lower, followed a similar trend. The 20th percentile household income estimates used in this analysis are based on the upper limit of the lowest household income quintile in ACS Table B19080 "Household Income Quintile Upper Limits" for selected years. The analysis is intended to provide a general sense of how HUD AMI has been trending relative to household incomes in the lowest portion of the overall household income distribution; there are nuances that this simple analysis does not take into account.

⁹⁵ See "[High inflation disproportionately hurts low-income households](#)" Aparna Jayashankar and Anthony Murphy, Federal Reserve Bank of Dallas, January 10, 2023. And "[United States Inflation Experience across the Income Distribution](#)" Joshua Klick, Anya Stockburger" Working Draft Prepared for the Group of Experts on Consumer Price Indices UNECE Geneva, June 2023.

Figure A-91

20th Percentile Household Income as a Percentage of HUD AMI, Seattle-Bellevue Metro Area



Median Apartment Rents by Number of Units in Property

This section looks at median gross rents by the size and age of properties.⁹⁶ In general, apartments less than 10 years old in Seattle tend to be in properties with 50 or more units, while apartments older than 30 years are more commonly in smaller properties. The relationship among property size, age, and price is also intertwined with the quality, type and safety of building materials used in development, the level of amenities (of which there are typically fewer in smaller buildings), the price of land and financing, and neighborhood characteristics.

Figure A-93 shows that units in older properties of all sizes have lower median rents than the overall medians in the corresponding size categories, whereas units in buildings under 10 years old are more expensive. Furthermore, having fewer units in a building is correlated with lower gross rents across all building ages.

⁹⁶ CoStar reports multifamily housing at the property level, which may include more than one building, whereas the Assessor's analysis reports multifamily housing at the building level.

Figure A-92
Median rents by Number of Units in Building

Number of Units in Building	Median Gross Rent (February 2023)			Number of Units in Sample		
	All Units	Less than 10 Years Old	Over 30 Years Old	All Units	Less than 10 Years Old	Over 30 Years Old
5 to 19 Units	\$1,391	\$1,787	\$1,370	8,739	389	7,901
20 to 49 Units	\$1,647	\$1,759	\$1,580	20,305	4,706	12,794
50+ Units	\$2,243	\$2,362	\$1,828	85,566	52,420	13,764
All buildings with 5 or more units	\$2,087	\$2,321	\$1,629	114,610	57,515	34,459

Sources: CoStar Group, www.costar.com; ACS 5-Year PUMS 2017–2021 prepared by City of Seattle OPCD
Notes: Median gross apartment rents are calculated using CoStar Effective Rents for apartments described in Footnote 92 and PUMS estimates of tenant-paid utilities by the number of bedrooms

Affordability of Apartment Rents by Worker Occupation

Another way to understand the implications of Seattle’s rental housing market is to look at whether people in various occupations can afford the rents being charged. The analysis presented in Figure A-94 gauges whether a Seattle apartment unit with the average rent for its size is affordable for a household where the worker(s) in the household earn the average pay in Seattle for their occupation(s). We consider a unit affordable if rent consumes no more than 30 percent of wages.^{97, 98}

Cells with green checks indicate the average rent for an apartment of the specified size would be affordable to the example households described in each row, while the red “x”s indicate the rent would not be affordable to the households with the specified workers.

The first rows in the table illustrate affordability for households with a sole wage earner who is in a full-time position in the occupation shown.

⁹⁷ This is a simplified analysis in that it does not account for the cost of utilities nor for sources of income besides wages.

⁹⁸ For this analysis, we used with average wage statistics for May 2022 for the Seattle-Tacoma-Bellevue MSA from the federal Bureau of Labor Statistics (BLS), adjusting for higher wages paid in the city for many occupations. ACS data (1-year 2022 estimates) indicate that wages in most occupational groups are somewhat higher in the city of Seattle than in the metro area. For occupations in these groups, we estimated average wages paid in Seattle for the occupation by multiplying the metro area earnings from the BLS statistics by the ACS-derived ratio of Seattle median earnings to metro area median earnings for the applicable occupational group. We used the BLS statistics without adjustment for other occupations. Part-time workers in our analysis were assumed to earn half the annual average for a full-time worker in their occupation.

For rents, we used second quarter 2022 average effective rent estimates for apartments in Seattle from CoStar. The apartments in the CoStar multifamily database are limited to units in complexes with 5 or more units. For this analysis we excluded units in properties where all units are income- and rent-restricted. We additionally excluded cooperatives, dormitories, student housing, congregate housing, condominiums, corporate housing, and military housing.

- In households with just one wage earner, the worker would need to be employed full time in an occupation earning roughly \$58,500 (roughly 1.6 times the minimum wage that large employers in Seattle must pay workers) to afford rent for a zero-bedroom unit of average cost. Full-time workers earning the minimum wage would be cost-burdened renting an average cost zero-bedroom unit. Childcare workers, groundskeepers, wait persons, and medical assistants earning the average for their occupations are also among those who would be unable to afford the average zero-bedroom apartment.
- The situation is somewhat better for construction workers, bus drivers, administrative assistants, and social workers; they can afford a zero-bedroom apartment, but not a one-bedroom apartment.
- Full-time workers in better-paying professional fields can afford a one-bedroom apartment without another wage earner in the home.
- Of all the occupations selected for analysis, registered nurses and software developers are the only ones able to afford an average-cost two-bedroom apartment as a sole wage earner. Of these, only software developers can afford three bedrooms.

The second part of Figure A-94 shows examples of households with two wage earners.

- Part-time workers in low-paying occupations struggle to afford housing costs even when sharing rent. For example, a part-time waitperson and a part-time bank teller would together be unable to afford even the average zero-bedroom apartment unit.
- Two-earner households in which at least one person works full time generally fare better. Still, some households with dual earners in low-paying occupations are unable to afford a one-bedroom apartment.

Of course, not all household members are wage earners; households may include dependents, and multiple bedrooms are needed for many of these households. Seattle's housing market is often more challenging for these households given that affording the average rent for a two-bedroom apartment requires earnings of at least \$108,000 per year. Households need two wage earners in at least a moderately well-paid occupation or one worker in a well-paid profession to afford an average-cost two-bedroom apartment.

Figure A-93**Affordability of Seattle Apartment Rents by Occupation of Wage Earners, 2022**

Number of Wage Earners and People in Household	Occupation(s)	Estimated Average Annual Wage Paid in Seattle	Estimated Maximum Affordable Gross Rent	Affordability of Rent by Unit Configuration			
				0-BR Ave. rent \$1,463 (\$58,520 per year to afford)	1-BR Ave. rent \$2,006 (\$80,240 per year to afford)	2-BR Ave. rent \$2,701 (\$108,040 per year to afford)	3+BR Ave. rent \$3,882 (\$155,261 per year to afford)
1 full-time wage earner in household with 1 or more persons	Minimum-Wage Worker (w/large employer)	\$35,922	\$898	✗	✗	✗	✗
	Childcare Worker	\$41,551	\$1,039	✗	✗	✗	✗
	Assembly Worker	\$46,430	\$1,161	✗	✗	✗	✗
	Groundskeeper	\$48,920	\$1,223	✗	✗	✗	✗
	Bank Teller	\$51,155	\$1,279	✗	✗	✗	✗
	Waitperson	\$51,796	\$1,295	✗	✗	✗	✗
	Hairdresser	\$52,511	\$1,313	✗	✗	✗	✗
	Medical Assistant	\$56,895	\$1,422	✗	✗	✗	✗
	Construction Worker	\$59,676	\$1,492	✓	✗	✗	✗
	Administrative Assistant	\$59,686	\$1,492	✓	✗	✗	✗
	Bus Driver	\$68,910	\$1,723	✓	✗	✗	✗
	Child or Family Social Worker	\$74,122	\$1,853	✓	✗	✗	✗
	Firefighter	\$84,270	\$2,107	✓	✓	✗	✗
	Teacher (Elementary School)	\$92,296	\$2,307	✓	✓	✗	✗
	Electrician	\$92,521	\$2,313	✓	✓	✗	✗
	Community Service Manager	\$107,871	\$2,697	✓	✓	✗	✗
	Registered Nurse	\$109,506	\$2,738	✓	✓	✓	✗
	Software Developer	\$165,294	\$4,132	✓	✓	✓	✓
2 wage earners—full-time (FT) or part-time (PT) in household with 2 or more persons	Waitperson (PT) and Bank Teller (PT)	\$51,475	\$1,287	✗	✗	✗	✗
	Childcare Worker (full-time) and Hairdresser (part-time)	\$67,806	\$1,695	✓	✗	✗	✗
	Two minimum-wage workers (both full-time)	\$71,843	\$1,796	✓	✗	✗	✗
	Assembly Worker (FT) and Medical Assistant (PT)	\$74,878	\$1,872	✓	✗	✗	✗
	Admin Assistant (FT) and Hairdresser (PT)	\$85,934	\$2,148	✓	✓	✗	✗
	Construction Wkr (FT) and Community Svc Mgr (PT)	\$113,611	\$2,840	✓	✓	✓	✗
	Bus Driver (FT) and Firefighter (FT)	\$153,180	\$3,830	✓	✓	✓	✗
	Registered Nurse (FT) and Electrician (FT)	\$202,027	\$5,051	✓	✓	✓	✓
Sources: Bureau of Labor Statistics (BLS), Occupational Employment and Wage Statistics (OEWS), www.bls.gov/oes/ ; American Community Survey; CoStar Group, www.costar.com . See Footnotes 92 and 93 for details on sources and analysis methodology.							

The Role of ADUs in Meeting Housing Needs

Accessory dwelling units (ADUs) are small, secondary living units allowed in residential areas. They go by many names — backyard cottage, carriage house, accessory apartment, in-law unit — and offer many benefits to their owners and occupants. ADUs were common in cities like Seattle in the first half of the 20th century but fell out of favor after World War II with the rise of detached homes and expansion of single-family-only zoning.

Seattle relegalized these traditional dwellings in our Neighborhood Residential zones starting with attached ADUs (AADUs) in 1994, as required following passage of the [Washington Housing Policy Act](#), and continuing with detached ADUs (DADUs), first in 2007 as a pilot in southeast Seattle and then citywide in 2010. Despite their many benefits for owners and occupants, including rental income, flexible space to meet changing family needs, and a lower-cost alternative to large, detached homes, relatively few ADUs were permitted following the 2010 legislation.

Since then, Seattle has taken steps to encourage production of ADUs as part of our broader work to increase housing opportunities and address neighborhood exclusion. In 2019, Seattle reformed its rules for ADUs and removed several regulatory barriers that historically discouraged or prevented property owners from creating this type of housing.

Under Seattle’s updated ADU regulations:

- Two ADUs are allowed on all lots in Neighborhood Residential zones. They can be configured as two AADUs or, depending on lot size, one AADU and one DADU. (House Bill 1337, adopted in 2023, requires cities in Washington to allow two DADUs in either one or two separate structures in all residential zones.)
- No off-street parking is required when an ADU is added.
- The ADUs and the principal dwelling unit can each be rented by different tenants, owned by a single property owner, owned as condominium units, or a mix of these forms of tenure. Seattle does not have an owner-occupancy requirement.
- New ADUs have a maximum size limit of 1,000 square feet, excluding garage and storage space. ADUs in a converted living space or accessory structure can exceed this size limit.
- DADUs have a maximum allowed height of 23 or 25 feet tall on most sites, allowing for a second story of living space.
- On sites with an alley, a DADU can be located at the lot line that abuts the alley.
- ADUs are not subject to subjective or discretionary design requirements.

In addition to regulatory reforms, Seattle implemented other programmatic strategies to address ADU barriers. In 2020, OPCD launched [ADUniverse](#), a one-stop online portal for ADU guidance and resources, including a property search tool that offers site-specific information about ADU feasibility and a gallery of pre-approved DADU designs that offer a faster and more predictable permitting process for residents.

Due in part to these efforts, ADU production in Seattle has increased substantially over the last several years. [OPCD's 2022 ADU Annual Report](#)⁹⁹ provides data and findings related to ADU production and outcomes in Seattle, with highlights summarized below. In 2022, the City issued permits for nearly 1,000 ADUs; this was more than four times the number of units permitted in 2018, the last full year before ADU reforms took effect. Permits were issued for 437 AADUs and 551 DADUs, primarily in Seattle's NR zones. About 40 percent of these permits included multiple units (either an AADU and DADU or two AADUs), and one-third of ADUs were permitted along with a new detached home, likely as part of a full redevelopment of a site in an NR zone that previously had only a single detached home. More than 70 percent of new detached homes permitted in Seattle in 2022 included an ADU, likely a reflection of the floor area ratio (FAR) limit established through the 2019 ADU reforms, which limited the size of new detached homes and exempts floor area in an ADU as an incentive to include those units in new developments.

ADUs in Seattle are used in various ways:

- Seattle's survey of ADU owners and occupants, analyzed in the 2022 ADU report, suggests the average monthly rent charged for ADUs that are rented to tenants is substantially less than a typical multifamily apartment. Most respondents to our 2022 survey of ADU owners and occupants reported monthly rents between \$1,250 and \$2,000, with an overall median of \$1,650. About 80 percent reported rents below the Seattle median one-bedroom apartment rent, and a portion of respondents reported rents under \$1,000.
- Some ADUs are offered as short-term rentals (STRs) on platforms like Airbnb and Vrbo. Seattle has regulations that limit the number of units an operator can offer for short-term rental. Data from the City's STR licensing system suggests that about 12 percent of ADUs in Seattle are associated with an active STR license.
- Through City permitting and County recording data, we can identify the share of ADUs created and sold as condominium units, which appears to be a rising trend. Very few ADUs were created as condos before 2018, but this became much more common starting in 2020. In 2021, roughly one-third of ADUs permitted were part of a condo. A review of a sample of condo sales in 2022 shown in the Ownership Market section of this Housing Appendix suggests that ADUs sold as condos typically offer a lower price point for new construction than otherwise available in NR zones.

The survey of ADU owners and occupants also found a median cost of \$100,000 to develop AADUs and \$230,000 to develop DADUs. The median cost to build two ADUs was \$200,000 per ADU. Survey respondents used a mix of cash and debt (home equity line of credit, mortgage refinancing, credit cards, etc.) to finance their ADU construction.

Together, these findings offer some potential conclusions about the role of ADUs in meeting Seattle's housing needs. First, ADU production has increased in recent years, due at least partly to the 2019

⁹⁹ [Accessory Dwelling Units 2022 Annual Report](#), City of Seattle OPCD, March 2023. Readers can access the report as well as other resources on OPCD's webpages related to our work [Encouraging Backyard Cottages](#).

regulatory reform, and consequently ADUs are the primary form of net housing unit growth in Seattle's NR zones. Second, high demand for ownership housing in these neighborhoods is driving a rise in ADUs offered as condominiums, suggesting that additional reforms to increase the potential for similar middle housing options would help meet the need for lower-cost homeownership options. Third, survey responses suggest ADUs provide myriad benefits for their owners — including the ability to house family members, adapt to changing household needs, and afford the costs of homeownership — but their high cost generally restrict these benefits to homeowners who have high incomes and wealth and who are disproportionately white.

Housing Condition

Substandard and otherwise poor housing conditions harm health and pose safety hazards. Living in such housing can exacerbate chronic diseases and heighten risks of infection and injury. Having substandard housing is also correlated with poor mental health.¹⁰⁰ Overcrowding of occupants within housing units, which is one of the topics covered in the earlier discussion of housing problems that households face, is connected to similar harms. The importance of housing conditions for health has recently been highlighted by research showing elevated COVID-19 case rates and deaths among households in housing with a lack of complete kitchen facilities, complete plumbing facilities, and/or overcrowding.¹⁰¹

Low-income renters, households of color, and other marginalized populations tend to experience the greatest exposure to and risks of substandard housing conditions. The youngest and oldest members of a community are particularly vulnerable as are those with a health condition or disability.

UNITS LACKING COMPLETE KITCHEN AND PLUMBING FACILITIES

The proportions of households in units lacking complete kitchen facilities and complete plumbing facilities are generally small in the U.S. and Seattle, although the shares tend to be somewhat higher for renters than for owners.

- About 1.8 percent of occupied housing units lack complete kitchen facilities, with lower rates for owner-occupied units (0.4%) than for renter occupied units (2.9%).¹⁰²

¹⁰⁰ Housing and Health: Time Again for Public Health Action, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447157/>

¹⁰¹ Zachary Parolin, Emma K. Lee, "The Role of Poverty and Racial Discrimination in Exacerbating the Health Consequences of COVID-19," *The Lancet Regional Health - Americas*, Volume 7, 2022,

¹⁰² The lack of a complete kitchen does not always signal a problem. Per the ACS, roughly one in three Seattle renter households whose units lack complete kitchens have their meals included in their rent. Another consideration is that tenants in some units, such as the microunits built in substantial numbers in Seattle in the early 2010s, may lack a complete kitchen within their individual

- About 0.4 percent of occupied housing units lack complete plumbing facilities, again with lower rates for owner-occupied units (0.2%) than for renter occupied units (0.6%).

RISK OF EXPOSURE TO LEAD PAINT

The state Department of Health uses data on housing units built before 1980 as a general indicator of potential risk of exposure to lead paint. When lead paint is present, risks are typically greatest for households with young children or pregnant persons, and when paint is being disturbed such as during renovations. An estimated 54 percent of housing units in the city were built prior to 1980.¹⁰³ Mapping shows that the prevalence of housing this old is higher in most neighborhoods in Seattle and communities just to the north and south of Seattle than in more suburban communities in King County.¹⁰⁴

UNSAFE HOUSING CONDITIONS FOUND BY RENTAL HOUSING INSPECTIONS

Seattle’s Rental Registration and Inspection Ordinance (RRIO) program provides additional insights into unsafe housing conditions. The RRIO Annual Report for 2022¹⁰⁵ indicates that the most common reasons that City inspectors found that year for units failing initial inspections that year included unsafe electrical equipment and exposed wiring, missing or nonfunctional smoke alarms, and issues with railing.

EXPERIENCES OF TENANTS

Questions about housing condition were part of a non-random online survey that the organization Washington CAN! conducted about the challenges experienced by renters in Seattle.¹⁰⁶ Mold was by far the most common problem that respondents identified with the physical condition of their unit. Other problems identified include problems with pests, exposed wiring, broken thermostats, broken windows, and broken locks.

The Washington CAN! survey additionally asked respondents to indicate barriers to securing needed repairs and barriers, if any, that would keep them from moving. Nearly nine in ten indicated that the up-front costs associated with moving into a different unit would be a barrier; concerns about discrimination

space, but share a full kitchen with others in a building. (The ACS data is not detailed enough to tell us how tenants in microunits answered the question about kitchen facilities.)

¹⁰³ Based on 2021 1-year ACS estimates.

¹⁰⁴ Washington State Department of Health, [Lead Risk from Housing | Washington Tracking Network \(WTN\)](#), 2015-2019 5-year ACS estimates.

¹⁰⁵ Seattle Department of Construction and Inspections “[Rental Registration and Inspection Ordinance \(RRIO\) 2022 Annual Report to the City Council](#),” March 2023.

¹⁰⁶ [Seattle’s Renting Crisis: Report & Policy Recommendations](#) Washington CAN!, July 2016.

by potential landlords was also a common response. Also common were worries that a landlord may retaliate if asked to repair a problem.

The King County Board of Health’s “Healthy Housing” report echoes many of these themes and highlights that households with lower incomes confront tradeoffs between housing condition and affordability. The authors also explain that part of why renters are at higher risk than owners of living in deficient housing is due to the lower level of control they have regarding the housing in which they live.¹⁰⁷

OTHER HAZARDS

Other hazardous housing conditions do not present day-to-day danger, but place people at great risk when earthquakes and other disasters happen. Earthquakes present the greatest risks of severe damage.¹⁰⁸ At greatest risk of severe damage and collapse during earthquakes are unreinforced masonry (URM) structures; typically, these are brick buildings built prior to 1945.

According to a report associated with the City’s recently updated URM inventory,¹⁰⁹ there are 362 URM buildings with residential occupancy, 47 of which contain income-restricted affordable housing units. The same report notes anecdotal information that many non-income restricted URM buildings also provide relatively affordable units and commonly house low-income and immigrant tenants.

¹⁰⁷ The [King County Board of Health Guideline and Recommendation on Healthy Housing](#) was produced in 2018 to inform regional and local implementation of earlier updates of the King County Countywide Planning Policies on housing.

¹⁰⁸ Seattle City Office of Emergency Management, [Seattle Hazard Identification and Vulnerability Analysis](#).

¹⁰⁹ The [List of URM’s Identified by the City in 2023](#) and the associated [Report To Policy Committee On URM List Validation and ConfirmedURMList.pdf \(seattle.gov\)](#) can be found with other information on URM’s the Seattle Department of Construction and Inspects webpage at [Unreinforced Masonry Buildings - Project Documents - SDCI | seattle.gov](#).

The Role of Housing Vouchers in Seattle’s Rental Market

The Seattle Housing Authority (SHA) administers 10 voucher programs financed through federal and state resources. Rental vouchers are critical in opening opportunities to housing across the city while ensuring that households with vouchers pay limited rental costs.

These voucher programs aim to ensure that income qualified tenants pay no more than 30 to 40 percent of their household income on housing, with some exceptions explained later in this section. These programs do so by providing a subsidy for voucher holders for rent costs that exceed 30 to 40 percent of household income, which are paid by SHA.

Figure A-95 shows that, as of 2023, SHA administers 13,117 vouchers to local households. The Moving To Work (MTW) program has the largest number of vouchers, with 10,406 vouchers locally. The MTW program serves families from waiting lists based on SHA or project-based local priorities; serving households with incomes at or below 30% of AMI is one of those priorities. Each of the other 9 voucher programs are targeted to serve a specific population or housing development need, such as how Veterans Affairs Supportive Housing (VASH) serves veterans.

To qualify for a voucher, households must have household incomes at or below 50% of AMI.¹¹⁰ However, unlike Medicaid, Medicare, Social Security, or the Supplemental Nutritional Assistance Program (SNAP), housing vouchers are not an entitlement program. This means there are very limited vouchers compared to the number of households that may qualify for them. Given the 2019 baseline of approximately 45,000 households in Seattle with incomes at or below 50% of AMI, there were vouchers for less than a third of households who would otherwise meet the income qualifications for voucher programs.

Utilization rates, or the percentage of vouchers currently in use, further presented in Figure A-95 show the degree to which local households are able to use the vouchers assigned to Seattle. Variances in utilization rates are dependent on the quality of housing, the ability to move income-qualified individuals into units, and a variety of market-related factors, such as cost, location, and discrimination, that may otherwise exclude households from housing. Timing is also highly important. SHA recently received more VASH vouchers, many of which are yet to be utilized, which had driven the utilization rate down.

¹¹⁰ For further eligibility information, visit [Seattle Housing Authority’s Housing Choice Voucher Eligibility webpage](#)

Figure A-94
Vouchers by Program (June 2023)

Program Names	Number of Vouchers			Utilization Rate (as of June 2023)	
	Project-based Vouchers	Tenant-based Vouchers	Total Vouchers	Project-Based Vouchers	Tenant-Based Vouchers
Moving to Work (MTW)	4,389	6,017	10,406	91%	88%
Tenant Protection Vouchers (TPV)	-	147	147	-	78%
Rental Assistance Demonstration (RAD)	396	-	396	94%	-
Emergency Housing Voucher (EHV)	-	518	518	-	114%
Veterans Affairs Supportive Housing (VASH)	169	500	669	91%	69%
Mainstream	89	216	305	91%	74%
Family Unification Program	-	210	210	-	87%
Family Unification Program Youth (FUPY)	-	65	65	-	92%
Foster Youth to Independence (FYI)	-	163	163	-	15%
Moderate Rehabilitation:	238	-	238	69%	-
Total:	5,281	7,836	13,117		
Source: Seattle Housing Authority as of June 2023					
Note: Program descriptions and waitlists for vouchers are further available on Seattle Housing Authority's Housing Choice Voucher webpage , and linked Special Purpose Voucher Program webpages.					

As shown in Figure A-95, vouchers can be either project-based – meaning tied to a specific unit in a housing development – or tenant-based – meaning they are given to a household so that they may find housing in the local market. As the total number of vouchers is limited by the financing given to programs by Congress, every project-based voucher issued results in one less that is tenant-based.

Project-based vouchers are tied to income-restricted housing developments throughout the city. SHA works with developers or, more commonly, Seattle’s Office of Housing (OH), to determine which developments receive project-based vouchers. This is beneficial for both tenants and the income-restricted housing developers, as the presence of project-based vouchers can help income-restricted developments receive development financing.

Tenant-based vouchers give households the opportunity to choose where to rent. Households have opportunities to reside in diverse forms of housing, as well as neighborhoods where there may otherwise be no subsidized rental housing, but where there are amenities such as job access, schools, transit, or public space that fit household needs.

In allowing tenants to seek their own housing in the market, tenant-based vouchers have a maximum subsidy, called a payment standard, paid on behalf of a voucher holder. Payment standards are determined by annual market studies conducted by SHA, which considers vacancy rates, leasing success rates, and other metrics when developed. In general, payment standards are roughly an estimate of the 40th percentile rents for units within the Seattle-Bellevue HUD Fair Market Rent (FMR) Metro Area.

Furthermore, voucher payment standards vary by the type of rental unit—market-rate or affordable. Market-rate units are those which have no income-restrictive covenants, whereas affordable units are those which do, such as those financed through OH.¹¹¹ Based on a 2023 survey of landlords who work with SHA, approximately half of tenant-based voucher holders live in housing that is otherwise income-restricted, and half live in housing that is not income-restricted.

Figure A-96 below describes the number of vouchers by project-based and tenant-based, as well as the tenant-based voucher payment standards. Vouchers and payment standards are broken down by the size of the units, so that households may better afford to rent units that are right sized for their household needs.

Seventy-two percent of project-based vouchers are for 0-bedroom units, whereas tenant-based vouchers are spread more evenly across unit configurations but are mostly for units with 2 or fewer bedrooms. The concentration of project-based vouchers can be a function of the populations these developments serve, such as through permanent supportive housing.

Tenant-based voucher holders can often have long searches to find appropriate housing, in part due to a limited supply that meets the payment standard budget. Tenants do have the option to exceed this payment standard budget; however, they will not receive additional subsidy, and families entering an initial lease with a Housing Choice Voucher must not pay more than 40 percent of their income toward rent costs. Tenants can exceed this rate after their initial lease.

¹¹¹ This is true with one exception - SHA considers Multifamily Tax Exemption Units to be market-rate.

Figure A-95
SHA Voucher Payment Standard as of October 2022

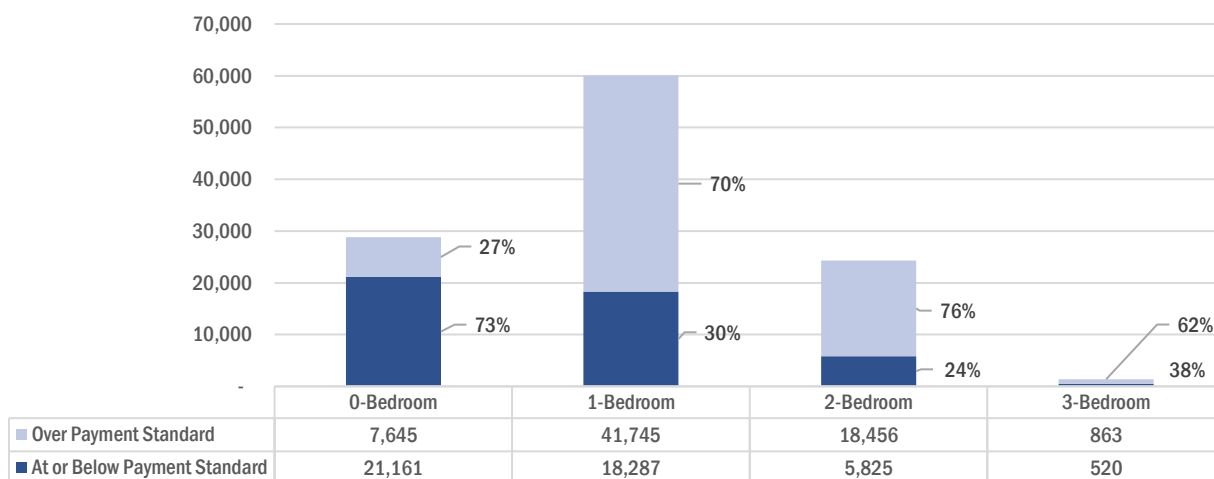
Minimum Persons in Household	Maximum Persons in Household	Number of Bedrooms	Number of Vouchers at SHA		Tenant-Based Voucher Payment Standard	
			Project-Based	Tenant-Based	Market-Rate	Affordable
1	1	0	3,468	1,432	\$1,747	\$1,358
1	2	1	534	1,757	\$1,816	\$1,455
2	4	2	575	1,794	\$2,134	\$1,747
3	6	3	235	956	\$2,917	\$2,018
5	8	4	32	217	\$3,430	\$2,251
7	10	5	2	42	\$3,945	\$2,484
Higher than 7	Higher than 10	6 or Higher	0	12	\$4,458	\$2,769

Source: [SHA Voucher Payment Standards as of October 2022](#)
Note: Voucher standards only apply to tenant-based vouchers; Project-based voucher rents and therefore maximum subsidies are negotiated directly with income-restricted housing operators.

Figure A-97 breaks down apartment rents in Seattle based on whether they are at or below payment standards by their size. The sample is limited and does not include income-restricted housing, and therefore uses the market-rate voucher payment standard in Figure A-96 as a benchmark. The share of Seattle apartments that are at or below the payment standard is limited, especially in the 1-bedroom and 2-bedroom sizes. The overall number of 3-bedroom units below the payment standard is much lower than all other unit configurations. In addition, households are ultimately not required to rent a unit that is the exact number of bedrooms as their voucher is worth; they may rent a smaller unit if that is the only one available.

We can further look at the vouchers currently in utilization by building type. Figure A-98 shows a sample of 9,688 vouchers in utilization for which we have building type data. A combined 23 percent of voucher utilizations are in detached homes, small multiplexes such as duplexes, and rowhouses or townhouses. Of 2,184 vouchers in these building forms, 1,584, or approximately three-quarters of these vouchers, are tenant-based. This sizable portion demonstrates how tenant-based vouchers increase the variety of building forms, and therefore also neighborhoods, accessible to voucher holders. The remaining 77 percent of vouchers utilized are in multifamily buildings, with nearly all being used in multifamily buildings with 3 stories or more.

Figure A-96
Share of Apartments with Rents at or Below Payment Standards



Sources: SHA; CoStar Group, www.costar.com; ACS 5-Year PUMS 2017-2021 prepared by City of Seattle OPCD

Notes: Median gross apartment rents are calculated using CoStar Effective Rents for apartments described in Footnote 92 and PUMS estimates of tenant-paid utilities by the number of bedrooms.

Figure A-97
Voucher Utilizations by Building Type

Building Type	Project-Based Vouchers	Tenant-Based Vouchers	Total
Detached Home	128	508	636 (7%)
Duplex or Triplex	103	317	420 (4%)
Fourplex, Townhouse, and 1 & 2 story multifamily	369	759	1,128 (12%)
Multifamily, 3 or more stories	4,246	3,258	7,504 (77%)
Total	4,846 (50%)	4,842 (50%)	9,688 (100%)

Source: Seattle Housing Authority as of June 2023

Affordability of Housing: Analysis Based on CHAS Data

This section uses 2015-2019 5-year CHAS data from the same period to analyze the affordability of Seattle's housing supply. With this analysis, we are examining the affordability of Seattle's housing supply independent of the households who currently live in the housing units.

Affordability of each housing unit is categorized based on the income level that a hypothetical household would need to afford the monthly housing costs associated with the unit, assuming the household spends no more than 30 percent of its monthly income on housing costs. The fact that suitable unit configurations vary by household size is accounted for by assuming one person for a zero-bedroom unit and 1.5 persons per bedroom for units with one or more bedrooms.¹¹²

The estimates from the CHAS data on the affordability of Seattle's housing supply refer to affordability in a broad sense; units tabulated as affordable to households at specified income levels may include market-rate as well as units that are income- and cost-restricted.

Affordability of Ownership Units

To represent the monthly costs associated with an ownership housing unit independent of any household currently in the unit, the CHAS tabulations simulate a situation in which a generic household has recently purchased the unit for the home value reported in the ACS and is making payments on an FHA-insured, 30-year mortgage.¹¹³ This analysis provides a useful, but limited picture of ownership housing affordability. One limitation is that the approach does not address whether down payments involved in

¹¹² For more information on the CHAS data, see "[Measuring Housing Affordability](#)," by Paul Joice, US Department of Housing and Urban Development, *Cityscape: A Journal of Policy Development and Research*, Volume 16, Number 1, 2014.

¹¹³ The ACS asks owners of owner-occupied and vacant, for-sale units to estimate how much the housing unit (and associated lot, if applicable), would sell for. These self-reported amounts are reported in the ACS as home values.

Joice, Paul. [Measuring Housing Affordability](#). *Cityscape: A Journal of Policy Development and Research*, 16(1). 2014. In this publication, Paul Joice of HUD explains that the CHAS tabulations on ownership housing affordability consider a home affordable to a household of a given income level if the home's value is no higher than 3.36 of the household's income. The assumed purchase price is the home value that the respondent provided on the ACS questionnaire. Joice explains that the 3.36 ratio is based on the following terms for FHA-insured mortgages: 31% monthly payment standard, 96.5% loan-to-value ratio, 5.5% interest rate, 1.75% upfront insurance premium, .55% annual insurance premium, and 2% annual taxes and hazard insurance. We have an inquiry into HUD to ask if the assumptions used in modeling ownership housing affordability have changed since the referenced publication was written.

purchasing a home would be affordable at a given income level.¹¹⁴ An added caveat for interpreting the findings is that self-reported estimates of home value tend to lag home sales price trends in the market.¹¹⁵ During the 2015-2019 5-year period reported here, sales prices in Seattle were increasing rapidly.

Figure A-99 summarizes the 2019 5-year CHAS estimates for ownership units in Seattle. The table shows the estimated number of owner-occupied units (disaggregated by whether the units have a mortgage) and vacant for sale units, along with percentages of these units by their AMI-based affordability category.

On a cumulative basis, only 6 percent of ownership units analyzed are affordable at or below 80% of AMI while the share of ownership units affordable at or below 100% of AMI is estimated at 13 percent.

To see how ownership housing affordability varies by neighborhood, see the maps in the Geographic Analysis section of this appendix.

Figure A-98
Affordability of Ownership Units

	Owner-occupied units with a mortgage	Owner-occupied units with no mortgage	Vacant for-sale units	Total ownership units
Ownership units:	108,835	42,165	1,360	152,360
By affordability category:				
Affordable with income of 0–50% of AMI	1.6%	3.0%	7.4%	2.1%
Affordable with income of 50–80% of AMI	3.4%	5.1%	3.3%	3.9%
Affordable with income of 80–100% of AMI	6.7%	6.6%	1.5%	6.6%
Affordable with income above 100% of AMI	88.2%	85.3%	87.9%	87.4%
By affordability level (cumulative):				
Affordable with income at or below 80% of AMI	5.1%	8.1%	10.7%	6.0%
Affordable with income at or below 100% of AMI	11.8%	14.7%	12.1%	12.6%
Source: CHAS tabulations of ACS 2015-2019 5-year estimates, U.S. Census Bureau and HUD.				
Notes: As ACS estimates, CHAS tabulations are based on a sample and carry margins of error that can be substantial for small groups of housing units, including for vacant for-sale units in this table. The estimates in this table exclude units that lack complete plumbing and kitchen facilities.				

¹¹⁴ The approach also does not account for how completion of mortgage payments can impact a household's ability to afford the home in which they live nor, for that matter, how the accumulation of equity after purchase can affect a household's wealth.

¹¹⁵ [On the Nature of Self-Assessed House Prices](#), Morris A. Davis and Erwan Quintin, June 2016.

Affordability of Rental Units

Like the preceding estimates for ownership housing affordability, the estimates presented below on rental housing affordability are based on the 2019 5-year CHAS tabulations.

The affordability categories in the CHAS data for rental housing differ somewhat from those for ownership housing; these include more detail in the lowest part of the income spectrum but do not provide detail needed for gauging affordability at 100% of AMI.

Like other data from the ACS, CHAS data do not enable income-restricted units to be distinguished from other housing units. (The ACS does not ask if units are income restricted or if tenants are using housing vouchers.)

Figure A-100 shows the estimated numbers of existing rental units in Seattle that are affordable within different income categories.

- Only 11 percent of Seattle rental units are affordable with an income at or below 30% of AMI.
- About 16 percent are affordable with incomes in the 30–50% of AMI category.
- Another 27 percent are affordable in the 50–80% of AMI category.

Figure A-99

Number and Share of Existing Rental Units by Affordability Category; 2019 5-Year Estimates

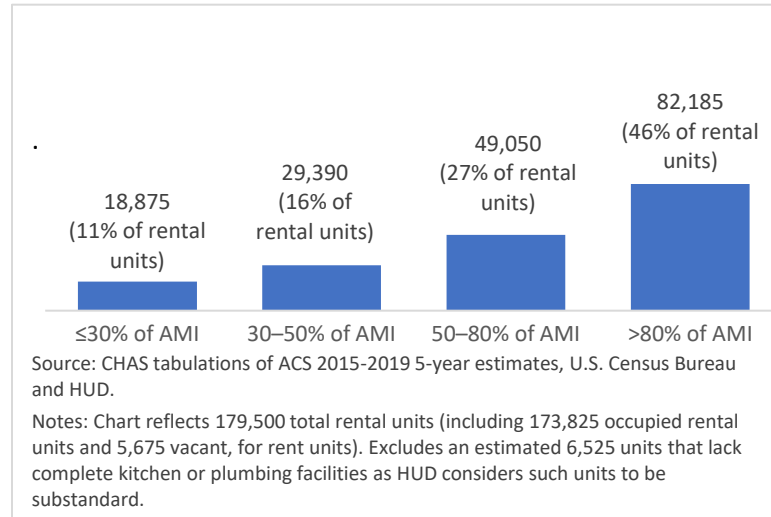


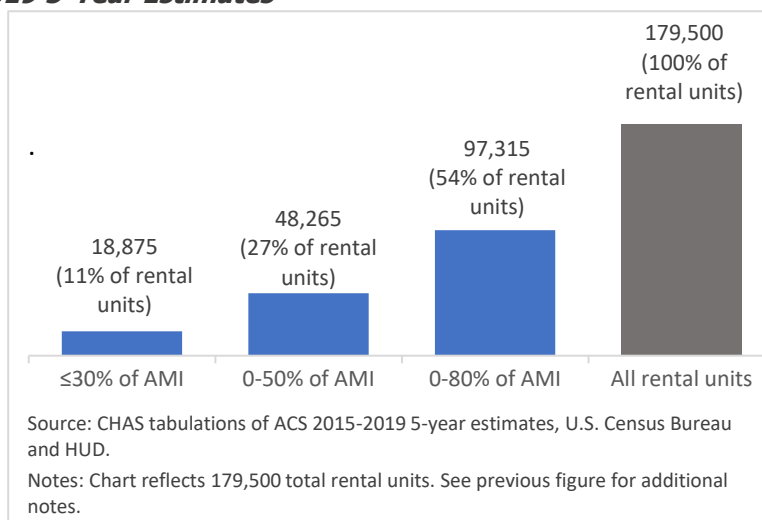
Figure A-101 shows affordability levels on a cumulative basis to provide additional perspective.

- At 50% of the AMI threshold, 27 percent of the rentals in Seattle could be afforded.
- With an income of 80% of AMI, the affordable share doubles—to 54 percent of rental units.

To see how patterns in rental housing affordability vary by neighborhood, see the maps in the Geographic Analysis section.

Figure A-100

**Number and Share of Existing Rental Units by Cumulative Affordability Category;
2019 5-Year Estimates**



TRENDS IN RENTAL

AFFORDABILITY COMPARED WITH RENTER HOUSEHOLD INCOMES

We can also examine CHAS data to understand trends in the capacity of Seattle's rental housing supply to meet the needs of households. The analysis below measures change between the 2010 5-year CHAS estimates and the 2019 5-year CHAS estimates.

As described earlier in the Housing Appendix, the income profile of Seattle's renter households has been shifting as the number of renter households has increased. To summarize, shares of renter households in low-income categories have decreased, with the 50-80% of AMI band showing a decline in rental households not only in proportional terms but also in sheer number. At the same time, the number and share of renter households with incomes above 120% of AMI have increased.

The affordability profile of rental units in the city has also changed, and this has included a large shift toward units renting for more money than households with incomes at or below 80% of AMI household can afford.

Figure A-102 shows proportional changes in rental housing supply in comparison with proportional changes in household income distribution. Figure A-103 provides additional perspective on these trends by showing the absolute changes in the number of rental units and renter households that accompanied these trends.

A general takeaway from viewing these data is that the rental housing market did an increasingly poor job during this period in providing housing that is affordable to households with incomes at or below 80% of AMI. The share of rentals affordable only with incomes above 80% of AMI increased more than the share of households with income above 80% of AMI, indicating that housing growth in Seattle has done a better job addressing demand from households above 80% of AMI than it has serving households who need units that cost less.

Figure A-101

**Changes in Rental Housing Affordability and Income Distribution of Renter Households
2010 5-Year Period and 2019 5-Year Period**

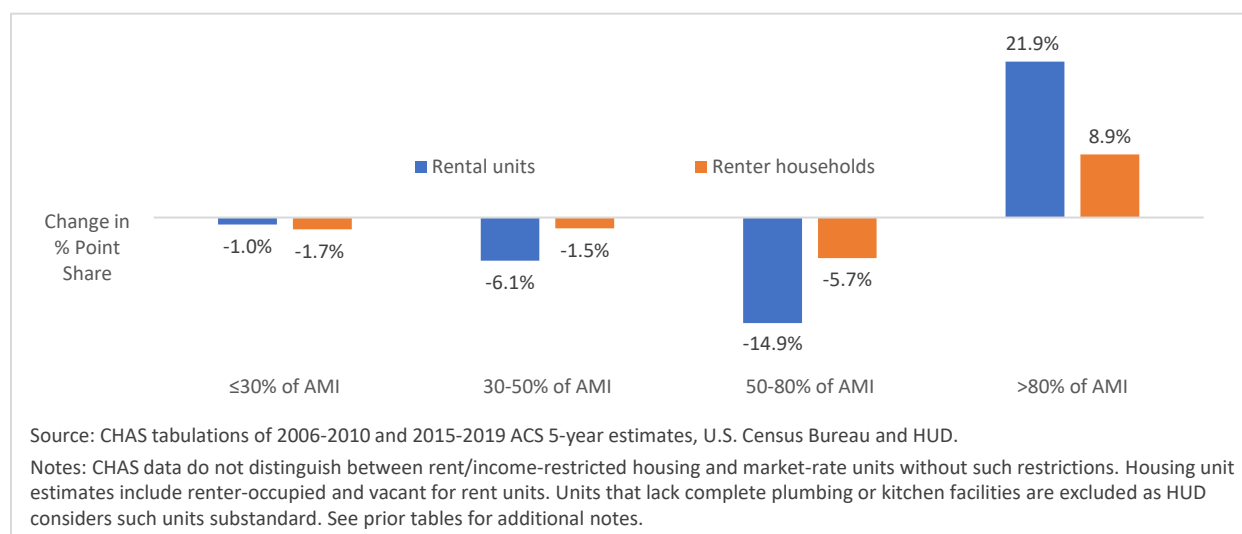


Figure A-102

**Changes in rental Housing Affordability and Income Distribution of Renter Households
2010 5-Year Period to 2019 5-Year Period**

	Income Categories			
	≤30% of AMI	30-50% of AMI	50-80% of AMI	>80% of AMI
Change in number of renter households	5,945	2,910	-3,640	31,525
Change in number of rental units in in each affordability category	2,210	-3,155	-12,100	47,630
Change in share of renter households (percentage points)	-1.7%	-1.5%	-5.7%	8.9%
Change in share of rental units in each affordability category	-1.0%	-6.1%	-14.9%	21.9%

Source: CHAS tabulations of ACS 2006-2010 and 2015-2019 5-year estimates, U.S. Census Bureau and HUD.
Notes: Estimates are based on a sample and carry margins of error. See prior tables for additional notes.

Affordability and Availability of Rental Units

The analysis of affordability presented in the preceding sections estimate how much of Seattle’s overall rental housing supply is affordable within low-income categories.

For a fuller picture, we need to find out if rental units affordable to households with incomes at or below low-income thresholds are also *available* to renter households with incomes at or below these thresholds. By available we mean that the units are either vacant, or if occupied, the units are not occupied by

households with higher incomes.¹¹⁶ The “affordability and availability” steps and findings are summarized below. (A table detailing the affordability and availability calculations is provided in the supplemental tables available online.)

To gauge shortages confronting low-income renters, we start by comparing shares of households at or below low-income thresholds with the shares of renter-occupied units affordable to these households. Based on the 2019 5-year CHAS data, which include both market-rate units and rent- and income-restricted units, we find the following.

- Just 11 percent of rental units can be afforded with an income of 30% of AMI. However, 23 percent of renter households have incomes at or below 30% of AMI. (Expressed as a ratio, that is 46 rental units per 100 renter households.)
- About 27 percent of rental units are affordable at 50% of AMI while 36 percent of renter households have incomes at or below 50% of AMI. (As a ratio, this is 73 rental units per 100 renter households.)
- About 54 percent of rental units are affordable at 80% of AMI. In comparison, about 49 percent of renter households have incomes at or below this level. (This equates to 111 rental units per 100 renter households.)

From these comparisons, we can readily see that there are shortages in rentals affordable at 30% of AMI and at 50% of AMI. At the same time, there *appear* to be sufficient units affordable at 80% of AMI.

We now need to adjust for the fact that some rentals affordable at each of these three low-income levels are occupied by households with incomes higher than these respective levels. This adjustment is necessary as market-rate rental units affordable at or below a given income threshold can be—and often are—occupied by households with incomes higher than that threshold.

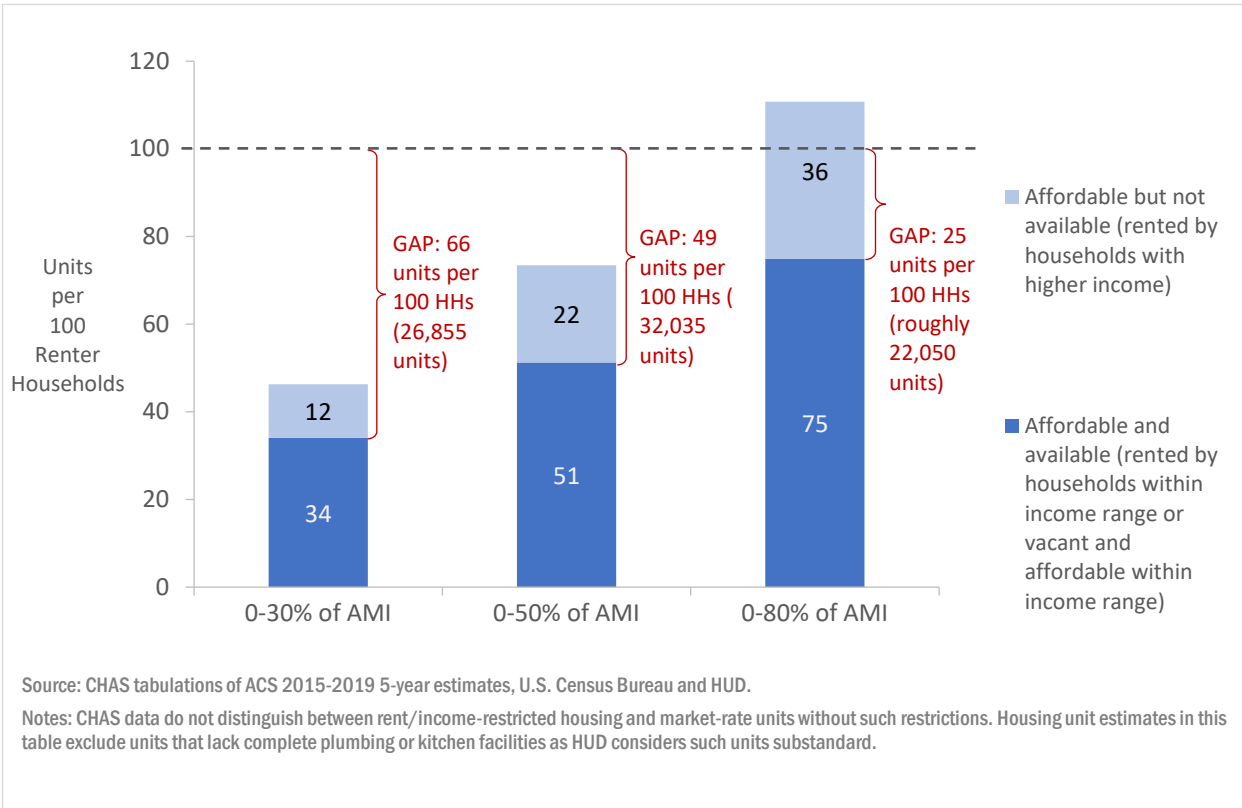
After taking this into account, we find that supplies of rentals at 30% of AMI and at 50% of AMI are extremely short and that the supply at 80% of AMI is also insufficient. As shown in Figure A-104, there are only:

- 34 affordable and available rental units for every 100 renter households with incomes at or below 30% of AMI,
- 51 affordable and available units for every 100 renter households with incomes at or below 50% of AMI, and

¹¹⁶ This analysis for Seattle is based on the affordability and availability methodology described in “[Measuring Housing Affordability](#),” by Paul Joice of HUD. The affordability and availability approach has been widely adopted for modelling gaps between rental housing needs and supply at low-income levels. Examples include the analysis of affordability and availability by the National Low Income Housing Coalition’s 2023 report “[The gap: A shortage of affordable homes](#)” and HUD’s “[2021 Worst Case Housing Needs Report to Congress](#).”

- 75 affordable and available rental units for every 100 renter households with incomes at or below 80% of AMI.

Figure A-103
Rental Housing Affordability and Availability
2019 5-Year Estimates



And yet, even these statistics underestimate unmet needs for affordability.

- This standard methodology likely overstates affordability within each income band, because households with incomes at the lower end of the band are less able to afford housing that would be affordable to households at the top of the band.
- Households experiencing homelessness, who are by definition not finding housing that is affordable and available, are not included in this analysis. (For information about the size and needs of the unhoused population see the Homelessness section later in the Appendix.)
- The analysis does not include households displaced from Seattle and other households who want to live in Seattle but reside in surrounding areas so they can afford housing.
- Because the analysis is based on pooled data gathered over five years, it does not fully reflect the increased rents being charged at the end of the period.

Zoned Development Capacity

As part of the major update to the Comprehensive Plan, the Office of Planning and Community Development (OPCD) has updated estimates of Seattle’s development capacity to accommodate new housing and jobs. The analysis of the city’s zoned development capacity evaluates the supply of housing and employment floor area, under the existing zoning regulations, that could be produced by the end of the twenty-year planning period ending in 2044.

While Seattle’s development capacity analysis represents a snapshot of what current zoning can feasibly accommodate it does not attempt to predict market demand for a particular type of development nor does it estimate how much or how quickly development will occur in coming years.

Based on current zoning, OPCD estimates that the city has development capacity to add approximately an additional 168,000 housing units and 242,000 jobs. The existing development capacity is sufficient to accommodate the minimum requirement for growth under the adopted Countywide Planning Policies of 80,000 housing units and 158,000 jobs over the 20-year planning period.

OPCD’s development capacity model is updated at the beginning of each comprehensive plan update process. These results were initially included in the King County Urban Growth Capacity Report (2021) in compliance with the state “buildable lands” requirements, using 2019 as a base year.¹¹⁷ (RCW 36.70A.215). The results summarized in this section are based on a model updated to reflect August 2022 development site and zoning data.

The development capacity model provides the City with data to help us evaluate how well the city is prepared to accommodate future growth in housing and jobs, including minimum targets for the new 20-year planning period (with a horizon year of 2044) adopted by the GMPC.¹¹⁸ development capacity estimates produced by the model are one among several data points that are used to inform an updated growth strategy in the One Seattle Plan. Other key data include growth and market trends, including data reported elsewhere in this appendix about high demand for housing in the city, growth outpacing the city’s current GMA targets, rapid increases in home prices and rents, declining affordability for low and even moderate-income households, and increased risk of displacement. Maintaining ample capacity for future residential growth across the city is needed to not only meet our statutory obligations, but also meet our goals to become a more affordable, resilient, and equitable city.

¹¹⁷ GMA requirements for the buildable lands analysis are in Revised Code of Washington (RCW) [36.70A.215](#). Visit King County’s [Urban Growth Capacity](#) webpage to find out more information about recent reports and planning as part of the Buildable Lands requirements.

¹¹⁸ The GMA requirements for analysis of development capacity in local comprehensive plans are found in RCW [36.70A.070\(2\)\(c\)](#), which requires Seattle to identify “sufficient capacity of land for housing including, but not limited to, government-assisted housing, housing for moderate, low, very low, and extremely low-income households, manufactured housing, multifamily housing, group homes, foster care facilities, emergency housing, emergency shelters, permanent supportive housing, and within an urban growth area boundary, consideration of duplexes, triplexes and townhomes.” This Zoned Development Capacity section in the Housing Appendix and the Land Capacity and Housing Affordability Analysis herein, in combination with the Emergency Housing and Shelter section, address these requirements in the GMA. Manufactured housing is allowable in Seattle so long as it is consistent with building code. Group homes and foster care facilities are allowed in any zone where residential uses are allowed.

Development Capacity Methodology

The capacity model estimates the amount of potential additional development in the city by comparing existing land uses, housing units and non-residential square feet to the development that could be built under current zoning regulations. The difference between potential and existing development yields the capacity for new development. This capacity is measured as housing units, non-residential floor area square feet and the number of potential jobs accommodated by that floor area. The capacity model uses a range of data sources and assumptions, including building and density trends, environmentally critical areas, and estimated market availability of land.

Key model steps include the following:

- Analyzing recent building trends, including actual densities achieved in each zone category,
- Identifying sites that are generally assumed to not be available for future housing or commercial development, such as public lands,
- Identify vacant and redevelopable sites based on the amount of underdevelopment relative to a site's potential,
- Identify and remove environmentally critical areas,
- Apply a market factor reduction to account for the reality that not all properties will become available for development during the 20-year planning period,
- Estimate capacity for housing and commercial floor area based on assumed densities that are consistent with recent development trends.

More detailed documentation of the capacity model are available online in the [Zoned Development Capacity background paper](#).

Zoned Development Capacity throughout the City

Overall, Seattle's current zoning provides development capacity to accommodate more than 168,000 additional housing units during the next 20 years, beyond the existing 391,000 units in the city today. The following sections describe the zoned development capacity by the types of housing that zoning typically supports, and by growth area of the city.

The primary purpose of this analysis is to inform land use and zoning changes enacted as part of the Comprehensive Plan update. The updated Growth Strategy described in the One Seattle Plan will increase capacity for more housing and new and more diverse types of housing across the city. The impact of those changes is not reflected in the current capacity model and won't be fully calculated until the final Plan is adopted along with implementing zoning.

CAPACITY ESTIMATES FOR MAJOR ZONING AND HOUSING TYPES

We consider the capacity for additional housing units by zoning category to understand the types of housing that can potentially be produced by potential unit types, as shown distributed throughout the city in Figure A-106. A zoning map is also included in Figure A-106 for reference. The results are further described in Figure A-105.

Capacity for higher-density multifamily and mixed-use residential building forms that typically result in stacked flats are grouped as follows:

- **Zones with > 85-foot height limits** have a combined 17 percent of the city's existing housing units (68,000 units) and 27 percent of capacity for new units (46,000 units). These zones allow for flats in multifamily and mixed-use buildings and have height maximums above 85 feet, typically requiring steel, concrete or cross-laminated timber construction when built to maximum height. This zone group includes Highrise Multifamily zones as well as mixed-use zones of Neighborhood Commercial, Commercial, Seattle Mixed, and Downtown.
- **Zones with 50- to 85-foot height limits** have a combined 31 percent of the city's existing housing units (119,000 units) and 56 percent of capacity for new units (95,000 units). These zones allow for flats in multifamily and mixed-use buildings and have height maximums between 50 and 85 feet, allowing for lower cost wood-frame construction. This zone group includes Midrise Multifamily zones, mixed-use zones of Neighborhood Commercial, Commercial, Seattle Mixed, and Downtown, and Lowrise 3 zones in Urban Centers or Urban Villages.
- **Zones with < 50-foot height limits** have a combined 7 percent of the city's existing housing units (27,000 units) and 4 percent of capacity for new units (7,000 units). These zones allow for flats in buildings under 50 feet in height, typically allowing for stacked flats up to 4 stories in height. This zone group includes mixed-use zones of Neighborhood Commercial and Commercial, as well as Lowrise 3 zones outside Urban Centers or Urban Villages.

Capacity for lower-density residential building forms are as follows:

- **Lowrise 1 and 2** have a combined 11 percent of the city's existing housing units (42,000 units) and 5 percent of capacity for new units (9,000 units). These zones allow townhouses, small apartments, and multiplexes, along with their ADUs, but typically result in townhouse and rowhouse development. This zone group includes Lowrise 1 and 2.
- **Residential Small Lot zones** have a combined 1 percent of the city's existing housing units (7,000 units) and 1 percent of capacity for new units (2,000 units). These zones allow for detached homes, ADUs, and small multiplexes on small lots. This zone group includes only Residential Small Lot zones.
- **Neighborhood Residential zones** have a combined 32 percent of the city's existing housing units (126,000 units) and 6 percent of capacity for new units (5,000 units). These zones allow for detached homes and up to two ADUs at a density of no greater than one principal dwelling unit per 5,000 square feet. This group includes only Neighborhood Residential zones.
- **Accessory dwelling units (ADUs)**, including both attached and detached formats, are allowed in Lowrise, Residential Small Lot, and Neighborhood Residential zones. ADU estimates across each of those zones are included in this category. The estimated 20-year production for ADUs accounts for approximately 3 percent of capacity for new units (5,000 units).
- **Industrial zones** have a combined 0.1 percent of the city's existing housing units (400 units) and 0.0 percent of capacity for new units (81 units), which would consist exclusively of accessory or caretaker units. This group includes only industrial zones.

There are several key takeaways from Figure A-105:

- Almost ninety percent of housing unit development capacity is in high-density multifamily and mixed-used zones that typically produce flats. As the Housing Production section of this Housing Appendix points out, flats produced in recent years have been predominately 0-bedroom units (such as studios and small efficiency dwelling units), or 1-bedroom units.
- Fifty-six percent of housing unit development capacity is in the multifamily and mixed-use zones with 50 to 85 feet height limits. These zones allow for apartment types such as 5-over-1s and 6-over-2s, which maximize the construction cost efficiency for wood-frame construction. However, these zones cover just 10.6 percent of developable land area.
- About 7 percent of unit development capacity is in the Lowrise 1 and 2 and the Residential Small Lot zone groups. These zone groups are the most likely to result in middle housing types. Just 3 percent of capacity units are in Neighborhood Residential zones. An additional 3 percent of capacity is accounted for by additional ADUs that may be added in these zones.
- Neighborhood Residential zones constitute the greatest share of residential land area (63 percent) and are also a large proportion of the Vacant or Redevelopable land area (28 percent). Despite this, density limits mean that redevelopment of these properties would result in very few additional dwelling units, most of which would be ADUs. This capacity mismatch illustrates how existing Neighborhood Residential zones are limited in their ability to accommodate additional housing units under current zoning.

CAPACITY ESTIMATES FOR URBAN CENTERS AND URBAN VILLAGES

Development capacity can also be estimated for the existing Urban Centers and Urban Villages (UCUVs), which are the focus of planned growth in the Seattle 2035 Comprehensive Plan. More than 80 percent of the capacity for new housing is within existing UCUV boundaries.

About 35 percent of the city's overall residential development capacity is within Urban Centers (renamed Regional Centers in the One Seattle Plan). Of the six Urban Centers, Downtown has the greatest share of that capacity. Urban Villages (renamed Urban Centers in the One Seattle Plan) contribute 46 percent of Seattle's total residential capacity.

Figure A-104

Seattle Residential Development Capacity Model Estimates

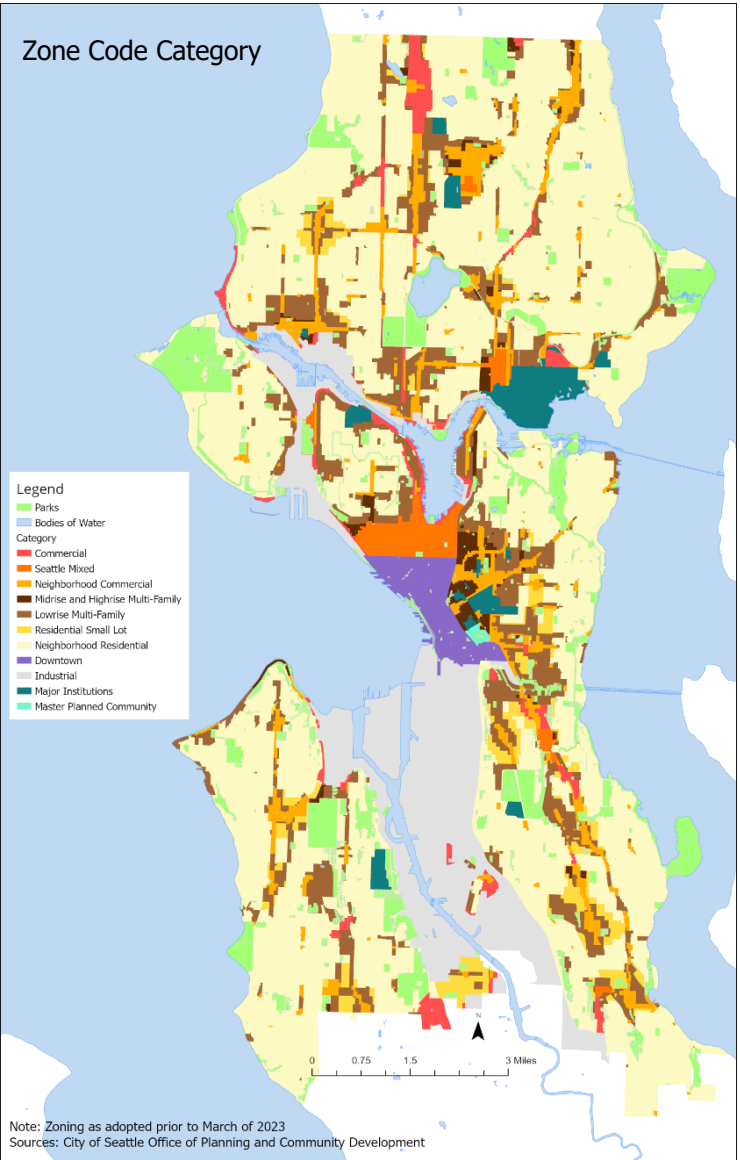
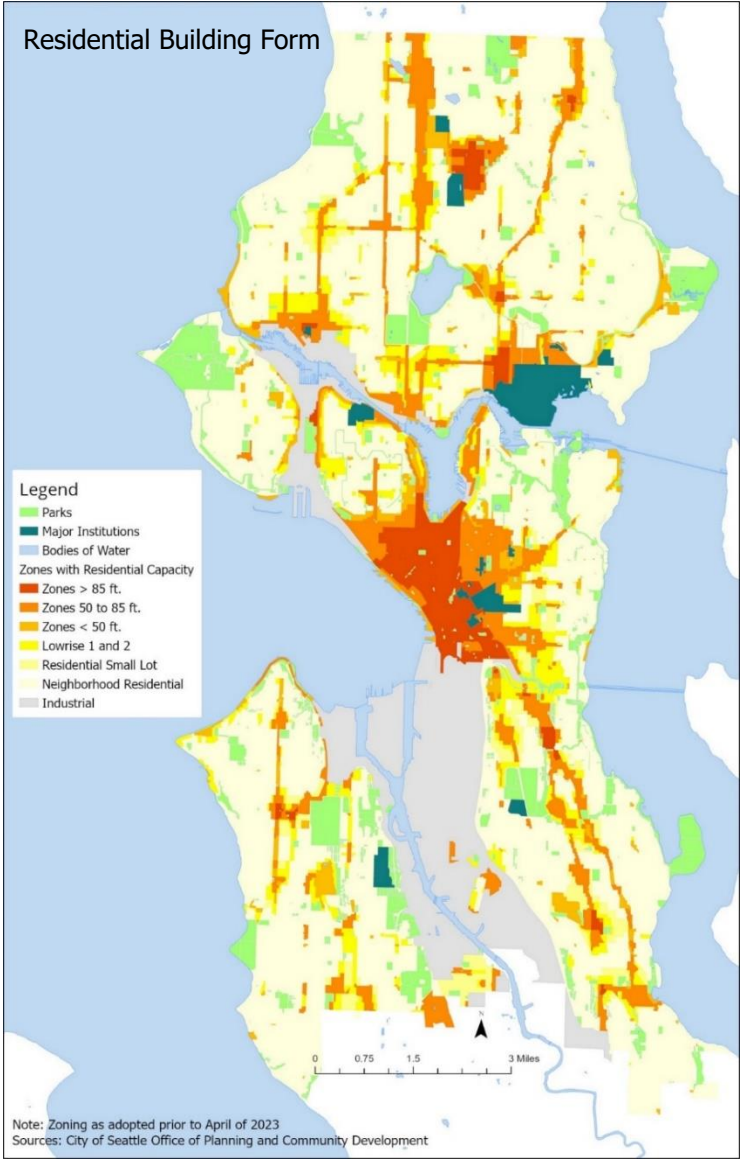
	Land Area						Development Capacity			
	Total Zoned Land Area (Acres / % of Acres)		Total Developable Land Area* (Acres / % of Acres)		Vacant or Redevelopable Land Area* (Acres / % of Acres)		Existing Residential Units (Units / % of Units)		Residential Unit Development Capacity (Units / % of Units)	
TOTAL	38,501		29,064		3,759		391,402		168,167	
By Residential Building Form:										
Zones with > 85 ft. height limits	1,098	2.9%	1,014	3.5%	261	6.9%	67,939	17.4%	45,741	27.2%
Zones with 50 to 85 ft. height limits	4,019	10.4%	3,094	10.6%	1,104	29.4%	118,798	30.6%	94,641	56.3%
Zones with < 50 ft. height limits	1,304	3.4%	859	3.0%	248	6.6%	27,456	7.1%	7,001	4.2%
Lowrise 1 and 2	2,295	6.0%	1,874	6.6%	411	10.9%	41,911	10.7%	8,745	5.2%
Residential Small Lot	936	2.4%	862	3.0%	247	6.6%	7,335	1.9%	2,311	1.4%
Neighborhood Residential	24,096	62.6%	17,530	60.3%	1,051	28.0%	126,070	32.2%	4,727	2.8%
Accessory Dwelling Units**	-	-	-	-	-	-	-	-	4,920	2.9%
Industrial	4,753	12.3%	3,832	13.2%	437	11.6%	415	0.1%	81	0.0%
By Existing Growth Area:										
Inside Urban Centers (renamed "Regional Centers")	2,135	5.5%	1,755	6.0%	400	10.7%	111,834	28.6%	57,090	35.0%
Downtown	540	1.4%	477	1.6%	101	2.7%	34,696	8.9%	22,003	13.5%
First Hill/Capitol Hill	566	1.5%	425	1.5%	85	2.3%	40,139	10.3%	11,536	7.1%
Northgate	296	0.8%	234	0.8%	77	2.1%	5,171	1.3%	7,914	4.8%
South Lake Union	196	0.5%	160	0.6%	36	0.9%	11,199	2.9%	4,607	2.8%
University District	317	0.8%	247	0.9%	61	1.6%	11,792	3.0%	6,740	4.1%
Uptown	220	0.6%	212	0.7%	40	1.1%	8,837	2.3%	4,290	2.6%
Inside Urban Villages (renamed "Urban Centers")	4,296	11.1%	3,931	13.5%	1,382	36.8%	91,207	23.3%	75,732	46.4%
Manufacturing and Industrial Centers	4,552	11.8%	3,688	12.7%	408	10.8%	355	0.1%	74	0.0%
Remainder of City	27,519	71.5%	19,689	67.7%	1,569	41.7%	188,186	48.1%	30,351	18.6%

Source: Development Capacity Report, OPCD, May 2023

*Environmentally Critical Areas and Parks are not developable lands but have zoning, much of which is Neighborhood Residential – which are included in the "Total Zoned Land Area" but excluded from the "Total Developable Land Area" column. Major Institutions are also excluded, as these institutions follow their own development plans (e.g., Harborview, University of Washington).

**ADUs estimates are for both attached and detached ADUs. Existing ADUs are counted in the Existing Residential Units in Neighborhood Residential, Residential Small Lot and Lowrise zones. The ADU capacity estimate is calculated by doubling the 10-year estimate from the ADU Final EIS's Preferred Alternative (Pg. 4-203).

Figure A-105
Zones Grouped by Residential Building Form and Category



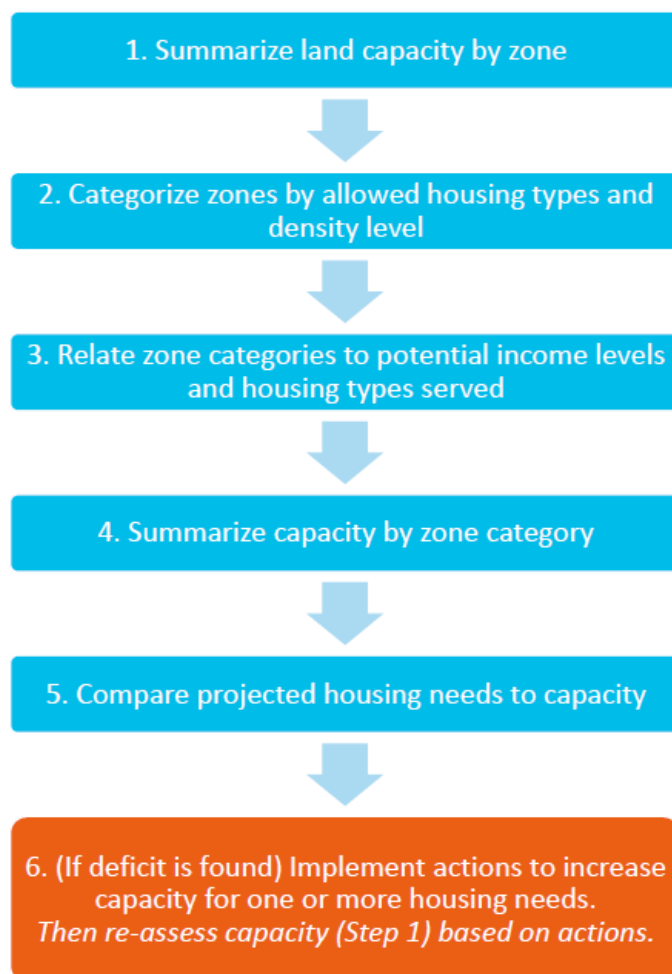
Land Capacity and Housing Affordability Analysis

As described in the Growth Targets and Housing Needs Projections section of this appendix, pursuant to recent changes to state GMA requirements, the GMPC adopted in 2023 housing needs projections for each of several income ranges as well as the need for permanent supportive housing (PSH) for each city in King County. The GMA also requires that local comprehensive plans document that existing zoned capacity may be capable of meeting those needs.

Seattle's analysis of capacity to meet affordable housing needs is summarized in this section. We use the development capacity model along with the analytical steps shown in Figure A-107 that reflect guidance provided by the State Department of Commerce.

Figure A-106

Steps for the Land Capacity and Housing Affordability Analysis



Source: [Washington State Department of Commerce Guidance for Updating Your Housing Element](#)

SUMMARIZE LAND CAPACITY BY ZONE

The first step of the Land Capacity and Housing Affordability Analysis involves classifying the City's residential zones into groupings based on the resulting housing unit types and level of affordability.

Over one hundred zoning codes throughout the city were summarized into seven groups, as shown in Figure A-105 in the previous section. Industrial zones, which were largely limited in residential development capacity to caretaker units and artist studios, are excluded from the Land Capacity and Housing Affordability analysis.¹¹⁹

We summarize the results of the development capacity model, which is conducted at the development site level, by these zone groups, which are shown in Figure A-105 in the previous section.

CATEGORIZE ZONES BY ALLOWED HOUSING TYPES AND DENSITY LEVEL

Zone groups are reflective of zones where housing developments are similar in type. Housing type refers to the height, density, material, and unit forms typically built in each zone. Figure A-108 describes these zone groups as they relate to housing types.

In addition, we considered where income restricted housing is developed when forming these zone groups and housing types. For example, separating multifamily zones with height limits under 50 feet from those which have 50 to 85 ft. height limits was based on deliveries of income-restricted housing developments from 2013 to 2021.¹²⁰ During this period, 74 percent of units that came into service were in buildings between 5 and 8 stories, which we estimate to be approximately 50 to 85 ft. in height. Just 21 percent of units were in buildings 4 stories or under, or typically less than 50 ft. in height. In addition, just 5 percent of units were in buildings greater than 8 stories, which would be approximately 85 feet or taller.¹²¹

¹¹⁹ This development capacity model was created prior to City of Seattle adoption of the [Industrial and Maritime Strategy](#) in July of 2023.

¹²⁰ This definition includes buildings that receive subsidies and public finance provided by nonprofit or private affordable housing developers, but excludes buildings which only participate in MFTE, MHA, or IZ programs.

¹²¹ For information about subsidized housing, our analysis uses the King County Income-restricted Housing Database, which the King County Department of Community and Human Services developed in collaboration with Seattle, other cities, and the Puget Sound Regional Council. This database includes all rent-restricted units within Seattle, and thus the total number of units may differ from data on the individual portfolios of the City of Seattle, the Washington State Housing Finance Commission, or the Seattle Housing Authority. OPCD then joined this dataset to King County Assessors data to determine the number of rent-restricted units by building type in buildings that were built between 2013 and 2021. Units in the development pipeline that were not yet in service by 2021 are not included.

Figure A-107

Land Capacity and Housing Affordability Analysis Density Level Assumptions

Zone Groups	Typical Housing Types allowed
Zones with > 85 ft. height limits	Multifamily flats in buildings with approximately 9 or more floors (maximum height higher than 85 feet and max residential FAR between 4.5 and 30) and generally requiring steel, concrete, or cross-laminated timber construction.
Zones with 50 to 85 ft. height limits	Multifamily flats in buildings with no more than 8 floors (maximum height higher than 50 but no more than 85 feet and max residential FAR between 2.3 and 6.25) allowing for wood timber construction, up to 6-over-2.
Zones with < 50 ft. height limits	Multifamily flats in buildings with typically no more than 4 floors (maximum height no more than 50 feet with a max residential FAR of 1.8 to 3)
Lowrise 1 and 2	Townhomes and small multiplexes allowed, but townhomes largely encouraged (maximum height no more than 40 feet with a max residential FAR of 1.3 to 1.6)
Residential Small Lot	Detached homes, cottages, and small multiplexes (maximum height no more than 40 feet with a max residential FAR of 0.75)
Neighborhood Residential	Detached single-family homes (Up to 0.5 FAR and no more than one principal dwelling unit for every 5000SF of lot area)
Accessory Dwelling Units	Attached and Detached Accessory Dwelling Units, which are allowed in Neighborhood Residential, Residential Small Lot, and Lowrise Zones throughout the city.

Figure A-109 further describes the density ranges of the individual zones in each zone group. We present density ranges in terms of floor area ratio (FAR), residential density, and height maximums. The figures in the table reflect what is allowed under current zoning, which is used to estimate development capacity, as well as data on recent development outcomes and market trends.

Figure A-108
Zone Groups Related to Density Levels

Zone Groups	Housing Types Typically Allowed	Residential Max Floor Area Ratio (FAR)	Assumed Residential Density (Units/Acre)	Height Maximum (Feet)
Zones with > 85 ft. height limits	Multifamily flats, approximately 9 stories or more	4.5 - 30 FAR	196 – 1,307 Units/Acre	95 - 1000 feet
Zones with 50 to 85 ft. height limits	Multifamily flats, approximately 5 to 8 stories	2.3 - 6.25 FAR	54 - 272 Units/Acre	50 - 85 feet
Zones with < 50 ft. height limits	Multifamily flats, approximately 4 stories or less	1.8 - 3 FAR	54 - 131 Units/Acre	30 - 45 feet
Lowrise 1 and 2	Townhomes, small multiplexes, and ADUs	1.3 - 1.6 FAR	34 Units/Acre	30 - 40 feet
Residential Small Lot	Detached homes, ADUs, cottages, small multiplexes	0.75 FAR	22 Units/Acre	30 feet
Neighborhood Residential	Detached homes, ADUs	0.5 FAR	5 - 9 Units/Acre	30 feet

RELATE ZONE CATEGORIES TO POTENTIAL INCOME LEVELS AND HOUSING TYPES SERVED

We next use recent market and development data to determine the lowest income level that various types of new housing can reasonably be expected to accommodate. We considered each form of housing described in Figure A-109 to provide an understanding of the income levels at which market rate and subsidized housing developments are able to serve households.

We estimated the lowest potential income levels served for each zoning group based on three individual analyses:

- As described in the Ownership Housing section of this Housing Appendix, we estimate income necessary to afford the monthly costs of newer homes sold in 2022 that were built between 2013 and 2022.
- We modeled multifamily rental data to look at affordability levels by number of bedrooms and building form. Our model employs CoStar data on effective unit rents in 2022 for market-rate units developed between the beginning of 2013 to the end of 2022. We supplement rent data from Costar with average costs for tenant-paid utilities by number of bedrooms from ACS Microdata obtained from IPUMS-USA.
- Finally, we conducted spatial modeling of subsidized housing developments that came into service from the beginning of 2013 to the end of 2021 to estimate which zones and building types were more likely to accommodate subsidized housing in the future.

The following findings informed our final classification of zone groups to different levels of income represented in our housing needs projections:

- Current development in the for-sale housing market largely caters to households that have incomes well above 120% of AMI. However, new ADUs sold as individual units, zero-bedroom and 1-bedroom stacked flats sold as condominiums, and townhomes are sold at

prices closer to, but still above, 120% of AMI. Recently developed principal dwelling units sold separately from ADUs, stacked flats with 3+ bedrooms sold as condominiums, and detached homes are sold at substantially higher price points.

- In the unrestricted rental market, multifamily developments over 8 stories (over approximately 85 feet in height) are primarily affordable to households with incomes above 120% of AMI. In comparison, new unrestricted apartments in multifamily buildings shorter than 8 stories tend to be affordable to households with incomes in the > 80 to 120% of AMI range. However, the affordability of apartments greatly depends on their size, configuration, and location throughout the City. The Affordability Levels of Apartment Rents section of this housing appendix highlights the great variability in the affordability of apartments by size. That section demonstrates that zero-bedroom and 1-bedroom units smaller than 400 square feet are much more affordable than apartments with the same number of bedrooms larger than 400 square feet. This is one factor driving the deeper affordability of 0-bedroom and 1-bedroom units relative to units with 2 or more bedrooms, even after adjusting for household size. Newly developed 3-bedroom units, of which there are very few, are primarily affordable to households with incomes above 120% of AMI, regardless of building height.
- Income-restricted rental housing is primarily developed in buildings between 5 and 8 stories (approximately 50 to 85 ft. in height). Units developed in wholly income-restricted rental housing developments that serve lower income levels and receive public financing are primarily in buildings with 8 stories or fewer. In comparison, low-income housing in taller buildings is rare and typically involves disposition of surplus public property at no cost to the affordable housing developer.
- Income-restricted for-sale housing is limited in its local scalability (e.g., it takes the form of smaller dispersed projects that represent a relatively few units overall added to the stock) compared to both income-restricted rental housing and the for-sale housing market. Newly developed for-sale housing that is subsidized has typically been constructed as townhomes in recent years; however, there has been a shift in development to include flats sold as condominiums in multifamily zones between 45 and 85 ft. in height as well. For this analysis and in recognizing the limited scalability of income-restricted for-sale housing, we do not assume affordability at or below 120% of AMI for zones which tend to produce townhomes.

These results inform our assumptions about the deepest affordability levels that the City's development capacity can serve, which are presented in Figure A-110.

Zones with 50 to 85 ft. height limits are assumed to be affordable to households 0 to 80% of AMI and PSH at their deepest level of affordability. Income-restricted apartments subsidized by the City serve households with incomes of 60% of AMI or less (e.g., at or below 30% of AMI for PSH). A vast majority of subsidized rental housing produced in recent years was at the densities allowed by these zones. Market-rate rental housing affordable to households with incomes 61 to 80% of AMI was also more common in this zone category, as well as micro-units that were more deeply affordable. While buildings with and without income-restricted units affordable to households in these lower income bands have vastly different financing and development structures, they are grouped here in one 0 to 80% of AMI category due to similar building scale and height.

We assume developments in Zones with < 50 ft. height limits to be affordable to households > 80 to 120% of AMI, particularly as recent unrestricted rental developments in these zones have served households in this income band, and as there has been less income-restricted housing development in these zones in recent years. Based on market data for both for-rent and for-sale housing, developments in all other zone groups are assumed to be affordable to households whose incomes are > 120% of AMI.

It is important to note that even if a given zone can theoretically accommodate additional income-restricted housing, this analysis did not consider other factors such as the availability of funding. These barriers are discussed more in the Income-Restricted Housing section and Barriers and Actions section.

Figure A-109
Lowest Potential Income Served by Zone Groups

Zone Groups	Approximate Income Served		Assumed Affordability Level for Capacity
	Market Rate	With Subsidies	
Zones with > 85 ft. height limits (Multifamily flats in buildings above 8 floors)	>80 to 120% of AMI**; >120% of AMI	Not typically feasible at scale	>120% of AMI
Zones with 50 to 85 ft. height limits (Multifamily flats in buildings between 5 and 8 floors)	>50 to 80% of AMI*; >80 to 120% of AMI	0 to 60% AMI and PSH	0 to 80% of AMI and PSH***
Zones with < 50 ft. height limits (Multifamily flats in buildings with typically no more than 4 floors)	>50 to 80% of AMI*; >80 to 120% of AMI	Not typically feasible at scale	>80 to 120% of AMI
Lowrise 1 and 2 (i.e., Townhomes, multiplexes, and ADUs)	>120% of AMI	Not typically feasible at scale	>120% of AMI
Residential Small Lot (i.e., Cottages, multiplexes, small lot detached homes, and ADUs)	>120% of AMI	Not typically feasible at scale	>120% of AMI
Neighborhood Residential (i.e., Detached single-family homes, and ADUs)	>120% of AMI	Not typically feasible at scale	>120% of AMI
*We only found 0-bedroom and 1-bedroom units to be affordable to households with incomes >50% to 80% of AMI in our analysis of CoStar Effective Market Rents. **We only found 0-bedroom and 1-bedroom units to be affordable to households with incomes >80% to 120% of AMI in our analysis of CoStar Effective Market Rents. ***Based on the information in the prior section, as well as state and local funding policies, City-funded rental apartments serve households with incomes up to 60% of AMI, Certain market incentives produce income-restricted units affordable between 61 and 80% of AMI. These incentives may not achieve below-market rents in certain neighborhoods or for certain unit configurations, such as micro-units.			

SUMMARIZE CAPACITY BY ZONE CATEGORY

Once assumed affordability levels have been determined for each housing type, we relate these affordability levels back to zone groups and aggregated housing unit development capacity. These are described in Figure A-111.

Figure A-110
Development Capacity by Zone Group and Assumed AMI

Zone Groups	Vacant or Redevelopable Land Area (Acres / % of Acres)		Residential Development Capacity (Units / % of Units)		Assumed AMI Level
Zones with > 85 ft. height limits	261	7.8%	45,741	27.2%	> 120% AMI
Zones with 50 to 85 ft. height limits	1,104	33.3%	94,641	56.3%	0 to 80% of AMI and PSH
Zones with < 50 ft. height limits	248	7.5%	7,001	4.2%	> 80 to 120% AMI
Lowrise 1 and 2	411	12.4%	8,745	5.2%	> 120% AMI
Residential Small Lot	247	7.4%	2,311	1.4%	> 120% AMI
Neighborhood Residential	1,051	31.6%	4,727	2.8%	> 120% AMI
Accessory Dwelling Units	-	-	4,920	2.9%	> 120% AMI
Total**	3,322		168,086		

Source: Development Capacity Model, OPCD, May 2023
 *Based on existing boundaries as adopted prior to May 2023
 **This number excludes zones that do not currently carry residential capacity, as well as the units limited to caretaker units in industrial zones

COMPARE PROJECTED HOUSING NEEDS TO CAPACITY

The final step in the analysis compares the capacity to projected housing needs by income level. We aggregate housing needs based on the forms of housing likely to accommodate them, as is consistent with Commerce guidance. This results in three groups of aggregated housing needs: 0 to 80% of AMI including PSH, >80 to 120% of AMI, and >120% of AMI.

We use a “discrete” level of analysis, which uses an exclusive one-to-one match of housing type to affordability level, along with a cumulative analysis to show that Seattle currently has sufficient capacity for the housing types and densities that can support development to meet projected needs at all income levels.

When allocating capacity to discrete income bands, we identify sufficient capacity for households at >120% of AMI and at 0 to 80% of AMI including PSH, but not for the band >80 to 120% of AMI. Figure A-112 shows that Seattle only has 60 percent of development capacity required through 2044 for households in the 80 to 120% of AMI category using the discrete method. This deficit is a result of only accounting for Zones with <50 ft. height limits when counting capacity for the >80 to 120% of AMI band.

Results from the market analysis, presented in the Affordability of Recently Developed Housing, show however that unsubsidized housing development in Zones with <50 ft. height limits and Zones with 50 to 85 ft. height limits can serve households with incomes >80 to 120% of AMI. Thus, we present a Cumulative Capacity to demonstrate that when accounting for all zones that would serve households with incomes >80 to 120% of AMI, there is sufficient development capacity for this, and therefore, all income bands.

Meeting this minimal GMA and county requirement is necessary, but not sufficient to address our housing needs and goals going forward. Additional analyses in this appendix and goals and policies in the Comprehensive Plan address other considerations, including the need for substantial funding sources to realize our potential to provide subsidized income-restricted housing, increasing neighborhood racial and

economic inclusivity, providing additional capacity for middle housing with opportunities for more family housing and more homeownership, prevention of displacement of vulnerable populations, targeting growth in areas that are well served by transit and other amenities, and growth of climate and economically resilient neighborhoods where all households have their daily needs met.

Finally, this analysis has several technical limitations due to its ability to only look at overall affordability and unit production.

- **Development of varying unit sizes:** This analysis does not account for the size of unit development. Current market production is largely limited to zero-bedroom and 1-bedroom units, which are not apt to serve the needs of families with children or multigenerational households.
- **Neighborhood level variation in cost and affordability:** This analysis only considers forms and production of housing based on affordability ranges, whereas Seattle's housing market produces a large variety of housing within these income ranges. For example, newer condos, middle-housing, and townhomes are sold at prices affordable closer to 120% of AMI, whereas new detached homes are typically affordable only to households of much higher incomes. Similarly, some neighborhoods around Seattle have produced housing that is more affordable due to land costs and the forms of housing available.
- **The role of existing housing in housing market affordability:** This analysis is limited in its focus on production. It does not consider the critical role that the older housing stock plays in Seattle, in particular how units in older multifamily buildings are more affordable at lower income ranges and provide much of the housing for low-income households across Seattle.

Figure A-111**Zoned Land Development Capacity Analysis and Projected Net New Housing Needs 2019-2044¹²²**

Housing Needs (AMI %)	Projected Net New Housing Units Needed	Zone Groups Serving These Needs	Aggregated Housing Unit Need	Capacity Units	Vacant or Redev. Land in Acres	Discrete Capacity Surplus/ Deficit	Cumulative Capacity Surplus/ Deficit
0 to 30% of AMI, PSH	15,024	Zones with 50 to 85 ft. height limits	70,726 (63.1%)	94,641 (56.3%)	1,104 (33.2%)	+23,915 (134%)	+23,915 (134%)
0 to 30% of AMI, Non-PSH	28,572						
> 30 to 50%	19,144						
> 50 to 80%	7,986						
> 80 to 100%	5,422	Zones with <50 ft. height limits	11,572 (10.3%)	7,001 (4.2%)	248 (7.5%)	-4,571 (60%)	+19,344 (124%)
>100 to 120%	6,150						
> 120%	29,702	Zones with > 85 ft. height limits, Lowrise 1 and 2, Neighborhood Residential, Residential Small Lot, ADUs	29,702 (26.5%)	66,444 (39.5%)	1,970 (59.3%)	+36,742 (224%)	+56,086 (150%)
Total	112,000		112,000	168,086	3,322	+56,086 (150%)	+56,086 (150%)

¹²² Permitting monitoring shows that Seattle has added 24,051 housing units between 2019 and 2023 and is on track to gain a total of 32,000 units for the 5-year period of 2020 to 2024. This leaves approximately 80,000 units in our 112,000-unit 2019-2044 target, the former of which is referenced throughout the Comprehensive Plan as our 20-year growth target. The LCHAA is not prorated for these 5-years of development; however, all development prior to October 2022 was incorporated into the development capacity model. If we reduced aggregated housing needs for the 20-year period, it would show even higher cumulative surplus capacity for projected housing need.

Housing Production Barriers and Actions

This section summarizes barriers to housing production that contribute to shortfalls in meeting the needs by type and affordability. It broadly outlines actions the City could take to begin closing those gaps. This section of the appendix addresses new requirements in the GMA, guidance from the Department of Commerce, and Countywide Planning Policies.

Barriers that limit the production, support, and rehabilitation of income-restricted housing permanent supportive housing, and emergency housing are discussed in later sections.

Barriers

REGULATORY AND PERMITTING BARRIERS

Some barriers to housing production that impact Seattle's ability to accommodate housing demand and meet housing needs, stem from how the City regulates and permits housing. Consistent with the requirements of HB 1220, this section summarizes some ways those barriers arise in Seattle's regulations and outlines actions the City is considering to reduce them.

Zoning

Zoning is a tool that is used to shape and guide development in the city, but zoning can also constrain housing supply and production. Zoning determines whether housing is allowed in a given area and, if it is, how much and what types. More indirectly, zoning can influence the feasibility of housing development and affordability of housing produced. In Seattle, most land where zoning allows housing is designated Neighborhood Residential, a zone that historically has allowed primarily low-density detached housing. More recently, Seattle adopted more permissive rules for the development of attached and detached accessory dwelling units (ADUs) that effectively allowed up to three units per lot in Neighborhood Residential zones. Even with this change, restrictions imposed by NR zoning across 60% of the developable land area in the city have contributed to constraining new housing production, especially housing that is scaled to accommodate larger households and families and more affordable forms of ownership housing in more areas.

Development Standards

Where zoning broadly governs where housing is allowed across Seattle, a zone's development standards determine specific housing outcomes for a particular site. To regulate how much housing is allowed, Seattle's residential zones rely primarily on maximum height, floor area ratio (FAR), and/or lot coverage limits. Certain low-density zones also use a maximum density limit to determine the number (and consequently size) of homes allowed on a site, though most residential and mixed-use zones in Seattle do not have outright limits on density in the Land Use Code. Other development standards also affect the form, layout, and configuration of buildings and therefore influence the viability of housing development. These include standards regarding the maximum size and length of facades; modulation requirements; setbacks; and design standards. In some cases, the interaction of development standards and market forces results in less housing being built on a site than what its zoning allows and can impact overall economic feasibility for redevelopment.

Accessory dwelling units (ADUs). Seattle reformed its ADU regulations in 2019, removing key barriers to production like owner-occupancy requirements, minimum parking, and a one-per-lot limit, catalyzing a fourfold increase in ADU permits within just a few years. Alongside this jump in production has been a rise in the frequency of ADUs built by homebuilders and offered for sale as condominium units as part of a redevelopment of a full site.

Currently, Seattle is developing legislation to fulfill requirements adopted in 2023 in HB 1337, most provisions of which Seattle already complies with thanks to the 2019 reform. Remaining barriers that Seattle will address to comply with HB 1337 include increasing ADU height limits, allowing two detached ADUs on one lot, and allowing ADUs on any lot meeting minimum lot size requirements.

Parking requirements. HB 1110 requires Washington cities and counties to allow middle housing on nearly all residential lots. Demand is high for small-scale ownership housing, evidenced by the rise in ADU condominiums in recent years. On the relatively small sites where middle housing is built, off-street parking has an outsized impact on the design, layout, and potential density of a given property. Off-street parking necessitates driveways, area for turning movements, and either space for surface parking or garages that reduce the amount of a home's living space. Minimum parking requirements limit the opportunity to develop without or with less parking, where homes can be larger and more site area can go to other uses, like open space.

Barriers to stacked forms of middle housing. Several regulatory barriers make stacked housing, which is capable of more efficient site layouts, difficult to produce at the scale of middle housing. Producing stacked flats for homeownership generally means forming a condominium, which subjects the builder and project to construction defect liability and heightened building envelope requirements in state condo law. Locally, stacked housing with more than two homes is regulated under the Seattle Building Code rather than the Seattle Residential Code, with stricter life safety requirements that add to the project cost. Together, these factors combine to make certain middle housing forms, like stacked flats, exceedingly rare in new construction, limiting the number of one-story and accessible homes available in low-density zones.

Midrise housing setbacks. Midrise housing of between five and eight stories produces stacked units that tend to be offered for rent more often than for sale. In Neighborhood Commercial zones, development can include a mix of uses, but residential is usually the predominant one. These zones have relatively few development standards that directly hamper housing production, as setbacks and FAR limits are more generous. Zoning that allows seven or eight stories of height tends to produce the most cost-efficient multifamily housing, as builders can maximize the number of lower-cost wood-frame stories allowed under construction codes. Midrise zones are subject to street- and upper-level setback requirements that can require modulation that reduces the quantity of housing allowed and adds complexity and cost to construction.

PERMITTING TIMES

The time required to receive a permit to build also affects our ability to produce housing. Seattle's permitting process involves several types of review, including compliance with not only zoning and land use regulations but also construction codes (the Seattle Building Code for most multifamily housing and the Seattle Residential Code for detached houses, duplexes, and most townhouses); regulations for

drainage, stormwater, and environmental factors; requirements for street and utility improvements; and many others.

Seattle's land use code is complicated and can be unclear to applicants. In many cases, this is due to code amendments adopted in response to initiatives and concerns unique to one development type or even a specific class of developers or site. The complexity of the permitting process, itself a natural consequence of an increasingly complex regulatory environment, often results in applicants needing professional consultants to navigate housing development, particularly for first-time housing developers.

While Seattle has in recent years lessened some of the reviews that apply to it, housing development must nevertheless navigate a series of permit approvals. Housing above a certain density goes through Seattle's Design Review process, where applicants present to and seek approval from a volunteer board in multiple meetings over a period of many months. Smaller projects may go through Streamlined or Administrative Design Review, which are administered by Seattle Department of Construction and Inspections (SDCI) staff. Using the City's Design Guidelines, Design Review covers how a new building fits into and relates to its surroundings, including overall appearance, relationship to its site and the street, building access, materials, and open space. These projects are also subject to the State Environmental Policy Act (SEPA), which involves review of the potential environmental impacts of a new building. The City will be making updates to its Design Review program to fulfill requirements in HB 1293 that design review processes use only clear and objective regulations.

Together, the need to pass many complicated reviews and change project aspects throughout the process can extend timelines and create bottlenecks for housing development. This in turn reduces the overall amount of housing produced and raises prices as delays boost holding costs and create uncertainty.

CONSTRUCTION COST AND FINANCING

Though largely outside the City's direct influence, many additional factors contribute to the availability to finance, cost to construct, and eventual price of housing.

Changes in the complex system of real estate financing, including interest rate hikes and many other variables, impact both large-scale multifamily developers and an individual household building an ADU. Interest rate hikes and cuts, which are determined by the Federal Reserve Bank, are deeply connected to housing production at a local level. Even where other barriers may not exist for projects, hikes can stall individual projects that may no longer be profitable to develop and temporarily prevent others from starting altogether. In the local market, this is experienced as a boom and bust of the real estate cycle.

When cost inputs increase, the feasibility of building housing can decline, sometimes precipitously. In recent years, for example, prices have greatly fluctuated for lumber and other raw materials used in housing construction but have ultimately risen over the longer term. Similarly, labor costs across all phases of housing development have escalated, especially during the period of high inflation in the early 2020s. These barriers are interrelated; longer permitting timelines can jeopardize financing arrangements or introduce uncertainty into a project's pro forma (financial analysis) due to volatility in material costs.

Over a longer period, land costs have dramatically increased across Seattle, decreasing a developer's ability to redevelop sites to add housing. High land costs can prevent developers from assembling sites

large enough to feasibly or efficiently develop with housing. In particular, site assembly may be necessary to create a development site large enough to develop multifamily apartments in neighborhoods with particularly small lots, especially in those neighborhoods formerly restricted to single-family.

Finally, City requirements that major infrastructure — public right-of-way, water, and utilities — be upgraded by the developer can be a significant barrier to housing production, particularly low-income housing. The cost of water, sewer, and storm main extensions, new electrical vaults, street resurfacing, and new sidewalks must be absorbed by development budgets, translating into higher housing costs for residents and in some cases rendering projects outright infeasible.

Actions to Address Barriers

Through the One Seattle Plan and other efforts, the City is considering strategies to address these barriers. Several respond to recently adopted state legislation that addresses the supply and affordability of housing, and others go above and beyond state requirements. These strategies include:

- **Zoning reform** to implement new state requirements for middle housing in HB 1110 which would allow at least 4 units on each residential lot and 6 units if within ¼ mile of a major transit station or where 2 units are affordable. Allowed types of middle housing include duplexes, triplexes, four-plexes, townhomes, stacked flats, and others.
- **Upzones** to implement the growth strategy that would allow stacked flats and apartments at a range of densities within Neighborhood Centers, center expansion areas, and along frequent transit arterials.
- **Modifications to development standards**, such as floor area ratio, intended to result in increased feasibility of housing development on more sites and larger units with 3 bedrooms in zones allowing middle housing. Modifications to development standards, such as height, FAR, and setbacks, in zones that allow apartments to increase capacity, decrease costs, and increase consistency for new development.
- **Incentives for the production of stacked flats** in zones that allow middle housing as a means of overcoming building code and condominium liability barriers that exist currently for this type of housing. Amendments to Seattle’s ADU regulations to fulfill requirements in HB 1337 and encourage larger, family-sized ADUs.
- **Amendments to ADU regulations** to fulfill requirements in HB 1337 and encourage larger, family-sized ADUs.
- **Legislation to allow congregate housing**, which can offer lower price points through small homes, in more areas.
- **Reform of the Design Review program** to create objective criteria that streamline and simplify the process, as required in HB 1293.

- **Legislation exempting affordable housing from Design Review**, including projects that include on-site performance for MHA, and allowing housing developments subject to Full Design Review to opt into Administrative Design Review.
- **Permit process improvements** including collaboration across departments and with community organizations to reduce process and cost barriers facing lower- and moderate-income homeowners seeking to add housing on their property.

Income-Restricted Housing

Income-restricted housing helps lower-income households secure housing in Seattle. This section provides an overview of Seattle’s income-restricted housing supply and strategies, including capital and operating funding, used to develop and preserve that housing. This section on income-restricted housing specifically focuses on housing units that have covenant restrictions but does not include housing that is low-cost for other reasons. The final portion of this section identifies actions that could address gaps between lower-income housing needs and supply to help achieve Seattle’s affordable housing goals.

Income-Restricted Housing Supply

As of 2022, the estimated supply of rent- and income-restricted housing units in Seattle is approximately 34,000 rental units.¹²³ Slightly more than half of these units are City funded while the balance are income-restricted units that have no City funding but are still regulated by the City or another public agency. In addition, more than 250 owner-occupied homes are subject to resale restrictions to ensure ongoing affordability.¹²⁴ All future sales of these homes are restricted and must be affordable to eligible households with incomes at or below 80% of AMI.

Figure A-113 shows income-restricted rental units by affordability level. Actual AMI limits may be anywhere within an affordability band; for example, most rental units in the 51% to 80% of AMI band are subject to a rent and income limit of 60% of AMI.

As shown in the figure, 39 percent of rental units have affordability limits up to 30% of AMI, 18 percent have affordability limits of 31 to 50% of AMI, 41 percent have affordability limits between 51 and 80% of AMI (although most do not exceed 60% of AMI), and 2 percent are restricted at levels above 80% of AMI.¹²⁵

Production and preservation of income-restricted rental housing is typically publicly funded and/or supported by private investment through the federal Low-Income Housing Tax Credit program. Rent for publicly funded rental housing is usually capped at levels affordable to households with incomes 60% of AMI or less. Some income-restricted rental units in largely market-rate buildings have limits above 60% of AMI. Income-restricted affordable units in market-rate buildings are typically provided as a condition of land use or incentive requirements.

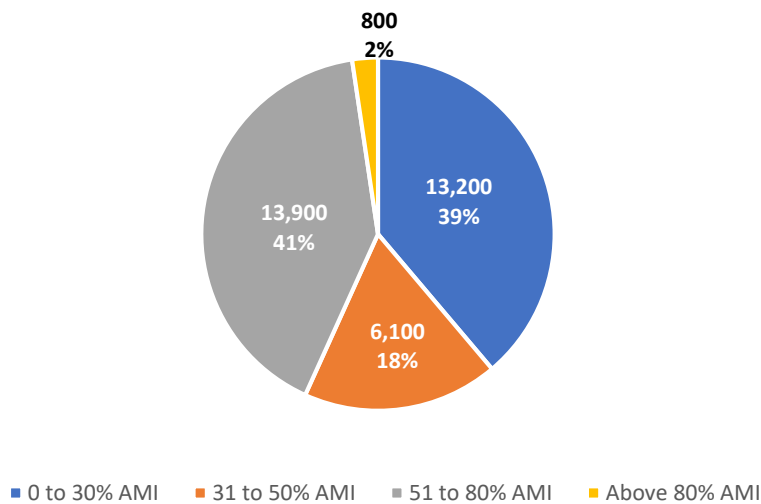
¹²³ The 34,000 estimate for rental units does not include units that came into service in 2022. The rental unit estimate, which comes from the King County Income-restricted Housing Database, includes City-funded income restricted housing, as well as income-restricted housing units not funded by the City.

¹²⁴ This estimate for homeownership units includes all units which came into service up through December 31, 2022.

¹²⁵ The King County database only provides data about the affordability limit of housing units. It does not include income data for resident households in these units, which may be lower than the affordability limits.

For-sale affordable homes are funded by a combination of public and philanthropic dollars (typically one-third of the development cost) leveraged by the eligible homebuyers' affordable mortgage and downpayment. Households eligible to purchase an affordable home have incomes no higher than 80% of AMI.

Figure A-112
Income Restricted Rental Unit Supply as of January 2022



Sources: King County Income-restricted Housing Database, developed through a survey of public regulatory agencies in collaboration with the Puget Sound Regional Council.

City Investments in Permanently Affordable Housing

Investment in permanently affordable housing is one of the most critical City actions to address public health and safety, prevent residential displacement, and reverse historic and ongoing harms to communities of color because of institutionalized discriminatory policies and practices.

This section of the Housing Appendix provides a high-level overview of the Seattle Office of Housing's efforts to produce and preserve affordable housing through various funding sources. As a City, we invest in income-restricted housing that other agencies, such as nonprofit affordable housing providers and SHA, own and operate. Funding and housing outcomes are summarized for OH's Rental Housing, Homeownership, Home Repair, and Weatherization programs, along with emergency rental assistance in response to the ongoing economic impacts of the coronavirus pandemic. This section also describes agreements with market-rate developers to include a modest share of income-restricted units affordable to low- and moderate-income families and individuals. Those units supplement Seattle's supply of City-funded low-income housing.

City investments in affordable housing infrastructure help advance racial equity, given the disproportionately high housing cost burden, displacement, and potential for homelessness experienced by people of color. The City makes special efforts to reach people of color and immigrant and refugee communities with the housing programs it funds. Based on available demographics of households that reside in City-funded housing or that receive other types of City-funded assistance, those programs serve greater shares of people of color and households with lower incomes compared to the overall housing

market.¹²⁶ For income-restricted units in otherwise market-rate buildings (provided as a condition of Multifamily Property Tax Exemption or Mandatory Housing Affordability requirements, for example), racial equity outcomes have not been documented to equal or surpass those achieved through City-funded affordable housing programs. The Office of Housing is working to improve collection and quality of demographic data for more thorough investigation of racial equity outcomes of the City's housing strategies.

RENTAL HOUSING PROGRAM

The OH portfolio of City-funded rental housing totals more than 18,000 affordable units in service, which is slightly more than half of the income-restricted units in Seattle. As of the end of 2022, funding has been awarded for approximately an additional 3,500 affordable apartments in the development pipeline. City-funded rental apartments are in all parts of Seattle where zoning allows for development of multifamily apartment buildings.

OH awarded \$154.75 million in 2022 to build, acquire, and preserve 990 affordable rental homes in neighborhoods across Seattle. These investments support a spectrum of housing types for low-income residents, including supportive housing for those experiencing homelessness and apartments for low-income individuals and families.

Figure A-114 shows that in 2022, \$137 million of the City's \$154 million of capital investment in affordable rental was for the development of new housing. This \$137 million of OH investments will result in additional investments totaling \$144.6 million for new low-income housing, not including funding for ground floor commercial or community spaces. The \$144.6 million supplementing City funding derives from multiple sources, with the largest being federal Low-Income Housing Tax Credit program private activity bonds and equity investment, which is administered by the Washington State Housing Finance Commission.

¹²⁶ [City of Seattle, Office of Housing, 2022 Annual Investments Report](#), pages 39-42.

Figure A-113**New Production, Reinvestment, and Preservation Funds Awarded for Rental Housing (2022)**

Fund Source	2022 Funding Awarded	Description
Seattle Housing Levy	\$17M	The voter-approved 2016 Seattle Housing Levy ¹²⁷ provides approximately \$29 million per year for the rental housing program. Based on cumulative outcomes over the first six years of the current levy period, the Rental Production and Preservation Program exceeded its 7-year goals ahead of schedule.
Seattle Mandatory Housing Affordability (MHA) payments	\$52.8M	In areas subject to MHA requirements, residential and commercial developers either make financial contributions for new low-income housing or include a modest number of affordable units as part of their developments.
Seattle Incentive Zoning / Housing Bonus payments	\$4.95 M	In a few select zones not subject to MHA, residential and commercial developers can opt to achieve additional floor area by meeting Incentive Zoning requirements for affordable housing.
Other local funds, including JumpStart Payroll Expense Tax	\$67.3 M	The Seattle Payroll Expense Tax is a business excise tax; a percentage of revenue is dedicated to affordable housing, including rental housing production.
Federal funds, which may include HOME, CLFR, or other	\$12.2 M	The HOME Investment Partnerships Program (HOME) provides formula grants to states and municipalities to fund a wide range of activities including building, buying, and/or rehabilitating affordable housing. Coronavirus Local Fiscal Recovery Funds (CLFR), a part of the American Rescue Plan Act (ARPA), provide local governments resources to support households, businesses, and public services impacted by the pandemic.
Total	\$154.3M	
Source: City of Seattle Office of Housing		

HOMEOWNERSHIP PROGRAMS**Development of New Affordable For-Sale Homes**

For more than 20 years, OH has invested in the development of affordable for-sale homes. The homes are resale restricted to help provide permanent affordability for low-income homeowners. Initial sales prices are affordable to eligible buyer households who have incomes at or below 80 percent of AMI. In return for the opportunity to purchase a home at an affordable price, homebuyers agree to resale price limits to enable another low-income household to own their own home. These agreements balance initial homebuyers' need for affordability, stability, equity, and legacy with the desire of future homebuyers to experience those same benefits. OH, in partnership with several nonprofit development and stewardship organizations, oversees a portfolio of roughly 275 owner-occupied homes with lasting affordability. The power of permanent affordability is that public investment in the development of each home serves

¹²⁷ In 2022, the Office of Housing awarded Seattle Housing Levy funds approved by voters in 2016. The new Seattle Housing Levy was approved by Seattle voters in Fall 2023. Annual funding for the Rental Housing Program under the new 2023 Levy is \$100 million.

multiple income-eligible buyer households well into the future. Nearly 200 more OH-funded resale-restricted homes will come on the market in the next few years.

Figure A-115 shows that in 2022, OH awarded \$10.48 million to develop 95 permanently affordable homes at six sites for low-income homebuyers. Development of homeownership housing typically leverages between \$4 and \$5 per dollar spent of City funding. The homebuyer's mortgage, borrowed from a conventional mortgage lender, and their down payment amount constitutes the largest share of that leverage, averaging roughly two-thirds of the cost of each home. Other subsidy sources include State Housing Trust Fund, Federal Home Loan Bank, the U.S. Department of Housing and Urban Development's Self-Help Homeownership Program (SHOP), along with philanthropic and volunteer labor contributions.

Figure A-114

Permanently Affordable, Resale-restricted For-Sale Housing (2022)

Fund Source	2022 Funding Awarded	Description
Seattle Housing Levy	\$5.8M	The 7-year Seattle Housing Levy dedicates \$14.3 million to a variety of homeownership programs, including development of new permanently affordable for-sale housing and down payment assistance loans for income-qualified first-time homebuyers.
Seattle Mandatory Housing Affordability (MHA) payments	\$3.78M	A portion of MHA payment proceeds (see description above, under Rental Housing) is used for development of permanently affordable, resale-restricted for-sale housing.
Mercer Mega Block sales proceeds	\$910K	A portion of the proceeds from the City's sale of the Mercer Mega Block in 2020 was set aside to fund the development of permanently affordable homeownership in the Rainier Valley as part of the Rainier Valley Affordable Homeownership Initiative.
Total	\$10.48M	
Source: City of Seattle Office of Housing		

Downpayment Assistance

OH-funded downpayment assistance (DPA) for homebuyers, also known as "purchase assistance," is administered through nonprofit partners. The amount available to each income-eligible household is currently \$55,000. DPA is structured as a non-amortizing, 3 percent simple-interest, secondary loan due upon resale or refinance. DPA is often layered with other, non-City subsidies that help low-income, first-time homebuyers purchase homes available in the open market. Seattle Housing Levy-funded DPA loans that closed in 2022 supported eight homebuyer households with the purchase of their first homes.

Foreclosure Prevention Loans

In 2018, OH launched a pilot Homeowner Rescue Fund to help prevent home foreclosures. Since then, HomeSight, a local nonprofit partner, has originated 13 loans (including four in 2022). These loans enable eligible homeowners to retain ownership of their homes and continue living in the neighborhoods they call home. Despite the relatively modest volume of foreclosure prevention loan activity, this tool has been determined to be critical to City-led anti-displacement efforts. For that reason, it is now an ongoing program and no longer a pilot.

Home Repair Program

This program funds critical health and safety repairs, helping low-income homeowners preserve what is often their greatest financial asset and remain in their homes. In 2022, OH's Home Repair Program provided nearly \$486,693 in loans and grants to 41 low-income homeowners to address critical health, safety, and structural issues. This funding was from a variety of sources, including Community Development Block Grant (CDBG) and the Seattle Housing Levy.

Weatherization Program

In 2022, OH's HomeWise Weatherization Program expended \$4.73 million to provide energy efficiency and indoor air quality improvements in affordable apartment buildings serving low-income renters and single-family homes with low-income owners. This funding was from a variety of sources, including Seattle City Light, U.S. Department of Health and Human Services, U.S. Department of Energy, Bonneville Power Administration, Puget Sound Energy, and JumpStart Payroll Expense Tax revenue.

EMERGENCY RENTAL ASSISTANCE

In 2022, the City continued its work administering emergency rental assistance to provide stability for renters with low incomes who were economically impacted by the COVID-19 pandemic.

To distribute available funds, the City employed a three-pronged strategy that reached more than 10,000 Seattle renters whose housing stability was jeopardized by the pandemic's economic impacts. This approach to program implementation emphasized efficient and trusted partnerships, through:

- A direct contract with United Way of King County, building on their strong foundation of existing eviction prevention work;
- Innovative delivery through OH direct support to nonprofits that operate City-funded affordable housing; and
- Intentionality with respect to communities most negatively impacted by COVID-19, through direct engagement with community-based organizations, including agencies led by and serving BIPOC, immigrant, and refugee communities.

By the end of 2022, approximately \$46.7 million in rental assistance had been paid out to 10,503 households. The three-program strategy ensured quick disbursement of federal funding in a streamlined yet equitable manner. Across community-based organizations, the United Way, and other OH partners, the majority of rental assistance recipients identified their race and/or ethnicity as other than white alone or Hispanic/Latinx.

INCOME-RESTRICTED UNITS IN MARKET-RATE MULTIFAMILY BUILDINGS

OH's affordable housing portfolio also includes income-restricted units in otherwise market-rate buildings. Two vehicles for restrictive housing covenants are described in this subsection.

Multifamily Tax Exemption Program (MFTE)

This program exempts multifamily building owners from property taxes on residential improvements in exchange for a set-aside of income-restricted units, generally for up to 12 years. In 2022, OH issued Final Certificates of Tax Exemption for 22 multifamily housing developments in neighborhoods throughout Seattle. Those multifamily properties total 3,738 rental units, of which 793 MFTE units are income-

restricted, and 12 for-sale homes. Exemptions for properties with a Final Certificate issued in 2022 became effective on January 1, 2023.

OH's portfolio of in-service rental units includes over 6,000 MFTE units. Preliminary applications have been approved for another 1,900 MFTE rental units in permitting or under construction. City-funded low-income housing that is tax exempt through MFTE is not included in these totals.

Nearly 90% of in-service MFTE units either have zero or one bedroom. Publicly funded low-income housing using MFTE provides far higher shares of units sized for families with children compared to properties that are largely market-rate. For publicly funded low-income housing using MFTE, one-third of total rental units and roughly eight in ten owner-occupied homes have two or more bedrooms.¹²⁸

Rents for two-thirds of units in OH's MFTE rental portfolio are capped at levels for households with incomes between 75% AMI (\$72K for an individual to \$92K for a three-person household) to 90% AMI (\$86K for an individual to \$111K for a three-person household). Fewer than five percent have rent limits affordable for households with incomes below 60% AMI (\$58K for an individual or \$74K for a 3-person household).¹²⁹

Mandatory Housing Affordability (MHA)

MHA requires inclusion of a modest share of affordable homes in new multifamily and mixed-use development or a contribution to a City fund designated for preservation and production of low-income housing. MHA has been implemented in stages in Seattle, concurrent with area-wide zoning changes and Land Use Code modifications that increase development capacity.

Funds contributed through MHA payment option are awarded for production and preservation of income-restricted housing (both rental and ownership) by OH. Total MHA payments received by the City for projects with building permits issued as of December 31, 2022, total \$246.1 million.¹³⁰ The MHA share of total City funding awarded annually for affordable rental and ownership housing is reflected in the first two subsections above.

In 2022, performance housing agreements were executed and recorded on the title of 14 properties. Once constructed, those properties will include 66 income-restricted units, three of which will be homes subject to limits on sale prices (including resales) that are affordable to buyer households with incomes no higher than 80% of AMI. Affordability limits for rental units depend on the apartment's square footage: 40% of AMI for those with net unit area of 400 square feet or less and 60% of AMI for those larger than 400 square feet. MHA performance units are generally subject to 75-year housing affordability covenants.

¹²⁸ [Seattle Office of Housing, 2022 Annual MFTE Report](#), page 12.

¹²⁹ [Seattle Office of Housing, 2022 Annual MFTE Report](#), page 14. Income limits are as published for fiscal year 2023.

¹³⁰ [Seattle Office of Housing, 2022 Annual MHA/IZ Report](#), page 12.

Funding and Funding Gaps for Production and Preservation of Income-Restricted Housing

This section presents the results of a recently completed analysis of future housing production conducted by OH to develop the proposal for the 2023 Seattle Housing Levy. We use this analysis to better understand to what extent City financing and available leverage funds can be used to meet Seattle's projected housing needs for households with incomes at or below 80% of AMI, including Permanent Supportive Housing (PSH), through 2044.

OH staff developed financial models to better understand costs associated with development of new income-restricted multifamily rental homes and permanently affordable for-sale homes. This analysis also provided cost modeling for reinvestment in Seattle's existing portfolio of City-funded income-restricted housing, as well as ongoing operating and maintenance needs, including operating, maintenance, and tenant services (OMS) needs for PSH residents.

Existing housing resources include the Seattle Housing Levy approved by voters in November of 2023, JumpStart/Payroll Expense Tax, Mandatory Housing Affordability (MHA), Federal funds, and funds typically leveraged from partner public funders. Affordable housing development requires layering of multiple fund sources for both capital and long-term operating costs.

OH invests in affordable housing to address the full continuum of needs, from homeownership to rental apartments to homelessness prevention. Due to statutory requirements, investment of public funding is limited to housing that serves households with incomes at or below 80% of AMI. A 2021 analysis of housing needs and supply indicates that "there are opportunities for the market to provide more housing that is affordable and available to households with incomes closer to 80% of AMI," but absent subsidies and other government action newly developed housing cannot be both profitable and affordable to households with incomes below 50% of AMI. Substantial public investment is needed to create housing for households with the lowest incomes.

To better understand the need for affordable housing in Seattle, OH reviewed several data sources including the King County GMPC Jurisdictional Housing Needs, which are described in the Housing Need Projections section of this Housing Appendix. In summary, as reflected in Figure A-34 within this appendix, the projections indicate approximately 112,000 net new homes will be needed between 2019 and 2044. Of the total 112,000 net new homes Seattle needs:

- approximately 63% needs to be affordable to households with incomes 0-80% of AMI;
- approximately 56% need to be affordable to households with incomes 0-50% of AMI; and
- nearly 40% need to be affordable to households with incomes 0-30% of AMI; (roughly a third of the need for new housing affordable at or below 30 percent of AMI is for PSH).

OH staff conducted an analysis of housing needs to inform the 2023 Seattle Housing Levy proposal. This analysis is based on the seven-year period that the newly adopted 2023 Seattle Housing Levy covers (2024-2030). OH staff annualized the GMPC's 2019-2044 projections by dividing by 25 and then multiplied by seven to estimate housing need over the seven-year levy period (2024-2030). Housing needs for 2031-2044 were also extrapolated using this same methodology.

Results of this analysis show it may be possible for OH, in coordination with all other public funding partners, to develop approximately 27% of the estimated need for the 2024-2030 period, for homes affordable to households with incomes at or below 80% AMI (roughly 5,350 units of the 19,803 units

estimated to be needed in that time frame). Addressing that share of the estimated need will require leverage of all City affordable housing capital funds, including the 2023 Seattle Housing Levy. Other public capital sources that would need to be leveraged include Low Income Housing Tax Credits (LIHTC), State funding, and County funding, comprising about 55% of total project development budgets.

For the 2024-2030 Seattle Housing Levy period, it might be possible for OH, in coordination with its public funding partners, to fund approximately 15% of the OMS needs for PSH, as estimated by the GMPC. All available City OMS funds would need to leverage other public sources, including Housing Choice Vouchers as well as OMS funds at the federal, state, and county level.

Capital and OMS funding gaps would need to be filled to meet the total Jurisdictional Housing Needs as estimated by the State. To calculate this funding gap, staff assumed that local and leverage funds and development and operation costs would be similar to what was assumed for purposes of the 2023 Seattle Housing Levy modeling, plus a reasonable annual escalation of costs (3.2% for capital and 4% for OMS).

Substantial capital and OMS funding gaps remain to meet the total state Jurisdictional housing needs through 2044 for households with incomes at or below 80% of AMI. The estimated gap totals \$30.4 billion (\$27.7 billion for capital costs and \$2.7 billion for PSH OMS costs).

To work toward closing this gap, the City must continue to advocate for significant expansion of the federal LIHTC program and new and/or increased federal and state fund sources for capital and OMS costs of production and preservation of low-income housing, including PSH.

Other Barriers to Increasing Supply of Income-Restricted Homes

This section describes how income-restricted housing production is especially sensitive to barriers and describes additional challenges involved in the production and operation of permanently supportive housing.

BARRIERS TO LOW-INCOME HOUSING DEVELOPMENT

Income-restricted housing is especially sensitive to regulations that add cost and complexity to producing housing. This is because affordability requirements limit the amount of income a project will be able to generate from residents' payments, and because assembling funding and development sites for income-restricted housing is already particularly complicated.

PSRC conducted outreach with developers of affordable housing to identify barriers that make it particularly challenging to produce housing able to accommodate needs of low- and moderate-income

households.¹³¹ The developers identified zoning as the biggest barrier that local jurisdictions have direct ability to change. When asked to identify the zoning characteristics most desired for sites on which to build affordable units, developers indicated zoning for moderate density residential, followed by zoning for high-density¹³² residential, density bonuses for affordable units, and reduced parking requirements. Respondents noted several types of standards, including requirements for ground-floor commercial space, open space, and parking minimums, that can reduce the feasibility of affordable housing projects. In addition, developers indicated that reducing fees, expediting permitting processes, and relaxing Design Review requirements for development of affordable housing can make more projects more viable.

The City made strides in reducing barriers to production of affordable housing with adoption in 2023 of [Ordinance 126855](#), which focuses on publicly funded low-income housing and code-incentivized income-restricted units. The ordinance exempted all low-income rent-restricted housing and sale and resale-restricted homes from Design Review and authorized the ability to request waivers or modification of certain development standards for these housing projects (as long as these departures do not increase building envelopes).¹³³ The ordinance also consolidated and simplified parts of the land use code focusing on income-restricted housing development.

Changes to State law in 2018 created flexibility for cities and other public entities to donate surplus land for permanently affordable housing uses rather than having to obtain fair market value with property transfers. Seattle has established affordable housing as a priority for disposition of City-owned property and is using the recently provided flexibility to reduce barriers to affordable housing associated with land costs.¹³⁴

Even with these changes, regulatory barriers in Seattle have continued to hamper the development of comparatively low-cost forms of housing. This is particularly the case in neighborhoods with low-density zoning, where constraints on the production of housing diversity and affordability have continued a history of racial exclusion.

City-funded affordable housing developments typically comprise about 20 homes for homeownership and, for rental, 85-125 apartments in five floors of wood frame construction over a one- or two-floor concrete podium. Approximately 10 percent of developable land in Seattle is zoned for the multifamily construction

¹³¹ PSRC published their findings to help jurisdictions better understand the constraints and opportunities these developers experience. See [VISION 2050 Planning Resources: Findings from Affordable Housing Developer Outreach](#), July 2023.

¹³² Definitions of “moderate density” and “high density” were not included in the questionnaire.

¹³³ Prior to adoption of <https://seattle.legistar.com/LegislationDetail.aspx?ID=6249076&GUID=DE1491A3-26AC-4B19-AB1D-B29636D81600&Options=ID|Text|&Search=low-income> the ordinance, those provisions were available on a temporary basis to housing with at least a 40% share of total units affordable for households with incomes no higher than 60% of AMI.

¹³⁴ As noted in Seattle’s successful Pro Housing grant application to HUD, of November 2023, Seattle transferred or is in the process of transferring 17 City-owned parcels to support production of more than 800 income-restricted housing units.

densities of five to eight stories that are most cost-effective for production of income-restricted homes. The share of zoned land that works for new midrise developments is even smaller, given that many of these sites are already developed or require lot assembly. Competition with market-rate developers for suitably zoned sites exacerbates challenges for developers of income-restricted housing. Private market developers commonly assemble development sites by taking on debt or private investors and speculators hold land until they reach their investment goals. Land banking and site assembly tend to be more difficult for income-restricted housing developers due to limited funding availability, financing structures, and timing.

Actions to expand the area zoned for higher density housing development, particularly in the 5 to 8 story range, which are documented in a previous section, can also help to address barriers to increasing production of rent- and income-restricted homes.

BARRIERS TO PERMANENT SUPPORTIVE HOUSING (PSH) DEVELOPMENT

In response to a pandemic-fueled rise in homelessness, including individuals and families living unsheltered, Seattle City Council adopted Ordinance 126287 in 2021. The ordinance provides flexibility to reduce the cost and increase the feasibility of developing and operating PSH. Specifically, Design Review is no longer required for PSH, and SDCI is authorized to approve requests from organizations developing PSH for waiver or modification of certain development standards like parking, overhead weather protection, indoor amenity areas, outdoor open space, ground-floor uses, and facades limits.

PSRC's outreach to affordable housing developers found that public opposition can play a significant role in delaying the development of housing to serve formerly homeless people and others in need of PSH. While Seattle has a requirement for a community relations plan with new PSH development, heightened engagement can result in public opposition that can derail new PSH projects.

Finally, in most of Seattle, the City's Housing Funding Policies currently limit siting of low-income housing for households with incomes at or below 30% of AMI (e.g., PSH) to no more than 20% of total housing units in any Census block group. This requirement can have the unintended consequence of restricting potential development sites of PSH to a small fraction of zoning for residential development citywide.

COMMUNITY PARTNERSHIPS FOR PRODUCING AND OPERATING INCOME-RESTRICTED HOUSING

Applicants for OH funding to support affordable rental apartments and for-sale homes must demonstrate ability and commitment to develop, own, and manage housing and state their housing mission in organizational documents. OH evaluates each applicant to determine that the applicant has sufficient capacity to sustainably develop, own and operate housing on a long-term basis.

OH has a number of policies and programs to expand its partnerships with communities that might lack direct experience in those areas. OH's Housing Funding Policies allow applicants to demonstrate capacity by partnering with an entity or entities that provide essential expertise to the proposed project. In addition, OH oversees the Community Self-Determination Fund (CSDF) which provides short-term or permanent funding to community-based organizations for strategic property acquisition, development, and preservation of low-income housing. An additional element of the CSDF is the Community-Based Organization (CBO) Capacity and Grant Program, which sets aside funds for a third-party to provide technical assistance and capacity support for CBOs and new developers. PSH presents unique partnership

needs since the housing first model generally includes case management, mental health, health care, and chemical dependency services to support the physical, emotional, and financial well-being of residents.

PSH staff play a critical role in meeting resident needs and thereby supporting the capital investments made by OH. However, PSH organizations experience a high volume of staff vacancies due to low wages and challenging working conditions. The PSH OMS Workforce Stabilization fund invests in the City's PSH portfolio to ensure that the most vulnerable remain housed and adequately supported, and that those working with them have sustainable wages and working conditions.

OH has also established effective partnerships with housing counselors, other City departments, and King County to determine how and when to appropriately intervene with financial or other assistance to assist low-income homeowners successfully remain in their homes.

Homelessness

Seattle has established a goal in the Housing element to make instances of homelessness rare and brief. To achieve this goal, there is a significant need for emergency housing and shelters. The King County Countywide Planning Policies estimate that Seattle will need to accommodate a total of 25,734 emergency shelter beds by 2044, a five-fold increase of 21,401 beds over the 4,333 beds in the city as of the end of 2019. These beds are critical to reducing and preventing street homelessness in Seattle, which has grown in prevalence, in particular during the COVID-19 pandemic.

In addition, permanent housing opportunities that are available to people experiencing homelessness, such as permanent supportive housing (PSH), are critical, both in Seattle and in the larger region, to reducing homelessness and reducing the future need for emergency housing.¹³⁵

Populations Experiencing Homelessness in King County

Seattle coordinates its local homelessness system with King County and its other cities, as part of the unified countywide system called the King County Regional Homelessness Authority (KCRHA). KCHRA estimated that a total of 52,000 people throughout King County experienced homelessness at some point in 2022, and the number experiencing homelessness is projected to grow to nearly 62,000 by 2028.¹³⁶ People can experience homelessness for various lengths of time, depending on the ability of the homelessness system to meet their needs, and their own ability to gain and maintain permanent housing.

This section describes the population experiencing homelessness at a given point in time. The Washington State Department of Commerce publishes January and July estimates of people experiencing homelessness in its biannual "[Snapshot of Homelessness in Washington State](#)" report.¹³⁷ These estimates are produced by combining a variety of data sources, such as Medicaid claims, Temporary Assistance for Needy Families (TANF), Basic Food Assistance, and Homelessness Management Information Systems.¹³⁸

Figure A-116 shows Commerce's Snapshot estimates for people experiencing homelessness in King County as of July 2022. These estimates are grouped by the type of household in which each of these persons is a member. The Snapshot tallied 33,652 people experiencing homelessness in the county in July 2022. Of these, 22,120 were members of adult-only households, 9,411 were members of households

¹³⁵ [Guidance for Updating Your Housing Element](#) pg. 49. Washington State Department of Commerce, August 2023.

¹³⁶ [King County Regional Homelessness Authority Update, March 2023](#).

¹³⁷ The snapshot tallies we include here in the Housing Appendix refer to the population who are experiencing homelessness, which include both those in emergency shelter and those who are unsheltered. (The snapshots also include broader tallies, not included in this Housing Appendix, encompassing persons who are unstably housed in addition to persons experiencing homelessness.) These snapshots are prepared by the Washington State Department of Social and Health Services (DSHS) Research and Data Analysis Division for Commerce and are published on the [Homeless System Performance](#) section of Commerce's website.

¹³⁸ For a fuller understanding of the data contributing to the Snapshots and the limitations of the Snapshots, view "[Measuring Homelessness Using Administrative Data: A Review of the Snapshot of Homelessness](#)," DSHS Research and Data Analysis Division, October 2022; and "[Understanding the Snapshot Report](#)," Commerce Housing Division Data and Performance Unit, November 2022.

with an adult 25 years or older with one or more minor (person under 18), and 2,082 were members of households where everyone was 24 years or younger.

The largest number of people experiencing homelessness by race are in white and Black racial groups. However, the Black population is overrepresented as a proportion of the population experiencing homelessness when compared to their overall countywide population. In addition, the Black population is the largest group of households with minors experiencing homelessness. American Indian or Alaska Native, the Native Hawaiian or Pacific Islander, and the Hispanic or Latino racial and ethnic groups are also overrepresented as a proportion of the population experiencing homeless when compared to their overall countywide population. This is consistent with other data showing racial disparities in housing and income that are documented in this appendix.

Figure A-115**King County Population Experiencing Homelessness****By Household Type, Race and Ethnicity, Sheltered or Unsheltered, July 2022**

Race and Ethnicity	Persons in Youth or Young Adult Household, All Members 24 or Younger	Persons in Adult-Only Households with at Least One Member 25 or Older	Persons in Households with One or More Adults 25 or Older and One or More Minors	Persons in Unknown Household Type	Total Population Experiencing Homelessness
American Indian or Alaska Native	216	2,564	887	<11	3,669 (10.9%)
Asian	160	1,347	685	-	2,191 (6.5%)
Black or African American	881	6,906	4,180	17	11,984 (35.6%)
Hispanic or Latino	392	2,589	21,808	<11	4,791 (14.2%)
Native Hawaiian or Pacific Islander	153	1,164	934	<11	2,252 (6.7%)
White	547	9,696	1,993	16	12,251 (36.4%)
Unknown	108	510	714	<11	1,334 (4.0%)
Total	2,082 (6.2%)	22,120 (65.7%)	9,411 (28.0%)	39 (0.1%)	33,652 (100%)

Source: [Snapshot of Homelessness in Washington for July 2022](#), Washington State Department of Commerce.
Note: Based on combined Medicaid, Economic Service, and HMIS populations Includes service recipients and all associated household members.

Figure A-117 shows racial and ethnic composition of the overall population in King County as reported in the Census Bureau's American Community Survey (ACS) alongside that of the population experiencing homelessness as reported in Commerce's Snapshot of Homelessness. Because Commerce does not report multiracial categories, its estimates are not strictly comparable to the ACS. The disproportionalities in rates of homelessness are so large that they are evident even when considering the differences between the data sources in tabulating race and ethnicity.

Figure A-116**Racial and Ethnic Distribution:****Population Experiencing Homelessness and Overall Population in King County**

Snapshot of Homelessness Tallies of Population in Experiencing Homelessness		American Community Survey (ACS) Estimates for Total King County Population	
Race and Ethnicity	Percent of Population Experiencing Homelessness (July 2022)	Race and Ethnicity	Percent of Population (2021 ACS)
Total:	100.0%	Total:	100.0%
American Indian or Alaska Native	10.9%	American Indian and Alaska Native alone, not Hispanic	0.5%
Asian	6.5%	Asian alone, not Hispanic	20.0%
Black or African American	35.6%	Black or African American alone, not Hispanic	6.6%
Native Hawaiian or Pacific Islander	6.7%	Native Hawaiian and Other Pacific Islander alone, not Hispanic	0.9%
White	36.4%	White alone, not Hispanic	54.6%
		Some other race alone, not Hispanic	0.6%
		Two or more races, not Hispanic	6.8%
Hispanic or Latino ethnicity	14.2%	Hispanic or Latino ethnicity (any race or race combinations)	10.8%
Unknown	4.0%		
Sources: Snapshot of Homelessness in Washington for July 2022, Washington State Department of Commerce; 2020 decennial census, U.S. Census Bureau.			

POINT-IN-TIME ESTIMATES

An additional source of data for estimating the population experiencing homelessness is the Point-in-Time Count. The Point-In-Time Count is a survey count of people experiencing homelessness. It is conducted one night each January at locations in Seattle and elsewhere in King County. The survey is used to identify the extent and nature of homelessness.

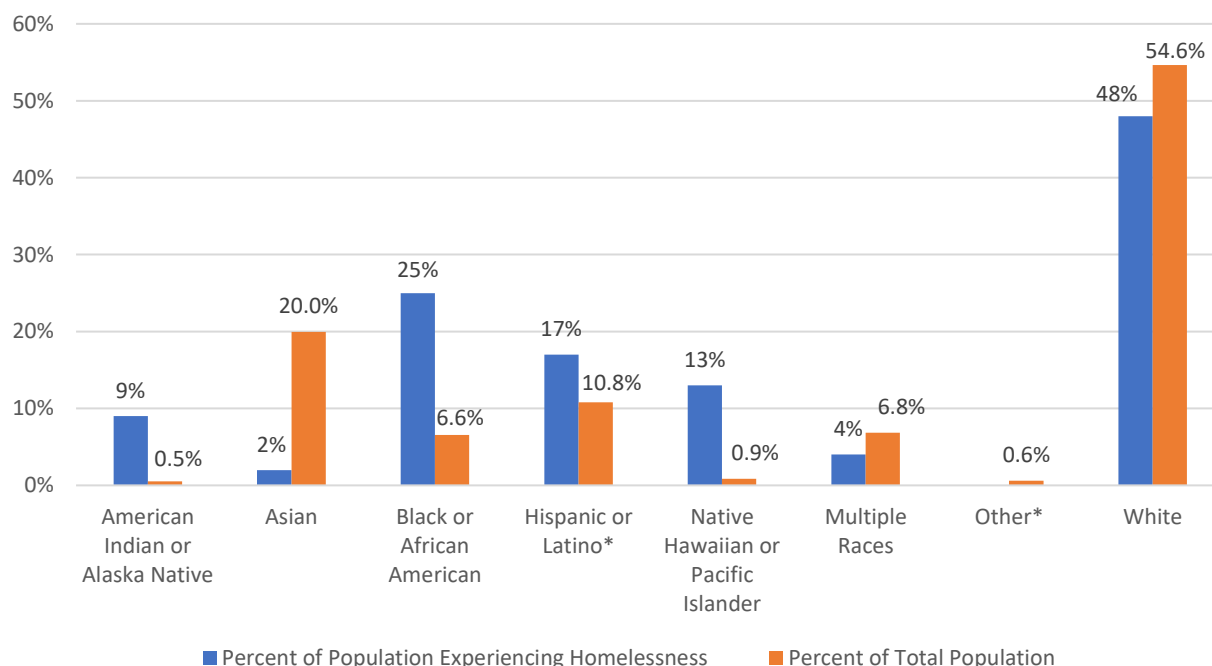
The One Night Count has two components: a count of unsheltered homeless, which was conducted by the Seattle/King County Continuum of Care until 2020 and by the King County Regional Homelessness Authority thereafter, and a count (by agency staff) of people being served that same night in emergency shelters and transitional housing programs. Agency staff also provide information about those people being served. As Point-In-Time counting does not occur everywhere and not all people experiencing homelessness prefer to be counted, the Point-in-Time count represents a limited sample of people experiencing homelessness in Seattle and King County.

[The 2022 Point-in-Time Count](#) counted 13,368 people experiencing homelessness that night in January in King County, with 57 percent of those being unsheltered and 43 percent sheltered. Sheltered spaces surveyed include family transitional housing, congregate and non-congregate emergency shelters, and tiny house villages. Unsheltered people included those who were in both sanctioned and unsanctioned encampments with tents; and people located somewhere outside on the street, located in an abandoned building, or living in a vehicle.

Of those surveyed in 2022, 51 percent identified themselves as having a disability, 31 percent identified themselves as having a mental health disorder, and 37 percent identified themselves as having a substance use disorder.

Race and ethnicity estimates from the 2022 Point-In-Time survey shown in Figure A-118 reveal that several groups are overrepresented in the population experiencing homelessness, similar to patterns seen in Commerce’s “Snapshot of Homelessness.” Black, Native Hawaiian or Pacific Islander, American Indian or Alaska Native, and Hispanic or Latino groups are all overrepresented in the population experiencing homelessness. Native Hawaiian or Pacific Islanders were 13 times more prevalent among the population experiencing homelessness than in the overall King County population.

Figure A-117
2022 Point in Time Count by Race and Ethnicity



Source: 2022 Point in Time Count for King County, King County Regional Homelessness Authority; U.S. Census Bureau 2020 decennial census

Note: King County 2022 Point-in-Time Count did not include data for people who identify as Other race

Comparing overall results between 2020 and 2022 allows for some insights into how homelessness has changed over time. In the January 2020 count, 47.5 percent of the overall 11,751 people experiencing homelessness were unsheltered while 52.5 percent were sheltered. Thus, there has been an increase of 10 percentage points in the share of unsheltered people between 2020 and 2022, which occurred as the number of people experiencing homelessness overall increased.

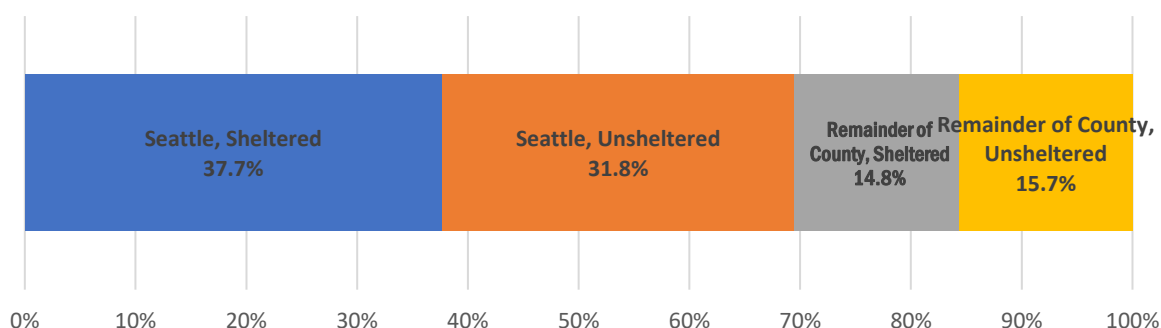
Furthermore, the 2020 Point-In-Time Count report provides details not available in the 2022 count, such as the location of people experiencing homelessness in King County. Figure A-119 shows 69.5 percent of

King County's people experiencing homelessness were found in Seattle as of the Point-in-Time Count in 2020. Of those in Seattle, a little more than half were sheltered.

Other key survey findings from the Point-In-Time 2020 count for King County include the following:

- Twenty-nine percent of people experiencing homelessness were considered chronically homeless, meaning they had spent more than 1 year experiencing homelessness or had experienced homelessness on four separate occasions in the last 3 years.
- People in families with children make up nearly one-third of people experiencing homelessness. Additional large demographic groups included single adult men and veterans.
- Reporting on issues such as disabilities and health conditions is voluntary. The most commonly reported disabilities and health conditions reported were mental illness, alcohol or substance abuse, and physical disability.
- In addition, self-reported reasons for experiencing homelessness most commonly included job loss, substance use, mental health issues, and not being able to afford a rent increase.

Figure A-118
2020 Point in Time Count by Location



Source: [2020 Point in Time Count for Seattle and King County](#)

Existing Emergency Shelter and Housing for People Experiencing Homelessness

Figure A-34 at the beginning of this Housing Appendix shows that Seattle had 4,333 shelter beds as of 2019. To describe existing shelter beds by type (i.e., family, adult or veteran beds) across Seattle and King County, we present data that is reported at the countywide level throughout the remainder of this section, Figure A-120 shows the existing emergency shelter and housing supply by type for people experiencing homelessness across King County.

As of 2023, there are a total of 5,344 emergency shelter beds situated in King County. About 55 percent of these beds are for adults without children, while 45 percent allow for adults with children. In addition,

small shares of these beds are for specific populations, including victims of domestic violence, people living with HIV, veterans, and youth between the ages of 18 and 24.

Transitional housing, which is limited in length of stay typically to 2 years, provides an additional 1,900 beds, mostly for households with children.

Forms of permanent housing include rapid rehousing, permanent supportive housing, and other permanent housing. Rapid rehousing is the smallest of these three categories, with 1,200 bed equivalents that serve households who are placed in permanent housing quickly through financial and housing support. Permanent supportive housing is the second largest of the groups, with 7,400 beds, while other permanent housing, which does not include supportive services typical of PSH, provides 4,100 beds. There are approximately 1,900 veteran PSH beds, the largest permanent housing supply for any specific population.

It is worth noting that beds serving victims of domestic violence, people living with HIV, veterans, and youth under the age of 25 vary in whether they also allow adults with accompanying children. Beds serving victims of domestic violence almost entirely allow adults with children, while beds serving people living with HIV do not. About a third of beds serving veterans and youth also allow adults with children.

Figure A-119

Supply of Beds by Population and Shelter/Housing Type in King County, 2023

Supply of Beds by Population and Shelter/Housing Type in King County, 2023					
Bed Type	Emergency Shelter	Transitional Housing	Permanent Housing		
			Rapid Rehousing	Permanent Supportive Housing*	Other Permanent Housing
Total Beds	5,344	1,895	1,247	7,416	4,057
Beds by Household Status					
Adults Only	2,928	33	113	5,309	2,003
Allow Adults with Children	2,416	1,862	1,134	2,107	2,054
Beds for Specific Populations					
Victims of Domestic Violence	169	295	243	-	18
Living with HIV	26	-	-	58	-
Veterans	34	-	178	1,936	59
Youth Aged 18 to 24	147	226	156	80	70
*Includes Supportive Housing and Permanent Supportive Housing, although most are Permanent Supportive Housing					
Source: King County Regional Homelessness Authority, 2023 Housing Inventory Count for King County					

Emergency Housing and Shelter Capacity

As described in the Growth Targets and Housing Needs Projections section of this appendix, pursuant to recent changes to state GMA requirements, the GMPC adopted housing needs projections for emergency housing for each city in King County. The GMA also requires that local comprehensive plans document that existing zoned capacity can accommodate those emergency housing needs.

Seattle's analysis of capacity to meet emergency housing needs is summarized in this section. We use the development capacity model along with the analytical steps shown below that reflect guidance provided by the State Department of Commerce. The steps for this analysis are as follows:

1. Identify the zones where emergency housing is allowed
2. Using recent examples, create density assumptions for shelter types
3. Identify sites to only properties suitable for emergency housing types in zones where they are allowed and calculate their capacity for emergency housing,
4. Compare the development capacity to the projected emergency housing need.

IDENTIFY THE ZONES WHERE EMERGENCY HOUSING IS ALLOWED

The City of Seattle has several permitted uses that allow for indoor emergency housing in permanent structures, including community centers, communal housing, congregate residences, and hotel uses. As one or more of these uses are allowed by-right across most zones, these are largely allowed in many areas of the city. The exception is within neighborhood residential zones, where indoor emergency housing is allowed as a conditional use.

In addition, tiny house communities, which provide a bed in temporary structures, are allowed in all zones if on a religious-affiliated property and any development site as an interim use once a permit has been issued.

DENSITY ASSUMPTIONS FOR SHELTER TYPES

To create density assumptions and filter our search for sites in Seattle that carry Emergency Housing and Shelter capacity, we start by looking at recent examples of shelters built across Seattle. Figure A-121 shows three shelter types that may be expected across Seattle and identifies property characteristics and shelter characteristics for examples of each shelter type. These shelter types are as follows:

- **Indoor emergency shelters in new buildings** are in purpose-built structures, or portions of them, that were purpose-built for emergency housing.
- **Indoor emergency shelters in converted buildings** are in permanent structures formerly occupied by another use, like an office or assisted living facility.
- **Tiny house villages** are sites with multiple temporary structures used for shelter beds, hygiene, cooking, security, and service facilities.

Figure A-120

Examples of Indoor Emergency Shelter and Tiny House Village Projects in Seattle

Project Name	Property Characteristics				Shelter Characteristics		
	Description	Zoning	Site square feet	Building square feet	Beds	Shelter square feet*	Density (Beds per shelter sf)
Indoor Emergency Shelter in New Buildings							
Mary's Place in the Regrade	Portion of new office tower	DMC 340 /290-440	83,422	80,460	190	37,985	200 sf/bed
Blaine Veterans Center	Ground-floor shelter with parking above	NC3-65	14,160	64,630	36	7,990	222 sf/bed
Indoor Emergency Shelter in Converted Buildings							
Seattle Mennonite Church	Church owned office	NC3P-95	19,223	6,877	20	6,877	334 sf/bed
ROOTS Shelter	Former Fraternity	LR3	8,640	18,196	45	9,938	221 sf/bed
Tiny House Villages							
LIHI Henderson	Transitional Encampment	NC3-55; NC3P-55	21,794	0	42	21,794	519 sf/bed
Pallet Shelter	Transitional Encampment	NC3-75	31,800	0	40	31,800	695 sf/bed
<i>Source: City of Seattle Department of Construction and Inspections; King County Assessor</i> *Shelter square feet for Tiny House Villages is the development site square feet. For Indoor Emergency Shelters, it's the building or portion of the building the shelter occupies.							

Figure A-121 helps to create assumed shelter densities shown in Figure A-122. We further consulted with City staff who work closely with emergency shelter providers to create appropriate assumed site aspects.

The City of Seattle has no regulations that universally limit the occupancy, spacing, or intensity of emergency housing beyond those applicable to other uses as a whole; therefore, we do not assume site aspects based on these limitations that frequently limit emergency housing across other jurisdictions.

Indoor Emergency Housing in New Buildings

We assume that Commercial, Neighborhood Commercial, Downtown, Lowrise and Seattle Mixed Use zones carry indoor emergency shelter capacity, as these allow shelter uses by-right. We do not assume shelter capacity in Neighborhood Residential and Residential Small Lot zones, where emergency shelter uses are conditional, in Industrial zones, which may not be appropriate for indoor emergency housing, nor in Master Planned Communities or Major Institutional Overlays, which have existing institutional plans.

Recognizing that shelters in new buildings may be one use in a mixed-use development, we create density assumptions based on total site developable square feet. Mary's Place has 1 bed per 439 square feet of developable land area in the redeveloped Amazon block, and Blaine Veteran's Center has 1 bed per 393 square feet. As a midpoint, we assume 415 site sf per bed would be required for shelters in new structures.

In addition, we assume only vacant or redevelopable sites with housing capacity also carry indoor emergency housing capacity. While we provide a full description of how we identify these sites in the Development Capacity section of this housing appendix, it is important to note that sites unlikely to fully redevelop are not included in the new building capacity (i.e., those that are fully developed, on parks or cemeteries, or on major institutional properties).

Indoor Emergency Housing in Converted Buildings

Sites with existing buildings may be preferred to be used as conversions due to the high cost and timing of new development. In consultation with colleagues, we found that there are three types of partial or whole building use conversions that occur in Seattle:

1. Most common—religious property conversions
2. Less frequent—publicly owned and/or properties marked for demolition
3. Very infrequent—existing commercial spaces

The Seattle Mennonite Church project described in Figure A-121 is an example of the first conversion type, and the ROOTS shelter is an example of the second. In estimating capacity for potential conversions to indoor emergency housing, we include only religious property conversions given that they are the most common form of conversion. In addition, we assume that no more than a quarter of the building envelope would be dedicated to shelter uses, as the remaining space may be required by remaining operations. We assume that shelter in building conversions range between 20 and 50 beds per site with each bed requiring 275 feet of building space, as in the example shelters.

Tiny House Villages

We include both tiny house villages on interim-use sites, which are those sites where a master use permit for a new building (usually housing) has been issued, and tiny house villages on religious sites, which are not dependent on future development activities. Tiny house villages on religious sites also have less stringent state and local requirements than those on interim-use sites, such as SEPA and permitting requirements. Tiny house villages as an interim use are further limited to a maximum of 40 villages within Seattle at any given time.

For tiny house villages on religious sites, we assume existing religious site control and do not include sites that carry indoor residential capacity. We also assume that these villages may be placed on the remaining developable land area on religious sites, excluding the portions of religious sites where current buildings exist.

Staff experience tells us that tiny house village providers typically look for properties with a minimum space for 40 tiny houses, which allows for services to be provided on-site in a cost-effective manner.

Given the two examples provided in Figure A-121, we assume one tiny home per 550 square feet of site developable area, and just 1 bed per tiny house, although some providers may allow more.

Figure A-121

Assumptions by Indoor Emergency Housing and Village Types

Emergency Housing or Village by Type	Assumed Site Aspects	Assumed Shelter Density
Indoor emergency housing in new buildings	Vacant or Redevelopable sites in zones where emergency shelter uses are allowed by-right**	1 bed per 415 sf of developable area
Indoor emergency shelter in converted buildings	Up to ¼ of floor area in existing religious buildings, with a minimum 20 to maximum 50-bed range per property	1 bed per 275 sf of building area
Tiny house villages on religious properties	Existing site control by a religious institution with a minimum space for 40 tiny houses*	1 bed per 550 sf of developable area
Tiny house villages as an interim use	Any vacant or Redevelopable site with a minimum space for 40 tiny houses*	1 bed per 550 sf of developable area
No shelter capacity assumed	Sites in zones where emergency shelter uses are conditionally allowed or unlikely, and not controlled by a religious institution**	No beds assumed

Source: Seattle Office of Planning and Community Development

*A minimum of 22,000 square feet of developable land area. Developable land area is site area, less any environmentally critical areas or otherwise restricted portions.

**We assume emergency housing capacity across Commercial, Neighborhood Commercial, Downtown (incl. Pioneer Square, Pike Place Market, and International District), Lowrise, and Seattle Mixed Use zone categories. We do not assume emergency housing or shelter capacity in Neighborhood Residential, Residential Small Lot, Industrial, Master Planned Community zone categories or in Major Institutional Overlays.

IDENTIFY SITES AND CALCULATE THEIR CAPACITY FOR EMERGENCY HOUSING

The next step is identifying those sites that may hold emergency housing capacity based on the assumed site aspects in Figure A-122 and calculating their potential capacity using the density assumptions in the same table. The results are shown in Figure A-123.

To identify sites, we use output from Seattle’s Development Capacity Model. Background on this model is included in the Zoned Development Capacity section of this Housing Appendix. We use vacant and redevelopable sites with housing capacity to calculate capacity for indoor emergency shelters in new buildings. In addition, we use vacant sites to identify sites where Seattle may temporarily accommodate tiny house villages as an interim use which typically move every 3 to 4 years as permanent structures are built. We identify religious properties for both conversions and tiny house villages by looking at existing land use identified by the Assessor, and filtering the search for each type using site aspects mentioned in Figure A-122.

In all cases, we exclude sites and portions of sites that are environmentally encumbered, or that otherwise do not have emergency housing development capacity. This step involves also identifying and excluding sites that are known to have indoor emergency housing.

Figure A-122
Emergency Housing Development Capacity by Shelter Type

Shelter Types	Land or Convertible Building Area	Emergency Housing Capacity (Beds / % of Beds)	
Indoor Emergency Shelter in New Buildings	2,014 acres	211,429	94.6%
Indoor Emergency Shelter in Converted Buildings	626,209 sf.	2,277	1.0%
Tiny House Villages on Religious Property	73 acres	5,795	2.6%
Tiny House Villages as an Interim Use	n/a*	4,000*	1.8%
Total	-	223,502	100%
<i>Source: Seattle Office of Planning and Community Development; Development Capacity Model, Sept. 2022</i> *There are a maximum of 4,000 beds, or 100 beds across 40 interim use sites at any given time. There were 166 vacant sites with land area sufficient for 100 beds at the time of this development capacity model. This number changes as sites undergo new development activities and when buildings on future development sites are demolished.			

COMPARE DEVELOPMENT CAPACITY TO THE EMERGENCY HOUSING NEED

In total, we estimate that Seattle has zoned capacity for 213,707 indoor emergency housing beds in Seattle across both potential new buildings and building conversions. Figure A-124 compares these capacity beds to the emergency housing needs. Seattle’s existing zoned capacity for indoor emergency housing is not, in itself, a barrier to meeting our indoor emergency housing needs.

We also have estimated zoned capacity for 9,795 tiny house villages beds on existing religious properties and as interim uses. Capacity for tiny house villages alone would not meet the projected needs of 21,401 additional emergency housing beds required by 2044. Tiny house villages additionally do not meet the standard for indoor emergency housing beds, which are in permanent structures that meet residential building standards.

Despite having a significantly higher zoned development capacity for indoor emergency housing than the projected need, there are significant barriers to increasing the number of emergency housing beds in Seattle relative to the projected needs. We discuss barriers and gaps, and actions for addressing these emergency housing needs, in the following section.

Figure A-123

Emergency Housing Development Capacity and Projected Housing Needs

Shelter Type	Emergency Housing Capacity	Total Emergency Housing Capacity	Projected Need (Beds)	Surplus Capacity (Beds / % of Beds)
Indoor Emergency Housing	213,707	223,502	21,401	+202,101; 944%
Tiny House Villages	9,795			
Source: Seattle Office of Planning & Community Development				

Emergency Housing Production Barriers and Actions

This section highlights key barriers to producing emergency housing in Seattle and outlines potential actions the City could take to address these challenges. This section addresses new GMA requirements, guidance from the state Department of Commerce, and countywide policies.

There are two primary forms of emergency housing in Seattle: indoor emergency housing in permanent structures and emergency shelters in temporary structures.¹³⁹

- Indoor emergency housing often involves converting existing buildings to a shelter use, such as religious properties converted to a congregate dormitory or former assisted living facilities with non-congregate sleeping rooms. Permanent structures newly developed for emergency housing uses are less common in Seattle than are conversions.
- In contrast to permanent structures, temporary structures like tiny houses have become the main form of new emergency shelter beds in recent years. This is largely due to the cost effectiveness and speed at which emergency shelter providers can open communities containing these structures. The Seattle Municipal Code considers tiny house villages to be a form of “transitional encampment,” which can either be on a religious sponsored site or on a redevelopment site as an interim use.

The following discussion addresses regulatory and process barriers, funding challenges, and partnership gaps that make developing and operating emergency housing challenging. Barriers were identified by City staff in the Seattle Department of Construction and Inspections and the Human Services Department who regularly engage with emergency housing providers and work in interorganizational partnerships for emergency housing.

¹³⁹ Local examples of both forms of emergency housing can be found in the preceding section on Emergency Housing and Shelter Capacity.

DEVELOPMENT REGULATIONS

Currently, the City has no on-site parking, recreation, or open space requirements for indoor emergency housing or tiny house villages. Indoor emergency housing in new permanent buildings is not subject to special development requirements (e.g., spacing, occupancy, intensity) beyond that of other residential types.

Tiny house communities, which are regulated as a form of transitional encampment, are subject to some special development requirements. For instance, interim use tiny house communities can have a maximum of 100 occupants. City of Seattle removed many limitations on these communities in 2020 by adopting Ordinance 126042.¹⁴⁰, which included:

- Increasing the maximum number of interim use communities from three to forty. Religious sponsored encampments are not included in this cap.
- Creating a new provision for the half-mile spacing requirement for interim use communities. The new provision included that when at least one interim use encampment exists in each Council District, then the spacing requirement is no longer enforceable. This condition has been met with the increase in tiny house villages following the legislation.
- Removing the requirement that the transitional encampment be accessory to an existing principal use for transitional encampments on religious sites.

PROCESS OBSTACLES

City of Seattle staff work closely with emergency housing providers to ensure their emergency shelter projects are compliant with state and local regulations, and that providers can open their facilities in a timely manner. The Mayor's Proclamation of Civil Emergency early during the COVID-19 pandemic allowed for various forms of indoor emergency shelter and tiny house communities to rapidly be set up across Seattle without any permits (except trade permits, i.e. - electrical, plumbing).

Tiny house communities on religious organizations' property are broadly exempted from obtaining a land use permit, while a Master Use permit continues to be required for tiny home villages on other properties. While many tiny house communities do not require a full State Environmental Policy Act (SEPA) review, those emergency housing and tiny home community projects which do (in particular, those greater than 12,000 sf. without religious affiliation) can face several months of delay. This delay, and the costs associated with it, can lead organizations to abandon their project or consider lower-cost shelter sites. SEPA appeals brought by parties opposed to the establishment of tiny house communities can lead to especially long delays or halt projects entirely.

¹⁴⁰ [Ordinance 12604](#) and materials describing its provisions can be viewed in the City's Legislation Information Center.

CAPITAL COSTS, OPERATION COSTS AND AVAILABLE FUNDING

High capital and operating costs, coupled with limited funding, are the biggest barriers to developing emergency housing. This funding gap is also a primary reason why shelter providers have increasingly turned to tiny home communities instead of indoor emergency housing when creating new shelters.

Costs

Establishing emergency housing in Seattle involves significant costs, both in terms of capital and ongoing shelter operations. Where appropriate, the City has sought to decrease capital costs by providing land at no cost for tiny house villages. However, with few City-owned properties appropriate for additional villages, some providers have turned to setting up tiny house villages on privately owned properties where they are charged market-rate land rents. In addition, villages are transitional uses, requiring costly site preparations and relocations as often as every three to five years. Moves also require significant provider and City staff time for coordination, siting, design, and permitting.

In contrast, indoor emergency housing involves higher costs for rents or upfront property acquisition. Master leased shelter buildings typically require a more expensive building rent and maintenance fees, therefore costing more per bed to operate annually than tiny house villages. Full property purchases for indoor emergency housing require much greater capital resources upfront, especially if a future shelter site requires development activities. However, purchasing a property results in long-term asset ownership associated with lower annual operating costs (as there are no rent costs) and reduces the likelihood of needing to relocate in the future.

Indoor emergency shelters planned for converted buildings sometimes face costly building improvements to ensure safety of shelter clients. Shelter spaces planned for areas not on the ground floor or on floors directly adjacent to the ground floor require more stringent fire suppression systems, i.e., sprinkler systems. The overall cost of upgrading safety features in existing buildings can make potential indoor emergency shelter projects financially infeasible. Given these potentially costly upgrades, a Draft Director's Rule that aims to ensure fire safety while providing flexibility was created to help make conversion projects more financially feasible. This Draft Director's Rule scales development requirements for sprinklers in conversions based on the hours of operations and intensity of the shelter. Given the safety tradeoff by deviating from standard code requirements, providers who seek to deviate are required to have specific maximum capacities and a 24-hour staffing plan to ensure client safety. Still, other types of significant safety upgrades to properties – such as reinforcing unreinforced masonry buildings – are not touched by this Draft Director's Rule and are necessary to meet residential requirements.

Funding Availability

Seattle primarily relies on local sources of funds for emergency shelters, with limited sources of funds from the State and federal governments. Unlike permanent housing projects, which can leverage local investments to win Low-Income Housing Tax Credit (LIHTC) dollars or win additional state funding, emergency housing lacks similar outside funding opportunities. The result is that local governments like Seattle are the main providers of dollars for producing new emergency housing beds.

COVID-19 response efforts brought in critical one-time funding that allowed acquiring properties such as closed rehabilitation centers or former hotels for use as emergency housing as well as renting temporary emergency shelter properties. However, many of these one-time dollar sources have been depleted.

Unless new outside sources of funds become available for additional indoor emergency housing beds, the City's attention will likely turn to retaining existing beds.

Gaps in Partnerships

In addition to directly working with providers, the City of Seattle participates in the King County Regional Homelessness Authority (KCRHA) to coordinate funding for emergency housing and services.

Limitations in opportunities for partnerships with other agencies that hold properties in Seattle potentially suitable for emergency housing also presents challenges to expanding the supply of emergency housing. For example, some State agencies are not able to enter partnerships to provide land at no-cost for tiny house villages, as they are legally bound to charge market rents on land.

ACTIONS TO ADDRESS BARRIERS

Through the One Seattle Plan and other efforts, the City is exploring several strategies to address the barriers identified here. These strategies include:

- Supporting efforts to end homelessness by working interjurisdictionally on emergency housing solutions.
- Advocating for additional state and federal sources of funding for operating and creating new indoor emergency shelter beds.
- Exploring new partnerships and incentives with philanthropy, the design community, and developers that will result in additional redevelopment, development, and operations resources for emergency housing.
- Examining regulatory and procedural obstacles that hinder development of indoor emergency housing, particularly in building conversions, while maintaining minimum life safety standards.

By addressing these barriers, Seattle aims to better meet the growing need for emergency housing and shelter options for residents experiencing homelessness.

Geographic Analysis of Racial and Social Equity in Housing

Citywide analysis presented earlier in the Housing Appendix reveals deep and persistent racial and social disparities in housing opportunities. This section provides analyses of how zoning, development and land uses relate to where people of color and low-income people live in and around Seattle. We present these analyses to show how land use and housing policies, including the legacy of past racist policies and practices, contribute to neighborhood segregation and racial and social disparities in housing and place-based quality of life outcomes.

Patterns of Where People Live

Patterns of where people live reflect policies and market forces that limit or expand choices in housing alongside the choices made by individual households within this system. This section looks at how population changes in neighborhoods and the current geography of racial and ethnic demographics relate to the decisions of years past and ongoing policy. This includes a look back at historical redlining maps, a consideration of the Urban Village Strategy, and zoning.

HISTORICAL EXCLUSION THROUGH REDLINING¹⁴¹

Redlining maps were created by the Home Owners' Loan Corporation (HOLC) in the wake of the Great Depression as part of the New Deal in the 1930s. The expressed purpose in the HOLC's "City Survey Program" was to create maps to assess mortgage lending risk at the neighborhood level in large cities throughout the United States. HOLC agents used a mix of local data, reports, surveys, and interviews in making these maps. Many of these interviews were with local lenders, real estate brokers, liquidators, and insurance agencies.¹⁴²

Each of these groups, including the HOLC agents, brought their own racial and social biases into the mapmaking process. In this sense, the maps reflected existing systems, both public and private, in denying housing capital to people of color and in devaluing the neighborhoods and homes where they lived.

¹⁴¹ See also: The Seattle Municipal Archives article "Redlining in Seattle" for more information about how community organizers and local leaders organized to change the practices of redlining and racialized lending and in the 1970s.

¹⁴² Michney, Todd M. "How the City Survey's Redlining Maps Were Made: A Closer Look at HOLC's Mortgage Rehabilitation Division." *Journal of Planning History*. 2022, Vol. 21 (4), 316-344.

The HOLC maps graded neighborhoods on a scale of lowest lending risk to highest, from “A” to “D.” In Seattle, the highest grades typically included those neighborhoods with high homeownership rates, residents who had upper middle-class incomes or higher, racial covenants that prevented people of color, Jewish people, and/or certain foreign-born populations from living there, and development covenants that prevented development aside from detached homes. The neighborhoods with the highest HOLC grades also had good access to neighborhood schools and parks. The lowest grades were given to neighborhoods that had larger proportions of low-income households, mixes of nationalities, high rates of Black households, proximity to substantial sources of pollution and environmental hazards, little access to schools and parks, a lack of transportation connectivity, and high vacancy rates.¹⁴³ Central business districts and industrial areas were not mapped, as these were viewed by the HOLC as commercial areas. Figure A-126 shows redlining maps for Seattle, along with current city boundaries.

Figure A-125 presents recent data from the 2020 Census on the demographics of people living in areas that had been assigned HOLC grades. The areas the HOLC graded highest still have fewer people of color. While Seattle continues to work towards a more equitable future, the legacy of historical exclusion, racial biases, and unfair policies prevalent in this period remain visible in the distribution of race and ethnic groups today. Furthermore, zoning large areas of the city for predominantly detached homes has perpetuated economic exclusivity of the highest graded neighborhoods, precluding many householders of color, who have disproportionately lower incomes, from entering them.

Figure A-124
Population and Housing Units by HOLC Grade

	Population				Housing	
	Total Population in each HOLC Area	Percent of Area’s Residents Who are People of Color	Percent of Area’s Residents Who are White	Percent of Citywide Population in each HOLC Area	Units	Percent of Citywide Housing Supply in each HOLC Area
HOLC Grade “A”	16,937	21%	79%	2%	6,154	2%
HOLC Grade “B”	209,630	30%	70%	28%	93,052	27%
HOLC Grade “C”	162,801	47%	53%	22%	76,174	22%
HOLC Grade “D”	95,768	52%	48%	13%	44,391	13%
Not Mapped*	251,879	42%	58%	34%	125,856	36%
Total Citywide	737,015	41%	59%	100%	345,627	100%

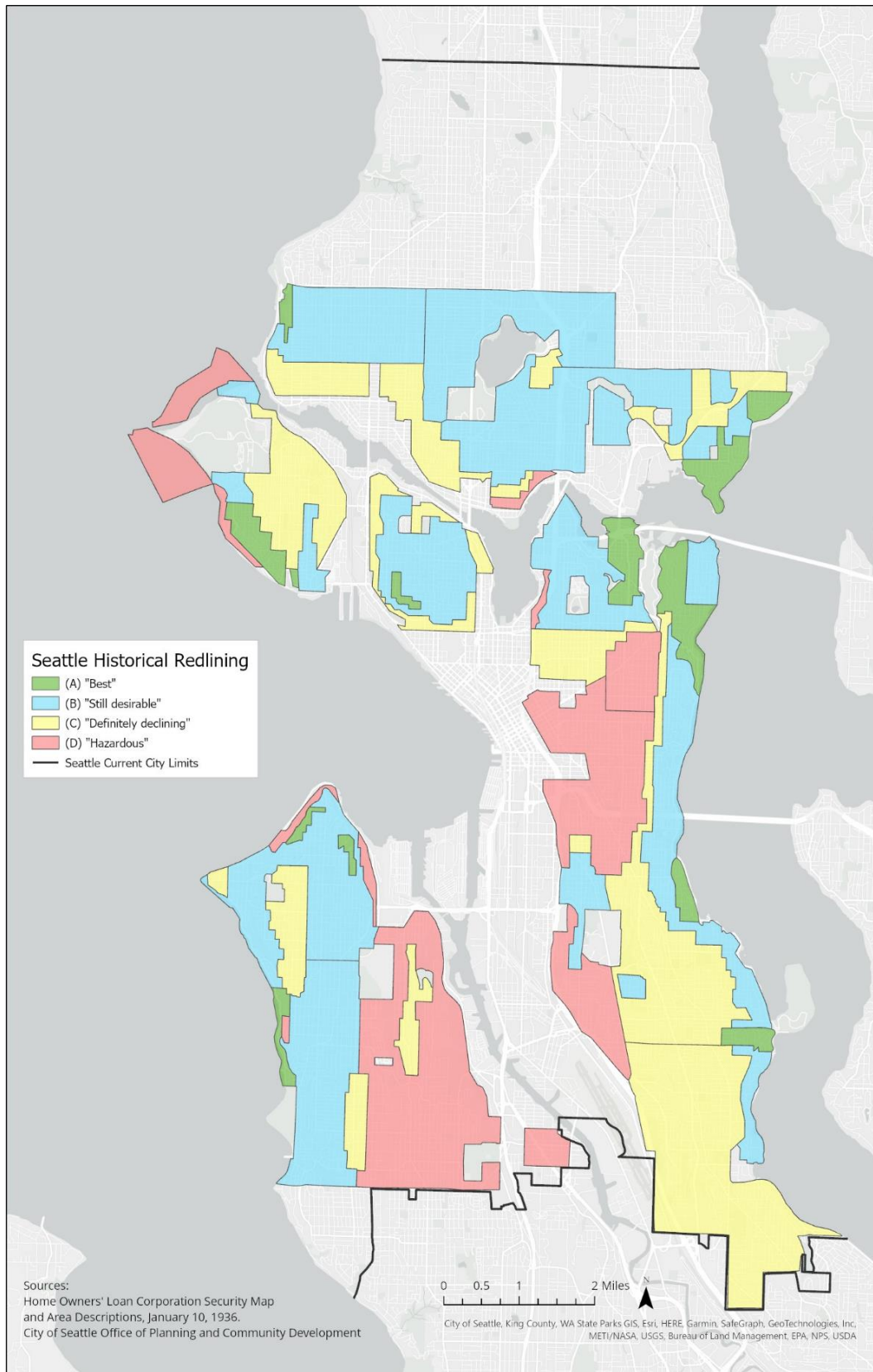
Sources: 2020 decennial Census, U.S. Census Bureau; Analysis by City of Seattle Office of Planning and Community Development based on the location of the center of 2020 census blocks.

Note: Neighborhoods unincorporated as of 1933 were not included in HOLC mapping. Many have racially restrictive covenants on the deed which are no longer enforceable, as well as detached home development covenants which remain enforceable under

¹⁴³ “Mapping Inequality: Redlining in New Deal America,” a project by Nelson R., Winling, L., Marciano, R., et al. Hosted at the University of Richmond.

current state law. In addition, incorporated neighborhoods with heavy commercial or industrial presence, like the Central Business District, were not included in HOLC mapping.

Figure A-125
Redlining in Seattle



REGIONAL SHIFTS IN COMMUNITIES OF COLOR

To make sense of demographic changes in Seattle neighborhoods we need regional context. The side-by-side maps in Figure A-127 provide some of this context. These maps show patterns in the share of the population who are people of color in neighborhoods in and around Seattle as measured in the last four decennial censuses.

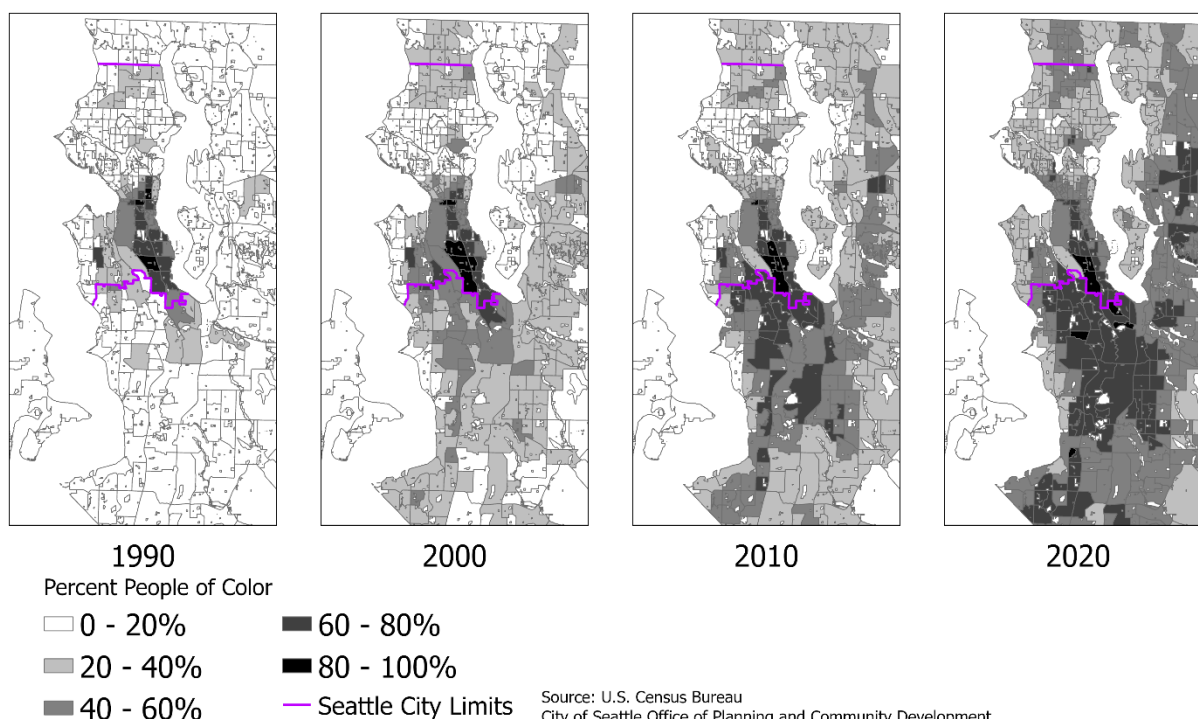
As of 1990, much of the racial and ethnic diversity in King County was still concentrated in Seattle's Central District and in Southeast Seattle. Rapid distributional changes occurred beginning in the 1990s as the population of color in many parts of King County grew; this growth was especially rapid in areas to the south and southeast of Seattle such as Tukwila and SeaTac. Neighborhoods in parts of north Seattle, Shoreline, Bellevue, and Redmond also saw increases in diversity. Furthermore, many neighborhoods in Seattle that saw little change before 2010 in the share of population comprised of people of color experienced increasing diversity in the 2010s.

These changes have been accompanied by a dramatic decline in and around Seattle's Central District in the proportion of residents who are people of color. This trend largely reflects reductions in the Black population within these neighborhoods—a trend that began in the 1970s and continues today.

While census data do not allow us to measure the extent to which displacement has been involved, data suggest that many people of color have left the city of Seattle and moved to nearby, rapidly diversifying, communities located to Seattle's south and southeast.

Figure A-126

Percent People of Color by Census Tract, 1990 to 2020



CHANGES IN THE RACIAL AND ETHNIC MAKEUP OF SEATTLE NEIGHBORHOODS

Another way to gain insights into demographic changes across the city's neighborhoods is to examine rates of growth for the overall population and for groups of color. We present a pair of additional maps in Figure A-128 focused on the population of color. The map on the left shows rates of growth for the population of color in Community Reporting Areas between 2010 and 2020. The map on the right shows the share of each area's residents who are people of color. Side by side, these maps show that many of the neighborhoods in which the population of color grew most rapidly are areas with relatively few residents of color. In contrast, the areas with the lowest population-of-color growth rates, and with net decreases in the population of color, happened where people of color are a large share of residents.

Trends within individual racial and ethnic groups vary greatly by community reporting area and by group. Some of these trends are continuations of trends seen in previous decades, while others are newer.¹⁴⁴

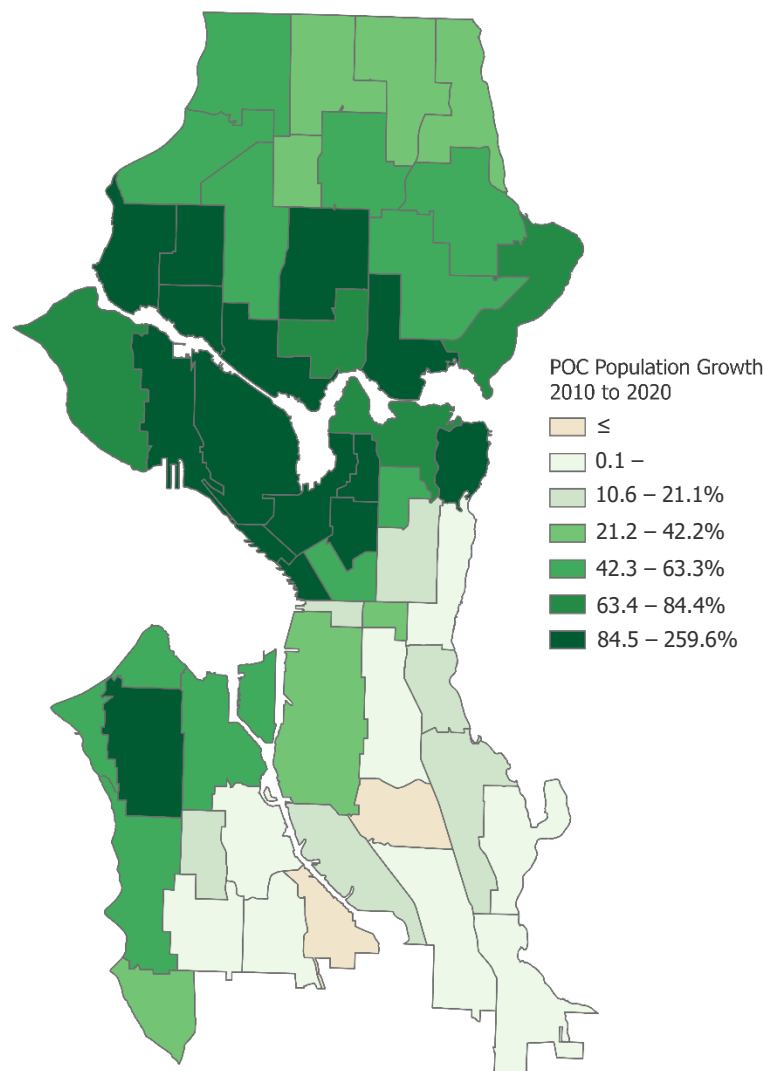
Trends from 2010 to 2020 include:

- Shrinking shares of residents who are Black in and around the Central District, and in much of Southeast Seattle and downtown, but increasing shares in some neighborhoods in north Seattle and in West Seattle.
- Increasing shares of residents who are Asian in South Lake Union, Downtown, Queen Anne, and most of north Seattle, but decreasing shares in the Chinatown-International District and Southeast Seattle.
- Decreasing shares of neighborhood populations who are white in most areas, except for Southeast Seattle, where the share increased.
- Increases in the shares of people who identify as multiple races across all Seattle neighborhoods.
- Increases in the shares of residents who are Hispanic in almost all areas of the city. South Park was one of the few exceptions to this trend. South Park, which had seen a burgeoning Hispanic population in prior decades, saw a reduction between the 2010 and 2020 censuses in both the Hispanic proportion and count of neighborhood residents.¹⁴⁵

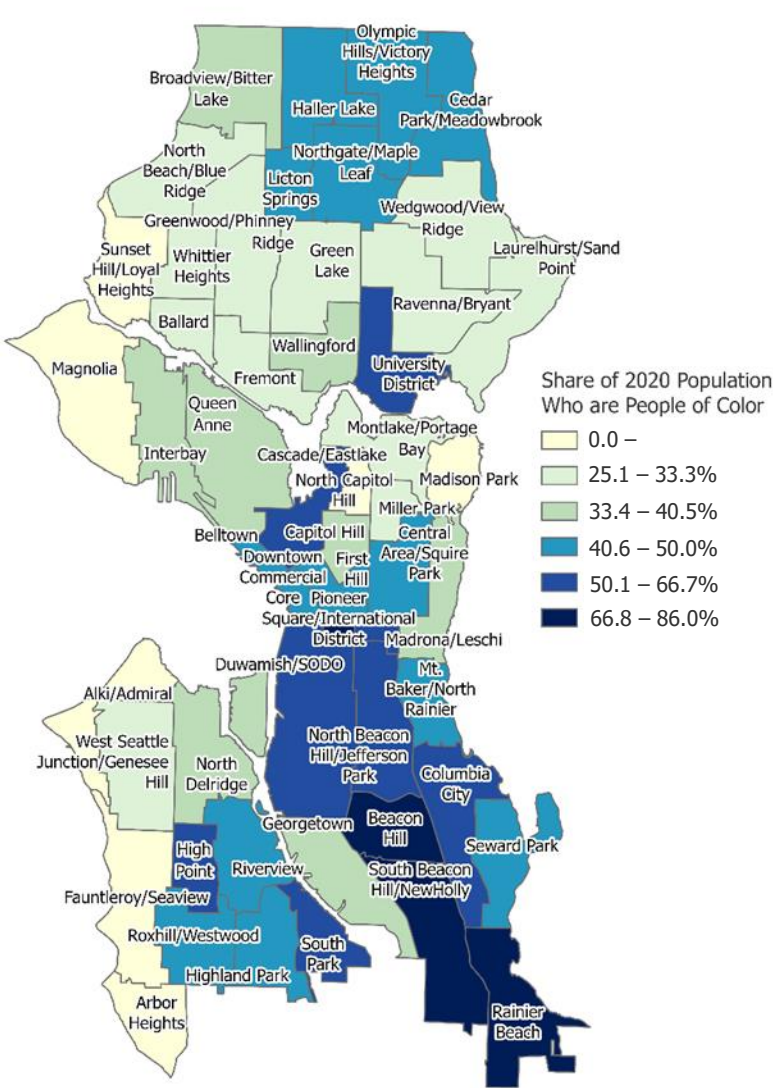
¹⁴⁴ A tabular report with [decennial census estimates on race and ethnicity from 1990, 2000, 2010, and 2020](#) is available for Seattle and its Community Reporting Areas on OPCD's Population and Demographics webpages.

¹⁴⁵ Some but not all of the reduction in census statistics for Hispanics in South Park is likely attributable to the worsened undercount of Hispanics found nationally in the 2020 census. ([Undercounts in the 2020 Census](#) are described in a March 2022 Census Bureau press release.)

Figure A-127
Community Reporting Areas (CRA) and People of Color
 Population of Color Growth Rates, 2010 to 2020



Share of CRA Population Who Are People of Color



GROWTH AND DIVERSITY IN URBAN CENTERS AND URBAN VILLAGES

This section examines how Seattle’s growth strategy prior to the 2044 One Seattle Plan is associated with changes in the racial diversity of Seattle’s neighborhoods. The Urban Village Strategy was adopted in 1994 as part of the City’s first comprehensive plan under the GMA. Since that time, Urban Centers and Urban Villages (UCUVs) have been focus areas for housing and job growth with the goal of locating housing in dense areas with high levels of access to transit, jobs, services, and other important amenities and infrastructure investments.

Figure A-129 which is based on decennial census counts, shows the distribution in 2010 and 2020 of people of color, the white non-Hispanic population, total population, and housing units by location inside or outside of an urban center or village. Compared with white persons, persons of color are disproportionately likely to live in UCUVs. The city’s UCUVs saw rapid population growth between 2010 and 2020, with the population of color growing especially rapidly in these areas. Over the same period, decennial census figures indicate that the city added approximately 8,000 housing units outside UCUVs and 50,000 inside UCUVs. By 2020, half of the city’s residents of color lived in UCUVs while the proportion of white people living in UCUV’s reached 36 percent.

While broad data on growth presented in Figure A-129 shows net changes in the population, it does not allow us to discern the numbers of people moving out of their homes amidst the rapid growth occurring in their neighborhoods. Community input and displacement-related data points suggest that many households, particularly those who are low income or people of color, have been displaced from these areas over this period.

Figure A-128
Distribution of Population and Housing Units:
Inside and Outside of Urban Centers and Urban Villages

	Population						Housing	
	People of Color		White		Total		Number of Units	Percent of Units
	Number	Percent	Number	Percent	Number	Percent		
2020								
Inside UCUVs	149,369	50%	158,938	36%	308,307	42%	181,810	49%
Outside UCUVs	149,478	50%	279,230	64%	428,708	58%	186,498	51%
Total	298,847	100%	438,168	100%	737,015	100%	368,308	100%
2010								
Inside UCUVs	91,785	45%	129,241	32%	221,026	36%	130,400	42%
Outside UCUVs	113,297	55%	274,337	68%	387,634	64%	178,116	58%
Total	205,082	100%	403,578	100%	608,660	100%	308,516	100%
Source: 2010 and 2020 decennial Census estimates, U.S. Census Bureau; City of Seattle Office of Planning and Community Development.								

RACIAL AND ETHNIC DIVERSITY IN ZONE CATEGORIES

Next, we look at racial and ethnic diversity of residents by the zoning category of the blocks where they reside. This can help provide insights into the racially disparate impacts of local land use policies given

that zoning is the local legal mechanism that most directly inhibits or enables neighborhood growth and change.

Figure A-130 presents zone categories alongside housing units and population. Each of these zone categories is a combination of individual zones largely consistent in how they regulate development, but varied in individual heights, densities, or in mix (where mixed-use). As shown, in the table zone categories vary greatly in terms of the number of housing units and population that live in them. The table also shows total housing units and population in the city of Seattle as a whole, and the remainder of King County for broader context.

Figure A-129
2020 Decennial Census Housing Units and Population Counts by Major Zone Category

	Housing Units	Percent of Housing Units	Population	Percent of Population
Commercial	10,578	2.9%	17,186	2.3%
Downtown	28,256	7.7%	40,319	5.5%
High-Density Multifamily	29,345	8.0%	41,859	5.7%
Industrial	2,138	0.6%	4,771	0.6%
Lowrise Multifamily	98,047	26.6%	182,970	24.8%
Major Institutions	1,639	0.4%	15,104	2.0%
Master Planned Community	802	0.2%	1,390	0.2%
Neighborhood Commercial	49,798	13.5%	76,448	10.4%
Neighborhood Residential	122,066	33.1%	312,796	42.4%
Residential Small Lot	6,236	1.7%	16,483	2.2%
Seattle Mixed	19,403	5.3%	27,689	3.8%
Total City	368,308		737,015	
Total Remainder King County	600,926		1,532,660	
Sources: Decennial Census, OPCD				
Note: Adopted zoning as of May 8, 2023 was attributed to each census block based on the zoning of the largest group of housing units in a block, identified using King County Assessors data.				

Figure A-131 also shows the shares of population by race and ethnicity for Seattle and the remainder of King County to better understand how diverse we are as a city and to provide relative benchmarks for considering the racial diversity of Seattle's zone categories. Zone groups and City and remainder of King County totals are listed by the population share who are people of color.

Figure A-130

Major Zone Categories by Detailed Race and Ethnicity from the 2010 and 2020 Decennial Censuses

	Population	Population Percentage								
		American Indian or Alaska Native	Asian	Black or African American	Hispanic	Pacific Islander	Other	Multiple races	Total POC Population	White, non-Hispanic
2020 Census										
Master Planned Community	1,390	1%	29%	36%	8%	0.0%	0.4%	4%	78%	22%
Industrial	4,771	2%	21%	8%	16%	1%	1%	10%	59%	41%
Seattle Mixed	27,689	0.4%	40%	5%	8%	0.2%	1%	6%	59%	41%
Major Institutions	15,104	0.4%	30%	4%	12%	1%	0.4%	8%	55%	45%
Residential Small Lot	16,483	1%	22%	9%	12%	0.5%	1%	8%	52%	48%
Downtown	40,319	1%	29%	8%	8%	0.3%	1%	5%	51%	49%
Total Remainder King County	1,532,660	1%	21%	6%	12%	1%	1%	7%	48%	52%
Commercial	17,186	1%	16%	12%	10%	0.3%	0.5%	6%	46%	54%
Neighborhood Commercial	76,448	0.4%	17%	9%	9%	0.2%	1%	7%	44%	56%
High-Density Multifamily	41,859	1%	18%	8%	9%	0.3%	1%	6%	43%	57%
Lowrise Multifamily	182,970	0.4%	15%	10%	9%	0.3%	1%	7%	42%	58%
Total City	737,015	0.4%	17%	7%	8%	0.3%	1%	7%	41%	59%
Neighborhood Residential	312,796	0.4%	13%	4%	7%	0.2%	1%	8%	33%	67%
2010 Census										
Total Remainder King County	1,322,589	1%	15%	5%	10%	1%	0.2%	4%	36%	64%
Total City	608,660	1%	14%	8%	7%	0.4%	0.2%	4%	34%	66%

Sources: City of Seattle Office of Planning and Community Development; U.S. Census Bureau decennial Censuses 2020 & 2010; King County Department of Assessments, compiled by City of Seattle July 2022.

Notes: Zone categories are based on effective zoning as of May 2023. The population in each census block is assigned to the Zone Category where the most housing units according to the King County Department of Assessments as of 2023 were counted. All population groupings are of non-Hispanic, while the Hispanic ethnicity category includes persons of any race.

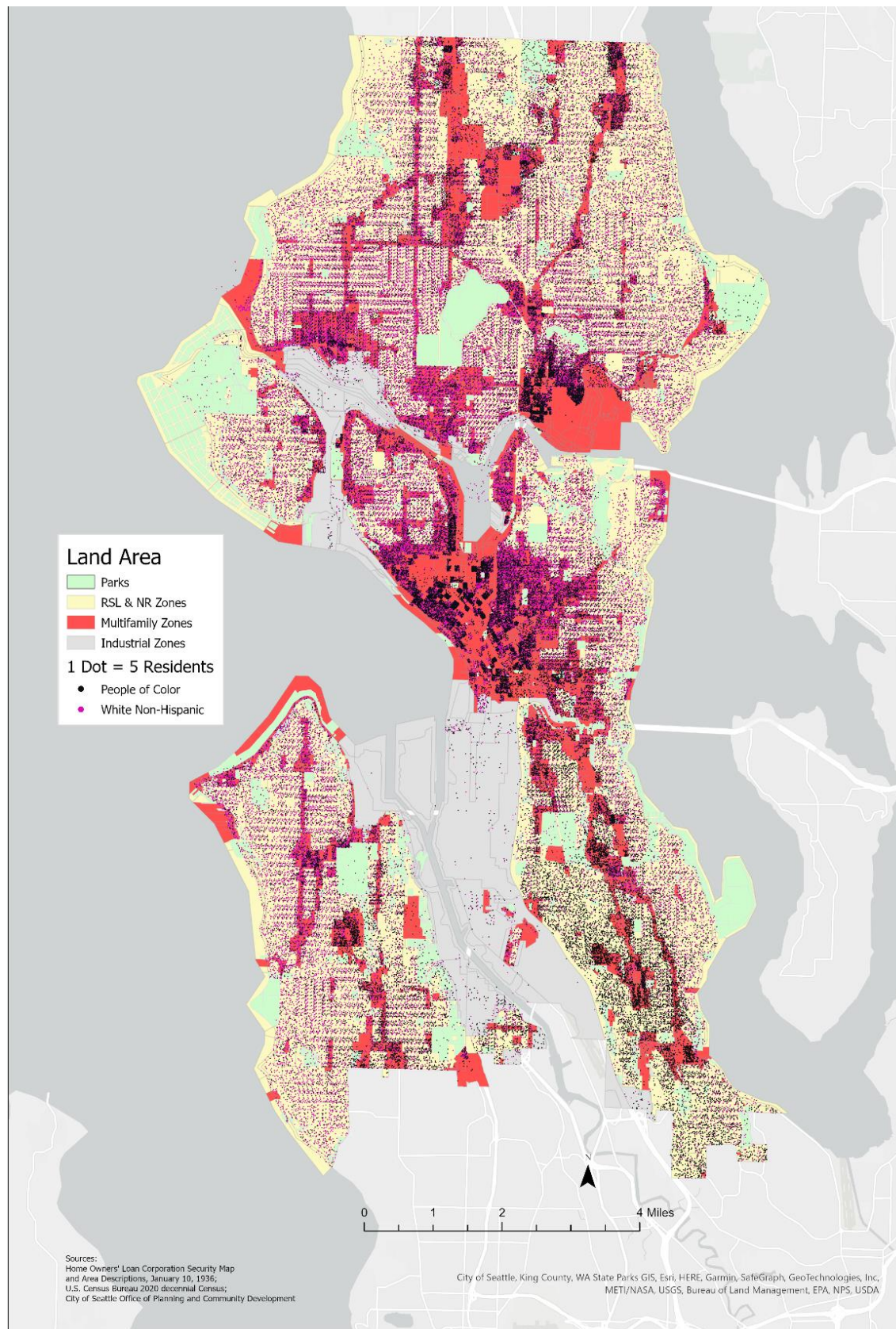
Key findings from Figure A-131 include:

- Within the zone categories, only Neighborhood Residential has a lower share of residents who are people of color than the city as a whole. This finding is symptomatic of historical policies that excluded people of color from living in neighborhoods dominated by single-family homes. The relatively lower shares of individual racial and ethnic groups among people living in areas zoned Neighborhood Residential also reflects ongoing economic and development barriers in this zone category that limit housing opportunities, particularly for people of color.
- Zones allowing moderate- and higher-density housing (e.g., attached housing, cottage style housing, stacked flats, townhomes; multifamily buildings; and mixed-use buildings) is associated with greater racial and ethnic diversity than areas with Neighborhood Residential zoning characterized primarily by single-family dwelling units on large lots. Neighborhoods allowing moderate and higher density housing have also accommodated much of the increased population in the last decade, as discussed in other sections of this appendix.
- While the share of Seattle's population who are people of color grew between 2010 and 2020, the share of people of color grew more quickly in the remainder of King County. Trends have not been uniform amongst all racial and ethnic groups; notably, the Black share of the population decreased between 2010 and 2020 in Seattle while slightly increasing in the remainder of King County. Zones that have added additional housing unit development capacity in recent years, such as those that are found in Urban Centers and Villages, have led to those neighborhoods being more diverse, while Neighborhood Residential has stayed less diverse. These findings echo demographic trends discussed earlier in the Housing Appendix.

As the number of units in moderate and higher density neighborhoods continues to grow over the next 20 years, the potential of the new units to do a good job of meeting the needs of an increasingly diverse population will depend on a number of factors including their affordability profiles and their collective ability to house a variety of household sizes and configurations from one-person households to multigenerational families. Forms of zoning that enable Neighborhood Residential zones to accommodate more units and a greater variety of housing types, such as city's 2019 ADU reforms and the future allowance of middle housing, will also allow these neighborhoods to become increasingly diverse.

Figure A-131 is limited in that it does not distinguish between neighborhoods in different parts of the city that share the same zoning category. There is, in fact, considerable variation in levels of racial and ethnic diversity in neighborhoods that share a zoning category depending on where in the city the neighborhood is located. For instance, Figure A-132 shows that Neighborhood Residential zones in some areas of the city such as in Rainier Valley have higher shares of people of color than other Neighborhood Residential zones throughout the City.

Figure A-131
Zoning and Residents



Housing Affordability and Income

This section looks at variations in the affordability of Seattle's housing supply and household incomes by neighborhood. It describes where proportionally larger shares of low-income households live, where the housing supply is affordable to households of various income levels, and where the greatest shares of households are cost burdened. This analysis uses 2019 5-year CHAS data from the American Community Survey (ACS) which include both subsidized and unsubsidized units.

Affordability is a key constraint on housing and neighborhood choice, especially for lower income households. Neighborhoods with less affordable housing preclude households with lower incomes from entering them or remaining in them without becoming cost burdened.

SHARE OF HOUSEHOLDS BY INCOME CATEGORY BY CENSUS TRACT

Historical practices, existing land use patterns, and localized housing prices have resulted in concentrations or exclusion of low-income households in different parts of the city. Examining household incomes by neighborhood assists us in understanding these patterns and in planning programs, policies, and capital projects important for equitably serving low-income households.

Figure A-133 shows three maps with the shares of households by census tract at or below the income thresholds of 30% of AMI, 50% of AMI, and 80% of AMI.

There is a great deal of variation between neighborhoods in the prevalence of households with incomes at or below 30% of AMI, with some of the greatest concentrations around Pioneer Square. High prevalence of households with incomes of 50% of AMI or under is additionally found in the Duwamish Valley, Rainier Valley, Downtown, and a handful of neighborhoods in North Seattle, including Aurora-Licton Springs, Northgate, and Lake City. Concentrations of households in these extremely and very low-income categories point to opportunities for creating equitable policies that serve these households and their neighborhoods.

When looking at the prevalence of households at or under 80% of AMI, we see a somewhat more diffuse pattern. However, many neighborhoods, particularly those with predominantly single-family detached housing have very low shares of households with incomes under 80% of AMI, pointing to the economic exclusivity of these neighborhoods.

AFFORDABILITY OF HOUSING

Figures A-134 and A-135 present the share of housing units in each census tract affordable at or below a specific income level by tenure based on analysis of CHAS data. Figure A-135 shows rental housing affordability at or under 30%, 50%, and 80% of AMI while Figure A-134 shows ownership housing affordability at or under 50%, 80%, and 100% of AMI. These maps help us understand the large variations in housing affordability that exist between areas within Seattle. However, some caution is needed in viewing them as the reliability of the estimates can be low where only small numbers of housing are either renter or owner-occupied.

Housing costs in the ACS-derived CHAS data are lower than those reflected in our analyses of CoStar data presented in earlier sections of this appendix. This reflects a variety of differences in these datasets including the wider inclusion of subsidized units in the ACS. The CHAS data are also different in that they are based primarily on responses from households and are not as up to date as the CoStar data.

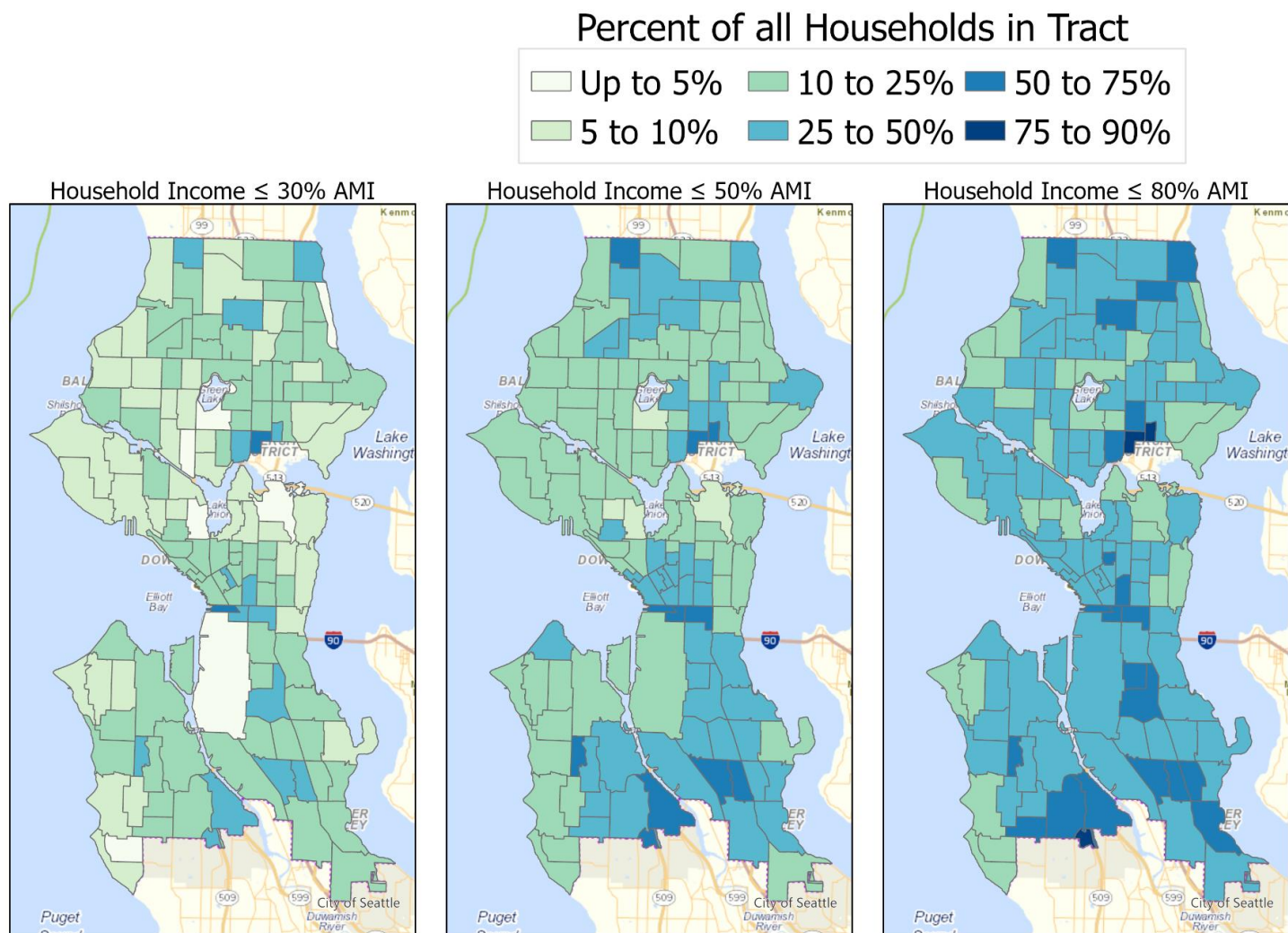
The vast majority of tracts in Seattle have 5 percent or fewer ownership units affordable at or below 80% of AMI. Ownership units affordable at or below 100% of AMI are also scarce in most tracts. Only in and around South Park are more than half of owner units estimated to be affordable at or below 100% of AMI. It is important to note that the affordability estimates for ownership housing use *survey respondents' estimates* of what their home would sell for *if* it were for sale rather than actual sales prices, such estimates tend to lag trends in sales prices in rapidly changing markets.

The vast majority of tracts have very low shares of rental units affordable to households at or below 30% of AMI. Nearly no tracts have a majority of rental housing units affordable to households at or below 50% of AMI. A small number of tracts, mostly in the city's southern and northern neighborhoods, have majorities of rental units affordable at or below 80% of AMI. While useful for picturing relative patterns in affordability by neighborhood, these maps do not fully capture challenges. For example, roughly a third of rentals affordable at 80% of AMI are not available to low-income households because they are rented by higher income households.

HOUSING COST BURDEN BY CENSUS TRACT

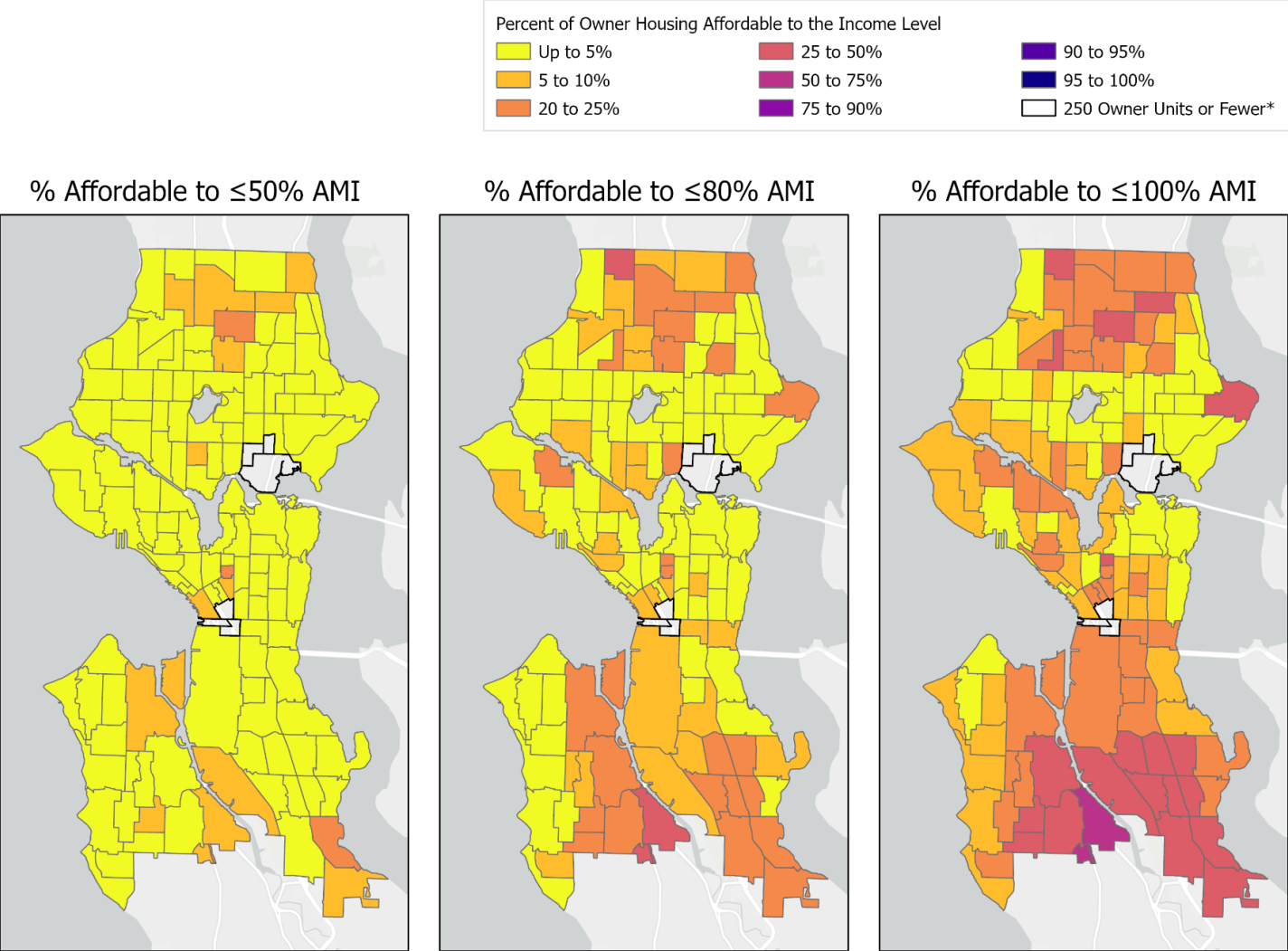
Figure A-136 following this section shows the estimated percentages of households in each census tract with housing costs exceeding 30 percent or 50 percent of their income, respectively. Not surprisingly, high percentages of cost-burdened households are found in many of the tracts where there are large shares of lower-income households. This indicates that, even in areas with a greater supply of housing that is relatively lower in price compared to other parts of the city, there is still an acute shortage of housing units affordable to households with lower incomes.

Figure A-132
Households by AMI Level



Sources: 2015-2019 CHAS; City of Seattle Office of Planning and Community Development
 Notes: Households for which no income calculation are provided are included in denominator, which may be households which have no income or negative income
 Census Tracts with fewer than 250 households are not included in this analysis due to relatively high margins of error, which decrease reliability of the data.

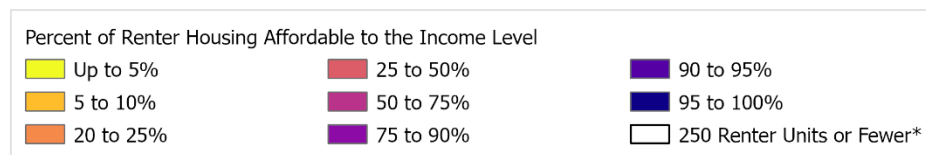
Figure A-133
Affordability of Ownership Housing by Area Median Income (AMI) Level



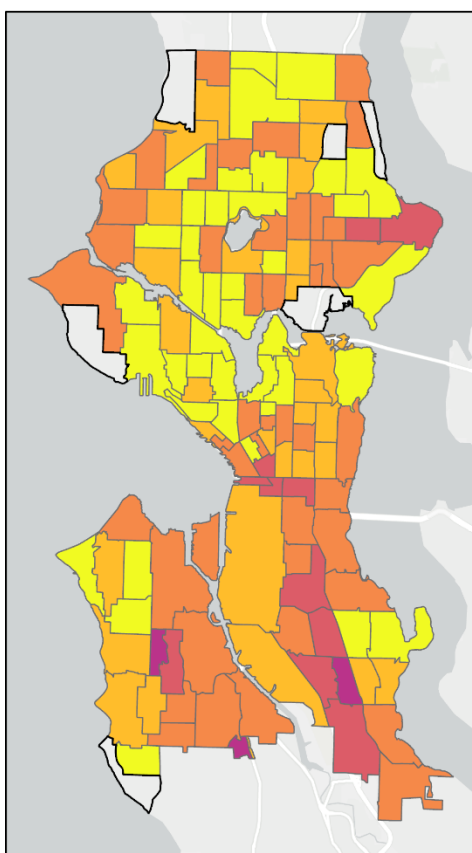
Service Layer Credits: City of Seattle, City of Seattle, King County, WA State Parks GIS, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA
 Sources: 2014-2019 Comprehensive Housing Affordability Strategy Data, U.S. Department of Housing and Urban Development; U.S. Census Bureau; City of Seattle Office of Planning and Community Development
 *Tracts with 250 owner units or fewer were excluded from this analysis due to high margins of error, which decreases the reliability of data in these census tracts.

Figure A-134

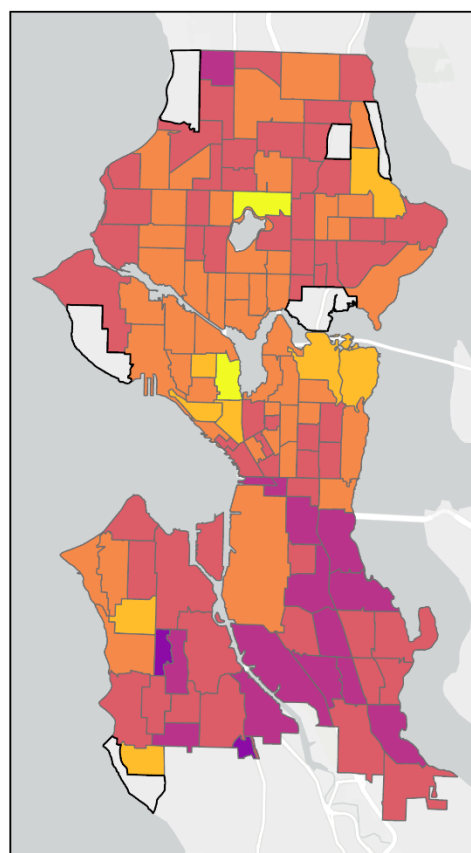
Affordability of Rental Housing by Area Median Income (AMI)



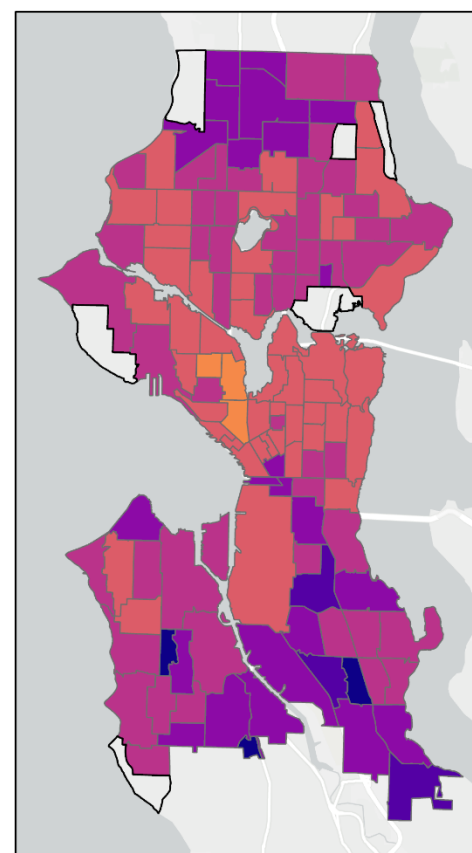
% Affordable to ≤30% AMI



% Affordable to ≤50% AMI



% Affordable to ≤80% AMI



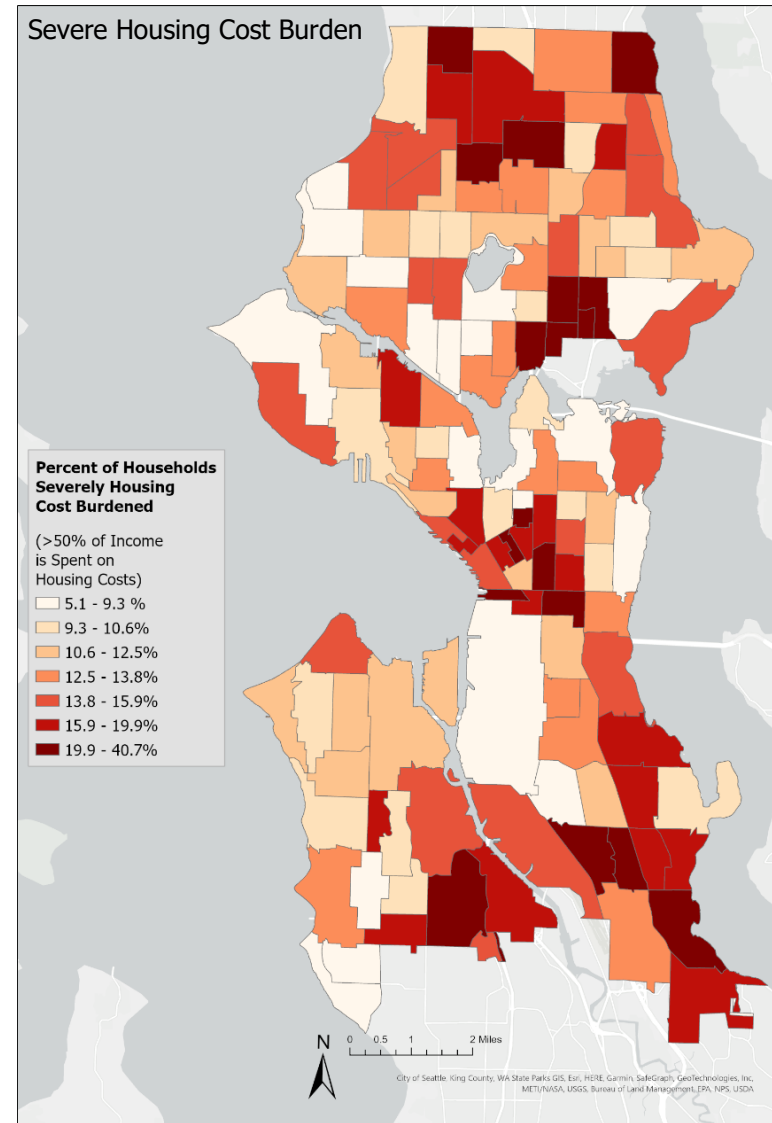
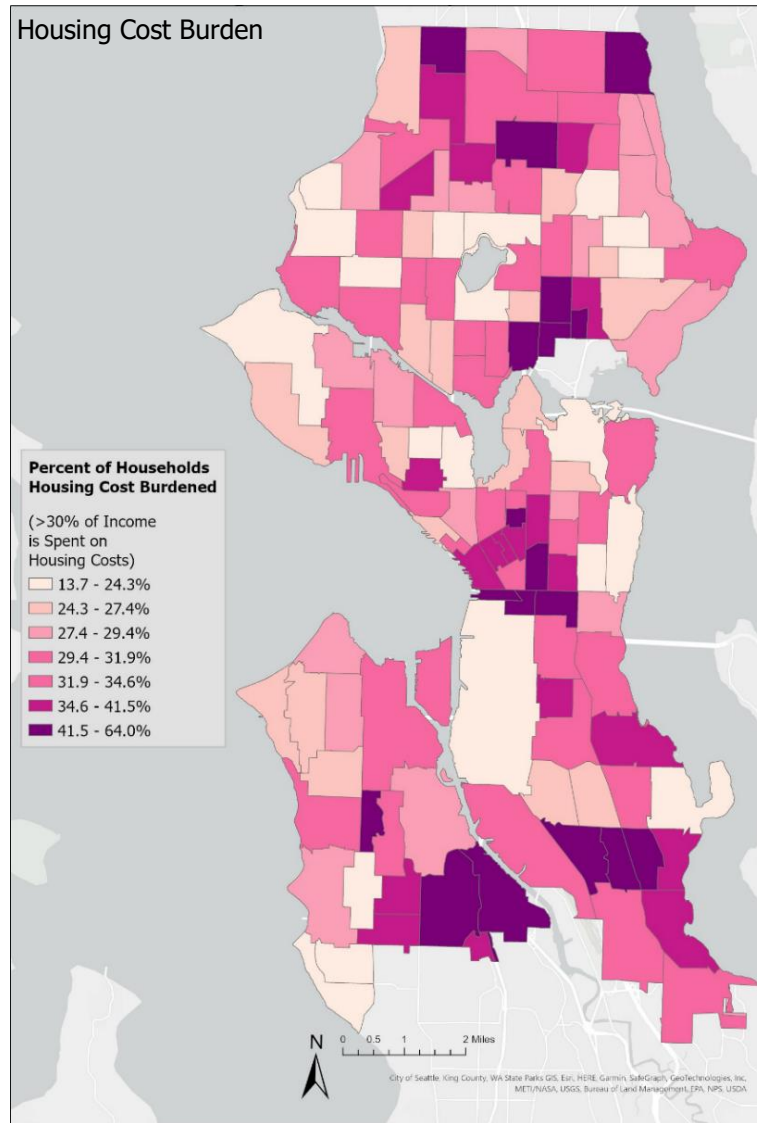
Service Layer Credits: City of Seattle, City of Seattle, King County, WA State Parks GIS, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

Sources: 2014-2019 Comprehensive Housing Affordability Strategy Data, U.S. Department of Housing and Urban Development; U.S. Census Bureau; City of Seattle Office of Planning and Community Development

*Tracts with 250 rental units or fewer were excluded from this analysis due to high margins of error, which decreases the reliability of data in these census tracts.

Figure A-135

Housing Cost Burden and Severe Housing Cost Burden of All Households



LOCATION OF INCOME-RESTRICTED HOUSING DEVELOPMENTS

Income-restricted housing reduces local displacement pressures and can contribute to creating more economically and racially inclusive neighborhoods. Moreover, income-restricted housing provides greater housing stability and access for households unable or struggling to afford the cost of housing in Seattle. However, income-restricted housing is not equally distributed throughout the city, with zoning creating or impeding opportunities for income-restricted housing development in neighborhoods.

Figure A-137 provides the number of City funded units in structures newly built and placed in-service, meaning became occupied, since 2013 in each zone category by household tenure. This analysis is for publicly subsidized development of income-restricted housing for households with incomes at or below 60% of AMI for renters and 80% of AMI for owners. Income-restricted units included in otherwise unrestricted market-rate properties to satisfy land use or incentives requirements (e.g., MFTE, MHA) are not included in this analysis.

All income-restricted rental apartments built since 2013 with City funding are in zones that allow for multifamily development. Income-restricted homes for income-eligible buyers are primarily in lowrise and residential small lot zones, which typically allow townhouses and other smaller-scale attached housing developments.

Figure A-136

City Funded Income-Restricted Units Built Since 2013 by Zone Category on Permit and Tenure

City Funded Income-Restricted Units Built Since 2013 by Zone Category on Permit and Tenure				
Zone category on permit ¹	Rental		Owner	
	Units (% of units)	Projects (% of projects)	Units (% of units)	Projects (% of projects)
Commercial	1,155 (15%)	14 (16%)	-	-
Downtown	881 (12%)	9 (11%)	-	-
Highrise and Midrise Multifamily	630 (8%)	9 (11%)	-	-
Industrial	-	-	-	-
Lowrise Multifamily	939 (12%)	11 (13%)	72 (71%)	5 (63%)
Major Institutions	-	-	-	-
Master Planned Community	-	-	-	-
Neighborhood Commercial	3,565 (47%)	37 (44%)	-	-
Neighborhood Residential	-	-	-	-
Residential Small Lot	-	-	29 (29%)	3 (38%)
Seattle Mixed	457 (6%)	5 (6%)	-	-
Total	7,627 (100%)	85 (100%)	101 (100%)	8 (100%)
Sources: City of Seattle Office of Planning & Community Development; City of Seattle Office of Housing				
¹ Zoning codes selected based on the most predominant zoning by permit; however, some project sites may be developed under more than one zone or under other site conditions, such as a station area overlay.				

Figure A-138 shows the number of City funded rental units built since 2013 by the number of stories in the project and the maximum height allowed by zoning. Key takeaways from Figure A-138 are:

- Approximately 81 percent of apartments in income-restricted rental properties are in 5 to 8 story buildings. Of the income-restricted units in 5 to 8 story buildings, most were developed in zones with height limits of 50 to 85 feet, but a sizeable number are midrise buildings in zones allowing taller buildings.
- While some older projects are 1 to 4 stories, only 15 percent of rental units are in these projects. Fifteen of the 19 projects under 5 stories opened between 2013 and 2019.
- Only one project is more than 9 stories tall. The Office of Housing noted that this was a surplus Sound Transit site provided at no cost to the developer.

The height of building that low-income housing developers are able to finance appears to be in the 5 to 8 story range; it could be that providers have a more difficult time financing highrise developments even if allowed by zoning. In addition, market conditions in zones with residential height limits greater than 85 ft. may be barriers to income-restricted housing development. This is likely due to higher land prices commanded in these zones as well as the higher construction costs associated with building structures greater than 85 feet (e.g., reinforced concrete and steel construction rather than traditional wood frame; elevators with more advanced technology and infrastructure requirements).

Beyond showing that 5 to 8 stories have provided the “sweet spot” for income-restricted rental housing, these findings provide a strong indication that zones allowing 5 to 8 story multifamily housing will also be the most likely to see income-restricted rental housing development in the future.

Figure A-137

City Funded Income-Restricted Rental Units Built Since 2013

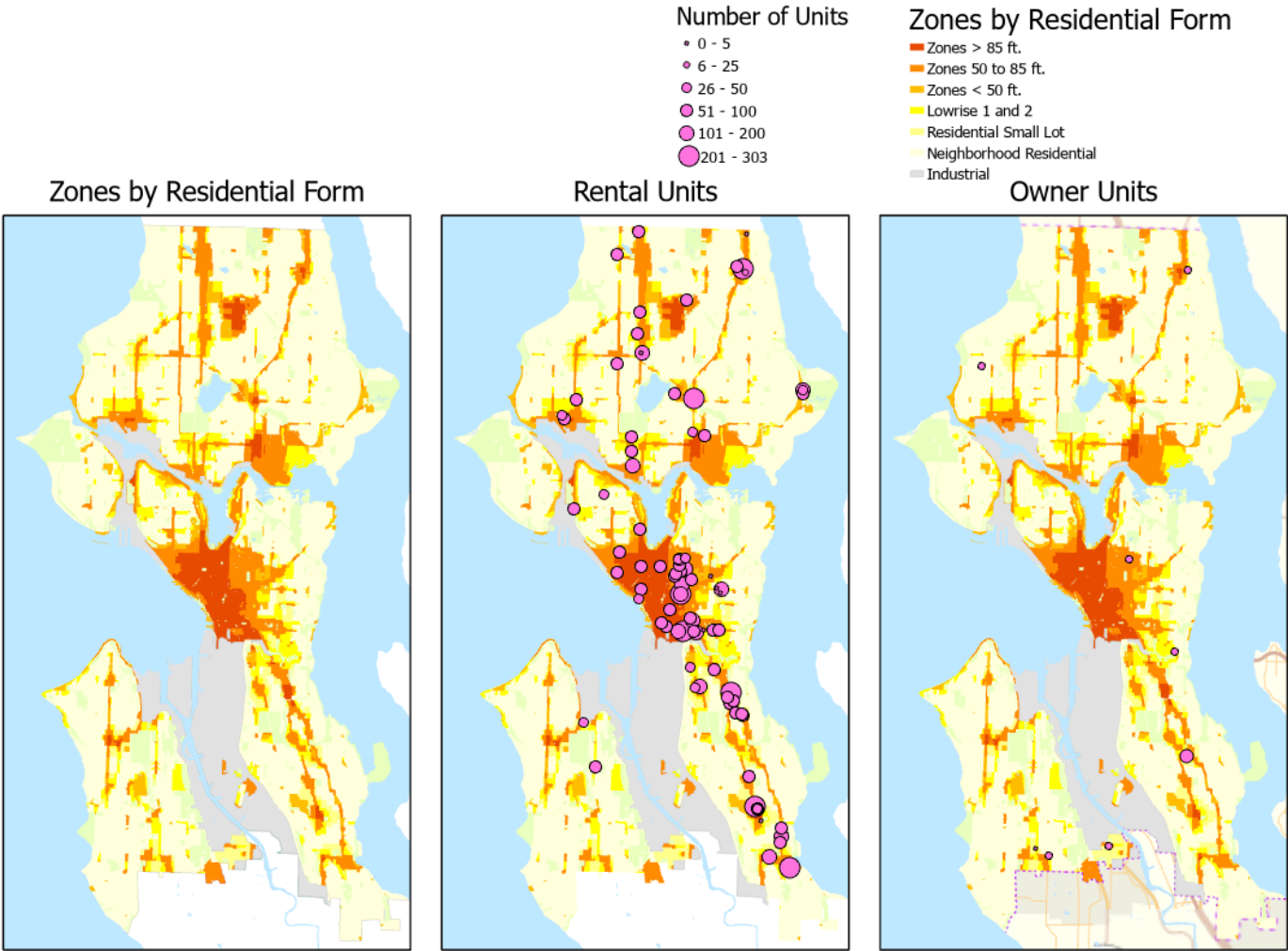
by Maximum Zoned Residential Height Allowable on Permit and Actual Stories Built

Zoning height limit on permit ¹	Units (% of Units)			Projects (% of Projects)		
	1 to 4 Stories	5 to 8 Stories	9+ Stories	1 to 4 Stories	5 to 8 Stories	9+ Stories
< 50 ft.	898 (12%)	587 (8%)	-	14 (16%)	6 (7%)	-
50 to 85 ft.	223 (3%)	4,420 (58%)	-	5 (6%)	50 (59%)	-
> 85 ft.	-	1,139 (15%)	360 (5%)	-	9 (11%)	1 (1%)
Total	1,121 (15%)	6,146 (81%)	360 (5%)	19 (22%)	65 (76%)	1 (1%)
Sources: City of Seattle Office of Planning & Community Development; City of Seattle Office of Housing						
¹ Zoning codes selected based on the most predominant zoning by permit; however, some projects may be developed under more than one zone or under other site conditions, such as a station area overlay.						

Figure A-139 shows the general location of income-restricted units with regards to zoning by residential form. We provide detailed documentation of these zones by residential form in the Development Capacity section of this Housing Appendix.

Figure A-138

Income-Restricted Units Built and Placed In-Service Since 2013 and Zoning in Seattle



Sources: City of Seattle Office of Planning and Community Development; Seattle Office of Housing.
Note: This map shows existing zoning as of May 2023; however, site zoning may have been different at the time when each property was permitted

USE OF VOUCHERS BY LOCATION

Housing vouchers are funded by federal and state dollars and distributed locally by SHA. These vouchers aim to ensure that tenants pay between 30 and 40 percent of their income on housing costs, while the voucher covers any remaining rent costs.

In addition, vouchers can be tenant based or project based, meaning tied to rental units in a specific publicly funded low-income housing property. Tenant-based vouchers are assigned to a household to be used to lease a housing unit in the local market. In choosing where to rent, households are given opportunities to reside in neighborhoods where there may otherwise be no subsidized rental housing, but where amenities such as job access, schools, transit, or public space fit their household needs.

A variety of factors such as the location of project-based vouchers, price of housing, proximity to transit, and location in SHA's market area, can limit where vouchers are in use throughout the city. Low access to high-cost neighborhoods, in particular those that also have high access to neighborhood amenities, poses a question of economic justice for the City. As such, SHA has implemented programs aimed at increasing access to more neighborhoods throughout Seattle. One such program, Creating Moves to Opportunity (CMTO), provides additional services and resources to families during their search for a unit to make higher opportunity neighborhoods more accessible. Another program, the Family Access Supplement (FAS), increases the maximum value of a voucher so that households can afford units in higher opportunity neighborhoods.

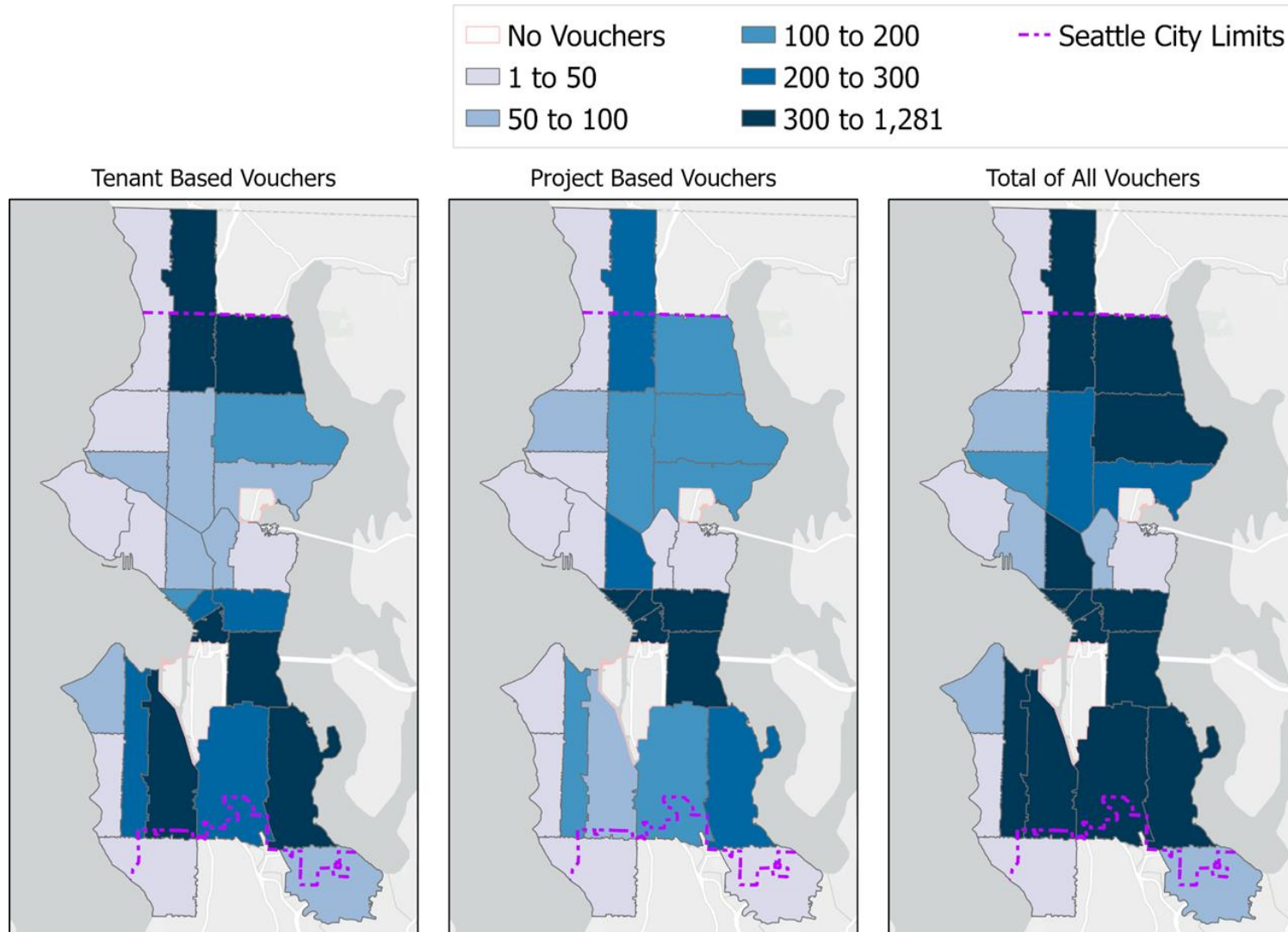
Figure A-140 shows three maps indicating where vouchers are used locally based on ZIP Code. Key findings include:

- Tenant-based vouchers and project-based vouchers vary in their areas of use throughout Seattle. Tenant-based vouchers have concentrations in ZIP codes associated with Downtown, Rainier Valley, Delridge, Bitter Lake/Licton Springs, and Northgate. Project-based Vouchers are primarily concentrated in Downtown and Central Seattle.
- There is low voucher use in neighborhoods where the housing supply is primarily detached homes, in particular the West Seattle neighborhoods of Fauntleroy and Arbor Heights, Magnolia, Madison Park, Montlake, Broadview and Crown Hill. Neighborhoods with a large multifamily stock have greater voucher utilization.

In addition, tenant-based vouchers can be used outside of Seattle after the tenant has lived in Seattle with a voucher for one year, giving tenants the opportunity to find rental housing that fits their household's need anywhere in the United States. June 2023 data from SHA indicates that 659 of the 673 voucher holders who moved to SHA's market area ("ported in") held vouchers for 0-bedroom units, such as studios and small efficiency dwelling units, while 1,791 of the 1,808 voucher holders who moved out ("ported out") of Seattle held vouchers for 1-bedroom or larger units. This is tied to the limited local stock of reasonably priced multi-bedroom rental units, which may push multi-bedroom voucher holders to look outside of Seattle.

Figure A-139

Seattle Housing Authority Voucher Use by Zip Code



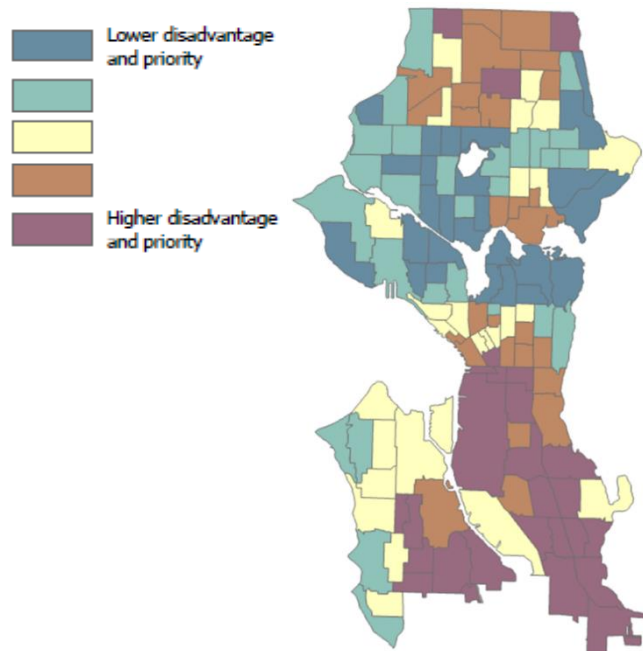
Sources: Seattle Housing Authority 2023; King County; City of Seattle Office of Planning and Community Development

Service Layer: City of Seattle, King County, WA State Parks GIS, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

Community Indicator Outcomes in Racial and Social Equity Priority Areas

Figure A-140

Seattle's Racial and Social Equity Index (2019)



A key principle in the Countywide Planning Policies is supporting more equitable access to housing and neighborhoods of choice, e.g., neighborhoods with essential components of livability such as well-funded schools, healthy environments, open space, and nearby employment. The CPPs call upon jurisdictions to analyze, monitor, and work to eliminate disparities in access to neighborhoods of choice. The City's Equitable Development Monitoring Program (EDMP),¹⁴⁶ launched in 2020 to inform and gauge progress on the Comprehensive Plan, helps fulfill this responsibility.

This section summarizes how neighborhoods in Racial and Social Equity (RSE) Priority Areas are faring on several community indicators selected for monitoring in the EDMP. As identified by the

City's RSE Index,¹⁴⁷ RSE priority areas are census tracts where persons of color and people with socioeconomic and health disadvantages make up relatively large proportions of neighborhood residents. Figure A-141 shows the RSE Index used in the 2020 report; "RSE Priority Areas" are shown in orange and maroon.

- **Affordability of housing**—While scarce overall, rentals affordable to low-income households are more common in most RSE priority areas than elsewhere in the city. However, several RSE priority areas, including neighborhoods in the Central Area, have a relatively low share of affordable units, making it increasingly hard for historical communities to remain.
- **Income-restricted housing**—Approximately two-thirds of all rent- and income-restricted housing in Seattle is in RSE priority areas (which are commonly also areas of high displacement risk), reflecting ongoing investment in affordable housing as an anti-displacement strategy.

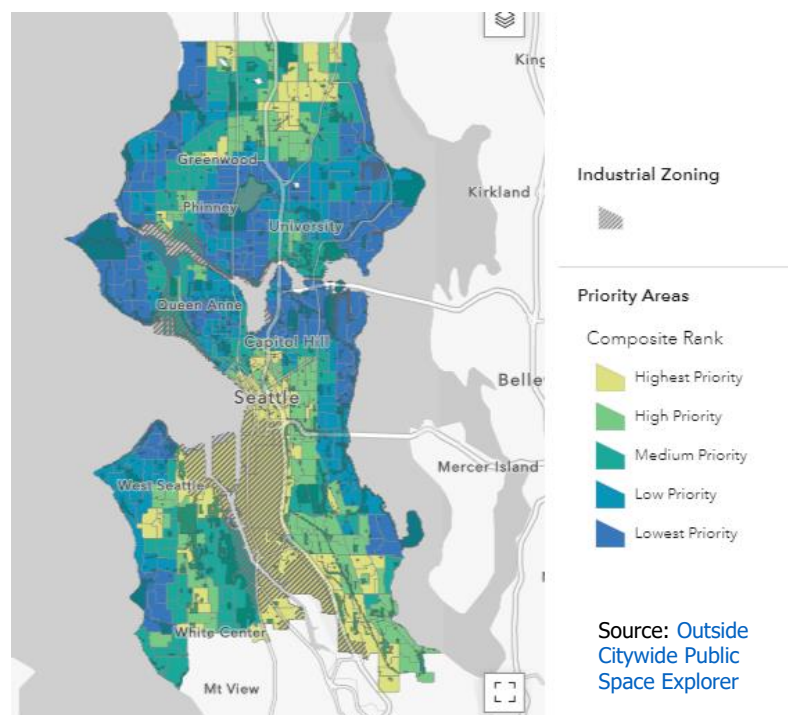
¹⁴⁶ Release of the [Equitable Development Community Indicators Report](#) in 2020 as part of the EDMP also helped inform the [2021 Racial Equity Analysis](#) examining how the Urban Village Strategy contributed to outcomes for communities of color.

¹⁴⁷ The current iteration of the RSE Index can be found online at: <https://maps.seattle.gov/RSEIndex>.

However, the concentration of income-restricted housing inside RSE priority areas also reflects that zoning in many other neighborhoods prohibits development at densities required for construction of income-restricted housing to be feasible.

- **Proximity to grocery stores**—At the time of analysis, several RSE priority areas in South Seattle lacked a grocery store. Populations in RSE priority areas tend to have lower incomes and fewer transportation options, which can limit access, especially when affordable or culturally relevant stores are many miles away.
- **Air pollution exposure risk**—Households in RSE priority areas face disproportionately high risks of exposure to outdoor air pollution due to proximity to industrial districts and major transportation routes.
- **Access to frequent transit service**—Based on 2019 schedules, about three-quarters of households in Seattle and 80 percent in RSE priority areas were within walking distance of frequent transit service running weekdays, nights, and weekends. However, some RSE priority areas near the northern and southern city limits lacked access to this level of service. With reductions in service since 2019, areas without frequent service have likely expanded.
- **Jobs accessible by transit**—The supply of jobs accessible by transit is particularly important for equity as low-income households and people of color are disproportionately transit dependent. Housing throughout the city, including in RSE priority areas, has relatively good transit access to jobs.
- **Sidewalk coverage**—Given that low-income households and households of color are less likely than others to own a car, pedestrian infrastructure is especially important for these households. Sixty-eight percent of roads in RSE priority areas have sidewalks (on both sides of the road for arterials and one side for other roads), compared with 76 percent in Seattle overall. Neighborhoods north of 85th street, including several neighborhoods in RSE priority areas, have sparse sidewalk coverage. Neighborhoods north of 85th were part of unincorporated King County until 1954 and were largely developed without sidewalks as County standards did not require construction of sidewalks.
- **Quality of neighborhood elementary schools**—The Washington Schools Improvement Framework, an index of school performance, shows large differences among Seattle’s elementary schools. While high-scoring elementary schools exist in many parts of Seattle, attendance areas for the lowest-scoring schools are all located fully or partially within RSE priority areas.

Figure A-141
Outside Citywide Prioritization Areas



- **Access to Parks and Open Space**—The City’s Outside Citywide Program recently inventoried public outdoor spaces and recommended priority areas for public space improvements, as shown in Figure A-142, based on an array of data. The measures included outdoor space quality and accessibility, pressure on park acreage from surrounding population, access to private yards, and 2023 RSE Index. The Outside Citywide Public Space Explorer highlights areas where outdoor public spaces could be expanded or enhanced to serve Seattle residents more equitably.¹⁴⁸ These areas include several neighborhoods in

Southeast Seattle adjacent to I-5; South Park, and portions of other Southwest Seattle neighborhoods; much of downtown; and some parts of north Seattle.^{149, 150}

The disparities between neighborhoods found in the EDMP, Outside Citywide, and other analyses summarized in this appendix have been shaped by redlining, racially restrictive covenants, and other historical practices that segregated people of color, commonly near environmental hazards,¹⁵¹ and that underinvested in these communities. These disparities have also been perpetuated by aspects of zoning introduced in the 1900s, but still in place as of 2023.

¹⁴⁸ The [Outside Citywide Public Space Explorer](#) is a tool for exploring Seattle’s public outdoor spaces and identifying priority areas for improvements. provides maps and details the methodology. OPCD’s Outside Citywide webpage provides additional background about the overall program.

¹⁴⁹ Access to Parks and Open Space is one of the indicators selected for Monitoring in the EDMP and an indicator feasible to monitor on an ongoing basis is being developed.

¹⁵⁰ Tree canopy coverage, while not accounted for directly in the Outside Citywide is another important contributor to the quality of life in neighborhoods and to overall environmental health. The City’s [2021 Tree Canopy Assessment](#) found that RSE Priority Areas not only have less tree canopy but have also been losing tree canopy at a greater rate than has the city as a whole.

¹⁵¹ “[Exposure Disparities by Income, Race and Ethnicity, and Historic Redlining Grade in the Greater Seattle Area for Ultrafine Particles and Other Air Pollutants](#),” K Bramble, et. al. *Environmental Health Perspectives*. 2023,131(7), 077004, DOI: 10.1289/EHP11662.

- This includes City of Seattle zoning in the majority of the city that prohibits construction of housing at the range of densities low-income households can afford. Exclusionary zoning concentrates students of color in higher poverty schools that struggle to meet their needs. The location of multifamily housing near major roadways can help with transit access but exposes residents in these units to higher levels of air pollution. This land use pattern also results in inequitable access to large parks and open spaces that are more commonly located in neighborhoods with primarily single-family homes where yards with trees are already more abundant.
- Another example is residential neighborhood zoning that restricts large areas of the city to exclusively residential uses. This effectively prohibits many community serving amenities such as small grocery stores, cafes, and arts and culture spaces that could otherwise provide walkable access to fresh produce, services, and gathering spaces near people’s homes.

Housing with Access to Transit

Having housing and jobs with direct access to high-capacity transit allows for Seattle to reduce total vehicle miles travelled in cars, reduce GHG emissions, reduce traffic, and improve access to areas of the city that are more difficult to travel to for households without vehicles.

The King County Countywide Planning Policies require that cities conduct several housing analyses with regards to ½ mile proximity to High-Capacity Transit (HCT) and Frequent Transit. This section of the Housing Appendix addresses these requirements with analysis of proximity to transit for existing housing units, income-restricted housing units, recently developed housing units, and for our housing unit development capacity.

Figure A-143 shows HCT walksheds measured to one-half mile of bus rapid transit, monorail, light rail, and commuter rail stations in Seattle. HCT walksheds cover approximately 16,100 acres, or around 30 percent of Seattle’s total land area. Furthermore, Figure A-143 shows Frequent Transit walksheds, which include the HCT walksheds as well as walksheds for additional transit options with frequent service.¹⁵² Frequent Transit walksheds cover approximately 36,800 acres, or about 69 percent of Seattle’s total land area.

A majority (55%) of Seattle’s existing housing units are within a half-mile walk of HCT, as shown in Figure A-144. About 73 percent of flats and 55 percent of townhomes are within HCT walksheds. However, majorities of both detached housing units and duplexes, triplexes and fourplexes are outside of HCT walksheds. Outside of these walksheds are 72 percent of detached units and 59 percent of small multiplexes.

Approximately 90 percent of housing units are within a half-mile walk of Frequent Transit. Ninety-five percent of flats and 92 percent of townhomes are within Frequent Transit walksheds. In addition, majorities of both detached housing units (77 percent) and duplexes, triplexes and fourplexes (77 percent) are inside of Frequent Transit walksheds.

¹⁵² Existing frequent transit service is identified by Seattle Department of Transportation, August 2023. Walksheds are generated by OPCD based on the center of the platform of existing and future high-capacity transit stations, using distance along a connected network of streets, trails, or stairs where the streets are not limited-access (i.e., highways or freeways). Frequent Transit walksheds include HCT walksheds, and also include frequent bus service.

SDOT maintains a [Frequent Transit Network webpage](#) as part of its Transit Master Plan.

Figure A-142

Half-Mile Transit Walksheds Analyzed in this Housing Appendix

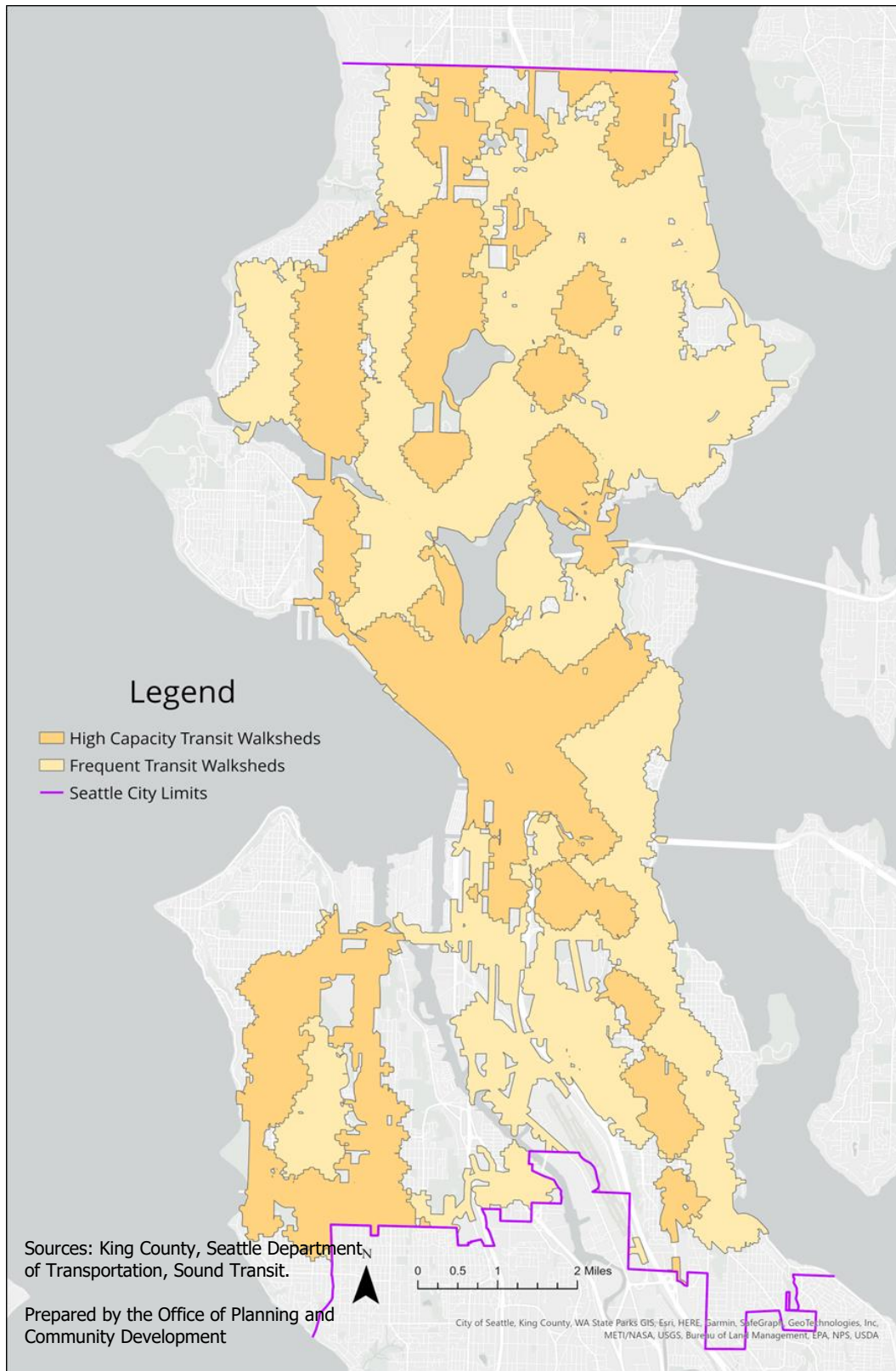


Figure A-143
Existing Housing Supply and Transit Walksheds

Housing Type	High-Capacity Transit			Frequent Transit		
	Outside Walkshed	Inside Walkshed	Total (Units/Residences)	Outside Walkshed	Inside Walkshed	Total (Units/Residences)
Flat	55,462 (27%)	151,746 (73%)	207,208	9,593 (5%)	197,615 (95%)	207,208
Townhouse	13,750 (45%)	16,905 (55%)	30,655	2,315 (8%)	28,340 (92%)	30,655
Live & Work	424 (38%)	683 (62%)	1,107	73 (7%)	1,034 (93%)	1,107
Duplex, Triplex & Fourplex	7,297 (59%)	5,156 (41%)	12,453	1,252 (10%)	11,201(90%)	12,453
Detached	96,991 (72%)	37,292 (28%)	134,283	30,565 (23%)	103,718 (77%)	134,283
Total Units	173,924 (45%)	211,782 (55%)	385,706	43,798 (11%)	341,908 (89%)	385,706
Congregate	8,429 (39%)	12,943 (61%)	21,372	1,027 (5%)	20,345 (95%)	21,372

Source: King County Department of Assessments, compiled by City of Seattle, July 2022; King County Metro.

Figure A-145 further looks at existing income-restricted units by these walksheds. More than 70 percent of Seattle’s income-restricted rental units and 60 percent of income-restricted owner units are located within a half mile walk of HCT walksheds. Nearly all income-restricted units are within a half-mile walk of Frequent Transit walksheds.

Figure A-144
Income-Restricted units and Transit Walksheds

Housing Type	High-Capacity Transit			Frequent Transit		
	Outside Walkshed	Inside Walkshed	Total (Units)	Outside Walkshed	Inside Walkshed	Total (Units)
0 to 30% AMI	3,700 (28%)	9,400 (71%)	13,200	200 (2%)	12,900 (98%)	13,200
31 to 50% AMI	1,700 (28%)	4,400 (72%)	6,100	300 (5%)	5,800 (95%)	6,100
51 to 80% AMI	3,400 (24%)	10,450 (76%)	13,900	200 (1%)	13,650 (98%)	13,900
Above 80% AMI	100 (13%)	700 (87%)	800	0 (%)	800 (100%)	800
Total	8,900 (26%)	24,950 (74%)	34,000	700 (2%)	33,150 (98%)	34,000
Owner Units	100 (40%)	150 (60%)	250	0 (%)	250 (100%)	250

Source: King County Metro. City of Seattle Office of Planning & Community Development; King County Income-restricted Housing Database, which the King County Department of Community and Human Services developed in collaboration with Seattle, other cities, and the Puget Sound Regional Council.

Note: Estimates are rounded to the nearest 50. Approximately 100 units serving households 0 to 30% of AMI and 50 units serving households 51 to 80% of AMI could not be geocoded for this analysis but are included in totals.

Housing development during the 2016 to 2022 period was largely concentrated in areas served by HCT and Frequent Transit, as shown in Figure A-146. Seventy-five percent of units developed during this period were within HCT walksheds. Units in mixed-use and multifamily buildings, which include flats, townhouses, and small multiplexes, were highly concentrated in HCT walksheds. Eighty-four percent of units in mixed-use buildings were developed in HCT walksheds, and 62 percent of units in multifamily buildings were. In contrast, new detached housing was primarily developed outside of HCT walksheds. Similarly, AADUs and DADUs, which can be built on the same lots as detached homes and townhomes throughout much of the city, were developed mostly in areas outside of ½ mile HCT walksheds.

Ninety-seven percent of units developed during this period were within Frequent Transit walksheds. Nearly all units in mixed-use and multifamily buildings were within Frequent Transit walksheds, while other forms were slightly less concentrated in Frequent Transit walksheds.

Figure A-145
Recently Developed Units and Transit Walksheds

Housing Type	High-Capacity Transit			Frequent Transit		
	Outside Walkshed	Inside Walkshed	Total (Units/Residences)	Outside Walkshed	Inside Walkshed	Total (Units/Residences)
Detached Unit	2,451 (61%)	1,548 (39%)	3,999	745 (19%)	3,254 (81%)	3,999
AADU	759 (71%)	312 (29%)	1,071	190 (18%)	881 (82%)	1,071
DADU	748 (68%)	354 (32%)	1,102	183 (17%)	919 (83%)	1,102
Multifamily	4,446 (38%)	7,259 (62%)	11,705	506 (4%)	11,199 (96%)	11,705
Mixed-Use	7,229 (16%)	37,625 (84%)	44,854	513 (1%)	44,341 (99%)	44,854
Institutional, Industrial or Other	6 (75%)	2 (25%)	8	2 (25%)	6 (75%)	8
Total Units	15,639 (25%)	47,100 (75%)	62,739	2,139 (3%)	60,600 (97%)	62,739
Congregate	510 (17%)	2,561 (83%)	3,071	0 (0%)	3,071 (100%)	3,071

Source: King County Metro; City of Seattle Quarterly Housing Report Dashboard as of April 10, 2023

Remaining development capacity for additional housing units is also concentrated in HCT and Frequent Transit walksheds. As of the time of this analysis, 77 percent of unit capacity (125,000 units) and about half of the overall redevelopable parcel area (2,100 acres) is within a half mile walkshed of an HCT station. Figure A-147 further shows that 96 percent of unit capacity (159,000 units) and 83 percent of redevelopable parcel area (3,400 acres) is within a Frequent Transit walkshed. This is a result of zones within a one-half mile walkshed of transit typically allowing for notably higher densities than those outside of high-capacity transit walksheds.

Figure A-146
Residential Development Capacity and Transit Walksheds

Measure	High-Capacity Transit			Frequent Transit		
	Outside Walkshed	Inside Walkshed	Total	Outside Walkshed	Inside Walkshed	Total
Capacity (Units)	38,442 (24%)	124,805 (76%)	163,247	4,476 (4%)	158,771 (96%)	163,247
Parcel Area (Acres):						
Total Area	24,604 (64%)	13,930 (36%)	38,534	8,787 (23%)	29,747 (77%)	38,534
Area Vacant or Redevelopable	2,075 (50%)	2,086 (50%)	4,161	725 (17%)	3,436 (83%)	4,161
Source: City of Seattle Quarterly Housing Report Dashboard as of April 10, 2023						

Displacement

As strengthened by HB 1220, GMA requires that a comprehensive plan identify factors that contribute to displacement to inform establishment of anti-displacement policies, with particular consideration given to the preservation of historical and cultural communities. Analysis is also required to identify areas that may be at higher risk of displacement from market forces, including those associated with zoning changes and capital investments.

Prevalence and Demographics of Displacement

Severe housing cost burden places households at increased risk of displacement. Households in the lowest income categories, renter households, and households of color disproportionately shoulder severe housing cost burdens. By race and ethnicity, the highest rates of severe housing cost burden are among Black households and Native American households.

Renters tend to face heightened vulnerability to displacement since they have less control over their housing status and can experience large and sudden rent increases that force them to relocate or make other sacrifices, including deferring on saving towards homeownership. Most households (54%) in Seattle rent, but nearly two-thirds of households of color are renters.

Owning one's home can increase household stability over renting, and in gentrifying neighborhoods, homeowners are about half as likely to be displaced as are renters.¹⁵³ Homeownership, especially permanently affordable homeownership, can be a bulwark against market pressures and, like income-restricted rental housing, offers stability, predictability, and a range of better outcomes in health, education, and well-being. Black, Native American, and Hispanic households have far lower rates of homeownership than white households.

Given the escalating prices of ownership housing options, many Seattle-area households lack the income and savings needed to purchase a home. This relegates these households to renting, where despite tenant protections adopted and strengthened locally in recent years renters remain vulnerable to price increases that lead to economic displacement. For families with children and multigenerational households unable to afford homeownership, many of whom are families of color and immigrant households, affordable and suitable rental housing is scarce. Less than 10 percent of apartment units across the market have two or more bedrooms and are affordable to households with incomes at or below 80% of AMI, though larger units affordable to low-income families are more common within publicly funded housing.¹⁵⁴

¹⁵³ Martin, I. W., and K. Beck. 2018. [Gentrification, property tax limitation, and displacement](#), Urban Affairs Review, 54(1), 33-73.

¹⁵⁴ OPCD estimates based on data from CoStar Group, www.costar.com.

The Puget Sound Regional Council Household Travel Survey asks households who said they moved in the last 5 years why they relocated. Figure A-148 summarizes responses. About 24 percent of surveyed households who moved within the region did so for one or more displacement-related reasons; at 27 percent, the share was somewhat higher for those who left Seattle. In both cases, rising housing costs was the most common displacement-reason. The survey found that people of color who moved cited all four displacement-related reasons more commonly than white movers did.

Figure A-147

Reason(s) for Moving from Previous Home

	Percent among households who:	
	Moved within region	Moved from Seattle to some other place within region
One or more displacement related reason(s):	24.0%	27.4%
Could no longer afford housing costs of previous home due to increase in housing costs	16.0%	16.6%
Forced (e.g., evicted, foreclosure, building demolition)	4.8%	6.0%
Could no longer afford housing costs of previous home due to change in household income or finances	4.3%	8.7%
Friends, family, or cultural community leaving area	2.1%	1.8%
Source: Puget Sound Regional Household Travel Survey (2019)		
Notes: The question about reasons for moving from one's previous home was asked of households who moved within the past five years. The data shown are limited to households who moved within the region.		

Other research on moves in King County found that residents of low socioeconomic status (SES) who moved in the wake of the Great Recession tended to move to neighborhoods with substantially lower life expectancy.¹⁵⁵ Overall rates of moving, however, were lower for low-SES residents than for moderate- and middle-SES households, a finding that prompted the researchers to emphasize the importance of supports to protect low-SES households from displacement.¹⁵⁶

¹⁵⁵ Hwang, Jackelyn, Bina P. Shrimali, Daniel C. Casey, Kimberly M. Tippens, Maxine K. Wright, Kirsten Wysen, 2022. ["Who Moved and Where Did They Go? An analysis of residential moving patterns in King County, WA between 2002–2017."](#) Federal Reserve Bank of San Francisco Community Development Research Brief 2023-01. doi: 10.24148/cdrb2023-01.

¹⁵⁶ The authors of the study also note that national research has also demonstrated that a lack of financial resources needed to move can also render households in low-SES groups stuck in areas of concentrated poverty regardless of whether or not these households wish to remain in place.

Legacy of Institutionalized Racism and Shifts in Communities of Color

In their report, “Systematic Inequality: Displacement, Exclusion, and Segregation,” researchers at the Center for American Progress describe how a legacy of institutionalized racism including redlining set the stage for recent and ongoing displacement of communities of color. For decades after World War II, development of predominantly white suburbs was subsidized with housing finance and highway systems that disproportionately benefited white middle class and affluent households.

Then, in more recent decades, neighborhoods close to prosperous regional job centers, including neighborhoods in previously redlined areas, grew in popularity with middle class and higher income households. Increased demand for housing near job centers resulted in many underinvested, previously redlined urban neighborhoods becoming too expensive for the resident communities of color who had been excluded from other neighborhoods due to discriminatory policies and practices. This pattern, and the accompanying “suburbanization of poverty,” has played out in many communities including in our own region.¹⁵⁷

The population of color has risen much faster in the rest of King County than in Seattle. Several Seattle neighborhoods have also seen net population declines among racial and ethnic groups that previously comprised majorities or large shares of neighborhood populations. For example, from 2010 to 2020 the decennial census counts of Black residents in the Central Area, Madrona/Leschi, and Rainier Beach; Asian residents in Beacon Hill and in North Beacon Hill/Jefferson Park; and Hispanic/Latino residents in South Park saw substantial declines. For some of these neighborhoods, the loss between 2010 and 2020 is part of a multi-decade trend.

Most dramatic is the loss of the Black population in the Central Area. Maps by the Civil Rights and Labor History Consortium¹⁵⁸ show that in 1970, Black people comprised a large majority of residents in the Central District. As of 2020, Black residents make up only about 13 percent of neighborhood residents in Seattle’s Central District.¹⁵⁹

The census data available do not allow us to measure the specific extent to which displacement has contributed to these regional and neighborhood trends. However, the combination of quantitative data and documentation of the lived experience of households strongly supports a finding that many

¹⁵⁷ This process is described in [Systemic Inequality: Displacement, Exclusion, and Segregation: How America's Housing System Undermines Wealth Building in Communities of Color](#),” by authors Danyelle Solomon, Connor Maxwell, and Abril Castro at the Center for American Progress, published Aug 7, 2019. For more on the suburbanization of poverty, see *The changing geography of US poverty*, Brookings Institution, 2017.

¹⁵⁸ See [Seattle's Race and Segregation Story in Maps 1920-2020](#) compiled by the [Civil Rights and Labor History Consortium](#) at the University of Washington.

¹⁵⁹ [Decennial Census data tabulated for the Central Area/Squire Park Community Reporting Area](#) by Seattle’s Office of Planning & Community Development.

households of color from Seattle’s cultural communities have been displaced from Seattle over time due to rising housing costs.

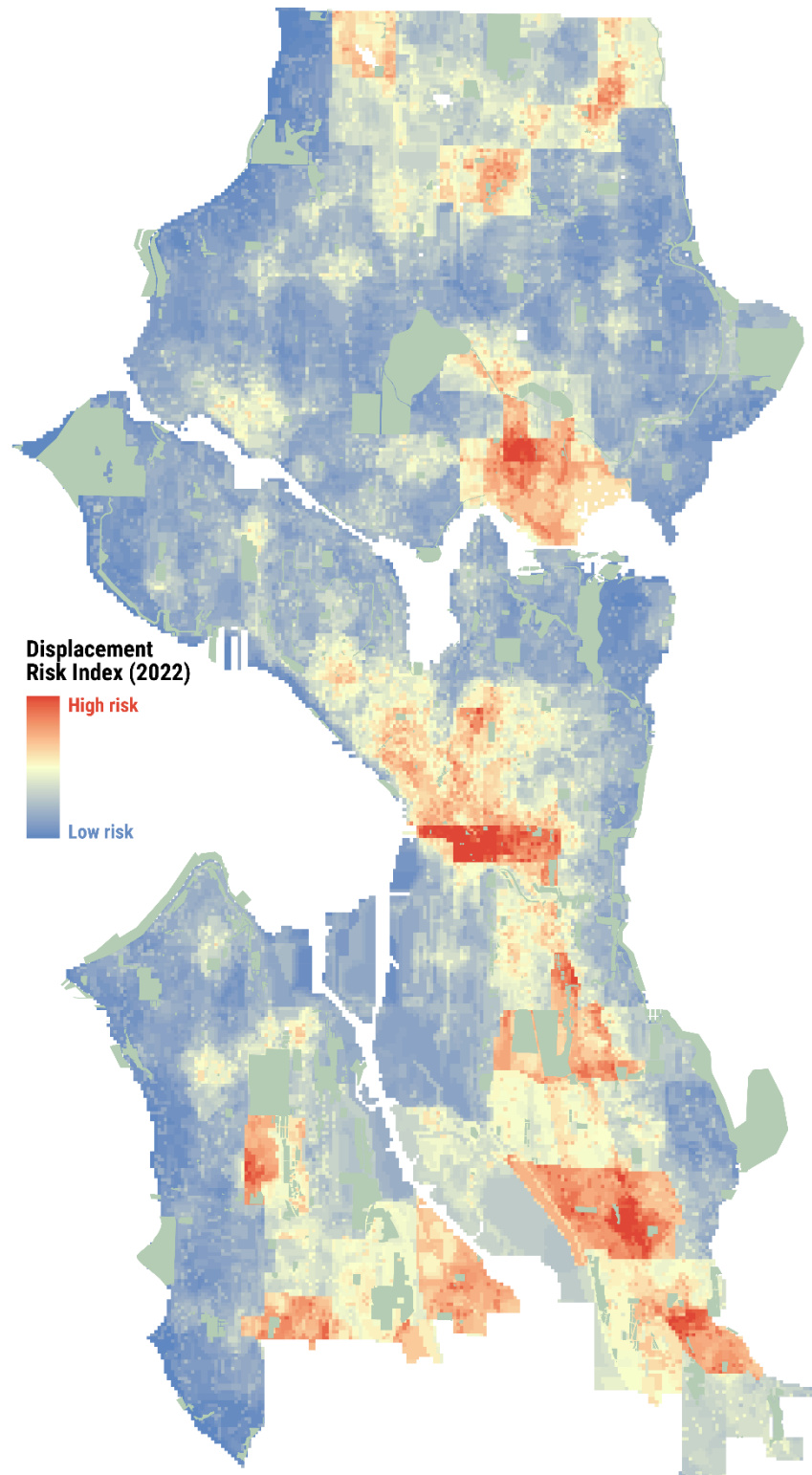
Neighborhoods at Greatest Risk of Displacement as Growth Occurs

In 2016, the Office of Planning & Community Development created and published the displacement risk index in its *Growth & Equity* report as part of the Seattle 2035 Comprehensive Plan. The displacement risk index identifies areas of Seattle where displacement of people of color, low-income people, renters, and other populations susceptible to displacement may be more likely, especially over the long term. It combines demographic, place-based, and market data to provide a longer-term view of displacement risk based on neighborhood characteristics like the presence of vulnerable populations and amenities that tend to increase real estate demand. The displacement risk index represents a snapshot in time that identifies where displacement of marginalized populations may be more likely to occur as growth unfolds over the medium- to long-term at a neighborhood scale. Other measures and indicators, which the City also monitors and is updating as a tool to guide anti-displacement programs and actions, provide information about where displacement has occurred in the recent past or is likely to be occur in the near future.

Shown in Figure A-149, the displacement risk index informs the City’s growth strategy and anti-displacement strategies. In 2022, OPCD updated the index in two ways. First, we updated the individual factors with the most current data available. Second, we made a few methodological improvements based on community input and best practices. The updated displacement risk index presents a similar overall pattern as the 2016 version, with the areas at greatest risk in southeast Seattle, South Park and Westwood–Highland Park, the Chinatown–International District, the University District,¹⁶⁰ and parts of north-end neighborhoods like Northgate and Lake City. For more discussion of the methodology and findings of the displacement risk index, see the [Anti-Displacement Framework](#) that accompanies the Plan.

¹⁶⁰ The University District has relatively high risk but should be considered carefully, as demographic data for student populations is often less reliable, and their comparatively lower incomes may not necessarily indicate the same degree of risk as it does elsewhere.

Figure A-148
Displacement Risk Index



Source: City of Seattle [Anti-Displacement Framework](#), 2024

Appendix 3

Capital Facilities

The Capital Facilities Appendix includes GMA required information about the location and capacity of all existing and proposed capital facilities -fire, police, parks and recreation, libraries, and schools. Information about capital facilities for utilities, such as drinking water, drainage and sewer, solid waste, and electricity, is included in the Utilities Appendix. Information about transportation facilities is included in the Transportation Appendix.

The City plans for capital facilities to preserve and maintain existing infrastructure, and build new facilities to support expected population and job growth. Capital facility investments by the City contribute to local economic vitality, quality of life, safety, and climate mitigation.

In some cases the required inventories, level of service and future needs are detailed in the City's functional plans or in plans prepared by other public entities. References to these plans are included where relied on.

The requirement for a 6-year plan that will finance City-owned capital facilities and identify sources of funding is provided in the [Seattle Capital Improvement Program](#) (CIP) which is updated as part of the City's annual budget process. The CIP has detailed information about proposed capital projects, including the proposed locations of expanded or new capital facilities and a six-year plan for financing these improvements.

Fire Department

The Seattle Fire Department (SFD) provides fire and rescue response, fire/EMS 911 services, fire prevention and public education, fire investigation, and emergency medical services throughout the city. Emergency medical services include basic life support and advanced life support. SFD also has specially trained technical teams that provide technical and heavy rescue, dive rescue, tunnel rescue, marine fire/EMS response, and hazardous materials response. SFD also provides mutual aid response to neighboring jurisdictions.

In addition, SFD officers and firefighters are members of local and national disaster response teams such as the Federal Emergency Management Agency (FEMA)'s Urban Search and Rescue Task Force and wildland firefighting. SFD's fire prevention efforts include fire code enforcement, building inspections, plan reviews of fire and life safety systems, public education and fire safety programs, regulation of hazardous materials storage and processes, and regulation of places of public assembly and public events to ensure life safety.

SFD has a strong record of fire prevention resulting in fewer fires than the national average and of other cities with similar populations. Seattle averages 1.4 fires annually per 1,000 residents, which is significantly lower than the national average of 4.5. Over the past five years, the average number of total structure fires per year in Seattle has been 1,025. Total fire dollar loss averaged \$19.6 million per year.

SFD provides emergency medical responses, which account for approximately 74% of all SFD emergency calls in Seattle. To respond to the emergency medical demand, all Seattle firefighters are trained as emergency medical technicians (EMTs) to provide basic emergency medical care or basic life support.

SFD's Mobile Integrated Health program reduces non-emergency calls to the 911 system and provides improved service and care to individuals with non-emergent needs. The program includes the Health One multidisciplinary response team of firefighters and case managers to respond to individuals immediately in their moment of need and help them navigate the situation - whether they need medical care, mental health care, shelter, or other social services. Currently, core activities of Mobile Integrated Health are high utilizer intervention (individuals and locations), low acuity data and trend analysis, establishing referral partnerships, and alternate treatment/transportation services.

Inventory

SFD provides emergency response services through five battalions consisting of 33 fire stations (plus Battalion 3/Medic One at Harborview Medical Center) strategically placed around the city to maximize coverage and minimize response time. SFD headquarters is located in an historic, earthquake-vulnerable building in Pioneer Square. Each station provides a full range of fire protective services including fire suppression, emergency medical, and rescue. Each station is equipped with at least one fire engine. Many stations include other equipment and special units. SFD has thirty-two engine companies, twelve ladder truck companies, five fire boats, seven aid units, eight paramedic units, and other specialized units including heavy rescue, hazardous materials, a 911 center, and tunnel rescue that provide a broad range

of emergency services. In addition, SFD shares a Joint Training Facility with Seattle Public Utilities. The general locations of existing SFD facilities are mapped in Figure A-150 and listed in Figure A-151.

Staffing

All fire stations are staffed 24 hours a day, seven days a week, by four separate shifts of firefighters. There are 216 members responding to emergencies every day across the city (220 with upstaffing for 2 daytime aid cars). In 2024, SFD had 987 uniformed personnel and 88 civilian personnel. Uniform personnel include 932 firefighter/EMTs (including chiefs) and 55 firefighter/paramedics.

Planning Goals

SFD evaluates emergency medical capabilities and staffing, or equipment additions and institutes operation changes each year as a part of the budget process. State law requires that fire departments report yearly on established emergency response standards. Response time is influenced directly by the availability of fire personnel, equipment, traffic conditions, and the number and location of fire stations. Firefighter and equipment requirements indirectly affect station requirements. SFD reports response time for fire response and emergency medical services (EMS), which includes basic life support (BLS) and advanced life support (ALS). Response standards are:

- Call Processing Time: Call answering time (≤ 15 seconds) and Incident dispatching time (≤ 60 seconds) for 90 percent of calls.
- Fire Response Time: 5:20 (≤ 80 second turnout time + 4:00 travel time) with a goal of arriving on scene 90% in under 5:20.
- Basic Life Support: BLS EMS response time is 5:0 (≤ 60 seconds turnout time + $\leq 4:00$ for travel) with a goal of arriving on scene 90% in under 5:00 .
- Advanced Life Support: ALS EMS response time is 9:00 (≤ 60 seconds turnout time + $\leq 8:00$ for travel), with a goal of arriving on scene 90% in under 9:00.
- The City plans for asset preservation of SFD facilities through a capital maintenance program. Minor and major capital facility projects are programmed in the City's six-year CIP.

Future Needs

Between 2003 and 2019, the City upgraded, renovated or replaced 32 neighborhood fire stations and other facilities as part of the \$167 million 2003 Fire Facilities levy, prompted by structural deficiencies identified during and following the 2001 Seattle-area Nisqually earthquake. Currently, the City of Seattle is constructing a new Fire Station 31, a 22,000 square foot station located in North Seattle, slated to be completed in late 2025 to replace an older station on Northgate Way. The new three-story station has four apparatus bays and space for a Health One unit. The new site is designed to meet the growing operational needs of Seattle Fire and the response times of the growing North Seattle community. Currently, no additional lands have been identified for SFD purposes.

In addition to SFD facilities included in the CIP, there are a number of prospective SFD capital projects that the City may undertake or fund over the next 20 years:

Replace Fire Station No. 3 at Fisherman's Terminal

Construct a new fresh-water marine and land-based fire suppression facility, preferably in the South Lake Union area

Replace or expand the commissary and fire garage

Replace SFD Headquarters, to include facility space inclusive of Fire Marshal office

Expand the Joint Training Facility

Replace fireboat Chief Seattle

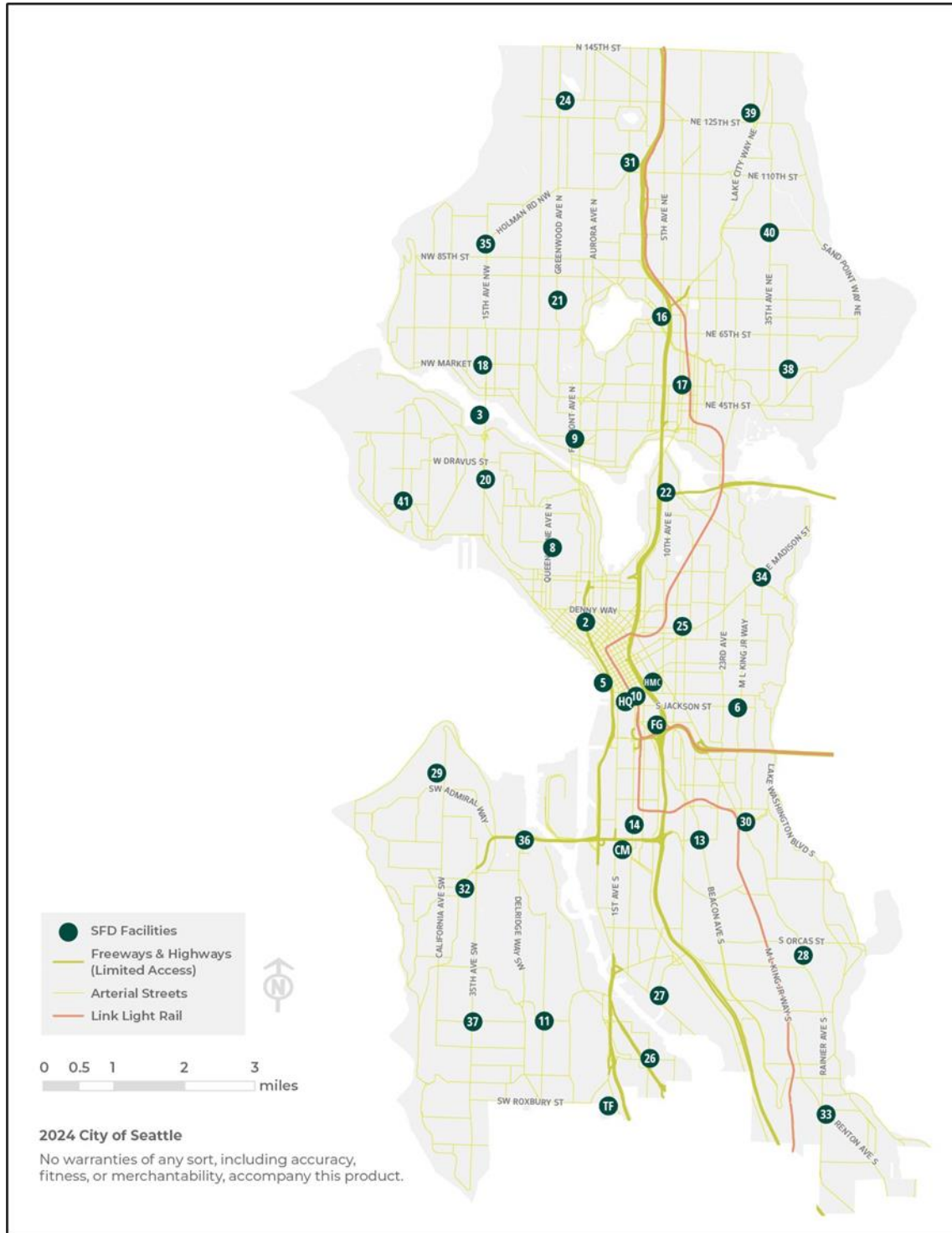
Retrofit fireboat Alki

Construct a north-end training facility (Magnuson Park area)

Remodel select fire stations to accommodate increased staffing/apparatus based on growth

Electrify SFD apparatus fleet of fire engines and ladder trucks; this would require an accelerated replacement schedule and additional vehicle cost would necessitate going through capital development

Figure A-149
Map of Seattle Fire Department (SFD) Facilities



Source: OPCD 2024

Figure A-150**Table of Seattle Fire Department (SFD) Facilities**

Facility Name	Map Reference	Year Built	Size (sq. ft.)	Address	Equipment
Headquarters*	HQ	1929	55,952	301 2nd Ave S	
Fire Station 2*	2	1922	37,740	2334 4th Ave	Engine 2, Ladder 4, Aid 2, Aid 4, Hose 2
Fire Station 3	3	1989	2,760	1735 W Thurman	Fireboat Chief Seattle, Fireboat 1
Fire Station 5*	5	1963	5,688	955 Alaskan Way	Engine 5, Fireboat Leschi, Fireboat 2, Rescue Boat 5, PT520
Fire Station 6	6	2012	11,003	405 Martin Luther King Jr Way S	Engine 6, Ladder 3
Fire Station 8	8	1964	5,450	110 Lee St	Engine 8, Ladder 6.
Fire Station 9	9	2013	8,804	3829 Linden Ave N	Engine 9.
Fire Station 10 Fire Alarm Control	10	2006	61,156	400 S Washington St 105 5th Ave S	Engine 10, Ladder 1, Aid 10, Aid 5, Staff 10, Hazardous Materials Team
Fire Station 11	11	1971	5,610	1514 SW Holden St	Engine 11.
Fire Station 13*	13	1927	4,329	3601 Beacon Ave S	Engine 13, Battalion 5
Fire Station 14*	14	1922	16,831	3224 4th Ave S	Ladder 7, Aid 14, Rescue One

Facility Name	Map Reference	Year Built	Size (sq. ft.)	Address	Equipment
Fire Station 16*	16	1927	3,995	6846 Oswego Pl NE	Engine 16
Fire Station 17*	17	1929	23,537	1050 NE 50th St	Engine 17, Ladder 9, Medic 17, Battalion 6
Fire Station 18	18	1974	16,624	1521 NW Market St	Engine 18, Ladder 8, Medic 18, Hose 18, Battalion 4, Hose 18
Fire Station 20	20	2014	6,229	2800 15 th Ave W	Engine 20
Fire Station 21	21	2011	8,783	7304 Greenwood Ave N	Engine 21, MCI 1
Fire Station 22	22	1965	4,110	901 E Roanoke St	Engine 22, Command and Communications Van
Fire Station 24	24	1977	3,630	401 N 130TH St	Engine 24, Air 240
Fire Station 25	25	1969	20,824	1300 E Pine St	Engine 25, Ladder 10, Aid 25, Battalion 2
Fire Station 26	26	1973	5,960	800 S Cloverdale St	Engine 26, Medic 26
Fire Station 27	27	1970	5,960	1000 S Myrtle St	Engine 27, REHAB1, DECON1
Fire Station 28	28	2008	13,638	5968 Rainer Ave S	Engine 28, Ladder 12, Medic 28

Facility Name	Map Reference	Year Built	Size (sq. ft.)	Address	Equipment
Fire Station 29	29	1970	5,049	2139 Ferry Ave SW	Engine 29
Fire Station 30	30	2009	9,100	2931 S Mount Baker Blvd	Engine 30, Air 9
Fire Station 31	31	To be completed in 2025	20,000	11302 Meridian Ave N	Engine 31 (FS 17); Ladder 5 (FS 39); Aid 31 (FS 24) and Medic 31 (FS 35)
Fire Station 32	32	2017	6,646	3715 SW Alaska St	Engine 32, Ladder 11, Medic 32, Battalion 7
Fire Station 33	33	1971	5,061	9645 Renton Ave S	Engine 33
Fire Station 34	34	1971	4,625	633 32nd Ave E	Engine 34, Hose 34
Fire Station 35	35	2009	11,532	8729 15th Ave NW	Engine 35
Fire Station 36	36	1900	4,676	3600 23rd Ave SW	Engine 36, Marine 1
Fire Station 37	37	2010	9,000	7700 35th Ave SW	Engine 37, Ladder 13
Fire Station 38	38	2010	8,700	4004 NE 55th St	Engine 38
Fire Station 39	39	2010	9,593	2806 NE 127th St	Engine 39
Fire Station 40	40	1965	6,500	9401 35th Ave NE	Engine 40
Fire Station 41	41	1936	6,146	2416 34th Ave W	Engine 41
Commissary	CM	1936	37,606	2416 34th Ave W	
Fire Garage	FG	1950	15,000	815 S Dearborn St	

Facility Name	Map Reference	Year Built	Size (sq. ft.)	Address	Equipment
Harborview Medical Center	HMC	1931	1,000	325 9th Ave	Medic 1, Medic 10, Medic 44, Battalion 3
Joint Training Facility	TF	2005	53,402	9401 Myers Way S	
Fire Marshall	n/a	1905	9,462	220 3rd Ave S	

*indicates a historic building
Source: OPCD 2024

Police Department

The Seattle Police Department (SPD) currently provides police protection services to the city. Its primary duties include emergency response, foot, car, and bike patrols, criminal investigations, traffic and parking enforcement, homeland security, special event safety and security, and specialty response services such as Special Weapons and Tactics (SWAT), arson/bomb, harbor patrol, and canine. The 911 Communications Center was previously part of SPD but is now a standalone department, Seattle Community Assisted Response and Engagement (CARE).

Inventory

The Department is divided into five precincts, each with a police station that serves as the base of operations for that patrol area. Detectives in centralized investigative units located at SPD headquarters downtown and elsewhere conduct follow-up investigations into violent and property crimes, and other types of crimes. Other parts of the department function to train, equip, and provide policy guidance, human resources, and employee support services to those delivering direct services to the public. The Harbor Patrol Unit covers fifty-nine square miles of waterways. The general locations of existing SPD facilities are mapped in Figure A-153 and listed in Figure A-154.

Staffing

SPD currently has 1,019 commissioned officers split between precincts, headquarters, and support facilities. Approximately 50% of commissioned officers work out of a police precinct. From 2017 to 2024, the total number of commissioned officers decreased from a high of 1,424 officers at the end of 2017 to a low of 1,012 officers in 2024. However, an increase in police hires in Q4 2024 coupled with a notable decline in officer separations in the same year resulted in a net gain in police officers for the first time since 2019. The department expects police staffing levels to continue to rise in 2025. SPD also employs nearly 500 non-sworn employees. Figure A-152 shows staffing and building capacity for the five precincts.

Figure A-151
SPD Precinct Staffing Levels

	North Precinct	West Precinct	East Precinct	Southwest Precinct	South Precinct
Officers	134	148	121	70	92
Other Staff	9	10	8	8	8
Total Staff	143	158	129	78	100

Capacity of the building to house total staff	93%	71%	70%	60%	81%
---	-----	-----	-----	-----	-----

Source: Police Employee Data System; Patrol Staffing Tables, 1/7/2025

Planning Goals

Precinct-based patrol officers who respond to emergency calls for service are generally allocated based on workload, time, and location. Patrol officers are assigned to one of the five precincts and typically respond to calls for service within the precinct area. Patrol officers begin and end each shift at their assigned precinct. The patrol workload is measured using calls for service data, which includes 911 emergency calls, police on-views, and administrative time. Other performance metrics, such as response time, also inform patrol staffing needs. The precinct boundary areas are occasionally redrawn to balance workload across sectors or better align with neighborhood designations. Long-term staff planning is ongoing and addressed as needed in the City's biennial budget process. Police hiring is continuous to achieve police staffing targets above attrition. Because of the many variables that affect staffing and space objectives, SPD does not apply a single level-of-service for planning of police facilities.

Future Needs

The City plans for asset preservation of SPD facilities through a capital maintenance program. Minor and major capital facility projects are programmed in the City's six-year CIP. The current CIP includes several projects to extend the operational life of the following SPD facilities: East Precinct, North Precinct, West Precinct, Mounted Patrol Facility, Harbor Patrol Facility, and Canine Facility. The existing North Precinct does not meet the needs of precinct personnel; therefore, a new consolidated facility is proposed to be built. The City is undertaking planning for long-term facility needs as well as interim upgrades and potential expansions at the existing North Precinct and has purchased property for a new North Precinct. Currently, no additional lands have been identified for SFD purposes.

In addition to SPD facilities included in the City's CIP, there are a number of prospective SPD capital facility studies and projects that the City may undertake or fund over the next 20 years:

- New Police Training Facility
- New Joint Harbor Facility
- South Precinct Renovation
- Police Range Renovation
- Seattle Justice Center (HQ) Renovation
- Airport Way Center Renovation
- Evidence Warehouse Maintenance and Upgrade

Figure A-152

Map of Seattle Police Department (SPD) Facilities and Precinct Boundaries

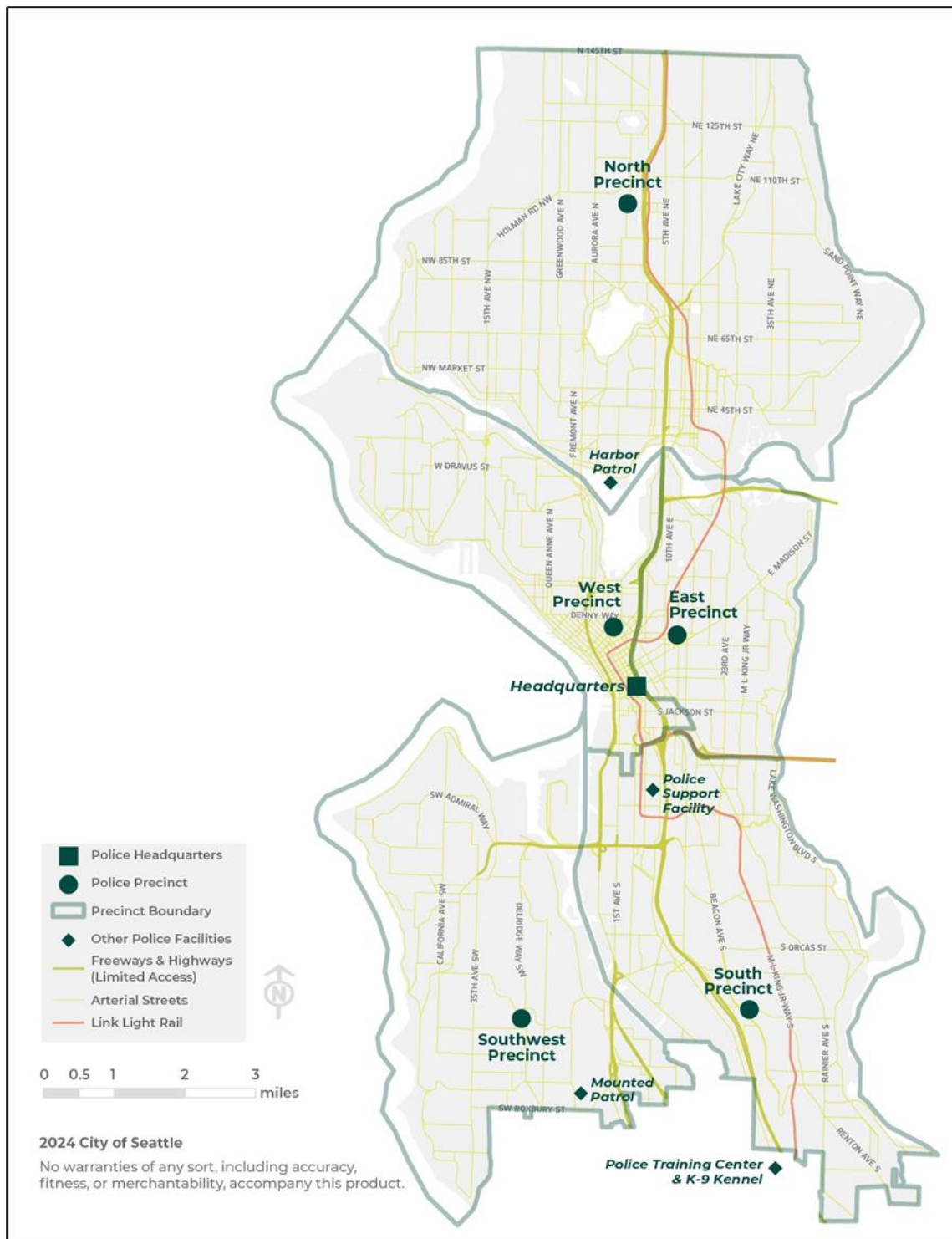


Figure A-153**Table of Seattle Police Department (SPD) Facilities**

FACILITY NAME	YEAR BUILT/ UPDATED	SIZE (SQ. FT.)	DESCRIPTION	ADDRESS
Police Headquarters	2002	n/a	Police Headquarters shares Justice Center building	610 5th Avenue
North Precinct	1984	16,434	Serves the area north of the Ship Canal to the City limits	10049 College Way N
	n/a	4,474	Annex is leased office space	10303 Meridian Ave N
West Precinct	1999	50,960	Serves Queen Anne, Magnolia, South Lake Union, Downtown, Chinatown-International District	810 Virginia St
	1948	53,336	Condo garage located in adjacent building	2021 9th Ave
East Precinct	1926/ 1985	61,580	Serves the area north of I-90 to the Ship Canal and generally the area east of I-5, as well as Eastlake	1519 12th Avenue
	2014	29,058	Garage located under 12th Avenue Arts building	1624 12th Ave
South Precinct	1983	13,688	Serves area south of I-90 and east of Duwamish River	3001 S Myrtle Street
Southwest Precinct	2002	28,531	Serves West Seattle and South Park	2300 SW Webster
Harbor Patrol	1928/ 1986	3,706	Offices, shops, docks and maintenance buildings	1717 Northlake Pl
Mounted Patrol	2001	39,041	12 full-time horse stalls and related equipment	9200 8th Ave SW
Police Support Facility	1985	145,158	Located at Airport Way Center	2203 Airport Way S
Police Training Center & K-9 Kennel	n/a	n/a	Practice range is an open-air range;	11026 E Marginal Way S

FACILITY NAME	YEAR BUILT/ UPDATED	SIZE (SQ. FT.)	DESCRIPTION	ADDRESS
			K-9 unit dogs and pups, related equipment and supplies	
<i>Facilities not shown on map</i>				
Professional Accountability	1970	6,300	Leased space in Pacific Building	712 3rd Ave
SPD Parking Enforcement	n/a	10,268	Leased office and warehouse	1330 N 131st St
Warehouse	n/a	5,400	Vehicle storage	923 S Bay S
Warehouse	n/a	21,800	Storage	4735 E Marginal Way S
Seattle Police Athletic Association Firing Range			Part of the range is only available to police. Located adjacent to SPD Training Center and K-9 Center.	11030 East Marginal Way

Source: OPCD 2024

Community Assisted Response and Engagement Department

The Community Assisted Response and Engagement (CARE) department, formerly known as the Community Safety and Communications Center, was established as a new department in 2021 to provide timely, accurate, and vital information to the City's first responders, city service providers, and to the public. It is home to the 911 Communications Center and the Community Crisis Responder Team. The department has continued working to establish itself as a new/independent city department, identify internal ongoing needs, and explore integrating non-uniformed and alternate resources for dispatch.

The 911 Communications Center, formerly part of the Seattle Police Department, is the largest call center in the Pacific Northwest, both by staff size and volume of calls received. The center manages approximately 900,000 calls per year including callers who need language translation services and those who are deaf or hard of hearing. The center coordinates the dispatch of police officers, fire fighters, Community Crisis Responders, and medical teams for emergency situations, as well as managing non-emergency lines. The center employs 163 employees and operates 24 hours a day, 365 days a year. In 2022, 911 data shows a response time consistently longer than one hour to these call types; the department seeks to reduce that response time and to support SPD's ability to respond to more urgent 911 calls swiftly. The vision for this team into the future is to expand to manage additional call types as deemed appropriate.

The Community Crisis Responder Team works in close collaboration with Seattle police officers to provide the community diversified responses to public safety and public health incidents in the City of Seattle. The team of behavioral health professionals responds to people experiencing non-violent mental health crises or quality of life concerns. These unarmed community responders are dual-dispatched with police to priority 3 and priority 4 person down and welfare check call types. Teams are also requested by police officers. This team currently assists in the West Precinct and East Precinct but is expected to expand to serve people citywide over time. In 2022, Seattle 911 data shows a response time consistently longer than one hour to these call types. The department seeks to reduce that response time and to support SPD's ability to respond to more urgent 911 calls swiftly. The vision for Community Crisis Responder Teams into the future is to expand to additional call types and primary dispatch without officers as appropriate.

Inventory

Currently, the department has space in a 61,156-sf facility shared with Fire Station 10, Fire Alarm Center, and the Office of Emergency Management at 400 S. Washington Street.

Staffing

CARE Department continues to develop as a new department. As of 2024 the CARE Department has 185 employees. Staffing is expected to increase to add dedicated administrative and management support for

Human Resources, Finance, Accounting, Technology Integration, Public Information, Public Disclosure, a Director, and a Deputy Director. This administrative support was previously provided by the Seattle Police Department. Due to the size of the 911 Communications Center the department requires its own internal team to handle these functions.

Parks and Recreation

Seattle Parks and Recreation (SPR) stewards a thriving and diverse system of parks, natural areas, beaches, and recreation facilities. This system has a rich history extending back over 135 years and plays an important role in keeping Seattle a dynamic and connected community as the city continues to grow and change. The parks and recreation system connects Seattle’s residents and visitors to nature, provides opportunities to stay healthy and improve well-being, and celebrates the vibrancy of our city.

Inventory

SPR manages a 6,478-acre park system of over 485 parks, shorelines, marine reserves, and extensive natural areas comprising about 12% of the city’s land area. SPR provides athletic fields, tennis courts, play areas, specialty gardens, park boulevards, green streets, greenways, trails, and public shorelines. SPR also manages many facilities, including community centers, indoor and outdoor swimming pools, environmental education centers, small craft centers, golf courses, and skateparks. The Seattle Aquarium and Woodland Park Zoo are also owned by SPR. The general locations of existing SPR parklands are mapped in Figure A-155. City-owned parks acreage by park classification are summarized in Figure A-156. Recreation facilities by type are summarized in Figure A-157. The location of over 860 recreation facilities are mapped in the [Seattle Parks and Recreation 2024 Parks and Open Space Plan](#) (pages 24-33).

Planning Goals

SPR’s capital investments are focused on new facility development and immediate facility improvements including major maintenance needs, safety issues, accessibility compliance (ADA), condition assessments, and asset life cycle planning. Between 2018 and 2023, SPR completed more than 200 studies assessing the conditions of facilities and also established developed schematic designs and cost estimates for each project.

Planned investments in the maintenance of existing facilities are provided in the CIP and updated annually according to asset management priorities and available funds. Generally, SPR analyzes and prioritizes capital projects generated in the identification stage using the priority ranking based on SPR management guidance and the City Council’s “Basic Principles Underlying Strategic Capital Planning,” policies established in Resolution 31203 (2010):

- **Enhancing Access and Services:** Improving access to the existing parks and recreation system and expanding services including ideas like activation and outdoor recreation programs, community center operations and youth development.
- **Restoring Clean, Safe and Welcoming Parks and Facilities:** Restoring clean, safe, and welcoming parks, including enhanced maintenance, safety and regulatory compliance, and continued focus on life-cycle asset management.

- Investing for the Future: Investing for future includes responding to climate change, building community capacity and responsiveness through grants and the equity fund, and developing new/enhancing existing parks and recreation facilities

SPR uses additional criteria to rank potential capital projects such as code requirements, life safety, facility integrity, improved operating efficiency, equity and other unique elements. SPR priorities for property acquisitions are growing regional and urban centers, habitat and natural areas, and other communities in need.

The Outside Citywide initiative is a tool for potential future open space investments that was designed by the Office of Planning and Community Development to foster equity, collaboration, and environmental justice by guiding data-informed investment strategies for Seattle’s public space system. The initiative encourages collaboration across government agencies, nonprofits, and private partners, ensuring that public space investments equitably serve all residents and meet the goals outlined in Seattle’s Comprehensive Plan. Outside Citywide includes a comprehensive inventory of public spaces owned by both public and private entities, consolidating data from multiple city departments, external agencies, and organizations. By mapping these assets and analyzing factors such as access to public space amenities, public space pressure, and equity, the initiative helps identify priority areas for new investments. These priority areas reflect communities where there are both historical disparities in public space distribution and those which face ongoing environmental challenges, targeting public space investments where they are most critical across Seattle. OPCD maintains the Outside Citywide website and map as a tool for use by other departments, including Seattle Parks and Recreation and Seattle Public Utilities. This information is available at the [Outside Citywide Public Space Explorer](#).

Future Needs

As Seattle increases in population and its demographic make-up changes, it is important to continue to provide a park and recreation system that reflects the demands and needs for these services. To determine the demand and need for parks and open space as part of the 2024 Park and Open Space Plan, multiple sources were examined and analyzed including past surveys of park visitors and residents, ongoing Open Space Gap Analysis, the 2017 Parks and Open Space Plan, the 2014 Parks Legacy Plan, the 2016 Seattle Recreation Demand Study, the 2015 Community Center Strategic Plan and other city plans.

Reflecting on all the data gathered from studies, surveys and the public engagement process, the current strongest demands and needs in Seattle are to:

- focus on adequate maintenance of existing facilities,
- provide more walking, hiking, or multi-use trails,
- provide more multi-purpose sports fields to allow for different sports and unscheduled or un-programmed use, and
- provide more parkland including beach and waterfront areas, urban gardens and farms.

In general, it is anticipated that there will be increased demand for “close-to-home” recreation due to the increased population density and traffic congestion that may affect mobility in Seattle. While it is

anticipated that many Seattleites will take advantage of regional recreational attractions in the Olympic and Cascade Mountains, and other Puget Sound destinations, much of Seattle's less affluent population tend to have relatively little access to such amenities due to lack of transportation, lack of sufficient income, or demands of work. It will be important to continue to offer an array of park and recreation opportunities that are affordable and easily accessible to all members of the public.

The 2024 Parks and Open Space Plan's adopted Level of Service (LOS) aims to provide parks and park facilities within a 10-minute walk of all residents. As of 2023, approximately 95% of the City's population are within a 10-minute walk of a park or park facility. Within designated regional and urban centers, the City aims to provide parks and park facilities within a 5-minute walk of residents.

In addition to SPR facilities included in the City's CIP, the types of SPR prospective capital projects that the City may undertake or fund over the next 20 years may include new or upgraded facilities:

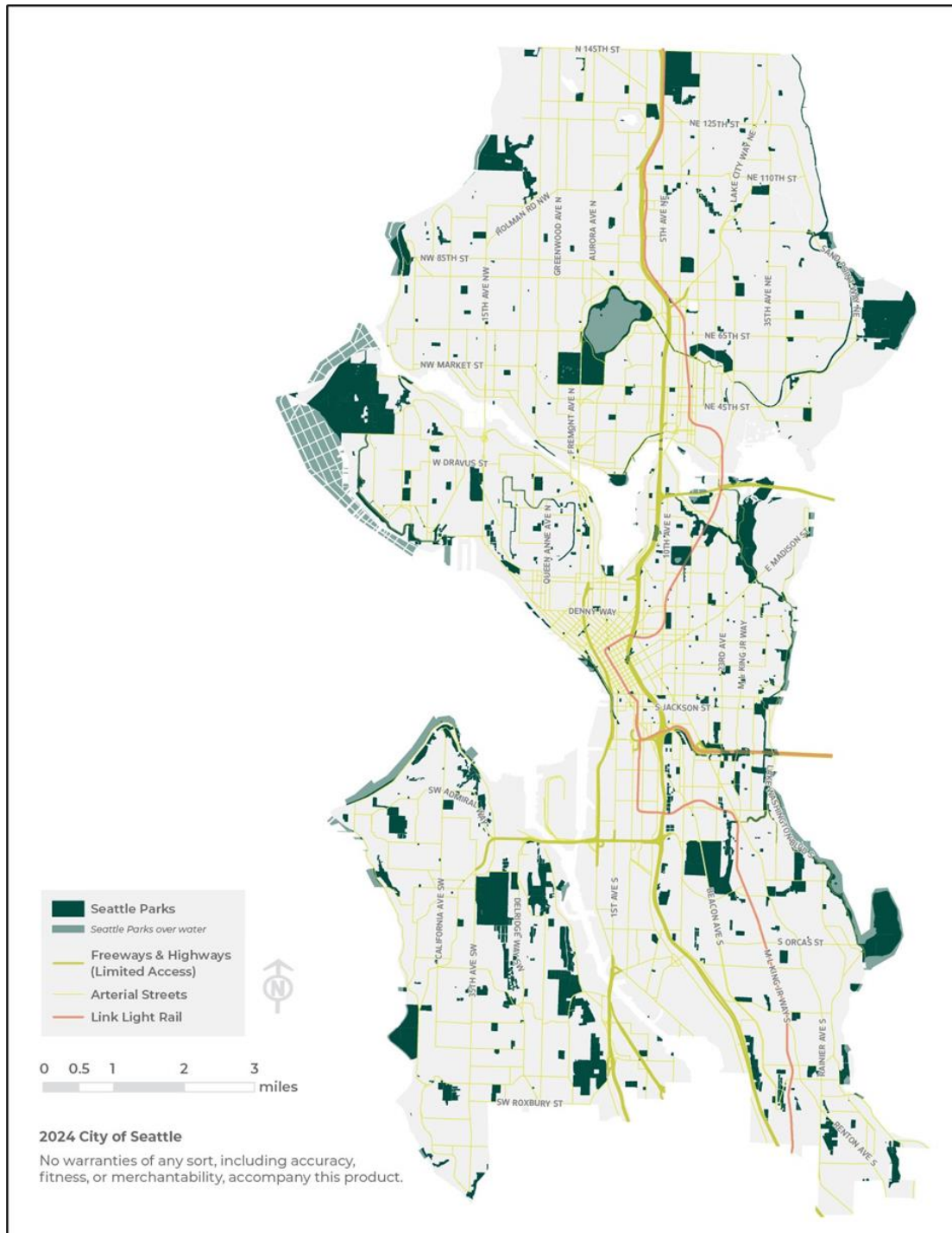
- community centers
- play areas
- outdoor fitness equipment
- sports courts
- picnic shelters
- linear street parks and green streets

The City has a robust citywide park system, which is available and accessible for use by all of the City's residents. To enhance Seattle's quality of life, the City seeks to add parks and open space to the City's system as additional amenities for all of the City's residents. Park acquisitions are opportunity-driven, thus sites to be acquired over the next 20 years have been identified. However, such additions are not necessary to accommodate new households in centers or citywide. To that end, the City continues to acquire land for public purposes in three priority areas:

- Land acquisitions for Regional and Urban Centers are prioritized based on the "gap analysis" in [Seattle Parks and Recreation 2024 Parks and Open Space Plan](#) (pages 65-72)
 - Centers located outside of Downtown Regional Center
- Land acquisitions for Natural Areas and Greenbelts are prioritized based on the following criteria:
 - Inholdings that interfere with public access and SPR management.
 - Gaps in existing SPR holdings.
 - Best natural resource value.
 - Availability of funds other than Seattle Park District funding.
 - Other considerations, such as access to non SPR-owned open space; and
 - Availability of land for purchase.
- Land acquisitions for other areas of the city may be prioritized based on the following criteria
 - Equity and health

- Income and poverty
- Density
- Opportunity

Figure A-154
Map of Seattle Parks and Recreation (SPR) Parks



Source: OPCD 2024

Figure A-155

Table of Seattle Parks and Recreation (SPR) Parks by Park Type

PARK TYPE	TOTAL ACREAGE
Boulevards/Green Streets/Greenways	393
Community Parks	730
Downtown Parks	37
Greenbelts/Natural Areas	1,470
Mini Parks/Pocket Parks	47
Neighborhood Parks	602
Regional Parks	2,779
Special-Use Parks/Specialty Gardens	420

Source: SPR 2024 Park and Open Space Plan

Figure A-156**Table of Seattle Parks and Recreation (SPR) Recreation Facilities by Type**

FACILITY TYPE	# OF FACILITIES
Boating — Hand Launch Sites	38
Boat Ramps	11
Fishing Piers	10
Rowing, sailing, and small craft centers	3
Indoor Swimming Pools (8), Outdoor Swimming Pools (2)	10
Swimming Beach	9
Wading Pool/Spray Feature	31
Community Centers	27
Environmental Education Centers	5
Teen Life Centers	3
Dog Off-Leash Areas	14
Golf Courses, including Driving Ranges (3), Green Lake Pitch/Putt (1)	5
Lawn Bowling	2
Indoor tennis centers (Amy Yee, Tennis Center Sand Point)	2
Basketball (59 locations)	90+
Bocce Ball	2
Pickleball (90 blended striping on tennis courts)	90
Tennis (56 locations)	150+
Volleyball – Outdoor (five locations)	5
Play Areas	156
Skateparks, comprised of district parks, skatespots, and skatedots	11

Sports Fields, fully synthetic playing surfaces (33), lighted (66)	207
Track and Field Tracks (West Seattle Stadium, Lower Woodland)	13
2 Museums (Seattle Asian Art Museum, MOHAI)	2
Seattle Aquarium	1
Woodland Park Zoo, 45 major exhibits, 145 buildings and structures (92 acres)	1
Bathhouses (repurposed for other uses, Green Lake Theatre, Madrona Dance Studio)	9
Performing and Visual Art Facilities	6
Amphitheaters	5
Public Restrooms (94), Shelter Houses (29), restrooms attached to other buildings (5)	123
Picnic Shelters (rentable)	47
Administrative offices, crew quarters and maintenance shops	20

Source: SPR 2024 Park and Open Space Plan

General Government

The Department of Finance and Administrative Services (FAS) is responsible for the facility management, maintenance, construction development and planning for 120-city-owned facilities- approximately 3.2 million square feet of building space throughout the city. FAS' capital investments either improve or enhance the operational capacity of these mission-critical facilities and systems. FAS also provide centralized real estate services to City departments. This includes buying, selling or transferring property.

Inventory

General government facilities include City Hall, Seattle Municipal Tower, vehicle repair shops, other office space, warehouses, communication facilities, social services facilities, and the Seattle Animal shelter. The City also owns property that is leased to social service organizations. The general locations of existing general government facilities are mapped in Figure A-158 and listed in Figure A-159.

Planning Goals

The City approaches long-range planning goals for general government facilities based on operational needs. FAS partners with other City departments, who as tenants, drive the plans for their department's operational and staffing needs, as well as other program needs. These governmental facilities are related to, or necessary for, future growth as dictated by the growth needs and demands put upon other departments served by FAS. The City plans for asset preservation of these facilities through a capital maintenance program. Ongoing minor and major capital facility projects are programed in the CIP.

FAS' current CIP priorities include life and safety issues, regulatory requirements, and sustainability. The CIP focuses primarily on preserving existing City assets, decarbonizing building systems, and expanding electric vehicle (EV) charging infrastructure for the City fleet. The FAS Asset Preservation Program spans across the city to preserve the real property assets within the communities served. EV and decarbonization investments are critical to achieving the City's transportation electrification strategy and emissions reduction goals.

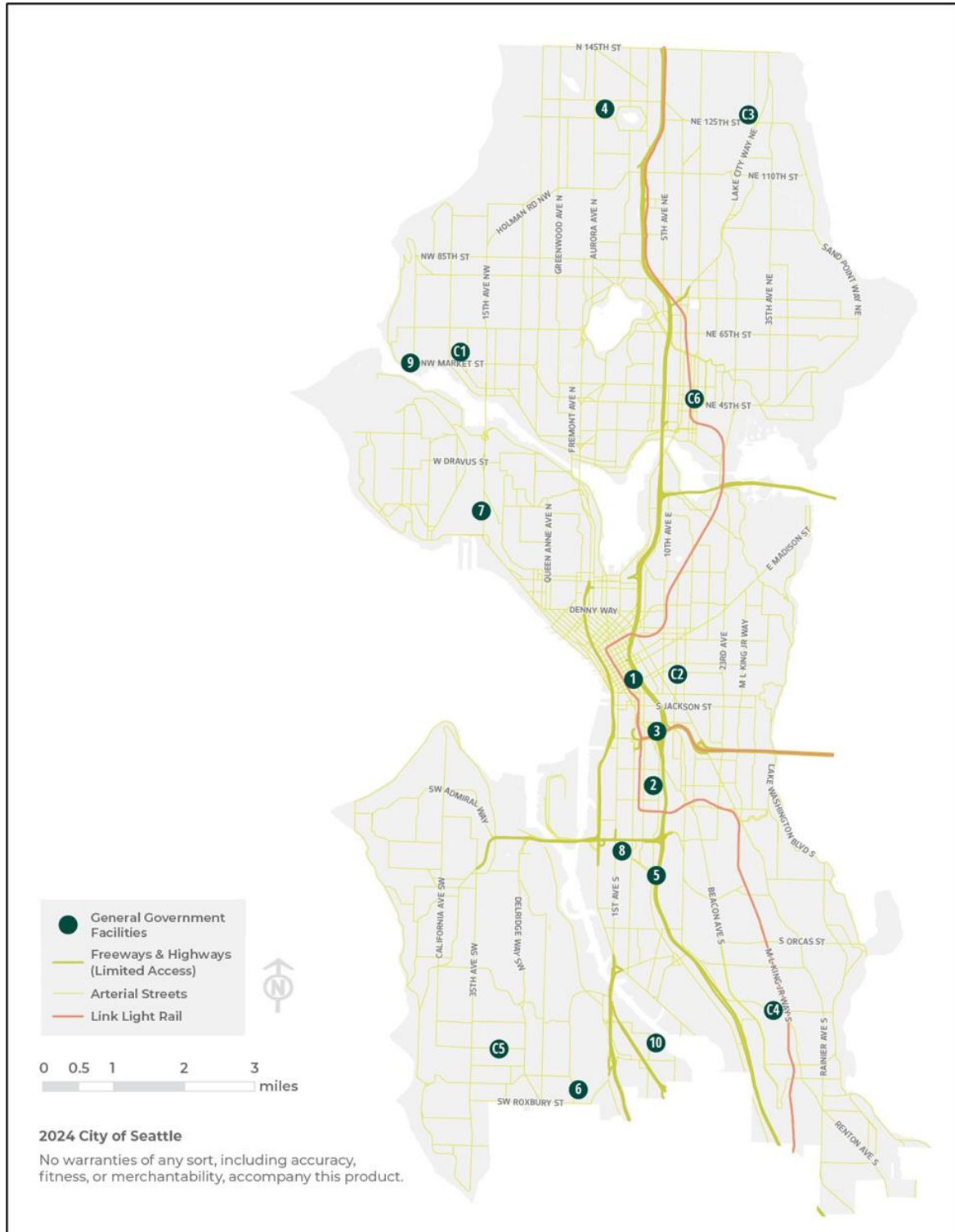
Future Needs

FAS has identified a need for expanded facilities that support vehicle maintenance, including specialty fire vehicles, and other department operations over the next twenty-years. Additional maintenance and office space may be needed as the City grows. This need is driven primarily by budget revenue and departmental priorities. Additional space needs can be accommodated through leasing as well as building new space. General facilities that support citywide functions such as the Seattle Animal Shelter and Consumer Protection also need new and expanded facilities to address quality of life and safety issues with current space. FAS will continue to partner with other City departments to assist with their Capital Facility needs, as well as real estate, property management, construction, development, planning, and forecasting needs required to meet City growth, and the service demands of the future. Currently no additional lands have been identified for general government purposes.

In addition to general government facilities included in the City's CIP, there are a number of prospective capital projects that the City may undertake or fund over the next 20 years:

- City building maintenance facilities upgrades
- City building ADA improvements
- City vehicle maintenance facilities replacement, such as at Haller Lake and Charles Street
- Office space consolidation and/or growth tracking needs of the City
- Seattle Animal Shelter repairs, upgrades and eventual replacement
- Consumer Protection Division facility upgrades
- Building energy efficiency improvements
- Seattle fleet electric vehicle infrastructure

Figure A-157
Map of General Government Facilities



Source: OPCD 2024

Figure A-158

Table of General Government Facilities

Facility Name	Map Reference	Year Built/ Major Renovation	Size (sq. ft.)	Description	Building Name	Address
Central Building	1 (Civic Campus)	1907/1955	37,658	Leased Office	Central Building	810 3rd Ave
City Hall		2003	199,530	Council, Mayor and other Municipal Offices	City Hall	600 4th Ave
Columbia Center		1985/1999	76,445	Leased Office	Columbia Center	701 5th Ave
SeaPark Garage		1993	213,346	Parking Garage for City Campus	SeaPark Garage	609 6th Ave
Seattle Municipal Tower		1989	1,223,577	Municipal Offices	Seattle Municipal Tower	700 5th Ave
		1989	193,891	Municipal Tower Parking	Seattle Municipal Tower Garage	
800 Fifth Avenue		1981/2000	43,837	Leased Office	Bank of America Fifth Avenue Plaza	800 5th Ave
Airport Way Center	2	1944/1981	102,075	Office Building	Airport Way Ctr- A (100-400)	2203 Airport Way S
		1985	16,800	FAS Shops & Offices	Airport Way Ctr- B (500) Shops	

Facility Name	Map Reference	Year Built/ Major Renovation	Size (sq. ft.)	Description	Building Name	Address
		1985	22,803	FAS Paint Shops	Airport Way Ctr- D (800) Paint	
Charles Street Campus	3	1994	2,576	Fuel Station	Charles Street- FAS Fleets Fuel Station	1040 7th Ave S
		1950/1975	69,225	Fleets Vehicle Maintenance	Charles Street- Bldg A- Fleets Vehicle Maintenance	805 S Charles St
		1951	14,221	SPU Materials Testing Lab	Charles Street- Bldg I- Material Test Lab/ Ofc-SPU	707 S Plummer St
		1974	21,315	SPU and SDOT Engineering	Charles Street- Bldg C- SDOT Engineering	714 S Charles St
		1967/1975	6,344	Fleets Tire Shop	Charles Street- Bldg E- Tire Shop	814 8th Ave S
		1950/1967	19,930	Traffic Meter Shop	Charles Street- Bldg H- Traffic Meter	1010 8th Ave S
		1954/1964	5,504	Weights and Measures	Charles Street- Bldg B- Weights & Measures	801 S Dearborn St

Facility Name	Map Reference	Year Built/ Major Renovation	Size (sq. ft.)	Description	Building Name	Address
Haller Lake Campus	4	1973/1995/2017	10,661	SPU Drainage & Wastewater Operations	HLF DWU Operations Bldg C- SPU	12600 Stone Ave N
		2019	2,060		HLF DWU Operations New Trailer T-1- SPU	12597 Ashworth Ave N
		2000	672		HLF DWU Operations Trailer T-2- SPU	12600 Stone Ave N
		2000	672		HLF DWU Operations Trailer T-3- SPU	
		1975/2015	3,400		HLF DWU Warehouse & Yard- SPU	
		1958	27,046	Vehicle Maintenance Building A	HLF FAS Vehicle Maint Bldg A	12555 Ashworth Ave N
		1975	2,001	Fuel Station	HLF Fuel Pump Island	12600 Stone Ave N
		1973	2,668	SDOT Paint Shop	HLF SDOT Paintshop Bldg D/ Bridge Maintenance	1328 N 125th St
		2018	474	SPU Hazardous Waste Buildings	HLF HHW Aurora HHW Shed- SPU	12530 Stone Ave N

Facility Name	Map Reference	Year Built/ Major Renovation	Size (sq. ft.)	Description	Building Name	Address
		1998	2,214		HLF HHW Collection Canopy- SPU	12550 Stone Ave N
		1993	668		HLF HHW Offices- SPU	
		1996	6,780	SDOT Street Maintenance Building B	HLF SDOT Street Maint Garage Bldg B	12599 Ashworth Ave N
SDOT Sign Shop	5	1962/1970	45,036	SDOT Sign Shop Warehouse	SDOT Sign Shop Warehouse	4200 Airport Way S
SDOT West Seattle Shops	6	1956	5,122	SDOT Street Maintenance	SDOT West Engineering Shops & Offices	9200 8th Ave SW
		1956	10,342		SDOT West Engineering Shops & Storage	9100 8th Ave SW
Animal Shelter	7	1981	10,567	Animal Shelter and Spay & Neuter Clinic	Animal Shelter	2061 15th Ave W
FAS Warehouse	8	1980/1989	31,844	Records and Surplus	FAS Warehouse	3807 2nd Ave S
Northwest Senior Center	9	1950/1967	8,400	Senior Center	Northwest Senior Center	5431 32nd Ave NW
South Park Neighborhood Center	10	1919/1980	5,848	South Park Neighborhood Center	South Park Neighborhood Center	8201 10th Ave S

Facility Name	Map Reference	Year Built/ Major Renovation	Size (sq. ft.)	Description	Building Name	Address
Ballard Customer Service Center	C1	2005	3,100	Customer Service Center	Ballard Customer Service Center	5604 22nd Ave NW
Central Area Customer Service Center	C2	1982/1990	3,941	Customer Service Center	Central Customer Service Center	464 12th Ave Fl 1
Lake City Customer Service Center	C3	1965/2000/2005	400	Customer Service Center	Lake City Customer Service Center	12525 28th Ave NE
Lake City Civic Core Garage		2005	8,549	Garage for Customer Service Center and Library	Lake City Civic Core Garage	12501 28th Ave NE
Southeast Customer Service Center	C4	2003	1,500	Customer Service Center	Southeast Customer Service Center	3815 S Othello St
Southwest Customer Service Center	C5	1975	1,000	Customer Service Center	Southwest Customer Service Center	2801 SW Thistle St
University Customer Service Center	C6	1927/1990	1,400	Customer Service Center	University Customer Service Center	4534 University Way NE
Benaroya Hall	n/a	1998/2001	284,100	Ground Lease to BH Music	Benaroya Hall	200 University St
Freeway Park Parking Garage-WSCTC	n/a	1975	63,750	Leased to Washington State	Freeway Park Parking Garage	1227 9th Ave

Facility Name	Map Reference	Year Built/ Major Renovation	Size (sq. ft.)	Description	Building Name	Address
				Convention Center		
Northeast Telecom	n/a	2016	600	Communications Building	Northeast Telecom	8526 Roosevelt Way NE
2021 22nd Ave S	n/a	1970 / 1980	15,500	Leased Warehouse & Comm Shop	2021 22nd Ave S	2021 22nd Ave S

Source: FAS 2024

Seattle Public Library

Since 1891, the Seattle Public Library (SPL) has grown from a single reading room in Pioneer Square to a world-class Library system with 27 locations and a robust “virtual library” available 24/7 through SPL website and mobile services. Library facilities not only house SPL’s collection of books and materials, but also provide welcoming and functional spaces for all members of the community. In 2022 Seattle library users collectively checked out 11.1 million items. Library buildings are among the most intensively-used City facilities in Seattle. Prior to the pandemic, the Central Library hosted over 1.2 million visitors annually, with library branches serving over 3.6 million visitors.

SPL receives funding from a mix of public and private sources. Every year, the City Council approves an annual budget appropriation that covers most basic expenses. In 2019, Seattle voters approved a seven-year, \$219.1 million Library levy to improve access to critical educational and literacy resources and increase economic opportunity for every city resident. Two organizations, The Seattle Public Library Foundation and The Friends of the Seattle Public Library, raise money to help fund activities, services and special projects not covered by SPL’s operating budget.

Inventory

SPL facilities include 26 branch libraries, the Central Library, and Maintenance and Operations Center. Library buildings can be divided into major categories:

- Ten buildings are designated as historic landmarks, including seven Carnegie-era libraries (built in the early 1900s) and three modern buildings.
- Eleven branch libraries are either new construction built primarily in the early 2000s (eight buildings) or non-landmarked buildings developed between the 1950s and the 1970s (three buildings).
- Five small library branches are essentially storefronts, four of which are part of larger buildings.
- Three branches are located in rented space.
- The Central Library serves as headquarters and hub of the library system. It houses the bulk of the Library’s extensive collection of books and materials (including rare “special collections” in the Level 10 Seattle Room), a 375-seat auditorium, public meeting rooms, a gallery, large public areas for reading and access to 330 public computers, a data center housing system-wide servers, and Library administration.
- The Maintenance and Operations Center, which houses the Library’s materials distribution system, serves as SPL’s maintenance shop and storage facility and hosts a fleet of five book mobiles.

Existing SPL facilities are mapped in Figure A-160 and listed in Figure A-161.

Planning Goals

SPL's CIP projects generally fall into one or more of the following categories: asset preservation, operational efficiency, environmental stability, public service improvements, and safety and security. SPL conducts condition assessments and updates to identify deficiencies and opportunities to reduce operating costs. Other proposals to change the use of some library space are evaluated. Public input also plays a role in projects planning.

The overriding priority of SPL's CIP is asset preservation, extending the useful life of its buildings. Examples of asset preservation projects include major repairs and replacement to roofs, building envelopes, HVAC and other critical building systems, doors, windows, flooring and casework, finishes and restroom fixtures.

Of the Library's 26 neighborhood branches, seven are Carnegie-era branches that are considered historic city and state landmarks. These branches—Douglass-Truth, Columbia, Fremont, Green Lake, Queen Anne, University, and West Seattle—are unreinforced masonry buildings, which means the buildings are at an increased risk for damage during a seismic event. The 2019 Levy included funding for seismic retrofits at the three of the most vulnerable branches: Green Lake, University and Columbia. Seismic retrofit projects will also allow installation of air conditioning in these Carnegie-era branches. Seismic retrofits and other building improvements are complete for the Green Lake Branch, and are about to begin for the Columbia Branch. SPL has not yet determined an anticipated construction start date for the Columbia Branch.

Air-conditioned public spaces have become an increasingly important community need throughout the city as summer temperatures climb, wildfire smoke becomes more prevalent, and many lack air conditioning in their homes. With the recent installation of air conditioning at two branches, unscheduled closures due to excessive heat in the summer have been reduced.

Mechanical systems replacement, repair and electrification of branch libraries will continue, with emphasis on the highest priority sites, to fulfill the Mayor's Executive Order for City-owned buildings to be fossil free by 2030.

This map of Seattle displays the locations of 29 public libraries, each marked with a green circle and a number. The map includes a legend in the bottom left corner identifying symbols for Seattle Public Libraries, Freeways & Highways (Limited Access), Arterial Streets, and Link Light Rail. A scale bar at the bottom left indicates distances from 0 to 3 miles, and a north arrow is positioned to the right of the legend. Major roads are labeled throughout the city, including N 145th St, NE 125th St, NE 110th St, NE 105th St, NE 100th St, NE 95th St, NE 90th St, NE 85th St, NE 80th St, NE 75th St, NE 70th St, NE 65th St, NE 60th St, NE 55th St, NE 50th St, NE 45th St, NE 40th St, NE 35th St, NE 30th St, NE 25th St, NE 20th St, NE 15th St, NE 10th St, NE 5th St, NE 1st St, NW 1st St, NW 5th St, NW 10th St, NW 15th St, NW 20th St, NW 25th St, NW 30th St, NW 35th St, NW 40th St, NW 45th St, NW 50th St, NW 55th St, NW 60th St, NW 65th St, NW 70th St, NW 75th St, NW 80th St, NW 85th St, NW 90th St, NW 95th St, NW 100th St, NW 105th St, NW 110th St, NW 115th St, NW 120th St, NW 125th St, NW 130th St, NW 135th St, NW 140th St, NW 145th St, NW 150th St, NW 155th St, NW 160th St, NW 165th St, NW 170th St, NW 175th St, NW 180th St, NW 185th St, NW 190th St, NW 195th St, NW 200th St, NW 205th St, NW 210th St, NW 215th St, NW 220th St, NW 225th St, NW 230th St, NW 235th St, NW 240th St, NW 245th St, NW 250th St, NW 255th St, NW 260th St, NW 265th St, NW 270th St, NW 275th St, NW 280th St, NW 285th St, NW 290th St, NW 295th St, NW 300th St, NW 305th St, NW 310th St, NW 315th St, NW 320th St, NW 325th St, NW 330th St, NW 335th St, NW 340th St, NW 345th St, NW 350th St, NW 355th St, NW 360th St, NW 365th St, NW 370th St, NW 375th St, NW 380th St, NW 385th St, NW 390th St, NW 395th St, NW 400th St, NW 405th St, NW 410th St, NW 415th St, NW 420th St, NW 425th St, NW 430th St, NW 435th St, NW 440th St, NW 445th St, NW 450th St, NW 455th St, NW 460th St, NW 465th St, NW 470th St, NW 475th St, NW 480th St, NW 485th St, NW 490th St, NW 495th St, NW 500th St, NW 505th St, NW 510th St, NW 515th St, NW 520th St, NW 525th St, NW 530th St, NW 535th St, NW 540th St, NW 545th St, NW 550th St, NW 555th St, NW 560th St, NW 565th St, NW 570th St, NW 575th St, NW 580th St, NW 585th St, NW 590th St, NW 595th St, NW 600th St, NW 605th St, NW 610th St, NW 615th St, NW 620th St, NW 625th St, NW 630th St, NW 635th St, NW 640th St, NW 645th St, NW 650th St, NW 655th St, NW 660th St, NW 665th St, NW 670th St, NW 675th St, NW 680th St, NW 685th St, NW 690th St, NW 695th St, NW 700th St, NW 705th St, NW 710th St, NW 715th St, NW 720th St, NW 725th St, NW 730th St, NW 735th St, NW 740th St, NW 745th St, NW 750th St, NW 755th St, NW 760th St, NW 765th St, NW 770th St, NW 775th St, NW 780th St, NW 785th St, NW 790th St, NW 795th St, NW 800th St, NW 805th St, NW 810th St, NW 815th St, NW 820th St, NW 825th St, NW 830th St, NW 835th St, NW 840th St, NW 845th St, NW 850th St, NW 855th St, NW 860th St, NW 865th St, NW 870th St, NW 875th St, NW 880th St, NW 885th St, NW 890th St, NW 895th St, NW 900th St, NW 905th St, NW 910th St, NW 915th St, NW 920th St, NW 925th St, NW 930th St, NW 935th St, NW 940th St, NW 945th St, NW 950th St, NW 955th St, NW 960th St, NW 965th St, NW 970th St, NW 975th St, NW 980th St, NW 985th St, NW 990th St, NW 995th St, NW 1000th St, NW 1005th St, NW 1010th St, NW 1015th St, NW 1020th St, NW 1025th St, NW 1030th St, NW 1035th St, NW 1040th St, NW 1045th St, NW 1050th St, NW 1055th St, NW 1060th St, NW 1065th St, NW 1070th St, NW 1075th St, NW 1080th St, NW 1085th St, NW 1090th St, NW 1095th St, NW 1100th St, NW 1105th St, NW 1110th St, NW 1115th St, NW 1120th St, NW 1125th St, NW 1130th St, NW 1135th St, NW 1140th St, NW 1145th St, NW 1150th St, NW 1155th St, NW 1160th St, NW 1165th St, NW 1170th St, NW 1175th St, NW 1180th St, NW 1185th St, NW 1190th St, NW 1195th St, NW 1200th St, NW 1205th St, NW 1210th St, NW 1215th St, NW 1220th St, NW 1225th St, NW 1230th St, NW 1235th St, NW 1240th St, NW 1245th St, NW 1250th St, NW 1255th St, NW 1260th St, NW 1265th St, NW 1270th St, NW 1275th St, NW 1280th St, NW 1285th St, NW 1290th St, NW 1295th St, NW 1300th St, NW 1305th St, NW 1310th St, NW 1315th St, NW 1320th St, NW 1325th St, NW 1330th St, NW 1335th St, NW 1340th St, NW 1345th St, NW 1350th St, NW 1355th St, NW 1360th St, NW 1365th St, NW 1370th St, NW 1375th St, NW 1380th St, NW 1385th St, NW 1390th St, NW 1395th St, NW 1400th St, NW 1405th St, NW 1410th St, NW 1415th St, NW 1420th St, NW 1425th St, NW 1430th St, NW 1435th St, NW 1440th St, NW 1445th St, NW 1450th St, NW 1455th St, NW 1460th St, NW 1465th St, NW 1470th St, NW 1475th St, NW 1480th St, NW 1485th St, NW 1490th St, NW 1495th St, NW 1500th St, NW 1505th St, NW 1510th St, NW 1515th St, NW 1520th St, NW 1525th St, NW 1530th St, NW 1535th St, NW 1540th St, NW 1545th St, NW 1550th St, NW 1555th St, NW 1560th St, NW 1565th St, NW 1570th St, NW 1575th St, NW 1580th St, NW 1585th St, NW 1590th St, NW 1595th St, NW 1600th St, NW 1605th St, NW 1610th St, NW 1615th St, NW 1620th St, NW 1625th St, NW 1630th St, NW 1635th St, NW 1640th St, NW 1645th St, NW 1650th St, NW 1655th St, NW 1660th St, NW 1665th St, NW 1670th St, NW 1675th St, NW 1680th St, NW 1685th St, NW 1690th St, NW 1695th St, NW 1700th St, NW 1705th St, NW 1710th St, NW 1715th St, NW 1720th St, NW 1725th St, NW 1730th St, NW 1735th St, NW 1740th St, NW 1745th St, NW 1750th St, NW 1755th St, NW 1760th St, NW 1765th St, NW 1770th St, NW 1775th St, NW 1780th St, NW 1785th St, NW 1790th St, NW 1795th St, NW 1800th St, NW 1805th St, NW 1810th St, NW 1815th St, NW 1820th St, NW 1825th St, NW 1830th St, NW 1835th St, NW 1840th St, NW 1845th St, NW 1850th St, NW 1855th St, NW 1860th St, NW 1865th St, NW 1870th St, NW 1875th St, NW 1880th St, NW 1885th St, NW 1890th St, NW 1895th St, NW 1900th St, NW 1905th St, NW 1910th St, NW 1915th St, NW 1920th St, NW 1925th St, NW 1930th St, NW 1935th St, NW 1940th St, NW 1945th St, NW 1950th St, NW 1955th St, NW 1960th St, NW 1965th St, NW 1970th St, NW 1975th St, NW 1980th St, NW 1985th St, NW 1990th St, NW 1995th St, NW 2000th St, NW 2005th St, NW 2010th St, NW 2015th St, NW 2020th St, NW 2025th St, NW 2030th St, NW 2035th St, NW 2040th St, NW 2045th St, NW 2050th St, NW 2055th St, NW 2060th St, NW 2065th St, NW 2070th St, NW 2075th St, NW 2080th St, NW 2085th St, NW 2090th St, NW 2095th St, NW 2100th St, NW 2105th St, NW 2110th St, NW 2115th St, NW 2120th St, NW 2125th St, NW 2130th St, NW 2135th St, NW 2140th St, NW 2145th St, NW 2150th St, NW 2155th St, NW 2160th St, NW 2165th St, NW 2170th St, NW 2175th St, NW 2180th St, NW 2185th St, NW 2190th St, NW 2195th St, NW 2200th St, NW 2205th St, NW 2210th St, NW 2215th St, NW 2220th St, NW 2225th St, NW

One Seattle Plan—Select Committee Draft

Figure A-160**Table of Seattle Public Library Facilities**

SPL Facilities	Map Reference	Year Built/ Major Renovation	Address	Size (sq. ft.)
Central	C	2004	1000 4th Ave	363,000
<i>Branch Libraries</i>				
Ballard	1	2005	5711 24th Ave NW	15,000
Beacon Hill	2	2004/2017	2519 15th Ave S	10,400
Broadview	3	2007	12755 Greenwood Ave N	15,000
Capitol Hill	4	2003	425 Harvard Ave E	11,615
Columbia*‡	6	1915/2004/2024	4721 Rainier Ave S	12,420
Delridge	7	2002	5423 Delridge Way SW	5,600
Douglass-Truth*‡	8	1914/2006	2300 E Yesler	8,008
Fremont*‡	9	1921/2005	731 N 35th St	6,840
Green Lake*‡	10	1910/2024	7364 E Green Lake Dr N	8,090
Greenwood	11	2005/2017	8016 Greenwood Ave N	15,000
High Point	12	2004/2017	6302 35th Ave SW	7,200
International District / Chinatown	13	2005	713 Eighth Ave S	3,930
Lake City*	14	1965/2005/2019	12501 28th Ave NE	15,300
Madrona-Sally Goldmark**	15	1973/2008	1134 33rd Ave	1,707
Magnolia*	16	1964/2008	2801 34th Ave W	7,790
Montlake	18	2006	2300 24th Ave E	1,574
New Holly	19	1999	7058 32nd Ave S	4,000
Northeast*	20	1954/2004/2013	6801 35th Ave NE	15,000

SPL Facilities	Map Reference	Year Built/ Major Renovation	Address	Size (sq. ft.)
Northgate	21	2006	10548 5th Ave NE	10,000
Queen Anne*‡	22	1914/2007/2018	400 W Garfield St	7,931
Rainier Beach	23	1981/1986/2004	9125 Rainier Ave S	15,000
South Park	24	2006/2019	8604 Eight Ave S	5,019
Southwest	25	1961/1986/2007	9010 35th Ave SW	7,557
University*‡	26	1910/2007/2024	5009 Roosevelt Way NE	8,104
Wallingford	27	2000/2009	1501 N 45th St	2,000
West Seattle*‡	28	1910/1987/2004	2306 42nd Ave SW	9,460
<i>Other Facilities</i>				
Maintenance and Operations Center	MOC	2021	5516 4th Ave S	n/a

*City of Seattle Landmark or located in City landmark/special review district

**City historic resource survey properties

‡Carnegie-era branch

Source: OPCD 2024

Future Needs

SPL is developing a strategic plan to guide the next 10 years and the development of the next levy that will go to the voters in 2026. Future building needs are one area of focus.

The strategic planning process has begun to identify future building needs. SPL is already working to reduce its carbon footprint and convert building systems away from fossil fuels. But SPL lacks a dedicated funding stream for this work, as well as for the ongoing maintenance needs of its high-use public facilities. Voter-approved Levy funds, state and federal grants and other one-time funding sources can provide support for building needs and upgrades, but a longer-term, sustainable approach is needed to maintain these beloved, but aging buildings.

In particular, the iconic Central Library will enter its third decade of service during 2024, and its systems are aging. A building of the Central Library's size, complexity, and intensity of use requires significant annual maintenance to preserve core functionality and continually improve building efficiency. Updating the Central Library's mechanical and HVAC systems to reduce its carbon footprint will require significant funding beyond the annual Levy major maintenance allocation.

SPL's buildings are increasingly being called on to serve in multiple capacities: centers of learning and knowledge, community meeting and gathering spaces, heating and cooling centers during extreme weather, daytime respite during wildfire smoke events, a safe haven for people experiencing housing instability, and more.

To serve these many needs, buildings must be flexible and accessible in design, as well as safe, clean, well-maintained and welcoming to all. SPL must leverage new technologies to meet building and sustainability goals, as well as to grow or improve collections, programs and services. Currently, no additional lands have been identified for SPL purposes.

Key goals for addressing future building needs in coming years include:

- Create accessible and culturally responsive Library spaces
- Reduce the Library's carbon footprint by meeting or exceeding the City's carbon reduction goals
- Offer access to modern technologies with an emphasis on reducing the digital divide
- Utilize new technologies to assess and improve the effectiveness of Library systems
- Be innovative in approach to capital improvements, facilities management, accessibility and beautification of library buildings

Potential actions to achieving these goals:

- Evaluate community usage of current Library locations; determine whether changes are needed
- Evaluate the current accessibility of Seattle libraries and develop an improvement plan
- Develop and implement a plan to move all Seattle libraries away from fossil fuels
- Enhance transportation options at libraries, such as bicycle parking and electric vehicle charging
- Convert the Library's fleet to electric vehicles
- Establish a solar roof replacement program whenever library roofs exceed their useful lives

- Develop adaptable and programmable spaces
- Provide fast and reliable Library technology, including hardware, software and internet access
- Maintain and upgrade systems to support scalable, sustainable technologies and services, including the Integrated Library System
- Monitor the success of Library sustainability work with goals, assessment and reporting

Seattle Center

Seattle Center is an active civic, arts and family gathering place adjacent to our downtown. More than 30 cultural, educational, sports and entertainment organizations reside on the grounds of the 74-acre campus providing a broad range of public and community programs and hosting thousands of events. Seattle Center is the most visited arts and cultural destination in the state, attracting an estimated 10 million visitors each year who attend arts, sporting, educational, and cultural events and festivals, and enjoy the grounds and open spaces. While these events and activities draw significant revenue for the city, Seattle Center will continue maintaining campus grounds and their unique features for the casual visitor. Seattle Center will also continue to serve its critical role in providing emergency shelter during adverse weather events and implementing the annual Seattle/King County Clinic public health event, which saw nearly 3,000 patients receive free medical and dental care for its tenth iteration in 2024.

Seattle Center resides on Indigenous lands, the traditional territories of the Coast Salish people. The origins of a civic campus at Seattle Center go back to the 1920s, with Mayor Bertha Landes presiding over the groundbreaking for the Civic Auditorium, Civic Ice Arena, and Civic Field. In the 1930s the Washington State Armory was built. Memorial Stadium was constructed in the 1940s. In the late 1950s and early 1960s the site for the 1962 Seattle World's Fair was created which is now Seattle Center, a City department.

Inventory

There are 24 buildings and three parking garages on the campus. The Seattle Center Monorail runs between the Seattle Center campus and Westlake in downtown Seattle. The City owns the Monorail, which is operated by Seattle Monorail Services. The Space Needle, the Pacific Science Center, and Seattle Public Schools' Memorial Stadium and its adjacent parking lot are also part of the campus but are owned and operated by private and other public entities.

The center includes 24 buildings and three parking garages (See Figure A-162 and Figure A-163). The center is home to twelve theater spaces ranging in capacity from 200 seats in the Cornish Playhouse to 2,900 at Marion Oliver McCaw Hall and totaling nearly 6,000 seats for theatrical performances. Sports facilities include the Climate Pledge Arena with a capacity of 17,000+ and Memorial Stadium with a capacity of 12,000 for field events.

The center owns and manages two surface parking lots and three parking garages totaling more than 3,500 spaces. The center is served by multiple King County Metro bus routes and by the Monorail, which runs between Downtown and Seattle Center and carries more than 2 million riders a year over a 0.9-mile route.

Seattle Center is also a major urban park with lawns, gardens, fountains, a children's play area (Artists at Play Plaza & Playground), skate park, and a variety of plazas and open spaces. The center includes approximately 40 acres of landscaped and green open space and pedestrian ways. Seattle Center's outdoor open spaces are a major urban oasis for active or passive and individual or group enjoyment.

As of June 2023, the Seattle Center expanded its services to the new Waterfront Park. Seattle Center will be stepping into a partnership with Friends of Waterfront Park to manage operations, maintenance, and public safety in the Waterfront Promenade, Overlook Walk, Pier 58, and Pier 62 at Waterfront Park.

Existing Seattle Center facilities are mapped in Figure A-162 and listed in Figure A-163.

Figure A-161
Map of Seattle Center Facilities



Source: Seattle Center 2024

Figure A-162**Table of Seattle Center Facilities**

FACILITY	ADDRESS	SIZE IN SQUARE FEET
Building (formerly Pottery NW)	226 First Ave N	7,200
5th & Mercer Building	401 Mercer St	88,910
A/NT Gallery (formerly the International Fountain Pavilion)	2 nd Ave N & Republican St	4,681
Armory Food & Event Hall	305 Harrison St	278,500
Artists at Play	158 Thomas St	130,680
Center Steps Plaza	Mercer St	4,457
Central Plant	324 Republican St	10,072
Chihuly Garden and Glass	305 Harrison St	30,000
Climate Pledge Arena	334 1st Ave N	740,000
Cornish Playhouse (w/out courtyard)	201 Mercer St	33,424
Cornish Playhouse Rehearsal Hall	201 Mercer St	4,333
Cornish Scene Shop	Roy St	
Exhibition Hall	225 Mercer	52,000
Fifth Ave N Garage	516 Harrison St	356,390
First Ave N Garage	220 1st Ave N	173,000
Fisher Pavilion	200 Thomas St	21,018
International Fountain	n/a	122,000
International Fountain Pavilion	2 nd Ave N & Republican	4,681
KEXP (formerly the NW Rooms)	472 1st Ave N	35,240
Kobe Bellhouse	n/a	600

FACILITY	ADDRESS	SIZE IN SQUARE FEET
Maintenance Shop – Leased (5.5 Building)	621 2nd Ave N	30,720
Marion Oliver McCaw Hall	321 Mercer St	295,000
Memorial Stadium	401 5th Ave N	238,920
Memorial Stadium Parking Lot	401 5th Ave N	101,489
Mercer Arena	363 Mercer St	108,000
Mercer Street Garage	300 Mercer St	511,424
Monorail Office and Gift Shop	370 Thomas St	4,592
Monorail Terminal	370 Thomas St	19,563
Mural Amphitheatre	305 Harrison St	3,200
Museum of Pop Culture	200 2 nd Ave N	283,324
Opera Center/ Classical KING	363 Mercer St	105,000
Pacific Science Center	200 2nd Ave N	141,681
Park Place	232 1st Ave N	7,200
Path with Art	200 Mercer St	4,800
Phelps Center/Pacific NW Ballet	225 Mercer St	49,680
Restroom Pavilion	303 2 nd Ave N	1,219
Seattle Center Skate Plaza	305 Harrison St	18,000
Seattle Center Warehouse (under N. Stadium Stands)	369 Republican St.	20,774
Seattle Children's Theatre	240 Thomas St	46,300
Seattle Children's Theatre Tech Pavilion	201 Thomas St	29,112
Seattle Repertory Theatre	151 Mercer St	65,000

FACILITY	ADDRESS	SIZE IN SQUARE FEET
SIFF (Seattle International Film Festival)	167 Republican St	11,776
Space Needle	400 Broad St	4,400
The VERA Project	305 Harrison St	9,536

Planning Goals

As Seattle Center embraces the post-pandemic return of crowded summer festivals and plays an important role supporting the recovery of downtown, now is the time to address these infrastructure needs and ensure it is well-positioned to serve the city's needs in the coming years through repairs, renewal, and redevelopment of the facilities and grounds of Seattle Center to provide a safe and welcoming place for millions of annual visitors.

Overall planning goals for capital improvements include:

- Preserving campus buildings and infrastructure
- Assessing building systems and developing maintenance and repair schedules
- Maintaining and repairing campus-wide utilities
- Creating and maintaining multi-use public spaces for both free and fee supported events
- Maintaining a large collection of public art
- Upgrading landscape features and public gathering spaces
- Planning for campus improvements and modernization Seattle Center
- Retrofitting buildings for improved energy efficiency
- Removing barriers in buildings, pathways, and public spaces on campus to better serve campus visitors of all abilities

Future Needs

The biggest challenge facing Seattle Center is the campus' rapidly aging infrastructure and funding constraints on advancing replacement projects to address it. The only new facilities funded in the current CIP include Waterfront Operations and Tribal Interpretive Center. The CIP also includes studies to support major redevelopment projects for Memorial Stadium and Lot 2. Most CIP projects focus on improving, rehabilitating, restoring, repairing, various existing buildings (including Fisher Pavilion, Mc Caw Hall, Armory, Theaters, Monorail Station), public art, open spaces, parking lots, site signage other infrastructure, energy efficiency, ADA improvements, and general site improvements.

Seattle Center has recently completed a series of Facility Condition Assessments (FCAs). These studies will define our priority investment in asset maintenance and replacement for the major existing systems on campus, including:

- Roofing assessment of all major facilities
- Cladding and fenestration assessment of selected facilities
- Mechanical systems
- Electrical systems
- Plumbing and piping
- Water features (including the iconic Seattle Center International Fountain)
- Elevators
- Campus bollards

Between 2025-2030 Seattle Center will invest \$50.6 million for major asset preservation, including plans to spend nearly \$29.5 million to design and construct the replacements and repairs identified in the FCAs as most critically needed for facility safety and reliability. Because our Real Estate Excise Tax (REET) allocation is not sufficient to keep pace with all needed replacements and repairs across the campus, the most urgent projects will be prioritized. Seattle Center intends to invest the remaining \$21.1 million of REET in projects to upgrade public spaces across the campus to meet public needs and support our core lines of business. Currently, no additional lands have been identified for Seattle Center purposes.

In 2024, Seattle Center and the Seattle Center Foundation kicked off an exciting process to create a 10-year Vision and Action Plan. The plan, to be completed in 2025, will incorporate research and stakeholder engagement, incorporate best practices from cultural campuses from around the world, and will result in an action plan for Seattle Center's future and will guide capital project planning and funding strategies in the coming years.

One major project underway is the redevelopment of the 77-year-old Memorial Stadium. It is owned by Seattle Public Schools (SPS) on land deeded by the City and is outdated, deteriorated, and in need of redevelopment. The new facility will transform the heart of Seattle Center with a state-of-the-art stadium that will serve SPS' needs for athletic events and graduations and be a major civic venue for arts, cultural, sports, and community events. In June 2023 following a Request For Proposals, the Mayor and School Superintendent agreed to enter into negotiations with One Roof Stadium Partnership (One Roof) to jointly develop an enhanced stadium. In 2024, Seattle Center, SPS and One Roof reached an important milestone by aligning on key project terms. Funding for the redevelopment will include SPS levy money, State capital budget, City of Seattle CIP funds, and private fundraising led by the One Roof Partnership. The Seattle Center warehouse will be relocated from Memorial Stadium to allow the existing stadium to be demolished. The new stadium is expected to be completed by the end of 2027.

As Seattle looks forward to welcoming the global community to the FIFA World Cup in June 2026, Seattle Center will play a critical role in hosting the FIFA Fan Fest event, where nine viewing parties are anticipated each with crowds as large as our largest typical summer events. Capital improvements are needed to make the event a safe and welcoming experience through following repairs and

improvements: security bollards, electrical infrastructure upgrades, International Fountain repairs and upgrades, furnishings for campus open spaces, and lawn restorations.

In addition to the Seattle Center projects included in the CIP, there are a number of prospective Seattle Center capital facility studies and projects that the City may undertake or fund over the next 20 years:

- 401 Mercer (Formerly KCTS) redevelopment for a future revenue generating use
- Planning to mitigate any potential impacts of future light rail
- Campus-Wide Open Space Plan
- Thomas Street Partnership to envision a new use and reinvestment in an aging gift shop building

Seattle Public Schools

Inventory

Public schools in Seattle are owned and operated by the Seattle Public Schools (SPS). As of October 2023, 49,226 students are enrolled in SPS and attend one of the 104 SPS schools (18 high schools, 12 middle schools, 11 K-8 schools, 63 elementary schools). SPS also owns various athletic, administrative, and support buildings.

Existing school locations are mapped in Figure A-164 and listed in Figure A-165.

Planning

Capital facility planning is driven by a number of factors, including projected student population, curriculum goals, educational specifications (including classroom size and necessary facilities), and specialized needs of specific students.

The SPS's latest plan is the SPS 2021 Facilities Master Plan Update. It provides planning information for a six-year period, 2021-2026. The Facilities Master Plan includes information on the condition of building systems (heating and ventilation system, roofing, windows, etc.) and educational adequacy (how design and layout supports student success). The report also includes cost estimates to replace or repair each system.

SPS develops enrollment projections, the expected number of students for a specific time period, based on historical information and demographics, especially birth rates. Like many school districts SPD is adapting to shifting community demographics. As of March 2024, SPS is forecasting that total enrollment will decline over the next ten years to somewhere between a low of 41,000 and a high of 46,000 students.

SPS conducts a district-wide capacity analysis annually. Multiple variables impact capacity including: the quantity, sizes and types of classrooms; the collective bargaining agreements, staffing ratios, school specific academic programs; student support programs; school master schedules; and community partnerships (preschool programs, community learning centers, etc.).

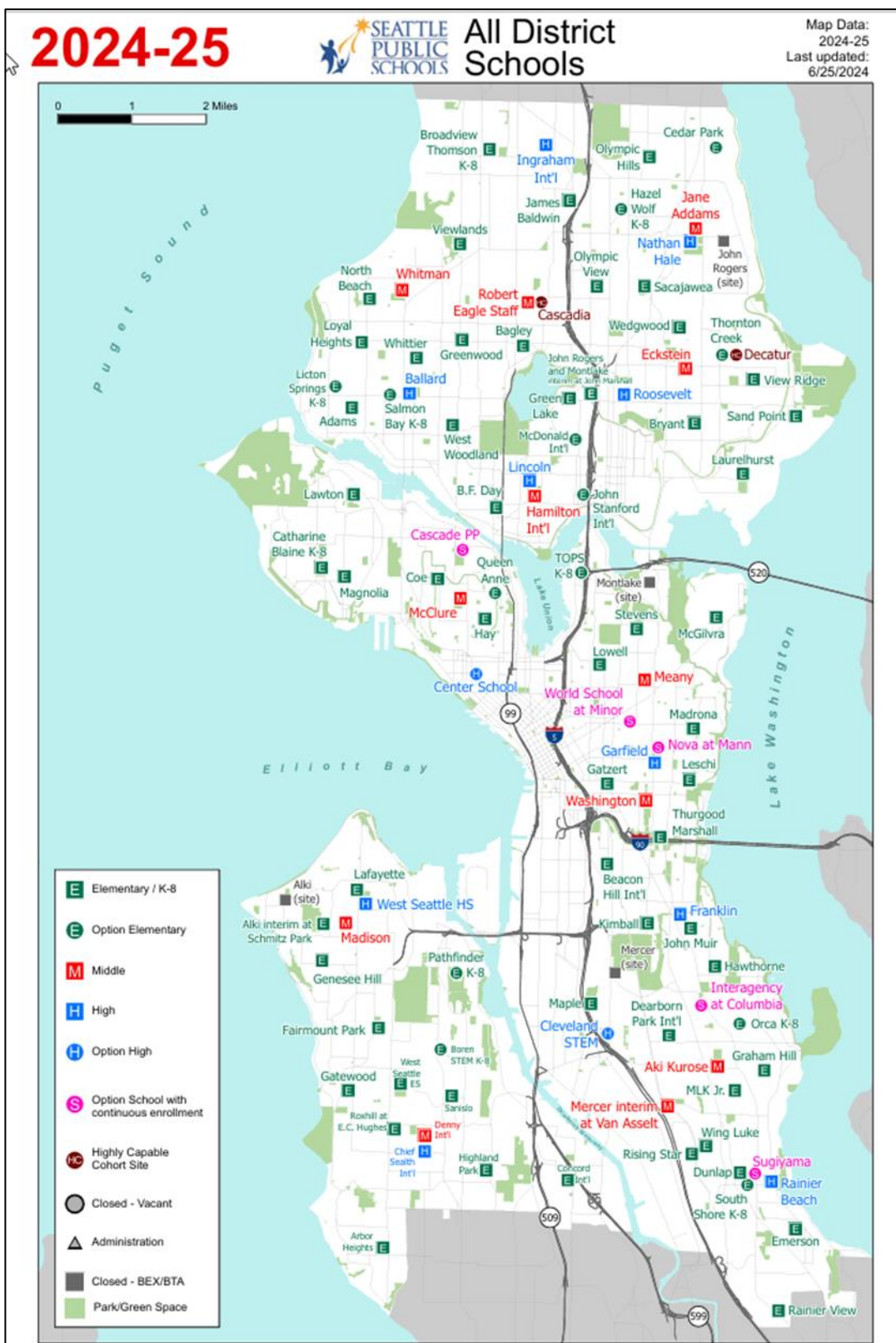
SPS is operating several school buildings that are under-enrolled, which often occurs in schools that serve the youngest students. SPS has proposed to develop a system of well-resourced schools. This new model would mean SPS would have fewer school buildings that serve students in preschool through 5th grade, but the building capacity would be better aligned with student enrollment.

Future Needs

For the majority of funding for facility construction and renovation, SPS relies on two voter-approved capital levies. These run on alternating six-year schedules and are called Building Excellence (BEX) and Buildings, Technology and Academics (BTA). BEX funds the renovation and replacement of schools, and BTA provides capital monies to repair existing building envelopes, replace roofs, improve

mechanical/electrical/life-safety systems, and provide technology improvements. The next levy, BEX VI, is expected to be on the ballot in February 2025. Currently, no additional lands have been identified for SPS purposes.

Seattle School District Schools



Source: Seattle Public Schools

Figure A-164
Seattle School District Schools

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
Adams	E	6110 28th Ave. NW		63,136	3.4	1989	
Alki	E	3010 59th Ave. SW		45,387	1.4	1954	2025
Arbor Heights	E	3701 SW 104th St.		91,660	5.7	2016	
B.F. Day	E	3921 Linden Ave. N	✓	66,937	3.9	1892	1991
Daniel Bagley	E	7821 Stone Ave. N	✓	62,752	3.9	1930	2020
Beacon Hill International*	E	2025 14th Ave. S		51,704	1.9	1971	
Bryant	E	3311 NE 60th St.	✓	83,167	3.3	1926	2001
Cascadia	E	1700 North 90th St.		97,381	5.4	2017	
Cedar Park	E	3737 NE 135 th St.	✓	33,037	4.4	1959	2015
Frantz Coe	E	2424 7th Ave. W		79,461	2.9	2003	2021
Concord International	E	723 S Concord St.	✓	67,889	3.4	1913	2000
Dearborn Park	E	2820 S Orcas St.		54,573	9.5	1971	2006
International*							
Decatur	E	7711 43rd Ave. NE		44,210	2.6	1961	1966

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
Dunlap	E	4525 S Cloverdale St.	✓	74,310	4.9	1924	2000
Emerson	E	9709 60th Ave. S	✓	78,804	1.8	1909	2001
Fairmount Park	E	3800 SW Findlay St.		63,658	3.1	1964	2014
Gatewood	E	4320 SW Myrtle St.	✓	55,785	3.6	1910	1991
Bailey Gatzert	E	1301 E Yesler Way		53,958	6.8	1988	
Genesee Hill	E	5013 SW Dakota St.		91,281	6.8	2016	
Graham Hill	E	5149 S Graham St.		55,792	4.5	1961	2004
Green Lake*	E	2400 N 65th St.		49,397	3.4	1970	2015
Greenwood	E	144 NW 80th St.	P	65,600	2.8	1909	2002
Hawthorne	E	4100 39th Ave. S		52,793	2.6	1989	
John Hay	E	201 Garfield St.		51,362	3.2	1989	
Highland Park	E	1012 SW Trenton St.		76,206	3.7	1999	
John Stanford International/Latona	E	4057 5th Ave. NE	✓	67,495	2.2	1906	2000
Kimball*	E	3200 23rd Ave. S		42,614	4.8	1971	1998; 2023

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
Lafayette	E	2645 California Ave. SW		53,471	4.7	1950	1953
Laurelhurst	E	4530 46th Ave. NE	P	54,125	2.7	1928	1950
Lawton	E	4000 27th Ave. W.		54,766	5	1990	
Leschi	E	135 32nd Ave.		59,490	3	1988	2022
Lowell	E	1058 E Mercer St.	P	74,136	3.9	1919	1962
Loyal Heights	E	7735 25th Ave. NW	✓	94,407	2.9	1932	2018
Martin Luther King Jr.	E	6725 45th Ave. S		73,566	3.4	2004	
Magnolia	E	2418 28th Ave. W.	✓	77,718	2.5	1927	2019; 2021
Madrona	E	1121 33rd Ave.		68,127	1.8	2002	2002
Maple*	E	4925 Corson Ave. S		49,730	6.7	1971	2006
McDonald International	E	6725 45th Ave. S	P	54,551	2.2	1914	1923
McGilvra	E	144 NE 54th St.	✓	45,492	2.5	1913	2018
Montlake	E	1617 38th Ave. E.	✓	23,983	1.7	1924	2025
John Muir	E	3301 S Horton St.		60,031	3.3	1991	

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
North Beach (to be closed in 2025)	E	9018 24th Ave. NW		41,791	6.9	1958	
Northgate	E	11725 1st Ave. NE		46,982	5.8	1956	2025
Olympic Hills	E	13018 20th Ave. NE		96,081	6.5	2017	
Olympic View	E	504 NE 95th St.		52,792	4.3	1989	
Queen Anne	E	2100 4 th Ave. N	✓	67,382	3	1903	2019
Rainier View	E	11650 Beacon Ave. S		38,141	8.9	1961	
Rising Star/African	E	8311 Beacon Ave. S		106,370	10.9	2000	
American Academy							
John Rogers	E	4030 NE 109th St.		38,582	9	1956	2025
Roxhill/E. C. Hughes	E	7740 34th Ave. SW	✓	48,010	3.7	1926	2018
Sacajawea (to be closed in 2025)	E	9501 20th Ave. NE		41,261	3.8	1959	
Sand Point	E	6208 60th Ave. NE		33,899	4.3	1957	
Sanislo* (to be closed in 2025)	E	1812 SW Myrtle St.		42,110	8.5	1970	1998
Stevens (to be closed in 2025)	E	1242 18th Ave. E	✓	69,381	2.4	1906	2001
Thornton Creek	E	7712 40th Ave. NE		92,490	7.3	2016	

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
Thurgood Marshall	E	2401 S Irving St.		61,054	4.5	1991	
View Ridge	E	7047 50th Ave. NE		68,719	9.1	1948	1969
Viewlands	E	10525 3rd Ave. NW		34,675	6.5	1954	1986; 2023
Wedgwood	E	2720 NE 85th St.		47,851	4.5	1955	
West Seattle ES	E	6760 34th Ave. SW		52,359	6.9	1988	2022
West Woodland	E	5601 4th Ave. NW		79,292	3.5	1991	2021
Wing Luke	E	3701 S Kenyon St.		86,730	6.9	2021	2021
Whittier	E	1320 NW 75th St.		71,864	2.7	1999	
Blaine	K-8	2550 34th Ave. W		109,109	8	1952	
Louisa Boren (STEM)	K-8	5950 Delridge Way SW		119,514	15	1963	
Broadview-Thomson	K-8	13052 Greenwood Ave. N		129,984	9.3	1963	
Pathfinder/Cooper	K-8	1901 SW Genesee St.		74,497	13.9	1999	
Hazel Wolf	K-8	11530 12th Ave. NE		81,897	3.2	2016	

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
Monroe/Salmon Bay	K-8	1810 NW 65th St.	P	117,116	4.2	1931	
TOPS/Seward	K-8	2500 Franklin Ave. E	✓	95,501	1.8	1893	1999
Orca/Whitworth	K-8	5215 46th Ave. S		63,649	3.4	1989	
South Shore	K-8	4800 S. Henderson St.		138,859	11.4	2009	
Licton Springs/Webster	K-8	3015 NW 68 th St.	✓	52,580	1.55	1908	1930; 2020
Aki Kurose	M	3928 S Graham St.		171,393	4.8	1952	
David T. Denny	M	2601 SW Kenyon St.		138,778	17.4	2011	
International							
Eckstein	M	3003 NE 75th St.	✓	177,977	13.9	1950	1968
Hamilton International	M	1610 N 41st St.	✓	150,473	2	1926	2010
Jane Addams	M	11051 34th Ave. NE	P	160,645	18	1949	1950; 2016
Madison	M	3429 45th Ave. SW	✓	155,667	8.9	1929	2005; 2022
McClure	M	1915 1st Ave. W		94,263	2.3	1964	1968
Meany	M	301 21st Ave. E		125,517	4.1	1955	2016

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
Mercer International	M	1600 S Columbian Way		129,993	8.4	1957	2025
Robert Eagle Staff	M	1330 N 90th St.		139,400	11.5	2017	
Washington	M	2101 S Jackson St.		143,793	17.3	1963	
Whitman	M	9201 15th Ave. NW		145,832	14.6	1959	
Ballard	H	1418 NW 65th St.		242,795	12.3	1999	
Chief Sealth International	H	2600 SW Thistle St.		230,357	21.6	1957	2010
Center School	H	305 Harrison St		17,500			
Cleveland	H	5511 15th Ave. S	✓	161,731	8.5	1927	2007
Franklin	H	3013 S Mt. Baker Blvd.	✓	269,201	8.7	1912	1990
Garfield	H	400 23rd Ave.	✓	244,177	9	1923	2008
Ingraham	H	1819 N 135th St.	✓	236,069	28.2	1959	2019
Lincoln	H	4400 Interlake Ave. N	✓	256,025	6.7	1907	1960; 2019
Nathan Hale	H	10750 30th Ave. NE		242,146	18.4	1963	2010
Rainier Beach	H	8815 Seward Park Ave S		189,638	21.5	1961	1998; 2025

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
Roosevelt	H	1410 NE 66th St.	✓	269,297	9.2	1922	2006
Alan T. Sugiyama at South Lake	H	8601 Rainier Ave. S		29,519	3.2	2008	
West Seattle High School	H	3000 California Ave. SW	✓	208,981	8	1917	2002
CPPP/North Queen Anne	S	2919 1 st Ave. W		22,975	2.3	1914	1922; 2022
Interagency/Columbia	S	3528 S. Ferdinand St.	P	34,581	3.2	1922	
Nova Alternative/Horace Mann	S	2410 E Cherry St.	✓	49,267	1.76	1902	2014
Interagency/Queen Anne Gym	S	1431 2 nd Ave. N		35,805	0.95	1961	
SW Interagency/Roxhill Site	S	9430 30 th Ave. SW		48,502	2.7	1958	
Seattle World School @ T.T. Minor	S	1700 E Union St.		59,495	3.49	1941	2016
John Marshall (Interim site)	I	520 NE Ravenna Blvd.	P	87,927	3.2	1927	
Schmitz Park (Interim site)	I	5000 SW Spokane St.		37,009	7.5	1962	
Van Asselt (Interim site)	I	7201 Beacon Ave. S		59,610	8.4	1950	2023
Original Van Asselt	I		✓	14,240	8.4	1909	2023

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
(Original Bldg.)		7201 Beacon Ave. S					
Athletic Office	A	401 5th Ave. N		1,803	2.7	1965	
John Stanford Center	A	2445 3rd Ave. S		350,000	12.1	2002	
Memorial Stadium	F	401 5th Ave. N	P	163,290	6.3	1947	
Fremont Art Council (former BF Day ES)		3940 Fremont Ave. N	✓	1,696	3.9	1910	2017
Columbia Annex (Closed/Leased)		3100 S Alaska St.		7,648	1	1944	
Former Fauntleroy School		9131 California Ave. SW		-	1.4		
Interlake – Wallingford Center (land lease)		4416 Wallingford Ave. N	✓	52,078	1.7		
Lake City Professional Building		2611 NE 125th St.	✓	37,500	2.7		
Leschi Donated House		3020 East Yesler Way		2,660	0.14	1952	
Denny Site (Vacant)		8402 30th Ave. SW		-	4.16		
Cleveland Memorial Forest		28322 SE Issaquah - Fall			32.9		

SCHOOL/FACILITY	USE	ADDRESS	LANDMARK	BUILDING AREA (GSF)	SITE AREA (ACRE)	DATE OF CONSTRUCTION	DATE OF LAST FULL RENOVATION ADDITION
		City Rd., Fall City, WA					
Jefferson Square Mall (land lease)		4720 42nd Ave. SW		282,642	3.2		
Oak Lake (tenant Oak Tree Plaza)		10040 Aurora Ave. N		-	3.4		
West Queen Anne School Condo (land lease)		1401 5th Ave. W	✓		1.7		

Appendix 4

Utilities

Introduction

The Utilities Appendix includes GMA required information about the location and capacity of all existing and proposed utilities - electrical, natural gas, telecommunications, drinking water, drainage and wastewater, and solid waste systems.

The City plans for City-owned utilities to preserve and maintain existing infrastructure, and build new facilities to support expected population and job growth. In addition to providing essential services to residents and businesses, utility investments contribute to overall local economic vitality, quality of life, safety, climate mitigation, and help the City meet all the state and federal requirements associated with these services.

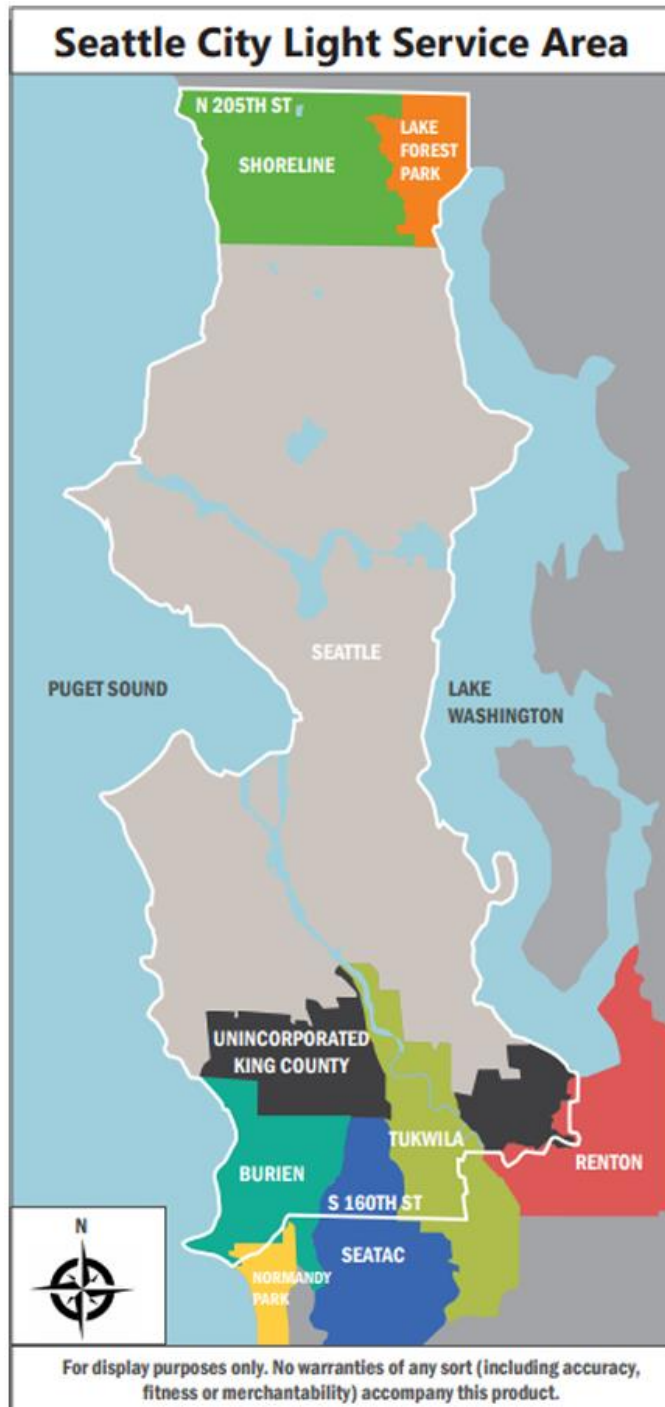
In some cases the required inventories, level of service, and future needs for utilities are detailed in specific system plans and analyses. References to these plans are included where needed. Seattle's [Capital Improvement Program](#) (CIP), which is updated as part of the City's annual budget process, contained detailed information about City-owned utility projects to be undertaken over the next six years.

Electricity

Seattle City Light (SCL) is the City-owned electric utility serving all of Seattle and some portions of other cities and unincorporated King County north and south of the city limits (see Figure A-166). SCL provides electrical power to over 425,000 residential customers and 50,000 commercial customers.

Every two years SCL develops or updates an [Integrated Resource Plan](#) (IRP). The IRP describes how SCL will meet anticipated customer energy needs over the next 20 years while meeting reliability, cost, risk, environmental and equity goals. The IRP includes long-term load forecasts and identifies energy resource options. The IRP is developed with flexibility and is regularly reviewed to respond to changing market conditions and future uncertainties. SCL developed a full IRP in 2022 and an update in 2024.

Figure A-165
Seattle City Light Service Area



Inventory & Capacity

SOURCES OF ELECTRICITY

SCL supplies power from a portfolio of sources that includes SCL-owned generation resources and purchased power. SCL typically purchases about half of all power delivered to its customers. Figure A-167 lists the sources of power and their contribution to SCL's power portfolio for 2023. Figure A-168 shows the general location of these sources.

The current resource portfolio includes SCL-owned generation resources, long term contract resources, near term purchases, and sales made in the wholesale power market, and conservation.

SCL-owned Generation Resources:

- The Boundary Dam, located on the Pend Oreille River in northeastern Washington, is City Light's largest resource. The dam has a peaking capability slightly above 1,000 megawatts (MW) and an average annual generation of approximately 418 average megawatts (aMW)¹⁶¹. Under an agreement between City Light and the Pend Oreille County Public Utility District No. 1 (PUD), City Light provides a portion of the output of the Boundary Dam to Pend Oreille PUD through the end of the current license.
- The Skagit Project includes the Ross, Diablo, and Gorge Dams in the North Cascades. This triple-cascaded project is located on the Skagit River in Whatcom, Skagit, and Snohomish Counties. These dams have a combined one-hour peak capability of about 700 MW at full pool with generous storage capacity, but they have significant operational constraints for fish management. Their average annual generation is approximately 274 aMW.
- South Fork Tolt Reservoir and Dam is located 16 miles upstream from the City of Carnation on the South Fork Tolt River in King County. This project is jointly operated with Seattle Public Utilities to provide drinking water to the metropolitan Seattle area. The project has a one-hour peaking capability of less than 17 MW and average annual generation is approximately 6 aMW.
- Cedar Falls Dam is located in King County. This was City Light's first hydroelectric plant and the nation's first municipally owned hydroelectric plant. This project is jointly operated with Seattle Public Utilities to provide drinking water to the metropolitan Seattle area. The project has a capacity of 30 MW and average annual generation is approximately 8 aMW.

SCL Long Term Contract Resources:

- The Bonneville Power Administration (BPA) contract allows City Light to receive power from 31 hydroelectric projects and several thermal and renewable projects in the Pacific Northwest. The energy is delivered over BPA's transmission grid.

¹⁶¹ One megawatt is 1 million watts. One million watts delivered continuously 24 hours a day for a year (8,760 hours) is called an average megawatt.

- The High Ross Agreement is an 80-year treaty with the Canadian Province of British Columbia (BC). City Light ended plans to raise the height of Ross Dam in exchange for power purchases from British Columbia Hydro (acting through its subsidiary Powerex).
- The Seven Mile Encroachment contract associated with the High Ross Treaty allowed BC Hydro to raise the Seven Mile Reservoir, which reduced the output at Boundary Dam due to encroachment on the tailrace. Under this agreement, BC Hydro returns or pays for the energy that would otherwise have been generated at Boundary Dam if Seven Mile Reservoir had not been raised.
- The Lucky Peak Project is a hydropower project located near Boise, Idaho, where City Light has power purchase contract rights to Lucky Peak output (approximately 34 aMW annually) until 2038.¹⁶²
- The Priest Rapids Project consists of two dams; Priest Rapids Dam and Wanapum Dam. City Light purchases power from this project under two agreements with Grant PUD, which owns and operates the project.
- The Columbia Basin Hydropower contracts comprise power from three hydroelectric projects. The projects are owned by three irrigation districts, so electric generation is mainly in the summer months. Two contracts that were previously part of this group have expired (Eltopia Branch Canal and RD Smith).
- The Columbia Ridge Landfill Gas Project is a 20-year power purchase agreement with Waste Management Renewable Energy, LLC to purchase approximately 12 aMW each year from its landfill.
- The King County West Point Treatment Plant Project is a 20-year power purchase agreement that began in February 2010 with King County to purchase the output from a methane gas-producing digester at the wastewater treatment plant in Discovery Park.

¹⁶² City Light occasionally enters into energy exchange agreements to exchange the weather-driven output of the project for firm energy. For the period studied in the 2024 IRP Progress Report it was assumed that output of the Lucky Peak Project is used to serve load directly without exchanges.

Figure A-166
Sources of Electrical Generation

SOURCE	DATE IN SERVICE	GENERAL LOCATION	TYPE	<u>ENERGY PRODUCED</u> (MWH)
SCL Owned Generation				
Boundary	8/23/1967	Pend Oreille River	Hydro	2,851,570
Skagit Projects (includes Gorge, Diablo and Ross Dams)	9/27/1924	Skagit River, North Cascades	Hydro	1,691,073
South Fork Tolt Reservoir and Dam	11/20/1995	S. Fork Tolt River	Hydro	30,432
Cedar Falls	10/14/1904	Cedar River	Hydro	25,809
Total Owned				4,598,884
Contracts	Contract Expires			
Bonneville Power Administration Block	2028	Multiple locations in Pacific NW	Hydro	4,039,150
High Ross Agreement	2066	British Columbia	Hydro	303,454
Seven Mile Encroachment	2066	British Columbia	Hydro	9,258
Lucky Peak	2038	Boise, Idaho	Hydro	332,046
Priest Rapids Project	2052		Hydro	19,221
Columbia Basin Hydropower	2025-2027	Columbia River	Hydro	249,373
Columbia Ridge	2028/ 2033	Arlington, OR	Landfill gas	78,333

King County West Point Wastewater Treatment Plant	2033	Seattle	Biogas	7,215
Condon Wind	2028	Condon OR	Wind	33,991
Total Contracts				5,072,041
Grand Total				9,670,925

In April 2024, City Light recently executed two solar power purchase agreements for 47 MW and 40 MW. These projects are expected to start operations March 2025 and December 2025 respectively.

Source: Seattle City Light Integrated Resource Plan, 2024

Figure A-167
Electrical Generation Resources



Source: City Light, Integrated Resource Plan 2024

Distribution

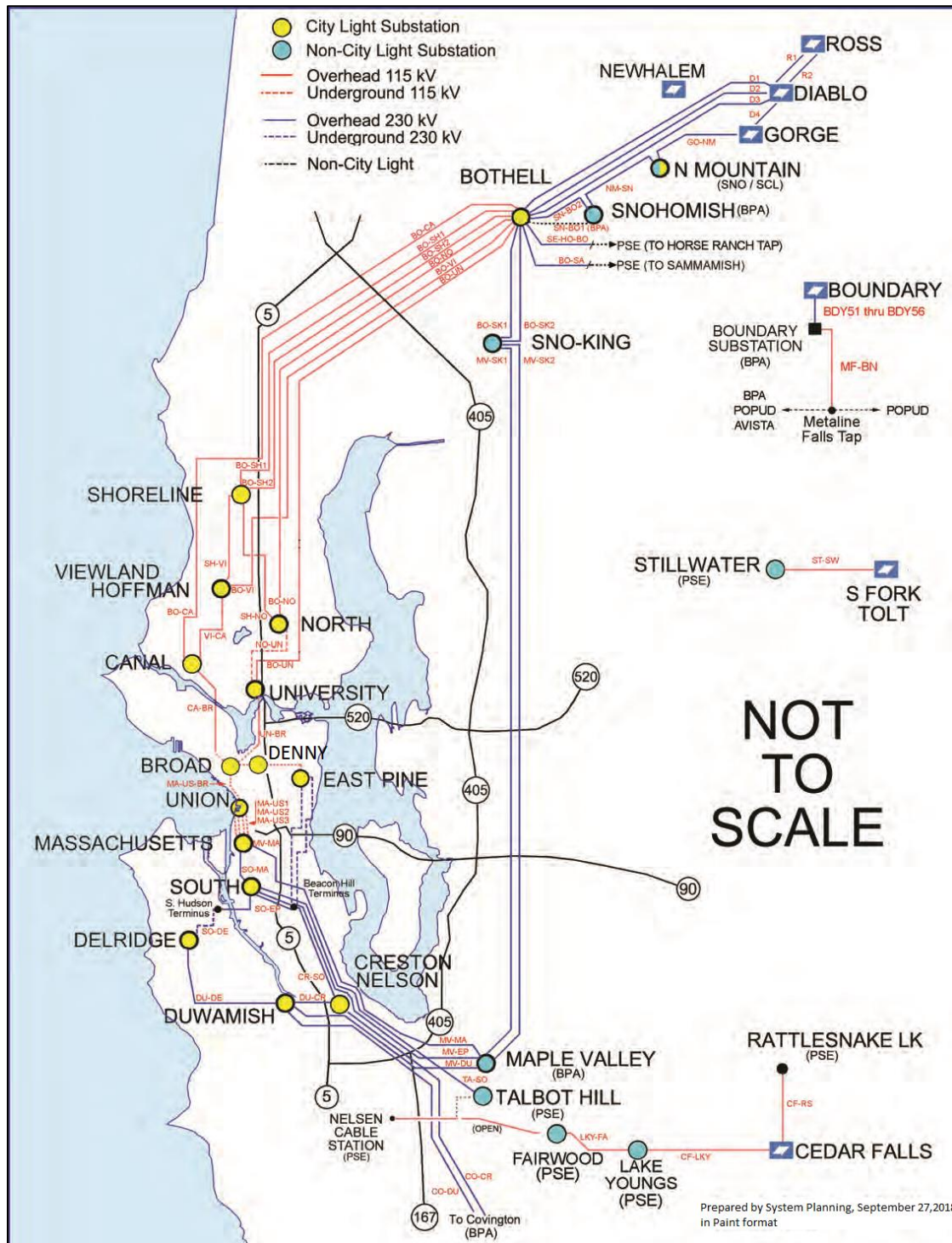
SCL owns and maintains approximately 667 miles of high voltage transmission lines, which carry power from the Skagit and Cedar Falls generating facilities to 16 principal substations. SCL is dependent on other transmission line owners, i.e., the Bonneville Power Administration (BPA), to bring power from its Boundary Dam hydroelectric plant and from other contracted resources, to serve its load in Seattle. The transmission grid interconnection with other utilities also provides additional reliability to meet load requirements. Power is distributed from SCL's principal substations via high voltage feeder lines to numerous smaller distribution substations and pole transformers, which reduce voltage to required levels for customers. SCL owns and maintains 2,500 miles of overhead and underground distribution lines within Seattle that deliver power from the 16 principal substations to approximately 365,200 customers. Figure A-169 shows the general location of transmission lines and substations. SCL also has a state-of-the-art System Operations Center located in Seattle.

SCL's current generation capability (owned and contracted) is adequate to serve existing customers. Because of the nature of City Light's hydroelectric system, the utility is not presently constrained by its ability to meet peak loads (typically referred to as capacity). At times, the system may be constrained in its ability to carry load over periods of heavy load hours (6 a.m. to 10 p.m.) during the winter. On an average monthly basis, City Light currently has sufficient resources to meet expected customer load in the next few years, even under serious drought conditions.

SCL sells on the wholesale energy markets the energy it does not need to meet customer load. The utility also buys energy in the wholesale markets to enhance the value of its resource portfolio and to meet occasional short-term energy deficits.

Figure A-168

Electrical Transmission and Substation System



Source: City Light, 2018

Future Needs

Seattle City Light develops comprehensive plans to assess future energy resource additions to serve customers' electricity needs in the short and long term. Resource plans are developed in coordination with an advisory group representing diverse customer interests, approved by City Council, and filed with the Washington Department of Commerce. The publication of resource plans takes two forms (1) a Demand Side Management Potential Assessment that is used to set targets for customer programs like energy efficiency and demand response and (2) an Integrated Resource Plan (IRP) that evaluates loads and resources over a 20-year study horizon.

The 2022 IRP, 2024 Demand Side Management Potential Assessment, and the 2024 IRP Progress Report have identified the need to add resources to meet increases in electricity demand from SCL's customers as a result of electrification of the building and transportation sectors. For the studies, energy resource needs are determined based on an internally developed hourly simulation optimization model and resources identified to serve the needs are determined based on internally developed capacity expansion model that minimizes total portfolio costs while ensuring that energy resource needs are met. The addition of wind, solar, batteries, demand-side resources, and carbon free firm resources are necessary to allow SCL to meet future need.

For the transmission and distribution components of SCL's system, projected growth will be accommodated by planned transmission and distribution capacity additions. The Denny Substation, energized in May 2018, is a long-term asset for City Light's entire system, providing reliability and flexibility through the ability to back up adjacent substations. It was designed to last 50-100 years with the capacity to accommodate future needs in the South Lake Union neighborhood and beyond. SCL is planning to construct a new substation in the Interbay area to serve the South Lake Union district. SCL is evaluating the need for a new substation that will meet the load growth at the University of Washington as their district energy system transitions to electricity.

SCL acquires property, rights of way, and easements necessary for power distribution, utility improvement projects, and environmental conservation. Over the next 20 years capacity will likely be expanded at existing substations: the North, Duwamish, Shoreline and Creston. New substations in other areas also may be needed, as load growth projections are updated. SCL currently owns properties in Northeast and Northwest Seattle where new substations could be built.

SCL's electric infrastructure is being pushed to do more than ever. SCL has produced a [Grid Modernization Plan and Roadmap](#) to support increased electrification and improve grid reliability, resiliency and security. It describes projects and tasks for the next two years, as well as laying the foundation of five-year and ten-year goals, with projects spanning across planning, operations, supporting technologies, and physical infrastructure upgrades. SCL is modernizing its grid to make it more efficient, reliable, resilient, and secure. Grid modernization will reduce disruptions and outages from severe weather, climate change, and natural disasters. It will implement new technologies and processes to deliver resilient, reliable, flexible, secure, sustainable, and affordable electricity. It will also accommodate new electrical loads from electric vehicles and ferries, transitions from natural gas to electricity for heating and cooking, and new, decentralized renewable resources such as rooftop solar.

The rapid transition to an electrified transportation system is expected to increase the demand for electricity. SCL is planning to ensure there will be sufficient power and grid capacity to support this transition. SCL, in association with SDOT and OSE, is leading the buildout of the essential network of public and private charging stations to accommodate the increasing number of electric cars, trucks, buses, ferries and other transportation modes. This increased demand is factored into SCL's [IRP](#) which is updated every two years.

District Energy

District energy systems are characterized by one or more central plants producing hot water, steam, and/or chilled water which then flows through a network of insulated pipes to provide hot water, space heating, and/or air conditioning for nearby buildings. District energy systems typically serve end-users such as central business districts, colleges and university campuses, hospitals, and healthcare facilities. Seattle currently has three district energy systems – CenTrio Energy, University of Washington Seattle Campus, and Amazon. The decarbonization of two systems, CenTrio Energy and University of Washington, will increase the demand for SCL electricity. However, Amazon’s waste heat system decreases the demand for SCL electricity.

CenTrio Energy

CenTrio Energy is a district energy utility franchised by the City. CenTrio Energy produces heat at a centralized plant using boilers powered by natural gas, and distributes steam to approximately 200 commercial, residential, and institutional customers for space and water heating, along with other uses. Two steam-generating plants are connected to a low pressure and high-pressure piping network. The primary plant is located on Western Avenue at University Street. The secondary plant is located on Western Avenue near Yesler Way, the site of the original plant built in 1893. Total steam generation capacity is 670,000 pounds per hour. Its boilers are designed to burn natural gas or diesel oil. Steam is distributed through a network of insulated steel pipe encompassing a total length of over eighteen miles beneath city streets. CenTrio Energy’s service area encompasses roughly a square-mile area of the Central Business District, extending from Blanchard Street to King Street and from the waterfront to 14th Avenue, crossing over First Hill.

CenTrio Energy has communicated to the City of its intent to convert its natural gas-powered boilers to non-emitting energy sources to reduce carbon emissions and comply with Washington’s Climate Commitment Act. CenTrio Energy emits approximately 70,000 metric tons of carbon dioxide equivalent (MTCO₂e) per year. CenTrio Energy and Seattle City Light have been meeting regularly in 2023 and 2024 to consider strategies for supplying additional power as more of CenTrio Energy’s generation is switched from gas/diesel boilers to lower emission sources. CenTrio Energy is considering a number of technologies including electric boilers, more efficient industrial heat pumps, hydrogen boilers, and future technologies needing development.

University of Washington

The University of Washington (UW) Seattle district energy system includes two plants and seven miles of distribution tunnels:

- Central Power Plant, located at 3920 Jefferson Rd NE, burns natural gas supplied by Puget Sound Energy in five boilers to create steam to heat and provide hot water to approximately 180 campus buildings. The plant also includes seven chillers to create chilled water to cool roughly 65 campus buildings. Six chillers use electricity supplied by Seattle City Light to create

chilled water. One chiller is powered by steam. The Central Plant can provide 100 megawatts (MW) of 185 Psi steam (thermal energy), 10 MW of emergency power and 10,500 tons of chilling. Some of the buildings on campus require 10 psi steam. Typically, this is produced by sending the 185 psi through a pressure reducing valve (PRV). In lieu of a PRV, the UW power plant uses a backpressure steam turbine which generates electricity from what would have been wasted steam. The 3 MW capacity of the turbine generator represents less than 5% of UW's current electrical demand and reduces the amount of electricity purchased from Seattle City Light.

- West Campus Utility Plant (WCUP), located at 3900 University Wy NE, was completed in 2017. It serves as an extension of the Central Power Plant, providing additional cooling and emergency power to the University's expanding collection of research buildings in the southwest corner of campus. As built, WCUP can provide 8 megawatts (MW) of emergency power and 4,500 tons of chilling. Chiller #4 is under development and will be in place by May 2025, increasing the total to 6,000 tons. With future expansion, the plant can achieve an ultimate capacity of 12 MW total and 10,500 tons of chilling. The combination of both chilled water plants serves approximately 50% of building space on campus.

UW is working to fully decarbonize the energy system of the Seattle campus. This monumental undertaking will modernize and decarbonize UW's energy infrastructure. About 93% of the greenhouse gas (GHGs) emissions on the Seattle campus are generated by the Central Power Plant. Eliminating these emissions will help the UW meet city and state GHG reduction mandates. Additional electrical capacity is needed to add cooling to campus buildings, and meet new winter demand when the UW shifts from natural gas, a fossil fuel, to electricity for heating. The SCL service to UW already exceeds 'firm capacity' in the summer. UW has asked SCL to increase the firm capacity from 45 MW to 120 MW (electrical). UW/SCL have been working collectively to develop the optimal approach to meet the needs of the University. The University of Washington has a 5-part strategy to transition the district energy system to 100% clean energy and decarbonize the heating system that includes a range of technology investments and upgrades.

In addition to decarbonization of the Central Power Plan, other factors will increase the demand for clean energy at UW over the next 20 years: more people on campus, EV fleets, AI, and climate change (need for more cooling). SCL is planning in coordination with the UW to meet these future needs.

Amazon

Amazon's district energy system captures the equivalent of 11 megawatts per day of waste heat from the 34-story Westin Building Exchange, a nearby data center that houses 250 telecommunication and internet companies, to heat Amazon's offices in the Denny Triangle campus. Heated water is piped from the Westin to a central plant in Amazon's Regrade building where five heat-reclaiming chillers concentrate the heat which is distributed to about 5 million square feet of office space within the four-block campus.

Drinking Water

Seattle Public Utilities (SPU) provides drinking water to approximately 1.5 million people living in Seattle and surrounding communities in western King County and portions of southern Snohomish County (see Figure A-170). In addition, SPU sells wholesale water to nineteen municipalities and special-purpose districts, plus Cascade Water Alliance, who in turn provide the water to their own retail customers. SPU operates under an annual operating permit issued by the Washington State Department of Health.

Inventory & Capacity

The City of Seattle's water supply comes primarily from surface water reservoirs on the Cedar River, 60 to 70 percent of the supply, and South Fork of the Tolt River, which supplies the remainder. SPU also manages a small wellfield located north of the Seattle Tacoma Airport that is available to provide drought and emergency supply. In total, these sources can supply up to 172 million gallons of water per day (mgd), on an average annual basis. Water from these sources is treated to meet drinking water quality regulations. The treated water is then delivered to Seattle retail and wholesale customers through a network of approximately 1,820 miles of transmission and distribution lines, 400 million gallons of treated water storage facilities (reservoirs, tanks, and standpipes), and thirty-one pump stations. System-wide treatment and transmission capacity is 310 million gallons per day (see Utilities Appendix Figure A-170). Actual consumption has been much less than supply and declining over time, with per capita consumption 44% less in 2019 than in 1990. In recent years, total consumption has averaged about 121 mgd.

Future Needs

SPU acquires property, rights of way, and easements necessary for water supply services and environmental conservation. Currently, no additional lands have been identified for water supply purposes and SPU does not have any planned efforts to increase water supply prior to 2060. Despite an anticipated household growth rate of 18% in its retail service area and 29% in its full and partial wholesale customers between 2016 and 2040, SPU anticipates total demand will remain relatively flat due to water conservation efforts and changes to its wholesale water customers. Current capital investments for SPU include those for maintenance of existing infrastructure including dams, watermain rehabilitation in the distribution system, seismic improvements, and ensuring the water system's resiliency under climate change.

More information about the current and future capital investments for the drinking water system can be found in [Seattle's 2019 Water System Plan](#).

Figure A-169

Drinking Water Service Area, Facilities and Transmission Pipelines



Source: Seattle Public Utilities, 2019

Drainage & Wastewater

Seattle Public Utilities manage wastewater and drainage systems in Seattle, which include the combined sewer system, the sanitary sewer system, and the stormwater drainage system. The city contains three different types of areas: the combined sewer area (with only combined sewer systems), separated sewer areas (with sanitary sewer and stormwater drainage systems), and partially separated sewer areas (with sanitary sewer and stormwater drainage systems, where some rainwater still goes to the sanitary sewer), each covering about one-third of the city. (See Figure A-171). The King County Wastewater Treatment Division operates the West Point treatment plant—one of the County’s three regional wastewater treatment plants—in addition to four combined sewer overflow (CSO) treatment facilities within the City of Seattle and the wastewater trunkline system that serves Seattle. The majority of wastewater collected from within Seattle is treated at the West Point plant, which is supported by the Brightwater plant near Woodinville if needed for additional capacity.

Inventory & Capacity

SPU operates a complex wastewater collection system network comprised of 1,423 miles of separated and combined sewer pipes and maintenance holes (MH), 68 pump stations (PS), and 86 permitted combined sewer overflow (CSO) outfalls in Puget Sound, Lake Washington, and the Duwamish Waterway. SPU acquires property, rights of way, and easements necessary for drainage and wastewater and environmental conservation as needed. Currently, no additional lands have been identified for drainage and wastewater purposes.

The combined sewer system is the oldest system conveying wastewater and drainage in Seattle, with infrastructure 100 years old or more in places. The combined sewer system collects wastewater from residents and businesses along with stormwater runoff from rooftops, yards, and streets into the same pipes, where it is then conveyed to the treatment plant. During periods of heavy rain, the system can overflow into waterbodies such as Lake Washington and Elliott Bay. While CSOs prevent wastewater treatment plants from being overwhelmed and prevent the wastewater system from backing up into roads and buildings, they contribute pollutants to receiving waterbodies. This degrades water quality, which impacts the aquatic life and habitat within these waterbodies and inhibits recreational opportunities.

In the separated sewer system wastewater from homes and businesses is collected through a separate set of pipes than stormwater. Wastewater is sent to the treatment plant while drainage collected from rooftops, yards, and streets is conveyed to waterbodies. Pollutants picked up by stormwater from rooftops and streets can impact water quality and the aquatic life in receiving waterbodies.

In the partially separated sewer system, stormwater runoff from the rooftops of older construction is collected along with wastewater from homes and businesses and conveyed through the wastewater system to the treatment plant. As in the separated system, stormwater runoff from yards, streets, and new development is conveyed to waterbodies.

While the vast majority of SPU's drainage system is piped, Seattle has areas that are served by a predominantly 'informal' drainage system, particularly north of 85th Street and in the southwest corner of Seattle. These areas include blocks with no, or only limited drainage infrastructure and several miles of ditch and culvert systems. According to Seattle's Stormwater Code ditch and culvert systems are considered capacity constrained, meaning they have inadequate capacity for existing and anticipated stormwater loads (see Figure A-172).

Future Needs

In 2019 SPU published a [Wastewater System Analysis](#) (WWSA) that identifies areas at risk due to limited wastewater system capacity, which can cause sewer overflows through maintenance holes or backups into homes or businesses. In 2020, SPU completed a [Drainage Systems Analysis](#) (DSA) that identified areas at greatest risk from limited drainage system capacity, which could cause flooding in the right-of-way or onto private property. The WWSA and DSA both used the best available growth and climate change projections at the time to assess how the identified risks might be impacted in the future. The WWSA and DSA modeled sewer and drainage system capacity under future conditions for the 2035 planning horizon and ran simulations to evaluate the potential changes in flooding, sewer overflows, and sewer back-ups caused by changes in impervious cover, stormwater code compliance, sea level rise, and more frequent and extreme rainfall events. The WWSA and DSA were developed to assess risks associated with system capacity citywide in order to prioritize SPU investments in sewer and drainage capacity improvements in the future.

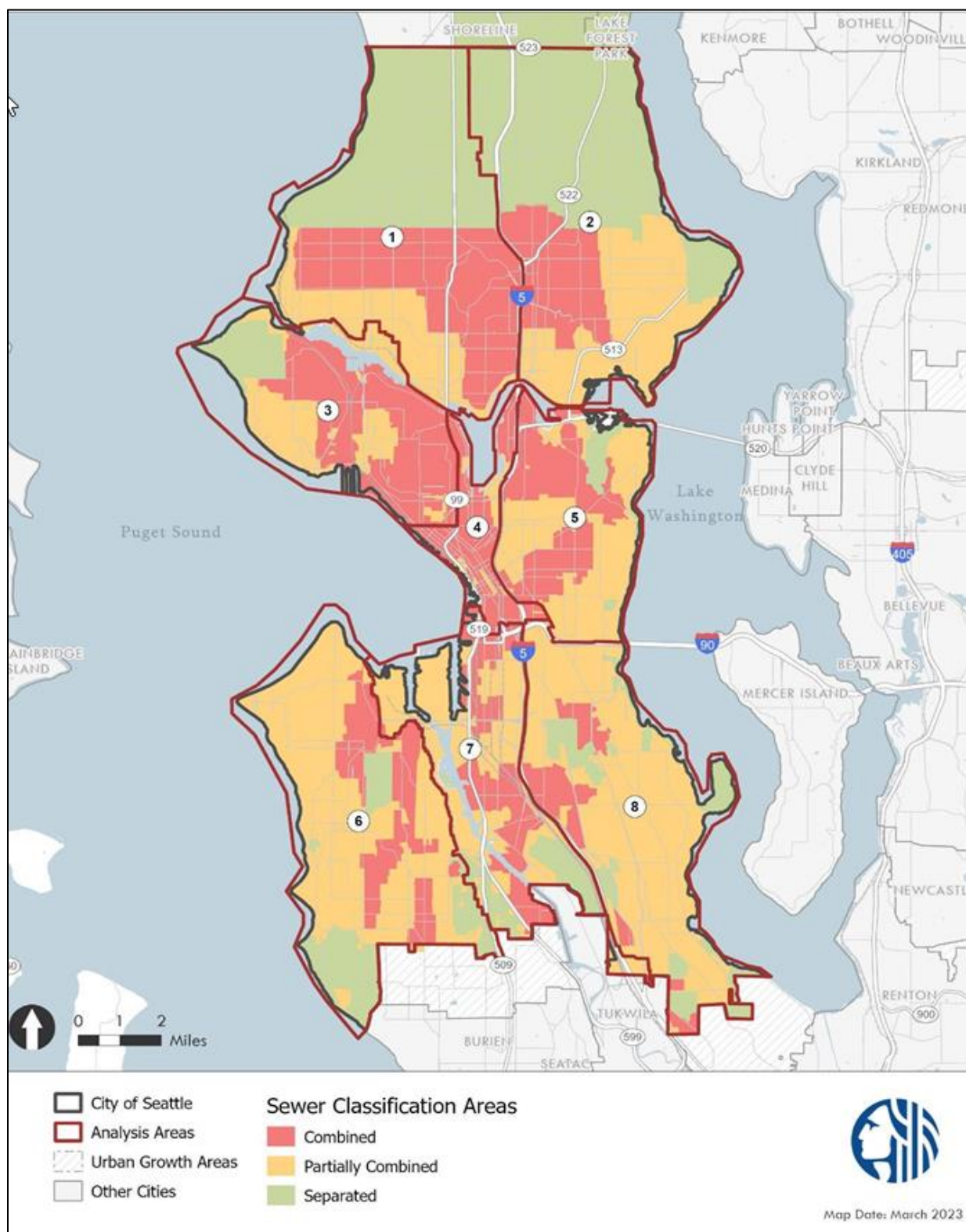
Seattle Public Utilities and King County Wastewater Treatment Division are building an underground storage tunnel to significantly reduce the amount of polluted stormwater (from rain) and sewage that flows into the Lake Washington Ship Canal, Salmon Bay and Lake Union from Seattle's sewer system. The tunnel will improve water quality regionally by keeping more than 75 million gallons of polluted stormwater (from rain) and sewage from flowing into the Lake Washington Ship Canal, Salmon Bay and Lake Union on average each year. The project began construction in 2020 and is expected to be completed in 2027.

Every ten years King County Wastewater Treatment Division (WTD) updates its projections of wastewater flows and loads and evaluates their impact on overall treatment plant capacity. The latest projection, 2019 [Treatment Plant Flows and Loadings Study](#), evaluated the capacity of its wastewater treatment plants in terms of handling overall volume of wastewater and stormwater flow in addition to the amount of organic and solids load (King County 2019). In its evaluation, the County used population estimates and projections based on 2013 PSRC forecasts, adjusted for the higher growth rate the region experienced between 2010 and 2016. Since 2014, WTD noted that influent loads were increasing at a faster pace than flows. Over the past few decades, water conservation efforts have reduced the amount of potable water used on a per capita basis. These reductions in water use directly impact the amount of wastewater flow, but do not impact the loads in the wastewater.

Based on the results, the West Point treatment plant is projected to be able to handle maximum month flow until 2050 but is already reaching capacity for maximum month loadings. In addition, the County will need to optimize treatment plant operations and ultimately invest in technical modifications to comply with the Puget Sound Nutrient General Permit, which became effective in January 2022. This may put

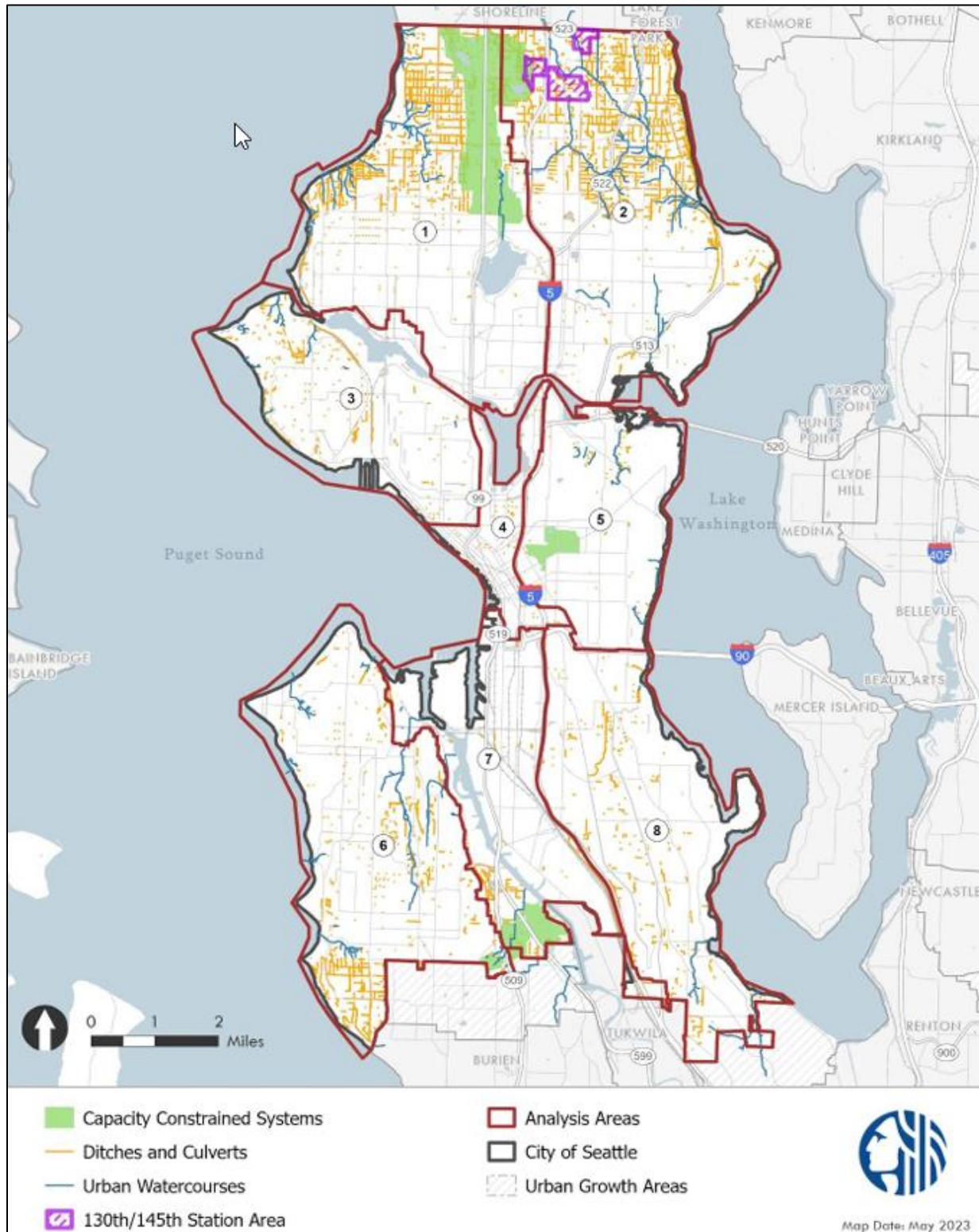
further constraints on treatment plant capacity. WTD has several projects underway to increase capacity of sewerage pumps and is assessing projects to address capacity of its secondary system and digesters. No capacity limitations were projected to be reached between 2040 and 2060 at the West Point treatment plant.

Figure A-170
Drainage Areas by Type



Source: One Seattle Plan EIS, 2024

Figure A-171
Capacity Constrained Wastewater and Drainage System



Source: One Seattle Plan EIS, 2024

Solid Waste

The City of Seattle is required by state law to develop a comprehensive solid waste management plan and update it every six years. Seattle's [2022 Solid Waste Plan Update: Moving Upstream to Zero Waste](#) (2022 Plan Update) guides how Seattle will manage and finance solid waste services and facilities over the next 5 years, and projects system management needs over 20 years.

Inventory & Capacity

The equipment and facilities necessary to operate Seattle's solid waste system are mostly provided by contracted services. SPU runs two transfer stations and two moderate-risk waste (MRW) collection facilities. Seattle provides the MRW collection service as a partner in King County's Local Hazardous Waste Management Program.

A network of public and private service providers and facilities collect, transfer, process, and landfill Seattle's discards. All Seattle's municipal solid waste that is not recycled or composted is, by law, under city control.

SPU contracts with private firms to collect residential garbage, recyclables, and yard and food waste (organics). The same contractors collect commercial garbage. Open-market providers collect commercial recycling and organics. Businesses may choose to "self-haul" their solid waste materials.

Transfer and recycling processing facilities consolidate collected solid waste materials and route them to their next destination. Garbage and organics collected by the city's contractors go to the transfer stations owned and operated by the City. Recycling picked up by the city's contractors goes to the City's contracted recycling processing facility. Recycling picked up from businesses may go to a recycling processor or one of the many local businesses specializing in recycled materials. Other collected materials go to the SPU's two transfer stations, or private transfer stations or processors. Occasionally, residential garbage is taken to private transfer facilities, such as when a city station temporarily needs to close.

At the SPU or private transfer stations, garbage is loaded into rail containers and trucked to Seattle's contracted rail yard. Assembled trains of containers are hauled to the city's contracted landfill. Processed recyclables go to various materials markets. Organics go to the City's contracted organics contractor to be processed into compost.

COLLECTION

Seattle contracts with two collection companies to collect all residential solid waste materials and commercial garbage. Current contracts started in April 2019 and run through March 2029. The companies provide all aspects of collection, including trucks, truck yards, and labor. Service areas and routes are planned to ensure efficient use of collection vehicles and to collect consistent amounts of material each day so that the daily capacity of each transfer station is not exceeded. Transfer and processing facilities need an even and predictable inflow to avoid having to stockpile incoming materials.

TRANSFER STATIONS

SPU owns and operates two transfer stations:

- North Transfer Station in the Wallingford neighborhood at 1350 N 34th St, Seattle
- South Transfer Station in the South Park neighborhood at 130 South Kenyon Street, Seattle

The transfer facilities now serve a variety of vehicles and customers and receive a range of discarded materials that include garbage, recyclables, and compostables. In addition to transferring materials delivered by the contracted collection companies, the stations play an important role in accepting materials unsuitable for curbside collection. Residents with large, bulky items or excess quantities can bring these materials to the stations for recycling or disposal. The stations also serve businesses that choose to self-haul their waste and recyclable materials.

In 2007, the Seattle City Council decided to proceed with improvements to the two SPU transfer stations which were originally built in the 1960s. SPU completed construction of the new South Transfer Station in 2013. The North Transfer Station redesign was completed in 2016.

Two private transfer stations, located in the Duwamish Manufacturing/Industrial Center, supplement City facilities.

King County and City of Seattle operate two hazardous and moderate risk waste facilities in the city of Seattle:

- North Household Hazardous Waste Facility 12550 Stone Avenue North, Seattle
- South Household Hazardous Waste Facility 8100 2nd Ave S, Seattle

RECYCLING AND COMPOSTING

SPU contracts with Rabanco Recycling Center for traditional recycling (newspaper, glass bottles, tin cans, etc.). It is located in the Duwamish Manufacturing/Industrial Center.

Most commercial recycling is provided by private arrangements. Vendors collect both mixed and source-separated materials and take them to a variety of processors in the Seattle area. Which processor they use depends on the material and any agreements haulers and processors may have.

For organics composting, SPU currently has contracts with two vendors, Lenz Enterprises, Inc., and Cedar Grove Composting, Inc.. Lenz Enterprises is mainly responsible for taking organics from SPU's Seattle's North Transfer Station to their processing facility in Stanwood, Washington. Cedar Grove takes mainly organics from SPU's South Transfer station to their processing facilities in Everett and Maple Valley.

DISPOSAL

SPU contracts with Waste Management of Washington for rail haul and disposal of all nonrecyclable waste at Columbia Ridge Landfill in Gilliam County, Oregon. After it has been compacted into shipping containers at transfer facilities, garbage is hauled to the Argo rail yard and loaded onto the train. The Argo Yard is owned and operated by the Union Pacific Railroad and is located in the Duwamish Manufacturing/Industrial Center.

Trains leave Seattle six times a week, stacked two-high. Waste Management of Washington owns the containers. The Columbia Ridge Landfill and Recycling Center is owned and operated by Oregon Waste Systems, a division of Waste Management.

Future Needs

As SPU contracts with private service providers for recycling processing, organics composting, and landfill long-haul and disposal, any programmatic changes would be made through those contracts. Since Public Health—Seattle & King County regulates all solid waste handling facilities in their jurisdiction, their approval is required for any new public or private facilities for the transfer, recycling, composting, and landfilling of solid waste materials.

Following a dip in waste generation during the COVID-19 pandemic, SPU expects overall generation of commercial, residential, and self-haul waste to rebound and to steadily increase over the next roughly 20 years. SPU forecasts waste generation using an econometric model that projects generation by sector. The projection for 2021–2040 is based model data from 2018, as well as some updates made in 2020. More details on solid waste forecasts can be found in the 2022 Plan Update, Chapter 3 Solid Waste Data and Trends.

SPU acquires property, rights of way, and easements necessary for solid waste services. Currently, no additional lands have been identified for solid waste purposes.

Figure A-172
Solid Waste Forecasts

YEAR	COMMERCIAL	SINGLE-FAMILY RESIDENTIAL	SELF HAUL	MULTI-FAMILY RESIDENTIAL	OVERALL CITYWIDE
Amount of Waste Generated					
2020 (actual)	286,036 tons	232,038 tons	109,844 tons	83,701 tons	711,619 tons
2040 (forecast)	451,644 tons	241,343 tons	117,656 tons	110,411 tons	921,053 tons
Recycling Rates					
2019 (actual)	62.1%	72.0%	11.1%	36.2%	54.4%
2040 (forecast)	78.0%	83.1%	17.2%	56.5%	69.0%

Source: SPU Seattle 2022 Solid Waste Plan Update

Although the overall amount of waste generated in the city will increase with projected residential and employment growth over the twenty-year plan horizon, the percentage of waste that will be directed to disposal is expected to decrease if the plan's waste prevention and recycling recommendations are implemented (see Figure A-173).

Historically, recycling rate goals have driven Seattle's solid waste program. However, SPU is shifting to focus more on waste prevention and diversion and working upstream to curb carbon emissions and preserve natural resources as much as possible. The 2022 Plan Update emphasizes waste prevention for the greatest environmental impact and began in 2023 to develop new metrics for measuring policy, programming, and environmental impacts.

Shifts in consumer patterns change over time. Likewise, new materials and combinations of materials continue to enter the consumption cycle. SPU will conduct waste composition analyses frequently enough to be able to respond to these changes. For example, SPU will continue to work with processors to designate additional recyclable materials and modify collection programs as needed.

Seattle will be able to accommodate expected increases in solid waste service and higher rates of diversion of waste to diversion and recycling through regular contract renegotiation, ongoing maintenance and upkeep of city-owned transfer stations and continued public education. Fees charged to residential and commercial customers from Seattle Public Utilities and from waste haulers directly support the necessary capital investments needed to ensure minimum levels of service.

COLLECTION

Seattle will continue with its strategy to competitively contract for collection services. The contractors will adjust to changing service needs, such as more recycling or more residential and commercial customers, over time.

TRANSFER STATIONS

The capacity provided by the rebuild of Seattle's two transfer facilities, in conjunction with private transfer capacity, is projected to satisfy Seattle's solid waste transfer needs for at least as long as the fifty-year expected life of the rebuilt facilities. Seattle's new facilities are purposely designed for flexibility in response to a changing mix of solid waste materials over time.

RECYCLING AND COMPOSTING

Recycling capacity at private facilities is considered adequate for at least two decades, and Seattle will continue to contract for these services. Seattle's current contract is guaranteed through 2029. In 2014, Recology Cleanscapes opened a new high-capacity mixed-material recycling facility in the Duwamish Manufacturing/Industrial Center. Furthermore, the Washington State Department of Ecology currently lists more than 280 recycling facilities in King, Pierce, and Snohomish Counties. In addition to the new Recology Cleanscapes facility, at least three of these are large facilities that process mixed recycling and are within twenty miles of Seattle. SPU expects that many other private recyclers that handle limited ranges of materials will continue their presence in the local market.

Current composting capacity is adequate for the anticipated growth of the twenty-year planning horizon. However, statewide there is concern about future capacity as more cities and counties divert more organics. Seattle's two organics contracts have been in effect for six years, April 2024 through March 2030. As regional demand for composting increases, composting service providers are researching and developing new technologies, for example anaerobic digestion.

DISPOSAL

Columbia Ridge landfill, Seattle's current contracted landfill, projects that it will be able to receive material beyond the current contract's guaranteed 2028 end date. Seattle plans to continue with contracting for this service. Although Seattle's disposal alternatives are restricted through the life of the contract, the City will continue monitoring emerging alternate technologies. Rail-haul capacity is sufficient through the planning horizon. The rail-haul contract provides for alternate transportation if rail lines become unavailable.

For a complete inventory of private solid waste contractors and facilities, see Chapter 7 of the Seattle 2022 Solid Waste Plan Update.

Natural Gas

Natural gas services for Seattle residents and businesses are provided by Puget Sound Energy (PSE), Washington State's largest and oldest utility. PSE serves more than 870,000 residential, commercial, and industrial natural gas customers in six counties through more than 26,000 miles of PSE-owned gas mains and service lines. Currently, PSE serves over 140,000 natural gas customers within the City of Seattle.

PSE controls its gas-supply costs by acquiring gas, under contract, from a variety of gas producers and suppliers across the western United States and Canada. About half the gas is obtained from producers and marketers in British Columbia and Alberta, and the rest comes from Rocky Mountain states. Once PSE takes possession of the gas, it is distributed to customers through more than 26,000 miles of gas mains and service lines. Supply mains then transport the gas from the gate stations to district regulators where the pressure is reduced to less than 60psig. Distribution mains are fed from the district regulators, and individual residential service lines are fed by the distribution mains.

Historically, PSE develops or updates a plan called an Integrated Resource Plan every two years that evaluates how a range of potential future outcomes could affect PSE's ability to meet customers' natural gas supply needs. This is a time of extraordinary change for PSE as they confront the challenge of climate change and work towards decarbonizing services. New legislation and regulations to reduce greenhouse gas emissions affecting PSE's natural gas utility include:

Clean Energy Transformation Act which commits Washington to an electricity supply free of greenhouse gas emissions by 2045 (effective May 7, 2019);

Climate Commitment Act that caps and reduces greenhouse gas emissions from the largest emitting sources and industries (effective January 1, 2023);

Updated Seattle building code efficiency improvements (effective Nov 2024);

Washington Decarbonization Act for Large Combination Utilities which consolidates the planning processes into a single integrated system plan due July 1, 2027 (80.86 RCW, March 2024); and

Various incentives to switch from natural gas to electricity from the Inflation Reduction Act (IRA) and other Seattle programs and regulations.

Natural gas energy use in PSE's service area is declining — down 7% for residential and 3% for commercial in 2023 and PSE forecasts a continued decline over the next five years. This is driven by a number of factors including building and energy code changes, the elimination of allowances for gas line extensions, continued energy efficiency, and warmer winters on average that mean less demand for heating. Also included is a proposal to accelerate depreciation of the existing natural gas delivery system to help protect against an undue share of the cost burden falling on an increasingly smaller group of customers, particularly those who can least afford it. PSE continues to prioritize investments in the safety and reliability of the natural gas delivery system.

PSE does not currently have any major capital projects planned in Seattle. However, PSE is implementing a pipeline safety improvements with the replacement of approximately 35 miles of large diameter (1 ¼" and larger) DuPont Aldyl "HD" plastic pipe in Seattle by 2032.

Telecommunications

Telecommunications is a broad term applied to different types of technology and communication services that provide and receive data/information to homes, businesses, and individuals, as well as public facilities and infrastructure. Services are delivered over wired and wireless networks and include internet, landline and mobile telephone services, cable television, over-the-air television, radio, and emergency communications. Telecommunications are primarily regulated at the federal level by the Federal Communications Commission (FCC). The City regulates limited aspects of these services, such as the siting of new facilities through its public right-of-way and land use regulations.

Residential and commercial services are provided by private telecommunications companies that own and maintain networks of coaxial cable, fiber, and cellular/wireless technologies ("carriers") in the city. Services to the public are also offered by satellite companies and those that lease use of other carriers' networks. For example, mobile *virtual* network operators (MVNO) are mobile service providers that use the cellular networks of major carriers (AT&T, T-Mobile, Verizon and Dish). Businesses, governments and institutions can also buy services and design custom solutions from private carriers to meet their telecommunication needs. The City does use some services and network capacity from private carriers but has steadily reduced this with an increased network of public infrastructure to City-owned buildings.

The City owns and maintains a public infrastructure network to provide specific telecommunications services to support City operations and other public agency service delivery. The Seattle Information Technology Department, in collaboration with City Light and other departments, jurisdictions, and institutions, installs, owns, and/or operates an extensive broadband information and communications technology (ICT) infrastructure, including radio (AM 1111) for emergency services and fieldwork, and fiber optic for transmission of voice, video, and data for delivery of city services. The infrastructure is used to support municipal and public sector services. The City has a fiber-sharing agreement with other public agencies that enables joint installation and maintenance of an extensive network of conduit and fiber, which minimizes the construction cost, digging, and installation of telecommunications infrastructure. The City also, in limited cases, leases excess fiber capacity to private providers.

Seattle is a major partner in, and user of, the new Puget Sound Emergency Radio Network (PSERN) regional governmental radio system. The PSERN system supports nearly 6,000 Seattle police, fire, and general government radios. Seattle also operates a number of additional radio and microwave networks to meet a variety of departmental needs for internal communications. Seattle City Light operates its own separate radio system for its internal radio communication needs.

City departments and telecommunications companies cooperate to provide efficient and stable processes for deploying telecommunications infrastructure, including infrastructure that will support high-capacity broadband, and next generation wireless (5th Generation or "5G") network technologies. Seattle City Light issues a permit for each installation of telecommunications (e.g., fiber lines, wireless facilities) on utility owned poles (e.g., wood and metal utility poles, light poles). The Seattle Department of Transportation also issues a permit for the installation of telecommunications facilities in the public right-of-way. The Seattle Department of Construction and Inspections issues a permit for the installation of wireless facilities ("minor telecommunication facilities") on private properties, such as building rooftops.

As of 2024, the City has identified multiple telecommunication service providers in Seattle (see Figure A-174).

New communication technologies will continue to evolve. The City will continue to work with providers and permit new technologies to increase consumer options and ensure new technologies are deployed equitably.

Figure A-173
Telecommunication Service Providers (as of September 2024)

Company	Internet/Data Service					TV Service		Telephone Service			Fiber Infrastructure
	Hybrid Cable/ Fiber Network	Fiber Network	Cellular (Mobile) Network	Satellite Network	Fixed Wireless Network	Cable TV	Satellite TV	Legacy Copper Network	Voice Over IP (VOIP)	Cellular (Mobile) Network	Fiber Supporting Other Commercial Providers
Comcast/ Xfinity	X					X			X		
Lumen/ Quantum/ CenturyLink	X	X						X	X		X
Astound Broadband	X	X				X			X		X
T-Mobile			X		X					X	
Verizon			X		X					X	
AT&T			X							X	
Dish Networks			X				X			X	
Atlas Networks					X						
Google Fiber					X						
Salmon Bay Wireless					X						
DirectTV							X				
Starlink				X							
HughesNet				X							
Viasat				X							
Crown Castle											X
Extenet											X
Zayo Group											X
Ziply*		X									X
Mobile <i>Virtual</i> Network Operators (MVNO)*			X							X	
* Commercial non-residential services. # There are over 100 MVNOs operating in the United States. Example MVNOs available to Seattle customers are Boost Mobile, Cricket Wireless, Metro PCS, Mint Mobile, Straight Talk Wireless, and <u>TracPhone</u>. MVNOs lease access to infrastructure built and maintained by telecommunications networks owned and maintained by major carriers (T-Mobile, AT&T, Verizon, and Dish).											

Source: Seattle Information Technology, 2024

Appendix 5

Legislative History of the Comprehensive Plan

Ordinances Amending the Comprehensive Plan

ADOPTION DATE	ORDINANCE #	NATURE OF AMENDMENTS
12/12/94	117436	1994 Capital Improvement Program
7/31/95	117735	1995 Comprehensive Plan amendments
11/27/95	117906	Adoption of a new Human Development element
12/12/94	117436	1994 Capital Improvement Program
7/31/95	117735	1995 Comprehensive Plan amendments
11/27/95	117906	Adoption of a new Human Development element
11/27/95	117915	1995 Six-Year CIP amendments
7/01/96	118197	Response to 4/2/96 Growth Management Hearings Board remand. Repealed policy L-127 of Ord. 117735
9/23/96	118408	Addition of Shoreline Master Program to Plan
11/18/96	118388	1996 CIP amendments
11/18/96	118389	1996 annual amendments
6/16/97	118622	Policies for the reuse of Sand Point Naval Station
9/8/97	118722	Response to 3/97 GMHB remand
11/13/97	118820	1997 Six-Year CIP amendments
11/13/97	118821	1997 annual amendments; addition of Cultural Resources element

ADOPTION DATE	ORDINANCE #	NATURE OF AMENDMENTS
6/22/98	119047	Adoption of the Ballard/Interbay Northend Manufacturing/Industrial Center neighborhood plan
8/17/98	119111	Adoption of the Crown Hill/Ballard neighborhood plan
10/26/98	119207	1998 annual amendments
11/02/98	119217	Adoption of the Wallingford neighborhood plan
11/02/98	119216	Adoption of the Central Area neighborhood plan
11/16/98	119231	Adoption of the Pioneer Square neighborhood plan
11/16/98	119230	Adoption of the University neighborhood plan
11/23/98	119264	1998 Six-Year CIP amendments
12/07/98	119322	Adoption of the Eastlake neighborhood plan
12/14/98	119298	Adoption of the MLK@Holly neighborhood plan
12/14/98	119297	Adoption of the Chinatown/International District neighborhood plan
1/25/99	119356	Adoption of the South Park neighborhood plan
2/08/99	119365	Adoption of the Denny Triangle neighborhood plan
6/22/98	119047	Adoption of the Ballard/Interbay Northend Manufacturing/Industrial Center neighborhood plan
8/17/98	119111	Adoption of the Crown Hill/Ballard neighborhood plan
10/26/98	119207	1998 annual amendments
11/02/98	119217	Adoption of the Wallingford neighborhood plan
11/02/98	119216	Adoption of the Central Area neighborhood plan
11/16/98	119231	Adoption of the Pioneer Square neighborhood plan
11/16/98	119230	Adoption of the University neighborhood plan
11/23/98	119264	1998 Six-Year CIP amendments
12/07/98	119322	Adoption of the Eastlake neighborhood plan
12/14/98	119298	Adoption of the MLK@Holly neighborhood plan

ADOPTION DATE	ORDINANCE #	NATURE OF AMENDMENTS
12/14/98	119297	Adoption of the Chinatown/International District neighborhood plan
1/25/99	119356	Adoption of the South Park neighborhood plan
2/08/99	119365	Adoption of the Denny Triangle neighborhood plan
3/15/99	119401	Adoption of the South Lake Union neighborhood plan
3/15/99	119403	Adoption of the Queen Anne neighborhood plan
3/22/99	119413	Adoption of the Pike/Pine neighborhood plan
3/22/99	119412	Adoption of the First Hill neighborhood plan
5/10/99	119464	Adoption of the Belltown neighborhood plan
5/24/99	119475	Adoption of the Commercial Core neighborhood plan
6/07/99	119498	Adoption of the Capitol Hill neighborhood plan
7/06/99	119524	Adoption of the Green Lake neighborhood plan
7/06/99	119525	Adoption of the Roosevelt neighborhood plan
7/09/99	119538	Adoption of the Aurora-Licton neighborhood plan
7/21/99	119506	Adoption of the West Seattle Junction neighborhood plan
8/23/99	119615	Adoption of the Westwood/Highland Park neighborhood plan
8/23/99	119614	Adoption of the Rainier Beach neighborhood plan
9/07/99	119633	Adoption of the North Neighborhoods neighborhood plan
9/07/99	119634	Adoption of the Morgan Junction neighborhood plan
9/27/99	119671	Adoption of the North Rainier neighborhood plan
10/04/99	119685	Adoption of the Broadview/Bitter Lake/Haller Lake neighborhood plan
10/04/99	119687	Adoption of the Fremont neighborhood plan
10/11/99	119694	Adoption of the Columbia City neighborhood plan
10/25/99	119713	Adoption of the North Beacon Hill neighborhood plan

ADOPTION DATE	ORDINANCE #	NATURE OF AMENDMENTS
10/25/99	119714	Adoption of the Admiral neighborhood plan
11/15/99	119743	Adoption of the Greenwood/Phinney Ridge neighborhood plan
11/15/99	119744	1999 annual amendments
11/22/99	119760	1999 Six-Year CIP amendments
12/06/99	119789	Adoption of the Delridge neighborhood plan
2/07/00	119852	Adoption of the Georgetown neighborhood plan
6/12/00	119973	Adoption of the Greater Duwamish Manufacturing/Industrial Center neighborhood plan
11/13/00	120158	Response to Growth Management Hearings Board remand; Greenwood/Phinney Ridge neighborhood plan
12/11/00	120201	2000 five-year Comprehensive Plan review amendments
10/15/01	120563	2001 annual amendments
12/09/02	121020	2002 annual amendments
12/13/04	121701	2004 ten-year Update to Comprehensive Plan
10/10/05	121955	2005 annual amendments
12/11/06	122313	2006 annual amendments
12/17/07	122610	2007 annual amendments
10/27/08	122832	2008 annual amendments
3/29/10	123267	2010 annual amendments
4/11/11	123575	2011 annual amendments
4/10/12	123854	2012 annual amendments
5/20/13	124177	2013 annual amendments
5/2/14	124458	2014 annual amendments
10/16/15	124886,124887, 124888	2015 annual amendments including the adoption of new housing and job targets, and incorporate changes relating to housing affordability.

ADOPTION DATE	ORDINANCE #	NATURE OF AMENDMENTS
10/28/2016	125173	2016 Seattle 2035 Update to Comprehensive Plan
10/5/2017	125428	2017 annual amendments
12/14/2018	125732	2018 annual amendments
3/20/2019	125790	2019 annual amendments
10/2/2020	126186	2020 annual amendments
10/15/2021	126456, 126457	2021 annual amendments
12/15/2022	126730	2022 annual amendments
7/25/2023	126861	2023 annual amendments

Resolutions related to the Comprehensive Plan

PASSAGE DATE	RESOLUTION #	NATURE OF LEGISLATION
7/25/94	28962	1994 Vision for the Comprehensive Plan
11/27/95	29215	Updated 1994 Vision to reflect addition of Human Development element in Comprehensive Plan (Ord. 117906)
12/11/00	30252	Updated Vision to reflect Cultural Resources and Environment elements and adoption of neighborhood plans
12/13/04	30727	Updated Vision in conjunction with the 2004 ten-year Update to the Comprehensive Plan
2/6/2013	31418	Intent to work with communities to review and implement neighborhood plans in the Neighborhood Planning Element of the Comprehensive Plan
5/15/15	31577	Confirmed race and social equity as a core value of the Comprehensive Plan
7/27/2022	32059	City of Seattle's intent to address climate change and improve resiliency as part of the One Seattle update to the Comprehensive Plan
9/20/2022	32068	Consider proposed annual amendments as part of the One Seattle update to the Comprehensive Plan and the Seattle Transportation Plan